REGIONAL SCIENCE AND PUBLIC POLICY*

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I would like, briefly and with a broad-brush stroke, to comment on three points:

1. The "regional science cycle" -- if, indeed, there is one;
2. The relationship of regional science to public policy; and
3. Several current and emerging areas to which regional scientists can contribute. These are:
 - The growth of the service sector and the implications of this growth for regional economic development;
 - The regional implications of environment protection; and
 - The regional implications of U.S. International competitiveness.

THE "REGIONAL SCIENCE CYCLE"

Areas of interest among scholars rise and fall like the tide, as new problems arise and as old problems take on new form.

Archivists of recent economic history will recall the concern in the 1930's and 1940's with a broad sweep of regional and urban problems (See President's Research Committee on Social Trends [5]) and with regional planning and public investment for regional economic development (See, for example, U.S. National Resources Planning Board [8] and Galbraith [2]). But interest seemed to languish until the 1960's, when there was a resurgence of research on regional and urban issues and of large-scale programs of public investment and planning for local and regional economic development.

Is this interest short-lived? Some have said that regional science has started to wane. In part, this is said to be because social scientists -- particularly economists -- have turned their attention since the latter part of the 1960's to national problems of inflation, general unemployment, and international economic relationships. In part, also, -- and not unrelated -- it has been attributed to the shrinkage in federal research and development expenditures and the consequent tightening in academic budgets. In economic terms, this suggests that recent disruption in the growth of the national economy has had a substitution and an income effect, both working against the study of regional and urban issues.

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Our field is certainly too firmly established to give credence to observations such as these: I believe that, even with shifts in focus and emphasis on social and economic problems, regional science will continue, over the long run, to develop and to contribute to both scholarship and public action.

Only five years ago, a survey on specialization in economics (Simon [7]) found that regional and urban economics was an underinvested specialty. Although considerable progress has been made, both in contributions to scholarship and to public knowledge, the field can hardly be said to be overinvested. By all evidence, greater investment in time and effort is warranted.

REGIONAL SCIENCE AND PUBLIC POLICY

A great many questions can be raised about the relationship of regional science to public policy. This is not to denigrate the contributions that regional scientists have made to the world of scholarship. But the link between scholarly research and public policy is neither clear-cut nor direct. I am sure that we all recall the discussions in history of economic thought textbooks about the contributions of Adam Smith, David Ricardo, John Maynard Keynes, and others, to the actual formulation of public policy.

In the comments that follow, I would like to emphasize that the interface between research and policy -- especially on basic issues -- requires the careful attention of the community of regional scientists. Ely Devons [1, p. 25], a noted British economist, who spanned both academia and public service, put it well when he pointed out that:

It is one of the virtues, or perhaps vices, of economists that paucity of evicence is no impediment to their formulating theories and policy recommendations. Indeed, without the frustrating and irritating complexities of reality, propositions of a simple and elegant kind are much easier to formulate; and since the evidence to confirm or rebut them is often not available they can be held and expressed with zeal akin to that of the medieval theologian. This is a godsend to the public and the politician, for it gives apparent rational and scientific support to proposals for political action.

A rejoinder to such a view may be that regional science is still in an evolutionary stage. Nevertheless, while scholars wrestle with the problems of fitting together the bits and pieces of research, the world of public and private affairs is forced by the necessity of daily decisions to deal, as best it can, with disparate social and economic factors. An integrated view is badly needed in the formulation of government and community policies to promote economic and social welfare.

Our knowledge and the techniques for its application can stand considerable improvement. There are in the public service many who seek to clarify objectives, to formulate effective means to attain given objectives, and to shape rational policy. Their efforts would be aided if the thought and knowledge of scholars, unhindered by day-to-day pressures, were more frequently focused on the analysis of problems calling for public action.

I do not propose that independent investigators should rush in to advocate policy. Instead, I suggest merely that investigators in an academic setting can contribute something essential by thoroughly analyzing real problems in their complex social setting, by delineating alternatives, and by examining and estimating the probable consequences of given policies and actions.

Our concept of the problems of resource use and economic development and the attitude of economists toward these problems have changed markedly. The study of distressed areas, stranded communities, and backward regions has made us aware of local troubles that formerly attracted little attention or public response. The deliberate assumption of responsibility by government to alleviate economic and social distress and to assist local and regional rehabilitation has forced a consideration of local and regional welfare, by itself, and in relation to the national welfare.¹ The problem of economic development has thus been recast from an academic pursuit to a recognition of the need for specific practical programs and of positive action for localities and regions.

Meanwhile, economists have emerged from the delusion that automatic adjustments will take place in the economy so that in the end all will benefit. Problems of communities and regions do persist, even in periods of national prosperity.

To these changes may be added the increased emphasis now attached to economic and social security. Communities are striving to attain greater stability of incomes for their residents -- and they will do something, rightly or wrongly. Communities will act, regardless of whether guidance is provided by regional scientists.

Let me now review three very basic questions. Although considerable research has been conducted in these areas, the evidence is not conclusive. What is worse, many of the inconsistencies, errors, and fuzzy concepts have found their way into the area of public action.

What are the objectives of regional economic development? The objectives, as stated in public documents, are often vague. Ultimate objectives are often forgotten in the concern over immediate goals, programs and operating procedures. Among the stated goals may be "industrialization," and operating procedures. Among the stated goals may be "industrialization," "diversification," "balanced economy," to mention but a few. But these are no more than intermediate objectives. How will achieving these intermediate objectives lead ultimately to the protection or improvement of the economic and social welfare of individuals, wherever they are located? Will everyone share in the benefits or will some benefit, while others may gain nothing, or even be worse off? And further, does the succession of short-run adjustments maximize real income and welfare over the long run? Regional scientists should provide more help in clarifying objectives and in showing the probable results of trying to attain given objectives.

Is local economic development desirable? Would the welfare of individuals in given areas, and of others throughout the nation, be more enhanced by migration to the more promising areas, or by local economic development? Analyses are numerous and a case can be made for each side of the issue -- the results, so far, I believe, is a "Scotch verdict." Apart from the pure economics of the issue, there is the further question of what weight should be given to the recognition of local preferences and to regional differences in culture, values, and aspiration.

How can more rapid economic development be achieved? One view -- a widely held one -- is that any new enterprise or industrial expansion in a community is desirable from an economic viewpoint, as multiplier analysis is clearly said to show. Increased employment, larger payrolls, a greater volume of retail and service business, improvements in real estate

values, and so on, are expected to result, and some or most of the residents are expected to share in the benefits. This is considered sufficient justification. The initial results are often appraised so highly that ultimate consequences are overlooked. This line of reasoning says in effect that the benefit-cost ratio of the proposed enterprise or activity approaches infinity, while that of subsequent economic developments must be considered to be in the neighborhood of zero. The fallacy is evident. Such enterprises may subsequently be found to be economically unsound, or to be poorly located, or to be outmodeled by change. In their collapse, the temporary gains may be more than offset by distress, losses, and the costs of readjustment. Surely regional scientists can provide more guidance on the long-run consequences that would result from policies that are based on such a view.

In judging which industries to encourage, decision-makers will often-times give insufficient attention to the extent to which the industry may improve or impair employment and incomes -- seasonally, cyclically, and secularly. Of course, we must not overlook the fact that perfect estimates and perfect judgment are beyond human capacity. But a large body of data is now available. This data, along with the analytical tools in the regional scientist's tool kit, should provide greater documentation than now exists on the long-run consequences of specific industrial location and development.

A second and commonly held view is that more rapid economic development can be achieved through diversification. Agricultural areas seek industry; industrial areas seek affiliated and unrelated industries; raw material areas seek processing and fabricating industries, and so on. Regional specialization in one or a few lines is often regarded as a sign of economic weakness and underdevelopment. Is it? Many moons have passed since the question of specialization versus diversification commanded serious attention.

A third view of improving long-run economic conditions is to seek "economic balance." Of the various concepts of "balance," I shall consider only two. The first is empirical and holds that the pattern of industry in the nation or in some roughly comparable high income area is the desirable goal. This concept creeps in obliquely and often unintentionally. In comparing the pattern of economic activity in a particular area or region with that of a higher income area (or the national average), there is a tendency to regard the dissimilarities as evidence of a lack of balance. The conclusion reached is that remedial measures are necessary. That the most productive and stable economy possible for one area or region might bear no close resemblance to that of another area or region is possible; that they might have marked differences is highly probable. To base development policies on such an illusory concept is likely to have disappointing results. Have regional scientists contributed to or adequately dispelled such notions?

A second concept of "balance" is that of an optimum balanced economy. While there is merit to the use of such a concept in visualizing the requirements of development policy, the concept has been couched, more often than not, in the analytics of programming solutions, mechanically and without regard for nonlinearities and the realities of the case. I believe that Sir Dennis Robertson's "lament" (in Lundberg and Knox [4]), expressed in verse, is quite appropriate on this point. He said:

I have at length become non-linear.
I wonder glumly round the house
As though I were exogenous.

I scarcely now a pallid ghost
Can tell ex ante from ex post.

My thoughts are sadly inelastic,
My acts incurably stochastic.

Even on the basic questions to which regional scientists have devoted considerable research energy, evidence suggests that not only more, but also a pulling together of findings, can be a useful background for decision-making.

One must also ask: Is it better to use sophisticated tools which require a great deal of data -- and, in the process, lose some insights that may be obvious from the data -- or is it better to use less sophisticated tools and depend on the insights of the researcher?

CURRENT AND EMERGING AREAS

Let me turn very briefly to several current and emerging developments that should command the attention of regional scientists. These are important areas in which scholarly research can contribute immeasurably to planning and decision-making.

The growth of the service sector and the implications of this growth for regional economic development. Regions have been viewed traditionally in terms of developing the resources needed to manufacture goods. Thus, research has focused on locating industries, financing industrial development, and developing markets.

But note the dramatic growth that has taken place in the service sector. The shift from a goods-producing to a service-producing economy took place shortly after World War II [9, p. 17]. Since 1947, four out of five new jobs added in this country have been service jobs. For each new dollar spent, more jobs have been added in services than in commodity production. What are the implications of this development, not only for employment, but also for wages and income and for the utilization of manpower resources at the local and regional levels? And, what are the implications for the growth of urban areas as compared with rural and smaller communities? (See for example, [8, p. 2])

The regional implications of environmental protection. Much of the present discussion of environmental standards focuses on the effect of environmental legislation on the economy as a whole and on the growth pattern of the industries that are affected by such legislation. Relatively little attention has been given -- outside of the press -- to the effect of environmental protection on the location of industry and on the growth of communities. The benefits and the costs have yet to be adequately assessed. More broadly our views of the economic welfare gains of subnational economic development need to be balanced against the more encompassing -- and less well-defined -- social welfare. In short, this is the question of "growth versus choice" in a new form.³

The regional implications of U.S. international economic competitiveness. Considerable attention has been directed, especially in Congressional proposals, to the improvement of U.S. competitiveness in international trade. In all of the discussions -- as far as I have followed them -- one crucial body of analysis is conspicuously lacking. We do not know the locational configuration of the industries that are most affected, both by exports and by imports, and the effects that patterns of trade would have on communities and regions within the U.S.

CONCLUSION

I have come to the end of my remarks. The purpose of all this has been to point out that, while much valuable research has added to our understanding of regional development, continued effort is called for. At the same time that regional scientists push ahead in their research, they should also draw together the knowledge gained in order to provide a more cohesive and coherent background for public decision-makings.

If regional science loses its vigor -- and I don't think it will -- it will not be for a lack of important real issues and analytical requirements. If regional science is attuned to the problems, both current and evolving, it will contribute materially to the well-being of the nation and its people -- especially those who are in areas of poverty and unemployment.

FOOTNOTES

¹For a discussion of the consistency of national and regional policy goals, see Richardson [6, pp. 365-379].

²For much of the basic data base in the regional field, we acknowledge the work of the Regional Economics Division within the Bureau of Economic Analysis (formerly the Office of Business Economics) of the Department of Commerce.

³In an article in 1956, Peter Wiles [11] raised the issue of "growth versus choice" in the context of comparative economic systems. For a delightful and meaningful discussion of this issue in the context of U.S. economic growth, see "Too Much and Too Poor" and "Consumers' Values in a Crazy World" in John Ise [3, pp. 31-47 and 99-118].

REFERENCES

- Devons, Ely, "Economists and the Public." Lloyds Bank Review, July 1965, pp. 19-29.
- Galbraith, John Kenneth, The Economic Effects of the Federal Public Works Expenditures, 1933-1938. Washington, D.C.: U.S. Government Printing Office, 1940.
- Ise, John, The American Way, Lawrence, Kansas: The Allen Press, 1955.
- Lundberg, Erik and Knox, A.D. (Eds.). The Business Cycle in the Post-War World. N.Y.: St. Martin's Press, 1955.
- President's Research Committee on Social Trends. Recent Social Trends. 2 Vols.; N.Y., 1933.
- Richardson, Harry W., Regional Economics: Location Theory, Urban Structure, and Regional Change. N.Y.: Praeger Publishers, 1969.
- Simon, Julian, "Investment Opportunities in Economics -- 1967." The Economics Journal. Vol. LXXVII, No. 310 (June 1968), pp. 476-479.
- Stewart, J.M.W., "The Inner City: Flight of Industry." Area (Institute of British Geographers). Vol. 3, No. 3 (1971)
- U.S. Department of Labor. The U.S. Economy in 1980 (BLS Bulletin 1673), Washington, D.C.: U.S. Government Printing Office, 1970.
- U.S. National Resources Planning Board. Regional Planning. Washington, D.C.: U.S. Government Printing Office, 1936.
- Wiles, Peter, "Growth versus Choice." The Economic Journal. Vol. LXVI, No. 262 (June 1956), pp. 244-255.