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2019 MAY PSMB MEETING

DOCUMENT N° 11:

EVALUATION OF THE HIES EXPERIMENT QUESTIONNAIRES FORM A NATIONAL ACCOUNTS PERSPECTIVE

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May 2019

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Pohnpei (États fédérés de Micronésie) ; Port-Vila (Vanuatu). Bureau de pays : Honiara (Îles Salomon).

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BACKGROUND

Household Income and Expenditure Surveys (HIES) are one of the most important data sources for national accounts GDP calculation. They shed light on parts of the economy, typically not covered by other statistics like administrative data (see also points 4 and 5 in Annex 1). However, informal household production and consumption represent a considerable part of total production in most developing countries. They form a closed cycle of production, small market distribution and consumption which is difficult to capture statistically.

In order to improve the content of information and the efficiency of used means, an experiment concerning a modification of the HIES survey has been implemented in the Republic of the Marshall Islands. Modern electronically supported survey techniques were tested alongside new modules. Furthermore, an alternative survey method to collect consumption data through HIES was tested.

SCOPE

The HIES experiment compares the current survey method of diary reports to be filled in daily by the surveyed household to an alternative method where the enumerator fills into an electronically guided template last week's consumption data as recalled by the household. Both methods use different questionnaires concerning surveyed consumption items and their grade of detail.

The underlying analysis tries to compare the appropriateness of both consumption questionnaires for deriving data for national accounts purposes. Apart from that, comments on the common non-consumption related part of the questionnaire are given, concerning the possibility to improve the questions for their usability in national accounts.

RESULTS

Comparing the different questions between recall and diary

The diary-based survey asks open questions about kind of purchased food, service items and home-produced products. This potentially allows for a more detailed classification but leads to a large workload to chart the results. In order to facilitate the recall of consumed productions in past periods CAPI uses closed questions which do not allow for a grade of product details as found in the diary.

However, for national accounts purposes both questionnaires, the recall as well as the diary, allow for a sufficient degree of detail according to COICOP, typically used in GDP and foreign account compilation. The same goes for Supply-and-Use tables used for balancing supply and demand side of economies.

Question H21g3q in the recall asks for home produced drinks consumed. In the case of water - as surveyed in H21g1 - it should be checked if this question is really understood well. The diary, in contrast, does not make clear whether water has to be subsumed under soft drinks but asks instead for stocks of water. Households with private wells could find it difficult to answer this. Maybe *bottled water* should be surveyed, instead.

Further suggestions for improvements of other parts of the HIES

- For vehicles (H13b6) – it is surveyed whether they have been acquired in new condition or used. This is important for national accounts, as new ones enter national accounts whereas second hand do not. Unfortunately, this information cannot be used, as the information is missing when (in which year) the vehicle has been acquired.
- Question H13b9 asks for the percentage of private and business use of taxi and cargo services provided by the household. Instead of asking “only” or “mainly” in questions P803 and P910, percentages could be surveyed there, as well.
- In national accounts expenditures for private owner-occupied homes can show different characteristics

- a) Expenditures increasing the lifespan of a building or potentially increase its rent value are to be regarded as investment, hence, increasing GDP.
- b) Expenditures which do not increase the lifespan of a building or its rent value are to be considered as maintenance repair. Such expenditures are to be booked as intermediate consumption, leading to a reduction of value added of dwelling services and hence do not increase GDP.
- c) Some expenditures are neither in a) nor b) and have only decorating character. In this case they have to be booked as private consumption, which increases GDP.

Question H13a1 just asks for different types of purchased services like plumbing, electrical or roofing which do not allow to differ between a) and b).

- Question H1401 asks: “In the last 12 months, did any member of this household spend any money **during** the following events? (Easter, Christmas, ...).” The correct question would be “**for** the following events?”
- Question H1701 asks: “*During the last 3 years, was this household **affected by** any of the following shocks?*” and gives “High price of food items” as a possible solution. The correct question would be “***Strongly increased prices of food items***”.
- In GDP calculation, cultivated production of meat is the increase of meat on the livestock and not the slaughtering. In order to set up a model for meat stock increases, births as well as stock reduction by slaughters, illness, or exports are crucial data. Question H1804 asks just for some **sold** livestock. It matters a lot whether this living animal was sold to a slaughter house or to the neighbor¹.
- Many questions in the template ask for quantities as well as values. Plausibility checks are done independently, just controlling for numbers laying between certain boundaries. A check for implied prices by dividing values by quantities is recommendable.
- Many private households in the south pacific borrowed money from loan sharks. This does not only represent a social problem, but national accounts would be interested in these activities as well. It is strongly recommended to survey households in the HIES for the amount of such debt and the interests they have to pay.

¹ In Papua New Guinea and Vanuatu pigs are form of payment for marriage or compensation to other tribes. They are either given away or sold, but neither automatically reduces the livestock.

ANNEX 1:

Feedback from Glenn McKinlay and Mark Sturton

Via email dated: 25 April 2019

Firstly, thank you for seeking our input. This is an important matter, and we wish to be involved as it progresses.

To prepare the paper suggested would require a period of well-focused thinking, but unfortunately the timeframe and timing are not workable. I was away until late last week, Mark is now in RMI for their IMF staff visit, and we both have other work priorities right now.

Some points:

1. We do not have a view on the best collection methods - the survey methodologists should determine that. But we emphasize the importance of comprehensive field execution, real-time quality control and prompt problem resolution.
2. Other data sources and information should be used to validate results at the earliest stage possible, and post survey. Comparison information might include, but not be limited to:
 - a) Data on Household expenditure on utilities (electricity, water/sewer/phone).
 - b) Income data. In Micronesia Social Security gives very good wages data, and most other cash income sources can also be estimated quite well (with business incomes being the most subjective). In Palau the HIES Income data matched the national accounts estimates closely, suggesting the HIES was effective on that side.
 - c) Logical consideration of aggregate results. In Palau the HIES indicated excessively high average household savings. Given the alignment of the income results with comparison data, this suggested significant under coverage of household expenditure.
 - d) Local knowledge of periodicity of spending patterns. In Palau wages are paid every second Thursday and household spending patterns should align with this. However daily dairy expenditure showed a pattern aligned with enumerator visits, which should have been a red flag.
3. For RMI the comparison data is not as strong as for Palau (where administrative data is particularly good), but all of the cross checks above should be possible to some extent. It is difficult to see how this can be done without weighted data results, at least in draft form.
4. For the national accounts the HIES is the key source for informal and non-cash incomes and expenditures (household production and consumption of food and other goods), so these need to be captured well, even though not relevant to the CPI.
5. It is important the HIES allows separation of formal/informal household business incomes aligned with those used in the national accounts for each country. In Micronesia Business Gross Revenue Taxes are used as the boundary for separating formal/informal. This covers much household income that would be informal in many countries (e.g. small Mom & Pop stores). If the HIES uses a regional definition (often suggested by international agencies) then it is not possible to use the HIES informal income data to supplement the national accounts.
6. Imputed rental of owner occupied dwellings: HIESs should collect data to inform this but the estimation should be done within the national accounts.
7. Macro-economic consistency of national accounts estimates GDP(E) with HIES estimate. In Palau we have good GDP estimates by expenditures including HH consumption-that's why we know there was an issue. We should be able to do something similar for the RMI once we have received an adequate sample and are able to rate up to provide population estimates.

Thank you again for seeking our input.

Glenn McKinlay and Mark Sturton