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Informal Economy in National Accounts of Russia

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Introduction

The introduction of the System of National Accounts in the Russian statistical practice started in the early 90-ies simultaneously with the beginning of market transformations in the economy of Russia. The liberalization of the economy has given an impetus to development of the new forms of economical activity and, in particular, to individual business. According to the Civil Code of the Russian Federation adopted in 1995, were officially permitted to be engaged in business activity not only legal entities, but also individuals registered as the individual entrepreneurs.

Commencing the end of the 90-ies for achieving exhaustive and qualitative estimates of GDP the work started on estimation of non-observed economy and, in particular, of informal economy as its components.

The purpose of this paper is to review the experience on measuring the informal economy carried out by the Federal State Statistics Service of Russian Federation in the context of compilation of the national accounts as well as prospects of the further work on improving estimates of the informal economy. The paper contains some figures characterizing parameters of this sector and its role in GDP estimation.

2. Main features of informal sector of Russia

As in all developing countries and countries with transition economy, the informal sector plays a significant role in the economy of Russia. About 8 % of GDP is created and more than 17 % of total employed population (aggregate number of the engaged population) is engaged in this sector.

According to the concept of the International Labour Organization (ILO) and the 15th International Conference of Labour Statisticians (15th ICLS) informal economy consists of units engaged in small scale production of goods and services with the purpose of generating income and employment for the person concerned. Informal economy is characterized by a low level of organization, informal employment relations (e.g. oral agreements), with little or no division between labour and capital as factors of production. The definition of the informal sector corresponds with the definition of unincorporated enterprises of households.

Theoretically, there are two basic criteria of allocation of an enterprise to the informal sector of the economy:

1)   production at least some part of output with the purpose of realization at the market,

2)   absence of official registration of an enterprise according to the applicable legislation.

The second criterion, namely absence of official registration of a producing unit as the legal entity, is adopted as the official criterion of its allocation to the informal sector in the statistics of Russia.

According to these criteria the informal sector comprises:

- individuals engaged in business activity, including individuals providing professional and/or technical services (such as doctors, notaries, auditors), irrespective of whether they are registered as entrepreneurs, have patent or license;
- farmers' households not registered as legal entities;
- members of households producing goods and services, including agricultural, forestry, hunting, and fishing products for sale in the market (completely or partially);
- individuals engaged in rendering paid personal services as well as employed by individual entrepreneurs.

The informal activity in Russia exists practically in all kinds of economic activity. The industries with the most significant share of the adjustments for the informal economy are as follows:

- agriculture (production of agricultural goods by personal plots and small farms),
- fishing,
- manufacturing (production of food-stuff and alcohol, clothes, footwear, furniture etc.),
- construction (construction and repair of dwellings and other buildings by informal contractors),
- trade (trade activity at the city markets, including " shuttle " trade; market services on the repair of cars and home appliances),
- hotels and restaurants (small private hotels and cafes),
- transport (transportation of passengers and cargos by individual motor transport),
- real estate (renting dwelling services),
- education (educational services of private teachers),
- health care (health care services of private doctors),
- other services.

3. Data sources and estimation methods

For an estimation of parameters of informal economy in Russia different data sources are used, the major of which are as follows:

- business registers maintained by the state statistical bodies (for obtaining information on the official number of registered individual entrepreneurs),

- agricultural census;

- population census and demographic data:

- Labour Force Surveys and employment data;

- household budget surveys;

- establishment surveys;

- sample surveys of individual entrepreneurs;

- special sample surveys of selected activities (construction by households, sales at the city markets, payments for services of individuals),

- administrative data (land, dwellings, cars registers).

Despite of the abundance of sources of information, the informal economy is difficult for measuring. The problem consists, on the one hand, in impossibility of obtaining the necessary information by direct methods of statistical surveys, on the other hand - in necessity of the coordination of inconsistent data, received from various sources.

One of the basic problems connected to information base of measurement of the informal sector of economy, was the absence of high-grade statistical survey of activity of the individual entrepreneurs, whose number equaled to 3,4 million on January 1, 2008.

Table 1. Main indicators of business activity of individual entrepreneurs for 2007 (based on the data of the sample survey)

	Number of entrepreneurs, thousand	Sales, mln, roubles,	Number of employees, thousand
Agriculture, hunting and forestry	26,4	26,3	83,7
Fishing	2,3	1,1	2,4
Mining and quarrying	0,3	0,2	0,6
Manufacturing	122,9	221,5	498,3
Electricity, gas and water supply	1,1	1,4	2,9
Construction	49,5	116,8	93,6
Wholesale and retail trade; repairs of motor vehicles, etc	1659,1	4562,4	4042,9
Hotels and restaurants	40,2	64,5	152,5
Transport, storage and communication	295,5	256,5	441,0
Real estate, renting and business activities	225,0	281,7	134,7
Education	9,9	2,1	2,2
Health and social work	19,3	5,6	7,8
Other community, social and personal service activities	128,6	68,1	146,6
Total	**2593**	**5622**	**5613**

Source: http://www.gks.ru/

Till 2007 the surveys of individuals were irregular, their activity was estimated by indirect methods. Only in some kinds of activity (trade, transport, manufacturing) the estimations were supported with the data of sample surveys on a regular basis. Unfortunately, the data of tax bodies on activity of individual entrepreneurs which might be used for this purpose were and still

are not available for statisticians, as in Russia the information on individuals items represents the tax secret.

The first sample survey of individual entrepreneurs was carried out in Russia in 2007. The observation covered 10 % of all individuals, engaged in all industries. The basic parameters of individual entrepreneurial activity in 2007 are presented in the table 1.

The organization of this survey was the important stage in improvement of information base for estimations of informal economy. With the help of the data of this survey for the first time a complex characteristic of activity of individual entrepreneurs was obtained, including major parameters such as sales, number of individual entrepreneurs, number employees etc.

Data of this survey has shown, that entrepreneurs are engaged in kinds of activity for which estimations of informal activity were not carried out earlier (for example, software programming and software installation services, architectural and engineering activities and related technical consultancy, labour recruitment and provision of personnel, advertising, etc). Besides the industries were revealed for which sales of goods and services or the employment data for individual entrepreneurs essentially differed from the corresponding parameters estimated on the basis of traditional sources of data. Thus, data on the industrial structure of manufacturing and employment in the informal sector of economy were revised due to this survey.
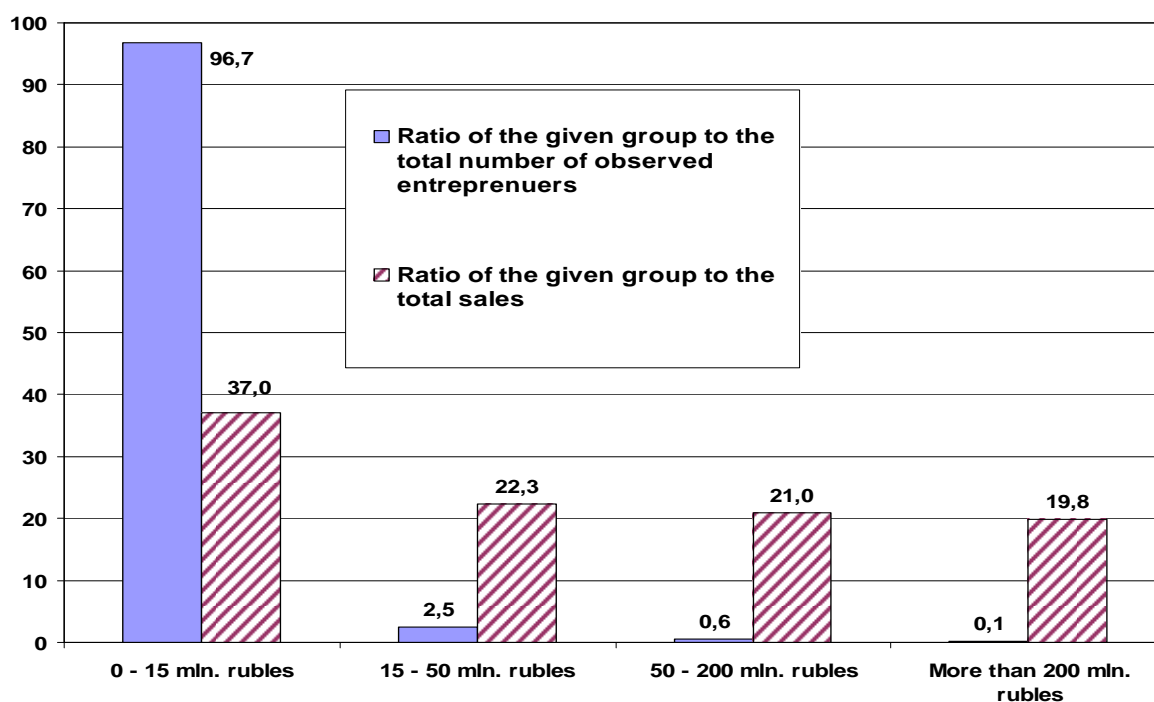

Figure 1. Grouping of the individual entrepreneurs by sales for 2007, in % (based on the data of the sample survey)

And, at last, this survey has revealed so-called "large-scale" individual entrepreneurs which should not be allocated to the informal sector due to large volumes of sales. Figure 1 shows that the majority of individual entrepreneurs (99 %) are engaged in fact in micro enterprises (with sales up to 50 mln. rubles)[1]. On the other hand, there is a rather small number of the entrepreneurs with sales more than 200 mln. rubles which share is about 20 % of the total sales. This group of individual entrepreneurs is a candidate for exception from the informal sector of the economy.

Methods of measurement of informal economy include both direct and indirect methods. The direct methods are based on use of the data of various statistical surveys and administrative data, indirect - on the basis of indirect indicators and related data.

An example of an indirect method is the estimation of dwelling rent in the informal sector. In Russia the households frequently hide incomes from renting dwellings with the purpose of evasion from payment of taxes. For an estimation of an actual rent payment were used data of the population census for 2002 on the quantity of persons living in apartments rented by households, average size of family and data on average dwelling rent.

When compiling the national accounts the basic method of estimation of informal economy is the method of comparison of the primary data and balancing of divergences of various parameters (incomes and charges, resources and uses and etc.). Thus, comparisons are carried out both of initial data (for example, charges of households on purchase of the goods and data of statistics of trade on a turnover of various kinds of goods) and relative indicators (for example, ratio of value added to output by industry and institutional sector).

The ideal tool for application of the balance method is the Supply and Use Tables (SUTs). The detailed nomenclature of production in SUT makes it possible not only to reconcile parameters of the national accounts, but also to improve adjustment for informal economy using the commodity flows method.

The labor cost method has not received a wide spread in Russia for estimation of informal economy yet. Despite of efficiency of this method it has some disadvantages. There are difficulties with identification of employment by kinds of activity. Under conditions of significant scales of the shadow economy in Russia the parameters of average production per one engaged person obtained from the survey of small enterprises and used for calculation of output

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[1] The Russian legislation uses at present the following criteria for allocation of economic units (legal entities and individual entrepreneurs) to the groups of small and average entrepreneurs: sales, average annual number of the employees, structure of the authorized capital (only the legal entities).
According to these criteria 3 categories of the enterprises are distinguished:
i) average enterprises – with a number of the employees from 101 up to 250, sales up to 1000 mln. rub,
ii) small enterprises - with a number of the employees from 15 up to 100, sales up to 400 mln. rub,
iii) microenterprises - with a number of the employees up to 15, sales up to 60 mln. rub.
Unlike legal entities, individual entrepreneurs have no legislative restriction in the quantity of employees.

of the informal sector, can be underestimated. (The reason of limitation of applying the labor cost method will be considered in section 5 in a more detailed way).

4. Informal Economy in the National Accounts

From the conceptual point of view production units of the informal sector have the characteristic features of household unincorporated enterprises. However informal sector is not identical to the households sector in the SNA, which includes not only market production, but also the production for own final use. Taking into account the peculiarities of functioning of unincorporated enterprises, it is impossible to construct a complete set of accounts for the informal sector of economy. National accounts for this sector are limited to the production account and generation of income account.

In Russia indicators of the production account, generation and use of income accounts and capital account are developed and officially published for the household sector. The share of the value added of the household sector in GDP is more than 9 %.

In the table 2 the main aggregates of the accounts for the household sector are shown for 2007.

Table 2. Indicators of production account and generation of income account

	In current prices, mln. rubles
Output	4 704 322
Intermediate consumption	1 559 368
Gross value added	3 144 954
Compensation of employees	…
Net taxes on production and import	9 686
Gross mixed income	3 135 268

Source: http://www.gks.ru/
Notes: In the generation of income account for the household sector compensation of employees is not shown separately, it is included in gross mixed income.

The production account and generation of income account are not compiled separately for the informal sector, as there are certain difficulties with an estimation of production for own final use on some kinds of activity. For example, the existing information does not allow to distinguish construction and repair of dwellings and other buildings carried out by households for their own use and by informal contractors.

Production of households for own final use in the Russian SNA includes at present the following kinds of activities:

- production of agricultural products, for own final consumption and capital formation,

    • processing food products by households for own final consumption (flour, groats, dairy and meat products, vine etc.),

    • production of owner-occupied dwelling services.

When excluding these kinds of production activity of households from the production account of households, it is possible to obtain estimation of the informal sector of the economy of Russia, which is closer to the international standards. In this case the share of this sector will be about 8 % of GDP (including agriculture).

Table 3. Value added of the informal sector by kind of economic activities, 2007

	Ratio of households sector to GDP and VA by industry (%)	of which informal sector (%)	Ratio of VA of informal sector by industry to the total VA of the informal sector (%)
Agriculture, hunting and forestry	55,2	20,9	10,7
Fishing	8,5	8,5	0,2
Mining and quarrying	0,0	0,0	0,0
Manufacturing	2,0	2,0	4,0
Electricity, gas and water supply	0,1	0,1	0,0
Construction	9,5	9,5	6,1
Wholesale and retail trade; repairs of motor vehicles, etc	21,9	21,9	48,7
Hotels and restaurants	24,3	24,3	2,6
Transport, storage and communication	4,5	4,5	4,7
Financial intermediation	0,0	0,0	0,0
Real estate, renting and business activities	18,0	16,2	19,5
Public administration and defense; compulsory social security	0,0	0,0	0,0
Education	3,3	3,3	1,0
Health and social work	3,8	3,8	1,4
Other community, social and personal service activities	5,7	5,7	1,1
Total VA	10,7	9,0	100,0
GDP	**9,5**	**7,9**	

Sources: http://www.gks.ru/ and authors' estimations
Notes: The share of informal sector excluding agriculture is about 7 % of GDP.

As one can see from the table 3 the greatest contribution to value added of the informal sector is secured by trade (48,7%), real estate, renting and business activities (19,5%), agriculture, hunting and forestry (10,7%) and construction (6,1%).

Thus, the share of the informal sector in hotels and restaurants accounts for about 24 % of total value added of this industry, in trade - about 22%, in agriculture, hunting and forestry - about 21 %, in real estate, renting and business activities – about 16%.

5. Problems and limitations

Problems and limitations connected with accounting the informal economy in the estimates of GDP are caused first of all by the current situation with compilation of Russian National Accounts.

Classifications

Despite the fact that since the 1990s all macroeconomic statistics has adopted the principally new methodology of the 1993 SNA, old national product and industrial classifications were still used in all statistical areas.

The new Russian classification of kinds of economic activities. harmonized with NACE, Rev.1, was introduced in Russia only in 2003 without (!) concurrent introduction of a new product classification. The new national version of product classification, harmonized with CPA 2002, was introduced in Russia only in 2009. Now the priority task of the Russian statistics is the final introduction of the new product classification in all statistical areas (collecting, processing information, representation of the data, etc).

One of the main requirements of the SNA 1993 and the ESA 1995 is that reconciliation of the national accounts should be based on the SUT framework. The commodity flow method being the base of construction of SUT is considered as the most effective method of accounting the non-observed economy in the estimates of GDP if the commodity groups are significantly disaggregated. However, detailed survey-based SUT using classifications the NACE and the CPA are not compiled now. The latest detailed survey-based SUT were compiled for 1995 and based on the old national industrial classifications. Tentative shortened SUT based on the NACE were compiled for 2004, 2005, 2006 for balancing the national accounts but the quality of these tables was not very good. The reason was that annual surveys of enterprises did not contain the cost structure data by product, so the calculation of intermediate consumption by product was based on the specific adjustment methods.

The absence of detailed survey-based SUT makes impossible the reconciliation of estimations of the informal economy by industries and products, carried out on the basis of various data sources and methods.

Statistical units

When compiling industry accounts in Russia an enterprise, not an establishment, is used as a statistical unit. The basic source of information for compiling the production account for the

non-financial corporations sector is the data of the structural business survey, containing the information on output of both enterprises and establishments. However, the data of this survey allows to calculate value added only for an enterprise as a whole.

The employment data by kinds of economic activity refer to establishments, therefore they are non-comparable with value added calculated for enterprises.

Special calculations in the matrix form are carried out for reconciliation of employment and production data; however, it is not always possible to achieve the coherence of these data. Due to this reason the labor cost method, which is the basic method of estimation of informal economy in many countries, has not found a wide application in Russia yet. The experimental estimates by this method provided the controversial data and showed the necessity of additional efforts for its full implementation.

6. Prospects

Two large-scale works will be carried out in the nearest future which will allow to improve essentially the estimations of informal production in Russia

An overall survey of large and medium size enterprises and individual entrepreneurs will be carried out in 2010. It will cover 50 thousand average enterprises, 1,4 mln. small enterprises, 4,1 mln. individual entrepreneurs which will be observed during this overall survey.

The results of this overall survey will allow to update the information in the statistical business register which will create a reliable basis for various sample surveys of enterprises and individual entrepreneurs.

Besides obtaining the all-round characteristic of economic activity of these units, the data of this survey will allow to specify borders of the informal sector of the economy. On the basis of the results of this survey individual entrepreneurs with the number of employees from 100 and microenterprises with the number of employees up to 5 will be selected. Large individual ehtrepreneurs will be the candidates for exclusion from the informal sector of the economy, while microenterprises - candidates for inclusion in this sector.

In March 2009 the government of the Russian Federation issued an order providing a legal and financial basis for organization of a special sample survey on input-output and compilation Supply and Use Tables (SUTs) for reporting year 2011. The same order contains regulation for compiling the survey-based SUTs on a regular basis (at least once per five years).

The special sample survey on input-output will cover economical units (legal entities and individuals) of all kinds of economic activity. The data of this survey will allow to compile more detailed SUTs, containing at least 150 of industries and 600 of products. The national version of the NACE, Rev.1.1 will be used as the industrial classification of SUTs 2011, the national version of the CPA 2002 - for products.

The compilation of survey-based IOTs 2011 will have a huge importance for improving the Russian statistics. These tables will be used not only for checking the internal coherence of the SNA accounts and GDP components but for reconciliation of various estimations of informal economy by the commodity flow method. In the framework of SUTs the production data will be reconciled with the employment data what will allow improving estimations of the informal economy in GDP using the labour cost method.

7. Concluding remarks

During less than 20-years period of compiling the national accounts Rosstat has achieved a considerable progress in introducing the estimates of the informal economy into practice.

Although Rosstat uses sources and methods adopted in the international practice there are certain problems in estimation of the informal economy caused by the current situation with the compilation of the Russian national accounts.

Updated SNA 2008 provided guidance on application of international statistical standards in measuring of the informal sector in a national accounting context.

It is necessary for Rosstat to undertake more efforts in the field improving both the SNA as a whole and the estimations of the informal economy. It implies improvement both in collecting basic data and methods of the estimates of the informal economy.

Rosstat will carry out two large-scale works in the nearest future (overall survey of small enterprises and individual entrepreneurs for 2010 and compilation of the benchmark SUTs for 2011 based on the new industrial and product classifications). It will give a new impetus to further improvement of measuring the informal economy for achieving exhaustive and reliable estimates of GDP.

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