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

4 – 7 October 2015 Tehran, Islamic Republic of Iran

#### Non-observed economy



### Defining the scope of production

- \* The task to determine the production boundary
- \* Components of economic production
- \* Economic production
- \* It includes any human controlled activity
- \* The task to define the boundary of economic production



### Characteristics of units engaged in informal activities

- \* Identification
- \* Criteria for determining the subject of the informal sector



#### Non-observed economy

- \* Non-observed economy is part of the economic activities not covered by the collection of statistical and administrative sources
- \* NOE measurements should cover illegal activities
- \* When using supply and use tables, using the theoretical value of taxes in relation to the actual amount of rip it leads to the determination of the missing or distorted information assembly statistics and improves the overall assessment



# The informal sector in the definition of the ILO

- \* Common features
- \* Section businesses on the principles of the ILO (International Org. of labor)



### Informal employment

- \* The ILO considers the five categories of work, the following categories of persons
  - a) self-employed persons working at their own expense
  - b) Heads of unincorporated enterprises with employees, considered as employers
  - c) unpaid family members working in unincorporated enterprises
  - g) employees
  - d) members of producers' cooperatives



#### Getting information on the activities of the informal Enterprises from data SNA

- \* From the household sector should be excluded informal enterprises. These include:
  - a) institutional households, such as prisons, religious organizations and nursing homes
    - b) households not engaged in any productive activity
  - c) households, whose only activity is the production of services in connection with living in their own homes and the production of services of hired domestic work, and in fact, and the other



#### Getting information on the activities of the informal Enterprises from data SNA

- \* Production is divided into three parts:
  - a) Market production
  - b) production for own final use
  - c) production of goods exclusively for own final use



#### Getting information on the activities of the informal Enterprises from data SNA

- \* Separation of households ILO
  - a) unincorporated businesses with no employees on a permanent basis
  - b) unincorporated businesses with employees on a regular basis



#### Systems of NOE measurement

- \* The components of the coverage of the informal economy
  - shadow production
  - -Illegal production
  - -Production of the informal sector
  - -Production by households for own final use
  - -Manufacturing not recorded due to deficiencies in the data collection program



#### Systems of NOE measurement

- \* When calculating the GDP by production method, the causes of unaccounted can be divided into three components
  - a) non-coverage of enterprises
  - b) non-receipt of statements from enterprises
  - c) under-reporting of these companies



#### Systems of NOE measurement

- \* The approach of separation NOE
- Shadow economy
  - -For statistical reasons
    - -(T 1) Failure to submit reports
    - -(V.2.) Non actual information
    - -(TZ) Non-registrated
  - -By economic reasons
    - -(V.4.) Underreporting
    - -(V.5.) Unregistered
- -Informal
  - -(T.6.a) Unregistered
  - -(T.6.b) Underreporting
- -Illegal
  - -(T.7) Unregistered



#### Systems of NOE measurement

- \* In EU, the shadow economy splits to 7 types N1-N7
  - -N1- Producer deliberately not detect avoiding taxes and social contributions to their employees
    - -N2- Producer deliberately not detect, because that is involved in illegal activities
  - -Manufacturer N3- not detect as it is a non-market producer (building households, agriculture), and its release is below the level necessary to register
  - -N4- Legal entity non-observed because of outdated registry as well as the reasons for the release below the survey
  - -N5- Non-registrated traders, enterpreneurs are not observed due to various reasons on the basis not to include them in the survey, excluding them from the survey sample unsuitable structure
    - -N6- Manufacturer deliberately distorts data
    - -N7a) Data incomplete or not collected directly
  - -N7b) Data treated during collection and processing incorrectly, or were filled with statistics



#### National accounts estimates - Comparison

- \* Comparison of the data from surveys of businesses in comparison with those on taxation
- Sales of goods and services subject to VAT, compared with collected VAT
- \* Production in comparison with taxes related to production
- \* These enterprise surveys on the production of products in comparison with the data of surveys of businesses to purchase products
- \* Resources goods and services in relation to their use
- \* Survey data costs in comparison with the data of the survey of retail trade turnover



# National accounts estimates - Comparison

- \* Household expenditure in comparison with the retail trade turnover
- \* Survey data costs in comparison with the data of income tax Ilene
- Household expenditure in comparison with the available income
- \* Survey data of enterprises in comparison with the data of labor force surveys
- \* The use of labor in comparison with the labor supply



### National accounts estimates - Comparison

- \* Turnover, value added, intermediate consumption, etc. compared to the use of labor
- \* Estimate the upper limit for each type of activity or measure, production, use and maximizes revenue evasion or shows the difference when using the data for exports and imports



### Methods to achieve completeness of coverage in National Accounts

- The calculation of GDP by production method common methods
  - -Methods based on resources
  - -Labour input method
  - -Methods based on demand
  - -Methods based on income
  - -The method of the flow of goods
  - -Special methods for industries



# Methods to achieve completeness of coverage in National Accounts

- \* Method end use: information sources and calculation methods
  - -Final consumption expenditure of households
  - -Final consumption expenditure of government
  - -Final consumption expenditure of NPISHs
  - -Gross fixed capital formation
  - -Changes in inventories and acquisition less disposals of valuables
  - -Imports and exports of goods and services
  - -Supply and use tables



### Methods to achieve completeness of coverage in National Accounts

- \* Methods of measuring the shadow economy are aimed at:
  - -Survey costs for goods and services produced by the informal production, can give better results than a survey of shadow incomes
  - -Survey of labor costs and revenues associated with the production of shadow give good results, so as in many countries, the shadow work is considered a minor violation of the law
  - -Shadow Production
  - -Shadow production, does not measure statistical survey
  - -Tax evasion
  - -Shuttle trade
  - -Purchases by individuals in border areas
  - -Barter Trading
  - -Capital flight



# Methods to achieve completeness of coverage in National Accounts

- \* Areas of measurement illicit production
  - -Theft and possession of stolen goods
  - -Bribes
  - -Laundering of money
  - -Fraud
  - -Drugs
  - -Prostitution



### Methods to achieve completeness of coverage in National Accounts

- Macro-model methodsMonetary methods
  - a) Method of operation
  - -b) The method of cash deposit ratio
  - -c) The method of demand for cash

Monetary macro model suitable for evaluation of the underground economy, primarily because they are based on model assumptions, which may not actually be checked



### Methods to achieve completeness of coverage in National Accounts

- \* Macro-model methods
- Methods of global indicators
- \* An example of an approach based on global indicators is the method of electricity consumption, which has many flaws depending on the index referred to the whole economy, specific industries or sectors. Unrecorded factors changing consumer skills, productivity
- \* Method latent variable
- \* The size of the shadow economy is estimated on the basis of the dynamics of variables that, on the one hand affect the size and growth of the informal production, and the other represents the next shadow economy



#### Conclusion

- \* Since unobserved variables is unknown, it is replaced by a set of indicators
- \* Frequent replacement indicators of cause and effect leads to inaccurate conclusions
- \* Most preferably, the basis of statistical estimates are always empirical data
- \* Models should be detailed as much as possible, to give the best opportunity to accurately reflect the simulated phenomena and other analysis

