

VARIOUS ASPECTS OF THE  
MEASUREMENT OF HOUSEHOLD  
INCOME IN  
UNDERDEVELOPED ECONOMIES

K A D U U L I      S T E P H E N

Some typical questions:

Would you mind just indicating into which of these categories your total weekly money income would fall (before tax)?

1. Less than \$10
2. \$10-\$29
3. \$30-\$49
4. \$50-\$69
5. \$70-\$89
6. \$90-\$109
7. \$110-\$149
8. \$150-\$199
9. \$200+

1977 Melbourne Family Survey.

719. (do did) you get paid mostly in cash, or mostly in kind, or (do, 'did) you work without pay? Cash kind No Pay

720. How much a month on average (do did) you earn?  
W(\$).....per month    Cannot calculate.....

Korean National Fertility Survey

### INTRODUCTION:

Household income is one of the measures that can be used in demographic analysis to determine the socio-economic standing of individuals or groups of individuals ordering of households along a rough socio-economic scale (Freedman 1974:6). It can also be used to provide a country with comprehensive economic data. Differentials in fertility, mortality, and migration can be viewed from the socio-economic perspective. But household income is fraught with conceptual and measurement problems.

### DEFINITIONAL CONCERNS:

The first problem is to define what 'household' and 'income' mean. Unless this is done, then questions that may be asked may be faulty and thus elicit misleading information. Defining a household is not an easy task because there is no one workable definition. In fact household income goes hand in hand with household identification. The definition of a household depends on the way people organize their domestic activities. According to the UN (1967), the concept is based on the arrangements made by persons living individually or together in groups and collectively providing themselves with food and other essentials for living. However, the UN goes on to suggest that the terms 'household' and 'family' should not be confused because they have different connotations. A Household should, therefore, be defined in terms of people pooling their resources, and having a common budget be they related or not.

Income, on the other hand, refers to wage and salary income, self employment income and other income received by individuals. Wage or salary income is the gross amount of money received from work as an employee. Self employment income refers to gross income minus operating expenses from a business, farm or professional enterprise in which a person was engaged on his own account.

And other income received from such sources as rent, interest , lotteries and so on (US Bureau of census 1963).

#### IDENTIFICATION OF THE HOUSEHOLD ECONOMIC UNIT

This can be a major problem especially in the less developed countries(LDC) where the 'extended family' exists. It is very difficult to identify household if the wrong operational definition is utilized because some families have as many as 20 members living in many huts within one compound. There is also the problem of perennial visitors who stay for as long as 6 months at a go. Do we consider them members of the household or not?

To identify the household economic unit, the procedure should be to enumerate all individuals who reside in the defined household and then to find out all those who work. But not everyone who works should be considered a member of the household economic unit. This is supposed to include only those people who pool at least part of their income to cater for the household expenditure. But what proportion of a members' income should he contribute before being considered as belonging to the economic unit? Freedman suggests that the possible rule is to consider all those members who contribute at least 50% of their earnings to the household expenses. This would require a comprehensive accounting of all the household income which is an uphill task especially in LDC's where accounting practices are still rudimentary. Most of the economies are not fully monetized and so you find that most of the people get payment in kind. Some people do plenty of work around the household and get no pecuniary returns, do you consider them members of the economic unit or not? However, the overall aim should be to identify all members who earn money so that the overall household income can be worked out.

The typical questions which were presented at the beginning of this discussion have their merits and demerits. The demerits are characterized by problems which are found in getting information about wage, salary, farm, business, wife's or other income.

PROBLEMS IN OBTAINING INFORMATION ABOUT SALARY  
AND WAGE INCOME

People's income is a very sensitive issue and some people look at questions about it as an invasion of their privacy and may not be willing to answer. In LDC's, if you ask someone what their monthly or weekly income is, there are bound to be many other problems. Most people, even in the developed countries, when asked about their salaries or wages only mention their net pay, forgetting or not knowing that what is needed is their gross pay. The question asked in the Melbourne Survey takes care of this problem very neatly whereas the Korean question fails. But asking about weekly income when people get paid on a monthly basis can lead to problems and that is why the Korean version is presented as an alternative.

Freedman (1974) suggests that the time reference period should be <sup>it</sup> 1 year because <sub>A</sub> is least subject to fluctuations. But in largely illiterate populations dates do not mean much and events if reported, may be misplaced in time. And the income received in the past year may not be the most relevant for the measure of past trends of, say, mortality, fertility or migration. Consider the case of a country where the economy is unstable and plagued with inflation, the respondents are likely to forget what occurred a year ago due to drastic changes. For example in Uganda there was a currency change in 1987. If you asked workers what wages they were getting before the change, they are likely not to remember. And as already mentioned above, workers who receive payment in kind tend to forget unless they are reminded through probing. A good way of doing this can be through the following chart suggested by Freedman (1974):

(IF YES) How much did that (income) amount to in the past 12 months.

Past 12 months

Person No.	Col.1	Col.2	Col.3	Total
	Regular Pay	Income in kind	Other income	
<b>TOTAL</b>				

Source : Freedman (1974) P.66

Such a question takes into account all sources of income. But the point here is that the respondent needs to be reminded.

#### PROBLEMS OF OBTAINING MEASURES OF FARM BUSINESS INCOME

Where farmers farm on a subsistence scale, estimating their income in monetary terms can be a problem for both themselves and the interviewers. They are usually not able to distinguish between their operating costs and investment on their land. On marketing their produce they tend to assume that all the money they receive is income forgetting the operating costs. They and their families consume some of their produce and when asked about income they only talk of the money they received from say the sell of their coffee. It is up to the interviewer to remind and assist their recall. A tactful way of doing this may be the following:

"Thinking of all the food that you and other members of your household consume, what part of it did you buy in the market and what part did you grow on your farm?"  
(Freedman 1974:25)

Unlike for farmers, it is very difficult to construct a standard questionnaire for ~~buyer~~ business incomes because there are thousands of different businesses.

Business people tend to be 'tax-man wary' so they are not very open about their incomes. If not approached tactfully, they may either refuse an interview or they may spew out plenty of lies. Their responses should therefore be analyzed carefully for inconsistencies.

#### PROBLEMS IN OBTAINING MEASURES OF OTHER INCOME:

In countries where inflation, corruption and bribery are rampant, asking questions about other sources of income can be very embarrassing and lie eliciting. No corrupt person would like to admit in an interview that he accepted bribes and so the best thing to do is to cook up some lies or not to talk about the other income at all. This may lead to underestimation of the true income.

Wage and salary earners receive other monies like housing and cost of living allowances. If they are simply asked in which bracket their income falls, they are likely to mention only their monthly income unless asked about the allowances. But the allowances may be hard to recall in unstable economic conditions.

#### PROBLEMS IN OBTAINING INFORMATION ABOUT THE WIFE'S INCOME:

Women in most parts of the world are not yet liberated. In fact in some societies they may get incomes but they are obliged to pass them on to the husbands. The wife may want to talk about the income she gets in her own right but the husband may not be agreeable. Wives play a big role in running farms, businesses, and domestic affairs. Their contribution to the earnings of the enterprise may not be distinguishable from the husband's. The failure to deal with this problem is one of the shortcomings of the questions under discussion here.

In practice, other measures are used in conjunction with household income to improve information on household economic standing. These include reports on monthly and annual spending and property or asset holding. However these other measures are not within the scope of this discussion.

#### CODING AND EDITING:

Interviewing about income needs a person who is well trained. An interview may elicit incomplete and contradictory data. And some calculations are not possible in the field until the inconsistencies are cleared which takes time. This job should be given to trained income editors prior to coding. Coding can be very easy if all income is in monetary form.

#### NON-SAMPLING ERRORS:

As already mentioned above, some people think asking about their incomes is an invasion into their privacy. This may create problems in the form of non-response which can lead to non-sampling bias. In other words we may fail to get the 'true' value if we ask about the other income and get high non-response. Failure to monetize the income received in non-monetary terms accurately can also lead to under or over estimation of the true income.

#### CONCLUSION:

It goes without saying that the measurement of household income is very important and helpful as a control in analyzing the relationship between the components of population growth and other variables. But from the foregoing discussion, it is obvious that obtaining information on household income is not an easy task. One cannot get information on household income by simply asking one question. A substantial number of questions have to be asked before full information of the income is elicited. Asking about household income alone may not be enough for a conclusion about the household's socio-economic status to be drawn.



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## S U M M A R Y.

Household income is one of the major ways of ascertaining the socio-economic standing of individuals or groups of individuals. However, measuring it is fraught with conceptual and measurement problems. Conceptual problems include defining what "household" and "income" are. Measurement problems pertain to the very nature of under developed economies and the ways in which people in these economies organise their domestic activities. Problems are encountered in obtaining information about wages, salaries, farm, business and other incomes. Careful thought and technical tact have to be put into the arduous task of eliciting reliable figures. However, household income on its own may not be enough for a conclusion about a household's Socio-economic status to be drawn, particularly in less developed economies because such economies are not fully monetised. This paper looks into ways in which some of the problems may be overcome.