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Chapter Title: Emphasis on the National Economy

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1. EMPHASIS ON THE NATIONAL ECONOMY

Much of the work of the National Bureau has been either on aggregative or on more specialized aspects of the national economy of this country. This is true of the studies of national income and wealth, capital formation, productivity, consumption, economic growth, and business cycles, which account for a predominant proportion of the Bureau studies. The same concentration on the economies of units classifiable as sovereign states characterizes all economic research—if we define it as the systematic use of observational data aimed at findings of established relevance to economic analysis. Here economic analysis is taken to be the implicit analysis typical of economic history, or the formalized structure of economic theory, or the combination of history and theory that provides intellectual bases for consideration of economic policy. Even when regions or components within the national economy are stressed, reference to the national aggregate must provide the weights and reveal the role of the region or component which is an integral part of the aggregate. Even when larger groupings of, or relations among, national economies are emphasized, the basic unit is still the national economy, as may be seen in any international compendium of statistics or in studies on international relations and comparative economic growth and structure.

The reasons for this concentration on, and persistent reference to, the national economy are far-reaching. The foremost reason is that the sovereign state sets the institutional conditions within which economic ac-

tivities are pursued, the boundaries within which markets operate and within which human resources are relatively free to handle material capital assets and claims to them. Furthermore, given the continuously changing material technology generally characteristic of countries taking advantage of modern economic growth potentials, the sovereign government is the overriding authority that resolves conflicts generated by growth and screens institutional innovations, sanctioning those believed essential and barring others. Except for such recent, and still incomplete, unions like the European Common Market, no combination of two or more sovereign states can be treated as a single source for basic decisions that channel economic performance or that resolve the internal conflicts generated by economic growth and related social change. Such a treatment would face major difficulties: limited mobility of resources, restricted freedom to pursue divergent paths of social innovation, and absence of community of feeling, among others.

It is the existence of national economies, separated from the rest of the world by, and unified under, the aegis of an effective sovereign government, and yet large and internally diverse enough to comprise distinct social and economic groups, that may have led to what is perhaps the most pervasive idea in economics. This is the conception of an economy as a system of different but interrelated parts, a system that is a unit despite the differences in its component elements and its partial dependence on other such units in the world. To be sure, this concept could be applied to a firm, or a region, or the world. But in the former two cases, there is little basis for claiming that the system is so independent of

others that it constitutes a separate unit susceptible of complete analysis; and in the case of the world, one can hardly argue that the national economies are integral parts of a unified system. It could be claimed that the notion of society in pre-Classical economics was even more representative of a unified system of diverse parts, in suggesting that the several economic and social groups, although different, were interrelated and analogous to the several members of the human body. But it was the great contribution of the discipline of economics to deny that the diversity within the society was innate in human nature or in blood lines, but was, rather, limited to differences in economic functions—which left the individual free to seek that function for which he felt most suited.

Without committing myself to an adequate exploration of the sources of the basic economic concept suggested above, I merely suggest that this concept of an economy represents a stylized reflection of the unity in diversity, of cooperation through the markets as set by an effective central authority, that might prevail within national economies under the aegis of a viable sovereign government. The economy is seen as a unified system of interdependent components, with members capable of responding to the market impulses in a forecastable (and under certain conditions, optimal) way.

If a national economy is the most likely empirical counterpart of the major notion of economic analysis, and if economic research aims at findings relevant to economic analysis, it follows that economic research must concentrate on national economies—their aggregate dimensions, their component parts, and the interrelations of the latter. This connection is strengthened

when we consider the bearing of economic research and analysis on national policy. If the sovereign state is the major agency entrusted by society to set the rules, to define the institutional channels for economic and social behavior, the major practical use of economic analysis, whether in history or theory, and of the research relevant to such analysis, is in translating the findings into some policy choices, with alternatives available to the sovereign government. In the evolution of modern economies, much economic analysis was generated by the presumption that the problematical and undesirable consequences of the operation of the economy could be avoided or minimized, without undue loss, by modifications of the rules or by some other ameliorative action within the purview of the authoritative organs of society—a major responsibility of such authority. Since the sovereign state constitutes that authority, the conception of its responsibilities vis-à-vis the economy leads naturally to concentration of economic analysis on the national economy. This argument, while similar to the one made above, is new in that it stresses the importance of our *views* on the feasible role of the government, since any changes in these views mean changes in the volume and direction of economic research.

Concentration on national economies, with due regard to the major distinct but interrelated sectors and components, still leaves wide scope for economic research. And, indeed, a glance at the many accepted specialties and "fields" in the discipline of economics reveals differences in emphasis on production sectors (agriculture, industry, transportation, etc.); on production factors (labor, capital); on infrastructure institutions, particu-

larly those dealing with money and credit; on regulatory agencies and government in all the variety of its drafts upon and contributions to the economy; and on international flows (including the economics of war and defense). All of this is in addition to the pursuit of the total view of the national economy in history and theory, including quantitative history and quantitative tests of formally structured concepts and hypotheses. Obviously one man cannot deal with trends and prospects in economic research in all of these broad fields. Some have already been covered in the six colloquia organized by the National Bureau, which provide us with some general insights that will be touched upon below.[1] I, therefore, limit my discussion to *quantitative* or *statistical* economic research concentrated on the broadest aspects of the national economy. Even this field is so wide that it permits only impressions that will necessarily reflect my own experience and intellectual predilections. However, they may be useful as bases for discussion of the major priorities in quantitative economic research in this country, with possible inferences for the program of the National Bureau.

Because economic analysis concentrates on the national economy, the research, which is the empirical counterpart of, and basis for, economic analysis, demands the statistical approach (thus emphasizing again the original meaning of statistics as the study of quantitative aspects of states, i.e., of nations). In thought-experiments, which constitute much of economic theory, one can operate with a typical or representative unit—

[1] See pp. vii–x for a description of these colloquia.

economic man, the business firm, the demander, the supplier, the unit of labor, the unit of capital, etc.—and the behavioral pattern of each unit as a formalized reflection of the actual behavior of real members of economic society. With the addition of a few exogenous assumptions (hopefully realistic), one can derive some interesting conclusions as to the functioning of an economy. These exercises are valuable in demonstrating how the social phenomenon of the market, and of market-determined output and its allocation, emerges from the activities of numerous individual units in rational response to economic motives. They may also be useful in deriving some secular trends, with the help of plausible exogenous assumptions concerning natural resource supplies, technology, and the like. But the difficulty is that representative firms in agriculture differ substantially in size, responsiveness, etc., from representative firms in industry or in trade; and that the impact of behavioral patterns on various parts of the economy changes with advances in technology, changing requirements for material or human capital, and so forth. Since the outcome of formalized reasoning concerning the combined effects of representative firms or units depends upon the weights of the differing groups and the rate and direction of impacts of changes in technology and correlated social innovations, we need statistical measures of these factors. Furthermore, the exogenous factors embodied in the assumption may change significantly over time, and in directions different from those postulated in the assumption—obvious examples being the changes from the demographic patterns assumed in the Malthusian set of Classical (and implicitly Marxian) economics, and, even more, the striking effect of technological power vis-à-vis

exhaustion of natural resources, the latter of major concern in the late eighteenth and much of nineteenth century economics. The *complexity* of national economies, with their diverse parts, makes quantification indispensable. The incidence of rapid *shifts* in weights (structure) and of movements in total productivity makes continuous statistical observation imperative. And the changing *social* processes, so closely related to the economic, may necessitate continuous extension of quantitative economic research to aspects of society with which the economic discipline is not currently concerned.

We can now consider some specific aspects of the task of quantitative economic research, concentrated on the national economy and directed at findings explicitly related to economic analysis—whether for history, theory, or policy. These aspects reflect the conditions under which quantitative economic research is pursued—conditions with reference to the supply of data and, to some extent, of human resources, in relation to the requirements of economic analysis.

2. CONDITIONS OF QUANTITATIVE RESEARCH

The Supply of Primary Data

The main fact of life in quantitative research on the national economy is that the supply of primary data is beyond the direct intellectual control of the scholar, in his individual or collective capacity. An economist, unlike a scholar in the experimental natural sciences, cannot isolate "pure" cases of economic and social activity on a countrywide scale. He can only simulate, by la-