

BOOK REVIEWS

Income Distribution Policy in Developing Countries: A Case Study of Korea by Irma Adelman and Sherman Robinson (A World Bank Research Publication), Stanford, Stanford University Press, 1978, xvii + 346 pp.

I

Many economists researching developing economies have recently been raising the questions of whether economic development and the equity of income distribution are compatible and whether the problem of poverty in developing countries can be solved with conventional economic policies. These are certainly important questions. Economic development planning has, after all, been criticized because in the process of economic development a rise in average income was generally accompanied by an increase in the inequality of income distribution.

There are two difficulties to be overcome in dealing with this problem. First, there is the problem of the shortage of data concerning income distribution. To obtain data on the size distribution of income it is essential to conduct sampling surveys such as family budget surveys. In most developing countries, unfortunately, surveys of this type have not been made on a large scale. But with the rising interest in problems of income distribution in the mid-sixties, the collection of such data has improved considerably. There are also several comprehensive research projects on income distribution now under way. Nevertheless, it will be some time before the results of these efforts are available.

Secondly, there is the problem of how to make a comprehensive model that will show the connection between the variables indicating economic development and the changes of income distribution. The econometric models for economic development and planning models applicable to developing countries have progressed considerably in recent years. There is a problem, however, because these models yield only variations in total values, and because it is not possible to directly derive figures on the size distribution of income. Thus, even though the importance of providing for income distribution in such models has been recognized, few planning models actually do so. Authors, Adelman and Robinson, should be commended for trying to meet this problem head on. As is discussed later, they have not been completely successful, but this was probably unavoidable given the nature of this difficult problem.

The economy of the Republic of Korea from about 1960 to 1970 serves as the object of this book's study. Compared with analyses of other developing countries, the authors' analysis of Korea is significant in two senses. First, the relationship between economic development and income distribution can readily be seen in the spectacular economic development of the Korean economy from the latter half of the 1960s. Consequently, the validity of the results of the experiments can be tested against recent data. Secondly, there is the comparative completeness of Korea's

statistical data. Besides problems of reliability, there are in general many difficulties in dealing with statistical data from developing countries. Although there are areas where Korea's data could also be criticized, if data on the income distribution is excluded, the authors' claim that among developing countries Korea's statistical data is of particularly good quality is, for the most part, not amiss. In addition, the authors' use of detailed information about the Korean economy gained through their many years of participation in Korea's economic planning has contributed greatly to the quality of their study.

II

The purpose of this book is to formulate a model that would include indicators of income distribution and, after measuring these factors statistically, permit the experimental calculation by computer of the effectiveness of various government policies. The heart of the model is an economic growth planning model for South Korea, made up of several non-linear equation systems. The model, estimating the rational behavior of firms and households in pursuit of profit and utility, generates solutions endogenously for prices in factor and product markets. The model is not simply a theoretical one. Based on the actual conditions of the Korean economy, it expressly makes allowance for the restrained behavior of government and firms in trade and financing. A lack of mobility among the self-employed and a degree of rigidity in wage-fixing are also involved in the model.

The overall model consists of a static adjustment part combined with a dynamic set-period adjustment part. In this regard the authors have taken various measures to ensure flexibility. As a result, even though it is far from streamlined as a theoretical model, as a model of the Korean economy, it is a remarkable improvement over prior models.

In such a model it is necessary to determine the parameters statistically. Theoretically speaking, this should be done by econometric methods, but here, due to the limitations of the statistical data, it is done by using cross-section data. Since the figures derived are carefully checked against Korean economic statistics after a parameter is established, we may with some assurance say that arbitrariness deriving from measurement error is largely avoided. Since the model is a non-linear system, there are some difficulties in its solution as opposed to other more complete models. These problems, however, have been solved through various kinds of mathematical techniques.

Although the model should be highly rated for the above reasons, an even more important contribution made by the model can be seen in the policy package simulations evaluated in Chapters 5-9. First, the authors examine the role of the tax structure, changes in the distribution of transfer expenditures, and the effect of government policies on agriculture, industry, trade, and the importation of technology. Then, they examine the larger concerns of income policies for rural and urban areas. Through these respective simulations the following two conclusions about the authors' main theme, income distribution in developing countries, emerge:

(1) Individual government policies do have a significant effect on factor income distribution.

(2) On the other hand, government policies have inelastic effect on the size distribution of income; the over time changes of the size distribution of income is relatively stable.

We found (2) to be of particular interest. Of course, the authors are not saying that there are no government policies that have an effect on the size distribution of income. Rather, they argue in the first half of their analysis that notwithstanding the inelasticity of size distribution of income in the face of various government policies, antipoverty policies do have an effective role to play. In the latter half, they go on to point out that there are differences in the effect of various policies. Nevertheless, it is clear that the conclusion given in (2) above is the book's most important finding.

III

Next, we will take a closer look at the authors' conclusion that the over time changes of size distribution of income are not responsive to individual government policies. First we will look at what this means in terms of the Korean economy. The authors have made a pioneering contribution to the study of income distribution in Korea. They conclude that despite the rapid economic development of the Korean economy from 1965 to 1970, there was no large change of equity in the size distribution of income. At that time the authors' conclusion was highly appreciated in Korea, because it assured the high economic growth being compatible with equality of income distribution. Relying on the authors' results, one might assume that even in the high economic growth of the 1970s the relatively equal type of income distribution would be maintained.

Recent research on income distribution in Korea, however, tells us that in the 1970s the distributional equality of income has actually worsened. This trend has been pointed out by one of the reviewers and has also been identified in the work of Dr. Hakchung Choo and D. H. Kim.¹ According to Choo, the equality of income distribution in Korea, which had been comparatively stable in the 1960s, has shown regressive changes since 1970. Although it would be inappropriate to criticize the validity of the model on the basis of such changes, this can certainly be regarded as a starting point for further examination of the model.

It is also important to note that, even though not directly related to research on income distribution in Korea, the size of income distribution over time in other Asian countries is undergoing substantial change. Research in Japan indicates a trend towards inequality in the size distribution of income in the 1950s and towards rapid equalization in the 1960s, supporting S. Kuznets's "reversed U-shape hypothesis." In Taiwan, on the other hand, where economic development is regarded as having preceded Korea's, size distribution of income over time shows a reversed U-shape with

¹ See H. Choo, "Probable Size Distribution of Income in Korea: Over Time and by Sectors" in *Income Distribution by Sectors and Over Time in East and Southeast Asian Countries*, ed. H. T. Oshima and T. Mizoguchi (Quezon City and Tokyo: CAMS and IADRPNU, Hitotsubashi University, 1978); and D. H. Kim, "A Note on the Size Distribution of Income for Nonfarm Households in Korea," *IADRPNU Working Paper* (1977).

its peak around 1968. There has also been substantial change in income distribution over time in other Asian countries. Taking this all together, we feel that the authors' model probably slightly underestimates the amount of actual change in income distribution.

Next, we will discuss the mechanics of the model in the generation of size distribution of income. The model's basic approach is to generate factor income distribution and to convert it to size distribution. Income recipients are divided into fifteen occupational groups and their average income is generated by the model. Then, the size distribution of income for each group is assumed to have a log normal form and the parameters of each group are calculated. The aggregation of these distributions as determined by the above method yields the overall distribution. Three factors determine overall distribution: (1) the number of income recipients in each group; (2) the average income of each group; and (3) the income distribution within each group. The authors' model generates the changes of (1) and (2) internally, but it is not clear how to evaluate the variations of (3). In terms of Japan's income distribution analysis, the factor which has played the largest role in determining over time changes in size distribution is not (1) or (2), but rather (3). Thus the fact that income distribution in this model tends to be inelastic to government intervention can be seen to originate in the nature of assumptions in the model. Moreover, the fact that the information used to determine the parameters was taken from the 1960s when income distribution was comparatively stable can be said to exaggerate this apparent tendency.

IV

Although the problems pointed out above should not be overlooked when examining the authors' conclusions, they do little to detract from the value of the authors' work. The incisive analytical point of view taken throughout the book and the authors' numerous suggestions are very instructive. It would take a review several times longer than this one to properly emphasize all the book's strong points.

The importance of this work is that now there is a successful example of a full-scale planning model that has overcome the limitations of a developing country's data and that provides a framework to deal with income distribution. The publication of this book should give encouragement not only to economists researching the Korean economy but also to other developing economists.

(Toshiyuki Mizoguchi and Do Hyung Kim)

Revolutionary Violence: A Study of the Maoist Movement in India by Manoranjan Mohanty, New Delhi, Sterling Publishers, 1977, xxviii + 267 pp.

I

This book is a research volume concerning the Naxalite movement in India.

The "Naxalite movement" is ordinarily used as a designation for the various re-