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## The Anatomy of Russian Foreign Trade Data in the 1990s<sup>1</sup>

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### Abstract

*This paper investigates the relationship between four kinds of official foreign trade data in Russia: customs statistics, foreign trade statistics, balance of payments statistics, and GDP statistics. The results suggest that there are serious reliability problems in areas such as Russian trade with Belarus, unregistered trade (shuttle trade), and Russian exports of fish and marine products from ships, which account for the differences between customs and foreign trade statistics in Russia.*

KEYWORDS: *Russian economy; customs statistics; foreign trade statistics; balance of payments;*

### 1. Introduction

In parallel with its transition to a market economy, the Russian statistical system has been transformed significantly during the 1990s. Russia has introduced the System of National Accounts (SNA) in place of the Material Product System (MPS) that was used in Russia for more than seventy years (Tabata, 1996). As a natural result of this shift, the statistics on foreign trade have also undergone substantial changes in the last decade. New statistics, such as customs statistics and balance of payments, were introduced in the Russian statistical system as late as the beginning of the 1990s.

At present, there are four kinds of official foreign trade data in Russia: customs statistics, foreign trade statistics, balance of payments statistics and GDP statistics. Unfortunately, Russian and foreign economists, when using these statistics, do not seem to pay due attention to their definition and the relationships between them. As a matter of fact, as with many other Russian statistics, those definitions and relationships are not always explicit: the explanations made by the official statistical agencies have not been satisfactory. In addition, those definitions are not necessarily constant and have been changed frequently. The purpose of this paper is to clarify the relationships between them and to consider their reliability.

### 2. Four Kinds of Official Foreign Trade Data

Customs statistics were introduced in 1994 and have become the most important source of primary data on Russian foreign trade. A newly created organization, the State Customs Committee of Russia (GTK Rossii), is responsible for customs statistics and has published *the Customs Statistical Handbook of the Russian Federation (Tamozhennaia statistika vneshnei trgovli Rossiiskoi Federatsii)*. When

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assessing the reliability of Russian customs statistics, we should bear in mind that since Soviet and Russian foreign trade statistics for many years were based on statistical reports submitted by enterprises, the procedure of customs statistics is completely new for Russia.

The State Committee on Russian Statistics (Goskomstat Rossii) has compiled foreign trade data. Although Russian foreign trade data for the second half of the 1980s was published, it was comprised of derivations recalculated from data compiled for the USSR (Tabata, 1994, p. 437). Russian foreign trade statistics began to be compiled independently only as late as 1992. Since 1994, foreign trade data has been based upon customs statistics.

Balance of payments statistics have been compiled since the beginning of the 1990s. Although experimental data is available for 1990, the systematic compilation and publication of balance of payments figures only began in 1993 (Uegaki, 1997, pp. 77-80).

GDP statistics were also introduced in Russia at the beginning of the 1990s. GDP data has been available since 1989. Export and import data in GDP statistics are expressed in rubles, while foreign trade data in the other three types of statistics mentioned above are expressed in dollars.

The relationship between these four sets of statistics are summarized in Figure 1. Numerical relationships between three of the four types of statistics in 1998 are shown in Table 1. Figure 1 was determined by examining the definitions and data now available. The most useful information for this purpose is contained in Table 2, which is based on the data published by the Central Bank of Russia in conjunction with the balance of payments statistics. This table shows how the balance of payments data is compiled from customs statistics and other sources.<sup>2</sup>

Figure 1.

Relationships of Foreign Trade Data in the Russian Statistical System (1997-1998)<sup>1)</sup>

Customs statistics	Foreign trade statistics	Balance of payments statistics:	Exports and imports in GDP statistics
Trade with Belarus			
Unregistered trade			
Exports of fish and marine products from ships			
Goods procured in ports			
Revision to F.O.B. (imports)	Trade in goods		
Assets of migrants			
Exports of energy resources			
	Trade in services		

Note:

1) We disregard humanitarian aid, because since 1997 it has been included in customs statistics, foreign trade statistics and balance of payments statistics. Until 1996 it had not been included in customs statistics and until 1995 it had not been included in foreign trade statistics.

Table 1.  
Russia's Exports and Imports of Goods (1998)

	Exports			Imports		
	Total	Non-CIS countries	CIS countries	Total	Non-CIS countries	CIS countries
Customs statistics	66,642	57,613	9,029	38,975	32,269	6,706
Trade with Belarus	4,623	...	4,623	4,555	...	4,555
Unregistered trade <sup>1)</sup>	1,607	...	1,607	14,955	12,725	2,230
Exports of fish and marine products from ships	906	906	0	...	...	...
Goods procured in ports	377	364	13	414	399	15
Residual <sup>2)</sup>	2	0	2	36	35	1
Foreign trade statistics	74,157	58,883	15,274	58,935	45,428	13,507
Adjustment to F.O.B. (imports)	...	...	...	-1,667	-1,592	-75
Assets of migrants	614	141	473	751	23	729
Exports of energy resources	-23	-23	0	...	...	...
Residual <sup>3)</sup>	0	1	-1	-631	-631	-1
Balance of payments statistics	74,748	59,002	15,746	57,388	43,228	14,160

Notes:

1) Calculated from foreign trade statistics (data from Table 3).

2) Calculated by subtracting all listed items from volume of foreign trade statistics.

3) Calculated by subtracting all listed items from volume of balance of payments statistics.

Sources:

*Tamozhennaia*, 1999, p. 6 for customs statistics.

*RSE*, 1999, pp. 564, 567 for foreign trade statistics and trade with Belarus.

Table 2 for the other items.

Table 2.  
Foreign Trade Data in Balance of Payments (1998)

	Exports			Imports		
	Total	Non-CIS countries	CIS countries	Total	Non-CIS countries	CIS countries
Balance of payments statistics	74,751	59,070	15,681	57,445	43,281	14,165
Basic exports/ imports of goods <sup>1)</sup>	74,374	58,706	15,668	57,032	42,882	14,150
Customs statistics, including trade with Belarus	71,268	57,681	13,587	43,591	32,324	11,267
Revision to customs statistics	3,106	1,025	2,081	13,441	10,558	2,883
Revision for coverage	3,128	1,048	2,081	14,710	11,752	2,958
Exports of fish and marine products from ships	906	906	0	...	...	...
Assets of migrants	614	141	473	751	23	729
Humanitarian aid <sup>2)</sup>	1	0	1	36	36	0
Adjustment to F.O.B. <sup>3)</sup>	...	...	...	-398	-398	0
Other (including unregistered trade)	1,607	0	1,607	14,321	12,091	2,230
Revision for valuation	-23	-23	0	-1,269	-1,194	-75
Exports of energy resources	-23	-23	0	...	...	...
Adjustment to F.O.B. <sup>4)</sup>	...	...	...	-1,269	-1,194	-75
Goods procured in ports	377	364	13	414	399	15

Notes:

1) This is not a familiar item in the literature reviewed. In this table, it shows the volume of exports/ imports of goods (customs statistics) plus revisions to customs statistics. In other words, it does not include goods procured in ports.

2) As noted in Figure 1, since 1997 customs statistics have taken account of humanitarian aid. Therefore, it is unclear why the revisions concerning humanitarian aid were made here.

3) Transportation and insurance services provided by residents (original note).

4) Transportation and insurance services provided by nonresidents (original note).

Sources:

Platzhnyi, 1999, pp. 21-34.

### 3. The Relationship between Customs Statistics and Foreign Trade Statistics

Differences between customs and foreign trade statistics include trade with Belarus, unregistered trade, exports of fish and marine products from ships and goods procured in ports.<sup>3</sup>

#### 3.1 Trade with Belarus

There have been no customs statistics on trade with Belarus since the abolition of customs controls between Russia and Belarus in 1995. Instead of GTK Rossii, Goskomstat Rossii has been in charge of statistics on trade with Belarus and has given this data to GTK Rossii. As a result, the data published in the customs statistical handbooks includes the total volume of trade with Belarus. However, the data on trade by commodity reported in these handbooks does not include data on trade with Belarus. In contrast, the trade data by commodity released by Goskomstat Rossii in *RSE* and other statistical handbooks does include trade with Belarus.

The estimation method used by Goskomstat Rossii has not been explained clearly and the reliability of these statistics seems to be very low. This is one of the fundamental defects of Russian foreign trade statistics, because Belarus has been Russia's second or third largest trade partner in recent years.

#### 3.2 Unregistered trade

Although unregistered trade represents one of the largest items in which revisions were made in Table 2, its definition has been ambiguous. In some cases, it only refers to the so-called shuttle trade carried out by individuals. In other cases, it also includes trade not fully declared by firms. The estimation of unregistered trade began in 1993. In Table 3, various estimates of unregistered trade are shown.<sup>4</sup> Although unregistered imports accounted for 30 percent of imports from non-CIS countries, the method for estimating the amount of unregistered trade remains extremely sketchy. In addition, only the total volume of unregistered trade has been estimated. It should be emphasized that there is no breakdown by commodity or by country of destination.

Table 3. Estimates of Unregistered Trade

		(million dollars)						
		1993	1994	1995	1996	1997	1998	
Exports	Total	Foreign trade statistics	...	680	1,227	1,710	1,699	1,607
		Balance of payments <sup>1)</sup>	...	672	3,931	1,710	1,699	1,607
		Cash foreign currency balance	...	...	500	700	800	500
	Non-CIS countries	Foreign trade statistics	...	...	...	...	...	...
		Balance of payments <sup>1)</sup>	...	...	2,704	0	0	0
	CIS countries	Foreign trade statistics	...	680	1,227	1,710	1,699	1,607
	Balance of payments	...	672	1,227	1,710	1,699	1,607	
Imports	Total	Foreign trade statistics	...	11,857	14,236	21,455	20,045	14,955
		Balance of payments <sup>1)</sup>	...	11,434	13,272	20,574	19,464	14,321
		Cash foreign currency balance	...	...	10,100	17,600	17,200	12,400
	Non-CIS countries	Foreign trade statistics	6,000	8,623	10,995	16,327	16,491	12,725
		Balance of payments <sup>1)</sup>	6,000	8,200	10,052	15,446	15,558	12,091
	CIS countries	Foreign trade statistics	...	3,234	3,241	5,128	3,554	2,230
	Balance of payments <sup>1)</sup>	...	3,234	3,220	5,128	3,906	2,230	

Notes:

1) Includes other revisions for coverage. See Table 2.

Sources:

Platezhnyi, 1994, p. 78, 1995, p. 35, 1996, p. 14, 1997, p. 21, 1998, p. 13 and appendix 3, 1999, pp. 8, 21, *RSE*, 1999, pp. 564, 566-567.

It can be suggested that the estimation methodology used by Goskomstat Rossii (*Metodologicheskie*, 1996, p. 419, 1998, pp. 27-54, *Metodicheskie*, 1997, pp. 10-20, Goskomstat & WB, 1995, pp. 110, 146-148) differs significantly from the methodology used by the Central Bank of Russia (*Platezhnyi*, 1998, appendix 6.1, 1999, appendix 5.1, *Metodika*, 1998).<sup>5</sup> In the Goskomstat analysis, the principal method of estimation is as follows:

$$V = p * q$$

V - amount of unregistered imports;

p - normative amount of imports for one shuttle trader, which is assumed to be equal to the maximum allowance for the duty free importation of goods;<sup>6</sup>

q - estimated number of shuttle traders.<sup>7</sup>

In the Central Bank explanation, however, there is no mention of this simple method. Instead, the Central Bank seems to employ an analysis based more on indirect calculation methods, using data on retail turnover and other various estimates.

In addition, there are other problems. For example, there are few accounts (especially in the Goskomstat document) of how the amount of unregistered trade is estimated in relation to CIS countries. It is unknown why unregistered exports to non-CIS countries have not been estimated, as shown in Table 3. Finally, there is a need to clarify why the amount of unregistered imports from non-CIS countries estimated in foreign trade statistics has always been larger than the corresponding estimates in the balance of payment statistics by almost 1 billion dollars, as shown in Table 3.

### 3.3 Exports of Fish and Marine Products from Ships

In *Tamozhennaia* (1999, pp. 475-476), data on "exports of fish and marine products from ships" was published for the first time, and footnoted as based on the Goskomstat data.<sup>8</sup> However, the amounts appeared to be very small, compared with mirror statistics of the Russias trading partners. For example, in 1998, Russian exports of fish and crustaceans (crabs) to Japan were reported to amount to 126 million dollars, according to Russian customs statistics; according to Goskomstat Rossii, their exports directly from ships were estimated to be 169 million dollars (*Tamozhennaia*, 1999, pp. 472, 476). Altogether, according to Russian statistics, exports of fish and crustaceans amounted to 295 million dollars. On the other hand, Japanese customs statistics reported that imports of fish and crustaceans from Russia amounted to 887 million dollars (*Monthly Bulletin of Trade with Russia & Eastern Europe* (in Japanese), No. 2, 1999, p. 3, annual statistics section).<sup>9</sup>

### 3.4 Goods Procured in Ports

These items include bunker fuel, foods and materials procured by foreign/Russian ships, airplanes and trucks in Russian/foreign ports, airports and service stations (*Metodologicheskie*, 1996, p. 419). Data on these items was also published for the first time in *Tamozhennaia* (1999, pp. 477-478). However, its total volume was much smaller than the corresponding figure reported in the balance of payment statistics (Platezhnyi, 1999, p. 21).<sup>10</sup> The former data was reported to be based on the Goskomstat figures, while the latter data was also reported to be based on the No. 8-VES (bunker) and No. 8-VES (transportation services) forms of Goskomstat Rossii (*Platezhnyi*, 1998, appendix 6).

## 4. The Relationship between the Foreign Trade Statistics and Balance of Payments Statistics

Differences between foreign trade and the balance of payments statistics consist of adjustments to F.O.B. (imports), assets of migrants and exports of energy resources.<sup>11</sup>

### 4.1 Adjustment to F.O.B. (Imports)

In customs and foreign trade statistics, imported goods are valued C.I.F., while in the balance of payments statistics they are valued F.O.B. Therefore, adjustment to F.O.B. is needed, as is the case in most countries of the world. As shown in Table 2, the adjustment is made in imports only from non-CIS countries.

### 4.2 Assets of Migrants

In the balance of payments statistics, exports and imports of goods by migrants are recorded as exports and imports of goods in the current account and they are

offset by an entry in items "capital transfer related to migration of population" (*Platezhnyi*, 1998, appendix 6.4). This procedure corresponds with international standards (IMF, 1993, p. 84). In Russia, exports and imports by migrants are calculated by multiplying the normative value per migrant by the number of migrants.<sup>12</sup>

### 4.3 Exports of Energy Resources

It is unclear what "exports of energy resources" means. It was only noted that this was calculated by the Central Bank of Russia based on data from GTK Rossii, VEP "Gaseksport" and Vneshekonombank (*Platezhnyi*, 1999, p. 36). One might suppose that this item is related to barter trade. However, there is no evidence to prove this.<sup>13</sup>

## 5. The Relationship between the Balance of Payments Statistics and GDP Statistics

The relationship between the balance of payments and GDP statistics is summarized in Table 4. It is confirmed in this table that export and import data in GDP statistics is calculated from the exports and imports of goods and services in the balance of payments using the official ruble exchange rate. This is in accord with the explanation provided by Goskomstat Rossii (Tabata, 1996, pp. 135-136).

**Table 4.**  
Exports and Imports in GDP and Balance of Payments Statistics<sup>1)</sup>

			1993	1994	1995	1996	1997	1998
EXPORTS								
GDP statistics	Total	million rubles	65,525	169,534	426,735	532,239	597,651	853,991
Balance of Payments	Total	million dollars	67,898	76,250	93,231	103,725	103,235	87,575
	Goods	million dollars	59,724	67,826	82,663	90,563	89,008	74,799
	Services	million dollars	8,174	8,424	10,567	13,162	14,227	12,776
Implicit conversion rate <sup>2)</sup>	Total	rubles/dollars	0.965	2.223	4.577	5.131	5.789	9.752
IMPORTS								
GDP statistics	Total	million rubles	52,300	141,666	373,593	442,815	524,175	643,067
Balance of Payments	Total	million dollars	53,682	65,292	82,157	86,274	90,482	73,553
	Goods	million dollars	44,133	50,152	62,188	67,629	71,647	57,449
	Services	million dollars	9,549	15,141	19,969	18,644	18,835	16,105
Implicit conversion rate <sup>2)</sup>	Total	rubles/dollars	0.974	2.170	4.547	5.133	5.793	8.743
Official exchange rate		rubles/dollars	0.932	2.204	4.554	5.124	5.785	9.705

Notes:

1) Figures expressed in rubles are evaluated in new rubles after the denomination of January 1998.

2) Calculated from GDP and balance of payments statistics.

Sources:

*International Financial Statistics*, December 1999, pp. 634-635.

*RSE*, 1999, p. 245.

*Rossiia*, 1998, pp. 298-300.

Tsentr'al'nyi, as of June 21, 1999 for balance of payments in 1993.

Tsentr'al'nyi, as of March 24, 2000 for balance of payments in other years.

## 6. Concluding Remarks

This paper has not argued about the reliability of customs statistics, which is beyond the scope of this paper. If this problem is disregarded, the most serious problems in Russian foreign trade data appear to lie in the calculation of trade with Belarus, unregistered trade, and exports of fish and marine products from ships. The methodology concerning these calculations has not been explained well and there is ample evidence to show that estimates provided by official Russian statistics have not been accurate. Table 1 indicates that the problems concerning these three estimates greatly undermine the reliability of Russian foreign trade statistics, since they accounted for a considerable part of the foreign trade data.

### Notes

<sup>1</sup> An earlier version of this paper was published in Japanese in Kuboniwa and Tabata (1999). Another version was presented in Tokyo on September 14-15, 1999, at the Hitotsubashi University COE International Workshop on Russian Economic Statistics in Historical Perspectives. The author thanks Yuri Ivanov, Tatiana Khomenko, Masaaki Kuboniwa and Akira Uegaki for valuable comments given on earlier versions of this paper.

<sup>2</sup> The type of information shown in Table 2 is available for the period 1995-1998.

<sup>3</sup> *Metodologicheskie* (1996, p. 40) indicates that foreign trade statistics include exports of oil and natural gas by pipeline in addition to customs statistics. However, since the data reported in the customs statistical handbooks clearly includes all oil and natural gas exports, this problem can be ignored.

<sup>4</sup> The cash foreign currency balance is a balance that shows the inflow and outflow of cash foreign currency by banks, migrants, tourists and shuttle traders. These statistics were published for 1995-1998 by the Central Bank of Russia in conjunction with the balance of payments statistics. Methodological explanations, though not fully satisfactory, were available in *Platezhnyi* (1999, p. 45).

<sup>5</sup> *Metodika* (1998) is a five-page document obtained from the Central Bank of Russia in July 1998.

<sup>6</sup> This had been 2000 dollars until August 1996 (Goskomstat & WB, 1995, p. 110). How the decrease in the maximum amount of duty free importation of goods in August 1996 (from 2000 to 1000 dollars) affected the calculation of the amount of unregistered trade is unclear.

<sup>7</sup> How the number of shuttle traders has been estimated is not clear either.

<sup>8</sup> These figures were reported to be based upon information obtained from the 8-VES (fish) statistical form (*Platezhnyi*, 1998, appendix 6).

<sup>9</sup> Nobuo Arai of Sapporo International University was the first scholar to point out the tremendous gap in the reported figures concerning the crab trade between Japan and Russia.

<sup>10</sup> According to the previous data, these exports and imports amounted to 37 and 242 million dollars respectively, while in the latter data the corresponding figures were reported to be 377 and 414 million dollars, respectively.

<sup>11</sup> The residual not explained by factors which should account for differences between foreign trade and the balance of payments statistics amounted to 631 million dollars concerning imports from non-CIS countries, as shown in Table 1. This is due to the difference in the estimated amounts of unregistered trade between foreign trade and the balance of payments statistics, as was mentioned above.

<sup>12</sup> Interestingly, calculations reveal that this normative value concerning exports to CIS countries by emigrants was equal to 5000 dollars in the period 1995-1997, and corresponding figures for imports from CIS countries by immigrants were 600, 2000 and 1600 dollars, respectively, in these three years (Calculated from *Platezhnyi*, 1996, p. 14, 1998, appendix 3, *RSE*, 1998, pp. 163-164).

<sup>13</sup> As for 1996, in a table similar to Table 2 published in *Platezhnyi* (1997, p. 23), there was a revision concerning barter trade. However, in the corresponding table in *Platezhnyi* (1998, appendix 3) there were no such revisions. Importantly, in both tables the same amount of energy resource exports was recorded. The reason why there have been no revisions concerning barter trade since 1996 has not been explained.

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