Coming Problems of U.S. Economic Development

A review of two volumes of specially prepared essays by economists, sociologists, and other thinkers.

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Winston Churchill is supposed to have complained that whenever he asked Britain's three leading economists for an opinion he received four replies—two from John Maynard Keynes. It comes as no surprise, therefore, that when the Committee for Economic Development (a business-sponsored, policy-oriented, economic research organization) asked economists and others to write two thousand words on the question: "What is the most important economic problem to be faced by the United States in the next twenty years?", they received a plethora of answers. Ninety-nine such essays have now been published under the title *Problems of United States Economic Development,* in two volumes (*1*).

Volume 1 contains 49 papers (*2*) which were contributed by invitation. The roster of authors is impressive. It includes six past presidents of the American Economic Association: J. M. Clark, Paul Douglas, Alvin Hansen, Frank Knight, Simon Kuznets, and Sumner Slichter. Several outstanding foreign economists are represented—for example, Colin Clark, Nicholas Kaldor, Robert Marjolin, Lionel Robbins, and Jan Tinbergen—as well as a sprinkling of distinguished writers from other fields, among them Henry Steele Commager, Julian Huxley, Reinhold Niebuhr, and David Riesman.

Volume 2 contains 50 papers which were chosen for publication (and awards of $500 each) from 1238 entries in a contest sponsored by the Committee for Economic Development. Most of the authors represented in this volume are economists, but a professional writer, a Harvard Law School professor, and a banker and other noneconomists were also among the winners.

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Picture of American Society

What do the 99 essays add up to? Is there a composite picture of America which emerges—a picture which delineates in broad terms our economic present and future? What do we, as a nation, see when we look in the collective mirror of our minds?

According to these essays, we see a well-dressed, well-fed, well-gadgeted, successful, albeit potentially erratic, middle-aged businessman. Through a combination of thrift, hard work, and some luck, he has become very wealthy, but he is surrounded by poor neighbors, who endanger his security and peace of mind and sometimes even trouble his conscience. He spends a sizable portion of his income for police protection but still does not really feel secure and wonders if there might not be some alternative.

At home, his children give considerable evidence of being "spoiled" and seem to be dissipating his wealth in an extravagant and rather purposeless manner. He is not in a good position to criticize them, however, since he has always encouraged their preoccupation with conspicuous consumption. He is worried about his own old age (the problem here is only partly financial), and at the same time he is faced with the task of providing adequate education and housing for an enormous crop of grandchildren. He has a strong distaste for "politics," but he finds that many of the most pressing problems of the day are not handled adequately by private enterprise, and that government must play an increasingly important role.

He has accepted a certain amount of control over his business in the interest of stability, but he is not sure that government can really fulfill on that promise. After having first fought the unions and then acquiesced in their growth, he now finds himself wondering whether the power of organized labor does not pose new problems of stability and equity. Moreover, he has an uneasy feeling that the tremendous growth and bureaucratization of his own business imperils some of the freedoms which he has always considered his most precious heritage.

Most important and most troublesome of all, he must ask himself what kind of person he really is and what he wants to become. The dreams of his youth have been, to a great extent, fulfilled. He must now dream new dreams, grander dreams, and pursue them with even more determination, intelligence, and compassion than he showed in the past. As Moses Abramovitz wrote in one of the most stimulating of the invited essays, we as a people, must ". . . define useful and worthy ends, and balance our efforts among them in due proportion" (*3*).

Internal Problems

This is the over-all picture; we may now examine the essays in somewhat greater detail.

The reviewer of these essays is faced with an almost insurmountable problem. It obviously is not feasible to say something about each; on the other hand, the essays do not fall easily into a simple system of classification. In preparing the papers for publication, the committee made two tries at grouping them according to subject (the categories of volume 1 do not correspond to those of volume 2) and neither is very satisfactory. My own attempt appears in Table 1.

We may first make a basic distinction between those papers which saw the "most important problem" as one which was *internal* to this country (that is, would exist even if the United States were alone in the world) and those essays which discussed *external* problems (problems involving United States relations with the rest of the world). Slightly more than one-fourth of all papers fell into this latter category; the burden of their argument will be discussed later.

Of the papers concerned with internal

problems, we may distinguish three major and one minor category, plus a miscellaneous group. The largest number of papers was devoted to the perennial problem of stability—that is, the prevention of inflation or depression. More than one-fifth of the writers made this their choice, while a number of others alluded to it but indicated that this is a problem the solution to which is now in hand.

Fear of "creeping inflation" was the dominant theme of the invited papers which dealt with internal stability. In essay after essay the experts expressed concern about the slow but persistent deterioration in the value of money. Most of them related it to the over-all commitment to full employment, coupled with the strong bargaining power of organized labor.

The contest winners were evenly divided between those who saw inflation as the major stability problem and those who stressed the possibility of another depression. The writers in the latter category stressed the historical instability of the American economy, the problem of maintaining a balanced rate of expansion of investment and consumption, and the difficulty of persuading the government to initiate, and the public to accept, those programs which would help to avert a major depression. On the whole, however, this represents an area in which there has been a tremendous change in thinking in the past decade. If these volumes had been published at the end of World War II, it is safe to estimate that at least 50 of the papers would have listed a possible depression as the number one problem.

Hard on the heels of the papers dealing with stability was an interesting group of papers devoted to the problems of economic growth. Very few of the writers were concerned about America's capacity or ability to grow in quantitative terms, but they were disturbed by the directions of growth and by the stresses and strains which accompany growth. In these papers there is little of the type of discussion which might have been offered by natural scientists about the depletion of natural resources as a growth-inhibiting factor. Instead of engaging in a discussion of means, most of the writers on growth were concerned about ends. In the words of contest-winner Werner Levi, "The great problem of future economic development in America will be how to influence its direction so that it may serve the cause of human freedom and dignity" (*4*). Or, as sociologist David Riesman wrote, "This searching of aims and discovery of motives seems to me the fundamental economic task in an age of abundance" (*5*).

Table 1. Distribution of papers according to subject, based, in part, on a few very arbitrary designations.

Type of problem	Invited papers	Contest papers	Total
External	20	6	26
Internal			
Stability	8	13	21
Growth	8	10	18
Freedom	5	8	13
Location and urbanization	5	2	7
Miscellaneous*	3	11	14
Total	49	50	99

* This category includes education, housing, problems of older people, and so on.

In third position among the internal problems was the question of freedom. For a few, this meant a concern over freedom of enterprise, but for most of the 13 writers in this category, the problem encompassed freedom for the individual in many varied aspects of life.

Writers on the subject of freedom fall into two main groups. There are those, such as Frank Knight, Milton Friedman, and John Jewkes, who see the principal threats to individual freedom residing in government, monopolistic labor unions, and the decline of free enterprise. On the other hand, Paul Douglas and several of the contest winners see the giant corporations as the greatest potential threat to freedom. Even if the giants acquire "corporate consciences," as Adolf Berle recommended a few years ago, the problem would still be with us, according to one contest winner, Roswell G. Townsend. He wrote, "The paradox is that the more the modern corporation accepts its own *public* importance, the more its managers succeed in living the good life in business affairs, the more effective its 'human relations' with labor and unions, the more it improves the community through fine educational and recreational facilities . . . the more the citizens lose that self-reliance, that independence of thought, that initiative which have made America great" (*6*).

A fourth, and much smaller, group of papers, dealt with problems of location, especially as they manifest themselves in the problems of the urban metropolis. Reginald R. Isaacs, chairman of city and regional planning at Harvard University, estimated that the cost of urban renewal will reach the staggering total of $2 trillion by 1970 (*7*). On the other hand, Luther Gulick, president of the Institute of Public Administration, in another invited paper, dismissed the cost factor and put the blame on "bad political engineering" (*8*), while economist Alvin Hansen saw the problem as a . . . "conflict between a rigidly private enterprise point of view and a social welfare point of view" (*9*).

Some 14 papers which deal with internal problems do not fall into any of the above categories and have been classified as miscellaneous. They include discussions of such diverse subjects as nuclear energy, the consumer, and the need for balance among competing groups. There were many more in the miscellaneous category among the contest papers than in the invited group, and it is not impossible that some element of "gamesmanship" is partially responsible for this diversity.

Two of the most interesting of the papers in the miscellaneous category posed questions which were symptomatic of a general unrest apparent in a majority of the essays—namely, the inability of the United States to meet the problems of tomorrow within the traditional framework of a competitive, free enterprise, profit system. Such a system, it must be remembered, *automatically* offered solutions to the basic social problems of choice of output, allocation of resources, and distribution of income, and at the same time provided a rigorous test of efficiency.

But, according to many of the essays, the problems of tomorrow will require new institutions and standards to supplement markets and profits. Contest-winner Norman H. Leonard, Jr., wrote, "The most important economic problem of the next twenty years is how to develop a methodology and institutions which encourage the public and its policy makers to make choices in the light of a multiple goal system. Each part of economic policy should be examined with respect to . . . the political goals of a free society. By this means economic policy could be related more directly to the ethical end of human existence . . ." (*10*). And in an invited paper, Gerhard Colm, chief economist of the National Planning Association, argued that ". . . the evolution of standards of economic performance and conduct is of the most crucial importance for our economic future. Without the development

of some such standards, I see little chance that the specific economic problems can be solved within the framework of a free and democratic society" (*11*).

External Problems

The great majority of the essays dealing with external problems stressed one major theme: the need for the United States to assist the so-called underdeveloped countries to achieve a more rapid rate of economic growth. Three principal arguments were advanced in support of this position. First, it was argued that a failure to solve this problem will drive these countries to communism, will block efforts to promote peace, and will endanger the *security* of the United States. Peter Drucker wrote, "We share today throughout the world a common goal, a common belief and a common commitment: The goal of economic development. . . . If the promises of Economic Development should be disappointed, however, international class war of the many very poor against the few very rich would become unavoidable. This would be a class war against the United States . . . such a class war would mean victory for world Communism" (*12*). Allusions to such an international class war can be found in many of the papers.

Second, a substantial number of writers suggested that the United States has a *moral* obligation to help other countries. Paul Homan wrote, "The upward striving of the human race depends upon attitudes; and I do not think that a satisfactory state of civilization can be achieved in the United States so long as it entertains a tribal attitude toward the rest of the human race. . . . We have it in our power, with little sacrifice, to give them a fair fighting chance to improve their condition . . . one cannot be neutral toward the consequences of hugging all our mounting prosperity to our own breasts. Unless animated by the right spirit and administered with a view to moral obligations, there is a better chance that it will corrupt and demean us than the contrary" (*13*).

Finally, a few writers urged foreign aid on the grounds that it would help the United States economy. But this argument was usually placed last and often seemed to be thrown in as an "extra," possibly to give the problem more of an "economic" aspect, or to placate those who pride themselves on being "practical."

The preponderance of invited as opposed to contest papers in the "external" category requires some explanation. It probably reflects the fact that a large number (19) of the invited papers were contributed by foreign writers. Of this group no less than 12 discussed external problems. On the other hand, only two of the contest winners were from abroad. It also may be attributed in part to the wording of the contest invitation, with its emphasis on United States problems. Many entrants probably felt it safer to limit themselves to internal problems.

Picture of Economics

Thus do the essays sketch the problems of American society at a crucial point in history. But they do something more than that; they also give us a picture of the subject of economics, a picture which is so strikingly different from the one portrayed in the graduate schools and the professional journals as to require some comment.

The past few years have witnessed many significant new developments in economic theory, especially in connection with the application of mathematics to economic problems. Linear programming, game theory, and input-output analysis are among the best known of these advances. Great hopes have been engendered, both within and without the profession, that with this increased attention to new developments in mathematics, economics will become more scientific and more fruitful. As one interested mathematician has written, ". . . classical mathematics has failed rather thoroughly to solve economic problems. Recent investigations of the type discussed here indicate that the fault may not lie in the mathematical approach itself, but in the type of mathematics used" (*14*). These hopes are undoubtedly shared by a great many mathematicians, scientists, and economists, and have had considerable influence on the direction of research and the training of young economists. They may be fulfilled with respect to certain kinds of problems, most notably those involving planning for an individual firm, such as scheduling output mixes and input requirements, inventory control, and negotiations with suppliers and customers. But with respect to the problems posed by most of the essays now under review, such hopes are bound to prove chimerical because they are based on a fundamental misunderstanding of the nature of economics.

As soon as we talk about freedom, justice, moral obligations, and values, we are in an area in which mathematics may help us to think more clearly but can never "solve" the problem. Let us admit at the outset that better theoretical models will never tell us whether we should or should not help the underdeveloped countries or even suggest the form that such assistance should take. Linear programming may be a great asset to the giant corporation but will never tell us whether the giant corporation is, on balance, an asset to our society. And input-output tables are not likely to reveal how we can use our growing command over matter to free man for what has been called "leisure work"—the use of free time for creativity in the arts, sciences, statesmanship, and religion.

It may be said that these are not economic problems. But these surely are the problems which economists have traditionally addressed themselves to. The greatest contributions of the past have been precisely those in which the normative and positive aspects of the subject have been inextricably entwined. In this respect economics is significantly different from the natural sciences, and no amount of mathematical rigor can erase this difference. To test this proposition we need merely examine the seminal works on the subject—for example, *The Wealth of Nations, Das Kapital,* Keynes's *The General Theory of Employment, Interest, and Money.* If we ask ourselves what would be left of these works if they were stripped of all except that which had scientific validity—that is, if they had been written under the same kind of restraints as are considered normal in scientific work—we can quickly appreciate this point.

These essays, therefore, do more than suggest that Americans need to reexamine their goals, their values, and their institutions. They also suggest that economists need to reexamine their own professional goals, research, and training lest they find themselves divorced from the crucial currents of our time. The papers are eloquent testimony to the proposition advanced by J. M. Clark, who wrote, "There are two worlds, the world of impersonal investigation of cause and effect, and the world of desires, ideals and value judgements. The

natural sciences deal with the first, ethics with the second . . . the peculiarity of economics is that it is called upon to bridge this gap" (*15*).

References and Notes

1. *Problems of United States Economic Development* (Committee for Economic Development, New York, 1958), vols. I and II.
2. One of these, by Paul Douglas, arrived late and actually appears in the second volume as an appendix, but since it was an invited paper, I treat it as if it were in volume 1.
3. M. Abramovitz in *Problems of United States Economic Development* (Committee for Economic Development, New York, 1958), vol. 1, p. 191.
4. W. Levi, *ibid.*, vol. 2, p. 243.
5. D. Riesman, *ibid.*, vol. 1, p. 234.
6. R. G. Townsend, *ibid.*, vol. 2, p. 187.
7. R. R. Isaacs, *ibid.*, vol. 1, p. 339.
8. L. Gulick, *ibid.*, vol. 1, p. 320.
9. A. Hansen, *ibid.*, vol. 1, p. 328.
10. N. H. Leonard, Jr., *ibid.*, vol. 2, pp. 79, 80.
11. G. Colm, *ibid.*, vol. 1, p. 244.
12. P. Drucker, *ibid.*, vol. 1, pp. 15, 16.
13. P. Homan, *ibid.*, vol. 1, pp. 22–4.
14. D. Gale, "Mathematics and economic models," *Am. Scientist* 44, 43 (1956).
15. J. M. Clark, "Economic means—to what ends?" in "The Teaching of Undergraduate Economics," *Am. Econ. Rev. Suppl.* (Dec. 1950), p. 36.

Radioactivity of People and Milk: 1957

Measurements of 2200 samples for cesium-137 and potassium-40 levels reveal interesting correlations.

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The investigations of the gamma activities of people and foodstuffs previously reported for 1956 (*1*), made by means of a large 4π liquid scintillation counter (*2*), have been continued (*3*). During 1957, dried milk was routinely sampled from 31 locations within the continental United States, and a few spot checks were made on foreign milks. A total of 887 measurements were made on milk. Studies on people included 820 determinations, mostly weekly measurements on a group of 14 control subjects, but 311 determinations on people from 30 states were included. Measurements on a total of 518 samples of dried blood from nine states completed the program. The entire series of 2200 measurements occupied about 20 percent of the operating schedule of the counter and was accomplished by one full-time and one half-time technician (including the data processing).

It is clearly impossible to present here a tabulation of all results or even to give the detailed graphs of activity versus time by states. The original data for 1956, 1957, and part of 1958 are tabulated in *HASL-42* (*4*). This article presents only the broad outlines of the results and indicates the principal correlations which are emerging.

As before, simultaneous measurements of both potassium-40 and cesium-137 were performed on all samples. The unit of measurement for the latter has been changed to micromicrocuries of cesium-137 per gram of potassium, to conform with general practice. Detailed gamma spectrum measurements made with the Los Alamos crystal spectrometer (*5*) have shown that these are the only significant gamma-emitting nuclides in this energy range normally present in people and milk. During periods of weapon testing, barium-140 appears prominently in milk, as previously reported (*6*), but we have not detected it in people. The electronic computation of the data as now programmed does not take barium-140 into account, and barium-140 is treated as if it were potassium-40. Because of the predictability of the potassium content of milk, it is feasible to calculate both barium-140 and cesium-137 from the data, and the programming is currently being revised to accomplish this. In the present article, however, all milk samples showing barium contamination are excluded from the average. The extent and duration of typical barium-140 contamination are illustrated in Fig. 1, which shows the yearly data for fresh milk samples from New Mexico. (Several sources are represented in these samples.)

The absence of barium-140 in people is indicated by Fig. 2, which shows the cesium-137 and potassium-40 activities averaged over 14 control subjects measured weekly. Barium-140 derived from the milk would have produced a rise in the apparent potassium-40 level (lower curve) during the summer months. The increase in cesium-137 level at this time reflects the corresponding increase in the milk supply.

The presence of iodine-131 in either people or milk would not constitute an interference, since the low energy gamma ray does not fall in the spectral bands accepted by the analyzers. The improved liquid scintillation counter now under construction will have additional energy channels for iodine-131 and for beta-ray bremsstrahlung.

Results

The frequency distribution of potassium-40 in the population sample is shown in Fig. 3. The average specific activity is 2.70 gamma rays per second and pound, corresponding to a potassium content of 1.98 grams per kilogram of body weight, or 139 grams of potassium in the 70-kilogram "standard man." The standard deviation of the normal curve is 14 percent. The average is not significantly different from the 1956 result (*1*), but the deviation is slightly less (the previous figure was 18 percent) and there is no tail on the upper end of the distribution, probably a result of better control over surface contamination.

The corresponding curve for cesium-137 is given in Fig. 4. The width of 36 percent is identical with the 1956 value. The possible significance of the very small difference in the average values (44 and 41 micromicrocuries of cesium per gram of potassium) is discussed below.

The cesium-137 data for people as a

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