than it is to capitalism, so it is not surprising that it is in precapitalist and very early capitalist societies that it has had the most appeal. This essay is not intended, however, to be a complete account of Marxist thought, and it should be judged by its own contribution, which is a real one.

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PROPERTY AND INDUSTRIAL ORGANIZATION IN COMMUNIST AND CAPITALIST NATIONS. By Frederic L. Pryor. International Development Research Center Studies in Development, no. 7. Bloomington and London: Indiana University Press, 1973. xix, 513 pp. \$17.50.

Professor Pryor has produced an important and stimulating book on comparative industrial organization that deserves the attention not only of East European specialists but of economists in a variety of other fields as well. What gives the work its original flavor and special interest is the author's conviction that improved understanding of economic behavior must begin with greatly intensified empirical study of economic institutions in general and of property rights in particular. The emphasis on property is crucial, because the concept yields significant new perspectives on economic processes, and provides a useful basis for organizing and comparing data drawn from countries having different economic systems.

For the purposes of the book Pryor finds it sufficient to consider only certain subsets of property rights; these are the rights conveying claims on income and the rights relating to decision-making or control. The implications of each subset are taken up in turn. Problems associated with *income rights* are discussed in chapters 2 to 4; and, consistent with the methodological preconceptions underlying the study, the approach used here is empirical rather than speculative. Extensive quantitative data are assembled from a number of European and North American nations in order to examine such matters as the patterns of public ownership in capitalist and socialist economies, the distribution of labor and property income, the factors influencing the separation of ownership from control, and so forth.

Then, in the next bloc of chapters (5–8), the discussion focuses directly on the complex of problems that arises from the structure of *control rights*. Since economic power resides in control, questions of monopoly, the size distribution and spatial distribution of industry, and so forth, are the logical topics of concern. Through ingenious use of available data, these aspects of industrial organization are also analyzed in quantitative and historical terms. Chapter 7 is noteworthy for its penetrating commentary on the causes and effects of economic reforms in East European countries. The emphasis here is on the consequences the reforms have had in restructuring the effective property relations and thus in bringing about a redistribution of decision-making power in the affected economies. These themes lead, in turn, to a consideration of the centralization of property rights, and of possible measures of such centralization. Finally, chapter 9 attempts to show how the separate empirical studies of the book fit into a broad framework for analyzing economic systems; the key elements of this proposed construct are, understandably, property, motivation, and information.

It is difficult to be critical of a book that is so well organized, so effective in

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its coverage of the literature, and so balanced in its assessment of the quantitative data. Nevertheless, a few questions can be raised concerning the treatment of some of the property concepts. Although it seems entirely appropriate for the book to focus on income rights and control rights, what is lacking is sufficient emphasis on the interconnections between these two categories of rights. Presumably, control rights are sought by individuals because such rights can serve to increase both their pecuniary and nonpecuniary rewards. Nonpecuniary rewards, however, include certain very elusive "goods," such as power and prestige, as well as more obvious elements of real income. Thus any attempt to determine, for example, the true distribution of real income in a country is subject to very serious measurement difficulties; and, certainly, conventional statistical data can be misleading. Moreover, it seems clear that the success a manager, or bureaucrat, may have in attenuating the ownership rights of other parties will depend, inter alia, on his willingness to assume risk and on the costs to the owners of detecting, policing, and enforcing desired patterns of behavior by the manager. In general, then, when analyzing an economic system, a case can be made for the adoption of a more explicitly defined optimization model based on the preferences and available opportunities of the individuals making decisions.

The interrelations between property rights, transactions costs, incentives, and economic behavior require explanation. But if the theory of property must account for the emergence and development of property rights as well as for the impact of rights structures on behavior, the task of model building becomes very difficult indeed. One might ask whether, initially, a less ambitious model concentrating on *impact* phenomena would not be preferable. By opting for a loose and highly general analytical scheme, Pryor is able to explore a wide range of economic situations. Yet the very flexibility of the approach suggests that in some cases the facts adduced by the empirical investigations may be open to different interpretations than those given.

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## SOVETSKAIA NAUKA V GODY PERVOI PIATILETKI: OSNOVNYE NAPRAVLENIIA GOSUDARSTVENNOGO RUKOVODSTVA NAU-KOI. By V. D. Esakov. Moscow: "Nauka," 1971. 271 pp. 1.07 rubles.

In the last ten years, interest among Soviet scholars in the history of scientific institutions has grown rapidly. They have published a series of documentary collections from Soviet archives and also a number of historical discussions of the legal, economic, and political aspects of Soviet research organizations. The "science of science," or *naukovedenie*, originally promoted by American and British scholars such as J. D. Bernal and Derek Price, has now gained greater impetus in the Soviet Union than in any other country. The Institute of the History of Science and Technology in Moscow and its Leningrad branch have created special sections promoting *naukovedenie*. There are also important centers in Kiev and Novosibirsk. At the recent history of science congresses in Moscow and Tokyo, Soviet scholars predominated at the sessions on science policy and the history of scientific institutions. The discussion at Moscow between Derek Price and S. R. Mikulinsky attracted approximately one thousand persons, a staggering statistic in view of the traditional smallness of the history of science profession and its congresses.