

CES/AC.68/59
4 March 1997

ENGLISH
Original: RUSSIAN

STATISTICAL COMMISSION AND
ECONOMIC COMMISSION FOR EUROPE

COMMISSION OF THE EUROPEAN
COMMUNITIES (EUROSTAT)

CONFERENCE OF EUROPEAN STATISTICIANS

ORGANIZATION FOR ECONOMIC
COOPERATION AND DEVELOPMENT

Joint ECE/Eurostat/OECD Meeting
on National Accounts
(Paris, 3-6 June 1997)
(Item 2 of the provisional agenda)

APPLICATION OF THE SNA IN EVALUATING HIDDEN INCOME OF HOUSEHOLDS

(Transmitted by the State Committee for Statistics of the
Russian Federation) ¹

Introduction

Among the problems connected with the introduction of the 1993 SNA, Goskomstat is currently devoting considerable attention to such issues as the compilation of sectoral accounts and the taking into account of the "hidden economy". These problems are related because the compilation of a full set of accounts for any institutional sector makes it possible to model the flow of funds, which can prove useful in identifying the weakest spots in the information base and, where necessary, to use the balance method in order to calculate the missing indicators.

¹Prepared by Mr. A. Ponomarenko, Russian State Committee on Statistics (Goskomstat).

Russia is compiling sectoral accounts step by step, using the information to hand and gradually extending the information base. Accounts of the households sector are the first to have been compiled, an approach which has enabled us not only to calculate the standard indicators but also to determine the volume of households' hidden income in Russia.

In defining the "hidden economy" concept, people often speak only of hidden production. Yet it would be more correct to speak also of hidden income and of consumption from unrecorded sources. Like hidden production, hidden income is not necessarily illegal. Some hidden income may be completely legal, although much of it will, of course, be attributable to the desire to evade taxation.

We do not lump together the concepts of "hidden" and "mixed" income. Mixed income relates to production activities of unincorporated enterprises or households and is an important indicator of the informal economy. It is connected with the assessment of value added in this sector and is determined, in accordance with the general recommendation of the 1993 SNA, by deducting compensation of employees and taxes on production from the value added obtained by the production method. However, since hired labour is rarely used in the informal sector and since the taxes on production are liable to be low, mixed income is numerically close to value added.

Hidden income may be either mixed income or hidden wages or salaries. Many entrepreneurs in Russia, seeking to evade taxation, pay their employees exclusively in cash and do not show such payments in their accounts. In the financial sector, banks may open special accounts for their employees and then pay abnormally high interest on them; until recently, this interest was not subject to tax. There are no doubt other methods, too, of concealing income. In our calculations we have not tried to determine the sources of income or the methods of obtaining it. Our object was to identify income which, for a wide variety of reasons, cannot be taken into account directly on the basis of traditionally available sources of information. It is such income that we call "hidden".

In accordance with the general approach of the 1993 SNA, GDP is not calculated by the incomes method, i.e. the mixed income and operating surplus indicators are obtained by balancing. Therefore, if the hidden income indicator is of reasonable size (if it does not exceed the operating surplus), introducing it will not affect the magnitude, but may substantially alter the structure of GDP, the share of household income increasing while that of the operating surplus is reduced.

The real situation in the Russian economy is, unfortunately, such that it is difficult to deny the existence of the problem of hidden income. From the macroeconomic point of view, many researchers note the low share of

compensation of employees in the Russian GDP (about 40% in the early 1990s); this share is, moreover, variable and can be even lower at times. This situation implies that the formal data are incomplete and indirectly confirms the existence of large-scale hidden compensation of employees.

Accounting particularities

Great care is generally taken to conceal income from the statistical authorities. Attempts to gather additional information on it, e.g. by organizing supplementary surveys, are therefore notoriously ineffective. The only hope of achieving success in this instance lies in using indirect methods of computation, especially the balance method.

In order to be able to use the balance method and to arrive at an assessment of hidden income, it is necessary to have at one's disposal a full set of basic accounts, including a financial account, if only in the households sector. This work was carried out in 1996.

Goskomstat does not, for the present, compile or publish a financial account. In most countries this task is entrusted to the national banks because it is they who are the principal holders of information on financial assets. In the case in point, however, an experimental calculation of the main indicators for the financial account of the "households" sector was carried out in Goskomstat with a view to determining the indicator of hidden compensation of employees.

The indicators of the financial account for the "households" sector in Russia have a number of specific features. Besides the traditional indicators recommended by standard international norms in accordance with the SNA, such as increases in cash, bank deposits, securities and foreign-currency holdings, the financial account in Russia includes an indicator called "Increase in indebtedness on wages and social welfare payments". In Russia, the State and enterprises owe households huge sums for back wages and pensions. This indebtedness has been growing for several years, turning from an economic problem into a social one.

From the point of view of national accounts, wage indebtedness represents a financial asset for households and a financial liability for the other sectors (the State or the corporation). But all types of transfer and of compensation of employees in the SNA are shown on the basis of accruals, whereas actual household expenditures can, obviously, only be made from money actually paid out. A difference therefore inevitably arises between resources and use, and this difference is explained by the presence of the corresponding entry in the financial account.

Another particularity concerns the determination of the indicator for growth of foreign-currency holdings. In the conditions obtaining in present-day Russia, much foreign currency is purchased by households not for the purpose of saving but to supplement the working capital of unincorporated

enterprises of the informal sector that engage in foreign trade, i.e. for "shuttle imports". The "increase in foreign currency" indicator, which is calculated as the difference between the purchase and sale of foreign currency, is therefore adjusted by the nominal value of "shuttle imports" and by net purchases of goods and services abroad by Russian residents. These data are included in Russia's balance of payments.

Other data relating to changes in the value of financial assets, including increases in households' deposit-account holdings in commercial banks and in cash, are obtained from the Central Bank. The Central Bank report does not, of course, break down the cash increase by sectors. The share of households is determined by Goskomstat.

As a result, it becomes possible to compare the total disposable income of households with the actual use of that income. Goskomstat made such calculations for the first time in 1996, using data for 1993, 1994 and 1995. Preliminary results are available for 1996. As was to be expected, households in Russia spend, allowing for the growth in savings, far more than would seem possible from the levels of their officially recorded wages and other income, including mixed income. In some years, the difference between recorded income and the expenditures of households amounted to 12-13% of GDP. There is every reason to believe that a considerable part of this difference can be explained by the existence of hidden wages. The figure cannot, of course, be absolutely precise because each of the basic indicators taken into consideration in balancing is calculated with a certain margin of error. For this reason, it is not enough to use the balance method alone when determining the actual magnitude of hidden wages. The result must, above all, look reasonable and be readily comparable with other indicators in terms both of current prices and of growth history.

A decision on the definitive magnitude of the hidden income indicator was taken after simultaneous calculation of the basic accounts in current and comparable prices. Account was also taken of the changing structure of GDP. As a result, household income and expenditures were balanced with a statistical divergence of 3-3.5% of GDP. The divergence in the rate of change in actual income and actual expenditures amounted to 1.5-2 percentage points in different years.

Results obtained

The adjustment for hidden compensation of employees proved so significant at the macroeconomic level that it not only showed up in the nominal amount and growth of income as such but also substantially altered the structure of GDP in terms of sources of income.

	(%)		
	1993	1994	1995
	Before adjustment		
Gross domestic product	100	100	100
Including:			
Compensation of employees	40	40	33
of which hidden	0	0	0
Gross operating surplus, including mixed income	49	51	57
Net taxes on production and imports	11	9	10
	After adjustment		
Gross domestic product	100	100	100
Including:			
Compensation of employees	45	49	43
of which hidden	5	9	10
Gross operating surplus, including mixed income	44	42	47
Net taxes on production and imports	11	9	10

When hidden wages are taken into account, the total share of employee compensation in the 1995 GDP is 10 points higher than when they are not. This brings the structure of Russia's GDP considerably closer to that of most other countries and by so doing increases its verisimilitude and rationality for purposes of economic analysis.

In 1993, the amount of hidden compensation of employees was relatively small, about 5% of GDP. Thereafter, however, the process of formation of hidden compensation continued to develop strongly so that in 1994 the level in real terms increased by a factor of almost 1.5, to nearly 9% of GDP. In 1995 the share of hidden compensation continued to grow (albeit more slowly) and exceeded 10% of GDP. According to preliminary estimates, the share of hidden compensation in 1996 was of the order of 11% of GDP.

Meanwhile, officially recorded compensation of employees moved in the opposite direction. Its real level fell by 9% in 1994 and by as much as 28% in 1995. The real level of secondary income (pensions, scholarships, etc.) fell still more rapidly. As a result, the shares both of official wages, including social contributions, and of secondary income in GDP diminished.

Total primary income of households (including hidden income) diminished more slowly in 1994 than GDP (2% as against 13%), whereas in 1995 the reverse was true (14% as against 4%). This may be connected to some extent with the rates of inflation in those years and with the methods used to fight inflation in Russia. During the same period, the rates of decline in secondary income remained practically unchanged (12% in 1994 and 11% in 1995).

The changes in the income of households were paralleled by changes in their expenditure. In 1994, compensation of employees remained practically stable despite a marked reduction in GDP as a whole. Actual purchases of goods and services by households also remained almost at the 1993 level. In the following year (1995), actual compensation of employees fell heavily, as did incomes in general. Actual expenditure was also reduced. However, the structure of the expenditure underwent a substantial change, the share of saving diminishing by one half (from 12.7% of GDP to 6.6%). The accumulation of financial assets fell particularly sharply, from 12% of GDP to 5.7%. On the other hand, the share of spending on the purchase of goods and services remained practically unchanged. These empirical data prove that a reduction in income leads in the first instance to a reduction in accumulation expenditure, the level of consumption being maintained as far as possible. Such behaviour on the part of the majority of households is entirely consistent with the postulates of economic theory for the current social and economic situation in Russia.

Parameters of the "hidden economy" in Russia

Goskomstat uses three approaches to determine GDP: by production, by sources of income and by expenditure orientations. The influence of the hidden sector, and especially of the informal part of the economy, is taken into account in all calculations of GDP. The principal features of the adjustments for the informal and hidden sectors are listed below.

Adjustments to GDP relating to the hidden and informal economy

	Adjustment as a percentage of GDP	Adjustment as a percentage of the indicator	Contents of the indicator
GDP calculated by the production method			
TOTAL	22		
Industry	4	11	Adjustment for hidden own-account production
Construction	1	8	Adjustment for unrecorded units and for the construction of summer cottages and garages

	Adjustment as a percentage of GDP	Adjustment as a percentage of the indicator	Contents of the indicator
Agriculture	4	46	Own-account agricultural production and adjustments for agricultural enterprises
Trade, including foreign trade	10	63	Sales on goods markets and mixed markets; adjustment for intermediaries in foreign trade transactions
Transport and communications	1	9	Adjustments for unrecorded units
Other branches	2	...	Market services to the population, real-estate operations, housing, advertising, show business, etc.
GDP calculated by the income method			
TOTAL	20		
Mixed income	9	100	Income of individual entrepreneurs and informal enterprises
Hidden income	11	100	Hidden compensation of employees and other hidden income received by households
GDP calculated by the use method			
TOTAL	20		
Household spending on consumer goods	14	42	Adjustment for purchases on goods markets and mixed markets
Household spending on consumer services	3	3	Adjustment for practical services in education, public health and culture

	Adjustment as a percentage of GDP	Adjustment as a percentage of the indicator	Contents of the indicator
Goods and services received in kind	5	95	Services of owner-occupied dwellings, consumption of own agricultural produce
Gross fixed capital formation	2	8	Adjustment for completeness of reporting on investments and for own-account housing construction
Imports	-4	17	Adjustment for completeness of coverage, including shuttle trade

The parameters of the hidden economy determined by each method are similar though not identical. Clearly, they ought not to be completely identical because the fact of receiving hidden income does not mean, for example, that such income will be used for consumption from hidden sources; however, the fact that the indicators calculated independently from one another by three separate methods are similar indicates the general correctness of the estimates obtained.
