



## THE AMERICAN FUTURE: OTHER VOICES

As the preceding dialogue makes clear, arguments over “resources and growth” policy hinge partly on opposing views of man’s future access to the earth’s finite resources—such as metals and fossil fuels. The “cornucopians” predict that, thanks to man’s technical ingenuity, such resources (or adequate substitutes) will prove ample in the long run. The pessimists fear that high development costs and environmental damage preclude an easy transition to an “Age of Substitutability.” During the dialogue, most speakers seemed to agree on one point: political barriers to any timely world consensus on “growth” policies are perhaps the biggest immediate problems. Such matters are examined below by Walt W. Rostow, Henry C. Wallich, and Eugene B. Skolnikoff in excerpts from *Growth in America* (Greenwood Press, 1976), edited by Chester L. Cooper, a former Fellow, and comprising 12 essays prepared for conferences sponsored by the Wilson Center.

### The Value of *The Limits to Growth*

by Walt W. Rostow

The most searching international task we face—and this includes Japan and Western Europe—is our common relations with the parts of the world that have come late to the industrial revolution. The problem here is a long-range version of what we are beginning to feel in energy, food, and raw materials. It is the problem posed in *The Limits to Growth* and other projections that demonstrate that trees do not grow to the sky.

Although I am fully aware of its technical inadequacies and the lack of data to fill the terms of its equations, I have not joined in criticisms of *The Limits to Growth* for a particular reason. To achieve the kind of international cooperation required to deal with the tasks ahead will require profound adjustments in the way men and governments think and act.

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*Walt Whitman Rostow, 60, is professor of economic history at the University of Texas. He served as Special Assistant to President Johnson (1966-69) and formerly taught economic history at MIT. His best-known work is *The Stages of Economic Growth* (1960).*

*Henry Christopher Wallich, 62, is one of the eight Governors of the Federal Reserve System. Until he joined the Fed's Board in 1974, he had been a professor of economics at Yale since 1951 and a columnist for Newsweek since 1965. He was a member of President Eisenhower's Council of Economic Advisers (1959-61).*

*Eugene Bertram Skolnikoff, 48, is director of the Center for International Studies at MIT, where he has taught political science off and on since 1952. Also an engineer and inventor, he holds a patent on electronic circuits.*

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And this takes time. With all its weaknesses, *The Limits to Growth* has made a contribution to that change in perspective.

Surely the long-run task will be to find the way to some more or less stable but dynamic equilibrium between man and his physical environment; and we must do so after two centuries of relatively uninhibited expansion in population and production, with all the habits of mind and action that experience carried with it. Surely it is possible, if we are not wise, to produce yet another grandiose cycle in man's affairs and so act as to disintegrate the industrial civilizations we have built. And surely, to avoid that outcome, we must design policies that permit the latecomers to move forward for a time as the presently more advanced societies go about dealing with the tasks of the search for quality.

In confronting together these questions, the nations that entered industrialization earlier and later each have serious grounds for complaint against one another. The latecomers can complain of the profligate use of finite natural resources in the past by the more advanced and their current disproportionate absorption of such resources. As representatives of the less industrialized nations stare at the computer readouts, they are bound to ask: Why should we be denied the stage of high mass consumption, whose costs and limitations are mainly perceived by those who take its blessings for granted? Why should we be denied the uncertain adventure of experimenting with high levels of per-capita income beyond?

The more advanced nations also have cause for complaint. The latecomers have eagerly absorbed the benefits of modern medicine and public health, but they have been extremely

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laggard in investing political, administrative, and physical capital in measures of population control. Some, indeed, have looked to vast increases in population as a future source of power in the world. Why should the more advanced nations permit themselves to be dragged down by such undisciplined self-indulgence?

Now, in fact, the world is not neatly divided, as conventional rhetoric suggests, between rich and poor nations. The so-called developing nations lie along a wide spectrum, whether that spectrum is defined in terms of the measurable but ambiguous index of GNP per capita or the harder-to-measure (but more basic) index of the degree to which they have absorbed efficiently the pool of modern technology. It is a long stretch from Yemen, or even Haiti, to Argentina, Brazil, and Mexico; and there is a sense in which India and China (at not much more than \$100 per capita) are technologically more advanced than Venezuela (at, say, \$1,000 per capita). Moreover, the incidence of the relative shortage of foodstuffs and raw materials will vary: some developing nations will, on balance, benefit from the agricultural and raw-material resources they command; others will suffer from rising import prices, if not absolute shortages.

Nevertheless, despite these real complexities, there is latent in the world as it is a most dangerous potential confrontation between the more developed and less developed nations as they come to perceive the limits within which they will both have to work out their destinies: the more developed confronting the possibility of absolute reductions in income per capita; the less developed, the possibility that tragedy and decline might well set in before they attain the levels of Western Europe, North America, and Japan. As these shadows fall over the minds of men, we could see emerge a desperate scramble in a more intense version of the mercantilist spirit as nations once again contest for sources of foodstuffs and raw materials and markets. In a nuclear age, the outcome of such a return to a kind of last-ditch mercantilism could bring with it catastrophe greater, even, than that which the semi-knowledgeable computers project from the present pace of population increase, industrialization, and pollution.

It will evidently take a remarkable and sustained effort by men and governments at different stages of growth to avoid such catastrophe and find the terms of cooperation that will permit them to bring the human race from where it is to a relatively stable, if dynamic, relationship to its physical environ-

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ment. Such terms, if they are found, must evolve from protracted joint study of the facts. The only procedural rule that has a chance of taking the human race through in reasonable safety is Jean Monnet's dictum for Europe and the Atlantic: "Bring men together to examine and solve a common problem, not to negotiate." But also there will—and must—be negotiations.

## Could Growth Be Stopped?

*by Henry C. Wallich*

Suppose there existed a national will to prevent further increases in GNP. To begin with, it would become immediately apparent that that is not really what we had in mind so long as population is still growing. To combine a constant GNP with rising population implies a decline in per-capita income. Presumably, then, halting GNP growth would have to mean halting GNP per-capita growth.

With no great effort of the imagination, one can today visualize population growth being brought to a halt. But if nothing else happens, zero population growth (ZPG) would accelerate rather than retard per-capita growth. The main reason is that new savings would no longer have to be devoted, in part, to equipping the additions to the labor force with new tools. The stock of capital per worker would rise more rapidly than before. Thus, halting per-capita growth would be more demanding under these conditions.

It takes a greater effort of the imagination to visualize a prohibition on an increase in the capital stock. People apparently want to save in order to provide for their old age, and the more they do so, the richer they get. This saving is one of the principal sources of growth. One can visualize a fiscal system in which the government absorbs all new savings by borrowing and neutralizes them by expenditure on public consumption. The savers would still have their claims that they could draw down in old age, but the stock of physical capital would not increase.

Even this, however, would not kill off all growth. As physical assets employed in production wear out, they must be replaced. If there is technological progress, they will be replaced,

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at no higher cost, by more efficient equipment. Growth thus could proceed without new saving. If the new technologies are resource-saving or environment-protecting, it might indeed be difficult to persuade people that this kind of growth should not be allowed to go forward solely in order to enforce a rigorous zero growth policy. And in the unlikely event that government succeeded in stopping all forms of growth of productive enterprises, it might still be possible for ingenious individuals to engage in private growth-oriented activities on the do-it-yourself system.

Growth is likely to prove a hardy plant. Attempts to stop it will turn out not only misguided but futile. Operating from the pragmatic expectation that growth is here to stay, a sensible policy should try to guide it in a manner that would neutralize the threats that growth supposedly carries. The question before us, in other words, is how to grow safely.

It is unlikely that agreement will be reached about the risks of continued growth. That debate has been going on since Malthus, and there will always be occasions to cry wolf. However persuasive the contrary case, it will never be possible to prove that some particular wolf will not actually arrive and stay.

Economists contend that depletion of low-cost resources will be gradual, that it will manifest itself in price increases, which will stimulate production, substitution, and resource-saving research, and eventually, if necessary, discontinuation of use. Many economists probably believe that this equilibrating process can go on indefinitely, except possibly with regard to population growth and the associated need for reproducible primary products, principally food. It is in fact immaterial whether we visualize this process as occurring within a context of continued growth or of a steady state. Unless the equilibrium mechanism functions, total exhaustion of resources and the environment will occur in a context of stability as well as of growth. The difference is only one of time. The strict logic of those who foresee doomsday requires a shrinkage of economic activity to some minimum that would be sustainable on the basis of recycling after the original supplies of natural resources have been fully used up.

Economists cannot predict what precise course events will take. What they can do is to make sure that the adjustment mechanisms are in good operating order. Prices must be free to give their signals. Markets must be capable of responding to the signals. Where markets do not operate properly—and

this may frequently be the case—devices must be introduced to make them operational. With these mechanisms in place, we can allow events to take their course with confidence. If the school that believes continuing growth is possible is right, the mechanisms will channel this growth and shift resource use in directions that insure continuity. If the opposite side is right, the same mechanisms will so increase costs on all sides that continued growth eventually becomes impossible. This would occur, however, not in the form of catastrophe and collapse. Rather, it would be a gradual slowing and eventual phasing out of growth into a stationary state. The question of which side is correct can be left for events to decide. Immediate action should be directed not toward the futile effort to halt growth, but toward improving the mechanisms that will make growth safe, if it does continue.

## Is Policy Possible?

*by Eugene B. Skolnikoff*

Within societies, as within the global system, a process of fragmentation is and has been underway—a fragmentation closely related to numbers, to erosion of accepted assumptions and values, to new awareness of individual possibilities, to disappearance of old power blocs and sources of legitimacy, and to confusion in a new world of exploding technology little understood and seemingly autonomous. Harold Isaacs has said it well:

We are experiencing on a massively universal scale a convulsive ingathering of men in their numberless groupings of kinds—tribal, racial, ethnic, religious, national.

. . . This fragmentation of man is one of the great pervasive facts of contemporary human affairs. It forms part of one of our many pervasive great paradoxes: the more global our science and technology, the more tribal our politics; the more we see of the planets, the less we see of each other. The more it becomes apparent that man cannot decently survive with his separateness, the more separate he becomes.

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It is a matter of argument, and research, as to the causes of this fragmentation. Certainly part of the motivation, as Isaacs says, is a search for security and identity in an increasingly complex and impersonal world. There is no reason to think that the continued growth of population and complexity of life will do other than stimulate this drive toward tribalism.

Coupled with the interdependence of modern society and with the erosion or disappearance of old assumptions, tribalism creates enormous strains on a political process. These ethnic or religious or national tribes no longer accept the simple notion of elites, nor are they any longer willing to give up voluntarily their claims for participation in social decision-making, nor can a society operate by ignoring them. And communication between them becomes more difficult as cultural development diverges. The result is growing competition and conflict—and less, rather than more, unity of purpose, just when physical realities call for the opposite.

Perhaps this fragmentation is the necessary prelude to a new, higher form of integration, but there is little other than idle hope to sustain such a prediction. Rather it is much more likely to be one of the societal characteristics with which political processes will increasingly have to cope. It goes to the heart of politics, since these groups will be battling for their share of power. And thus it will add greatly not only to the agenda of politics but also to the background noise and conflict within which the process will have to work.

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The legitimacy of the political authority is at stake unless the often strident new demands for participation are met. But participation is usually inimical to efficiency because of: increased competition for resources among more groups, increased time necessary for resolution of issues, difficulties of communication, and varying levels of competence and information.

The information needed for planning—the nonquantitative indicators or projections that the market does not produce—is not necessarily available or understood or is contentious. How should preferences be determined when needed? Questionnaires? Ad hoc elections? Instantaneous electronic feedback systems? Under what conditions and with what information?

And the growing importance of external events may mean planning bodies have only a portion of the subject actually under their control.

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Regulatory agencies and mechanisms also share these problems and have some of their own: public interest in the subject (and hence in the agency) wanes, reducing public pressure and awareness; the only groups consistently interested, and thus able to exert continuous pressure or to infiltrate, are those to be regulated; often the commercial interests to be regulated are able to organize political and economic power more effectively than the more diffuse groups affected by the commercial interests; the original political objectives and setting that led to a particular regulatory institution may have changed, but the statutory base and historical development make change exceedingly difficult; and the knowledge on which to base regulatory decisions is often uncertain and controversial.

The problems inherent in bureaucracy itself must be added to all of these, especially since a concomitant to increased complexity and scale in society is expanded bureaucracy. The difficulties of generating adequate information and analysis, of modifying the status quo, of integrating action, of developing competence, of providing a sense of participation, of influencing permanent bureaucracies, and of reaching effective and timely decisions are all well known and grow along with bureaucratic expansion. The situation is further complicated by the growing need for more international bureaucracies, which tend to be far less satisfactory than U.S. domestic bureaucracies.

Finally, the information and analysis problem must be stressed. The increased scale and complexity of society and of its artifacts, especially their technological complexity, greatly multiplies the difficulty of providing adequate, comprehensible, and timely information for decision-making. Society is much more vulnerable to the parochial views of small groups able to understand facets of the issues, and the difficulty of developing alternative policy choices is enormously compounded. Informed public debate over the consequences of planning choices becomes rare, at best.

Thus, the great benefit of the market for self-regulation must increasingly be sacrificed because it is not adequate to serve social goals. But the capability of political institutions to carry out the planning and regulation thereby required is also in question.

