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**MEASURING THE NON-OBSERVED ECONOMY IN NATIONAL ACCOUNTS**

**ILLEGAL ACTIVITIES**

**A SURVEY FOR MEASURING UNDERREPORTING OF DATA BASED ON TAX  
INSPECTORS IN TAJIKISTAN**

Note by the secretariat<sup>1</sup>

*Summary*

The underground activities relate to non-observed activities due to either statistical or economic reasons. One of the reasons for economic underground is underreporting of production by producers in order to avoid the payment of taxes, social security contributions, etc. The paper provides information on a survey carried out among tax inspectors in Tajikistan in order to estimate the misreporting by enterprises. The survey was carried out in the framework of the European Union technical assistance project to CIS countries (TACIS-9).

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<sup>1</sup> Prepared by Anders Nordin at the invitation of the UNECE secretariat. The paper is based on preliminary data, final results from the project are available in document ECE/CES/GE.20/2008/SP.7 Add.1.

## **I. INTRODUCTION**

1. The Non-observed Economy classification of underground activities relates to non-observed activities for either statistical or economical reasons.
2. Statistical underground activities are due to deficiencies in the statistical system, including deficiencies in statistical registers. Economic underground activities relate to either registered units producing legal goods and services but underreporting their production in order to avoid the payment of taxes, or to units producing legal goods and services which are not registered at all in order to avoid paying taxes or to comply with legal standards.
3. In general, surveys based on managers' opinions do not give fully satisfactory results when measuring underreporting of production or profits because companies are reluctant to admit that they conceal a part of their production from the tax administration, even if the body conducting the survey asserts that the information provided will never be released to other parties.
4. Tax audit data gives quite successful results when estimating underreporting, as audited enterprises can not refuse to respond to questions about underground activity and, moreover, they are obliged to provide a complete set of accounts. Nevertheless, tax audits are rarely conducted on a random basis as tax officers generally target their fiscal controls towards companies where risks of underground activities are the largest.
5. In other words, among all the companies which can potentially be controlled, tax inspectors will choose the companies in each size class and branch of activity for which tax evasion is supposed to be the greatest. This results in an overestimation of correction coefficients when grossing up the estimates to the whole population. Hence the corrected production (P1) and value added (B1) are overestimated when correcting national accounts.
6. The "shortcomings" of both methods described above have led to the proposal of a survey based directly on tax inspectors.

## **II. THE PROPOSED APPROACH FOR A SURVEY ON TAX INSPECTORS IN TAJIKISTAN**

7. In the framework of the TACIS 9 project, it was not considered feasible to carry out a survey on tax inspectors working in Tajikistan as a whole. So it was suggested to carry out a tax inspector survey only for tax inspectors attached to certain regions.
8. The first step was to seek information about the number of tax inspectors working in the regions. The companies were to be stratified by size (from 1 to 10 employees, from 11-50 employees, above 50 employees), by branch of activity and type of legal status (incorporated/unincorporated).
9. The proposed branches of activity were the following:
  - (a) Industry (manufacturing could be broken down if necessary),  
Manufacturing of food products and beverages,

Manufacturing of textile,  
Manufacturing of clothing,  
Manufacturing of wood and wooden products,  
Manufacturing of furniture,

- (b) Agriculture, hunting and forestry,
- (c) Transport,
- (d) Trade,
- (e) Construction,
- (f) Hotels- restaurants,
- (g) Real estate –renting,
- (h) Informatics,
- (i) Recreation – sport,
- (j) Individual services.

### **III. CONDUCTING THE PILOT SURVEY ON THE DISTORTION OF THE REPORTING DATA OF THE ENTERPRISES**

10. In the framework of the TACIS 9 project, a survey was carried out only on tax inspectors attached to certain regions.

11. When carrying out an evaluation of the non-observed economy, it is important to know not only about unaccounted volumes of manufacture of the goods and services, but also about scopes of community losses from distribution of those or other "shadow" forms of business activity.

12. The survey which was conducted by the State Committee on Statistics concerns Eurostat methodology using "a tabular approach": understating of the accounting data connected with deviation from taxpaying by the enterprises, the public sector entity, the private companies, physical persons and so on.

13. In the first stage, regions with the highest quantity of tax inspectors and enterprises were chosen. Out of 1277 tax inspectors, the following numbers were selected: Dushanbe- 215, Kurgan-Tube (the center Khatlon region) – 23, large industrial region Tursunzade – 42 and in one more large region of Tajikistan – Rudaki – 41. As it became clear that not all tax inspectors were engaged in audit checks, only a number of selected inspectors were chosen for the survey.

Table 1

**Tax inspectors surveyed**

Regions	Number of tax inspectors	Number of selected inspectors for the survey
1. Dushanbe:	<b>215</b>	<b>197</b>
Shokhmansur district	53	49
Somoni district	51	47
Firdavsi district	53	48
Sino district	58	53
2. Kurgan-Tube	<b>23</b>	<b>21</b>
3 Tursunzade	<b>42</b>	<b>38</b>
4. Rudaki region	<b>41</b>	<b>37</b>
TOTAL	<b>321</b>	<b>293</b>

14. In the first stage, a questionnaire with the following 8 questions was proposed:

- (a) What proportion of declared taxes is controlled by taxation authorities?
- (b) What average taxable income from declared taxes is administrated by taxation authorities?
- (c) What is the average size of controlled companies by number of employees?
- (d) Are regular checks made of the tax declarations filled by the companies not having status of legal person?
- (e) What part of sale, according to the checks made, was not declared by activity branches?
- (f) According to the checks made, what is the share of falsified purchases of the goods and the services included in operational charges and expenses for services with the purpose of increase in the Value Added Tax (VAT) which are a subject of deduction?
- (g) What share of salaries, according to the resulted checks, is included in operational charges and expenses for services?

(h) According to the checks made, what is the share of hidden salaries (not included in operational charges and expenses for services)?

15. All proposed questions were discussed with representatives of Tax Committee and changes and additions were made to the questions.

16. The questionnaire was furthermore translated and presented at the training session on preparation and conduct of the pilot survey in October 2007 with the purpose of acquainting supervisor and interviewers with the questionnaire. Representatives of the tax authorities proposed that also physical persons working under certificate and physical persons working under patent should be included in the questionnaire.

#### **IV. THE QUESTIONNAIRE USED IN THE SURVEY**

17. Part A. General – the interviewer should write the address of tax inspection which is subject to inspection up to the beginning of inquiry.

18. Part B. The circulation to the respondent and further by questions:

**Question 1** – Proportion of taxes that are under control:

- a) What is the share of declared taxes (in per cent)?
- b) What is the share of non-declared taxes (in per cent)?

**Question 2:**

- a) Total amount of the declared taxable income;
- b) Total amount of the declared tax from the income;
- c) Hidden taxation;
- d) Hidden taxation as percentage of declared taxes.

**Question 3** – Number of enterprises checked during the year.

**Question 4** – Regular check of tax declarations presented by physical persons from tax audits (yes, no, not completely).

**Question 5** – According to the tax checks carried out, what is the proportion of enterprises who do not declare tax, by economic activities?

**Question 6** – According to the tax checks carried out, what is the sum and the share of falsified purchases of goods and services included in operational charges with the aim of increasing deductible VAT, by types of economic activities?

**Question 7** – According to the results of tax checks, what are the amount and share of income hidden from the tax authorities (as part of income from realization of goods and services), by kinds of economic activities?

**Question 8** – According to tax checks, what are the amount and share of material inputs in the income from realization of goods and services, by types of economic activities?

**Question 9** – The opinion of the respondent about the share of non-paid taxes, by the following types of taxes:

- (a) income tax; from the legal persons, from the natural persons;
- (b) tax on wealth and land;
- (c) social tax;
- (d) VAT (which is included, according to the opinion of research officers and tax authorities – this tax does not concern the entrepreneurs)

**Question 10** – The opinion of the respondent about tax treatment in Tajikistan (soft, rigid, radical).

## V. RESULTS OF THE SURVEY

**Question 1** – What proportion of taxes from enterprises are:

- a) declared
- b) non-declared

Table 2

**The average proportion of controlled taxes by region  
(thousand somoni)**

№ question	Sino district	Somoni district	Somoni district large taxpayer	Shokhma nsur district	Firdavsi district	total Dushanbe	Rudaki region	Tursunzade	Kurgan-Tube	large taxpayer Kurgan-Tube	Total
<b>LEGAL PERSONS</b>											
in total (%)	100	100	100	100	100	100	100	100	100	100	100
a) declared	59,00	74,40		90,60	80,00	79,20	89,70	89,50	88,80	78,40	82,1
b) non-declared	41,00	25,60	100,00	9,40	20,00	20,80	10,30	10,50	11,20	21,60	17,90
<b>NATURAL PERSONS</b>											
in total (%)	100	100		100	100	100	100	100	100		100
a) declared	74,5	84,2		88	93	82	83	90,7	85		82
b) non-declared	25,5	15,8		12	7	18	17	9,3	15		18,0

**Question 2**

- a) the total sum of the declared taxable income
- b) the total sum of the declared tax from the income
- c) the hidden taxation
- d) the hidden taxation in % to declared taxes

Through analysis of the processed information (table 3) for the four regions:

- a) declared incomes are in total 1567354,3 thousand somoni including:
  - *legal persons 1458979,8 thousand somoni (93,1 %)*
  - *natural persons 108374,5 thousand somoni (6,9 %)*
- b) declared taxes are in total 323422,9 thousand somoni including:
  - *legal persons 311716,1 thousand somoni (96,4 %)*
  - *natural persons 11706,8 thousand somoni (3,6 %)*
- c) hidden taxation 33284,5 thousand somoni including:
  - *on legal persons 31651,9 thousand somoni (95,1 %)*
  - *on natural persons 1632,6 thousand somoni (4,9 %)*
- d) total amount of hidden taxation in per cent is:
  - *to income 2,2 %*
  - *to taxes 10,2 %*

Table 3

**The declared and non-declared income and taxes  
(thousand somoni)**

№ question	Sino district	Somoni district	Somoni district large taxpayer	Shokhmansur district	Firdavsi district	total Dushanbe	Rudaki region	Tursunzade	Kurgan-Tube	large taxpayer Kurgan-Tube	Total
<b>LEGAL PERSONS</b>											
<b>2</b>											
A	165607,7	101441,8	581931,0	110249,1	194636,0	153865,6	91429,2	51438,6	149671	12575,4	1458979,8
B	18666,3	22118,9	192934,1	18690,9	21870,4	274280,6	21509,8	6060,2	8484,5	1381	311716,1
C	6726,8	5434,7	8291,5	1574,6	4542,5	26570,1	3529,5	637,9	785,2	129,2	31651,9
in % to the income	4,06	5,36	1,42	1,43	2,33	2,30	3,86	1,24	0,52	1,03	2,2
in % to the tax	36,04	24,57	4,30	8,42	20,77	9,69	16,41	10,53	9,25	9,36	10,2
<b>NATURAL PERSONS</b>											
A	4932,4	13317,4		46493,4	11425,3	76168,5	28001,3	1933,6	2271,1		108374,5
B	962,6	560,4		5433,6	2252,2	9208,8	1840,9	290	367,1		11706,8
C	242,3	102,72		680	183,0	1208,0	323,8	48,2	52,6		1632,6
in % to the income	4,91	0,77		1,46	1,60	1,59	1,16	2,49	2,32		1,51
in % to the tax	25,17	18,33		12,51	8,13	13,12	17,59	16,62	14,33		13,95
<b>TOTAL</b>											
A	170540,1	114759,2	581931,0	156742,5	206061,3	1230034,1	119430,5	53372,2	151942,1	12575,4	1567354,3
B	19628,9	22679,3	192934,1	24124,5	24122,6	283489,4	23350,7	6350,2	8851,6	1381	323422,9
C	6969,1	5537,42	8291,5	2254,6	4725,5	27778,1	3853,3	686,1	837,8	129,2	33284,5
in % to the income	4,09	4,83	1,42	1,44	2,29	2,26	3,23	1,29	0,55	1,03	2,12
in % to the tax	35,50	24,42	4,30	9,35	19,59	9,80	16,50	10,80	9,46	9,36	10,29



**Question 3** – The number of enterprises checked during the year.

Table 4  
**Share of enterprises under control**

№	Region	Registered enterprises	Continuity	Number of controlled enterprises	Share of controlled enterprises, in %
1.	<b>Dushanbe, total</b>	<b>7737</b>	<b>4826</b>	<b>4426</b>	<b>91,7</b>
	Including:				
a.	Sino district	2088	1168	1123	96,1
б	Somoni district	2330	1709	1354	79,2
В	Shokhmansur district	1973	1243	1243	100
г	Firdavsi district	<b>1346</b>	<b>706</b>	<b>706</b>	<b>100</b>
2	Rudaki region	<b>635</b>	<b>576</b>	<b>437</b>	<b>75,8</b>
3	Tursunzade	<b>649</b>	<b>362</b>	<b>362</b>	<b>100</b>
4	Kurgan-Tube	<b>581</b>	<b>451</b>	<b>451</b>	<b>100</b>
	<b>Total:</b>	<b>9602</b>	<b>6213</b>	<b>5676</b>	<b>91,4</b>

**Question 5** – According to tax verifications, amount of non-declared taxes by economic activity.

19. The report results indicate that the largest share of non-declared goods and services in Dushanbe occurred in the service industries – 26,3%, in industry – 23,9%, and in trade - 23,8%. According to the number of employees, the largest share of non-declared goods and services occurred in the service industries, with up to 10 persons – 12%; in the industry with more than 50 persons – 17,9% and in trade from 11 to 50 persons – 9,1%. The largest share in Tursunzade occurred in the branch of trade – 29,3% and 29,1% in agriculture. According to the number of employees in trade with up to 10 persons – 23,9% and in the agriculture with more than 50 persons – 26,5%. The largest share of non-declared goods and services in the Rudaki region occurred in construction – 36,3% and in the industry – 31,9%. A similar tendency could be seen in the Kurgan-Tube, i.e. in the service industries – 30,45% of the total volume and 16,1% - in the industrial activity 23,0% and 7,3% where the employment size is from 11 to 50 persons.

**Question 6** – According to the tax inspection, what is the proportion of falsified procurements of goods and services included in the operating expenses with the aim of increasing deductible VAT by economic activity.

20. A higher proportion of falsified procurements of goods and services included in the operational expenses with the aim of increasing deductible VAT is generally observed in the branches of trade and consumer services, 28,6 % and 22,5 %.

Table 5

**Share of false procurements of goods and services**

	Activity category	Proportion
I.	Trade	28,6
II.	Other services	22,5
III.	Industry	19,4
IV.	Information services	12,2
V.	Construction	15,9
VI.	Agriculture, transport, health services	1,4
	Total:	100

**Question 7** – The amount of income hidden from taxation and its share in income from selling the goods and services by economic activity.

21. The total share of hidden taxes (in the income from selling the goods and services) is 2,1%. The largest share of hidden taxes occurred in the service industries – 26,1 %. In industry it was 23,1 %, in trade – 23,0 %, in construction – 18,3 % and in the other activities – 9,5 %.

**Question 8** – From tax verifications, the amount and share of material inputs in the income from selling goods and services, by economic activity.

22. The respondents' answers showed that the largest share of overvaluation of material inputs in income from selling goods and services relates to legal persons. The highest share in the total amount of overstated expenditures of legal and natural persons was in industry – 64,1 %. In construction it was 13,4 %, in service industries – 10,7 %, in trade – 5,6 %, in information technology – 3,6 %, in transport – 1,8 % and in the other activities – 0,8 %.

**Question 9** – Respondents' opinion concerning the share of non-payment of taxes by types of taxes mentioned below:

- income tax: a) from legal persons, b) from natural persons;
- wealth and land tax;
- social tax;
- VAT (according to the opinion of research workers and tax authorities, this tax does not relate to entrepreneurs).

Table 6  
**Share of non-paid taxes (in per cent)**

№	Type of taxes	Legal persons	Natural persons
1	VAT	8,2	3,4
2	Income tax	6,4	0,7
3	Tax on real estate	3,3	6,2
4	Land tax	12,8	4,1
5	Social tax	4,3	11,0

**Question 10** – Respondents’ opinion about tax treatment in Tajikistan (soft, strict, radical).

23. Any tax system reflects the character of the framework of society, the country’s economic climate, the degree of population’s trust in government. The aim of this question is to define the stability of the tax system.

Table 7  
**The tax treatment in Tajikistan (in per cent)**

№	Treatment	Legal persons	Natural persons
1	Soft	9,5	14,8
2	Strict	41,4	32,5
3	Radical	0,0	1,8

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