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on Measurement of the Non-Observed Economy
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Measurement of Non-Observed Economy

GEORGIA

According to the current data, the share of non-observed economy (NOE) in Georgia (especially in entrepreneurial sphere) is too high. In 1999 it comprised 27 percent of the GDP and 50 percent of the entrepreneurial sphere. Therefore accurate measurement of the shadow economy scales is an important. During the last period we had significant achievements in this direction.

Surveys conducted within previous years, data from new informational sources and analysis had revealed that it is necessary to correct existed estimates on main aggregates of national accounts. in particular, we use the following new sources:

1. Household Budget Survey (1-IBS) System from 1997;

2. Labor Force Survey from 1998;

3. Sample statistical surveys by various type of economic activity;

4. New questionnaires of entrepreneurial statistics, which are adopted with requirement of national accounts and international standards;

5. Estimates of informal and hidden economy based on new methodology.

From second half of 1998 by using the new informational sources SDS had carried out independent calculations of main aggregates of national accounts by consumption and production methods. Results showed great difference with comparison to the old estimations. Namely, for 1996-1998 (IDP data might be by 30% less.

Change of old, overestimated data on non-observed (hidden for statistical survey for several reasons) economy had caused the reduction of GDP volume.
Despite the reduction, estimates for non-observed economy still remain high - about half in entrepreneurial sector:

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<tbody>
<tr>
<td>Non-observed/Total Output</td>
<td>27%</td>
<td>26%</td>
<td>24%</td>
<td>27%</td>
</tr>
<tr>
<td>Non-observed/Output in entrepreneurial sector</td>
<td>59%</td>
<td>54%</td>
<td>48%</td>
<td>50%</td>
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Importance of careful measurement of the hidden economy is reflected in the given table. One of the successful methods is implementation of special surveys for sectors with high shadow share and low quality data.

SDS of Georgia had conducted specially arranged statistical surveys in the framework of TACIS project with the assistance of Dutch experts (from CBS of Netherlands).

According to the mentioned surveys:

- The submitted (initial) data by restaurants is 3,7 times less than corrected data;
- The volume of sold petrol is 3,1 times more with the comparison to official data, presented by petrol-stations;
- The net income of microbuses, received during 2 days equals the amount paid by entrepreneur engaged in transport during month.
- Total production value in construction more than 2 times exceeds the official submitted data;
- Non-observed economy scales are high by markets (agrarian and etc.) too.
Main source for non-observed output estimations is household budget survey data. In particular, final consumption expenditures of the population by different categories of consumption and employment data by various types of economic activity.

One of the major method is construction of balances for goods and services, creation of supply and use balances for specific products based on information from 1-IBS, entrepreneurial statistics and foreign trade, which gives opportunity to estimate of hidden economy volume. However this method cannot be used in all cases. Production of such industries, which participates in fixed capital formation, is impossible to determine with this approach. The problem is raised from difficulties of independent measurement of all consumption components.

The Division of National Accounts calculates non-observed part of the economy underestimated by the statistical surveys using employment data from labor force survey comparing data from households and entrepreneurial statistics by the different types of economic activity.

The results for similar industry are used in cases when the methods mentioned above could not realized. For instance the share of non-observed output of bread backing is used for the manufacturing, namely for food industry.

The serious steps were done toward the estimation of NOE. With the financial support of TACIS the special surveys on restaurants and household tobacco consumption expenditures were conducted in the December of last year. The survey of health-care service has been carried out now.

The comparison between the results of tobacco consumption survey and customs and entrepreneurial statistics data implies that real volumes of tobacco import and production are 1,6 and 1,3 times more than respective declared data. Therefore the corresponding adjustments are necessary.

The received volume of tobacco consumption sharply, approximately 4,5 times more than the figures of consumption of same good receptive to other (household budget) surveys.
These changes make various influences on the (3DP estimates:

- Correction of import and output figures in the production accounts increases the output volume for trade and manufacturing because of increasing respective value added indicators. The adjustment is 1-% growth. The aggregates of income distribution accounts also are under the revision.

- The size of influence on QDP calculation by expenditure approach because of tobacco consumption adjustment is 3,5 percent to the increasing side, but the new estimate of net export reduces this growth by 1,5 percent.

The size of non-observed part of restaurant output was 59-% until the new survey. It was based on the household expenditure data from HBS and employment data from labor force statistics. This share was increased by 12-% follow received results from new special survey. Therefore the total effect on volume of restaurants services was 4i-% growth. As a result, the GDP estimates was increased by 0,57-%.

There were interesting results by the health-care service survey.

Comparison of results received from population side and from parallel observation of health-care enterprises and pharmacies enables us to conclude:

The real volume of health-care services received by population in the first quarter of 2000 is 4,2 times more than output data provided by medical enterprises; and medicines purchased by households at the same period is 3,1 times more than sales declared by pharmacies.

- Received estimate 87,1 mln. Georgian lari for quarterly volume of medical service essentially (more than 6,8 times) increases the consumption figures estimated from other (household budget) surveys.

Situation is similar also for medicine purchases – survey results 72,9 mm. lari is 3,1 times more than corresponding figures from household budget survey.
The discrepancies detected by the survey of medical services give us possibility to establish corrections of estimates received from regular statistical surveys.

- Correction of output data in the production accounts will imply growth of value added estimates for medical service and trade. The adjustment will be 3,3-% growth of output figure in this account. The 3,1 percent change is due to medical service and 0,2 percent—due to trade adjustments. The corresponding changes will take place for income distribution accounts.

The 5,3 percent adjustment will be made for GDP figures from expenditure approach because of new results for non-observed part of heath-care and pharmacy services.

We plan to conduct special survey targeted on the estimation of scales of unrecorded output for education services.

It is obvious from the above given data that special surveys in field of hidden economy measurement have big importance for national accounts based on which valuation of non-observed part of output becomes possible for different industries and then using of employment data as written above we get needed adjustment size for coverage. Totally, both give us estimation of NOE.

The introduction of Supply and Use Tables will contribute in following improvement of data quality. It is necessary to do quarterly enterprise surveys with detailed breakdown of intermediate consumption. Together with special surveys these are rather reliable methods to estimate size of hidden economy and improvement of national accounts aggregates. When compilation of balances for goods and services helps in valuation of non-observed part in particular industry, SUTs contribute to global analysis and comparison between each industry and sector.

Nowadays, works for implementation of SUTs are in progress, however SDS of Georgia needs financial support.