



Measuring the non-observed economy



Regional Seminar on Developing a Programme for the Implementation of the 2008 SNA and Supporting Statistics in the Pacific region

Apia, August 21, 2013



Outline

- ➊ Scope and terminology
- ➋ Production boundaries
- ➌ Compilation issues
- ➍ Non observed economy in the PICs



Terminology: Non observed economy

- ✦ Not captured in regular statistical enquiries
- ✦ Informal (unincorporated enterprises, low level of organization, with little/no division between labor and capital as factors of production and on a small scale subsistence)
- ✦ Concealment of legal activity (tax avoidance)
- ✦ Illegal activity (forbidden by law or unauthorized)



SNA and unrecorded economy

The SNA production boundary

- Production of all goods whether produced for the market or for own-use
- Production of services *if*
 - Sold on the market
 - Supplied to units other than producers
 - Produced by paid labor
- Production of housing services by owner-occupier



Implications of incomplete coverage of GDP

- ❖ Biased growth rates
- ❖ Misleading information on structure of economy
- ❖ Misleading information on the level of GDP
- ❖ Biased international comparability
- ❖ Distortions in the internal consistency of the national accounts



References: Non observed economy

- ✦ See Measuring the Non-Observed Economy A Handbook, OECD
- ✦ 2008 SNA, chapter 25
- ✦ Delhi Group



Comprehensive coverage

- Covering all economic activities that fall within the production boundary
 - Whether market or non-market
 - For sale or own use
 - Legal or illegal
 - Hidden or not
 - Formal or informal sector
 - Recorded or unrecorded economic activities



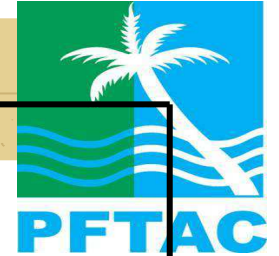
Size of informal economy

- \$9 trillion in 1999 (The Economist)
- Kiribati (including monetary unrecorded and non monetary-subsistence fishing and agriculture plus owner occupiers): 35%
- Solomon Islands: 28% for 2012
- OECD: 16% on average in 2005
- Significant for agriculture, fishing, construction in the PICS



Separate measurement: Difficulty

- ❖ Difficult to identify and separately estimate hidden, illegal, and informal activities due to:
 - ❖ Overlaps between them
 - ❖ Borderline issues
 - ❖ Unclear definition and scope
 - ❖ Lack of data



Recorded vs. unrecorded economic activities

Recorded- covered in statistical collections	Unrecorded- not covered in statistical collections
Most of the corporate (or formal) sector included in the regular data collections	▪ Units within the survey scope
	✓ But excluded – outdated frames
	✓ But excluded – non-registration
	✓ Covered, but misreport
	▪ Part of unincorporated ent. Not in survey scope
Part of HH unincorporated enterprises (informal sector activity)	▪ Part of corporate (formal) units not in survey scope
	Part of illegal – misreport
Part of illegal – misreport	Most part of illegal economy



Strategy for measuring the unrecorded economy

- Be clear on what is to be measured
- Assess the existing national accounts compilation
- Evaluate existing statistical sources
- Analyze the unrecorded economy
- Increase the efficiency of existing data collections
- Develop measurement procedures using
 - available source data, supplemented with ad-hoc collections
 - indirect techniques and adjustments
- Develop new data sources



Inadequacy of data sources

- Incorporating unrecorded activities in GDP involves extensive use of available statistics to obtain **INDIRECT INDICATORS**
- Shortcomings in available data
 - Overlap in coverage
 - Coverage is often partial
 - Classification in various sources may differ
 - Indicators are usually a by-product of regulatory needs
 - Partial information
 - No clear distinction between incorporated and unincorporated enterprises
 - Available irregularly



Under-reporting or mis-reporting

- ❖ Fiscal audits (personal and corporate income tax systems and the VAT system)
- ❖ Confrontation of detailed data and detailed ratios of income and expenses for similar type of establishments from business surveys
- ❖ Demand side data to verify and correct production estimates
- ❖ Specific study of under-reporting or mis-reporting
- ❖ Expert knowledge
- ❖ Suitable methods vary for different kinds of under-reporting and for different activities



Illegal activities

- Direct observation is obviously out of the question
- Indirect sources have to be used
 - Administrative and law enforcement records
 - Data on key inputs
 - Data on major uses
 - Special research/studies
- Part of illegal production may have been included implicitly
 - Enterprises over-reporting legal activities to legalize income from illegal activities



Household production: Two problems in surveys

- ❖ Problems in identifying production units, developing sample frames, and managing data collection:
 - ❖ Often a large number of small scale units
 - ❖ Some activities are widespread and some are concentrated in certain areas
 - ❖ Often invisible – may take place within the premises of a household
 - ❖ Often not registered
 - ❖ Open and close quickly, frequently
 - ❖ Part-time, seasonal and move from industry to industry
 - ❖ Often not regulated and supported by government
 - ❖ Mobile - no fixed working premises



Household production: Two problems in surveys

● Measurement problems:

- ❑ Often no formal bookkeeping is kept
- ❑ Production for own use - appropriate market prices might not be available
- ❑ Use of own material, labor and capital - difficult to calculate cost of production
- ❑ Expenditure for production is often indistinguishable from Household consumption expenditure
- ❑ Many capital goods may be used indistinguishably for business and Household consumption purposes
- ❑ Seasonal character of many activities



Production: Labor input-based method



Uses data on labor force obtained from:

- Business surveys and administrative sources
- Household labor force surveys

Both sources should provide comparable data, or should provide information to convert to a standard labor unit

- Hours worked, or
- Full time equivalent



Production: Labor input-based method



- ❖ Determination of the labor participation not covered in business surveys
- ❖ The assumption is that the regular household survey give a comprehensive estimate of labor participation benchmarked to census data



Production: Labor input-based method



- ❖ Determination of output/value added per labor unit
 - ❖ Analyze the characteristics of units excluded from the business surveys
 - ❖ Derive output/value added per labor unit on the basis of ad-hoc studies
 - ❖ If not feasible, use information that is closely related to unrecorded activities
 - ❖ Determine ratios at a detailed level



Household Income Expenditure Survey

Compilation methods

- Direct observation methods
 - ⊕ Enables periodic benchmarking
 - ⊕ Confrontation of income and expenditure data
 - ⊕ Standardized SPC questionnaires in the PICs
 - ⊕ 12 months and diary



Non observed economy in the PICs

- ❖ Subsistence covered in most (all?) PICs
- ❖ HIES extrapolated using various indicators
- ❖ FAO agriculture censuses (Vanuatu)
- ❖ Adjustments for illegal activities or under/mis-reporting: started in Fiji, Solomon Islands
- ❖ Commodity flow approach can help identifying inconsistencies