AMERICAN INSTITUTE for ECONOMIC RESEARCH
GREAT BARRINGTON MASSACHUSETTS
BOOK REVIEW SUPPLEMENT
October 11 1954

ECONOMICS, AN INTRODUCTORY ANALYSIS

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The prestige provided by the implied approval of one of the Nation's eminent scientific institutions presumably explains in part why the second edition of this book has become widely accepted as a text for undergraduates. However, that the eminent scientists on M. I. T.'s faculty have little knowledge as to what is in this book for undergraduate consumption seems all too obvious. A textbook less suitable for the instruction of budding scientists probably could be written; but I do not recall seeing one among the many that have appeared in recent years.

On page 3, the author begins his Introduction by asserting "There is a strong probability that one [of any three], at some period of his life, will be hard hit by a depression or he may have his lifetime savings wiped out by price inflation." In the first edition, Dr. Samuelson's depression bogey-man was described somewhat differently, as follows: "When, and if, the next great depression comes along, any one of us may be completely unemployed * * *." In both editions, he precedes these comments by the familiar story of the college administrator who addressed the entering class in these words "Take a good look at the man on your right and the man on your left, because next year one of you won't be here." Thus he makes clear that he intends the students to consider his dire warnings applicable to them.

Now it happens that the present reviewer was associated with M. I. T. as a member of the staff or as a Visiting Committee member from 1930 to 1942, all during the Great Depression. I had occasion to learn much about the status of M. I. T.'s graduates. During that depression, the most severe and most prolonged in the memory of men now living, the actual situation for M. I. T.'s graduates was as follows:

1. A substantial percentage, literally thousands employed by colleges and universities, by the engineering agencies of Federal, State, and local governments, and by the more stable corporate units such as operating public utilities, research divisions of large corporations, etc., were better off than they had ever been before in their lives. The large decrease in living costs was for them a great boon. Few of these men suffered salary reductions even approaching the decrease in the cost of living.

2. Relatively few M. I. T. graduates were unemployed during those years. The ratio of 1 in 3 suggested by Professor Samuelson's estimate of the probabilities is a fantastic exaggeration.

3. Based on contacts by mail with every M. I. T. graduate alive in the last five years of the 1930's, I should estimate that, as a group, M. I. T.'s graduates were far better off in the closing years of the Great Depression than most of the rest of the population.

As for the threat of losing one's lifetime savings through price inflation, if, to use Dr. Samuelson's phrase, "the future should be like the past," there would be no chance at all of such loss. In the entire history of the United States, only the citizens of the Confederate States who placed their lifetime savings in the bonds or currency of the Confederacy experienced that catastrophe. If such losses do occur in the future, that is, if the dollar does depreciate to zero, it will not be because the future of this country proves to be "*like* the past" [italics supplied] but because it proves to be quite different.

These considerations invite the question, Why does Professor Samuelson begin his text for undergraduates with such an obvious attempt to inculcate fear and distrust of the Nation's economic system? Does he hope that youthful minds under the influence of that emotion will more readily accept his economic panaceas? Surely this is a strange approach in an institution where great emphasis is placed on the methods of science, on the need for an objective viewpoint, on eliminating, insofar as that is possible, the personal equation from the results of research.

If M. I. T. graduates who studied this book or an earlier edition have remembered their introduction to the subject, they must have marvelled at it in recent years. For a decade and a half employers have been "standing in line" for M. I. T. graduates. Even during the recession years 1949 and 1954, M. I. T. graduates have been at a premium in the markets for the services of new graduates.

Although few M. I. T. graduates have any reason to fear widespread unemployment, they have more reason to fear that their "lifetime savings may be wiped out by inflation," Professor Samuelson's other bogey-man. However, the reason that they should fear this possibility is most assuredly *not* because the future may be, in the words of Professor Samuelson, "like the past" here in the United States, but because the economic panaceas apparently favored by him, if continued, probably will result in the destruction of lifetime savings as has happened in France since 1914.

On page 7, the author cautions "Peculiarly in a field where such an everyday concept as 'capital' may have ten or more different meanings we must watch out for

the tyranny 'of words'." A brief homily on accurate naming or scientific specification follows. This encourages the hope that in one economics text at least, all words used with specific meanings, all the technical terminology of the science of economics, will be carefully defined. However, in the entire 756 pages I could not find a single instance of such precise defining. In fact, aside from a few vague generalizations on pages 43 to 50 about "capital or 'wealth'" the author seems simply to have abandoned all of the good intentions outlined in the discussion on page 7.

In discussing the economic role of government on page 41, Professor Samuelson asserts, "Democratic countries are not satisfied with the answers to the three questions, What, How, and For Whom, given by a perfectly unrestrained market system." This seems to imply that a perfectly unrestrained, presumably freely competitive, economic system has been tried and found wanting. Yet on page 14, in a footnote, the Professor has asserted that "there never has been a 100 percent purely automatic enterprise system," and the footnote reference indicates that he is referring to a perfectly unrestrained or completely "free enterprise economy." If such an economy has never been tried, and I should be the first to agree with him that such is the case, how do the "democratic countries" know they would not be satisfied with it and how does Professor Samuelson know they know that? The impression that this reviewer has is that Dr. Samuelson prefers a managed economy, managed as he would like to see it managed, and that this personal desire on his part has influenced him virtually to eliminate a free or a more nearly free economy as an alternative worthy of serious consideration. The procedure he follows may be convincing polemics to undergraduates, but it is not the method considered acceptable by scientists.

Especially noteworthy is Professor Samuelson's discussion of money. From pages 50 to 59 he provides a most interesting example of the weakness he cautioned against on page 7, "the same one word is being applied to two quite different phenomena." He uses the word symbol "money" for the standard monetary unit, for promises to pay the standard unit, for pocket currency, and, apparently, for at least some of the records of depositors' shares in investments made by some of the banks. By using the same word, for example "chugit" to refer both to one's trunk and to the baggage check given one by the railroad an interesting statement could be made such as, "the age of trunk chugit gives way to the age of baggage-check chugit." This paraphrase, like the original of Professor Samuelson's assertion (page 54) "The age of commodity money gives way to the age of paper money," is of semantic even if not of scientific interest.

Aside from the semantic problem presented by the assertion last quoted, the historical problem deserves some consideration. If today is the age of paper money, how should we label the period nearly 200 years ago when perhaps the greatest paper money fiascos of all time occurred? Can it be that Professor Samuelson failed to consider the French assignats, the classical example of paper money, or the "shin-plasters" that constituted our Continental currency, or the numerous experiences of the American colonies with paper money? And what of the nearly 100 years that ended in 1914; was that a period of temporary retrogression to the age of commodiity money, a sort of unsane interlude in a progressive age of paper money that had begun even earlier? If that is Professor Samuelson's view, he seems to disagree with the Nation's leading monetary economists and many historians whose views perhaps merit more consideration.

Of course, emergence from the semantic swamp, assuming that Professor Samuelson can find his way out, might be embarrassing to such an ardent government interventionist as he. If one were to forego placing the same verbal label on trunks and baggage-checks (or dollars and claims on dollars), M. I. T. sophomores might be less willing to accept dogmatic assertions to the effect that claim checks and trunks are virtually the same and that it matters not which one can get. Only an individual far more naive in this respect than French peasants have long been would entertain some of the views that Professor Samuelson offers on "money."

In discussing the economic role of government, Professor Samuelson prepares his readers (one might more appropriately say conditions his readers) for acceptance of what seems to be his pet panacea for economic ills. He asserts (page 161), "Moreover, to the extent that taxes come out of the income of the more well-to-do and thrifty and are used to make payments to the needy and ready-to-spend—to that extent the total of purchasing power is increased." Now, it is apparent that this statement can be correct only if and to the extent that the well-to-do would otherwise hoard the funds that the tax collector takes from them. In other words, Professor Samuelson has assumed, first, that the "well-to-do and thrifty" habitually hoard portions of their incomes and, second, that the well-to-do pay their taxes from such hoarded funds rather than by turning over to the tax collector funds that they otherwise would spend or invest (meaning, of course, spend for capital goods).

In this connection, it is important to note that the portion of income one saves by depositing it in a savings bank or by paying a life insurance premium (to the extent that such a premium is, in effect, savings) is spent. A savings deposit is a record of funds received by the bank concerned and spent for the securities, mortgages, etc., that constitute the bank's assets. All such funds virtually always flow promptly into the channels of business and neither increase nor decrease the "total of purchasing power." One need only examine the records of the cash holdings (including checking accounts) of savings banks and life insurance companies in both prosperity and depression to see that this is so.

If Professor Samuelson is aware of the facts just mentioned, he must have assumed that the well-to-do habitually hoard currency or hoard idle demand deposits. It may surprise him to learn that the available records, which are extensive, detailed, and cover a long period, do not support his first assumption. That being the case, the only comment necessary regarding his second concealed assumption is that, even if the first were correct, he would still have to prove his second to be correct before he would be warranted in offering his readers any such assertion as that quoted above.

Even in elementary logic Dr. Samuelson frequently stumbles. One of numerous examples follows (page 217): after pointing out that savings bonds in the hands of the public are "* * * the other side of the social balance sheet which shows the government's liability," he says, "If the public debt is a completely bad thing, then these family savings are essentially a bad thing; if these family savings are a good thing, then the public-debt cannot be as completely black as it is often painted."

A few simple syllogisms will reveal the fallacies in these assertions. In order for the first part of the statement to be correct, the following must be true:

a. Family savings are essentially good or bad (socially desirable or undesirable) depending on whether the investments made are socially desirable or undesirable.

b. Government debt is socially undesirable.

c. Therefore family savings invested in government bonds are undesirable.

In order for the second part of the assertion to be correct, the following must be true:

a. Government debt is good or bad (socially desirable or undesirable) depending on whether the funds thus invested are socially desirable or undesirable.

b. Family savings invested in government bonds are a good thing.

c. Therefore government debt is socially desirable (at least to some extent, etc.).

Now it is apparent that one could offer either one of these syllogisms without necessarily being mistaken, but it is equally apparent that to offer both of them must involve error. To argue that the desirability or undesirability of debt depends on the desirability or undesirability of the invested funds or savings and in the same sentence to argue that the desirability or undesirability of the invested funds depends on the desirability of the debt in the evidence of which they are invested is to argue in a circle. That's the sort of reasoning Lewis Carroll used to puzzle Alice in Wonderland and decidedly not the sort of reasoning one would expect to have offered to students at M. I. T.

Also concealed in the murky semantic depths of Professor Samuelson's assertion are shifting uses of "good" and of "bad." Moreover, I suspect that the Professor is indulging in another attempt to condition his readers so that they will accept his pet panacea. He presumably assumes that they will reason thus, "Why of course family saving is a good thing; therefore, the government debt is a good thing." Perhaps it would hardly be fair to convict him of such ingenuousness without a hearing. but I should be much interested to hear his explanation of why that obvious non sense was offered.

In Chapter 13, Dr. Samuelson presents the familiar Keynesian theory with numerous charts and formulas. Apparently it never occurs to him that the accumulating uninvested savings assumed to cause a depression should accumulate somewhere. The Keynesians generally have followed the unscientific procedure of judging the usefulness of a theory by its plausibility instead of by checking its implications against measured economic changes. In the realm of science, theory is controlled by the facts. When scientists find facts at variance with a theory, that theory is discarded; but many Keynesian economists do not even trouble to seek the measurements of changes implied by their theory. In this respect, Professor Samuelson is simply following the too long established precedent in his field.

Far more surprising, especially at an Institution like M. I. T., are the mathematics and the accompanying charts. On page 283 and again on page 291 Dr. Samuelson asserts that his charts "confirm" his reasoning. Apparently he sincerely believes that by showing in chart form what he has previously expressed verbally or as a mathematical formula he has offered incontrovertible proof. A witness testifying in court might as well say, "Now that I have told you what occurred I shall draw a picture of it thus confirming what I have just said." One can understand that formulas and charts might seem impressive to nontechnical readers but that even sophomores at M. I. T. should thus be "gulled" is, to say the least, surprising. One wonders whether the professor himself is so mathematically illiterate that he believes what he has written or is deliberately taking advantage of immature minds in order to peddle his panacea and in the hope that no student will have the temerity to question his assertions.

In any event, that Professor Samuelson places great emphasis on the Keynesian notions is clear from the following (page 295): "the art of economics consists of recognizing both the core of truth in the simple theory of income determination and also its needed qualifications." Evidently, no student who failed to memorize the elements of the Keynesian theory could hope for a passing grade. Who would have the temerity, rather the foolhardiness, to argue with the professor about that aspect of the subject?

One of the most interesting features of the book is the author's inconsistency. For example, in discussing with obvious approval the effects of a long-term upward trend in prices, he says (page 302) "* * * such a mild steady inflation [a rise in prices of 5 percent per year] need not cause too great concern." But a rise in prices at the rate of 5 percent per year would halve the value of the dollar every 14 years. The young M. I. T. graduate who bought life insurance shortly after graduation would see its value depreciate to less than 10 percent of its original value during his normal life expectancy. If losing more than 90 percent of the buying power of one's life insurance "need not cause too great concern," why should M. I. T. students be worried about the professor's bogey-man of having their "lifetime savings wiped out by price inflation"? What is the catastrophic difference between a 90 plus percent loss and losing 100 percent?

Those who argue that gradually rising prices would foster the most rapid economic growth should study the record more carefully. The period of most rapid industrial growth in the Nation's recent history was from 1878 to 1892, during which time commodity prices *declined* gradually about 40 percent. This does not, of course, prove that declining prices create prosperity; but it does prove that rising prices are not essential to prosperity and possibly do not foster it, in spite of popular notions to the contrary.

Another interesting inconsistency concerns Professor Samuelson's assertion (page 343) to the effect that changes in the rate of interest do not appreciably affect personal consumption and saving. Subsequently, his presentations of facts and discussion (page 352) seem to establish the precise opposite. This obvious inconsistency apparently does not lessen his faith in the Keynesian notions that depend in part on his first assertion.

Space does not permit a complete cataloging of the criticisms that seem justified. For that purpose a large volume would be required. However, mention should be made of certain important omissions, at least.

In the entire 750 pages, there is little material that would inform students about the modern industrial society they live in. There are many charts, but few of them portray actual economic trends; most merely illustrate theoretical discussions. Except for a few simple charts and tables showing the gross national product,

etc., there is almost no description of the American economy as it is now and has been most of the time for many decades. For example: there is no chart showing industrial production, say since the Civil War (nor table nor adequate description); there are no charts or tables showing the physical volume of other forms of economic activity; not even one of the major industries that has developed in recent decades is discussed in sufficient detail to give any conception of the Nation's tremendous economic growth. The only long-term chart of business activity shown has been adjusted for long-term trend, thereby eliminating any impression of economic growth. If his students learn that they live in a dynamic economy that has almost consistently grown beyond the expectations of all but the most optimistic and apparently will thus continue indefinitely, they will learn this from other sources than Professor Samuelson's book.[1]

Lest the foregoing seem unduly critical of Professor Samuelson, the man, it may be well to emphasize that he is not responsible for the indoctrination that taught him what he knows, he is not responsible for the lack of scientific standards in his profession and he certainly is responsible only to a very minor extent for what goes on at M. I. T. Nevertheless, that such a book should have the implied stamp of approval of the Nation's leading scientific institution is a tragedy; in a sense it is a betrayal of intelligence in the modern world. But the situation only serves to show how urgently needed is more adequate understanding of the philosophy of science. Through failure to use and develop further the understanding that such men as John Dewey, Arthur Bentley, and Joseph Ratner already have provided, even such a leading scientific institution as M. I. T. is neglecting to foster application of the intelligence that has enabled many of its own distinguished scientists to assist in creating this modern world.

E. C. HARWOOD

Origin of the Land Tenure System in the United States by Marshall Harris
Iowa State College Press, Ames, Iowa ($7.50)

Those who appreciate the significance of the "land question" will find in this volume a comprehensive description of origins to land titles in the United States. Especially interesting are the discussions of early departures from European procedures, the effect of free land on attempts to recreate in the New World the feudal manors of the old, and the differences between the system followed by the Virginia Company and that applied in New England. The author points out that "Under the eyes of the Virginia Company land speculators * * * became so thoroughly established and permanently entrenched that they became an integral part of the American land system."

Federal Debt-Management Policies, 1865-1879 by Robert T. Patterson
Duke University Press, Durham, North Carolina

The maximum debt of the Federal Government shortly after the end of the Civil War was almost precisely 1 percent of the Federal debt today. However, in relation to the physical volume of industrial production the Civil War debt was about 50 percent of today's debt and in relation to the dollar value of industrial production the debt 90 years ago was about equal to today's total. With these relations in mind, it seems more reasonable to suppose that useful lessons can be learned by a study of the debt management following the Civil War.

Dr. Patterson has compiled data pertinent to the problem of handling the burden of Federal debt. If some of the lessons of earlier experience are heeded, there is no reason why even the colossal debt of 1954 should not be wisely managed and ultimately repaid in large part as was the Nation's debt after the Civil War.

History of Economic Analysis by Joseph A. Schumpeter
Oxford University Press, 114 Fifth Avenue, New York 11, N. Y. ($17.50)

In this volume the author reviews comprehensively the theories advanced since the days of Ancient Greece in explaining economic activity. His system of handling the subject is chronological following four brief introductory chapters in which, among other things, the techniques of economic analysis and contemporaneous developments in other sciences are touched upon. The development of economic thought is traced from its rudimentary beginnings in the form of some "splinters of Greek economic thought," found in the teachings of Plato and Aristotle, down to the present day.

Owing to the author's death before completion of this work the manuscript was edited by his wife, Elizabeth Boody Schumpeter. For the benefit of the specialist she has included in the book an appendix giving certain detail concerning the development and status of various parts of the manuscript as left by the author.

The Quantity Theory of Money by Hugo Hegeland Gumperts, Goteborg, Sweden

Part I of this volume is devoted to a detailed and valuable historical presentation of the development of the quantity theory of money from the forerunners and founders of the theory (Nicholas Copernicus, John Locke, Charles Montesquieu, and David Hume) to the most recent interpreters of the theory.

Part II consists of the author's analysis of active and passive cash balances and their relation to the rate of interest and the price level. By making a distinction between the velocity of active money and the velocity of passive money (the latter is equal to zero), the author presents an attempt to reformulate the quantity theory of money. A similar distinction, developed here at the Institute independently, is being used successfully in our estimates of idle purchasing media, thus enabling us to incorporate changes in the rate of use of money into the Harwood Index of Inflation.

Monetary students interested in an analysis of the velocity of money and the theory of passive money will find the second part of this book both interesting and stimulating.

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[1]Of course, if the students were given any such material, they might wonder how the United States ever got where it is today from such small beginnings with so little help from the Professor's pet panacea. Whether or not the possibility of embarrassing questions explains the absence of material such as that mentioned is not apparent from the book itself. If Professor Samuelson sincerely believes that all of the few hundred pages devoted to unsupported and untested theories are more important to undergraduates than any few pages that might have been used to present a more comprehensive picture of actual economic developments, he is of course entitled to his opinion. However, the scholastic method of weaving complicated but untested theories has been completely discredited by modern science. Such teaching seems as out of place in the economic classroom at M. I. T. as would the theories of the alchemist in the chemical laboratories nearby.