ECONOMIC SCIENCE IN THE FUTURE

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The *Economic Journal* is celebrating its one-hundred year life, in part, by publishing a special issue (January 1991) in which several economists make personal predictions about developments in the discipline, or "science," over the next century. My own contribution to this is entitled "Economics in the Post-Socialist Century," and in that contribution I argue that the research programs of economists have been, are and will be influenced by the events of history. And I suggest, in this respect, that 1989 will prove, indeed, to have been a critical year. That year marked the recognition that socialism, defined in terms of state or collective ownership and/or control of the means of production, is not an economically viable organizational alternative. The century-long ideological debate no longer offers the framework for arguments carried on within the science itself. As a result, I suggest that political economists will find themselves in more agreement on policy issues, and that such agreement, in turn, will enhance the influence of economists on political events. History influences economics, but economics also influences history.

I do not propose here, in this paper written only a year later, to modify the essential thrust of my earlier argument. I do propose, however, to extend the prediction in a direction that, in one sense, may seem to run counter to the earlier discussion. Socialism is dead; the market is alive and well, especially as an idea. And economists almost universally agree that market organization works "better" than politicized economic control, with "better" defined, quite simply, in terms of the production of more valued goods and services.

There are, however, several dimensions along which the performance of an economy can be measured. For the most part, although not universally, economists have analyzed market structures in terms of their relative efficiency in allocating resources among separate uses within an abstracted model that freezes preferences, resource supplies and technology. Formalized general equilibrium models, with highly elaborate existence proofs, have occupied center stage in the economists' toolkits over the middle to last decades of the twentieth century.

At the start of the 1990s, however, the limited applicability and usefulness of these models is being increasingly recognized. The formal proof that effectively competitive markets will operate so as to place "resources in their most highly valued uses" in a setting of fixed preferences, resources and technology tells us very little about the world of economic reality, in which persons, through their own choices, discover what their preferences are, determine the quantity of resources used for productive purposes and dictate the rate of exploitation of technological opportunities. The emerging recognition of this simple point suggests to me that static general equilibrium analysis will assume a less central position in economists' research programs over the coming decades, and that the normative welfare implications derivative from the static allocative efficacy of markets will seem less rather than more compelling.

The "welfare economics of markets" in a dynamic, nonequilibrium, evolutionary framework remains largely to be developed. But it is possible, I think, to identify several research programs that will be relevant to this inclusive enterprise, research programs that will occupy economists' increasing attention. The Austrian-Hayekian conception of the market as a "discovery process" will likely yield further insights, and perhaps especially as the role of entrepreneurship [Kirzner, 1973] is more fully incorporated into models of economic interaction. The property-rights/public-choice emphasis on comparative incentive structures in differing organizational forms will surely be developed beyond its current limits. The relationship between the radical subjectivism of Shackle [1972] and the modern theories in the physical sciences of self-organization outside of equilibrium warrants further inquiry [Buchanan and Vanberg, 1991].

I want here, however, to point out a quite different set of developments that will surely assume increasing importance. Recall Adam Smith's central theorem to the effect that the division of labor, upon which economic progress depends, is limited by the extent of the market. Economists, generally, have been able to neglect this central theorem of Smith, because they have been satisfied to remain behind the assumptions of their models in which the extent of the market is exogenously fixed. If the assumed fixity of preferences, resources and technology is dropped, the extent of the market, and hence the potential for exploiting specialization, comes within the choice set of participants in the economy.

The relationship between generalized increasing returns and economic progress, sensed by Adam Smith and Alfred Marshall, and articulated informally by Allyn Young in a seminal, but widely misunderstood, 1928 paper, will dominate many research programs, and in many applications and extensions [Kaldor, 1985]. Already by 1991, there are developments to be noted in theories of endogenous growth, associated particularly with the work of Paul M. Romer [1987; 1989] and new theories of international trade [Ethier, 1982]. In my own work over the period 1987-90 [Buchanan, 1991a; 1991b; forthcoming], I have stressed the importance of the work ethic, the economic relevance of which depends on the presence of generalized increasing returns. Quite clearly, comparable extensions could be made to the ethic of saving. More controversially, but in some respects much more interestingly, Adam Smith's classical distinction between productive and nonproductive labor deserves reinterpretation and reexamination in the light of the modern revival of the increasing returns analysis.[1]

The welfare economics of the middle decades of this century, sometimes called "theoretical welfare economics," was developed within the collectivist-socialist mindset, and its central thrust involved the identification of market failure, defined against the idealized allocative efficiency of static equilibrium along with the normative precept that such failure provided a *prima facie* case for politicized correction. The post-socialist welfare economics, most of which remains to be developed, will emerge in a mindset that examines markets in nonequilibrium settings and that accepts the incentive incompatibilities always present in politicized alternatives. This post-socialist welfare economics will necessarily incorporate the interdependence between dynamic market performance and the institutions (property rights, legal structures, constitutional rules) within which persons economically interact. The "new institutional economics" that has emerged in the 1970s and 1980s already has done much to fill in the gaps here. But the post-socialist welfare economics also must incorporate the interdependence between dynamic market performance and the ethical norms that constrain the behavior of the economy's participants. This part of the research program scarcely has been commenced. An "economic theory of ethics" must emerge to take its place alongside the "economic theory of law" and the "economic theory of politics."

NOTES

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1. For a preliminary effort, see my paper "The Simple Economics of the Menial Servant," [1991].

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