

**UNECE workshop – measuring NOE in National
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Use of mixed surveys

EU projects about NOE

Rémi Bardon (Eurostat-E5)

NOE components

- **Illegal activities:** activities forbidden by law (drugs), or by nature (cigarette smuggling).
- **Underground activities:** non declared activities, by registered companies.
- **Informal sector:** activities as a whole, legal or not, which are not registered in any administrative register.

The measurement of the NOE and the Informal Sector (IS)

- * Indirect estimations
 - Comparing different aggregates and NA balances (supply based and demand based methods).
 - labour input method (Italian ISTAT).
- * Direct measurement (specific and global methods)
 - Industry-specific method: building, transport, trade, restaurants, agriculture, etc... (specific surveys, monography)
 - Combining with census/sampling surveys of the informal establishments (global).
 - Mixed surveys: sample of HH, interviewed via a double approach household+establishment (global).

Indirect estimation: supply based and demand based methods

- Comparing different aggregates and NA balances
 - advantages (+): cover all NOE components
 - disadvantages (--): lack of statistical data concerning NOE ; poor accuracy ; no scientific value.

Indirect estimation: labour input method

- Mains principles: estimating the production (GDP) through direct measurement (enterprises' side) and indirect employment estimations (households' side: LFS).
- Mains steps:
 - labour input at constant compensation (full time equivalent job),
 - estimation of the informal employment (diff. between data from enterprises side and from HH side LFS),
 - estimation of informal VA (= input of informal labour X average per capita values)
 - global VA = aggregation of formal + informal VA.
- Advantages (+): cover all NOE components ; use of statistical data.
Disadvantages (--): indirect method → no direct measurement of the informal employment and production → strong assumptions and poor accuracy ; necessity to have enterprise and employment surveys implemented on a regular base.

Direct measurement: establishment approach

- Mains principles:
 - census of informal establishment and enterprises.
 - sampling an informal sector survey.
- Advantages (+): direct method → use of statistical data for informal employment and production.
Disadvantages (--):
 - cover only the IS, not underground and illegal activities
 - no exhaustiveness : no coverage of the 'without fixed location' activities.

Direct measurement: mixed survey approach

- Mains principles:
 - to propose a double 'household-establishment' approach.
 - sampling a HH survey for measuring the economic activity ; then sampling an informal sector survey (informal production units) from the first HH sample.
 - to refer to the international standard related to the employment and the informal sector definitions (ILO 82 resolutions on employment and 93 on informal employment ; SNA93).
- Advantages (+):
 - direct method → use of statistical data for informal employment and production, as well as HH consumption.
 - Exhaustiveness of IS: each kind of informal activities is measured (located and non=located activities).
- Disadvantages (--):
 - cover only the IS, not underground and illegal activities

Advantages of the mixed surveys

- Accuracy of the sampling surveys, compared to indirect methods.
- Relatively cheap, especially compared to the establishment approach (census of informal production unit).
- Ability to be inserted in the national statistics systems (Labor force surveys, HH budget surveys, HH expenses surveys).
- Global approach of the studied field (IS), compared to the industry-specific methods.
- Exhaustiveness of the studied field, compared to the other methods as a whole.

Different kind of mixed surveys

- Surveys studying the production side (ILO method, Tanzanian surveys 91-95, Palestine pilot 2000)
- Surveys combining with a double approach: employment and production (*supply side*) (Mexican surveys 89 up to now)
- Surveys combining with a triple approach: employment, production (*supply side*) and consumption (*demand side*) (1-2-3 system) (many countries in Africa, in Latin America, in Asia)

Mixed survey ; 1-2-3 system

Triple approach in terms of :

- Employment (phase 1): characterization of the economic activity for the whole population (HH and Individuals) → employment measurement, incl. informal employment.
- Production (phase 2): activity of the “Informal Production Units” ; reconstitution of the production and exploitation accounts of the informal establishment (Individuals)→ supply side.
- Household Consumption (phase 3): global consumption, including the one from the informal sector (HH) → demand side.

1-2-3 system : main principles (1)

- **Phase 1 : study of the economic activity of the individual within the HH.**
- Household (HH) sample.
- HH questionnaire: socio-demographic characteristics (Housing, etc.), individuals identification.
- Individual questionnaire: employment characteristics (rate of employment, payment, qualification, precarity, unemployment , etc.).
- To create a sample frame of Informal Production Units (IPU), to be studied in the phase 2.

1-2-3 system : main principles (2)

- **Phase 2 : to study the activity of the Informal Production Units:**
- Sample of informal activities = statistical units represented by an individual head of IPU within his/her principal or secondary activity.
- To analyse the strategy of the head of IPU within the framework of their activity (price, investment, competition, etc).
- To analyse the way the IS is integrated within the economy (inputs, outputs, labour, customers characteristics).
- To help the estimation of the IS within the National Accounts : to build the sequence of the “household enterprise” account (production account, generation of income account, allocation of primary income account, sec. distribution of primary account, use of income account...).

1-2-3 system : main principles (2b)

- **Questionnaire phase 2 : Informal sector .**
- Some specific modules are addressed to the head of IPU:
 - Labour Characteristics: number of hours worked, type of payment, payment, bonus and facility , leave with pay, ...
 - Production : turnover (product, product sold without transformation, services).
 - Evaluation of the expenditures and inputs of the establishment: expenses for raw material and services, expenses for products sold without transformation, other expenses (energy, housing, etc.).
 - Estimation of equipment (cost of replacement): land, premises, machinery, etc.
 - Estimation of the money borrowed during the period.

1-2-3 system : main principles (3)

- **Phase n°3 : study of the HH consumption:**
- HH sample obtained from the one of the phase 1.
- To measure the HH consumption expenses: daily expenses structural expenses (clothing, housing, energy, transport, health, education).
- To facilitate the estimation of the informal sector within the NA : threshold by product, threshold according the origin of the demand (formal/informal).
- Phases 2 and 3 allow to introduce the IS within the productive sector as a whole (by confronting supply/demand from the IS).

EU projects including a NOE/IS component.

- Seven (7) European programmes covering 40 countries: TACIS, Africa (sub-Saharan, Mediterranean), and Asia (China, ASEAN, Bangladesh).
- Passed and on-going projects:
 - TACIS (95-today ?): NOE component in 8 countries (inc. labour input approach).
 - UEMOA project (98-02): 8 western African countries (1-2-3 survey).
 - MED-NOE project (99-02): 12 Mediterranean countries (labour input approach and mixed survey in 3). Follow up in ongoing pgm 06-09.
 - Madagascar, China, Bangladesh: mixed 1-2-3 surveys or pilots.
- Scheduled programmes:
 - ASEAN programme (07-09): 9 countries (mixed survey or pilot).

Conclusion (1) : Combining the use of mixed survey with other indirect methods to estimate the NOE as a whole

- Case of countries for which the structure of labour market is more or less comparable to OECD countries:
 - labour input method or other method usually applied, for measuring the whole NOE.
 - possible implementation of a mixed survey for measuring the IS (if necessary).
- Case of other developing countries:
 - Labour input method if the NSS data production is relevant, or other methods usually applied.
 - Implementation of a mixed survey for measuring the IS.

Conclusion (2) : Measuring the NOE for improving the exhaustiveness of the NA

- Estimations, surveys and studies on NOE and IS are made of re-estimating the GDP.
- Measuring the NOE and IS in order to give as exhaustive as possible estimations of the GDP in the NA, ...
- ... according to the standards and methodologies proposed by the UN in the SNA93.

Thank you for your attention

- **Contacts in Eurostat:**

Responsible for TACIS countries:
Vera ZAZVONOV, project manager, Eurostat-E5
e-mail: vera.zazvonov@ec.europa.eu

Responsible for actions on NOE :
Remi BARDON, project manager,
Eurostat-E5, 5 rue Alphonse Weicker
L-2721 LUXEMBOURG
Tel : +352 43 01 32642
E-mail: remi.bardon@ec.europa.eu