THE DEVELOPMENT OF ECONOMIC THOUGHT

AN OVERVIEW

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To the Grandchildren.

Contents

Introduction

For one reviewing this volume an obvious question is, “Why the need for this book?” Are there not enough volumes available which recount the development of economic thought? The answer, of course, is yes there are many fine books available. If that is the case, why, then this effort?

One reason is that it is intended for students and others who are interested in an introduction or overview of the development of economic thought and the writers who contributed to it. It is also deigned to be a refresher for those who may have had a course in the development of economic thought during their undergraduate or graduate studies.

In today’s pursuit of an undergraduate or even graduate degree with a concentration in economics, it is unlikely that the student will get much exposure to the study of those writers who were responsible for the very concepts and theories they are now studying. It also bears noting that in the post–World War II era, economics has become much more mathematical, concentrating on quantitative economics, statistics, and econometrics to the exclusion of the social and philosophical aspects of the discipline. There is no questioning the intentions of this approach to move economics from the social to the hard sciences. But whether this effort succeeds or not, there is still much to be gained from a review of the older and more humanistic treatment of the discipline. Moreover, even if one wishes to pivot and move from the traditional to another direction, it is important for one to know where one has been to determine where one is going.

The purpose of this book, therefore, is to provide the interested reader and students who are taking courses in the social sciences and philosophy an understanding of the principal theoretical developments in the history of economics. Unlike many of the encyclopedic compendia available for the study of economics, this book avoids a great deal of nonessential detail

and focuses on the highlights of the principal contributors to the discipline. Its purpose is not to overwhelm the reader, but to introduce him or her to the members of the major schools of thought, beginning with the early ancient writers and ending with the work of John Maynard Keynes. Substantively, this work aims to serve as a bridgehead, the starting point from which the reader can proceed to the original works of the writers on economic subjects and the more exhaustive commentaries on them.

Economics as a formal subject of learning is of comparatively recent origin, but man has always had to deal with economic matters. Economic issues have impacted all aspects of life and so it is not surprising that many of the writings in philosophy, religion, politics, and history had an economic dimension associated with them. It was, therefore, from these writings and even the scriptures that many of our economic concepts evolved. For example, the Old Testament makes reference to private property, labor, and money, while the New Testament, in addition to money, makes reference to the payment of taxes. The schoolmen of the medieval period, although primarily concerned with the moral aspects of taking interest, implicitly justified some aspects of it on the basis of opportunity cost. Significantly, many of the issues they raised continue to confront us to the present day. They have not disappeared with the passage of time.

From the very outset writers on economic issues may have been concerned with money, property, trade, and other mundane matters, but their primary interest was the improvement of the human condition. While the classicists, utopians, neoclassicists, Austrians, welfare, institutional, and the members of other schools of thought may have differed in their approaches, their objective was the same. As Professor Heilbroner noted in his iconic book, *The Worldly Philosophers*, "the ultimate objective of their economic thinking was social understanding."[1]

This theme runs throughout the writings of those who contributed to the development of economic thought, beginning with the Greeks and Romans and proceeding to the middle ages, the period of mercantilism, the era of the French Physiocrats, Adam Smith, Ricardo, the classical economists and their dissenters, John Stuart Mill and the later classicists, Karl Marx,

the Austrians, the institutionalists, and John Maynard Keynes—all works to be reviewed in the pages that follow.

Regrettably, that era which ran for more than two thousand years has come to a close. That period is gone. The work of present-day economists is not in the tradition of the past. Although economics has always had a good number of mathematically trained economists, starting with Cournot followed by Cassel, Walras, Jevons, Wicksell, Edgeworth, Marshall, Fisher, Keynes, and others, for them mathematics was a tool to help them develop their thoughts which they then presented in terms understandable to the reader. A good example is presented in Marshall's *Principles of Economics* in which the text is devoid of mathematics, but can be found in the appendix of his book. Notwithstanding the fairly wide use of mathematics over the course of its history economics continued to be the handmaiden of logic and philosophy for the longest time.[2]

Quite intelligent people can still read Adam Smith and Karl Marx, but doubtless will experience much more difficulty in comprehending many of the articles in today's learned journals. Since the end of World War II, the pendulum has swung to the greater use of quantitative methods. The discipline has tried to become more of a pure science with a heavy emphasis on statistics, mathematical economics, econometrics, game theory, and other quantitative measures. As noted by Professor Heilbroner, "[i]n the main economics has become a technical, often arcane calling, and ambitious projections of imagination into the future are no longer listed among its aims."[3]

Professor Lionel Robbins, the noted British economist, stated that the economics of the future "will not be a body of knowledge accessible to everyone." "An understanding of this new economics," he added, "[will require] a greater equipment than a combination of intelligence and curiosity."[4] But one may well ask, "How would that concentration of knowledge in the hands of the few affect the functioning of the economy, public policy and the other diverse interests of humankind?"

At present, less mathematically gifted graduate students spend more time in mastering mathematics than "becoming wise and imaginative observers of history, politics and social problems." The danger lies in divorcing economic analysis from the human aspects of life and removing

the discipline from the social sciences.[5] Regrettably, rigor has become more important than relevance and form counts for more than matter.

Notwithstanding the efforts of economists to elevate economics to the status of a pure science, mathematicians and natural scientists contend that the discipline is scientifically immature.[6] In truth the problem is not that economics has not had sufficient time to mature, but that it is difficult, if not impossible, to quantify human behavior. Therefore, at some point, economists may have to reassess their role and strike a better balance between what they are doing and their traditional role of dealing with the issues that really matter to mankind. Hopefully that aggiornamento will not be too far off into the future.

NOTES

1. Heilbroner, R. L., *The Worldly Philosophers*, 6th ed., New York: Simon & Schuster, 1986, 325.

2. Newman, P. C., *The Development of Economic Thought*, New York: Prentice Hall, 1952, 2.

3. Heilbroner, op. cit., 323.

4. Gray, A., *The Development of Economic Doctrine* (1931), London and New York: Longmans, Green, 1970, 353.

5. Bell, J. F., *A History of Economic Thought*, New York: Ronald Press, 1953, 659.

6. Niehans, J., *A History of Economic Theory: Classic Contributions, 1720–1980*, Baltimore, MD: Johns Hopkins University Press, 1990, 533.

Chapter 1

The Early Contributors to the Development of Economic Thought

THE GREEKS

Attention to purely economic matters appears late in the development of ideas. The earliest systematic development of such notions as value, price, capital, labor, the law of supply and demand, and the distributive shares appears toward the end of the seventeenth century and the beginning of the eighteenth.

Why though did it take so long for economics to develop as a formal subject of inquiry and learning? Don't all societies have to produce, exchange, distribute the yield of production and then consume the fruits of their production? In view of their advanced state of development, one could reasonably expect the Greeks to have offered some thought on these basic relationships. Similarly, the fact that the state played such an important role in Greek life should have produced some explanation of how it was able to sustain itself through the imposition of taxes and the administration of its revenues.

In fairness, the Greeks did consider such economic issues as the ownership of land, profits, and the taking of interest. The problem, though, is that these subjects were not treated in an exhaustive manner and were quickly dismissed. For example, Aristotle effectively dismissed the notion of profits, arguing that money, unlike production, is barren and money does not beget money. The exchange of one good for another, because of necessity was natural, but the exchange of goods for money for the sake of gain was unnatural. He also rejected the payment of interest on the grounds of morality. The trouble with Aristotle's position, of course, is that he was viewing money from a purely consumer and not from an entrepreneurial perspective where gains may be mutually beneficial; where money begets money and the payment of interest to the lender can be justified in terms of fairness.

But what, if anything, did the Greeks have to say about the return to labor? Actually the make-up of the ancient Greek economy did not require an extensive consideration of labor. For wages, as we consider them today, were nonexistent.

During these early times, the relationship between proprietor and worker was that of master and servant. In effect, the economy was predicated on slave labor. The slave remained a thing, not a person, and could not assert a legal claim to whatever he earned; hence, there is no reason to have expected the Greeks to develop a theory of labor. The same argument can be advanced to explain why the Greeks did not develop a theory of rent. Land was not owned by individuals, but rather it was owned in common, in accordance with Plato's preference. To understand this lack of attention to these and other economic issues we must examine early Greek thinking on sociological subjects.[1]

The Greeks conceived the individual as subordinated to the state through which alone his nature could be developed. In turn, all his efforts had to be devoted to the maintenance and service of the state. The citizen was not regarded as a producer, but only as a possessor of material wealth. This wealth was not esteemed for its own sake or for the enjoyments it makes possible, but rather for the higher moral and public aims to which it may be directed. The state, therefore, claims and exercises authority over every sphere of social life, including the economic, in order to bring individual action into harmony with the good of the whole.[2]

This idea of the subordination of the individual to the state appears in its most extreme form in Plato's *Republic*. In his state there would be three groups: the governing; the military; and those engaged in industry. This last class, he holds, in accordance with the spirit of the age in little esteem. He regards their occupations as tending to the degradation of the mind and enfeeblement of the body, rendering those who follow them unfit for the higher duties of men and citizens. The lowest forms of labor he would commit to foreigners and slaves.[3]

Contrasted with the idealism of Plato, Xenophon's system, which is outlined in his "Oeconomicus," is somewhat more moderate. However, he too recognizes the institution of slavery, and recommends the hiring of slaves by the state for labor in the mines as a means of increasing its revenue. In addition, he recommends that the number of slaves be constantly increased by fresh purchases out of the gains of the state's enterprises.[4] Aristotle, although opposed to the suppression of personal freedom, initiative, and the excessive subordination of the individual to the state, propounds a theory of slavery. His theory is based on the universality of the relation between command and obedience and on the natural division by which the ruling is marked off from the subjected race. He regards the slave as having no independent will, but as an "animated tool" in the hands of his master. Aristotle holds that in his subjection to such control the inferior will find his true well-being.[5]These views which are so shocking to our modern values are not personal to any of these writers. Rather, they provide a theoretic presentation of the facts of Greek life. That life was based on a body of citizens pursuing the higher culture and responsible for the defense and the administration of government. That ruling class was supported by the systematic degradation of a wronged and despised class excluded from the higher offices and sacrificed to the maintenance of a special type of society.

Given the importance of the state in Greek life, one may ask, "Why did the Greek writers fail to make any contribution to the study of public finance?" The answer is that there was no need for an exhaustive treatment of the government's finances, because the broad sources of revenue, such as exist today, were unknown to the administrators of the early Greek state. Governmental revenues, acquired through the imposition of income taxes, commercial undertakings; administrative fees and special assessments, as is the case with most governments today, were unknown to the Greeks. Rather, the treasury of the early Greek state operated with relatively limited resources. Generally speaking, there were three or four regular sources of governmental revenue: taxes on land; the rents from lands owned by the state; the payment of fines, and the small sums that came from the various indirect taxes and dues.

Until the advent of Pericles in the fifth century BC, these revenues were rather limited; however, during his reign the revenues of the state treasury were greatly augmented owing to the increased level of economic activity. The growth of trade was favorable to the imposition of taxes which included levies in the market place, the licenses and duties on slaves and foreigners which resulted from an increase in immigration. Another source of revenue was the increase in law-court fees which were swollen by the increased duties assigned to the courts. This added revenue for the Athenian Treasury was supplemented by talents from the Attic silver mines, and other large sums from new domains, including mines in Thrace.[6] Absent any information on the value of these talents, it is, of course, impossible to make any estimate of their significance for the treasury's resources.

In the main, the state's revenues were used to defray administrative expenses which were comparatively modest. Included were the maintenance of public works, the upkeep of public slaves, rewards for killing wolves, prizes for poets and doctors, grants to the infirm, payments to individual citizens for service as councilors, the operation of the courts and above all offerings and sacrifices to national and Panhellenic deities.

It is important to note that the state's finances were operated largely on a hand to mouth basis; and it was not until the time of the Persian Wars that there was any thought in Athens of accumulating any reserve out of current revenue. Once this need was recognized, money set aside for the war chest became the most important fund.

In regard to war finance, Athens, beginning in 478 BC was chosen as the head of an alliance or confederacy of the Greek States against Persia. The total sum annually needed for these defense preparations was 460 talents, a sum fixed by Arisdiedes the Just, to whom the task of raising this money had been assigned. The tax basis for this sum was a rough valuation of the lands owned by each of the confederates. Accordingly, landowners were assessed a certain amount of money depending upon their landholdings. The money thus raised was reserved for the expenses of war. To inspire her allies with more confidence, Athens converted it into a fund distinct from her ordinary revenues and deposited it at Delos.[7] Interestingly, the setting aside of funds for special purposes is standard practice among all levels of government in today's world.

From the foregoing we can readily see that with the exception of preparation for war, there were relatively few undertakings assumed by the Greek State in comparison with the subsequent operations and activities of governments. The importance of public finance in Greek life can be gauged only by the number and intensity of activities carried on by the government. With the sole exception of defense, these duties were few and of minor consequence. Therefore, there was little need for the Greek writers to concern themselves extensively with

problems of government finance anymore than with labor, profits, the payment of interest, and other economic issues, because of the makeup of Greek society.

THE ROMANS

Notwithstanding the eminently practical, realistic, and utilitarian character of the Romans, they failed to use those talents for the development of economic thought. There was a conspicuous lack of speculative originality among the Romans and as a consequence, there is little evidence of serious theoretical inquiry on economic issues. By and large, their ideas on economic and other social questions were borrowed from the Greek thinkers. Such traces of economic thought as do occur are to be found in the writings of the jurists, the philosophers, and the scriptores de re rustica, or writers on agricultural subjects.

Among the jurists are to be found the most original and undoubtedly most productive Roman thinkers. The Romans were renowned as jurists and lawyers and so it is not strange that the most important contribution to the development of economic thought should come from that source. It should be understood that these writers did not express either explicitly or implicitly any system of economics; as a matter of fact, the ethical and political aspects of their writings outweigh by far any purely economic considerations.

The jurists occupy a special niche in the history of economic thought, because their study of natural law had a tremendous impact upon medieval and later economic thinking. Reasoning a priori, they concluded that natural law and the natural rights of men existed in nature even before people became organized in a society. Ultimately, natural law derives its origin from primitive times and is applicable to all peoples regardless of circumstances. This concept of natural law had its origin in the distinction made by the Roman jurists between jus civile and jus gentium. Their jus civile or civil law was a national law applicable to Roman citizens. On the other hand, a body of law known as jus gentium was developed for foreigners outside the Roman state, regardless of nationality. This latter law was broader and less guided by arbitrary local customs. It was more rational. Specifically, when this jus gentium was combined with the Greek concept of the natural law a jus naturale was formed.

Of more direct economic relevance were the doctrines which Roman jurists developed for the regulation of economic relations. They upheld the rights of private property almost without limit and guaranteed freedom of contract to an extent which seems more appropriate to the conditions of modern capitalism.[8] The Roman concept of property was a narrowly individualistic one. Under the stimulus of a jus naturale the jurists moved away from the clan or the family as a social unit. Under their jurisdiction, clearly defined individual rights replaced whatever community of property rights had been in force earlier.[9] A corollary of this movement was the development of the freedom of contract, including the right of the individual to dispose of his property as he saw fit. The principle recognized by Roman law is that price was entirely a matter to be determined by free contract. It left the two contracting parties entirely free to agree upon a price at their own risk. The only requisite is that the seller was bound to reveal any defects associated with the good being offered for sale. The legist Paulus noted that buyers and sellers constantly try to outdo each other. The buyer seeks a price lower than the true value of a given good and the seller seeks a price higher than the intrinsic value of the same good.

This last clause echoes the dictum of Pomponius, a legist of the second century who said that: “In purchase and sale it is naturally allowed to the contracting parties to try to overreach one another.” From the foregoing, we can appreciate why Alfred Marshall was moved to state:

> To Roman influence we may trace indirectly much of the good and evil of our present economic system; on the one hand much of the untrammeled vigour of the individual in managing his own affairs, and on the other not a little harsh wrong done under the cover of rights, established by a system of law which had held its ground because its main principles are wise and just.[10]

Thus, while Aristotle becomes the philosopher of the Middle Ages and one of the sources of Canon law, it is Roman law which serves as an important basis for the legal doctrines and institutions of capitalism. This, then, is the contribution of the Roman jurists to the development of economic doctrine.[11]

The philosophers, among whom numbered Cicero, Seneca, Marcus Aurelius, and Pliny the Elder, lamented the decay of industry, the relaxation of morals, and the spirit of self-indulgence among their contemporaries. These men decried the luxury and vices of their time, condemning the thirst for material riches and preaching moderation. Looking back at an earlier time, they praised a simpler agricultural economy. “0 tempora! 0 mores!”

Such was the state of affairs in Rome that her philosophers dreamed of the simple life and called for a movement of "back to nature."[12]

In view of such a prevailing attitude, it is easy to understand why these philosophers concluded that the only honorable industry was agriculture. Cicero, who was one of the chief advocates of this back to nature movement, claimed that those callings are held in disesteem that come into collision with the goodwill of men, like that of tax gatherers and usurers. Those who are paid for their work and not for their skill are vulgar and not well-bred as are those who make profit by buying and selling. He claims that the professions which require great skill, care, and are of great service to the community are respectable and genteel. However, of all the pursuits, none is held in higher esteem than agriculture. None of these other callings is more productive, more pleasant, nor more worthy of a man of liberal mind.[13]

The writings of these Roman philosophers were to a high degree influenced by Stoicism which caused an economic fatalism in many of them. For example, Marcus Aurelius meditated as follows,

> Be satisfied with your business, and learn to love what you were bred to do; and as to the remainder of your life be entirely resigned, and let the Gods do their pleasure with your body and soul.[14]

According to the tenets of Stoicism, which exercised such an influence over these writers, a man should submit himself to the all embracing laws of nature. Only by so conforming to natural law would it be possible for him to attain happiness. The influence of such philosophy upon economics may be readily seen in the later thought of the physiocrats and to some degree in that of Adam Smith.

Chief among the scriptores de re rustica, or writers on agriculture were Cato,Varro, and Columella. These men concerned themselves with the technical aspects of husbandry, dealing with the production of wine and oil, the raising of different crops, and the grazing of cattle and sheep. Varro and Columella have the distinction of having seen and proclaimed the superior value of free to slave labor. Columella was convinced that the use of enforced labor was in large measure responsible for the decline of the Roman agricultural economy. These writers condemned not only slave labor, but also the latifundia, or large estates, and absentee owners. In reference to the latifundia, the question of the comparative merits of the large and small systems of cultivation was intensely debated. In the main, these writers of agricultural subjects, who were headed by Columella, were in favor of "petite agriculture."

In studying the background to the Roman agricultural problem, we find that originally, the Romans were a stern and warlike people of simple tastes. It was only after military conquest had enriched them with the wealth of other nations that they took to luxurious living, a type of living which necessitated the employment of a greater and greater number of slaves. At the same time; however, there was a concomitant destruction of the independent yeoman class. Land was cultivated in the form of latifundia for absentee landlords, while an increasing mass of free but impoverished citizens was maintained at public expense. In effect, these large landholdings brought about a decline in farm yield, a running down of the soil and serious discontent and poverty among the people. It is little wonder, therefore, why the writers of this period, the scriptores de rustica, turned longing eyes upon the simple rural life of bygone days.

Clearly, the attitude of these writers is comparable to that of the French physiocrats who urged the zealous pursuit of agriculture in place of the material evils and the social degeneracy of their time. It is interesting to note a parallel between these two cases, namely, a declining economy in both instances that caused men to clamor for a simpler and more "natural" life.[15]

THE MEDIEVAL WRITERS

The Middle Ages, which extended approximately from the fall of the Roman Empire to the fifteenth century was largely a period of transition. It was during this era that national economies replaced independent domestic economies; that commerce and manufactures encroached upon the sole rule of agriculture; and slavery was gradually abandoned for serfdom and free labor. In the realm of thought, one finds a transition from the materialism of later paganism to the modified idealism of Christianity. A system of thought, which was predicated on slavery and a natural inequality among men, changed to a system which promoted the ideals of freedom and brotherhood.

As a result of these changes in institutions and in the realm of thought, a number of economic problems, closely related to the question of morality, attracted the interest of the writers of this era. Although they concerned themselves with economic subjects, it should be emphasized that they produced no formal economic treatises. Men such as Aquinas (1225–1274), Buridon (1300–1358), Magnus (1183–1280), and Biel (1400–1495) were canonists, theologians, and churchmen. Their interest in economics was not motivated by economic matters, as such, but rather by the influence which these issues exerted on matters of morality. The main economic problems stressed by these medieval writers, because of their moral ramifications, were value and price, and money and usury.

The increase in commerce during the eleventh century was largely responsible for raising the question of exchange value. Specifically, the problem of exchange value asked the question, "What price should be charged for a particular commodity?" The answer was that a "just price" should be imposed on all commodities offered for sale.[16]

To understand the meaning of this "justum pretium," it is necessary that we first have some concept of value as defined by the medieval schoolmen. In effect, the doctrine of "justum pretium" was based upon their notion of exchange value. Albertus Magnus, in keeping with Aristotle's view, argued that ideally goods containing the same amount of labor and expense should be exchanged. St. Thomas Aquinas also seems to have adhered to the same vague notion of the cost of production. Because competition was not present to any sizeable degree in the medieval economy, it can be seen why these writers espoused theories of exchange value based on the cost of production. To depend upon freely determined markets to provide a proper measure of value seemed unnatural to these writers.[17] In regard to the cost of production, labor was considered to be its chief component and because there was little capital involved in medieval production, the worth of a good was measured by the amount of labor required to produce it. Briefly stated, the medieval churchmen held that every commodity has a true absolute value, and is to be determined on the basis of the common estimation of the cost of production, which usually covers labor. But, we may ask, "what is this cost which usually covers labor?"

In answer to this question, St. Thomas Aquinas says that the price which a producer should receive for his wares is that price which would fairly recompense him for his labor; not what would enable him to make a gain, but what would permit him and his family to live a decent life according to the standard of comfort which public opinion would recognize as appropriate to his class. This norm involved the important idea of "status" and fixed rules as to the standard of life for each status, in order that the customary or conventional price could be determined.

The value fixed by the "just price" was not necessarily expressed in terms of market price and was independent of the estimate of buyer or seller. The canonists never conceded that price could be determined by the arbitrary will of buyer or seller and they argued that in each state of the market there was a just price which dealers ought to recognize. St. Thomas Aquinas maintains that in any particular country or district there is for every article, at any particular time, one just price. Prices should not vary with momentary supply, with individual caprice, or skill in the chaffering of the market. It is the moral duty of buyer and seller to try to arrive, as nearly as possible, at this just price.[18]

With the rise of towns and a money economy, the notions of value and price began to be modified, though they dominated the whole period and beyond. Aquinas gave some passing consideration to utility and to the amount offered for sale. Buridan went farther than Aquinas in this direction by stating that the measure of value is to be found in the satisfaction of wants. The greater the need, the higher would be the value of a commodity, and hence, the higher its price.

Biel, another important Father of the Church, in standing for a necessary equality in the value of goods exchanged, bases it upon their utility for human needs. Prescinding from these later contributions to value and price, the problem was resolved by the medieval writers by making value an absolute entity based upon cost, which was largely a labor cost. By so handling the problem of value and price, the medieval writers hoped to achieve justice in transactions between individuals.

The second important economic issue considered by the medieval writers was the question of money and usury. The term usury was used to cover what we designate as interest, and, in a broader sense, to include any price in excess of the justum pretium. In the early stages of the Middle Ages only the clergy was prohibited to practice usury (i.e., the payment of interest on loans). During the major part of the medieval period productive capital was not being too widely applied, and so, there was no reason to condemn completely the practice of usury.

Hence, it wasn't until the close of the twelfth century that the prohibition of usury was extended to the laity as well.

The justification for this action was the belief that to take interest for a loan of money was comparable to charging more than the just price. When money was loaned at that time, it was usually for consumption purposes. For this reason, interest taking was looked upon as the exploitation of the weak and the less fortunate. The Church dogma against usury was based largely upon Scripture. To prove their point, the Church Fathers cited the passage in the Gospel of St. Luke which states that "The Mosaic law prohibits usury-taking from a brother; Christ said, lend, hoping for nothing again."

The Church's arguments against usury were based as much on Aristotle as on Scripture; perhaps even more so. Certainly, St. Thomas Aquinas depended chiefly upon Aristotle whose argument against usury was based on the fact that money was really a means of facilitating natural or legitimate exchange. Bareness is an essential characteristic or quality of money. Therefore, usury which made money bear fruit was unnatural.[19]

St. Thomas Aquinas took up this view and combined it with the doctrine of Roman civil law which distinguished between fungible and nonfungible goods. Honey is a res fungibilis, or "consumptible," according to the civil law. As such it has no use distinct from itself; its use cannot be separated from the ownership of it, and a loan must amount to a sale. Therefore, to lend money is to give up ownership of it, and to ask a payment for the use of that which is sold is unjust. St. Thomas's reasoning on this point appears in the following quotation,

> To take usury for a loan of money is in itself unjust, for it is to sell what does not exist, which is an inequality, and, therefore, an injustice. To understand this it must be known that there are some things whose use consists in the consuming of them, as when we consume wine. . . . In articles of this kind (consumptibles), therefore, the use of the thing must not be reckoned separately from the thing itself; he who is given the use is thereby given the thing. And accordingly in lending a thing of this kind, all the rights of ownership are handed over. If therefore a man wanted to sell wine and the use of the wine apart from one another, he would be either selling the same thing twice (meaning that the use is the wine), or would be selling what does not exist. Wherefore he would commit injustice who lent wine or corn, seeking for himself two rewards, the restitution of an equal amount of the article and also a payment for its use, called usury.
>
> But money, as Aristotle says . . . has been devised for the making of exchanges. So the first and chief use of money is its consumption or spending. Wherefore it is in itself wrong to receive (besides the return of the money itself) a price for the use of the money.[20]

With the development of commerce and the greater opportunities for monetary transactions there evolved a gradual modification of the doctrine of usury or the value of money. Aquinas and his brother scholastics recognized a number of exceptions among which were "damnum energens," the case wherein a loss was incurred because the loan was not repaid when due; "lucrum cessans," the case in which a lender could have used the money loaned to his own advantage (opportunity cost); and "periculum sortis," the possibility of not having the loan repaid at all. It should be made clear that these concessions were made concerning commercial dealings and must be distinguished when dealing with loans for consumption purposes.

Following these concessions, other exceptions were made. A buyer on credit was not prohibited from paying more than the cash price; discounts were allowed on bills of exchange; and money combined with labor, as in partnerships, was called productive. However, the retreat of Canon law in general was slow and involved the concession of exceptions rather than the abandonment of its principles on usury as such.[21]

In answering the question why these problems were stressed by the medieval writers, we must seek our explanation in the fact that these men were not economists or businessmen, but rather canonists, theologians, and schoolmen. They were not concerned with economic questions, as such, but rather, only insofar as they had a bearing on the morality of their followers. The teaching of the Gospels about worldly goods had been unmistakable. They had repeatedly warned men against the pursuit of wealth, which would alienate them from God and choke the good seed. In the writings of the Apostles, Matthew, Mark, Luke, and John which are embodied in the Gospels, Christ had declared the poor and hungry blessed, and had prophesied woes to the rich. Instead of anxious thought for one's materialistic welfare, the Gospels had taught trust in God. Charity which gave freely to all who asked should replace selfish appropriation of whatever a man could obtain. The early Christian Church presented to its members the example of men such as Simon Bar Jona, the fisherman (St. Peter), who gave up their individual possessions so that they might seek their salvation.

With such lessons before them, it is not difficult to understand why the early Christian Fathers condemned the pagan world's pursuit of gain. As a matter of fact, it took them so far as to deny to the individual the right to do what he liked with his own. In answer to the question of "what injustice is there in my diligently preserving my own, so long as I do not invade the property of another?" St. Ambrose answers,

> Shameless saying! "My own," sayest thou? what is it? from what secret places hast thou entered into the light, when thou earnest from thy mother's womb, what wealth didst thou bring with thee? . . . That which is taken by thee, beyond what would suffice to thee is taken by violence.[22]

Prior to the eleventh century the Church's beliefs concerning economic behavior could do little harm, because there was scarcely any commerce; however, the rapid development of trade, which had taken place in the twelfth and thirteenth centuries, had rendered commerce a very important element in social life. During this latter period, a class of craftsmen appeared, who could exist only on condition that they were able to sell their manufactures. Hence, economic questions, especially those concerning the relations of buyer and seller, of creditor and debtor, became of primary importance.[23]

To deal with these new questions, a new jurisprudence presented itself—a jurisprudence based on the revised study of Roman law. This law was completely extraneous to the beliefs of the early Church Fathers, for it rested upon a theory of absolute individual property; upon unlimited freedom of contract; and upon the theory that price is a matter of free contract between buyer and seller.

In the light of these developments, the Church's point of view on economic matters, especially as outlined by St. Ambrose and St. Augustine, was being challenged. This caused churchmen once more to turn their attention to economic matters, and to meet what they regarded as the evil tendencies of the Roman law, "the principle of the world," by a fresh application of Christian principles. These principles, especially as applied in the writings of St. Thomas Aquinas, attempted to reconcile theological dogma with the existing conditions of economic life. It is for this reason, therefore, that we find the medieval church writers concerning themselves once again with those same economic questions with which they had grappled at an earlier time.

Given this altered economic environment, did the medieval writers modify their views on free competition? The answer is that they did not. They did not believe that prices should be set by the free interaction of buyers and sellers.[24] These writers were clearly opposed to the principle recognized by the Roman law which stated that price was entirely a matter to be determined by free contract.[25] The Roman law believed that it was entirely up to the contracting parties to determine what the price of an article should be.

Sp. Thomas Aquinas, on the other hand, contended that the institution of selling and buying goods was intended for the common advantage of the whole society. The buyer and seller are both to receive an equal advantage in doing business. However, if one must pay a price in excess of what the article is really worth because of a pressing need, then an injustice is being done to him. According to St. Thomas, the "just price" was to be determined by the rule of doing to others as one would wish others to do to him. As noted earlier, a producer should not sell his wares at a price higher than the cost incurred by him in the manufacture of that commodity plus, return sufficient to maintain him and his family on a standard to which he was accustomed.

St. Thomas maintained that in each state of the market there was a just price from which dealers ought not deviate and it is the moral duty of buyer and seller to try to arrive, as nearly as possible, at this price. Moreover, there are for all articles proper measures and qualities, and these also must be secured; and if the wares have any flaws or defects, it is the duty of the vender to make note of them.[26]

Value is something more subjective; that is to say, it is determined by that which each individual wants to surrender for a thing. However, according to the doctrines of St. Thomas Aquinas and the other theologians, value was considered something objective; it was a quality attached to the thing itself, existing whether he liked it or not, and that he ought to recognize it. In effect, value was something outside the will of the individual purchaser or seller.

The schoolmen were further opposed to the existence of free competition, because experience had shown that individuals could not be trusted to admit the real value of things. From this it followed that it was the duty of the proper authorities of the state, town, or guild to step in and determine what the just and reasonable price of an article should be.[27]

In light of this experience, one can well understand why the medieval church writers did not have confidence in a freely competitive system. There was, indeed, no little divergence between the ethical concept of how business was to be conducted and how it would be directed under a free enterprise system. However, even apart from the

ethical arguments, the idea of control over prices was not unreasonable in the early part of the Middle Ages. The existence of a predominantly rural economy, difficulties of transport, and restricted trade in purely local markets did not provide a suitable environment for the unrestricted play of supply and demand in early medieval society.

In such restricted conditions of business, it was not unreasonable to insist that prices be determined by a common estimate. During this time, trade was still sufficiently haphazard and cumbersome, so that the stipulation and enforcement of regulations to insure a fairly steady supply of goods was justifiable. As a consequence, rules against engrossing, (i.e., the practice of withdrawing a product from a market to boost up its price); regrating (i.e., the practice of buying up commodities on the market for future re-sale at a higher profit); and forestalling (i.e., the practice of purchasing raw materials before they reached the market); and the fixing of prices were subject to legislative control and guild regulation.[28]

NOTES

1. Zimmern, A. E., *The Greek Commonwealth* (1911), Oxford: Oxford University Press, 1973, 268–270.
2. Ingram, J. K., *History of Political Economy*, New York: Macmillan, 1888, 11–12.
3. Ibid., 12–14.
4. Ibid., 14–15.
5. Ibid., 15–17.
6. Zimmern, op. cit., 402–405.
7. Ibid., 406.
8. Roll, E., *A History of Economic Thought*, New York: Prentice Hall, l942, 30.
9. Haney, L., *History of Economic Thought*, 4th ed., New York: Macmillan, 1949, 75.
10. Marshall, *Principles of Economics*, 8th ed., New York: Macmillan; See 10–11, 173–4, 730–3, for the Romans' influence on economics.
11. Roll, op. cit., 31.
12. Ingram, op. cit., 20.
13. Cicero, *De Officis*, BR. I.
14. Aurelius, M., *Meditations of Marcus Aurelius*, IV, 31.
15. Ingram, op. cit., 21.
16. Haney, op. cit., 99.
17. Whittaker, E., *A History of Economic Ideas*, New York: Longmans, Green, 1940, 407.
18. Ashley, W. J., *An Introduction to English Economic History and Theory*, vol. 1, New York: G. P. Putnam, 1906, 138–144.
19. Cossa, L., *Introduction to the Study of Political Economy*, New York: Macmillan, 1893, 143.
20. Ashley, op. cit., 153.
21. Cossa, op. cit., 146.
22. Ashley, op. cit., 126–127.
23. Cunningham, W., *The Growth of English Industry and Commerce*, vol. 1, London: Cambridge Press, 353.
24. Cossa, op. cit., 143.
25. Justinian Digest IV, 16(4) XIX, ii, 22, 3.
26. Ashley, op. cit., 146.
27. Ibid., 140.
28. Roll, op. cit., 41.

Chapter 2

The Mercantilists and the Physiocrats

THE MERCANTILISTS

Mercantilism covers the period from the sixteenth to the beginning of the eighteenth century preceded by two institutions: the manorial or feudal system and the guild system in the towns. It was a period which witnessed the development of the strong central state for economic and/or political purposes. Mercantilism did not emerge from any uniform body of doctrine and differs as it developed in France under Colbertism, Germany under Kameralism, and in England under Mercantilism.

In the case of England, the country—commercially and industrially—came out of the feudal period with a very weak economy. Up to the end of the fifteenth century she had been an agricultural country heavily dependent on the export of leather, fish, and wool, the latter a concomitant of the Enclosure Movement. The Flemish purchased raw wool at one price, converted it into cloth and sold it back to the British at a higher price. The British had the same relationship with the Dutch who were more advanced in the manufacture of finished goods. To pay for these differences between imports and exports, the British had a limited supply of gold and silver with which to make payment. Not having any domestic mines from which to extract the precious metals, the British realized that the only way they could add to their meager supply was through a favorable balance of trade. This would not only enable them to meet their foreign obligations more easily, but more importantly increase domestic investment from the trade surplus, increase the money supply, reduce domestic prices, and make their exports more competitive.

Mercantilist thought was primarily the product of men of affairs. The crystallization of the idea of a national economy was developed not by philosophers, theologians, or even administrators, but by men engaged in business and commerce it was the merchant or man of practical affairs who was the primary contributor to the development of economic thought. As a rule, his writings were fragmentary and unsystematic, endeavoring to "interpret the actualities of contemporary life and the need of government to achieve any and all desired ends."[1]

Before undertaking a consideration of a number of mercantilist writers it should be stated that none of them embraced all aspects of that school of thought. The complete mercantilist, as such, never existed. The doctrine of mercantilism does not represent the views of any individual mercantilist or the mercantilists of any particular country, but rather a loose set of beliefs to which mercantilists everywhere subscribed in a greater or lesser degree. Mercantilism was preeminently rooted in practice. In its origins and by its very nature, mercantilism was anything but a system; it was primarily the product of the minds of statesmen, civil servants, and of the financial and business leaders of the day.[2] There is no unified body of knowledge to explain mercantilism, except to say that it favored a positive balance of trade and a strong central state to determine public policy and enforce the rules for foreign trade.

At best, therefore, all we can do to gain an appreciation of mercantilist thought is to turn to the writings of a number of the best-known contributors.

ANTOINE DE MONTCHRESTIEN (1576–1621)

Antoine de Montchrestien was one of the better-known representatives of mercantilism in France. The author of *Traité de l'œconmic politique*, he was responsible for the phrase "Political Economy" as suggested by the title of his book.

One of the major themes of his book is the importance of work. Everyone should work and avoid idleness. Man, he says, should live in continual exercise and occupation. To insure that is the case, the state should insure that no one remains idle. Men without work are easily tempted to do evil; idleness usurps the vigor of men and

compromises the chastity of women. Idleness is a curse for rich and flourishing states; it is the mother of all vices and the cause of all sins. Thus, for de Montchrestien, both prosperity and morality require the intense activity of the beehive. If the happiness of man depends upon wealth, then that wealth depends upon labor.[3]

The second general characteristic of de Montchrestien's writing is his glowing spirit of nationalism. He contends that the object of the rulers of France, endowed as France is, should be to make the country rightly regarded as "incomparable."[4] France should be self-sufficient and a world in itself. It should dispense with what it receives from neighboring countries; but these other countries cannot do without France.[5]

A country which is thus a world in itself ought to be in a position to maintain her children; "being born in France, it is right that they should live there"; but they cannot exercise that right if they lose their means of subsistence. Much of de Montchrestien's volume tends to be a condemnation of the familiar theme of trade lost to the foreigner, who is represented as in a process of strangling the industries of France. De Montchrestien's arguments follow along the usual lines—the folly of having a good made by another individual which one can produce himself and the evil economy of spending one's substance on what can be obtained by one's own efforts.

For de Montchrestien, the foreigner is a person given to fraud and guile. He associates corruptibility with anything that is foreign. In short, de Montchrestien approves of a vigorous national exclusiveness, hinting at a divine ordinance which has assigned to the inhabitants of any area the use of the elements and the goods which it produces.

The reason de Montchrestien places such stress on the need for all persons in the economy to work incessantly is that if the nation is to be wealthy all must contribute to that wealth by producing. It is only through work that the nation can secure any degree of self-sufficiency and independence from other nations. If a country can produce all the things it needs, reasons de Montchrestien, there will be no need for it to engage in foreign trade except to the extent that it would export only those things which it produced in superabundance.

The reason de Montchrestien advocates such strong national self-sufficiency is that unlike other mercantilists, he does not place too much emphasis on international trade. Rather, he relies more on internal trade, and argues that no country could excel France in happiness, wealth, and glory, if it could only keep the whole of its internal trade to itself. De Montchrestien maintains that there can be no loss for the public in domestic trade such as he fears may result from foreign trade. Foreign trade is thus for de Montchrestien something of a snare and a gamble; it may lead to loss from which danger domestic trade is free.[6] Clearly he comes down on the side of self-sufficiency and national autarky.

PHILIPP W. VON HORNICK (1633–1712)

Philipp W. von Hornick was a member of the Kameralist School which was a form of mercantilism operating in the German states and Austria. His chief contribution to the body of Kameralist literature was "Oesterreich uber alias wann es nur will." Herein, von Hornick holds that the might and standing of a country are defined in terms of the amount of gold and silver it owns and all other things necessary for its well-being. This wealth, he adds, should be derived from a country's own resources and not be dependent on other countries.

In order for a country to attain this status, it must, according to von Hornick satisfy the following rules:

I. The most is to be made of the country's soil; not a clod of earth is to be unconsidered; every form of plant is to be experimented with; above all, if possible, gold and silver are to be discovered.
II. Commodities are to be worked up in the country.
III. Population is to be encouraged, and people turned from idleness to industry (the populationist element is a peculiar characteristic of Kameralism).
IV. Gold and silver, once in the country, are under no circumstances to be taken out for any purpose; equally, however, they are not to be hoarded, but are to remain in circulation.
V. The inhabitants are to get along with their own domestic products, and do without foreign products as far as possible.
VI. When absolutely essential to obtain goods from the foreigner, these should be obtained in exchange for other wares; and not by the payment of gold and silver.
VII. In the event of the unavoidable importation of foreign goods, they should be imported in unfinished form, and worked up in the country.
VIII. Opportunity is to be sought to sell superfluous goods to the foreigner, but these should be in finished form and for gold and silver.

IX. No imports should be allowed whenever there is a sufficient supply of the relevant commodity in the country, and this even if the home article is of inferior quality and of higher price.[7]

From a consideration of these principles, it can be seen that von Hornick's major stress is on national self-sufficiency. The reason he places such emphasis on nationalism is that if the amount of money which flows out to foreigners each year in payment for goods, such as silk, woolen and French wares were saved, this sum could be utilized in reviving Austria. Von Hornick's contention is that if the ten million thalers which the Austrians threw away to the foreigners every year were to be saved, the depressed Austrian economy would be revived. Von Hornick contends that if this sum were saved for twenty years, there would be no country in Europe that could rival Austria. Von Hornick's position is that it is better to pay two thalers for an article which remains in the country than only one which goes out. For the two thalers that remain at home will further the prosperity of the nation whereas the one thaler that goes out of the country stays out and cannot benefit it.[8]

ANTONIO SERRA (1580–1650)

Antonio Serra, one of the most prominent Italian mercantilists, epitomizes the mercantilist creed in his short pamphlet "A Brief Treatise on the Causes Which Can Make Gold and Silver Abound in Kingdoms Where There Are No Mines," published in 1613.[9]

In his treatise, he assumes as a given proposition the importance of a kingdom with a large quantity of gold and silver. He then goes on to say that in the case of those countries where there are no gold or silver mines the supply of such metals must be attributed to four main factors; the volume of industry, the quality of the population, extensive trading operations, and the regulations of the sovereign.

In regard to the first point, Serra explains the rationale for the mercantilist's preference of industry over agriculture. It is safer, because the artisan is more certain of a profit than is the peasant. The latter depends on the weather, and because of the uncertainty attending it his efforts may result in a loss. Serra contends that so long as labor is expended there is always a certainty for gain. Secondly, industry is subject to increasing returns, whereas agriculture is not. The third reason proposed by Serra for the mercantilist's preference for industry is that this form of economic activity has a certain market. Produce is difficult to keep and must be sold for whatever price the market brings. The goods of industry, however, can be withheld for a better market or exported. Hence, there is more profit in industry than there is in agriculture. With reference to the other causes leading to an abundance of gold and silver in a country with no mines, Serra maintains that the inhabitants must expand trade within and out of the country.

Serra is much less certain about the fourth cause, the regulations to be made by the sovereign. Although an important factor in the mercantilist system, Serra concedes that it is not too easy to know how to administer this role, for at one time it may cause one effect and at other times an entirely different one.

Notwithstanding the desirability of a large supply of gold and silver, Serra, like Thomas Mun in England, was opposed to the embargo on the exportation of the precious metals, but he did so with a condition. He insisted that if money was exported for any reason whatsoever, it should be returned with a profit from the kingdom to which it was sent.[10] Now, if these precious metals are so vital to the national interest, it follows that a country should strive to accumulate as large a supply as possible. But if gold and silver mines are not available in a country such as Serra's Italy, what alternatives does it have?

It was in answer to this question that Serra wrote his thesis, proposing and explaining the various means available to a country, as has been noted, to augment its stock of gold and silver.

WILLIAM PETTY (1623–1687)

William Petty, renowned for his work during the second half of the seventeenth century, maintained that when bread is plentiful the cost of production is proportionately higher. Conversely, when bread is in short supply and its price is high the cost of labor is lower. Petty's contention was that when bread is abundant and cheap, the worker will only labor long enough to purchase bread sufficient for him and his family. It may be that one day's labor will be sufficient to pay for this bread, and for this reason, the entrepreneur would have to offer considerably higher wages to induce the worker to toil the other five days of the week. This, of course, would cause the cost of producing a commodity to increase. For this reason, therefore, Petty claims that as bread becomes abundant and cheaper, the cost of labor will rise and with it will also raise the cost of production.

As a result, Petty suggested that a worker should not be paid a wage higher than would be necessary for him to obtain an adequate food diet. The worker should receive a wage which would only enable him to purchase sufficient bread for himself and his family. Petty maintained that if a worker is paid a higher wage than is required for an adequate quantity of food, this will result in his idleness and drunkenness, let alone a higher cost of production.

The reason Petty placed such emphasis on the need for low wages was that only by paying such wages could a sufficient labor supply be forthcoming. A labor force which worked only part-time would cause the cost of production to rise which, in turn, would cause the prices of exports to foreigners likewise to rise. Such an advance in export prices would, of course, cause foreigners to purchase their goods from other countries and thereby limit the home country's ability to earn gold and silver. Thus, it was for this reason that Petty stressed the need for a level of wages which would guarantee the worker only an adequate supply of food for himself and his family.[11]

EDWARD MISSELDEN

Edward Misselden was one of the strongest opponents of the "balance of bargains system," a complex set of provisions minutely regulating individual contracts between English and foreign traders. The purpose of these regulations was to increase a nation's stock of gold which could be used to increase the volume of money circulating in the economy. Not unexpectedly these regulations prohibited the export of the precious metals. As a matter of fact, English merchants dealing in foreign trade were bound by law to bring back cash for their exports of manufactured goods. To guarantee the collection of tariffs on imports and the satisfaction of all the other restrictions imposed on them, traders were subject to close supervision by officers of finance, the equivalent of today's customs inspectors.

As noted, Misselden was opposed to the overregulation of commerce. He was against the antiquated practices of granting monopolies to individuals, favored towns and companies, and other restrictive measures. Instead, Misselden was in favor of free trade and would impose no bar to freedom. But does that not remove him from the ranks of the mercantilists? It may appear to be counterintuitive, but the reality of his position is that the uprooting of monopolies and the promotion of free trade would add immeasurably more to the stock of a nation's precious metals. Quite simply, Misselden suggested a different route to the same mercantile destination—an increase in a nation's supply of gold and silver.[12]

GERARD DE MALYNES

Gerard de Malynes, a Dutchman who lived in England, maintained that "all the causes of the decay of trade are almost all of then comprised in one, which is the want of money." In his most famous work, "A Treatise of the Canker of England's Commonwealth," de Malynes argued that the disease in the decrease of British wealth was attributable to:

1. The transportation of money or bullion.
2. Selling home commodities at too low a price.
3. Buying foreign commodities at too high a price.

All these measures serve to increase imports over exports. The first cause of this imbalance, according to de Malynes, is the abuse of the money exchange between England and other countries. After providing a description of the foreign exchanges, he proposes the following remedies for the imbalance of trade:

1. The exchange for all places should be kept at a certain price;
2. Higher custom duties should be placed on imports and paid by the foreigner; and
3. The transport of bullion should be prohibited.

He believed that the public authority alone could fix the terms of exchange and the value of money irrespective of the cost of the precious metals.[13] The question though, is "through what means was the exchange to be fixed?" de Malynes's contention was that by following his recommendations England would realize an excess of exports over imports. This export surplus would be in keeping, of course, with the tenets of mercantilism, "which

claimed that only in this way could a nation, such as England, without a domestic source of gold and silver add to its stock of the precious metals."[14]

THOMAS MUN (1571–1641)

Of the innumerable English mercantilist writers, Thomas Mun was the acknowledged spokesman of this heterogeneous group. His chief contribution to the body of mercantilist thought was "England's Treasure by Foreign Trade, or the Balance of Our Foreign Trade Is the Rule of Our Treasure." The significance of Mun's work is that it provides a clear explanation of the theory of the balance of trade. Unlike the earlier mercantilists who believed in the balance of bargain theory, for example, each individual transaction with foreigners should result in an export surplus for the home merchant or at least a balancing of exports and imports, Mun contended that such individual balancing of transactions was not important. Rather, his argument was that the overall account of pluses and minuses was the more important measure to consider. Mun set forth the following rules if a nation wished to increase its wealth:

> To sell more to strangers yearly than we consume of theirs in value . . . this rule, moreover, will give us a precise index of the amount of precious metals entering or leaving the country. If exports are £2,200,000 and imports £2,000,000, we may rest assured that the Kingdom shall be enriched yearly by two hundred thousand pounds, which must he brought to us in so much Treasure; because that part of our stock which is not returned to us in wares must necessarily be brought home in treasure.[15]

To achieve this result, Mun argued that it would be well to do away with those laws which prevent the exportation of precious metals from England in payment for individual imports. As a director on the board of the East India Company, Mun could not help but be interested in the outcome of such a proposal. He reasoned that India was a very poor country; therefore, an equal exchange of goods between it and England was not possible. In effect, England could not send as many goods to India as would be necessary to make payment for all her imports from that country, because the Indians could not afford to purchase British goods. As a result, the East India Company was unable to import into England, and then sell to other foreigners as large a quantity of spice and other Indian products as it would have desired.

It was Mun's view that if this obstacle could be removed, the East India Company could purchase as much as it desired from India by paying its merchants in silver. The reason for this is that the Indians were eager to accept silver in payment for their goods. Mun held, therefore, that by allowing silver to be shipped to India a greater quantity of precious metals could be obtained in the long run. With the silver it would send to India, the East India Company would obtain, say, a greater shipment of spices which it would then sell to other countries in exchange for even greater amounts of gold and silver.[16]

In analyzing the reason for Mun's favoring the balance of trade theory, we find that he did so because he believed that through this medium, rather than through the balance of bargain arrangement, a nation could gain a greater supply of gold and silver. Mun claimed that it wasn't necessary for the home nation to achieve an export balance with each country, but rather that its overall exports should be greater than its imports. Hence, because Mun wanted to maximize his country's gold and silver holdings he advocated that an outflow of precious metals be used as a means of acquiring a still greater quantity of gold and thereby promote the economic interests of the state.

THE PHYSIOCRATS

With the increasing discovery of the presence of natural laws in the physical, plant, and animal worlds independent of human will, the question inevitably rose as to whether or not the body alone or too the mind and moral nature of man were also subject to the control of universal laws of nature. As a result of such speculation philosophers of the eighteenth century, along with a group which included novelists, historians, dramatists, and writers of books on politics, economics, education, religion, and the like, came to regard the social order of man as paralleling the physical order and being similarly subject to the laws of nature.[17] Accordingly, the natural law (ordre naturel) served as the foundation for the philosophical structure of the physiocratic system.

The concept of the natural law is considered to be one of the physiocrats' chief doctrines. The physiocrats believed in an ideal order of things consistent with the will of God. By contrast the ordre positif, the laws of man, were imperfect. Nevertheless, they should correspond as closely as possible to the laws of the natural order.

Men are subject to natural law in the same way that nature is kept in balance by physical laws. The production and distribution of goods, the physiocrats maintained, are carried on in accordance with the laws of nature. For example, problems of distribution are resolved as though they were problems of physics.

The physiocrats believed that no one knows an individual's interest better than the individual himself. For them, self-interest is at the base of their system. And from this emerges the maxim, "laissez faire et laissez passer." In this setting, government has a limited role, namely, the protection of life, liberty, and property.

Since liberty and property derive from the nature of man, the purpose of human law should be designed to safeguard them.[18] The physiocrats devoted much attention to "rights" based upon the inherent nature of man. In the economic sphere, they maintained that the chief natural right of man is to enjoy the fruits of his own labor, provided that such enjoyment be not inconsistent with the rights of others. The physiocrats believed that the individual knows his interest best and that he tends to act more in accordance with the law of nature than government. The physiocrats assumed that the individual calculates advantages and disadvantages and recognizes the necessity of cooperating with his neighbor.

Accordingly, governments should never extend their interference in economic affairs beyond the minimum required to protect life and private property and the maintenance of freedom of contract. Domestic as well as international trade should be free of restrictions so that the most advantageous price for all parties might be realized. As a consequence of this philosophy, the famous maxim, "laissez faire et laissez passer, le monde va de lui meme" (let do and let alone, the world goes on of itself) formulated for all time the principle of nonintervention. Private property, freedom of contract, and free competition were the inherent rights of man that flowed inevitably from the operation of the natural law, and to whose guarantee the state must commit itself.

Physiocracy developed largely as a reaction against mercantilism in the mid-eighteenth century. Ideas out of harmony with mercantilist thought began to appear as early as the seventeenth century, but did not reach their crescendo until the advent of the physiocratic system. Among the chief points of divergence between the two schools of economic thought was the physiocratic doctrine that nature and labor, rather than the precious metals as contended by the mercantilists, were the real sources of the wealth of nations. The physiocrats maintained that agriculture was far more important in a nation's economy than foreign trade which begets the precious metals.

The physiocrats held firmly to the importance of agriculture, contending that trade and manufacturing depended upon it whereas the mercantilists believed in the preeminence of trade and the dependence of all other forms of economic activity upon it.[19] The physiocrats further dismissed the mercantile notion of the importance of trade by stating that the goal of a nation's economic policy should be the provision of an adequate supply of the necessities and conveniences of life for a nation's people rather than the maintenance of a favorable balance of trade.

In the mercantilist system the state was economically omnipotent. The mercantilist writers believed that only through a high degree of government control and participation in the economic affairs of the country could a nation succeed in obtaining a sufficient share of the precious metals. The role of government was to foster and encourage foreign trade in every way possible. In the physiocratic system; however, the economic omnipotence of the state was delivered a decisive blow. The physiocrats believed that people knew their own interests better than any government and so should be left free to pursue their own affairs. Therefore, the physiocrats argued that labor and manufacturing should be free and unencumbered by government regulation. According to their reasoning, the freedom of industry and trade would promote prosperity better than any protective duties, bounties, monopolies, and privileged corporations.

Unlike the powerful state which the mercantilists advocated, the physiocrats were in favor of cutting down its functions to the simple maintenance of social order. Despite the fact that the physiocrats believed in a greater degree of freedom, they favored a strong government in a monarch's hands to that of an assembly. This was not because the physiocrats favored a strong government per se, but rather because they considered it more likely for a king to be independent and more disposed to a less regulated economy.

In strong contrast with the tenets of mercantilism which restricted human freedom and liberty, the physiocrats offered their principle of "laissez faire et laissez passer, le monde va de lui-meme." The physiocrats believed that private property, freedom of contract, and free competition were the inherent rights of man. In short, the physiocrats favored freedom as opposed to the mercantilists who championed control and intervention to promote the economic interests of the state.

During the second half of the eighteenth century, in the aftermath of the Seven Years' War, France found itself in difficult economic and fiscal straights. To deal with the crisis a group came forward that hoped to find a

solution in the resurgence of agriculture. In its view, agriculture had been rendered unproductive, lacked investment, and its peasantry was overtaxed. In addition, they decried the failure of French industry due chiefly to its lack of an adequate home market. Their cry was for a return to nature in keeping with the ordre naturel.

According to the physiocrats, only agriculture could produce a produit net (net product). Nature labors along with man to create wealth. All other classes of activity are sterile. They only restore capital and maintain themselves. In fact, even the tools of industry ultimately come from the land. In many quarters it is felt that the preeminence accorded to agriculture and the doctrine of laissez faire are the main contributions to physiocratic thought. However, there is another school of thought which believes that Francois Quesnay's Tableau Economique deserves that standing. Nevertheless, agriculture still plays a very prominent role in the Tableau as well.

QUESNAY'S TABLEAU ECONOMIQUE

Basically, the Tableau showed diagrammatically how the annual production and distribution of agricultural output and manufactured goods flowed through the economy. The Tableau deals with three classes of society, namely, the farmers who represent the productive class; the artisans who represent manufacturing and simply reproduce their own value without any increase in the nation's output; and the proprietors who receive rent for the use of their land. The Tableau is presented in terms of a circular flow showing how the output is produced and distributed with an amount left over for the production of food and raw materials in the next period. Inasmuch as Quesnay was a physician (and a prominent one serving as a physician to the Marquise de Pompadour and Louis XV), it is not surprising that he would present his Tableau in a manner comparable to the flow of blood in the human anatomy.[20] A simplified version of the Tableau may be presented as follows:

The farmers start the year with an output, say, of $5 billion. Of this amount, $2 billion in kind is deducted for the cost of reproducing the output, viz., the farmers' subsistence, the cost of seed, provision for the animals, etc. The remaining $3 billion represent the produit net of which $2 billion consists of food and $1 billion of raw materials. The proprietors or landowners hold nothing, but have a claim on the farmers for a rent of $2 billion. The sterile or manufacturing class possesses two billion of manufactured goods produced in the previous year. The farmers pay the landowners their $2 billion in rents. The landowners upon receiving their $2 billion buy $1 billion of foodstuffs from the farmers who receive half of what they had paid the landowners and purchase $1 billion of manufactured goods. The sterile class buys $1 billion of foodstuffs with the $1 billion received from the landowners. The farmers buy $1 billion of manufactured goods with the $1 billion received from the landowners. Whereupon the sterile class sends back its $1 billion to the farmers for raw materials.[21] After the exchange process has been completed, the landowners will end up with $1 billion in food and $1 billion in manufactured goods; the sterile class will have $1 billion in food and $1 billion in raw materials and the farmers end up with $2 billion in money.

At this point the process starts all over again. The outcome depends largely on the value of the produit net, the difference between the value of output and its cost of production. According to the physiocrats, the farmers bear a heavy responsibility for only they can increase the level of output.[22] The output they generate has to satisfy not only their needs, but those of the rest of society as well. Any decline in that output, be it for a lack of capital or high taxes, will have adverse consequences for the country as a whole.

The significance of Quesnay's Tableau rests in the fact that it shows the dependence and interplay among the principal social classes of the time; how the produit net is produced, circulated, distributed, and is reproduced.[23] It also underscores the importance of the amount of capital available for agriculture. For without additional investment, it would not be possible to increase the net product. As a corollary, it bears noting, too, that without an expanding and thriving agricultural sector, as recommended by Quesnay, the government's revenues could not be increased. Why not? The answer is that all other forms of economic activity were sterile; only agriculture could increase wealth and was the only source for the expansion of the tax base; hence, the concept of the single tax on agriculture (the impot unique).

NOTES

1. Ferguson, J. M., *Landmarks of Economic Thought*, New York: Longmans, Green, 1938, 37–38.
2. Gray, op. cit., 80.
3. De Montechretien, A., *Traité de l'œconomie politique*, 1576, 21.

4. Ibid., 23.
5. Ibid., 24.
6. Gray, op. cit., 72.
7. Ibid., 80–81.
8. Ibid., 81–82.
9. Scott, W. R., *The Development of Economics*, New York: Century Co., 1933, 25.
10. Gray, op. cit., 78–80.
11. Roll, op. cit., 107.
12. Palgrave, H., *Dictionary of Political Economy* (1894), vol. 2, New York: Macmillan, 1940, 778–779.
13. De Malynes, G., *The Maintenance of Free Trade*, 1622, 101.
14. Palgrave, op. cit., 667–678.
15. Abbott, L. D. (ed.), *England's Treasure by Foreign Trade: Masterworks of Economics*, New York: Doubleday, 1947, chapter 2.
16. Gray, op. cit., 73–78, 85–91.
17. Ferguson, op. cit., 53.
18. Haney, op. cit., 177.
19. Scott, op. cit., 54.
20. Niehans, op. cit., 40.
21. Roll, op. cit., 130–131.
22. Newman, op. cit., 38–39.
23. Roll, op. cit., 131–132.

Chapter 3

Adam Smith (1723–1790) and the *Wealth of Nations*

Adam Smith is often considered to be the founder of political economy; however, as has been noted there were others before him who dealt with economic issues, including the medieval schoolmen, the mercantilists, and the physiocrats. Smith accomplished much because others had prepared much of the ground before him. The schoolmen made contributions to the notion of price through their understanding of the just price and the paying of interest on loans. The mercantilists with their penchant for practical concerns made important contributions to the role of the precious metals and foreign trade. The physiocrats with their Tableau Economique came close to providing an account of how the economic system works.

There are many other instances in which Smith incorporated the ideas of others into his *Wealth of Nations*. For example, his theory of self-interest was not original with him, but rather was to be found in the works of Mandeville, Hume, and Locke. His advocacy of low interest rates was borrowed from Sir Josiah Child. His conception of labor as a measure of value had been cited earlier by William Petty. Smith's reference to specialization or the division of labor goes as far back as the time of Plato and the Greek writers. Smith's canons or rules of taxation which included the ability to pay, convenience, certainty, and the efficient collection of taxes had appeared earlier in the writings of the physiocrats.

From this short review it can be seen that Smith's ideas were not completely novel; in fact, it is argued that he did not introduce any new economic concepts or theories. Nevertheless, Smith in his *Wealth of Nations* did bring together a vast amount of knowledge and his interpretation of it.[1] To his credit, he put together many of the concepts and theories that had preceded him into a single system of thought.

In writing his magnum opus, Smith's purpose was not so much to write a book explaining the tenets of economics, but rather it was a reaction against the overregulation of business and to bring about change to a more liberal economy. Quite simply, his purpose was to remove the system of controls that the feudal and mercantilist institutions had imposed on individual freedom. Smith believed that only freedom and competition could insure that everyone received the full value of his worth.[2]

Smith's views were diametrically opposed to those of the mercantilists. Unlike the mercantilists who were ardent defenders of the omnipotence of the state, Smith was opposed, with limited exceptions, to any program which had the state as its sponsor. Like the physiocrats, Smith believed in the doctrine of laissez faire. According to him, laissez faire together with the self-interest of every individual and the force of competition were more effective regulators of economic activity than any form of governmental intervention.[3] Smith insisted that if the government did not interfere in the affairs of its citizens, the economy would take care of itself. Regulation and planning would assert themselves automatically in a system where an optimum degree of liberty prevailed. Under such a system there would be automatic checks operating and so there would be no possibility for excesses.

There is no denying that the role of the government under Smith's model was entirely opposed to that assigned to the state by the mercantilists. For as he writes in book 4, chapter 9 of his *Wealth of Nations*,

> All systems, either of preference or restraint, therefore, being thus completely taken away, the obvious and simple system of natural liberty establishes itself of its own accord. Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest in his own way, and to bring both his industry and capital into competition with those of any other man, or order of men. The sovereign is completely discharged from a duty, in the attempt to perform which he must always be exposed to innumerable delusions, and for the proper performance of which, no human wisdom or knowledge could ever be sufficient; the duty of superintending the industry of private people, and of directing it towards the employment most suitable to the interests of society.

This is not to suggest that Smith was opposed to all forms of government intervention in the economy, for as he adds,

> According to the system of natural liberty, the sovereign has only three duties to attend to; first the duty of protecting the society from the violence and invasion of other independent societies; secondly, the duty of establishing an exact administration of justice; and thirdly, the duty of erecting and maintaining certain public works, which it can never be for the interest of any individual or small number of individuals to erect and maintain; because the profit never pay the expense to any individual, or small number of individuals though it may frequently do much more than repay it to a great society.[4]

This passage makes clear that while there is a role for the government to play, that role is limited to those goods and services which the public cannot profitably produce itself, such as public goods, but for the rest, Smith leaves it to the free market to decide.

For Smith, the wealth of a nation was not to be measured in terms of gold and silver as did the mercantilists, but rather in terms of labor which produces all those things that are consumed. The wealth of a nation, according to Smith, depends upon the ratio between the annual produce and the number of consumers. Effectively, the net wealth depends upon the productivity of labor (i.e., the skill and dexterity of the workers and the ratio between productive and unproductive workers). To illustrate, the carpenter who constructs a lectern is productive, but the professor who uses it is not. The reason for this strange distinction is that Smith thought in terms of commodities and excluded services.

The central issue for Smith then was, "how can the wealth of a nation be enhanced?" His answer was through a simple system of natural liberty. Every man, as long as he does not violate the laws of justice, should be left free to pursue his own interest in his own way and to bring both his industry and capital into competition with those of any other man or order of men. Effectively, a nation's wealth depends upon the satisfaction of two prerequisites: (1) self-interest and competition; (2) a condition of laissez faire or noninterference on the part of government.

Since each person knows his interests better than anyone else, he should be left free to follow them. Although not intended, each person, by following his own best interests, adds not only to the wealth of the nation, but to the well-being of his fellow man as well. Smith thought that reliance on the free market would bring a far greater return than would a system of regulation and control. He had great confidence in the Laws of the Market. The drive of individual self-interest among similarly motivated individuals results in competition and provides those goods that society wants in terms of quantity, quality, and price.[5] Accordingly, Smith states that "it is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their self-interest."[6]

It is in this context that Smith refers to "the invisible hand"—that force in the market place which leads man and societies to produce the greatest good for the many. Although not intended, the pursuit of individual self-interest also works to the advantage of others.[7] The best interests of society could not be better served than if man had consciously decided to do good for others.[8]

Granted, Smith's claim about the superiority of a free market, is it not possible for this self-interest to lead to an exploitation of the market? Smith does not believe that is possible, because the market is self-regulating through the force of competition. For example, if a producer overcharges or provides a good of inferior quality, it will be rejected by the consumer. In its place, other producers will step in, charge a lower price and offer a substitute of higher quality. Similarly, if consumers want more of one good and less of another, producers under the pressure of competition will adjust their product lines to meet the altered demand. Self-interest and competition insure a self-regulating market. Paradoxically, the market is both free and not free at the same time.[9]

In assessing the status of England's economy, Smith was especially impressed by its advances in productivity. He attributed that success to specialization or the division of labor. This was by no means a new concept; in fact, it was at the root of Plato's ideal state.

The point he makes is that specialization makes possible a higher level of output than if a single worker were to produce a good by himself from start to finish. To best describe the concept, Smith cited the celebrated case of the pin factory. A single worker producing a pin from start to finish could not produce more than twenty or more likely ten pins a day. By contrast, if the process of production were subdivided into two or three distinct operations, with each worker performing the same function, a total of forty-eight thousand pins could be made by ten workers in a single day.[10]

The advantages of specialization, according to Smith, are that they increase the dexterity of labor; save time; and lead to innovations and invention. Although he does not cite it, the latter factor is the most important one for increasing productivity and not the division of labor, as such. Smith assigns this division of labor to man's inherent urge to cooperate and seek the assistance of others.[11] But this division of labor cannot stand alone, for without the use of money there is no way a worker can be compensated for the value he has added to a jointly produced good short of disassembling that good into its parts. To do so would, of course, vitiate the very purpose of specialization. Accordingly, Smith moves on to a consideration of money and value.

Smith begins his consideration of value by distinguishing "value in use" from "value in exchange." Smith holds that some commodities have a large value in use but at the same time have a small value in exchange. For example, water has a great value in use, but a small value in exchange. Diamonds, on the other hand, he contends, have little utility for the individual, but have a great value in exchange. This point which Smith makes is subject to questioning, for unless an item, such as a diamond, also has value in use, how can it possibly command value in exchange? The point is that unless an object has utility, such as it renders the owner some satisfaction, that person would not want to exchange or give up anything for it; hence, it would not have value in exchange.

Smith may have been correct in his characterization of water, but not for diamonds. A diamond does have value in terms of the utility and satisfaction (or conspicuous consumption) it can create for its owner. For that reason, it can command value not only in terms of utility but in exchange as well. It was this paradox that provided the Austrians their starting point for the doctrine of marginal utility.

Despite his misrepresentation of value in use Smith proceeds to base his theory of value on the distinction between it and value in exchange:

> The things which have the greatest value in use have frequently little or no value in exchange; and, on the contrary, those which have the greatest value in exchange have frequently little or no value in use. Nothing is more useful than water; but it will purchase scarce anything; scarce anything can be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it.[12]

Although Smith mentions "value in use," he does so only for the purpose of contrasting it with "value in exchange" the power of purchasing other goods. He considers value in use and value in exchange as practically independent and unrelated. Nevertheless, he asks "Why should they differ in the market place?" His answer is that the actual market price is unstable because of the unstable connection between demand and supply or as he puts it,

> It is adjusted, however, not by any accurate measure, but by the higgling and bargaining of the market, according to the sort of rough equality which, though not exact is sufficient for carrying on the business of common life.[13]

It seemed impossible that their constant fluctuation should represent the true value of the commodity. Smith reasoned that its real value could not vary from one moment to the next or from one place to another. Hence, in an effort to discover a more stable and a more constant element beneath the continual fluctuations of price movements, Smith developed his initial theory of value.

Smith's earliest theory was that labor is the sole source of value. The amount of labor in each good is equal to the amount of labor it can receive in exchange for any other good. Smith points to the practice in a primitive state wherein goods are exchanged in the same proportion or ratio as their labor content. In this state, each worker receives the full value of his labor.

In formulating his theory, Smith, at tines seems to be discussing the cause of value and at other times the most stable measure of value in the ever changing market place. But to consider the determinant of value and the ideal measure of value raises two questions. Initially, Smith starts out to resolve the latter question as noted in the opening statement in Book I, chapter 5 of his work:

> The value of any commodity, therefore, to the person who possesses it, and who means not to use or consume it himself, but to exchange it for other commodities, is equal to the quantity of labour which it enables him to purchase or command. Labour, therefore, is the real measure of the exchangeable value of all commodities.[14]

In short, the value of an object which an owner wishes to exchange for another object is best measured by the quantity of labor which its selling price will command. Smith is partial to labor as a standard or measure of value because whereas gold and silver vary in value, equal quantities of labor at all times and circumstances will have equal value to the laborer.[15] Presumably, he means that an aching back of a longshoreman is equivalent to an aching back of a farmer.

After determining the measure of value, Smith undertakes a consideration of what constitutes the determinant of value. Smith is somewhat confusing here because like the measure of value he again makes labor the cause of value.

> The real price of a good for the man who wants to acquire it is the toil and trouble of acquiring it. Labour was the first price, defined in terms of money, for the purchase of all things. It was not by gold or silver, but by labour, that all the wealth of the world was originally purchased.[16]

From this passage, it can be stated that Smith's earliest theory regarded the quantity of labor embodied in each commodity as the measure of that value and the effort expended in its production the cause of that exchange value.[17]

In order to understand Smith's theory of value, one should keep in mind the distinction between cause and determinant on the one hand, and measure on the other. At several points the two ideas, labor as the cause of value and labor as the measure of value are to be found side by side.[18] At the very outset, this twofold aspect is suggested by Smith's assertion that the fund of national wealth consists "either in the immediate produce of that labour, or in what is purchased with that produce from other nations," and again when he says that "the quantity of labour commonly employed in acquiring or producing any commodity, is the only circumstance which can regulate the quantity of labor which it ought commonly to purchase, command, or exchange for it."[19]

Smith had scarcely found a firmer foundation for exchange value than the fluctuating forces of supply and demand when he realized a number of shortcomings to his labor theory of value. Not all labor is the same; it can vary in quality and intensity of effort. He acknowledges that difficulty in the following terms:

> There may be more labour in an hour's hard work than in two hour's easy business; or in an hour's application to a trade which it cost ten years' labour to learn, than in a month's industry at an ordinary and obvious employment. But it is not easy to find any accurate measure either of hardship or ingenuity.[20]

A second problem which Smith encounters is the fact that labor by itself cannot produce anything; something must be contributed not only by labor, but by land and capital as well. However, neither of these is a free good and there must, therefore, be some cost entailed in their attainment. As a result, Smith modifies his earlier theory by admitting that labor is the cause of value only in a primitive state. In all other circumstances labor is neither the sole source nor the measure of value.

Having dismissed labor, Smith now seeks a new determinant of value. This time he hits upon the cost of production as the likely source. Accordingly, he now defines the real or natural price as the price of a good valued at the cost of its production. On both this and his earlier attempt Smith was trying to determine the real or natural price which was behind the fluctuations of everyday market prices.

Essentially, Smith was trying to answer the same question, but with a different approach. He reasoned that if the price of a good exceeds the cost of labor and materials, something must be left over in the form of profits for the entrepreneur. Therefore, labor cannot be the sole determinant of value. The price of a commodity now makes provision for the payment of wages, profits, and rents. These payments are referred to by Smith as the natural rates and their sum equals the cost of production. When that value equates with the market price, the latter becomes a natural price.[21]

According to Smith, the commodity is then sold for what it is truly worth: "When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of the labour and the profits of the stock employed in raising, preparing, and bringing it to market, according to their natural rates, the commodity is then sold for what may be called its natural price." The commodity is then sold for what it is really worth, for example, at the cost to the person who brings it to market.

In sum, Smith provides us with two theories of value. In one instance, he makes value dependent upon labor and in another, makes it contingent on the cost of production. These two meanings remain juxtaposed in *Wealth of Nations*, because it seems that he never made up his mind on which side of the fence to fall. As a result, his analysis of value is full of contradictions—contradictions which are difficult to reconcile.[22]

In presenting his cost of production theory of value, critics maintain that Smith should have provided a more adequate explanation of the factors that determine it. In the case of labor, wages were determined by the bargain struck between the master and the worker.

That bargain was influenced by a number of factors: the disagreeableness or agreeableness of the work; the cost and length of time required to achieve proficiency in the position; the amount of trust required for the performance of the work; and the degree of risk and uncertainty attending the successful completion of the work. Nevertheless, it turns out that in a dispute, the masters had the upper hand and could hold out longer because they had superior resources. Moreover, the workers during Smith's time could not consolidate their power into unions because combinations of workers were prohibited. Nevertheless, there was a floor below which wages could not fall, namely, the subsistence wage foreshadowing Ricardo's Iron Law of Wages.

Despite this explanation of wages, the view persists that Smith's analysis was less than satisfactory. The cost of the factors of production—such as wages, rent, and interest—he reasons, are dependent upon the selling prices of the commodities they produce. However, this reasoning is erroneous because it is redundant to say that the cost of production depends upon the returns to the factors, and the returns to the factors depends upon the cost of production. This reduces to circular thinking because it ends up with value determining value.

Perhaps, a study of the returns to the factors of production would have cleared up any obscurity that still clung to the theory of prices, but it was not forthcoming and so this analysis turned out to be one of the most inadequate portions of Smith's book.[23] Despite the inverse relationship between wages and profits, the optimistic Smith believed that a growing economy would make possible an increasing return to both capital and labor, albeit not necessarily at the same time. A rising tide lifts all boats. Smith was well aware of the large fortunes being made by enterprising capitalists and applauded their success, because that wealth would redound to the benefit of the working class as well. How so?

An expanding economy would call forth an increase in the demand for capital. This in turn would lead to an increase in the demand for labor which in turn would lead to an increase in wages, but a lesser return for capital. Profits would be further reduced by rising interest rates and the law of diminishing returns. In time, though, profits would recover at the expense of lower wages as wages increased the workers' standard of living increased and with that population increased. That would in time lead to an increase in the labor force and a resulting decline in wages.

However, the process would not stop here, but reverse itself as the renewed profits would stimulate an increase in the demand for capital and another increase in the demand for labor with the same earlier results.[24]

Smith ascribed these advances to the market mechanism and believed that if left alone would produce a constant improvement in the human condition. However, he did acknowledge that in the very long run, resources would run out and capital accumulation would be no longer possible. At the end, the landlord will have done well and capital will no longer have a profit, but just an ordinary wage of management, and labor a subsistence wage. Thus, even for the optimistically minded Smith the improvement of humankind did in the very long run have its limits.[25]

JEAN-BAPTISTE SAY (1767–1832)

Jean-Baptiste Say was the popularizer of Adam Smith and the founder of the classical school of economics in France; however, his prominence was due to the formulation of his Law of Markets. Basically, that law holds that general overproduction is impossible because supply creates its own demand.[26]

During Say's time, machinery was being introduced into an economy which heretofore had been almost exclusively dependent upon labor. With the expansion of industry a fear developed that there would soon be an overproduction of goods. To counter that fear, Say argued that a product is no sooner created than from that moment it creates a purchasing power for other goods to the amount of its own value. For example, if a product is worth $10, it will create a demand for $10 worth of other goods and services. The argument is certainly plausible in a barter economy, because the only way a person can recoup the value of his good is to exchange it for something of equal worth. In this case, supply has created an offsetting demand.

As a corollary to Say's Law, the most effective way to stimulate an economy experiencing difficulty would be to increase output. The increased volume of goods would generate a like amount of purchasing power which sui generis would create a demand for the increased output. According to Say's Law, overproduction was not possible, because of the equality between the value of goods produced and the resulting purchasing power or

income. Nevertheless, Say did admit that it might be possible to have a surplus of a given good, but not a general overproduction. If there is an overproduction of one good, it means that there must be an undersupply of other goods, because that is where the money is going. The reason for the overproduction of the given good is not that there was a shortage of money, but that consumers were directing their expenditures to other goods for which there emerged a shortage. To rectify the imbalance, therefore, the prices of unsold goods should be reduced and the output of goods in higher demand should be increased. In this way overproduction or gluts of goods could be avoided.

Say's Law of Markets has not been without controversy. Very early on Malthus questioned its validity by pointing out that overproduction and gluts were possible, but was unable to refute the law as defended by his friend, David Ricardo. The truth of the matter is that Say's Law would hold in a barter economy, as noted, for there is no other way whereby one can recoup the value of one's product. The assumption of flexible prices is also necessary if gluts are to be avoided.

In a monetary economy, the validity of the law becomes highly questionable. But even in a monetary system it would hold true if all buyers and sellers came into the market at the same time to buy and sell. But that is not the case. All buyers do not meet all sellers at the moment the producers are ready to dispose of their wares. There is no simultaneity of action by the two parties. There may well be a time lag between the time an individual receives and spends the income he receives; therefore, goods can remain unsold. It is also possible that there may not be an adequate demand for the goods that are produced and prices sufficiently flexible to dispose of them. Most importantly the money received may not be spent at all and used instead by the individual to increase his net savings. Therefore, it is not supply that determines demand, but rather it is demand that determines supply, as Keynes pointed out. For unless demand is forthcoming, the supplier will not be able to dispose of his supply of goods.

LORD LAUDERDALE (1759–1830)

In his treatise, "An Inquiry into the Nature and Origin of Public Wealth and Private Riches," published in 1804, Lord Lauderdale criticized Smith for equating public wealth with private riches. Smith's contention was that public wealth consisted of the total wealth of all the people in a society. Lauderdale, however, made a distinction between public and private wealth. He defined public wealth as the sum total of "all that man desires as useful and delightful to him," and private wealth as the sum total of "all that man desires as useful or delightful to him which exists in a degree of scarcity."[27] [28]

In Lauderdale's view, the difference between the two forms of wealth is caused by the scarcity factor. In effect, an item which is scarce adds to an individual's riches, but that would not add to public wealth as he points out:

> What opinions would be entertained of the understanding of a man, who, as the means of increasing the wealth of a country, should propose to create a scarcity of water, the abundance of which was deservedly considered as one of the greatest blessings incident to the community? It is certain, however, that such a projector would by this means, succeed in increasing the mass of individual riches.[29]

It is clear in terms of what Lauderdale has spelled out, that an increase in the value of one person's riches need not necessarily add to the public's wealth As a matter of fact, the value of the one increases at the expense of the other. We have, in effect, a reciprocal relationship between the two—a constant sum game.

The failure of Adam Smith to distinguish between public wealth and private riches was also responsible, in Lauderdale's judgment, for a second error in the *Wealth of Nations*, namely, the doctrine that saving is one of the chief, possibly the chief, means of increasing public wealth.[30] Smith reasoned that labor is the active productive agent; capital sets labor in motion; and capital is the result of saving. Therefore, the more saving the more capital; the more capital the more labor set in motion; and the more labor set in motion the more wealth. Lauderdale attempts to show the shortcoming of this reasoning by stating that capital as well as labor is an active factor in production; that it works in substantially the same manner as labor; and that its true function, instead of being that of setting labor in motion is that of supplanting a portion of labor which would otherwise be performed by the hand of man.

In keeping with this reasoning, Lauderdale held that,

> The wealth of man can alone be increased by labor, whether personal or performed by capital, employed in increasing the quantity, and ameliorating the quality of the objects of his desire; and by labour whether

personal or performed by capital, employed in giving form to, and adapting commodities for, consumption.[31]

Lauderdale's conclusion, therefore, was that wealth need not be increased chiefly by capital, as Smith maintained, but could likewise be augmented by labor. In Lauderdale's estimation, Smith overemphasized the role of saving Lauderdale was further opposed to Smith's overemphasis of saving on the grounds that if parsimony if given too virtuous a quality, it would result in underconsumption and overproduction. Lauderdale was similarly opposed to the sinking fund, because money tied up in such a fund takes money out of circulation and results in a reduction in spending.

Lauderdale was certainly correct in asserting that labor can add to a person's well-being either with or without additional capital and his reservations about too much savings. Nevertheless, there is no gainsaying that if Smith's savings were converted to investment, it would be a powerful force in raising the level of output and income.

JOHN RAE (1796–1872)

The American writer, John Rae (1796–1872), provides another early criticism of Smith's work. Rae was a Scotch immigrant, first to Canada and later to the United States. His book entitled, *Statement of Some New Principles on the Subject of Free Trade, and of Some Other Doctrines Maintained in the "Wealth of Nations,"* was published in Boston in 1834.

Rae is critical of his countryman on two grounds. First, that the national wealth can be increased by the accumulation of private wealth and secondly that there is a natural harmony between private and public wealth. In regard to the first issue, Rae notes that the individual accumulation of wealth, as a means of advancing the national wealth, has limits beyond which it cannot grow. For example he points out that there is a limit to the number of flails (hand instruments for threshing) a country may profitably use. Beyond a certain point the mere accumulation of flails will accomplish little, if anything. Therefore, in order for the national capital to increase further it will be necessary for the economy to grow. Flails must be replaced by threshing machines. In short, the point Rae makes is that if a nation wishes to increase its capital it will need more invention and innovation.

Like Lauderdale, Rae dispels Smith's contention that there is an identity between private and public wealth. Individuals may add to their capital by acquiring a larger portion of existing wealth. When that happens, one may grow rich while another remains poor or may become even poorer, because what the former gains the latter loses. While one may add house to house and farm to farm, the national capital itself may remain but little changed. This is so because there has been only a transfer of goods from one person to another without any increase in the nation's overall wealth. This, essentially, is what Rae is saying in the following: "As individuals seem generally to grow rich by grasping a larger and larger portion of the wealth already in existence, nations do so by the production of wealth that did not previously exist. The two processes differ in this, that the one is an acquisition, the other a creation."[32]

Clearly, Rae assigns a role of primary importance to investment. Individuals may grow rich by taking a larger share of the wealth already in existence, but nations must increase their wealth by investment and an increase in production. Conceivably, private and national wealth may both be increased; however, that is not the case if one's wealth derives from existing wealth. For in a constant sum game one gains and another loses there is no natural identity between private and public interests. To underscore his point, Rae asks, "do the labours of the cool, calculating gambler or of the sharper, add to public wealth? Does the spirit of keen bargaining add to public wealth?"[33]

From these and other examples Rae calls into question the benefits which Smith assigns to the invisible hand. Self-interest guided by an invisible hand may not in fact lead to the promotion of larger ends. As a result, Rae is led to a reasoned refutation of laissez faire and support for enlightened government interference.[34] According to Rae, there is no presumption against government and no presumption in favor of laissez faire. To prove that government regulation was permissible, Rae depended on the distinction between the natural and the artificial. He says that society is natural, proceeding from the operation of natural forces, both subjective and objective. But the statesman cannot be separated from society nor can the actions generated by him be called unnatural. It follows from this, therefore, that the interference of the legislator is natural and often beneficial, because through legislation he may promote intelligence and invention, and prevent dissipation of the community's resources.[35]

Rae is also in disagreement with Smith on the question of the division of labor. He contends that the division of labor springs from invention rather than that invention springs from a division of labor, as Smith holds. Hence, according to Rae, the division of labor is the effect rather than the cause of increased productivity. There is, to be sure, an element of truth in Rae's criticism, for invention and the division of labor are closely interrelated each being now cause and now effect.[36]

NOTES

1. Newman, op. cit., 55.
2. Roll, op. cit., 149.
3. Cossa, op. cit., 234–235.
4. Smith A., *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), Cannan edition, vol. 1, London: Methuen, 1904, 30.
5. Heilbroner, op. cit., 54.
6. Smith, *Wealth of Nations*, Cannan edition, 54.
7. Ibid., 286.
8. Newman, op. cit., 52–53.
9. Heilbroner, op. cit., 65.
10. Smith, *Wealth of Nations*, Cannan edition, 4–5.
11. Gray, op. cit., 114.
12. Smith, *Wealth of Nations*, Cannan edition, 30.
13. Ibid., 33.
14. Smith, A., *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), Everyman's Library edition, vol. 1, New York: Knopf, 1991, 26.
15. Ibid., chapter 5, 28–29.
16. Ibid., 26.
17. Roll, op. cit., 165.
18. Haney, op. cit., 219.
19. Smith, *Wealth of Nations*, Canaan edition, book 1, chapter 5, 32.
20. Ibid., 1.
21. Gray, op. cit., 119–120.
22. Smith, *Wealth of Nations*, Everyman's edition, vol. 1, book 1, chapter 7, 46–49.
23. Gide, C. and Rist, C., *A History of Economic Doctrine*, Boston: D. C. Heath & Co., 1915, 80.
24. Heilbroner, op. cit., 67–68.
25. Gray, op. cit., 122.
26. Newman, op. cit., 89–91.
27. Lauderdale, J. M., *An Inquiry into the Nature and Origin of Public Wealth* (1804), 2nd ed., Edinburgh: Archibald Constable & Co., 1819, 57–58.
28. Ibid., 57–58.
29. Ibid., 41–42.
30. Scott, op. cit., 190.
31. Lauderdale, op. cit., 102–103.
32. Rae, J., *Sociological Theory of Capital* (1834), Mixter edition, London: Macmillan, 1905, 383.
33. Ibid., 343.
34. Gray, op. cit., 20.
35. Haney, op. cit., 386.
36. Ibid., 386.

Chapter 4

The Classicists

THOMAS MALTHUS (1766–1834)

The standard explanation of why Thomas Malthus wrote his book, *Essay on Population*, is that it was to be a refutation of his father's arguments in favor of William Godwin. In 1793, Godwin published a work entitled *Enquiry Concerning Political Justice and Its Influence on Morals and Happiness*. The author was a precursor of modern anarchism. He took the position that government is largely responsible for the unhappiness and misfortune of man and that even the best form of government is evil.

Like his colleague, Condorcet, he advocated a Community of Property. Godwin did not advocate a violent overthrow of the present government. Rather, he was a "philosophic anarchist" who thought that the quality of life could be improved under the political arrangement he was suggesting. Godwin believed in the perfectibility of man. In his book he developed, in particular, the possibilities of the advancement of science and of the influence of reason upon the conduct of men. The former, he believed, would so increase the productivity of human labor that all material wants could be satisfied by a half-hour's work per person per day. But Godwin's model was not without challenge. If the conditions Godwin predicted became real, population would increase without limit. Godwin's retort was that with only three-fourths of the earth occupied, there was no need to worry about overpopulation. Various inventions will be forthcoming and those improvements will substitute for food. People will take pills for nutrition. Moreover, he argued that reason would dominate men to such a degree that reproduction would cease. In this state man will become so perfect that he may become immortal on earth.[1] In this state, there may not be any concern about overpopulation.

Therefore, it was in reply to the arguments advanced by Godwin and subscribed to by the elder Malthus that Thomas Malthus in 1798 published the first edition of his famous *Essay on Population as It Affects the Future Improvement of Society*, *with Remarks on the Speculations of Mr. Godwin, M. Condorcet, and Other Writers*. That Malthus had to go through the task of writing a dissertation on population in order to settle a domestic debate hardly seems to be a full and sufficient explanation for the origin of his work. Of more importance, perhaps, than any one factor in inducing Malthus to write his thesis was the economic condition of England just prior to and during the time at which he wrote. During the early part of the eighteenth century, the agricultural prosperity of England had been substantial, but in the latter half of the century it seemed that there were more mouths to feed than there was grain to go round.

In addition, the evil effects of the Industrial Revolution were starting to manifest themselves at this time. Unemployment, poverty, disease, and riot were all products of the transition from an agrarian to an industrial economy. These factors made the agricultural situation still more worrisome. During this time, too, various social and communistic schemes were starting to assert themselves, especially in France.

To add further to the bleak conditions of the times, the English Poor Laws were being very badly administered. The independence of the laborer was being sapped; incompetence and pauperism were widespread.[2]

Certainly, a person could not help but be influenced by these conditions and the environment surrounding him; least of all a person of Malthus's character. Clearly, it was the conditions of the time and the food requirements of a growing population that provided Malthus his lifetime work.[3]

In the first edition, Malthus submits two postulates: first that food is necessary for the existence of man, and secondly that the passion between the sexes is necessary and could not be generally weakened or diminished without injuring man's happiness.[4] In analyzing these two postulates, Malthus noted that owing to the natural desire between the sexes, population tends to increase at a more rapid rate than the available food supply. The misery and vice which necessarily result from this deficiency render impossible Godwin's and Condorcet's contention about the perfectibility of man.

Malthus attempted to prove this tendency of population to increase faster than the food supply by contrasting the results of a geometrical and an arithmetical progression, the former illustrating the natural rate of increase for population and the latter for the food supply. Malthus reasoned that if population should increase at a geometric rate and the food supply at an arithmetic rate every twenty-five years the results would be as shown in Table 4.1.

Table 4.1 The Growth of Population Relative to Subsistence

Population 1	2	4	3	16	32	64	128	256
Subsistence	1	2	3	4	5	6	7	8

This means that if the population doubles itself in the first twenty-five-year period, a 100 percent increase in population will occur. If subsistence, which progresses at an arithmetic ratio, increases during the first twenty-five-year period, it too doubles itself and so will keep abreast with population. If in the second twenty-five-year period population is again doubled, because of its geometric progression, the rate of increase will again be 100 percent. Subsistence, however, which still continues at an arithmetic rate will increase by only 50 percent in the second twenty-five-year period. As time goes by its rate of increase will be lower and lower (e.g., 100 percent, 50 percent, 33 1/3 percent, etc.).[5]

The essence of this argument was contained in the second edition of Malthus's essay. The rate according to which the productions of the earth may be supposed to increase will not be so easy to determine. Of this, however, we may be perfectly certain, that the ratio of their increase in a limited territory must be of a totally different nature from the increase of population. One thousand millions are just as easily doubled every twenty-five years by the power of population as one thousand:

> But the food to support the increase will by no means be obtained with the same facility. Man is necessarily confined in room. But population, could it be supplied with food, will go on with unexhausted vigour; and the increase of one period would furnish the power of a greater increase the next, and this without any limit.[6]

According to this argument, the available food supply acts as a restraining force on population. The poor, he said, were themselves responsible for this restraint. They had no right to complain about the high prices of foodstuffs, because they were responsible for their increased numbers. Surprisingly for a man of the cloth, he was in favor of a protective tariff on grain (which ostensibly was supposed to increase domestic production) which would cause its price to rise even further; a position which placed him at odds with the classical free traders. Malthus describes this force under the heading, "Checks to Population," which he classified subjectively as misery and vice and objectively as positive and preventive.

Understandably, the publication of Malthus's essay on population caused a great deal of discussion and criticism. Because of the widespread attention which his initial **Essay** received, Malthus was encouraged to expand his inquiry to ensure that it would achieve greater scientific accuracy. With that objective in mind, he made an extended trip of Europe, visiting such countries as Norway, Sweden, Russia, and Switzerland. His absence from England plus his continued researches into the question of population led Malthus to write a second edition to his *Essay* in 1803 entitled, *An Essay on the Principle of Population, or A View of Its Past and Present Effects on Human Happiness with an Inquiry into Our Prospects Respecting the Future Removal or Mitigation of the Evils Which It Occasions*. Malthus's purpose in writing this second edition was to turn his earlier impulsive production into a more mature and reasoned discussion of the whole question. But more specifically, what was the difference between these two editions?

In some aspects, the second edition was very different from its forerunner; especially in regard to its treatment of the restraining forces on the increase in population. His change of perspective in this regard altered his whole argument on the question of population. In the first edition of his *Essay*, Malthus undertook a consideration of the restraining influences on population under his treatment of "Checks to Population." When viewed objectively these checks were classified as positive and preventive, the former including "every cause, whether arising from vice or misery, which in any degree contributes to shorten the natural duration of human life."[7] This category consists of wars, disease, famine, and all the other evils which, in general, arise unavoidably from the laws of nature. The second category includes practices such as promiscuous intercourse, unnatural passions, violations of the marriage bed, and improper acts which if they could be avoided would lead to a lower birth rate. Viewed subjectively, he classified these same checks as "misery" and "vice," with the latter ultimately resulting in

misery as well, but being distinguishable from it in the initial stages by the fact that its immediate effects may be happiness.

In the second edition of his *Essay*, Malthus added to the two subjective checks to population (misery and vice), a third one which he called "moral restraint." This, he described as a postponement of marriage unaccompanied by irregular gratification.[8] Malthus contended that although this preventive check was a restraint on a natural inclination and may lead to some unhappiness, in the long run it will spare the people much misery. But, argues Malthus, we have the same obligation to undergo this unhappiness as we have of having to bear any of the other discomforts associated with our practicing any of the other virtues. In his own words Malthus states: "if moral restraint be the only virtuous mode of avoiding the incidental evils arising from this principle (of population), our obligation to practice it will evidently rest exactly upon the same foundation as our obligation to practice any of the other virtues."[9] To put it briefly, Malthus advocates that an individual postpone his marriage until such time as he can assume the full responsibility of bringing up a family. In addition, this third preventive check which he calls moral restraint would dictate that people abstain from all sexual intercourse outside the bonds of matrimony.[10]

In fairness to Malthus, it should be stated that he was not in favor of artificial birth control, as many people seem to think. As a matter of fact, he vehemently condemned all who favored the free exercise of sexual intercourse, whether within or without the marriage bond, through the practice of voluntary sterilization. He groups all such preventive practices as vices and contrasts their evil effects with the practice of moral restraint. Malthus is very definite on this point, as noted in the following:

> Indeed, I should always particularly reprobate any artificial and unnatural modes of checking population. The restraints which I have recommended are quite of a different character. They are not only pointed out by reason and sanctioned by religion, but tend in the most marked manner to stimulate industry.[11]

From the foregoing, we can see that the chief difference between Malthus's first and second editions of the *Essay on Population* lies in the fact that in his later work he adds a third check on the expansion of population, namely, moral restraint. It seems, however, that in striving for more scientific accuracy Malthus took a great deal of novelty away from his initial ideas. In amending his original thinking to meet the requirements of a more scientific approach, Malthus seems to have weakened his argument against the perfectionists, for if it were possible for humans to practice the necessary moral restraint, the earthly paradise of Godwin and Condorcet might never be exposed to attack by the evils which are supposed to accompany overpopulation.[12]

Moral restraint, it has been observed, is an innovation in the second edition; however, that is not entirely true. For in the first edition Malthus substantially stated this principle of moral restraint; but for the purpose of his stand against Godwin he had to assume that such restraint was conducive to vice. For example, in his first edition Malthus states, "this restraint almost necessarily, though not absolutely so, produces vice."[13] In a later passage he states, "even the slightest check to marriage, from a prospect of the difficulty of maintaining a family, may be classed under the same head (misery)."[14]

In view of these quotations, it would not be unreasonable to suggest that even in the first edition Malthus recognized the principle of moral restraint, but because of his argument with Godwin was compelled to regard it as a species of human suffering. In the second edition, as noted, Malthus did moderate his point of view by detaching the virtue of moral restraint from vice and misery and assigning it to another category.

HENRY GEORGE'S *CRITICISM OF THE ESSAY* ON *THE ESSAY OF POPULATION*

Understandably, Malthus's *Essay on Population* has drawn considerable attention over the years, not all of it positive. Especially noteworthy is Henry George's assessment of it. Henry George, the author of *Progress and Poverty*, took serious exception with the book's findings. Although his review appeared long after the book was published, it still provides a representative view of those who took exception with Malthus's conclusions.[15] George rejected the idea that population was constantly increasing and unrestrained. Similarly, he could not understand why the natural attraction between the sexes would end up in vice and suffering. In his estimation, the result would come into rude collision with *Wisdom of the Creator*.

Moreover, it does not seem proper to George that Malthus should throw the responsibility for poverty and its concomitant misery upon the decrees of Providence. He rejects Malthus's contention that there is a tendency for

population to increase faster than subsistence. According to him, there is no experience to warrant the Malthusian claim:

> The globe may be surveyed and history may be reviewed in vain for any instance of a considerable country in which poverty and want can be fairly attributed to the pressure of an increasing population. Whatever be the possible dangers involved in the power of human increase, they have never yet appeared. Whatever may sometime be, this never yet has been the evil that afflicted mankind.[16]

George goes on to argue that if the growth in population tends to outstrip the means of subsistence, how does Malthus account for the fact that after all of the thousands, and perhaps millions of years that man has been on earth, this globe of ours is still so thinly populated.

To refute further Malthus's contention, George points out that if it be true that the Malthusian doctrine is based on a universal law, namely that the natural tendency of population is to outrun subsistence, then why is it that this principle has not been recognized as was one of the great natural laws, by man of all ages and places?

It is a matter of fact that neither in the classical creeds and codes, nor in the general writings of the Jews, Egyptians, Chinese, or other peoples who have been closely associated with the formulation of natural laws, do we find any recognition of this law nor any exhortations to practice the prudential restraints advocated by Malthus. On the contrary, the wisdom of the centuries and the religions of the world have always inculcated ideas of civic and religious duty to increase and multiply.[17] This certainly is in direct contradiction to what Malthus had to say respecting this law.

More specifically, George is critical of Malthus's arguments on the grounds that he does not believe, as Malthus does, that an increase in population necessarily tends to reduce wages and cause want or reduce the amount of wealth that can be produced by a given amount of labor. He does not believe that these conditions are created by overpopulation or by the exploitation of labor by capital as the socialists seem to think. George argues that although an increase in population means that there are more mouths to be fed, it also means that there are more hands available to produce the added necessities. In any state of civilization a greater number of people can collectively be better provided for than a smaller. It was George's contention that although an increasing population requires that more mouths be fed, it also means that there are more hands available to help produce the added necessities; therefore, the greater the population, the greater the comfort which an equitable distribution of wealth would give to each individual.[18] But if neither the exploitation of the workers by capital nor overpopulation is the reason for the existence of poverty, what then is the cause?

According to George, it is the injustice of society and not the niggardliness of nature, as Malthus contends, that is the real cause of want and misery. To George's way of thinking, the root cause of this social injustice is to be found in rent. Therefore, if rents could be done away with, poverty would be banished, the inequality of wealth would be removed, and the economic crises, which George thought were the result of speculation in land, could be more effectively restrained. This, in effect, is the core of his thesis and it is herein that he differs with Malthus on the reason for the existence of human suffering and misery.[19]

DAVID RICARDO (1772–1823)

In his *Preface to the Principles of Political Economy and Taxation*, Ricardo states, "the produce of the earth—all that is derived from the surface by the united application of labour, machinery, and capital, is divided among three classes of the community; namely, the proprietor of the land, the owner of the stock of capital necessary for its cultivation and labourers by whose industry it is cultivated." On the same page he states that the determination of the laws which govern this distribution is the principal problem of *Political Economy*:

> To determine the laws which regulate this distribution is the principal problem of *Political Economy*: much as is the science has been improved the writings of Turgot, Stuart, Smith, Say, Sismondi, and others, they afford very little satisfactory information respecting the natural course of rent, profit and wages.[20]

In his explanation of the distribution of wealth, Ricardo accepts certain postulates: the differential theory of rent; the doctrine of diminishing returns in agriculture; and the Malthusian doctrine of population.

In dealing with the issue of how income is distributed, Ricardo wanted to know the way in which the division of output takes place and the laws which govern the share which each claimant receives. The fact that individual

interests may cooperate in production but may prove to be antagonistic in its division was of no concern to Ricardo. He was not interested in any preconditions attached to the justice or injustice of distribution.

Interestingly, whereas Smith at least intimated a connection between the processes of production and distribution, Ricardo divorces them. He all but identifies economics with the theory of distribution, implying that he had little or nothing to say about the laws which determine output. He seemed to think that there was little more that could be added to the determination of output and, therefore, treated it as a given.

Equally perplexing is the fact that Ricardo divorced the distribution of income from the principal of valuation. He rejected the notion that the proportion in which the total product is distributed between the proprietors, the capitalists and the workers is necessarily connected with the doctrine of value.

RICARDO'S THEORY OF VALUE

To understand Ricardo's theory of value, a distinction must be made between what he termed "natural" and "market" values. By the latter term he meant the actual price at which commodities change hands from day to day. By "natural" value, on the other hand, he referred to that point about which "market" values fluctuate and which they tend to approach. This "natural value" is distinguished from that of the market in that it is not temporary and fluctuating, as the latter, and is really the value that would obtain if there were no disturbances in market conditions. It is with this "natural value" that Ricardo concerns himself.[21] Ricardo commences his treatment of natural value by distinguishing between "value in use" and "value in exchange" and by stating that utility, although essential, is not the measure of exchangeable value. Rather, those commodities which possess utility derive their exchange value from two sources, namely, from their scarcity and from the quantity of labor required to produce them. Rare statues, scarce books, unique coins, old wines and other such articles derive their exchange value from their scarcity alone. Their exchange value is not dependent upon the labor cost embodied in them, but rather upon what people are willing to surrender for them. This class of commodities is, however, so limited in extent that Ricardo leaves it out of consideration, and concentrates his attention on commodities of the second class.

These goods can only be increased in quantity by the exertion of human industry, and on the production of which competition operates without restraint.[22] The goods in this category, contends Ricardo, exchange for each other in proportion to the amounts of labor required in their production. To gain support for this contention, Ricardo referred to Adam Smith who had explained that in the early state of society preceding the appropriation of land and accumulation of capital, the relative values of such things depended upon the quantities of labor expended in producing them. Ricardo not only agrees with Smith in this regard, but goes further, maintaining that long after land has been appropriated and capital has been applied to industry these relative values continue to depend upon the quantities of labor required in the same fashion as before. Smith, on the other hand, believed that once society had attained a higher degree of social organization, elements besides labor would have to be considered in determining the comparative value of commodities. These components are wages, profit, and rent.

In contradistinction to Smith's cost of production, Ricardo maintained that the rates of wages, profits and rent had no influence on exchange values. According to him, rent could not determine value because it is a result and not a cause of value; in effect, rent exists because of value and not the other way around. Neither can wages and profits influence the value of a commodity, because a rise in wages would affect all industries in the same way says Ricardo. Wage rates cannot affect relative values, because they, like profits, are the same indifferent employments. Perfect competition is assumed, with the corollary that the same price is paid for the same kind of labor by all employers. So long as two employers pay the same sum for a day's work of the same kind, it is manifestly indifferent whether the sum be $1 or $10, for both are affected equally by the rate of wages.

Ricardo then amends his theory of value somewhat by stating that value is not only determined by the labor immediately applied to commodities, but also by the labor which is spent on the capital which assists labor in production. In effect, capital is equated with stored up or canned labor. Ricardo holds, therefore, that exchange value is determined not only by the amount of labor expended in the immediate production of a good, but also by the amount of labor that has been utilized in the creation of the tools required to produce the given commodity. It appears, then, that at first Ricardo embraced a pure labor-cost theory of value, but was later forced to abandon or at least qualify it.[23]

In the process of defining capital goods in terms of labor, Ricardo realized that the differences in durability and composition of capital might very well cause changes in relative values and so in section four of his book he

deals with a further modification of value.[24] Through the introduction of a varying time element in the durability or longevity of capital, it becomes possible for changes in wages and profits to affect costs and relative values unequally in different industries. Obviously, if the capital of one producer is less durable than that of a competitor, it will be used up more rapidly and thereby cause a difference in the cost and value of their products. For example, if a machine is very durable, the value of the product it helps to produce will be less affected by changes in wages and profits than one which soon has to be replaced.

With reference to the organic composition of capital, differences in the proportion of fixed to variable capital might also cause changes in exchange values. For example, if two producers each employ $100,000 of fixed capital and $50,000 of variable capital, a rise in wages will equally affect both. However, if manufacturer A employs $100,000 of fixed capital and $60,000 of variable capital in his business, whereas manufacturer B employs $50,000 of fixed capital and $100,000 of variable capital, a 10 percent increase in wages will not affect A and B equally as before, because a greater proportion of B's capital is utilized for wages. Hence, it will now cost more for B to produce than it will for A, and in this way relative values will be affected.

In view of the foregoing, Ricardo admits that his assumption of equalized wages and profits breaks down, and with it the argument that wages and profit do not determine value. Therefore, Ricardo was forced to amend his theory by stating that his labor cost theory of value would obtain only in those cases in which goods are produced with capital of the same durability and the same organic composition. In view of this modification, Ricardo was compelled to divorce himself from a pure labor theory of value. Nevertheless, he considered this modification of slight importance, because it causes comparatively slight differences in the ratios of exchange between commodities.[25] In his own words he states,

> In estimating, then the causes of the variations in the value of commodities, although it would he wrong wholly to omit the consideration of the effect produced by a rise or a fall of labour (wages), it would be equally incorrect to attach much importance to it. . . . I shall consider all the great variations which take place in the relative value of commodities to be produced by the greater or less quantity of labour which may be required from time to time to produce them.[26]

From this analysis of Ricardo's theory of value it would seem that the founder of the classical school made value more dependent upon cost of production than on the amount of labor time embodied in a commodity. However, owing to his own qualifications, as noted in the passage above, we cannot be completely certain whether in the end he favored the one or the other.

THE LAW OF COMPARATIVE ADVANTAGE

Far more definitive was Ricardo's contribution to the law of comparative advantage. Although other economists including Adam Smith had referred to this concept earlier, Ricardo extended it to show that the exchange of goods in foreign trade is advantageous even if a country has an absolute advantage in producing both goods. If a country is in such a position, it should produce that good in which it has the higher comparative advantage and leave the other one to its trading partner.

Basically, the law of comparative advantage holds that each country should produce and export those goods in which it has a high cost advantage and import those goods in which it has a low cost advantage. In his illustration, Ricardo suggested that England should produce cloth and Portugal should produce wine because each could produce its product more cheaply than the other. The reason for these differences in costs is owing to the immobility of labor and capital between two different countries. In a domestic economy, wages and profits are the same and so trade is governed by absolute labor costs; however, in a foreign country those rates may be different and that is what gives occasion for trade.

To illustrate, assume that in England the opportunity cost of producing a woolen coat is two leather bags, whereas in Spain the opportunity cost of producing a woolen coat is three leather bags. The ratios, therefore, are 1:2 for England and 1:3 for Spain. In England, a consumer would get two leather bags for one coat, whereas in Spain the consumer would get three leather bags for the same coat. Clearly, it's cheaper to buy the bag in Spain. On the other hand, it would cost only two leather bags for one coat in England, but three bags for one coat in Spain. In this case, it would be cheaper to purchase the coat in England. On the basis of these illustrative numbers, the terms of trade are 1:2 and 1:3. If the British consumer could get more than two bags for one coat and if the Spanish consumer could get more than one coat for his three leather bags, they would trade at some point between those two ratios.

If it so happened that England could produce both commodities more cheaply then, as noted above, it would produce that good in which it had the higher comparative advantage and leave it to Spain to produce the other.

THE THEORY OF RENT

In Ricardo's judgment, rent is the most important consideration in the theory of distribution, for the share assigned to land determines the proportion which the other factors of production receive. He defines rent as "that portion of the earth which is paid to the landlord for the use of the indestructible powers of the soil."[27] It may seem counterintuitive, but Ricardo maintains that the payment of rent is not due to the fertility of the soil. Rather, it is based on the fact that land is not unlimited in quantity and not uniform in quality. So long as the best land is abundant and everyone can have it by taking possession, it is obvious that no charge can be exacted for rent. When a country is first settled only a small portion of the land will be cultivated for the support of the population. Under such instances, there will be no rent paid by the cultivators of the land, for no one would pay for the use of land when there is an abundant quantity not yet appropriated. No rent could be paid for such land for the same reason that no price can be exacted for the use of air, water, or any other gift of nature which exists in boundless quantity. In his own words, Ricardo says, "if all land had the same properties, if it were unlimited in quantity and uniform in quality, no charge could be made for its use."[28]

However, land is not unlimited in quantity and uniform in quality, as are the gifts of nature. As population increases and the needs of the people become greater, the best land is gradually taken up until there is none left. It now becomes necessary to cultivate land of less fertile quality or, too, is less advantageously situated. At this point, the payment of rent which amounts to the difference in the yields of the two different qualities of land begins.

As land of a second degree of fertility is brought under cultivation, rent immediately commences on the land of the first degree of fertility. When land of a third degree of fertility is cultivated, rent then commences on the land of a second degree. The rent on the first land will, of course, increase, because it is now equal to the difference between it and the land of a third degree of fertility rather than the land of a second degree of fertility. Therefore, the long-run tendency for rent is to increase, because as population keeps increasing resort must be made to the less and less fertile lands, thereby raising the differential between the more fertile and less productive soils. In this way, then, the rents on the more superior lands will keep on increasing, because the presumption is that population will continue to grow rather than diminish.

It often happens though that additional capital will be applied to land already under cultivation instead of clearing new land. In this case, the fertility of the soil is the same, but is being more intensively cultivated. For example, the first X units of capital may produce 100 quarters of grains; the second X units of capital may yield 85 quarters of grain—a lesser yield, because of the law of diminishing returns. Nevertheless, so long as the additional labor and capital applied to the land under cultivation exceeds the yield that would be realized on land of a lesser quality, the investment would be made on the old land. In this case, the landowner would receive the difference between the returns from the two quantities of labor and capital. According to Ricardo, "rent is always the difference between the produce obtained by the employment of two equal quantities of capital and labour."[29] It bears noting that the additional investment on the land of the same fertility would not have been made unless the return on the less fertile land was less than 85 quarters.

As a result of Ricardo's doctrine, a number of corollaries or accompanying propositions may be formulated. One of these corollaries is that the unit of capital last employed pays no rent. This means that the landowner can exact no share of the product of the last increments of labor and capital employed. The landlord can receive an economic rent on this particular land only on condition that additional units of capital are employed or that lands of a less fertile quality are brought under cultivation.[30]

Another corollary following from Ricardo's treatment of rent is the fact that it has no bearing on prices. Ricardo reasons that prices are determined by the last application of capital and labor on the poorest quality of land or by the lowest returns on the superior qualities of land. In these instants, rents are not included as a cost of production and are not, therefore, determinative of price. They are not the cause, but rather, the effect of price. In his own words, Ricardo states:

> The reason, then, why raw produce rises in comparative value, is because more labor is employed in the production of the last portion obtained and not because rent is paid to the landlord. The value of corn is

> regulated by the quantity of labour bestowed on its production on that quality of land, or with that portion of capital, which pays no rent. Corn is not high because a rent is paid, but a rent is paid because corn is high.[31]

The third corollary following from Ricardo's theory of rent in Ricardo's own words is that "rent increases more rapidly, as the disposable land decreases in its productive powers."[32] Every increase in population requires that more land be brought under cultivation to increase the food supply. But since this land is less productive than the marginal land now being used, the cost of production on it will rise and with that so, too, will the level of prices and the resulting rents on the more fertile lands.

Similarly, "it follows from these principles that any circumstances in the society which should make it unnecessary to employ the same amount of capital on the land, and which should therefore make the portion last employed more productive, would lower rent."[33]

In addition to a decreased volume of capital as a means of reducing rent, Ricardo also cites "such marked improvements, in agriculture, as shall have the same effect of diminishing the necessity of cultivating the poorer lands, or of expending the same amount of capital in the cultivation of the more fertile portion."[34] Improvements such as better fertilization, for example, would enable a tenant to obtain the same produce as heretofore from a smaller quantity of land. This would enable him to withdraw the worst land from cultivation and in this way reduce the rent which would be forthcoming to the landlord.

Paradoxically, the less difficult it is to produce corn, the lower the rent; the more difficult it is to produce that crop the higher the rent. Ricardo was perfectly logical in concluding toward the close of his chapter on rent that the landlord is benefited by the difficulty of production. The greater the increase in population and the greater the need to use less fertile land, the higher will be the cost of producing corn and the greater will be the gain to the land-owner. His advantage is diametrically opposed to that of the rest of society.[35]

It has been alleged that Ricardo, in advancing his theory of rent, employed the same differential principle and concept of diminishing returns in the same way as did Thomas Malthus. So closely allied are their writings on the theory of rent, that J. K. Ingram, a highly regarded authority, held that Ricardo's theory of rent was not really his, but rather belonged to Malthus.[36] As a matter of fact, Ricardo himself was quick to recognize Malthus's contribution, stating in the preface to his *Principles* that "in 1815 Mr. Malthus, in his *Inquiry into the Nature and Progress of Rent*, and a fellow of University College, Oxford, in his *Essay on the Application of Capital to Land*, presented to the world, nearly at the same moment, the true doctrine of rent."[37]

Although it appears that Ricardo was deferring to Malthus, there was, in fact, a difference between their approaches to the subject. Whereas Malthus accepted the position of Adam Smith and the physiocrats on the question of rent Ricardo took an opposite view. In his analysis of rent, Malthus took as a starting point the explanation offered by the physiocrats and Adam Smith, namely, that rent is the natural outcome of some special feature possessed by the earth and given it by God—that is, the power of enabling more people to live on it than are required to till it. In effect, they regarded rent as a gift of nature, and consisted of that part of the produce of land which, after deducting the wages of labor and the profits of capital, is received by the landlord. Ricardo, on the other hand, did not believe that rent was due to the liberality of nature. His position was that rent exists only because nature is niggardly. To prove his point, Ricardo, citing an earlier argument, holds that the earth's fertility, alone, can never be the cause of rent in a new country. In a newly founded colony land yields no rent, however fertile, if the quantity of land is in excess of the people's demands.

Ricardo reasons that "no one would pay for the use of land when there was an abundant quantity not yet appropriated and therefore at the disposal of whosoever might choose to cultivate it."[38] According to Ricardo, rent appears only when an increase in population calls into cultivation land of an inferior quality or land less well situated. Consequently, instead of being a gift of nature's generosity, rent is the result of the grievous necessity of having recourse to relatively poor lands under the pressure of population and want. As Ricardo points out, "The labour of Nature is paid not because she does much, but because, she does little. In proportion as she becomes niggardly in her gifts she exacts a greater price for her work."[39]

Although Ricardo did substantially agree with Malthus's theory of rent, he did, nonetheless, employ an entirely different approach. The difference between the two lies in the fact that Ricardo draws a distinction between wealth born of abundance and value which is begotten of difficulty and effort. For Ricardo rent is a result of the second category, whereas for Malthus it is the result of the first.[40]

WAGES AND PROFITS

For Ricardo, labor, like commodities, has a market and a natural price. The market price of labor is determined by the law of supply and demand operating in the market at a given time. "The natural price," on the other hand, "is that price which is necessary to enable the labourers, one with another, to subsist and to perpetuate their race, without either increase or diminution."[41] This price depends on the price of the food, necessaries, and conveniences required for the support of the laborer and his family. From this then it follows that the natural price of labor will rise with an increase in the price of food and necessaries; conversely, the natural price of labor will fall with a decrease in the cost of living.[42]

Ricardo claims that the market price which is determined by the relationship between the existing supply and demand is the price which is paid to labor. Hence, when the market price of labor exceeds its natural price the condition of the laborer is flourishing and happy, for now he has it in his power to command a greater proportion of the necessaries and enjoyments of life, and therefore to rear a healthy and numerous family. When, however, the improved standard of living leads to an increase in the size of the labor force wages again fall to their natural price In fact, it may even fall below the minimum necessary for existence because the supply of labor exceeds its demand. However, they cannot remain below the natural level of wages for too long a period because according to Ricardo

> When the market price of labour is below its natural price, the condition of the labourers is most wretched: then poverty deprives them of those comforts which custom renders absolute necessaries. It is only after their privations have reduced their number, or the demand for labour has increased, that the market price of labour will rise to its natural price, and that the labourer will have the moderate comforts which the natural rate of wages will afford.[43]

From this it may be seen that although in the short run the wages of labor may either rise above the natural price or fall below it, in the long run, the market price of labor tends to equal its natural price, namely, that wage which is necessary to enable the laborer to subsist and to perpetuate his race.[44] Hence, in the long run, Ricardo concludes that the real wages accruing to labor tend to remain stationary. In effect, labor receives as its share just a quantity of those foodstuffs and necessities which is absolutely essential to its existence. Ricardo does allow that as the price of food gradually becomes more expensive, the worker's nominal wages increase; however, no real benefit will accrue to him as a consequence. If there is any tendency at all for a long-run charge to occur in the worker's status, it will more likely be a decrease in his real wage rather than an increase.[45]

On the question of profits, Ricardo maintains that once the value of corn has been determined by the cost of producing it on the least favored land, the proceeds are shared by the capitalist and the wage earners. Hence, Ricardo claims that whatever raises the return to capital will reduce the wages of workers and vice versa, since we are dealing with a constant sum game. If one party receives more, the other party must receive less. However, Ricardo does not take into consideration that perhaps the pie may be a larger one and, as a result, may increase the shares of each, even though their portions remain relatively the same.

Although shares may differ in the short run, wages will tend to receive a higher proportion of the returns in the long run. This is so because of Ricardo's law of profits which he labels "the tendency of profits to a minimum." According to this law, the natural tendency of profits is to become smaller and smaller.[46] Why so? As population increases and lands of a less fertile nature, requiring more laborers to produce the additional corn, are brought under cultivation rents will increase.[47] But so too will the return to labor, because the capitalist has to pay the worker a higher wage to assure him of at least a subsistence wage. In sum, the increase in the price of corn will serve to increase the rent to the landlord, increase the wage of the laborer, but reduce the level of profits. The outcome is, therefore, consistent with Ricardo's law of profits. It is also in agreement with Ricardo's argument that it is not the accumulation of capital that will bring about a reduction of profits, as Smith contended, but the increase in wages which is required as the price of corn rises.

Ricardo therefore concludes that profits will show a downward trend in the long run for the simple reason that it finds itself squeezed between the proprietor's share, which, as we have already seen, tends to increase and the wage-earner's which is more or less stationary.[48] He points this out by citing as an example the case of the English tenant farmer who is obliged to raise his workers' wages as the price of corn increases, because of the rise in the cost of producing it on the marginal lands, but who gains no share of the higher price because this extra revenue is taken by the proprietor in the form of higher rents.[49]

THE PESSIMISM OF MALTHUS AND RICARDO

To understand why Malthus and Ricardo are often referred to as pessimists, we must return to a consideration of Adam Smith's *Wealth of Nations*. Embedded in Smith's opus are two tendencies, the optimistic and the pessimistic. The optimistic outlook finds expression in Smith's contention that through the exercise of self-interest men are led, as by a divine hand, to the attainment of the best economic results. The pessimistic tendency, on the other hand, is to be found in the fact that the interests of various classes clash with one another, and with those of society. Added to this is Smith's contention that at some future date a nation's resources will be exhausted and progress ceases. Briefly stated, the essence of the pessimism expressed by Malthus and Ricardo is that under the conditions which existed during their time, the state of mankind must steadily grow worse rather than grow better.[50]

Although Malthus and Ricardo are said to have been in agreement with Smith's identity of individual and societal interests, that appears to have been contradicted by the divisions they cited between proprietors and capitalists and, in turn, between capitalists and workers. They reasoned that these parties' interests did not coincide with one another, but instead were diametrically opposed. For example, whereas proprietors sought higher rents, capitalists sought lower ones and whereas laborers clamored for higher wages, capitalists felt that they were too high at their present level and, should be reduced.

Instead of the natural laws that were to secure the establishment of the order, as the physiocrats contended, they discovered the existence of other laws, like that of rent, which guaranteed a revenue for a small minority of idle proprietors—a revenue whose growth was contingent upon and in proportion to the people's growing need. Another law of a similar pessimistic nature was the principle of diminishing returns, which set a definite limit upon the amount of necessities which could be provided for the needs of society. On the one hand, the needs of the people would steadily increase while on the other hand the wherewithal to satisfy those needs would increase at a steadily declining rate. This limit was already being approached and mankind, in the opinion of Malthus, had no prospect of bettering its lot, save by the voluntary limitation of its numbers.

In retrospect, the basic reason for their pessimism is that they assumed that the future would be no different from the past. They failed to allow for the possibility of economic growth which would have benefited all classes. In Ricardo's judgment, workers in the long run would receive no more than a subsistence wage. Capital, squeezed by the rising prices of foodstuffs, as more and more marginal land had to be brought under cultivation, and the need to pay their workers at least a subsistence wage kept its return at a minimum.

But, it may be asked, why did not Ricardo realize that as more and more capital depreciated that it could be replaced by more efficient capital? Was he not aware of the benefits that might be forthcoming from increased productivity, as was Smith with his reference to the pin factory? Could he not foresee any increase in agricultural productivity by altering the way crops were produced or how the productivity of the soil could be improved?

Having introduced the principle of comparative advantage, why did he not see that specialization and the expansion of foreign trade could have increased England's output and income, thereby providing the country's working class greater opportunities? Admittedly, Ricardo did recognize the advantage of free trade as noted by his opposition to the corn laws which kept the price of grains unduly high, the rationale being that the high cost of grain imports would stimulate an increase in the production of domestic grains and in time lead to lower prices for corn. But why this disproportionate concern with the agricultural side of the economy vis à vis the production of manufactured goods?

In the end, it appears the reasons for Malthus and Ricardo's pessimistic view of the future is that they based their economics on an agricultural economy. In short, they placed themselves in a box. Had they thought outside of that box, their outlook for the future of society would have been more optimistic.

NOTES

1. Scott, op. cit., 93.
2. Haney, op. cit., 257–258.
3. Ibid., 259.
4. Malthus, T., *An Essay on Population* (1798), in *Masterworks of Economists*, vol. 1, edited by L. D. Abbott, New York: Doubleday, 1947, 216.
5. Gide, C. and Rist, C., op. cit., 123.
6. Malthus, T., *An Essay on Population*, London: Ward, Lock & Co., 1890, 4–5.
7. Malthus, , *Masterworks* edition, op. cit., 203.
8. Malthus, T., (1798), Everyman's edition, vol. 1, New York: J.M. Dent & Sons, 18–19.
9. Malthus, , *Masterworks* edition, 221.

10. Gide and Rist, op. cit., 128.
11. Malthus, T., *Essay*, *Masterworks* edition, 472.
12. Gray, op. cit., 156–158.
13. Malthus, T., , Everyman's edition, 29.
14. Ibid., 108.
15. Patterson, H., *Readings in the History of Economic Thought*, New York: McGraw-Hill, 1932, 668.
16. George, H., *Progress and Poverty (1879), in Masterworks of Economists*, vol. 3, edited by L. D. Abbott, New York: Doubleday, 1973, 645.
17. Ibid., 647.
18. Ibid., 651.
19. Gide and Rist, op. cit., 565–566.
20. Ricardo, D., *Principles of Political Economy and Taxation* (1817), London: G. Bell & Sons, 1891.
21. Haney, op. cit., 296.
22. Ricardo, op. cit., 8.
23. Haney, op. cit., 280.
24. Ricardo, op. cit., 288.
25. Ibid., 289.
26. Ibid., 24.
27. McCulloch, J., *Works of David Ricardo*, London: John Murray, 1888, 34.
28. Ibid., 35.
29. Ricardo, op. cit., 36 as cited by Newman, op. cit., 81.
30. Scott, op. cit., 114–115.
31. McCulloch, op. cit., 36–37.
32. Ibid., 40.
33. Ibid., 41.
34. Ibid., 41.
35. Haney, op. cit., 296.
36. Ingram, op. cit., 125.
37. Ricardo, op. cit., 12.
38. Ricardo, D., *Principles of Political Economy and Taxation*, Gonner edition, London: G. Bell & Sons, 1926, 36–37.
39. Ibid., 53.
40. Gide and Rist, op. cit., 143–144.
41. Ricardo, op. cit., 130.
42. Ibid., 130.
43. Ibid., 311.
44. Ibid., 311.
45. Gide and Rist, op. cit., 161.
46. Ibid., 161.
47. Ibid., 321.
48. Ibid., 162–163.
49. Malthus, *Essay*, *Masterworks* edition, 319–320.
50. Palgrave, op. cit., vol. 3, 97–98.

Chapter 5

The Early Critics of Classical Economics

THE ECONOMIC OPTIMISTS: CAREY (1793–1870) AND BASTIAT (1801–1850)

Whereas the pessimists, Malthus and Ricardo, emphasized the darker aspects of economics, the optimists chose to emphasize its brighter side. This group of economists, among whom numbered mostly French and Americans, took exception to certain tenets of classical economics, particularly the views of Ricardo and Malthus. Numbered among the doctrines with which they took exception were the law of diminishing returns, the Ricardian theory of rent, and the Malthusian principle of population. Like Smith, they believed that the interests of the various classes were in harmony and not necessarily in conflict with one another.[1] The group broke down into two classes: one could be characterized as materialistic and subscribing to the doctrine of "laissez faire" while the other could be described as idealistic and believing in social reform.

Among the materialistic optimists were Jean-Baptiste Say, and other French economists, Dunoyer, Sarnier, and Chevalier. J. H. von Thunen and some members of the Austrian School could also be included in this group. These economists were firm advocates of "laissez faire." They believed that a beneficent order could be established if individuals were given free reign and allowed to do as they pleased. They had high hopes for the future of man.

Notable among the idealistic optimists were John Stuart Mill and Friedrich List.[2] High on their agenda was the need for social reform. They maintained that by adopting perfected social arrangements, man may surmount environmental limitations and make progress toward the ideal state. These men had considerable faith in the perfectibility of man's nature and the institutions formulated by him.

Notwithstanding the importance of the aforementioned economists, the men whose names are most closely associated with economic optimism are Henry Carey, the American, and Frederic Bastiat, the Frenchman. Their ideas are so similar to one another, that it is difficult to determine which contributions rightfully belong to Carey and which belong to Bastiat. So closely akin are these two men's writings, that it is often alleged that one of the two must have been guilty of plagiarism. Without indicting either one, the general consensus is that Bastiat was more deeply indebted to Carey than he would admit, and that he erred in not according him the credit that was due to him. Moreover Carey's

work, in the judgment of his peers, was more original. Also, it bears noting that Carey's two major works, *Principles of Political Economy* and *Past, Present, and Future*, which contain the substance of his doctrine, preceded Bastiat's work by thirteen and two years respectively.[3] Accordingly, greater reliance will be placed on Carey's work in considering the arguments advanced against the pessimistic views of Ricardo and Malthus.

The significance of Carey and Bastiat's contributions to the development of economic thought rests in the fact that they reinterpreted the classical theory of political economy and concluded, quite apart from the pessimistic views advanced by Malthus and Ricardo, that the economic future of man was bright. Their optimism was predicated on their theories of value, rent, and population.

The core of the optimists' doctrines rests on their theory of value. In their view, value is an estimate of the resistance to be overcome before a desired article can be produced or acquired. Both Carey and Bastiat argued that the value of a good should not be measured by its cost of production, but rather by its cost of reproduction. In the early stages of society the value of a commodity is determined by the amount of labor embodied in it; however, as the same commodity is produced over and over again, its value will be determined not by this same quantity of labor, but rather by that amount which is required for its reproduction. This cost of reproduction will decline over time, because as man produces additional quantities of a given good he becomes more efficient in producing it.

Consequently, as the worker overcomes nature's resistance through his increased productivity, the prices of commodities will tend to fall. Wealth increases steadily as the exchange value of goods decreases, because it takes less and less labor to produce each additional unit of a good.[4] It should be noted that this decline in prices is predicated on Carey's premise that labor is the sole source of value. In sum, Carey concluded that, as labor aided by capital becomes more productive, its exchange value, in terms of goods, will constantly increase. At the same time, existing capital will experience a decline in terms of labor because its cost of reproduction, like that of other goods, is constantly falling. Nevertheless, the capitalist's return will increase in absolute terms, because of the growth of capital, but only as a diminishing proportion of an increasing product. Certainly, this is a far more optimistic picture for the future of the wage earner and the capitalist than the one depicted by Ricardo.

The optimists extended their notion of harmony among the classes of society by eliminating rent as a separate category and identifying land with other forms of capital. Ricardo's view concerning land was that he saw in the productive powers of land a free gift of nature which had been monopolized and, because of the ever-increasing demand for food, became a source of great wealth for the landlords. Because this value was not the result of labor, Ricardo reasoned that the capitalist could not justly demand a payment for what was the product of the "original and indestructible powers of the soil."

Carey, on the other hand held that this return rightfully belonged to the landlord. He contended that land is really an instrument of production which has been formed by man and that its value is due to the amount of labor which is required to bring it into cultivation. Carey maintained that the land properly belonged to the individual who through arduous and continued effort overcame all of the difficulties and obstacles to make

the land arable. Continuing, Carey noted that the value of this land today would be much lower than originally, because the value of land is not determined by the original cost which was required to bring it into cultivation, but rather by the cost which would be required, with the techniques and know-how of our time, to bring the land from its primitive into its present state of cultivation.

Therefore, property in land is only a form of invested capital. It is a quantity of labor permanently invested in the soil for which the owner is compensated by a share of the yield it produces. Rent, which is regarded as a proportion of the produce, becomes smaller and smaller as time goes on, just as capital does, because the cost of bringing land into cultivation falls progressively with every technological advance. However, in absolute terms that return, like the one for capital, increases in absolute terms.

The share of the laborer increases both as a proportion and as an absolute amount. In this way, therefore, the optimists pointed out that there is harmony among the interests of the different social classes. Unlike the pessimism of Ricardo and Malthus which was based on the divergent interests of the different classes of society, Carey, by modifying the labor theory of value, was able to show that there was a convergence among these interests.

Carey's theory of population was developed as a refutation of Malthus's position on population; however, it should be emphasized that Carey was living in a young, expanding country with unlimited resources and opportunities at the time. Like Henry George, he argued that the Malthusian theory constituted a direct contradiction of the attributes of the Supreme Creator. It seemed to Carey that after God had given man all the powers and faculties needed to subdue nature, it would appear inconsistent that man should become slave to them, as Malthus seemed to think.[5]

Unlike Malthus, Carey, as well as his French colleague, Bastiat, believed that an increase in population meant an increase in wealth. Both writers were much more positive than Malthus, arguing that if there were more hands available to produce goods and services, the greater would be man's ability to make demands on nature's resources. In justifying his claim, Carey pointed out that in an early settlement much hardship and poverty exists, because of the scarcity of its members. This poverty cannot be eliminated until such time as its numbers start to increase. In effect, the ability of the new community to produce wealth can increase only with an increase in population.

Carey, living in America in the early nineteenth century, could see the realization of this claim with every new increase in the pioneer settlements of the western lands. But what would happen, as appeared to be the case in England at the time? In answer, the optimists maintained that an increasing population would not create a subsistence problem even after this came to pass, because new and improved agricultural techniques would make possible a greater supply of food to satisfy the increased population.

The optimists' position on rent was just as strongly opposed to the theory of rent advanced by Ricardo. According to Ricardo, higher rents came into being as people moved from richer to poorer lands with each increase in population. Carey, on the other hand, took an opposite view stating that experience shows that men first take up poor soils because they are light and sandy and easier to cultivate. Men begin to cultivate the hills, and when the poorest land has been exhausted they work down toward the rivers and make use of the

rich valleys. As a result, the last settlers receive the best land. From this it follows, that the law of diminishing returns, as set forth by Ricardo, cannot operate in the circumstances cited by Carey. Therefore, as population increases, better and better lands come under cultivation, so that labor, instead of becoming less productive, becomes more productive.[6] In Carey's scheme of things the law of diminishing returns gives way to increasing returns with every increase in population.

As a result, wealth increases not only absolutely, but proportionately as well. This view is, of course, the very antithesis of what Ricardo maintained for according to him society's status should grow worse, whereas according to Carey, there was no need for such pessimism, because the future status of society would be enhanced as population continued to multiply.

FRIEDRICH LIST (1789–1846)

Friedrich List is best known for his contribution to the theory of protectionism which he presented in his work, *Das Nationale System der Politischen Ökonomie* (*The National System of Political Economy*). By the middle of the nineteenth century most of the doctrines of Adam Smith had undergone some revision or amendment. The exception to this was the principle of free trade which was accepted by practically all economists in all countries. List's purpose was to question, if not overthrow the principles of free trade held by Adam Smith, David Ricardo, Jean Baptiste Say, and others with whom he disagreed.[7]

List begins his treatise by accusing the followers of Adam Smith of divorcing themselves from the world as it really exists and of building on suppositions which do not and never have existed. List, criticizes them for regarding the world as living in peace and harmony, and for completely overlooking the differences of nationality among the different peoples of the world.[8] In short, be claims that the adherents of Adam Smith were guilty of establishing a cosmopolitan or world economy which does not comprehend nationality and has no regard for national interests. List contends, however, that nations do exist, that they do go to war with one another and do take advantage of one another whenever they can. That is the stark reality.

Following his introduction, List provides a study of the economic history of the different nations of the world. He claims that the economic life of nations, except those lying in the tropics, pass through five phases, namely, the hunting or savage stage, the pastoral stage, the agricultural stage, the agricultural and manufacturing stage, and finally, the agricultural, manufacturing and commercial stage. Because these different economic phases represent a continual advancement in the material life of a country, List believes that the government should play an important role in making possible this transition from a lower to a higher economic level.[9]

List contends that because one phase of a nation's development differs from that of another, different measures will have to be employed at different times. In the lowest stages of development free trade should be encouraged as a means of obtaining many of the goods which the economy is not in a position to produce. As the nation moves on to the agricultural phase of its development, a policy of free trade should again be subscribed to

by the government, for in this way it may enable its people to exchange more raw materials for finished goods. However, when the economy has advanced to a point where it starts producing some of the manufactured goods itself, then it is time for the government to introduce protective measures on foreign trade. Unless a nation adopts restrictive trade measures at that time, the infant industries will very likely find themselves strangled by the competition of the older and more advanced manufacturing nations. Therefore, manufactures and commercial activity should be adequately protected by the government until such time as they are in a position to compete with any other country. At that juncture, a nation should revert to a policy of free trade. This, in essence, is List's theory of protectionism.

In formulating his theory, List was in no small way influenced by the environment in which he lived. The Germany of his day had a very special influence on him as did the United States where he lived for some seven years. Following the Napoleonic Wars, Germany's industries were in their initial stage of development, but found themselves hard hit, by England's more mature industries which enjoyed superior machinery, high levels of output and technical expertise. In addition to not being able to compete with England industrially, German agriculturalists could not sell their produce in England because of the Corn laws which were in place there. Such a state of affairs left Germany in a dilemma. What could she do to escape it?[10]

In seeking a solution, List turned to the case of the United States, whose situation was in all respects comparable with that of Germany. In both cases, their economic independence had not yet been fully established, their natural resources were abundant, their territory vast, their population was intelligent and industrious, and their prospects for a great political future bright. But both faced the same problem of British competition which posed a serious threat to the survival of their newly established industries. How did the Americans meet this threat? Although they were not yet economically free, the Americans made the establishment of industry a national priority. To achieve this end they shut out English goods by means of protective tariffs, just as the French had done earlier to meet the same British challenge. Why, then, asked List, could not the Germans resort to the same measures?[11]

In addition to his opposition to free trade, List differed with Adam Smith and his followers on a number of other grounds. He was especially critical of Smith's materialism regarding the exchange value of things, because it did not take into account the moral or political interests of the present; neither does it consider the future nor the productive power of the state. In effect, List is critical of Smith's theory of exchange value, because it has little relevance for the nonmaterial elements which also play an important role in the production of value.[12] List claims that a true theory of value should be supplemented by a theory of productive forces among which should be included intellectual efforts, public institutions, the laws of the state, morality, religion, culture, science, public order, and the harmonious cooperation among agriculture, manufacturing and trade. How all this was to be accomplished was, of course, an open question. Smith, on the other hand, limits his study to those activities of man which produce material values and does not accord too much attention to the spiritual factors involved in the creation of wealth.

List was also opposed to the conclusions reached by Malthus in his principle of population. He believed that there was no need for alarm, because each economic order had within its own capacity the power to absorb population. This power was not static, but kept on increasing in accordance with a nation's economic development. In assessing List's contribution, the most important one is his theory of protectionism. The issue of free versus protected trade was not resolved during List's time and continues to the present as nations continue to debate the advantages and disadvantages of free trade and globalization.[13]

JEAN CHARLES SIMONDE DE SISMONDI (1773–1842)

Although it is difficult to assign Sismondi categorically to any school of thought, in many ways he can be considered to be a critic of classical economics. Sismondi's disagreement with the classical economists was not related to the theoretical principles of political economy, for insofar as they were concerned, he considered himself a disciple of Adam Smith. Rather, he disagreed with the classical approach in terms of its method, aim, and practical conclusions.

Sismondi was in disagreement with Smith chiefly on the grounds that he did not employ the historical method in treating his subject matter. It seemed to Sismondi that Smith attempted to study every fact solely in the light of his own environment and from that study proceed to make generalizations which would or would not hold in a different environment and a different set of circumstances. According to Sismondi, the science of economics should be based upon experience, history, and observation. Human conditions should be studied thoroughly and allowance made for the period in which a man lived, the country he lived in, and the activities he was engaged in, if the influence of economic institutions upon him could be successfully analyzed.[14]

Sismondi was likewise critical of the aim of those classical economists who attempted to divorce economics from all moral ramifications. Unlike Jean Baptiste Say, who contended that in order for economics to be a science it should be divorced from ethics, Sismondi retorted that political economy could not be treated merely as an exposition of a few general principles apart from any moral considerations. It seemed to him that the classicists looked upon political economy as the science of wealth, or chrematistics, as Aristotle called it. According to Sismondi, however, the real "object of the science should not be wealth, as such, but the physical well-being of man. In order for political economy to have any meaning at all, it would, of necessity, have to take the human element into consideration."[15]

In regard to the tenets subscribed to by the classicists, Sismondi was especially critical of the doctrine of free competition. No legal intervention was allowed to limit this liberty which existed only on the side of the employers. According to the classicists, the freer and more widespread free competition was to be found in a particular pursuit or industry, the greater would be the benefits accruing to the public. Sismondi, however, was opposed to this reasoning on the grounds that the pursuit of low costs of production forces the entrepreneur to economize not only on material, but also on the employment of men. He

goes on to argue that many entrepreneurs, in order to compete with one another, subjected men, women, and children to enforced day and night toil for only a scanty wage in return. Under such conditions, the health and vigor lost by these workers certainly cannot be counterbalanced by any advantage gained by the general public through lower prices. Evidently, competition for Sismondi was more a producer of evil than of good.

Sismondi then goes on to argue that since the free play of private interests often involves injury to the general interest, there is no justification for the continuance of the "laissez-faire" doctrine advanced by Adam Smith.[16] On the contrary, there is room for the intervention of society, which should set a limit to individual action and correct its abuses. This then makes Sismondi an advocate of a regulated economy. He argued, for example, that state action should be employed in curbing production and in putting a restriction upon the too rapid introduction of inventions. The reason he advises that production be regulated is that he was fearful of overproduction. Although production in itself is a good thing, there may be too much of it at one time, In regard to his favoring state control over the too rapid increase of inventions, Sismondi maintains that although every new product must in the long-run increase consumption, the immediate effect of an increase in the tools of production is to increase the level of unemployment and to reduce wages. This will result in diminished consumption and a slackening of demand. Machinery can produce useful results only when its introduction is preceded by increased revenue and the possibility of giving new work to those displaced. Only when a person who is to be displaced by a machine can obtain employment elsewhere should that machine be introduced.[17]

One of the most important contributions made by Sismondi to the development of economic thought is his theory of crisis. Sismondi was quite aware of the economic crises which occurred during the period, 1815–1818. In analyzing their causes, he reasoned that they were due to overproduction or to its counterpart, namely, underconsumption. As Sismondi viewed the problem, economic crises stem chiefly from large-scale production and free competition. Under a highly competitive economic system, entrepreneurs compete keenly with one another and in order to remain in the market they must sell at low prices, hence, to meet the competition they must sooner or later resort to cutting the wages of their employees. This means, therefore, that purchasing power is being taken from the hands of the workmen, and because of this decrease in the amount of money in their hands, more goods will be available on the market than they can purchase. If overproduction is to be avoided, therefore, not only must an adequate supply of goods be available, but so too must the demand and the means for acquiring them.

Sismondi believed that crises are due to a great extent to the difficulty of obtaining exact knowledge about a market that has become very extensive. Producers are guided not by the amount of demand they can expect for their product, but rather by the amount of capital they have at their disposal. Also sharing responsibility for these economic crises is the unequal distribution of. income. Sismondi maintains that the cause of this maldistribution of income derives from the separation of property from labor. The income of those who own property increases, while the incomes of those who have only their labor to offer remain at a minimum. Although those with higher incomes can well afford to purchase the

goods that have been produced, there is a limit as to how much food and other ordinary goods they may demand. They have the power, but not the desire to consume what they have produced. As a result, they turn their demand to luxury goods such as silk lace, chinaware, and other such items. As the demand keeps rising for the more refined goods in place of the more ordinary goods of life, firms producing the latter type of goods find themselves overstocked and obliged to reduce their workforce. The industries producing luxury goods may be expanding, but not at a rate to absorb the unemployed workers. As a result, the workers who have been laid off are forced to reduce their consumption and with that a crisis immediately follows.[18] At this stage we have a paradox, namely, the rich have the wherewithal, but not the demand to consume, whereas the poor have the desire to consume but not the power to buy. In view of this outcome, Sismondi reasons that if economic crises are to be avoided, the incomes of the poor must be increased; they and not the rich are the only ones who are in a positon to take the regular commodities off the market. Sismondi's argument in favor of such a pattern of distribution of purchasing power is based on the fact that "the consumption of a millionaire master who employs one thousand men all earning but the bare necessities of life is of less value to the nation than a hundred men each of whom is much less rich but who employ ten men each who are much less poor.[19] It should be noted that Sismondi's theory is more than a mere underconsumption theory, for it is concerned with the possibility of averting economic crisis through a more equitable distribution of income.

Regardless of the merits or shortcomings of Sismondi's explanation of economic crises, the fact remains that his theory deserves credit for at least attempting to explain what other economists had failed to consider. Unlike Ricardo and the other classicists who believed that overproduction was not possible and that equilibrium would be established in the long run, Sismondi believed otherwise and deserves credit for facing the issue squarely and analyzing the facts as he saw them.

NOTES

1. Scott, op. cit., 231.
2. Haney, op. cit., 315.
3. Ibid., 338.
4. Ingram, op. cit., 173.
5. Ibid., 174.
6. Gray, op. cit., 254.
7. Haney, op. cit., 322–333.
8. Gide and Rist, op. cit., 263–265.
9. List, F., *The National System of Political Economy*, New York: Lippincott, 1856, 193.
10. Haney, op. cit., 415.
11. Gide and Rist, op. cit., 268–269.
12. Ibid., 269.
13. List, op. cit., 212–213.
14. Gide and Rist, op. cit., 174–175.
15. Ibid., 177.
16. Ibid., 192.
17. Ibid., 180.

18. Ibid., 190–191.
19. Simonde de Sismondi, *Nouveaux principes d'economique politique*, vol. 1, 1819, 327.

Chapter 6

The Later Classicists

JEREMY BENTHAM (1748–1832)

Jeremy Bentham, strictly speaking, was not an economist; however, his contributions to social philosophy had such an impact on the development of economics that his work is worth citing. Bentham was deeply impressed by the methods which scientists like Sir Isaac Newton had worked out in the physical sciences. So impressed was he by these methods that he hoped he could formulate a similar pattern for the social sciences. He dreamed of developing a science of human behavior applicable to jurisprudence, politics, economics and even religion. This science could be erected, he thought, by measuring the forces which control society, much as the physical sciences rest upon accurate measurement.[1] These controlling social forces, according to him, were pleasure and pain, as he explains in the opening pages of his book, *Principles of Morals and Legislation*:

> Nature has placed mankind under the governance of two sovereign masters, pain and pleasure, it is for them alone to point out what we ought to do, as well as to determine what we shall do. On the one hand the standard of right and wrong, on the other the chain of causes and effects, are fastened to their throne. They govern us in all we do, in all we say, in all we think; every effort we can make to throw off our subjection, will serve but to demonstrate and confirm it.[2]

Bentham was essentially a social philosopher, and as such, was more interested in government and law than in economics; hence, to understand what he hoped to accomplish, we must seek the explanation in those two areas of study. Although he developed no economic theory or doctrine, Bentham's analysis of pleasure and pain had a significant impact on the work of economists who followed him. It is for that reason, therefore, that his work is acknowledged in most texts dealing with the development of economic thought.

Like Hutcheson and Priestly who preceded him, Bentham maintained that happiness consists of the presence of pleasure and the absence of pain. This assessment applies not only to individuals, but to the whole of society as well. It follows from this, therefore, that the social institutions, which have been founded to aid society, should be constituted in such a way as always to be promotive of the greatest happiness for the greatest number, just as individual means are devised with a view toward maximizing private self-interest.

In considering the role of government in the promotion of this goal to achieve the greatest happiness for the greatest number, Bentham cautioned that state interference should be kept to a minimum. He believed that government action in economic matters is needless, because the wealth of society is simply the wealth of the individuals who comprise it. Secondly, no one knows the individual's interest as well as the individual himself. In fact, the only true interest is individual interest; hence, all the more reason why an individual should be left to do as he pleases. Government interference, in Bentham's mind, is not only inexpedient but pernicious as well. He contended that every law constitutes an infraction of liberty and with its exercise pain is sure to follow.[3] In advancing his argument that "nothing ought to be done or attempted by government," and that it should remain "quiet," Bentham went so far as to argue that competition should be allowed almost unlimited freedom. If that caused distress for certain individual competitors, that pain would be more than offset by the benefits accruing to others.[4]

In summation, we may say that Bentham hoped to develop a science of human behavior based upon a measurement of the forces of pleasure and pain. Those measures should be applied not only to the actions of individuals, but to those of society as well. Accordingly, social institutions should be designed, he thought, in such a way as to promote the greatest happiness for the greatest number. This was Bentham's understanding of utilitarian ethics and it is around the formulation and propagandizing of this doctrine that his efforts were directed. In expounding this doctrine, he charged that all governments had been established by force and

perpetuated by habit. As far as he was concerned, government action is malicious because it deters the national happiness instead of promoting it, as is customarily thought. Therefore, Bentham, like the economic liberals, favored unrestricted competition and the enlightened self-interest of the individual as the best medium through which his program of utilitarianism might be realized.[5]

It was Jeremy Bentham's belief that in order for economics to be properly considered as a science it should, given certain conditions, be able to predict human conduct. Unless economics can calculate men's behavior, it can have no claim to being truly scientific. Such calculations of human conduct can be made by a measurement of the two masters of mankind, pleasure and pain. According to Bentham, man is motivated in all his actions by a drive-seeking pleasure and another avoiding of pain. We should be able to predict man's actions, because he will always attempt to maximize the pleasurable and minimize the painful.

In choosing between two acts, the notions of pleasure or pain present themselves to the human will. If the will remains undecided, it will pass the problem on to the intellect, which will calculate the amount of pleasure and pain involved, and then decide whether to act or not to act. If the intellect reveals that it is better to act, the will transforms this thought into action.[6]

It is in the measurement of these pleasures and pains that Bentham employs his felicific calculus. In determining whether or not a specific act should be performed, the pleasures and pains associated with it are subjected to various norms. If the calculation reveals that the total amount of pleasure outweighs the total amount of pain, then the act should be performed; otherwise it should be avoided.

According to Bentham's felicific calculus, pleasures and pains are evaluated according to seven different dimensions or qualities. The first of these dimensions is the duration of the pleasure or pain. This duration is conveniently measured in terms of time. The second of these norms is the intensity of the pleasure or pain. According to Bentham, some idea of this intensity of feeling may be obtained by comparing the act with the slightest sensation (e.g., a drink of water). A third measure of pleasure and pain is certainty. The greater is the certainty of the realization of a particular thing, the greater will be its pleasure. The greater the assurance for success, the greater will be the pleasure of a given act. Conversely, the less assurance we have of succeeding, the more painful will be the act. Closely allied to the preceding dimension is that of propinquity. By comparing the nearness or remoteness in time of the achievement of a certain thing, the degree of pleasure can be ascertained. The closer a thing is to its realization (e.g., the obtaining of a graduate degree), the greater will be the pleasure and the less will be the pain involved in studying. To the extent that the realization of a certain goal will occur immediately, its pleasure can be graded unity, and to the extent that it will materialize in the future, it should be graded as a fraction. A fifth dimension to which the pleasure and pain of a given act are subjected is fecundity. This refers to the capacity of a given act to increase in pleasure or pain as it is repeated over and over. For example, the enjoyment derived from art and music increases as a person becomes more and more knowledgeable about them.

On the other hand, there are other acts which tend to become less and less pleasurable every time they are repeated, such as mowing the lawn as the summer wears on. A sixth quality by which pleasure and pain are measured is purity. This refers to the amount of pleasure which remains after experiencing the pain to acquire that pleasure. For example, a person might like to go to the movies but must subtract from that pleasure a certain amount of displeasure entailed in walking to the theater on a rainy night. The last dimension in terms of which the pleasure and pain of a given act are measured is extent. This quality refers to the number of people participating in the act. After the net pleasure or pain of a particular act is computed, this value is multiplied by the number of people affected. This then, gives us the total pleasure or pain to be experienced by society.[7]

Bentham does not apply this exercise of matching pleasure against pain only to individuals, but to society in general as well. He claims that the principle of utility, namely, the seeking of pleasure and the avoiding of pain governs not only the conduct of individuals, but of society as well, which Bentham regards as an artificial body of the individuals who comprise it.[8]

An important implication follows from this insofar as governmental policy is concerned, for by multiplying the total net pleasure or pain associated with a public act times the total number of individuals affected by it, a determination may be had on whether or not that act will be in accord with the best interests of the community. As far as Bentham is concerned, every act of government is evil, because it involves an infringement of some citizens' liberty. Therefore, it is extremely important that a comparison be made of the sum total of evil which a given act will cause through this curtailment of liberty and the sum total of evil it will remove through its enforcement. If the latter is greater than the former, the legislation should be enacted; otherwise it should not. In

effect, Bentham ascribes the same role to legislation as he does to the attainment of the greatest possible amount of well-being for the greatest number.[9]

In evaluating Bentham's felicific calculus we might very well question its worth because it is highly debatable whether the feelings of different people are comparable. But even if we grant that premise, we might still disagree with the common denominator which Bentham used to measure the qualitative differences in human feelings and emotions. Nevertheless, the true worth of Bentham's felicific calculus should not be sought in itself, but rather the influence it exerted on the writings of a number of economists who played an important role in the development of economic thought. In particular, Bentham's utilitarianism had a significant impact on a group of reformers known as the Philosophical Radicals who were very active and effective during the early part of the nineteenth century. This group included such men as James Mill, Joseph Hume, Francis Place, Sir Robert Peel, and many other prominent and influential individuals representing every walk of life.[10]

Insofar as economics is concerned, Bentham's significance lies in the fact that he added to the philosophical, ethical, and psychological base of the discipline. His felicific calculus or hedonistic psychology helped to shape the development of economic doctrine by doing away with instincts and emotions as governing economic action and substituting in their place rational choices motivated by the desire for pleasure and the dislike for pain. Also, by showing that every individual can know what is best for him through the calculation and comparison of pleasures and pain, Bentham's principle of individual interest served as a force for more freedom in economic life.[11]

JOHN STUART MILL (1806–1873)

The complete title of John Stuart Mill's chief contribution to the development of economic thought is, *Principles of Political Economy with Some of Their Applications to Social Philosophy.*

The motivating force behind Mill's writing this book, in his judgment, was the need for a more comprehensive and more recent work to supplant Adam Smith's *Wealth of Nations*. Although Smith's work had served admirably well within his century, Mill felt that it was obsolete and imperfect for use in his own day. This was so because political economy had developed almost from infancy since the time of Adam Smith and the philosophy of society had advanced beyond the point at which he had left it. In spite of these advances no one had attempted to combine Smith's doctrines with the contributions made to economic theory by later writers and to explain the economic phenomena of the day in the light of those developments. Therefore, the goal which Mill set for himself in writing the *Principles*, was to provide a work comparable in its object and general conception to that of Adam Smith, but adapted to the more extensive knowledge of the present age.[12]

In writing his *Principles*, Mill hoped to provide a reformulation of economic theory in the light of all the modifications it had undergone since the publication of Smith's *Wealth of Nations*. Mill was not simply interested in synthesizing the work of the classical authors, but also in fusing the contributions of the socialists, especially those of the Utopian School. Basically, the intention of Mill's work was to combine all their criticisms with the previously existing body of work and to fit them into the same framework.[13]

With the publication of Mill's *Principles* in 1848, classical economics may be said to have attained its perfection; however, it may likewise be said that with it classical economics began its loss of favor. In effect, the middle of the nineteenth century marks the crest of the wave for the classical school of economic thought. This seems strange, for it would appear that Mill's *Principles* should have strengthened the classical approach rather than to sound its death knell. The truth of the matter, however, is that Mill was caught between two schools of thought. On the one hand he was drawn to Ricardo's classical economics, to which he was linked by paternal ties, and on the other, he was drawn to the pleadings of the utopian socialists as articulated by Saint-Simon and Auguste Comte.

Therefore, we may say that the real significance of Mill's work lies in the fact that it marked the close of one epoch in the development of economic thought and the commencement of another. Essentially, Mill's *Principles* was a transitional work summing up and explaining what had been done in the past and paving the way for the developments of the future. The real importance of John Stuart Mill's contribution to economics lies not in his effort to merge two different schools of thought, but rather his development of the discipline's philosophical base He was responsible for applying the idea of utility to the body of classical economic thought thereby helping to free it from the deadly assumptions of "the law of nature" and "natural rights." Mill was also the leader in recognizing the importance of an understanding of the relation between individuals and society and in

developing the principles underlying a social point of view. Laws are not absolute, but are limited by customs and institutions. In contradistinction to Ricardo, Mill argued that laws are provisional and subject to time and place. Mill's penchant for social reform was so strong that he was prepared to consider the reform of existing institutions, even if they involved governmental interference with the rights of private property. He believed that the government could do much, directly and indirectly, to insure the well-being of the people and to insure the development of those faculties essential to their moral existence.[14]

Mill stands halfway between the economics of the classicists and the utopian socialists. Utopian socialism was the natural outcome of the Smith-Ricardo labor theory of value. The utopian socialists among whom numbered Saint-Simon, Robert Owen, Charles Fourier, and Louis Blanc believed that since labor was responsible for the production of a commodity, the full value of that good belonged to labor. Their call was for a return to the land and a simpler lifestyle. Mill wanted to bring about a reformulation of economic theory in light of the criticism voiced by the utopians. He wanted to fuse traditional economics with the views of the utopians, but however noble his efforts were, he failed. Instead of giving us a synthesis of the two schools of thought, he produced in his *Principles of Political Economy* a two-faced Janus. As a result, we find two treatises in Mill's work, viz., one which the classicists would have written and the other which the utopian socialists would have produced.

Apart from his philosophical and social contributions to the study of economics, Mill's name is not associated with any economic law.[15] In Mill's estimation, there was little that could be added to the study of economics; hence, he was more concerned in defending the contributions of Smith, Ricardo, and Malthus than in finding any new doctrines with which to amend their writings. As a consequence, his efforts largely resulted in a restatement of the classical theories of his predecessors.

Instead of writing an up-to-date synthesis of economics, Mill in many ways wrote an embellished Ricardo, a book in which the theoretical aspects of economics are mainly based on the ideas of Smith, Ricardo, Malthus, and his own father, James Mill.[16]

In his *Principles* Mill subscribed to the time-honored beliefs of the classicists (e.g., self-interest as the sole motive in economic activity, laissez faire and free competition as the best instruments for giving full expression to self-interest). Like Adam Smith, John Stuart Mill firmly believed in the general principles of individual liberty and free competition which he had been taught by his father. In accordance with his classical predecessors, Mill held that the individual has both a greater knowledge of his own feelings and circumstances, and more interest in his own well-being than anyone else.[17] Individuality was the root of all progress, and so, private initiative should be promoted at all times except in those instances when it infringes upon the rights of others. Since each individual is the best judge of his own best interests, then the wisest arrangement is to have each individual choose his own field of endeavor. Hence, Mill was in definite agreement with the classical economists who believed that laissez faire should apply to every aspect of economic life. Like them, he believed that laissez faire should include freedom in choosing one's employment, free competition, and free trade beyond as well as within a nation's domestic economy. Mill likewise agreed with the classicists that laissez faire should resist all state interference whenever the need for such resistance is required.[18] In truth, Mill was as committed as any classical economist could be to the doctrine of laissez faire, as noted by what he had to say on the matter, "Every restriction of competition is an evil . . . every extension of it is always an ultimate good."[19]

Insofar as his relationship to Malthus is concerned, Mill seems to have been more impressed by the law of population than any other classical economist. As a matter of fact, he was even more fearful of the dire consequences of overpopulation than Malthus himself.[20] Mill believed that "a too numerous family was vicious and almost as revolting as drunkenness, and that little improvement (could) be expected in morality, until the producing of large families (was) regarded with the same feelings as drunkenness or any other physical excess."[21]

So opposed was he to excessive procreation, that he was willing to sacrifice the principle of liberty, which everywhere else he so vehemently championed, if it could in some way curb overpropagation In effect, Mill was willing to support a law which could prohibit the marriage of those parties who could not show that they had adequate means of supporting a family, a proposal to which Malthus was absolutely opposed.

It is impossible to read the *Principles* without being struck by the influence which Malthus exerted on Mill. The wages fund theory, which Mill later publicly recanted, was in no small way affected by the Malthusian doctrine of population, for the only method by which workers could raise their wages, according to him, was through a proper reduction of their numbers. A decrease in population would enable fewer people to participate in the fixed wages fund and this, of course, would make possible higher wages for the remaining participants.

Hence, we can see that Mill was not merely in accord with Malthus's views, but subscribed to them to such an extent that he utilized them in his own work.

In reference to Mill's relationship with Ricardo, too much need not be said respecting their similarity. Indeed, Mill is popularly known as his disciple. In considering the theory of value, one will find that Mill's doctrine is essentially that of Ricardo's.[22] In setting forth his theory, Mill classifies goods into three groups according to which as their supply is "absolutely limited in quantity, susceptible of indefinite multiplication without increase of cost, or susceptible of indefinite multiplication but not without increase of cost."[23]

In the first class fall all those commodities which are absolutely limited in supply, and cannot be increased, as for instance, rare pictures, old wines, and other unique commodities. The value of goods of this class, according to Mill, depends chiefly upon the law of supply and demand with cost of production playing a relatively unimportant role. According to Mill's conception of the law of supply and demand, "the demand for a commodity varies with its value, and the value adjusts itself so that the demand shall be equal to the supply."[24]

The second classification of commodities contains the largest number of objects. It includes those goods which can be increased in quantity without limit. The value of goods of this class, contends Mill, is determined by demand and supply; the latter determining their natural or long-run value, and the former their market value which fluctuates around the natural or long-run value. Where goods are readily producible, there is a minimum point established by the cost of production below which this value cannot fall. Therefore, under perfectly competitive conditions the minimum and maximum points of value for these goods will be the same.

Thus, the value of reproducible commodities will, in the long run, depend upon the cost of production. The law of supply and demand will, of course, continue to determine value in those instances in which there are disturbances in the market, and pending the adjustment of supply and demand.[25]

In considering the cost of production, Mill includes in it the wages of labor and the usual profits. He also agrees with Ricardo's theory that the relative value of commodities depends principally on the quantity of labor. Mill, like Ricardo, does not consider rent as a part of costs.

In regard to Mill's third classification of commodities, this category includes those goods which, like agricultural products, may be increased in supply indefinitely, but only by a more than proportionate increase in cost. The determinant of value in the case of goods of this type is their marginal cost which rises with each additional unit of output. Mill's consideration of value added nothing substantially new to Ricardo's theory of value. As a matter of fact, his discussion of value is perhaps more memorable because of his assurance that the question of value was settled once and for all than for any contribution he may have made. In fact, Mill was so well satisfied with Ricardo's treatment of the subject that he concluded that the theory of value was substantially complete, as note what he had to say on the matter: "Happily, there is nothing in the laws of value which remains for the present or any future writer to clear up; the theory of the subject is complete."[26]

Similarly, John Stuart Mill's approaches to monetary theory and the business cycle were largely restatements of Ricardo's teachings. Mill's contributions to monetary theory were based upon Ricardo's quantity theory of money which holds that the purchasing power of money varies inversely with its quantity. In other words, a doubling of the amount of money in circulation will similarly cause the price level to double, and thereby cut the purchasing power of money in half. However, what both Ricardo and Mill failed to take into account is the role of velocity or the circulation of money. For example, a doubling of the money supply will leave prices at the same level if the velocity of money is cut in half. Also an increase in the money supply may lead to an increase in output, thereby restraining an increase in the general price level. In his approach to business cycle theory, Mill again employed the same reasoning as did Ricardo, contending that general overproduction was not possible because of Say's Law which holds that supply creates its own demand.

In regard to international trade, Mill's contributions were again, primarily based upon Ricardo's theorizing, such as his theory on the principle of comparative advantage. However, Mill did make a significant contribution to the theory of international trade by pointing out that the value at which commodities exchange for one another is determined by the reciprocity of demand. The value at which goods exchange in international trade is determined by the relative intensity of demand in each country for the goods produced in the other country.[27] For example, if the demand for cloth in Portugal is high, its wine will exchange for a lesser quantity of cloth in England in accordance with the law of supply and demand. For trade to be viable the value of the cloth in terms of wine could not rise above the point at which it would pay Portugal to produce its own cloth and the value of that cloth could not fall below the point at which the British would be better off producing their own wine. In sum, the limits within which the values of goods can fluctuate may be set by Ricardo, but the actual rate of

exchange rate, according to Mill was determined by supply and demand. Effectively, the value at which commodities exchange in international trade is determined by the relative intensity of demand in each country for the commodities produced in the other country.

In considering the effects which progress has on the pattern of production and distribution, Mill reached virtually the same conclusions as did Ricardo. According to Mill, industrial progress was characterized by an increase of capital, an increase of population, and improvements in production. In due time, though, such progress would cease and a stationary state wherein advances in material production and increases in population would come to a virtual standstill. In moving to such a state, Mill agreed with the conclusions reached by Ricardo in his consideration of distribution, namely, that in the long run rent would tend to rise, real wages would tend to remain constant and profits would tend to approach a minimum.[28]

In sum, we may say that Mill's theories did not differ from those of the classical authors and as a matter of fact were very closely allied. Nevertheless, Mill occupies a special niche in the annals of economic thought for two reasons. The first being his Wages Fund Theory (which he later recanted) and second, his distinction between the principles governing production and those determining distribution.

THE WAGES FUND THEORY

Mill's Wages Fund Theory complements Ricardo's subsistence theory of wages. The difference between the two rests in the fact that the former constitutes a short-run and the latter a long-run explanation for the determination of wages. In Mill's formulation, wages depend upon the demand and supply of labor or on the proportion between population and capital. By population is meant the number of workers in the labor force and demand refers to the amount of circulating capital which is available for the payment of wages. The fund may be supplemented by profits or savings from the previous year, but cannot be increased at any given point in time.

Wages are determined by a single ratio: the division of the wages fund by the total number of workers. It follows, therefore, that wages can be altered by either an increase in the wages fund or by a change in the number of workers. Mill's prescription for raising wages, in keeping with Malthus's law of population, was, of course, a reduction in population. But, "Why should the Wages Fund be fixed?" In determining the size of his circulating capital why could not the capitalist augment it? It was not a predetermined amount, but subject to the employer's decision. Could it not be increased through the increased productivity of the workers? Wages are not paid out of a predetermined amount of money, but out of the produce resulting from the employment of labor. Labor, sui generis, should be able to pay for its own output. In time, Mill recognized the fallacy of his thinking and recanted the Wages Fund Theory in 1869.

THE DETERMINATION OF INCOME

Mill challenged the belief of the classical school in the universality and permanence of natural law. For example, he draws a distinction between the laws which obtain in the realm of production and those that regulate distribution. Only in the case of production can man speak of "natural" laws; in the other they are artificial, being created by men, and, therefore, capable of being changed. In his own words, he says,

> The laws and conditions of the production of wealth partake of the character of physical truths. There is nothing optional or arbitrary in them. . . . It is not so with the distribution of wealth. This is a matter of human institution solely. The things, once there, mankind, individually or collectively, can do with them as they like.[29]

This passage has great significance, for it opened the door to social reform. But what can be done to modify the method of distribution? Mill's answer is that it largely depends on what happens to the institution of private property. Mill thought that a more equitable distribution of income depended upon a change in the ownership of land. He went so far as to advocate the confiscation of land rent on the premise that rent, as established by Ricardo, was a surplus and not a factor in the cost of production. Mill was a social reformer, and not content with merely opening the door to social reform went through it with a comprehensive program of social policy which included the fostering of petit agriculture, the abolition of the wage system and the substitution of a cooperative association of producers; the socialization of rent by means of a tax on land; the extension of peasant proprietorship; and the lessening of inequalities of wealth by imposing restrictions on the right of inheritance.

In sum, unlike the laws of production which are subject to immutable physical truths, the principles governing distribution are subject to control by mankind. Once men have produced goods they can do with them as they please. The distribution of wealth depends upon the laws and customs of society.[30] Because of this flexibility in the determination of distribution, Mill was able to break the rigidity of the classical concepts of "natural law" and "iron laws" and paving the way for the new developments of the future.[31]

In as much as many of the ideas expressed by Mill smacked of socialism, he has been regarded in some quarters as a socialist. Admittedly he did have an inclination toward socialism, but that was not out of ideology but rather due to the emotional empathy he had for the working-class movement. Although Mill did not consider himself an advocate of socialism, strictly defined, he did often speak of the doctrine when he thought it was being unfairly attacked. For example, in one passage of his *Principles* he points out to those who credit socialism with a desire to destroy personal initiative or to undermine individual liberty that "a factory operative has less personal interest in his work than a member of a communist association, since he is himself a member, (and that) the restraints of communism would be freedom in comparison with the present condition of the majority of the human race."[32]

Despite this favorable comparison of socialism with the existing plight of the working man, this view did not qualify Mill as an unqualified socialist, because he differed vehemently with the socialists on the question of free enterprise. As far as he was concerned, free competition was an absolute necessity and there could be no interference with the essential rights of man. Neither was he disposed to doing away completely with private property despite its attending shortcomings. The fact that he was a strong supporter of Ricardo's classical economics throws further doubt on that allegation. Nevertheless, it is true that his views on socialism were strongly influenced by his wife, Mrs. Harriet Taylor, a strong social activist who was sympathetic to the teachings of Saint-Simon and other socialist thought.

In the final analysis, it must be said that although Mill did not accept socialism as a ready substitute for the institution of private property in his own day, he did not preclude its acceptance at some future date. He believed that such a form of society was a thing of the future, and for the time being advocated that communism be experimented with only on a limited scale, without endangering society. Despite the many reforms which Mill himself advocated (e.g., producers' cooperatives, a limitation on inheritance, a high tax on land rents, and the transfer of lands to the small farmers), he cannot be properly classified as a socialist or worse a communist, for he did not believe that a system, whose true worth was still an unknown quantity, should supplant the economic system of his day despite its many faults and evils.

Any reason, therefore, why his work should not have been characterized as that of a two-faced Janus?

NASSAU SENIOR (1790–1864)

Like Jean Baptiste Say, Nassau William Senior contended that if economics aspired to be a science it would have to divorce itself from all ethical considerations. To him economics did not mean the study of happiness, but rather the study of wealth. For him political economy, in its strictest sense, is the science which deals with the nature of production and the distribution of wealth. The economist who understands his role must stop short of anything which might be called an art. In his words, practical questions, "no more form a part of the science of political economy than navigation forms part of the science of astronomy."[33] Furthermore, the conclusions reached by an economist do not authorize him to give one iota of advice. His business is neither to recommend nor to dissuade, but solely to concern himself with deductions made from economic principles.[34] Clearly, Senior does not see a role for the normative economist in the practice of the discipline.

According to Senior, the most important principles of political economy are: (1) a universal desire to obtain more wealth with the least sacrifice; (2) the Malthusian principle of population; (3) the law of increasing returns in industry; (4) the law of diminishing returns from land. All other principles, he said, were corollaries. For example, he maintained that the greater part of rent is merely the profit on the capital employed in finding land for use and the remainder was a gift of monopoly. Senior spoke of profit as a sort of surplus which varied inversely with wages. These profits were so vital to the capitalist, in his judgment, that he was opposed to the Factory Law of 1833 which shortened the workday for the underaged to twelve hours, because it was the last hour of a laborer's toil that generated a profit for the capitalist. (Could he have been thinking of Marx's "surplus value"?)

Senior took exception to Malthus's view on population arguing that improvements in technology could increase the means of subsistence faster than population. An increase in productivity together with moral restrain, he thought, could avert the dire consequences of overpopulation. Senior also questioned the validity of the Wages Fund, an issue closely related to population. He did not subscribe to it because Mill had failed to explain how this fund was created in the first place. More importantly, Senior maintained that the fund could be increased through an increase in labor productivity and that the wage could be further increased by a decrease in the working population.

Senior's greatest contribution to the development of economic theory is generally considered to be the concept of abstinence as a cost of production. This concept was not introduced by him, but rather by a minor writer, G. P. Scrope, who had earlier declared that owners of capital are given a return as compensation for abstaining from present consumption. This concept had also been vaguely presented in the writings of Ricardo; however, it was Nassau Senior who popularized it.

Senior held that the primary factors of production are labor and natural agents. Abstinence, he maintained, is the secondary instrument of production. He thus replaced the conventional term "capital" with the word "abstinence," which he defined as "the conduct of a person who either abstains from the unproductive use of what he can command, or designedly prefers the production of remote to that of immediate results."[35] In regard to the other two factors of production, Senior defines the term, natural agent, as "every productive agent so far as it does not derive its powers from the act of man" and labor as "the voluntary exertion of bodily or mental faculties for the purpose of production."[36] Thus, human labor and abstinence are characterized as the human or man-supplied tools of production, while natural agents owe their existence to nature alone.[37]

Senior claimed that besides the two primary elements of production, viz., labor and natural resources, a third element is required for the proper employment of labor. This third element is not capital or man-made material goods, but rather the abstinence from consumption which makes capital possible. Costs of production, therefore, should not be thought of in terms of the outlays made by employers, but rather in terms of the sacrifices or disutility experienced by the wage earners and the capitalist.

It should be understood that Senior did not mean that abstinence creates wealth, but rather that it constitutes a title to wealth, because abstinence causes pain and sacrifice to the capitalist, as labor does to the wage earner. In Senior's estimation, the abstinence from the immediate enjoyment of a particular good to which a capitalist has a just claim is one of the most painful exertions of the human will; hence, he should be compensated for this disutility encountered in the postponement of his gratification.[38] Closely related to Senior's abstinence theory of capital is his doctrine on rent. Senior believed, as has been noted, that the cost of production is made up of two elements, labor and abstinence. Wherever competitive conditions exist, the value of a given product is equal to its cost. However, in the absence of perfect competition and the presence of a greater or lesser degree of monopoly, the difference between the price and the cost entailed in the production of a good represents an unearned increment for those who profit by it. This revenue cannot be considered as accruing either to labor or abstinence, because it has not been gained through personal effort or sacrifice. Senior labeled this unearned income as rent, which is comparable to Ricardo's concept of land rent.

In Senior's analysis, rent is not only the result of appropriating the more fertile or more advantageously located lands, but may also be due to superior and unique personal abilities. Senior claimed that "a considerable part of the produce of every country is the recompense of no sacrifice (and) is received by those who merely hold out their hands to accept the offerings of the rest of the community."[39] As an illustration, he analyzes the income of a successful physician which amounts to £4,000. Of this amount, £40 represent wages or the recompense for the labor expended, £960 constitute a payment for the abstinence which the doctor underwent during the period of his preparation for the practice of medicine. The balance of the £3,000 constitutes rent for it cannot be accounted for in any other way.

In today's terminology, the rent described by Senior is referred to as a quasi-rent, compensation over and above the time and effort expended in producing a good or a service, such as the cost of training, the opportunity cost, and a normal profit for the service performed. Any income in excess of these charges represents a payment for some special talent such as the acting ability of a Hollywood star, the gifted voice of an opera soprano, the athleticism of a professional athlete, and the uncanny ability of a Wall Street trader. The high compensation paid to individuals with these gifts cannot be explained other than to ascribe it to their "star quality" and not to their labor or abstinence.

Senior applied this same analysis to inheritances, claiming that whenever capital passes from the hands of those who have earned it into the possession of others, who cannot be said to have abstained or labored in any way, this revenue assumes a different nature and becomes rent.[40]

NOTES

1. Ferguson, op. cit., 83.
2. Bentham, J., *Principles of Morals and Legislation*, London: W. Pickering & R. Wilson, 1823, 1–2.
3. Ferguson, op. cit., 85.
4. Haney, op. cit., 251.
5. Ferguson, op. cit., 83–85.
6. Haney, op. cit., 248.
7. Ferguson, op. cit., 83–84.
8. Scott, op. cit., 128.
9. Ibid., 128.
10. Scott, op. cit., 128–129.
11. Ingram, op. cit., 110–111.
12. Mill, J. S., *Principles of Political Economy with Some of the Applications to Social Philosophy*, London: Longmans, Green, 1909, book 2, chapter l, 200.
13. Bain, A., *John Stuart Mill: A Criticism*, New York: Longmans, Green, appendix "J. E. Cairnes on Mill's *Political Economy*," 182.
14. Roll, op. cit., 389–393.
15. Gide and Rist, op. cit., 359.
16. Gray, op. cit., 277–278.
17. Haney, op. cit., 468.
18. Gide and Rist, op. cit., 355–358.
19. Mill, op. cit., 793.
20. Ibid., chapter 11, section 2.
21. Ibid., 375.
22. Ibid., book 2, section 4, chapter l.
23. Ibid., book 3, chapter 2
24. Ibid.
25. Haney, op. cit., 452.
26. Mill, op. cit., book 3, chapter 1, section 1.
27. Ferguson, op. cit., 126–127.
28. Haney, op. cit., 459–461.
29. Mill, op. cit., 200.
30. Gray, op. cit., 280.
31. Scott, op. cit., 152.
32. Mill, op. cit., 210.
33. Senior, N., *Political Economy* (1850) in *Encyclopedia Metropolitana*, vol. 6, London: Griffen & Co., 1854, 2–3.
34. Gray, op. cit., 273.
35. Senior, op. cit., 57.
36. Ibid., 58.
37. Scott, op. cit., 138.
38. Ferguson, op. cit., 119–120.
39. Senior, op. cit., 89.
40. Gide and Rist, op. cit., 35.

Chapter 7

The Socialists and Karl Marx

HENRI DE SAINT-SIMON

Henri de Saint-Simon, a member of the French Utopians, was born in Paris in 1760 of noble heritage going back to the reign of Charlemagne. At the age of nineteen he fought in General Washington's army and distinguished himself for gallantry in action at the siege of Yorktown.[1]

Upon returning to France he became a social activist and is credited with being the founder of socialism. His perspective in dealing with social problems was ethical rather than economic. He believed strongly in industrialism with a slight admixture of socialism. Basically, he was an egalitarian. In his judgment, labor was entitled to the full value of his output and wages should be determined on individual ability and surprisingly not on need.

In viewing Saint-Simon's work, it is important to distinguish his work from the convictions of his followers; it is as though they ran on two separate tracks with the same destination in view. The basic premise of his writing was that industry constitutes the bedrock of society. He contended that if France were to lose its doctors, merchants, ironmasters and the like, the country would fall into "a lifeless body." On the other hand, if a country were to lose its rulers, judges, cardinals, and the like, it would not cause the slightest inconvenience to society. "The world we live in," he said, "is based upon industry, and anything besides industry is scarcely worth the attention of thinking people."[2]

The future order is industrialism—a social organization having only one end in mind, namely, the further development of industry—the source of all prosperity and wealth. The new regime implies the abolition of all class distinctions; no need for nobles, bourgeois, or clergy.

There will be only two categories—workers and idlers—the bees and the drones. The latter, he thought, would disappear. Saint-Simon's objective was to supplant the study of political economy by a study of social economics. His main concern was with distribution. In dealing with this issue, he did not give too much attention to the institution of private property. This had always been considered to be an indisputable and indispensable institution and Saint-Simon respected that view.[3] This is surprising, because the ownership of property, especially land, loomed large in most considerations of distribution. By contrast, Saint-Simon's followers were of a different persuasion. They took exception to his view and treated property from an economic rather than from an ethical point of view. They questioned the right to property because of its adverse impact on the production and distribution of wealth. They cast doubt upon those theories which justified the ownership of property on the basis of historical evolution, arguing that its abolition would help the perfection of the scientific and industrial organization of society.

Continuing with the views of the followers of Saint-Simon, the Saint-Simonians, as they were called, believed that in terms of distribution the whole produce of labor belonged to labor, but that, consistent with Saint-Simon's view, wages should be apportioned according to capacity to produce.[4] Each person should draw from society benefits which are exactly proportionate to his share in the state, such as in proportion to his potential capacity and the use to which he makes of it. By contrast, Saint-Simon did not want to deprive the capitalist of his revenue.

In Saint-Simon's regime, government would be limited. Its function would be to defend the workers from the unproductive sluggards and guarantee security and freedom for its people. The nation would be transformed into productive associations. France would become a large factory. Its purpose would be to combine the interests of the entrepreneurs with those of the workers on the one hand and with those of consumers on the other. The objective would be to maximize the country's material well-being through the means of peaceful industry. Saint-

Simon would substitute an economic system for a political form of government which would administer affairs rather than men. In effect, politics should be merged into economics.

Soon after his death, Saint-Simon's followers organized into a formal group and established a journal, *Le Producteur*, under the leadership of Enfantin to propagate their leader's teachings.[5] In a short time, the group took on the nature of a religious cult. Under their stewardship, private property was criticized on the grounds of production, the distribution of wealth and the lack of justice. They were opposed to private property, because it inculcated habits of idleness and living on the labor of others.

Although Saint-Simon believed that capitalists had made some contributions to society and were entitled to a return, the Saint-Simonians argued that private property and capital were the worst of all privileges. In their estimation, capitalists and landowners were idlers. Their income came from the exploitation of others' labor. This exploitation was an organic defect of the system inherent in private property. Strangely, the entrepreneur was not considered to be an exploiter, because he is compensated for his work of direction.

For the Saint-Simonians value comes from labor plus something else. However, value was of no concern to them and so they were simply content to make a distinction between revenue from labor and revenue from all other sources. Therefore, if a return to private property was to be forthcoming from that difference, on what basis could it be justified? Could property be productive? Could it work to the advantage of all producers?

The Saint-Simonians did not think so as long as the existing practices of distributing and inheriting property was in force. In their view, children are chosen by chance to inherit and manage the tools of production. Instead those tools should be placed in more competent hands. If capital is not to be considered as wealth, but rather as a means to an end, namely production, then the current system is found wanting. The Saint-Simonians believed that all disorders of production were due to the chance disposal of property. People who own property do not know where it is needed and where it is in excess of need.

To remedy the situation the Saint-Simonians proposed Collectivism. Under this system the state becomes the inheritor of all forms of wealth which is then distributed according to the needs of the general interest. It bears noting that industrialism as advocated by Saint-Simon was not the same as socialism strictly defined. The only equality demanded was that of opportunity. Each person should receive a return on the basis of his capacity or ability. They did not advocate a community of goods; they merely insisted on the abolition of all privileges.

To reinforce their opposition to private property for reasons of production and distribution the Saint-Simonians presented a third reason, namely, the historical argument. Historically, it appeared that private property was sacrosanct, but that was not the case from the Saint-Simonians's perspective. Their argument was that property is a social fact which must submit to the laws of progress. At one time even men could be included in the concept of property, but that was no longer the case. The primogenitore doctrine was also being done away with. The downward trend of the right of inheritance was also starting to restrain the prerogatives of the owners of property. According to the Saint-Simonians, the law of progress tended to establish an order of things in which the state and not the family will inherit all accumulated wealth. The secular march of mankind seemed to march toward industrialism.

In providing a brief assessment of the role played by the Saint-Simonians in the history of economic thought, we find that unlike the Marxists who followed them, they believed in the power of ideas; hence, there was no need for an uprising. Their doctrine constitutes a curious mixture of realism and Utopianism. Their socialism, which makes its appeal to the cultured class, was inspired by the remarkable intuition they had concerning the great economic currents of their time. The Saint-Simonians saw the need of a better system for adapting production to meet the demands of the people than is possible under a competitive system.

Interestingly, they applied the doctrines of Ricardo and Malthus to justify the awarding of the surplus of more productive land to the general needs of society. The theory of profit sharing may also find its origin in their writings. It should be noted that no attempt had been made by Ricardo and the other classicists to distinguish between political economy and social organization. Property was simply a social fact accepted without demurral. The methods of dividing and inheriting property were of no concern to them—so they thought. Their theory of distribution was simply a theory concerning the prices of services rendered. For the Saint-Simonians, on the other hand, the problem of distribution is how property is properly to be assigned. Why do some have property and others have none? Why is there an unequal distribution of the tools of production?

To cite a number of other differences between the two schools of thought, the classicists believed that the major conflict was between the interests of consumers and those of producers. The Saint-Simonians thought it to be between workers and idlers. The classicists believed that society should be organized from the standpoint of

the consumer and that the general interest is satisfied when the interests of the consumer are satisfied. The Saint-Simonians believed that society should be organized from the standpoint of the worker and that the general interest is best served when workers are drawing their full share of the social product. The classists tried to reduce the disorder of individual action within the compass of a few principles and laws. The working of these principles and laws was never questioned, but not from the standpoint of the Saint-Simonians. For example, in the case of competition, the Saint-Simonians were convinced of the cruelty, slowness and awkwardness with which spontaneous economic forces go to work. Instead of conflicting interests being "spontaneously reconciled," they suggested a so-called artificial reconciliation. Admittedly, their attempts to develop new mechanisms to take the place of the spontaneous mechanism failed to gain traction. Nevertheless, it is equally true that Saint-Simon and his followers presented the first, most eloquent and penetrating expression of the sentiments and ideals that inspired nineteenth-century socialism.

THE ASSOCIATIONIST SOCIALISTS

Another important school of socialist thought is the one developed by the Associationist Socialists. This label was assigned to all those writers who believed that voluntary associations were the answer to the social problems plaguing England in the early 1800s. Contrary to Smith's assessment, capitalism and the market system did not provide the poor and the working classes the benefits it had promised. Factories were filled with child labor and working conditions were deplorable. To compound difficulties, the advent of the machine threatened to take away jobs and reduce the wages of the remaining workers; a revolution appeared to be inevitable. It was in this environment that the associationist writers and utopian socialists set forth their plans for a solution to the rampant social ills of their time.

ROBERT OWEN

Robert Owen was among the best representatives of the Utopian Socialists.[6] The objective of the socialists as a class was to promote a free exercise of individual initiative, but found that it was being smothered They were very much concerned about the new phenomenon of competition, the mortal struggle for profits and the keen competition for wages. Their fear was that this intensive competition would lead to business consolidation, monopoly, and a further loss in the well-being of humanity. It seemed to them that voluntary associations of a co-op character provided the only means of dealing with this new force. Indeed, there was still hope if one turned to the model workshops Owen had established in his mills at New Lanark, Scotland. There he established a number of reforms which included a reduction of workers' hours from an unbelievable seventeen to ten and three-quarter hours a day; no employment of children under ten years of age; and the elimination of all workshop fines.

Owen's achievement at New Lanark received wide acclaim; encouraged by that success he thought that he could export his principles to the rest of the world. He believed that man is formed by his environment. A person is bad because his environment is bad. Change the environment and man changes with it. Granting his premises, Owen envisaged a Utopian society consisting of individual self-sustaining units of eight hundred to twelve hundred people living and working together in agriculture and manufacturing. Families would live in the same houses with private family rooms and shared kitchens, living and reading rooms. These planned communities would be known as Villages of Cooperation. Owen had hoped to receive the funding for these communities from Parliament. Although he was well received by that body, it failed to provide the support Owen was seeking.

Undaunted and still intent on putting his ideas into practice, Owen sold his interest in the mills at New Lanark and with the proceeds purchased a tract of thirty thousand acres in Posey County, Indiana. Unfortunately, his planned model for New Harmony failed to take root, lasting for less than two years. The community was simply too disorganized to function as a Utopia. Most of the settlers had little interest in implementing Owen's ideas and so the project was doomed to fail even before it got off the ground.

The land was sold in 1828 at a substantial loss. And with that Owen returned to England. He gave up trying to build a new social order, but did not give up on fighting what he considered to be social injustices. One such injustice, in his estimate, was the existence of profits. Profits represent a surplus over the cost of production, but Owen believed that goods should be sold for what they cost. Both overproduction and underproduction are due, he said, to an unhealthy desire for profits.

Because of the difference between what a worker produces and what he receives, he cannot purchase that part of the output that goes to profits. These returns are parasites and should be eliminated. But how? Owen did not

think that the forces of competition could eliminate them completely. Hedonists believed that profits could be driven to zero, but Owen did not think so. To him competition meant war and profits were the spoils of war. What then?

Owen believed that profits could be eliminated by abolishing the use of money and replacing it with labor notes which would reflect the full value of the output produced. This was justified, he thought, because labor is the cause and substance of value. However, the elimination of money did not square with Owen's communistic ideal, namely, "to each according to his need," if the laborer was to receive the full value of his output. Nevertheless, the cooperative store, an Owen experiment not unlike the Saint-Simonians's co-op, did succeed in eliminating profits without the need to abolish the need for money. As a matter of fact, this concept of the co-op represents Owen's most remarkable and lasting achievement.

LOUIS BLANC

Louis Blanc, represented the French wing of the Associationist Socialists. He was trenchantly opposed to competition, believing that every evil was the result of this force. In his judgment competition is the cause of poverty, the growth of crime, industrial crises, and much else. It means the extermination of the proletariat and ruin for the bourgeois.

He belonged to that group of economists who thought that voluntary associations would satisfy all the needs of society. Blanc's solution called for a social workshop, which simply translates into a co-op—a producer's society. Basically, it would combine all men of the same trade. In a way it would be comparable to a trade union, except that it would produce for itself and not for an employer. It would be democratic and egalitarian. Unlike Owen's scheme, it would not contain within itself all aspects of economic life. By no means would it be self-contained, dealing only with production to the exclusion of consumption.

Unlike the schemes of the Saint-Simonians and the utopians which were to be privately financed, Blanc advocated a National Workshop whose capital at the outset was to be supplied by the government. Another difference between his plan and that of the utopians relates to the distribution of the co-op's revenue. It would be divided in three parts; one to the members of the association; a second for the upkeep of the old, the sick, and the infirm; and the remainder would be set aside to purchase tools for those who wished to join the association. Very importantly, Blanc's plan, like those of his contemporaries, remained faithful to the social principle of making provision for those in need.

Blanc believed that his local workshops would in time grow into one vast association representing all of the social workshops in the same industry. Again, note the parallel between the growth pattern of Blanc's workshops and the emergence of national trade unions in the United States and other industrialized nations. At some point this consolidation will be completed and at that point the competitive model will give way to the associationist regime.

All that is needed to start these social workshops, says Blanc, is some assistance from the government, an amount of capital to set up the workshops, and the development of regulations to guide their operations. In comparing Blanc's association with that, say, of Owen the differences are significant. First, Blanc's system focused on production and left consumption to the discretion of its members; it made no provision for communal living; it left its members to live as they wished and in the overall appeared to give its members much more freedom of movement. Finally, and most importantly, Blanc's system involved reliance on government, both in terms of funding and providing a sense of direction. He thought that some government involvement was necessary, because he did not think that artisans were capable of successfully launching these workshops. He did not think that state intervention compromised personal liberty. Neither did he believe that a role for government constituted an intrusion or violation of personal liberty, for unless people are given a chance they will be unable to exercise that liberty.[7]

KARL MARX

Karl Marx was the intellectual leader of the revolutionary movement of the nineteenth century. In the *Communist Manifesto*, a twenty-two-page pamphlet, which he co-authored with Friedrich Engle he railed against the plight of the laboring classes. In the Manifesto he predicted the inexorable collapse of capitalism. It declared that the end of capitalism could be achieved "only by the forcible overthrow of all existing social relations." Continuing, he warned, "Let the ruling classes tremble at a Communist revolution. The proletarians have nothing to lose but

their chains. They have a world to win."[8] Capitalism would disappear just as other systems had broken down, citing the struggles between the freeman and the slave; the patrician and the plebian; the baron and the serf; and the guild master and the journeyman. But how could these changes be explained? For the answer, he turned to Hegel's dialectics and the notion of the materialistic interpretation of history.

Basically, dialectics involves a process in which a thesis is confronted by an antithesis with the two ending in a synthesis. The object or thought which is being challenged is the positive and the challenge is referred to as the negative force. During the transition, one system destroys itself, giving birth to a successor. Because of their fusion, the struggle between antagonistic elements results in a higher end. The contradiction or negation, according to Hegel, was "the source of all movement and life; only insofar as it contains a contradiction can anything have movement, power and effect." The end result is a negation of negation or a synthesis.[9]

Marx subscribed to a materialistic interpretation of history. The unfolding of history was not based on the development of ideas, philosophy, or religion, but rather on economics. The source of all changes, social and political, he thought, was based on changes in the modes of production and exchange—the economics of the time. For Marx, Property + Proletariat = A Classless Society. One might well question this premise, because other factors have certainly played a role over the course of time. But the reason he emphasized the role of economics was that this factor played an important role in capitalistic production which was at the root of the class struggle.

To gain a perspective on the Marxian system, one must make reference to his *Das Kapital*, a three-volume work the first of which was completed in 1867. Although he had done a voluminous amount of research, Marx died before he could publish it and so it was left to his good friend, Engels, to complete it. In all, the three volumes amount to more than two thousand pages and by most accounts constitute very difficult reading. Accordingly, this brief summary will rely largely on what Marx had to say in the first volume. The work can be best summarized under four topics: the theory of value, surplus value; the falling rate of profit; and the collapse of the capitalistic system.

Marx began his study of value in quite the same fashion as did the classicists. He states that the wealth of those societies in which the capitalist form of production prevails represents an immense accumulation of commodities which is capable of satisfying human wants. If a good has utility, it has use-value; however, utility alone is not sufficient to explain value in exchange, since every act of exchange implies some common element, some degree of identity between the exchanged commodities. This identity is certainly not the result of utility, because the degree of utility varies in every commodity and it is this difference that constitutes the reason for exchange.[10]

In considering this exchange, value which, "at first sight, presents itself as a quantitative relation, as the proportion in which values in use of one sort are exchanged for those of another sort."[11] Marx holds that, if a number of things—X blacking, Y silk, Z gold—exchange for each other, then each must be replaceable by any one of the others. If we take, then, an equation representing an equality of exchange, e.g., one-quarter corn for X cwt. iron, then we may infer that in one-quarter of corn and in X cwt. iron there exists in equal quantities something which is common to both; and to this third thing, which is neither of these, both must be reducible.

Obviously, Marx's next step, in formulating his theory of value, is to determine what this mysterious property is which lies concealed in equal quantities in a shilling's worth of fresh butter and a shilling's worth of tin-tacks. "Firstly and quite evidently, this common something cannot be either a geometrical, a chemical, or any other natural property of the commodities. These properties engage our attention only insofar as they have any bearing on the utilities of the commodities. Nor has the undetected common property anything to do with the utilities of the things." As Marx expresses it, "the exchange of commodities is evidently an act characterized by a total abstraction from use-value."[12] Having thus excluded these factors as possible explanations of value, Marx reasons that there now can be but one property left which is common to all commodities, namely, "that of being products of labor." The common element which is contained in commodities themselves heterogeneous in character is the quantity of human labor in the abstract, great or small, which is contained in them. Therefore, the value of every commodity is simply the amount of crystallized human labor which it contains, and commodities differ in value according to the different quantities of labor which are socially necessary to produce them; that is to say, the labor time necessary to produce any use-value with the given normal conditions of social production and the social average degree of skill and intensity of labor. If things are of equal exchange value, they must have congealed in them the same amount of labor. Substantively, Marx adopted the same labor theory of value

advanced by Smith and Ricardo. But whereas Ricardo had reservations about a pure labor theory of value, Marx pushed it to its extreme.

In evaluating the labor theory of value propounded by Marx, the reader cannot help but question a number of the premises on which it is predicated. First of all, Marx assumes that everything that has value must be the product of labor, for this is the only quality common to two things of equal exchange value. Gifts of nature such as virgin soil, minerals, and timber Marx allows to have value in use but not value in exchange.

This of course, is not a realistic view of things, for whether we want to admit it or not, objects that are not the product of labor do in fact have exchange value; items that are scarce have value; however, all such things are excluded by Marx at the outset of his inquiry into the meaning and cause of value.

Another objection against the Marxian theory concerns its method of exclusion. Marx contends that the reason value is equal to the amount of labor congealed in a commodity is due to the exclusion of every other possible explanation. However, nowhere does Marx prove that the possible list of answers he offers is complete. Hence, how can it be said without a doubt that labor is the proper cause of value when there is at least some likelihood that other factors could be added to the list of alternative determinants of value?[13] A number of additional arguments could be advanced against Marx's concept of the labor theory of value. It emphasizes the supply side and pays insufficient attention to the demand for labor; it fails to give full consideration to the element of utility and reduces labor to an unintelligible abstract fund of social labor.[14]

In any event, it is indeed ironic that Marx should base his demise of capitalism on the labor theory of value espoused by Smith and Ricardo, both supporters of the capitalistic system. To get to the base of Marx's explanation on the exploitation of labor and the demise of the capitalistic system, one must turn to his concept of surplus value.

According to Marx's theory of surplus value, if a workman toils three hours to mine $6 of gold, then according to the labor theory of value, his wage for the three hours should be $6. On the assumption that the working day in the mine is three hours, the employer realizes no surplus value, for the worker receives the equivalent of what he produces. On the other hand, if the working day is of eight-hours duration and the worker still receives the equivalent of three hours of labor, he would be creating five hours of surplus value for the employer. Labor is treated like a commodity and the worker's service is purchased by the capitalist at whatever price he decides, but it cannot be bought for less than the subsistence wage, an amount barely adequate for the maintenance of the worker and his family.[15] In sum, the laborer produces all value, but receives only a part of it with the remainder accruing to the employer in the form of surplus value.

If all value derives from labor, what role does capital play? According to Marx, capital may be of two types: variable and constant. The former refers to the wages paid out to the workers and results in surplus value. The latter includes the machinery and tools that assist laborers in production. This capital does not produce surplus value. It goes directly into production. It simply reproduces the equivalent of its value, in other words, the totals of all the values measured in labor time and congealed in it at its time of production.[16]

From this it follows, that although capital may be of different organic composition, according as the ratio of constant to variable capital changes, the whole of the surplus value comes strictly from the variable capital. Although constant capital cannot of itself create surplus value, it can through its effect on labor bring about the same result. To the extent that more capital is employed, the increase in efficiency lowers the cost of production and the resulting level of prices. Owing to the lower prices which result from this increased efficiency the employer can lower the worker's wages and in so doing add to his surplus value. And so the worker is being exploited even when he is being paid for the full exchange value of his labor.

If profit springs only from the labor employed, and in no way from the constant capital, then the rate of profit in different industries will vary according as the proportion of variable capital is high or low. When there is much variable capital employed the rate of profit should be high and when there is an extensive use made of machinery the rate of profit should be low. But how are we to account for these variations in the rates of profit in different industries according to the different quantities of capital employed, seeing that it is an axiom of political economy that under a regime of free competition the returns on different capitals should everywhere be the same.[17]

Marx is clearly aware of this difficulty and so in his third volume of *Das Kapital* offers an explanation of how a uniform rate of profit may exist despite the differences in the organic composition of capital in different industries. Marx contends that the rate of profit is the same for all capitalists within the country, but that this rate of return is the average of the different rates in all the different industries. In effect, it is the rate that would be

obtained if all the entrepreneurs in the country employing varying amounts of fixed and variable capital formed a single imaginary enterprise. The surplus value gained by each of the individual entrepreneurs would be thought of as entering into a social pool and then distributed among the members. The rate of return would be a kind of average ratio determined by the forces of competition. An illuminating illustration of this average rate of profit is offered by Gide and Rist.

Suppose A and B represent the total industry of the country: the whole national industry will be made up of £900 + £100 circulating capital and £100 + £900 fixed = £2000 altogether. If the surplus value be at the rate of 100 percent of the circulating capital, the total capital value will be £900 + £100 = £1000 on a capital of £2000, or a percentage of 50 percent.[18]

Those industries which have a large amount of variable capital find themselves with just the average rate of return on their whole capital, but draw much less in the way of surplus value than they had expected, whereas those industries which employ a considerable amount of fixed capital draw more than their capital had led them to anticipate. This is clearly indicated by a reference to the above illustration.

The mean of £900 + £100 = £500, and industry A, instead of 90 percent, will draw only 50 percent profit, while industry B, instead of drawing only 10 percent, will draw 50 percent.[19]

From the foregoing we can see, then, that the profit of an individual businessman is unaffected by the organic composition of his capital, i.e., it makes no difference whether he has a high or low ratio of constant to variable capital. Instead, his profit will be determined by the sum total of his capital, regardless of composition, multiplied by the average rate of profit. In effect, the total surplus value which has been pooled will be shared among all the members in proportion to their share of the total capital. But how this was to be accomplished remained an open question.

It is in the very nature of capitalism for firms to seek more and more profits. Since only labor can produce profits, the demand for labor over time increases. But as the demand for labor increases the wages of labor will rise. As a result, employers introduce more and more cost-cutting machinery into their operations. But why would it pay the firm to add more capital, if it does not create more surplus value? The answer, according to Marx, is that the added capital would lead to lower prices (implicitly acknowledging the productivity of capital) thereby allowing the firm to lower wages and add to its surplus value. But would not the lower prices reduce the firm's revenue, thereby offsetting the advantage of lower wages? Moreover, if surplus value could indeed be increased through reliance on more fixed capital, how could Marx argue that capital does not create surplus value?

The preceding observations to the contrary notwithstanding, as more and more capital is employed workers continue to be displaced thereby adding to the ranks of the Industrial Reserve Army. To remain in business the capitalist has to increase his output, but in so doing he cannot dispose it because of the large number of unemployed workers without the necessary purchasing power. Neither can those workers who continue to be employed afford to purchase the added output, because their subsistence wages do not equal the value of the output they had produced. (Clearly, Say's Law is not working in these circumstances.) In addition, the increased output at lower prices causes the smaller and less efficient firms to go out of business and with that their owners, too, join the Industrial Reserve Army.

As the remaining firms continue to operate, their profits decline, because their greater reliance on machines does not produce surplus value. Only the displaced laborers could have produced such returns. But why didn't the capitalists understand the futility of their ways? Marx has no satisfactory answer. In the end, goods remain unsold, unemployment is massive, and the Industrial Reserve Army continues to expand.

In anger and frustration the proletariat rises up and overthrows the propertied classes. We now have the two opposing forces in dialectical play; so what is the synthesis? What does the successor to capitalism look like? Marx had little to say, except that we would have a classless society. But should we be disappointed in Marx's work? Admittedly, his economic analysis left much to be desired, as noted especially by English and American economists. But his contribution to the realm of ideas certainly transcended that shortcoming. Alerting society to the dark side of capitalism with all the hardships and injustices it wrought upon society and crying out for a more humane and benign treatment of humankind must go down as one of the greatest moral imperatives in the history of man.

BERNSTEIN'S CRITICISM OF MARXISM BY A FELLOW SOCIALIST

Edouard Bernstein, leader of the Revisionist School which developed in Germany during the nineties, was opposed to the revolutionary ideas of Marxism. Unlike the Marxists, Bernstein had faith in the ability of the evolutionary processes of democracy to affect the needed reforms. Relying upon the complete democratization of politics and economics, the believed that the socialization of production and other such reforms could be achieved without violence. Thus, in contradistinction to Marx and the other revolutionary socialists, Bernstein was a democratic reformer who relied heavily upon the evolutionary process.

Although his thought was related to that of Marx in terms of the doctrines of class struggle, internationalism, and the socialization of the instruments of production, Bernstein differed with Marx on a number of issues. First, he took issue with Marx's materialistic interpretation of history, contending that in the progress of mankind factors other than economic must be taken into account. Moral, legal, and social issues must be considered as well. In contrast to Marx who believed in a materialistic interpretation of history, Bernstein argued that the influence of technical-economic factors on the evolution of social institutions was becoming less and less significant.[20]

In reference to Marx's labor theory of value, Bernstein claimed that it was an abstraction remote from social conditions. To support his contention, he pointed out that Marx was implicitly obliged to admit that value is dependent upon demand and supply rather than upon the amount of labor time imbedded in a commodity to strengthen his argument, Bernstein cites the following passage from *Das Kapital*:

> According to the law of value, not merely must one devote the socially necessary amount of time to the production of each commodity, but each group of commodities must have such extra effort spent upon it as the nature of the commodity or the character or the demand requires. The first condition of value is utility or the satisfaction of some social need—that is, value in use raised to such a degree of potentiality as shall determine the proportion of total social labour to each of the various kinds of production.[21]

If this be the case, adds Bernstein, then the doctrines advanced by Gossen, Jevons, and Bohm-Bawerk cannot be passed off as so many insignificant irrelevancies. Another criticism which Bernstein offered against Marx's position was that the collapse of the capitalistic system was not imminent and therefore recommended to the Socialist Party that it changed its view concerning such a prospect. He also took exception to Marx's assertion in the *Communist Manifesto* that the middle class of small proprietors would be absorbed into the proletariat, thereby leaving only a handful of proprietors to be expropriated.[22] Instead, Bernstein points out that not only is the capitalist still waxing strong, but that there is no evidence that the small proprietor or manufacturer is disappearing. Hence, the Marxian can scarcely console himself with the thought that the revolution is being achieved without opposition when he sees hundreds of peasant proprietors, master craftsmen, and small shopkeepers all around him.

Contrary to what Marx had proclaimed, Bernstein noted that the lot of the worker was not getting worse and that the law of concentration was not operating as Marx thought it would. Although Bernstein conceded that the number of large industries was increasing rapidly, this growth was not being achieved at the cost of small manufacturers and proprietors who were at the forefront of developing new products to satisfy the needs of the emerging industries. As far as agriculture is concerned, Bernstein allayed fears of mass displacement of petit farmers by pointing out that concentration had scarcely made an appearance; therefore, efforts to have this industry fit into the Marxian model were misplaced. It is true, of course, that Russia, a largely agrarian economy, did subsequently embrace communism, but not because of the concentration of economic power in agriculture.

Finally, the argument advanced by Marx that crises are to be bigger and more widespread was likewise rejected by Bernstein. He claims that Marx's contention that these crises will eventually lead to a world catastrophe has no justification whatever. As a matter of fact, he believed that such a prospect could be forestalled by introducing gradual measures of reform. As a socialist, Bernstein placed hope for such reform on the development of trade unions, cooperatives, and other such institutions. By so allowing the system of socialism to evolve gradually, Bernstein believed that violent eruptions of the type Marx foresaw could be avoided. In truth, Bernstein came closer to the truth with the changes that have been made in capitalism than did Marx who foresaw its total demise.

NOTES

1. Newman, op. cit., 139.
2. De Saint-Simon, H., *L'Organisation*, Paris, 10–20.

3. Bell, op. cit, 364.
4. Ibid., 364.
5. Neman, op. cit., 141.
6. Heilbroner, op. cit., passim.
7. Newman, op. cit., 146–149.
8. Heilbroner, op. cit., 136.
9. Ibid., 144–147.
10. Gide and Rist, 451.
11. Marx, K., *Das Kapital* (1867), translated by S. Moore and E. Aveling, New York: Modern Library, 1906.
12. Ibid., 44.
13. Gray, op. cit., 309–314.
14. Ferguson, op. cit., 10.
15. Marx, op. cit., 190.
16. Newman, op. cit., 166.
17. Ibid., 457.
18. Gide and Rist, op. cit., 457–458.
19. Ibid., 458.
20. Ibid., 479.
21. Marx, op. cit., vol. 3.
22. Gide and Rist, op. cit., 472–480.

Chapter 8

The Marginalist School

Marginalism, with its emphasis on demand and utility, was developed by a number of early nineteenth-century authors. Nevertheless, the development and refinement of the utility concept are popularly associated with the work of William Stanley Jevons and the Austrians, namely, Karl Menger, Friedrich von Wieser, and Eugen von Bohm-Bawerk.

WILLIAM STANLEY JEVONS (1835–1882)

William Stanley Jevons's prominence as an economist rests in the fact that simultaneously with and independently of the Austrian School, he developed ideas fundamentally identical with theirs and can thus claim to be one of the founders of utility analysis. In fairness, though, it should be noted that the concept of marginal utility did not originate with Jevons or the Austrians, but rather with two German economists, Herman Heinrich Gossen and John von Thunen. Jevons was not aware of Gossen's contributions to marginal utility at the time that he was developing his own analysis of it, but on learning of Gossen's earlier work, he graciously acknowledged his primacy.[1]

Although the classical economists had not ignored utility completely, Jevons's approach represented a substantial innovation in the realm of economic theory. Utility had never been regarded as a proper explanation of exchange value by the classicists, for their theory of value was something objective and not subjective. From the time of Adam Smith economists tried to explain value in terms of the cost of production. Their contention was that in the short-run exchange is determined by supply and demand, but in the long-run supply and its cost of production were the more important determinants. In effect, they were less interested in what happens in a moment of time than over a longer period of time. Jevons, on the other hand, by diverting attention to the demand side and the individual's assessment of personal wants, made it possible to formulate a theory of value as an alternative to the classical model. In his words, "Repeated reflection and inquiry have led me to the somewhat novel opinion that value depends entirely upon utility."[2]

Jevons's objective was to build economics on the basis of a utilitarian psychology and to develop it in terms of a calculus of pleasure and pain.[3] In doing so, he depends heavily upon the work of Jeremy Bentham. He does so not because Bentham himself had made great contributions to economics, but because he seems to have formulated with considerable precision notions about human nature.[4] Thus, Jevons started with a psychological system which was nearly one hundred years old. However, he did not take over all of Bentham's notions, because he felt that the fundamental influence of pleasure and pain upon a person's conduct could be put in a more simple and reasonable form. He denied the necessity of exact measurement of pleasures and pains, assuming that we can easily decide which of the two pleasures or of two pains is the greater and know when pain exceeds pleasure.[5]

Jevons believed that economic life rests in the final analysis upon calculations of pleasures and pains and that a science could be developed on this basis. Pleasure and pain are measurable quantities which vary continuously in magnitude according to the amount of effort one makes or the amount of goods one already possess. For example, the last hour of the day's work is more painful than the first hour and the goods produced in this last hour of toil give us less satisfaction or pleasure than the goods of the first hour. When we arrive at the point where the pleasure to be had from the production of additional goods ceases to exceed the disutility of further labor we stop working.

Similarly, in exchanging goods we continue to trade up to the point where another unit of a good received would give us no more pleasure than if we did not possesses it. Thus, economic activity is regulated by calculations of utility and disutility. By employing this calculation of utility and disutility, Jevons believed that it would be possible for the economic theorist to reinterpret the phenomena of production, exchange, distribution, and consumption.[6]

Accordingly, Jevons begins with a theory of pleasure and pain based on Bentham's "A Table of the Springs of Action," which regards man as a pleasure machine whose aim is to derive the maximum pleasure. Jevons then proceeds to define utility as the quality possessed by an object of producing pleasure or preventing pain. This utility is not an intrinsic quality, but rather it is "a circumstance of things arising out of their relation to man's requirements"[7] in which the amount already possessed is therefore a material factor. In effect, it expresses a relation between an object and a subject.

Jevons claimed that the most significant law in all economics is the tendency toward satiety; hence, he reasoned that utility tends to decrease as the amount of a good's use increases. This led Jevons to cite a distinction between the total amount of goods used and the utility which an individual attaches to any one unit of that supply. For the utility of the last unit used, he coined the phrase "final degree of utility." Like Gossen, Jevons examines the effect of changes in the total quantity of a commodity on the utility of an individual portion of that product and concludes that successive increments reduce the utility of every unit. Thus there is a difference between total utility and the final degree of utility; the utility of successive units decreasing while total utility increases.[8]

In Jevons's opinion, it was the final degree of utility that determines the value of exchange. On the basis of a hedonistic philosophy which he borrows from Jeremy Bentham and the notion of a final degree of utility, Jevons develops his theory of exchange value which he states as follows: "The ratio of exchange of any two commodities will be the reciprocal of the ratio of the final degrees of utility of the quantities of the commodity available for consumption after the exchange has been completed."[9]

Quite simply, there is an inverse relationship between the ratio of exchange and the ratio of the final degrees of utility. In Jevons's opinion, it was the final degree of utility that determines the course of exchange and value in exchange. Or, too, the value of any good is arrived at by a comparison of the final degrees of two or more goods. Equilibrium is reached at the point where neither party can gain an advantage by continuing to trade. At this point marginal utility equals price. The absolute values of these ratios might differ, but in relative terms they must all be equal. For example, one may enjoy more total utility from a steak than from an after-dinner cordial, but at the margin their utilities should be the same.[10] These views concerning value then serve as the basis for Jevons's theory of exchange which is his greatest contribution to economic theory.

Thus, while the classicists were primarily concerned with the cost of production, Jevons turned the tables around shifting attention from cost and supply to utility and demand; thereby supplying economics with the second component of value which Marshall put together with supply to give us value as we know it today.[11]

The preface to *The Theory of Political Economy*, leads the reader to anticipate that the theory of value, once described, would then be applied to rent, interest, wages, and profits. Although he hints that the distribution of income is determined by the same principle of value, none of the theories he advanced for each of the factors of production met that claim. On the contrary, for each factor, he used a different principle. For example, in discussing the theory of rent, Jevons adopted the Ricardian theory. In considering interest, he seems to have relied upon the marginal productivity theory, as suggested by the following statement: "The rate of interest depends on the advantage of the last increment of capital, and the advantages of previous increments may be greater in almost any ratio."[12]

For a wage theory, Jevons gives us what may undoubtedly best be called the residual claimant theory. He maintains that the laborers get whatever is left after the shares of the landlord, the capitalist, and the entrepreneur have been paid. Therefore, labor is the residual claimant to any surplus of production over and above the rewards which must be allocated to the three other factors of production: "The view which I accept concerning the rate of wages is that the wages of a working man are ultimately coincident with what he produces, after the deduction of rent, taxes, and the interest of capital."[13]

Finally, concerning profits, he divided them into three parts—wages of superintendence, insurance against risk, and interest—but did not succeed in developing a theory. In sum, Jevons failed to construct a theory of distribution based upon his theory of value. Had he done so, he would have followed the table of organization followed by Ricardo with a discussion of value, then an analysis of wages, rent, interest, and profits.

Although Jevons's contribution to the development of economic thought was formidable, his work was not without criticism. In addition to his failure to explain how his notions of value and utility would relate to the returns to the factors, he failed to disprove the classical argument that value depends on the cost of production. In his fundamental theorem, Jevons said nothing about the cost of production. This represented a very distinct

break from the traditional analysis of value offered in his assertion that, "repeated reflection and inquiry have led me to the somewhat novel opinion that value depends entirely upon utility."[14]

Later, however, he seems to veer back to a cost of production explanation by way of his famous "catena" in which he states the following: "Cost of production determines supply; supply determines final degree of utility; final degree of utility determines value."[15] According to this chain of reasoning, value depends upon the cost of production and so we are right back to the very arguments of Ricardo and Mill. As Marshall pointed out, if as Jevons stated, cost of production determines supply, and supply determines the final degree of utility, and the final degree of utility determines value, then in the final analysis it may be concluded that cost of production determines value. Moreover, the cost of production, supply, the final degree of utility, and value, do not stand in simple relationship, but rather, as Marshall noted, in one of continual adjustment and readjustment. These factors mutually determine one another. In sum, Jevons may have been one of the founders of the marginal utility school, but he could not divorce himself completely from the classical school.[16]

THE PSYCHOLOGICAL SCHOOL

Interestingly, the members of the Austrian wing of the Marginalist School, along with the American economist, Frank A. Fetter, are also considered to be members of the Psychological School. The reason for their having been classified as such, is that they attempted to deal with the psychological dimensions of subjectivism—the ultimate cause of value.[17] In their estimation, economics must deal with the individual and his behavior; hence, their theorizing starts from within the mind of the economic man. The psychological approach emphasizes man, over material object, and insists that economic values are determined by subjective elements. The Austrian economists claimed that value springs essentially from the calculation of utility and reflects the mind of a person who finds something useful in some object or another. Fetter claimed that the basis of value rests in the simple act of human choice. Although they emphasized the subjective, this does not mean that these psychological economists denied the reality of the object or the existence of objective value. Nevertheless, they did consider objective phenomena as secondary and dependent upon the wants, choices, and volitions of human beings. Therefore, value is subjective and not determined by impersonal or objective standards.[18]

Although many of the earlier economists had acknowledged that utility and other subjective considerations entered into the determination of value, they tended to take these factors for granted. This was especially true of the English classicists who subscribed to an absolute standard of value, e.g., the labor or cost of production standard of value. Consequently, it remained for the members of the Austrian and the Psychological Schools to reconsider the question and come up with a standard based on subjective elements.

Although both the Austrians and Fetter employed psychology extensively in formulating their theories of value, they differed in the type of psychology they employed. The Austrian School, under the aegis of Menger, Wieser, and Bohm-Bawerk had recourse to a psychology based implicitly on hedonistic concepts, whereas Fetter tried to do away completely with hedonism and to substitute in its place a psychology based on how humans act. Speaking of himself in the third person, he states,

> He presents here a quite new statement of the theory of value, one in accord with the modern volitional psychology, thus eliminating entirely the old utilitarianism and hedonism which have tainted the terms and conceptions of value ever since the days of Bentham. The basis of value is conceived to be the simple act of choice and not a calculation of utility.[19]

In the period between Jevons's end and Marshall's beginning, there occurred a declining faith in hedonism. The doctrine which Bentham had expounded with so much confidence was becoming less and less acceptable as people learned more and more about human behavior at large. The theory that all our actions are guided by an attempt to maximize pleasure and to minimize pain seemed to be at variance with the findings of psychological research. This development created quite a stir in the study of economics, because at the time most economists implicitly, at least, based their writings on hedonistic thought. Clearly, if the tenets of hedonism, as the psychologists contended, were erroneous, then their economic theorizing which was largely based on hedonistic premises would be equally wrong.

Economists were faced with a serious problem: Could they find a sounder psychological basis for their economic theorizing? Could they prove that their theories remained valid irrespective of any shortcomings associated with the hedonistic doctrine? Could they dispense with a psychological foundation altogether?[20]

The easiest thing to do was to disregard what was going on in the field of psychology and continue to do their research in the traditional manner. Unlike Jevons, economists in the midst of developing their utility analysis such as Menger and Walras, had nothing to say about hedonism. Others, like Fisher and Davenport, rejected hedonism and tried to eliminate psychological considerations altogether by considering economics as "the science that treats phenomena from the standpoint of price."

A third course was taken by Professor Frank A. Fetter, who, in *Economic Principles*, presented "a new statement of the theory of value, one in accord with the modern volitional psychology, thus eliminating entirely the old utilitarianism and hedonism which have tainted the terms and conceptions of value ever since the days of Bentham."[21] What was this "modern volitional psychology" to which Professor Fetter made reference?

Volitional psychology is distinguished from other types of psychology by the emphasis it places on the will. From a volitional point of view the individual is perceived as a creature with inherent tendencies, such as instincts and impulse. The individual is not passive, but active. There are things he wants and he pursues them. His conduct cannot be explained in terms of what the environment offers as pleasures and pains, but rather in terms of what he himself is striving for, recognizing, of course, that what he will do as an individual will depend largely upon the opportunities which his environment presents. Human action, according to this psychological approach is less deliberate and not a matter of reflective choice, as is the case with the hedonistic psychology.

Employing this volitional approach, Fetter contends that the determination of value depends upon a simple act of choice and not the calculation of pleasure and pain. Choices, asserts Fetter, are determined by habit and instinct rather than by any calculation of utilities. The human nervous system, he holds, reacts in a certain way to various stimuli, just as a chick does. Because of its inborn nature, the chick picks at any object it sees, rejecting some and accepting others. According to psychology, the experiences of the chick, in which it accepts or rejects certain objects, will help it to make other determinations in the future.

The human being, says Fetter, also starts out in this way. As he matures, calculation comes more and more into prominence, to be sure; however, it is still instinct which plays the primary role in the ultimate determination of his activity. Choice is ruled by instinct. In his own words, Fetter states that "choice is ruled fundamentally by impulse and by instinct; one likes what one likes; de gustibus non disputandum est."[22]

The next consideration in Fetter's theory of value concerns valuation—an expression of the importance of one object of choice in terms of another. Fetter claims that few people can command all the goods they desire, because of the scarcity of commodities; therefore, choices have to be made. In the process of making a choice, one commodity is compared with another. According to Fetter, "a comparison of this sort between things may take the form of a mere vague preference without any exact quantitative expression of the degree to which one thing is more important to us than the other."[23] Each comparison of the importance of one commodity in terms of another "is a focus of many influences, a resultant of many conditions, some in the environment and some in the nature and feeling of man."[24] It is customary to speak of valuation as preceding choice, but Fetter says:

> Evidently this is not so in the case of instinctive choice, and many choices have in a measure this impulsive character. In case of a choice of a thing by a person for his own use the valuation is simply the resultant of choice; it is the arithmetic expression necessarily involved in the action and reveals to the person himself what he has done, how he values the object rather than what determines his action.[25]

Only when one businessman buys for another can there first be valuation and then choice, argues Fetter; otherwise, as is the case with the average consumer, the order is choice, valuation, and then value. As a choice is made, and a valuation is thus expressed, the person choosing feels that there is a certain quality of importance possessed by the good which determines his choice. This quality of importance which things have when they are the objects of man's choice is value; however, it is not something which was present in the good before the consumer made the choice; "it goes and comes, it grows and wanes, according to the intensity of the desire. It may have existence for one economic subject and not for another; it is not to be thought of as something in a thing before man makes it an object of choice."[26] From this, then, we can see that Fetter makes value entirely subjective. According to him, it's not the cost of production or labor that determines the value of a commodity but rather the psychological process whereby a commodity is chosen. This, then, is the connection between his economics and volitional psychology.

THE AUSTRIAN WING OF THE MARGINALIST SCHOOL

Notwithstanding their similarities with the Marginalist School, the Austrians are generally treated as a separate entity. Included in its membership are Karl Menger, Friedrich von Wieser, and Eugen von Bohm-Bawerk. The special intent of the Austrians was to refute the Marxian system. To do that they understood that they would have to deal with the Marxian theory of value. But in so doing they would by inference also be attacking one of the main tenets of classical economics. To refute Marx they understood that they would have to strike at the very heart of his system; they would have to undermine his labor theory of value. But in refuting the labor theory of value, the Austrians, by inference, would also be attacking one of the major tenets of classical economics. As important as this issue was, the bond that held all of the school's members together was the "mechanics of utility" as developed by William Stanley Jevons.

The arguments advanced by Karl Menger against the labor theory of value are typical of those of the school in general. He categorically denied that either the labor or cost of production theory played a decisive role in the determination of exchange value. In his judgment value was purely subjective both in nature and measurement. Value is determined by individuals. There is no necessary and direct connection between the value of a good and the amount of labor or quantities of other factors that went into its production.

To support his claim, Menger points out that noneconomic or free goods such as minerals and timber do not attain value, because labor, capital, or land were expended in its production. Whether a diamond was found accidentally or whether it took one thousand man hours to bring it out of the ground is completely irrelevant so far as its value is concerned.

In general, people do not ask what went into the production of a commodity; rather, they simply consider the service which the good will render or too the need they will have to forego, if they do not possess it. Again, in discounting the importance of the cost of production, Menger points out that goods which have considerable labor and other resources expended in their production oftentimes have no value at all. The market prices of produced consumer goods do not necessarily correspond to their labor or other factor costs. The quantity of labor or other means of production cannot explain the value of a good that cannot be reproduced, such as antiques and paintings by old masters. In summing up his argument, Menger notes:

> The determining factor in the value of a good, then is neither the quantity of labor or other goods necessary for its production nor the quantity necessary for its reproduction, but rather the magnitude of importance of those satisfactions with respect to which we are conscious of being dependent on command of the good.[27]

THE THEORY OF VALUE

Casting aside the classical notion that value depends upon labor or the cost of production, the Austrians turned to the subjective notion of marginal utility for their explanation. Basically, the Austrian theory of value can be summed up by Bohm-Bawerk's proposition that "want tends to decline in intensity as man satisfies it." Essentially, this view is no different from the principle of marginal utility first propounded by Friedrich Hermann. In his work, Gossen, another early proponent of utility, set forth three important principles:

1. The amount of satisfaction derived from the consumption of a good decreases with each additional unit of the same commodity until the point of satiety is reached.
2. Individual consumers must keep the marginal utility of goods equal if they are to attain maximum satisfaction. Unless a person can satisfy all of his wants to the point of zero utility he must discontinue the use of that good at the point where the utility derived from it is the same as that derived from the consumption of all other goods.
3. Subjective or use value attaches to a good only when the supply of the good is smaller than the quantity demanded. As more and more units are supplied, the subjective value of the additional units approaches zero. (This principle is derived from #1 and # 2.)[28]

Condillac, too, preceded the Austrians in the development of a subjective theory of value. In his *Commerce and Government* (1776) Condillac states that since the value of things is based on want: "[A] more keenly felt want gives rise to a greater value." He also observed that "the value of a thing increases with scarcity and decreases with abundance."

Other early writers who intimated a subjective theory of value were John Craig and Mountiford Longfield. In *Remarks on Political Economy* (1821), Craig states that if one wishes to sell more of a good, one can do so by

reducing price. In this way, the estimate of gratification can be brought within the reach of more people. In *Lectures on Political Economy* (1833), Longfield notes that "market price is measured by that demand, which being of least intensity, yet leads to actual purchases."

Returning to Bohm-Bawerk's "proposition," we find that his thinking on value closely parallels that of Gossen, Condillac, and the earlier writers. To illustrate his principle of value, Bohm-Bawerk cites the case of a farmer living in a log cabin in the midst of nowhere. The farmer has harvested five sacks of corn which he must apportion to various uses. This he does as follows:

1. The first sack of corn he sets aside for sustaining life.
2. The second is set aside for unforeseen contingencies, e.g., a very long winter
3. Not content just to consume bread, he sets aside a third sack for raising poultry.
4. A fourth sack is allotted for the distillation of spirits.
5. A fifth sack is to be used for feeding the farmer's parrot. The parrot provides the farmer with entertainment.[29]

The question now is, "How does the farmer value any one of these sacks of corn?" The answer, quite simply, is to take one sack away. The one he takes away, of course, is the one he had previously assigned to the parrot. Therefore, we may reason that the value of any one of these five sacks is determined at the margin. But why should each of the five sacks be worth no more than the last one? The answer is that the sacks of corn are homogeneous, and so, easily interchangeable. In effect, the value of the corn is determined by the value of the one with the least usefulness. The rationale for this outcome is neatly summarized by Menger: "Hence, the value to this person of any portion of the whole available quantity of the good is equal to the importance to him of the satisfactions of least importance among those assured by the whole quantity and achieved with an equal portion."[30]

In sum, for the Austrians value is neither inherent in goods nor are they independent in themselves. Value entails a judgment about the importance of goods which man has at his disposal. Value does not exist outside of human consciousness. Entities that exist objectively are only particular things and their value is different from the things themselves. In Menger's words, "value is a judgment made by economizing individuals about the importance their command of the things has for the maintenance of their lives and well-being."[31]

THE VALUE OF COMPLEMENTARY GOODS

Granted the Austrians' explanation for the value of a single commodity, what explanation did they offer for complementary goods wherein the value of one item is dependent upon the value of the other? In his explanation of the valuation of complementary goods, Wieser differs with the approach advanced by his father-in-law, Karl Menger. In his explanation, the latter would measure the loss that would result from the removal of each one of the units from the combination. Each of these losses could be the same or differ from one another. Weiser argues, as against Menger, that in the case of a stock of heterogeneous goods, when one is removed, the others are simultaneously deprived of a portion of their effect.[32] Consequently, "the deciding element is not that portion of the return which is lost through the loss of a good, but that which is secured by its possession."[33]

Weiser's solution for determining the exact contribution of each complementary good in the production of a finished good involves the utilization of a series of algebraic equations, each of which would exactly represent the character and results of each combination into which it enters. For example, suppose "a," "b," and "c," enter as complementary goods in the following proportions into the production of three goods X, Y, and Z, valued respectively at 145, 160, and 260: into X, 2a, 3b, and 4c; into Y, 3a, 6b, and 2c; and into Z, 7a, 2b, and 8c. Then the following algebraic equations may be formulated: $2a + 3b + -4c = 145$; $3a + 6b + 2c = 160$; and $7a + 2b + 8c = 260$. The solution of these simultaneous equations will give us the following answers: $a = 10$; $b = 15$; and $c = 20$. These results would represent the productive contribution of each of the complementary goods used in varying combinations in different commodities. Wieser contends that since complementary goods actually enter into a great number of different combinations in the processes of production, ordinary accounting methods enable businessmen to form the necessary number of equations and to impute to each good its contribution to the value of the product in question.[34]

While it is true that Wieser's approach in employing simultaneous equations to solve a series of unknown quantities is perfectly legitimate from a mathematical point of view, we fail to see what it proves. Wieser works on the assumption that the price of the final product is known and that the costs of the complementary goods

which are used in its production are determined by the value of this good in finished form. The complementary goods, a, b, c are producers' goods whose value will be determined by the value of the consumer good in final form. But if Wieser requires the price of this good to be known, then is he not guilty of assuming something which he is supposed to prove? Quite obviously, his reasoning falls victim to the fallacy, petition principia.

THE VALUE OF PRODUCER GOODS

Having explained the value of finished goods, how did the Austrians explain the value of producer goods? They did so by making a distinction between the factors of production which they labeled goods of a higher order and finished or consumer goods which they labeled goods of a lower order.

Significantly, Menger holds that neither the cost of production or labor theories of value can explain the value of the factors of production—goods of a higher order. Conventional theory cannot explain the value of goods provided by nature, such as land, for example. Neither can it explain the value of labor nor the services of capital. Therefore, these factors cannot determine the value of consumer goods because the value of the latter cannot be determined by the cost of production. Actually, the value of goods of the higher order is determined by the prospective value of the goods of lower order at the end of the production cycle. This is known as the Law of the Imputation of Value—the valuation of productive goods on the basis of the contribution they make to the value of their products.

According to Menger, the value of the productive factors, land, labor, and capital cannot be reduced to labor or cost of production. As in the case of a consumer good, the value of a producer good is equal to the importance of the satisfaction lost if the owner did not have command of it. Effectively, Menger's explanation depends upon negative imputation.

At times, some part or even all of a productive factor may be eliminated without destroying the capacity of the remaining factors to produce a good of a lower order. In these cases, the proportions in which the factors are combined are entirely variable. For example, the services of land, seed, labor, fertilizer, and implements are required to produce grain and yet a quantity of grain can still be produced without the use of one of these factors.

As a result of this alteration in the use of the factors, it is evident that both the quantity and quality of the product are going to be affected. The resulting loss determines the value of the factor which was withdrawn. In the same way, the value of each unit of a good of higher order is equal to the importance of the satisfaction associated with the command of a unit of that good. According to Menger, that value is equal to the portion of the product that would be lost, by negative imputation, if it were not employed:

> Assuming in each instance that all available goods of higher order are employed in the most economic fashion, the value of a concrete quantity of a good of higher order is equal to the difference in importance between the satisfactions that can be attained when we have command of the given quantity of the goods of higher order whose value we wish to determine and the satisfactions that would be attainable if we (did) not have this quantity our command.[35]

If producer goods were used singly, the foregoing analysis would be understandable. But producer goods must be used in concert with one another. They are complementary. These goods of higher order need not always be combined in fixed proportions and a change in one factor can have an impact on the others. Economics is not the same as chemistry. How then are the values of these higher order goods to be determined when they are used in varying proportions?

Contrary to Menger's explanation, Wieser holds, as noted earlier, that a factor's value depends upon its "positive contribution." Therefore, whereas Menger explains a factor's return in term of a negative imputation, Wiesser explains it in terms of a positive imputation. Nevertheless, they do agree that the returns to the factors are determined by the demand side of the market. According to Wieser,

> If we ask why products (consumer) thus produced—neither under nor over costs—have value, and why they have definite amounts of value, we shall doubtless find that they have themselves alone to thank for it. They create it out of their utility, taking into consideration the amounts produced. The circumstance that costs of a certain value have been expended in making them is of no consequence as regards their value. The cost value does not determine the use value; the use value exists of itself, and sanctions the cost value.[36]

In effect, what Wieser is saying is that production goods do not determine the value of consumption goods, but rather consumer goods determine the value of the production goods. Value, according to Wieser, exists primarily

and essentially in goods which immediately serve the uses of the consumer and obtain a value directly from an estimate of their marginal use. In effect, it is from these goods of this order that the production goods derive their value. The needle derives its value from the value of the stocking; the plough, ultimately, from the value of the bread, and so on.

Obviously, these production or cost goods have no value until a value is "imputed" or "attributed" to them. But on what principles is a share of the value of finished goods to be imputed to producer goods?[37] In imputing value to land, capital, and labor, Wieser employs the principle of complementary goods, and argues that "the elements that are bound up may alter, and this fact makes it possible for us to distinguish the specific effect of each single element, "by comparing a number of simultaneous equations."[38] In effect, what Wieser is saying is that the contribution of each productive factor can be ascertained by employing a series of algebraic equations, and in this way determine the shares that should properly go to each of the factors in the form or rent, profits, and wages.

Weiser warns us, however; that in the case of land this scheme cannot be too easily applied because lands have different degrees of fertility end consequently different rates of return. In brief, the amounts imputed to lands of different qualities will vary according to their degrees of superiority in substantial accord with the differential law expounded by Ricardo.[39] To get around this difficulty that not all land receives the same proportion of the return, Wieser draws a distinction between what he calls "cost instruments of production" and "specific instruments of production."

A specific instrument, he asserts, is one which for the same reason exists only in one particular instance or can be applied only to the satisfaction of one particular want. Land would be such a specific good, because it is naturally scarce or limited to a single use. Cost instruments, on the other hand, are reproducible and applicable to more than one use. Labor and capital would, of course, be examples of such cost instruments. The significant difference between these two types of instruments, as far as Wieser's analysis is concerned, rests in the fact that in the case of the cost instruments a good number of different equations showing how they fit into different processes of production can be had; whereas, in the case of specific instruments of production such an opportunity to study these different equations cannot be had because of their uniqueness.[40]

Therefore, Wieser concludes that cost instruments, being subject to many uses, can have their value imputed by comparing numerous equations; however, specific instruments, have only one use and cannot therefore be employed in a series of simultaneous equations. They must be treated as residual claimants, assigned such portions of the marginal product which are not imputed to capital and labor with which they are being used.

Starting with the above proposition that production goods derive their value from their finished products, Wieser elaborated a corollary to it, namely, that if several commodities can be fashioned from a certain cost or production good, it is the marginal or least valuable of these finished goods which will determine the value of the cost good. Once the value of the cost good is so derived from its least valuable utilization, it is transmitted to the other finished goods, in whose production it plays a part.[41]

Wieser's reasoning may be illustrated by the following example. Suppose that there are three finished commodities, X, Y, and Z, each of which may be produced by one unit of cost good A, and that there are only six units of this production good available. Also, let us assume that commodity X is valued at 0.20; commodity Y at 0.18; commodity Z at 0.16; and further that every unit added to the supply of X, Y, or Z will reduce its value 2 points (i.e., if 2 units of X are put on the market instead of 1, its value per unit will be 0.18 instead of 0.20, and if 3 units are marketed, its value will be 0.16 instead of 0.18 and so on). Under these circumstances, which one or which combination of these commodities would the manufacturer produce?

Offhand, it would seem 6 units of A in the production of commodity X because this would maximize his return at $1.20, viz., 6 X 0.20 = $1.20; however, a closer examination reveals that this return would be impossible, because as more units of the same commodity are produced its price will decline by 2 points per unit. In effect, if the manufacturer were to produce 6 units of commodity X, its marginal price would be 0.10, and so his total receipts would be 0.60, viz., 6 X 0.10 = 0.60. Similarly, if he were to produce 6 units of Y, his total receipts would be 0.48, viz., 6 X 0.08 = 0.48, and if he were to produce 6 units of Z, his gross receipts would be 0.36, viz., 6 X 0.06 = 0.36.

From this then we can see that if only one of these three commodities is to be produced, it should be X; however, the answer for a maximum profit rests in producing a combination of these products. By using 3 units of A in the production of 3 units of X (3 X 0.16 = 0.48); 2 in the production of 2 units of Y (2 X 0.16 = 0.32); and 1 in the production of 1 unit of Z (1 X 0.16 = 0.16) the total product will be valued at 0.96. The most economical

use of cost good A, then, will require the production of 1 unit of Z, the least important of the three consumer goods in the production of which it could be used and, therefore properly termed the marginal unit. Specifically, it is the value of this marginal product, Z, which determines the value of the cost good A. Commodities X and Y may be called A's supramarginal products.[42]

Once the value of the cost good is determined, it influences the number of units of the supramarginal commodities that can be profitably produced, and in that way their marginal utility and value. It is in this sense, therefore, that it may be said, contrary to Wieser's contention that "value sanctions costs and is not caused by costs," that producer goods or costs of production do play a vital role in the determination of value.

PRICE DETERMINATION BY THE "MARGINAL PAIRS"

According to von Bohm-Bawerk (1851–1914), the objective value of a good is set by the so-called marginal pairs.[43] By objective value Bohm-Bawerk means the exchange of one good for another. By comparison, subjective use value refers to the amount of utility one gains from using a particular good. The market value or price is determined by the subjective evaluations of the marginal or least-willing buyer and the marginal or least-capable seller.

To illustrate how price is set, Bohm-Bawerk uses the purchase and sale of horses. In his model, all the competitors come together at the same time. All horses are the same and known to both buyers and sellers. It is further assumed that each participant knows the terms being offered by the other buyers and sellers. Bohm-Bawerk offers three scenarios to show how the "marginal pairs" set the price: (i) the case of isolated exchange; (ii) one-sided competition among buyers; and (iii) two-sided competition.

Isolated Exchange

In this case we have one horse. The buyer would offer as much as £30 and the seller would be prepared to accept as little as £10. Both stand to gain if the price falls somewhere between these two limits (e.g., £15). But for each of them to gain even a minimal advantage the price would have to be £29 and 19 shillings for the buyer and £l0 and 1 shilling for the seller.

One-Sided Competition

In this scenario we have one seller and five buyers. The bids for the five buyers are as follows in Table 8.1. In this instance, the competition is between A1's bid of £30 and A5's bid of £28. The bid to the seller, who is prepared to accept the best offer, will fall between those limits. Clearly A1 should top A5's offer by the lightest margin possible, namely, £28 and 1 shilling.

Table 8.1 Bids for the Horse

A1	£30
A2	£20
A3	£22
A4	£25
A5	£28

Two-Sided Competition

In this instance we have competition on both sides of the trade, as shown in Table 8.2. With these bids to buy and offers to sell, A1 and A2 are sure to buy a horse, because anyone of the eight sellers is prepared to meet their price. The sellers B1 and B2 could sell their horses to any one of the ten buyers, because the price they ask is below their bids. But suppose that the sellers want a price of £22. At that price A5 drops out, because he wants to pay less than £22, leaving four buyers. We now have six would-be sellers and only four buyers. Seller B6 must either drop out or cut the price to find a buyer. That leaves us with buyer A5 who is prepared to pay a price below £22 and seller B5 who would settle for a price above £20. We now have five buyers and five sellers who would stop bidding at £21. In sum, A6 and B6 drop out because the price is above £21 on the demand side and below £21 and 10 shillings on the supply side. The last parties to do business would be A5 and B5, the marginal pairs, who set the price at £21 with five horses being bought and sold at that price.[44]

Table 8.2 Bid and Asked Prices

Buyers		*Sellers*	
A1 values horse at £30 and will buy under £30.		B1 values horse at £10 and will sell at any price over £10.	
A2	£28	B2	£11
A3	£26	B3	£15
A4	£24	B4	£17
A5	£22	B5	£20
A6	£21	B6	£21 10S
A7	£20	B7	£25
A8	£18	B8	£26
A9	£17		
A10	£15		

BOHM-BAWERK'S RATE OF INTEREST

The contributions of the Austrian School were not restricted to the subjective determination of value and the marginal analysis. Through the efforts of Eugen von Bohm-Bawerk, in large measure, they made noteworthy contributions to the field of capital and interest.[45]

Classical economics had become hopelessly confused in its approach to interest, failing to explain that interest represents a return on capital. Following the classicists, Jevons had made a devastating attack on all cost theories and in so doing laid the groundwork for a marginal productivity theory. Friedrich von Wieser had developed a well-rounded marginal utility theory of distribution in which the idea of a positive imputation was made to apply to all the shares in the distributive process and in which he considered interest as a ratio between the productivity of capital goods and their money cost. Nevertheless, Bohm-Bawerk was dissatisfied with all such explanations of interest hitherto offered. The issue, as he saw it, was how and why the owner of capital is able to draw from it "a permanent net income."[46]

The question he raised was this: "Why is it that when capital is productively employed, there regularly remains over in the hands of the undertaker a surplus proportional to the amount of his capital?" This surplus owes its existence to the circumstance that the value of the goods produced by the assistance of capital is regularly greater than the value of the goods consumed in their production. The question accordingly is, "Why is there this constant surplus value."[47]

Thus, the important role of interest in Bohm-Bawerk's analysis is the determination of the causes which guide into the hands of the capitalist a constant return, over and above the value of the goods utilized to produce present goods and on what grounds this return to capital is justifiable. The question he tries to resolve is, why do present goods have a higher subjective value than future goods? Why is $100 today worth $105 a year from now?; in other words, why does interest emerge?[48]

According to Bohm-Bawerk, the existence of interest may be explained on three grounds. They combine both subjective and objective factors which are intended to overcome the difficulties encountered by the abstinence and subjective real cost theories. As in their case, Bohm-Bawerk's explanation starts with a consideration of the significance of time in relation to both consumption and production.[49] The first two are purely psychological and relate to consumption. Bohm-Bawerk contends that individuals faced with the choice between present and future goods usually overestimate future gains and underestimate future wants. Insofar as people expect to be better off in the future, a like sum today will have a higher marginal value than the same sum they expect in a more prosperous future.[50]

The second reason is, just as we tend to overestimate our means, so, too, we tend to underestimate our future wants. This is due to a lack of imagination and a lack of foresight. We do not know how many things we will want, how many pleasures we may want to experience, etc. These miscalculations are due in part to a lack of will and discipline, running through our monthly salary shortly after the day we receive it, even though we know that there are thirty days in the month. In effect, we pit our goods in the future against a body of wants and desires which when the time comes will exceed our expectations.

The effect of these two errors of optimism, placing our future resources at a maximum, and future needs at a minimum, will serve to increase the marginal utility of the present compared to the marginal utility of the future. Therefore, to increase a future supply of goods an agio or rate of interest has to be paid.

The third cause advanced by Bohm-Bawerk to explain the emergence of interest relates to production.[51] The payment of interest is due to what he refers to as "the roundabout method of production." The longer the method of production, the greater the return. This process is also referred to as indirect production. What this means, quite simply, is that savings and the provision of the tools of production come first and then the production of finished good; hence, the reason for the longer period of time required for production.[52]

To illustrate, if people in a community want drinking water, they may have to go to a nearby spring or reservoir and carry the water back home. That, of course, takes time and is inefficient, because only a limited amount of water can be carried back home in their containers. On the other hand, if they could first produce a pipe, connect it to the water supply and run it to some central point in town that would not only make much more water available, but make access to it much easier. This process takes more time than direct production, but because of its use of capital makes it more productive. The more capital goods and the longer the period of time involved, the greater the output. The use of capital goods or even simple hand tools enhances productivity and makes possible a higher level of output.[53]

Due to its greater productivity roundabout production creates a demand for capital. But before such capital becomes available compensation has to be paid to the owners of capital because of the greater value of present goods over future goods. In short, because roundabout methods of production create a larger volume of output than does direct production, Bohm-Bawerk explained why it was possible to offer a price which overcame the time discount between present and future goods.

In sum, interest for Bohm-Bawerk appears in three different forms. Firstly, is loan interest, which is due to lenders placing more value on the present sum of money than on the future like sum. Secondly, the interest on money borrowed to purchase capital goods for investment, such as tools and machines. These are goods of a remote rank to be transformed into goods of a primary rank (namely, consumer goods). But because future goods are worth less than present goods interest has to be paid. Thirdly, interest may arise in the case of durable goods which provide services over a long period of time. In this case, the further out in time a given service is rendered, the less will be its future value. The present value of that durable good works out to the sum of discounted annual returns.

In evaluating Bohm-Bawerk's theory of interest, a number of points merit comment. As noted, the theory relied heavily on the subjective evaluation of the present and the future. The assumption that time preference leads one to prefer present over future values cannot be generally applied as Bohm-Bawerk does. The present is not always preferred to the future. For example, a person contemplating retirement or starting one's own business might prefer the future over the present and even save a part of his or her earnings without the inducement of an interest payment. Secondly, even if a time preference assumed by Bohm-Bawerk did exist, it might not have any quantitatively precise significance, because time preferences are conditioned not only by human nature but also by social factors such as class divisions and the distribution of income.[54] In regard to his third justification for the existence of interest, Bohm-Bawerk depends not so much on a preference for present over future goods, but rather on "roundabout production" which is, in fact, a productivity theory, because it rests on the possibility of a higher productive return through the use of capital goods.

NOTES

1. Gossen, H., *The Development of the Laws of Exchange among Men and the Consequent Rules of Human Action*, Vieweg: Braunschweig, 1854.
2. Jevons, W. S., *Theory of Political Economy*, New York: Macmillan, 1911, 1.
3. Heiman, op. cit., 185.
4. Mitchell, op. cit., 19.
5. Ferguson, op. cit., 160.
6. Tugwell, R. G., *The Trend of Economic Thought*, New York: F. S. Croft and Company, 1924.
7. Jevons, op. cit., 1.
8. Roll, op. cit., 417–418.
9. Jevons, op. cit., 95.
10. Ferguson, 161.
11. Patterson, op. cit., 324.
12. Jevons, op. cit., 255.
13. Ibid., 268.
14. Jevons, op. cit., 1.
15. Ibid., 165.

16. Newman, op. cit., 213.
17. Haney, op. cit., 586.
18. Ibid., 581.
19. Fetter, F., *Economic Principles*, New York: The Century Co., 1915, Forward.
20. Tugwell, op. cit., 15.
21. Fetter, op. cit., Forward.
22. Ibid., 13.
23. Ibid., 15.
24. Ibid., 16.
25. Ibid., 18.
26. Ibid., 19.
27. Menger, K., *Principles of Economics*, Vienna: Braumüller, 1871, 147.
28. Gossen, op. cit., 1854.
29. Bell, op. cit., 442.
30. Menger, op. cit., 132.
31. Ibid., 121.
32. Gray, op. cit., 355.
33. Von Wieser, F., *Natural Value*, London: Macmillan, 1893, 85.
34. Scott, op. cit., 353–354.
35. Menger, op. cit., 164.
36. Von Wieser, op. cit., 177.
37. Haney, op. cit., 611.
38. Von Wieser, op. cit., 87.
39. Scott, op. cit., 355–355.
40. Mitchell, op. cit., 172.
41. Gray, op. cit., 353–355.
42. Scott, op. cit., 350–352.
43. Roll, op. cit., 444.
44. Gray, op. cit., 343.
45. Scott, op. cit., 365.
46. Von Bohm-Bawerk, E., *Capital and Interest*, translated by William Smart, London: Macmillan, 1890, 1.
47. Ibid., 77–78.
48. Von Bohm-Bawerk, E., *Positive Theory of Capital* (1891), London: W. Smart, 1920, passim.
49. Roll, op. cit., 448.
50. Gray, op. cit., 344.
51. Roll, op. cit., 406.
52. Gray, op. cit., 345.
53. Roll, op. cit., 441.
54. Ibid., op. cit., 407.

Chapter 9

The Outliers

For the most part economists and other writers on economic subjects can be placed in a particular school of thought or associated with a particular period of time. The three economists considered in this chapter, John Hobson, Ralph Hawtrey, and Joseph Schumpeter, cannot be so easily classified. Hobson could be considered a utopian socialist against the existing establishment or too as a member of the welfare school. Schumpeter, for all of his brilliance, did not establish a school based on his teachings nor despite his views on the demise of capitalism was not strongly allied with socialism or any other particular doctrine. To contend that these two economists were totally opposed to the existing doctrines of their times might be too strong a view; hence, the reason for placing them in a less judgmental way outside the pale of orthodoxy. As far as Hawtrey is concerned, he is considered to be a Marshallian economist in some quarters; however, that is open to question, because he did not study under Marshall. Moreover, he did not have the advantage of an academic base which would have put him into contact with other academicians and students. As a result, he fell outside the dominant trends of the discipline[1] and for that reason cannot be easily classified. Nevertheless, he is included in this volume because of the contribution he provided in explaining the role of money in the trade cycle.

JOHN HOBSON

John Hobson was a social reformer. His work largely constituted an indictment of the prevailing economics of his time. He wrote extensively about "the inequalities, injustices and maladjustments of economic society under capitalism."[2] In economics he would replace a system that was more concerned with price and value with one that was more concerned with human well-being. He sought a system that would provide an explanation of the inequality in society and the means for eliminating it. In short, he wanted a more humanistic approach than the one offered by the prevailing orthodoxy. Notwithstanding his dissatisfaction with the existing state of affairs, this should not be construed to mean that Hobson was a Marxist or even a socialist. His purpose was to humanize the system and that he tried to do with his major works on the business cycle, distribution, and welfare.

Hobson was an extremely controversial economist. He was in such disagreement with the prevailing economic doctrines of his time that he was unable to obtain an academic position.[3] Although considered to be a member of the Welfare School, in retrospect he could also have been considered to be a pre-Keynesian, because of his opposition to classical economics and more importantly for his development of the underconsumption theory of the business cycle and his criticism of oversaving as a vice and not a virtue. The fact that Keynes paid a tribute to him in his *General Theory* would seem to corroborate such a designation.

In the classical system, the explanation for the distribution of income was based on pure competition; however, Hobson denied that was the case, because of the existence of monopolistic elements in the industrial system. In that system, the owners of capital collected and distributed income at every stage of production. Owing to the maldistribution of income a disproportionate amount of that income went to the wealthy. In his *Physiology of Industry* which he co-authored with Alfred Mummery, Hobson agreed that if a nation is to grow it must continue to invest in plant and equipment. This means that it must save, but the question is "How much?" The answer is that there must be a proper balance between savings and consumption. Savings come at the expense of consumption.

Therefore, if too much is saved and invested and too little remains for consumption, the added output that comes on the market cannot be sold. Contrary to Say's law, supply in this case does not create enough income to clear the market of the added supply of goods. The glut of supply leads to unemployment and to what Hobson refers to as the "Depression in Trade," a condition of overinvestment and underconsumption.[4]

Hobson's economics is referred to as "welfare" or "social" economics, because of its advocacy of human well-being as the first and foremost priority of economic inquiry. Whereas Adam Smith and those who immediately

followed him were primarily concerned with the production of wealth and the processes of exchange and distribution,

Hobson was more concerned with the way in which modern methods of producing and distributing wealth add to or subtract from the general welfare of the community. Like Bentham, he developed a calculus of costs and utilities for both production and consumption (on the assumption that costs and utilities inhere in both functions). Hobson first analyzes production from the standpoint of human costs; secondly from the standpoint of human utilities; and thirdly as a balance between the two. The same procedure is followed for consumption and on the basis of a comparison of the two results a decision can then be made. In sum, Hobson's theory looks upon economics as a study of a broad field of human activity in which full consideration must be given to all aspects of a person's being and not just to the material side of his life. In effect, man should not be treated as a mere commodity.[5]

Hobson then sets up seven classes of productive activity. Each, of course, has its own economic cost, but a different human cost. Interestingly, he found that the highest paid and most satisfying callings—professional athletes, entertainers, leaders of industry—have the lowest cost. Conversely, the lowest paying jobs—day laborers, factory workers performing routine functions—have the highest costs and the lowest utilities. If material rewards were to be assigned on the basis of net satisfaction, it follows that corporate executives, artists, and professional baseball players would receive low compensation while those doing the more arduous work physically and mentally would be more handsomely compensated.

For the same reasons as those cited above, Hobson maintains that social costs should be taken into account in the measurement of any human activity. For example, in the matter of saving, the cost of abstinence is much lower for a person of wealth, notwithstanding the large sum involved, than it is for a poor person putting aside enough money to pay for his rent. The same reasoning applies to measuring the wealth of a nation. A seeming increase in the wealth of a nation may be easily cancelled by a distribution which leaves comparatively little for the many. In his own words Hobson says,

> An injurious excess of income is possible for an individual, perhaps for a nation, and the national welfare which an increased volume of wealth seems possible of yielding might be more than cancelled by a distribution which bestowed upon a few an increased share of the larger wealth, or by an aggravation of the toil of the producers.[6]

In view of the many industrial and social ills existing during his time, Hobson believed that under modern industrialism the "system of natural liberty" was obsolete and undesirable; hence, he was very much opposed to the absorption of economists with the market place and their continued defense of laissez faire. What they should do, he argued, was to construct a theoretical foundation for the regulation of industry and to relate this theory to a general theory of human welfare.[7]

The economist, in his view, must be investigator, seer, and physician applying the scientific technique to the discovery and cure of social diseases. The task of the economist, he contends, is not to discover fixed and immutable laws which are supposed to govern economic activity, but rather to study ways and means of increasing economic welfare. This economic welfare would include such things as an increase in production, an improvement in the quality of the goods produced, a reduction in the relative amount of effort and material resources required to produce those goods, a reduction in industrial accidents, the lengthening of human life, a higher degree of literacy in the population, an increase in the standards of consumption, and a more equitable distribution of wealth. In brief, the task of the economist is to analyze the production, distribution, and consumption of wealth primarily from the standpoint of human welfare. For these reasons, Hobson is considered in some corners as a leading representative of the "welfare school of economics."

In addressing the issue of distribution, Hobson turned to his *Human Law of Distribution*, an exposition on how a reorganization of society and a more rational distribution of income would enhance the welfare of society. Hobson claimed that an inordinate amount of production in our society is misdirected and a comparable amount of consumption is malconsumption. A considerable proportion of the goods and services produced, from Hobson's perspective, cannot be classed as wealth, but as filth. In his estimation, "a large proportion of the stimulants and drugs which absorb a growing share of income in many civilized communities," "bad literature, art, recreations (and) the services of prostitutes and flunkeys," are notable instances of such malproduction.[8] Hobson further views malproduction from the standpoint of human cost. An old man shining shoes represents a

heavy human cost and any service which such an advanced person could render to society would embody more disutility than utility.

On the consumption side, Hobson lashes out at modern consumer standards. In his judgment, some demands are for useless and even harmful goods; especially those for the gratification of human vanity. The ostentatious manner of living of the rich, their emulation by the moderately well-to-do (and even by the poor), and the partial control of consumption through specious advertising, all combine to create an appalling amount of economic waste.[9]

Since much of society's production and consumption is harmful, Hobson proposes a pattern of redistribution of wealth which will minimize human costs and maximize human well-being. This, in essence, is his *Human Law of Distribution*. According to this law, society should distribute the cost of production according to the ability of individuals to bear those costs and distribute the produced goods among consumers in proportion to their capacity to derive satisfaction from them. In other words, such a law would eliminate all unnecessary human costs associated with the maldistribution of individual wants and at the same time increase human well-being by a more rational response to the needs of individuals and society as a whole.[10]

Hobson believed that reform along these lines is necessary, because society fails to realize that business should be a cooperative undertaking for mutual gain. He contends that there should be a humanization and rationalization of industry. There should be a reformation of the structure of business enterprise in such a way as to resolve many of the existing discords and "to evoke the most effective cooperation, in fact and will, between the several parties, and to distribute the whole product, costs and surplus, among them on terms which secure for it the largest aggregate utility in consumption."[11]

From an ethical standpoint Hobson believed that labor should not be bought or sold like a commodity subject to the fluctuations of supply and demand in the market. Rather its compensation should be determined on the basis of human needs.[12] Clearly this judgment must have pricked the conscience of many economic theorists and leaders of business enterprise. However, this mandate for a "distribution according to needs," should not be interpreted as a concession to communist doctrine, but rather as an attempt to minimize human costs and to maximize human well-being.

There is no gainsaying that the lot of mankind, as a whole, would be vastly improved, if costs could be readily distributed in accordance with human capacity to endure sacrifices, and if goods and services could be distributed in accordance with consumers' capacity to maximize their utility from consumption. However, it is highly unlikely that such a desideratum could be put into place, because of the difficulty of quantifying the pleasure and pain involved in all of these allocations of costs and benefits.[13] The measurement of pleasure and pain is difficult enough, but it becomes even more difficult to distinguish between the two in each of the processes of production and consumption.

The fact that Hobson's Law of Distribution encounters practically insurmountable difficulties does not mean that it is without merit. For one thing, it raises the issue of the meaning and proper scope of economics and for another, the need to address the issues relating to the ethical dimensions of the discipline.

Granted the virtual impossibility of measuring human costs and utilities, how did Hobson expect to implement the other elements in his Human Law of Distribution? To do so, Hobson would call upon the intervention of the state through various devices of social control. He claims that "the substitution of direct social control for the private profit-seeking motive in the normal processes of our industries is essential to any sound scheme of social reconstruction.[14] This does not mean the replacement of capitalism by collectivism, but simply a curbing of the profit motive that will bring about a better distribution of what he calls the "unproductive surplus of industry." He urges a limitation upon exclusive property rights, such as landownership, and upon the unique ability that some individuals have of gaining unearned wealth through the cornering of monopolistic positions.[15]

Insofar as his policy of control is concerned, Hobson believes that the professions should be for the most part socialized. All industries which are largely reduced to routine operations, all those performing an essential public service, and all those serving markets which are likely to become monopolistic should come under the control of the state. This does not mean that Hobson would socialize all industries. He exempted artistic activities, because if they are to prosper they must be left free. New or experimental industries should likewise be given a relatively free hand, subject to minimum wage laws and the high taxation of profits.

The result of this combined freedom and control, supported by proper wage and other social legislation, would be to divert to wages and the public treasury most of what is now an "unproductive surplus"—such as the profits of industry—without stopping the wheels of progress. According to Hobson, these higher wages would purchase

more leisure time and make possible better living conditions, higher efficiency, and provide an opportunity for the pursuit of nonmaterialistic goals. The taxation and receipts from the socialized industries would make possible a higher standard of education, improved public-health services, adequate housing, parks, playgrounds, lower transportation costs, and more efficient public services. The demise of profiteering and the end of excessive incomes would place the ownership of wealth on a more socially responsible and ethical basis.[16]

If industry could be sensitized to its social responsibilities and distribute its rewards in accordance with the more humane Law of Distribution, the major problems of society, such as luxury versus poverty, work versus idleness, individual versus societal rights, and authority versus liberty, could be resolved. But that is not all, because the most important contributions that would come from a more enlightened distribution would lie in fields other than the economic. The most important of all advances forthcoming from his application of the Human Law of Distribution, he contends, "would lie in other fields of personality than the distinctly economic, in the liberation, realization, and improved condition of other intellectual and spiritual energies at present thwarted by or subordinated to industrialism."[17]

To evaluate Hobson's contributions to the study of economics, one would have to assign a high priority to his *Work and Wealth*. This is so because in this book he confronted a problem which, while not altogether overlooked by his predecessors, had not been seriously considered. The issue was "To what extent do our methods of producing and distributing wealth promote human welfare?" Unlike most economists who had followed Adam Smith in concentrating on the production of wealth and those who followed Ricardo by focusing on the processes of exchange and distribution, Hobson's entire analysis in *Work and Wealth* deals with the manner in which modern methods of producing and distributing wealth add to or subtract from the general welfare of the community. Hobson was keenly aware that there are many sets of factors which must be taken into account in studying such a broad subject as social welfare; however, in *Work and Wealth* he restricts his study of welfare to its relationship with the purely economic processes. To sum up, the essence of *Work and Wealth* is a study of human welfare and how it is affected by the existing economic processes.[18]

Notwithstanding its positive objectives, one might still ask whether or not Hobson's *Work and Wealth* qualifies as a contribution to economics. In answering this question, one could certainly say that the first part of the book, which deals with value costs, production, and consumption, falls within the realm of economic theory; however, as regards the second half, wherein Hobson lays down his organic Law of Distribution and the manner in which the organization of society might be modified, one cannot be quite so certain that it does so belong.

Admittedly, the overall text of *Work and Wealth* cannot be considered as a contribution to economic theory in terms of the generally accepted scope of economics. For example, Hobson is not interested so much in explaining the proceeds of distribution as he is in showing how far that distribution falls short of a more equitable one and the use of that income in purchasing goods and services. On the surface, Hobson's efforts appear more like a contribution to sociology than to economic theory; however, it will not do to declare that Hobson's contribution is not economics at all.[19] For if we were to take the view that it is the function of economics not only to study economic issues as such, but also to help promote the betterment of mankind, we could then safely say that Hobson's *Work and Wealth* was truly a courageous attempt at fulfilling the real goal of economic study.[20]

RALPH G. HAWTREY

Ralph Hawtrey was a graduate of Cambridge University, but his concentration was in mathematics and so he did not pursue economic studies under Alfred Marshall. Although he was a good friend of John Maynard Keynes and other economists trained at Cambridge, he cannot be considered to be a member of the Cambridge School. His training in economics was largely received at the British Treasury where, except for a brief teaching assignment at Harvard, he remained for his entire professional career.

Hawtrey's principal contributions to economic thought are his work with the quantity theory of money and the trade cycle. He is also known for his work with the multiplier concept which was popularized by Keynes in the *General Theory of Employment, Interest, and Money*. In view of the importance of his work with the trade cycle, a brief account of his theory follows.

Most business cycle theories acknowledge the role played by money in generating upswings and downswings in the level of economic activity. Nevertheless, there are others who believe that money is a purely passive agent and that economic fluctuations can occur irrespective of money. Hawtrey acknowledges that fact, but insists that

changes in economic activity can result in a business cycle only through the medium of money. In an exchange economy buyers and sellers meet their obligations through the use of money which can be metallic money, government money, bank notes, and demand deposits (checkbook money) much of which represents loans provided by the banks. During Hawtrey's time, checkable accounts provided for 85 percent of all transactions. (At present, electronic transfers have largely reduced the use of paper checks.)

At the start of the cyclical process, the amount of money in circulation remains the same; so too, cash balances which represent the difference between the income and outlays of consumers remain the same. Alternatively, Hawtrey describes these cash balances as the "unspent margin of purchasing power." So long as the cash balances remain constant, the system remains in equilibrium.

This equilibrium can be upset for any number of nonmonetary reasons, including such developments as a new investment, an increase in labor productivity or a change in psychology. Owing to the improved prospects for profit, the upward phase of the business cycle begins. For Hawtrey, the wholesaler and the commercial banks play a key role in both the upward and downward movement of the cycle. The banks, given the adequacy of their reserves at the recovery stage of the business cycle, are eager to make loans at low rates of interest. The wholesalers are especially sensitive to changes in the short-term rates of interest, because their profits are based on narrow margins and high rates of turnover.

At these low rates of interest, wholesalers increase their orders to the manufacturers in an effort to add to their inventories. The increases in the manufacturers' orders for their goods lead to an increase in output, employment, income, and expenditures. At first, the cash resulting from this increased activity is being returned to the banks at an acceptable rate, because the cash balances or the unspent margins between consumer income and outlays are stable; the system is in equilibrium. But in time, the wholesaler seeks to make more profit by adding to his inventories. To finance them he can increase the turnover of his own balance, i.e., "increase the velocity of circulation" and or borrow from the commercial banks. That should not create a problem so long as cash balances or the unspent portion of consumer income remains the same.

However, as incomes increase, cash balances increase. As a result, money is not being returned to the banks as was earlier in the expansion phase. The absorption of cash by consumers causes a decrease in the flow of money to the banks thereby causing shrinkage of their reserves. As a result, there now occurs a tightening of credit in the banking system. Nevertheless, consumers continue to spend for investment and consumer goods; however, their cash balances increase which in time will cause a contraction of credit. At that point, the downward phase of the cycle begins. Unfortunately reserves have already started to contract and restraints on a further expansion of credit are applied too late.

Ordinarily, there is an average relationship between the value of cash balances and consumer income, but once that average relationship has been reduced the banks, albeit belatedly, try to restore their reserve position. They do so by setting higher standards for the extension of loans and increasing rates of interest. In the larger economy, the prices of goods fall as firms try to dispose of their excess merchandise, the value of business assets and security prices fall. The decline in the value of business assets results in widespread failures, thereby endangering the solvency of the banks whose underlying security is their customers' assets. Increased bank failures and the curtailment of loans by solvent banks will lead to the further liquidation of the assets of business firms. The result is a financial panic with its attending decline in output, employment, and income.

In Hawtrey's judgment, the downward phase of the cycle had started well before the time that the banks started to take action. The reason for this failure, according to Hawtrey, is that the banks rely too heavily on the relationship between loans and reserves. They should act well in advance of the timing of this signal. He believes that so long as credit is regulated on the basis of that relationship, trade cycles are bound to reoccur. The flow of legal tender into circulation and banks is one of the slower consequences of a credit expansion and contraction. If the banks wait passively by looking for a return flow of reserves before they take action, depression and unemployment are inevitable. Quite simply the signal to contract comes too late.

In sum, so long as the cash balances or unspent margins remain the same, money will flow into and out of the commercial banking system at a steady rate. If though consumers decide to increase their cash balances, because of an increase in economic activity, equilibrium will be upset. This increase in the unspent balances will interrupt the even flow of money into and out of the commercial banks. That rupture will be further aggravated by the increased demand for credit by the traders who face a slowdown in their revenue because of the increase in the consumers' cash balances. All these developments have an adverse effect on commercial bank reserves. At the point where the banks stop lending the economy falls into a downturn and remains depressed until such time as reserves are restored, interest rates are reduced, and a new development triggers off a recovery.

Unlike most economists who explained economic fluctuations in terms of investment, Hawtrey maintained that changes in inventories were the more important determinant. He was not interested in investment market analysis, e.g., how the rate of interest affects the volume of investment. His contention was that banks exercise control over the supply of credit primarily through the interest rates on loans for customers engaged in the wholesale trades. For one reason or another, wholesalers are better able to anticipate changes in economic activity. Fluctuations of inventories in the hands of wholesalers provide a better signal than do fluctuations in the production of durable goods. He believed that any analysis in terms of the long run is purely speculative. Business firms can better anticipate economic fluctuations as they monitor their sales and changes in their business inventories.

Hawtrey maintained that changes in inventories are much more reliable in anticipating economic changes. In fact, he considered them so important that he divorced them from investment and assigned them a special category. He made it a concept apart. As a result of this realignment, savings could no longer equal investment in his scheme of things. This divorce got him into a dispute with Keynes who insisted that conceptually savings equal investment. Keynes agreed that in the case of consumer goods, changes in inventories would be an important guide for making decisions. But why, he asked, should this particular indicator be singled out from all of the other changes in effective demand?

Hawtrey's explanation of the trade cycle was criticized not only for its separation of changes in inventories from changes in investment, but for other reasons as well. Timing was a case in point. A decrease in the short-term rate of interest is not the immediate cause for an increase in the demand for an increase in inventories. Wholesalers do not go to their banks for loans until after the expansion phase of the cycle has taken root. At the beginning of an upturn in business, the trader is more likely to finance his inventory accumulation out of his own funds. He does not go to the bank until after the expansion is well underway; hence, the wholesaler does not initiate the recovery, but follows it.

It may also be argued that the price-cost relationship for goods is much more important than the cost of money. An increase in the spread between prices and costs provides the wholesaler a greater inducement to add to his inventories than a change in interest rates which account for a relatively small part in the cost of production. Thus, the way the wholesaler affects the system is not through interest rates, but by reacting to the spread between the price and the cost of producing goods. That margin is much more significant than the cost of borrowing. Some event must occur before the wholesaler is moved to expand his holding of inventories. A mere drop in interest rates of and by itself is not likely to produce that spur. Moreover, it has been shown empirically that the velocity of money and bank deposits move with a lag behind the indexes of production and wholesale trade.[21]

JOSEPH A. SCHUMPETER

Arguably, Joseph Schumpeter was one of the most illustrious economists of the twentieth century, ranking in a class with Thorstein Veblen, Friedrich von Hayek, and John Maynard Keynes. He was unique in that he was able to combine economics with sociology and economic history in his work. His major concern was with Western capitalism as an institution as expressed in two of his major works, the *Theory of Economic Development* published in 1912 and *Capital, Socialism, and Democracy* which appeared in 1942.

THE THEORY OF ECONOMIC DEVELOPMENT

Schumpeter found the static approach used extensively by economists as inadequate and decried the fact that dynamism and economic development were not well explained. Ironically, in his *Theory of Economic Development*, he used the static state as a model to explain economic growth and dynamism. Unlike other economists whose analyses ended up with the static state, he uses it as the starting point of his analysis. In this state, economic growth is totally absent. It is marked by a circular flow of economic life based on a number of assumptions: no change in population; the techniques of production remain unchanged; no accumulation of capital; no net savings that can finance any new investment; no profits; an unchanging equilibrium and pure competition. Unless some new force intervenes, the state is perfectly static, changeless, and reproducing itself in a circular flow. It continues without interruption; it becomes a natural, self-regulating mechanism when left undisturbed. Nevertheless, it does generate wages and rents, but no profit. The purpose of this model is to help determine whether or not profits are possible and from what source they are derived.[22]

Assuming that they are possible, the "circular flow" would have to be broken. Could it be broken by the exploitation of labor or some capital development? According to Schumpeter, the flow could be broken by the introduction of some form of new technology or organizational innovation[23] by the entrepreneur. But who is this entrepreneur or innovator? The entrepreneur is a breed apart. He is a person of unique ability and foresight. Through his innovation, be it a lower cost of production, a new product, the opening of a new market, or new way of doing business, he makes it possible for profits to emerge. However, before profits can be realized savings will have to be found to put these innovations into place. But this poses a dilemma, because net savings are not available in the static economy; therefore, the funds will have to come from the extension of credit by the banks.

It bears noting that this innovation is not a singular event. Others will follow in its wake in clusters and in a herd-like fashion. Not all can lead as does the first entrepreneur, but following his success others will follow. Clearly, it is easier to follow than to lead. In light of these new profit possibilities, businessmen will react and try to gain profit from these new innovations.[24] Schumpeter refers to these individuals as "swarmers." They come into the market with a rash of bank borrowings based on the expectation of profit. As more and more "swarmers" come into the market the advantages of the new innovations are generalized. Competition serves to reduce prices, increase costs, and eliminate profit. The period of prosperity was transient. The "swarmers" are left with debts, a stockpile of unsold goods and unemployment becomes widespread. The boom has come to an end and a struggle sets in for a new equilibrium—one which will absorb the results of innovation in the recent phases of the business cycle and will contain new elements as old ones drop out—"creative destruction" at work.

The significance of Schumpeter's *Theory of Economic Development* is that capitalism and the realization of profits owe their existence to the entrepreneur. Without him the economy would remain in the static state and the unending and changeless "circular flow." The entrepreneur is the hero of capitalism. But who is he? Strangely, he is not necessarily the one who enjoys the profits from the innovation. Profit accrues to the capitalist, the owner of the enterprise. The entrepreneur is squeezed out of his due share of income by the dynamics of the very process he has set in motion. But why does he allow himself to be caught in that position? Why does he become involved if that is the outcome of his work? Any number of reasons can be advanced, but according to Schumpeter they include the urge to compete and win in any encounter; the joy and satisfaction of getting a job done; the creative urge or quite simply to use one's energy and imagination.[25]

CAPITALISM, SOCIALISM, AND DEMOCRACY

Inasmuch as Schumpeter was a champion of capitalism it comes as a surprise to learn in this volume that he foresaw the end of that institution. Does this conviction place him in the same category as Karl Marx? The answer is a resounding no. They both agreed on the ultimate demise of capitalism, but for different reasons. Marx believed in a violent overthrow whereas Schumpeter believed that capitalism would evolve gradually over time into a different economic system.

Why, though, should capitalism as outlined in his earlier work, *The Theory of Economic Development*, come to an end? Actually, he did not think that it would come completely to an end, but would be replaced by a "plausible capitalism." It would not be a system mired in stagnation or vanishing investment opportunities. Rather, it would be one in which the economy would be caught up in a process of continuous and self-renewing growth. It would provide an environment in which old practices would constantly be discarded in favor of new ones—call it "creative destruction."

The above to the contrary notwithstanding, why would capitalism have to transform itself into some form of socialism? Paradoxically, Schumpeter's answer was that the old capitalism would fail because of its own success. He believed that capitalism would weaken by itself and eventually collapse. The success of capitalism would lead to corporatism and to values inimical to capitalism, especially the bourgeois or the intellectuals. Schumpeter may have disagreed with Marx about the means whereby capitalism would be displaced, but agreed that in the end capitalism would evolve into some form of socialism. He did not believe that it would come to a violent end by the overthrow of the proprietors by the proletariat, but by more peaceful means in which the bourgeois or intellectual class plays a dominant role.

Capitalism may have been an economic, but not a sociological success.[26] It was doomed to fail. Capitalism led to a larger and larger concentration of corporate power and, as previously noted, to values which were not consistent with bourgeois values. The bourgeois had a special standing in capitalistic society. They could criticize matters for which they had no responsibility and defend interests which were none of their own. They

tended to have a negative outlook on capitalism, but were dependent upon it. The growing number of people with a higher education may have reflected well on capitalism, but the lack of a sufficient number of richly fulfilling positions and unemployment would create a great deal of angst and disquiet among the bourgeois. There would be no revolt, but their discontent would lead them into political action voting into place social democratic parties which would enact measures that would restrict entrepreneurship, increase workers' self-management, promote industrial democracy, and lead to the creation of the welfare state. In that state, personality and force of character count for less. Innovation itself becomes institutionalized and is reduced to routine.

"But can socialism work?" asked Schumpeter. His answer was, "of course, it can."[27] Schumpeter thought that it could, because the kind of socialism he had in mind was benign, bureaucratic, and planned. However, he could not provide an answer based on the likes of which were used by Smith, Ricardo, and Marx. He did not think that the processes of economics could explain how the process unfolds. Schumpeter makes a judgment about social and political matters that cannot be easily quantified and entered into a model for a solution He is not providing an economic solution which can be predicted with a high degree of confidence. His explanation is an historical one—a judgment on the direction of entrepreneurship.

Again, one could ask, "how would the loss of competition and the concentration of economic power under planned capitalism represent at amelioration over the present state of affairs?" In regard to the virtues of competition, Schumpeter thinks that they are overrated. He did not think it was a means for maximizing economic well-being. Under pure competition, all firms in an industry produce the same good, sell it for the same price, and have access to the same capital equipment and technology. Schumpeter did not consider these characteristics of pure competition very important. More important for competition is the development of new commodities, the introduction of new technology, new sources of supply, and new forms of business organization. Again note Schumpeter's emphasis on innovation.

Neither is Schumpeter too concerned about the consolidation of industry. In his judgment, firms would become less aggressive, but with the growth of multinational corporations that judgment is open to question. But there is another side to consider, namely, competition among the few. This form of competition is preferable to the traditional one, because large enterprises must be ever vigilant about any new advantage a competitor may gain by a new process of production or invention. They must constantly look ahead and anticipate any action on the part of their competitors. They pose an ever-present threat which must be met head-on. This competition to seek out more and more efficient measures to stay abreast of competition will in the end work to the benefit of consumers.

The need for innovation is an ongoing concern under Schumpeter's brand of socialism as it is under traditional capitalism. But innovation is not a one-sided dimension. It also entails the substitution of a new for the old way of doing business. The introduction of a new technique entails the destruction of an earlier one. It is what Schumpeter referred to as "creative destruction." Like a forest, industry must constantly renew itself. In sum, innovation leads to "gales of creative destruction" as they cause old ideas, technology, capital equipment, even labor skills to become obsolete. The question then is how will planned capitalism create and then destroy existing structures.

In *Theory of Economic Development* it is the entrepreneur or innovator who played the major role for the success of capitalism. But who is to play that role in the new order? Schumpeter's answer is that it comes down to a question of leadership. In society it is the elite, the person of unique ability who has the greatest impact on the rest of society. To illustrate his point, he takes the case of musical ability. On average, it may be that half of a community can carry a tune; one-quarter of that group can occasionally hit a high note; one-eighth could qualify for a role in an acapella group, but only a fraction of one person would qualify for an audition at the Met or at La Scala. So, too, it is with leadership. In fact, leadership is so limited in supply that Schumpeter did not think that Marx's revolution would have succeeded. It did have a massive number with average leadership quality, but no one with the charisma and leadership ability to lead and succeed in the revolution.

Leaders may change, but the institution of leadership does not. From where will that rare talent come? Schumpeter's answer is that it will come from the bourgeois class. Therefore, there is no reason to be concerned and to fear socialism. Clearly, Schumpeter had great confidence that someone would emerge from the ranks to manage the socialist system as well as he might serve the capitalist system. Was this then a work in economics? No, it was a theory of historical movement—a work unparalleled in social theory.

BUSINESS CYCLES

In addition to his seminal work on capitalism, Schumpeter made an important contribution to the study of economic fluctuations in his *Business Cycles*, a two-volume work of some eleven hundred pages, in 1939. His theory of business cycles follows in large measure from his earlier work on economic development.[28] Basically the business cycle is due to the appearance and disappearance of waves of innovation. These innovations consist of scientific and mechanical inventions, new forms of industrial and business organization, the development of new products, the opening of new markets, and other such changes.[29] In effect, Schumpeter took the all-important innovator out of *The Theory of Economic Development* and showed how his appearance in the broader economy could lead to an explanation of the upward and downward movements of the business cycle.

Schumpeter believed that fluctuations in economic activity were the resultant of three cycles which were separate, but operated concurrently. These included the Kitchin which was of forty-months duration; the Juglar which took nine years to complete; and the Kondratief which ran for fifty to sixty years. These cycles were presumed to be international in scope and appeared in European capitalistic countries and the United States. The larger cycles were composed of a number of smaller cycles. For example, the Juglar contained three Kitchin cycles, and the Kondratief was made up of six Juglars.

The presence of the longer cycles modified the performance of those cycles of lesser duration. An upswing in the cycle of longer duration would raise the amplitude and extend the duration of the prosperity phase of the lesser cycle. The opposite, of course, would be true during the downswing of the longer cycle. If each of the three cycles were to reach their bottoms simultaneously the result would be a devastating depression. In sum, Schumpeter believed that the course of economic activity was a composite of three cycles; each interacting with one another; in effect, a three-ply cycle driven most importantly by innovation.

In Schumpeter's scheme of things, the cycle begins with the "circular flow" where the economy is in static equilibrium, continuous and changeless. Nothing will happen unless this "circular flow" is interrupted in some way. The flow will be short-circuited when the entrepreneur comes on the scene with his innovation. Since sufficient savings are not available in the static state, firms are obliged to obtain credit from the banks to implement the innovation. Inasmuch as the static economy is fully employed the innovating firm will encounter difficulty in obtaining the necessary labor to take advantage of the innovation. Their only recourse will be to draw workers away from other firms, by offering higher wages. But to the extent that these workers will be engaged in the production of capital goods, this means that the production of consumption goods will have to be reduced. As a result, we have a mismatch between the increased purchasing power and the availability of consumer goods. Prices will rise, but perhaps not as fast as costs. This will enable firms, including those that do not innovate, to enjoy a profit.

In time, the innovating firms will market their finished goods. A glut of commodities appears on the market and prices start to fall. The innovators with their more efficient methods of production can absorb the lower prices, but not so the noninnovating firms. A recession starts caused by the marketing of new goods and the application of the new techniques of production at different levels. Firms must adjust to a new level of economic activity. The noninnovating firms are especially hard hit. Some can succeed in making the adjustment; others cannot and are forced out of business. Those firms which took advantage of the innovation survive and may even prosper.

Having fallen into recession, could the economy fall into a depression? Not necessarily, but if it did why would it follow? According to Schumpeter, the seeds of a depression are planted during the boom phase of the cycle. The role played by the innovating firm is critical, but the psychological factor is also important. An increase in prices, for example, is likely to spur economic activity among producers and consumers as in the case of a housing or stock market boom. In addition, there is a strong desire on the part of producers to increase their inventories. All of these developments cause an overinvestment and overexpansion of economic activity. In effect, it is the tacking on of the overoptimism to the innovation that brings on the depression. Aggravating the recession too is the overexpansion by the noninnovating firms which were encouraged by the high prices.

The downturn would have been much less severe if only the innovating firms had expanded their output. When it comes time to redeem their loans, the noninnovating firms cannot liquidate them, because they are not making continuing sales as are the innovators, albeit at lower prices. As a result of these developments, firms must turn from a simple adaptation if the economy had suffered only a recession, to a full-scale purge which has been brought on by the depression.

Caught in a depression, how does the economy extricate itself? The double deflation brought on by the innovation and the optimism of producers will in time play itself out. The reason is that the deflation is a

manifestation of the diminishing force of bankruptcies and other failures. The depression slows down because the cumulative force of deflation slows down. The higher the degree of deflation, the longer it will take for a recovery to set in. Another reason why the depression comes to an end is that the businessman, like the investor in the stock market, is anxious to recoup the losses incurred during the downturn of the cycle. Still another reason is the behavior of the marginal propensity to consume. Although income will decline during a downturn, the level of consumption will not fall by the same margin. In fact, there is a limit as to how far it may fall. At some point, it cannot fall any further. The depression will last until such time as the readjustments have been largely completed and the economy is sufficiently stable to restore men's confidence in the future.[30]

In reflecting on Schumpeter's theory of the business cycle, a number of corollaries are worth noting. In assigning such a high degree of importance to innovation, Schumpeter joins a number of other economists, including John M. Keynes, to explain economic fluctuations in terms of investment. The role he assigns to innovation and investment is by no means unique.[31]

Schumpeter's explanation of the cycle depends heavily upon the relationship between the banking system and the innovating firms and between the innovators and the noninnovators. In economics, everything depends upon everything else. All of the elements are mutually interdependent and, in this regard, he takes a page out of Walras's playbook. As he points out, if there were no interdependence among firms there would not be any business cycle.

Although he does not make reference to it, the recovery phase in Schumpeter's business cycle is akin to that of the multiplier/accelerator theory. On the downswing of the cycle matters get worse and worse, but at some point they hit rock bottom. At this point, unless a new innovation is forthcoming, even the smallest pickup in activity jump-starts the economy, trips off the multiplier/accelerator mechanism, and with that the recovery stage of the cycle begins anew.

It is abundantly clear that Schumpeter bases his theory on the role of the innovator and his innovation. In the *Theory of Economic Development*, the entrepreneur plays a key role in justifying the institution of capitalism. In *Theory of the Business Cycle*, Schumpeter awards him a wider role and on a much wider stage as the prime mover of the economic system.

NOTES

1. Deutscher, P., *R. G. Hawtrey and the Development of Macroeconomics*, New York: Macmillan, 1990, viii.
2. Hobson, J. A., *Work and Wealth*, London: G. Allen and Unwin Ltd., 1914, 107.
3. Newman, op. cit., 320–321.
4. Hobson, J. and Mummery, A., *Physiology of Industry*, London: J. Murray, 1889, iii–v.
5. Ferguson, op. cit., 198–199.
6. Hobson, *Work and Wealth*, v.
7. Homan, P. T., *Contemporary Economic Thought*, New York: Harper & Brothers, 1928, 340–343.
8. Hobson, *Work and Wealth*, 107.
9. Ferguson, op. cit., 200.
10. Homan, op. cit., 354.
11. Hobson, *Work and Wealth*, 283.
12. Ibid., 190.
13. Mitchell, op. cit., 270.
14. Hobson, *Work and Wealth*, 293.
15. Ferguson, op. cit., 201.
16. Homan, *Work and Wealth*, 358.
17. Hobson, *Work and Wealth*, 299–300.
18. Ibid., passim.
19. Homan, op. cit., 364.
20. Mitchell, op. cit., 265–267.
21. Section on R. G. Hawtrey developed from the unpublished notes on "The Business Cycle," a course offered by Prof. James McGinley S.J., in the Graduate Program at Fordham University, 1954.
22. Heilbroner, op. cit., 294.
23. Newman, op. cit., 339.
24. Ibid., 339.
25. Heilbroner, op. cit., 297.
26. Ibid., 302.
27. Ibid., 303.
28. Niehaus, op. cit., 448.

29. Mitchell, W. C., *Lecture Notes on Types of Economic Theory*, New York: Augustus Kelly, 1949, 406.
30. Ibid., 406.
31. Niehaus, op. cit., 448.

Chapter 10

The American Economists

HERBERT J. DAVENPORT

The definition of economics, according to Herbert J. Davenport, is "the science that treats phenomena from the standpoint of price." Continuing further, he states, "it is, in fact the value problem, or more specifically and more accurately for present society, the problem of market price, that is the central and unifying problem of present—day economics. Price then must attend and characterize all things that are economic."[1]

In his view, productive activity takes place for the sale of goods and services and so we are interested primarily in prices. Price is the central and focal point; it is the core of all economic theory. It follows from Davenport's definition of economics, that by dealing only with prices the problem of valuation becomes immaterial. Value and price are one and the same. In this way, valuation, which involves the study of cost, pleasure, and pain, need no longer be a concern for economists, especially with the study of psychology which forms the basis of valuation. "Purely as economists," he says, "we are fortunately free from the necessity of investigating the origin of choices or any of the psychological difficulties surrounding the question."[2] He does not deny that human desires are one of the real forces to contend with in human behavior, but as an economist, he feels that he is absolved from any responsibility to investigate them. In a later passage he states substantially the same thing:

> The present discussion will serve again to emphasize the fact that economic analysis need not attempt the solution of all, or of any, of the difficult psychological problems connected with the theory of desire, and cannot safely commit itself to any particular school or method of solution. It is enough for all economic purposes that these desires exist, that these wants are with us, that these utilities "are." We have merely to report the manner of their working as they affect the disposition to pay, and thereby affect the fixation of price.[3]

By concentrating solely upon the problem of price, which in his estimation has always been the chief concern of the economist, Davenport feels that he can avoid becoming involved with the many diverse notions of the warring psychological schools. Those notions are difficult to understand and do very little for the economist other than add to his confusion. In sum, these are the reasons Davenport wished to divorce the study of prices from that of value.

Davenport approaches the problem of price by pointing out that every consumer of a good has his own individual scale of utilities. From these individuals we obtain their characteristically different schedules of the utilities they expect to derive from the use of a particular good. Each individual, in view of the utilities he expects to derive and the amount of money he has to spend, makes up his mind on what prices he should offer for successive units of the commodities he wishes to buy. Now all these individual demand schedules are taken together, and by summing them up we get for any market at any given time a market demand schedule.

On the other hand, we can construct a set of supply schedules which show the amount of goods that will be offered in the market at a given time at successive prices by the producers of commodities. These supply schedules will be based on the money costs to those who have produced the goods, supplemented by an estimate of their opportunity cost (what they may have earned had they invested their funds in an alternative opportunity). These individual supply schedules are taken together like the individual demand schedules and by summing them up generate an overall supply schedule for any market at any given time. Thus, demand schedules running in terms of price are set against supply schedules also running in terms of price and at the point of their intersection provide the price for the good.[4] At this point, the quantity demanded at that price will be just equal to the supply that will be forthcoming for sale at that price. But, one might ask, "Why does the price equilibrate at that level?" To answer that question, assume that a number of buyers offer a higher price than the one

currently prevailing. Understandably, a good number of suppliers will rush in to meet that higher offer and as a consequence the price will fall back to equilibrium. If, on the other hand, some producers make an offer to sell their goods at a lower price, they will find that there are more buyers than sellers. As a result, the competition among the buyers will force the price back up to equilibrium.[5]

This part of Davenport's price theory is, of course, quite familiar to students of economics; however, there are a number of facets of his analysis which are not so well known. Of these, one is Davenport's contention that every price offer presupposes the existence of two marginal utilities which are compared with each other.[6] This point may be illustrated by a person contemplating the purchase of a pair of shoes. In making up his mind on what he will pay for these shoes, the person will consider their utility to him as a consumer and the utility to him of the amount of money which he is to spend. The utility of that money will be determined by his estimate of the utility of the other goods he could purchase with that same amount of money. However, the utility which our consumer expects to receive from the amount of money that he would spend on some alternative to shoes will, of necessity, be dependent upon the prices of those alternative goods. In effect, the consumer cannot determine the utility of a tie, to him, as compared with shoes in terms of money, unless he knows first how many ties he can obtain with the amount of money it takes to purchase a pair of shoes. The consumer will have to know the prices of other goods before he can decide whether or not to purchase the pair of shoes; hence, the drawing up of a demand schedule by the consumer is feasible only as he is acquainted with the markets in which there are a large number of prices already determined. In reality, the demand schedule of the individual, which is a basic element in Davenport's theory of prices, presupposes an existing array of prices for a great many other goods. Therefore, the price of shoes is determined ultimately by the prices of other things consumers may desire; one price is simply explained in terms of other prices.[7]

The same reasoning must be applied to the supply side of the market. A producer in determining at what price he can afford to sell shoes in the market must consider not only his outlay for capital, rent, labor, and the cost of the leather he buys, but also whether or not he could make more money in some other calling. As in the case of the consumer who has to take into account the prices of other commodities, so, too, the producer must consider the full range of prices from which profits may be made. In other words, he must consider the prices of those commodities into whose production he might conceivably have entered. From the supply side, too, it appears that the price of one good depends upon the prices of other goods. For in explaining one price, reference must be made to an organized system of other prices.[8] In short, prices are explained in terms of other prices. In the final analysis, Davenport leaves one walking around in a circle, a circle out of which one cannot break, because of the circuitous reasoning which is involved.[9]

Other economists, notably Gustave Cassel and Leon Walras, also tried to break the connection between value and price. Like Davenport, they tried to limit the scope of economics by concentrating on the determination of price.[10] Their interest, quite simply, was to provide an accounting of the market exchanges. Another shared characteristic with Davenport is that all prices are mutually determined. According to Cassel, economic phenomena should be studied from the standpoint of price alone. There is no need to get involved in the theory of value, as he contends in the following:

> We need not analyze the demand further in connection with the problem of prices. The extent of the demand at a given price is a tangible fact of a quantitative, arithmetical nature, and in this form it may be used directly in economic science as part of its structure. The psychological processes which lie behind this fact have, of course, a certain interest for the economist, since a knowledge of them helps us to estimate correctly the influence of prices on demand. In so far as they can be elucidated, they are best studied from this point of view; but that study clearly does not fall within the domain of economic theory proper.[11]

Although all three agreed that prices were mutually determinative, they differed in their attempts for a solution. Cassel and Walras employed a mathematical approach, while Davenport simply stated his case in qualitative terms. In any event, the mathematical approach employed by Walras and Cassel ran into difficulty, because the determination of the price of a single commodity requires that we know the demand and supply of that good, but that cannot be determined unless the prices of other commodities are first known. To eliminate this problem Walras reasoned that the prices of all commodities should be determined in a market at one time. To effect this simultaneous determination of prices, both Walras and Cassel set up various sets of equations—simultaneous equations which are all supposed to be true at the same time. These equations show that the amount of a commodity sold in the market during a given time will be equal to the quantity offered within that time; demand

will equal supply. Therefore, under the stable conditions assumed, the supply of every commodity would be equal to the costs of producing it. These equations further show that the demand for every commodity would be a function of the price at which that commodity and all other commodities were sold (e.g., the demand for shirts = f [P ties, P shoes, P suits . . . P n]). By setting up a number of simultaneous equations equal to the number of the unknown prices that are to be determined, Walras and Cassel demonstrated that it is possible to solve the problem of the simultaneous determination of all prices in a market.[12]

From a mathematical point of view, one cannot take issue with Walras and Cassel, for whenever a number of simultaneous equations are equal to the number of unknowns the problem is determinate. However, there is no denying that the data may not be easily forthcoming. To solve the problem of price determination, data would be needed to show how much of each good in the market would be purchased by every consumer in the market at each of the successive possible prices.

By questioning the consumers, we are supposed to be able to draw up individual demand schedules for each commodity in the market. By summing up these individual schedules for each commodity, market demand schedules will be set up to show the quantity of each commodity which will be purchased by all the consumers in the market at successive prices. Similarly, we have to know the amount of the commodity brought to market by each seller and the price each seller will ask for each successive increment. By summing up all of these individual supply schedules for each of the commodities, we develop market supply schedules showing the quantity of each commodity the producers will bring to the market at successive prices. Thirdly, we have to know the stock of each commodity which each buyer and seller has in his possession before the market opens; otherwise how can we know what value a person will attach to the acquisition of an additional unit of that good? But, how are we going to obtain all these data?

At this point we are going to encounter a great deal of difficulty, for it is simply impossible to obtain all the data required to complete the simultaneous equations. In practice, we could not possibly determine how many units of a given good a consumer would be willing to purchase at successive prices, nor could we know the prices which different sellers would be willing to take for successive units of their products. At best, consumers and producers have only very rough approximations of what they expect in the market—and these exist purely in their own minds. These are essential data, and if we cannot obtain them, we cannot very well obtain a solution for the pricing problem.[13]

Another shortcoming associated with Cassel and Walras's approach is that it implicitly assumes a static situation, a condition that exists at a given moment of time. It is a period in which existing stocks of commodities, market demand and market supply schedules for all commodities are determinate. But suppose that the price of a substitute good has been lowered during the time the consumer was determining his demand schedule. Would that not have ramifications for that schedule as well as for the prices of a number of other related goods? All buyers and sellers are supposed to meet in a perfectly competitive market at one and the same time and are supposed to keep buying and selling until the equilibrium price has been established for each article. The market demand schedule for pure competition is perfectly elastic, but what happens to that schedule and the resulting level of prices under imperfect competition consequent upon a change or a shift in demand? What assurances do we have that a system of simultaneous equations can capture all of these changes?

Clearly, the mathematical approach of Walras and Cassel does not admit practicable application, for a number of reasons. First, the number of equations that would have to be determined would run into the millions. However, given the capacity of today's computers to solve large mathematical problems, this would not be a major concern. More importantly, the data required to satisfy the simultaneous equations are not readably available; consumers and suppliers do not come together in a static market nor in a perfectly competitive setting.

In summation, Davenport's approach to the determination of the price of a single commodity faces the same difficulty as did Walras and Cassel, because he is unable to establish individual and market schedules for consumers and producers. In addition, we could not very well apply Davenport's price analysis to real conditions, because it involves circuitous reasoning. The price for a given commodity in Davenport's analysis is dependent upon the utilities of other commodities; however, the utilities of these other goods can be known only if their prices are known; hence, his analysis explains prices in terms of other prices. In reality, Davenport's approach confines us to an endless circle which fails to give us any real answer as to the nature of prices.

THORSTEIN VEBLEN

Thorstein Veblen, along with Wesley Clair Mitchell and John R. Commons, was one of the founders of the Institutional School of Economics. He has been characterized as a philosopher, iconoclast, psychologist, social anthropologist, and economist. Veblen was opposed to classical economics calling into question its postulates on hedonism, the concept of the economic man and preoccupation with utilitarian preconceptions.

He did not believe that economics was an evolutionary science. He criticized the discipline for not being an evolutionary study.[14] It was out of date and out of step in comparison to the biological sciences. Economists, he said, were not modern, but were "still content to occupy themselves with repairing a structure and doctrines and maxims based on natural rights, utilitarianism, and administrative expediency."[15] These shortcomings made the work of earlier economists unscientific and obsolete. In singling out Thorstein Veblen from other economists, one usually thinks of "the criticisms which he levelled at the existing systems of economic thought. It is erroneous, however, to think of him solely in that light, for he did offer some constructive solutions to the problems he saw in those systems."

In place of the classical economic theory, which he rejected, Veblen substituted a theory of economic development which constitutes one of his primary contributions to the study of economics. His principal concern was with the evolution of economic institutions. Veblen was largely influenced by the evolutionary notions propounded by Darwin and Spencer. He claimed that, insofar as man's physical evolution is concerned, there have occurred no important changes since the Neolithic Age; however, enormously large changes have taken place in the way in which the human species has survived.

The reason why the lives we live now are different from those of our ancestors, argues Veblen, is that we have gradually acquired certain ways of utilizing the world around us to satisfy our needs. Since our minds are shaped principally by their daily activities, and because most of these activities are concerned with procuring a livelihood, it follows that the minds of modern men have been shaped chiefly by their economic activities. As a consequence, it appears that if modern economic life is to be understood, we must provide an accounting for those particular habits of thought which dominate any given period of time. These habits of thought which prevail in a given period Veblen calls institutions.

Therefore, the task of the economist is to explain the institutions prevailing in whatever culture he is dealing—institutions which are the outcome of an agelong accumulation. The work of the economist is to find out how these institutions have evolved: with what they started, the transformations they have undergone, and how people have come to submit to this seemingly curious and in some respects rather ineffectual way of organizing themselves to promote their economic interests. In brief, Veblen proposes that the economist's primary concern should be the effect of the great institutions upon the lives of men—the ways these institutions have evolved, the changes they are undergoing at the present time, and the changes they are likely to undergo in the future.

In sum, Veblen's intention is to provide a highly objective explanation of economic institutions in terms of the process by which they have developed, and an unbiased account of their operative effects. However, the materials available for such an evolutionary study are meager. A scientific explanation of modern economic institutions would require a very extensive and complicated survey of cultural history and an almost encyclopedic presentation of factors that have entered into the process of "cumulative causation." Moreover, even if all these data could be gathered, it is doubtful that a competent intellect could be found to deal with them. In truth, to attempt to do what Veblen proposes, and to do it in a truly scientific manner, would involve labors too monumental to be practicable or even thinkable for any man.

THE *THEORY OF THE LEISURE CLASS*

The author of some ten books, Veblen is best known for his *Theory of the Leisure Class* published in 1899 and the *Theory of Business Enterprise* published in 1904. It is in the first book that Veblen introduces the well-known concept of "conspicuous consumption." In the development of man, Veblen says, two institutions stand out: private property and the technological method of production. The first gives rise to what Veblen refers to as the "pecuniary element." It plays a dominant role in the culture of the leisure class. The propertied class does not use the surplus made possible by technological advances for their betterment. Instead, they use it to show that they have these surpluses.

To impress others that they have the wherewithal to live a life of idleness, they engage in wasteful consumption. The leisure class may own property, but does not work. That is left to absentee managers whose sole purpose is not to maximize the production of useful goods for society, but to maximize income for themselves and the absentee owners. It is in this setting that Veblen thrashes out at waste and the useless ways of

the leisure class. But the existence of a leisure class was not novel to Veblen's time, for as he points out it had its origins in ancient times. Certain classes throughout the ages have been exempt from work and membership in those classes has been a mark of superior rank. In feudal times, the leisure class was primarily employed (an oxymoron) in the military and the ministry. In today's pecuniary society, it does not suffice to provide just for the necessities of life, but rather to attain a level of wealth worthy of emulation. Monetary success is measured in terms of imitation and emulation. It is an achievement worthy of honor. One form of that emulation is "conspicuous waste." Clearly, that waste does not serve the interest of human well-being and it was for that reason Veblen railed against the leisure class. But no matter, emulation was an end in itself.

One way to achieve emulation was through reckless spending.[16] For to spend in a careless manner was a sure way of convincing one's friends and associates that the person must be well-off. To be sure, there are many other ways whereby one may testify to one's opulence whether it be real or imagined. These take the form of attire unfit for labor; the pursuit of esoteric studies without any useful purpose; the acquisition of symbols of rank such as honorary titles, degrees, and insignia even though they have little meaning. At times this emulation may be enjoyed vicariously through one's wife by the notice she attracts by her attire, jewelry, the places she frequents, etc. Sadly this pursuit of imitation and emulation has it dark side as well, because in the end it may lead to licentious living marked by drugs, alcoholism, and sexual indiscretion, all symbolic, unfortunately, of a life to be emulated.

In a financial society, says Veblen, it may be necessary for the upper class to work in some capacity, but those callings are limited. Banking, the law, large business are acceptable, but less so in most trades unless they are engaged in the production of goods that are not very useful. Moreover, their involvement is nominal, leaving the management of the enterprise to absentee managers whose assignment is not to make useful goods for society, but to maximize the income of their absentee owners.

In sum, the leisure class is motivated in its behavior by pecuniary considerations alone. Their time, money, and effort are spent in an unproductive pursuit of "pecuniary emulation," to inflate their own egos and impress others with their "conspicuous leisure" and life of idleness. *The Theory of the Leisure Class*, in the judgment of many, qualifies more as work in sociology than in economics. It has little economic theory and little relevance to economic issues.[17] The surplus value which resulted in large measure from the application of technology was not presented in economic terms, but rather as a means of maintaining the cultural identity of a particular class of our society.[18] Quite simply, Veblen's polemic was more of a critique on the behavior of a segment of society motivated by a pecuniary culture rather than, say, the consequences of a maldistribution of income.

THE THEORY OF BUSINESS ENTERPRISE

Veblen's *Theory of Business Enterprise*, which has a much stronger economic tone, focuses on the struggle between business and industry. Business is comprised of bankers, lawyers, brokers, and managers. Industry is made up of engineers, designers, technicians, and labor. The contrast between the two is that business concentrates on making money, while industry is focused on efficiency and the production of more goods for the wider society. Veblen's purpose in this work was to show that, contrary to the opinion of many economists, business enterprise has, at various points, harmed industrial efficiency. If it were not for the interference of the money-makers, Veblen believed that with the use of industrial techniques output could double and triple and thereby raise the material welfare of society. Veblen calls this "capital sabotage." In effect, business enterprise warps efficiency, because the business-man, as the owner of industrial enterprises, has an aim which is not consistent with the industrial objective of turning out goods.

In business enterprise the aim is profits—money—not maximizing output. Business is not conducted with the aim of satisfying human needs, but rather with the object of making money for those who run the business enterprise. The same profit could be realized either by a higher volume of goods and a lower price, or a higher price and a lower volume, but business prefers the latter to the detriment of society as is the case in imperfectly competitive markets.

Veblen's contention is that the tendency of business enterprise is to become more and more antisocial. To substantiate his claim he points to the production of goods of dubious value, the prevalence of parasitic trades, the growth of advertising, markets becoming less competitive, and the rapid increase in businesses financed largely by borrowing. These are the ways, according to Veblen, how business hampers industry and leads to periodic breakdowns in the economy.

Veblen anticipated an ever-deepening rift between the directed and the directing classes, each failing to understand each other, because of ingrained habits which caused them to continue to think along old lines. With his fondness for the simple life; his interest in the material process of providing for our wants; his skeptical attitude toward the process of business; and his uncanny analytic skill, Veblen builds up, largely out of materials provided by the industrial magnates who testified before the Industrial Commission of 1900, a theory of business enterprise. Its purpose, in large part, is to show how the pursuit of profit runs counter to the industrial process of producing serviceable goods; the extent to which business earnings may result not from the constructive efforts of the captain of industry; but how they may result from the bargaining art of a man who makes his money by interfering with the process of supplying consumers with goods at reasonable prices.[19]

In evaluating Veblen's theory of the business enterprise, we find that it conforms in many ways with existing conditions. For example, his assertion that the vast and complicated production of modern industry is devoted not to what is considered humanitarian and useful, but rather to what promoters and speculators believe will sell at a profit, is true. That producers often drum up a demand for useless or even harmful goods, as Veblen contends, needs no confirmation. So too, in regard to monopoly, there is little basis for disagreeing with Veblen's argument, nor could one argue that monopoly is beneficial to society.

Veblen tells us that the extraordinary economic gains which man has made in the last century or two are due chiefly to the progress of the machine process. Unfortunately modern society subordinates this machine process to business enterprise and in that way partially nullifies the economic advantages that might be gained if industry were free from the domination of business.

In proving that business enterprise hampers industry, Veblen points to the fact that the businessman is more interested in the marketability of his commodity than in its ability to meet some human need. A businessman is interested primarily in producing things which will sell at the highest profit, and it goes without saying that goods which are highly marketable may not necessarily be goods which are highly serviceable. Therefore, charges Veblen, the modern system of putting business in control of industry involves a constant bias in the direction of turning out goods which are fitted primarily to catch the buyer's eye and appeal to his momentary desire rather than goods which promote his higher interests. So too, he points out that advertising, which has become a branch of business requiring the use of a very large amount of capital and employing the efforts of tens of thousands of workers, contributes little to human wants and satisfaction. Nevertheless, it continues to be a useful instrument from a business standpoint, because it helps competitors to get ahead of one another.

One of the most serious problems created by the dominance of business enterprise over industry, says Veblen, is the continual striving to obtain a monopolistic advantage which is highly profitable to the businessman, but highly detrimental for the community. Whenever an entrepreneur, either through advertising or any other medium, succeeds in establishing a monopolistic position, he is in a position to exploit the buyers to his advantage. He can charge whatever price the traffic will bear and realize a higher profit—a profit which prevents the community from obtaining the desired supply of goods which modern industrial methods could otherwise produce at lower prices.

Another shortcoming of business enterprise, according to Veblen, is the fact that modern industry is full of parasitic trades. In fact, he alleges that the whole business class is parasitic, living off the extraordinary productivity of industry. He believes that were it not for the advances of modern technology, it would be impossible for society to support the millions of businessmen who draw very large salaries without participating directly in the work of organizing our production.[20]

The final difficulty created by modern business enterprise, according to Veblen, is loan credit. Although Veblen agrees that it does increase the amount of business activity and the resulting volume of profits, he is not so certain that credit transactions contribute anything to the productive process. He does admit, however, that insofar as debt transfers the control of capital from the hands of those who do not wish to engage in active trade to those who are both able and willing to do so may serve to increase production. Nevertheless, Veblen's view of borrowing is that it merely serves to pyramid a highly complex set of financial relationships on top of the industrial process. Credit transactions are a cause of concern to Veblen, because these interlocking credits produce a situation which quite often leads to periods of forced financial liquidation. In this process of liquidation businessmen are concerned primarily with warding off bankruptcy and in so doing are forced to restrict their commitments, reduce their volume of output, discharge workers, and bring on a period of depression from which business will not emerge until a fortunate circumstance comes from the outside to start the wheels of industry turning over again.

Insofar as any future amelioration of these problems is concerned, Veblen believes that conditions will become worse rather than better. He believes that modern society with its differentiation into two classes, one which is producing goods and the other which is concerned primarily with making money, is building up two groups of people who are failing more and more to understand each other; hence, the further we push our civilization along present lines, the deeper this rift between the two classes will become.

The solution, Veblen feels, is to place responsibility for the production of goods in the hands of the engineer and technical worker, for they are far better versed in this regard than is the businessman or captain of industry. Unfortunately, those who have the most to say about how an enterprise should be run know the least about it. The rationale for Veblen's argument is that our fundamental interest is to produce goods and not money. Therefore, it would appear that the sensible thing to do is to turn over the direction of our labor and our capital from the business leaders to the engineers, scientists, and technical experts, the men who are best trained and best fitted to organize industrial processes, to make proper choice of materials on technical grounds, to understand the designing of machine processes, and to produce an optimum quantity of goods. Only in that way could the material needs of society be best served.[21]

In view of the prominent role which technology plays in the *Theory of Business Enterprise*, it is not surprising that Veblen should use that concept to explain the business cycle. A combination of skilled management and the use of technology, he says, is capable of turning out an unlimited supply of goods. But if the amount produced cannot be absorbed by the market, both prices and net profits will fall. The continued advance in technology, says Veblen, becomes "a menace to the equilibrium of business" and the only way to deal with it is through a reduction in employment and output, so that prices can cover costs and allow a reasonable profit on investment. At times demand may be such as to call forth an increase in output in which case output is raised to full capacity. But in the end this prosperity leads to overproduction and the usual consequences, such as gluts, depression, liquidation, and a state of semidepression.[22]

But one may ask, "Why cannot these crises be avoided?" The reason, says Veblen, is to be found in the institutional makeup of the capitalistic system. There is no relationship between the physical equipment used in production and the pecuniary value of the capital which is supplied. The value of the capital provided by the absentee owner is capitalized on the basis of what it can earn for the investor. Again it comes down to the issue of making money versus making goods and business versus industry[23] issues which permeate Veblen's mind-set.

Not unexpectedly, Veblen places much of the onus for economic fluctuations on the businessman. In good times, the captain of industry goes into debt to expand the firm's productive capacity. The value of the loan is predicated upon the expected income capitalized at the current rate of interest. During prosperous times, interest rates start to rise thereby reducing the capital value of the expected income. At the same time, prices cannot be raised further to help offset the effect of the higher interest rate on the capital value. Credit becomes more difficult to obtain and the costs of labor and materials rise.[24] All it takes in this setting is some sort of catalytic event, such as the failure of a bank or large enterprise and the economy is in a free fall. In time, the economy recovers and the process of boom to bust starts all over again.

In evaluating Veblen's theory of the business enterprise, we find that it conforms in many ways with conditions as they exist in reality. For example, his assertion that the vast and complicated production of modern industry is devoted not to what is considered humanitarian and useful, but rather to what promoters and speculators believe will sell at a profit, can find little contradiction. That producers often drum up a demand for items of questionable value and make a profit for selling them, as Veblen maintains, certainly needs no verification. So, too, one would be foolhardy to argue with him that monopoly is beneficial to society.

In spite of the fact that there are many shortcomings inherent in business enterprise, it seems that in some respects Veblen treats business enterprise somewhat unfairly. One of the more serious criticisms which Veblen makes of modern business is that it has made possible too may parasitic industries. Though it may be true that so-called parasitic trades such as sales and advertising have no direct bearing on the production of goods, there is no denying that they are rendering some service to society. In reality, the salesman is performing a very useful function in making goods more accessible and thereby bridging the gap between producer and consumer. Also, it can be argued that Veblen's indictment of advertising does not pay sufficient attention to the fact that while it is not a direct means of producing goods it does provide a service in helping the consumer make better informed choices. It appears that Veblen's emphasis on the production of goods fails to appreciate the need for and the value of services.

Another point on which one could take issue with Veblen is that he looks upon business enterprise as an institution inimical to the best interests of society. Though it be true that business enterprise is driven primarily by the profit motive, it is also true that the drive for profits induces the entrepreneur to take more and more chances to explore new fields of economic opportunity. Thus, by risking capital in unknown ventures, business enterprise has played an important role in making available many of the goods and services which we enjoy today.

Arguably, one of the most serious criticisms of Veblen's *Theory of Business Enterprise* is his suggestion to turn production over to the proficiencies of engineers, scientists, and other technicians. However, he leaves open the question of management. How are these technician to be organized; what are they to produce; how much should they produce; at what cost; for which markets? He does not seem to concern himself with the issues of economic guidance and direction, as though production would take care of itself. Admittedly not all managers have performed their functions very well, but this failure cannot justify the doing away with the role of management. Someone still has to drive the cart.

Prescinding from these criticisms of Veblen's *Theory of Business Enterprise*, we cannot help but express a healthy regard for his views. Regardless of whatever criticisms may be leveled against his position, there can be no questioning the fact that he rendered a great service to economics by exposing the darker side of business and by showing how the ends of business activity run counter to those of the community. In the final analysis, it is only by identifying these shortcomings of business enterprise that we can hope to correct them. Hence, to the extent that Veblen makes us aware of our business failings, he made a valuable contribution to economic thought.[25]

WESLEY CLAIRE MITCHELL

Wesley Claire Mitchell studied under Thorstein Veblen at the Universty of Chicago and under his influence became a member of the Institutional School of Economics. Following Veblen's death in 1929 Mitchell assumed the leadership of that school.

Institutional economics, which can claim such illustrious followers as Sumner Slichter of Harvard, R. G. Tugwell of Columbia, John Kenneth Galbraith of Harvard, and John R. Commons of the University of Wisconsin is characterized by a deep and pervading dissatisfaction with classical and neo-classical economics. Its contention was that the economics of Marshall and his followers did not relate to any large extent to present-day economic life. The institutional approach to economic theory maintains that neoclassicism is nothing more than an embellishment of generalizations made more than a century ago by the classicists.[26]

The criticisms of the institutionalists are directed especially against the classical assumption that the processes of production, exchange, distribution, and consumption are determined by economic laws. On the contrary, they claim that they are determined by institutions. In studying these institutions the economist must turn to history, psychology, biology, archaeology, and anthropology. Institutional economics seeks a more empirical approach to the study of human behavior, looking more toward the description than the explanation of economic phenomena. The institutionalists tend to emphasize group behavior rather than value and price as the central point in their economic thinking; hence, they devote much more attention to nonmonetary motives than did the classicists. In their estimate, competition has broken down as a regulator of economic activity and economic life must be reorganized by some method of social control over man-made institutions such as private property.

Like Veblen, Mitchell disapproved the classicists' practice of assigning only a minor role to institutional factors in their consideration of economic problems. Mitchell's objection to the classical method of dealing with economic institutions is borne out by his treatment of monetary issues. In his study he shows that it is far more important to deal with economic problems from the standpoint of humanly devised and changeable institutions than it is to consider them in strictly economic terms. For example, he noted that the monetary system, a purely human institution, could have devastating effects on the economy when it runs into trouble. The system was devised and instituted by a legislature often in ignorance and unaware of its possible consequences: hence, it appeared to Mitchell that it would be far more meaningful to study its problems in terms of the legislation, the circumstances leading to its passage, its impact on people's lives, and measures to forestall a recurrence of the problem than by an analysis of market forces. In his judgment, classical economic theory took too simple and too abstract a view of the institutions through which economic factors play out their roles.[27]

Contrary to the classicists' contention that competition promotes maximum output and the highest degree of consumer satisfaction, Mitchell did not think that our dependence on competition served the best interests of the

community. Production, he said, is not directed to any large human purpose; rather, its purpose is to maximize profits; not human well-being. The economic system, as presently organized, insures no humanly desirable distribution of goods; rather, asserts Mitchell, it merely assures abundance to the few. Mitchell did not believe, as did the classicists, that there was a natural harmony between the businessman's pursuit of profits and the welfare of the community.

Another indictment of the classical tradition in Mitchell's view concerns the notions of normality and equilibrium of forces. Mitchell contended that if one were to turn from reading economic theory to reading business history, one would be surprised by the artificiality of the classical assumptions of "static" and "normal" conditions. These terms, he observed, suggest an idea of unchanging order, or an order in which economic principles are always tending to reestablish after every divergence. A survey of business records, however, does not disclose any "static or normal" state. As a matter of fact, in the real world of business, affairs are always passing through some phase of the business cycle into another. In business, only a constantly dynamic state of affairs can be properly termed "normal."

Like Veblen, Mitchell rejected the hedonistic psychology upon which much of classical theory was predicated. The theories of most classical economists trace the motives for human activity back to certain fundamental human traits which may be divided into two classes: pleasure, which incites activity; and pain, which discourages activity. Upon these underlying "real forces" is built the system of prices representing an objective expression of the underlying calculation of alternatives. Money, therefore, enters into the picture purely as a convenience to facilitate the smooth working of the economic system; there is no superior measure by which to gauge these human reactions.[28] However, unlike the classicists, Mitchell does not believe that the motives of economic activity can be traced back to a calculation of satisfactions and discomforts; rather, he regards economic motivation largely as the outcome of the institutions by which human nature is disciplined. Therefore, his concern is to determine the nature of these institutions and then by the study of objective data to explain the consequences of their action.[29] Clearly, Mitchell agreed with Veblen's indictment of the classical tradition.[30]

Wesley C. Mitchell shared the same point of view with Veblen in many other respects, namely, the concept of human nature, the indictment of the classical and neoclassical approach to the study of economics, beliefs that economics should be an evolutionary science, rejection of the hedonist approach, and the origin and the development of institutions. Like Veblen, he believed that there was no adequate explanation of economic life rendered by any of the existing theories. In place of the current economic thought he would substitute a system of economics which would be a science of human behavior engaged in examining the structure and functions of institutions through which economic activity takes place. Mitchell, like Veblen, contended that economic studies should be congruent with the evolutionary point of view; facts should fit into a conception of "process" rather than "equilibrium," as the classicists believed.

On the other hand, Mitchell may be distinguished from Veblen by his reliance on statistics as an analytical tool and his belief that the generalizations which statistics make possible will constitute the greater part, if not the whole, of the economic theory of the future.[31] Mitchell's primary conviction was that little could be done with logic or with mere casual knowledge of a limited range of facts. These approaches had been tried with no better outcome than the mutual defeat of competing theories. What was required, he believed, was the collection and analysis of all the facts that might measurably affect economic activity. These facts should be of a type not only capable of discovery, but of measurement as well. Clearly, the only facts which seemed to fulfill such specifications were statistical.

In advancing his argument for the use of statistics, Mitchell pointed out that they should not be gathered with reference to any theory in mind; on the contrary. After all the data and relevant facts have been collected, they should be carefully analyzed and made to yield whatever conclusions they suggest. Bearing on this, Mitchell said that one should not expect from statistics what some of the older economists, especially Marshall, hoped for, namely a confirmation of the older theory. Mitchell did not think that the issues the older theorists worked on could either be verified or rejected by statistical methods. What statisticians could do, he thought, was to come up with new problems that could be solved quantitatively and in this way render the old problems moot. In his own words, Mitchell states,

> If any forecast is valid, our whole apparatus of reasoning on the basis of utilities and disutilities, or motives or choices, in the individual economy, will drop out of sight in the work of quantitative analysts, going the way of the static state. The psychological element in the work of these men will consist mainly of objective

analysis of the economic behavior of groups. Motives will not be disregarded, but they will be treated as problems requiring study, instead of being taken for granted as constituting explanations.[32]

Typical of the problems that the new quantitative economics will be able to study, according to Mitchell, is "the relation between business and industry, between making money and making goods, between the pecuniary and the technological phases of economic life," a problem which he thinks the qualitative analyses of the past and present have treated ineffectively.[33] Also, Mitchell feels that in the study of institutional problems in which the issue of welfare is inextricably combined quantitative analysis promises to expand the range of objective criteria by which this human welfare can be judged. The statistician's assistance in measuring objective costs and results will play a vital role in converting society's blind fumbling for happiness into an intelligent process of experimentation.

From the foregoing, we can see that Mitchell's significance in the field of economics lies in the alliance between his intellectual approach to economic problems and his technical handling of them. His method is purely quantitative, for he believed that in dealing with the multifaceted issues of social organization our one authoritative and impartial source of information is statistics.[34] Specifically, it is in his adherence to the quantitative approach in dealing with economic problems that he differs with Veblen.

Mitchell's reputation, unlike that of most economists of earlier times, is not based upon any compendious contribution to the field of economic theory, but rather upon the application of statistical techniques to the investigation of economic phenomena. Specifically, Mitchell's greatest contribution to the study of economics was made in the field of business cycles. Although Mitchell was by no means the first economist to consider this problem, his approach certainly differed from those of all others.

His primary conviction was that little could be done with logic, or with mere casual knowledge of a limited range of facts. What was required, he believed, was "the collection and analysis of elaborate records of business experience in quantitative form." According to him, it was expedient to consider not some, but all of the facts that might appreciably affect the regularity of business activity. These facts should not only be discovered, but measured as well; hence, they would of necessity have to be statistical in nature. Mitchell maintained that "since in his effort to make accurate measurements the economic researcher cannot devise experiments, he must do the best he can with the cruder gauges afforded by statistics."

Very briefly, it may be stated that Mitchell's study of business cycles is based on quantitative analysis. It entails the gathering, ordering, and interpreting statistical data. The statistics which he gathered for *Business Cycles and Their Causes*, cover the period from 1890 to 1911, and are drawn from the United States, Great Britain, France, and Germany. In this work, he follows the course of price fluctuations of consumer goods at retail and wholesale, producers' goods, manufactured goods, raw materials, organic, and inorganic goods. He also follows the course of wages, interest, and security prices in detail. He examines the physical volume of trade; the volume of currency; the condition of the banks; the course of saving, investment, new enterprises, speculation, and the records of profits and bankruptcies. Out of this broad mass of statistical evidence is drawn a comprehensive statement of the sequence of events during the course of a cycle, accompanied by a series of suggestions of methods for stabilizing business.

Mitchell's study of business cycles was distinct from those of earlier writers, for while they had, on the basis of limited data, proceeded by logical processes to trace fluctuations to one or two causes, Mitchell's theory consisted of a statement of certain sequences or relationships which his statistics showed to recur more or less regularly during the progressive movement of business activity from depression to prosperity and from prosperity to depression. These fluctuations, he noted, are recurrent, but not periodic and they vary in duration, scope, and intensity.

Some activities are more sensitive to cyclical fluctuations than others. Capital goods are more sensitive to the cycle than are consumer goods, because their purchase can be made or postponed at any time, while the latter cannot be as easily deferred. Similarly, dental services are more sensitive to change than medical services, because cosmetic dental work, say, can be postponed, but an appendectomy cannot.

Although no two cycles are alike, Mitchell believed that they all had sufficient common characteristics to permit their analysis. For example, before the cycle reaches its peak, certain kinds of activities start to slow down; others reach their peaks at about the same time as general economic activity, while others reach their turning points after the peak has passed. For example, building permits may start to slow down before the peak and start to turn up before the trough has been reached, because of the lapse of time between obtaining the necessary permits and the actual construction; so, too new orders for durable goods. These activities turn down

before the peak and move up in advance of the trough in economic activity. The money supply starts to decrease before the peak. Initial claims for unemployment benefits start to increase before the peak and yet the duration of unemployment does not increase until after the peak has passed.

Data on these and many more activities are readily available and through the use of statistical analysis can be categorized as leading, coincident, and lagging indicators, providing the economist a valuable set of tools with which to analyze the different phases of the cycle. In summation, we may say that Mitchell's reputation in the field of economics does not rest upon any formulation or restatement of doctrine, but rather upon his contributions to institutional economics and the technical handling of economic problems through quantitative analysis. Mitchell's thesis was that in dealing with all of the changes that occur over the course of the business cycle, the one authoritative and impartial source of information is statistics. As a result, much of his energy was devoted to improving the sources of statistical information available to economists. However, although Mitchell believed that quantitative analysis is the most scientific tool or studying economic phenomena, he did not believe that it was the only factor for advancing economic thought. Certainly, he recognized the existence of important facts that do not lend themselves to quantitative treatment and appreciated the essential service of qualitative analysis in institutional economics.[35] In his own words, he states that "[q]uantitative work cannot dispense with distinctions of quality. In the thinking of competent workers, the two types of analysis will cooperate with and complement each other in economics as they do in chemistry."[36]

JOHN BATES CLARK (1847–1938)

John Bates Clark's contribution to the development of economic thought rests in his work on the distribution of income which he presented in his magnum opus, *The Distribution of Wealth*. Clark's concern was with the issue of fairness. He rejected the belief that man is moved solely by self-interest. In his judgment, the economic man was a myth. The man whom God created bases his action on moral principles and altruism. Self-interest does not necessarily mean selfishness. Clark attacked competition describing it as an ignoble struggle for personal profit. When industry was on a small scale, competition was an effective regulator. However, the introduction of machines brought into play monopolistic combinations both in capital and labor. The results were conflicts, strife, and uncertainty about workers' employment and wages. It was owing to this state of affairs why Clark wanted to know whether or not workers were receiving the full benefit of their labor and what laws of distribution could provide the answer.

In seeking answers, Clark turned to the marginal analysis. Quite simply, Clark "broadened the application of the marginal concept to explain the returns to the factors of production" and in doing so succeeded in developing a theory of distribution.[37] In formulating his theory, Clark made a number of important assumptions, including very importantly the institution of private property, perfect competition, and the static state. Additional assumptions included the principle of diminishing utility and diminishing returns. Clark provided no special role for land, assuming that it was part of capital. As a result, Clark dealt with only two returns, viz., wages and interest,[38] both of which are determined the same way, whether by marginal or specific productivity. As he points out: "These incomes (wages and interest) are fixed by the final productivity of labor and capital, as permanent agents of production. . . . The specific productivity of labor fixes wages. . . . In like manner does specific productivity of capital fix the rate of interest."[39]

Although the return to labor and the return to capital are determined in the same way, Clark's reference to capital bears qualification. Capital may be viewed as a capital good or as a flow of income. Clark uses the latter form, because of its continued life instead of capital goods which are material goods consumed in producing value. Clark's interest, the return to capital, derives from the time preference theory in which the present is preferred to the future along the lines developed by Bohm-Bawerk.[40]

In sum, Clark's purpose in writing the *Distribution of Income*, was to show that the distribution of the income of society is controlled by a natural law, and that this law, if it worked without friction, would give to every agent of production the amount of wealth which that agent creates."[41] That objective would be achieved at the point where the marginal product of the last unit of each factor would be equal to its cost.[42]

Clark, in terms of the specific productivity theory, held that the study of distribution is a study of "specific production." In his own words he states:

> It is an analysis of the wealth-creating operation, and a tracing to each of the three agencies that together bring wealth into existence of the part which it separately contributes to the joint result. To each agent (is

given) a distinguishable share in production, and to each a corresponding reward—such is the natural law of distribution.[43]

This inquiry into the source and allocation of incomes is a matter of very great importance for as Clark states, "more hinges on the truth of it than any introductory works can state. The right of society to exist in its present form, and the probability that it will continue so to exist, are at stake."[44]

Clark argues that the welfare of the laboring classes does not depend on whether they get much or little, but rather upon whether the amount they receive in wages and salaries is in proportion to what they produce. If they were to receive more than they produce they would not very likely become revolutionists; however, if it could be proved that workers are regularly robbed of what they produce then it would be justifiable for every worker to become a socialist. To determine whether or not each factor is receiving its appropriate share, Clark turns to the role of competition. Whether the returns to the factors be higher or lower than what they contribute to production, the forces of competition should bring them back into balance.[45]

If it turns out that the share of output produced is equal to the recompense received by the factors then the next thing we have to know, according to Clark, is whether each of these separate incomes grows absolutely larger or smaller. We have to establish whether evolution makes labor more productive, and hence better paid, or less productive, and therefore worse paid. The same inquiry must be made concerning the future status of capital and entrepreneurship. The answers to these questions are important, because they will determine whether or not our current economic arrangements should be allowed to continue. Clark summarizes the issues in the following terms,

> Having first tested the honesty of the social state, by determining whether it gives to every man his own, we have next to test its beneficence, by ascertaining whether that which is his own is becoming greater or smaller. The right of the present social system to exist at all depends on its honesty; but the expediency letting it develop depends entirely on its beneficence.[46]

Clark contends that if each productive function is rewarded in accordance with the amount of its product, then each person receives what he himself produces. If wages, interest and profits are based on such a principle, "then the different classes of men who combine their forces in industry have no grievances against each other."[47] On the other hand, if they do not receive their product in its entirety, there is "institutional robbery—a legally established violation of the principle on which property is supposed to rest" and "there would be at the foundation of the social structure an explosive element which sooner or later would destroy it."[48]

A state that would thus force a workman to leave behind him a share of property that was his by right of creation would fail at a very critical point: "for nothing, if not to protect property, does the state exist."[49] Only a study of distribution can settle the question as to whether the modern state is true to its principle; it was specifically for this reason that Clark considered such an analysis of this process of economics so vitally important. If the thesis can be proved that each receives according to his contribution, i.e., if actual wages are the whole product of labor, and if interest is the product of capital, then property is truly protected at the point of origin and our present organization of society is justified.

In setting forth his theory, Clark makes a number of assumptions: (i) no government interference; (ii) private property is protected by the government; (iii) free competition; (iv) self-interest is the motivating force; and (v) labor and capital are mobile. In a static state with no changes in population capital; methods of production; competition; and freedom of labor and capital to move, each factor would receive whatever it produces. Profits would be non existent, because of free competition and the whole social income would accrue to labor and capital. By contrast, in a dynamic state all of the foregoing factors can change, including the emergence of profits, because of the absence of free competition. Nonetheless, says Clark, the shape of a dynamic society still tends to conform in some degree to its static model.

The above to the contrary notwithstanding, how does Clark determine the return to each of the factors of production? Inasmuch as the factors work together in production, how is each one's share of the output to be determined? Although it is possible in some instances to substitute one factor for another, in general they must be used in concert with one another. They are mutually interdependent. The return to one factor depends upon the contribution made to production by its complement. Nevertheless, we must determine in some way how each factor receives a share of the commodity produced in proportion to its contribution to that product. In making his

case for an equitable distribution of income, Clark relied on two different explanations: marginal productivity and specific productivity.

In regard to the marginal productivity theory, it is dependent upon the use of a given quantity of capital goods, or concrete instruments of production. As more men are employed, these additional workers create less than did the original workers, because they have less capital with which to work. This leads to the result that "wages tend to equal the product of marginal labor; and that part of the work force which occupies a zone of indifference is thus marginal."[50] Although the earlier workers produced a larger physical product, their remuneration cannot exceed that of the workers who were later employed. This is due to the principle of substitution. The workers are homogenous; they are interchangeable so that the wage of each worker will equal the marginal product of the last worker employed.[51] Now in view of the fact that the supramarginal workers receive the same wage as the marginal worker, it would seem that the entrepreneur obtains a surplus.[52] In reality though, the employer enjoys no such excess benefit, because the rivalry incurred in disposing of the commodity eliminates profit. In effect, when the marginal worker is employed, the addition he contributes to the total product can be sold only at a lower price and in this way the entrepreneur's so-called surplus is diffused throughout the economy.

In sum, the marginal productivity theory of wages means that no one of a class of interchangeable workers can obtain remuneration in excess of the addition made to the total product by the least essential worker. "The product on which the workers' payments are based can be determined only where the use of instruments has been pushed so far that the product of the final unit of labor has no intermixture of other income and is attributable to labor alone." In the final analysis the marginal productivity theory is nothing more than a "demand and supply" theory of wages in which the marginal unit of labor, like the final unit of any commodity, determines the price.[53]

Concerning the specific productivity theory, Clark maintains that capital always adjusts itself to the amount of labor employed with the result that, regardless of the productive combination, each unit of labor works with an amount of capital equal to that with which every other unit of labor works. The "specific" product of each unit of labor is, therefore, the same as that of every other unit. In other words, the specific product of the first worker is no greater or smaller than that of the fiftieth worker, since they all have the same amount of capital with which to work. Thus, although the marginal product of labor is greater when there are fewer workers employed and less when more units of labor are utilized, these variations in the marginal product are due to the variation in the amount of capital employed in the productive combination.

A comparison of these two theories reveals a very interesting difference in their methods of testing wages. The marginal productivity analysis permits a testing of wages simply by withdrawing one worker and determining the amount of product lost. The specific productivity theory, on the other hand, can be tested only by taking the total product of one workforce, subtracting one worker, reshaping the capital to accommodate the smaller number of workers, and then comparing their respective outputs. This then would measure the value of the final, and therefore, every other unit of labor under the specific productivity theory.[54]

To sum up the difference between the two theories, Clark says,

1. The difference between what the first division of workers created by the use of the whole capital and what they now create is an amount solely attributable to the extra capital they formerly had.
2. The difference between what one increment of labor produced when it used the whole of the capital, and what two increments are now producing, by the aid of that same amount of capital, is attributable solely to the second increment of labor. We have, in this way, tested the specific productivity of one unit of labor.[55]

The reason Clark supplemented the marginal productivity theory with the specific productivity theory was to make it "doubly clear that labor on all parts of the industrial field has the same degree of productivity that it has on the marginal zone.[56] In addition, he employed the specific productivity theory to answer the charge that the intramarginal workers in the marginal productivity theory were being exploited. In doing so, he utilized two different theories of wages without an adequate distinction between the two. It was suggested, therefore, that the difficulty created by Clark's two-fold approach could have been averted had he resorted to Marshall's distinction between the results of the "short run" and the "long run." In that event the determination of wages by the marginal analysis could have been treated as a short-term solution and the fixing of wages by the specific productivity approach through the reallocation of capital as a long-term adjustment.[57]

Inasmuch as Clark and Wieser used marginal utility to explain the distribution of income, it is not surprising to find a striking similarity between the laws of the imputation of values which Wieser used and Clark's specific

productivity theory. In dealing with the factors of production, Wieser bases their value on their marginal productivities. By using the principle of complementary goods Wieser maintains that the productive elements which are bound up in the composition of an article may change from one combination to another and it is this fact that makes it possible to distinguish the specific effect of each single factor by comparing a number of simultaneous equations[58] which include all of the variables. The value of the factor in question will be determined by the least important role it plays in all of these combinations of the productive factors. The value of the factor as it exists at the margin or at the point of its least economical employment will determine the value of that factor in all of its other employments. On the basis of these calculations, it will be possible to assign a separate portion of a jointly produced good to any one of the factors taken alone.[59] Thus although their approaches to the problem differed, in the end Clark and Wieser came to the same conclusion.

Granted the validity of Wieser's approach, it might be virtually impossible, as has been noted earlier, to obtain data on all of the goods in which the factors are involved. Take, for example, the determination of a machinist's wage. To make that determination, we would first have to identify all of those goods in which the machinist plays a role. Next, we would have to determine his contribution to each of those commodities as expressed in each of their equations. The equations for all of those commodities in whose production the machinist plays a part would be collected and solved simultaneously to determine his marginal contribution and the wage which should be paid to him. Quite obviously, such a task would be of unsurmountable proportions and the results, if they were forthcoming, subject to further questioning.

In evaluating Clark's theory of distribution, it is difficult to take exception with it on theoretical grounds, because of the assumptions on which it is predicated. Nevertheless, the presentation does raise a number of questions. For example, in his reference to the law of diminishing returns, Clark fails to acknowledge that for a time the law makes allowance for increasing returns. He dismisses this omission on the grounds that increasing returns represent a dynamic force, but that he was dealing with a static state. Another criticism is that he did not deal with land as a separate factor, but simply included it under capital. Critics argue that it should have been handled separately, because it is fixed and its supply is not responsive to changes in its return. The fact that the analysis deals with homogenous labor raises another question. Suppose that one of the supramarginal workers is more skilled than the marginal worker, is it fair to compensate him at the same rate as the marginal worker? His answer is that all workers are the same, so that the first worker is interchangeable with the marginal worker. Unless Clark stipulates that all firms must employ the same amount of capital, it would seem that the marginal worker who is toiling with more capital in one firm would have a higher marginal productivity and a higher wage in a firm with less capital. How does this square with the assumption that labor is homogenous, interchangeable, and receives the same wage?

In regard to the specific productivity theory, the reallocation of capital among a smaller workforce is understandable, if that capital is comprised of simple hand tools which can be easily redistributed. But how would it be possible to reallocate capital if we are dealing with large entities of fixed capital goods which cannot easily be broken down and reallocated? Like the other adherents to marginal utility, Clark pays too much attention to the demand for labor and not enough to the supply of labor. Clark's theory is based on an economy in which free competition plays a critical role; competition is the keystone that maintains the arch. For that reason it may be difficult, as has been acknowledged, to take exception with his theory on theoretical grounds. A more realistic assumption is that in the real world imperfect competition and oligopoly come closer to the truth. Therefore, Clark's theory leaves much to be explained when that assumption of perfect competition is lifted.

NOTES

1. Davenport, H. J., *The Economics of Enterprise*, New York: Macmillan, 1913, 25.
2. Ibid., 60.
3. Ibid., 23.
4. Mitchell, op. cit., 156–158.
5. Davenport, op. cit., chapter 5, passim.
6. Ibid., 91–93.
7. Mitchell, op. cit., 158–159.
8. Davenport, op. cit., chapter 6, passim.
9. Ibid.
10. Haney, op. cit., 895.
11. Cassel, G., *The Theory of Social Economy*, New York: Harcourt, Brace & Co., 1899, 80–81.

12. Mitchell, op. cit., 205.
13. Ibid., 206.
14. Roll, op. cit., 441.
15. Bell, op. cit., 542.
16. Newman, op. cit., 353.
17. Bell, op. cit., 545.
18. Ibid., 545–546.
19. Mitchell, op. cit., 252.
20. Ibid., 242.
21. Homan, op. cit., 168.
22. Bell, op. cit., 548.
23. Newman, op. cit., 357.
24. Ibid., 358.
25. Veblen, T., *The Theory of Business Enterprise*, New York: C. Scribner's Sons, 1904, passim.
26. Ferguson, op. cit., 268.
27. Homan, op.cit., 388–389.
28. Ibid., 406–407.
29. Ibid., 401–402.
30. Ibid., 127.
31. Scott, op. cit., 522.
32. Mitchell, W. C., "Quantitative Analysis in Economic Theory," *American Economic Review* 15 (1925): 1–12.
33. Ibid.
34. Homan, op. cit., 427.
35. Ibid., 391–436.
36. Mitchell, supra.
37. Bell, op. cit., 535.
38. Newman, op. cit., 240.
39. Clark, J. B., *The Distribution of Wealth*, New York: Macmillan, 1899, 47.
40. Newman, op. cit., 241.
41. Clark, op. cit., v.
42. Bell, op. cit., 527.
43. Clark, op. cit., 3.
44. Ibid.
45. Ibid., 4.
46. Ibid., 4–5.
47. Ibid., 7–8.
48. Ibid., 9.
49. Ibid.
50. Ibid., 106.
51. Homan, op. cit., 60.
52. Roll, op. cit., 474.
53. Homan, op. cit., 61.
54. Ibid., 60.
55. Clark, op. cit., 325.
56. Homan, op. cit., 62–63.
57. Ibid.
58. Haney, op. cit., 611.
59. Ibid.

Chapter 11

Marshall and Keynes

This concluding chapter deals with two of the most dominant and influential economists of all times, namely, Alfred Marshall and John Maynard Keynes. Marshall was the founder of the Cambridge School which numbered such outstanding economists as Arthur C. Pigou, Joan Robinson, Dennis Robertson, and John Maynard Keynes. Through his *Principles of Economics*, he provided classical economics of a new life. By bringing together the supply side of the classicists and the demand side of the Austrians he provided a synthesis and the basis of what today is referred to as microeconomics. Keynes, through his *General Theory of Employment, Interest and Money*, diverted attention from the study of economics and its parts to the study of its aggregates—demand, investment, consumption, and so on—and in doing so provided economics its study of macroeconomics. It is for their singular contributions to economics that they are treated side by side in this volume.

ALFRED MARSHALL

Amidst the various changes in intellectual and practical affairs that were taking place in the days of Marshall's youth, the subject of political economy lost some of the standing and prestige it had enjoyed in the period following Ricardo, and perhaps even more so in the years following the publication of John Stuart Mill's *Principles*. Prior to the publication of Marshall's *Principles*, the classical doctrines of John Stuart Mill, which had predominated in England for thirty years, had been seriously undermined and economics had fallen into disfavor. As the generation which had experienced the Napoleonic wars and the tariff and currency issues passed, the center of interest shifted. Militant socialism and an organized labor movement attacked classical economic doctrines as propounded by Ricardo. The Historical School, under the guidance of Roscher and Hildebrand, effectively challenged some of the postulates assumed by Smith and Ricardo, and emphasized the complexity and changing character of economic life. The exposition by Jevons and the Austrians on the subjective theory of value had also served to call into question the thinking of the classical theorists.[1]

The writings of American economists, such as F. A. Walker, and those members of the mathematical school on the continent, such as von Thunen and Cournot, had raised disturbing questions on theoretical issues. Sismondi, Carlyle, Ruskin, and other social economic reformers, together with socialists of various types, had drawn attention to the increasing complexity and evils of economic life. Startling developments in the field of biology, associated primarily with Charles Darwin and A. B. Wallace, the theme of evolution through natural selection and new theories of life were wielding an ever-growing influence upon economic doctrines.[2]

Meanwhile, serious economic and social disruptions necessitated a change in the way economic problems had to be viewed. Numerous inventions and an unparalleled use of machinery, frequent rapid and sweeping readjustments in employment and enterprise; the passage of protective factory legislation; the reestablishment of barriers to free trade; the rapid growth of monopolistic practices; and finally, an expansion of the role played by the state in regulating economic life were the principal factors that demanded a fresh study of economic issues. Thus, it was in this highly complex and confused environment that Marshall, in all his modesty, sought to reinterpret the fundamental aspects of economic theory.[3]

In addition to being the leader of the Cambridge School, Alfred Marshall was also credited with being the founder of the Neoclassical School of Economics. Basically what he tried to do was to rehabilitate and restore the economics of Smith, Malthus, Ricardo, and Mill. Like other economists who preceded him, Marshall was concerned with the plight of the poor and the marginalized.[4] He did not depart from the Utilitarian beliefs of earlier economists. To understand poverty, he believed that it was necessary to study the causes of the degradation of such a large part of mankind.[5] He strongly believed that the purpose of economics was to contribute to the solution of social problems.[6]

Unlike other definitions of economics which made economics the study of wealth, he made it the study of man, as noted by his definition of the discipline, "Political economy or economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely associated with the attainment and with the use of the material requisites of well-being."[7]

In the *Principles of Economics*, published in 1890, Marshall deals with two of the major topics that had preoccupied the classical economists: value and distribution. To start with the issue of value, the classicists from the time of Adam Smith had, alternatively believed that it was due to the exertion of labor or the cost of production. The Austrians believed that value depended solely on utility and the demand side of the market. Cost for them played no role in determining value. For them cost was of no consequence because it is fixed.[8] As Bohm-Bawerk argued, labor which accounts for a large part of the cost of production plays no role in the determination of value because the supply of labor is a fixed quantity. The reason Bohm-Bawerk thought that it was fixed is that the entrepreneur set the time for the workday and could not be altered by the worker. Marshall rejected this monistic approach and believed that price and value also depended upon supply and the cost of production. It is the interaction of the two like the blades of a scissor that determines the price of an object. As he explains,

> We might reasonably dispute whether it is the upper or the under blade of a pair of scissors that cuts a piece of paper. As whether value is governed by utility or cost of production. It is true that when one blade is held still, and the cutting is effected by moving the other, we may say with careless brevity that the cutting is done by the second; but the statement is not strictly accurate, and it is to be excused only so long as it claims to be merely a popular and not a strictly scientific account of what happens.[9]

Although Marshall was dealing with value, he realized that it was difficult to explain or quantify it and so he determined that price was the best way to express and measure it. To determine value or price Marshall maintained that we must first establish the nature of demand and supply along with their demand and supply prices and then bring them together to establish a price/output equilibrium. Demand, in the form of a schedule, reports the quantities of a good which will be taken and the prices at which the good is offered with all else given. Demand, he says, depends on the amount of satisfaction one derives from successive units of the same good. The additional benefit which one derives from each successive unit diminishes, in accordance with the law of diminishing marginal utility. Quite simply, as one increases one's consumption of a homogeneous good, one's utility increases, but at a diminishing rate.

The utility of the last unit acquired is referred to as the marginal utility. In his own words, Marshall defines the law of diminishing utility as "the additional benefit which a person derives from a given increase in the stock that he already has . . . the utility of the marginal purchase may be called the marginal utility of the thing to him."[10]

When this schedule is plotted on graph paper it becomes a downward sloping demand curve, demonstrating the inverse relationship between price and quantity. When reported in this fashion, the curve discloses a number of important economic concepts. By gauging the slope of the curve, the consumer can gain a good indication of the elasticity of demand, viz., the relative change in quantity over the relative change in price. That measure should help the producer to determine whether or not a change in price will add to or reduce his revenue. If the demand curve is vertical (i.e., perfectly inelastic), it means that the consumer will purchase the same amount of the good at any price. If the curve is horizontal to the x-axis, it means that the consumer will demand an infinite quantity at the same price. If it is a rectangular hyperbola, the consumer will spend the same amount of money at any price. This concept of elasticity is also very useful in determining the incidence of taxation on buyers and sellers. For example, an inelastic demand causes more of the incidence to fall on the buyer; conversely, an inelastic supply causes more of it to fall on the seller.[11]

In connection with this relationship between price and utility, Marshall introduced the concept of consumer surplus. It measures the extra utility between the equilibrium price and the price the consumer was prepared to pay for the good in question. The producer also enjoys a surplus when the price he receives is higher than the marginal cost at which he was disposed to selling his wares.

In developing his theory of demand, Marshall assumed a fixed real income and constant prices. But this creates a problem, for if the price of the good in question changes, this will cause real income to rise or fall. For exapmle, if the price of the good increases, this may cause the consumer to increase his demand for a cheaper

good, thereby increasing its sales and quite possibly its price.[12] In effect, Marshall, in developing his side of demand theory, failed to take into account income and substitution effects.

In the same fashion as demand, a supply schedule shows the varying amounts of a commodity that will be forthcoming for sale within a given market, within a given time, and at different prices.[13] The characteristic feature of most supply schedules is they show that the amount of a commodity that will be forthcoming for sale within a given market and at a given time increases as the price rises.[14] In accordance with the principle of the law of diminishing marginal returns, which Marshall awkwardly states as "An increase in the capital and labor applied in the cultivation of land causes in general a less than proportionate increase in the amount of produce raised."[15] Quite simply, the cost of production rises with each additional unit of output. Because of the rising marginal cost, the supply schedule when converted to a curve slopes upward and to the right. In sum, demand schedules, as a general rule, are represented by a curve that slopes downward and to the right, whereas supply schedules are represented by a curve that slopes upward and to the right.[16]

According to Marshall, each potential buyer brings to the market a demand price reflecting the equilibrium between the marginal utility to him of the particular commodity and his marginal utility of money. Similarly, each individual would-be seller brings to the market a supply price reflecting the equilibrium between his total costs of production and his marginal utility for money. Now because incomes and tastes vary among individual consumers and because methods of production and expectations vary among individual sellers, it is highly likely that we will be confronted with as many demand and supply curves as there are buyers and sellers of a commodity in a giver market at a given time. Therefore, the thing to do is to fuse this vast collection of individual demand curves into a single curve for the market as a whole. This market demand curve will have the same general form as the individual demand curve with the aggregative number of units demanded at each price. In the same manner, a market supply schedule would be constructed out of the extensive collection of individual supply schedules.

Once the curves of the market demand and market supply schedules are determined, Marshall proceeds to draw them on the same graph. At the point of the intersection of these curves the marginal demand price and the marginal supply price of the commodities exchanged will be approximately equal. It is at this point of equilibrium between demand and supply that price is determined.[17]

The reason for holding that the selling price will be determined at the point of intersection between supply and demand is that if the price demanded by the suppliers exceeds that offered by buyers, the supply offered at that point would be greater than the demand. As a result, not all of the commodity brought to the market could be sold, unless the sellers were willing to accept a lower price. Similarly, if the price quotation is below the one which equates demand and supply, demand would exceed supply. As a result, the price would be forced up. From this then we can see that prices always tend toward equilibrium; that is, they tend toward that point at which the quantity forthcoming for sale is just equal to the quantity demanded. In sum, buyers and sellers come together in the market place and by "higgling and bargaining and tossing the price hither and tither like a shuttle cock," they arrive at a price which temporarily equates the existing supply and demand for one day on which there is no time for change.[18] Very importantly, Marshall depends heavily upon pure competition to deal with imbalances and frictions in the market place to bring about equilibrium.

As noted, the equilibrium price may be set for as short a period as a single day, but that is not a mutually exclusive time period. Actually, Marshall deals with three different intervals of time: the market period in which supply is fixed; the short run in which supply can be adjusted within the firm's existing capacity; and the long run in which supply and the firm's capacity can be either expanded or contracted. In the immediate or market period, Marshall claims that value is determined more by the demand for the article in question than by its supply. This is so, because the available supply of the commodity in the market is fixed and cannot be altered at will (i.e., the supply cannot be increased or decreased in a short period of time). For example, on a given day the amount of fish for sale is fixed and the price will be set by demand. If though that price remains below the fishermen's supply price for an extended period, the fishermen will cut back production and in the long run, if need be, even mothball a part of their boats. Over a longer period of time, the supply of fish can be reduced or, too, increased depending upon the demand for it.

Therefore, if in the instant case consumers want more fish they must be willing to pay a price at least equal to the supply price (i.e., one that covers the cost of production). If the price of the commodity is sufficiently high, the supply will increase or at least remain at the same level; however, if the price is not equal to the cost entailed in producing the commodity, then its supply will be curtailed. Hence, supply is the more important determinant

of value in the long-run period and a partial vindication of the earlier classicists' claim that value depends upon the cost of production. In Marshall's own words: "As a general rule, the shorter the period which we are considering, the greater must be the share of our attention which is given to the influence of demand on value; and on the longer the period, the more important will be the influence of the cost of production on value."[19]

In summary, Marshall, unlike Jevons, does not provide an explanation of the determinants of value in terms of a catena. On the contrary, he refuses to bind himself down to any cut and dried propositions. In his judgment, nothing is "constant or normal except change" and everything depends upon everything else. He continuously takes the view that we are dealing with a tremendously complicated situation in which the opposing forces are mutually determining one another. Therefore, it is impossible to say that any one factor in a given situation determines the value of any other factor. Marshall frequently warns his readers that a simple statement of doctrine is necessarily false and mischievous, as in the following passage:

> In this world therefore every plain and simple doctrine as to the relations between cost of production, demand and value is necessarily false: and the greater the appearance of lucidity which is given it by skillful exposition, the more mischievous it is. A man is likely to be a better economist if he trusts to his common sense, and practical instincts, than if he professes to study the theory of value and is resolved to find it easy.[20]

Marshall is at pains to emphasize the infinite complexity inherent in the value problem, and to maintain that every factor in its determination is continually being reacted upon by changes in all of the other factors. The cost of production does not determine value, he contends, nor does marginal utility determine value, nor do even demand and supply determine value. Neither can it be said that the amount of the demand or of the supply is governed by price. In short, no one factor in any given situation can be said to be the sole cause of any other single factor.

The problem of value, according to Marshall, is in the final analysis a tremendous complex of opposing forces, each one of which is mutually and continuously aiding in determining all of the others. In his own words Marshall states:

> The amount of the thing and its price, the amounts of the several factors or agents of production used in making it, and their prices—all these elements mutually govern one another, and if an external cause should alter any one of them the effect of the disturbance extends to all others. In the same way, when several balls are lying in a bowl, they mutually govern one another's positions; and again when a heavy weight is suspended by several elastic strings of different strengths and lengths (all of them being stretched) attached to different points in the ceiling, the equilibrium positions of all the strings and of the weight mutually govern one another. If any one of the strings is shortened, everything else will change its position, and the length and the tension of every other string will be altered also.[21]

To repeat, Marshall considers the problem of value a complex of forces which for convenience of analysis he summarizes in two great categories, namely, demand and supply, equated at a price; but in which all these forces of demand, supply, and the price at which they are equated are continually determining one another. Marshall maintains, therefore, that it is erroneous to say that the cost of production determines value, as the classicists contended and equally fallacious to say that the final degree of utility determines value, as Jevons did. It is likewise wrong to say that supply and demand determine value. Our only way out of this dilemma then, according to Marshall, is to recognize that the process of value determination is an exceedingly intricate one in which every single factor is continuously reacted upon by changes in all other factors. In reality, Marshall is saying the same thing that Leon Walras did, namely, that there are many forces at work, all of which are helping not only to solve the problem of price but also to determine the worth of each of those other forces as well.[22] Clearly, Marshall's treatment of value did not qualify as a work in general equilibrium analysis. In his analysis of value, Marshall distinguished between different degrees of adjustment, involving a step-by-step approach and so from that perspective it was a work in partial equilibrium analysis.[23]

In returning to the question of value, Marshall dealt with different intervals of time. In the short run or market period, Marshall claims that value is determined more by the demand for the article in question than by its supply. This is so because the available supply of the commodity on the market is fixed and cannot be altered at will (i.e., the supply cannot be increased or decreased in a short period of time).

In a longer period of time, however, there is an opportunity to alter the supply of a commodity that is forthcoming on the market. If the price of the commodity is sufficiently high, the supply will increase or at least

remain the same, because the cost of producing that commodity is being met; however, if the price is not at least equal to the cost entailed in producing the commodity, then its supply will be curtailed. Hence, supply is the more important determinant of value in the long-run period.

The supply forthcoming is ultimately determined by its cost of production; therefore, in the long run it is the cost of production that really determines value. But, we may ask, "whose costs will ultimately determine supply?" To answer this question, Marshall falls back on his concept of the representative firm. According to him, the normal supply price of any amount of a commodity is determined by the normal expenses of a representative firm, including the gross earnings of its management. A representative firm is in a sense an average or model firm and should not be confused with a marginal one. In effect, by this phrase Marshall is referring to all those business firms which sell at, or just above, or just below, their costs, and are therefore typical of business as a whole. Lower cost firms, because of their paucity in number, are not held to be representative of business as a whole, while higher cost firms tend to be weeded out altogether.[24]

The representative firm is one which has had a fairly long life, moderate success, and is managed with normal ability. It sells at just above or below its cost and is typical of business as a whole. The purpose of Marshall's representative firm is to serve as a standard for estimating the normal expenses of production over long periods in which the normal action of economic forces has had time to work itself out more fully than is the case in the immediate or short-run periods of production.

For Marshall the owner of the representative firm is not a new producer just struggling into business, who works under many handicaps, and has to be content for a time with little or no profits, but who is satisfied with the fact that he is establishing a connection and taking the first steps toward building up a successful business.[25] Neither does Marshall have in mind a firm which by exceptionally long-sustained ability and good fortune has got together a vast business, and large well-organized workshops that give it superiority over almost all its rivals. Rather, he maintains that our representative firm must be one which has had a fairly long life, and fair success, which is managed with normal ability and has "normal access to the economies, external and internal, which belong to that aggregate volume of production" particular size firm.[26]

By "external economies," Marshall makes reference to those economies which are dependent on the general development of the industry, or in other words, "economies which can be secured by the concentration of many small businesses of a similar character in particular locations."[27] They would include "the cross-fertilization of ideas, the development of auxiliary and subsidiary industries and the availability of skilled labor. Internal economies would include economies in the use of materials, greater efficiency in the use of larger units of machinery, economies in the purchase and sale of materials, and the specialization of labor."

The representative firm has a special significance for the long run, because all firms, like it, must end up with just a normal return; no windfall profits. If a firm should reap excess profits because of a favorable location or superior management, those factors will either be bid away or, too, must be more handsomely compensated. In either case the forces of competition will leave the firm with higher costs and the elimination of the excess profits.

From the foregoing, then, we can conclude that the purpose of Marshall's representative firm is to serve as a standard for estimating the normal expenses of production over long periods of time during which the normal action of economic forces has time to work itself out more fully than is the case under the temporary equilibrium of the short-run period.

To explain the distribution of income, Marshall turned to his theory of value which he thought could explain not only the prices of commodities, but the returns to the factors of production as well. Except for land, the other factors have their own demand and supply schedules with their respective demand and supply prices. Land does not have a comparable supply schedule, because its supply is fixed. It has no supply price and cannot respond to changes in its rent; in effect, its supply schedule would be perfectly inelastic As a result, land is treated as capital and its return becomes a part of the cost of production.

As far as wages and interest are concerned, in the immediate or market period they are both determined by supply and demand. Wages are determined by the relative scarcity or abundance of labor. The market wage will have an effect on supply; a high wage will attract more workers, while a low wage rate will serve to reduce the supply of workers. When in equilibrium, wages should equal the net product of labor. The rate of interest is similarly determined by supply and demand. According to Marshall, "interest, being the price paid for the use of capital in any market tends towards an equilibrium level such that the aggregate demand for capital in that market, at that rate of interest, is equal to the aggregate stock forthcoming there at that rate."[28]

Profits are considered from two perspectives. Normal profits are treated as a cost of production and excess profits are a windfall over and above the receipt of interest. These factors may be substituted, one for the other, or in complement to one another. When used in the latter form, their returns are mutually determined. A change in any one of them may have a bearing on each of the others.[29] The returns to the factors are interdependent and, as in the case of his "balls in a bowl" analogy, a change in one affects the positions of all the others. To determine the return for one factor a set of simultaneous equations is required incorporating all of the factors.

As in the case of commodities, Marshall treats the returns to the factors of production over different periods of time. In the immediate or market period, wages are simply determined by supply and demand. They are determined by the relative scarcity or abundance of labor. The wage will have an effect on supply; a high wage will attract more workers, while a low wage rate will serve to reduce the supply of workers. When in equilibrium, wages should equal the net product of labor. The rate of interest is similarly determined by supply and demand.

Moving away from the immediate and short-run periods to the long run, Marshall contends that the distributive shares will depend on the cost of production. The cost of labor will depend upon the cost of "rearing, training, and sustaining the energy of efficient labor."[30] In regard to capital, Marshall says that interest, in the long run, depends upon demand and the volume of savings lenders are prepared to supply. Accordingly he states that,

> An extensive increase in the demand for capital in general will therefore be met for a time not so much by an increase in supply as by the rise in the rate of interest; which will cause capital to withdraw itself partially from those uses in which its marginal utility is lowest. It is only slowly and gradually that the rise in the rate of interest will increase the total stock of capital.[31]

Interestingly, Marshall agrees that the increase in the interest rate will lead to a reduction in investment, but that slowly the rise in the rate of interest will increase the stock of capital. Parenthetically, in the Keynesian system an increase in the rate of interest will serve to reduce investment, reduce income and lead to a decrease in saving. As far as profits, the earnings of the entrepreneur, are concerned, their supply price will, at a minimum, have to be set at their opportunity cost, for example, the return on an amount of capital in its best alternative use.

Over time the supplies of the factors of production may change. An increase in the supply of a given factor may cause its marginal need and price to decline or, too, a change may cause its price to rise. In any case, changes in the quantities and prices of the factors will alter their relative shares of remuneration, thereby leaving more or less for the other factors to share. But in the long run their supplies will be determined by their cost of production. In his own words Marshall says, "This reflex action may be slow. But, if there is no violent change in the arts of production or in the general economic condition of society, the supply of each agent will be closely governed by its cost of production"[32]

A final note concerning Marshall's work is whether it represented as a static or dynamic analysis. Inasmuch as he considered real income and prices to be fixed that would suggest a static approach. However, the fact that his analysis moves through three different periods of time, certainly suggests motion. To strike an analogy, it would not be a continuously running film, but three still shots over time. Whether a truly dynamic value analysis could be realized remains an open question.

To summarize Marshall's seminal contribution to the development of economic thought, instead of rejecting the classical theory of value outright in favor of the utility analysis, Marshall fused the elaborate analysis of cost of production, which had been formulated by Adam Smith, David Ricardo, John Mill, and their co-workers, with the analysis of utility which had been developed by Stanley Jevons and the Austrian economists. Marshall was able to reconcile these two seemingly opposed schools of thought by citing a homely illustration. A pair of scissors did not cut with either the upper blade or the lower blade alone, but by both moving together.

Marshall held that value theory is not quite so simple and proceeded to show why. Value is almost entirely influenced by demand over a short period of time. Once a good is on the market, the consumers' willingness to purchase it determines its price. In the long run, said Marshall, supply is important, for the price of a commodity cannot vary greatly from the expenses incurred in producing it. In short, the utility analysis gives us an account of the demand blade and the cost of production an account of the supply blade of the scissors. This synthesis by Marshallian economics produced a rounded theory of value which could now be applied systematically to show the value of labor, the value of the use of capital, the value of land, and the services of the entrepreneur.

The great significance of Marshall's work is that it revitalized classical economic theory and reworked it into something that became much more acceptable. Up to his time, theorists had revolted against the cost of

production theory in favor of utility. To these writers it was essentially the power of a good to satisfy human wants which gave it value; not what was spent in producing it as the classicists had maintained. By combining these two strands of thought Marshall was able to reconcile their differences and provide the classicists a new life under the banner of neoclassicism.

JOHN MAYNARD KEYNES

John Maynard Keynes, one of the most dominant and influential economists of the twentieth century, was born in Cambridge, England, on June 5, 1883. His father was a renowned economist in his own right and mother a very accomplished woman who served as the mayor of Cambridge. Keynes attended Eton, England's most prestigious preparatory school. Following his graduation from Eton, he attended Cambridge University where he earned a degree in mathematics and studied economics under Alfred Marshall and Arthur Pigou.[33]

Upon the completion of his studies at Cambridge, he received a civil service appointment to the India Office, although he had preferred one to the British Treasury. After completing two years of service in the India Office, he returned to Cambridge as a fellow in King's College and later became bursar of the school as well. Over the course of his life, Keynes was a practicing economist, editor of the *Economic Journal*, a highly successful investor, journalist, a public servant, and an enthusiastic patron of the arts. He died on April 21, 1945, a life prematurely cut short by heart disease.

As the author of the *General Theory of Employment*, *Interest and Money,* Keynes developed a new school of economic thought, namely, Keynesian Economics, which in time became the basis of Macroeconomics. Trained in classical economics by his mentor, Alfred Marshall, Keynes, apart from his misgivings with the traditional gold coin standard, was a member of the classical school of thought during his early career. However, toward the end of the 1920s, his attitude toward the efficacy of classical economic thought started to change in sympathy, no doubt, with Great Britain's declining economic fortunes. The Great Britain that emerged from World War I was a seriously weakened nation. British foreign trade and investment were decreasing in importance and London was steadily losing her international supremacy. Taxes were heavy, British industry was plagued by obsolescence, and workers were disciplined and well organized. British costs relative to those of the rest of the world were high. Tastes and technology were rapidly changing. Many of Britain's old customers were now able to produce goods, such as textiles, formerly produced by her. In addition to these ominous developments, Great Britain had to face in her foreign markets the increasing competition of the United States which was rapidly becoming the world's foremost economic power. Professor Schumpeter aptly summarizes Britain's postwar standing in the following terms:

> She had not emerged from the war of the Napoleonic era. She had emerged impoverished; she had lost many of her opportunities for the moment and some for good. Not only this, but her social fabric had been weakened and had become rigid. Her taxes and wage rates were incompatible with vigorous development, yet there was nothing that could be done about it.[34]

Keynes was conscious of these developments and when the tenets of classical theory did not work to Britain's advantages, he was quick to modify or even abandon their prescriptions. He was eminently practical and when the facts did not conform to theory he was quick to move on to some other solution. Keynes's theory was always geared to policy.[35] This attitude may be confirmed by the solutions he offered on issues which left him beyond the pale of classical orthodoxy. Notable were his recommendations for a managed monetary standard; control over investments; a preference, at one time, for national autarky; and even a revenue tariff. Should important economic issues be left to automatic forces, he asked, or should they be subject to some form of control? Very often he favored the latter.

The fact that Keynes was quick to change course when conditions required should not be misconstrued. One should not make the mistake of identifying practical inconsistency, if such it should be called, with an inconsistency of the Keynesian mind.[36] The views of Keynes the economist reflected those of Keynes the adviser, the businessman, the statesman, and the diplomat. If ideas previously developed by him were unable to stand the test of practicability, he was quick to discard them and set to thinking along different lines. His abandonment of the two volumes of *A Treatise on Money* and move to the *General Theory of Employment, Interest and Money* is a case in point. He had no vested interest in his own past thoughts and never permitted them to impede further intellectual progress.

For some, consistency involves pursuing the same solution through thick and thin just because it is thought to be the best solution. To them any attempt to move to a less satisfactory, but a more practical solution constitutes an inconsistency of the mind. But Keynes's reaction was that "no one ever better demonstrated that a foolish inconsistency is the hobgoblin of little minds."[37]

It is important to note that while Keynes may have been inconsistent in the realm of ideas, he was completely consistent when it came to advancing the best interests of his country. Keynes was first and foremost a Briton. His economic thinking was always colored by what he thought was in England's best interests, as noted by the Canadian economist W. A. Macintosh:

> The most steadfast of his roots was his passionate belief in and concern for England. This is often not explicit in his writings but is embedded in the fabric and is an essential clue to the pattern. From the *Economic Consequences of the Peace* to his last article in the *Economic Journal*, whether he was concerned with the dismemberment of Europe, the flexibility of the exchange rates, the relation between investment and income or buffer stocks of food and raw materials, the pattern of his problem was English.[38]

The essentially British character of Keynes's thoughts on economic issues may again be corroborated by Schumpeter's assessment of that thinking:

> It cannot be emphasized too strongly that Keynes's advice was in the first instance always English advice, born of English problems even when addressed to other nations. Barring some artistic tastes, he was surprisingly insular, even in philosophy, but nowhere so much as in economics. And he was fervently patriotic of a patriotism which was indeed quite untinged by vulgarity but was so genuine as to be subconscious and therefore all the more powerful to impart a bias to his thought and to exclude full understanding of foreign viewpoints, conditions, interests, and especially creeds. Like the old free traders, he always exalted what was at any moment truth and wisdom for England into truth and wisdom for all times and places.[39]

INDIAN CURRENCY AND FINANCE

Keynes's first major work dealt with the Indian currency system. Following the completion of his studies at Cambridge, Keynes joined the British Civil Service and was assigned to the India Office where he developed a good understanding of the country's financial system. On his return to Cambridge as a fellow in King's College, he wrote *Indian Currency and Finance*. His purpose in writing it was to explain the development of the gold exchange standard in India and why countries aspiring to a gold standard should adopt it instead of the traditional gold coin standard.

Until 1893, the Indian currency was based on the free coinage of silver. The gold value of the silver rupee fluctuated, of course, with the value of silver bullion. The fact that the value of silver had been declining made it difficult for the government to redeem its sterling obligations in London. Neither were the interests of importers well served by a depreciating currency. Accordingly, the Indian mints were closed to the free mintage of silver in 1893.

Divorced from the value of silver, the rupee remained the local currency and the government, although it did not formally adopt a gold standard, tried to keep the rupee at a stable rate relative to sterling. The target in 1893 was to raise the exchange value of the rupee to 1s 4d. Having rejected silver, the understanding was that India would in time move to a gold standard. As of 1898, the rupee had unlimited legal tender and was convertible into sterling at a rate of £1 to 15 rupees. The really important aspect of the country's prevailing monetary system was that the government would sell in Calcutta bills in London at the rate of 1s 27/32d per rupee. The rupee was the local currency, but could be converted into foreign currency at an approximately stable rate.

Basically, the system that evolved without any legislative measures provided for the exchange of rupees for sterling and sterling for rupees from two reserves, one for each currency. At first, even the Indian government did not fully understand the nature of the new system that had come into being. For all intents and purposes, it had simply drifted into place. The one thing that could be said about the standard in 1913 is that it enjoyed widespread acceptance in both official and business quarters.

Keynes, too, was satisfied with the outcome. He thought that developments had moved in the right direction. He approved the fact that gold was not allowed to circulate domestically and that paper notes and token coins were used instead as a medium of exchange. In his judgment, gold should be used as a reserve to support the external value of the rupee; that the reserves should be invested in the London money market or other financial

center, thereby adding to their value; and that the exchange rate should be consciously managed by the government. In this latter regard, Keynes applauded the government's intervention in safeguarding the parity of the exchange and in doing so provided an early indication of his belief that the monetary standard should be managed and not left to be buffeted about by the so-called automatic forces of the free market.

In view of these advantages, Keynes urged those countries which were desirous of implementing a gold standard, but had a limited amount of gold, to forgo the traditional gold coin standard and opt, instead, for a gold exchange standard of the kind that had evolved in India.

THE ECONOMIC CONSEQUENCES OF THE PEACE

Shortly after the outbreak of World War I, Keynes went into the service of the British Treasury. After the conclusion of hostilities, he served as the representative of the Treasury and as a deputy for the Chancellor of the Exchequer at the Paris Peace Conference. Disappointed with the peace terms the Allies were imposing on Germany, he resigned from both positions on June 7, 1919, returned to England, and reported his personal reactions to the Conference in *The Economic Consequences of the Peace,* which was published in December of that same year. According to his biographer, Roy Harrod, the book dealt with three issues, namely, the terms of the peace treaty should have been more magnanimous; the reparation sums imposed on Germany were unrealistic; and the issue of political boundaries was far less important than those facing the problems of Europe.

The sums demanded from Germany were exorbitant and unrealistic, because she did not have the capacity to meet them. Keynes felt that the French aim to crush Germany economically was wrong, because Europe could not survive without Germany. After the war, the countries in Europe would be smaller and no longer self-sustaining. They would need each other and Germany would have to resume her position as the hub of the wheel of exchange. Unfortunately, the leaders were more concerned with drawing political boundaries than trying to understand the economic implications of their actions. It was that failure which caused Keynes to become disenchanted with the proceedings in Paris.

The reparation payments imposed upon Germany were substantial. Included were a large part of the German merchant fleet; all overseas possessions, including the property of German nationals; 10 percent of her territory which included the rich iron and coal regions; a large part of her rolling stock, and the cost of all damage done to the civilian population of the Allies, estimated at some $40 billion. Keynes questioned whether or not Germany could meet even $10 billion of that amount.

In addition, Germany was to provide a first reparation payment of $5 billion by June 1921. Keynes did not think that more than $1 billion could be provided. The Allies thought that this payment could be made in part by Germany's trade surplus. However, as Keynes pointed out, with the mark reduced to one-ninth of its former value, Germany would find it difficult to pay for the imports of raw material needed to produce the higher volume of exports.

In light of what had transpired at the conference, Keynes's assessment of the future of Europe was not a positive one. Facing Europe were a broken cycle of production and consumption; a badly damaged railway system; a loss of productivity; the depreciation of currencies with a disconnect between their internal and external values; a high degree of inflation; and the issuance of paper currency instead of raising taxes or incurring debt to finance public expenditures. In sum, Keynes ends his account of the postwar status of Europe on the same pessimistic note on which he started.

A TRACT ON MONETARY REFORM

Shortly after the end of the war, the *Manchester Guardian* invited Keynes to edit a series of supplements dealing with Europe's postwar economic, financial, and political problems. The supplements appeared between 1922 and 1923, and contained a number of articles which were authored by Keynes himself. His contributions dealt largely with monetary issues. These and a number of other articles were published in 1925 in a volume entitled *A Tract on Monetary Reform*.

In it, he cited the evils of inflation and devaluation; his arguments for the stabilization of the European exchanges at their current rates; his opposition to the restoration of currencies to their prewar parities if it called for the imposition of deflationary measures; inflation as a hidden form of taxation; and the forgiveness of the large amounts of debt incurred by the belligerents in the prosecution of the war. On a theoretical plane, Keynes dealt with the quantity theory of money and an elaboration of the Cambridge or the cash balances theory of

money; an explanation of the market in forward exchange and the role of differences in the interest rates prevailing between trading nations; and the deficiencies of the purchasing power parity theory for determining the external value of a nation's currency, because it confused a domestic measure of prices with one that measures changes in the prices of internationally traded goods. On the practical side, he proposed a postwar monetary system for Great Britain. Basically, it represented an adaptation of the system which evolved after the start of the war. It had two objectives: stable internal prices and a steady exchange rate.

THE ECONOMIC CONSEQUENCES OF MR. CHURCHILL

The war had left Great Britain a much weakened country. As noted, she had not come out of World War I as she had in the aftermath of the Napoleonic War. She had lost a great deal of treasure; her competitive position in world markets greatly weakened; her currency devalued and off the gold standard. Despite the pound's loss of purchasing power, public opinion largely favored Britain's restoration of the gold standard and the return of sterling to its pre-war parity of exchange.

Keynes argued against such a restoration for two reasons. First, the return to a currency based on a gold reserve could well restrict the size of the money supply. More importantly, an overvalued sterling would make it even more difficult for British industry to compete effectively in world markets. A return to the gold standard at the prewar parity of exchange would overstate the external value of sterling. To justify that higher value, domestic costs and prices would have to be reduced with an accompanying increase in the level of unemployment.

Those who favored a restoration of sterling at its prewar parity based their case in part on the fact that wholesale prices in England were comparable to those in foreign markets. However, as Keynes pointed out, wholesale prices contain a large proportion of goods traded in international markets and apart from transactions costs must be the same in all markets. But that is not the case for a domestic price index which measures the prices of sheltered goods and services which do not have to compete directly in foreign markets. Therefore, exporters who have to pay for higher priced sheltered goods and services, but then have to sell their goods at lower prices in foreign markets will find it difficult to compete unless they can reduce wages and other domestic costs. Unfortunately, Keynes's arguments were to no avail and in April 1925, Winston Churchill, the then Lord of the Exchequer, in his budget speech announced the restoration of the gold standard at its prewar parity of £1 = $4.86.

A TREATISE ON MONEY

Keynes's purpose in writing *A Treatise on Money,* a two-volume work, was to move monetary theory toward a theory of output. Basically, the work sought to find some dynamic law to explain the business cycle—the movement of the economy from boom to bust. It was based on two well-known theories. The first is that fluctuations in investment are the prime mover of the capitalistic system. The second is that the rate of interest plays a key role in balancing saving and investment. When it does equate the two, it becomes the natural rate of interest, a concept closely associated with the work of Knut Wicksell.

Like other theories of the business cycle, Keynes determined that the relationship between saving and investment was the prime mover of the economy. That relationship determined profits, the level of prices, and the direction of the economy. When saving equaled investment, profits (as he defined them) were zero and prices and the economy were stable; when investment exceeded saving, profits emerged and the economy expanded; when saving exceeded investment, profits declined and the economy contracted.

Through his *Fundamental Equations*, Keynes sought to determine the level of profits, the level of consumer prices, the price of output as a whole and the price level of investment goods, although it is questionable whether or not he established the value of the latter. To achieve economic stability, Keynes depended heavily on the Central Bank to pursue a monetary policy which would set the interest rate at its natural level—at a point where saving equaled investment.

Despite its laudable objective, the work was not sufficiently distinctive to warrant its being described as a breakthrough. "The Fundamental Equations," which were the centerpiece of the first volume, were needlessly confusing because of the way they defined income, investment, saving, and profits. They were defined in such a manner that differences could emerge between saving and investment. These differences were important, because they constituted the motor force for explaining profits and the movement of the economy between

expansion and contraction. But as important as they were for Keynes's system, the possibility of differences between saving and investment were questioned, because conceptually saving and investment are always equal.

From the title of the second volume, *The Applied Theory of Money*, one would have expected Keynes to apply in it the theoretical tools developed in the first volume. However, much of the material produced in the first volume was not used in the second. Instead, Keynes overburdened his work with matters extraneous to his main thesis. Included were such topics as price indices, the modus operandi of the bank rate, the gold exchange standard, the quantity theory of money, and much else which he had treated earlier. From Keynes's own standpoint, the work fell short of the mark. It was not up to his standard of success. He was well aware of its shortcomings and acknowledged the criticism leveled against it. But rather than attempt to revise his work, he let it stand and moved on to his magnum opus, *The General Theory of Employment, Interest and Money*.

Notwithstanding his own dissatisfaction, the *Treatise* had value in that it provided Keynes a number of pivot points from which he changed direction in the *General Theory*—a return to the identity of saving and investment—the equality between saving and investment at any level of output; the fact that output is not fixed and varies with different levels of employment; and the development of the liquidity preference theory of interest which evolved from his "bearishness function" in the *Treatise*.

THE MEANS TO PROSPERITY

In the early 1930s, following the publication of Keynes's *Treatise on Money*, economic conditions in England and indeed the rest of the world were at low ebb. For some time, Keynes had been considering possible remedies for the U.K. One of his most favored policies was the institution of a public works program to be financed by borrowing (i.e., loan expenditure). However, in light of the opposition to this form of financing, Keynes suggested in the spring of 1931 that it be paid for by a revenue tariff. However, his support for such a measure was short-lived, because in September of that same year, England abandoned the gold standard. This turn of events resulted in a de facto devaluation of sterling, thereby making British goods more competitive in foreign markets. Therefore, for a time at least, Keynes modified his views for trade protection.

Still, the world at large remained in the throes of depression marked by a serious price deflation. In Keynes's judgment, a solution could be found only if all countries instituted expansionary policies simultaneously. Such an effort had to be universal; it could not be undertaken by a single country; otherwise, much of that stimulus would be dissipated domestically and redound, instead, to the benefit of other countries through increased imports and capital flows.

Accordingly, in 1933, Keynes prepared a number of pamphlets on the need for expansionary policies which were subsequently consolidated in *The Means to Prosperity.* The work dealt primarily with the worldwide deflation and measures to alleviate it. Keynes believed that the problem could be resolved; it was simply a matter of will. He pointed to the need for public works, the multiplicative effects of the multiplier, the need for an increase in demand through reduced taxes, and an increase in international trade.

To the World Conference held in London in 1933, he recommended a worldwide expansion of loan expenditure. To allay the fears of the Central Banks, he urged an expansion of their reserves through the issuance of gold notes. To Keynes's disappointment, his proposal was rejected. In large measure, its failure was due to President Franklin D. Roosevelt, who was opposed to the restoration of a rigid international standard. He favored, instead, a more flexible one which would assign a higher priority to the maintenance of stable internal over external prices.

Disappointed with the outcome of the conference, Keynes turned inward and suggested that Great Britain experiment with a closed economy model, shielded from the disturbances associated with an open trading system. It should follow a policy of national autarky. From this point on to the development of his *Currency Union Proposal* during World War II, Keynes favored a policy of managed foreign trade. Following the collapse of the Conference Keynes became no less disposed to providing guidance for a country's external than to its internal needs.

THE GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY

Following *The Means to Prosperity*, Keynes was busily occupied with the preparation of the *General Theory of Employment, Interest and Money*, which was published in 1936. The reason he used the prefix "general" was to distinguish his theory from that of the classicists. Whereas the latter dealt with only one or a level of full

employment, Keynes dealt with all levels of employment, including that of the classicists. In the classical model, output was given and in keeping with Ricardo's view, the major issues were how a given volume of resources was to be allocated in production and how the resulting output was to be distributed to the factors that produced it.

The reason the classicists dealt with only one level of output and full employment was owing to the characteristics of their postulates, viz., the wage equals the marginal product and the marginal utility of the wage equals the marginal disutility of labor. An additional factor was their reliance on Say's Law. Owing to these factors, a worker need not be involuntarily unemployed if he or she was prepared to accept a lower wage which equated with a lower marginal product.

Keynes agreed that the wage should equal the marginal product of labor, but for a different reason. Workers had no control over wages. If real wages were to be reduced, they would have to be reduced through an increase in effective demand. That, in turn, would cause prices to rise and real wages to equate with a lower marginal product. A reduction in unemployment, therefore, required an expansion in the level of effective demand and not a reduction in money wage rates.

Keynes rejected the second postulate (the marginal utility of the wage equals the marginal disutility of labor), because it was not true that workers demanded a higher real wage with every passing increase in prices. Moreover, the evidence showed that there were many workers prepared to work at a wage well below their disutility of labor and could still not find employment.

In regard to the classicists' reliance on Say's Law for their explanation of full employment, specifically that demand cannot be deficient because supply creates its own demand, Keynes's rebuttal was that the law might be true in a barter economy, but not in one based on money. For, in the latter, money serves not only as a medium of exchange, but as a storehouse of saving, which may be withheld from the expenditure stream. There is, of course, much more to explain in Keynes's theory of employment, e.g., the consumption function; the importance of aggregate demand; the equality between investment and saving; the shortcomings of the classical rate of interest; his own liquidity preference theory of interest; the marginal efficiency of capital and its relationship to the rate of interest; the employment of the multiplier; and the roles of monetary and fiscal policy.

HOW TO PAY FOR THE WAR

Shortly after the outbreak of World War II, in November of 1939, Keynes prepared two articles for the *Times* suggesting how the war should be financed. The two articles were later combined and published as a small book which appeared in January 1940. The requirements of war clearly meant that resources would have to be transferred from peacetime to wartime use. The nation's productive resources and output would have to be shared by the civilian population and the government. How large a piece of the cake would the government need? How much would be left over for consumption? Should the rich pay for the war? Should a capital levy be imposed, in addition to the wartime tax, to reduce excess profits further? Inasmuch as earnings realized in production would exceed the total value of consumption, how was that consumption to be distributed? Should that determination be made in the marketplace through supply and demand with the inevitable rise in prices or by a system of rationing, fixed prices, and wage controls? Should the cost of the war be defrayed by taxes, voluntary savings, and a measure of inflation which was the case in World War I?

In his work, Keynes attempted to address each of the above questions and then set forth his own plan for how best to satisfy the war needs of the government and the consumption needs of the civilian population. To those who thought that the war should be paid for by the rich, Keynes's answer was that the needs of the government were so great that the discretionary income of that class could cover only two-thirds of the government's requirements. To cover these costs fully, therefore, it would be necessary to tap the earnings of the lower-income classes as well. All groups, rich and poor, would have to share the burden of the war, although Keynes did make some allowance for those on the lowest rungs of the income ladder by exempting from taxation incomes below a certain level.

To those who would employ the model used in World War I, viz., taxation, voluntary savings, and a measure of inflation to finance the war, Keynes's response was that sufficient savings would not be forthcoming to satisfy the instant war's needs. He was even less well disposed to a system of distribution based on rationing, price fixing, and wage controls. Although he was not in favor of an uncontrolled rise in prices, neither did he think that rationing and price fixing would be as effective as inflation in achieving equilibrium. Rationing and price fixing would not clear the market, resulting in shortages, long queues of unsatisfied shoppers, and frayed tempers.

The better alternative, in Keynes's judgment, was to reduce demand to offset the lower supply of goods and then allow the free market to balance the two. Accordingly, to reduce or more accurately to postpone consumption, Keynes proposed a third alternative, namely, a system that depended upon taxes and the deferment of one's earnings. Those savings would be deposited in blocked accounts to be released after the war. This system would have the advantage of reducing the level of demand for consumer goods during the war and add to it after the war when a downturn in economic activity was likely.

Apart from its practical advice on how best to finance the Treasury's needs and deal with the shortages of war, Keynes's proposal demonstrates that he was not an undisciplined free spender. Increased expenditures or allowing inflation to take hold were not always the solution. In this instance, sacrifice and restraint were needed not only to finance the war, but to keep inflation at bay. Contrary to how critics depict him, Keynes was a responsible steward of fiscal policy, restraining or expanding expenditures and raising or lowering taxes as conditions warranted. Clearly, he knew how to switch gears.

THE CLEARING UNION PROPOSAL

During and after World War II, Keynes worked in the British Treasury. His assignment was to develop a plan which, while reflecting British interests, would satisfy the United States' plan for an expansion of multilateral free trade in the postwar world. Left to their own devices, Keynes and the British would have favored the continuation of managed foreign trade with its barter arrangements, "dollar pools," control over capital flows, etc. In the interest of promoting Britain's needs, Keynes, as noted earlier, would do no less in managing the foreign than he would the domestic sector of the economy.

Despite his own preference for a continuation of the planned trading system which had evolved in the United Kingdom prior to the war, Keynes and his colleagues knew that they were playing with a weak hand. They would have to satisfy the Americans' desire to expand free trade in the postwar world and at the same time Britain's desire to maintain high levels of employment at home. The fact that he had to modify his views in order to meet American demands did not deter Keynes from insisting on the priority of internal over external needs.

Briefly, the plan developed by Keynes and his colleagues at the Treasury was referred to as the Clearing Union Proposal. It was designed to restore a multinational clearing system which would not only clear accounts, but insure the availability of reserves to deal with trade deficits. In the Union, Each member would define its home currency in terms of the bancor, an international currency. The bancor itself would be defined in terms of gold, but not redeemable in gold. Under the terms of the plan, the Clearing Union, like a central bank, could generate its own supply of bancor. Unfortunately for Keynes's proposal, this provision raised fear among the conferees at Bretton Woods that too much money would be created and became one of the more controversial aspects of the plan.

Although Keynes and the British were not on the same footing with the Americans, they did succeed in preserving a reasonable amount of authority over interest rates, exchange rates, capital flows, and other aspects of foreign trade. The Clearing Union proposal had considerable merit, but was turned down in the negotiations at Bretton Woods in favor of the International Monetary Fund (IMF), the proposal submitted by Harry Dexter White, the United States representative. Keynes's proposal for raising reserves stated in terms of bancor was too novel for the conferees. The fact that the Clearing Union could increase the volume of bancor without limit did not help either, because it raised for many of the conferees the specter of inflation.

By contrast, White's plan employed a more traditional approach for raising reserves. It provided for the formation of an international fund (the IMF), to which each member state would contribute an amount of its own currency and gold in accordance with its quota. Whether for solid economic reasons or in deference to the Americans, the IMF emerged as the preferred plan.

THE ANGLO-AMERICAN LOAN

The conclusion of the war brought no change to Keynes's status at the Treasury. Although Clement Attlee's Labour Party had supplanted Winston Churchill's Conservative Party, Dr. Hugh Dalton, the incoming Lord of the Exchequer, asked him to stay on as his financial advisor. When American Lend/Lease assistance from the United States was terminated shortly after V-J Day in August 1945, no one was better qualified than Keynes to deal with the crisis facing the British over this loss of assistance.

Keynes thought it was entirely possible for Britain to receive a grant of £1,500,000 or an interest-free loan of that amount. But he had no illusions about obtaining this aid, because he knew that strings would be attached, including a British commitment to an open commercial trade policy.

Negotiations opened on September 11, 1945, shortly after the conclusion of hostilities and lasted until December of that year. In the end, the loan amounted to $3.75 billion to assist Britain to deal with her postwar transitional problems. The loan was to be repaid in fifty annual installments at an interest rate of 2 percent. In accepting the loan, the British had to make certain concessions: dissolving the Sterling Area "dollar pool"; removing exchange restrictions; making sterling freely convertible; and terminating exchange controls. On the other hand, the agreement did allow the British to impose restrictions on imports to insure that the loan would not result in an orgy of reckless importing. A final condition was that Great Britain would become a member of the IMF and meet a number of other requirements as well.

Although Keynes may have made certain concessions, for example, the convertibility of sterling balances, he did not move too far from his prewar position on the need for managed trade. In accepting the American terms, he did not believe that they would compromise Britain's pursuit of her purely domestic or external objectives. State trading and bulk purchasing are not interfered with nor is the planning of imports and exports to preserve balance in the country's foreign trade accounts. Despite the terms of the Anglo-American Loan and the currency proposals of Bretton Woods, the emerging British trading system provided for high levels of employment, freedom from a rigid monetary system like the gold standard, insulation from external fluctuations, and the priority of domestic over external issues.

This is not to suggest that the realization of these terms placed Keynes in the camp of the protectionists; to the contrary. His view was that if all nations could learn to promote full employment simultaneously, the need for restrictive trade policies would be appreciably reduced and free trade, by extending the division of labor to the foreign sector as well, would increase national productivity. However, neither should this be interpreted to mean that he returned to the camp of the classical free traders. In the end, he was neither a protectionist nor a free trader, but an advocate of managed trade who would employ restrictive policies when needed, and would allow the forces of free trade to operate when nations could be assured of full employment. He would apply to the external economy no less oversight than he would to the domestic economy.

NOTES

1. Haney, op. cit., 637–639.
2. Ferguson, op. cit., 176–177.
3. Ibid., 177.
4. Bell, op. cit., 574.
5. Newman, op. cit., 276.
6. Bell, op. cit., 592.
7. Marshall, A., *Principles of Economics*, New York: Macmillan, 1946, 2.
8. Newman, op. cit., 285.
9. Ibid., 348.
10. Ibid., 93.
11. Roll, 398.
12. Newman, op. cit., 290.
13. Ferguson, op. cit., 183.
14. Bell, op. cit., 581.
15. Marshall, op. cit., 150.
16. Ibid., 92.
17. Ibid., 345.
18. Ibid., 332–334.
19. Marshall, op. cit., 349.
20. Ibid., 368.
21. Ibid., 526.
22. Mitchell, op. cit., 106.
23. Roll, op. cit., 399.
24. Marshall, op. cit., 317–318.
25. Ferguson, op. cit., 181–182.
26. Marshall, op. cit., 317–327.
27. Ibid., 266.

28. Ibid., 534.
29. Newman, op. cit., 292.
30. Marshall, op. cit., 532.
31. Ibid., 534.
32. Ibid., 537.
33. Cammarosano, J. R., *A Wider View of John Maynard Keynes: Beyond the General Theory*, Lanham, MD: Lexington Books, 2014.
34. Schumpeter, J. A., *Ten Great Economists from Marx to Keynes*, Oxford: Oxford University Press, 1951, 224.
35. Dillard, D., *The Economics of John Maynard Keynes*, New York: Prentice Hall, 1948, 245.
36. Harrod, R. F., *The Life of John Maynard Keynes*, London: Macmillan, 1951, 525–556.
37. Ibid., 469.
38. Macintosh, W. A., "Keynes as a Public Servant," *Canadian Journal of Economics and Political Science*, August 1947, 380.
39. Schumpeter, op. cit., 274.

Conclusion

The formal study of economics may have started with Adam Smith, but society's concerns with economic matters preceded him from the time Adam and Eve were expelled from the Garden of Eden. The issue which humankind has had to face from the time of his expulsion has been the conflict between unlimited wants and limited means. To satisfy his needs man has had to produce whatever he lacked, but what he produced could not cover the variety of his needs. Production was not enough and, therefore, had to be supplemented by the processes of exchange and distribution. And so, the hunter exchanged his output with the catch of the fisherman; the latter exchange part of his output with the yield of the farmer. But that was not the end of the process, because each of the three may have had to share his output with the individual who assisted him in production. As a result, distribution came into being and with that evolved the processes of production, exchange, distribution, and consumption. Mankind has had to deal with these four stages of economic activity from the very beginning of its existence on this earth. They have not changed and continue to the present.

Each of these stages has given rise to its own problems—problems which both the early writers and formal economists have been grappling with from time immemorial. In production, the issue through the ages has been "What to produce and under what form of organization should it be produced?" In ancient times, the system was largely based on slavery; in medieval time on the manorial system; later on the guild system, and following that free labor. Adam Smith and the classicists were concerned with the production of wealth. Malthus was concerned with overproduction and gluts of unsold goods, Ricardo and Say argued that was not possible, because supply creates its own demand. Hobson and Mill were more concerned with the distribution of output. The utopians and

social welfare writers proposed co-ops as alternatives to capitalism as means of production. Marx would have overturned the system of production under capitalism. Veblen thought that the captains of industry were not interested in production and had no interest in maximizing output for the common good. Their interests did not serve a higher purpose. Therefore, Veblen argued that the responsibility for production should be turned over to engineers and technicians who were more interested in the production of goods than money. The classicists emphasized the supply side of the market; Keynes the demand side.

The process of exchange raised its own issues. How should goods be exchanged? In an economy where the value of goods is defined in terms of price, the schoolmen of the medieval period maintained that the price should be a just price conditioned by an individual's social status and standard of living. In a barter economy, the issue was somewhat less formidable. Throughout the nineteenth century, the main issue for the classicists was money and value. Smith argued that the exchange of one good for another depended upon how much labor time was expended in the production of each. That would be satisfactory if all labor was homogeneous, but what happens in the case where different skills are involved? Ricardo vacillated between the labor theory and the cost of production theory of value. The Austrians believed that value and price do not depend on the cost or supply side, but rather on demand as determined by marginal utility. Others like Davenport, Cassel, and Walras thought it was useless to divine the cause of value. They thought that it was an exercise in futility to try to understand the psychological underpinnings of value. They did not concern themselves with the nexus between price and value and simply concentrated on price. Alfred Marshall resolved the issue of price by insisting that price, like a pair of scissors depended upon two blades, supply and demand.

The payment of interest has been another long-standing issue in the process of exchange. It goes back at least to the classical period wherein Aristotle maintained that it was immoral to exact the payment of interest The schoolmen also dealt with this issue on ethical grounds, substantively agreeing with Aristotle, but then modifying their position to allow for a number of exceptions, such as damnum emergens, perriculum sortis, and luccram cessans. Significantly, they allowed for the taking of interest if

the loan deprived the lender of using it for some purpose advantageous to him. Without realizing it they were using the concept of opportunity cost to justify their position. The classicists held that interest should be determined by the demand for investment and the supply of saving. The lending of money at interest was justified on the grounds that to save one had to abstain from consumption and for that one should be compensated. The classicists maintained that savings depended on the rate of interest. High interest rates would draw more savings. Keynes argued that savings was a function of income and that high interest rates would lead to less investment, less income, and less savings. Bohm-Bawerk put another face on the issue by arguing that the value of money today is greater than the same amount to be received in the future, thereby justifying the payment for its use. Like Bohm-Bawerk, Keynes did not relate the payment of interest to any ethical consideration. Quite simply his Liquidity Preference Theory was largely determined by the transaction, precautionary and speculative motives with a high degree of importance assigned to the latter.

Finally, the distribution process has taken on special significance in the United States in recent times because of the widening gap between the rich and poor. Going back to ancient and medieval times the distribution of income was not an issue, because under slavery and the feudal regimes labor had little to say about its recompense; the issue was moot. The recompense to slaves and serfs depended upon the discretion of the master or the lord of the manor. In Ricardo's time distribution was a paramount issue. In his judgment, production was a given and the more important issue was to find laws on how that production should be distributed; hence, his theory of rents, the subsistence wage for labor and minimal returns to capital. The winner in this scheme of things was the landlord, because with each increase in the use of marginal land, prices would rise and as a consequence cause rents to rise. In the end, labor would receive a subsistence wage and capital a modest, if any, return. John Stuart Mill, a later classicist, thought otherwise. He believed that while production was governed by immutable principle, that was not the case with distribution. There were no hard and fast rules to determine how output should be distributed and could therefore be determined by society.

Marx, of course, was unalterably opposed to how workers were being exploited and to prove his case turned to the classicists' own labor theory of value and his own concept of surplus value. In the end this injustice could be addressed only by the overthrow of the propertied class by the proletariat. Hobson may not have been as outraged as Marx, but he too was opposed to the distribution of income during his time. Quite simply, the well-to-do were receiving an inordinate amount of income and not being able to consume all of it saved and invested it. The increase in investment led to a glut of goods which could not be taken off the market because the rest of the community did not have the wherewithal to match the increased output. The result, of course, was depression, underconsumption, and unemployment, consequences which could have been avoided had there been a more equitable distribution of income. At the other extreme, John Bates Clark did not share the views of Marx, Hobson, and other radicals, because no injustice was being done if each factor of production was being rewarded in accordance with its marginal productivity.

Consumption, the end game of economic activity, depends on a number of considerations. Under Ricardo's Iron Law of Wages, consumption in the long run did not exceed the subsistence level. For the Austrians, the degree of satisfaction decreases with each additional unit of consumption. From Hobson's perspective the problem was too little consumption (underconsumption) because the affluent saved and attempted to invest too much of their earnings. According to Nassau Senior, abstinence from consumption was important for capital formation. For Keynes, consumption is a function of income. As disposable income increases so, too, does consumption. However, he did not make clear whether consumption rises at a diminishing or constant rate. But in either case it meant that savings increased and had to be offset by an increase in investment. Keynes's consumption function was later modified by Friedman's permanent income hypothesis which holds that consumption depends upon one's regular income, so that windfall gains and windfall losses do not permanently alter one's pattern of consumption. Another explanation, the lifecycle hypothesis, holds that people save more during their working years in order to provide for their years in retirement. Finally, the wealth effect holds that individuals whose wealth has been

increased, say, by a favorable stock or housing market development, will spend more than one who has only a regular disposable income.

The one thing that economists do hold in common is that their contributions to the discipline were influenced by the events of their time. The mercantilists by the rise of the national state; the physiocrats by the difficult economic and fiscal straights France experienced in the aftermath of the Seven Years War; for Malthus it was the pressure on living standards resulting from a decline in mortality without a corresponding decline in fertility; for the utopians the depravations caused by the beginning of the industrial revolution; for Marx the French Revolutions from 1789 to 1948 which provided him the elements for his revolutionary model of history, and for Keynes, of course, it was the Great Depression of the 1930s.

In summation, as this book has shown the issues facing economics go back millennia of years and continue in force to the present. The most basic of these issues relates to the disparity between limited means and unlimited wants. The economic organization for dealing with this problem, regardless of society's political arrangements, has been basically the same throughout history: production, exchange, distribution, and consumption. Although a formal consideration of the problems attending each of these stages is of recent origin, those problems did not escape notice in the writings of philosophers, historians, religious scholars, political figures, and men of affairs. These writers were well aware of the problem of scarcity and man's practices for dealing with it. Their analyses might not have been very sophisticated. Their answers to the problems of production, exchange, distribution, and consumption might not have been the same as those of the latter day economists, but the questions they addressed were, indeed, the same. In many ways formal economists starting with Adam Smith and following him used the same methodology, relying on philosophy, logic, history, and the culture of the time to formulate their theories. Their method of reasoning was largely deductive, but whether deductive or inductive, it had to be logical and carefully reasoned. In recent times, economists, relying more heavily upon quantitative measures, have sought to make economics more of a pure than a social science. That has not been easy, because economics is but just one facet of man's existence, namely, how he carries out his manifold

activities which are intertwined with psychology, politics, sociology, religion, law, history, and much else. It is a difficult and imperfect study, because it cannot be easily separated from all of the other elements that make up man's existence. Whether economists can accurately quantify human behavior, their decisions, and emotions remains to be seen, but one thing is certain: the issues they have to address are no different today than they were millennia ago. The times may have changed, but the issues remain the same.

Bibliography

Abbott, L. D., *Masterworks of Economics*, New York: Doubleday, 1946.
Bain, A., *John Stuart Mill: A Criticism*, New York: Longmans, Green, 1882.
Bell, J. F., *A History of Economic Thought*, New York: Ronald Press, 1953.
Bentham, J., *Principles of Morals and Legislation*, London: W. Pickering & R. Wilson, 1823.
Bonar, J., Malthus and his Work, London: G. Allen and Unwin Ltd., 1924.
Bonar, J., *Philosophy and Political Economy*, London: G. Allen and Unwin Ltd., 1922.
Botsford, G. W. and Sihler, E. G., *Hellenic Civilization*, New York: Columbia University Press, 1929.
Boucke, Fred, O., *The Development of Economics*, New York: Macmillan, 1921.
Cammarosano, J. R., *A Wider View of John Maynard Keynes: Beyond the General Theory*, Landham, MD: Lexington Books, 2014.
Cannan, E., *A Review of Economic Theory*, London: P. S. King and Son Ltd., 1929.
Cassel, Gustav, *The Theory of Social Economy*, translated by J. McCabe, New York: Harcourt, Brace and Co., 1924.
Clark, John Bates, *The Distribution of Wealth*, New York: Macmillan, 1899.
Cunningham, W., *The Growth of English History and Commerce*, vol. 1, Cambridge: Cambridge University Press, 1910.
Davenport Herbert J., *Economics of Enterprise*, New York: Macmillan, 1913.
Deutscher, P. *R. G., Hawtrey and the Development of Macroeconomics*, New York: Macmillan, 1990.
Dillard, D., *The Economics of John Maynard Keynes*, New York: Prentice Hall, 1948.
Eckard, E. W., *Economics of William S. Jevons*, Washington, DC: American Council on Public Affairs, 1940.
Ferguson, John M., *Landmarks of Economic Thought*, New York: Longmans, Green, 1938.
George, H., *Progress and Poverty* (1879), in *Masterworks of Economists*, vol. 3, edited by L. D. Abbott, New York: McGraw-Hill, 1973.
George, H., *Progress and Poverty*, New York: D. Appleton & Co., 1881.
Gide, C. and Rist, C., *A History of Economic Doctrines*, Boston: D. C. Heath & Co., 1915.
Gray, Alexander, *The Development of Economic Doctrine: An Introductory Survey* (1931), New York: Longmans, Green, 1970.
Haney, Lewis, *History of Economic Thought*, 4th ed., New York: Macmillan, 1949.
Harrod, R. F., *The Life of John Maynard Keynes*, London: Macmillan, 1951.
Heilbroner, R. L., *The Worldly Philosophers*, 6th ed., New York: Simon & Schuster, 1986.
Heimann, Edward, *History of Economic Doctrines*, New York: Oxford University Press, 1945.
Higgs, H., *The Physiocrats*, London: Macmillan, 1897.
Hobson, J. A., *Work and Wealth*, London: G. Allen and Unwin Ltd., 1933.
Homan, P. T., *Contemporary Economic Thought*, New York: Harper & Brothers, 1928.
Ingram, J. K., *History of Political Economy*, New York: Macmillan, 1888.

Jevons, W. S., *Political Economy*, New York: D. Appleton & Co., 1882.
Jevons, W., *Theory of Political Economy*, Fourth Edition, London: Macmillan, 1911.
Keynes, J. M., *William S. Jevons—A Centenary Allocution on his Life and Work as Economist and Statistician, London: Royal Statistical Society, Part 3, 1936.*
———. *Indian Currency and Finance*, London: Macmillan, 1913.
———. *The Economic Consequences of the Peace*, New York: Harcourt, Brace & Co., 1920.
———. *Monetary Reform*, New York: Harcourt, Brace & Co., 1925.
———. *A Treatise on Money,* London: Macmillan, 1930.
———. *The General Theory of Employment, Interest and Money*, New York: Harcourt, Brace & Co., 1936.
Laistner, M., *Greek Economics*, London: J. M. Dent & Sons, 1923.
Lauderdale, J. M., *An Inquiry into the Nature and Origin of Public Wealth, and into the Means and Causes of its Increase* (1804), 2nd ed., Edinburgh: Archibald Constable & Co., 1819.
List, F., The *National System of Political Economy*, New York: Lippincott, 1856.
Macintosh, W. A., "Keynes as a Public Servant," *Canadian Journal of Economics and Political Science* (August 1947): 380.
Malthus, T., *An Essay on Population* (1798), Everyman's edition, vol. 1, New York: J. M. Dent & Sons, 1960.
Malthus, T., *An Essay on Population* (1798), in *Masterworks of Economics*, vol. 1, edited by L. D. Abbott, 1947.
Malthus, T., *Essay on Population*, London: Ward, Lock & Co., 1890.
Marshall, A., *Principles of Economics*, 8th ed., New York: Macmillan, 1946.
Marx, Karl, *Das Kapital* (1867), translated by S. Moore and E. Aveling, New York: Modern Library, 1906.
McConnell, J., *Basic Teachings of the Great Economists*, New York: Garden City Publishing Co., 1943.
McCulloch, J., *Works of David Ricardo*, London: John Murray, 1888.
Mill, J. S., *Principles of Political Economy*, London: Longmans, Green, 1909.
Mitchell, W. C., "Quantitative Analysis in Economic Theory," *American Economic Review* 15 (1925): 1–12.
———. *Lecture Notes on Types of Economic Theory*, vol. 2, New York: Augustus Kelley, 1949.
———. *What Veblen Taught*, New York: Viking Press, 1936.
Mun, T., *England's Treasure by Foreign Trade*, Oxford: B. Blackwell, 1928.
Newman P. C., *The Development of Economic Thought*, New York: Prentice Hall, 1952.
Niehans, J., *A History of Economic Theory: Classic Contributions, 1720–1980*, Baltimore, MD: Johns Hopkins University Press, 1990.
Palgrave, H., *Dictionary of Political Economy*, New York: Macmillan, 1894.
Patterson, H., *Readings in the History of Economic Thought*, New York: McGraw-Hill, 1932.
Rae, J., *Sociological Theory of Capital* (1834), Mixter edition, London: Macmillan, 1905.
Ricardo, D., *Principles of Political Economy and Taxation* (1817), Gonner edition, London: G. Bell & Sons, 1926.
———. *Principles of Political Economy and Taxation* (1817), London: G. Bell & Sons, 1891.
———. *Economic Essays*, London: G. Bell & Sons, 1926.
Roll, Eric, *A History of Economic Thought*, New York: Prentice Hall, 1942.
Schumpeter, Joseph A., *The Theory of Economic Development*, Cambridge: Harvard University Press, 1949.
Scott, W. A., *Development of Economics*, New York: The Century Co., 1933.

Seligman, E., *Encyclopedia of the Social Sciences*, edited by E. Seligman, New York: Columbia University Press, 1903.
———. *The Economic Interpretation of History*, New York: Columbia University Press, 1917.
Senior, N., *Political Economy* (1850), in *Encycolpedia Metroplitana*, vol. 6, London: Griffen & Co., 1854.
Shepherd, R., *Turgot and the Six Edicts*, Columbia University Press, 1903.
Shumpteter, J. A., *Ten Great Economisits from Marx to Keyenes*, Oxford: Oxford University Press, 1951.
Small, A., *The Cameralists*, Chicago: University of Chicago Press, 1903.
Smart, William, *Theory of Value*, London: Macmillan, 1920.
Smith, A., *An Inquiry into the Nature and Cause of Wealth*, London: Methuen, 1904.
———. *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), Cannan edition, vols. 2, London: Methuen, 1904.
———. *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776), Everyman's Library edition, New York: Knopf, 1991.
Stigler, George J., *Production end Distribution Theories*, Macmillan, 1941.
Tugwell, R. C., *Trend of Economic Thought*, New York: F. S. Crofts & Co., 1924.
Veblen, Thorstein, *The Theory or Business Enterprise*, New York: C. Scribner's Sons, 1904.
Von Bohm-Bawerk, E., *The Positive Theory or Capital*, translated by William Smart, London: Macmillan, 1891.
———. *Capital and Interest*, translated by William Smart, London: Macmillan, 1890.
Von Wieser, Friedrich, *Natural Value*, London: Macmillan, 1893.
Whittaker, Edmund, *A History of Economic Idea*, New York: Longmans, Green, 1940.
Zimmern, A., *The Greek Commonwealth: Politics and Economics in Fifth-Century Athens* (1911), Oxford: Oxford University Press, 1973.

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Joseph Cammarosano has combined two careers over his lifetime: one in public service and the other in higher education. A veteran of World War II, he has served as a fiscal economist in the U.S. Bureau of the Budget and the New York State Department of Taxation and Finance. While teaching, he has served as a consultant to the U.S. Commerce Department, the U.S. Department of Labor, the U.S. Department of Health, Education, and Welfare as well as a number of state and local agencies, including membership on the New York City Independent Budget Committee. In academe, he has served as a professor of economics, vice president for finance, and executive vice president of Fordham University. As a youth, he aspired to playing short stop for the New York Yankees, but, unfortunately had trouble with the curve ball. As a result, his baseball journey left him short of his destination, as the bus left him off instead at Fordham's Rose Hill Campus in the Bronx, just a short distance removed from the Yankee Stadium.