ALBANIA NATIONAL INSTITUTE OF STATISTICS (INSTAT)

Non-Observed Economy ALBANIA

Exhaustiveness approach
1. Introduction
2. Tabular Approach/Data sources
3. Estimating services of owner-occupied dwellings in Albania
4. Summary of major findings
5. Future work
‘Non-observed’ economy refers to the following activities:

- **Underground activities** (payment of income, value added or other taxes; payment of social security contributions).

- **Illegal activities** (goods and services forbidden by law; unlawful when carried out by unauthorized producers).

- **Production of households for own final use** (production of crops and livestock; production of other goods for their own end use; construction of own houses and other own-account fixed capital formation; imputed rents of owner-occupiers, and services of paid domestic servants).

- **Non-observed informal activities** (observed activities undertaken informally)
Tabular Approach

- Unregistered
  - Producers Deliberately Not Registering Underground
  - Producers Deliberately Not Registering Illegal
  - Producers Not Registering Illegal

- Not-surveyed activities
  - Legal Persons Not Surveyed
  - Registered Entrepreneurs Not Surveyed

- Misreporting
  - Producers Deliberately Misreporting

- Other
  - Other Statistical Deficiencies

N1 N2 N3 N4 N5 N6 N7
## Tabular Approach

<table>
<thead>
<tr>
<th>NOE</th>
<th>Description</th>
<th>Method used</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1</td>
<td>Producers Deliberately Not Registering - Underground</td>
<td>Labour Imput method (LIM)</td>
<td>SBS, LFS, BR, administrative data</td>
</tr>
<tr>
<td>N2</td>
<td>Producers Deliberately Not Registering - Illegal</td>
<td>Quantity x Price</td>
<td>NA</td>
</tr>
<tr>
<td>N3</td>
<td>Agriculture for own-use Production for own-account in construction</td>
<td>Expert method</td>
<td>Agriculture data, LFS and SBS</td>
</tr>
<tr>
<td>N4</td>
<td>Legal Persons Not Surveyed</td>
<td>Different analyses</td>
<td></td>
</tr>
<tr>
<td>N5</td>
<td>Registered Entrepreneurs Not Surveyed</td>
<td>Different analyses</td>
<td>SBS, BR</td>
</tr>
<tr>
<td>N6</td>
<td>Producers Deliberately Misreporting</td>
<td>Franz and LIM</td>
<td>SBS, LFS, BR</td>
</tr>
<tr>
<td>N7</td>
<td>Other</td>
<td>% over turnover</td>
<td>HBS</td>
</tr>
</tbody>
</table>
New Estimations

IPA 2015 and IPA 2017

- Improvement of LIM, method used in FTE. Experimental Calculation for years 2012-2018 (Tables sanded to EUROSTAT, December 2020); N1&N6
- Work on Illegal activities about Drugs (N2); Experimental calculations for years 2014-2016;
- New methodology used on estimation of Individual housing construction, reconstructions, modernizations- Experimental estimations for the year 2016 to improve N3;
- Experimental estimations on Fiscal Audits to improve estimates according to ESA 2010 for N6;
- Experimental estimations on VAT Fraud to improve estimates according to ESA 2010 for N6;
- Description of the applied assumptions and coefficients.
Estimating services of owner-occupied dwellings in Albania

Stratification Approach for estimating rent of owner-occupiers cannot be applied in Albania because of the following fundamental reasons:

1. Rented dwellings constitute **less than 25%** of all the dwellings in the country;
2. Rented dwellings are **not distributed** over all parts of the country, which means that rental markets are small and limited to Tirana or principal urban areas;
3. Tenants that are foreigners, government or other employees paying rents **cannot be regarded as representative**.

→ **Benchmark estimates were performed by applying of User Cost Approach.**
In application of UCA, services of OOD are calculated by adding up the costs of renting a dwelling, such as:

\[
\text{Rental OOD} = \text{Intermediate Consumption} + \text{Other Taxes on Production} + \text{Consumption of Fixed Capital} + \text{Net Operating Surplus}
\]


b) The proper implementation of UCA requires a large set of different data sources useful for each component that has to be integrated in the calculations.
Expenditure on maintenance and repair of owner-occupied dwellings. 
(*Household budget survey 2009 (HBS)*).

The following basic information that is taken from HBS, classified according twelve (12) prefectures:

a) Total ordinary maintenance and repair of main dwellings
b) Total ordinary maintenance and repair of secondary dwellings

Net insurance premiums paid by owners.

a) Gross insurance premiums paid on dwellings and claims paid to owners (*AMF*)
b) Premium supplements (*INSTAT calculations*)
c) FISIM (*INSTAT calculations*)
Consumption of fixed capital of owner occupied dwellings: (*Census of Population and Dwellings 2011*)

- Information on the dwelling stock for 12 prefectures in Albania (urban/rural), by dividing urban area in two types of dwellings (houses/apartments) has been compiled from Census data.

- Since Census was conducted in October 2011, we can assume that it produces the mid-year stocks of dwellings, thus *no growth adjustments* are made to reported data.

- To calculate CFC from the estimated value of the stock of owner occupied dwellings is excluded the value of the land on which the dwellings are situated multiplied by D/L.
Number of owner-occupied dwellings in the middle of current year based on Census 2011 data, includes conventional dwellings according tenure status of household:

- Owner with legal act of ownership, no mortgage or loan,
- Owner with legal act of ownership, paging mortgage or loan,
- In process of acquiring legal act,
- Occupant (free of rent).

Since the current stock of dwellings looked a little underestimated, it was proposed to split up the part of non-response according area and type of dwelling.

To make the new number of dwelling the floor areas correspond, shares are used.
Value of the stock of dwellings

The assumption was made that the prices of dwellings decline by the same amount each year reaching a zero price in the last year of their life.

The price of a dwelling of average age \( (P_{\text{average}}) \) is equal the new price \( (P_{\text{new}}) \) times the remaining years that a dwelling of average age is expected to continue providing dwelling services as a ratio of the total service life i.e.

\[
\text{Where, } A - \text{ average age of dwelling } \rightarrow \text{(Census 2011) stratified by the year of construction, prefecture, type of dwellings}
\]

\[
L - \text{ average service life of dwelling}
\]
Methodological adjustments:

1. The service life of dwellings (L) – 70 years,

2. “declining balance factor” (1.6) was used in the calculation consumption of fixed capital,

3. Net operating surplus is imputed using the opportunity cost principle (imputed on the basis of what owner occupiers could have earned on alternative investments) (2.5),

4. Market prices of dwellings for 2011 for rural/urban area by prefecture and type of dwelling are adjusted by:
   
   a) **Quality adjustments factors** of basic amenities such as: heating system, inside water supply system, toilette, etc (2011 Population Census).

   b) **Factor prices** to distinguish urban/rural area, houses/apartments. The same is done also for land.

<table>
<thead>
<tr>
<th>Prefectures</th>
<th>Factor price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td></td>
</tr>
<tr>
<td>House</td>
<td>1.00</td>
</tr>
<tr>
<td>Apartment</td>
<td>0.90</td>
</tr>
<tr>
<td>Rural</td>
<td>0.50</td>
</tr>
<tr>
<td>Land</td>
<td>0.30</td>
</tr>
</tbody>
</table>
## Summary of major findings

### Year 2011

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item description</th>
<th>Value in 000/lekë</th>
<th>Structure in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC (05)</td>
<td>IC</td>
<td>9,785</td>
<td>0.13</td>
</tr>
<tr>
<td>UC (08)</td>
<td>Taxes</td>
<td>3,072</td>
<td>0.04</td>
</tr>
<tr>
<td>UC (09)</td>
<td>CFC</td>
<td>24,576</td>
<td>0.32</td>
</tr>
<tr>
<td>UC (14)</td>
<td>NOS</td>
<td>38,400</td>
<td>0.51</td>
</tr>
<tr>
<td>UC (15)</td>
<td>(UC 05) + (UC 08) + (UC 09) + (UC 14)</td>
<td>75,834</td>
<td>1</td>
</tr>
</tbody>
</table>

Expenditure on owner-occupied dwelling services

<table>
<thead>
<tr>
<th></th>
<th>Year 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of imputed rent in <strong>published</strong> GDP (%)</td>
<td>5.93</td>
</tr>
<tr>
<td>Published Gross domestic product, current prices (thousand lekë)</td>
<td>1,279,130</td>
</tr>
</tbody>
</table>
Future work

1. To continue work on estimation of imputed rent in line with User Cost Approach,
2. To improve available data sources for more reliable estimates for all components of NOE,
3. Further investigation on Illegal data, VAT Fraud, Fiscal Audit.
4. To include all the experimental estimations in GDP according to ESA 2010;
5. Description of the applied assumptions and coefficients in GNI.
Thank you for your attention!

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