

**Session**

**NATIONAL AND REGIONAL DIMENSIONS OF POPULATION AGEING**

**Regional differentiation of ageing characteristics in Russia**

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It is acknowledged that population ageing, the global long-term irreversible process, has been affected almost all spheres of society's life, and thus should be taken into account when elaborating population-relevant policies. Ageing process in Russia is not homogeneous – there are significant gender disparities and rural/urban differences [3, 4]. This heterogeneity should be taken into account for social policies to be effective. Russia has the biggest territory and regional differences in demographic processes may result in differences in ageing characteristics. The paper aims at revealing regional differences in ageing characteristics in Russia.

At present there are 89 regions in the Russian Federation arranging into 7 federal districts (FD) – The Central FD, The North West FD, The South FD, The Privolzhsky FD, The Urals FD, The Siberian FD, The Far East FD. The most populous are the Central FD and The Privolzhsky FD with 26.2% and 21.5% of Russian population while only 4.6% of Russians live in the Far East [2].

By the beginning of the XXIst century sufficiently universal demographic situation took place for all Russian regions: fertility declines reaching below replacement level, high mortality determines low life expectancy. When in addition to this the natural increase is negative, the role of migration in population reproduction is increasing. Nevertheless considerable regional differences in fertility, mortality and migration characteristics has shown to take place (see Table 1). Thus, for The South FD, The Urals FD, The Siberian FD, The Far East FD the TFR is higher than for the Russian Federation as a whole, the life expectancy at birth (for both sexes) in The Central FD and The South FD is higher than in Russia as a whole, the rate of migration (per 10000 inhabitants) in the year 2002 varied from –15 (for The Far East FD) till 16 (for the Central FD) [5]. To be more exact, in 2002 the maximum value of the TFR was observed in Aginsky Burayt autonomous area, the Siberian FD (2.255), minimum – in the largest megacities Moscow and Saint-Petersburg (1.034 and 1.064 correspondingly); maximum values of the LE for males and for females were registered in the Republic of Ingushetia and the Republic of Dagestan, the South FD (70.3 and 67.57 for males and 77.79 and 76.02 for females correspondingly),

minimum – in the Republic of Tuva, the Siberian FD (48.19 for males and 60.19 for females).

These differences in demographic characteristics result in age-structural differences which in turn lead to regional differentiation of ageing process. Fig. 1 shows population age-sex structures for regions with traditionally low and high fertility (a) and for regions with high and low proportion of population aged 60+ (b).

The following ageing characteristics have been considered, computed (based on [1, 5]) and compared for all regions of the Russian Federation: the proportion of the population aged 60+, ageing index, old-age dependency ratio, parent support ratio, besides the total dependency ratio has been considered (see Table 2, Fig. 2-6). Data of the first census conducted in independent Russia (year 2002) has been used [1].

The lowest values of all considered ageing characteristics have been observed in The Far East FD, the highest ones – in The Central FD. It should be mentioned that only very small part of the Russian population (4.6%) has extremely low values of considered ageing characteristics, while for more than a half of population (The Central FD, The North West FD, The Privolzhsky FD) these values are higher than average values for Russia.

To demonstrate differences in ageing characteristics within a FD, the regions of The North West FD including the city of Saint-Petersburg have been considered. Main demographic indicators are given in Table 3. Fig. 7-11 represent ageing characteristics for regions of the North West FD. Though differences in fertility and life expectancy within the FD are smaller than those for all Russian regions, ageing characteristics for the FD vary in rather wide range. In this district the Nenets a.a. (having the smallest in the district population size equal to 0.3% of the district population) stands out for the lowest values of all considered ageing characteristics – they are almost two times lower than those for the whole district. This may result from very high fertility not characteristic of this district, i.e. the TFR for the Nenets a.a. is not only the highest in the district, it is close to to the highest values observed in the Russian Federation. In

the North West FD three regions with lowest values of ageing characteristics (the Nenets a.a, Murmansk obl., the Republic of Komi) include 14% of the district population, while three regions with the highest values of the considered characteristics (Saint-Petersburg, Pskov obl., Novgorod obl.) are much more populous – they include 44% of the district population.

Result of the study show that on the background of the general trend of ageing characteristics increase, for regions of the Russian Federation ageing characteristics vary considerably. Thus, to be effective, socio-demographic policies should take into account age-structural changes in general and regional differentiation of ageing process in particular.

## References

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Table 1. Main demographic indicators for Russia and its federal districts (FD), 2002 and 2004

<i>INDICATOR</i>	<b>TFR</b>		<i>LIFE EXPECTANCY AT BIRTH</i>								<b>RATE OF MIGRATION (per 10000 population)</b>	
			<b>2002</b>				<b>2004</b>					
			males and females	males	females	males and females	males	females	males and females	males		
<i>REGION</i>	<b>2002</b>	<b>2004</b>								<b>2002</b>	<b>2004</b>	
<b>RUSSIA</b>	1.286	1.340	64.95	58.68	71.90	65.27	58.89	72.30	4	7		
<b>THE CENTRAL FD</b>	1.146	1.218	65.60	59.28	72.58	66.14	59.77	73.12	16	35		
<b>THE NORTH WEST FD</b>	1.210	1.251	63.84	57.47	71.00	63.76	57.12	71.26	-0.2	9		
<b>THE SOUTH FD</b>	1,378	1.510	67.24	61.42	73.39	67.92	62.16	73.94	10	-0.4		
<b>THE PRIVOLZHISKY FD</b>	1.314	1.335	65.15	58.69	72.29	65.22	58.59	72.57	-1	-2		
<b>THE URALS FD</b>	1.355	1.392	64.63	58.40	71.55	65.07	58.69	72.10	-1	4		
<b>THE SIBERIAN FD</b>	1.363	1.394	63.05	56.79	70.12	63.27	56.87	70.45	--6	-11		
<b>THE FAR EAST FD</b>	1.392	1.466	62.64	56.70	69.65	62.36	56.32	69.52	-15	-31		

**Table 2. Dependency ratio and ageing characteristics for Russia and its federal districts (FD), 2002**  
(computation based on the 2002 census)

<i>REGION</i>	<i>INDICATOR</i>	60+ PROPORTION %	AGEING INDEX	DEPENDENCY RATIO		PARENT SUPPORT RATIO
				OLD-AGE DEP. RAT.	DEP. RAT.	
<b>RUSSIA</b>		18.5	112.8	28.4	53.5	4.7
<b>THE CENTRAL FD</b>		21.4	155.3	33.0	54.3	5.5
<b>THE NORTH WEST FD</b>		18.8	128.9	28.3	50.2	4.4
<b>THE SOUTH FD</b>		17.6	91.4	28.0	58.6	5.1
<b>THE PRIVOLZHISKY FD</b>		18.9	112.4	29.3	55.3	4.9
<b>THE URALS FD</b>		16.1	94.7	24.1	49.6	3.8
<b>THE SIBERIAN FD</b>		16.2	92.2	24.5	51.2	3.7
<b>THE FAR EAST FD</b>		13.2	73.7	19.1	45.0	2.2

Table 3. Main demographic indicators for the North West FD and its regions, 1995, 2002 and 2004.

<i>INDICATOR</i>	<b>TFR</b>			<b>RATE OF MIGRATION</b> (per 10000 population)		
	<b>1995</b>	<b>2002</b>	<b>2004</b>	<b>1995</b>	<b>2002</b>	<b>2004</b>
<i>REGION</i>						
REP. OF KARELIA	1.214	1.326	1.310	-4	-0.5	2
REP. OF KOMI	1.283	1.374	1.397	-44	-23	-55
ARKHANGELSK OBL.	1.282	1.375	1.400	-22	-15	-36
NENETS A.A.		1.977	1.877	-68	45	11
VOLOGDA OBL.	1.324	1.380	1.403	5	-2	4
KALININGRAD OBL.	1.257	1.206	1.196	30	18	40
LENINGRAD OBL.	1.109	1.110	1.129	32	23	78
MURMANSK OBL.	1.140	1.268	1.293	-63	-36	-51
NOVGOROD OBL.	1.240	1.293	1.310	17	2	3
PSKOV OBL.	1.217	1.297	1.318	22	1	5
SAINT-PETERSBURG	1.008	1.064	1.152	9	4	21

Table 3. (continued)

<i>INDICATOR</i>	<b>LIFE EXPECTANCY AT BIRTH</b>										
	<b>1995</b>				<b>2002</b>				<b>2004</b>		
	males and females	males	females	males and females	males	females	males and females	males and females	males	females	males and females
<b>REP. OF KARELIA</b>	61.24	54.66	69.23	61.45	54.94	69.15	61.58	54.80	69.57		
<b>REP. OF KOMI</b>	61.71	55.69	69.13	62.17	56.16	69.24	62.21	56.09	69.28		
<b>ARKHANGELSK OBL.</b>	63.38	57.14	70.95	62.23	55.69	70.22	62.23	55.59	70.49		
<b>NENETS A.A.</b>				61.48	55.45	69.24	62.13	55.36	70.91		
<b>VOLOGDA OBL.</b>	64.26	57.64	72.06	63.71	57.06	71.71	62.78	55.69	71.56		
<b>KALININGRAD OBL.</b>	64.81	58.88	71.42	62.19	56.09	69.36	61.36	55.19	68.68		
<b>LENINGRAD OBL.</b>	62.25	55.49	70.10	61.90	55.35	69.64	61.97	55.16	70.00		
<b>MURMANSK OBL.</b>	63.77	57.68	70.40	63.50	57.39	70.20	63.59	57.14	70.66		
<b>NOVGOROD OBL.</b>	62.14	55.29	70.33	61.86	54.86	70.25	61.44	54.21	70.11		
<b>PSKOV OBL.</b>	62.21	55.83	69.82	61.06	54.97	68.53	60.63	54.34	68.37		
<b>SAINT-PETERSBURG</b>	66.12	59.93	72.28	67.08	61.04	73.08	67.34	60.97	73.74		



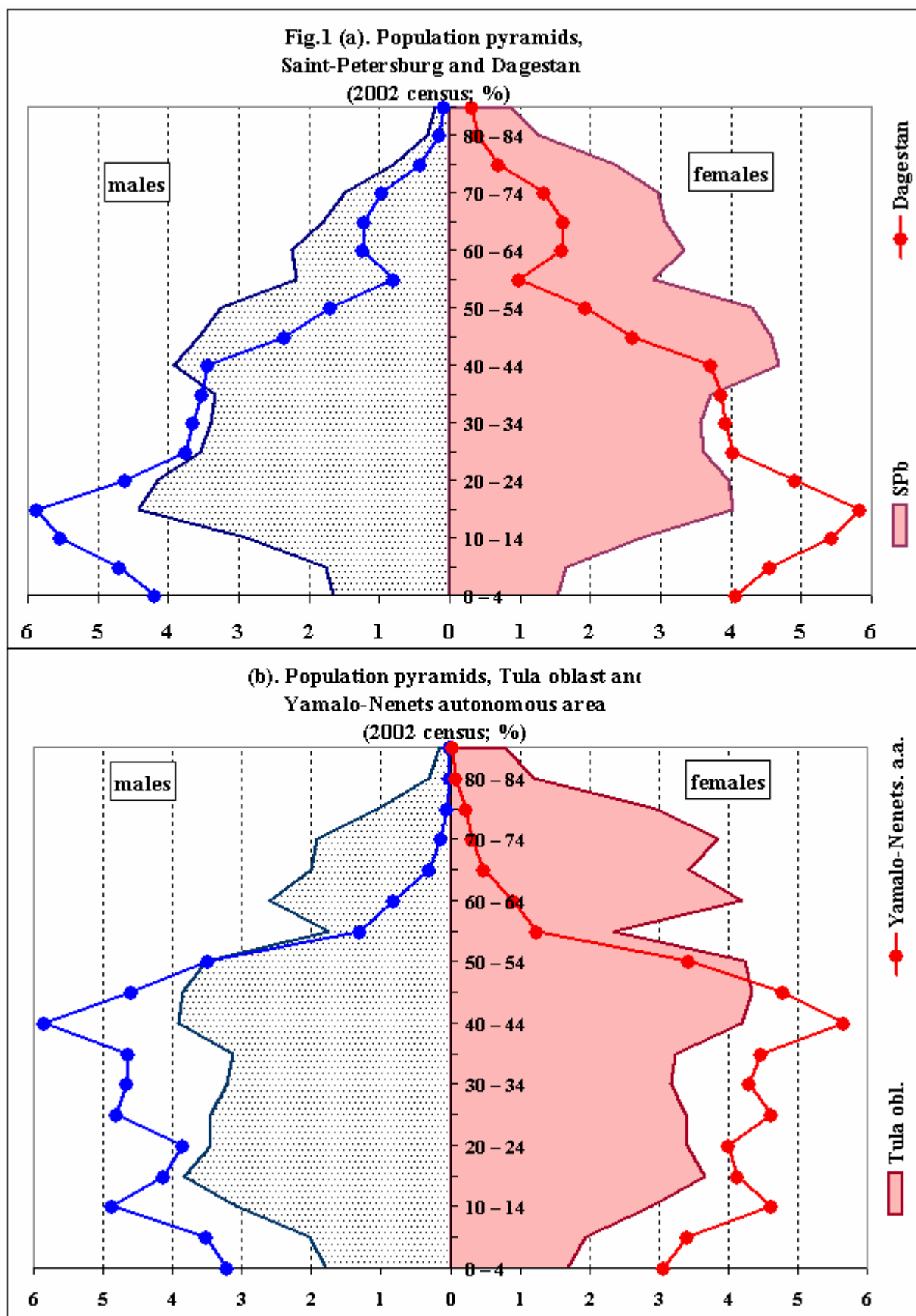


Fig.2. 60+ proportion (%), Russia and federal districts

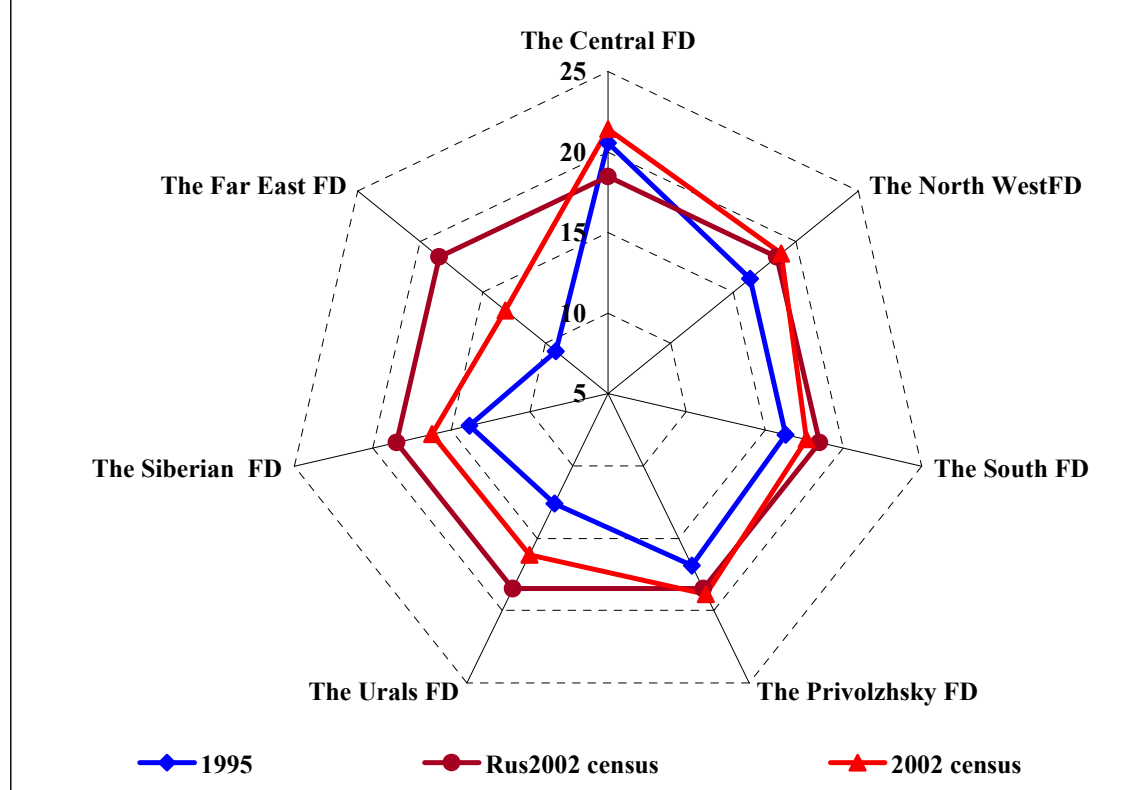


Fig. 3. Ageing index, Russia and federal districts

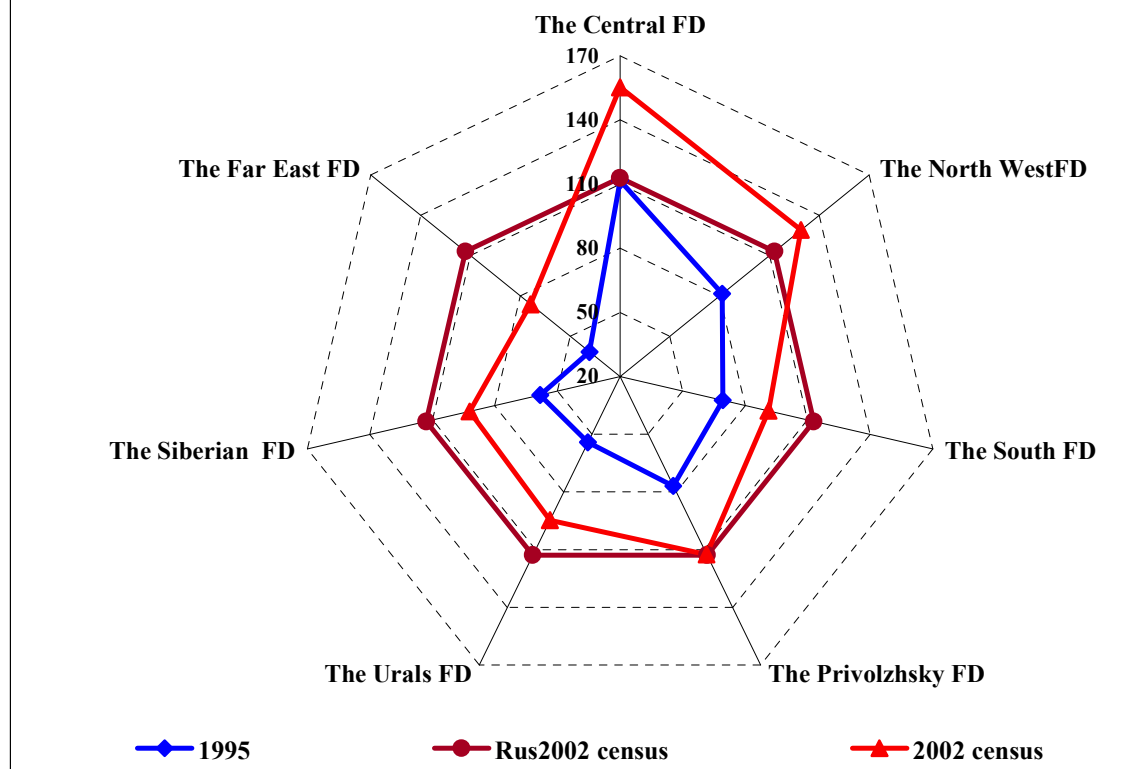


Fig. 4. Old-age dependency ratio, Russia and federal districts

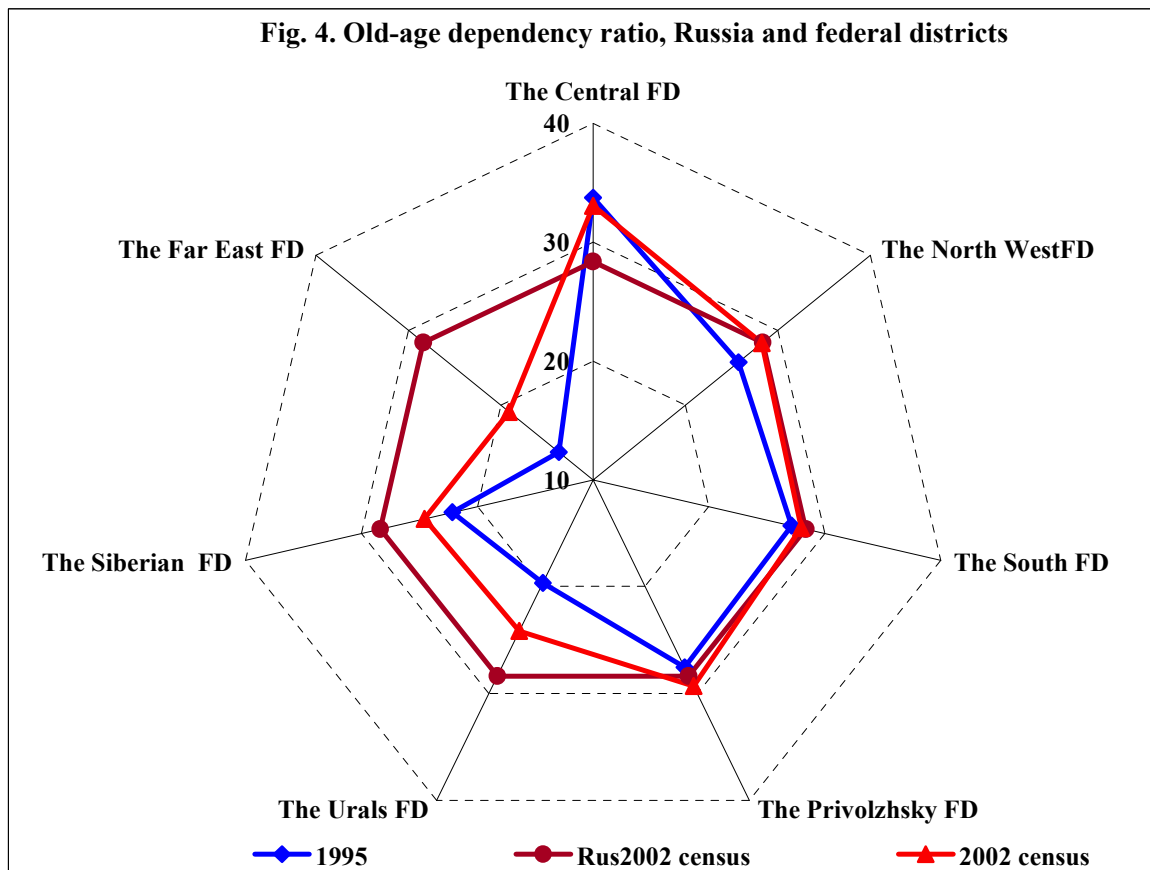
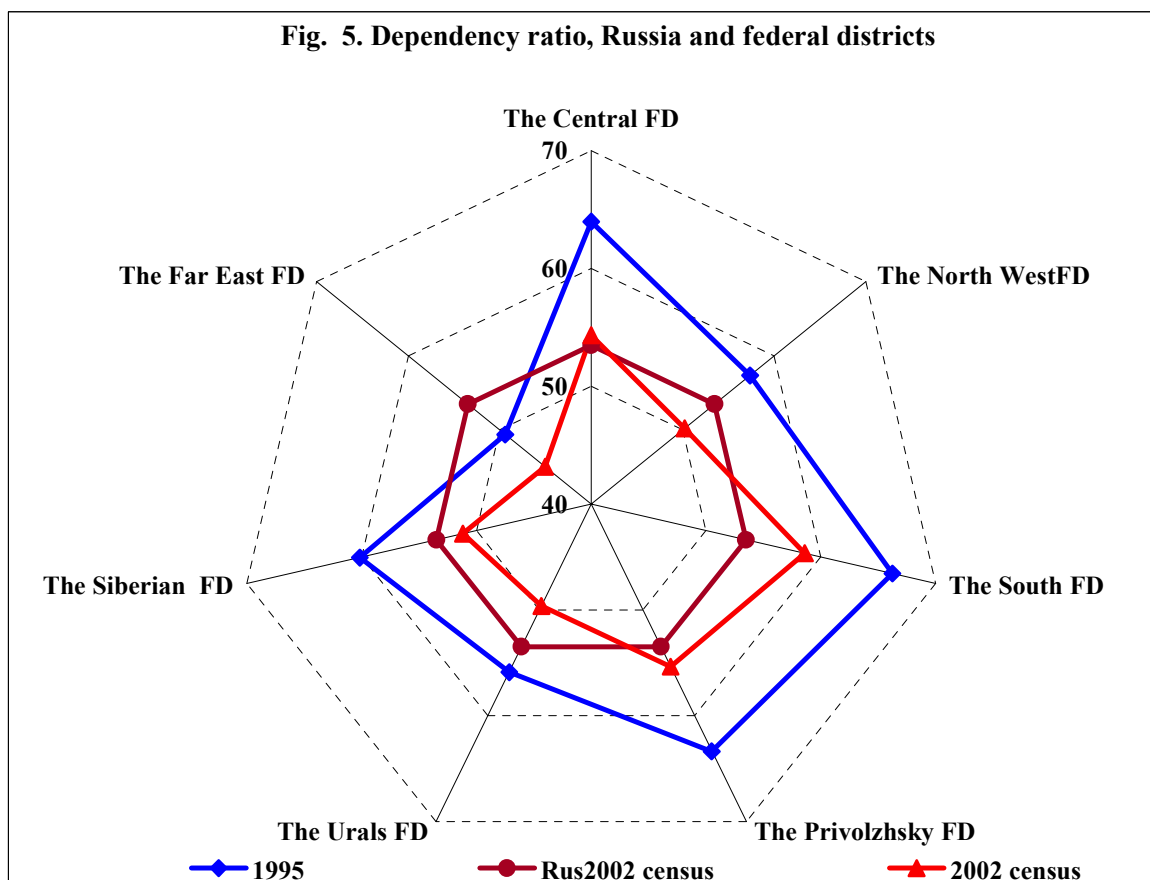
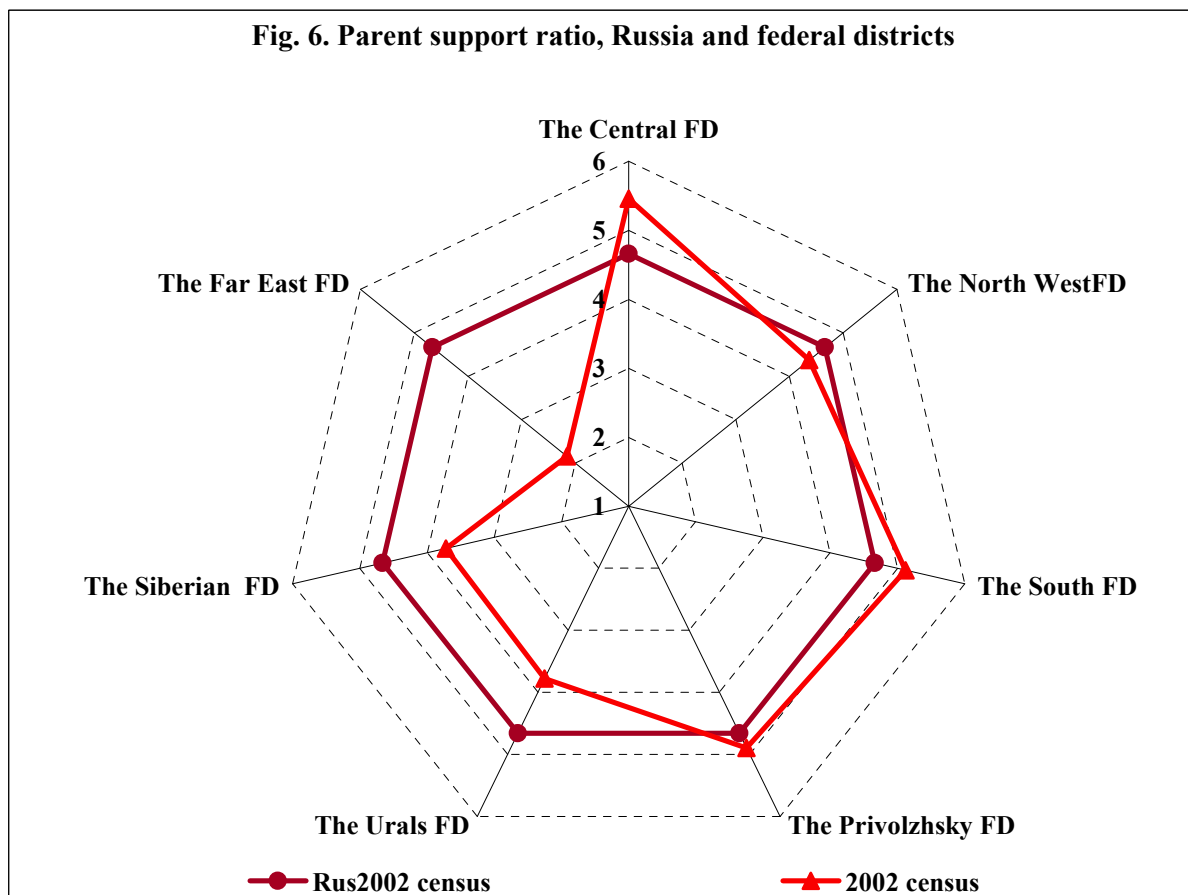


Fig. 5. Dependency ratio, Russia and federal districts





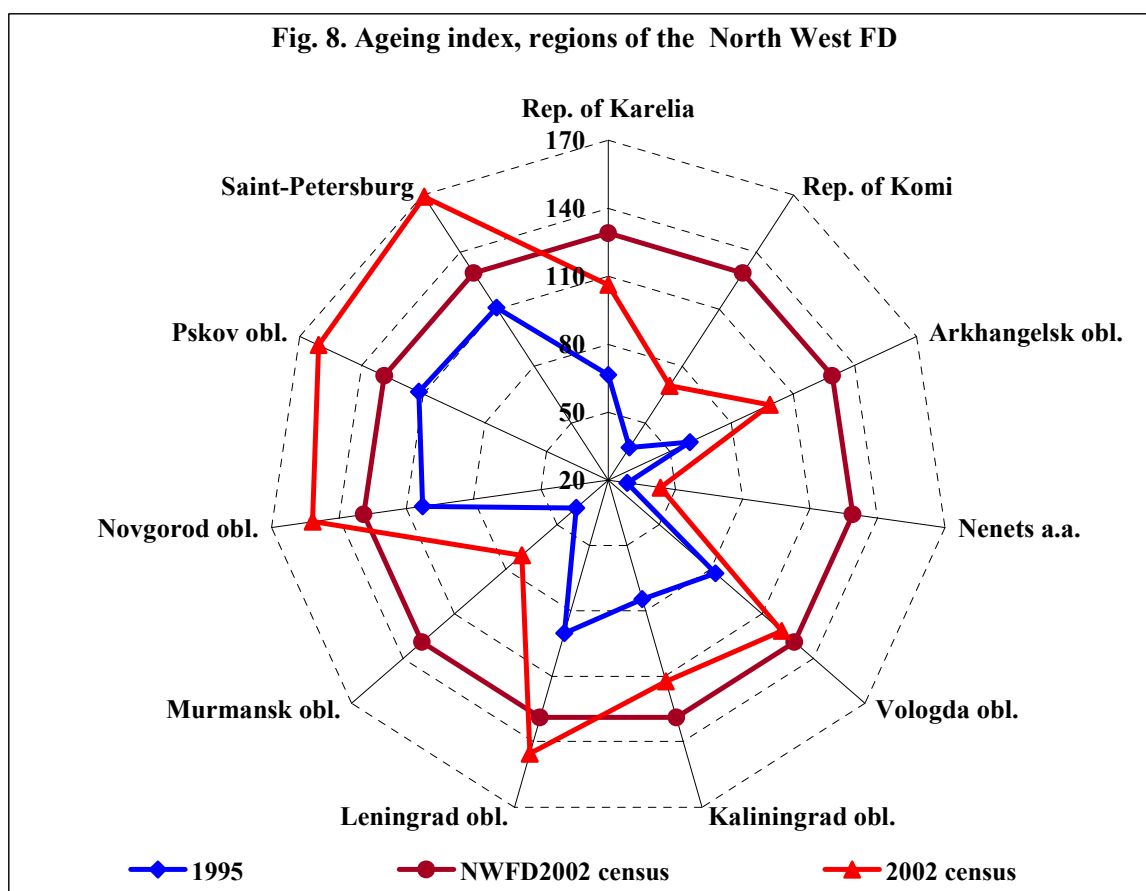
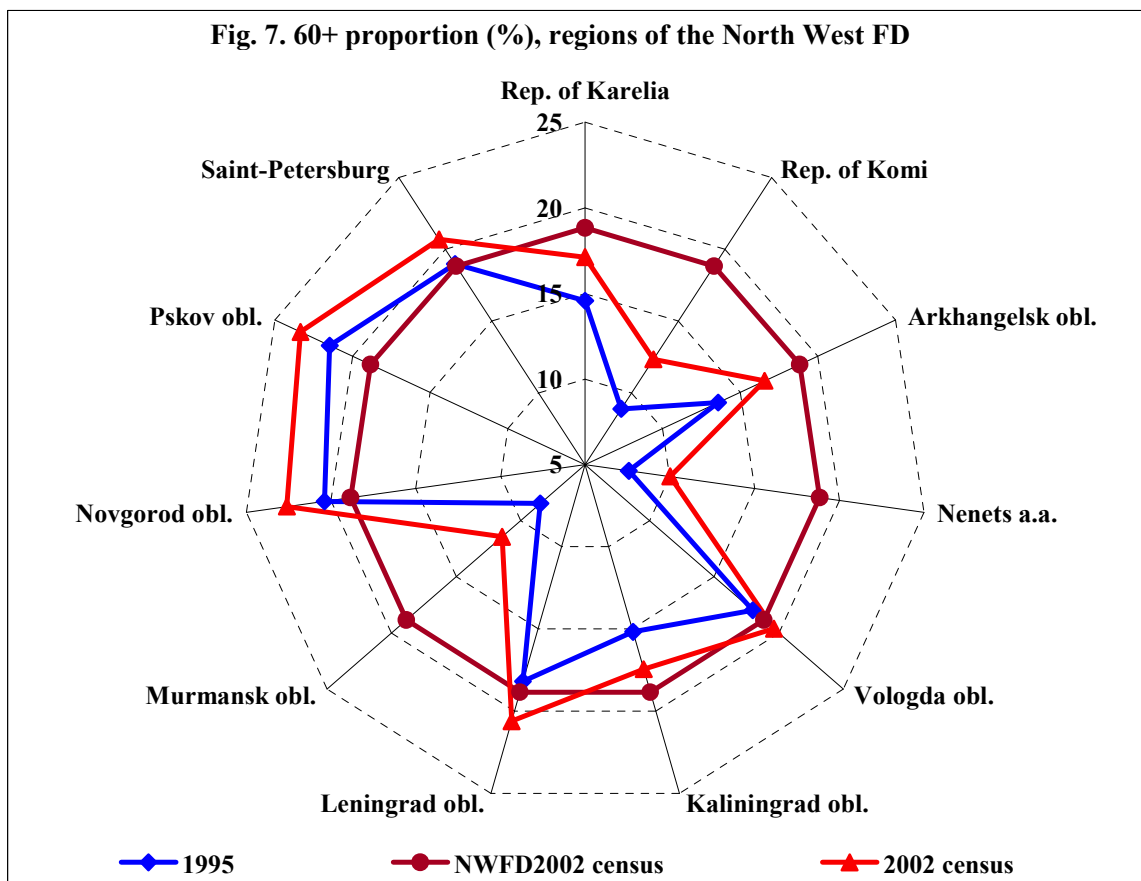


Fig. 9. Old-age dependency ratio, regions of the North West FD

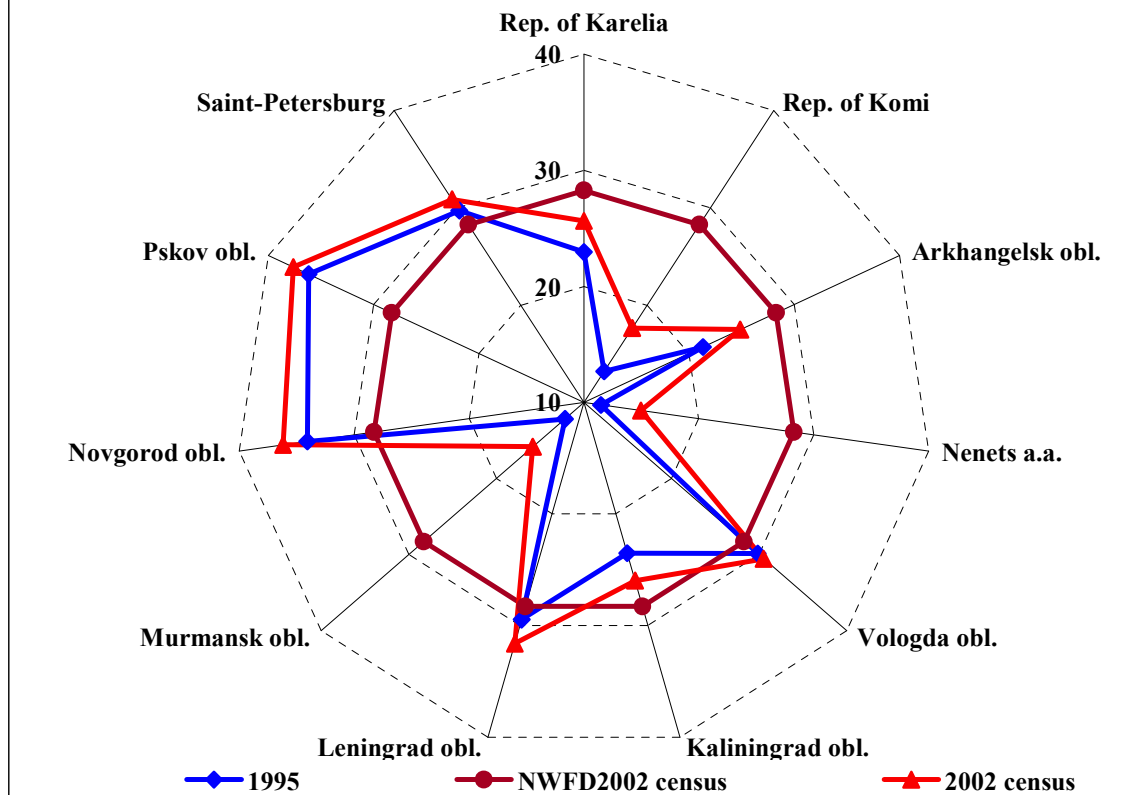


Fig. 10. Dependency ratio, regions of the North West FD

