Economic Analysis: A Study in Uncertainties

G. P. ST. CLAIR, Chairman, Department of Economics, Finance and Administration

● BEN JONSON wrote of Shakespeare that he had "...small Latin and less Greek" (1). As one who has small Engineering and less Economics I feel myself admirably fitted to be General Chairman of a Conference on Economic Analysis in Highway Programing, Location and Design; for a general chairman makes no decisions, and is not obliged to take a position on any subject whatever.

Having been told, nonetheless, by the organizing committee that I was to lead off as a keynoter for this conference, I have conceived the notion that it might be well to start the orchestration by sounding a sour note. I am going to follow the lead of a well-beloved radio and TV figure and of that much less beloved fictional character, Uriah Heep, in preaching a counsel of humility in dealing with the subject matter of the next two days.

There can be heard at times, among those who deal with the economics of highway engineering, a note of undue certainty, of rather questionable positiveness, about the precision of estimates and forecasts, the truth of hypotheses and postulates, and perhaps even the God-given-ness of dogmas and prejudices. One hears accepted experts proclaim the Economic Law, as thunderers from Mt. Sinai; and one sometimes wonders whether this bold front may not mask an inner lack of confidence in the validity of what they preach.

But, one may say, research engineers and research economists are scientists. Their findings, based on experiment, observation, and applications of the statistical method, are the necessary basis of planning and action. This is true; it is equally true that the scientific findings of one day may become the discarded waste of the next. Surely Albert Einstein, in developing the theory of relativity and later the unified field theory, had little doubt that, as his findings displaced the Newtonian physics, so they in turn must give way to new discoveries and a new synthesis. The Einsteins and the Oppenheimers are the humblest and least assertive of men. And so, if we admit that we may be wrong, or that we may have hold of a temporary rather than an eternal truth, we are in the best of company — in the company, indeed, of such as Galileo, Kepler, Newton, and Darwin. That is why I feel that the hesitant suggestion — even the bashful stammer — will be more seemly in our deliberations than the bold, brassy pronouncement.

Underlying all work in economic analysis — although not so readily perceived when we are concerned only with the relative advantages to traffic of alternative locations or designs — is the concept of the economic allocation of limited resources. A corollary of this concept, which in part determines the assumptions and the analytical devices that we use, is the dictum that the market economy of private enterprise is the basic and sure means by which economic allocation of resources is brought about. In the public economy, the maximizing of benefits is substituted for the maximizing of profits; but we attempt to utilize the same frameworks of analysis; and indeed we put benefits in competition with prospective profits or profits forgone when we try to determine the economic warrant for a program of public investment. Each of the following quotations has some bearing on this, or some other, canon of the rites we celebrate at this gathering.

I will lead off with a Golden Text from the recent Brookings publication, "Federal Budget and Fiscal Policy," by Lewis H. Kimmel.

> Underlying the analysis is the thought that the great majority of ideas in economics and finance have a time-and-place significance. They are not immutable truths. Yet specific doctrines are often expounded in a manner that suggests neither temporal

> nor institutional limitations.... Any theory or idea should be appraised in the light of the conditions prevailing in the society in which it was advanced. (2, p. 1)

ALLOCATION OF RESOURCES

John Kenneth Galbraith in "The Affluent Society" says some provocative things about "...the ancient conviction that resources must be allocated efficiently between their various employments and that the free market is the most efficient and possibly even the only satisfactory instrument of such allocation." (3, p. 224) In discussing the position of production in the United States he declares that we do not pay enough attention to increasing the labor force, to increased capital formation, or even to technological improvement; and goes on to state:

> ....Our operative concern for increasing production is confined to the measures — for getting greater resources use efficiency and promoting thrift and diligence — which were relevant a century ago. The newer dimensions along which there might be progress attract our attention scarcely at all. (3, p. 131)

Galbraith drives the point home by contrasting the preoccupation with market-motivated allocation of resources with the direct, purposive action to get the job done, regardless of the conventional standards of efficiency, that takes place during wartime.

> ....Under the stress of circumstance the conventional wisdom is rejected. We set about expanding output along all the relevant dimensions. Serious efforts are made to expand the labor force. It becomes permissible to import toilers with swarthy skins who speak unintelligible languages. The drive for increased saving becomes serious. Where investment is inadequate more is made. There is no involuntary idleness. As in the case of alloy steels, synthetic rubber manufacture, and ship construction in World War II, technology is brought purposefully to play to permit of expanded output with available resources. (3, p. 131)

Although not within the bounds of the conventional wisdon, it is not unheard of to question the effectiveness of resource allocation via the market economy. One might, for example, doubt the economic as well as the social soundness of the relative investment in call-girls and schoolma'ams, albeit bearing in mind that the services of the one and not those of the other may become legitimate tax deductions for business expenses. Galbraith has a word to say on this score:

> In a free market, in an age of endemic inflation, it is unquestionably more rewarding, in purely pecuniary terms to be a speculator or a prostitute than a teacher, a preacher or policeman. Such is what the conventional wisdom calls the structure of incentive. (3, p. 223)

And, perhaps closer to the present focus of interest:

> We view the production of some of the most frivolous goods with pride. We regard the production of some of the most significant and civilizing services with regret ....Automobiles have an importance greater than the roads on which they are driven. We welcome expansion of telephone services as improving the general well-being but accept curtailment of postal services as signifying necessary economy. We set great store by the increase in private wealth but regret the added outlays for the police force by which it is protected. (3, pp. 132-134)

IMPLICATIONS OF THE ECONOMY OF AFFLUENCE

Galbraith's central thesis, of course, is that we are no longer in an economy of scarcity, where the task is to allocate limited resources to the production and distribution of goods and services that will fall far short of meeting the needs of the populace for food, clothing, and shelter; but in an economy of affluence where these elementary needs are satisfied as a matter of course, and all the vast resources of advertising and salesmanship are now marshalled in the effort to create new wants so that the production machine may continue to function and expand. To quote:

> A man who is hungry needs never to be told of his need for food. If he is inspired by his appetite, he is immune to the influence of Messrs. Batten, Barton, Durstine, and Osborn. The latter are effective only with those who are so far removed from physical want that they do not already know what they want. In this state alone men are open to persuasion. (3, p. 158)

In emphasizing this point he further states:

> ....As a society becomes increasingly affluent, wants are increasingly created by the process by which they are satisfied ....If production is to increase, the wants must be effectively contrived. In the absence of the contrivance the increase would not occur. This is not true of all goods, but that it is true of a substantial part is sufficient. It means that since the demand for this part would not exist, were it not contrived, its utility or urgency, ex contrivance, is zero. If we regard this production as marginal, we may say that the marginal utility of present aggregate output, ex advertising and salesmanship, is zero. (3, pp. 158-160)

If this analysis is accepted, then the doctrine that the market economy automatically brings about the most efficient allocation of resources suffers a severe blow. For if the wants must be fabricated with the products, the social and economic essentiality of the goods and services so marketed is ever open to doubt. At the very least we may question whether we are obligated to use the analogies, the coefficients, the factors of the marketplace — commercial interest rates or rates of return, for example — in determining the economic warrant for public investments. On this point let me give one last quotation from Galbraith:

> ....There will be a question as to what is the test of balance — at what point may we conclude that balance has been achieved in the satisfaction of public and private needs. The answer is that no test can be applied, for none exists. The traditional formulation is that the satisfaction returned to the community from a marginal increment of resources devoted to public purposes should be equal to the satisfaction of the same increment in private employment. These are incommensurate, partly because different people are involved, and partly because it makes the cardinal error of comparing satisfaction of wants that are synthesized with those that are not. (3, pp. 320-321)

ANOTHER CONTEMPORARY VIEW

But Galbraith is a Harvard professor, one of a breed notorious for new, unconventional, and unorthodox ideas. Perhaps it would be well to inquire whether such doubts have invaded institutions of learning to the west of Harvard Yard.

In the 1959 publication, "Public Finance," by the Committee on Public Finance, we find a mixed bag of 66 co-authors from colleges and universities scattered from Maine to California, with not a few from the Middle West and South. In this work, surely of impeccable orthodoxy, we find, in a section titled, "The Economic Effects of Transportation Expenditures," the following:

> Government subsidies have been granted to all major types of transportation except pipelines. These subsidies received popular approval because it was believed that they would accelerate the general economic growth of the nation. A secondary basis for this approval arose from military needs. An examination of the history of the United States shows that these were actually sound judgments and compare very favorably with judgments made through the market. Because the market quotes relative values in dollars and even cents, it gives the impression of definiteness, sureness, and accuracy; whereas because political decisions to grant subsidies are the subject of wrangling, charges and countercharges, and compromises, they give the impression of indefiniteness, unsureness, and inaccuracy. Both impressions are largely illusions. Past records of the market and government budgets in allocating and using resources indicate that both have made very grave errors and that both have been very sound in their judgments. (4, pp. 232-3)

AN EARLIER COMMENT

The quoted works are still rather hot off the presses. It is appropriate to inquire whether there is any history of rebellion against the market-based economic analysis. There is time for but one quotation. Professor Horace M. Gray of the University of Illinois, writing in 1940 in the Journal of Land and Public Utility Economics on "The Passing of the Public Utility Concept," made some statements which, though tangential to our theme, seem to imply that the techniques and procedures of public investment are neither to be judged nor to be shackled by the standards and concepts of private enterprise. Referring primarily to public utilities, he wrote:

> ....Under the prevailing system of monopoly capitalism, private enterprise seems to have lost, in large measure, its power to plan constructively for progressive improvement of the economy. This failure is observable in many areas and, in the utility field, is most apparent in connection with water resources, electric power, natural gas, communication, and transportation. (5, p. 9)

In contrast he offered the following:

> Within recent years the "institutional inventiveness" of political leaders and public administrators has produced a number of such new institutional arrangements. Among these are: Direct action by departments or bureaus of the Federal Government to supply needed facilities; public corporations charted under both Federal and State authority; multiple-purpose, regional, water-control projects; rural electric cooperatives; Federal grants-in-aid; Federal-State-municipal cooperation; Public Works loans-and-grants; Reconstruction Finance Corporation loans; and Federal subsidy for desirable services. None of these comes within the traditional public utility concept; they all involve direct, positive action rather than mere negative restraint; ...instead of relying exclusively on the police power of the States and the commerce power of the Federal Constitution, ...they call into play other more positive and less restricted powers of the Federal Government, such as the proprietary, finance, public welfare and national defense powers. In every respect, therefore, these new institutional devices appear more capable of serving modern social needs than do private monopolies operating under public utility regulation. (5, p. 8, 9)

In offering these borrowed observations I have no intention to decry the importance of our task at this conference, or the essentiality of the economic analysis of highway projects and programs. What I desire is to introduce into the deliberations a flavor of salty skepticism, a disposition toward critical examination, a propensity toward greeting even our own pronouncements with suspicion. If we can get into that mood we will have a successful conference.

This invocation of a mood of caustic inquiry is closely linked with the mode of operation of the conference itself. It is our plan to make the floor discussions equally important with the prepared papers, if not more so. To this end the session chairmen are instructed to cut each speaker short promptly at 20 minutes. The speakers in turn are besought to withhold some of their best ammunition to repel attackers during the floor discussion. To those who are neither chairmen nor discussion leaders I would say, "Spring promptly to the attack. Be searching in your inquiries, merciless but fair in your criticisms, persistent in your search for the truth."

An finally, permit me one last quotation, this time not from an economist but from a poet (6).

> There lives more faith in honest doubt,
> Believe me, than in half the creeds!

REFERENCES

1. Johnson, Ben, "To the Memory of My Beloved, the Author, Mr. William Shakespeare."
2. Kimmel, Lewis H., "Federal Budget and Fiscal Policy." The Brookings Institution, Washington, D.C. (1959).
3. Galbraith, John Kenneth, "The Affluent Society." Houghton Mifflin, Boston (1958).
4. The Committee on Public Finance, "Public Finance." Pitman, New York (1959).
5. "The Passing of the Public Utility Concept." Jour. of Land and Public Utility Econ., XVI:1, p. 8-20 (Feb. 1940).
6. Tennyson, Alfred Lord, "In Memoriam." Canto xcvi.