

*Paper Prepared for the International Conference on Experiences and Challenges in Measuring
National Income and Wealth in Transition Economies*

Organized by the International Association
for Income and Wealth and the National Bureau of Statistics of China
September 18-21, 2007, Friendship Hotel, Beijing, China

Economic Growth and Income Inequality Across the Regions
of the Russian Federation (1995 – 2004 years) *

Irina A. Gerasimova

Central Economics and Mathematics Institute of Russian Academy of Sciences

Moscow, Russia

For additional information please contact:

Author Name : Irina A. Gerasimova
Author Address : Central Economics and Mathematics Institute
of Russian Academy of Sciences (CEMI RAS),
47, Nakhimovsky Prospect, Moscow, 117418 Russia
Author E-Mail : iger@cemi.rssi.ru
Author FAX : (495) 718 9615
Author Telephone : (495) 129 1011

*This work has been supported by the Russian Foundation of Humanities,
project № 05-02-02130a

Introduction.

Since the beginning of ninetieths the Poverty and Income Inequality, as well as increasing or very low level of GDP per capita in The Russian Federation have been the most important and stable problems of socio-economic development. During last five - six years, in 2000 – 2005 (6) years the statistical data indicated the tendencies to growing of Gross Domestic Product in Russian Federation, as well as some increasing in living standards of population.

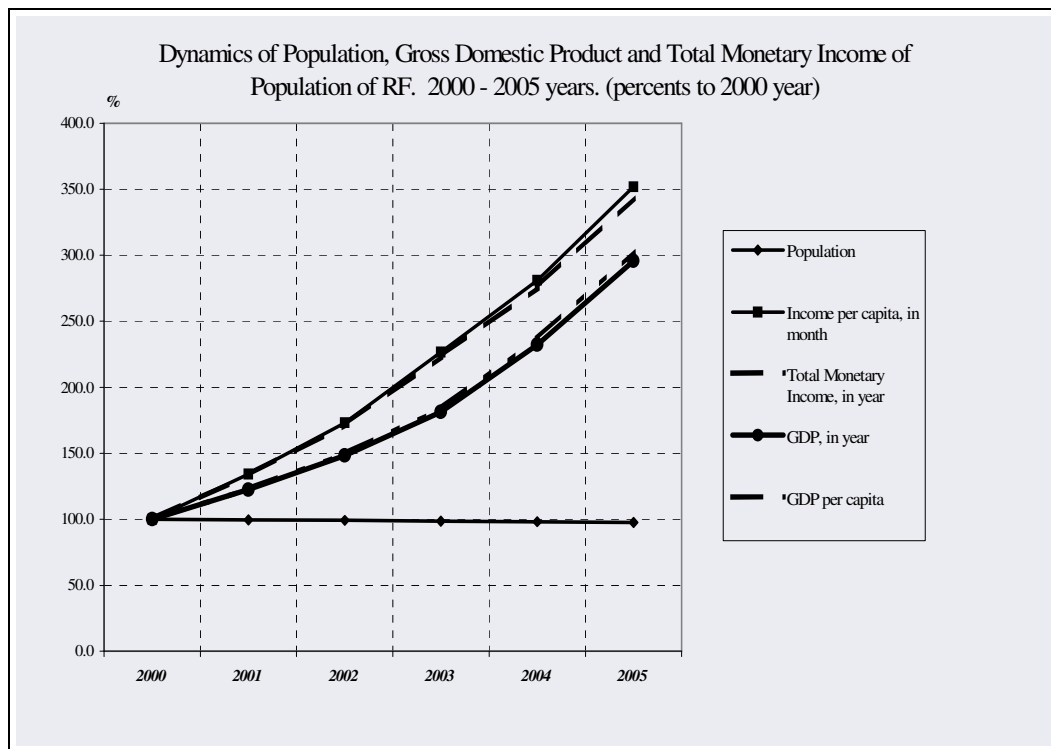
Dynamics of Population, the Gross Domestic Product (further – GDP) and Total monetary Income (further – TMI), estimated in current prices in 1995 – 2004 (5) years have been presented in Tables 1. and Tables 2 and in Figures 1.

Table 1. Main social and economic indicators of Russian Federation in 1995 – 2005 years, at current prices (RUR)

	<i>1995</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
Population, millions	148.3	146.3	145.6	145.0	144.2	143.5	142.8
Income per capita, in month (RUR, before 2000 year – thousands)	515.9	2281.1	3062.0	3947.2	5170.4	6410.3	8023.2
Total Monetary Income, in year, billion RUR (before 2000 year – trillions)	918.1	4004.7	5349.9	6868.1	8946.9	11038.5	13748.6
GDP, in year, billions (1995 year – trillions)	1429.0	7306.0	8944.0	10831.0	13243.0	16966.0	21598.0
GDP per capita, thousands (1995 year – millions)	9.6	49.8	61.3	74.5	91.6	118.0	150.9

Table 2. Main social and economic indicators of Russian Federation in 1995 – 2005 years, percent to 2000 year

	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
Population	100.0	99.5	99.1	98.6	98.1	97.6
Income per capita, in month	100.0	134.2	173.0	226.7	281.0	351.7
Total Monetary Income, in year	100.0	133.6	171.5	223.4	275.6	343.3
GDP, in year	100.0	122.4	148.2	181.3	232.2	295.6
GDP per capita	100.0	122.9	149.6	183.8	236.7	302.8



More than eighty subjects (regions) have been composed The Russian Federation. As to concerned of their economic development it would be very pleased and easily for forecast, if all regions of Russia would be moving at the same direction and with the same speed as the RF at average. The differences between directions and rates of social – economic development of regions (subjects) of RF have been mentioned by many researchers and this opinion has been published in various reports. To clear understand the contemporary situation and to find out and to formulate the set the optimal decisions concerning the further development of the Russia as a whole and its different parts (subjects, Federal Districts), it needs to investigate the trajectories of social and economical evolution of each regions of Russia Federation in dependence from their initial position and try to defined some stable types of regions by evolution. This is the main topic of this paper. For this goal the tendencies of distributions across the regions of RFⁱ (spatial distributions) of three volume macro indicators: Population, Gross Domestic Product (GDP) and Total Monetary Income (TMI)ⁱⁱ during 1995-2004(5) years have been investigated. In the paper have been presented the results of comparative analysis of dynamics of distributions of the three volume indicators by Federal Districts and by deciles groups of regions (Parts I, II and III). Applying of Method of “Classification Tree” let to determine four Classes of regions by composition of dynamics of GDP

and TMI. (Part IV). The initial data for regions, distributions by Deciles Groups and Classes as well as Figures and Maps are presented in Appendixes.

Part I. Population

Since 1995 year the number of Population in FR increased for 5500 thousands of habitants, from 148.3 to 142.8 millions. More then ¼ part of them are living in the Central District. In The City of Moscow and Moscow region. As to concern the distribution of population across the Federal Districts (further – FD), the more significant changes have been referred to 1995 – 2000 years. As the result it could be pointed the growing of population in the Central FD and decreasing of population in Siberian and Far East FD's. (See Tables 1.1. 1.2 and Tables and Figures in Appendix 1. Population)

Table 1.1 Population by Federal Districts of RF, percent, 1995, 2000 - 2005 years

<i>number of FD</i>	Federal District	1995	2000	2001	2002	2003	2004	2005
1	Central	25.7	26.1	26.1	26.2	26.2	26.2	26.2
2	North West	10.0	9.7	9.7	9.6	9.6	9.6	9.6
3	South	15.1	15.5	15.6	15.7	15.8	15.9	15.9
4	Privolzhsky (Volga)	21.6	21.6	21.5	21.5	21.4	21.4	21.4
5	Urals	8.5	8.5	8.5	8.5	8.5	8.6	8.6
6	Siberian	14.1	13.9	13.9	13.8	13.8	13.8	13.8
7	Far East	5.0	4.7	4.6	4.6	4.6	4.6	4.6

Considering the distributions of population by deciles groups of regions (first the regions have been ranged by share of population, living in it) it could be noted that **there were not the redistributions within them, which could be estimated as important factor of changes in shares of GDP, produced by the Federal Districts and regions.**

Table 1.2 Population by deciles groups of Regions of RF (percent). 1995, 2000- 2005 years

deciles group	1995	2000	2001	2002	2003	2004	2005
DG - 1	1.4	1.4	1.4	1.4	1.4	1.4	1.4
DG - 2	3.4	3.4	3.4	3.4	3.4	3.4	3.4
DG - 3	4.9	4.8	4.8	4.8	4.8	4.8	4.7
DG - 4	5.9	5.7	5.7	5.6	5.6	5.6	5.6
DG - 5	7.1	6.9	6.8	6.8	6.7	6.7	6.7
DG - 6	8.2	8.0	7.9	7.9	7.8	7.8	7.8
DG - 7	10.2	10.0	10.0	9.9	9.9	9.9	9.9
DG - 8	14.3	14.5	14.5	14.5	14.5	14.6	14.6
DG - 9	18.2	18.1	18.1	18.1	18.1	18.1	18.2
DG - 10	26.5	27.2	27.4	27.6	27.7	27.8	27.9
FUND Coefficient	18.9	19.5	19.3	19.6	19.7	19.7	19.8

Part 2. Gross Domestic Product of the Russian Federation.

The analysis of data, represented in Tables of this section and Tables and Figures of Appendix II. Has given evidence about same redistribution of GDP by Federal District. It could be easily noted the strengthening of The Central and Ural FD and weakening of all others.

Table 2.1 Gross Domestic Product by Federal Districts of RF. (percent)
1995 - 2004 years

<i>number of FD</i>	<i>Federal District</i>	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
1	Central	25.1	26.0	27.5	29.4	32.1	33.0	32.3	33.8	34.0	31.5
2	North West	10.6	9.7	9.5	10.3	10.3	9.8	9.7	10.0	10.0	10.1
3	South	8.2	8.1	7.7	8.1	7.9	7.6	7.9	7.8	7.8	7.5
4	Privolzhsky (Volga)	20.7	20.1	20.4	19.2	18.6	18.1	18.0	17.0	17.0	16.6
5	Urals	14.7	15.8	15.1	14.0	13.6	15.1	15.6	15.1	15.3	18.0
6	Siberian	15.0	14.4	13.8	13.1	11.8	11.4	11.3	11.1	10.9	11.6
7	Far East	5.8	5.9	6.0	6.0	5.7	5.0	5.1	5.1	5.0	4.7
RF	Russian Federation	100	100	100	100	100	100	100	100	100	100

It needs to underline the differences in rate of GDP across the regions within all FD (Table 2.2). The gaps were high at the beginning of considered period of time and have been increased during the last years. The only in The Far East FD could be watched some decreasing in this gap.

This phenomenon gives the reason to propose that there are the different types of economic evolution of Regions of RF. The investigation of distributions of GDP by deciles groups of regions¹ of RF and then their comparison by different years to confirm that supposition (see Tables 2.3, 2.4 and Appendix 2.)

It's very important to emphasize the growing the differences between lowest and highest deciles groups of regions. Since 1995 year the share of 1-5 DG decreased from 16.0% to 12.8%, the share of 6-10 DG increased from 84.0 % to 87.2 %, and FUND Coefficient raised from 52.0 to 75.9.

¹ initially regions have been ranged by rate of GDP for each year separately

Table 2.2 Minimum and Maximum rates of GDP in RF and Federal Districts,*
1995 - 2004 years

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<i>The Russian Federation</i>										
MIN	0.04	0.04	0.05	0.04	0.05	0.06	0.06	0.04	0.04	0.04
MAX	10.25	12.16	14.26	15.29	18.96	21.05	20.04	21.00	21.08	18.96
MAX - MIN	10.21	12.12	14.21	15.24	18.91	20.99	19.98	20.96	21.04	18.91
<i>The Central FD</i>										
MIN	1.68	1.38	1.31	1.25	0.94	0.87	0.93	0.86	0.84	0.83
MAX	40.88	46.87	51.91	52.07	58.97	63.79	61.99	62.10	61.97	60.15
MAX - MIN	39.21	45.49	50.60	50.82	58.03	62.92	61.06	61.24	61.13	59.32
<i>The North West FD</i>										
MIN	2.95	3.07	3.03	2.59	2.79	2.81	2.73	2.66	2.63	2.48
MAX	31.51	35.31	35.96	36.77	35.14	33.59	36.60	39.06	37.76	35.17
MAX - MIN	28.55	32.23	32.93	34.17	32.35	30.78	33.87	36.40	35.13	32.69
<i>The South FD</i>										
MIN	0.49	0.54	0.61	0.55	0.63	1.21	0.80	0.50	0.54	0.55
MAX	26.92	29.13	26.45	28.07	32.52	31.07	31.01	31.19	30.64	30.01
MAX - MIN	26.43	28.59	25.83	27.51	31.88	29.86	30.21	30.69	30.10	29.46
<i>The Privolzhsky (Volga) FD</i>										
MIN	1.35	1.19	1.35	1.39	1.29	1.07	1.15	1.19	1.25	1.26
MAX	15.42	15.20	16.10	15.75	15.18	18.10	15.70	16.28	16.25	17.02
MAX - MIN	14.08	14.01	14.76	14.35	13.89	17.03	14.55	15.09	14.99	15.76
<i>The Urals FD</i>										
MIN	3.07	2.71	2.65	2.91	2.72	2.09	2.22	2.20	2.19	1.72
MAX	52.74	59.63	59.95	60.18	61.00	65.75	67.65	67.44	67.19	72.62
MAX - MIN	49.67	56.92	57.29	57.27	58.28	63.66	65.43	65.24	65.00	70.90
<i>The Siberian FD</i>										
MIN	0.43	0.45	0.46	0.51	0.53	0.51	0.57	0.60	0.61	0.54
MAX	20.89	20.51	20.52	22.97	26.16	30.37	27.21	22.68	22.31	22.46
MAX - MIN	20.46	20.06	20.06	22.46	25.63	29.86	26.64	22.09	21.70	21.92
<i>The Far East FD</i>										
MIN	1.46	1.28	1.25	1.06	1.24	1.18	1.17	1.41	1.48	1.68
MAX	25.02	23.58	22.92	23.16	25.93	25.94	25.54	24.04	22.91	23.99
MAX - MIN	23.56	22.30	21.68	22.10	24.69	24.76	24.36	22.63	21.43	22.32

- For RF - across all regions, for FD - across regions in it.

Table 2.3 Gross Domestic Product by deciles groups of regions of RF *. 1995 - 2004 years.

Deciles group	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
DG – 1	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.6
DG – 2	2.2	2.2	2.3	2.3	2.2	1.9	2.0	1.9	1.9	1.7
DG – 3	3.3	3.2	3.1	3.2	3.0	2.8	3.0	3.0	2.9	2.8
DG – 4	4.3	4.0	3.9	3.8	3.6	3.5	3.6	3.6	3.6	3.5
DG – 5	5.7	5.3	5.1	5.0	4.7	4.3	4.4	4.2	4.2	4.2
DG – 6	7.3	6.7	6.4	6.5	6.3	5.8	5.9	6.1	6.1	5.9
DG – 7	9.3	8.4	8.3	8.4	7.8	7.6	7.4	7.7	7.8	7.9
DG - 8	12.0	11.5	11.5	10.8	10.5	9.8	9.9	9.7	9.7	10.0
DG - 9	20.2	19.9	19.1	18.3	17.8	16.7	17.1	16.3	16.2	16.0
DG - 10	35.2	38.1	39.7	41.0	43.4	46.9	46.2	46.7	46.9	47.3
FUND Coefficient	52.0	54.3	58.7	60.0	72.3	70.8	65.7	69.7	68.4	75.9
DG(1-5)	16.0	15.4	15.0	15.0	14.1	13.2	13.6	13.4	13.3	12.8
DG(6-10)	84.0	84.6	85.0	85.0	85.9	86.8	86.4	86.6	86.7	87.2
RF	100	100	100	100	100	100	100	100	100	100

* Regions ranged by rate of GDP in each year separately.

Although there are some changes in Rank of regions by GDP, the lowest and the highest deciles groups have been stable (see Appendix 5, Table A5.1). For example at the DG-1 have been included: R. Adygeya (3.1); R. Ingushetia (3.3); R. Kalmykia (3.5); Karachaevo-Ch. R. (3.6); R. Altai (6.1); R. Tuva (6.3); Jewish A. region (7.8); Chukotka A. district (7.9). These regions are presented The South, Siberian and Far East Federal Districts. Their main features – the increasing of share in GDP of RF. The same could be claim about the regions which formed the 2-5 deciles groups.

Also very stable the list of regions formed the tenth DG. They are: Moscow region (1.10); The City of Moscow (1.18); Sankt-Petersburg (2.10); Samara region (4.12); Sverdlovsk region (5.2); Tyumen region (5.3); Krasnoyarsk ter. (6.6). The contributions of these regions in GDP of RF continual growing and the regions dominated in 6-10 DG by GDP. So the main conclusion from this part of investigation that the growing of GDP of RF as a whole determined by small and stable groups of regions. At the same time the others are getting down.

Table 2.4 Minimum and Maximum rates of GDP in Decile Groups. 1995 - 2004 years

	<i>1995</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>
<i>DG - 1</i>										
MIN	0.04	0.04	0.05	0.04	0.05	0.06	0.06	0.04	0.04	0.04
MAX	0.13	0.13	0.13	0.14	0.12	0.14	0.15	0.12	0.16	0.10
MAX-MIN	0.09	0.08	0.08	0.09	0.07	0.08	0.09	0.08	0.12	0.06
<i>DG - 2</i>										
MIN	0.17	0.16	0.15	0.17	0.18	0.16	0.19	0.19	0.18	0.16
MAX	0.36	0.36	0.36	0.36	0.32	0.29	0.30	0.27	0.28	0.26
MAX-MIN	0.19	0.19	0.21	0.19	0.14	0.12	0.11	0.09	0.10	0.10
<i>DG - 3</i>										
MIN	0.36	0.36	0.36	0.37	0.33	0.29	0.30	0.29	0.31	0.30
MAX	0.46	0.43	0.40	0.44	0.42	0.40	0.41	0.43	0.42	0.39
MAX-MIN	0.10	0.07	0.04	0.08	0.08	0.11	0.11	0.14	0.11	0.10
<i>DG - 4</i>										
MIN	0.47	0.44	0.42	0.46	0.43	0.40	0.43	0.43	0.42	0.41
MAX	0.57	0.58	0.53	0.50	0.51	0.48	0.47	0.48	0.47	0.45
MAX-MIN	0.11	0.14	0.11	0.04	0.08	0.08	0.04	0.05	0.05	0.04
<i>DG - 5</i>										
MIN	0.58	0.59	0.53	0.54	0.51	0.49	0.49	0.48	0.47	0.45
MAX	0.83	0.76	0.69	0.69	0.66	0.61	0.62	0.59	0.58	0.60
MAX-MIN	0.25	0.17	0.16	0.15	0.15	0.13	0.13	0.11	0.11	0.15
<i>DG - 6</i>										
MIN	0.83	0.77	0.73	0.70	0.68	0.61	0.66	0.63	0.64	0.60
MAX	1.01	0.93	0.89	0.93	0.89	0.78	0.83	0.89	0.90	0.83
MAX-MIN	0.25	0.17	0.16	0.15	0.15	0.13	0.13	0.11	0.11	0.15
<i>DG - 7</i>										
MIN	1.02	0.93	0.89	0.93	0.89	0.86	0.86	0.89	0.90	0.91
MAX	1.37	1.23	1.27	1.21	1.12	1.04	1.05	1.08	1.07	1.06
MAX-MIN	0.35	0.30	0.38	0.28	0.23	0.19	0.18	0.19	0.17	0.14
<i>DG - 8</i>										
MIN	1.37	1.28	1.34	1.21	1.13	1.09	1.06	1.08	1.08	1.11
MAX	1.87	1.64	1.64	1.66	1.63	1.51	1.50	1.51	1.48	1.44
MAX-MIN	0.35	0.30	0.38	0.28	0.23	0.19	0.18	0.19	0.17	0.14
<i>DG - 9</i>										
MIN	2.20	2.19	2.04	1.90	1.65	1.52	1.62	1.58	1.53	1.54
MAX	2.80	2.95	2.90	2.93	2.82	2.56	2.62	2.47	2.41	2.40
MAX-MIN	0.60	0.76	0.85	1.02	1.17	1.05	1.00	0.90	0.89	0.86
<i>DG - 10</i>										
MIN	3.13	2.97	2.90	3.00	2.83	2.67	2.73	2.52	2.44	2.52
MAX	10.25	12.16	14.26	15.29	18.96	21.05	20.04	21.00	21.08	18.96
MAX-MIN	7.12	9.20	11.35	12.29	16.13	18.38	17.31	18.48	18.64	16.44

Part 3. Interaction between Population, GDP and Total Monetary Income

By analogy with Part 1. and 2. the dynamics and spatial distributions of Total Monetary Income (TMI) by Federal District and deciles groups of regions have been taken by consideration.

Table 3.1 Total Monetary Income by Federal District of RF, percent. 1995, 2000 - 2005 years.

<i>number of FD *</i>	<i>Federal District</i>	<i>1995</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
1	Central	34.60	36.98	36.75	36.09	36.58	36.81	35.87
2	North West	10.96	9.70	9.77	9.82	10.06	10.40	10.65
3	South	9.06	9.74	9.76	10.18	10.15	10.36	10.63
4	Privolzhsky (Volga)	15.51	16.35	16.34	16.55	16.28	16.04	16.45
5	Urals	10.01	10.27	10.66	10.37	10.11	9.92	9.97
6	Siberian	13.54	11.81	11.70	11.85	11.65	11.40	11.41
7	Far East	6.33	5.14	5.03	5.15	5.17	5.07	5.01

- FD - Federal District
-

Table 3.2 Total Monetary Income by deciles groups of regions of RF, percent.
1995, 2000 - 2005 years.

deciles group	<i>1995</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
DG - 1	0.90	0.84	0.87	0.93	0.88	0.85	0.86
DG - 2	2.65	2.33	2.27	2.35	2.21	2.21	2.16
DG - 3	3.75	3.29	3.26	3.31	3.22	3.16	3.07
DG - 4	4.50	4.12	4.10	4.26	4.14	3.97	4.04
DG - 5	5.26	4.62	4.60	4.72	4.63	4.54	4.49
DG - 6	6.35	5.60	5.66	5.77	5.65	5.64	5.66
DG - 7	8.40	7.70	7.89	7.89	7.57	7.61	7.78
DG - 8	10.69	10.30	10.03	10.28	10.31	10.26	10.46
DG - 9	16.27	16.98	17.09	17.07	16.74	16.52	16.95
DG - 10	41.23	44.21	44.22	43.42	44.65	45.24	44.53
FUND Coefficient	46.0	52.9	50.8	46.5	50.9	53.2	51.9

The Distributions presented in Tables 3.1 and 3.2 have been more likes the Data for

Population (Part 1.), then for GDP. So the main conclusion is: **it needs to investigate the interaction between them.** The Coefficients of correlation of these indicators are very high (0.9 and upper) and stable. They could not be used for more detailed studying of the relationship.

For this aim the three dimension vectors by rate (5) of Population, GDP and TMI

(P,GDP,TMI) have been composed for each region and then the regions have been ranged once more by rate of GDP. The results in two variants have been presented in Tables 3.3 and 3.4

Table 3.3 Population, Gross Domestic Product (GDP) and Total Monetary Income (TMI) by deciles groups of GDP, percent. 1995, 2000, 2004 years.

Deciles group by GDP	<i>1995 Popul</i>	<i>1995 GDP</i>	<i>1995 TMI</i>	<i>2000 Popul</i>	<i>2000 GDP</i>	<i>2000 TMI</i>	<i>2004 Popul</i>	<i>2004 GDP</i>	<i>2004 TMI</i>
DG 1	1.6	0.7	0.9	1.6	0.7	0.8	1.7	0.6	0.8
DG 2	4.9	2.2	2.9	4.0	1.9	2.4	3.4	1.7	2.2
DG 3	4.8	3.3	3.6	6.0	2.8	3.7	5.3	2.8	3.3
DG 4	6.3	4.3	4.7	6.1	3.4	4.0	6.3	3.5	4.1
DG 5	7.3	5.7	5.2	6.8	4.3	4.3	8.2	4.2	4.8
DG 6	8.2	7.3	6.4	9.1	5.8	6.2	8.7	5.9	6.2
DG 7	10.5	9.3	8.4	9.6	7.6	7.7	9.4	7.9	7.9
DG 8	13.1	12.0	10.7	11.7	9.8	9.9	11.2	10.0	9.0
DG 9	19.7	20.2	16.9	20.5	16.7	17.3	20.6	16.0	17.2
DG 10	23.7	35.2	40.5	24.7	46.9	43.7	25.3	47.3	44.6
DG 1 - 5	24.9	16.2	17.3	24.5	13.1	15.2	24.9	12.8	15.2
DG 6 - 10	75.2	84.0	82.9	75.6	86.8	84.8	75.2	87.1	84.9

* regions ranged by rate of GDP for each years separately

Table 3.4 Dynamics of Distributions of Population, GDP and TMI by deciles groups of GDP, percent. 1995, 2000, 2004 years.

Decile group by GDP	<i>1995 Popul</i>	<i>2000 Popul</i>	<i>2004 Popul</i>	<i>1995 GDP</i>	<i>2000 GDP</i>	<i>2004 GDP</i>	<i>1995 TMI</i>	<i>2000 TMI</i>	<i>2004 TMI</i>
DG 1	1.6	1.6	1.7	0.7	0.7	0.6	0.9	0.8	0.8
DG 2	4.9	4.0	3.4	2.2	1.9	1.7	2.9	2.4	2.2
DG 3	4.8	6.0	5.3	3.3	2.8	2.8	3.6	3.7	3.3
DG 4	6.3	6.1	6.3	4.3	3.4	3.5	4.7	4.0	4.1
DG 5	7.3	6.8	8.2	5.7	4.3	4.2	5.2	4.3	4.8
DG 6	8.2	9.1	8.7	7.3	5.8	5.9	6.4	6.2	6.2
DG 7	10.5	9.6	9.4	9.3	7.6	7.9	8.4	7.7	7.9
DG 8	13.1	11.7	11.2	12.0	9.8	10.0	10.7	9.9	9.0
DG 9	19.7	20.5	20.6	20.2	16.7	16.0	16.9	17.3	17.2
DG 10	23.7	24.7	25.3	35.2	46.9	47.3	40.5	43.7	44.6
Total	100	100	100	100	100	100	100	100	100

* regions ranged by rate of GDP for each year separately

The significant result of consideration of these type of spatial distributions (not only separate indicators, but 3-dimentional vectors) by regions and their deciles groups are: **for the most of regions of RF the rate of TMI lower then its share in Population and GDP.**

This differentiation increased during practically the all period of time. Only in the last years some tendencies to decreasing of this gaps between share of Population, GDP as indicator of economic development of region, and TMI as indicator of well-being of population has been outlined.

To study the various types of evolution of regions by dynamics of GDP and TMI during the time the method named “Classification Tree” has been applied to the collected data across the regions of RF. The algorithm of classification and the results has been placed in Part 4 and Appendix 4.

Part 4. Classification of Regions of RF by dynamics of rates of GDP and TMI in ($t2 - t1$)

1. Types of regions by dynamics of rate of GDP.

The three sub-classes are determined by differences between rates of **GDP(t2)** and **GDP(t1)**:

- a) Sub-class "**GDP+**" : $\{ \text{GDP}(t2) - \text{GDP}(t1) > 0.01 \}$. It's the sub-class of regions, increasing by the rate of GDP.
- b) Sub-class "**GDP=**" : $\{ -0.01 \leq \text{GDP}(t2) - \text{GDP}(t1) \leq 0.01 \}$. It's the sub-class of regions, stable by the rate of GDP.
- c) Sub-class "**GDP-**" : $\{ \text{GDP}(t2) - \text{GDP}(t1) < -0.01 \}$. It's the sub-class of regions, decreasing by the rate of GDP.

2. Types of regions by dynamics of rate of TMI.

The three sub-classes are determined by differences between rates of **TMI(t2)** and **TMI(t1)**:

- d) Sub-class "**TMI+**" : $\{ \text{TMI}(t2) - \text{TMI}(t1) > 0.01 \}$. It's the sub-class of regions, increasing by the rate of TMI.
- e) Sub-class "**TMI=**" : $\{ -0.01 \leq \text{TMI}(t2) - \text{TMI}(t1) \leq 0.01 \}$. It's the sub-class of regions, stable by the rate of TMI.
- f) Sub-class "**TMI-**" : $\{ \text{TMI}(t2) - \text{TMI}(t1) < -0.01 \}$. It's the sub-class of regions, decreasing by the rate of TMI.

3. Classification of regions by composition of sub-classes.

Classification of regions (initial)			
	TMI+	TMI=	TMI-
GDP+	Class1	Class2	Class3
GDP=	Class4	Class5	Class6
GDP-	Class7	Class8	Class9

Aggregated classification			
	TMI+	TMI=	TMI-
GDP+	Class1	others	Class3
GDP=	others	others	others
GDP-	Class7	others	Class9

Names of Classes		
composition of sub-classes	name (inital)	name (aggerate)
(GDP+; TMI+)	Class1	Class1
(GDP+; TMI=)	Class2	others
(GDP+; TMI-)	Class3	Class3
(GDP=; TMI+)	Class4	others
(GDP=; TMI=)	Class5	others
(GDP=; TMI-)	Class6	others
(GDP-; TMI+)	Class7	Class7
(GDP-; TMI=)	Class8	others
(GDP-; TMI-)	Class9	Class9

Table 4.1 Classification of regions by dynamics in 1995 - 2000 years

		TMI+	TMI=	TMI-
GDP+	10	3	4	17
GDP=	1	2	1	4
GDP-	13	5	40	58
Total	24	10	45	79

Table 4.1a Classification of regions by dynamics in 1995 - 2000 years, percent

	TMI+	TMI=	TMI-	Total
GDP+	12.7	3.8	5.1	21.5
GDP=	1.3	2.5	1.3	5.1
GDP-	16.5	6.3	50.6	73.4
Total	30.4	12.7	57.0	100.0

Table 4.2 Classification of regions by dynamics in 2000 - 2004 years

	TMI+	TMI=	TMI-	Total
GDP+	10	8	8	26
GDP=	3	6	5	14
GDP-	11	4	24	39
Total	24	18	37	79

Table 4.2a Classification of regions by dynamics in 2000 - 2004 years, percent

	TMI+	TMI=	TMI-	Total
GDP+	12.7	10.1	10.1	32.9
GDP=	3.8	7.6	6.3	17.7
GDP-	13.9	5.1	30.4	49.4
Total	30.4	22.8	46.8	100.0

Table 4.3 Classification of regions by dynamics in 1995 - 2004 years

	TMI+	TMI=	TMI-	Total
GDP+	10	1	4	15
GDP=	2	2	5	9
GDP-	10	4	41	55
Total	22	7	50	79

Table 4.3a Classification of regions by dynamics in 1995 - 2004 years, percent

	TMI+	TMI=	TMI-	Total
GDP+	12.7	1.3	5.1	19.0
GDP=	2.5	2.5	6.3	11.4
GDP-	12.7	5.1	51.9	69.6
Total	27.8	8.9	63.3	100.0

Table 4.4 Population, Gross Domestic Product (GDP) and Total Monetary Income (TMI) by deciles groups of GDP, percent. 1995, 2000, 2004 years.

Deciles group by GDP	<i>1995 Popul</i>	<i>1995 GDP</i>	<i>1995 TMI</i>	<i>2000 Popul</i>	<i>2000 GDP</i>	<i>2000 TMI</i>	<i>2004 Popul</i>	<i>2004 GDP</i>	<i>2004 TMI</i>
DG 1	1.6	0.7	0.9	1.6	0.7	0.8	1.7	0.6	0.8
DG 2	4.9	2.2	2.9	4.0	1.9	2.4	3.4	1.7	2.2
DG 3	4.8	3.3	3.6	6.0	2.8	3.7	5.3	2.8	3.3
DG 4	6.3	4.3	4.7	6.1	3.4	4.0	6.3	3.5	4.1
DG 5	7.3	5.7	5.2	6.8	4.3	4.3	8.2	4.2	4.8
DG 6	8.2	7.3	6.4	9.1	5.8	6.2	8.7	5.9	6.2
DG 7	10.5	9.3	8.4	9.6	7.6	7.7	9.4	7.9	7.9
DG 8	13.1	12.0	10.7	11.7	9.8	9.9	11.2	10.0	9.0
DG 9	19.7	20.2	16.9	20.5	16.7	17.3	20.6	16.0	17.2
DG 10	23.7	35.2	40.5	24.7	46.9	43.7	25.3	47.3	44.6
DG 1 - 5	24.9	16.2	17.3	24.5	13.1	15.2	24.9	12.8	15.2
DG 6 - 10	75.2	84.0	82.9	75.6	86.8	84.8	75.2	87.1	84.9

* regions ranged by rate of GDP for each years separately

Table 4.5 Dynamics of Distributions of Population, GDP and TMI by deciles groups of GDP, percent. 1995, 2000, 2004 years.

Decile group by GDP	<i>1995 Popul</i>	<i>2000 Popul</i>	<i>2004 Popul</i>	<i>1995 GDP</i>	<i>2000 GDP</i>	<i>2004 GDP</i>	<i>1995 TMI</i>	<i>2000 TMI</i>	<i>2004 TMI</i>
DG 1	1.6	1.6	1.7	0.7	0.7	0.6	0.9	0.8	0.8
DG 2	4.9	4.0	3.4	2.2	1.9	1.7	2.9	2.4	2.2
DG 3	4.8	6.0	5.3	3.3	2.8	2.8	3.6	3.7	3.3
DG 4	6.3	6.1	6.3	4.3	3.4	3.5	4.7	4.0	4.1
DG 5	7.3	6.8	8.2	5.7	4.3	4.2	5.2	4.3	4.8
DG 6	8.2	9.1	8.7	7.3	5.8	5.9	6.4	6.2	6.2
DG 7	10.5	9.6	9.4	9.3	7.6	7.9	8.4	7.7	7.9
DG 8	13.1	11.7	11.2	12.0	9.8	10.0	10.7	9.9	9.0
DG 9	19.7	20.5	20.6	20.2	16.7	16.0	16.9	17.3	17.2
DG 10	23.7	24.7	25.3	35.2	46.9	47.3	40.5	43.7	44.6
Total	100	100	100	100	100	100	100	100	100

* regions ranged by rate of GDP for each year separately

The main result of classification should be formulated as:

only 12 – 13 percent of regions have got the positive dynamics on economic development and income during the last ten years. They could be named “the best” and they are the Engine of the positive dynamics of RF as a whole;

30-50 percents of regions “falling down” by rate of GDP and TMI, they have got the negative dynamics and should be named “The worst”;

the last 35- 40 percent of regions have not got the some stable dynamics and saved their middle position within the others regions.

In conclusion it could be established that since the middle of ninetieth the differences across the regions of RF by levels and directions of economic development have been raising. So the results of the investigation let to formulate more questions then to give the answer about the perspectives of economic development and Well-being of population across the regions of The Russian Federation.

Data sources :

Official Statistical Publication of State committee of the Russian federation on statistics (ROSSTAT) for 2002 – 2007 years.

Statistical Handbooks:

1. Statistical Yearbook of Russia
2. Social Status and Living Standard of Population of Russia
3. Regions of Russia. Social and Economic Indicators
4. Regions of Russia. Basic Characteristics of Subjects of the Russian Federation

ⁱ The objects (units) of investigation have been the 79 regions of The Russian Federation, in witch living 98 – 99 percent of population.

ⁱⁱ Total Monetary Income of population (TMI) composed by five sources: 1) wages (salaries); 2) business (enterprise) activity; 3) social transfers; 4) property; 5) other incomes, including profit from shady economy.

Appendix 1. Population of The Russian Federation

Table A1.1 Population by Regions of The Russian Federation, percent.1995,
2000 – 2005 years

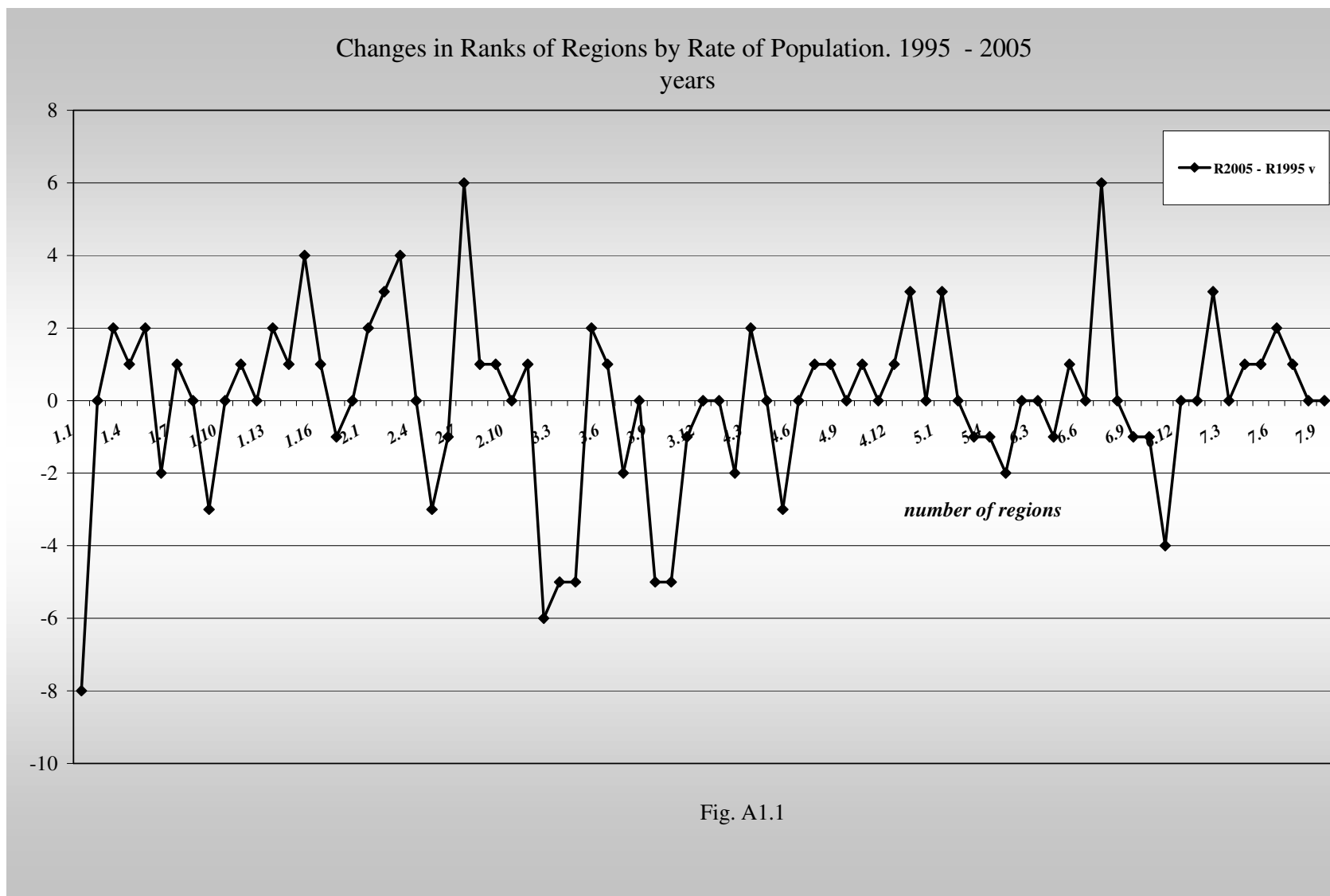
<i>Regions of RF</i>	<i>number in RF</i>	<i>number in FD</i>	<i>1995</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
Russian Federation	RF	RF	100	100	100	100	100	100	100
Belgorod region	1	1.1	0.99	1.03	1.04	1.05	1.05	1.06	1.06
Bryansk region	2	1.2	1.00	0.97	0.97	0.96	0.95	0.95	0.94
Vladimir region	3	1.3	1.11	1.08	1.07	1.06	1.05	1.05	1.04
Voronezh region	4	1.4	1.69	1.67	1.66	1.65	1.65	1.64	1.64
Ivanovo region	5	1.5	0.85	0.82	0.81	0.80	0.79	0.79	0.78
Kaluga region	6	1.6	0.74	0.73	0.73	0.72	0.72	0.72	0.72
Kostroma region	7	1.7	0.54	0.52	0.52	0.51	0.51	0.51	0.50
Kursk region	8	1.8	0.90	0.88	0.87	0.86	0.85	0.85	0.84
Lipetzk region	9	1.9	0.85	0.85	0.84	0.84	0.84	0.84	0.84
Moscow region	10	1.1	4.53	4.55	4.56	4.59	4.61	4.64	4.67
Oryol region	11	1.11	0.62	0.60	0.60	0.60	0.60	0.59	0.59
Ryazan region	12	1.12	0.90	0.87	0.86	0.85	0.85	0.84	0.84
Smolensk region	13	1.13	0.78	0.75	0.74	0.73	0.72	0.72	0.71
Tambov region	14	1.14	0.88	0.84	0.83	0.82	0.81	0.81	0.80
Tver region	15	1.15	1.10	1.05	1.04	1.03	1.01	1.01	1.00
Tula region	16	1.16	1.23	1.19	1.18	1.17	1.16	1.14	1.13
Yaroslavl region	17	1.17	0.99	0.96	0.96	0.95	0.95	0.94	0.94
Moscow	18	1.18	6.23	6.89	7.03	7.16	7.24	7.29	7.34
R. Karelia	19	2.1	0.52	0.50	0.50	0.50	0.50	0.49	0.49
R. Komi	20	2.2	0.78	0.72	0.71	0.71	0.70	0.70	0.70
Arkhangelsk region	21	2.3	1.01	0.95	0.94	0.93	0.92	0.92	0.91
Vologda region	22	2.4	0.91	0.89	0.89	0.88	0.88	0.88	0.87
Kaliningrad region	23	2.5	0.64	0.66	0.66	0.66	0.66	0.66	0.66
Leningrad region	24	2.6	1.14	1.16	1.16	1.16	1.16	1.16	1.16
Murmansk region	25	2.7	0.71	0.64	0.63	0.62	0.62	0.61	0.61
Novgorod region	26	2.8	0.50	0.49	0.49	0.48	0.48	0.48	0.47
Pskov region	27	2.9	0.56	0.54	0.54	0.53	0.52	0.52	0.51
Sankt-Petersburg	28	2.1	3.28	3.25	3.24	3.24	3.23	3.23	3.23
R. Adygeya	29	3.1	0.31	0.31	0.31	0.31	0.31	0.31	0.31
R. Dagestan	30	3.2	1.50	1.69	1.73	1.77	1.81	1.83	1.85
R. Ingushetia	31	3.3	0.19	0.27	0.31	0.32	0.33	0.34	0.34
Kabardino-BalkR.	32	3.4	0.56	0.61	0.61	0.62	0.63	0.63	0.63
R. Kalmykia	33	3.5	0.21	0.21	0.21	0.20	0.20	0.20	0.20
Karachaevo-Ch. R.	34	3.6	0.30	0.30	0.30	0.30	0.31	0.31	0.31
R. North Ossetia	35	3.7	0.46	0.48	0.49	0.49	0.49	0.49	0.50
Krasnodar territory	36	3.8	3.43	3.53	3.54	3.55	3.56	3.58	3.59
Stavropol territory	37	3.9	1.82	1.88	1.89	1.90	1.90	1.91	1.91

Astrakhan region	38	3.1	0.69	0.69	0.70	0.70	0.70	0.70	0.70
Volgograd region	39	3.11	1.85	1.88	1.87	1.87	1.87	1.87	1.86
Rostov region	40	3.12	3.05	3.06	3.06	3.06	3.05	3.05	3.04
R. Bashkortostan	41	4.1	2.77	2.83	2.84	2.85	2.86	2.86	2.87
R. Marij El	42	4.2	0.51	0.51	0.51	0.51	0.50	0.50	0.50
R. Mordovia	43	4.3	0.65	0.63	0.62	0.62	0.61	0.61	0.61
R. Tatarstan	44	4.4	2.55	2.60	2.61	2.62	2.63	2.64	2.65
Udmurtian R.	45	4.5	1.10	1.09	1.09	1.09	1.09	1.09	1.09
Chuvashi R.	46	4.6	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Kirov region	47	4.7	1.10	1.06	1.05	1.05	1.04	1.03	1.02
N.- Novgorod reg	48	4.8	2.53	2.48	2.47	2.45	2.44	2.43	2.41
Orenburg region	49	4.9	1.51	1.52	1.52	1.51	1.51	1.51	1.51
Penza region	50	4.1	1.05	1.03	1.02	1.01	1.01	1.00	1.00
Perm region	51	4.11	2.01	1.97	1.96	1.96	1.95	1.95	1.94
Samara region	52	4.12	2.25	2.26	2.25	2.25	2.25	2.25	2.25
Saratov region	53	4.13	1.86	1.86	1.86	1.85	1.85	1.85	1.84
Ulyanovsk region	54	4.14	1.00	0.98	0.97	0.96	0.96	0.95	0.95
Kurgan region	55	5.1	0.74	0.72	0.72	0.71	0.70	0.70	0.69
Sverdlovsk region	56	5.2	3.17	3.13	3.13	3.12	3.11	3.11	3.11
Tyumen region	57	5.3	2.16	2.22	2.24	2.26	2.29	2.31	2.34
Chelyabinsk region	58	5.4	2.50	2.51	2.51	2.50	2.50	2.50	2.49
R. Altai	59	6.1	0.14	0.14	0.14	0.14	0.14	0.14	0.14
R. Buryatia	60	6.2	0.70	0.69	0.68	0.68	0.68	0.68	0.68
R. Tuva	61	6.3	0.21	0.21	0.21	0.21	0.21	0.22	0.22
R. Khakasia	62	6.4	0.39	0.38	0.38	0.38	0.38	0.38	0.38
Altai territory	63	6.5	1.83	1.82	1.82	1.81	1.81	1.80	1.80
Krasnoyarsk territory	64	6.6	2.11	2.07	2.06	2.06	2.06	2.06	2.05
Irkutsk region	65	6.7	1.86	1.81	1.80	1.79	1.79	1.79	1.79
Kemerovo region	66	6.8	2.08	2.03	2.02	2.01	2.01	2.01	2.01
Novosibirsk region	67	6.9	1.86	1.87	1.87	1.87	1.87	1.87	1.87
Omsk region	68	6.1	1.47	1.46	1.45	1.45	1.44	1.44	1.44
Tomsk region	69	6.11	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Chita region	70	6.12	0.85	0.81	0.81	0.80	0.80	0.80	0.80
R. Sakha (Yakutia)	71	7.1	0.70	0.66	0.66	0.66	0.66	0.67	0.67
Primorsky territory	72	7.2	1.53	1.46	1.45	1.44	1.44	1.43	1.43
Khabarovsk territory	73	7.3	1.06	1.01	1.00	1.00	1.00	1.00	1.00
Amur region	74	7.4	0.67	0.64	0.63	0.63	0.63	0.62	0.62
Kamchatka region	75	7.5	0.28	0.25	0.25	0.25	0.25	0.25	0.25
Magadan region	76	7.6	0.17	0.14	0.13	0.13	0.13	0.12	0.12
Sakhalin region	77	7.7	0.44	0.39	0.38	0.38	0.38	0.38	0.37
Jewish A.region	78	7.8	0.14	0.13	0.13	0.13	0.13	0.13	0.13
Chukotka A.district	79	7.9	0.06	0.04	0.04	0.04	0.04	0.04	0.04

Table A1.2 Rank of Regions by rate of Population. 1995, 2000 - 2005 years

regions of RF	<i>number in RF</i>	<i>number in FD</i>	1995	2000	2001	2002	2003	2004	2005	<i>R2005 - R1995</i>
Belgorod region	1	1.1	38	33	32	31	30	30	30	-8
Bryansk region	2	1.2	37	37	37	37	37	37	37	0
Vladimir region	3	1.3	29	30	30	30	31	31	31	2
Voronezh region	4	1.4	22	23	23	23	23	23	23	1
Ivanovo region	5	1.5	45	46	47	47	47	47	47	2
Kaluga region	6	1.6	51	49	49	50	50	50	49	-2
Kostroma region	7	1.7	63	63	63	63	63	63	64	1
Kursk region	8	1.8	42	42	42	42	42	42	42	0
Lipetzk region	9	1.9	47	44	44	44	44	44	44	-3
Moscow region	10	1.10	2	2	2	2	2	2	2	0
Oryol region	11	1.11	60	61	61	61	61	61	61	1
Ryazan region	12	1.12	43	43	43	43	43	43	43	0
Smolensk region	13	1.13	48	48	48	48	49	49	50	2
Tambov region	14	1.14	44	45	45	45	45	45	45	1
Tver region	15	1.15	30	32	33	33	33	33	34	4
Tula region	16	1.16	27	27	27	27	28	28	28	1
Yaroslavl region	17	1.17	39	38	38	38	38	38	38	-1
The City of Moscow	18	1.18	1	1	1	1	1	1	1	0
Republic of Karelia	19	2.1	64	65	65	65	65	65	66	2
Republic of Komi	20	2.2	49	52	52	52	51	51	52	3
Arkhangelsk region	21	2.3	35	39	39	39	39	39	39	4
Vologda region	22	2.4	41	41	41	41	41	41	41	0
Kaliningrad region	23	2.5	59	56	55	55	55	56	56	-3
Leningrad region	24	2.6	28	28	28	28	27	27	27	-1
Murmansk region	25	2.7	53	57	58	58	59	59	59	6
Novgorod region	26	2.8	66	66	67	67	67	67	67	1
Pskov region	27	2.9	61	62	62	62	62	62	62	1
The City of Sankt-Petersburg	28	2.10	4	4	4	4	4	4	4	0
R. of Adygeya	29	3.1	70	70	71	71	71	71	71	1
R. of Dagestan	30	3.2	25	22	22	22	21	20	19	-6
R. of Ingushetia	31	3.3	75	72	70	70	70	70	70	-5
Kabardino-Balk. R.	32	3.4	62	60	60	58	57	57	57	-5
R. of Kalmykia	33	3.5	73	74	75	75	75	75	75	2
Karachaevo-Ch.n R.	34	3.6	71	71	72	72	72	72	72	1
R. of North Ossetiaa	35	3.7	67	67	66	66	66	66	65	-2
Krasnodar territory	36	3.8	3	3	3	3	3	3	3	0
Stavropol territory	37	3.9	21	16	16	16	16	16	16	-5
Astrakhan region	38	3.10	56	53	53	53	53	52	51	-5
Volgograd region	39	3.11	19	17	17	17	17	18	18	-1
Rostov region	40	3.12	6	6	6	6	6	6	6	0
R. of Bashkortostan	41	4.1	7	7	7	7	7	7	7	0

R. of Marij El	42	4.2	65	64	64	64	64	64	63	-2
R. of Mordovia	43	4.3	58	59	59	60	60	60	60	2
R. of Tatarstan	44	4.4	8	8	8	8	8	8	8	0
Udmurtian Republic	45	4.5	32	29	29	29	29	29	29	-3
Chuvashi Republic	46	4.6	40	40	40	40	40	40	40	0
Kirov region	47	4.7	31	31	31	32	32	32	32	1
N. Novgorod region	48	4.8	9	10	10	10	10	10	10	1
Orenburg region	49	4.9	24	24	24	24	24	24	24	0
Penza region	50	4.10	34	34	34	34	34	34	35	1
Perm region	51	4.11	15	15	15	15	15	15	15	0
Samara region	52	4.12	11	11	11	12	12	12	12	1
Saratov region	53	4.13	17	19	19	19	19	19	20	3
Ulyanovsk region	54	4.14	36	36	36	36	36	36	36	0
Kurgan region	55	5.1	50	51	51	51	52	53	53	3
Sverdlovsk region	56	5.2	5	5	5	5	5	5	5	0
Tyumen region	57	5.3	12	12	12	11	11	11	11	-1
Chelyabinsk region	58	5.4	10	9	9	9	9	9	9	-1
R. of Altai	59	6.1	78	76	76	76	76	76	76	-2
R. of Buryatia	60	6.2	54	54	54	54	54	54	54	0
R. of Tuva	61	6.3	74	75	74	74	74	74	74	0
R. of Khakasia	62	6.4	69	69	69	69	68	68	68	-1
Altai territory	63	6.5	20	20	20	20	20	21	21	1
Krasnoyarsk ter.	64	6.6	13	13	13	13	13	13	13	0
Irkutsk region	65	6.7	16	21	21	21	22	22	22	6
Kemerovo region	66	6.8	14	14	14	14	14	14	14	0
Novosibirsk region	67	6.9	18	18	18	18	18	17	17	-1
Omsk region	68	6.10	26	26	25	25	25	25	25	-1
Tomsk region	69	6.11	52	50	50	49	48	48	48	-4
Chita region	70	6.12	46	47	46	46	46	46	46	0
R. Sakha (Yakutia)	71	7.1	55	55	56	56	56	55	55	0
Primorsky territory	72	7.2	23	25	26	26	26	26	26	3
Khabarovsk territory	73	7.3	33	35	35	35	35	35	33	0
Amur region	74	7.4	57	58	57	57	58	58	58	1
Kamchatka region	75	7.5	72	73	73	73	73	73	73	1
Magadan region	76	7.6	76	77	78	78	78	78	78	2
Sakhalin region	77	7.7	68	68	68	68	69	69	69	1
Jewish A. region	78	7.8	77	78	77	77	77	77	77	0
Chukotka A. district	79	7.9	79	79	79	79	79	79	79	0



Population by decile groups of Regions. 1995, 2000- 2005 years

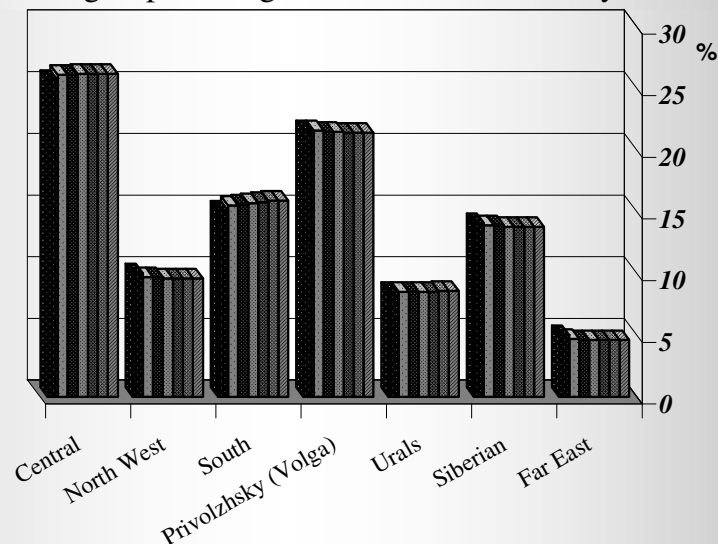
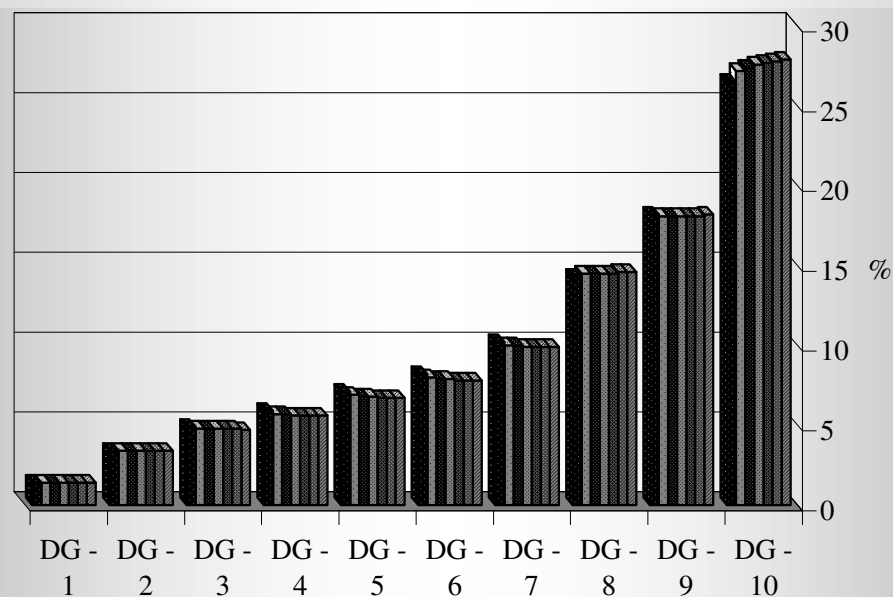


Fig A1.2

	Central	North West	South	Privolzhsky (Volga)	Urals	Siberian	Far East
1995	25.7	10	15.1	21.6	8.5	14.1	5
2000	26.1	9.7	15.5	21.6	8.5	13.9	4.7
2001	26.1	9.7	15.6	21.5	8.5	13.9	4.6
2002	26.2	9.6	15.7	21.5	8.5	13.8	4.6
2003	26.2	9.6	15.8	21.4	8.5	13.8	4.6
2004	26.2	9.6	15.9	21.4	8.6	13.8	4.6
2005	26.2	9.6	15.9	21.4	8.6	13.8	4.6

Population by decile groups of Regions (percent). 1995, 2000- 2005 years



	DG - 1	DG - 2	DG - 3	DG - 4	DG - 5	DG - 6	DG - 7	DG - 8	DG - 9	DG - 10
■ 1995	1.4	3.4	4.9	5.9	7.1	8.2	10.2	14.3	18.2	26.5
□ 2000	1.4	3.4	4.8	5.7	6.9	8	10	14.5	18.1	27.2
■ 2001	1.4	3.4	4.8	5.7	6.8	7.9	10	14.5	18.1	27.4
□ 2002	1.4	3.4	4.8	5.6	6.8	7.9	9.9	14.5	18.1	27.6
■ 2003	1.4	3.4	4.8	5.6	6.7	7.8	9.9	14.5	18.1	27.7
□ 2004	1.4	3.4	4.8	5.6	6.7	7.8	9.9	14.6	18.1	27.8
■ 2005	1.4	3.4	4.7	5.6	6.7	7.8	9.9	14.6	18.2	27.9

Appendix 2. Gross Domestic Product of The Russian Federation

Table A2.1 Gross Domestic Product by Regions of RF (percent). 1995, 2000 - 2004 years

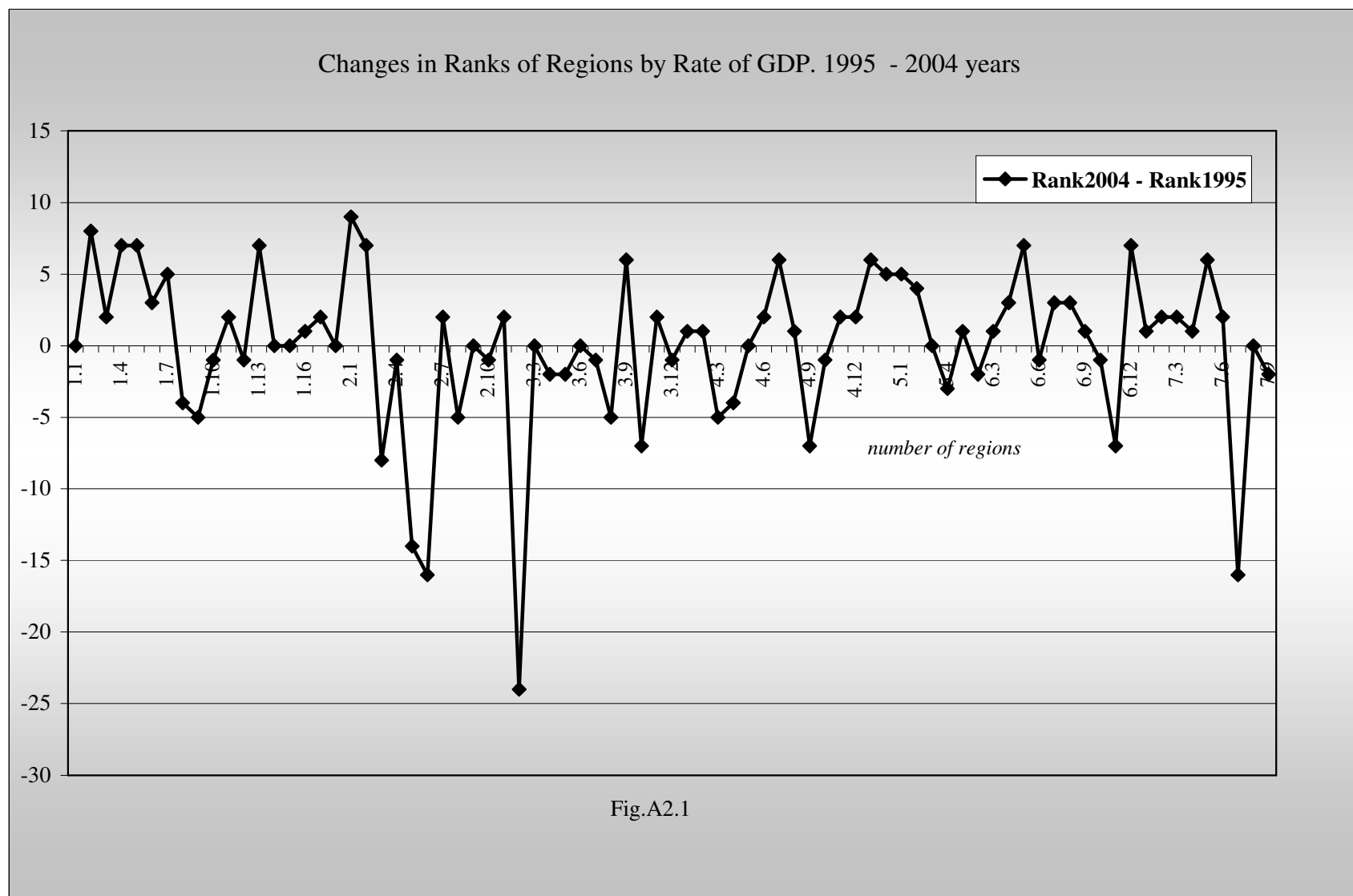
regions of RF	<i>number in RF</i>	<i>number in FD</i>	1995	2000	2001	2002	2003	2004
Russian Federation	RF	RF	100	100	100	100	100	100
Belgorod region	1	1.1	0.89	0.71	0.69	0.70	0.69	0.78
Bryansk region	2	1.2	0.55	0.42	0.41	0.42	0.42	0.38
Vladimir region	3	1.3	0.76	0.57	0.58	0.57	0.58	0.51
Voronezh region	4	1.4	1.17	0.86	0.83	0.93	0.91	0.80
Ivanovo region	5	1.5	0.46	0.29	0.30	0.30	0.31	0.30
Kaluga region	6	1.6	0.58	0.41	0.44	0.43	0.46	0.45
Kostroma region	7	1.7	0.42	0.29	0.30	0.29	0.28	0.26
Kursk region	8	1.8	0.68	0.52	0.50	0.51	0.51	0.57
Lipetzk region	9	1.9	0.98	0.77	0.67	0.76	0.85	0.99
Moscow region	10	1.10	3.38	3.24	3.39	3.67	3.86	3.77
Oryol region	11	1.11	0.43	0.41	0.40	0.42	0.40	0.35
Ryazan region	12	1.12	0.74	0.51	0.57	0.59	0.57	0.55
Smolensk region	13	1.13	0.56	0.48	0.49	0.47	0.45	0.39
Tambov region	14	1.14	0.47	0.40	0.43	0.44	0.44	0.41
Tver region	15	1.15	0.83	0.61	0.66	0.63	0.64	0.60
Tula region	16	1.16	0.88	0.71	0.72	0.73	0.67	0.60
Yaroslavl region	17	1.17	1.05	0.75	0.92	0.93	0.90	0.83
Moscow	18	1.18	10.25	21.05	20.04	21.00	21.08	18.96
R. Karelia	19	2.1	0.57	0.45	0.44	0.44	0.41	0.38
R. Komi	20	2.2	1.38	1.04	1.11	0.99	0.98	0.97
Arkhangelsk region	21	2.3	1.01	1.01	0.88	0.90	0.93	1.06
Vologda region	22	2.4	1.37	1.13	0.87	0.89	0.99	1.13
Kaliningrad region	23	2.5	0.37	0.40	0.44	0.44	0.44	0.45
Leningrad region	24	2.6	0.89	0.95	1.05	1.08	1.14	1.20
Murmansk region	25	2.7	1.02	0.92	0.74	0.74	0.71	0.81
Novgorod region	26	2.8	0.31	0.35	0.36	0.35	0.34	0.32
Pskov region	27	2.9	0.33	0.28	0.27	0.27	0.26	0.25
Sankt-Petersburg	28	2.10	3.34	3.30	3.55	3.90	3.76	3.56
R. Adygeya	29	3.1	0.13	0.10	0.09	0.09	0.09	0.09
R. Dagestan	30	3.2	0.29	0.34	0.41	0.45	0.47	0.52
R. Ingushetia	31	3.3	0.04	0.09	0.06	0.04	0.04	0.04
Kabardino-BalkR.	32	3.4	0.19	0.25	0.27	0.25	0.23	0.22
R. Kalmykia	33	3.5	0.06	0.14	0.15	0.10	0.08	0.08
Karachaevo-Ch. R.	34	3.6	0.12	0.09	0.10	0.11	0.10	0.10
R. North Ossetia	35	3.7	0.17	0.16	0.19	0.19	0.18	0.17
Krasnodar ter.	36	3.8	2.20	2.36	2.46	2.45	2.38	2.24
Stavropol ter.	37	3.9	1.29	0.92	0.93	0.91	0.95	0.91
Astrakhan region	38	3.10	0.41	0.52	0.47	0.48	0.47	0.43
Volgograd region	39	3.11	1.39	1.12	1.16	1.20	1.19	1.11
Rostov region	40	3.12	1.87	1.52	1.63	1.58	1.58	1.54
R. Bashkortostan	41	4.1	2.80	2.56	2.39	2.27	2.41	2.31

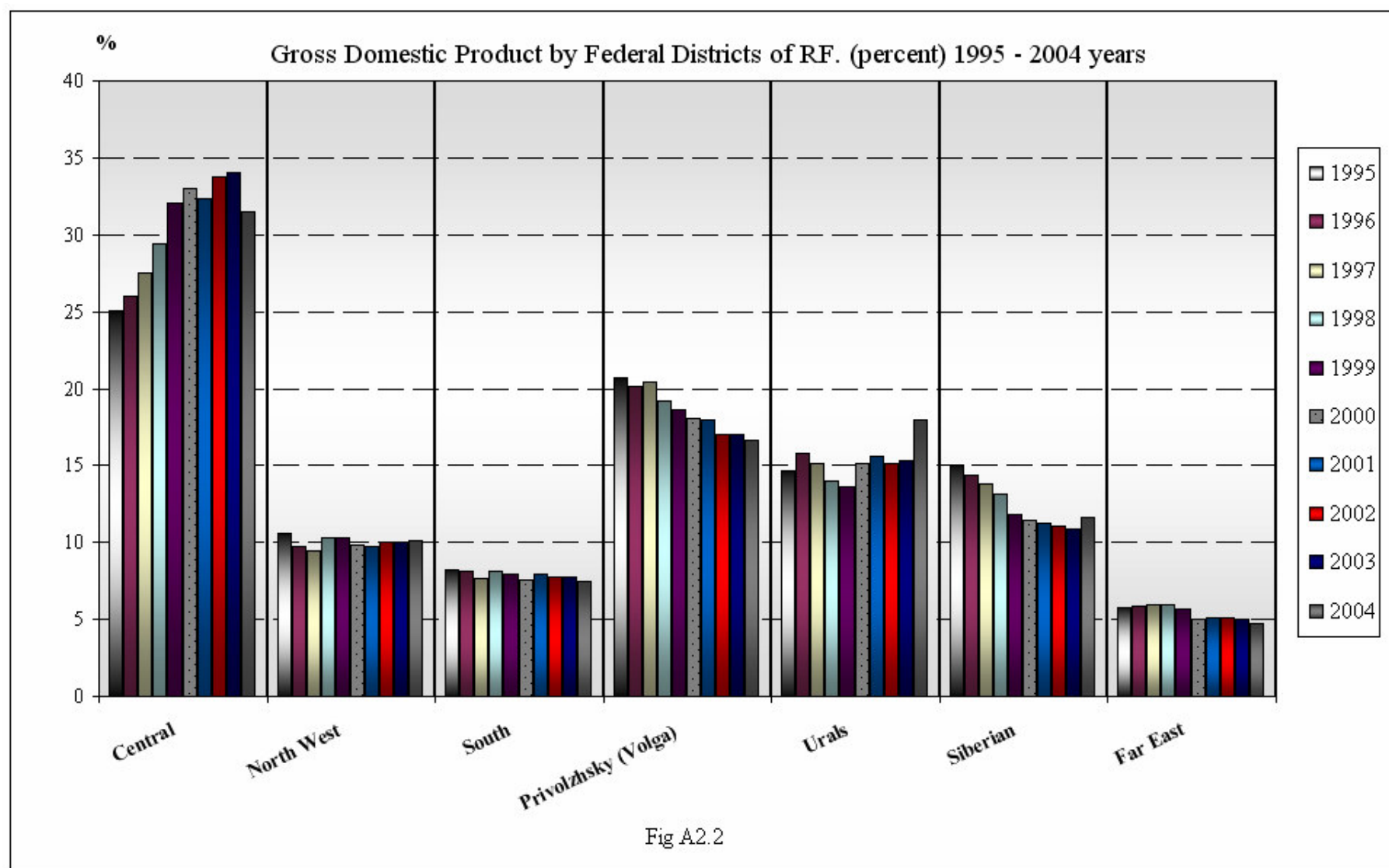
R. Marij El	42	4.2	0.28	0.19	0.21	0.20	0.21	0.21
R. Mordovia	43	4.3	0.36	0.38	0.32	0.25	0.32	0.36
R. Tatarstan	44	4.4	2.69	3.27	2.83	2.78	2.75	2.82
Udmurtian R.	45	4.5	0.88	0.90	0.90	0.89	0.84	0.74
Chuvashi R.	46	4.6	0.53	0.40	0.43	0.43	0.43	0.43
Kirov region	47	4.7	0.83	0.61	0.57	0.57	0.54	0.51
N. Novgorod reg	48	4.8	2.50	1.80	2.08	1.96	1.92	1.82
Orenburg region	49	4.9	1.29	1.30	1.19	1.09	1.08	1.21
Penza region	50	4.10	0.53	0.44	0.46	0.47	0.42	0.43
Perm region	51	4.11	2.63	2.09	2.35	2.06	2.00	1.84
Samara region	52	4.12	3.20	2.50	2.62	2.47	2.37	2.40
Saratov region	53	4.13	1.45	1.10	1.17	1.10	1.13	1.05
Ulyanovsk region	54	4.14	0.76	0.53	0.53	0.51	0.50	0.47
Kurgan region	55	5.1	0.45	0.31	0.35	0.33	0.34	0.31
Sverdlovsk region	56	5.2	4.13	2.67	2.73	2.65	2.71	2.52
Tyumen region	57	5.3	7.73	9.90	10.56	10.21	10.31	13.04
Chelyabinsk region	58	5.4	2.35	2.17	1.97	1.94	1.99	2.09
R. Altai	59	6.1	0.06	0.06	0.07	0.07	0.07	0.06
R. Buryatia	60	6.2	0.55	0.35	0.39	0.41	0.40	0.45
R. Tuva	61	6.3	0.08	0.06	0.06	0.07	0.07	0.07
R. Khakasia	62	6.4	0.36	0.28	0.26	0.27	0.25	0.23
Altai ter.	63	6.5	1.06	0.78	0.82	0.80	0.78	0.77
Krasnoyarsk ter.	64	6.6	3.13	3.46	3.08	2.52	2.44	2.61
Irkutsk region	65	6.7	2.44	1.71	1.62	1.59	1.53	1.44
Kemerovo region	66	6.8	2.58	1.51	1.50	1.51	1.48	1.75
Novosibirsk region	67	6.9	1.64	1.23	1.38	1.42	1.45	1.37
Omsk region	68	6.10	1.47	0.78	0.86	1.11	1.09	1.44
Tomsk region	69	6.11	0.91	0.70	0.80	0.86	0.90	1.01
Chita region	70	6.12	0.71	0.49	0.47	0.48	0.48	0.44
R. Sakha (Yakutia)	71	7.1	1.44	1.31	1.30	1.22	1.15	1.13
Primorsky ter.	72	7.2	1.37	1.03	0.95	1.07	1.07	1.01
Khabarovsk ter.	73	7.3	1.07	1.09	1.06	1.08	1.06	0.93
Amur region	74	7.4	0.59	0.43	0.50	0.49	0.47	0.45
Kamchatka region	75	7.5	0.38	0.29	0.30	0.27	0.25	0.23
Magadan region	76	7.6	0.24	0.20	0.20	0.22	0.20	0.16
Sakhalin region	77	7.7	0.49	0.57	0.62	0.52	0.58	0.61
Jewish A.region	78	7.8	0.08	0.06	0.06	0.07	0.07	0.08
Chukotka A.district	79	7.9	0.10	0.06	0.10	0.12	0.16	0.10

Table A2.2 Ranks of Regions by rate of GDP. 1995, 2000 - 2004 years

regions of RF	<i>number in RF</i>	1995	2000	2001	2002	2003	2004	<i>number in FD</i>	Rank2004 - Rank1995
Belgorod region	1	35	36	37	38	37	35	1.1	0
Bryansk region	2	50	52	56	57	56	58	1.2	8
Vladimir region	3	42	42	41	41	41	44	1.3	2
Voronezh region	4	27	31	32	27	30	34	1.4	7
Ivanovo region	5	56	63	64	62	63	63	1.5	7
Kaluga region	6	47	53	51	56	50	50	1.6	3
Kostroma region	7	59	64	63	63	64	64	1.7	5
Kursk region	8	45	44	45	45	44	41	1.8	-4
Lipetzk region	9	33	34	38	35	33	28	1.9	-5
Moscow region	10	4	6	4	4	3	3	1.10	-1
Oryol region	11	58	54	58	58	59	60	1.11	2
Ryazan region	12	43	46	43	40	42	42	1.12	-1
Smolensk region	13	49	48	47	49	51	56	1.13	7
Tambov region	14	55	56	55	54	53	55	1.14	0
Tver region	15	40	39	39	39	39	40	1.15	0
Tula region	16	38	37	36	37	38	39	1.16	1
Yaroslavl region	17	30	35	27	28	31	32	1.17	2
Moscow	18	1	1	1	1	1	1	1.18	0
R. Karelia	19	48	49	53	52	57	57	2.1	9
R. Komi	20	22	24	22	26	27	29	2.2	7
Arkhangelsk region	21	32	26	29	30	29	24	2.3	-8
Vologda region	22	23	20	30	32	26	22	2.4	-1
Kaliningrad region	23	62	57	52	53	52	48	2.5	-14
Leningrad region	24	36	27	24	24	20	20	2.6	-16
Murmansk region	25	31	29	35	36	36	33	2.7	2
Novgorod region	26	66	60	60	60	60	61	2.8	-5
Pskov region	27	65	67	67	66	65	65	2.9	0
Sankt-Petersburg	28	5	4	3	3	4	4	2.10	-1
R. Adygeya	29	72	73	75	75	74	74	3.1	2
R. Dagestan	30	67	61	57	51	47	43	3.2	-24
R. Ingushetia	31	79	74	78	79	79	79	3.3	0
Kabardino-BalkR.	32	70	68	66	68	68	68	3.4	-2
R. Kalmykia	33	78	72	72	74	75	76	3.5	-2
Karachaevo-Ch. R.	34	73	75	74	73	73	73	3.6	0
R. North Ossetia	35	71	71	71	71	71	70	3.7	-1
Krasnodar ter.	36	15	10	9	9	9	10	3.8	-5
Stavropol ter.	37	25	28	26	29	28	31	3.9	6
Astrakhan region	38	60	45	48	48	49	53	3.10	-7
Volgograd region	39	21	21	21	19	18	23	3.11	2

Rostov region	40	16	15	14	15	14	15	3.12	-1
R. Bashkortostan	41	8	8	10	10	8	9	4.1	1
R. Marij El	42	68	70	69	70	69	69	4.2	1
R. Mordovia	43	64	58	62	67	62	59	4.3	-5
R. Tatarstan	44	9	5	6	5	5	5	4.4	-4
Udmurtian R.	45	37	30	28	31	34	37	4.5	0
Chuvashi R.	46	52	55	54	55	54	54	4.6	2
Kirov region	47	39	40	42	42	43	45	4.7	6
N. Novgorod reg	48	12	13	12	12	13	13	4.8	1
Orenburg region	49	26	18	19	22	23	19	4.9	-7
Penza region	50	53	50	50	50	55	52	4.10	-1
Perm region	51	10	12	11	11	11	12	4.11	2
Samara region	52	6	9	8	8	10	8	4.12	2
Saratov region	53	19	22	20	21	21	25	4.13	6
Ulyanovsk region	54	41	43	44	44	45	46	4.14	5
Kurgan region	55	57	62	61	61	61	62	5.1	5
Sverdlovsk region	56	3	7	7	6	6	7	5.2	4
Tyumen region	57	2	2	2	2	2	2	5.3	0
Chelyabinsk region	58	14	11	13	13	12	11	5.4	-3
R. Altai	59	77	77	76	78	78	78	6.1	1
R. Buryatia	60	51	59	59	59	58	49	6.2	-2
R. Tuva	61	76	79	77	77	77	77	6.3	1
R. Khakasia	62	63	66	68	65	67	66	6.4	3
Altai ter.	63	29	32	33	34	35	36	6.5	7
Krasnoyarsk ter.	64	7	3	5	7	7	6	6.6	-1
Irkutsk region	65	13	14	15	14	15	16	6.7	3
Kemerovo region	66	11	16	16	16	16	14	6.8	3
Novosibirsk region	67	17	19	17	17	17	18	6.9	1
Omsk region	68	18	33	31	20	22	17	6.10	-1
Tomsk region	69	34	38	34	33	32	27	6.11	-7
Chita region	70	44	47	49	47	46	51	6.12	7
R. Sakha (Yakutia)	71	20	17	18	18	19	21	7.1	1
Primorsky ter.	72	24	25	25	25	24	26	7.2	2
Khabarovsk ter.	73	28	23	23	23	25	30	7.3	2
Amur region	74	46	51	46	46	48	47	7.4	1
Kamchatka region	75	61	65	65	64	66	67	7.5	6
Magadan region	76	69	69	70	69	70	71	7.6	2
Sakhalin region	77	54	41	40	43	40	38	7.7	-16
Jewish A.region	78	75	78	79	76	76	75	7.8	0
Chukotka A.district	79	74	76	73	72	72	72	7.9	-2





Dynamics of differences between MAX and MIN rates of GDP across all regions of RF and within each Federal Districts. 1995 - 2004 years.

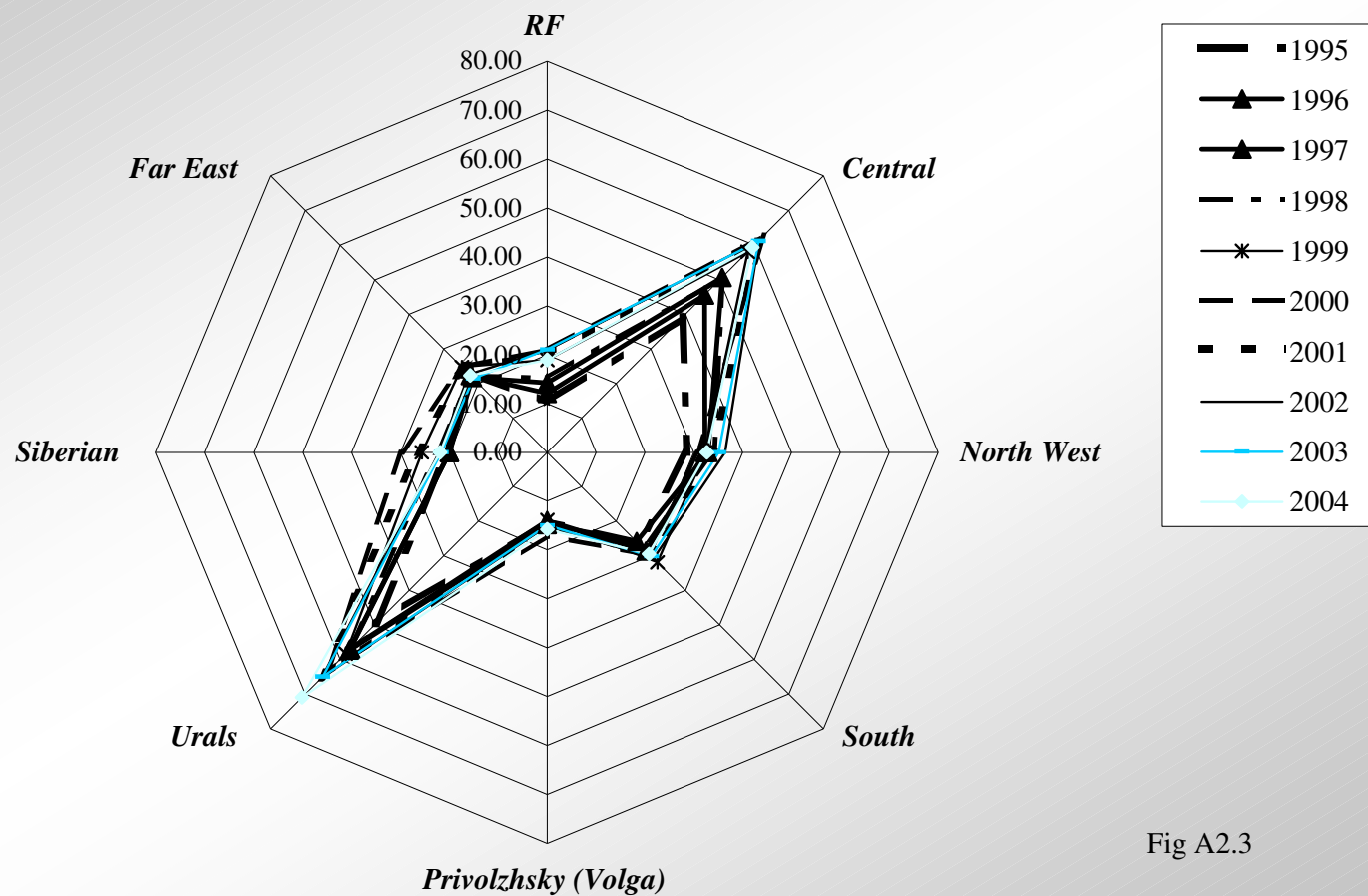
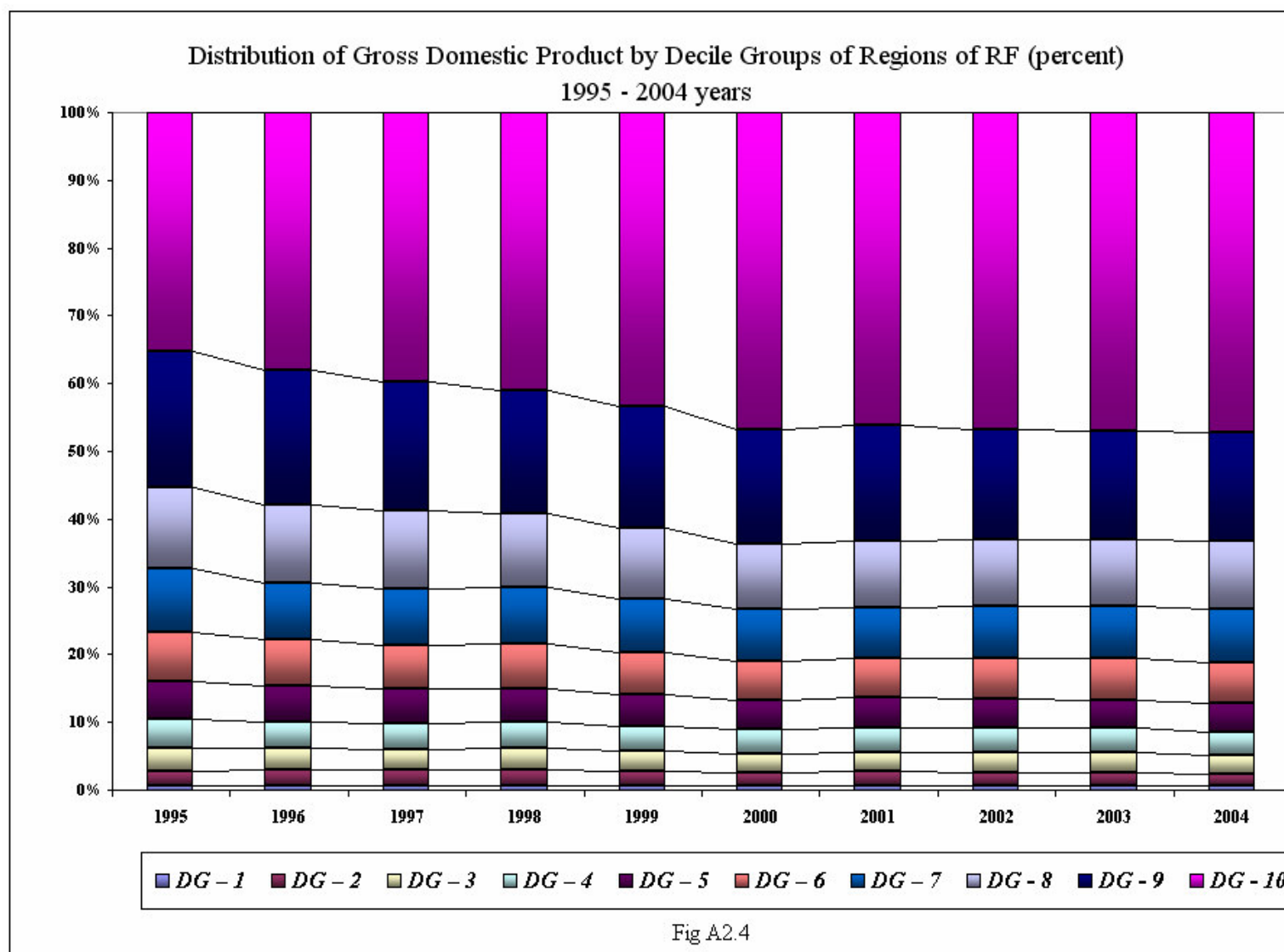


Fig A2.3



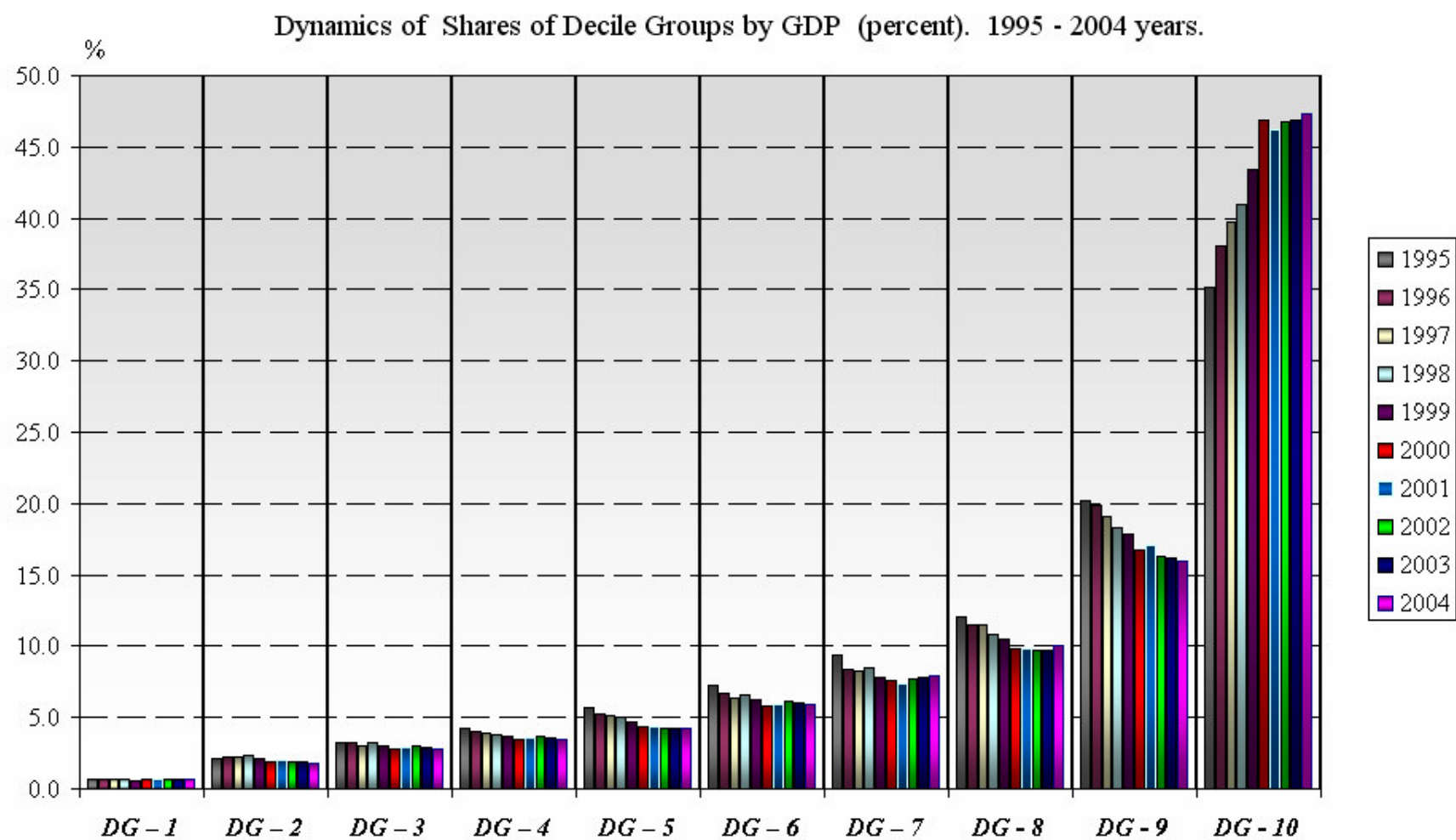


Fig A2.5

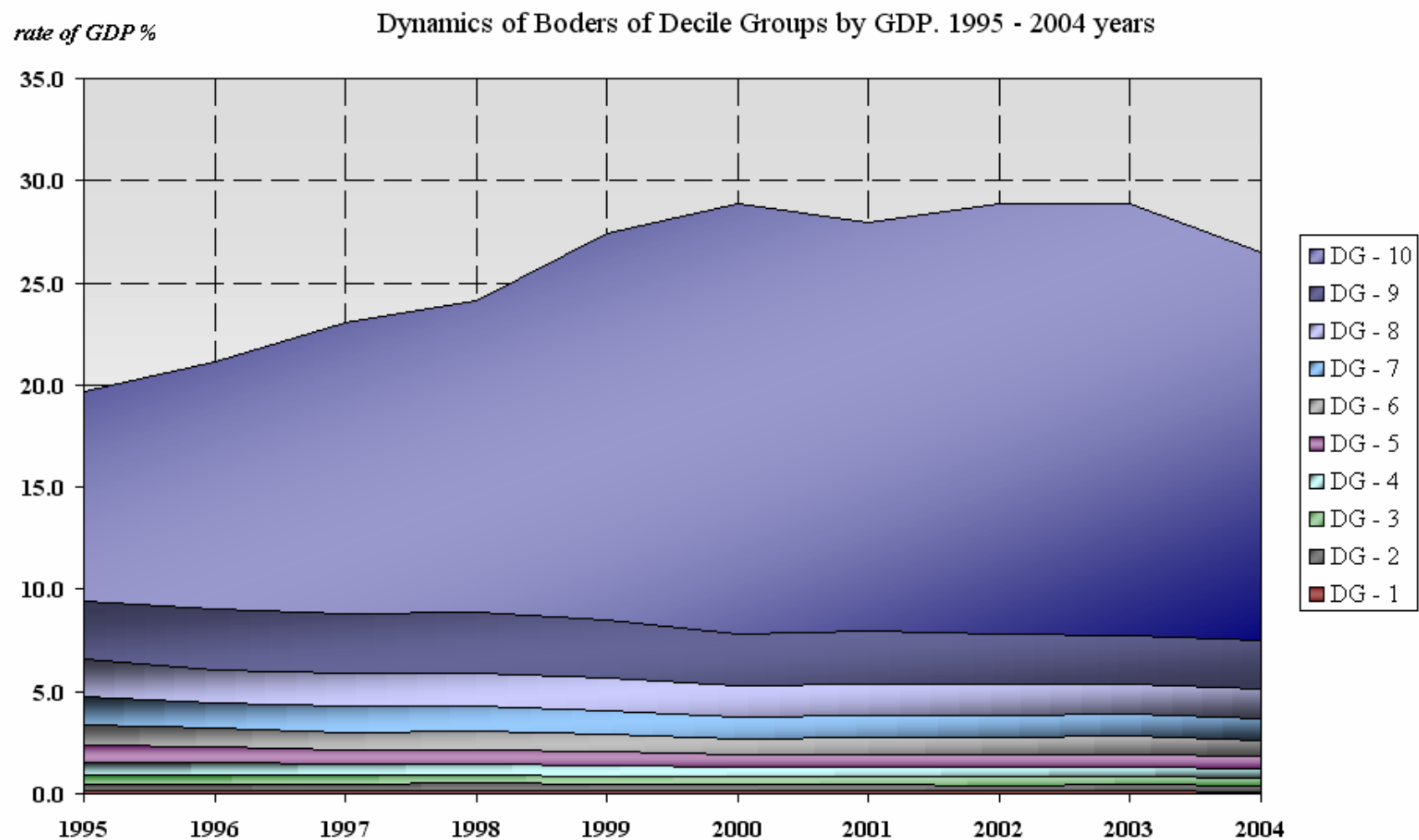


Fig A2.6

Appendix 3. Total Monetary Income (TMI) of Population of RF. 1995, 2000 - 2005 years

Table A3.1 Total Monetary Income by Regions of RF, percent. 1995, 2000 - 2005 years

regions of RF	<i>number in RF</i>	<i>number in FD</i>	1995	2000	2001	2002	2003	2004	2005
Russian Federation	RF	RF	100	100	100	100	100	100	100
Belgorod region	1	1.1	0.75	0.70	0.72	0.73	0.68	0.67	0.70
Bryansk region	2	1.2	0.66	0.56	0.57	0.60	0.58	0.55	0.56
Vladimir region	3	1.3	0.68	0.60	0.58	0.58	0.58	0.55	0.54
Voronezh region	4	1.4	1.13	1.09	1.11	1.09	1.08	1.06	1.11
Ivanovo region	5	1.5	0.51	0.37	0.34	0.36	0.35	0.35	0.34
Kaluga region	6	1.6	0.63	0.42	0.42	0.46	0.47	0.47	0.48
Kostroma region	7	1.7	0.42	0.33	0.32	0.33	0.30	0.30	0.30
Kursk region	8	1.8	0.55	0.56	0.56	0.59	0.56	0.56	0.54
Lipetzk region	9	1.9	0.62	0.66	0.62	0.59	0.58	0.58	0.59
Moscow region	10	1.10	3.44	3.63	3.91	4.12	3.95	4.22	4.21
Oryol region	11	1.11	0.46	0.37	0.39	0.40	0.37	0.36	0.35
Ryazan region	12	1.12	0.59	0.48	0.52	0.55	0.54	0.48	0.49
Smolensk region	13	1.13	0.57	0.56	0.56	0.56	0.52	0.50	0.49
Tambov region	14	1.14	0.53	0.56	0.56	0.56	0.54	0.51	0.51
Tver region	15	1.15	0.75	0.58	0.57	0.61	0.59	0.62	0.70
Tula region	16	1.16	0.95	0.77	0.77	0.77	0.76	0.71	0.71
Yaroslavl region	17	1.17	0.90	0.76	0.79	0.81	0.78	0.75	0.73
Moscow	18	1.18	20.63	24.12	23.59	22.59	23.55	23.76	22.71
R. Karelia	19	2.1	0.70	0.51	0.48	0.51	0.47	0.45	0.43
R. Komi	20	2.2	1.05	0.99	1.13	1.12	1.02	1.02	0.98
Arkhangelsk region	21	2.3	1.02	0.89	0.93	0.93	0.86	0.88	0.89
Vologda region	22	2.4	0.89	0.79	0.79	0.78	0.75	0.72	0.69
Kaliningrad region	23	2.5	0.46	0.53	0.50	0.46	0.49	0.49	0.53
Leningrad region	24	2.6	0.82	0.69	0.71	0.71	0.68	0.81	0.83
Murmansk region	25	2.7	1.03	1.00	0.95	0.93	0.85	0.80	0.79
Novgorod region	26	2.8	0.43	0.39	0.38	0.37	0.34	0.32	0.32
Pskov region	27	2.9	0.37	0.33	0.32	0.37	0.36	0.35	0.31
Sankt-Petersburg	28	2.10	4.26	3.64	3.63	3.70	4.28	4.63	4.94
R. Adygeya	29	3.1	0.16	0.19	0.17	0.17	0.15	0.15	0.15
R. Dagestan	30	3.2	0.53	0.64	0.64	0.69	0.74	0.95	1.09
R. Ingushetia	31	3.3	0.04	0.07	0.09	0.09	0.09	0.09	0.11
Kabardino-BalkR.	32	3.4	0.28	0.28	0.29	0.33	0.31	0.31	0.32
R. Kalmykia	33	3.5	0.10	0.09	0.11	0.09	0.08	0.07	0.06
Karachaevo-Ch. R.	34	3.6	0.13	0.14	0.13	0.15	0.15	0.16	0.16
R. North Ossetia	35	3.7	0.28	0.31	0.26	0.24	0.25	0.32	0.29
Krasnodar territory	36	3.8	2.37	2.41	2.45	2.57	2.52	2.44	2.48

Stavropol territory	37	3.9	1.16	1.16	1.09	1.12	1.13	1.16	1.23
Astrakhan region	38	3.10	0.43	0.54	0.53	0.54	0.52	0.50	0.50
Volgograd region	39	3.11	1.17	1.30	1.32	1.40	1.37	1.35	1.36
Rostov region	40	3.12	1.94	2.21	2.26	2.34	2.37	2.40	2.40
R. Bashkortostan	41	4.1	1.75	2.15	2.22	2.26	2.29	2.30	2.44
R. Marij El	42	4.2	0.26	0.24	0.23	0.23	0.21	0.20	0.21
R. Mordovia	43	4.3	0.36	0.31	0.32	0.33	0.32	0.31	0.31
R. Tatarstan	44	4.4	1.95	2.07	2.11	2.16	2.17	2.21	2.40
Udmurtian R.	45	4.5	0.69	0.73	0.72	0.70	0.65	0.63	0.63
Chuvashi R.	46	4.6	0.54	0.46	0.46	0.48	0.48	0.45	0.44
Kirov region	47	4.7	0.82	0.63	0.63	0.67	0.62	0.60	0.58
Nizhni Novgorod reg	48	4.8	1.88	1.87	1.94	1.99	1.88	1.81	1.82
Orenburg region	49	4.9	0.97	0.96	0.95	0.95	0.92	0.91	0.94
Penza region	50	4.10	0.62	0.57	0.57	0.57	0.54	0.53	0.54
Perm region	51	4.11	1.91	2.07	2.09	2.05	1.98	1.94	1.97
Samara region	52	4.12	2.07	2.57	2.40	2.43	2.52	2.52	2.60
Saratov region	53	4.13	1.17	1.25	1.23	1.23	1.19	1.15	1.14
Ulyanovsk region	54	4.14	0.61	0.55	0.54	0.58	0.57	0.54	0.53
Kurgan region	55	5.1	0.40	0.43	0.42	0.43	0.39	0.42	0.41
Sverdlovsk region	56	5.2	3.11	2.94	3.05	3.12	3.17	3.27	3.36
Tyumen region	57	5.3	4.52	4.79	5.19	4.90	4.66	4.40	4.23
Chelyabinsk region	58	5.4	2.02	2.16	2.04	1.97	1.93	1.88	2.02
R. Altai	59	6.1	0.08	0.07	0.07	0.08	0.08	0.08	0.08
R. Buryatia	60	6.2	0.52	0.49	0.51	0.54	0.51	0.50	0.50
R. Tuva	61	6.3	0.13	0.11	0.11	0.13	0.12	0.11	0.11
R. Khakasia	62	6.4	0.36	0.32	0.31	0.30	0.28	0.26	0.24
Altai territory	63	6.5	1.24	0.97	1.00	1.01	1.01	0.98	1.01
Krasnoyarsk ter.	64	6.6	2.43	2.51	2.41	2.27	2.19	2.06	1.96
Irkutsk region	65	6.7	2.14	1.88	1.69	1.64	1.57	1.51	1.55
Kemerovo region	66	6.8	2.83	2.02	2.04	2.04	1.91	1.93	1.94
Novosibirsk region	67	6.9	1.23	1.32	1.30	1.39	1.41	1.48	1.53
Omsk region	68	6.10	1.23	1.01	1.11	1.18	1.26	1.22	1.24
Tomsk region	69	6.11	0.70	0.66	0.68	0.73	0.76	0.74	0.73
Chita region	70	6.12	0.72	0.50	0.53	0.61	0.62	0.60	0.58
R. Sakha (Yakutia)	71	7.1	1.30	1.15	1.08	1.06	1.05	1.00	0.92
Primorsky territory	72	7.2	1.60	1.15	1.12	1.14	1.18	1.21	1.26
Khabarovsk ter.	73	7.3	1.10	1.10	1.11	1.19	1.20	1.18	1.15
Amur region	74	7.4	0.67	0.51	0.48	0.46	0.47	0.46	0.45
Kamchatka region	75	7.5	0.52	0.38	0.37	0.37	0.34	0.32	0.32
Magadan region	76	7.6	0.34	0.22	0.22	0.22	0.20	0.18	0.17
Sakhalin region	77	7.7	0.58	0.47	0.48	0.53	0.56	0.56	0.57
Jewish A.region	78	7.8	0.11	0.09	0.09	0.10	0.10	0.10	0.10
Chukotka A.district	79	7.9	0.13	0.08	0.10	0.11	0.10	0.08	0.09

Table A3.2 RANK of Regions by rate of TMI. 1995, 2000 - 2005 years

regions of RF	<i>number in RF</i>	1995	2000	2001	2002	2003	2004	2005	<i>number in FD</i>	R2005- R1995
Belgorod region	1	36	35	35	34	36	37	37	1.1	0
Bryansk region	2	44	46	42	42	44	46	44	1.2	1
Vladimir region	3	42	41	41	45	43	45	46	1.3	-1
Voronezh region	4	25	24	24	25	24	24	24	1.4	0
Ivanovo region	5	58	63	63	64	62	61	61	1.5	0
Kaluga region	6	45	59	58	56	58	55	55	1.6	8
Kostroma region	7	63	64	65	67	67	68	67	1.7	6
Kursk region	8	52	45	47	44	47	43	45	1.8	-1
Lipetzk region	9	47	38	40	43	42	42	40	1.9	7
Moscow region	10	4	4	3	3	4	4	4	1.10	-4
Oryol region	11	60	62	60	60	60	60	60	1.11	0
Ryazan region	12	49	55	51	50	48	54	53	1.12	-2
Smolensk region	13	51	44	45	49	52	51	54	1.13	-4
Tambov region	14	54	47	46	48	50	49	50	1.14	-2
Tver region	15	37	42	43	40	41	39	36	1.15	0
Tula region	16	31	32	33	33	33	36	35	1.16	-8
Yaroslavl region	17	32	33	32	31	31	33	34	1.17	2
Moscow	18	1	1	1	1	1	1	1	1.18	11
R. Karelia	19	40	52	55	54	56	58	58	2.1	7
R. Komi	20	27	27	20	24	26	25	27	2.2	0
Arkhangelsk region	21	29	30	30	29	29	30	30	2.3	-4
Vologda region	22	33	31	31	32	34	35	38	2.4	-4
Kaliningrad region	23	59	50	53	58	54	53	49	2.5	0
Leningrad region	24	35	36	36	36	37	31	31	2.6	-3
Murmansk region	25	28	26	29	30	30	32	32	2.7	-1
Novgorod region	26	62	60	61	62	63	63	63	2.8	-4
Pskov region	27	65	65	64	63	61	62	65	2.9	0
Sankt-Petersburg	28	3	3	4	4	3	2	2	2.10	4
R. Adygeya	29	72	72	72	72	73	73	73	3.1	1
R. Dagestan	30	55	39	38	38	35	28	25	3.2	-2
R. Ingushetia	31	79	79	77	77	77	76	75	3.3	4
Kabardino-BalkR.	32	70	69	68	66	66	67	64	3.4	2
R. Kalmykia	33	77	75	75	78	78	79	79	3.5	5
Karachaevo-Ch. R.	34	74	73	73	73	72	72	72	3.6	7
R. North Ossetia	35	69	68	69	69	69	65	68	3.7	-4
Krasnodar territory	36	8	8	6	6	6	7	7	3.8	1
Stavropol territory	37	24	20	25	23	23	22	21	3.9	-1
Astrakhan region	38	61	49	50	52	51	50	52	3.10	4
Volgograd region	39	22	18	17	17	18	18	18	3.11	-6

Rostov region	40	13	9	9	8	8	8	9	3.12	18
R. Bashkortostan	41	16	11	10	10	9	9	8	4.1	-2
R. Marij El	42	71	70	70	70	70	70	70	4.2	4
R. Mordovia	43	67	67	66	65	65	66	66	4.3	13
R. Tatarstan	44	12	13	11	11	11	10	10	4.4	0
Udmurtian R.	45	41	34	34	37	38	38	39	4.5	10
Chuvashi R.	46	53	57	57	55	55	57	57	4.6	1
Kirov region	47	34	40	39	39	40	40	41	4.7	-7
N. Novgorod reg	48	15	16	15	14	15	15	15	4.8	0
Orenburg region	49	30	29	28	28	28	29	28	4.9	4
Penza region	50	46	43	44	47	49	48	47	4.10	-7
Perm region	51	14	12	12	12	12	12	12	4.11	3
Samara region	52	10	6	8	7	7	6	6	4.12	-7
Saratov region	53	23	19	19	19	21	23	23	4.13	4
Ulyanovsk region	54	48	48	48	46	45	47	48	4.14	-4
Kurgan region	55	64	58	59	59	59	59	59	5.1	-30
Sverdlovsk region	56	5	5	5	5	5	5	5	5.2	6
Tyumen region	57	2	2	2	2	2	3	3	5.3	-6
Chelyabinsk region	58	11	10	13	15	13	14	11	5.4	3
R. Altai	59	78	78	79	79	79	78	78	6.1	-10
R. Buryatia	60	57	54	52	51	53	52	51	6.2	0
R. Tuva	61	75	74	74	74	74	74	74	6.3	-9
R. Khakasia	62	66	66	67	68	68	69	69	6.4	1
Altai territory	63	19	28	27	27	27	27	26	6.5	4
Krasnoyarsk ter.	64	7	7	7	9	10	11	13	6.6	-5
Irkutsk region	65	9	15	16	16	16	16	16	6.7	0
Kemerovo region	66	6	14	14	13	14	13	14	6.8	3
Novosibirsk region	67	21	17	18	18	17	17	17	6.9	-1
Omsk region	68	20	25	23	21	19	19	20	6.10	3
Tomsk region	69	39	37	37	35	32	34	33	6.11	-1
Chita region	70	38	53	49	41	39	41	42	6.12	-6
R. Sakha (Yakutia)	71	18	22	26	26	25	26	29	7.1	-1
Primorsky territory	72	17	21	21	22	22	20	19	7.2	1
Khabarovsk territory	73	26	23	22	20	20	21	22	7.3	4
Amur region	74	43	51	56	57	57	56	56	7.4	-2
Kamchatka region	75	56	61	62	61	64	64	62	7.5	-1
Magadan region	76	68	71	71	71	71	71	71	7.6	0
Sakhalin region	77	50	56	54	53	46	44	43	7.7	2
Jewish A.region	78	76	76	78	76	75	75	76	7.8	0
Chukotka A.district	79	73	77	76	75	76	77	77	7.9	-4

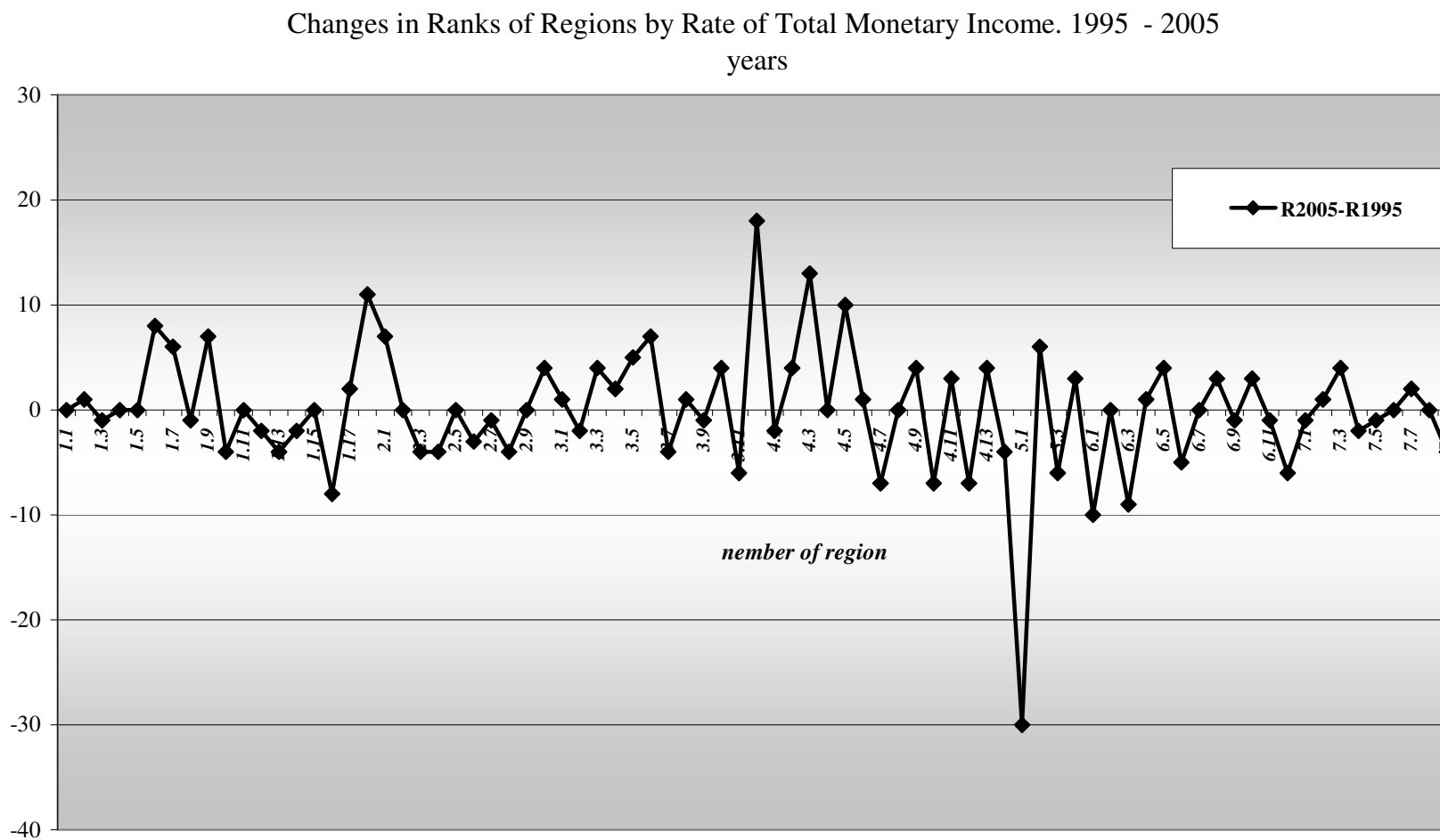
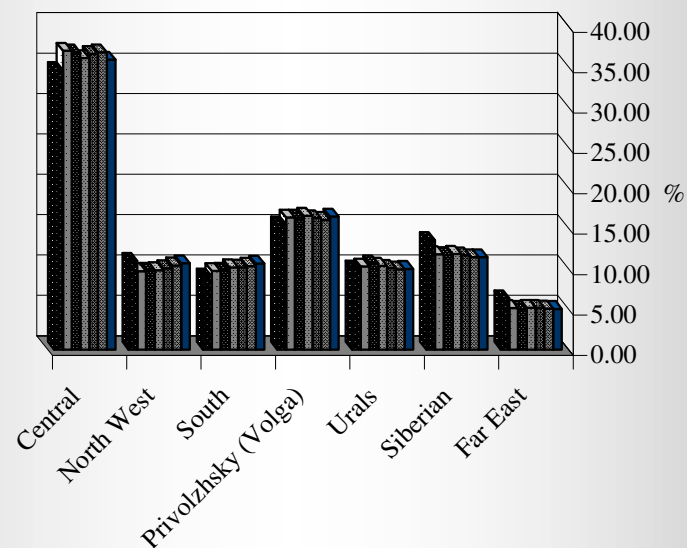


Fig. A3.1

Total Monetary Income by Federal District of RF, percent. 1995, 2000 - 2005 yeras.



	Central	North West	South	Privolzhsky (Volga)	Urals	Siberian	Far East
■ 1995	34.6	10.96	9.06	15.51	10.01	13.54	6.33
□ 2000	36.98	9.7	9.74	16.35	10.27	11.81	5.14
■ 2001	36.75	9.77	9.76	16.34	10.66	11.7	5.03
□ 2002	36.09	9.82	10.18	16.55	10.37	11.85	5.15
■ 2003	36.58	10.06	10.15	16.28	10.11	11.65	5.17
□ 2004	36.81	10.4	10.36	16.04	9.92	11.4	5.07
■ 2005	35.87	10.65	10.63	16.45	9.97	11.41	5.01

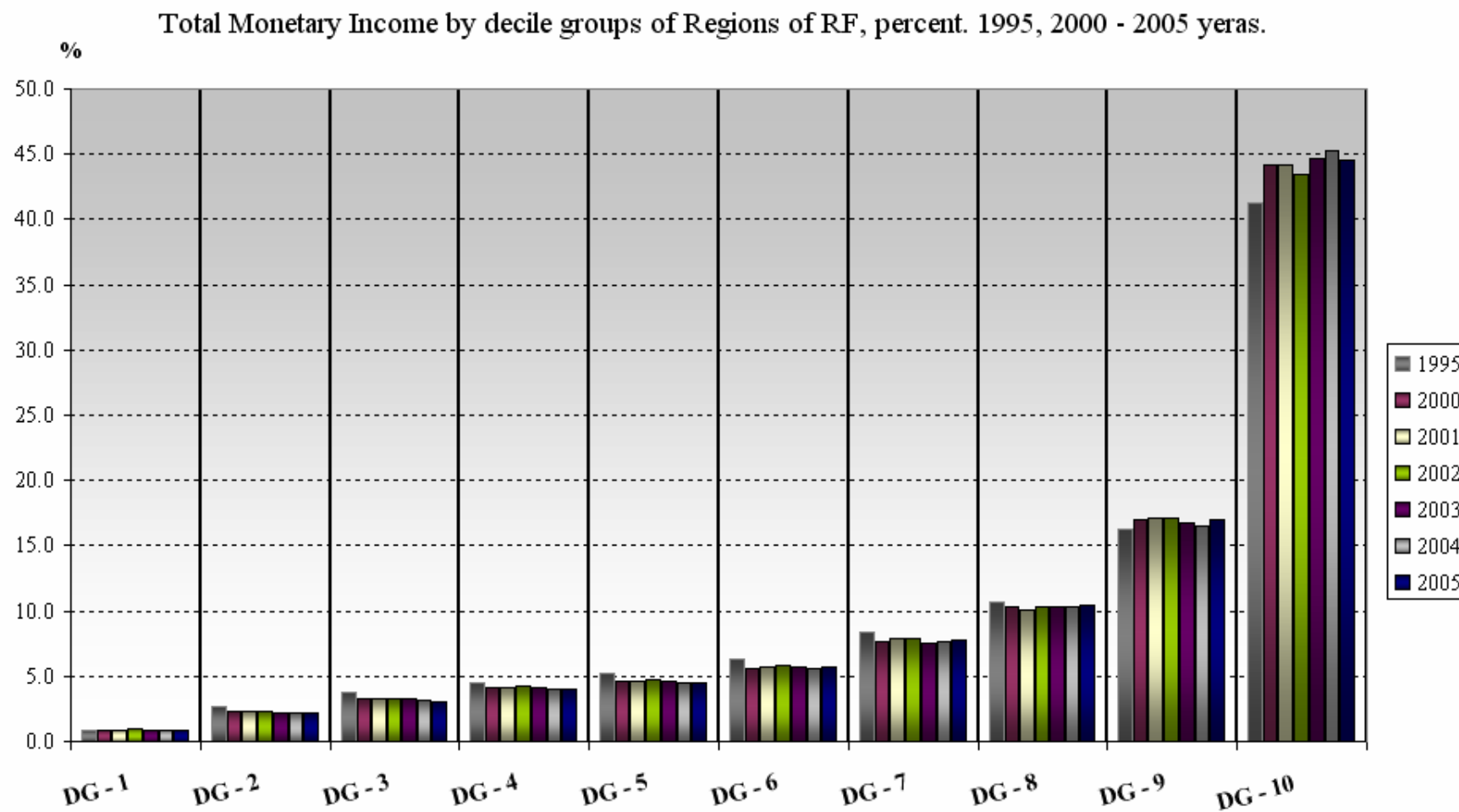
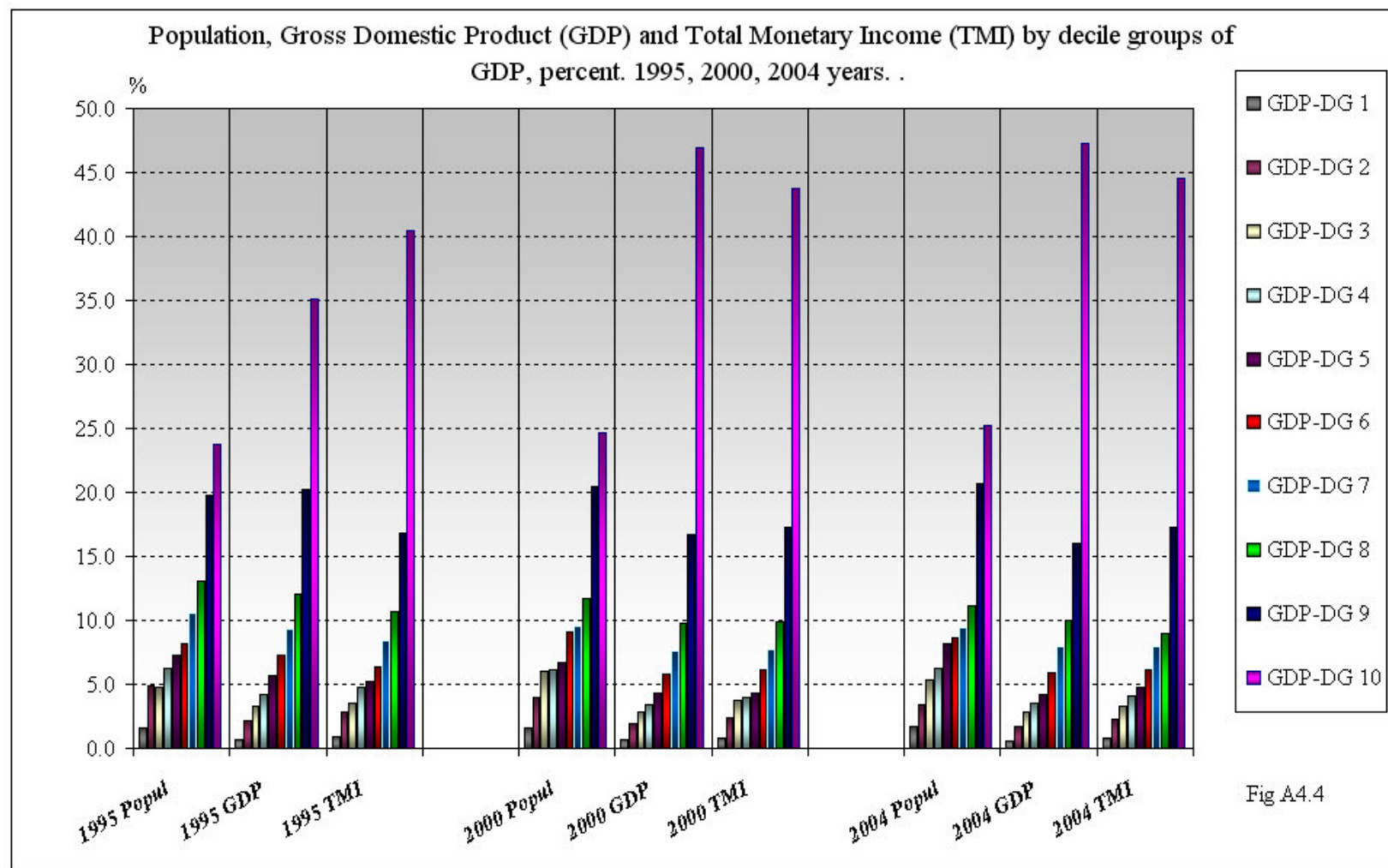
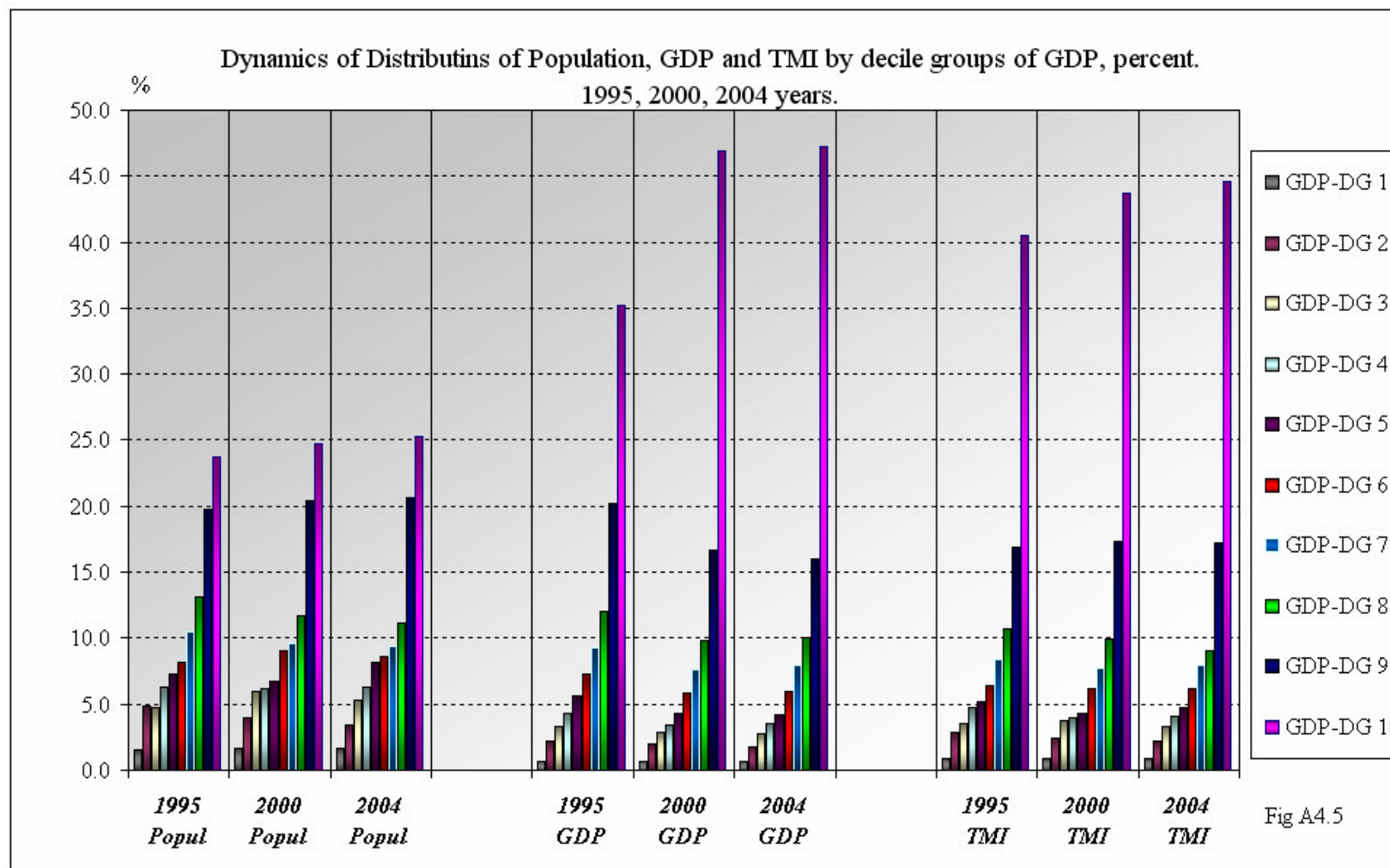


Fig. A3.3





Appendix 4. Classification of Regions of RF

Table A4.1 Algorithm of Classification of Regions of RF by dynamics of GDP and TMI in (t2 - t1)

1. Types of regions by dynamics of rate of GDP.

The three sub-classes are determined by differences between rates of **GDP(t2)** and **GDP(t1)**:

- a) Sub-class "**GDP+**" : $\{GDP(t2) - GDP(t1) > 0.01\}$. It's the sub-class of regions, increasing by the rate of GDP.
- b) Sub-class "**GDP=**" : $\{-0.01 \leq GDP(t2) - GDP(t1) \leq 0.01\}$. It's the sub-class of regions, stable by the rate of GDP.
- c) Sub-class "**GDP-**" : $\{GDP(t2) - GDP(t1) < -0.01\}$. It's the sub-class of regions, decreasing by the rate of GDP.

2. Types of regions by dynamics of rate of TMI.

The three sub-classes are determined by differences between rates of **TMI(t2)** and **TMI(t1)**:

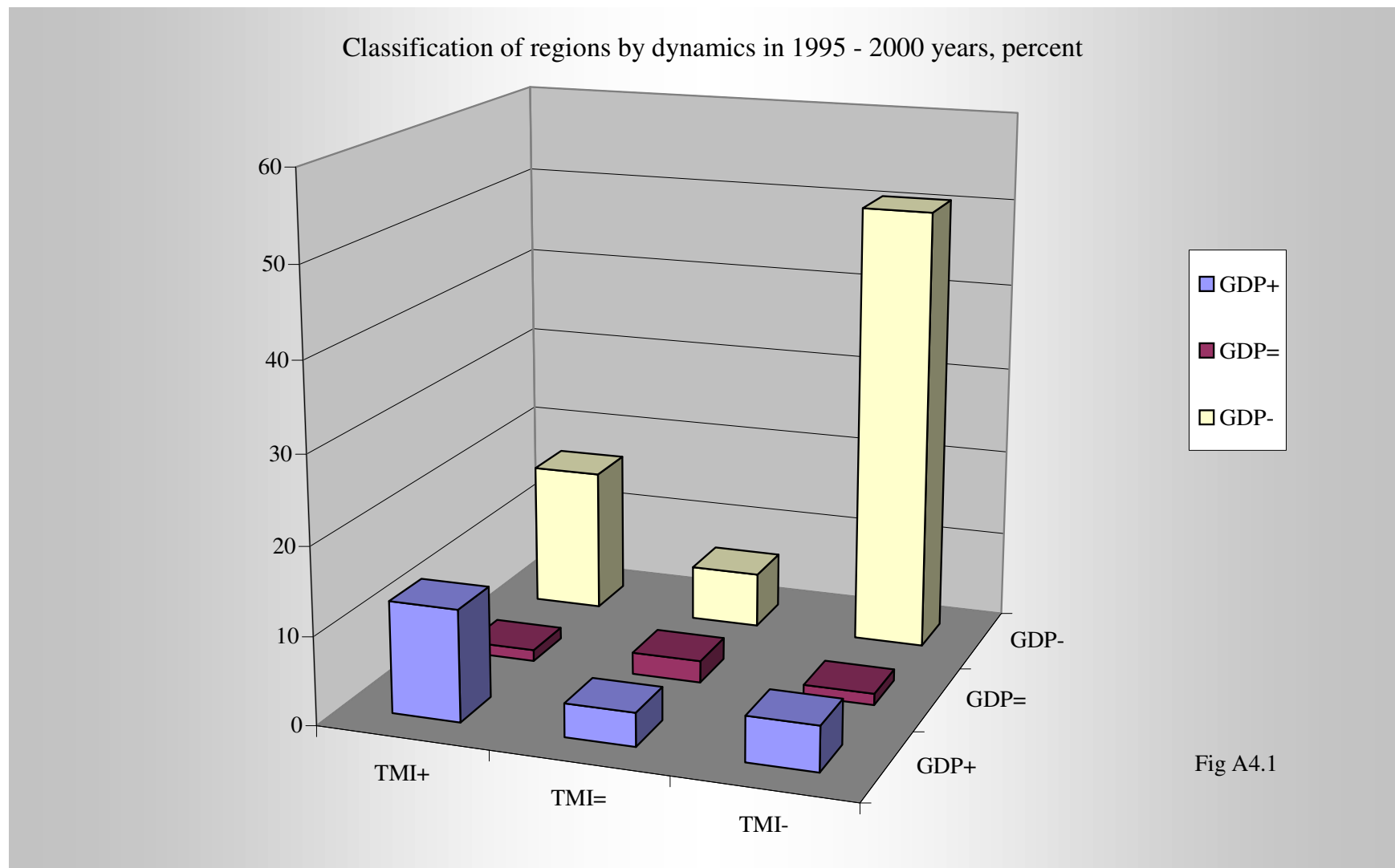
- d) Sub-class "**TMI+**" : $\{TMI(t2) - TMI(t1) > 0.01\}$. It's the sub-class of regions, increasing by the rate of TMI.
- e) Sub-class "**TMI=**" : $\{-0.01 \leq TMI(t2) - TMI(t1) \leq 0.01\}$. It's the sub-class of regions, stable by the rate of TMI.
- f) Sub-class "**TMI-**" : $\{TMI(t2) - TMI(t1) < -0.01\}$. It's the sub-class of regions, decreasing by the rate of TMI.

3. Classification of regions by composition of sub-classes.

Classification of regions (initial)			
	TMI+	TMI=	TMI-
GDP+	Class1	Class2	Class3
GDP=	Class4	Class5	Class6
GDP-	Class7	Class8	Class9

Aggregated classification			
	TMI+	TMI=	TMI-
GDP+	Class1	others	Class3
GDP=	others	others	others
GDP-	Class7	others	Class9

Names of Classes		
composition of sub-classes	name (inital)	name (aggerate)
(GDP+; TMI+)	Class1	Class1
(GDP+; TMI=)	Class2	others
(GDP+; TMI-)	Class3	Class3
(GDP=; TMI+)	Class4	others
(GDP=; TMI=)	Class5	others
(GDP=; TMI-)	Class6	others
(GDP-; TMI+)	Class7	Class7
(GDP-; TMI=)	Class8	others
(GDP-; TMI-)	Class9	Class9



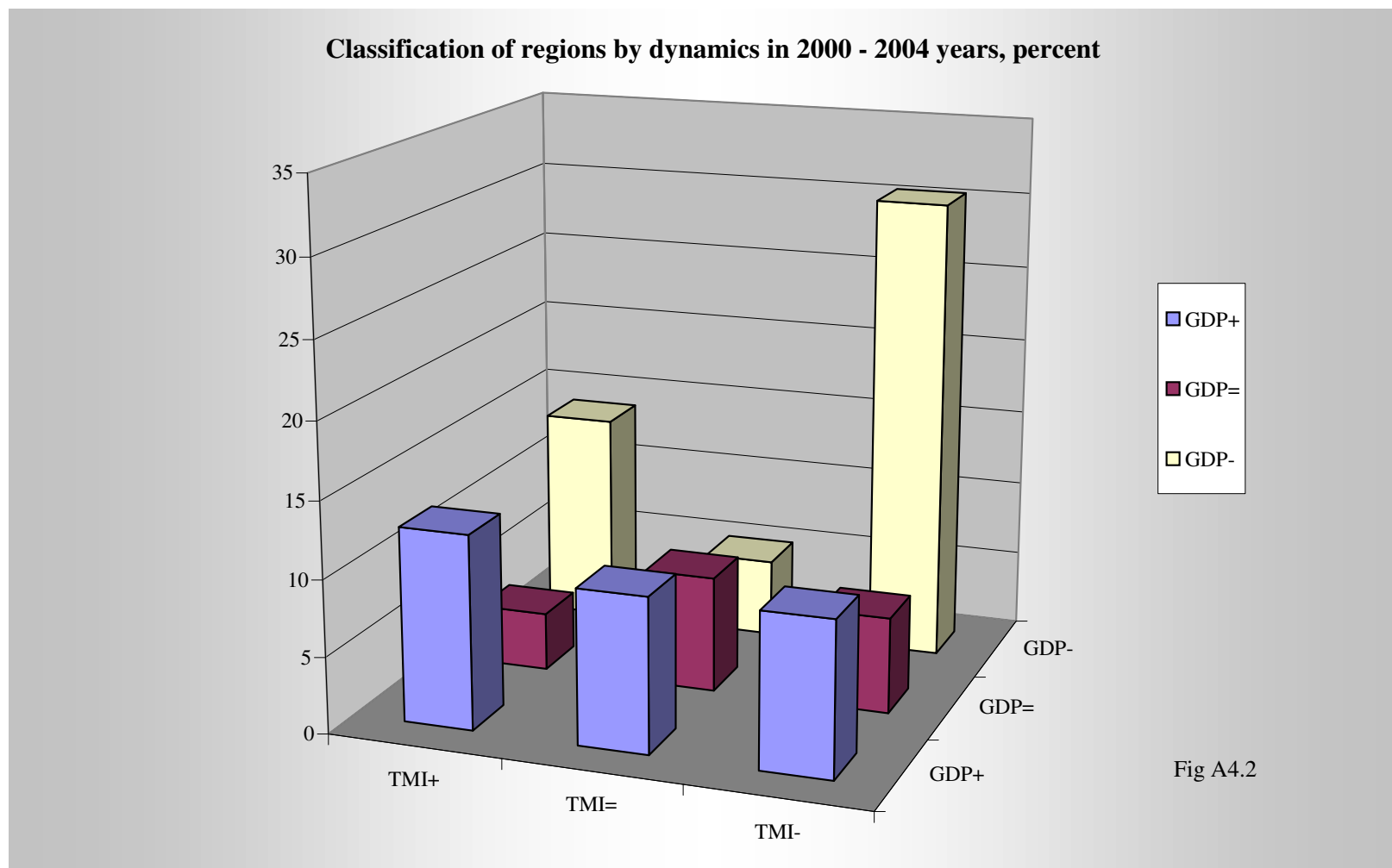


Fig A4.2

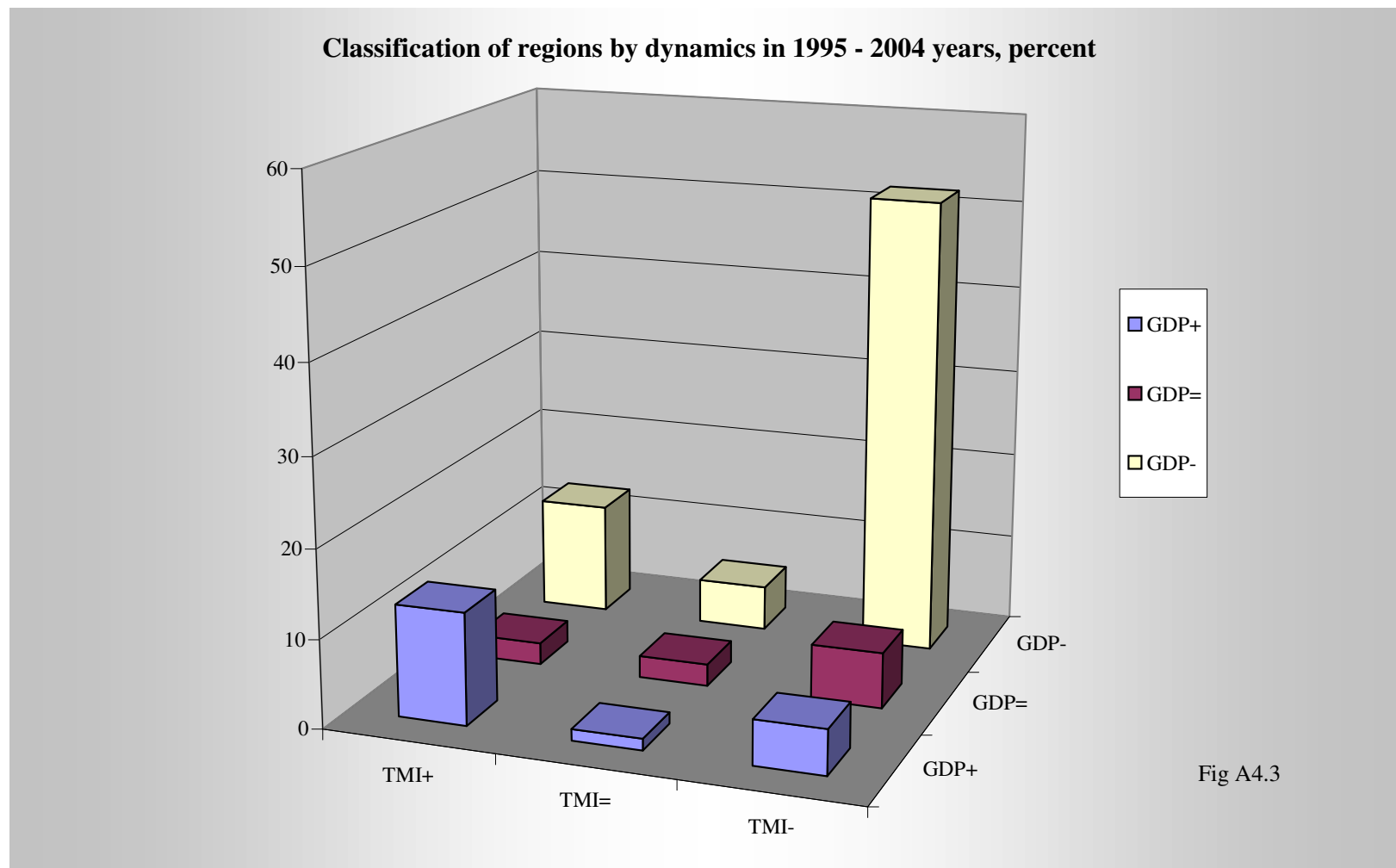


Fig A4.3

Appendix 5. Composition of Deciles Groups and Classification of Regions. 1995 – 2004 years.

Table A5.1 Regions of RF by Deciles groups and Classes during 1995 – 2004 years . (Regions ranged by DG of GDP in 1995 year)

regions of Russian Federation	# in FD	decile group by GDP			deciles group by TMI			Classes		
		1995	2000	2004	1995	2000	2004	1995 - 2000	2000- 2004	1995- 2004
R. Adygeya	3.1	G_1	G_1	G_1	Inc_ 1	Inc_ 1	Inc_ 1	Class7	Others	Others
R. Ingushetia	3.3	G_1	G_1	G_1	Inc_ 1	Inc_ 1	Inc_ 1	Class1	Class7	Others
R. Kalmykia	3.5	G_1	G_1	G_1	Inc_ 1	Inc_ 1	Inc_ 1	Others	Class9	Class3
Karachaevo-Ch. R.	3.6	G_1	G_1	G_1	Inc_ 1	Inc_ 1	Inc_ 1	Others	Others	Class7
R. Altai	6.1	G_1	G_1	G_1	Inc_ 1	Inc_ 1	Inc_ 1	Others	Others	Others
R. Tuva	6.3	G_1	G_1	G_1	Inc_ 1	Inc_ 1	Inc_ 1	Class9	Others	Others
Jewish A.region	7.8	G_1	G_1	G_1	Inc_ 1	Inc_ 1	Inc_ 1	Class9	Others	Others
Chukotka A.district	7.9	G_1	G_1	G_1	Inc_ 1	Inc_ 1	Inc_ 1	Class9	Others	Others
Novgorod region	2.8	G_2	G_3	G_3	Inc_ 3	Inc_ 3	Inc_ 3	Class3	Class9	Others
Pskov region	2.9	G_2	G_2	G_2	Inc_ 2	Inc_ 2	Inc_ 3	Class9	Class7	Class9
R. Dagestan	3.2	G_2	G_3	G_5	Inc_ 4	Inc_ 6	Inc_ 7	Class1	Class1	Class1
Kabardino-BalkR.	3.4	G_2	G_2	G_2	Inc_ 2	Inc_ 2	Inc_ 2	Others	Class7	Class1
R. North Ossetia	3.7	G_2	G_2	G_2	Inc_ 2	Inc_ 2	Inc_ 2	Others	Others	Others
R. Marij El	4.2	G_2	G_2	G_2	Inc_ 2	Inc_ 2	Inc_ 2	Class9	Class3	Class9
R. Mordovia	4.3	G_2	G_3	G_3	Inc_ 2	Inc_ 2	Inc_ 2	Class3	Others	Others
Magadan region	7.6	G_2	G_2	G_2	Inc_ 2	Inc_ 2	Inc_ 2	Class9	Class9	Class9
Ivanovo region	1.5	G_3	G_3	G_3	Inc_ 3	Inc_ 3	Inc_ 3	Class9	Others	Class9
Kostroma region	1.7	G_3	G_2	G_2	Inc_ 3	Inc_ 2	Inc_ 2	Class9	Class9	Class9
Oryol region	1.11	G_3	G_4	G_3	Inc_ 3	Inc_ 3	Inc_ 3	Class9	Others	Class9
Kaliningrad region	2.5	G_3	G_3	G_4	Inc_ 3	Inc_ 4	Inc_ 4	Class1	Class3	Class1
Astrakhan region	3.10	G_3	G_5	G_4	Inc_ 3	Inc_ 4	Inc_ 4	Class1	Class9	Class1
Kurgan region	5.1	G_3	G_3	G_3	Inc_ 2	Inc_ 3	Inc_ 3	Class7	Others	Class7
R. Khakasia	6.4	G_3	G_2	G_2	Inc_ 2	Inc_ 2	Inc_ 2	Class9	Class9	Class9
Kamchatka region	7.5	G_3	G_2	G_2	Inc_ 3	Inc_ 3	Inc_ 2	Class9	Class9	Class9
Bryansk region	1.2	G_4	G_4	G_3	Inc_ 5	Inc_ 5	Inc_ 5	Class9	Others	Class9
Smolensk region	1.13	G_4	G_4	G_3	Inc_ 4	Inc_ 5	Inc_ 4	Others	Class9	Class9
Tambov region	1.14	G_4	G_3	G_4	Inc_ 4	Inc_ 5	Inc_ 4	Class7	Others	Class9
R. Karelia	2.1	G_4	G_4	G_3	Inc_ 5	Inc_ 4	Inc_ 3	Class9	Class9	Class9
Chuvashi R.	4.6	G_4	G_4	G_4	Inc_ 4	Inc_ 3	Inc_ 3	Class9	Others	Class9
Penza region	4.10	G_4	G_4	G_4	Inc_ 5	Inc_ 5	Inc_ 4	Class9	Others	Class9
R. Buryatia	6.2	G_4	G_3	G_4	Inc_ 3	Inc_ 4	Inc_ 4	Class9	Others	Class9
Sakhalin region	7.7	G_4	G_5	G_6	Inc_ 4	Inc_ 3	Inc_ 5	Class3	Class1	Class3
Vladimir region	1.3	G_5	G_5	G_5	Inc_ 5	Inc_ 5	Inc_ 5	Class9	Class9	Class9
Kaluga region	1.6	G_5	G_4	G_4	Inc_ 5	Inc_ 3	Inc_ 4	Class9	Class1	Class9
Kursk region	1.8	G_5	G_5	G_5	Inc_ 4	Inc_ 5	Inc_ 5	Others	Others	Others

Ryazan region	1.12	G_5	G_5	G_5	Inc_4	Inc_4	Inc_4	Class9	Others	Class9
Tver region	1.15	G_5	G_6	G_5	Inc_6	Inc_5	Inc_6	Class9	Others	Class9
Ulyanovsk region	4.14	G_5	G_5	G_5	Inc_4	Inc_4	Inc_5	Class9	Others	Class9
Chita region	6.12	G_5	G_5	G_4	Inc_6	Inc_4	Inc_5	Class9	Class7	Class9
Amur region	7.4	G_5	G_4	G_5	Inc_5	Inc_4	Inc_3	Class9	Class3	Class9
Belgorod region	1.1	G_6	G_6	G_6	Inc_6	Inc_6	Inc_6	Class9	Class3	Class9
Lipetzk region	1.9	G_6	G_6	G_7	Inc_5	Inc_6	Inc_5	Class7	Class3	Others
Tula region	1.16	G_6	G_6	G_6	Inc_7	Inc_6	Inc_6	Class9	Class9	Class9
Arkhangelsk region	2.3	G_6	G_7	G_7	Inc_7	Inc_7	Inc_7	Others	Others	Class3
Leningrad region	2.6	G_6	G_7	G_8	Inc_6	Inc_6	Inc_7	Class3	Class1	Others
Udmurtian R.	4.5	G_6	G_7	G_6	Inc_5	Inc_6	Inc_6	Class1	Class9	Class9
Kirov region	4.7	G_6	G_5	G_5	Inc_6	Inc_5	Inc_5	Class9	Class9	Class9
Tomsk region	6.11	G_6	G_6	G_7	Inc_6	Inc_6	Inc_6	Class9	Class1	Class1
Voronezh region	1.4	G_7	G_7	G_6	Inc_7	Inc_7	Inc_7	Class9	Class9	Class9
Yaroslavl region	1.17	G_7	G_6	G_6	Inc_6	Inc_6	Inc_6	Class9	Others	Class9
Murmansk region	2.7	G_7	G_7	G_6	Inc_7	Inc_7	Inc_6	Class9	Class9	Class9
Stavropol territory	3.9	G_7	G_7	G_7	Inc_7	Inc_8	Inc_8	Others	Others	Others
Orenburg region	4.9	G_7	G_8	G_8	Inc_7	Inc_7	Inc_7	Others	Class9	Class9
Altai territory	6.5	G_7	G_6	G_6	Inc_8	Inc_7	Inc_7	Class9	Others	Class9
Primorsky ter.	7.2	G_7	G_7	G_7	Inc_8	Inc_8	Inc_8	Class9	Class7	Class9
Khabarovsk ter.	7.3	G_7	G_8	G_7	Inc_7	Inc_8	Inc_8	Others	Class7	Class7
R. Komi	2.2	G_8	G_7	G_7	Inc_7	Inc_7	Inc_7	Class9	Class7	Class9
Vologda region	2.4	G_8	G_8	G_8	Inc_6	Inc_7	Inc_6	Class9	Others	Class9
Volgograd region	3.11	G_8	G_8	G_8	Inc_8	Inc_8	Inc_8	Class7	Others	Class7
Rostov region	3.12	G_8	G_9	G_9	Inc_9	Inc_9	Inc_9	Class7	Class1	Class7
Saratov region	4.13	G_8	G_8	G_7	Inc_8	Inc_8	Inc_8	Class7	Class9	Class9
Novosibirsk region	6.9	G_8	G_8	G_8	Inc_8	Inc_8	Inc_8	Class7	Class1	Class7
Omsk region	6.10	G_8	G_6	G_8	Inc_8	Inc_7	Inc_8	Class9	Class1	Others
R. Sakha (Yakutia)	7.1	G_8	G_8	G_8	Inc_8	Inc_8	Inc_7	Class9	Class9	Class9
Krasnodar territory	3.8	G_9	G_9	G_9	Inc_9	Inc_9	Inc_10	Class1	Class7	Class1
R. Bashkortostan	4.1	G_9	G_9	G_9	Inc_8	Inc_9	Inc_9	Class7	Class7	Class7
R. Tatarstan	4.4	G_9	G_10	G_10	Inc_9	Inc_9	Inc_9	Class1	Class7	Class1
N. Novgorod region	4.8	G_9	G_9	G_9	Inc_9	Inc_8	Inc_9	Others	Class3	Class9
Perm region	4.11	G_9	G_9	G_9	Inc_9	Inc_9	Inc_9	Class7	Class9	Class7
Chelyabinsk region	5.4	G_9	G_9	G_9	Inc_9	Inc_9	Inc_9	Class7	Class9	Class9
Irkutsk region	6.7	G_9	G_9	G_8	Inc_9	Inc_9	Inc_8	Class9	Class9	Class9
Kemerovo region	6.8	G_9	G_8	G_9	Inc_10	Inc_9	Inc_9	Class9	Class3	Class9
Moscow region	1.10	G_10	G_10	G_10	Inc_10	Inc_10	Inc_10	Class7	Class1	Class1
The City Moscow	1.18	G_10	G_10	G_10	Inc_10	Inc_10	Inc_10	Class1	Class9	Class1
Sankt-Petersburg	2.10	G_10	G_10	G_10	Inc_10	Inc_10	Inc_10	Class9	Class1	Class1
Samara region	4.12	G_10	G_9	G_9	Inc_9	Inc_10	Inc_10	Class7	Class9	Class7
Sverdlovsk region	5.2	G_10	G_10	G_10	Inc_10	Inc_10	Inc_10	Class9	Class7	Class7
Tyumen region	5.3	G_10	G_10	G_10	Inc_10	Inc_10	Inc_10	Class1	Class3	Class3
Krasnoyarsk ter.	6.6	G_10	G_10	G_10	Inc_10	Inc_10	Inc_9	Class1	Class9	Class9

Table A5.2 Legends fo MAPs

1. MAP “Distribution of population by 20% groups of regions of Russian Federation, 2004 year”:

<i>Legend for Population</i>	<i>Data 2004</i>
(DG1& DG2) = Pa_1	Pa_1 (17 reg)
(DG3& DG3) = Pa_2	Pa_2 (16 reg)
(DG5& DG6) = Pa_3	Pa_3 (18 reg)
(DG7& DG8) = Pa_4	Pa_4 (17 reg)
(DG9& DG10) = Pa_5	Pa_5 (18 reg)

2. MAPS “Distribution of GDP by 20% groups of regions of Russian Federation”

<i>Legend for GDP</i>	<i>Datar 1995</i>	<i>Data 2000</i>	<i>Data 2004</i>
(DG1& DG2) = Ga_1	Ga_1 (16reg)	Ga_1 (17reg)	Ga_1 (17reg)
(DG3& DG3) = Ga_2	Ga_2 (17reg)	Ga_2 (16reg)	Ga_2 (17reg)
(DG5& DG6) = Ga_3	Ga_3 (18reg)	Ga_3 (17reg)	Ga_3 (16reg)
(DG7& DG8) = Ga_4	Ga_4 (16reg)	Ga_4 (17reg)	Ga_4 (18reg)
(DG9& DG10) = Ga_5	Ga_5 (19reg)	Ga_5 (19reg)	Ga_5 (18reg)

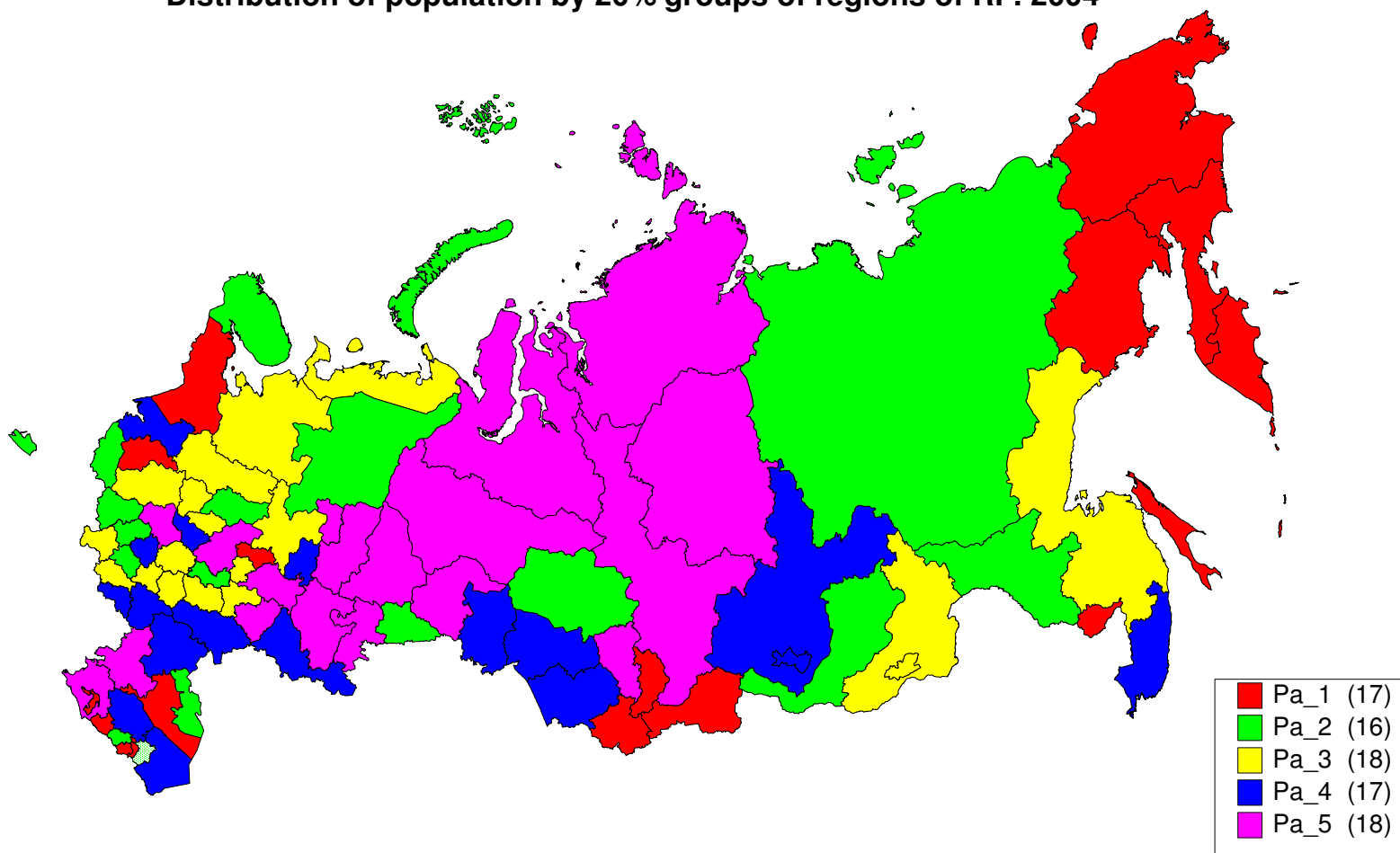
3. MAPS ” Distribution of income by 20% groups of regions of Russian Federation

<i>Legend for TMI</i>	<i>Data 1995</i>	<i>Data 2000</i>	<i>Data 2004</i>
TMI (DG1& DG2) = Ia_1	Ia_1 (16reg)	Ia_1 (16reg)	Ia_1 (16reg)
TMI (DG3& DG3) = Ia_2	Ia_2 (17reg)	Ia_2 (18reg)	Ia_2 (17reg)
TMI (DG5& DG6) = Ia_3	Ia_3 (17reg)	Ia_3 (16reg)	Ia_3 (17reg)
TMI (DG7& DG8) = Ia_4	Ia_4 (17reg)	Ia_4 (17reg)	Ia_4 (18reg)
TMI (DG9& DG10) = Ia_5	Ia_5 (19reg)	Ia_5 (19reg)	Ia_5 (19reg)

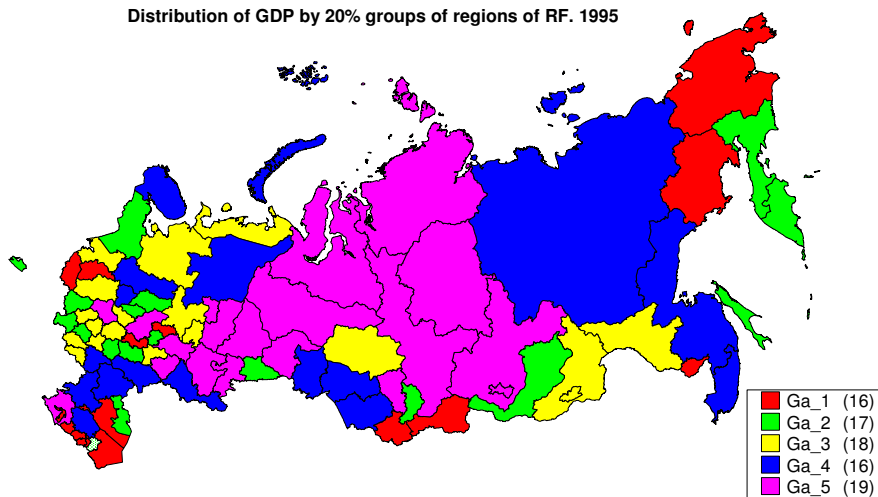
4. Legends for “Class Tree” (See definitions of Classes in Appendix 4)

<i>1995-2000</i>	<i>2000-2004</i>	<i>1995-2004</i>
Class 1 (13reg)	Class 1 (9reg)	Class 1 (8reg)
Class 3 (4reg)	Class 3 (10reg)	Class 3 (7reg)
Class 7 (14reg)	Class 7 (12reg)	Class 7 (11reg)
Class 9 (42reg)	Class 9 (28reg)	Class 9 (46reg)
Others (13reg)	Others (27reg)	Others (14reg)

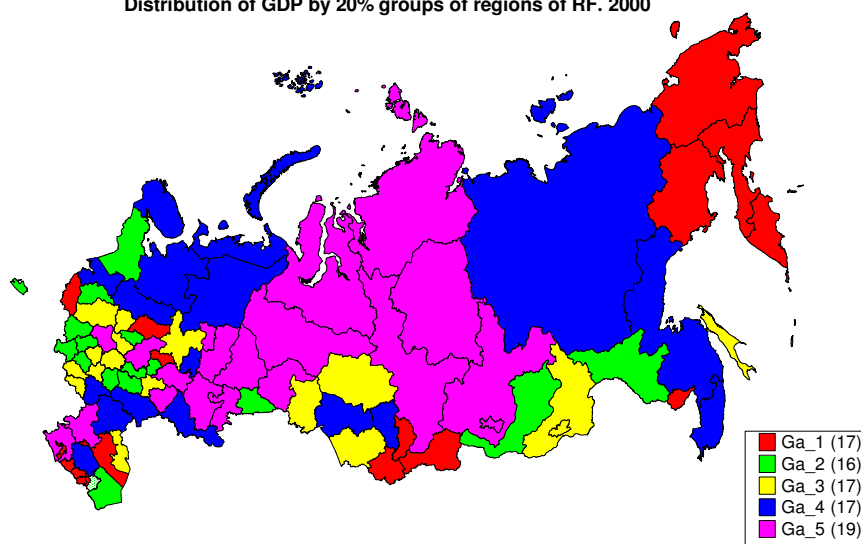
Distribution of population by 20% groups of regions of RF. 2004



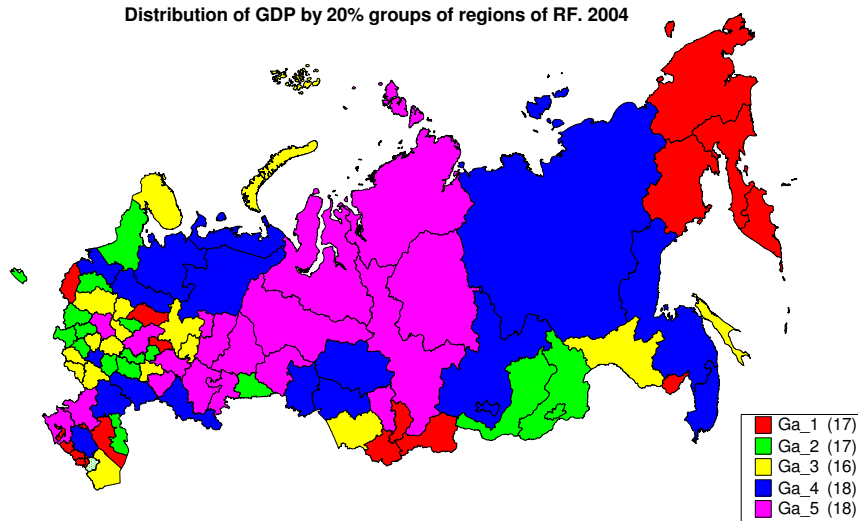
Distribution of GDP by 20% groups of regions of RF. 1995



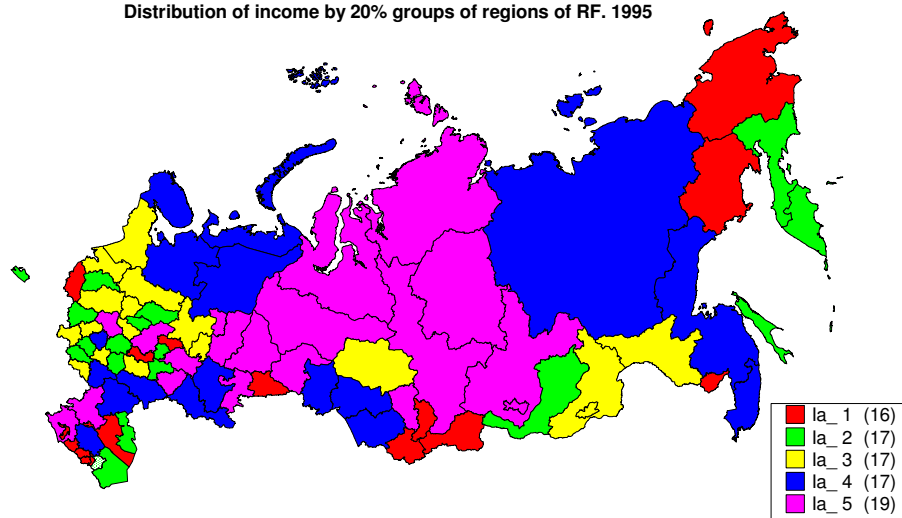
Distribution of GDP by 20% groups of regions of RF. 2000



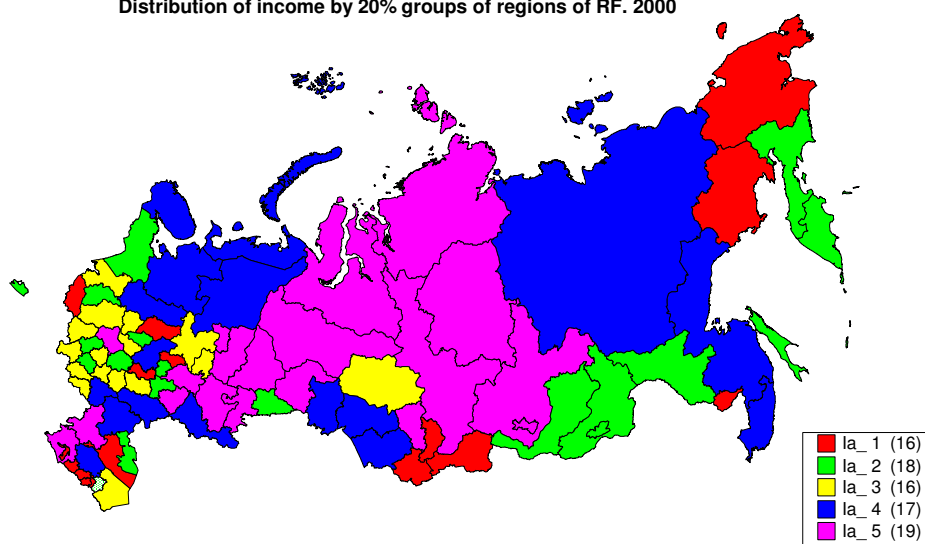
Distribution of GDP by 20% groups of regions of RF. 2004



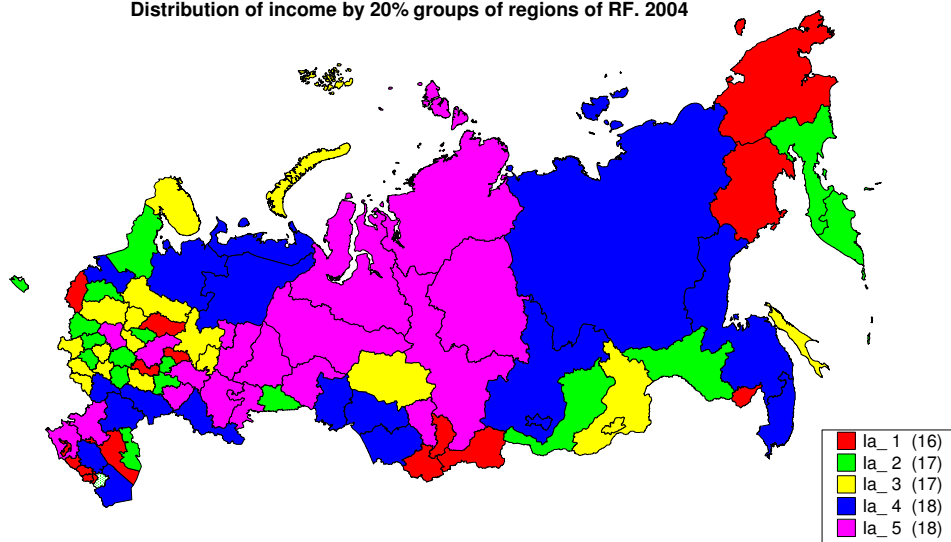
Distribution of income by 20% groups of regions of RF. 1995



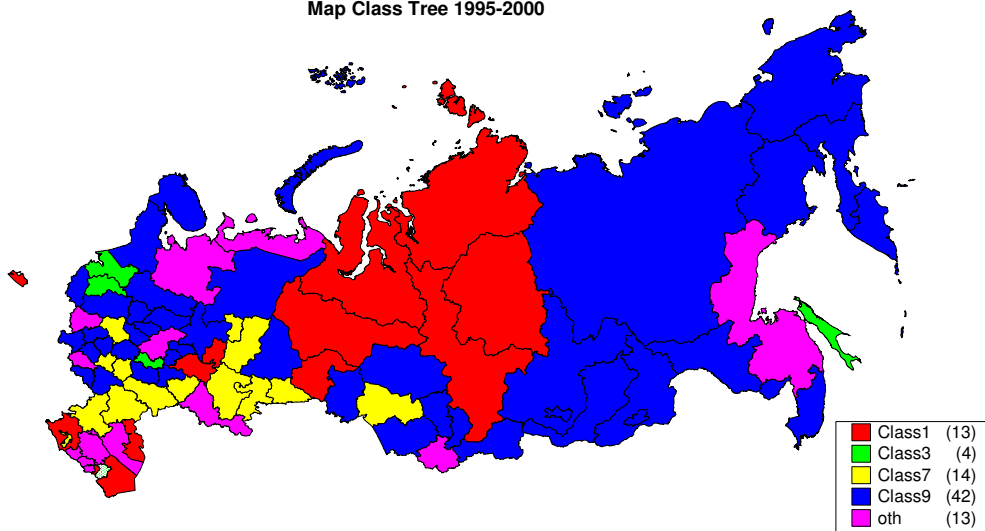
Distribution of income by 20% groups of regions of RF. 2000



Distribution of income by 20% groups of regions of RF. 2004



Map Class Tree 1995-2000



Map Class Tree 2000-2004



Map Class Tree 1995-2004

