CONCEPTS AND MEASURES OF WELFARE

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The concept of welfare, in its most general form, underlies any approach to the construction of social indicators. Welfare (and how to achieve it) is, indeed, what social indicators--and economic indicators--are all about.

An important aspect of the measurement of welfare must be fractional or sectorial, growing out of the answers to the questions of "how much," "what quality," "for whom," that should be asked with respect to each separate component of social life and of social and economic change. But this cannot be the entire answer. For these identifiable parts are interacting and potentially conflicting. And the human mind--no matter how sophisticated--persists in wanting to know whether matters in general are better or worse, while the policymaker must ask which emphasis or which choice will contribute most to general welfare.

Whether welfare in this general sense can ever be measured is highly doubtful. General welfare, like positive health, may be impossible to define in operational or policy terms. This is not to say that the idea of welfare has no meaning. But because the meaning is value-laden and complex, all that the social scientist can hope to discover is symbolic indicators and proxy measures. Theoretical welfare economics--which this paper is by-passing--has been built on the recognition that the value or utility of specific goods, services or forms of leisure is not the same for all individuals, and that the presumed end product--satisfaction and equivalent levels of satisfaction--is not directly measurable. We measure observable states and reactions and our best policy goals may be those which stress access to rather than use of particular goods and services. Let me add quickly that "access to" means more than formal availability; it includes the information, the education and the social structure that make possible a genuine choice.

As I observed at the outset, there are many partial welfare indicators--relating to health, housing, civil rights, social disorganization and so on. This paper is drawn from the final chapter of a volume now in preparation that deals with social indicators and the measurement of social change in thirteen specific areas. Presumably the final chapter can assume the importance of all the individual measures.

In searching for a more over-all measure or frame in which to view the specifics, I have come up with nothing startling or new. What I have found myself pushed back to is the level and distribution of income as the most significant general determinants of welfare. Productivity and abundance on the one hand, and equity and social justice on the other become the general frame of welfare.

Abundance--the total quantity of goods and services available--is the more easily measured, and I shall not deal here with any of the problems or issues that are involved, particularly if one attempts to take into account some of the disutilities of technology and economic growth.

Equity is an abstraction almost as difficult as welfare. Notions as to what is fair and just differ among individuals in different circumstances, among societies in different stages of development and over time. But the preference for an equitable society is deeply rooted.

Equity, of course, does not necessarily mean equality. Some degree of inequality would appear to be necessary to provide economic incentives to produce, although our knowledge as to the effects of different types of incentive or disincentive (earnings differentials, progressive taxation, power relationships, status and symbolic rewards) is limited.

Fortunately, it is possible to measure distributional elements without complete agreement on a definition of equity. And if we are not sure as to the desirable shape of the total distribution curve, we can perhaps come closer to agreement on certain cut-off points or negative welfare indicators. The current interest in poverty measures is an example of this approach. The idea of a social minimum has a long history, both in philosophical discourse and in reform movements. The relation of this concept to the general concept of equity may be particularly relevant to currently important issues of social policy.

So long as necessities mean largely subsistence type needs, the distinction between a social minimum concept and a measure of the over-all degree of inequality can be fairly clear-cut. As the general wealth of a society and the goods and services which are perceived as necessities increase, the distinction becomes somewhat blurred. The higher the poverty level in absolute terms, the more critical becomes the question of the distribution of real income both below and just above the level. The social minimum which gains solid public and political support at any given time will certainly be related to and largely bounded by the existing distributional patterns in the middle-income levels.

Defining What is Distributed

Thus far I have intentionally slurred over the question of what is meant by income and to whom it is distributed (the individual or a defined family group) as well as the reference period. The relevant literature is so voluminous--and the unsolved questions so numerous--that I cannot hope to discuss even the major points in a twenty-minute paper. I shall resort, therefore, to some fairly didactic statements and propositions.

If the basic purpose is to measure change in over-all welfare, an indicator that lends itself to repeated use and to the provision of meaningful trend data is what we must look for. An indicator in this context is not intended to mean one series of figures. It does mean an interrelated set of measures, not just a congeries of statistical data. Several different methods of summarizing the distribution of income may be appropriate and desirable. The basic measure should be usable as a classificatory scheme for the analysis of the distributional effects of all the components of economic and social change. Supplementary measures will be needed for specific analytic purposes. They may lead to refinements in the basic measure or simply to better understanding of its limitations and its meaning.

From this perspective, perhaps one can turn to the obvious starting point--current money income--and ask how useful for an analysis of welfare is the distribution of money income alone. I would argue that it is considerably more useful than much current discussion implies, primarily because of the degree to which it is related to other factors that affect the way people are able to live and their control over their life situation.

Recent attention to the problems of the poor has highlighted the fact that ability to use income may in some circumstances be almost as important for the level of living as the amount of income itself. There appears, however, to be a high correlation between the amount of money income and the ability to use it effectively. Efforts to improve the purchasing power of the poor through better access to the market and lessened discrimination of all kinds are highly desirable. In the end, the amount of money income may prove to be the critical factor.

Considerable attention has been devoted to the definition of nonmoney equivalents of money income. An important factor in any comparison of farm and nonfarm incomes is the value of home-grown food or home-produced clothing. International comparisons and trends over time are also affected by the treatment of such items. Of a different character is the imputed value of the use of owner-occupied dwellings or of consumer durables. The latter concept approaches a wealth-income measure. It is important for certain kinds of economic analysis, but may not be essential for a welfare-distribution indicator because of the relation between previous and current money income levels and the quantity and value of durables possessed.

Certain forms of private compensation that may be of growing importance also fall outside the usual measures of current money income. Expense accounts, help in the purchase of a home, stock bonuses, advanced education and training, private pension plans--all benefit disproportionately the higher-income groups. Our knowledge as to the aggregate value and distributional effect of such forms of compensation is very limited. This is an area where much more work is needed.

The growing importance of public expenditures and their close tie to social welfare policy give special importance to their effect on distribution. Total social welfare expenditures alone topped the $100 billion mark in fiscal 1967 and amounted to 13 percent of the Gross National Product, and 43 percent of all Federal, State and local spending. A sizeable part of these expenditures takes the form of transfer payments, most of which have a specific distributional purpose--either a more appropriate distribution of income throughout the life cycle than can be accomplished by the wage system, or a meeting of recognized income deficiencies. In the case of transfers, society is distributing money income, which enters directly into any income count.

But beyond this, publicly-provided services are increasing in scope and importance. With growth in population and pressure into cities, more and more goods--some once free, like clean air and privacy--can be generally available or equitably rationed or distributed only through mechanisms other than those of the marketplace.

The distributional effect of public expenditures involves both tax and benefit impacts. Neither the data nor the theoretical basis for analysis of these effects are as satisfactory as one might wish. Some of the conceptual problems can be illustrated with reference to public education. Public education through high school is intended to be available for all. The value (cost) of the services may, however, vary greatly from school to school, with the lesser per capita expenditures too often associated with poor neighborhoods and families. On the other hand, the imputed addition to income will be proportionately greater the lower the family income. Recent findings that educational success depends more on family and cultural background than on the quantity or quality of schooling provided raise a question as to whether a "correction" of the money income distribution to take account of the redistributive effect (downward) of public education really improves the value of the measure as a welfare indicator. This is not to say that society and social scientists should not be vitally concerned with the relative expenditures on education for different groups in the population. But at least at the lower end of the income scale, what is needed may be not the correction of a money-income distribution through the addition of assumed values for nonmoney income, so much as interpretation through reference to other analytic data.

One general observation may be worth making with respect to all attempts to develop an inclusive income figure. All such attempts involve imputations that rest on more or less arbitrary assumptions as to dollar values and as to incidence. The inclusion of items which are fairly equally distributed among money income classes automatically makes the distribution of total income less unequal.

Furthermore, as Dorothy Brady pointed out in one of the early analyses of income size distribution, an individual or family whose income is 80 percent nonmoney and a family with the same total income all in the form of money are simply not in the same situation or welfare category. To put the point another way, the school child who can get a school lunch if he declares himself needy may consume the same food as the child who buys his lunch, but he does not feel himself to be in the same position.

Assets and Wealth

The importance of assets and wealth as a corrective to the distribution of current money income has also received a great deal of attention and study.

Looking only at the current value of assets, there is a high correlation between levels of current income and asset holding. The poor have little in the way of accumulated wealth. For the near poor and middle-income groups, the value of an owned home is likely to be the major asset. In general, large wealth is associated with large current income. A measure of income plus wealth would show more dispersion than would a measure of current income (including, of course, current yield of assets).

The more important aspect of wealth may be the sense of security and freedom of action and the power and control of the future well beyond the lifetime of the owner that it can give. Ownership of wealth and particular forms of wealth also has different meanings in a dynamic growth economy than in a more static society. Small--or even fairly large--amounts of assets can lose their value as a result of inflation or economic depression. Physical assets--such as an owned home--can appreciate in value or be destroyed in the path of urban renewal or highway construction.

The importance of social insurance derives not only from the transfer of income from the economically active to the economically inactive years (or generations), but from the ability of the system to assure a continuing income with a stable or increasing purchasing power. It represents for the middle- and lower-income groups some of the security of wealth. While social security benefit levels are as low as they are today, the analogy may seem painfully strained. In terms of the potential of the institutional mechanism, it is valid.

Other Measurement Problems

Both conceptually and statistically the unit of reference or of count can significantly affect the apparent distribution of income. In terms of welfare, the individual is the ultimate referent. But the well-being of the individual is dependent on a network of social relations. Most importantly for present purposes, for about half his life, the ordinary individual must look to his family or society for his current consumption needs.

In analyzing the distribution of income and of welfare, the structure of individual earned income is an important subsystem. For more general analysis the unit of count is usually the family, but attention must then be given to demographic changes and family patterns. Increasing employment of women--both cause and effect of other changes--longer years of schooling, earlier retirement, undoubling of families when rising income or the assured income of social security for the aged permits--all have their effects on the distribution of family income. The relationships are neither simple nor static. In the space of this paper, I shall not attempt even to summarize the more important ones.

The conventional time period for measurement of income is a year. Income, however, may fluctuate both within a year or between years. The time period chosen to define "current" income smoothes out or averages fluctuations within the period, accentuates fluctuations between periods. There is no way of avoiding this effect. An important task of analysis is to measure the variability of income and to assess its effects. It is easier to recognize the significance of the distinction between reasonably "permanent" and variable income than it is to separate the two, particularly in trend data. We need more longitudinal family income data to increase our understanding of this aspect of distribution as related to welfare.

Statistical Measures of Inequality

There are a number of ways of measuring income inequality, whatever the definition of income or recipient unit. The distinction that comes first to mind in the current situation is the difference between the budget or poverty-line approach and the income-shares approach. As I suggested at the outset, the former focuses on the social minimum aspect of welfare, the latter on the more general equity aspects. The definition of a social minimum is inherently normative. The analysis of income shares--the proportion of aggregate income received by each fifth or tenth or other portion of the population--does not in itself depend on a concensus as to how equal or unequal the shares should be, although it may lead to conclusions and convictions on the subject.

The fact that the lowest fifth of all families (measured by family income) receive only five percent of aggregate family income may take on a somewhat different coloring depending on the presumed adequacy of the income they get to meet minimum needs. On the other hand, the repeated revisions of measures of minimum need as the general level of living goes up is evidence of the way in which the concept of fair shares permeates the budget approach.

In the few minutes remaining to me, I want to point up some of the other differences in these two types of equity measures.

Poverty Line Measures

It is obvious that any given family income has a different significance depending on the number of people it supports. Most budgets have been constructed for a selected typical family--such as the BLS wage earner's family of four with an employed husband age 38, a wife not employed outside the home, a son aged 13 and a daughter aged 8. To compare the budget cost with the median or mean income for all families of this general type does not tell us very much about the income distribution as a whole.

The usefulness of the poverty-line index and low-income index developed by the Social Security Administration derives from the fact that they are based on approximations of equivalent levels of living for all family types (taking account of farm-nonfarm residence) 1/ and that the cut-off points are applicable to Census current population income data and do provide a measure of how the income of the entire population relates to the defined social minimum. The poverty index cuts into the income distribution at a series of points representing equivalent positions of income adequacy. It thus makes possible not only a count of those above and below the defined level, but also a listing of their characteristics. It tells directly and in easily summarized fashion how many and who are "poor." It can be a stable measure (for short periods at least) and thus provide some indication of changes in the proportion of the population and of different groups affected by the general course of the economy or by specific social policies.

Analyses of the complete income distribution reveal some of the same relationships but from a different perspective. An example may illustrate this point. Analysis of income shares shows full-year rather than part-year employment to be one of the main determinants of personal income distribution, and hence of family income. The poverty analysis highlights a different fact--that a large number of full-year workers are nevertheless poor. Some are poor because they work in very low-paying occupations. More are poor--as defined--because of the size of their families.

An acceptable social minimum is obviously related to the general level of affluence of a society. In a dynamic economy it must therefore change over time. It is easy to reach agreement that what was an appropriate poverty measure in 1900 or 1933 is no longer relevant. It is also possible to get agreement that an acceptable social minimum in 1985 will be higher than today. It is difficult to find a satisfactory method of gradually moving the level up from its present to a hypothetical future position. The difficulty is not simply that of measuring progress in a war with an ever-escalating goal. There are other conceptual problems involved.

The issues involved go in part to the question of optimum allocation of resources at different levels of GNP. They relate to the relative growth of public expenditures for services and for particular types of services. They may involve the distinction between disposable and total money income. The weights for equivalencies may change with demographic changes and as the absolute level of per capita income rises.

Thus far the poverty index has been adjusted only for price changes. The need for a more substantial upward adjustment of the index level has been noted by many commentators. One solution that has much to recommend it would be two concurrent indexes. The SSA poverty and low-income indexes could be continued--adjusted only for changes in purchasing power--through say 1969. A second set of indexes could be adjusted to reflect productivity as well as price changes. The second set could start from the 1959 level, as do the present SSA indexes, or the divergence could start in 1963 or later. The result would be to provide a range of estimates of the number in poverty as well as a forceful demonstration of the way in which the composition of the poor varies depending on the measure of poverty used. The additional cost of the annual tabulations and the confusion in public debate that could result from two sets of figures would be among the disadvantages. The analysis of the two sets of data should provide a better basis for a decision in 1970 as to a new starting level and perhaps a different basis for adjustment over the following decade.

Income Shares

A poverty or low-income line can be misleading if it is treated as though it had some independent reality. It inevitably gives excessive weight to a single position on the income scale. Some of those classified as "poor" are very poor, others close to the line. Some of those whom we say with a sense of relief are above the minimum are hardly enough above to make any real difference. The near poor may be as important for social policy as the poor, particularly with relation to policies that determine income after taxes. Inequality cannot be left out of account as a concern of social policy.

Measures of the total income distribution remain an essential element in the set of interrelated measures that we need to understand changes in welfare. The over-all distribution of income shares is a gross measure which may exhibit great stability in the face of considerable change in the income position of components. For an understanding of trends and of the factors that affect social change, analyses of changes in income distribution within major segments of the population is also needed. Income redistribution analysis adds another dimension.

In a fuller discussion, one would examine the statistical measures that have been used to summarize the income distribution--and particularly the Lorenz Curve and the Gini Index of concentration. Suffice it to say that the usefulness of any such single measure of concentration or dispersion lies primarily in the possibility it offers of testing the effect on over-all inequality of a great variety of actual or hypothetical variations in income patterns. The potential contribution to income theory is greater than any direct use in measurement of welfare.

The major thrust of what I have been trying to say can perhaps be summarized as follows: the measurement of changes in welfare calls for a renewed emphasis on distributive justice and on income distribution; current money income itself is a better measure than our increasingly sophisticated and proper concern with other dimensions of control over resources might suggest; aggregate income distribution measures should be supplemented by a whole series of subsystem measures--for different income units, for age and sex cohorts, for place of residence, for different time periods and for different classifications of income, including the poverty-line type of classification; more important than "correcting" the money-income distribution is its interpretation in the light of as much detailed understanding of interrelationships as economic and social analysis can provide. However the task is formulated, there is much to do.

1/ For a description of the methodology, see articles by Mollie Orshansky in the Social Security Bulletin, January and July, 1965.