

# Regional Workshop on Measuring the Informal Sector and the Non-Observed Economy

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## Expenditure methods



## *A common part*

- \* Calculations of GDP by categories of use show the final demand for goods and services
- \* Sometimes the expenditure method developed less than the production method, the causes may be the traditional attention to the statistics of production and the problem of availability of data on the use of

## A common part

- \* Independent estimates of GDP by end-use are not made as a total and are calculated only the individual elements of the end-use, such as gross fixed capital formation, final consumption expenditure of government, exports and imports, while the other articles (for example, final consumption expenditure of households changes in inventories) are obtained by the residual method. This leads to the fact that the estimation of GDP by expenditure approach can not provide independent verification the production approach method of GDP estimation

## A common part

- \* Estimates use can not provide independent verification of production estimates
- \* Indirect methods of calculation depends on the availability of source data, and they vary considerably by country
- \* Make every effort to avoid the calculation method in which the performance assessment at the aggregate level are obtained by the residual
- \* The calculation should be based on detailed and specific adjustments using specific sources of data and the known relations

## Certain categories of use

- \* Final consumption expenditure of households
- \* Final consumption expenditure of government
- \* Final consumption expenditure of non-profit institutions serving households
- \* Gross fixed capital formation, changes in inventories, acquisitions less disposals of valuables
- \* Exports and imports of goods and services

## Final consumption expenditure of households

Separate theme

## Final consumption expenditure of government

- \* The calculation of output and final consumption expenditure of public administration are closely related
- \* Calculations of release shall be made separately for market output, production of fixed assets of the economic way (in his performance) and other non-market output governance

## Final consumption expenditure of government

- \* Information is needed on the revenue from sales of non-market services and purchases by government agencies of goods and services provided to households free or at not economically significant prices (the sphere of healthcare, education)

## Final consumption expenditure of government

- \* The required information is usually available in the reports on the planning and execution of budgets and other public accounts, but here it is necessary to take into account:
  - \* a) These figures may not be available on the costs of the regional and local governments, extra-budgetary funds and the costs associated with the defense, law-enforcement authorities (wages, social welfare payments)

## Final consumption expenditure of government

- \* b) In the situation of absence of data on the consumption of fixed capital, can be used data on the basic foundations of public institutions (at current prices)
- \* c) It is necessary to take into account the fact that data on a cash basis to differ significantly from data for accounting used in the national accounts (acrua)

## Final consumption expenditure of NPISHs

- \* If the public authorities to monitor and control or financing of large NPISHs there are not problems with data collecting (records for tax authorities)*
- \* In the absence of data for small NPISHs it is possible to use their roster to made some observations by survey sampling method*

## Final consumption expenditure of NPISHs

- \* In countries where foreign aid is an important source of funding for NPISHs is necessary to use data on income transfers from abroad NPISHs (accounting, the Ministry of Finance, law-enforcement agencies)*

# Gross fixed capital formation

- \* For the calculation of fixed capital is used direct observation of the capital costs as well as using the indirect methods (commodity flows, and other data about resources or demand for the goods of capital nature)

# Gross fixed capital formation

- \* The best source for the calculation of the accumulation of capital is a survey of capital expenditures of enterprises, but there are problems associated with coverage, the registry of new businesses with capital-intensive start activities, a long period of not investing in already established companies

# Gross fixed capital formation

- \* Good data on the acquisition of fixed assets are generally available for government, public corporations, large companies for large investment projects financed from abroad, the data coming from surveys of production.
- \* The problem remains the acquisition of data on fixed assets on its own for small businesses and unincorporated household enterprises

# Gross fixed capital formation

- \* If there is a separation system of value added tax on the purchase of capital and current character, the indicator may well be appropriate, but often there is no breakdown by product and missing data for the production of fixed assets in own performance



# Gross fixed capital formation

- \* Methods of flow of goods use the classification of the types of assets, but not by activity or institutional sectors, and it is a reason why they are used more for machinery and equipment as the evidence of their resources are readily available.
- \* For information about resource should be made adjustments for the inclusion of taxes, trade and transport margins and the cost of their installation and the need to exclude products used in intermediate consumption (spare parts), household final consumption (cars, computers), inventories, net sales of goods of a capital nature (sale of used cars by households, non-residents)

# Gross fixed capital formation

- \* Methods of flows of goods are also applicable for construction, as the assessment of capital accumulation is closely linked to the issue of the construction of settlements. Differences between the release of the construction and the accumulation of capital products in kind of construction:
  - \* a) The issue involves the construction of maintenance, not related to the accumulation of capital
  - \* b) Construction of facilities (for which the customer is not defined and which continue to belong to the builder) for speculative purposes until the object is completed, unsold or not put into operation, should be classified as current assets inventories and not as fixed capital formation
  - \* c) should take into account the costs of the transfer of ownership which are part of the of capital accumulation

# Gross fixed capital formation

- \* Gross fixed capital formation includes:
  - \* a) Cultivated assets (livestock, crops). Indicators based on data on livestock and agricultural census data and surveys
  - \* b) Intangible fixed assets (mineral exploration, computer software, original works of entertainment, literature, art). Indicators can be derived based on the production of standard or shelf software, development of its own software, plus imports, minus exports, or on the demand side (software costs). The positive side of the indicators is that fewer companies involved in its production, with the disadvantages relating to their use for household consumption and that is the development of enterprises, state - sector of its own software, as well as part of the program. Indicators for mineral exploration - on the basis of permits for exploration work, but with the time shift for its implementation.
  - \* c) adding to the value of non-produced assets (land melioration)

# Change in inventories

- \* Not acceptable technique can be considered to calculate changes in inventories as a balancing item between the production method and expenditure approach of GDP calculation, which leads to serious errors in the turning points of the business cycle (comparing sales and output).

## Change in inventories

- \* Good data on changes in stocks can be provided only in surveys of industrial enterprises, agriculture, based on the food and energy balances, management reports of sales data for the state -sector.
- \* Stocks related to non-observed economy are making only insignificant contribution is concentrated in a limited number of products in agriculture, trade, manufacturing

## Change in inventories

- \* Evaluation on changes in inventories is carried out on the basis of purchase price and not on the basis of the current replacement cost required by system of national accounts, so it is a reason why there is needed adjustment to eliminate holding gains / losses. This mainly concerns the construction and agricultural sectors where there is a long period of their account (bridges, roads, large-horned cattle)

## Acquisition less disposals of valuables

- \* As a separate category of capital expenditures
- \* The calculation of value can be made on the basis of statistics of production, imports, retailers, buyers (household survey)

## Imports and exports of goods and services

- \* The main source of data on imports and exports of goods is international trade statistics
- \* Used calculations based on customs data and declarations of international trade or business

## Imports and exports of goods and services

- \* Disadvantages:

- Customs figures do not include services,
- Incomplete coverage of the data,
- The registration does not correspond to the concept of National Accounts,
- Do not take into account the direct import of state institutions (military goods and foreign aid in kind),
- Shuttle, cross-border trade

## Imports and exports of goods and services

- \* The customs statistics may not reflect the export and import of oil and natural gas, gifts, parcels and general merchandise at a cost below the limit set by law for inclusion in the collection of data

# Imports and exports of goods and services

- \* Shuttle trade is often not included in the customs records and must conduct surveys of shuttle traders (the use of sampling, the total number of shuttle trips, the average price of imported or exported goods)