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REGIONAL ECONOMIC DEVELOPMENT AND
POLITICAL ATTITUDES OF THE POPULATION
OF RUSSIA: RESULTS FOR THE
DECEMBER 1993 FEDERAL ELECTIONS

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REGIONAL ECONOMIC DEVELOPMENT AND POLITICAL ATTITUDES OF THE POPULATION OF RUSSIA: RESULTS FOR THE DECEMBER 1993 FEDERAL ELECTIONS

Introduction

The paper explanes the relation between the political behaviour of the population of the regions of Russia and social and economic regional developments.

As an indicator of political attitudes we use the results of the Constitutional referendum and of the national Parliamentary elections that have taken place on December 12, 1993.

Our choice of variables to describe the social and economic situation in the regions in a considerable degree depended on the availability and reliability of the statistical data. In our study we compare the results of the referendum and the elections with the indicators that characterize:

- urban/rural structure of the population;

- absolute and per capita volume of industrial output;

- dynamics of industrial output;

- branch structure of industrial output;

- role of the state sector in the economy;

- level of real and nominal incomes of the population.

The object of our study is represented by 77 top-tier territorial units (TTTUs) of the Russian Federation - republics, krais, oblasts and the cities of Moscow and St.Petersburg. The republic of Chechenya is not taken into account since the elections and the referendum have not taken place there. For the reason of the compatibility of data we exclude from our analysis 11 territories - 10 autonomous okrugs and 1 autonomous oblast - that have recently received the status of the subjects of the Russian Federation. Prior to this, these territories were the parts of certain krais and oblasts. In our study the former are considered together with the latter as before.

The paper consists of two parts and the conclusions. Part one presents the analysis of the political attitudes of the population of different regions. In part two these attitudes are compared with the indicators of the social and economic development of the regions. The conclusions summarize the results of the study and present the directions of the further investigations in the field.

To study the relationship between the variables in question we use simple correlation technique, regression equations and a more advanced method of cluster analysis. This method is based on the dendrogram principle of classification. It takes into account the distance between pairs of objects (in our case we consider so called Euclidian distance between clusters). For a more detailed description of the method see Appendix I.

4.

I. Political Behaviour of the Russian Population: Regional Trends

a. Turnout

Throughout the country, the turnout at the national Parliamentary elections and the Constitutional referendum on December 12, 1993 was 56.63%. This figure, however, differed significantly among the regions. The best turnout was reported in Karachaevo-Cherkessia - 71.9% of the potential voters; on the other pole is Tatarstan where only 13.43% of those eligible to vote have come to the ballot boxes. By the Election Law the threshold for the validity of the results of the elections and the referendum was set at 50% - at least a half of the number of the potential voters should have come to the ballot boxes.

As may be seen above, on the national average the minimum requirement was exceeded by more than 6 percent. In 21 TTTUs out of 77 the turnout was more than 60%. On the other hand , in 12 regions the turnout was below the threshold of 50%. The top ten and the bottom ten TTTUs with respect to the index of the turnout are represented respectively in APPENDIX III on the Page 36.

Figure 1. Distribution of Shares (%) of Turnout in the Regions.

Number (bar chart, A through F)

```
A =   from      0% to  13,88%;
B =   from   13,88% to  25,17%;
C =   from   25,17% to  36,47%;
D =   from   36,47% to  47,76%;
E =   from   47,76% to  59,06%;
F =   from   59,06% to  70,35%.
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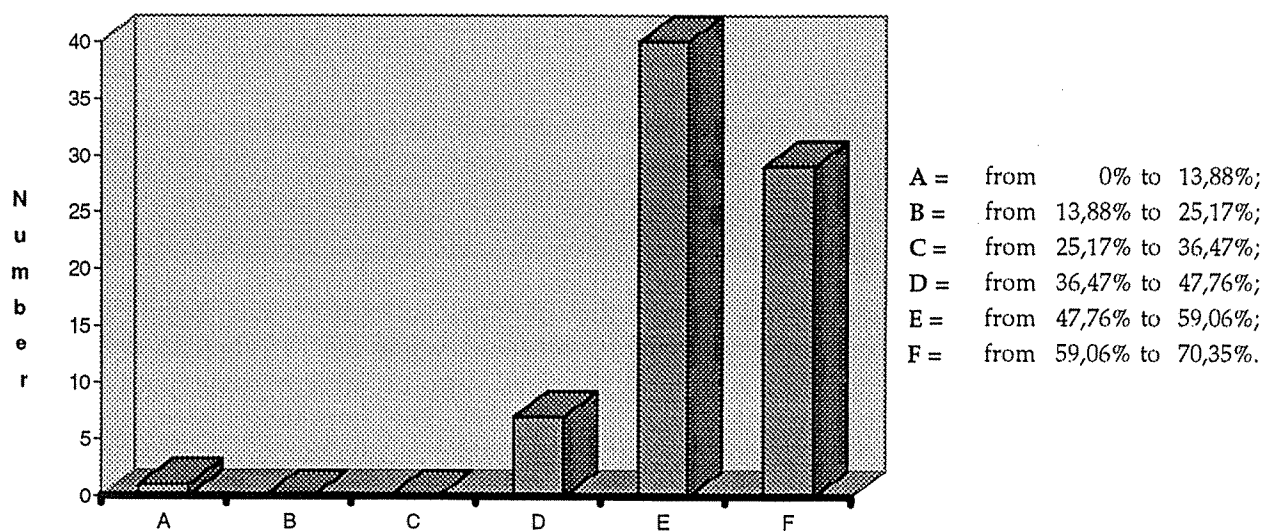
b. Results of the Referendum

At the referendum the population was asked to vote for or against the adoption of the new Constitution of the Russian Federation. In the eyes of the electorate the necessity to adopt the new basic law of the state itself, as well as the main outlines of the document were strongly associated with the movement towards further pro-market democratic reforms in the country. On the contrary, by voting against the new Constitution the people tried to show their dissatisfaction with the changes that are taking place in Russia.

Table 1. Turnout at the elections within economic regions of the Russian Federation[1].

	Economic Regions	number of Regions	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	1,25	59,19	47,53	11,66	52,90	52,81	4,34
2	North-West	4	1,27	66,84	52,44	14,41	58,55	57,46	6,12
3	Central	13	1,25	64,89	51,72	13,17	60,25	59,88	4,11
4	Volgo-Vyatskii	5	1,21	62,81	51,86	10,94	58,27	57,69	4,30
5	Central-Chernozyom	5	1,13	66,80	58,86	7,94	62,70	63,98	3,28
6	Povolzhskii	8	4,62	64,13	13,88	50,25	51,31	55,96	15,70
7	North Caucasus	9	1,31	70,35	53,65	16,70	60,22	60,43	5,12
8	Uralskii	7	1,34	62,67	46,66	16,01	53,11	50,76	6,40
9	West Siberia	7	1,47	65,61	44,61	21,00	52,94	52,82	7,39
10	East Siberia	6	1,38	63,13	45,73	17,39	52,82	51,58	5,99
11	Far East	7	1,48	65,38	44,32	21,06	52,43	50,64	6,98
12	Kaliningradskaya oblast	1	1,00	56,17	56,17	0,00	56,17	56,17	0,00
	Russia as a whole	77	5,07	70,35	13,88	56,47	56,13	56,97	7,83

For this reason the regions where the majority of voters has supported the Constitution we regard as democratic and reform oriented, while the TTTUs with the lowest share of those who has voted for it among the total amount of the participants in the referendum may be viewed as comparatively conservative. This hypothesis is confirmed by the results of the Parliamentary elections that are analyzed later. On the national average, 58.6% of those who have voted at the referendum have supported the project of the constitution. The maximum share of supporters was reported in Permskaya oblast - 79.9%. The level of 50% was reached in 59 regions; in the other 18 the amount of the opponents exceeded the number of supporters. The most striking case is Dagestan republic, where only 20.9 percent of the voters have backed up the Constitution. The histogram of the distribution of regional support for the new Constitution is presented in the Figure 2. Distribution of Share Of Votes For The Adoption Of The New Constitution.".

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[1] In current and following tables similar to this we present the information according to the general schema: number of TTTUs within the economic region, the ratio between the maximal and minimal observations within the economy region, maximal and minimal values, range (difference between the maximum and minimum), sample mean, sample median, and sample standard deviation respectively for the economic region as well as for the Russian Federation as a whole.

The dendrogram method of cluster analysis has allowed us to group all the TTTUs into 7 classes with respect to the share of votes given to support the Constitution. Group 1 with the maximum values (between 77.2 and 79.9%) contains 3 Ural's oblasts - Chelyabinskaya, Sverdlovskaya and Permskaya. Twenty six regions (group 2) have the shares of the supporters of the Constitution between 61.4 and 74.8%. In group 3 18 TTTUs are located within the narrow range between 54.2 and 59.6%. Group 4 consists of 14 cases with the threshold values of 48.7 and 53.1 percent. Group 5 includes 13 territories where the index in question had the range between 37.1 and 45.2%. The next group contains two regions - republics of Karachaevo-Cherkessia and Tuva - where the share of the votes for the project varied between 28 and 31.2%. Finally, in this classification Dagestan represents the separate type with the absolute lowest figure of 20.9%. The results of this classification are shown on Map 3. Results of the Referendum. Regional Shares of Votes For Adoption of the New Constitution.on page 29 in the Appendix III.

Figure 2. Distribution of Share Of Votes For The Adoption Of The New Constitution.

A = from   0% to 20,86%;
B = from 20,86% to 32,67%;
C = from 32,67% to 44,47%;
D = from 44,47% to 56,28%;
E = from 56,28% to 68,09%;
F = from 68,09% to 79,89%.
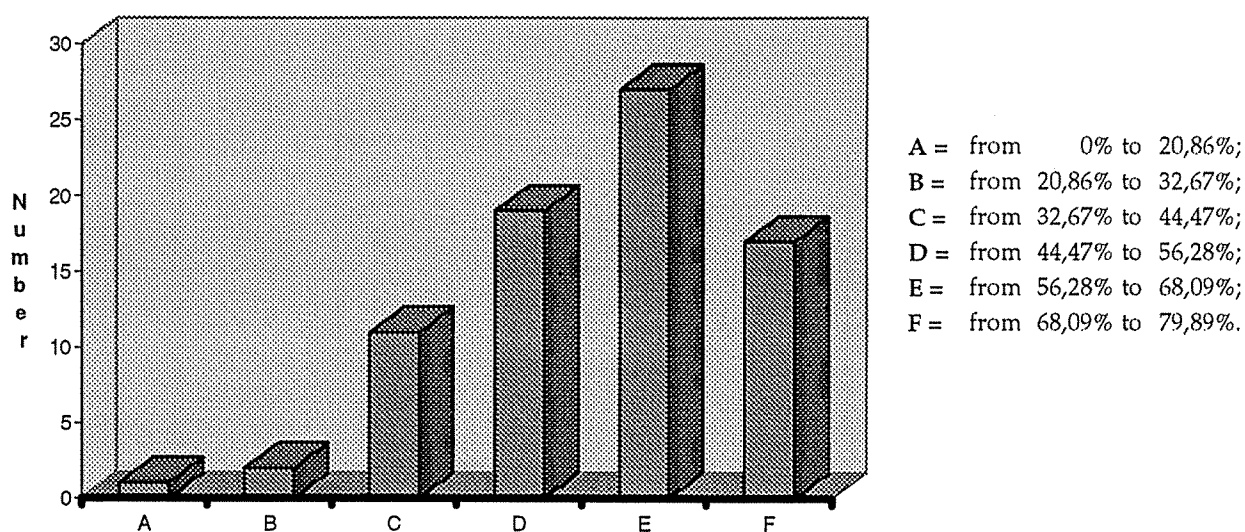
As may be seen, the regions of Russia differ tremendously with respect to the share of the votes in support of the Constitution in the Table 2. Share Of Votes For The Adoption Of The New Constitution. Table 2. Share Of Votes For The Adoption Of The New Constitution. on page 8 shows the maximum and the minimum values of this index within 11 economic regions and in Russia as a whole. Only Northern, North Western and Central-Chernozyom regions are more or less homogeneous (the first two of them are reform-oriented and the third - conservative). Other regions are characterized by a large variety of indexes. Within, for example, North Caucasus and East Siberia the difference between the maximum and the minimum value exceeds 40 percentage points or 2 times. Within the country as a whole this difference reaches 59 percentage points between Permskaya oblast and Dagestan (3.8 times).

Table 2. Share Of Votes For The Adoption Of The New Constitution.

	Economic Regions	number o Regions	Max/min	Max	Min	Range	Mean	Median	St.Dev
1	North	5	1,15	73,28	63,77	9,51	69,81	70,88	3,60
2	North-West	4	1,26	71,61	56,96	14,66	64,80	65,31	6,29
3	Central	13	1,65	69,94	42,36	27,59	55,34	58,00	9,35
4	Volgo-Vyatskii	5	1,65	61,38	37,14	24,23	50,00	52,43	10,34
5	Central-Chernozyom	5	1,08	45,16	41,99	3,18	43,65	43,79	1,45
6	Povolzhskii	8	1,88	74,84	39,91	34,93	54,07	51,34	10,08
7	North Caucasus	9	3,03	63,26	20,86	42,40	46,42	51,50	14,12
8	Uralskii	7	1,90	79,89	42,01	37,88	64,52	58,02	14,63
9	West Siberia	7	1,46	74,74	51,17	23,57	60,28	57,79	8,80
10	East Siberia	6	2,39	74,59	31,21	43,37	57,02	58,21	14,18
11	Far East	7	1,42	71,45	50,24	21,21	64,66	69,78	8,73
12	Kaliningradskaya oblast	1	1,00	66,33	66,33	0,00	66,33	66,33	0,00
	Russia as a whole	77	3,83	79,89	20,86	59,03	56,90	57,47	12,26

c. Results of the Parliamentary Elections

At the elections of December 12, 1993 the Russian people elected a two-chamber Parliament. The Upper Chamber - the Council of the Federation - was elected according to the majority principle. The same voting system was applied to the election of the half of the deputies of the Lower Chamber - the State Duma - as well. The other half of the deputies of the State Duma were elected according to the party lists. In our study we are interested mostly in the results of the latter voting.

The distinguishing feature of the Russian electorate is that the people always voted according to their perceptions about the personal merits of a candidate rather than the merits of the political body which this candidate supported.

8.

Table 3. Political parties, blocks and movements participated in the December 1993 Parliamentary elections.

Name	Representation in the Parliament
1. Agrarian Party;	Yes
2. "Yabloco" block;	Yes
3. "Future of Russia - the New Names"	No
4. Russia's Choice;	Yes
5. Civic Union;	No
6. Democratic Party of Russia;	Yes
7. "Dignity and Mercy"	No
8. Communist Party;	Yes
9. Movement "Cedar";	No
10.Liberal-Democratic Party;	Yes
11.Party of Russian Unity and Concord;	Yes
12.Movement "Women of Russia";	Yes
13.Russian Movement for Democratic Reforms;	No

Knowing this, many candidates preferred not to advertise their party affiliations, in some cases even stressing their independence from any organized political movements. On the other hand, the idea that if the voters from the very beginning backed up definite political movements that have more or less clear programs of action, it could help to create more reliable democratic institutions of power, is gaining support in the Russian society. The December elections represented the first attempt to reveal definite political perceptions of the Russian electorate, which makes the results the party lists voting even more interesting to analyze.

13 political parties, blocks and movements have taken part in the December Parliamentary elections (see Table 3.). To gain seats in the State Duma they should have collected not less than 5% of the total number of votes. Only 8 organizations have managed to reach this threshold. In the following analysis we consider these 8 associations together with the Russian Movement for Democratic Reforms (RMDR) which came ninth with 4.08% of the votes.

According to their views and programs with respect to the development of the reform process in Russia some of the 9 above organizations can be integrated into the following blocks.

A. Democratic reform-oriented.

The highest support here has been gained by the party *The Russia's Choice* (15.51% of the votes) led by the former Prime Minister Egor Gaidar. This party argues for the necessity of the most radical economic and political reforms in the country. Its program has a clear orientation towards a free-market economy.

The Russia's Choice has gained the highest share of the votes mostly in the largest industrial and cultural centers - Moscow (34.73%), St.Petersburg (26.89%), Permskaya (26.56%), Sverdlovskaya (25.2%) and Chelyabinskaya (23.58%) oblasts. On the other hand, the positions of The Russia's Choice are the weakest in the national republics - in the first place, Ingushetia (1.65%), Dagestan (2.03%), Karachaevo-Cherkessia (4.3%), Tuva (6.15%) Kabardino-Balkaria (6.65%). This can be explained by the fact that the party in question is strongly opposed to the idea that the national republics of Russia should have any additional constitutional rights compared with the non-national units - krais and oblasts.

The *"Yabloco"* block [2](7.86% of the votes on the national average - the 6th place) and the *RMDR* (4.08% - the 9th place) do not differ much from the Russia's Choice in their political and economic programmes, though they are, maybe, less radical - their leaders agree with Mr.Gaidar about the final goals of reform but argue that their pace could be more slow.

The distribution of the regions with respect to the share of votes received by the above two movements very much correlate with those for the Russia's Choice. For example, the highest support for the "Yabloco" was reported in St.Petersburg (21.2%), while the lowest figures can be found in some of the republics - Ingushetia (2.11%), Tuva (2.11%), Altai (3.16%), Dagestan (3.27%) - and in Altaiskii krai (3.19%).

An interesting case is represented by the results of the voting for the *Party of Russian Unity and Concord (PRUC)*. Its political and economic programme is more or less similar to that of the other parties of the democratic reform orientation. However, one of its key points is the necessity to increase the participation of the population and the leaders of the regions of Russia in the elaboration of the strategy and the tactics of the transformation process in the country. Unofficially the PRUC is called "the party of the regions".

On the national average, this party has gained the support of the 6.73% of the voters (7th place). Again, this index has a high inter-regional deviation. The maximum figures are found in the republics with the strong support of the idea of national autonomy - Tuva (48.38%), Kabardino-Balkaria (31.53%), Altai (26.55%), Buryatia (17.39%), Bashkortostan (13.06%), Sakha (13.01%). The lowest values of the index are in St.Petersburg (3.74%), Voronezhskaya oblast (4.02%), Mordovia (4.03%), Smolenskaya oblast (4.09%).

B. Conservative.

This block consists of the Communist Party of Russia and the Agrarian Party of Russia.

The *Communist Party of Russia* is opposed to the idea of a free market in general and argues for the necessity of the preservation of the vast State interference in the most of aspects of the social and economic development of the country. It may be said that those

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[2]Its name is an abbreviation of the names of the leaders of the leaders of this movement - Yavlinskii, Boldyirev, Lukin. This word means "Apple" in Russian.

who voted for this party are dissatisfied with the present reforms and want to return to some modification of the past system of a centralized economy.

The Communist Party came third at the December elections with 12.4% of the votes. The positions of the party are the strongest in the republics - Dagestan (54%), Karachaevo-Cherkessia (38.58%), Northern Ossetia (36.06%), Adygeia (28.87%). The lowest support the party has received in the industrial regions of the North, Far East and Urals - Vologodskaya (5.19%), Kamchatskaya (5.25%), Murmanskaya (5.67%), Sverdlovskaya (5.79%), Magadanskaya (6.18%), Arkhangelskaya oblasts (6.44%).

The Agrarian Party of Russia also has a clear conservative programme. The difference is that its supporters insist on the preservation of the Soviet-type large collective enterprises (kolkhoses and sovkhoses) in agricultural sector in particular.

At the elections the Agrarian Party came fifth with 7.99% of the votes. The index again differes significantly among the regions - from 24.76% in Bashkortostan, 23.4% in Altaiskii krai, 18.36% in Dagestan, 17.79% in Orenburgskaya oblast to 1.43% in Moscow, 1.3% in Murmanskaya, 1.17% in Kamchatskaya, 1.07 % in Magadanskaya oblasts and 0.89% in St.Petersburg. The positions of the party are strong in the regions with a relatively high proportion of the rural population engaged in agricultural activities and vice versa.

C. Nationalistic.

This trend is represented by the *Liberal-Democratic Party of Russia (LDPR)* led by Vladimir Zhirinovskii. It is very difficult to explain in detail the reasons why this or that particular person has given his backing to the Liberal Democratic party, which on the national average has collected the highest share of the votes - 22.92%. In our opinion, the support of the party in question was connected with the strong Russian nationalistic idea, the strong dissatisfaction with the process of reforms in the country without any concrete programme of further actions, the high degree of populist notions. It may be true that to some extent the people voted against the current leaders with their programme and policies rather than for Mr.Zhirinovskii and his party.

Among the regions with the highest support of the Liberal Democratic Party two groups of territories can be clearly distinguished. First, these are the regions that have borders with foreign countries that make explicit claims on parts of the territory of the regions in question - Pskovskaya oblast with the border with Estonia (the highest support for the LDPR among all the TTTUs -43.01% of the voters), Sakhalinskaya oblast with the border with Japan (36.86%). Second, a very high proportion of the votes for the LDPR can be found in the regions of the Central European part of Russia (Central Chernozyom region and the adjoining parts of Povolzskii and Central regions), where the population is composed mostly of the ethnic Russians and its significant proportion is engaged in agricultural and food-processing activities - Belgorodskaya (37.07%), Tambovskaya (35.35%), Kurskaya (33.48%), Smolenskaya (32.63%), Penzenskaya (32.56%), Orlovskaya (31.8%), Lipetskaya (31.7%) oblasts.

D. Other parties and blocks.

Two political movements among those that have reached the threshold of 5% of the votes stand separately from the described blocks.

The Political Movement "Women of Russia" has gained a surprising success at the December elections. It has come fourth with 8.13% of the votes. Again, the support of the

Movement in all probability was connected with the dissatisfaction with the reform process (though in this case the dissatisfaction was not so strong as among the supporters of the conservative and nationalistic blocks) and the lack of a clear notion about the further course of actions, apart from a rather vague desire to ensure a more prominent role for women in different aspects of the decision-making process in the country.

The maximum support the Movement has received in Kurganskaya oblast (15.53%), Primorskii krai (15.27%), Udmurtia (14.7%), Tyumenskaya (14.51%) and Irkutskaya (13.18%) oblasts. Among the territories where the "Women of Russia" were the least popular are Dagestan (2.34%), Ingushetia (2.76%), Moskovskaya oblast (4.35%), Karachaevo-Cherkessia (4.41%) and Kabardino-Balkaria (4.62%).

The Democratic Party of Russia (DPR) has the left-center orientation, but with a rather strong tendency towards nationalistic views. It was the last, eighth party to reach the necessary requirement of the minimum share of the votes with 5.52% on the national average.

The party has achieved an outstanding result in Ingushetia, where it has been supported by 71.07% of the voters. In other regions the popularity of the DPR varied between 9.11% in Chuvashia and 2.92% in Tuva.

As may be seen, there exist considerable regional differences with respect to the support of each of the 8 analyzed political organizations. Tables 17 - 32 in the Appendix III show the difference between the minimum and the maximum value of the share of the votes given for each party, block and movement within the economic regions and in Russia as a whole. Table 4. Regional Differences of the Results of the December 1993 Elections. presents the nationwide differences.

The method of cluster analysis has allowed us to obtain a typology of the Russian regions with respect to their support of different political parties, blocks and movements. We have got 7 definite classes of the regions.

1. Strongly reform oriented territories - 14 (Arkhangelskaya, Chelyabinskaya, Murmanskaya, Permskaya, Sverdlovskaya, Tomskaya, Tyumenskaya, Yaroslavskaya oblasts, Karelia, Komi, Tatarstan, Khabarovskii krai, Moscow and St.Petersburg). The cluster-forming indicators in this class are the relatively high proportion of the votes given for the Russian Choice (18-35%) together with the low share of the votes in support of the Communist Party (5-12%).

2. Reform oriented territories with a strong development of nationalistic ideas - 15 (Ivanovskaya, Kaliningradskaya, Kamchatskaya, Kemerovskaya, Leningradskaya, Magadanskaya, Moscovskaya, Novgorodskaya, Novosibirskaya, Sakhalinskaya, Tulskaya, Vladimirskaya oblasts, Khakassia, Krasnoyarskii and Primorskii krais). For this group the significant indicator is the low proportion of the votes given for the Communists (5-12%) together with the strong support of the LDPR (23-37%).

3. Territories with the clear dominance of nationalistic ideas - 12 (Belgorodskaya, Kurskaya, Lipetskaya, Orlovskaya, Penzenskaya, Pskovskaya, Ryazanskaya, Smolenskaya, Tambovskaya, Voronezhskaya oblasts, Mordovia, Stavropolskii krai). These regions are characterized in the first place by the highest share of the votes given for the LDPR (31-43%).

4. Territories where regionalistic ideas prevail - 3 (Altai, Kabardino-Balkaria, Tuva). For these 3 republics the most prominent feature is the high percentage of the votes in support of the Party of Russian Unity and Concord (27-48%).

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5. Conservative-agrarian territories - 17 (Amurskaya, Bryanskaya, Chitinskaya, Kaluzhskaya, Kirovskaya, Kostromskaya, Kurganskaya, Orenburgskaya, Saratovskaya, Tverskaya, Ulianovskaya, Volgogradskaya, Vologodskaya oblasts, Altaiskii krai, Bashkortostan, Chuvashia, Marii El). This group is characterized by the share of the votes given for the Agrarian Party which is higher than the national average (8-25%).

Table 4. Regional Differences of the Results of the December 1993 Elections.

Parties, Blocks and Movements	Difference between the maximum and the minimum regional value of the share of the votes, percent	Difference between the maximum and the minimum regional value of the share of the votes, times
1. Russia's Choice	33.1	21.1
2. "Yabloco"	19.1	10.1
3. RMDR	8.6	11.3
4. PRUC	44.6	12.9
Reform-oriented block as a whole	48.0	4.7
5. Communist Party	48.8	10.4
6. Agrarian Party	24.1	35.9
Conservative block as a whole	65.9	11.3
7. LDPR	39.6	12.7
8. Women of Russia	13.2	6.6
9. DPR	68.1	24.3

6. Ultra conservative communist territories - 4 (Adygeia, Dagestan, Karachaevo-Cherkessia, Northern Ossetia). The population of these 4 republics has expressed the highest support for the Communist Party (29-54%).

7. Undetermined territories - 11 (Astrakhanskaya, Irkutskaya, Nizhegorodskaya, Omskaya, Rostovskaya, Samarskaya oblasts, Buryatia, Kalmykia, Sacha, Udmurtia, Krasnodarskii krai). The population of these regions has not shown any definite political preferences.

The results of this classification are presented on the **Map 3. Results of the Referendum. Regional Shares of Votes For Adoption of the New Constitution.** in Appendix III. on the page 38.

Results of the Referendum Compared with the Results of the Elections: a Test of Consistency

One of the opinions that have been widely expressed immediately after the results of the referendum and the elections had become known plays with the idea that the population of Russia had shown a very inconsistent behavior at the polling stations. Having supported further reforms by voting for the adoption of the new Constitution, they at the same time had backed the political forces that in all probability are not capable of implementing these radical reforms. Our task now is to test this hypothesis and to try to answer the question whether the Russian people are really so inconsistent in revealing their political preferences.

Table 5. Correlation of the Results of the Referendum and of the Parliamentary Elections of December 1993.

Parties, blocks and movements	Correlation coefficients between the share of the votes given for the adoption of the new Constitution and the share given for the party, block or movement
1. Russia's Choice	0.76
2. "Yabloco"	0.54
3. PRUC	-0.09
4. Reform oriented block as a whole	0.58
5. Agrarian Party	-0.57
6. Communist Party	-0.72
7. Conservative block as a whole	-0.80
8. LDPR	-0.06
9. Women of Russia	0.47

Table 5. presents the partial correlation coefficients between the share of the votes given for the adoption of the new Constitution at the referendum, on the one hand, and the shares of the votes received by the main political parties, movements and blocks at the Parliamentary elections, on the other hand.

As may be seen from these coefficients, there is a clear link between the results of the referendum and of the elections. The following conclusions might be drawn.

1. Those who supported the idea of the new Constitution voted, on the whole, for the parties of the democratic reform orientation. One exception is the PRUC - some people supported the reform programme of the party, while the population of certain regions (see above) paid more emphasis to the orientation of the PRUC towards the demand of the territories for more autonomy from the center. It is not surprizing that these people voted also against the adoption of the Constitution.

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2. The part of the population that supported the parties of the conservative block voted also against the new Constitution.

3. There is no correlation between the support of Mr. Zhirinovskii's LDPR and the voting with respect to the adoption (or rejection) of the new Constitution. We believe that there is a rational explanation to this fact. The part of the population that have voted for the LDPR is not satisfied with the changes that are taking place in Russia (not in the least for nationalistic reasons) but mostly has no clear idea how the situation should be improved. So this part of the population is split with respect to the people's perceptions as to whether the Constitutional reform can help to make things better or not. We are also inclined to support in this case the theory of the signal voting - by supporting LDPR quite a number of people was sending (explicitly or implicitly) a message about their dissatisfaction with the situation in Russia to the governing political bodies , not really believing that Mr:Zhirinovskii would really come to power and maybe not even wanting this to happen.

If we look at the distribution of the shares of the votes given for the Constitution among the territories that belong to the different classes with respect to the results of the elections, the following picture emerges.

Territories of the first group (strongly reform oriented) are characterized by the highest proportion of the votes in support of the Constitution. 7 out of 10 top regions with respect to this index (including all the top five territories) are presented in this group. Even the lowest figure within the group (63.8% for Komi republic) is by 6.9 percentage points higher than the national average.

Among the regions of the second group (reform oriented with a strong development of nationalistic ideas) only 3 territories are characterized by the share of the votes for the Constitution which is slightly below the average figure. In the other 12 TTTUs of this group the figure is above the average.

On the contrary, among the regions that compose group 3 (territories with a clear dominance of nationalistic ideas) only in Pskovskaya oblast the share of the votes in support of the Constitution exceeds the national figure by 0.1 percentage point. In all the other 11 TTTUs of the group the value of this index is below the average. 3 out of 10 territories with the lowest values belong to this group.

Regions of group 5 (conservative agrarian) are also characterized by the shares given in support of the Constitution that are mostly lower than the national average. This is true for the 12 regions out of the 17 that form the group. Among these 12 TTTUs 3 territories belong to the bottom 10 regions with respect to the index in question. 4 out of the other 5 TTTUs are characterized by the figures that are only slightly (within 1.1 percentage point) above the average. Only Vologodskaya oblast where 69.8% of the participants have supported the Constitution is the clear exception from the general trend.

The same trend, even in a more definite form, can be seen among the regions of group 6 (ultra conservative communist). In Northern Ossetia 53.1% of the voters have backed up the new Constitution, which is below the average figure, but not by far. The other 3 territories from this group have the lowest values of the index among all the TTTUs.

In 10 out of 11 regions that we classify as undetermined with respect to their political preferences (group 7) the index in question does not differ much from the average figure. The range is from 4.7 percentage points below the average to 1.6 points above. Only Irkutskaya oblast represents the different case - with the value of the index at 74.6% it is placed 6th among all the territories of Russia.

So the 6 groups of regions classified by us according to their party preferences are clearly distinguished from each other with respect to the results of the referendum as well. Only the 3 regions that are united in group 4(territories where regionalistic ideas prevail) have very little in common with regards to the voting of their population at the referendum. The most peculiar case of Tuva is described separately further on.

To ensure the further test of the link between the results of the referendum and of the elections, we have constructed a regression model where the share of the votes given in support of the Constitution acts as a dependent variable, while the share of the votes received by all the 13 political organizations that have taken part in the elections are regarded as independent variables. Since we have 77 Russian regions, we run the regression on 77 observations.

The regression equation that we have received has the value of R-squared of 0.8149. This can be interpreted as follows: the results of the referendum are by 81.5% explained by the results of the elections.

Moreover, the omission of the 3 territories that in the highest degree get out of the general trend, i.e., the consideration of 74 regions, increases the value of R-squared by further 7.1%. These 3 regions are: Ingushetia, where 56.9% of the voters have supported the Constitution (the figure very close to the national average), while the share of the votes given for the Democratic Party of Russia has reached 71.1%; Tuva with very low support of the Constitution (only 31.2%) but very high share of the votes received by the PRUC (48.4%), which, on the contrary, believes that its adoption is a necessary step; Altai, where the situation was approximately the same as in Tuva.

We found a regression model constructed on the 77 observations which helps well enough to explain the results of the referendum.

Let us to define :

Y is the share of the votes given for the Constitution at the referendum;

X1 is the share of the votes received by the Agrarian Party;

X2 is the share of the votes received by the "Yabloco" block;

X3 is the share of the votes received by the party "Future of Russia - the New Names"

X4 is the share of the votes received by the Russia's Choice;

X5 is the share of the votes received by the Civic Union;

X6 is the share of the votes received by the Democratic Party of Russia;

X7 is the share of the votes received by the Party "Dignity and Mercy";

X8 is the share of the votes received by the Communist Party;

X9 is the share of the votes received by the Movement "Cedar";

X10 is the share of the votes received by the Liberal-Democratic Party;

X11 is the share of the votes received by the Party of Russian Unity and Concord;

X12 is the share of the votes received by the Movement "Women of Russia";

X13 is the share of the votes received by the Russian Movement for Democratic Reforms.

Total amount of shares equals 100%.

The covariance matrix obtained for all defined variables in presented in Table 6.. One should note that for 77 observations the 95% bound for the absolute value of correlation coefficient is 0.254.

Table 6. Correlation Matrix For Shares Of Votes For Different Parties Participated In The Federal Elections.

	Y	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13
Y	1	-0,57	0,54	0,22	0,76	0,17	0,02	0,08	-0,72	0,41	-0,06	-0,09	0,47	0,74
X1	-0,57	1	-0,56	-0,14	-0,48	-0,14	-0,2	-0,08	0,34	-0,22	0,06	-0,04	-0,14	-0,51
X2	0,54	-0,56	1	-0,01	0,61	-0,05	-0,16	-0,16	-0,36	0,16	0,02	-0,22	0,03	0,57
X3	0,22	-0,14	-0,01	1	0,13	0,16	-0,19	0,52	-0,07	0,4	-0,13	0,02	0,52	0,26
X4	0,76	-0,48	0,61	0,13	1	0,08	-0,24	-0,04	-0,55	0,29	-0,06	-0,19	0,28	0,73
X5	0,17	-0,14	-0,05	0,16	0,08	1	0,26	0,18	-0,16	0,13	-0,34	0,1	0,15	0,04
X6	0,02	-0,2	-0,16	-0,19	-0,24	0,26	1	-0,09	-0,12	-0,08	-0,31	-0,1	-0,23	-0,12
X7	0,08	-0,08	-0,16	0,52	-0,04	0,18	-0,09	1	-0,09	0,36	-0,22	0,34	0,42	0,04
X8	-0,72	0,34	-0,36	-0,07	-0,55	-0,16	-0,12	-0,09	1	-0,28	-0,19	-0,04	-0,49	-0,45
X9	0,41	-0,22	0,16	0,4	0,29	0,13	-0,08	0,36	-0,28	1	-0,14	0,04	0,4	0,37
X10	-0,06	0,06	0,02	-0,13	-0,06	-0,34	-0,31	-0,22	-0,19	-0,14	1	-0,46	-0,01	-0,13
X11	-0,09	-0,04	-0,22	0,02	-0,19	0,1	-0,1	0,34	-0,04	0,04	-0,46	1	0,11	-0,15
X12	0,47	-0,14	0,03	0,52	0,28	0,15	-0,23	0,42	-0,49	0,4	-0,01	0,11	1	0,27
X13	0,74	-0,51	0,57	0,26	0,73	0,04	-0,12	0,04	-0,45	0,37	-0,13	-0,15	0,27	1

The obtained regression equation is the following:

$$Y = 0.63X4 + 4.89Ln(X6) - 9.83Ln(X8) + 3.55Ln(X11) + 10.82Ln(X13) + 43.64 + \varepsilon,$$

were ε assumed to be a white noise. Parameters of the models were tested under the null hypothesis (H0) that every partial regression coefficient equals 0. In the following table we display the respective results.

Variable	Coefficient	Std.error	t-value	Probability H0 = true
X4	0.63739	0.16464	3.8715	0.0002
X6	4.8939	1.7925	2.7302	0.0080
X8	-9.8335	1.69	5.8185	0.0000
X11	3.5517	1.3639	2.6042	0.0112
X13	10.821	2.0713	5.2243	0.0000
CONSTANT	43.642	8.7807	4.9702	0.0000

The hypothesis that all regression coefficients together are zeros was tested with F-statistics (observed value 61.204). The probability of such event equals 0.

According to this model on can explain the results of the referendum according to the shares of votes for Communist Party, Russian Movement for Democratic Reforms, Democratic Party of Russia, Party of Russian Unity and Concord and Russia Choice at the federal elections by 84%.

To summarize what was said above, we believe that the Russian people were rather consistent at the ballot boxes, and the results of the referendum have a very high correlation with the results of the Parliamentary elections.

II. Political Attitudes of the Population and Regional Development: Is There Any Link?

Having received a picture of political attitudes of the population of different regions of Russia, we will compare the results with a number of the parameters that describe some important aspects of the social and economic development of the territories. In our previous studies (see (5), (6)) we have shown that the TTTUs of Russia are characterized by the enormous differences in these parameters. Our task now is to try to find regional variables that determine the political behaviour of the population. Since we have discovered that the results of the Constitutional referendum in a very high degree coincide with the results of the Parliamentary elections, in this part of our study we use the value of the share of the votes given in support of the Constitution as the main indicator of the political preferences of the population.

In our analysis we use the following parameters that describe the economic and social situation in the regions of Russia.

A. Indicators of the industrial development of the territories[3].

1. Absolute volume of the regional industrial output in the first 10 months of 1993, i.e. during the period immediately before the December voting - billions rubles.

2. Per capita volume of regional industrial output - thousands rubles in January-November 1993.

3. Dynamics of the industrial output during the above period (compared with the corresponding period of the previous year) - percent.

4-10. Structure of the regional industrial output by aggregated branches of industries, calculated on the basis of current prices as of the end of 1992 - percent. The branches of

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[3] The current Russian statistics does not present the relative contribution of different branches of the economy (industries, agriculture, construction, etc.) to the regional output or regional GDPs. For this reason we are restricted in our analysis to industry, which, however, is the main branch of the economy. Due to the latter consideration we believe that this approach can help us to reveal the most important trends.

industries are: energy and fuel industries, metallurgy, chemistry and forestry, machine-building and metal works, industry of construction materials, light industries, foodstuffs-producing industries.

B. Variables that describe the degree of the development of a free market mechanisms among the regions.

11. Share of the industrial output produced by State and municipal enterprises - percent.

12. Share of the State trade in the value of retail turnover in October 1993 - percent.

13. Share of privatized flats in October 1993 - percent.

C. Regional indicators of the people's real and nominal incomes.

14. Nominal per capita incomes in November 1993 - thousands rubles.

15. Per capita expenditures of the population in November 1993 - thousands rubles.

16. Per capita expenditures/per capita incomes ratio.

17. Wage growth/CPI ratio during the first 11 months of 1993.

D. Indicator of the degree of urbanization among the regions.

18. Share of the urban population as of the end of 1992 - percent.

In order to answer the question about the presense or absense of the link between these four groups of factors and the political preferences of the population, we have used first the technics of a simple correlation analysis.

Its results have shown that the factors from group B that characterize the development of a free market mechanisms in the regions are not related to the results of the referendum in any way. From our point of view, there might be 2 possible explanations of this.

First, the real perceptions of the people about their social and economic surroundings might differ from the real processes that are taking place in the country. We believe that the case with the share of privatized flats represents an example of such phenomenon. On the one hand, the process of the transfer of the ownership rights for dwellings to those who live in them means the beginning of the formation of a radically different situation on housing markets and property markets in general. On the other hand, however, so far the majority of the new owners has not deeply understood the difference between their previous and present positions with respect to their relations with the State, with the private sector of the economy and with each other. It might be said that the poor development of property markets in Russia at present restricts the advance of the psychology of property-owners among the Russian population, while the lack of such psychology, in turn, is one of the serious obstacles in the process of the formation of the market relations and mechanisms.

Second, it might be true that the official statistics does not describe the process of the development of non-state sectors in the Russian economy correctly. We suspect that this in particular might be applied to the indexes that reflect the structure of the regional industrial output by enterprises that have different ownership rights. In our opinion, the clear criteria

of the division of the Russian enterprises with respect to this characteristic are still lacking; moreover, we think that the statistical offices in the TTTUs use quite different approaches for the calculation of the indexes in question.

Though the correlation analysis has failed to reveal any link between the results of the Constitutional referendum and the variables that describe the development of a free market mechanisms in the regions, it has shown the existence of the connection between the political attitudes of the population and the factors from the other 3 groups that we used in our study. The technique of a simple partial correlation, however, does not allow to obtain a clear picture of the relations within the system as a whole. In order to get such picture we have employed the method of a regression analysis. In our models the share of the votes given in support of the new Constitutions acts as a dependent variable, while the 15 indexes from groups A, C and D serve as independent variables.

The model is described by the following regression equation.

$$Y = 7.03\log X1 + 0.60X2 - 7.86\log X3 + 0.30X4 - 2.05\log X5 - 0.09X6 - 0.18X7 -$$
$$(1.49) \quad (0.10) \quad (2.82) \quad (0.14) \quad (0.90) \quad (0.06) \quad (0.08)$$

$$- 9.90\log X8 - 1.90\log X9 - 3.99\log X10 + 4.90\log X11,$$
$$(2.72) \quad (0.98) \quad (1.66) \quad (4.25)$$

where

Y is the share of the votes given for the Constitution at the referendum;

$X1$ is per capita incomes of the population;

$X2$ is the share of the urban population;

$X3$ is per capita volume of the industrial output;

$X4$ is the dynamics of the industrial output;

$X5$ is the share of energy and fuel industries in the industrial output;

$X6$ is the share of metallurgy in the industrial output;

$X7$ is the share of machine-building and metal works in the industrial output;

$X8$ is the share of industry of construction materials in the industrial output;

$X9$ is the share of light industries in the industrial output;

$X10$ is the share of foodstaffs-producing industries in the industrial output;

$X11$ is the expenditures/incomes ratio.

The estimated constant of the model is equal to zero. The probability of the regression coefficients being significally different from zero is 75% for the variables $X11$, 82% for $X6$, 94% for $X9$, 96% for $X4$ and more than 97% for the rest of the coefficients. R-squared of the model is 0.619.

The analysis of the above three models offers the following interpretation.

1. The main three factors among all the indicators of the social and economic development of the regions that we use in our study are:

- per capita incomes of the population;

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- the level of urbanization;

- the share of the industry of construction materials in the industrial output.

These 3 variables are present in regression model that we have obtained[4]. The addition of the other variables does not help much to increase the determination parameters of the models - R-squared of the third model exceeds the respective figure for the first model only by 9.2 percentage points.

2. There exists a definite positive link between the political behaviour of the population and the amount of the nominal incomes of the people. This is not surprising - the more people earn, the better they are inclined to support the reforms that have already taken place, as well as the further development of the reform process. What is very interesting, however, - the people pay much more attention to the nominal figures than to their real incomes and the dynamics of the latter. In our opinion, it is an another example of somewhat superficial or even myopic attitudes of a significant part of the Russian population towards the complex processes that are taking place in the country.

3. On the whole, the people that live in cities and towns are much more reform-oriented than the voters from the rural areas. We do not think that the main reason of this phenomenon is that the current economic crisis in Russia hits those living in the rural territories harder than the urban population. It might be even that the opposite is true. So the explanation of the weaker support of the new Constitution among the rural voters is rather that the urban people, especially those living in the larger cities, are much more informed about the real processes that are taking place in Russia, while the former group of the population feels itself less oriented and for this reason is reluctant to support the changes without being sure of their possible outcomes.

3. The striking result that we have obtained with the help of our model is that the share of the industry of construction materials in the total value of the industrial output has such influence on the results of the voting at the referendum, and that the link is negative. This seems strange since among all the 7 branches of industries the industry of construction materials is characterized by much lower contribution to the total volume of the output than any of the other complexes, both on the national scale and in the majority of the regions.

There might be two possible explanations of the above fact. First, a large proportion of the enterprises that produce construction materials is represented by small units situated in small towns or rural settlements, so those working at these enterprises are characterized by the rural mode of thinking described above. Second, the share of the industry of construction materials is, as a rule, higher among the smaller TTTUs of Russia, mostly the republics. In the latter the support of the Constitution has been, in general, lower than on average, mostly for the reason that this document, in the eyes of the majority of the population in some republics, does not encourage the idea of a strong national autonomy. The most characteristic example of Tuva has been described in the first part of the present paper - meanwhile, in this republic the share of the industrial output produced by the enterpises that belong to the complex of construction materials is the highest among all the 77 regions of Russia (11.3%):

4. Apart from the three above factors, the other variables used in our models have much lesser effect on the political attitudes of the Russian population. Some interesting trends, however, might be noted.

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[4] As always, more regressions have been run than reported.

5. If we look at the influence of the branch structure of the regional industrial output on the results of the referendum we can see that only the share of chemistry and forestry is positively correlated with the share of the votes given in support of the Constitution. This complex is present in the second model with the positive sign and absent from the third model, where all the 6 other branches are represented with the negative coefficients.

The complex of chemistry and forestry consists of the industries that among all the branches are in the least degree hit by the crisis in the Russian economy. The fall in industrial output in the regions that are specialized on the production of the complex was the lowest among all the TTTUs of Russia both in 1992 and during the first 10 months of 1993. So those working at the enterprises of this complex are, maybe, relatively more satisfied (or less dissatisfied) with the process of reforms than the representatives of the other industries.

The higher degree of the development of the other 6 complexes tends to decrease the share of the votes cast in support of the Constitution. Apart from the complex of construction materials, the highest negative regression coefficient in the third model is for the foodstuffs-producing industries. Here we should note that the Russian statistics presents under this heading such different branches as the processing of agricaltural products and fishery. Meanwhile, the population of the regions that are specialized on these 2 branches differ very much with respect to their political preferences shown at the referendum. While the voters from the territories where fishery is one of main industrial branches have shown the strong support for the Constitution, in the TTTUs specialized on the processing of agricultural goods this support was usually low. So, probably, the example of the foodstuffs-producing industries taken without fishery represents the second major case (together with the complex of construction materials) of how the branch structure of the regional industrial output in a considerable degree affects the political attitudes of the voters.

6. The third regression model obtained in our analysis has shown that two more factors have some influence over the political behaviour of the population. One is the dynamics of the industrial output, which is not surprising. In general, the voters from the regions where the lowest drop of output was reported are more inclined to support further reforms that they associate with the adoption of the new Constitution.

Probably a more unexpected result is that the ratio of per capita expenditures compared with per capita incomes of the population is positively related with the share of the votes given in support of the Constitution. This result should be treated with some caution - among all the coefficients of the model, the regression coefficient of the variable in question has the lowest probability of being significantly different from zero. Nonetheless, there is some probability that the higher proportion of their income the people spend, the more they are likely to support the process of reforms.

One possible explanation of this trend is that the higher level of spending is connected in the first place with the better development of trade and service sector. Of course, the situation with the severe shortages of the whole groups of commodities that was characteristic for the era of the central planning has to a great extent moved away to the past. Some inter-regional differences with respect to the possibility of obtaining goods and services, especially those of high quality, however, still remain. So maybe the people that have a better choice of commodities are more inclined to support the reforms, even if they are obliged to spend a higher proportion of their incomes on consumer goods.

One other conclusion might be drawn from the described outcome. Our analysis has shown that, in general, the support of the Constitution is higher in the regions where the people have higher per capita incomes. If on the basis of the obtained result we assume that

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within this regions the expenditures/incomes ratio is also above the average figure, it might mean that the official statistics significantly underreports the people's incomes, and the degree of such underreport is higher among the better-off layers of the population. Although we understand that this is a preliminary conclusion, the further studies in this direction might bring some interesting results.

In the following part of our paper we will consider the 7 groups of regions with respect to the results of the referendum that we have obtained with the help of the cluster analysis and have described in part one, and look how the variables that describe the economic and social development of the territories behave themselves within each group.

Regions from the first cluster are characterized by the maximum support of the Constitution. All 3 territories are located in the Urals economic region, thus constituting a compact geographical area. They have very much in common with each other from the point of view of their social and economic parameters. In the first place, they are highly industrialized territories - both the absolute and per capita volumes of the industrial output here are much above the national averages. With respect to the absolute figures the above difference is more than 2 times. Naturally, the share of the urban population among the 3 territories in question is also much above the average level. Though these 3 regions differ from each other with respect to the structure of their industrial output, in all 3 of them the proportion of heavy industries (fuel and energy, metallurgy, chemistry and forestry complexes) is, again, much higher than in Russia as a whole. Finally, one more distinguishing feature of the regions of the 1st cluster is the relatively high level of per capita incomes, which is by 11-22% above the national average.

The second cluster is characterized by the support of the Constitution which is significantly above the national average. This cluster is the largest of all with respect to the number of objects (territories). It is composed of the TTTUs that differ very much from each other, though some common features can be found. The most interesting fact is that the majority of the regions of this group forms an uninterrupted belt which goes from the north-west to the east of Russia. 5 out of the 5 TTTUs of the Northern economic region, 3 out of the 4 TTTUs of the North Western region, 5 out of the 7 TTTUs of the Far East are represented in this cluster.

Only 9 out of the 26 regions of the group have the share of the urban population that is below the national average, and only 4 of them have the value of index lower than 70%. Though the territories of this group differ with respect to the values of their absolute and per capita inustrial output, the average figures for the group are significantly higher than those for all the 77 territories of the country in general. The TTTUs from this group have the common features also with regards to the structure of their industrial output: in general, heavy industries prevail. In 21 TTTU out of the 26 the share of the industry of construction materials is below the average figure for Russia; in 23 TTTUs the share of the light industries is lower than the national average. Only 7 territories are characterized by the above-average proportion of the foodstaffs-producing industries, but 5 territories out of these 7 are specialized on fishery (see above).

Finally, per capita incomes and expenditures of the population of the regions of this group are, as a rule, higher than in Russia in general.

18 TTTUs that comprise cluster 3 of our classification are characterized by the voting at the referendum which does not differ much from the national figure. This cluster unites the territories that have not very much in common.

Approximately 50% of the voters in the 14 regions that fall into the 4th cluster have given their support to the Constitution - this is below the national average, but not by much. These territories might be characterized by:

- the absolute and per capita values of the industrial output that, as a rule, exceed the average level (for the absolute volume this is true for 10 TTTUs, for the per capita figures - for 12 TTTUs out of the 14);

- relatively low share of the urban population (only in 3 territories this share is above the national average);

- relatively high share of the industry of construction materials in the value of the industrial output (this is true for the 11 territories of this group);

- relatively low levels of per capita incomes and expenditures of the population (the figures that are higher than the national averages can be found only in 2 regions with respect to the incomes and in 3 territories with regards to the expenditures).

13 TTTUs from the 5th claster are characterized by the very low support of the Constitution among their voters. The majority of these 13 regions, as in the case with the territories where the support of the Constitution was the highest, compose a compact geographical area around the Central Chernozyom economic region of Russia. All 5 TTTUs from this economic region fall into the group in question.

The most distinguishing common feature for the TTTUs from this group is that in all of them the proportion of the urban population is lower than the national average figure. In none of the above 13 territories this index exceeds 70%, while in Russia as a whole its value is 73.8%. Apart from this, the other characteristic features of the 5th cluster are approximately the same as those for the 4th group described above.

The remaining 3 territories of Russia fall into clusters 6 and 7 with the lowest support of the Constitution (from 20.9 to 31.2% participants in the referendum). All 3 of them are the republics; all have the share of the urban population that is below 50%. The absolute and per capita values of the industrial output in these republics is also much below the national averages. All 3 have the indexes of the industrial dynamics that are worse than the index for Russsia as a whole. With respect to their industrial structure, the 3 republics in question have a relatively low share of heavy industries, while the shares of the industry of construction materials and of the foodstaffs-producing industries are here significantly higher than the national averages. The levels of per capita incomes and, in even a higher degree, of per capita expenditures of the population are much below than in Russia as a whole; consequently, the expenditures/incomes ratios are also below the national average.

On the whole, it may be seen that the regions that represent the polar cases (groups 1-2 versus groups 5-7) have much more in common with the territories that fall into the same group with them than the TTTUs from the "median" clusters (4 and especially 3).

We have also calculated the parameters of the "average statistical" region from each cluster[5]. They are shown inTable 7. It is necessary to note that among all the parameters we have chosen only those characteristics that reveal some definite trends, i.e. have a tendency to increase or decrease while moving from cluster to cluster.

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[5]Note: all the figures that characterize "average statistical" regions are simple averages, not weighted averages.

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As might be seen from Table 7, the roster of the variables that have more or less definite trends with respect to their changes from cluster to cluster resembles very much the list of the parameters that we have obtained as a result of our regression analysis. This might be regarded as an additional confirmation of the validity of these results.

Table 7. The Parameters of an "Average Statistical" Region for Each Cluster Obtained with Respect to the Results of the Constitutional Referendum.

Index	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Clusters 6-7
Absolute volume of the ind. output	2451	1059	709	578	589	52
Per cap. volume of ind. output	635	492	380	271	351	33
Share of fuel and energy complex	14.6	22.3	17.7	17.1	10.4	9.8
Share of metallurgy	38.5	14.4	12.9	7.9	12.0	7.7
Share of industry of constr. mat.	3.4	3.4	4.1	6.3	4.8	11.3
Share of foodst.-prod. industries	6.3	17.9	14.7	20.6	22.5	29.0
Share of heavy industries	65.0	54.8	41.7	36.6	34.4	35.4
Share of light and foodst.-prod ind.	9.0	25.2	25.8	30.2	32.3	34.7
Per capita incomes	66.5	82.1	61.8	52.6	50.7	41.4
Per capita expenditures	37.0	42.6	33.8	29.4	29.8	15.3
Expend./inc. ratio	0.55	0.59	0.56	0.55	0.54	0.37
Share of urban population	82.4	78.6	64.9	66.5	61.3	46.8

Conclusions.

In our study we have obtained the following main results.

1. The regions of Russia very much differ from each other with respect to the political attitudes of their population shown at the December 12, 1993 Constitutional referendum and Parliamentary elections.

2. The Russian people are rather consistent in their political preferences. The results of the referendum may be explained by the results of the elections by more than 80%.

3. There exists a definite link between the political attitudes of the population and the levels of the economic and social development of the regions. Such variables as the urbanization level, per capita personal incomes and expenditures, industrial structure and dynamics explain the results of the referendum by more than 60%.

4. The portion of the results that is left unexplained, in our opinion, might be split into two parts that should be addressed in futher research steps.

First, there exist economic and social variables that have not been included in our model. For example, it is interesting to compare the political attitudes of the population with the industrial structure in dynamics. This structure changes over time not only due to the fact that the fall in the absolute volumes of the output differs from branch to branch, but also as a result of the shift in relative prices. Such shifts take place in Russia at the present moment very rapidly, and they might have some influence upon the political attitudes of the population that is interesting to look at.

It might also prove worth while to look, if possible, not only at the composition of the industry by branches and by owhership rights, but also at the structure of the other spheres of the economy, in the first place of agriculture. With respect to the latter it might be interesting to test the hypothesis of the link between the share of the agricultural output produced by the non-state sector (farmers) and the results of the voting at the referendum and the elections. On the whole, an attempt to obtain a more reliable data to describe the development of a free-market institutions and mechanisms in Russia could help to bring fruitful results to the studies of the problems in question.

It might be also possible that the industrial and agricultural structure measured not in terms of the value of the output, but by the number of those working within each branch, will produce a more interesting picture with respect to its link with the political preferences of the people.

One another possible direction in the studies is connected with the introduction of a more formalized way of describing the possible differences in the political attitudes within the national republics, on the one hand, and within the non-national territorial units, on the other hand. One of the possible ways to do this is to introduce a dummy variable into the regression model.

Since our analysis has shown a clear link between the proportion of the population that live in cities and towns and the results of the referendum, it is interesting to disaggregate this index by using the shares of the population of the settlements of the urban type, of the smaller towns, of the medium cities, of the largest cities.

However, even if the addition of some extra variables will increase the degree of the explanation , there are factors of the second kind that are connected with the regional specifics and that are hardly possible to catch by any formal model. For instance, quite a lot in the political attitudes of the population of a particular region depends on the combination of the political preferences of regional authorities with their ability to solve the problems of the peoples'everyday lives. Another example of the influence of the regional specifics is presented in our paper. The fact that Pskovskaya oblast is situated near Estonia which has territorial claims for some of its parts has led to the situation when this oblast is characterized by the highest level of the support of the LDPR of Vladimir Zhirinovskii among all the regions of Russia.

26.

Consider the series of object denoted as $\mathbf{X}_i$, $i = 1, \ldots, n$, where n is a sample size. Every object represent a point in r-dimensional Euclidean space R^r : $\mathbf{X}_i = (X_{i1}, \ldots, X_{ij}, \ldots, X_{ir})$, $i = 1, \ldots, n$. Here r represents the number of actual variables we want to describe our object with. Some arbitrary subset of the set of object united following some ideas of the neighborhood can be interpreted as a cluster.

Dendrogram is a cluster structure model formed by sequentially merging pairwise two nearest clusters from among a set of clusters. It is displayed as a hierarchical tree, the initial object (in our case TTTU) or clusters being at the root and the cluster corresponds to all objects at the vertex. Each merger generates a new merged cluster which is assigned an increasing serial number.

The merging algorithm is based on the selected type of a distance between objects and, hence, clusters. Let be S_l and S_m are two clusters consisting of n_l and n_m objects respectively (n or m can be equal one). The general formula for the various distances offered by A.N.Kolmogorov can be written as follows:

$$\rho_\tau(S_l, S_m) = \left[\frac{1}{n_s n_m} \sum_{X_i \in S_l} \sum_{X_j \in S_m} d^\tau(\mathbf{X}_i, \mathbf{X}_j) \right]^{\frac{1}{\tau}},$$

where

$$d^1(\mathbf{X}_i, \mathbf{X}_j) = \sum_{k=1}^{r} (X_{ik} - X_{jk})^\tau.$$

Hence, if we have the group of objects $S(l,m) = S_l \bigcup S_m$ obtained as the union of the clusters S_l and S_m then the generated Kolmogorov distance between clusters $S(l,m)$ and any other cluster S_q is defined by the formula

$$\rho_\tau(S_q, S(l,m)) = \left\{ \frac{n_l \left[\rho_\tau(S_q, S_l) \right]^\tau + n_m \left[\rho_\tau(S_q, S_m) \right]^\tau}{n_l + n_m} \right\}^{\frac{1}{\tau}}.$$

In the case of our study we terminated the cluster merging procedure when the seven agglomerated clusters were constructed. For more detail description of the methods see, for example (2)-(4).

Table 8. List of the Economic Regions of the Russian Federation.

Code	Economic Region
1.	North Economic region
2.	West-North Economic region
3.	Central Economic Region
4.	Volgo-Viatskii Economic Region
5.	Central Cheronziom Economic Region
6.	Povolzhskii Economic Region
7.	North Caucasus Economic Region
8.	Uralskii Economic Region
9.	West Siberia Economic Region
10.	East Siberia Economic Region
11.	Far East Economic Region
12.	Kaliningradskaya oblast

Map 1. Economic Regions Within the Russian Federation.
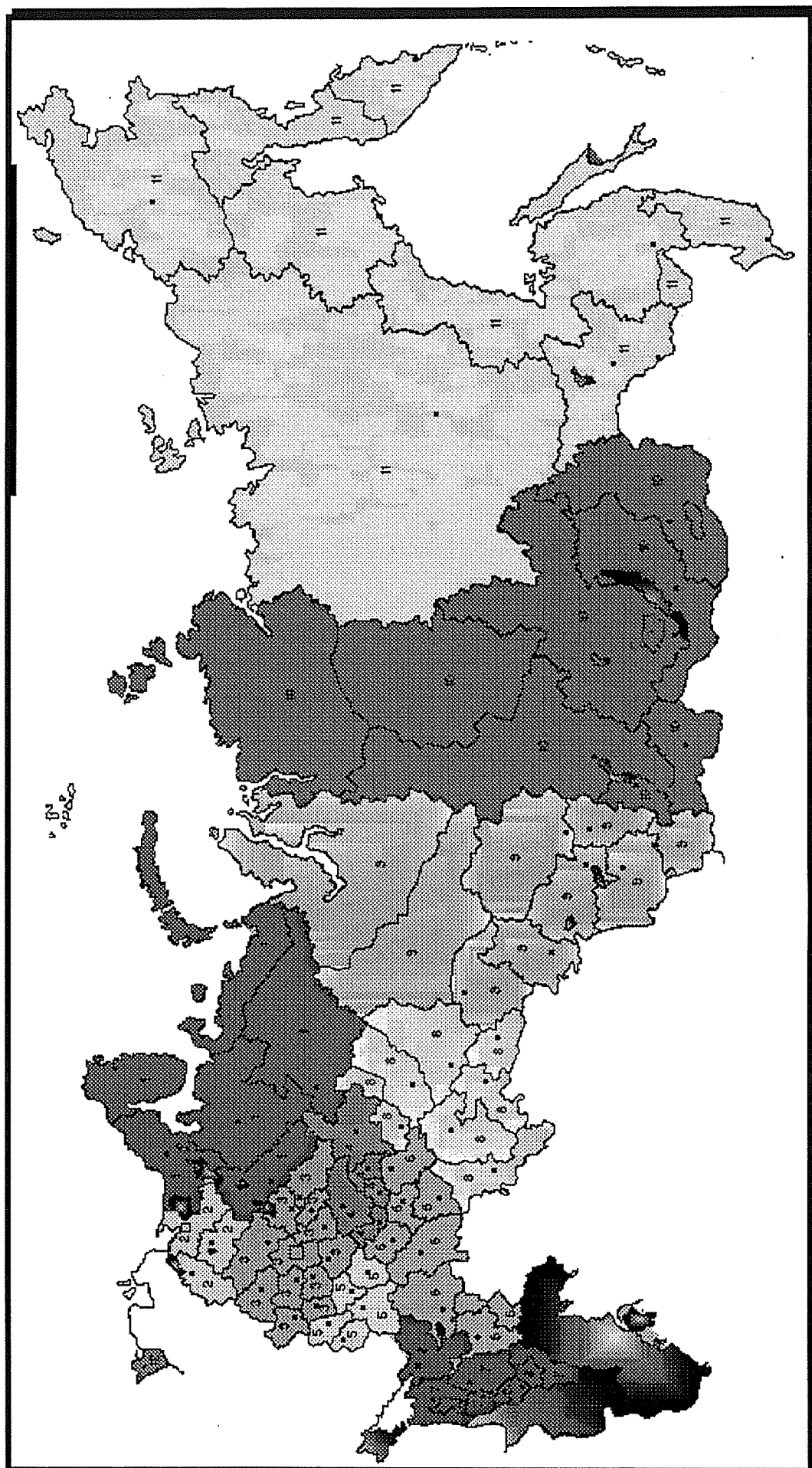
Map 2.Top-tier Territorial Units (TTTUs) of the Russian Federation.
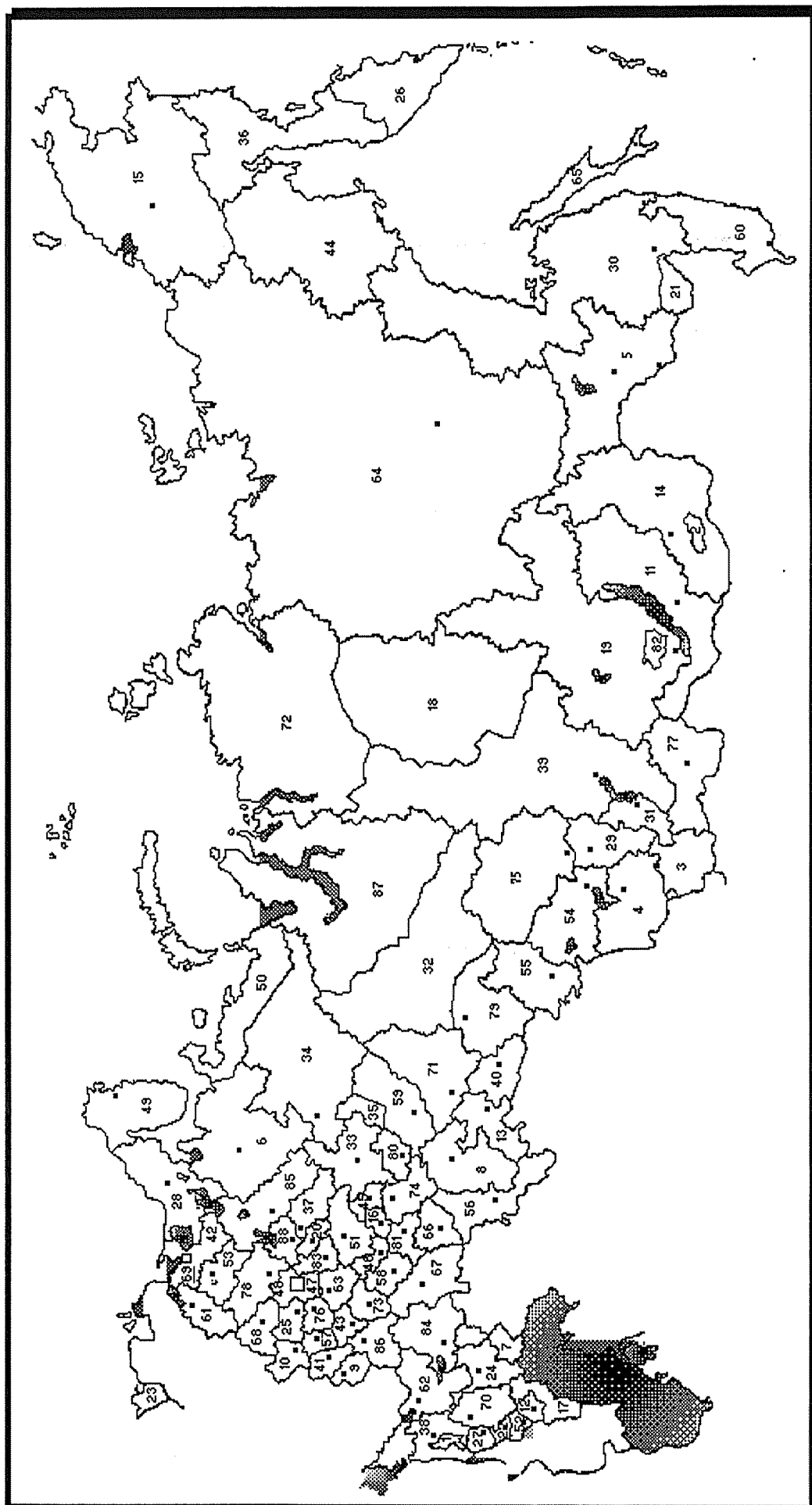
Table 9. Alpabetical List Of The Top-Tier Territorial Units Of The Russian Federation

Code	Top-tier territorial unit	Economic Region	Economic Subordination	Code	Top-tier territorial unit	Economic Region	Economic Subordination
1	Adygei republic	7		26	Kamchatskaya oblast	11	
2	Aghin-Buryat aut.district	10	Chitinskaya oblast	27	Karachaevo-Cherkess republic	7	
3	Altai republic	9		28	Karel republic	1	
4	Altaiskii Krai	9		29	Kemerovskaya oblast	9	
5	Amurskaya oblast	11		30	Khabarovskii krai	11	
6	Arkhangelskaya oblast	1		31	Khakass republic	10	
7	Astrachanskaya oblast	6		32	Khanty-Mansi aut.district	9	Tyumenskaya oblast
8	Bashkortostan republic	8		33	Kirovskaya oblast	4	
9	Belgorodskaya oblast	5		34	Komi republic	1	
10	Bryanskaya oblast	3		35	Komi-Permyak aut.district	8	Permskaya oblast
11	Buryat republic	10		36	Koryak aut.district	11	Kamchatskaya oblast
12	Chechen-Ingush republic	7		37	Kostromskaya oblast	3	
13	Chelyabinskaya oblast	8		38	Krasnodarskii krai	7	
14	Chitinskaya oblast	10		39	Krasnoyarskii krai	10	
15	Chukot aut.district	11	Magadanskaya oblast	40	Kurganskaya oblast	8	
16	Chuvash republic	4		41	Kurskaya oblast	5	
17	Dagestan republic	7		42	Leningradskaya oblast	2	
18	Evenki aut.district	10	Krasnoyarskii krai	43	Lipetskaya oblast	5	
19	Irkutskaya oblast	10		44	Magadanskaya oblast	11	
20	Ivanovskaya oblast	3		45	Maril El republic	4	
21	Jewish aut.oblast	11	Khabarovskii kraii	46	Mordovian republic		
22	Kabardino-Balkar republic	7		47	Moscow	3	
23	Kaliningradskaya oblast	12		48	Moscowskaya oblast	3	
24	Kalmyk-Khalm.Tangch republic	6		49	Murmanskaya oblast	1	
25	Kaluzhskaya oblast	3		50	Nenetzkii aut.district	1	Arkhangelskaya oblast

Table 10. Alphabetical List Of The Top-Tier Territorial Units Of The Russian Federation (Continuation)

Code	Top-tier territorial unit	Economic Region	Economic Subordination	Code	Top-tier territorial unit	Economic Region	Economic Subordination
51	Nizhegorodskaya oblast	4		75	Tomskaya oblast	9	
52	North Ossetian republic	7		76	Tulskaya oblast	3	
53	Novgorodskaya oblast	2		77	Tuva republic	10	
54	Novosibirskaya oblast	9		78	Tverskaya oblast	3	
55	Omskaya oblast	9		79	Tyumenskaya oblast	9	
56	Orenburgskaya oblast	8		80	Udmurt republic	8	
57	Orlovskaya oblast	3		81	Ulianovskaya oblast	6	
58	Penzenskaya oblast	6		82	Ust-Orda Buryat aut.district	10	Irkutskaya oblast
59	Permskaya oblast	8		83	Vladimirskaya oblast	3	
60	Primorskii krai	11		84	Volgogradskaya oblast	6	
61	Pskovskaya oblast	2		85	Vologodskaya oblast	1	
62	Rostovskaya oblast	7		86	Voronezhskaya oblast	5	
63	Ryazanskaya oblast	3		87	Yamalo-Nenets aut.district	9	Tyumenskaya oblast
64	Sakha (Yakut) republic	11		88	Yaroslavskaya oblast	3	
65	Sakhalinskaya oblast	11					
66	Samarskaya oblast	6					
67	Saratovskaya oblast	6					
68	Smolenskaya oblast	3					
69	St.Peterburg	2					
70	Stavropolskii krai	7					
71	Sverdlovskaya oblast	8					
72	Taimyr aut.district	10	Krasnoyarskii krai				
73	Tambovskaya oblast	5					
74	Tatarstan republic	6					

32.

Table 11 Structure of Economic Regions

1. North Economic region

6	Arkchangelskaya oblast	
50		Nenetzkii aut.district
28	Karel republic	
34	Komi republic	
49	Murmanskaya oblast	
85	Vologodskaya oblast	

2. West-North Economic region

42	Leningradskaya oblast
53	Novgorodskaya oblast
61	Pskovskaya oblast
69	St.Peterburg

3. Central Economic Region

10	Bryanskaya oblast
20	Ivanovskaya oblast
25	Kaluzhskaya oblast
37	Kostromskaya oblast
47	Moscow
48	Moscowskaya oblast
57	Orlovskaya oblast
63	Ryazanskaya oblast
68	Smolenskaya oblast
76	Tulskaya oblast
78	Tverskaya oblast
83	Vladimirskaya oblast
88	Yaroslavskaya oblast

4. Volgo-Viatskii Economic Region

16	Chuvash republic
33	Kirovskaya oblast
45	Marii El republic
46	Mordovian republic
51	Nizhegorodskaya oblast

5. Central Cheronziomnii Economic Region

9	Belgorodskaya oblast
86	Voronezhskaya oblast
41	Kurskaya oblast
43	Lipetskaya oblast
73	Tambovskaya oblast

6 Povolzhskii Economic Region

7	Astrachanskaya oblast
24	Kalmyk -Khalm Tangch republic
58	Penzenskaya oblast
66	Samarskaya oblast
67	Saratovskaya oblast
74	Tatarstan republic
81	Ulianovskaya oblast
84	Volgogradskaya oblast

7. North Caucasus Economic Region

1	Adygei republic
12	Chechen-Ingush republic
17	Dagestan republic
22	Kabardino-Balkar republic
27	Karachaevo-Cherkess republic
38	Krasnodarskii krai
52	North Ossetian republic
62	Rostovskaya oblast
70	Stavropolskii krai

8. Uralskii Economic Region

8	Bashkortostan republic	
80	Udmurt republic	
40	Kurganskaya oblast	
56	Orenburgskaya oblast	
59	Permskaya oblast	
35		Komi-Permyak aut.district
71	Sverdlovskaya oblast	
13	Chelyabinskaya oblast	

9. West Siberia Economic Region

3	Altai republic	
4	Altaiskii Krai	
29	Kemerovskaya oblast	
54	Novosibirskaya oblast	
55	Omskaya oblast	
75	Tomskaya oblast	
79	Tyumenskaya oblast	
32		Khanty-Mansi aut.district
87		Yamalo-Nenets aut.district

10. East Siberia Economic Region

11	Buryat republic

34.

77	Tuva republic	
31	Khakass republic	
39	Krasnoyarskii krai	
72		Taimyr aut.district
18		Evenki aut.district
19	Irkutskaya oblast	
82		Ust-Orda Buryat aut.district
14	Chitinskaya oblast	
2		Agino-Buryat aut.district

11. Far East Economic Region

64	Sakha (Yakut) republic	
60	Primorskii krai	
30	Khabarovskii krai	
21		Jewish aut.oblast
5	Amurskaya oblast	
26	Kamchatskaya oblast	
36		Koryak aut.district
44	Magadanskaya oblast	
15		Chukot aut.district
65	Sakhalinskaya oblast	

12.   23   Kaliningradskaya oblast

Table 12. Top Ten with Respect to Share of Turnout of Russia.

Rating	Region	Population 1993, th.	Contribution of the region	Share of Turnout %
1	Karachaevo-Cherkess republic	213	1,63	70,35
2	Pskovskaya oblast	541	1,55	66,84
3	Belgorodskaya oblast	906	1,55	66,80
4	Altai republic	53	1,52	65,61
5	Sakha (Yakut) republic	726	1,51	65,38
6	Ryazanskaya oblast	899	1,50	64,89
7	Orlovskaya oblast	5690	1,50	64,76
8	Bryanskaya oblast	1004	1,491	64,43
9	Smolenskaya oblast	804	1,49	64,25
10	Penzenskaya oblast	952	1,48	64,13

Table 13. Bottom Ten Regions with Respect to Share of Turnout of Russia.

Rating	Region	Population 1993, th.	Contribution of the region	Share of Turnout %
68	Sverdlovskaya oblast	4118	1,12	48,61
69	Khabarovskii krai	1464	1,11	47,98
70	Udmurt republic	1149	1,10	47,65
71	Komi republic	948	1,10	47,53
72	Permskaya oblast	2409	1,08	46,66
73	Khakass republic	421	1,06	45,73
74	Tomskaya oblast	695	1,04	44,91
75	Tuymenskaya oblast	2402	1,03	44,61
76	Kamchatskaya oblast	384	1,03	44,32
77	Tatarstan republic	2719	0,32	13,88

Table 14. Top Ten TTTUs with Respect to Share Of Votes For The Adoption Of The New Constitution and their Contributions.

Rating.	Region	Population 1993, th.	Contribution of the region	Share of Votes %
1	Permskaya oblast	2409	1,82	79,89
2	Sverdlovskaya oblast	4118	1,82	79,84
3	Chelyabinskaya oblast	2973	1,76	77,21
4	Tatarstan republic	2719	1,71	74,84
5	Tuymenskaya oblast	2402	1,71	74,74
6	Irkutskaya oblast	2319	1,70	74,59
7	Arkchangelskaya oblast	1150	1,67	73,28
8	St.Peterburg	5004	1,63	71,61
9	Primorskii krai	1791	1,63	71,45
10	Kamchatskaya oblast	384	1,63	71,30

Table 15. Bottom Ten TTTUs with Respect to Share Of Votes For The Adoption Of The New Constitution and their Contributions.

Rating.	Region	Population 1993, th.	Contribution of the region	Share of Votes %
68	Bryanskaya oblast	1004	0,97	42,36
69	Bashkortostan republic	2591	0,96	42,01
70	Tambovskaya oblast	751	0,96	41,99
71	Chuvash republic	810	0,95	41,58
72	Penzenskaya oblast	952	0,91	39,91
73	Adygei republic	233	0,89	38,90
74	Mordovian republic	560	0,85	37,14
75	Tuva republic	147	0,71	31,21
76	Karachaevo-Cherkess republic	213	0,64	28,00
77	Dagestan republic	830	0,48	20,86

Map 3. Results of the Referendum. Regional Shares of Votes For Adoption of the New Constitution.
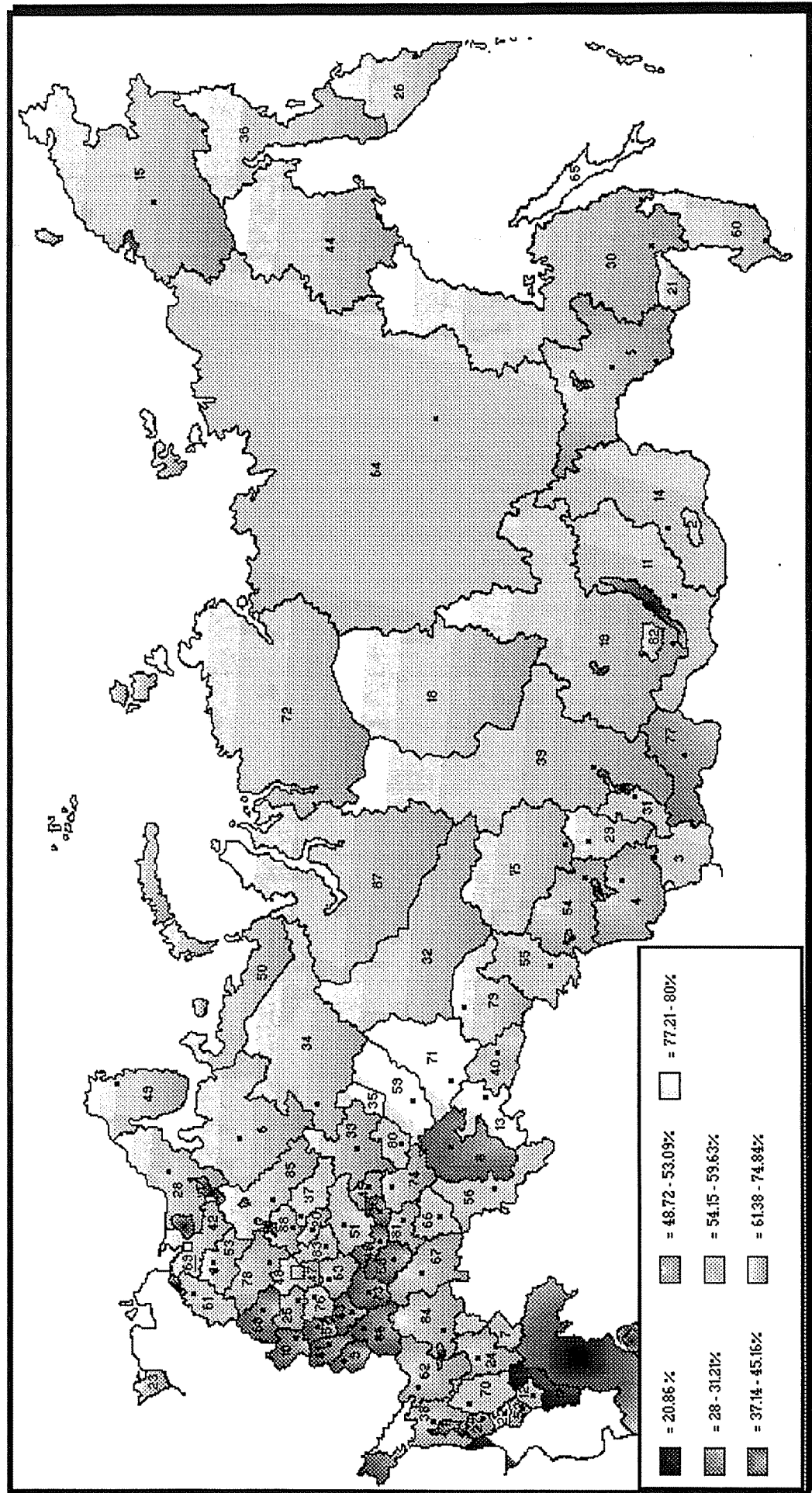
Map 4. Results of the Parliamentary Elections.Classification of the Top-tier Territorial Units with regard their political Attitude.

Strongly reform oriented

Reform oriented with strong development of nationalistic idea

Clear dominance of nationalistic ideas

Territories where regionalistic ideas prevail

Conservative-agrarian territories

Ultra conservative communist territories

Undetermined

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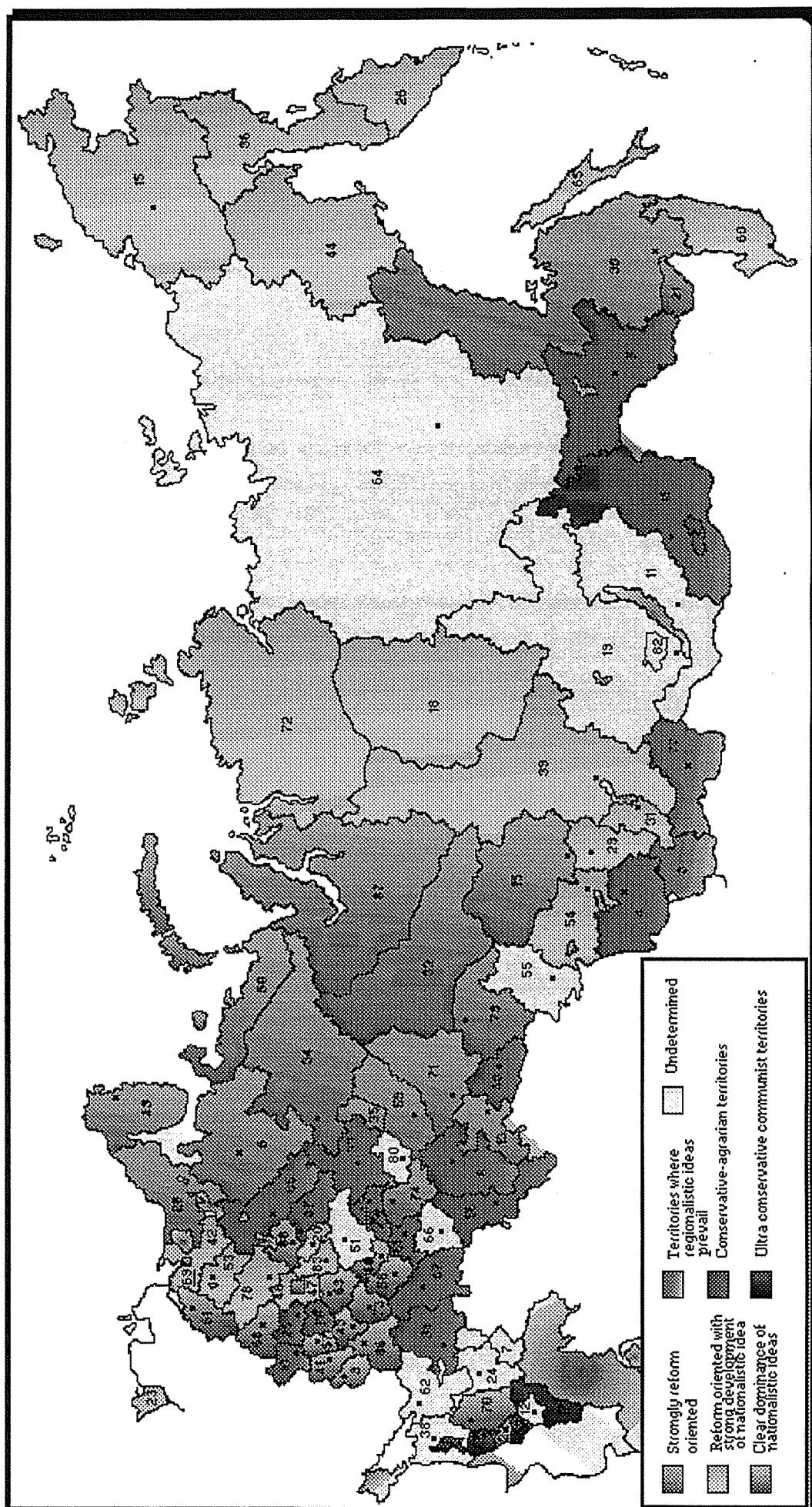
ANALYSIS OF THE NUMBER OF VOTES FOR AGRARIAN PARTY OF RUSSIA

Table 16. Number of Votes for Agrarian Party of Russia Within Economic Regions And Within Russia As A Whole.

	Economic Regions	number of TTTUs	Volume	Regional shares :	Max/ min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	141839	3,30%	16,87	78956	4679	742770	28367,80	1888	30367,43
2	North-West	4	97566	2,27%	2,24	36024	16092	19932	24391,50	22725	8520,08
3	Central	13	735918	17,14%	3,70	106666	28803	77863	56609,08	47967	23554,46
4	Volgo-Vyatskii	5	359252	8,37%	3,08	116384	37728	78656	71850,40	62813	32775,41
5	Central-Chernozyom	5	375346	8,74%	2,19	123660	56501	67159	75069,20	66642	27493,53
6	Povolzhskii	8	459617	10,71%	15,30	106394	6953	99441	57452,13	69286	35019,79
7	North Caucasus	9	574805	13,39%	337,58	135031	400	134631	63867,22	35389	58873,07
8	Uralskii	7	764080	17,80%	8,53	380042	44537	335505	109154,29	51713	123555,93
9	West Siberia	7	477280	11,12%	35,03	219114	6255	212859	68182,86	55587	71276,18
10	East Siberia	6	194439	4,53%	17,34	77948	4494	73454	32406,50	25603,5	27879,08
11	Far East	7	102055	2,38%	27,13	34159	1259	32900	14579,29	11014	14546,30
12	Kaliningradskaya oblast	1	10321	0,24%	1,00	10321	10321	0,00	10321,00	10321	0,00
	Russia as a whole	77	4292518	100,00%	950,11	380042	400	379642	55746,99	46950	55148,93

ANALYSIS OF THE SHARE OF VOTES FOR AGRARIAN PARTY OF RUSSIA

Table 17. Share of Votes for Agrarian Party of Russia Within Economic Regions.

	Economic Regions	number of TTTUs	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	11,66	15,21	1,30	13,90	6,19	5,57	5,44
2	North-West	4	10,00	8,94	0,89	8,05	5,18	5,44	3,51
3	Central	13	9,71	13,87	1,43	12,44	8,52	7,51	3,58
4	Volgo-Vyatskii	5	1,68	15,27	9,11	6,16	12,75	12,75	2,33
5	Central-Chernozyom	5	1,25	12,24	9,83	2,41	11,15	11,46	1,07
6	Povolzhskii	8	6,59	13,98	2,12	11,86	9,36	10,65	3,80
7	North Caucasus	9	26,62	18,36	0,69	17,67	8,75	7,59	5,28
8	Uralskii	7	6,24	24,76	3,97	20,79	11,19	11,07	7,81
9	West Siberia	7	5,21	23,40	4,49	18,91	9,30	8,53	6,46
10	East Siberia	6	1,69	9,25	5,47	3,78	6,82	6,46	1,45
11	Far East	7	9,85	10,51	1,07	9,44	4,10	2,20	4,17
12	Kaliningradskaya oblast	1	1,00	3,03	3,03	0,00	3,03	3,03	0,00
	Russia as a whole	77	35,89	24,76	0,69	24,07	8,46	7,71	4,91

ANALYSIS OF THE NUMBER OF VOTES FOR "YABLOCO" BLOCK OF RUSSIA

Table 18. Number of Votes for "Yabloco" block of Russia Within Economic Regions And Within Russia As A Whole.

	Economic Regions	number o TTTUs	Volume	Regional shares :	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	177244	4,20%	2,13	51128	24044	27084	35448,80	30334	10939,97
2	North-West	4	510132	12,08%	16,85	381268	22630	358638	127533,00	53117	171560,92
3	Central	13	1048974	24,84%	23,50	397421	16911	380510	80690,31	34034	114425,66
4	Volgo-Vyatskii	5	252389	5,98%	13,01	156143	12001	144142	50477,80	20807	60555,63
5	Central-Chernozyom	5	198879	4,71%	2,90	80925	27933	52992	39775,80	29798	23023,22
6	Povolzhskii	8	419227	9,93%	19,68	94933	4825	90108	52403,38	42261	35361,16
7	North Caucasus	9	419260	9,93%	138,45	169186	1222	167964	46584,44	19278	59964,94
8	Uralskii	7	481836	11,41%	8,27	136247	16474	119773	68833,71	59576	43752,17
9	West Siberia	7	332834	7,88%	47,00	106311	2262	104049	47547,71	36169	33232,77
10	East Siberia	6	168345	3,99%	43,25	73867	1708	72159	28057,50	17393	28597,25
11	Far East	7	187014	4,43%	3,73	58268	15614	42654	26716,29	21082	15386,79
12	Kaliningradskay oblast	1	27085	0,64%	1,00	27085	27085	0	27085,00	27085	0,00
	Russia as a whol	77	4223219	100,00%	325,22	397421	1222	396199	54847,00	32017	69752,82

ANALYSIS OF THE SHARE OF VOTES FOR "YABLOCO" BLOCK

Table 19. Share of Votes for "Yabloco" block Within Economic Regions.

	Economic Regions	number of TTTUs	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	2,44	14,25	5,84	8,41	9,31	8,16	3,40
2	North-West	4	3,77	21,20	5,62	15,58	11,95	10,50	6,99
3	Central	13	2,93	12,08	4,13	7,95	7,02	6,87	2,23
4	Volgo-Vyatskii	5	3,56	12,23	3,43	8,79	6,62	5,39	3,48
5	Central-Chernozyom	5	1,71	7,84	4,57	3,27	5,68	5,32	1,31
6	Povolzhskii	8	2,42	11,55	4,78	6,77	7,86	8,25	2,31
7	North Caucasus	9	5,16	10,88	2,11	8,77	5,67	5,04	2,99
8	Uralskii	7	2,92	11,34	3,88	7,46	7,07	7,94	2,66
9	West Siberia	7	3,87	12,23	3,16	9,07	7,05	6,83	3,75
10	East Siberia	6	3,46	7,31	2,11	5,19	4,99	5,11	1,89
11	Far East	7	3,65	17,09	4,68	12,41	9,59	7,62	4,64
12	Kaliningradskaya oblast	1	1,00	7,94	7,94	0,00	7,94	7,94	0,00
	Russia as a whole	77	10,06	21,20	2,11	19,09	7,33	6,97	3,46

ANALYSIS OF THE NUMBER OF VOTES FOR RUSSIA`S CHOICE.

Table 20. Number of Votes for Russia`s Choice Within Economic Regions And Within Russia As A Whole.

	Economic Regions	number of TTTUs	Volume	Regional shares	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	413842	4,96%	1,94	112221	57725	54496	82768,40	84179	19886,50
2	North-West	4	666181	7,99%	12,26	485447	39601	445846	166545,25	70567	214483,27
3	Central	13	2572135	30,84%	29,10	1142762	39274	1103488	197856,54	80538	310759,54
4	Volgo-Vyatskii	5	359100	4,31%	6,04	178293	29533	148760	71820,00	43828	62554,56
5	Central-Chernozyom	5	368641	4,42%	2,31	122845	53281	69564	73728,20	65133	27888,45
6	Povolzhskii	8	674358	8,09%	17,09	176472	10325	166147	84294,75	70635	52944,93
7	North Caucasus	9	588611	7,06%	221,29	211774	957	210817	65401,22	18197	86390,14
8	Uralskii	7	1229182	14,74%	7,72	369253	47835	321418	175597,43	130633	119414,06
9	West Siberia	7	680110	8,16%	21,32	142049	6662	135387	97158,57	104896	47992,07
10	East Siberia	6	387245	4,64%	28,85	143406	4971	138435	64540,83	41014	58769,45
11	Far East	7	331886	3,98%	5,63	95670	16995	78675	47412,29	43422	34096,40
12	Kaliningradskaya oblast	1	68054	0,82%	1,00	68054	68054	0	68054,00	68054	0,00
	Russia as a whole	77	8339345	100,00%	1194,11	1142762	957	1141805	108303,18	74013	151600,74

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ANALYSIS OF THE SHARE OF VOTES FOR RUSSIA`S CHOICE.

Table 21. Share of Votes for Russia`s Choice Within Economic Regions.

	Economic Regions	number of TTTUs	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	1,42	23,47	16,51	6,96	21,07	21,80	2,65
2	North-West	4	2,66	26,99	10,13	16,86	16,61	14,65	7,34
3	Central	13	3,62	34,73	9,58	25,15	16,61	14,69	6,45
4	Volgo-Vyatskii	5	1,82	13,96	7,65	6,31	10,88	11,42	2,58
5	Central-Chernozyom	5	1,39	12,93	9,27	3,66	10,96	10,64	1,47
6	Povolzhskii	8	2,62	22,40	8,56	13,84	13,45	12,27	4,27
7	North Caucasus	9	7,45	12,30	1,65	10,65	7,12	7,81	3,88
8	Uralskii	7	3,12	26,56	8,51	18,05	17,83	16,19	7,23
9	West Siberia	7	2,37	22,06	9,31	12,75	14,72	13,74	4,52
10	East Siberia	6	2,67	16,43	6,15	10,27	12,70	13,71	3,74
11	Far East	7	1,94	18,67	9,60	9,06	14,01	14,09	2,77
12	Kaliningradskaya oblast	1	1,00	19,96	19,96	0,00	19,96	19,96	0,00
	Russia as a whole	77	21,05	34,73	1,65	33,08	14,16	13,21	5,81

ANALYSIS OF THE NUMBER OF VOTES FOR DEMOCRATIC PARTY OF RUSSIA

Table 22. Number of for Votes for Democratic Party of Russia Within Economic Regions And Within Russia As A Whole.

	Economic Regions	number of TTTUs	Volume	Regional shares :	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	109729	3,70%	2,07	29844	14390	15454	21945,80	22636	6044,92
2	North-West	4	134112	4,52%	4,38	71584	16339	55245	33528,00	23094,50	25856,06
3	Central	13	705503	23,77%	9,98	182882	18333	164549	54269,46	35634	52819,65
4	Volgo-Vyatskii	5	204222	6,88%	5,13	90381	17623	72758	40844,40	32518	29841,58
5	Central-Chernozyom	5	189813	6,39%	2,91	74545	25626	48919	37962,60	30226	20724,23
6	Povolzhskii	8	296865	10,00%	8,93	73186	8199	64987	37108,13	31117	24143,29
7	North Caucasus	9	361298	12,17%	12,07	105028	8704	96324	40144,22	28083	37372,26
8	Uralskii	7	346674	11,68%	3,24	80720	24926	55794	49524,86	43848	20150,68
9	West Siberia	7	296766	10,00%	21,34	73760	3457	70303	42395,14	46939	24774,60
10	East Siberia	6	152629	5,14%	21,47	50744	2363	48381	25438,17	21289	20427,85
11	Far East	7	145088	4,89%	6,17	49702	8060	41642	20726,86	16990	14736,81
12	Kaliningradskaya oblast	1	25834	0,87%	1,00	25834	25834	0,00	25834,00	25834	0,00
	Russia as a whole	77	2968533	100,00%	77,39	182882	2363	180519	38552,38	30226,00	31371,26

ANALYSIS OF THE SHARE OF VOTES FOR DEMOCRATIC PARTY RUSSIA

Table 23. *Share of Votes for Democratic Russia Within Economic Regions.*

	Economic Regions	number of TTTUs	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	1,60	6,97	4,36	2,61	5,56	5,43	0,95
2	North-West	4	1,54	6,14	3,98	2,16	4,66	4,26	1,01
3	Central	13	1,52	7,71	5,07	2,64	5,87	5,70	0,77
4	Volgo-Vyatskii	5	1,86	9,11	4,89	4,22	6,59	6,62	1,67
5	Central-Chernozyom	5	1,64	7,23	4,41	2,81	5,45	5,09	1,14
6	Povolzhskii	8	1,73	8,13	4,71	3,42	5,94	5,47	1,11
7	North Caucasus	9	19,54	71,07	3,64	67,43	12,56	5,24	21,96
8	Uralskii	7	1,65	7,35	4,45	2,89	5,45	5,34	0,96
9	West Siberia	7	1,58	7,45	4,71	2,74	6,07	6,29	1,07
10	East Siberia	6	2,56	7,48	2,92	4,55	5,29	5,29	1,50
11	Far East	7	1,55	7,75	5,01	2,74	6,35	6,53	1,01
12	Kaliningradskaya oblast	1	1,00	7,58	7,58	0,00	7,58	7,58	0,00
	Russia as a whole	77	24,30	71,07	2,92	68,14	6,60	5,56	7,53

ANALYSIS OF THE NUMBER OF VOTES COMMUNIST PARTY OF THE RUSSIAN FEDERATION

Table 24. Number of Votes for Communist Party of the Russian Federation Within Economic Regions And Within Russia As A Whole.

	Economic Regions	number of TTTUs	Volume	Regional shares :	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	123799	1,86%	1,71	33197	19385	13812	24759,80	23915	5591,67
2	North-West	4	257585	3,86%	4,99	138300	27727	110573	64396,25	45779	50372,78
3	Central	13	1482630	22,24%	11,27	362936	32211	330725	114048,46	85431	99009,83
4	Volgo-Vyatskii	5	404672	6,07%	4,42	147841	33413	114428	80934,40	72323	44160,65
5	Central-Chernozyom	5	539203	8,09%	2,09	149979	71892	78087	107840,60	103567	28667,69
6	Povolzhskii	8	805593	12,08%	12,47	178378	14301	164077	100699,13	113982	61655,71
7	North Caucasus	9	1336887	20,05%	93,97	350679	3732	346947	148543,00	84496	129187,19
8	Uralskii	7	667883	10,02%	4,45	231427	52031	179396	95411,86	84916	62997,92
9	West Siberia	7	486681	7,30%	13,16	103809	7889	95920	69525,86	92288	38272,57
10	East Siberia	6	284375	4,27%	13,38	90815	6787	84028	47395,83	45881	33074,16
11	Far East	7	241637	3,62%	9,34	60541	6484	54057	34519,57	33115	24405,45
12	Kaliningradskaya oblast	1	35457	0,53%	1,00	35457	35457	0	35457,00	35457	0,00
	Russia as a whole	77	6666402	100,00%	97,25	362936	3732	359204	86576,65	65720	76180,57

ANALYSIS OF THE SHARE OF VOTES FOR COMMUNIST PARTY OF THE RUSSIAN FEDERATION

Table 25. Share of Votes for Communist Party of Russia Within Economic Regions.

	Economic Regions	number of TTTUs	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	1,41	7,32	5,19	2,13	6,34	6,44	0,90
2	North-West	4	1,24	9,50	7,69	1,81	8,75	8,90	0,81
3	Central	13	3,15	25,69	8,14	17,55	13,33	12,00	4,98
4	Volgo-Vyatskii	5	2,26	19,73	8,74	10,99	14,27	12,55	4,76
5	Central-Chernozyom	5	1,40	20,03	14,27	5,76	16,32	15,90	2,32
6	Povolzhskii	8	2,08	19,49	9,38	10,11	15,41	15,86	2,99
7	North Caucasus	9	8,39	54,00	6,44	47,57	25,61	20,08	15,06
8	Uralskii	7	2,60	15,08	5,79	9,28	10,32	11,14	3,58
9	West Siberia	7	1,83	13,93	7,63	6,30	10,50	10,05	1,94
10	East Siberia	6	1,86	15,58	8,40	7,18	10,82	10,27	2,59
11	Far East	7	3,09	16,23	5,25	10,98	9,66	8,91	3,70
12	Kaliningradskaya oblast	1	1,00	10,40	10,40	0,00	10,40	10,40	0,00
	Russia as a whole	77	10,40	54,00	5,19	48,81	13,45	11,44	7,73

ANALYSIS OF THE NUMBER OF VOTES FOR LIBERAL DEMOCRATIC PARTY OF RUSSIA

Table 26. Number of for Votes for Liberal Democratic Party of Russia Within Economic Regions And Within Russia As A Whole.

	Economic Regions	number of TTTUs	Volume	Regional shares :	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	493332	4,00%	2,76	153980	55864	98116	98666	87002	37180,05
2	North-West	4	773233	6,28%	3,65	324019	88702	235317	193308	180256	97412,02
3	Central	13	2866656	23,27%	8,47	712315	84053	628262	220512	174453	169298,79
4	Volgo-Vyatskii	5	736747	5,98%	3,91	254320	65123	189197	147349	136369	70988,97
5	Central-Chernozyom	5	1115420	9,05%	1,98	315963	159686	156277	223084	202988	59495,86
6	Povolzhskii	8	1265230	10,27%	13,59	278352	20477	257875	158154	174896	100729,79
7	North Caucasus	9	1386430	11,25%	244,25	453576	1857	451719	154048	38134	192667,55
8	Uralskii	7	1173923	9,53%	3,16	259734	82163	177571	167703	169830	69431,18
9	West Siberia	7	1170668	9,50%	23,88	291274	12195	279079	167238	164093	101797,46
10	East Siberia	6	695645	5,65%	39,73	312283	7861	304422	115941	81339	111648,39
11	Far East	7	539109	4,38%	4,91	158537	32273	126264	77016	75583	44791,36
12	Kaliningradskaya oblast	1	102169	0,83%	1,00	102169	102169	0	102169	102169	0,00
	Russia as a whole	77	12318562	100,00%	383,58	712315	1857	710458	159981	136369	120393,38

ANALYSIS OF THE SHARES OF VOTES FOR LIBERAL DEMOCRATIC PARTY OF RUSSIA

Table 27. Share of Votes for Liberal Democratic Russia Within Economic Regions.

	Economic Regions	number of TTTUs	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	1,41	29,66	21,09	8,57	24,29	24,26	3,31
2	North-West	4	2,39	43,01	18,02	25,00	30,17	29,82	10,21
3	Central	13	2,54	32,63	12,82	19,81	27,03	28,06	5,18
4	Volgo-Vyatskii	5	1,77	35,34	19,91	15,43	25,96	24,47	5,94
5	Central-Chernozyom	5	1,21	37,07	30,63	6,44	33,64	33,48	2,62
6	Povolzhskii	8	1,89	32,56	17,25	15,31	23,83	23,28	5,01
7	North Caucasus	9	12,03	38,53	3,20	35,33	17,49	18,11	11,27
8	Uralskii	7	1,89	23,72	12,56	11,16	18,51	17,72	3,99
9	West Siberia	7	1,73	29,42	17,04	12,38	23,41	21,90	4,36
10	East Siberia	6	3,18	30,89	9,73	21,16	22,64	24,24	8,19
11	Far East	7	2,39	36,86	15,45	21,42	25,03	24,90	6,64
12	Kaliningradskaya oblast	1	1,00	29,96	29,96	0,00	29,96	29,96	0,00
	Russia as a whole	77	13,43	43,01	3,20	39,81	24,34	24,57	7,47

ANALYSIS OF THE NUMBER OF VOTES FOR THE PARTY OF RUSSIAN UNITY AND CONCORD.

Table 28. Number of for Votes for party of Russian Unity and Concord Within Economic Regions And Within Russia As A Whole.

	Economic Regions	number of TTTUs	Volume	Regional shares :	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	133090	3,68%	1,50	34653	23105	11548	26618	24459	4708,51
2	North-West	4	150058	4,15%	3,42	67203	19655	47548	37515	31600	20608,84
3	Central	13	749075	20,69%	11,08	213073	19226	193847	57621	34520	65175,83
4	Volgo-Vyatskii	5	161697	4,47%	4,63	72102	15569	56533	32339	23802	23251,21
5	Central-Chernozyom	5	149554	4,13%	1,76	41499	23630	17869	29911	29840	7230,24
6	Povolzhskii	8	307864	8,50%	6,94	62329	8981	53348	38483	32864	19061,33
7	North Caucasus	9	581459	16,06%	71,75	204047	2844	201203	64607	44287	67300,40
8	Uralskii	7	606989	16,77%	8,71	200492	23019	177473	86713	81323	64804,43
9	West Siberia	7	292373	8,08%	4,35	62155	14291	47864	41768	48777	18478,64
10	East Siberia	6	274585	7,59%	7,36	74211	10089	64122	45764	47652	24718,60
11	Far East	7	195510	5,40%	6,74	55546	8246	47300	27930	24688	17645,63
12	Kaliningradskaya oblast	1	17781	0,49%	1,00	17781	17781	0	17781	17781	0,00
	Russia as a whole	77	3620035	100,00%	74,92	213073	2844	210229	47013	32948	44441,78

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ANALYSIS OF THE SHARE OF VOTES FOR THE PARTY OF RUSSIAN UNITY AND CONCORD

Table 29. Share of Votes for the party of Russian unity and concord Within Economic Regions.

	Economic Regions	number of TTTUs	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	1,75	9,05	5,18	3,87	6,92	6,72	1,41
2	North-West	4	2,70	10,08	3,74	6,34	6,00	5,09	2,80
3	Central	13	1,76	7,20	4,09	3,11	5,80	6,29	1,04
4	Volgo-Vyatskii	5	1,61	6,49	4,03	2,46	5,27	5,34	0,92
5	Central-Chernozyom	5	1,29	5,19	4,02	1,17	4,54	4,69	0,48
6	Povolzhskii	8	1,90	8,91	4,69	4,22	6,72	6,01	1,58
7	North Caucasus	9	6,43	31,53	4,90	26,62	10,28	7,51	8,26
8	Uralskii	7	2,34	13,06	5,58	7,48	8,25	7,00	2,78
9	West Siberia	7	5,30	26,55	5,01	21,54	8,81	5,61	7,88
10	East Siberia	6	7,38	48,38	6,55	41,83	15,95	8,34	16,40
11	Far East	7	1,86	13,01	6,98	6,03	8,51	8,18	2,08
12	Kaliningradskaya oblast	1	1,00	5,21	5,21	0,00	5,21	5,21	0,00
	Russia as a whole	77	12,95	48,38	3,74	44,65	7,91	6,44	6,32

ANALYSIS OF THE NUMBER OF VOTES FOR THE MOVEMENT "WOMEN OF RUSSIA"

Table 30. Number of for Votes for the movement "Women of Russia" Within Economic Regions And Within Russia As A Whole.

|	Economic Regions	number of TTTUs	Volume	Regional shares :	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	218646	5,00%	2,35	65931	28038	37893	43729	41287	14863,72
2	North-West	4	210876	4,83%	3,17	90653	28542	62111	52719	45841	28517,14
3	Central	13	821683	18,80%	7,22	178873	24771	154102	63206	49073	45776,16
4	Volgo-Vyatskii	5	278837	6,38%	5,24	124272	23702	100570	55767	41879	41072,89
5	Central-Chernozyom	5	207947	4,76%	2,1	61492	29257	32235	41589	36408	12736,26
6	Povolzhskii	8	447807	10,25%	10,32	109443	10598	98845	55976	46360	36274,17
7	North Caucasus	9	427706	9,79%	95,5	152618	1598	151020	47523	13920	59427,21
8	Uralskii	7	662072	15,15%	2,4	141729	58893	82836	94582	102358	31721,24
9	West Siberia	7	481331	11,01%	12,75	113869	8927	104942	68762	79841	38969,33
10	East Siberia	6	299221	6,85%	14,69	106906	7276	99630	49870	37264	41285,42
11	Far East	7	286593	6,56%	9,76	103682	10621	93061	40942	35957	33497,59
12	Kaliningradskaya oblast	1	27199	0,62%	1	27199	27199	0	27199	27199	0,00
	Russia as a whole	77	4369918	100,00%	112	178873	1598	177275	56752	44628	39909,11

ANALYSIS OF THE SHARE OF VOTES FOR FOR THE MOVEMENT "WOMEN OF RUSSIA"

Table 31. Share of Votes for the movement "Women of Russia" Within Economic Regions.

	Economic Regions	number of TTTUs	Max/min	Max	Min	Range	Mean	Median	St.Dev.
1	North	5	1,64	12,79	7,82	4,97	11,01	12,18	2,21
2	North-West	4	1,89	9,52	5,04	4,48	8,05	8,81	2,09
3	Central	13	2,53	11,01	4,35	6,66	7,78	7,66	1,83
4	Volgo-Vyatskii	5	1,68	10,32	6,14	4,18	8,93	9,73	1,70
5	Central-Chernozyom	5	1,42	7,12	5,02	2,10	6,25	6,34	0,82
6	Povolzhskii	8	1,47	10,51	7,16	3,34	8,87	8,97	1,37
7	North Caucasus	9	3,66	8,57	2,34	6,23	5,66	5,94	2,27
8	Uralskii	7	1,99	15,53	7,82	7,71	10,93	9,23	3,22
9	West Siberia	7	1,87	14,51	7,78	6,74	10,51	10,65	2,38
10	East Siberia	6	1,46	13,18	9,00	4,18	10,64	10,16	1,62
11	Far East	7	1,77	15,27	8,61	6,66	11,33	10,43	2,22
12	Kaliningradskaya oblast	1	1,00	7,98	7,98	0,00	7,98	7,98	0,00
	Russia as a whole	77	6,63	15,53	2,34	13,19	8,93	8,61	2,71

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