

DISCUSSION PAPER

of

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The measurement approach currently in use in the Philippines and in most countries of the world to assess the employment situation in the "Labor Force Approach." This approach divides the population of working age into those *in the labor force* and those *not in the labor force*. The labor force is further specified as the sum of the *employed* and *unemployed*. These categories are mutually exclusive; by definition, one cannot be employed and unemployed at the same time, nor can one be both in the labor force and not in the labor force. The specification of the employed is done in three steps: (1) An activity criterion is specified, (2) in case of multiple activity a priority is established (principal job), and (3) a time referent for the activity is set.

The *activity criterion* is defined as working or actively looking for work. Those who are working are among the employed, no matter how long they work and whether or not they are looking for additional work; those who have no job but are looking for work make up the unemployed. The activity criterion distinguishes further between *work* and *casual* activity. Operationally a person who has worked at least one hour for pay or profit is considered employed. To include in the work force persons whose product is part of the Gross National Product but who do not receive pay or make profit, e.g., the unpaid family workers, a time criterion is frequently added to the monetary criterion according to which persons are considered employed if they work a specified number of hours (e.g. 15 hours) in unpaid family enterprise. The definition of unpaid family worker used currently by the National Census and Statistics Office is less specific since it omits the time criterion. According to Philippine usage, unpaid family workers are "members of the family who assist another member

in the operation of the family farm or family enterprise and who do not receive any wage or salary for their work" (NCSO 1973: xiv).

Using these basic concepts and categories of the Labor Force Approach to measure the employment situation in the Philippines, a relatively optimistic picture emerges. Of the 13.3 million persons in the labor force in November 1972 (the latest date for which employment statistics have been published by the National Census and Statistics Office, cf. NCSO 1973), 94.6 percent were employed. The unemployment rate stood at 5.4 percent. Considering that the United States with its strong economy views an unemployment rate of 4 percent as tolerable, the Philippine performance is not bad.

TABLE 1

Household Population 10 Years and Older, by Labor Force Status, Philippines, November 1972

Labor Force Status	Persons	Percent of Labor Force
Household Population		
10 Years and Older	27,477,000	
In the Labor Force	13,294,000	100.0
Employed	12,582,000	94.6
At Work	12,296,000	92.5
Full Time	9,406,000	70.6
Part Time	2,889,000	21.7
Not at Work	289,000	2.2
Unemployed	712,000	5.4
Not in the Labor Force	14,184,000	

Source:

National Census and Statistics Office, *The BCS Survey of Households Bulletin*, Series No. 36, Tab. A and C, pp. xx-xxi. Manila, 1973.

However, the complexion of the picture changes when we separate the underemployed from those satisfactorily employed. During employment surveys the employed are asked whether their jobs are full-time or part-time and whether or not they seek additional work. If they do seek additional work, they are classified as underemployed; *visibly underemployed* if their work is part-time only, and *invisibly underemployed* if they have a full-time job.

Of the 12.3 million at work in November 1972, 1.55 million, or 12.6 percent, wanted additional work; 678,000 were visibly underemployed, and 873,000 invisibly. In all, 18.9 percent of all Filipinos in the labor force expressly wanted additional work.

While the Labor Force Approach provides means to locate the underemployed in the various sectors of the economy, to sort them according to personal or family characteristics, or to specify the extent to which the visibly underemployed are underutilized in terms of time, it has no facilities to determine, e.g., why the invisibly underemployed—and they constitute the bulk of the underemployed in this country—are looking for additional work. We can only surmise that they do so because the earnings which they derive from their full employment are insufficient to meet their needs. To policy makers whose main aim is to provide full employment, this type of people will be of little concern. But if it is the aim of the government not just to provide employment but employment which guarantees those dependent on it a decent living, these invisibly underemployed or underutilized by income present a problem.

Besides providing full employment and employment which guarantees a decent living, problems related to labor supply, the government is faced with another problem which is more closely related to labor demand. Many people hold badly paying jobs and, consequently, are looking for another or an additional one, because they lack the skills which better paying jobs require. This is not to say that all of these persons possess no skill at all; they may possess the wrong ones which either are not needed or needed only to a limited extent. In other words, many of these people have been trained, but they are unable to match their training with an appropriate job. For this to happen obviously educational training and commitment of educational resources must have gone wrong somewhere. In addition, mismatch between training and type of employment not only can and all too frequently does result in underutilization in terms of income, it likewise constitutes inefficient use of labor resources, a point of interest for those who are charged with the task of restructuring the work force toward greater productivity.

A thorough examination of the employment situation and a sound overhaul of the work force has to take all of the

points mentioned into account. Unfortunately, the quarterly labor force surveys undertaken by the National Census and Statistics Office which utilize the Labor Force Approach do not furnish the detailed and specific information needed by those concerned with worker welfare, educational planning, and efficient utilization of labor resources.* The Labor Utilization Approach outlined and exemplified in Miss Domingo's paper is one initial attempt to differentiate these summary figures better and to provide at least some additional information.

Two of the basic advantages of the Labor Utilization Approach are (1) that it is not an entirely new approach but rather an addendum to the Labor Force Approach which preserves comparability with data series collected in the past, and (2) that it requires relatively little additional input for the new information which it generates. In most instances labor force surveys will have to add two bits of information: education and income.

The similarities which the Labor Utilization Approach shares with the Labor Force Approach are:

1. it is a classification of the working-age population;
2. the labor force is separated from the non-labor force, and the non-labor force is the residual category;
3. the employed are separated from the unemployed;
4. the survey questions are linked to a time referent.

The major distinction between the Labor Force and the Labor Utilization approaches is that in the latter the employment-unemployment dichotomy is not the major dichotomy of the work force. Instead the major distinction is between the adequately-inadequately utilized. And unlike the Labor Force Approach, in which the employed take the first priority, in the Labor Utilization Approach it is the inadequately utilized who have first priority. The adequately utilized are the residual category. This change in the major dichotomy corresponds to the government's concern away from the completely unemployed *only* to those with insufficient income and those not fully contributing to the economy.

By distinguishing four types of underutilization, the Labor Utilization Approach recognizes explicitly that unemployment,

* They present instead relatively undifferentiated summary figures of the employed, underemployed and unemployed.

either fully or partly, is not the only form of underutilization, a fact which the Labor Force Approach does not entirely hide but definitely obscure. The Labor Utilization Approach focuses not simply on *unemployment* in terms of having a job or not but tries to specify idleness within the work force which the unemployment rate largely understates. For example, the self-employed or those engaged in family enterprises for no wage or profit are rarely reported as unemployed even though we know that many of them do what they do simply because there is nothing else to be done. Statistics based on the November 1972 labor force survey bear this out. They show (1) that the proportion of the self-employed who worked part-time only was nearly twice as large as the proportion found the wage and salary workers (21.7 vs. 12.7 percent) and the proportion of the part-time employed unpaid family workers was almost four times as large as that of the wage and salary workers (45.5 vs. 12.7 percent), and (2) that approximately two thirds (61.8 percent) of all employed persons actively looking for additional work were either self-employed or unpaid family workers (cf. NCSO 1973: xxii and 14).

In addition to measuring inadequate utilization in terms of hours of work—in this task the Labor Utilization Approach does not differ from the Labor Force Approach—the former recognizes that a worker, even if he is working a full work week, may be underutilized by the adequacy of income. Low income may indicate several things. As a welfare measure, it may show the extent of the working poor, those who work full work weeks and still make little income. Low income may indicate those workers (or those industries) with low productivity. In turn, low productivity may indicate either inadequate physical capital inputs or inadequate human capital inputs. This latter case may occur if income is too low to permit adequate nourishment and shelter. Mismatch reflects the adequacy with which the skills of the population are used.

Every employed person can be located on each of the three dimensions of adequate utilization and, with the help of a summary measure, be placed more precisely on the employment scale ranging from full utilization to complete underutilization. Both measurement approaches use the same type of scale, but while the Labor Force Approach recognizes only three discrete points on this scale: full employment - underemployment in terms of hours of work (or partial unemployment) - full unemployment, the Labor Utilization Approach specifies many more.

The Labor Utilization Approach may or may not use an implicit series of priorities depending on what types of underutilization are considered most serious. If such a series of priorities is built in, the inadequate utilization categories are mutually exclusive. When the Labor Utilization Framework was first proposed, it was recommended that those in the labor force be sorted first according to whether they had a job or not, thereby isolating the unemployed. Secondly, if they had a job, they should be sorted according to utilization by hours of work, then by level of income, and finally by mismatch. This recommendation was based on the assumption that governments will try first to get full work weeks to occupy the time of all workers, and that only then concern will be focused on those underemployed by income, and, lastly, by skill. However, priorities may be arranged differently, if so desired, or workers may be classified by all types of underutilization simultaneously, as demonstrated in Miss Domingo's paper. What way is to be chosen will depend entirely on policy implications. The latter procedure definitely is of greater interest to those concerned with welfare, education, and efficient use of available manpower resources.

A final innovation which the Labor Utilization Approach proposes and which is not contained in Miss Domingo's paper in which it goes beyond the present Labor Force tabulations is that it makes provision for the assessment of utilization not only of individual workers but of households as well. More specifically, it proposes to classify households in terms of the utilization of their labor force members. In contrast to industrialized countries, where most labor force members perform economic activities outside and, in cases of unmarried persons, often independently of their families and households, persons in societies with an agricultural economic base tend to perform their activities within the framework of their families or households. This is particularly true for persons employed within the "traditional" sector of the economy. The most clear examples of such cases are the self-employed farmers and unpaid family workers. It is the family or household which provides the employment and to which the remuneration for the labor accrues. Family or household members become part of the labor force by virtue of their family or household membership, and in a good number of instances it is hardly possible to distinguish personal income from that of the family or household.

While both the Labor Force and the Labor Utilization Approach classify individual workers in terms of one job and, consequently, one economic sector and one industrial status only, households may contain labor force members belonging to different sectors and statuses. Information of this type appears to be not only useful, but needed. For example, households with members in both agriculture and non-agriculture are typical for an industrializing economy, and changes in their number and composition are important indicators for the direction in which the economy is moving. Households with all of their labor force members in non-agricultural jobs and salaried can be regarded as the "modern" sector of the economy, while their counterparts at the opposite end of the spectrum, i.e., households with members engaged in agricultural non-salaried jobs represent the "traditional" sector. Simultaneous classification of households by economic sector and industrial status of their labor force members permits one to locate those households which are economically most unstable. They are presumably to be found among those who have a good number of self-employed workers, of unpaid family workers, or both, i.e., members in those industrial statuses which tend to hide inadequately utilized persons.

By way of summary it can be said that the Labor Utilization Approach attempts to provide analytic sophistication to the traditional labor force analysis in two ways: several dimensions of underutilization may be tabulated, and two levels of analysis are possible, for individual workers and households. Furthermore, it preserves comparability with the Labor Force Approach. The labor utilization categories may be readily resolved into the labor force categories. Finally, it offers new insights into types and composition of underutilization and thereby provides additional and needed information not only to the labor analyst and economist, but to the social planner in general.

PROBLEMS

Conceptually, the idea of labor underutilization is relatively clear: That worker is underutilized who is substandard in terms of the three dimensions of employment: time, earnings, and skill. However, *operationally* the concept presents considerable difficulties. In the context of this discussion it would

go too far to lay out all the details of these difficulties, but I would like to mention at least the basic ones.

What are the standards against which the adequacy of employment is to be measured? What constitutes, for example, "full employment?" Concerning this problem the Labor Utilization Approach offers no better, but likewise no worse solution than does the Labor Force Approach. In Philippine statistics full employment is arbitrarily defined as 40 hours of work per week. Whether or not this criterion is a useful or realistic one depends on various considerations. If the government wishes to supply everybody able and willing to work with a minimum of 40 working hours per week, it is useful. If, on the other hand, 40 hours of work do not permit the majority of workers a decent income, it is an unrealistic figure. It likewise is unrealistic if the government has no way of supplying that much work. It depends entirely on the purpose for which the measurement is made, and on the social and economic context in which the work takes place. In short, the standard is purpose—as well as culture-bound, and it may and must vary accordingly. It may be most useful to vary the cut-off point separating adequate from inadequate utilization by hours of work from industry to industry. For example, the full work week of a farmer may be longer than that of a government employee, depending on how much time is needed to obtain a sufficient return.

Even more complex than the question of what constitutes full employment is the problem of adequate income. There are first the questions of what income is to be included and how it is to be computed or estimated. Should it be *total* income or only *work-related* income? If income is taken as a measure of earning power of the individual, only work-related income should be used to determine adequacy of income. If, on the other hand, income is seen as an indicator of the level of living or the extent to which wealth is being distributed, total income is more appropriate to use. When income is reported for households rather than individual workers, as it often happens in the case of unpaid family workers, an adjustment for individual income will have to be made. The reference period for which income is being measured may not be a realistic one for farm households which take income only

once or twice a year. Work-related income may come from several jobs or occupations and not just from the one reported as principal job. Where subsistence agriculture or barter are common, non-monetary income needs to be translated into monetary units. Besides, there may be other types of income which ought to be included, like household goods produced from home consumption, or rental value of owner-occupied housing, or exchange labor.

Over the past two years various ways to get at relatively reliable income figures or substitute measures, like indexes of wealth based on consumption patterns, have been proposed and in experimentation.

The second question is what the cut-off point should be. Depending on the purpose of the end-user of the statistics, the cut-off point may represent several considerations: the cost of living, a minimum level of living, or a reasonable target level for policies aimed at redistributing income. The following cut-off points have been suggested:

1. The wage which would be generated by a full work week according to minimum wage laws;
2. The official government poverty level;
3. The income level below which no income tax is levied;
4. The income level below which a particular percentage of the population falls;
5. A target figure for per capita income or per worker income.

Differing cut-off points may be selected for urban and rural workers or primary and secondary household workers or other significant groupings.

Obviously, no single and best solution to any of these difficulties exist. Instead, they will have to be worked out within each social and cultural context.

While the determination of an appropriate cut-off point for adequate income involves a good number of measurement problems, the operational definition of a mismatch between education and occupation involves even more. To define adequate education properly, ideally three factors will have to be taken into account: (1) Amount of education, (2) quality of education, and (3) type of education. The factor which

has been used most in previous experimentation, including Domingo's work, is amount of education. To establish the absence or presence of a mismatch, either education or occupation must be ranked along an ordinal or interval scale. If education is recorded in years or grade completed, the mean education of an occupational group may be used as standard (as demonstrated by Domingo). A more appropriate measure may be standard score (the ratio of the mean to the standard deviation) since some occupations may have a bimodal educational distribution, or there may be a trend toward higher education among the younger members of the occupational group. If type of education is used (i.e. education is a nominal rather than an ordinal or interval scale), then the occupational scale must be ordinal or interval. That is, one must be able to tell that one occupation is "higher" than another and thus requires more education. Since occupational prestige rankings are rather unstable, the use of an ordinal or interval scale for education is to be preferred. (For an example of an occupational prestige scale for the Philippines see Melinda M. Bacol, *Intergenerational Occupational Mobility in the Philippines*, *Philippine Sociological Review* 19 (3-4), 1971, pp. 195-6.

Obviously, an approach which considers only the amount of education and not its quality will equate, e.g., all high school students although some have better records than others and come from better schools. or technical and academic high school diplomas, thereby disregarding the specialized skills of some graduates.

A second problem area concerns the summary measure of inadequate utilization. It has been argued that to add the underutilized in the four underutilization categories together and to divide the sum by the labor force in order to obtain the proportion of underutilized in the labor force is similar to adding different food stuffs according to weight, to divide this by the population and to come up with food consumption per capita by weight. (cf. Oshima 1974).

This objection is a serious one. However, the underlying problem is not one which is inherent in the Labor Utilization Approach. Instead, it is a shortcoming of the Labor Force Approach as well, to which the Labor Utilization Approach is an addendum. In the same way as the latter adds together all the inadequately utilized, so does the former add the employed regardless as to whether the persons have been unem-

ployed for a year or a week, and the underemployed by hours of work regardless of the extent of their underemployment or the reason for it. Attention has been called to the fact that the summary figure of unemployment is the least meaningful figure which employment surveys provide. "It is the disaggregation of the unemployment data—for example, into urban-rural residence, agricultural — non-agricultural activity, and class of worker—which is meaningful (cf. Hauser 1974). The summary figure of inadequately utilized persons shares the same fate, and precisely for that reason the Labor Utilization Approach has retained the meaningful and necessary disaggregation practiced by the Labor Force Approach, and, in addition, has extended it to cover the underemployed. For example, educational-occupational mismatches may be separated for persons with technical diplomas and academic diplomas, or for persons with high school or college diplomas. Such comparisons might suggest a reallocation of the investments in education into certain fields or certain levels of training. Though the Labor Utilization Approach does not contribute to a clarification of the "conceptual fuzziness" of the Labor Force Approach, with which we had to be satisfied so far, it does not leave the labor analyst with a quite as undifferent summary figure as does the Labor Force Approach.

DISADVANTAGES

Aside from the problems related to operational procedures, the Labor Utilization Approach is open to criticism on several other counts, some of which it shares with the Labor Force Approach.

There is an implicit assumption of homogeneous labor with respect to input—that is, A works as hard in an hour as does B. This allows no room for ability to be reflected in higher wages. If ability were accounted for, then low income might indicate inadequate productivity or inherent incapacity. Although some differences in human capital are noted—for example, in the level of education—the more basic differences in health, vigor, and stamina are presumed not to exist. To the extent that the assumption of homogeneity cannot be met, the interpretation of the generated statistics are somewhat suspect. For example, the poor might be labeled as "lazy", and unemployment might be viewed as a sign of inadequate industriousness.

There is a danger in using the cut-off points to associate, say, "low income" with a given monetary figure, and to forget the ideas underlying the concept. Labor utilization figures employ relative cut-off points, and data comparisons must not overlook the differences in cut-offs which will occur from country to country.

Just as the Labor Force Approach does, the Labor Utilization Approach uses an activity criterion and a time referent, which in developing economies are not always realistic. Unlike the former, the Labor Utilization Approach also relies heavily on attitudinal criteria e.g., when asking people whether they *want* more work, and status criteria, e.g., highest education level attained. This mixture of criteria is likely to make interpretation of data ambiguous. Finally, although more sensitive to some work situations in developing economies than the Labor Force Approach, it still relies on principal occupation for mismatch and hours of work.

While the Labor Utilization Framework has neither been able to remove all or even most of the deficiencies inherent in the Labor Force Approach, nor the first one to bring them to attention, it is the first large-scale attempt to do something, however limited, about them. As emphasized earlier, it is just an attempt, not a final solution. To take into account all of the divergent social and cultural factors at work in developing economies, most probably a more radical change in concepts and procedures will be required. Trial work in that direction has been started by the Committee on Asian Manpower Studies and the Organization of Demographic Associates (CAMS-ODA Approach). The Labor Utilization Approach may be a useful stepping stone toward that goal.