

2. MONITORING OF TRAFFICKING

After the attempt of summarizing, analyzing and describing the typical smuggling schemes, channels and practices there arises the question of the present situation and the possibilities of assessing the changes.

In cases of trafficking, as well as in cases of corruption, the discreteness and lack of transparency are typical of these phenomena. The fact that trafficking in general and combined with corruption in particular is illegal and concealed activity shows that it could not be measured by the traditional methods of socio-economic statistics.

In this field the studies of the "grey sector" may serve as a base for estimating the amount of smuggling. A precondition for that is the existence of serious empirical and theoretical research in the field of the "grey economy".

On the other hand, a considerable part of this parallel economy in Bulgaria exists through and due to different mechanisms of smuggling. Therefore, the assessment of the scale of the "grey economy" also defines the frame for studying the smuggling.

2.1. METHODS FOR MEASURING THE HIDDEN ECONOMY

A good base for assessing the national "grey economy" are the international studies for the share of this economy in the East-European countries (Table 2.1).

The assessment of the share of hidden economy of the country, made by the NSI, is rather different. According to the Institute, the share of the "grey economy" in the country in 1998 was 22%. Some experts monitoring different sectors of that economy believe that the data from international comparative studies reflect much better the actual state of the "grey economy".

The conversion of assessments from percentage values into absolute figures clarifies the losses of Bulgaria's national economy in the last few years. If we accept the international assessments during the period 1994-1995 the "grey economy" formed between 32-35% of the country's GNP, which was about USD 3.6 – 3.9 bn. If we accept the considerably lower assessment of the NSI, in 1998 the "grey economy", estimated in dollars, amounted to USD 2.240 bn.

The assessment of the scale of smuggling needs a more detailed analysis. Above all, it should be clarified what part of these USD 2.2-4 bn is directly or indirectly connected with practices of smuggling. Undoubtedly, there is a number of activities within the frame of the hidden economy that are indirectly connected with smuggling – for example, hiring of labour force, trade in Bulgarian goods, natural economy, etc.

In order to identify the "smuggling" share of the hidden economy, it is necessary to combine different methods of estimation. Conditionally, the instruments used could be divided into two basic kinds [19]:

TABLE 2.1

Physical Input (Electricity) Method Using Values from Johnson; Kaufmann, Shleifer (1997) and values in "()" from Lacko (1999)							
		Average 1989-1990		Average 1990-1993		Average 1994-1995	
Former Soviet Union States							
1	Azerbaijan	21.9	(-)	33.8	(41.0)	59.3	(49.1)
2	Belarus	15.4	(-)	14.0	(31.7)	19.1	(45.4)
3	Estonia	19.9	(19.5)	23.9	(35.9)	18.5	(37.0)
4	Georgia	24.9	(-)	43.6	(50.8)	63.0	(62.1)
5	Kazakhstan	17.0	(13.0)	22.2	(29.8)	34.2	(38.2)
6	Kyrgyzstan	-	(13.9)	-	(27.1)	-	(35.7)
7	Latvia	12.8	(18.4)	24.3	(32.2)	34.8	(43.4)
8	Lithuania	11.3	(19.0)	26.0	(38.1)	25.2	(47.0)
9	Moldavia	18.1	(-)	29.1	(-)	37.7	(-)
10	Russia	14.7	(-)	27.0	(36.9)	41.0	(39.2)
11	Ukraine	16.3	(-)	28.4	(37.5)	47.3	(53.7)
12	Uzbekistan	11.4	(13.9)	10.3	(23.3)	8.0	(29.5)
Average: former Soviet Union states		16.7	(16.2)	25.7	(34.9)	35.3	(43.6)
Central and Eastern Europe							
1	Bulgaria	24.0	(26.1)	26.3	(32.7)	32.7	(35.0)
2	Croatia	22.8	(-)	23.5	(39.0)	28.5	(39.0)
3	Czech Republic	6.4	(23.0)	13.4	(28.7)	14.5	23.2
4	Hungary	27.5	(25.1)	30.7	-30.9	28.4	(30.5)
5	Macedonia	-	(-)	-	-40.4	(-)	(46.5)
6	Poland	17.7	-27.2	20.3	-31.8	13.9	(25.9)
7	Romania	18.0	-20.9	16.0	-29.0	18.3	(31.3)
8	Slovakia	6.9	-23.0	14.2	-30.6	10.2	(30.2)
9	Slovenia	-	-26.8	-	-28.5	-	(24.0)
Average: former Central and Eastern Europe		17.6	(17.6)	20.6	(32.4)	20.9	(31.6)

Source: Shadow Economies: Size, Causes, and Consequences, Journal of Economic Literature, June 2000

- Direct methods based on sample studies of the economic operators, which are supposedly connected with undeclared economic activity. Through them, the range of activities connected directly to smuggling could be additionally estimated. For example, what part of the value of the product originates from raw materials and half-finished products connected with smuggling;
- Indirect methods that use official information about the structure and dynamics of economic characteristics for the purpose of assessing the production, quantities and the scope of the hidden economy. Correlations between smuggling and other sectors of this economy could also be sought here, for example the analysis of market segments in the import and export by comparison between Bulgarian statistic and international statistics on bilateral and multilateral customs basis (see item 2.2 below).

2.2. METHODS FOR MEASURING SMUGGLING

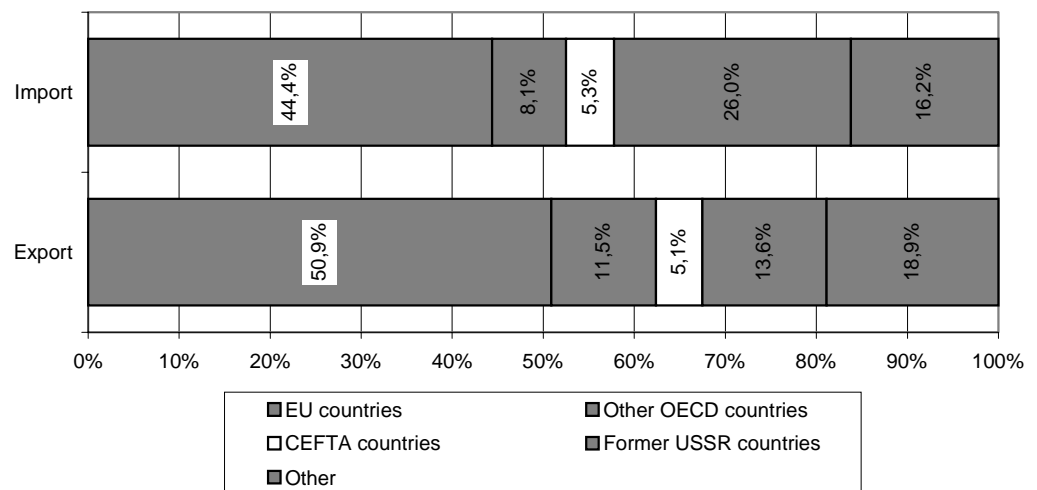
2.2.1. ASSESSMENT OF SMUGGLING IN BULGARIA BY MEANS OF "MIRROR STATISTICS"

The so-called "mirror statistics" are used to outline differences in the foreign trade reporting between partner countries. The method is conducive to an analysis of the commodity turnover between the EU countries (the EU as a whole and its

different members) and the economies in transition [20]. It compares the foreign trade information collected by the partner countries for the same international database (i.e. according to a uniform methodology). In our case, the information about Bulgarian exports to the EU (or one of its member states) furnished by Bulgaria is compared with the information about European imports, provided by the EU. Similarly, the Bulgarian information about EU imports is compared to the European information about exports to Bulgaria [21].

The review of the aggregate information from the different sources shows a serious discrepancy between the information from COMEXT and COMTRADE-HS. The difference between COMEXT and the IMF database and COMTRADE-STIC is somewhat smaller. According to EU information (COMEXT-EEC Special Trade), Bulgarian exports in 1998 amounted to USD 2,510 m, and imports to USD 2,730 m (See Chart 2.1).

CHART 2.1. STRUCTURE OF THE IMPORT AND EXPORT OF BULGARIA BY COUNTRIES IN 1998



Significant differences are encountered between BG export – EU import and BG import – EU export. In the first case the difference amounts to USD 375 m, which is the amount of import in EU countries not reported as export in Bulgaria. In the second case the difference is even bigger – USD 483 m, that is import registered in the EU countries not reported as export in Bulgaria.

If we try to summarize, the difference revealed in the “mirror exercise” in reporting Bulgarian export (-15%) and import (-18%) in 1998, compared to the information provided by the EU in COMEXT, should by no means be underrated.

Noticeably, the significant differences between Bulgarian and European foreign trade statistics data to 1994 (which correlates with some of the generalizations in Chapter One). In the period 1994-1998, they were retained at a 15-20% level compared to European statistical reporting.

Conditionally, it may be claimed that the comparison of the total difference, minus USD 858 m, to the GDP in 1998 could give us an idea of the scale of the hidden economy generated by the country’s trade with the EU.

The analysis should also take account of the level of concentration of Bulgaria’s trade with the EU according to member states and commodity groups. According to information of Eurostat – COMEXT EEC Special Trade (i.e. based on the EU’s reported import from Bulgaria), 63% of Bulgaria’s export to the EU countries in 1998 was directed to three of them: Italy – 25%, Germany – 22% and Greece – 16%. Italy has been the “favored” market for Bulgarian goods since 1995 (the year of the entry into force of the Association Agreement). The same is true of import – 61%

of Bulgaria's import from the EU comes from the same countries: 29% from Germany, and 16% each from Italy and Greece.

The concentration of commodity groups is significant [22]. The information about Bulgarian export – Chart 2.1 (BG export – EU import in million USD and BG export – EU import/EU import in %) shows the largest discrepancy in absolute figures between Bulgarian and West European information about Bulgaria's leading partners: Germany (-113 USD in 1998) and Italy (-72 USD). The differences in export to France, Belgium, Luxembourg, Holland, Austria, etc. are also significant. In percentage terms, in 1998, as in 1997 too, the biggest reported differences concerned Bulgarian exports to Ireland (234%!), Austria (-30%), Holland, etc. High figures are also recorded in the export to Germany and Italy (See Chart 2.1).

Regarding the differences in reporting Bulgarian exports in 1998, significant differences are observed in imports from Greece - USD 150 m. The discrepancy in imports from Germany is significant - USD 108 m, Austria - USD 64 m, Italy - USD 61 m, etc. In terms of percentage, the discrepancy is largest in the reported Bulgarian imports from Greece (-34%), Austria (-31%), Holland (-27%). That percentage also remains high for Germany, Bulgaria's main EU exporter.

What do these differences mean?

In reporting Bulgarian export to Germany the monitored -113 mln USD mean that goods to that amount were reported in Germany as import from Bulgaria in 1998, whereas these goods are simply absent in Bulgaria's foreign trade reporting. Likewise, regarding export to Italy and Austria, where the differences in absolute figures amount to - USD 100 m, in these two countries goods to this amount were reported as import from Bulgaria, yet they are not found anywhere in the Bulgarian statistics.

In import, the systematic differences with Greece throughout the period under review (1993-1998) warrant a separate analysis. They amounted to -52% and -44% respectively in 1994 and 1995. The USD 150 m difference observed in 1998 means that in that year in Greece goods to that amount were reported as export to Bulgaria, whereas such information is missing in Bulgarian reporting. Those differences are mainly due to three positions (HS 2-digit): 84 (Nuclear reactors, boilers and machinery) – USD 20 m, 61 (Apparel and clothing accessories) – USD 13 m, 87 (Vehicles) – USD 10 m. Different hypotheses are possible here but without an analysis by importing firms there could hardly be a clear answer.

In 1998, Germany reported that vehicles worth over USD 40 m were exported to Bulgaria, whereas Bulgarian statistics simply do not report them (as import). Or, assuming that these are used cars whose average price did not exceed USD 2,000, we end up with 20,000 vehicles reported as export to Bulgaria in Germany during the respective year but not reported in Bulgaria. In the cases of import of apparel and clothing differences come mainly from the trade with Italy and Greece (USD 70 bn), and in the case of import of alcohol – in the reporting of import from Great Britain (USD 11 m). The problem with the reporting of alcohol import with this country is a systematic one. From 1993-1998, alcohol of value between USD 11 m (1998) and USD 21 m (1993) was reported as export to Bulgaria but in Bulgaria it was not reported as an import.

In the case of at least three of positions showing greater differences – 87, 85 and 61 a large part of the import comes from the so called "suitcase trade". It certainly prevails in the import of clothing.

It may be assumed that the illegally working Bulgarian "guest workers" in Greece account for these differences. According to information of the Greek Ministry of

Labor, their number is between 50,000 and 80,000. Using informal networks and channels, they send both currency and goods to their friends and relatives in Bulgaria - Electrical machinery (84), Apparel and clothing accessories (61), etc.

The difference in reporting Bulgarian imports from Germany and Austria comes mainly from position 87 (Vehicles).*

The differences concerning raw materials are also of particular interest. Data show that about 56 % of the differences in the import are connected with raw materials. According to experts in grey economy a considerable portion of Bulgarian manufacture starts in the "grey zone" and creates a real opportunity to add value only contrary to law.

In the information presented by Eurostat the differences in Bulgarian import for the EU-countries come from different sources. In the export of confection (62) more than half of the differences come from the Bulgarian export to Germany, and in the export under N 61 (another type of dress-making), the difference is due to the export to Greece. The differences in the export of ferrous metals (72) and fertilizers (31) come mainly from Bulgarian exports to Italy, while the differences in the export of copper come from the export to Germany.

The great differences in apparel and clothing accessories (positions 61 and 62), which together represent almost 50% of the differences in export, could be due to purely methodological problems in reporting the export of these products. The next "item" - ferrous (72) and non-ferrous (74) metallurgy - together account for about 17% of the differences in 1998.

As may be seen from the schematically represented results of comparing information between Bulgarian and Western European statistics, "grey zones" of illegal import/export are categorically revealed. Only a comparison of mirror statistics can begin to reveal the scale of smuggling channels for emblematic luxury items such as electrical machinery, household electronics, spare parts, alcohol, cigarettes and other goods.

In conclusion it may be said that the method of mirror statistics is a very efficient instrument for fighting smuggling. If the specialized services begin to use actively the opportunities given by modern technologies, the pressure on the traditional smuggling channels will increase dramatically. The opportunities for multiplan researches - from identifying the concrete firms that have presumably caused those differences (and checking their books), to creating of computer data exchange between customs administrations in the Eurozone and in the countries applying for EU-membership.

Let us now take a look at another analytical instrument for assessing of smuggling channels which, besides considering smuggling from a different perspective, paves the way to more concrete and operative assessment.

2.3. MECHANISM FOR ASSESSING SMUGGLING THROUGH SAMPLE METHODS (ILLUSTRATED BY AN ANALYSIS OF CIGARETTES AND ALCOHOL MARKET)

This method makes it possible to combine direct sample studies used for marketing assessments of segments of the consumer market specific with official, in this case, customs statistics.

* The differences come from Germany (-42 million dollars), the Benelux (-25 million dollars) and Greece (-10 million dollars)

The first stage in the application of this mechanism consists of a real assessment of the amount of smuggled goods. For this purpose we suggest a combination of existing market studies on consumer goods with customs statistics. This can easily and quickly be realized in practice because numerous marketing studies have been made for virtually all consumer products since the early 90s. There is an established trend and reliable information about the size and structure of the country's main markets at present. The comparison between the value of the goods declared by official customs statistics and the results of marketing analyses provides an excellent possibility to determine the size and structure (brands and labels, packaging size, etc.) of the market of smuggled goods. Let us give an example with the two of the most controversial markets - those of **cigarettes and alcohol**.

A clearly positive trend is observed on the *market of imported alcohol* with regard to restricting smuggling (as well as certain counterfeit brands). What are the facts? A look at the period from 1989 to 1998 shows that the quantities of imported vodka varied around 1.2 million liters, and those of different brands of whisky – between 2 and 2.5 million liters a year. In general, it may be claimed that a relatively stable market of imported alcohol exists in the country, estimated at about 50-60 million leva.

According to official statistics, the legally imported quantities of alcohol in 1998 amounted to 4.1 million leva or about 6-8% of the supposed market. In 1999, however, a major change was observed in the behavior of the main players on this market. On the one hand, the Bulgarian customs introduced tighter control measures and, on the other, world producers started controlling supplies to the country. As a result, alcohol worth 12.3 million leva was declared at the country's borders by October alone, i.e. four times more than in 1998, without any real significant changes in the level of consumption. In this connection it may be claimed that there is a trend towards the gradual legalization of the market of imported alcohol.

In the case of imported cigarettes, however, the game continues to be played according to the old rules and in some respects the situation has become even worse. According to the lowest market study assessments, the annual market in Bulgaria is about 260 million leva. The analysis shows that 85% of cigarettes sold in the country are Bulgarian, leaving 15%, or BGN 39 m, for imported cigarettes. The question as to what part of these cigarettes have been imported legally arises quite naturally. The answer is: cigarettes worth approximately 5.5 million new leva entered the country in 1998, i.e. only 14.1% of the imported cigarettes are of legal origin. A comparison with the 1998 figures shows that the duty paid until October 1999 had decreased to about 35%.

The second stage of the application of the chosen methodology focuses on potential retail channels of contraband goods. In the example with imported cigarettes and alcohol, marketing studies clearly show the market shares of the various brands. For example, assuming that *Smirnoff*, *Finlandia* and *Absolut* hold almost 78% of the market of imported vodka in the country and that the sold quantity corresponds to customs statistics, whereas the quantities of all other brands have not been officially imported, the special bodies should focus on brands with the largest market share outside the group of the above three. Considering that, according to market studies, almost two-thirds of the market of imported vodka is located in the country's biggest cities – Sofia, Plovdiv, Varna and Bourgas - the chance to take measures against smuggled imports are absolutely tangible.

2.4. DEVELOPMENT OF INSTITUTIONAL FORMS FOR FIGHTING TRAFFICKING AND CORRUPTION

The above described methods of assessing of trafficking are in and of themselves just devised for measurement. In order for them to become efficient instrument for counteracting smuggling, it is necessary to be combined with the traditional methods of coercion and punishment used by the state. At the same time, the analysis of traditional smuggling practices shows that the largest part of the efforts of the departments in charge are at the operational level. According to experts, at present the state institutions are almost unfamiliar and do not exploit the modern methods of socio-economic statistics.

There are different approaches for institutionalizing and exploiting the methods of assessment of smuggling presented above. As a first step it is advisable that an analytical center be created within the frame of the Ministry of Finance or the Ministry of Interior, or at the Council of Ministers, that will collect and analyze data coming from different sources like customs and tax administration, international comparative studies, statistics from NSI and market studies of different private organizations. It is important to mention that this department should not deal with information from intelligence sources and data from them. This condition is also connected to the compulsory transparency and the public character of an institution of this kind that should publish regularly the results from its research.

The main object of this institution will be the assessment and monitoring of the smuggling channels and their markets. With the above described methods of “mirror statistics” and sample studies the most affected sectors of Bulgarian market could be identified. After that the basic aims of counteraction could be defined.

Let us try to use the above examples to present two of the possible practical approaches for destroying trafficking mechanisms.

● “Institutional control and macro-level influence”

This approach presumes a direct contact between state institutions and members of the organization suspected of violations. Its application could be illustrated in the field of imported cigarettes. A closer look at the 10-year development of this market will show that despite its large scale the representatives of the big cigarette companies in Bulgaria are not interested in smuggling restriction.

The discussion that took place in the last months about the involvement of VAT (one of the giants of the cigarettes industry) in smuggling, answers that question to a certain extent. According to experts, some corporations deliberately promote through their advertising campaigns the selling of cigarettes that they have already sold to Bulgarian smugglers.

The situation with international corporations importing alcohol in the country was the same. If the “mirror” and customs statistics find out that the import of alcohol differs sufficiently from the paid taxes, the firms will be easily identified due to modern technologies.*

● Control and influence upon smuggling in retail trade

The institution should be entitled to check the distribution network.* In this respect an example with the sales of imported alcohol can be given. As we have already seen, about 70 – 90 % of the luxury goods, including imported alcohol, are sold in the four biggest Bulgarian cities. There are about 3,000 stores selling alcohol (it is

* Consequently, a key function of that institution would be to come to forms of interaction with those companies that, knowingly or not, support smuggling in the country

possible to make a relatively punctual map of the distribution of every type of luxury or mass good). In order to reach maximum efficiency with the present financial and human resources, different algorithms of optimization are possible. One of the possible approaches is for the institutions in charge to begin examinations only of the alcohol brands with unpaid taxes. These may be month sample examinations. For example, 10 % of these stores could be occasionally checked every month with the clear indication of the sought brands of cigarettes and alcohol.

Presumably, only a few shop owners will risk selling imported brands that have been declared illegal. Illegal brands will be removed from retail distribution, which given the strongly competitive market of imported alcohol, would be fatal in the long run. After the paid import duty of the checked brands reaches the levels corresponding to the average sales, the respective brand can gradually be removed from the list of checks. A condensed sample scheme (e.g. 20-30 % and more) for suspect brands and less so (2-5%) for less suspect brands could be used as part of the proposed technology. This will prevent wholesale smugglers from focusing on specific sellers.

The aim of such impersonal technology is to make the payment of taxes and duties of the respective goods more advantageous for the traders by using limited human and financial resources and by the modern technological opportunities. The method is impersonal and automatic. In this sense this kind of approach is not particularly vulnerable.

Pressure upon the wholesale trade (channels). The actual analysis of operative customs statistics can suggest the direction of checks. The official figures for the import of cigarettes in 1999 by months may be cited as an example:

TABLE 2.2. CUSTOMS STATISTICS FOR IMPORT OF CIGARETTES

	Net (kg)	Statistical value (BGN m)
Cigars, cigarillos, cigarettes	62,814	1,440,318
January	1,865	47,375
February	1	204
April	18,744	429,601
May	10,852	229,328
June	24	1,115
July	8,736	213,787
August	11,005	238,791
September	60	2,669
October	11,527	277,448

As shown in table 2.2, in some months the declared cigarette imports amount to only a few kilograms, which immediately suggests smuggling. This should initiate a procedure of checks, for example, of wholesale warehouses. This kind of information should also lead to checks of customs through which such goods can potentially be imported.

In conclusion, the proposed mechanism for assessing of smuggling according to types of goods and specific brands can also be effectively used as an instrument for restricting and preventing smuggling. Its use would help legalize the market of consumer goods.

* It is important to establish a system for such checks.

2.5. DEVELOPMENT OF A SPECIALIZED INDEX OF TRAFFICKING

It is widely believed that the fight against the dyad of “trafficking – corruption” should be led only by using different forms of agency information. The approaches presented in this study do not contradict the use of such instruments. Moreover, the combination of “closed” and “open” methods creates new opportunities for prevention and interception of transborder crime. But in order to operate efficiently the institution designed to prevent the “contraband” needs an objective public assessment of the results of its activity. Otherwise its activity may become the object of a deal between smugglers, state officials and politicians. The experience of the Western democracies shows that the lack of information about institutions with such functions often gives birth to suspicions on the part of the media and diminishes society’s trust in them.

Along these lines it is reasonable to create a common smuggling index that will register the changes in the scope and the structure of this type of crimes. It should be published regularly (for example twice a year). Such index could be created on the basis of presumed losses of the state from unpaid taxes and excises. It may consist of a certain amount of smuggled goods (selected according to their total value), which will be compared regarding their paid taxes and market share as value and goods that form the biggest differences between Bulgarian statistics and the statistics of the countries from OECD. In the course of gaining experience, it is possible to start selecting different groups of goods depending on their importance.

At present there are different opinions regarding the contents of such index but there is no doubt it should be publicly announced and verified. The described methods of “mirror statistics” and sample research are a good basis for discussion.

- The experience of the “victimization survey” conducted within the project “Early Warning System in Bulgaria” of the UN Development Program, as well as the Corruption Indexes of *Coalition 2000* may be used for the creation of this index. For example the indexes for the estimation of corruption are created as a result of public discussion between academic institutions and research organizations.