Measurement methods

Overview

Different measurement methods
Minimum set of data items
Recommended frequency
Statistical units

Methods:
- Labour force surveys
- Establishment-based surveys
- Mixed surveys
- Indirect methods

Summing up
Measurement methods

Types

Direct estimation
- Labour force surveys (household-based surveys with a labour force component)
- Establishment-based surveys
- Mixed household and enterprise surveys

Indirect estimation
- Macro-economic estimation
- Comparative analysis of statistics from different sources

Methods are not mutually exclusive
Each has strengths and limitations
Can be combined to improve coverage

Choice of survey method depends on
(a) The data items that need to be measured;
(b) The existing surveys and sample frames in the country;
(c) Financial and human resources
Measurement methods
Statistical units

Analytical units – for which the statistics are produced
  Informal sector unit (informal sector entrepreneur)
  Persons employed in informal sector units, persons in informal employment

Observation units – for which information is collected
  Are not always the same as the analytical unit – need for adjustment

Sampling units – units selected in sample
  Households, enterprises

Reporting units – that provide information (respond to a questionnaire)
  Persons, entrepreneurs
Measurement methods
Minimum requirements

Sound sample design
- Sample frame should be comprehensive
- Sample size should be adequate for required detail in statistics
- Informality should be a basic objective of sample design
  - It should take into account the need for statistics on informality
  - There should be enough observation units in all industries and areas

Inclusion of relevant questions in standard questionnaire
- Registration, book-keeping and size of enterprise
- Social security coverage and entitlement to holidays

Coverage of all jobs and economic units
- Main and secondary jobs, household-based and itinerant economic units, all economic activities

Coverage of all seasons and sporadic activities
Measurement methods
Labour force surveys

What they do:
Collect detailed information about labour force characteristics of persons
Using a standard questionnaire

Data items
Number of persons in the informal sector
and characteristics relating to their work, their person and their households

Number of informal sector entrepreneurs
and characteristics relating to their work, their person and their households

Number of persons in informal employment
and the characteristics related to their work, person and households
Measurement methods
Labour force surveys - Advantages

Existing survey infrastructure
Low cost of adding a set of questions on informality

Coverage
Of all jobs, all branches of economic activity, all informal workers (including employees & unpaid family workers)

Coherence
Data on informal sector and informal employment can be related at micro-level to other information collected in the same survey
Informal employment and working conditions measured at macro-level along with employment in other sectors and unemployment
Measurement methods
Labour force surveys - Limitations

Limited data items
Do not cover informal sector enterprises nor their characteristics

Response errors
Proxy respondents may not know enough about the employment situation of other household members
Even employees and contributing family workers may not know enough about the enterprise in which they work to classify in the informal sector

Unreliable estimates
If sample is not designed to produce informality estimates

Lack of coverage of seasonal and sporadic activities
If survey is not frequent enough or reference period is not long enough
Measurement methods
Establishment-based surveys

What they do:
Collect detailed information about establishments/enterprises and their economic activities and other characteristics. Are usually carried out to supplement formal sector surveys, i.e., target all units excluded from list-based register.

Data items:
Number of (informal sector) establishments
And characteristics of units, such as organization & functioning, constraints & potentials

Production, income generated, costs, etc.

Number of (informal sector) entrepreneurs
And characteristics relating to their work, their person and their households

Number of jobs in (informal sector) establishments
And characteristics relating to these jobs

Number of informal jobs in all establishments
And characteristics relating to these jobs
Measurement methods
Establishment-based surveys - Advantages

Coverage
  - Of informal sector units
  - Of informal sector jobs and working conditions

No proxy response
  - Information is provided by entrepreneurs

Coherence
  - Data on informal sector units can be related to economic units outside the informal sector, to obtain coherent data for the whole economy
Measurement methods
Establishment-based surveys - Limitations

Observation unit is not equal to analytical unit
  Enterprise vs establishment
    Linkages between different establishments belonging to the same enterprise
    Double counting of enterprises is possible, if no checking is done to identify establishments belonging to the same enterprise
  Worker vs job
    Requires adjustments to the observations

Coverage
  May not cover all kinds of economic activities (e.g., exclude agriculture, industry-specific surveys)
  If not area-based, coverage of informal sector units will be incomplete
  Even if area-based will exclude employees in households
  Will tend to underestimate informal employment outside the informal sector

Response errors
  Detailed information about the production, costs or sales of the unit may not be provided because no registers are kept

Cost
  Listing operation in area-based surveys is expensive
Measurement methods

Mixed surveys

What they do
Collect detailed information about households and enterprises
Are carried out in two phases:
Household survey phase identifies informal sector entrepreneurs
Enterprise survey phase obtains information about enterprises owned by informal sector entrepreneurs

Data items:
Number of workers in the informal sector and in informal employment
and characteristics related to their jobs, their person and their household

Number of informal sector units
and their characteristics, including organization & functioning, constraints & potentials

Production, income generation, costs, etc.
Number of informal sector entrepreneurs
and characteristics related to their person and their household
Measurement methods
Mixed surveys - Types

Mixed modular survey
First phase: Module attached to existing household-based surveys

Mixed independent survey
First phase: stand alone survey or listing operation of households

May use dual sample frames:
(a) An establishment frame of informal sector units operating with premises;
(b) A household frame for informal sector units operating within dwellings or mobile activities
Measurement methods
Mixed surveys - Advantages

Coverage
Complete coverage of informal sector enterprises, irrespective of size, kind of activity or type of work place

Enterprise data
Different informal sector activities undertaken by same individuals/households can be analysed in conjunction at the enterprise/household level

Coherence
Data on informal sector enterprises can be related to characteristics of the entrepreneurs’ households
Data on informal sector activities can be related to data already obtained from the base survey
Measurement methods
Mixed modular surveys - Advantages

Simple
Mixed modular surveys are less complex than mixed independent surveys
Estimation of survey results is facilitated through possibility to use the same sampling weights as the base survey

Trends
Possibility of monitoring evolution of informal sector over time if base survey is conducted regularly and informal sector module attached periodically

Economic
Lower cost than mixed independent survey: identification of sub-sample units on the basis of base survey data, no special listing operation needed
Measurement methods
Mixed modular surveys - Limitations

Unreliability of estimates

In mixed modular surveys, the sample design does not necessarily incorporate informal sector measurement as a core variable

The number of informal sector entrepreneurs may be quite small
No control over distribution of Informal Sector sample by type of activity and its representativeness
No guarantee to obtain reliable separate estimates for each type of Informal Sector activity
Measurement methods
Mixed independent surveys - Limitations

Complexity of survey operations
Mixed independent surveys are more complex than mixed modular surveys

Cost
The listing operation is an expensive operation
Measurement methods

Indirect measurement methods

Common prior to direct measurement methods
Approximate estimates of employment in the informal sector and informal employment

Two approaches

Residual balance
Mainly to estimate employment in the informal sector and informal employment
Can also be used to estimate value added
Combine data from different sources

Macro-economic estimation (econometric models)
Mainly for national accounts for estimation of value added
Also to estimate number of informal units
Combine aggregated variables
Measurement methods

Summing up

When the main objective is to measure employment in the informal sector or informal employment
- Labour force survey
- Mixed modular survey

When the main objective is to measure value added of the informal sector
- Establishment survey

When the objective is to measure the number of enterprises in the informal sector and their characteristics
- Mixed survey (modular or independent)

When the objective is to measure both employment and production with the same source
- Mixed survey (modular or independent)

When no direct measurement exists
- Indirect methods