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Poverty

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A NOTE ON THE MIS(USE) OF NATIONAL ACCOUNTS FOR ESTIMATION OF HOUSEHOLD FINAL CONSUMPTION EXPENDITURES FOR POVERTY MEASURES

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This chapter addresses the question whether the national accounts concept of final household consumption (expenditures) can be used to supplement household survey data for the purpose of poverty measures. We reinforce some of the views expressed by many authors quoted in this note, that the national accounts estimate of household final consumption, as used in the current procedures to estimate poverty, is not appropriate. We also try to clarify some misconceptions of the national accounts procedures and methods of estimation of final household consumption, and suggest ways for supplementing household surveys with individual consumption of government and non-profit institutions serving households (NPISHs) and other components from national accounts not generally captured through household surveys¹. Likewise, some suggestions are made to guide future work on the harmonisation of household income and expenditure surveys for their use in national accounts compilations and poverty measures.

This chapter should not be considered as a comprehensive response to the recent debate over the use of national accounts in poverty measures. Rather this chapter should be viewed as work in progress.

Is income or consumption more appropriate for measuring poverty?

Since the last decade there has been a broad agreement that poverty encompasses multiple dimensions, going beyond material deprivation. However, this chapter is concerned only with comparability between the national accounts (NA) and household survey (HS) estimates of household consumption and their implications for poverty measures when consumption is the preferred indicator of well-being.

Conceptual approaches to the measures of well-being are well known. A case is generally made to favour consumption over income when it comes to the measure of living standard. However, there are cases where income is a better measure of well-being than consumption, when for example, well-being is viewed as the capability of a household to consume rather than what is actually consumed by the household (Ravallion,1992)

In addition to conceptual considerations, there is also a general consensus on the practical level that consumption is better captured than income through household surveys and we share that view. Income is often perceived as being less reliable than consumption. People might have difficulty remembering or conceptualising non-wage income or income might be deliberately under-reported for tax evasion.

In national accounts, the income concept to be used for measuring the capability to consume is the disposable income, which requires more complex imputations and adjustments than consumption by individual households included in the surveys. Table 8.2 presents the national accounts concept of disposable income and indicates which components should be surveyed and those to be imputed. Table 8.1 shows for some

selected countries, the components of adjusted disposable income of the household sector in national accounts, which also takes into account social transfers in kind from the government and NPISHs. In these countries, compensation of employees makes up from 36 to 60% of the total adjusted disposable income. The Philippines and Vietnam have a larger component of unincorporated household enterprises than Malaysia, thus having a higher share of mixed income in disposable income. Social transfers in kind from the government to households are more significant in Vietnam thus resulting to a higher share in “others.” The statistics here may help indicate where household income from household surveys deviate from national account household income.

Table 8. 1. Components of adjusted disposable income of households a few countries

	Malaysia (1996)	Philippines (1993)	Vietnam (1999)
Per capita GDP in in 1999 (US\$)	3613	1033	373
Total adjusted disposable income	100%	100%	100%
Compensation of employees	60%	38%	36%
Mixed income	32%	56%	49%
Net property income (receivable less payable)	11%	9%	3%
Others	-2%	-2%	12%

Sources: 1) *Distribution and use of income accounts and capital account 1996*, Department of Statistics Malaysia, 2000; 2) *Vietnam Economy in the Years of Reform*, General Statistical Office of Vietnam 2002; 3) Unpublished information from a national account project in the Philippines.

Table 8. 2. Compilation of disposable income by individual households

	Components of disposable income	Contents covered in national accounts	Estimation method
+	Compensation of employees	Includes wages and salaries, payments in kind and employers' social contributions to pension funds and other insurance schemes	Should be surveyed.
+	Withdrawals of income from quasi-corporations	Withdrawals of income for own use by owners of unincorporated enterprises but with full set of business accounts such as partnership	Should be surveyed.
+	Mixed income	Income left for own use to owners of household enterprises without business accounts after deducting from output intermediate cost of goods and services as well as depreciation and taxes on production	Should be surveyed in association with survey on household production.
+	Property income receivable	Interest, land rent, dividends received and property income attributable to insurance policy holders imputed as received from pension funds.	Should be surveyed. Interest received should be adjusted to include financial service charges paid that had been already deducted from interest received. Property income attributable to insurance holders must be imputed on the basis of insurance held.
+	Social benefits other than social transfer in kind	Social security benefits in cash, private funded social benefits (pension benefits), unfunded social benefits by employers and social assistance benefits in cash.	Should be surveyed and or use of pension funds data.
+	Other current transfers in cash receivable	Net non-life insurance claims, current transfers from government, current transfers from relatives and others.	Should be surveyed and adjusted to exclude insurance service charges.

+	Social transfers in kind	Individual final consumption of government and NPISHs (see footnote 1).	Imputed by analysing government and NPISHs expenditure with regards to types of households that benefit.
-	Social contributions	Contributions to social security fund, pension funds and other insurance schemes.	Should be surveyed and compared with sources of data like government, pension funds and insurance companies.
-	Property income payable	Interest and land rent paid	Should be surveyed and compared with data from financial corporations and adjusted to exclude financial service charges, which are treated in the NA as final consumption.
-	Taxes on income	Regular income, property and wealth taxes	Should be surveyed and compared with data from government. .
-	Current transfers payable	Net non-life insurance premiums paid and current transfers from relatives and others.	Should be surveyed and compared with data from insurance companies and adjusted to exclude insurance service charges.
=	Disposable income (adjusted)		

Comparability between national accounts and household survey estimate of final household consumption.

Consumption is not an easy flow to measure either. The concerns that poverty estimates are sensitive to the survey design are well justified. Another challenge is the over-time and cross-country comparisons of poverty measures, given the variation in survey design over time and across countries. The reliability of survey estimates of household consumption critically depends for example on the choice of the recall period. Other technical aspects such as the training and commitment of field staff and the degree of cooperation of the sampled household are also important criteria for good sample estimates. Still, survey estimates of household consumption can be improved with an adequate survey instruments and appropriate sampling methods. One serious conceptual problem of the consumption approach however, is the valuation of consumption of goods provided through social transfers in kind by the government and NPISHs. Its inclusion in actual household consumption has to be derived from national accounts and imputed to individual household through allocation indicators principally obtained from household surveys, in addition to crude allocations of government expenditures.

Table 8.3 presents the concept of actual household final consumption (AHFC) based on a harmonised approach to household surveys. It indicates the type of information that should be collected from a household survey and the adjustments to be made to be compatible with the concept of AHFC in national accounts.

Table 8. 3. National accounts (NA) concept of actual household final consumption within a harmonised approach to household survey (HS)

	Components of actual household final consumption	Estimation methods
+	Goods and services purchased for final consumption	Should be surveyed.
+	Goods and services provided by employers	Should be surveyed.
+	Own-produced consumption, including imputed rent for own-occupied dwellings	Should be surveyed along with household production through unincorporated enterprises and household dwelling ownership.
+	Goods and services bartered for consumption	Should be surveyed.
+	Current transfers in kinds other than social transfers in kind	Should be surveyed.
=	Household Final Consumption Expenditures (from HS)	
+	Financial intermediation services indirectly measured (FISIM)	Adjusted through NA.
+	Insurance service charges	Adjusted through NA.
=	Household Final Consumption Expenditures (in NA)	
+	Social transfers in kind from government and NPISHs	Adjusted through NA from information on government and NPISHs data.
=	Actual household final consumption	

It is important to point out that in national accounting, there are two concepts of household final consumption. *Household final consumption expenditure (HFCE)*, as the wording of the concept indicates, it measures the expenditure of households for its own

consumption. HFCE includes those items of household final consumption (HFC) that are conventionally available through household surveys (such as goods and services purchased for final consumption, goods produced for own consumption, goods and services bartered, goods consumed and obtained from transfer in kind and imputed rent for own-occupied dwellings). In addition to the expenditures components covered, adjustments need to be made for financial intermediation services indirectly measured (FISIM) and for insurance service charges. The concept of *actual household final consumption (AHFC)* measures both household final consumption expenditure and the individualizable consumption paid for by the government and NPISH, like education, health and other community and social services. The estimation methods of the individual consumption provided by government and NPISH rely fully on imputations based on valuation assumptions on cost structures of the services rendered.

The concept of actual household final consumption captures better what is actually consumed by a given household. This might partially explain the empirical findings that household consumption expenditure obtained through household surveys from many countries tends to be lower than the total final consumption expenditures from NA. For example, Ravallion (2001) finds that for 77% of the 88 developing countries studied, the ratio of the two consumption estimates ranged between 0.2 and 2.4 and averaged to 0.826.

Precisely, because there could be sizable difference, it has been suggested by some authors in the recent literature that NA estimates of the household final consumption

expenditure should be used to adjust household survey estimates of household consumption (Bhalla, 2002). This practice is feasible if the unmeasured components of household consumption can be allocated/imputed to individual households. Still, there has been strong opposition to this adjustment, the main two reasons being that there are no solid justifications for the accuracy of the NA estimates and that the observed gap between the two is not distributional neutral among the households. In fact there is a misconception about the (lack of) accuracy/reliability of the country-estimates of total final household consumption expenditure. The most recent reference on the compilation of consumption in the NA cited to support arguments against this adjustment is Ruggles and Ruggles (1986). However, since then, and with the implementation of the 1993 System of National accounts (SNA), it has been advocated among countries to estimate household final consumption expenditures through more direct methods based on surveys using an commodity flow approach within a supply and use table framework.

National accounts aim at measuring the final household consumption of the total economy. The aggregate household consumption from national accounts is therefore not an aggregate of income or final consumption by individual households and cannot provide information on the distribution of income or consumption for the purpose of poverty measures.

Advocators of the use of NA over household surveys have used distribution of consumption over households from previous years, assuming it remained unchanged. This assumption is hardly believable and remains to be justified empirically.

Concluding notes and recommendations

The fact that household surveys might underestimate the true consumption does not mean necessarily that household survey is not an appropriate tool for measuring household consumption. Neither does it imply that NA estimate of household final consumption is incorrect because adjustments are made to the survey estimates, mainly through the commodity flow approach. The recent debate has been centered around the question whether poverty measures should be based on national accounts and not on household surveys. We believe that is a wrong question to debate on since there are clear conceptual and empirical justifications of the gap between the two figures. A more useful and important question is how the two methods can be improved and reconciled. Below we summarize our views and make some suggestions for further work.

1. Household survey is the only tool that can provide information on income/consumption distribution for the purpose of measuring poverty.
2. The practice of household surveys need to be improved. In particular, it is necessary to establish global standards for household surveys. This is feasible fairly easily, given an abundance of experiences accumulated over the past two decades. Empirical work has shown that in many cases the samples were not representative, forms and methods of data collection were not consistent over time, the types of questions asked may not be appropriate, in addition there was also a lack of proper training of interviewers.

3. The clarification of national accounts concept of household final consumption is needed and an appropriate list of imputed consumption should be developed, and finally methods for imputation at a single household need to be worked out to assist the harmonization of national accounts and household survey data.
4. International agencies and other organization should give high priority to develop global standards for harmonised household surveys as a tool that could generate reliable estimates for poverty consistent across countries and across time. This harmonised tool should, in addition, support a direct measure of household consumption in the national accounts. Under the ICP program, a strong push towards a harmonised household survey tool might be considered.

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¹ Individual final consumption of the government and NPISHs is defined as the final consumption expenditure incurred by those respective institutions for the benefit of individual households (SNA, para. 9.80) such as expenditure on health care, education, disposal of household waste, etc. In analysing household consumption, in this paper, we will focus on the concept of *household consumption*, which is more comprehensive than the concept of *household consumption expenditure* since the former includes in addition to household final consumption expenditure the expenditures by the government and the NPISHs for the benefit of individual households.