

Book Reviews

V.K.R.V. Rao, *India's National Income 1950-1980, An Analysis of Economic Growth and Change*. Sage Publications India Pvt. Ltd., New Delhi, 1983, pp. xv + 208, Tables (text) 146 + (appendix) 6, Appendices, Index; Price (hardbound edition) Rupees (Indian) 125.00.

The history of Indian national income estimates goes back to 1876 when Dadabhai Naoroji made the first crude estimates for the year 1867-68. However, these estimates and most of the work that followed was tainted by the political biases of the researchers. The main purpose of national income statisticians including Naoroji, upto 1934, was to point out the stark poverty and sub-marginal conditions of an average Indian as a direct result of an alien rule. In 1934 V.K.R.V. Rao published "an Essay on India's National Income, 1925-29", which is widely regarded as the first authentic academic exercise into the estimation of the national income of India. In 1949 the Government of India, realizing the need for reliable estimates of national income for policy purposes appointed the National Income Committee under the chairmanship of Professor Mahalanobis. The Committee had two members, Professor Gadgil of the Gokhale Institute at Poona and Professor Rao, the then head of the Delhi School of Economics. This Committee was responsible for putting the national accounts estimation of India on a modern footing. The coming into being of the Directorate of National Sample Survey and the National Income Unit within the Central Statistical Organization are a direct result of the work of that Committee. Professor Rao is justly considered to be the father of national income accounting in India. He has authored fourteen books, co-authored three others and edited four more. The book under review is the latest work by this prolific researcher and marks a return to his early field of interest, that of National Income Estimation.

The book is divided into twelve chapters. The initial chapter discusses the concept of national income estimation and its limitations. The second chapter describes the different aspects of India's economic growth and change as seen through aggregate national income data. In most Indian Government statistics the base year for constant price series is 1970-71, however, the author presents an analysis of the Indian growth experience based upon 1960-61 prices. The effects of the growth of money income on the sectoral distribution of income are discussed in

chapter three. The analysis of change in different sectors and sub-sectors of the economy and in the product-mix by commodities and sectors of industrial origin is the subject of chapters four and five. The sixth chapter deals with the quantum and composition of consumption and its distribution both rural and urban and by expenditure groups. The analyses of state domestic products and inter-state variation in growth and national shares and the extent of changes in inter-state inequality are presented in chapter seven, while the question of factor shares is dealt with in chapter eight, and the growth and composition of savings in chapter nine. The volume and composition of capital formation and the changing shares of its contributing sectors and sub-sectors makes up the analysis in chapter ten. Chapter eleven presents an analysis of factor productivity and growth. The growth rate and changes in productivity by sectors of industrial origin are also considered. The last chapter presents alternative projections of India's national income in the year 2001, on the basis of the observed trend during the twelve years from 1968-69 to 1979-80. The projections are made for the net national product as a whole, and by industrial origin and state domestic products. The policy implications arising out of the study are also presented in this chapter.

The analysis contained in the book is descriptive and is based largely on the national accounts data published by the Central Statistical Organization of the Government of India in their annual White Papers. In addition relevant data from the Reserve Bank of India, the National Sample Survey and other government publications are also made use of as and when required. A critical examination of the data sources is undertaken at the outset, and various anomalies are highlighted. It is shown, for example, that the National Accounts Statistics are subject to continuous upwards revision in successive publications. The reader is also warned that only 60 percent of the annual estimate of the Net Domestic Product is based upon direct information relating to that year, the remaining 40 percent being obtained by indirect methods involving intrapolation of bench-mark information. In India the estimation of private final consumption and capital formation is based upon the commodity flow method while the estimation of savings and factor shares is based upon independent data sets. Because of the preponderance of unincorporated enterprises and household industries, which either do not maintain accounts or are wholly managed by self-employed workers, the factor incomes generated cannot be separated into income accruing to labour and that accruing to other factors. As such factor incomes are categorized under five heads i.e. income accruing to the four factors of production and a mixed income category that accounts for the total income of own account workers as well as the profits of unincorporated enterprises. Savings represent the excess of current income over current expenditure. For the purposes of estimating national savings three broad constituent categories of households, private, corporate and public sectors are considered. The estimates of the physical savings of the household sector are obtained as residuals.

The Net Domestic Product of India, in current prices, grew by an impressive 732 percent over the thirty-year period covered by the book under review. Much of this growth, however, occurred in the second and third decennial. This growth in nominal terms was largely illusory, the growth in real terms being about 169 percent. The high, observed, nominal growth rate for the economy during the period under review was not uniformly transmitted over all the functional sectors of the economy. While the compound growth rate of the overall Net Domestic Product implicit price deflator was 5.00 percent, it was 5.90 percent for the primary sector, 4.60 percent for the secondary sector and 3.50 percent for the tertiary sector. This means that the net barter terms of trade for the agriculture sector improved consistently during the thirty year period. It should, however, be borne in mind that the primary sector includes fishing and forestry also. Nevertheless the favourable aggregate terms of trade for the primary sector are indicative of the conducive environment for economic development in India. One of the characteristics of the economic development of countries starting from a predominant agricultural base is the structural transformation in which the growth in secondary and tertiary sectors outpaces the growth of the primary sector, and the share of the primary sector in the overall domestic product declines over time. Such a structural transformation is evidenced for India by the data presented in chapter 4. It shows that the share of the primary sector declined from a little over 56 percent in 1950-52 to slightly over 35 percent in 1979-80. There is further evidence that agriculture has fueled the engines of economic development in the data presented from the last three decennial population censuses. These data show the declining proportion of the work-force that is associated with agriculture. A number of indices are presented that substantiate the hypothesis of a structural transformation towards modernization, market orientation and the increasing role of the secondary and tertiary sectors. An important aspect of this trend towards modernization is the increasing role of the public sector. The public sector's share in the Net Domestic Product doubled over the period under review and by the terminal year it accounted for one-fifth of the national income making it one of the most important sectors of the economy. The fastest rate of growth by sub-sectors was recorded by electricity, water and gas, followed by the banking and insurance sub-sector and public administration and defence, with growth rates of 10.4 percent, 7.2 percent, and 7.0 percent respectively. The slowest growth was recorded by agriculture and allied activities.

The data on the growth and change in consumption patterns are in line with the evidence of economic development and the historical experience of developed countries. These data show the declining share of food items in total consumption. However, because of the aggregate nature of the data used, possible distortions caused by unequal distribution are masked. The rural-urban distribution of expenditure shows a slight percentage increase in rural sector expenditure over the thirty-year period. This evidence, however, is inconclusive for the purposes of showing

an improvement in the rural standards of living because it could have resulted from the increasing monetization of the rural sector. There is no evidence presented separately on the extent and change in urban and rural poverty. However from the limited aggregate data on consumption expenditure by population deciles, classified according to the percentage share of each decile in the aggregate expenditure, it can be concluded that no significant improvements in relative poverty occurred over time. It would have been in line with the detailed analysis contained in other sections to explore the questions of rural-urban, inter- and intra-regional disparities in consumption at greater length. This has, however, not been attempted and is in part due to the dearth of reliable data to which the author has referred.

One of the most interesting chapters of the book relates to the distribution of Net Domestic Product by States of origin. The data presented show that the largest contribution to national income is made by Uttar Pradesh and the smallest by Jammu and Kashmir. The relative ranking of the States by share in Net Domestic Product reveals that while Uttar Pradesh and Jammu and Kashmir have maintained their rank over time, the most significant improvements have been recorded by Andhra Pradesh, Punjab and Haryana, each of which has moved up two ranks during the period 1960-61 to 1976-77. The highest increase in the ratio of per capita State Domestic Product to per capita Net Domestic Product is recorded by Kerala followed by Haryana and Punjab. The largest decrease in this ratio is recorded for Assam followed by West Bengal and Tamil Nadu. In terms of the overall percentage consumption shares and the percentage consumption shares in rural areas, by States, the rankings of West Bengal, Punjab and Haryana and Tamil Nadu have declined over time. Although in terms of per capita expenditure on consumption. Punjab and Haryana, and Tamil Nadu have maintained their ranks, West Bengal has declined from 2nd to 14th position. It should be borne in mind that these data are in current prices so that constant or improved ranks of certain States could be a reflection of the different rates of inflation, however, the drastic decline in the relative position of West Bengal cannot be completely explained away by this phenomenon.

The increasing role of loan finance in economic activity is highlighted by the growing share of interest earnings in total factor income. This component more than doubled during the twenty-year period from 1960-61 to 1979-80. This was coupled by a decline in the relative share of rents and profits. The share of wages and salaries, which is by far the largest component, recorded a marginal increase. The declining share of profits could be due to the increasing share of public sector enterprises where the profitability is allegedly low or negative.

The rate of growth of national income is dependant upon the saving propensity of a nation. The aggregate savings in the Indian economy during the thirty-year period under review, show a remarkable increasing trend, with the share of savings in Net Domestic Product increasing from 5.82 percent during the first five years of the

1950s to 19.48 percent in the last five years of the 1970s. By far the largest contribution to total savings is made by the household sector and its relative contribution has continued to grow over time. The relative contributions of the corporate and public sectors have, however, declined over time. Within the household sector the proportion of physical to financial savings has declined drastically. This healthy trend is supported by the phenomenal growth of the banking sector, mentioned earlier. The average rate of savings from disposable income increased from 4.07 percent to 16.07 percent over this thirty-year period. The increased rates of savings are, however, accompanied by an increasing trend in the average capital-output ratio which increased from 2.50 in the first four years of the 1950s to 4.20 in the last four years of the 1970s.

The productivity of labour, land and capital measured in terms of Net Domestic Product per unit of the particular factor shows interesting growth patterns. While productivity per worker showed a 76 percent increase over the thirty year period, the productivity per hectare of net area sown increased by over 124 percent and the productivity per rupee of capital stock declined by nearly 48 percent. These trends are supportive of an evidence of a capital-intensive process of technical change. The increasing capital-intensity of non-agricultural production is naturally, accompanied by a much higher growth of labour productivity in this sector. These trends have serious long term implications for technology choice and for Indian planning for economic growth and employment generation.

The author has yielded to the temptation of projecting the Net Domestic Product to the year 2001. For this purpose he has used the trend values from the 1968-69 to 1979-80 series in 1960-61 prices. The projections are made for the aggregate Net Domestic Product and for Net Domestic Product by sectors of industrial origin. For the aggregate projections a number of alternative growth rates are also assumed. Such projections are prone to a number of inadequacies which arise largely due to the assumptions underlying this method. It assumes that the trends that prevailed in the 1970s would continue on to the year 2001. Moreover, the relative weights assumed in the 1960-61 price series for different commodities are assumed to remain constant through this entire period. Both these assumptions are unrealistic and the author is fully aware of them.

On the whole the book is a comprehensive and detailed account of India's national income, its growth and structural changes during the thirty year period from 1950 to 1980. It provides in one place a host of information on the Indian economy. The treatment of the subject matter is objective and befitting one who has spent over five decades working in this general area. There are, however, a couple of minor, shortcomings. The author has a tendency to use initials as abbreviations for concepts in the text and for names of journals etc. in the references. This can often be quite confusing for the reader who is not as familiar as the author with the sources

of information on India or with the concepts used. Additionally, in cases where the author has used information from sources other than the standard ones noted in the text, he has not cited the original source. An example of this is Table 3.2 on page 19 which shows the rates of inflation for selected economies.

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