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Changes in the foreign trade structure of the Russian Far East under the process of transition toward a market economy

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Abstract

Under the process of transition toward a market economy, the economic connections of the Russian Far East (RFE) with external regions changed from a division of labor among the regions of the USSR (Russia) to an international division of labor. This happened due to factors including the liberalization of the trade system away from a state monopoly, the presence of rich natural resources and of developed industries related to these resources, the advantage of geographically proximity to Asia-Pacific countries, and the political and economic division of the once unified national economic space during the process of transition.

The economic connections of RFE with external economies changed radically under the transition toward the market economy. First, the value of foreign trade increased dramatically and the importance of foreign trade for the RFE economy increased enormously. Second, however, different territories of RFE traveled along different trajectories, due to factors involving their industrial structure and geographical conditions. Third, in recent years connections with China, in the areas of both exports and imports, have grown. Fourth, the share within exports of "fuel, mineral resources and metal” increased radically from the end of the 1990s, and the share of “machine, facilities and transportation means” increased from 2002 year within imports. Under this situation, especially since 2002, there has been a major change in the structure of foreign trade.

Keywords: Centrally planed economy (CPE), process of transition towards the market economy, the economic connections of RFE with external economies, the role of foreign trade.
JEL classification: F1

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Introduction

At the beginning of the 1990s, when the Soviet Union (USSR) was dissolved, the centrally planned economic system which had been adopted as a method of management for many years was radically transformed to a market one. Under this process of transition, there was a tremendous drop in the industrial production of the Russian Far East (RFE) as a whole, on the one hand, but the role of foreign trade hardly changed, on the other. In this paper, we analyze how the foreign trade structure of the RFE changed under the process of transformation of the economic system, and elucidate the factors behind these changes.

1. Overview of the RFE

The RFE is the largest region[1] of Russia, containing 36.4% of the country's total territory. A large portion of the RFE has the severest natural conditions in Russia, and is called "the territories of the Far North and the like" under a Russian law. There are rich natural resources including crude oil, coal, nonferrous metals, wood, marine products, etc. The regions key industries are nonferrous metallurgy, industrial sectors related to wood and the food industry (mainly fish products), which are based on the rich natural resources, and the machine industry, which developed on the basis of the military industry related to the Russian Pacific Fleet. In recent years, the extraction of crude oil and natural gas is developing rapidly, while the share of the machine industry has declined due to armament reductions and the economic decline of Russia. From 1991-2004, the share of "food" in GDP changed from 31.8% to 16.8%, "nonferrous metal"

[1] In this paper we use the term "region" for the economic regions of the USSR (and Russia) and the term "territory" for administrative areas inside the regions.

from 19.4% to 29.7% and "machinery" from 15.3% to 9.6%.

In addition to a few ice-free ports, the RFE has the Trans-Siberian Railroad and Baikal Amur Railroad (BAM) to transport natural resources. These are the most important means of distribution of Russia.

In the Russian Constitution, there are ten "federal subjects" of the Russian Federation in the RFE. Dividing the RFE into the north area, south area and the islands, in the north there are five subjects; Republic of Sakha (951,000 population at the beginning of 2004), Cyukoto Autonomous Okrug (51,000 people), Koryak Autonomous Okrug (24,000 people), Kamchatka Oblast (328,000 people), and Magadan Oblast (175,000 people). In the south area there are four subjects; Jewish Autonormous Oblast (189,000 people), Primorie Krai (2,036,000 people), Khabarovsk Krai (1,420,000 people), and Amur Oblast (887,000 people). Finally Sakhalin Oblast constitutes the islands (532,000 people). The subjects in the north area are characterized by small populations, underdeveloped social and economic infrastructures, and a monoculture-type industrial structure based on the extracting of natural resources. On the other hand, the south area contains the largest concentration of population (about 80% of the regional population), has relatively well developed social and economic infrastructures and has a diversified industrial structure, including processing industries. The south area is bounded by the Chinese Northeast (Heilongjiang and Jilin Province) with a border running more than 3,000 kilometers (most of it along a river), and there are active economic and personnel exchanges between the RFE and Chinese Northeast.

One characteristic of the RFE is the very large discrepancy between its large territory and its small population, gross product, and industrial production, which is just only 5% of national production. The population of less than 6.6 million people (at the beginning of 2005 year, making up 4.6% of the total population of Russia) inhabits either small cities or is dispersed. There are only ten cities more than100,000 people, with many of them being provincial capitals. Even the cities of Khabarovsk and Vladivostok, the largest in the RFE, only have populations slightly over 600,000 people.

By contrast, the RFE received about 31% of Russia's total direct foreign investment in 2003, the large share in comparison with regional production capacity. This large share of FDI is the result of foreign companies making investments into the extraction of the natural resources of the RFE. However, this does not mean that the RFE as a whole is attracting foreign investors. It is the result of investments in oil and natural gas production projects in Sakhalin Oblast, which in 2003 accounted for 96% of FDI in the RFE and about 30% of the total for Russia.

2. Economic Connections between the RFE and Other Regions of the USSR and External Economies in the Era of the Centrally Planned Economy

Before we proceed to analyze the changes of the foreign trade structure of the RFE, it is useful to review the role and actual conditions of foreign trade in the economy of the RFE at the time of the centrally planed economy (CPE).

We briefly describe the economic connections of the RFE with the external economy under the CPE by looking at relations with gross product, export (+"buibos") and import (+"bbos") [2](Table 1).

[2] In this paper, we use the term of "export and import" in foreign (external) trade and the term of "buibos" and "bbos" as internal trade between the regions of the USSR (Russia), because in the table of economic connections on RFE with Russian regions and foreign countries are not identified and are expressed as [export and "buibos"] or [import and "bbos"] collectively.

Table1. Gross Product, Exports (+ “buibos”) and Imports (+ “bbos”) of the RFE

Year	1977	1982	1987
Gross product (bilion rbl)	32.7	42.4	52.5
Export (+ “buibos”) (bilion rbl, %)	4.5 (13.9)	7.2 (17.0)	8.3 (15.8)
Import (+ “bbos”) (bilion rbl, %)	8.9 (24.1)	12.7 (26.5)	14.6 (24.9)

Source: ИЭИ［1994:47~48］

Note: The figures inside brackets are the rate of exports (+“buibos”) and the rate of imports (+“bbos”). The rate of exports (+“buibos”) is the value of exports (+“buibos”)/gross product. The rate of imports (+“bbos”) is the value of imports (+“bbos”)/ (gross product+(value of imports(+“bbos”)- value of exports(+“buibos”).

For the period of 1977-1987, imports (+“bbos”) consistently exceeded exports (+“buibos”), and the difference was about 1.8-2 times. In addition, the rate of exports (+“buibos”) and the rate of imports (+“bbos”) were relatively stable during this period. What were the characteristics of these connections with the external economy in comparison with the other Russian regions? Table 2 shows the rate of exports (+“buibos”) and the rate of imports (+“bbos”) by Russian regions in 1987. As shown by the table, the rate of imports (+“bbos”) exceeds the rate of exports (+“buibos”) in eight of 11 regions. As for the RFE, the rate of imports (+“bbos”) exceeds the rate of exports (+“buibos”), but the rate of imports (+“bbos”) is relatively low, and the rate of exports (+“buibos”) is remarkably low. In addition, there are only small differences between other regions in the rate of exports (+“buibos”) and the rate of imports (+“bbos”) (the greatest difference outside of the RFE is the Northwest region, with 5.9 points), whereas there is a very large difference (9.1 points) in the RFE.

What this means is that the economy of the RFE is relatively closed in comparison with other Russian regions. Incidentally, under the CPE the central government planned the “rational arrangement of production forces” in the overall national economy, and distributed the necessary resources to the regions, with foreign trade being used to the minimum degree possible to meet the needs of the entire national economy[3] with

[3] With regard to the relative insignificance of foreign trade in the economy of the USSR

imports being arranged when the national economy had a deficit, and exports being made when the national economy had a surplus. Therefore, the share of foreign trade in the economy of the RFE was secondary for the regional economy, and the rate of exports in exports ("buibos") and of imports in imports ("bbos") were not so big for the overall regional economy.

Table 2. Rate of exports (+"buibos") and Rate of Imports (+"bbos") by Region (1987 year, %))

Region	Export (+"buibos")	import (+"bbos")
North	25.3	29.1
Northeast	25.5	31.4
Central	25.2	29.8
Volga-Byatka	24.0	25.0
Central Chemnozemiy	22.4	25.8
PriVolga	24.8	22.9
North Caucasus	20.0	24.4
Ural	24.7	22.9
West Siberia	24.0	22.4
East Siberia	23.2	28.5
Far East	15.8	24.9

Source: Мацнев [1995:3]

Under the CPE, the RFE had economic connections for the mutual supply of regional products with external economies, though they were weak in comparison with other regions of Russia, and the strongest connections were ironically with regions far from the RFE. Although the RFE and Siberia are close geographically, the economic connections between the two were smaller than their connections with other Russian

in comparison with the market economic countries which were close to the USSR on the level of economic development, according to P.R. Gregory & R.C. Stuart ([1987:308-310]), there are five explanations. First, the western markets held some risks for the planned system of the Soviet economy. Second, the leaders of the USSR had a general idea of being "surrounded by hostile capitalism." Third, incorporating foreign trade as a preferential area in the CPE would have complicated the planning process tremendously. Fourth, capitalist countries put in place trade barriers toward the USSR. Fifth, the foreign trade administration mechanism of the USSR was very complicated, limiting the USSR's ability to participate in international financial society.

regions, because "the economic structure of RFE was too similar to Siberia in order to allow cooperation" (ИЭИ [1995c:55]).

The products from three industries (the food industry [mainly fish products], nonferrous metallurgy and the wood-related industry) held a large share of exports (+"buibos") in the production of the RFE, in addition the share of the above-mentioned industries in overall exports (+"buibos") of the RFE (component) was also large (Table 3).

Table 3. Rate of Exports (+buibos) and Imports (+bbos) of the RFE by Industrial Sector (1987, %)

Industrial sector	Exports ("+buibos")		Imports ("+bbos")	
	rate	component	rate	component
Electric power	0.2	0	-	0
Oil and gas	8.4	1.6	39.0	6.3
Coal	14.2	2.3	3.1	0.3
Other fuel industries	-	0	21.5	0
Steel industry	18.2	1.3	58.2	4.7
Nonferrous metallurgy	93.7	32.5	47.3	1.1
Chemical	13.9	1.7	52.8	6.7
Machine	10.6	7.5	49.5	35.3
Wood, wood process and	38.2	13.7	10.1	1.4
pulp	16.6	4.5	8.7	1.2
Construction materials	12.9	2.7	66.4	20.1
Light industry	26.1	27.1	28.1	17.0
Food industry	4.4	0.4	19.8	1.3
Other industrial sectors	-	0	-	0
Construction	6.3	3.9	10.2	3.7
Agriculture	0.6	0.4	-	0
Transportation	-	0	-	0
Commerce	12.4	0.4	36.1	0.9
Other material production				
sectors	15.8	100.0	24.9	100.0
Total				

Source: Мацнев.Д, Петренко.И, Расторгуева. В, 1994]

The "traditional" specialized industries (or products) of the RFE are these three very industries. In this connection, they occupied a large share (food industry 31.8%, nonferrous metallurgy 19.4% and wood industry 9.2%) of the industrial production structure in 1991, the last year of the USSR.

On the other hand, the share of imports (+ "bbos") is large for many industrial sectors with the exception of coal, which is plentiful in the RFE, and construction materials. The share in the whole import (+ "bbos") was especially high for machines such as producer goods, light industry and food as consumer goods. This means that the RFE economy was resource export and consumer goods import oriented. In other words, it received supplies of consumer goods and capital goods from outside, while the RFE economy supplied natural resources to the outside.

In addition, the share of both exports (+ "buibos") and imports (+ "bbos") of the nonferrous metallurgy and food industry is large. This shows that different goods in the same industry (for example, the food industry) moved between regions. For instance, raw fish was exported from the RFE and processed food was imported into the RFE.

There were no major changes in the economic connections of the RFE in the 1977-1987 period with external economies with regard to the rate of exports (+"buibos") and the rate of imports (+"bbos"), trading partner countries (or regions of Russia) and industrial sectors (Economic Research Institute [1994:49]). We can conclude that the CPE functioned precisely with regard to the supply and arrangement of resources.

3. Economic Connections with External Regions During the Transition towards the Market Economy

1) Changes in the economic connections of the RFE before and after the transition

When we analyze the economic connections of the RFE with the external economy, we should consider several problems. First, there is the problem regarding statistics. It is said that regional connections can be shown precisely by input-output tables categorizing the regions of a country by value. However, these tables were not compiled in Russia, and balance tables listing movements of materials between industrial sections (input-output table) by regions were used instead, as the best available substitute data (ИЭИ［1995a:69］Клоцвог.П etc［1996:71］). In Russia during the period of the USSR, these tables were compiled every five years. For the RFE, these tables are available from 1966 to 1987. However, such tables have not been compiled since 1987. Because of this, we cannot compare the economic connections of the current RFE with those of the RFE during the USSR period. There is a second problem with using the balance table of the RFE. In it, the RFE's economic connections with Russian regions and foreign countries are not identified, and are expressed collectively as [export and "buibos"] or [import and "bbos"]. As a result, we cannot show the economic connections of the RFE with Russian regions and foreign countries (foreign trade) separately. A third problem involves the kind of statistics available for each territory of the RFE. There are no statistics for "buibos" and "bbos" on producer goods, while such statistics do exist for consumer goods. So we cannot compare the economic connections of the RFE before and after the transition using the statistics on producer and consumer goods.

Despite the existence of such statistical problems, we analyze here the change of the RFE's economic connections with outer regions using the "buibos" and "bbos" on consumer goods.

In the RFE economy during the transition, the role of foreign trade was low and the division of labor inside the national economy was characterized as follows: the RFE supplied natural resources and received processed consumer goods. These goods were transported chiefly by railway. During this period, the quantity of transported goods decreased more significantly than did regional production. Particularly striking is the fact that the quantity of goods transported by railway in 1994 was just 44% of the quantity in 1991 (ИЭИ［[1995b:176)). This means that the connections of the RFE with other Russian regions were weakened in this period.

Table 4 shows the "buibos" and "bbos" of consumer goods for the territories of the RFE. We can see that both the rate of "buibos" and the rate of "bbos" generally declined, except for the rate of "buibos" for Khabarovsk Krai and Magadan Oblast between 1987 and 1993. The change of "bbos" was larger than that of "buibos."

Table 4. Rate of "buibos" and Rate of "bbos" of Consumer Goods by Territory of the RFE (%)

	Rate of "buibos"				Rate of "bbos"			
	1988	1991	1992	1993	1988	1991	1992	1993
Sakha R.	-	0.5	0.1	-	85.2	77.4	68.0	65.0
Jewish A.O	-	-	-	12.0	-	-	-	15.0
Primorie Krai	50.9	55.7	36.0	33.0	65.0	68.8	41.0	32.0
Khabarovsk Krai	33.0	15.2	16.0	30.0	65.1	46.9	41.0	46.0
Amur O.	73.3	34.2	20.0	13.0	87.1	62.1	58.0	64.0
Kamchatka O.	67.8	83.9	63.0	51.0	66.5	76.1	33.0	35.0
Magadan O.	29.1	14.9	16.0	36.0	80.2	63.9	65.0	49.0
Sakhalin O.	59.6	19.2	39.0	32.0	66.3	40.9	51.0	22.0

Source: ИЭИ［1995b: 180］

The rate of "buibos" is the ratio of total production to the value of "buibos," so a relatively small decline in the rate of "buibos" means that the decline in the value of "buibos" was small in compare with that of total production. On the other hand, the trend for the rate of "bbos" shows that the decline in the value of "bbos" was large in comparison with that of total production. Since the "bbos" here is for consumer goods, it is difficult to conceive that even if the economic crisis was terrible, the necessary quantity which people consumed would decrease radically. We can surmise that the decrease of "bbos" was compensated for by an increase in imports from foreign countries.

Here, let us analyze changes in the economic connections between Primorie Krai and external economies by looking at "buibos" and "bbos" for consumer goods between 1992 and 1995. Of course, a considerable change was expected for 1992, considering the impact of the dissolution of the USSR in 1991, but we use here the statistics for 1992, because of the lack of earlier statistics.

With regard to imports ("bbos"), an overwhelming share of consumer goods came from other Russian regions in 1992 (Table 5). However, when focusing on foreign trade, we find that the share of imports from countries (in the table, labeled "other foreign countries") that were not former republics of the USSR is relatively high, while the share of imports from former republics of the USSR is small. In 1995, the greatest partner was "other foreign countries," with the connections with other regions of Russia decreasing.

Table 5. Regional Structure of Exports (+ "buibos") and Imports (+ "bbos") of Primorie Krai (%)

Region and country	Component of exports ("buibos")			Component of imports ("bbos")		
	1992	1995	2002	1992	1995	2002
Other Russian regions	74.1	20.5	16.3	81.3	47.7	50.4
Former republics of the USSR	19.3	0.2	0	4.8	3.9	-
Other foreign countries	6.6	79.3	83.7	13.9	48.4	49.6
total	100.0	100.0	100.0	100.0	100.0	100.0

Source: The data for 1992 is quoted from ИЭИ[1995b:183]. The data for 1995 is quoted from the national statistical committee of Primorie Krai [1995:5], and the data for 2002 year was calculated from the same statistical book [1995:7] by the author.

A more drastic change occurred in exports ("buibos"). In 1992, exports ("buibos") to the former republics of the USSR and Russian regions held an overwhelming share, but in 1995, the overwhelming share of exports ("buibos") was to other foreign countries. We note that the share of exports to former republics of the USSR was quite high (about 20%) in 1992, and especially so for Ukraine, Belarus and Kazakhstan (57.7%, 18.4%, and 16%, respectively), but in 1995 exports to the former republics of the USSR fall to approximately zero. The change in the direction of imports ("bbos") and exports ("buibos") of consumer goods can still be seen today (for example, at the end of 2002, the share of exports to "other foreign countries" was 84%, and the ratio of imports from "other foreign countries" 50%). This means that the trade partners of the RFE have completely changed.

In this way, during the 1992-1995 period, the economic connections of Primorie Krai with other Russian regions weakened, but they did not all weaken to the same degree.

Table 6 shows “buibos” for consumer goods from Primorie Krai to other Russian regions. It shows that “buibos” to European Russia decreased, while the connections with Ural and Siberia strengthened. The reason for this seems to be that the industrial structure of Primorie Krai is different from Ural and Siberia, so there are no competitive relations between the products of Primorie Krai and those of Ural, Siberia. In addition, price liberalization was implemented under the process of transition to the market economy and railway fees increased enormously. For this reason it is clear that “buibos” to the neighbor regions is more reasonable than to European Russia.

Table 6. Regional Structure of Consumer Goods on Primorie Krai with Russian Regions

Regions	1992	1995
North	0.6	0.4
Northeast	4.1	1.3
Central	16.8	12.6
Volga-Byatka	1.6	2.5
Centralchemnozemiy	3.5	0.5
Privolga	5.2	2.4
North Caucasus	1.7	0.6
Ural	6.5	10.1
West Siberia	8.2	12.4
East Siberia	9.9	15.5
Far East	41.7	41.6
Total	100.0	100.0

Source: Same as Table 2.

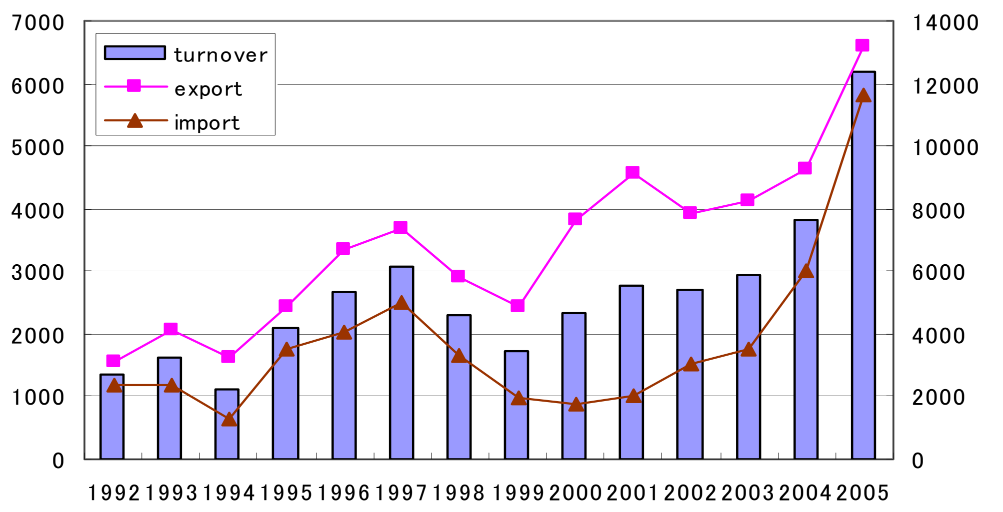
A tendency similar to Primorie Krai can be seen in the other territories of RFE, but the strength of connections with the outside differs by territory. For Sakhalin Oblast, the share of imports from other countries grew 5.5 points, from 33.1% in 1992 to 38.6% in 1995, while the share of exports to other countries increased 45.5 points from 28.3% to 73.8% in the same period (Сахалинское областное управление статистики［1993:2］, Сахалинский областной комитет государственной статистики ［1996:12］). As for Amur Oblast, the share of exports to other countries grew 18.1 points, from 0.5% in 1990 to 18.6% in 1994, while the share of imports from other countries increased 17.1 points from 12% to 29.1% (Амурский областной комитет государственной стстистики

［1995］, Амурское областное управление стстистики［1991:2］).

2) Drastic increase in foreign trade

Next, we will analyze changes in the foreign trade of the RFE under the process of transition to the market economy. Looking at trends in foreign trade, the turnover of foreign trade fell radically in 1994 and 1998-99 (Graph 1), but as a whole it shows an upward trend. Both exports and imports increased in general, but there were differences in the rate of the movement. Until 1999, both exports and imports showed the same tendency, but during 2000-2001 exports increased rapidly, while imports were stagnant. Exports began to increase again from 2003, and imports from 2002. Especially in 2005, both exports and imports increased largely in comparison with the same period of the previous year.

graph1 foreign trade of RFE（unit:100mills US$）



Source: Made by the author from Japan Association for Trade with Russia and Central-Eastern Europe [2002] [2003] [2006].
Note: Left scale is value of exports and imports. Right scale is turnover.

The radical decline of turnover in 1994 occurred mainly due to a policy effect. As for imports, the changes of customs system (the import tax was doubled and a value-added tax on imported goods was introduced) were influence. Exports were also affected by several factors. First, the Central Bank of Russia maintained strong ruble policy toward US dollars (Адмидин. А & Деваева. Е［1998:38］). A second factor was the inflation of domestic prices in intermediary trade and railway fees. A third was the deflation of export goods from the RFE in the international market, as there was a radical increase in exports (Ишаев.В.И & Минакир.П.А［1998:64］)

In 1995, the turnover of foreign trade of the RFE grew largely in comparison with the previous year. It is believed that this happened because the export tax was abolished, and companies abandoned the domestic market, where they faced problems of unpaid payments, and drastically increased their exports to foreign markets, where there was effective demand (Ишаев.В.И & Минакир.П.А［1998:65］). Because the economic crisis took place in the summer of 1998 under the influence of these factors, the turnover decreased in 1998 and 1999.

3) Foreign trade of the territories of the RFE

As analyzed above, both the exports and imports of the RFE as a whole now exceed the amount in 1992, but the dynamics of foreign trade have differed among the territories. In the following analysis, we will look for trends, using averages of various three-year periods between 1992-2005. For example, the figure for 1993 is the average for 1992-1994.

We can divide the territories of the RFE into three groups on the basis of the tendency of exports. The first group includes Khabarovsk Krai, Primorie Krai and Sakhalin Oblast, in which there was an increasing tendency from 1993 to 2004, though there were some fluctuations during this period. The share of the total export of RFE occupied by these territories grew from 65.6% in 1993 to 83% in 2004 year. The second group contains Kamchatka Oblast and the Republic of Sakha, where an increasing tendency is observed until the middle of the 1990s, followed by a temporary decline. However, from 2000 it began to increase again, and as a result exports in 2005 exceeded those of 1993. The third group contains Amur Oblast and Magadan Oblast, which show a radical decrease from the middle of 1990s, which never rises above the level of 1993. The shares among the RFE of the second and third groups fell sharply (from 21% to 13.5% and 13.4% to 3.5%, sharply).

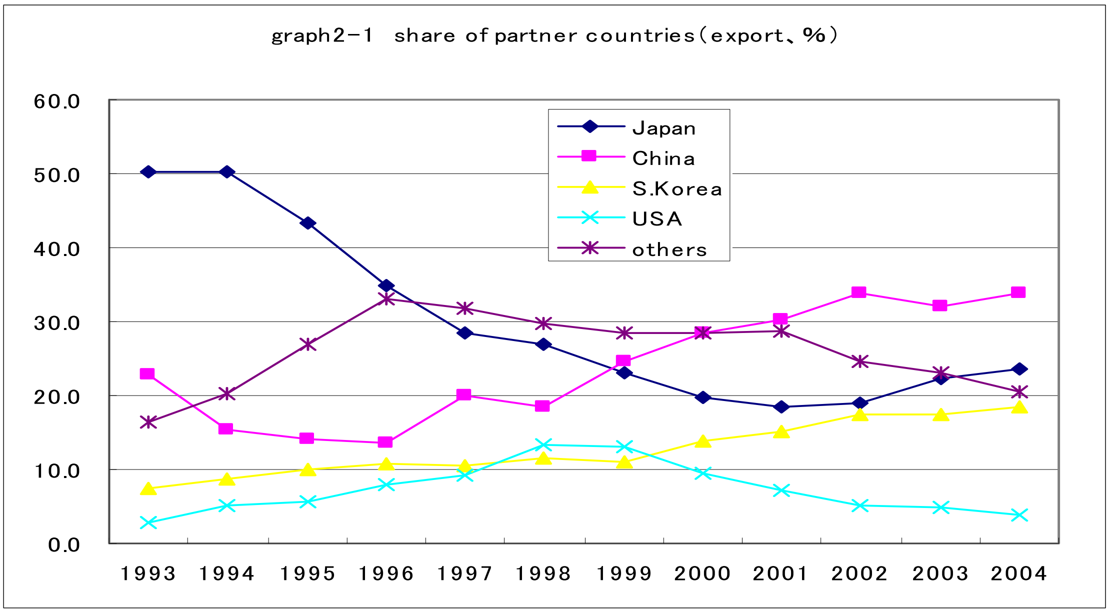
There are a few common characteristics among the territories of the first group. They have some export goods which have competitive power in the foreign market (wood, fish products, "fuel, mineral resources and metal," "machines, facilities and transportation means," etc.) and the scale of industries for these products is relatively large. In addition, they have favorable geographical positions for exporting these goods to Japan, China, South Korea and USA, since all three territories face the ocean. The other groups, with the exception of the Republic of Sakha, have small economic scales and tend to have a mono-culture economy. In addition, they do not have strong connections with countries such as Japan and China, Japan and South Korea, or Japan alone, based on specialized products which the territories produce.

Some common patterns can also be observed for imports. For the first group, imports increased in the second half of the 1990s, but declined temporarily at the end of the 1990s, and then began to increase again from 2000, so that imports in 2004 exceeded those in 1993. This group includes Khabarovsk Krai, Primorie kKrai and Sakhalin Oblast. The share of these three territories grew from 61.3% in 1993 to 92.2% in 2004. The second group contains Kamchatka Oblast and the Republic of Sakha, whose imports increased in the second half of the 1990s, but then tended to decrease afterwards, with imports for 2004 ending up lower than those of 1993. Magadan Oblast belongs to this group, but showed an increasing tendency from 2002 onward. The third group is Amur Oblast, whose imports decreased in the middle of 1990s, and then stagnated. The shares of the second and third group fell to 7.8% in 2003 from 38.7% in 1993.

We can conclude from the above analysis that under the liberalization of foreign trade and the process of transition toward the market economy, Khabarovsk Krai, Primorie Krai and Sakhalin Oblast strengthened their connections with foreign countries, while other territories went in the opposite direction.

4) Foreign trading partners

At the time when foreign trade was liberalized, the overwhelming share of foreign trade was with three East Asian countries (Japan, China and South Korea), which accounted for 80.7% of exports and 69.5% of import in 1993. The share of these three countries declined radically from 1998 (exports) and 1995 (imports), but after 2000, both exports and imports began to recover (2004: exports 75.5%, imports 70.6%) (Graphs 2-1,2-2). This recovery was made possible by the increase of exports to China and imports from Japan and China.

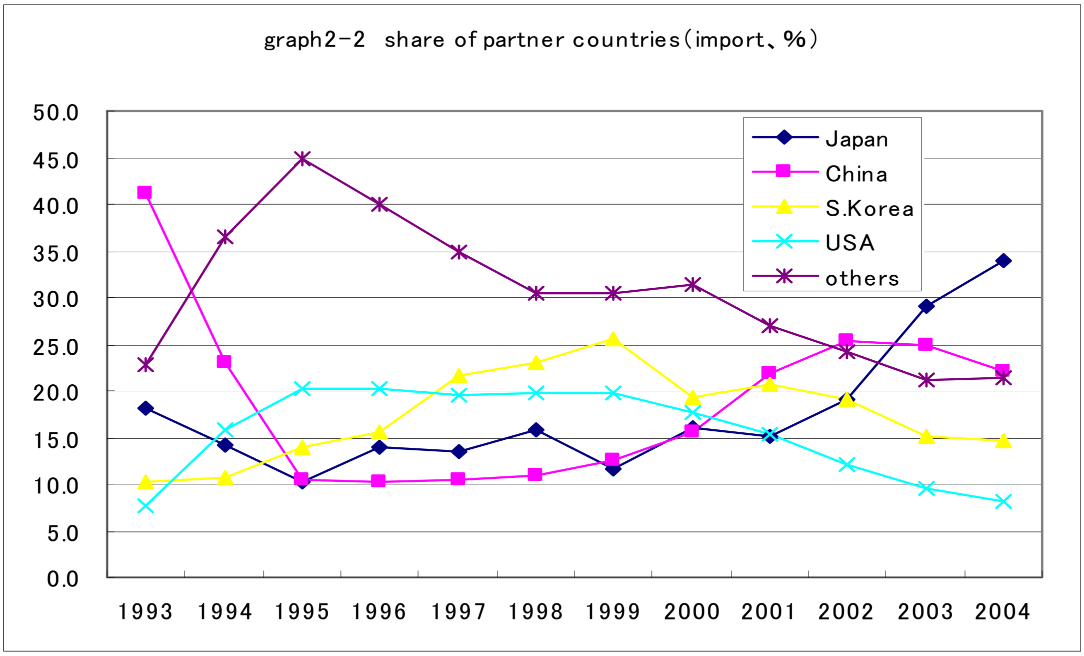


Source: Same as Graph 1.

Looking at the exports of the RFE as a whole, the share of Japan continued to fall dramatically, while South Korea's share grew consistently during the period. However, from 2003, exports to Japan began to increase. On the other hand, the connection with China weakened between the beginning and middle of the 1990s, but subsequently the share of China showed a radically increasing tendency.

Looking at imports of the RFE as a whole, the share held by China declined drastically between 1995 and 1998, and then remained stagnant, but began to grow tremendously from 1999. Japan's share was not very large, and remained stagnant till 1999, but after 2000 it began to increase dramatically. On the other hand, the share of South Korea grew until 1999, but after 2000 started to decline.

Changes also took place in the share of partner countries with the territories of the RFE. Here, we analyze the share of partner countries by exports and imports with Primorie Krai, Khabarovsk Krai and Sakhalin Oblast, which hold large shares of the foreign trade of the RFE.



Source: Same as Graph 1.

Primorie Krai

The shares of the partner countries of Primorie Krai changed radically between 1993 and 2004. For exports, Japan's share fell greatly during this period (36.1% to 15.9%), while those of China (25% to 42.4%) and South Korea (8% to 20.7%) rose. The share held by Japan fell fairly constantly during the period, while that of China fell between 1993 and 1995, but then increased consistently. The share of South Korea fluctuated till 1998, but after that showed an almost constant tendency to increase. As for imports, the share of Japan showed a long-term decline (21% to 9%) until 2001, but after that increased enormously (to 39.6% in 2004). The share of China showed a drastic fall until 1995 (47.2% to 13%), but after that showed a generally constant increase. However, the share in 2004 (31.9%) was lower than in 1993. South Korea shows a different movement from Japan and China. Its share showed a tendency to increase until 2001 (from 15.7% to 31.9%), but afterwards showed a tendency to decline (to 17.6% in 2004).

Khabarovsk Krai

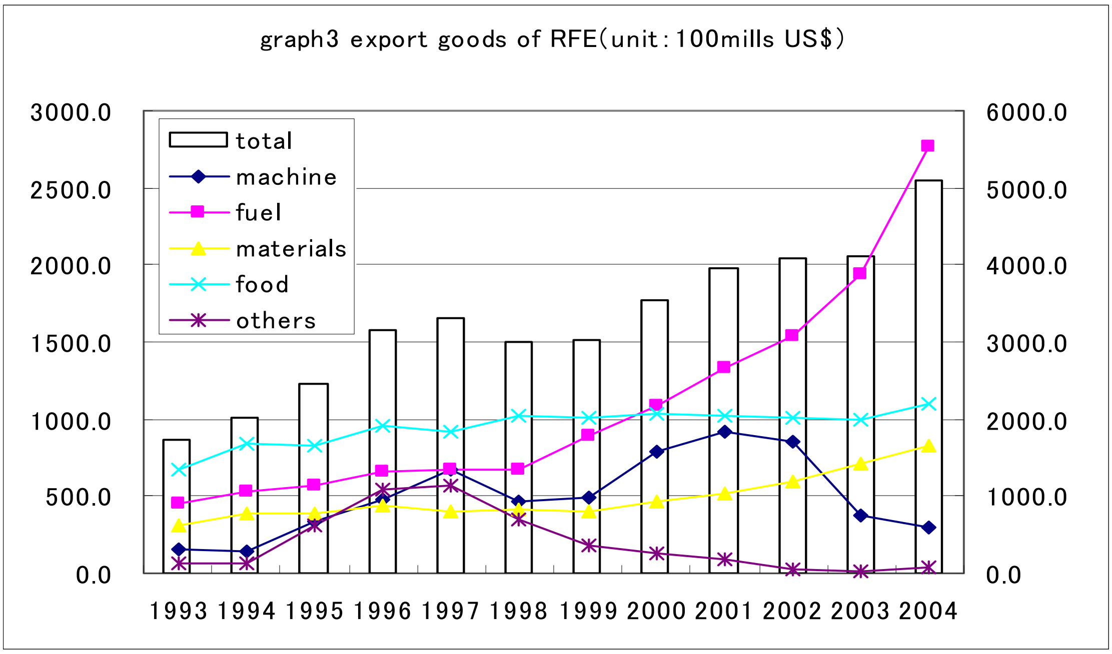
For Khabarovsk Krai, the share of partner countries also changed significantly between 1993 and 2004. For exports, Japan's share fell sharply (56.9% to 10.2%) during this period, while that of China rose greatly (21.2% to 46.9%). Japan's share fell fairly constantly while that of China increased constantly throughout. The share of South Korea fluctuated until 2001, but after 2002 showed a tendency to increase. As for imports, the shares of Japan and China showed a long-term increasing tendency (10.3% to 23.4%, and 17.6% to 43.1%, respectively), while the share of South Korea decreased constantly (from 15.9% to 5.2%).

Sakhalin Oblast

A major change in the share of partner countries was observed for Sakhalin Oblast as well. For exports, the share held by Japan fell (58.4% to 51.5%), but those of China and South Korea rose (4.6% to 11% and 17.4% to 20.9%, respectively). Japan's share fell fairly consistently until 2000, but subsequently showed a tendency of increase. The share of China was stagnant until 1998, but after that showed a tendency to increase. South Korea fell fairly constantly until 1999, but afterward showed a tendency to increase radically. As for imports, the share of Japan showed a declining tendency until 1998 (from 29.7% to 7.2%), but grew after 1999 (to 33.3% in 2004). The share of China declined in general until 1999 (12.3% to 0.6%), but then stagnated at a low level (1.7% in 2004). South Korea's share grew until 1999 (15.2% to 38.4%), but afterwards fell (to 7.1% in 2003). However, the share again grew in 2004 (to 16.1%).

5) Commodity structure of foreign trade

The structure of goods exports from the RFE changed greatly in the period from 1993 and 2004. In the beginning of the period, the RPE's export goods were mainly "food (fish product)," "fuel, mineral resources and metal (coal, crude oil and oil products, iron and nonferrous metal scraps)," and "raw materials and its processed products (wood)." In this period, the goods that changed most were "fuel, mineral resources and metal" and "machine, facilities and transportation means." Export of "fuel, mineral resources and metal" increased from the outset throughout, and showed a particularly radical increase from the end of the 1990s. On the other hand, despite a one-time decrease in exports of "machine, facilities and transportation means" in 1998, the increasing tendency was from the outset. However, from 2002 a radical increase is observed. "Foodstuffs" were traditionally the greatest export goods of the RFE, and export of such goods increased until the end of 1990s, but exports were stagnant afterwards and in 2000 the first place shifted to "fuel, mineral resources and metal" (Graph 3).



Source: Same as Graph 1.
Note: Left scale is value of export goods. Right scale is value of total exports.

Exports from the RFE increased by US$3,377.1 million during the 1993-2004 period (from US$1,732.6 to US$4,220.4 million), mainly as a result of an increase of exports of "fuel, mineral resources and metal" (US$2,175.7 million).

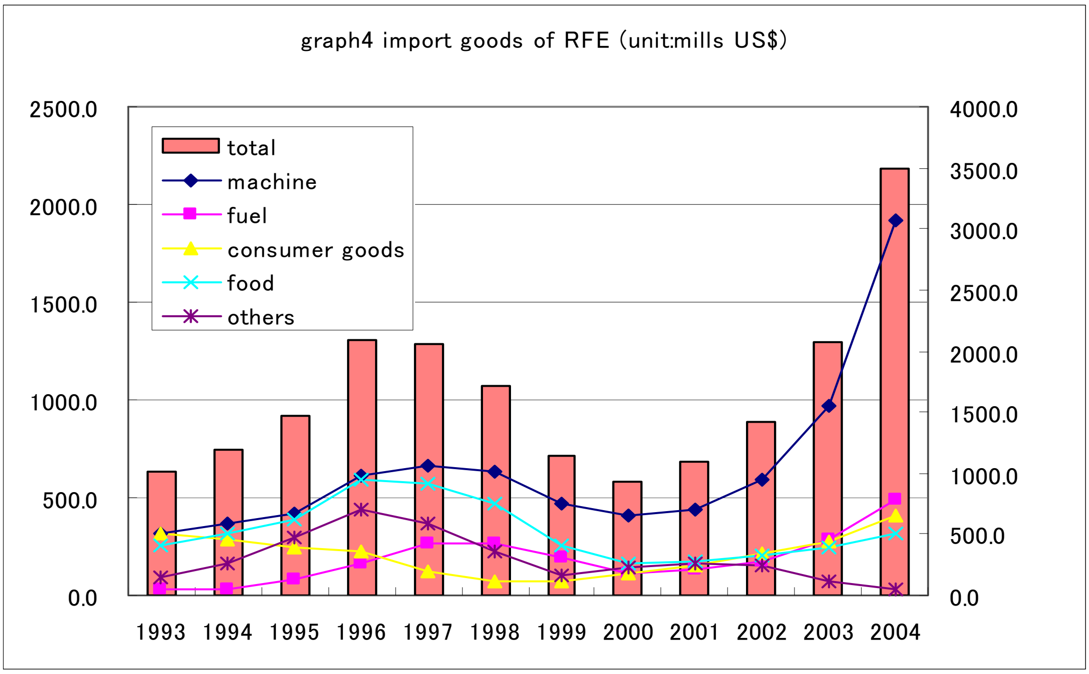
The leading exporters of "fuel, mineral resources and metal" were Khabarovsk Krai (mainly crude oil and oil products, with US$160.3 million) and the Republic of Sakha (coal, US$148.3 million) at the beginning of the 1990s. But in 2004, Khabarovsk Krai (mainly crude oil and oil products, US$1,447.5 million), Sakhalin Oblast (mainly crude oil and oil products, US$624.4 million), Primorie Krai (mainly iron and steel, US$352 million), and the Republic of Sakha (coal, US$182.3 million) become the main exporters. The radical increase in "fuel, mineral resources and metal" was mainly brought about by exports of crude oil and oil products from Khabarovsk Krai and Sakhalin Oblast.

The leading exporters of "food" were traditionally Primorie Krai, Kamchatka Oblast and Sakhalin Oblast. Exports from Kamchatka Oblast showed an increasing tendency (US$196 million in 1993 to US$369 million in 2004), whereas exports from Primorie Krai (US$288 million to US$362 million in 2004) and Sakhalin oblast (US$135.3 million to US$221.1 million) remained stagnant.

The machine industry of the RFE is based on the military industry in Khabarovsk Krai and Primorie Krai, and exports of "machine, facilities and transportation means" are mainly from these two territories. Exports from Khabarovsk Krai increased radically until 2001, with the exception of 1998 (from US$18.3 million in 1993 to US$664.3 million in 2001), but after that decreased (to US$90.7 million in 2004). The change in Khabarovsk Krai was influenced by the agreement between Russia and China and Malaysia on the export of combat planes manufactured in Komsomorisk-na-Amure in the Khabarovsk Krai. Exports from Primorie Krai displayed an M-pattern of change, hitting bottom in 2004 after decreasing to approximately a third of the maximum level (US$211.9 million, in 2002).

The import of "machinery, facilities and transportation means" increased greatly until 1997 (to US$2,062.5 million), but under the influence of the economic crisis in Russia in 1998, decreased to US$956.6 million in 2000. However, imports then entered a period of remarkable recovery (to US$3,530.8 million in 2004). The main goods imported to the RFE at the beginning of the period (1993) were "machinery, facilities and transportation means" (31%), "consumer goods (non-food)" (30.8%) and "food" (24.8%), but in 2004, the main import goods were "machinery, facilities and transportation means" (55%), while "consumer goods" (12%) and "food" (9%) decreased their shares in imports (Graph 4).

"Machinery, facilities and transportation means" have consistently been the greatest import goods of the RFE. They fell in 1999-2000, but then reentered a path of radical recovery. "Consumer goods" were on a declining tendency after the middle of the 1990s, but showed a tendency to recovery after 2001. "Food" increased until the middle of the 1990s, but then decreased till 2000 and was stagnant afterwards (Graph 4).



Source: Same as Graph 1.
Note: Left scale is value of import goods. Right scale is total imports.

The imports of "machinery, facilities and transportation means" of the RFE are concentrated into Primorie Krai, Khabarovsk Krai and Sakhalin Oblast, but the changes differ among these territories. For Primorie Krai, imports increased until 1996 and then declined until 1999, but from 2002 onward increased radically again. As a result, the share of Primorie Krai in imports of "machinery, facilities and transportation means" of the RFE as a whole was 43%. Imports from Sakhalin Oblast continued to increase until 1997, but decreased until 2000, and then began to increase again. The share of Sakhalin Oblast was 38% in 2004. Imports of "machinery, facilities and transportation means" of Sakhalin Oblast initially held the third place after Primorie Krai and Khabarovsk Krai, but in 1997-1999, it took first place. This is directly related to the oil and natural gas development projects in Sakhalin Oblast. However, Primorie Krai took the first place again from 2000. The share of Khabarovsk Krai increased slowly from the outset, with the share in 2004 being approximately 12%.

Though "consumer goods" were one of the largest import items of the RFE at the beginning (US$311.5 million in 1993, representing 31% of total imports), they decreased consistently until 1999 (to US$71.9 million). From this, we can see that the share of "consumer goods" in the total imports of the RFE declined to 6%.

The import of "food" increased until 1996, reaching the highest level ever (US$593.2 million). It then fell drastically until 2000, but is now increasing again. However, imports in 2004 were only 53% of the level of 1996. The main importing regions were Primorie Krai (32.2%), Khabarovsk Krai (22%) and Sakhalin Oblast (9.8%) in the beginning, but Primorie Krai now has a commanding share (80%), while those of Khabarovsk Krai and Sakhalin Oblast have fallen drastically in both value and share (9%,and 1%).

4. Factors which influenced the changes of economic connections with external economies

From a historical point of view, with the extension of the Russian Empire to the south and east from European Russia, the economic space came to cover the Caucasus, Siberia and RFE. At that time, the ethnic minorities there were living in circumstances close to the natural economy. There were no so-called modern industries in Siberia and the RFE. After the Revolution of 1917, the centrally planned system was adopted as a method of economic management for the Russian regions, and the industrial policy called the "arrangement of production forces" (APF) was carried out. Under this policy, some industrial sectors were planted by the central government into the regions, based on a consideration of the presence of local nature and natural resources, geopolitical significance of the region, etc.

Under the APF policy, the problems of mutual cooperation among the regions of the USSR (the division of labor inside the economic space of the USSR) were considered within the framework of the general concept of "the unified national economic complex." The vector (directions and strengths) of the mutual cooperation among the regions was decided under the central plan (ИЭИ［1995b:175］). However, this division of labor was not based on the principle of economic profit in each company, as is observed under capitalism in general. Rather, it was based on the national economic effect of mutual supply among the regions (ИЭИ ［1994:165］) .

Under such the policy, the economy of RFE has become to have the industrial structure that was strongly connected with only one or a few industries[4]. In addition, under CPE both industrial sections (in a narrow sense, they were the companies belonging to the various sections of economy) and the regions completely depended on the plan and the fund of the central government, however, in the new conditions that the system of CPE was devoted and had to change to the capitalistic mechanism, both the industrial sectors and the regions became to have to adapt to the new conditions. Especially the development of RFE had been implemented by the big investment from

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[4] Under this policy, the industrial sections (or products) which should be put on the regions were classified in six groups (Гребцова［1999: 119-120］). The first group is "the sections put in the regions where labor force is accumulated," and includes machine industry, electric industry, light industry (fiber, tricot and sewing), medicine and plastic products etc. The second group is "the sections which is near to the consumer market," and includes food, brick, reinforced products etc. The third group is "the sections which is near to raw materials," and includes mining industry, heavy raw material processing industry (steel industry, nonferrous metallurgy, paper manufacturing) and is "the processing industry of raw materials, movement of which is easy" such as food and cotton gin. The fourth group is "the industry put in the regions where is near to cheap electric power," and includes aluminum, iron alloy and nonferrous metallurgy. The fifth group is "the industries arranged in the regions that is near to fuel sources," and includes thermal power stations, chemical industry etc. The sixth group is "the section put in the regions where does not have a clear characteristic," and includes machine products etc.

the federal government of the USSR, however, the central government in the end of the USSR already could not afford to invest to RFE, besides failed to accomplish the long-term federal program on the development of RFE. In addition, the capitalization of economy means that economic subjects act according to the principle of "economic profit for oneself," and it is natural that the economic relations against this principle are kept out. On these accounts, the economy of RFE faced to make new economic connections which are fully different from old economic connections under CPE. It is natural that the vector (directions and strengthens) of economic connections with outer economy was changed[5]. In this case it is clear that economic structure of regions which were formed under CPE influence to the new vector (directions and strengthens).

The changes of the economic connections of RFE with outer economy, that is, transition from the division of labor among regions of the USSR to that in the world wide occurred by some complex factors. Be different from the time of CPE, under the process towards market economy the centrally planed system was abundant, trade system was liberalized from the monopoly of foreign trade by the state, the functions covered by the state were referred to each economic subjects. On account of these changes companies became to be able to act independently according to the economic rationality and select trade partners freely on the principle of profit. In addition, trade companies became to be able to manage earnings of foreign currency from foreign

[5] According to the research about the efficiency of the connections among Russian regions and industrial sectors, which is based on the relative productivity of labor and the production per one ruble for production of companies in 1999 year, there is an inefficient bottleneck among them. If divide the industries of Russia 10 sectors, it is inefficient to manufacture the goods, in North Caucasus at six sectors, in East and West Siberia at 5 sectors, Volga-Byatka, PriVolga, Ural and RFE at 4 sectors. That is, if consider the efficiency of the national economy as a whole, these inefficient sectors must be changed on the connections among Russian regions (Балацкий.Е & Потапова.А ［2001: 136-146］).

trade freely, as though there are a certain degree of restrictions (see Economic Research Institute［1994:235-252］).

In addition, it was the other factors of the growth of foreign trade that some natural resources which can be sold in the world market are rich, industrial sectors related to these resources (fish, wood and nonferrous metal) developed under CPE as “traditional specialized sectors” and the products from these industries had a very big share in the export of the USSR.

Besides, as we already analyzed, the products of “traditional specialized sectors” were chiefly transported to far from RFE (European Russia and the former republics of the USSR) in the national economy of the USSR, especially to the republics of Central Asia. However as soon as the former republics of the USSR became to independent countries with the disorganization of the USSR and they became to act according to own profit at first, “the unified national economic complex of the USSR” which was formed under CPE was disorganized in fact. The same situation happened in Russia too. In Russian regions was build up regionalism from political and economic disorder. Some of the regions acted separatism, and was created autarky by the economic enclosure (平泉［1993］).

In addition, the liberalization of price which was one of the most important policies of new Russia grew transportation price radically and functioned to divide more strongly the economic connections of RFE with the other regions of the USSR. The fee of goods transportation grew average of Russia 2305 times, while in Primorie krai 4449 times, Khabarovsk krai 3056 times and Amur oblast 3157 times. Such the radical growth of transportation fee influenced to weaken the connections of RFE with the former republics of the USSR and European Russia which were the traditional buyer of the products of RFE. Originally the economy of RFE was the very high cost one, in addition the large and radical growth of transportation fee in comparison with country average heightened the production cost and lost the competitive power of products of RFE on price.

While the economic connections among Russian regions were divided by the intention of economic autarky of regions or the decline of price competitiveness, RFE has a advantage that it is geographically close to Asia-pacific countries (China, Japan, South Korea and the USA) including Northeast Asian countries. Moreover as in this area the former USSR and China normalized diplomatic relations in 1989 year, in 1990 year the USSR and South Korea, after that in 1992 year China and South Korea established diplomatic relations, political restrictions were released and created prerequisite conditions for the development of economic relations. In addition, these countries need the natural resources of RFE, and have complementary relations with RFE.

By such complex factors, the economy of RFE performed the big turn from domestic division of labor to the international division of labor (foreign trade).

Conclusion

Under the process towards market economy, the economic connections of RFE with outer regions changed from the division of labor among the regions of the USSR (Russia) to international division of labor, it arose from the factors which are the liberalization of trade system from monopoly by the state, the presence of rich natural resources and the developed industries related these resources, the advantage of geographically closeness to Asia-pacific countries, the division of the unified national economic space by political and economic disorder before and after of system conversion.

As for changes in the foreign trade structure of RFE under the process towards market economy, we can conclude some characteristics of it as follows. First, the value of foreign trade increased drastically and the importance of foreign trade for economy of RFE became gig. Second, however, there are the different directions among the territories of RFE due to the factors of their industrial structure and geographical conditions. Especially the share of Primorie krai, Khabarovsk krai and Sakhalin oblast in the total amount of RFE' foreign trade became big. Third, in the recent years the connections with China became strong at both export and import (export increased from 1999 year and import increased from 2001 year). Forth, "fuel, mineral resources and metal" increased radically from the end of 1990's in export on the one hand, "machine, facilities and transportation means" increased from 2002 year in import on the other hand.

Under this situation, especially from 2002 year the big change is observed in the structure of foreign trade. First, the radical increase of the turnover of foreign trade and of import (turnover increased to 8,640.6 mills US$ from 5,229.6 mills US$, import increased to 3,496.9 mills US$ from 1,095.7 mills US$ during 2001-2004 years). Second, the radical increase of import from Japan (from 171.5 mills US$ to 1,195.7 mills US$ during the same period). Third, the amount of import of "machine, facilities and transportation means" in both value and the rate (value increased to 1,922.3 mills US$ from 436.4 mills US$ during the same period). By the way, this radical increase of import from Japan and import of "machine, facilities and transportation means" is remarkable in Primorie krai and Sakhalin oblast in particular.

Because there are supplement relations between RFE and Japan, South Korea in the fields of resources (crude oil, natural gas, electric power, wood, nonferrous metal, and marine products, etc) of RFE, investment goods of Japan and Korea, consumer goods of China and Korea, the role of foreign trade in RFE's economy will become to be higher in future and be connected more tightly with these East Asia countries than now.

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