International Workshop on Regional Products and Income Accounts
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Conclusions of the Round Table Discussion

Conclusions on the 10 issues for the round table discussion as well as the comments of participants that have led to their formulation are presented below.

Institutional arrangements: agency responsible for compiling GRP

Canada – Some issues cannot be resolved by regional offices, for example multi-regional enterprises or central government activities that operate throughout the country. NSO may approach these enterprises and collect data for the enterprise and its establishments and regionalize ancillary activities to local establishments. In addition, central government activities may be allocated to the regions on the basis of the sum of compensation of employees and consumption of fixed capital.

Brazil – Though in Brazil, GRPs are compiled locally but to have a full supervision of consistency in data, NSO of Brazil controls the compilation of GRPs as follows:
1. Have focal points in the regions as GRPs in Brazil may also be compiled by non-statistical agencies.
2. Set up the central database where both national and regional data are stored in a systematic manner that allows checking and confrontation of data such as the sum of local data does not add up to the national data. Discussion between central NSO and local offices is organized to resolve inconsistency. Small and independent regional databases are not efficient and cannot be independently verified as it is a part of the national system.
3. Control methodological consistency.

Australia – NSO should ensure consistent methodology, transparent compilation process and numerical consistency.

Regional GDP data should be controlled and signed off to be official. NSO should decide on standards and methods. Data should be produced properly by all agencies in the National Statistical System.

Conclusion: It is recommended that GRPs be preferably compiled by the Central National Statistical Office. The Central National Statistical Office should have the ultimate responsibility for compiling and disseminating regional GDP and ensuring that the statistics are reliable and regional data add up to the national total.

Three approaches to GRP compilation

China – In China, a mixture between income and output approaches for different activities is used, depending on data sources available, the question is which approach can be considered the leading one for GRPs.

Viet Vu: GRP is compiled by the production approach in many countries. In countries where enterprise statistics are available, the income approach is often used. For enterprises, when turnover and sales data, intermediate costs, profits and other relevant costs and incomes are available, the production approach (also called output approach) should provide the same value as the income approach. In principle, for enterprises, gross operating surplus can be compiled from business profit (or net income before taxes) of the enterprise after some adjustments. The adjustments includes: (1) deducting from profit other incomes (such as interest and dividends receivable, insurance claims, capital gains realized, etc.) that are considered property income, current transfers or holding gains in the SNA and (2) adding in items that should not be regarded as intermediate costs in the SNA (such as interest payable, insurance premiums, bad debt allowance, etc.). In this sense, China was correct to comment that the income approach was better, because in majority of cases information about the intermediate consumption is missing. However, this practice is reliable only for GDP at the national level. At the regional level, the method does not work properly because of the fact that the financial statements of enterprises that operate in more than one regional economy include data on more than one region. Proper collection of data requires the identification of establishments (i.e. part of the enterprise) operating at every region. Thus the proper statistical units for regional statistics are establishments, not enterprises. In addition, value added of informal activities cannot be easily compiled by the income approach.

Australia – The application of 2 or 3 methods for measuring GRP are better than a single one in order to have a confrontation between different values. Usually one of the approaches is stronger than the others, at the same time; each of the three has its own weaknesses.

Philippines – While deciding on the approaches one should take into account the needs of users. Some of the expenditure components are difficult to regionalize; however, countries should continue to develop the remaining items by regions. The Philippines strongly supports the 3 approaches to GRP. Short term and long term plans should be developed with the recognition of some components' constraints, for example the difficulty in compiling regional exports and imports, but it is useful to elaborate foreign trade from the regions.

Viet Vu – It is worthwhile to emphasize that the income approach may not be implementable for the informal sector (which makes up a significant share of GDP in the developing countries, particularly at some poor regions). For the informal sector (or activities), the best approach is the production approach.

Conclusion: The workshop strongly supports that the GRP be estimated by the 3 approaches, with the production approach (also called the output approach) as the leading one. Whenever possible, countries are encouraged to regionalize some components of the final expenditure (GFCF, government and household consumption), while income approach could be used for additional validation of the production-based GRP. The balance between the production approach and the demand approach is treated as a residual that may include net imports, change in inventories and statistical errors.

Equality between GDP and the sum of GRPs

Brazil – if the discrepancy between GDP and the sum of GRPs is significant GRPs should not be published

Conclusion: If a discrepancy exists between regional and national data, it should be negligible (i.e. due to some balancing procedures) and clearly explained to users. If the discrepancy is large, revisiting of basic data and compilation methods are recommended. Data with large discrepancy should not be published.

Constant prices

India – It is difficult to compile price indices at regional level.

China – There are 4 regional levels (national, provincial, district and cities). PPI and CPI are calculated by NBS and used by provinces. They cannot reflect the real situation at local level in a timely manner. At the same time there are some controversies between prices set at national level and the local prices.

Australia and Canada - It is reported that Australia and Canada mostly use national price indexes for deflation purposes. In Australia, only construction is deflated by local price indices.

Viet Vu – One may assume that prices of traded goods vary similarly across regions, however, if price indices are at highly aggregated level, than it may be a problem at the regional level when prices of commodities within the same aggregate grouping vary differently and when the composition of commodities within the grouping in the region is not the same as the national average. If national prices are used, for commodity-driven economy regions, prices should be at appropriately detailed level.

Conclusion: Appropriate deflators for estimating constant prices should be developed and used, if possible, at an appropriately detailed level. To avoid inconsistency between national and regional data at constant prices, the use of average national prices is acceptable for deflating regional goods and services. However, countries may improve it by developing local price indexes for non-traded goods and services such as construction services. Use of regional CPIs is recommended for final consumption and services.

Supra region

Australia – Case by case basis should be adopted for deciding whether a unit belongs to the supra region. If there are significant offshore transactions it will be good to include it in the supra region, otherwise for small like embassies abroad – could be debated. [Australia allocates costs of embassies abroad proportionally to all regions.]

India – Per capita GRP may be distorted, however some units/activities could be allocated.

Viet Vu – Supra region comes from the residency criteria. Local government does not have control over the units and the units also do not provide significant benefits to the region where they are located. Countries should decide which unit is not a resident of the region on the basis of the employment and other income benefits brought to the region, in addition to other SNA criteria.

China – how to better distribute the supra region?

Viet Vu – Similar to the treatment of international organizations – compensation of employees of the IOs (locally recruited staff) is recorded as income received from abroad by the economy; the output is recorded in another economy.

Australia - Working definition on what should be considered a supra region unit needs to be elaborated in the future handbook. Decision making tree for countries to decide would be helpful.

Vietnam – Should the national army be treated as part of the supra region?

Australia - The SNA rule is – where the production activity takes place. In the case of army, if it is in one region, then the activity is there and should be included in that region.

Conclusion: Activities to be included in the Supra-region should be decided on a case by case basis by countries. The future handbook on GRPs should include a working definition and criteria, if possible a decision tree, to decide what is the coverage of the supra region

Head office

Viet Vu – it is recommended that treatment of the head office in the new SNA, IRIS and IRDTS be adopted for GRPs.

Conclusion: New SNA 2008 recommendations for the treatment of the headquarters were accepted in the compilation of regional accounts. This means that they and similar ancillary activities operating at regional economies should be treated as production statistical units.

National industries

The list presented in the meeting includes the following industries:
- Postal services
- Transportation (interregional bus, railroad, airline, ships, pipeline, etc.)
- Operation and maintenance of highway
- Mobile phone and other telecommunication activities
- Banking and other financial activities
- Government services

Australia – Electricity needs to be included in the list as a national industry.

Canada – Production is a result of the use of capital and labour inputs. Some activities may have fewer employees but significant capital stock. The sum of compensation of employees and consumption of fixed capital should be used as indicators for allocation of national data to the regions.

India – Suggested that we should look for other indicators.

Vietnam – How should one deal with hydroelectricity – it is generated in one particular location, and then electricity is distributed to companies in other regions.

Viet Vu – The allocation should be based on production indicator not consumption indicator.

Malaysia – For some industries – employment in the region is used – such as for transport, airlines. Employees may be mobile, if the headquarter reports on where they are employed, they will be included in one region only.

Indonesia – Total population is used for electricity; total number of passengers for transportation. These indicators are considered better than employment for those activities.

Conclusion: List of national activities (electricity, post, etc.) should be established in each country and appropriate indicators for their allocation by region identified. Indicators should reflect the production that occurs in a region.

Mobile assets

Canada – Convention is taken – the non-mobile capital stock is allocated to region where they are located. Mobile asset is allocated to places where it operates. Similar to notional site which is created for foreign construction activity to avoid recording of import and export, notional unit is created for mobile asset to capture its production in the region where it operates. [The allocation affects the treatment of assets as capital stock, gross

capital formation, consumption of fixed capital and the production of service using the asset.]

Conclusion: mobile asset should be placed where it operates. If there is no a production statistical unit, a notional unit should be created.

Taxes and subsidies

Canada – A distinction is made between taxes paid by businesses and consumers. Taxes paid by businesses should be allocated to the enterprises in the region, while consumer taxes should be allocated to where the consumer resides. Canada focuses more on GDP by expenditure approach and therefore taxes paid by consumers need to be identified. Canada however cannot trace the flows of taxes paid on products by consumers to where the products are produced.

Australia – identifies taxes on products with locations where products are produced.

Viet Vu – To be consistent throughout the three approaches, basic price valuation should be adopted to measure output, value added and GRPs and the issue with taxes and subsidies will be eliminated. This means that taxes and subsidies should not be allocated to regions.

Conclusion: The issue of allocating taxes less subsidies to regions is considered complicated from the conceptual point of view, therefore, no recommendation was made and the decision on how to do it is left to countries.

Informal sector

India – Supports the suggestion made in the presentation. India wants to mention that it has a household survey through which only expenditure categories are asked as information on income provided by households were found to be not reliable.

Philippines – Most countries estimate the informal sector indirectly. Support the proposal. There is a need for more-frequent-than-5 year surveys.

Conclusion: The workshop supports the recommendation that the benchmark household income and expenditure surveys serving both national and regional purposes be conducted by countries at least every 5 years, although the need for more frequent surveys is emphasized. The difference between the employment from the establishment and LFS surveys is recommended for estimating the informal sector activities in developing countries. Thus it is recommended countries should carry out regularly establishment survey on employment and labor force survey.