

## SOME PRACTICAL ASPECTS OF INCOME DISTRIBUTION AND REDISTRIBUTION\*

**Prof. Dr. Fuat M. ANDIÇ**  
University of Puerto - Rico

### 1. INTRODUCTION

Just a few days ago you heard Professor Alan Peacock's lecture dealing with some methodological aspects of income distribution. It is not my intention at all to enter into discussion of the same aspects of distribution so ably expounded by Professor Peacock, nor do I intend to discuss the problems of measurement of income distribution which must follow the discussion of methodological problems. I shall in fact assume all methodological questions away; and I assume further that, for the sake of argument at least, we all agree upon a specific method of the measurement of income inequality, say the Lorenz curve.

Let us assume that in a given developing country an income distribution study has been done and the result is summarized in a Lorenz curve which indicates a certain state of inequality. Let us further assume that this given state of distribution of income is found to be unacceptable and the decision-maker wishes to correct it towards a more equitable distribution of income. My intention here today is to concentrate upon the ways and means available to government for changing the income distribution. Towards a more equal one.

### 2. FACTORS AFFECTING INCOME DISTRIBUTION

For analytical purposes we can divide the government's effects on income distribution into two major groups. One is effects of government policies on income distribution while the initial distribution is taking

---

\*) This is a shortened version of the lecture delivered at the Institute of Public Finance, University of Istanbul on 11 April 1967.

place, i.e. pre-redistribution; and the other, the redistributive effects of government proper, in other words impact of taxes and expenditures.

Before we deal with the redistributive effects of taxes and expenditures let us briefly see the possible effects of government policies for a better distribution of income.

#### **a. Structural Shifts**

Structural shifts among sectors of the economy account for a substantial part of the long-run changes in income distributions. Among the most significant shifts of this kind is the relative decline in the importance of the this kind is the relative decline in the importance of the agricultural sector, together with a decline in the proportion of rural to urban population. When this movement results in an increase in the mean farm income and a shift toward the mean urban income, there would be a diminution of inequality in the overall distribution of income. One could argue that it is mostly the low income farm families that leave agriculture for employment possibilities in the cities where they most probably enter the low income brackets. But one has to take into consideration that farm families are disproportionately concentrated at the bottom of size distributions and that the average income of the rural families is usually lower than of the urban. A pronounced drop in the number of farm families can act therefore to reduce the number of low income units and raise the average income of farm families. If this rise is accelerated via public policy measures, there will be a movement towards a diminution of income differentials.

#### **b. Changes in the Functional Distribution of Income**

The functional distribution of income measures the form in which income is earned in current production by the different factors of production. Changes in the distribution of income by type are apt to bring about changes in the distribution of income by size, since specified factor incomes reveal different patterns of distribution and are combined in different proportions as one moves up the income scale. Thus property incomes are highly concentrated in the upper income brackets and are subject to relatively higher inequality, while wages and salaries play a dominant role in low and middle income groups and reveal relatively less inequality. Therefore, factors that bring about changes in the functional

distribution of income in favour of wages and salaries and discriminating against property incomes will also tend to change the direction in which size distribution of income is moving.

**c. Changes in Unemployment**

Changes in unemployment, especially in structural unemployment, are likely to have relevant effects on income distribution. It is quite probable that elimination of structural unemployment, especially if its decline is conducive to an increase in employment in industry, would eliminate a large portion of very low incomes both of the unemployed and also of workers on the margin of unemployment. In other words, the persistence of unemployment, *ceteris paribus*, may reduce the share of the low income groups while other groups enjoy an increase in income, hence contributing towards greater inequality and *vice versa*.

**d. Changes in Demographic Factors**

Income distribution is also affected by changes in the proportion of the total population which is economically active. Such changes may result from changes in the period of education, the retirement age, the marriage frequency, and from changes in the degree of participation in the labour force by married women. Demographic influences are often important, because government measures are closely tied to age groups. This is obvious in the case of changes in the period of education and the retirement age. We shall discuss the effect of government below, we only call the attention to the fact that often deliberate government policies change the age composition of the labour force by, for instance, preventing the employment of children under a given age limit, by providing free educational facilities and/or retirement pensions, thus encouraging earlier retirement.

(i) The lengthening of the education period would have the effect of reducing the size of the labour force and the very same effect is obvious when different schemes for retirement and old-age benefits tend to reduce the number of persons over 65 who are employed. These two ends of the labour force, i.e. 15 years or under, and 65 years and above, which are becoming more and more inactive due to the above mentioned reasons, may seem to be contributing to a more unequal distribution of incomes. However, a close examination should yield otherwise, since the relative decline in the employment of juvenile workers, whose incomes

most probably concentrate in the bottom income ranges will also reduce the weight of these ranges in the overall distribution. The lengthening of education period is not necessarily accompanied by complete stoppage of juvenile employment, but may very well go together with part-time employment such as delivery of papers after school hours. What the effect of such a development will be depends upon the concept of income recipient underlying the statistics. As far as the retired people are concerned, their incomes, which are also concentrated in the lower ranges of size distribution, would tend to show less dispersion under the improved schemes of old-age and retirement pensions, be they public or private. However, the increase in equality which may be expected from increased transfer-payments, both in terms of coverage and amount, should be amended with two qualifications. First of all, in the periods of steeply rising prices, these transfer income recipients will be faced with rapid deterioration in their position. Secondly, it is also possible that these somewhat higher transfer payments may raise the incomes of elderly persons sufficient enough as to bring them into statistics primarily due to maintaining separate households, which would tend to increase the weight of very low income ranges.

(ii) The shift from single to married women in the labour force may also be one of the factors contributing to a change in the size distribution of income toward greater equality, provided that the tendency of married women taking paid employment is accentuated where the earnings of the head of the family are particularly low, since this would tend to move families in the low income ranges to middle income ranges, and make incomes less dispersed. Therefore, as the proportion of married women in the active labour force rises, the relative importance of the incomes below average is generally reduced. This effect would only be seen where sample surveys on income distribution take the family as the unit or where income tax legislation obliges husband and wife to fill out a joint return.

#### e. The Role of Government

Income in our mixed system largely derives from the ownership of the factors of production and their earnings in the market. At the same time, however, a substantial part of private incomes originates in the public sector and a substantial part of national output is used for the satisfaction of public wants. Government, therefore, alters the distribution of income,

first of all, in its role as an employer of resources, especially of labour. Since it may be assumed that there is less inequality in wages and salaries in public than in private sector, an increase in government employment would move the overall distribution toward equality. Secondly, as a supplier of services for the satisfaction of public wants, governments influences the primary distribution. For example, an increase in the scope of free education may lead to a reduction in the scarcity of skilled labour and differences in the ability to earn will be reduced. Among other interventions of the government which will have this effect is the improvement of public health. Thirdly, as a rule-maker and regulator of business, government affects the earning power of talents and property. Among such policies, which are numerous, can be cited minimum wage legislation, agricultural price support programmes, tariff protection, rent controls, etc. Finally, we must also mention two important direct transfers. Redistribution of income may be carried out in several ways: through a reduction in personal incomes, or of wealth by progressive direct taxes on income and property; by increasing disposable income through transfer payments; and by increasing personal incomes through a greater availability of free public goods and services.

It is very difficult to estimate quantitatively the redistributive effects of government policy. It is necessary to differentiate between those public revenues which bring about redistribution and those which do not. Among the former are taxes, the issue of money to finance a budget deficit and, in an indirect way, the issue of debt for open market operations. A definite knowledge of shifting is required so that the fiscal burden can be made to fall on those for whom it was intended. A statistical breakdown of the incomes of individuals in various income brackets is required, giving the sources of income in the form of wages, salaries, dividends, etc., in order to be able to consider the changes of income from one bracket to another. Detailed family budgets by social classes and size of family are needed to study the effects of taxes on consumption and saving. Income and consumption taxes affect differently families of equal income but of different size. Finally, it is indispensable to have an analysis of public expenditures to know who receives benefits and to what extent. This perhaps is the greatest of all difficulties even for countries equipped with the best statistical techniques, institutions and facilities. Although it might be very difficult, especially for countries where the necessary statistical information is lacking, to assess the net result, nevertheless it should be expected that the redistributive effects of government fiscal and non-fiscal policies will alter the pattern of income distribution.

#### f. The Role of Unions

Trade Unions by increasing the bargaining strength of the employees, by reducing the wage differentials due to sex and race differences, by insisting, for example, as in the United States, on equal pay for equal jobs, by helping increase the productivity of workers, etc., hence by reducing the inequality within wage incomes, may move the overall income distribution towards greater equality. Furthermore, Union influence prevents wage levels from falling during periods of depression, as much as non-union wages. If this holds true, then one would not expect a violent mass decline from middle to low income ranges to take place. Moreover, the recent introduction of such systems like guaranteed annual wages in the United States, acting as built-in stabilizers, together with the Unions' endeavours to prevent a fall in wages may be effective during a recession. In a major depression, nevertheless, it would be only natural to expect Union wages to fall together with non-union wages, though perhaps to a lesser extent, thereby changing the distributive pattern towards less equality.

It is very difficult to establish the relationship between the process of economic development and the growth of organized labour. In a number of underdeveloped countries Unions are either still too weak or reflect political aspirations rather than economic interests. Hence the effects of the Unions on income distribution will vary with the circumstances of particular countries.

I have so far tried to explain some of the important economic forces bearing upon the distribution of income in a given economy. It is very hard to distinguish them individually and measure the degree of their influence separately. However, the existence of many of them should lead to the conclusion that there would be a change in the degree of income inequality.

Factors mentioned above do not stem directly from public policies. Nor is it my intention here to give specific prescriptions. What I would like to emphasize is simply the possibility of various policy measures, which would bring about the factors which in turn influence the income distribution.

### 3. REDISTRIBUTIVE EFFECTS OF THE GOVERNMENT BUDGET

The points above are those that are related to possible government activities that would alter the initial distribution of income. Now turning

our attention to the direct effects, of government budget, we can summarize the impacts of government budget on income distribution.

**a. Taxes**

If the tax system of a country is such that after its application the poor is relatively richer and the rich is relatively poorer, then one can argue that the redistributive effect of the tax system is towards more equality. One can think of such taxes as progressive direct taxes on income and wealth, high corporate profit taxes and heavy-and/or progressive indirect taxes, such as a sales tax, on goods and services customarily consumed by high income group families. One methodological problem must be mentioned here, namely the problem of incidence. It is usually assumed that direct taxes remain where they are imposed, namely on the factors of production, while indirect taxes are passed on completely to the consumer. It has been shown, by Prest for example, that such assumptions are based on the contradictory premises that the supply of factors of production is elastic so far as indirect taxes are concerned but is inelastic so far as direct taxes are concerned. In practice, it is difficult to believe that the supply of all factors of production is completely inelastic or elastic, and that the demand for all goods has an elasticity of zero. In fact there is evidence — as shown by Musgrave and Krzyzaniak — that corporate taxes are shifted, at least partly, to the consumer. Therefore although redistribution through government taxes is an accepted practice one must not be hasty about drawing conclusions as to their effects unless the incidence of each tax is studied carefully.

**b. Government Expenditures**

Government expenditures have two aspects. They involve on the one hand cash payments to individuals who sell goods and services to the public sector, or receive special incomes in the form of transfer payments. On the other hand, these expenditures involve the provision of services and benefit in kind to individuals and families. Cash payments for the purchase of goods and services from individual units cannot be considered as having redistributive effects (although they have distributive effects), but transfer payments, such as public assistance, relief payments, etc., would have redistributive effects in terms of increasing the income of families crowding the lower end of the distribution. Moreover, certain government expenditures on health, education, etc., would, by improving general health conditions and by affecting the intangible capital formation (i.e.

education), change the distribution of wealth and thereby change the income distribution.

Before passing on to concluding remarks I would like to point out one more aspect of government expenditures, namely the role of subsidies to public corporations; this is an aspect which is usually neglected in terms of their impact upon income distribution. It is quite likely that, especially in developing countries, subsidies are more likely to flow from the poor to the rich than *vice versa*. As Stolper points out, taxes collected through Marketing Boards — in West Africa — from cocoa and groundnut farmers, say, to be used on heavily subsidized jet airlines, or to subsidize interest rates on civil service housing, or meeting the deficit of public utilities such as electricity, gas, telephone, etc., mainly consumed by upper and middle classes in developing countries, represent rather obviously a redistribution of income from the poor to the rich.

#### 4. CONCLUSION

This discussion centered around the practical aspects of distribution. It is fair to call it practical aspects since the conceptual and statistical problems of income distribution were assumed away, and we dealt with the possible avenues open to government in influencing income distribution without entering into specific policy measures.

It is only fair to add here that a more equal distribution of income cannot be adopted as a policy objective on its own merits alone, but has to be conceived in conjunction with the other aims of development policy. It has been argued in the literature, e.g. by Kuznets and Lewis, that in fact a better income distribution in developing countries is not compatible with economic growth. On the other hand there is now some evidence, e.g. in Puerto Rico and Mexico, that there is in fact a direct relationship with economic development and better income distribution. There is neither time nor place to enter into this discussion at this stage. However the necessity of co-ordinating a better income distribution with the other objectives of economic development cannot be over-emphasized.

---