

ECONOMICS AND THE REAL WORLD

By Dipendra Sinha

Alfred Marshall defined economics as “a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of well being.”(1) A close examination of the definition indicates that economics should be very closely related to reality. The time is ripe now to have a look at the present state of economic science — how close are current economic theories to the real world? Can economic theories describe the real world adequately? Or are we moving away from reality in an attempt to convert economics into a “hard science”?

Doubts have been cast in recent years by eminent economists as to the relevance of economics in its present form. Thus, Joan Robinson(2) finds a second crisis in economic theory. The crisis, according to her, emanated from the neoclassical attempt to put Keynesian economics into an equilibrium mold. The consequence was that the key ideas of Keynes, namely, the role of time and uncertainty, were pushed aside. Leontief(3) argues that in our desire to emulate hard sciences, we now have a very weak empirical foundation of economics on which we have put a complicated superstructure which is elegant in mathematics. We create facts to fit the theoretical structure. Brown(4) is of the opinion that the basic assumptions of economics are not drawn from reality. The abstract models in economics have little to do with reality. He argues that extensive use of statistics in economics is likely to deceive rather than reveal. The solution, according to Brown, is to move closer to other disciplines like sociology and political science. Kaldor(5) has shown how general equilibrium analysis as developed by Walras, Arrow and Debreu is irrelevant as an apparatus of thought to deal with the way in which economic forces operate or to predict the effects of economic changes.

Much of the criticisms centers around the excessive use of mathematics and statistics in economics in recent years. Economics is not a precise science. It concerns human behavior. While it cannot be denied that mathematics is a useful tool in the hands of economists, the excessive use of it in economics

may obscure reality. Mathematics is not a perfect substitute for language. In short, although less precise, natural language is more flexible in conveying meaning and much richer in vocabulary than mathematics.

Although both Keynes and Marshall had very rigorous mathematical training, they believed that it was not possible to apply exact mathematical models to economics. Keynes believed that economic analysis requires an 'amalgamation of logic and intuition and the wide knowledge of facts, most of which are not precise.'(6) Use of mathematics in economics may sometimes create a false sense of certainty according to Streeten.(7) Thus, the correct deduction of logical conclusions may be falsely taken as the discovery of facts about the real world.

Friedman(8) argues that the test of an economic hypothesis is successful prediction. He thinks that it matters little whether the assumptions are realistic or not. But as Karmack(9) points out, there are two basic drawbacks in taking such a position. First, it ignores one of the important functions of a scientific theory, i.e., to provide an understanding of the events and processes that underline such a prediction. Second, there is no guarantee that even a theory based on unrealistic assumptions would continue to provide successful prediction in the future even if it had appeared to do so in the past.

This paper attempts to evaluate where different branches of economics stand with respect to the real world. Although there will be some overlapping, our discussion will proceed under three broad headings, namely, microeconomics, macroeconomics, and econometrics.

Microeconomics

The fundamental assumption of consumer behavior theory is that consumers are rational and selfish. Given the limited budget, consumers know which commodities will maximize their utility. Most economists have accepted this position. Thus, for example, Robbins(10) thinks that such an assumption is obvious. As Karmack(11) has argued, there is an inherent lack of precision in consumer preference orderings.

As Koopmans points out, "...this interpretation denies the consumer such privileges as the joys in random variability in consumption, as well as its opposite, the comfort of consumption habits somewhat rigidly maintained under varying circumstances.... Finally,... the postulate denies him the noble urge to

respond with sacrifices to the distress of others, as well as the less highly regarded gratification in conspicuous levels or forms of consumption outdoing those of others. Nevertheless, almost every consumer values these privileges, and regards them as part of his normal experience and motivation.”(12) On a similar vein, Collard argues, “The standard assumption of self interest is simply a special case. It ignores those non-selfish elements in his behavior of which man has always been conscious and has to be stretched to the very limit to accommodate everyday instances of altruistic conduct.”(13)

Although maximization of satisfaction is considered the desired goal for the consumers, the approach seems to be very simplistic.(14) The concept is very ambiguous. Maximization of satisfaction loses its predictive power because any course of action may be said to lead to maximum “well-being” because we have no objective measure of whether that well-being is really maximized or not.(15)

The implicit assumption behind the theory of consumer behavior is that consumers do have all the knowledge of what combinations of commodities are available, their quality and their price. But perfect knowledge is not a realistic assumption because gathering information is a costly process.

Objections can also be raised to the two basic postulates of entrepreneurial behavior, namely, profit maximization and perfect competition. Although here also one can take the Friedmanian position that assumptions do not matter, we have already seen the shortcomings of such an approach. A number of economists have found fault with profit maximization as the accurate description of the goal of corporations. Baumol, for example, emphasizes growth-maximization as an objective, but subject to earning some desired level of profits. On the basis of the corporations he studies, Marris finds growth-maximization to be the objective, but with sufficient profits to prevent threats of displacement to the managers.(16)

Arndt(17) has brought out an interesting point regarding the law of diminishing returns which is used so extensively in microeconomics. This law, which is attributed to Turgot, is a technological law rather than an economic law, although it has been considered a major constituent of economic theory. Because the law of diminishing returns is a noneconomic law, no cost curves can be derived from it.

Macroeconomics

More than any other branch of economics, macroeconomics is in a state of flux at present. There is no ruling "paradigm" in the Kuhnian sense. At least three distinct schools of thought, namely Keynesianism, monetarism and new classical macroeconomics, exist side by side. Another school of thought which is more issue-oriented is supply-side economics, which supposedly forms the intellectual base of the Reagan administration's programs and policies. We will restrict our discussion mainly to the reasons of the 'alleged' failure of Keynesian economics and to enquiring how close the new classical economics and supply side economists are to reality.

Macroeconomics, in the true sense of the term, did not exist before Keynes. The ruling paradigm in economics was that of classical economics. The greatest blow to classical economics was the Great Depression of 1929 and the consequent massive unemployment. The situation could not be explained by classical economics. The alternative explanation was provided by Keynes who for the first time pointed to the possibility of the prevalence of involuntary unemployment. Consumption function, liquidity function and investment function are the three elements of the Keynesian system. One way of expressing the sequence of events in intellectual history is thesis, anti-thesis and synthesis. This accurately describes the situation at hand. The prevailing thesis was the classical economics. The anti-thesis was provided by Keynes. But out of these came the neoclassical synthesis or the income-expenditure approach. This was developed mainly by Hicks(18) and Samuelson. Thus, Keynesian economics was put in the equilibrium mold although it was not meant to be equilibrium economics to begin with.

As Paul Davidson points out, "...despite its name, the neoclassical synthesis was not really a synthesis of neoclassical with Keynesian ideas (as it purported to be) but merely the reassertion of the neoclassical framework with the addition of some Keynesian 'macro' terminology." (19) He believes that the neoclassical synthesis is basically pre-Keynesian. He sees the perceived failure of Keynesian economics to deal with the complex problems of today to be really a failure of the neoclassical synthesis.

The three key elements in post-Keynesian economics which were lost in the neoclassical synthesis are 1) The economy is a

historical process. 2) In a world where uncertainty is unavoidable, expectations have an unavoidable and significant effect on economic outcomes. 3) Economic and political institutions play a significant role in shaping economic events.(20)

Post-Keynesian economics, therefore, tries to bring back realism into macroeconomics by a proper interpretation of Keynes.

The two fundamental ideas of the new classical economics are the rational expectations hypothesis and the theory of instantaneous market clearing. It was developed by Robert Lucas(22) by combining the Friedman-Phelps analysis of the Phillips curve with the rational expectations hypothesis of Muth. But whereas Muth applied the rational expectations hypothesis only to the commodity markets at the micro-economic level, Lucas applied the idea to the entire macro-economy.

One implication of the new classical economics with respect to effectiveness of monetary and fiscal policies is that the desired result will be obtained only if people are fooled or surprised.

Despite its strong appeal in the economics profession, the realism of this school's assumptions and conclusions have been subjected to severe criticism by prominent economists.

The most severe criticism is with regard to the assumption of continuous market clearing. As Tobin(23) points out, this assumption is not based on new empirical evidence for the assumption. Similarly, the rational expectations hypothesis has also come under attack. The assumption that people have sufficient knowledge and that they use this knowledge efficiently seems to be very strong and unrealistic. The explanation of the business cycles in terms of imperfect information on the part of the agents has also come under sharp attack.(24)

The supply side economics which forms the basic theoretical rationale for the Reagan administration's economic programs is less complex than the new classical economics or the neo-classical synthesis.(25)

Supply-siders argue that the encouragement of demand is not effective and only leads to inflation. They emphasize the production of goods and services and the incentives necessary to encourage work, saving and investment. The primary determinants of these incentives are relative prices or, in particular, real after-tax rate of return.(26) Supply-siders advocate four

policies — a large across-the-board tax cut, a cut in social welfare spending, less government regulation and a restricted rate of growth of money supply.(27) Tax cuts are aimed at increasing the take-home salary of the workers and inducing them to work harder and thus to save and invest more. A cut in social security payments is assumed to work in the same way by encouraging individuals to work harder and save more to secure the future. While the slow rate of growth of money supply is supposed to put a lid on inflation, a reduction in government regulation is expected to provide a stimulus to the more rapid growth of private industry.

The rationale for the tax cut and the incentive scheme, to quote George Gilder, runs as follows: "The average worker exerts himself at about half of capacity and the average executive is vastly less productive than the best ones. Modern economies are filled with fat, grease, and under-used or much abused manpower and industry, above ground and below. In an over-taxed system the statistics of economic limits and capacity are mostly mush."(28)

The basic ideas of supply side economics come from the old classical economics, with a similar emphasis on the Says' law and the policy of *laissez faire*. Thus, all the criticism that apply to the classical economics apply equally to the supply-side economics.

Reagan economists believe in absolute free markets. This unqualified faith in the free markets prompts them to argue that if the economy is not working as it is supposed to be working, there must be something wrong with the government's place in the economy.(29) Taxes and government expenditure are perceived in terms of market imperfections. The question that is put to them by their critics is: How would the supply siders explain the phenomenon of the Great Depression when government had a minimum role to play?

Another problem inherent in the theory of supply-side economics, as Lerner(30) points out, is that supply-siders generally equate an increase in savings with increased investment. Increased savings, even if it occurs from supply-side programs may not lead to increased investment.

Furthermore some economists have raised the question whether the Laffer curve on which the tax cuts are based is an accurate depiction of economic reality or not. Thus, a tax rate cut may not necessarily cause people to work more.(31) The

higher take-home salary resulting from a tax rate cut may induce people to buy more leisure by working less, but Laffer rules this out by arguing that the decrease in government services resulting from the tax cut lowers people's real income and reduces their demand for leisure.

Econometrics

Econometrics emerged in the 1950s and the belief was that econometric method would be able to prove or disprove economic hypotheses, quantify economic relations and forecast the future correctly. Unfortunately, these high hopes were not fulfilled.

The large macroeconometric models such as those formulated by the Chase Econometrics, the Data Resource Inc., and the Wharton School failed to predict inflation and unemployment of the 1970s. Although these were built around the income-expenditure version of Keynes, these failures of the econometric techniques applied rather than that of theory.

There is a tendency in the profession now-a-days to use econometric methods very mechanically. The quality of research is judged in many cases by the degree of the sophistication of the methods used. As Bauer and Walters(32) point out, the more successful application of econometric methods, such as those of Solow, Friedman and Stone, are based on simple statistical methods with penetrating economic insight.

Unrealistic and trivial results may be the outcome if the researcher ignores the complexities that surround economic realities. One cannot apply econometric methods in the same way as statistical methods are applied to experimental data. Social sciences, especially economics, do not lend themselves easily to statistical methods of prediction because of the complexity of variables associated with human behavior.

The coefficient of multiple determination (r^2) has been relied upon too heavily as a measure of the success of a model without realizing that it might indicate spurious relationship. Similar misuse of the test of significance have been found by McCloskey. He notes, "Roughly three-quarters of the contributors to the *American Economic Review* misuse the test of significance. They use it to persuade themselves that a variable is important. But the text can only affirm a likelihood of excessive skepticism in the face of errors arising from too small a sample. The text does not tell the economist that a fitted

coefficient is large or small in an economically significant sense." (33)

Several problems arise if econometric methods are not applied very cautiously. Thurow (34) identifies at least two types of problems. First, economic theory does not really tell us what secondary variables are to be held constant. Thus, one has to guard against misspecifications. Part of this problem is due to the fact that while economies are dynamic, most economic models assume independent and normally distributed errors with zero mean value. But this does not depict reality.

Conclusion

Economics is in a state of confusion. In no other branch is this confusion more visible than in macroeconomics. Much of the criticism that contemporary economics is shying away from the real world is due to the preoccupation of many economists with the degree of sophisticated mathematization in their methodology rather than a clear understanding of the complex realities that surround us. As Boulding observed, "...mathematics in any of its applied fields is a wonderful servant but a very bad master; it is so good a servant that there is a tendency for it to become an unjust steward and usurp the master's place." (35) This is precisely what we have to guard against.

FOOTNOTES

(1) Alfred Marshall, *Principles of Economics*, 8th ed. (London: Macmillan, 1925), p. 1.

(2) Joan Robinson, "The Second Crisis of Economic Theory," *American Economic Review* (May, 1972).

(3) Wassily Leontief, "Theoretical Assumptions and Nonobserved Facts," *American Economic Review* (March, 1971).

(4) E.H. Brown, "The Underdevelopment of Economics," *The Economic Journal* (March, 1972).

(5) Nicholas Kalkor, "The Irrelevance of Equilibrium Economics," *The Economic Journal* (December, 1972).

(6) John M. Keynes, "Alfred Marshall, 1842-1924," in *Memorials of Alfred Marshall*, edited by A.C. Pigon (London: Macmillan, 1925).

(7) Paul Streeten, *The Frontiers of Development Studies* (New York: John Wiley and Sons, 1972).

(8) Milton Friedman, "The Methodology of Positive Economics," *Essays in Positive Economics* (Chicago: University of Chicago Press, 1953).

(9) Andrew M. Karmack, *Economics and the Real World* (Philadelphia: Univer-

sity of Pennsylvania Press, 1983), p. 5.

(10) Lionel Robbins, *An Essay of the Nature and Significance of Economic Science* (New York: St. Martin's Press, 1962).

(11) Andrew M. Karmack, op. cit., p. 81.

(12) Tjalling C. Koopmans, *Three Essays on the State of Economic Science* (New York: McGraw Hill, 1957), p. 137.

(13) David Colard, *Altruism and Economy: A Study in Non-Selfish Economics* (Martin Robrtson & Co.: Oxford, 1978), p. 16.

(14) Tibor Scitovsky, *The Joyless Economy: An Inquiry into Human Satisfaction and Consumer Dissatisfaction* (New York: Oxford University Press, 1976).

(15) Robert L. Heilbroner, "Introduction" in *Economic Relevance: A Second Look*, edited by R.L. Heilbroner and A.M. Ford, p. x, Pacific Palisades, California: Goodyear Publishing Co., 1976).

(16) Andrew M. Karmack, op. cit., p. 91.

(17) Helmut Arndt, *Economic Theory vs. Economic Reality* (East Lansing, Michigan: Michigan University Press, 1984), p. 23.

(18) J.R. Hicks, "Mr. Keynes and the Classics; A Suggested Interpretation," *Econometrica*, Vol. 5, 1937.

(19) Paul Davidson, "Post Keynesian Economics: Solving the Crisis in Economic Theory" in Irving Kristol, *The Crisis in Economic Theory*, edited by D. Bell and I. Kristol (New York: Basic Books, 1981).

(20) Ibid., p. 158.

(21) James Tobin, "Are New Classical Models Plausible Enough to Guide Policy?" *Journal of Money, Credit and Banking* (November, 1980), p. 788.

(22) Robert Lucas, Jr., "Some International Evidence on the Output-Inflation Trade Off," *American Economic Review* (June, 1973).

(23) James Tobin, *Asset Accumulation and Economic Activity* (Chicago: University of Chicago Press, 1980), p. 34.

(24) Arthur M. Okun, "Rational-Expectations-with-Misperceptions as a Theory of the Business Cycles," *Journal of Money, Credit and Banking* (November, 1980).

(25) Wallace C. Peterson, *Income, Employment and Economic Growth* (New York: W.W. Norton & Co., 1984), p. 419.

(26) Bruce Bartlett and Timothy P. Roth, "Introduction" in *The Supply-Side Solution*, edited by B. Bartlett and T.P. Roth, p. 3 (Chatham, New Jersey: Chatham House Publishers, 1983).

(27) Lester C. Thurow, *Dangerous Currents: The State of Economics* (New York: Random House, 1983), p. 129.

(28) George Gilder, *Wealth and Poverty* (New York: Basic Books, 1981).

(29) Lester C. Thurow, op. cit., p. 140.

(30) Alan C. Lerner, "A Wall Street Perspective" in *Supply-Side Economics in the 1980s: Conference Proceedings* (Westport, Connecticut: Quorum Books, 1982), p. 73.

(31) David Henderson, "Limitations of the Laffer Curve as a Justification for Tax Cuts," in *Supply-Side Economics: A Critical Appraisal* edited by R.H. Fink, p. 244 (Frederick, Maryland: University Publications of America, 1982).

(32) P.T. Bauer and A.A. Walters, "The State of Economics," *The Journal of Law and Economics* (April, 1975).

(33) Donald M. McClosky, "The Loss Function Has Been Mislaidd: The Rhetoric of Significance Tests," *American Economic Review* (May, 1985).

(34) Lester C. Thurow, op. cit., Ch. 4.

(35) Kenneth E. Boulding, *Economics As a Science* (New York: McGraw Hill, 1970), p. 115.

The MANKIND QUARTERLY

MONOGRAPH SERIES

Number Two

ECOLOGY AND EVOLUTION

Editor Dr. Roger Pearson. A collection of papers which throw sociobiological light upon the complex interrelationship between the ecological system and social and cultural evolution, with particular emphasis upon mammalian and human social organization. The first paper, authored by the editor, examines the interrelationship between Ecology, Adaptation and Speciation from an overall long-term evolutionary point of view. This is followed by an article on Ecosystem and Genetic System by F.J. Irsigler, which concentrates on the biological mechanisms at work in this process. J.W. Jamieson presents the next paper which discusses Mammalian Societies and the Emergence of the Family System. In this he traces the roots of the human family in pre-hominid social evolution, comparing human pair-bonding with mating patterns of other mammalian and non-human primate species. The editor contributes a paper in which he develops this theme into an analysis of evolving Human Social Evolution from well-reasoned but admittedly speculative hypothetical hominid societal systems, and Umberto Melotti (University of Pavia) follows this with an important contribution entitled Genetic Altruism: Some Hypotheses on Monogamy, Polygyny, Incest Taboo, Exogamy, and the Origin of the Family. Finally, distinguished social psychologist Raymond Cattell winds up the collection with a fascinating contribution entitled Ethics and the Social Sciences, in which he considers some of the issues raised by sociobiology and points to the need for social scientists to find ways in which to investigate human social behavior in an appropriately neutral fashion.

ISBN 0-941694-00-3

Price: \$20.00

Institute for the Study of Man
1133 13th Street, N.W., Suite C-2
Washington, D.C. 20005

CAPITAL INFLOWS TO LDC'S AND THEIR IMPACT ON IMPORTS

By Gladson I. Nwanna

Economic growth in Less Developed Countries is said to be constrained by what has at times been referred to as 'development gaps,' notably shortages of financial resources, foreign exchange, and technological and managerial expertise. This belief has often led planners to seek increased foreign capital inflows as an instrument of economic growth.

However, the role played by capital inflows into developing countries has now become a matter of considerable concern and debate. (2) On the one hand, there are those who view foreign capital inflows as beneficial and as an 'engine of growth' for LDCs. To these proponents of foreign aid and investment, foreign capital inflows represent a 'sine-qua-non' for development and therefore should be encouraged. On the other hand, there are those who argue against such inflows, pointing to their potential and too often real negative effects. To these opponents, the flow of capital can become a constraint, with deleterious side effects which can too frequently distort the economy and exercise a net adverse effect on economic growth and development. While the debate continues, the flow of capital persists, and LDCs continue to welcome and increasingly depend on foreign capital inflows. The continued resort to foreign loans and investment capital conveys the impression that the net effect of such inflows on economic growth and development is necessarily positive and beneficial.

It is the objective of the present study to further explore the contributions of foreign capital inflow. Specifically, this study examines the impact of annual changes in foreign capital inflow (private and public) on imports into developing countries. Any information in this area can provide helpful insight into the role of capital inflow in the development efforts of LDCs, and also provide additional insight into the problem of transfer pricing. (3)

Studying the Impact of Capital Transfers

Empirical studies on capital inflows into LDCs, like those