
The 2002 Census in Russia: Preliminary Results

Timothy Heleniak¹

Abstract: A demographer specializing in the population of Russia examines salient trends revealed by the first post-Soviet census conducted in the Russian Federation in October 2002. The paper examines the statistical evidence for three notable developments: (1) a decline in Russia's overall population that was less than expected on the basis of previous official estimates; (2) the continuing growth of Moscow against the backdrop of absolute urban population decline; and (3) the emergence of abandoned settlements ("ghost towns"). In addition, the author presents background information on the conduct of the census and explains the various measures of Russian population that are commonly employed (*de facto* and *de jure* population, enumerated population, etc.). *Journal of Economic Literature*, Classification Numbers: J11, O18, R23. 2 figures, 2 tables, 19 references.

Preliminary results from Russia's long-awaited, first post-Soviet census were published in April 2003. The census, originally scheduled for 1999 in keeping with the schedule of previous post-war Soviet censuses, was delayed several times due to a lack of funding. It was finally conducted between October 9 and 16, 2002, with October 9 being the actual census date. This makes Russia one of the last of the 15 former Soviet states to conduct its first population census as an independent state.² Although demographic trends in Russia have been relatively well documented, these preliminary results do contain a few surprises. The most surprising result was that the worrisome decrease in the size of the Russian population was not as large as previously thought. The most recent official estimate indicated a population of 143,854,400 at the beginning of 2002 (according to the *de jure* or permanent definition),³ down by 4,371,200 from the peak population at the beginning of 1992. The latter year was when the number of deaths in Russia first began to exceed the number of births, and with net migration not compensating for natural population decrease, the population started to fall.

¹Innocenti Research Centre, UNICEF, Piazza SS. Annunziata 12, 50122 Florence, Italy (theleniak@unicef.org). The views and opinions expressed in the paper are those of the author and are not to be attributed to UNICEF.

²Like Russia, many of the other FSU successor states originally intended to conduct their first censuses as independent states in 1999, in keeping with the schedule of past Soviet censuses. However, many encountered financial or methodological difficulties in doing so or simply decided on a different schedule. Four countries conducted their censuses in 1999 (Belarus, Azerbaijan, Kazakhstan, and Kyrgyzstan), three in 2000 (Latvia, Estonia, and Tajikistan), three in 2001 (Ukraine, Lithuania, and Armenia), and two others in 2002 (Moldova and Georgia). Turkmenistan conducted a census in 1995 and apparently intends to conduct another in 2004. Officials in Uzbekistan announced that they intended to conduct a census in 2001, but this has been delayed until 2004 or later. For analyses of the first post-Soviet censuses of Belarus, Kazakhstan, and Kyrgyzstan, see Rowland (2001, 2002, 2003).

³The *de jure* concept (*postoyannoye* in Russian) considers the number of legal (officially registered) residents in a particular location at the time of the census to constitute its population. The other common population concept, the *de facto* population (*nalichnoye* in Russian) is the number of people physically present during the time the census is conducted.

However, the census indicated a figure that proved to be 1.2 million higher than the estimate, namely 145,181,900 as of October 2002.⁴

Despite the higher census count, the population of Russia indeed has fallen, and is expected to continue to decline well into the future. This confirms that Russia, the world's largest country territorially, has fallen to the seventh largest in terms of population behind China (1,285 million), India (1,025 million), the United States (286 million), Indonesia (215 million), Brazil (173 million), and Pakistan (146 million). Of the world's 20 largest countries, only the population of Russia is declining. According to the most recent UN population projections, the population of Russia is expected to fall by one-third, to 101,456,000 in the year 2050 (UNPD, 2003, p. 34), and possibly even further if the birth rate does not recover and infectious diseases such as tuberculosis and AIDS begin to have a larger impact than at present, as some predict (see Wines, 2003).⁵ If these projections hold, Russia will fall to the 17th largest country in the world in terms of population by mid-century. The implications of this position for Russian economic growth and its place in the world are difficult to determine, as a population decline of such a magnitude for a country of this size is unprecedented.

CONDUCT OF THE CENSUS

The preliminary results noted above are presented in five tables or sections: (1) preliminary census results at the national and regional levels and for major cities along with some explanatory text; (2) permanent (*de jure*) population by region; (3) cities with populations of 100,000 and higher; (4) groupings of cities and villages by region; and (5) a set of graphs and maps illustrating population change. The complete publication of results is scheduled for release in the fall of 2003 in 12 volumes, with the last report to be issued on December 29, 2003. Most of the results will be made available in electronic form as well, although the exact structure has not yet been decided. Following the complete compilation of census results, the entire time series of population figures over the 1989 to 2002 intercensal period will be re-estimated, including estimates for January 1, 2003. An updated set of population projections will then be performed—at the national level to 2050, and 20 years into the future for the regions.

As in the other FSU states, the Russian census was conducted under vastly different economic and social conditions than the last Soviet census in 1989. Previous Soviet censuses were carried out in a state that exercised wide-ranging control over its population, and compliance with the census was mandatory. Crime was low and people had much less fear of enumerators coming to their houses or apartments to conduct the census. The population's fear of enumerators, going door to door, is one of the major reasons countries such as the United States went to a mail-out, mail-back census decades ago. Since the last Soviet census, distrust in the state has increased and crime has risen considerably in Russia, so that ordinary citizens now are apprehensive about allowing census takers into their homes.

⁴These and other preliminary census figures cited are all from Goskomstat Rossii (2003a). The same census results appeared in Goskomstat Rossii (2003b). (See also Smolyakova and Nevinnaya, 2003).

⁵There does seem to be some recent recovery according to various measures of fertility, as the number of births has risen in each of the past four years, from 1,214,700 in 1999 to 1,396,600 in 2002 (Goskomstat Rossii, 2003c, p. 70). The total fertility rate has risen in each of the past three years for which data are available, from 1.171 births per woman in 1999 to 1.249 in 2001 (Goskomstat Rossii, 2002, p. 94). Despite the increase in the number of births, however, the excess of deaths over births remains high, as the number of deaths has increased as well. Although the number of births that women are having is increasing, the rate remains far below the replacement level of ca. 2.1 births per woman, and population growth is extremely susceptible to deviations from this replacement level.

During the 2002 Russian census, there were numerous reports of census takers being harassed or worse, or of citizens demanding that long-promised services be delivered before they would comply with the census. Russians who feared census takers were allowed to come to local census stations or, alternatively, to answer census questions over the phone. There were numerous allegations that enumerators filled out forms themselves or gathered data on households from administrative records. As a result, many disregard the count as flawed (e.g., see Shpak, 2002). However, there is no census in any country in the world that is a completely true and accurate representation of the number and composition of the population as of the census date. The true test is whether the census is sufficiently close to what had been expected, so that the census count produces plausible results that are useful for social and economic policy making. Until more complete results are published and more thorough demographic analysis can be conducted, it cannot be determined whether the recent Russian census will pass this test.

Reflecting the differing social conditions and data requirements of a centrally planned versus a market economy, several changes were evident in the 2002 census questionnaires (e.g., see Myers, 2002). In addition to a general marital status question, the 2002 census asked whether the marriage was registered, reflecting the increase in cohabitation. Furthermore, a question on citizenship was added, whereas in previous Soviet censuses, the assumption was that all those included in the census were Soviet citizens. The sequence of the questions on nationality and language was interrupted, whereas previously the question on mother tongue (*rodnoy yazyk*) immediately followed that on nationality.⁶ The language question was changed to ask whether the respondent speaks Russian and what other languages he/she speaks, and the requirement that other languages be one of those of the peoples of the USSR was dropped. There were numerous changes to the sets of questions on source of income and employment, including the possibility of being unemployed and working less than full time. The cost of the census was estimated at \$180 million or about \$1.25 per person, which is roughly the standard for countries with Russia's GDP per capita (Smirnov, 2002).⁷

NATIONAL POPULATION CHANGE

Table 1 shows population change by component between the 1989 and 2002 censuses as well as information regarding various aspects of Russia's population. Three separate population figures are presented. The first figure of 145,537,200 comprises the total enumerated population. It is the sum of the *de jure* or permanent population, plus Russian citizens living abroad who were counted in the census, plus foreigners living in Russia and who were enumerated in the census. The second figure, 145,287,400 is the sum of the *de jure* population and Russian citizens living abroad, and the third figure of 145,181,900 is the *de jure* population. The latter is given as the population figure for the country in most Russian statistical publications (Goskomstat Rossii, 2002, p. 19; Goskomstat Rossii, 2003c, p. 67).

As shown in Table 1, the population of Russia declined by 1,840,000 or 1.3 percent during the intercensal period, whereas the most recent population estimate indicated that from January 1989 to January 2002, the population had declined by 3,067,600, for a difference of 1,227,500. A portion of this difference can be attributed to the fact that previous censuses had been conducted close to the beginning of each relevant year, and that intercensal population

⁶This caused many to believe that the two had to be synonymous.

⁷This compares with census costs of about \$4.1 billion (or about \$14 per person) in the United States.

Table 1. Intercensal Population Change in Russia, 1989-2002

Category	Thousands
1989 census total (January 12)	147,021.9
Population change	-1,840.0
Natural increase (decrease)	-7,399.8
Births	20,540.0
Deaths	27,939.8
Net migration	5,559.8
Immigration	10,975.5
Emigration	5,415.7
2002 census total (October 9)	145,181.9
Total enumerated	145,537.2
Including:	
Population of Russia	145,287.4
Permanent population living in Russia	145,181.9
Russian citizens living temporarily abroad	105.5
Foreigners temporarily living in Russia	249.8

Sources: Compiled by the author from data in Goskomstat Rossii, 2003a.

estimates are for January 1 of each year, whereas the date of the 2002 census was October 9. Data from the census are taken as year-end 2002. However, the greatest discrepancy between census figures and previous estimates involve migration figures, and specifically immigration.

Census figures show that the natural decrease of the population was 7,399,800, a decline of five percent from the 1989 to the 2002 censuses. This figure consisted of 20,540,000 births and 27,939,800 deaths. However, over half of this natural decrease during the 14-year intercensal period occurred during its last four years when the number of deaths exceeded the number of births by over 900,000 each year (Goskomstat Rossii, 2002, p. 20; Goskomstat Rossii, 2003c, p. 70). Both the birth and death figures from the census results are very close to the figures given for the period from 1989 to the beginning of 2002. This is not surprising in view of the fact that Russia has long had a nearly complete vital statistics registration system.

In Russia, as in many countries in the world, it is the measurement of migration that appears to be the largest source of error in intercensal population estimates at both the national and regional levels. Each year, some 18 million persons are recorded as crossing the borders into Russia and 14–15 million persons crossing out of Russia.⁸ In addition to the usual problems in measuring migration, the USSR had disintegrated during the intercensal period, and what had previously been internal migration within one rather tightly controlled system became international migration across increasingly porous borders. For much of the 1990s, residents of the FSU states could either gain citizenship in Russia rather easily or travel to Russia visa free, making the tracking of movements rather difficult. In addition, many new migration streams such as forced migration and the return of formerly deported

⁸Information based on author's meeting with Goskomstat Rossii officials, Moscow, June 2003.

peoples appeared across Russia and the former Soviet states. And there was an increased amount of temporary migration, further compounding proper and complete measurement. Over the 1990s, Russia became a migration magnet within the region for residents from the non-Russian FSU states and other countries. Until some changes in migration law, prompted in part by the events of September 11, 2001 and the subsequent war on terrorism but also by the realization that Russia was being flooded by illegal and semi-legal migrants, visas to enter Russia were not required of residents of most CIS countries. Moreover, there is an increasingly large illegal migration into the country, estimated at about 3 million. As mentioned above, there was a special effort in the 2002 census to enumerate those temporarily present in Russia.⁹

The census indicated that there was a net population gain from migration of 5,559,800, whereas migration figures from the beginning of 1989 to the end of 2002 show a net migration to Russia of 3,761,396—a difference of 1,798,404. The difference between the census and migration statistics for emigration are quite close, with a total of 5,415,700 emigrants indicated by census statistics and a total of 5,343,031 from migration data for the period 1989–2002 period. For immigration, migration statistics counted 9,104,427 immigrants, whereas the census indicated immigration of 10,975,500, a difference of 1,871,073.¹⁰ The apparent undercount of the immigrant population resulting in a total undercount of about one percent is actually less than that in the most recent United States census. Prior to the 2000 US census, the population was estimated at 275 million, but the census revealed a population of 281 million, a difference of six million.

REGIONAL POPULATION CHANGE

Of Russia's 87 regions (excluding Checheniya and Ingushetia),¹¹ only 22 recorded population gains during the intercensal period (see Fig. 1 and Table 2). The largest gainer was Dagestan, which grew by 43 percent, most of this by virtue of having the highest rate of natural increase in the country, although the census figure was 19 percent higher than the 2002 estimate, indicating that some of the increase might have been due to unrecorded migration. Another seven regions registered population increases of greater than 10 percent. These include Moscow city, several regions which have become migration destinations in the North Caucasus, and the natural gas-producing Khanty-Mansi Autonomous Okrug in West Siberia.

⁹Census form B was for "Persons Temporarily Residing in Russia and Whose Permanent Place of Residence Was Abroad." It contained seven questions on sex, date of birth, country of birth, permanent place of residence, citizenship, nationality, and purpose for the respondent's visit to Russia.

¹⁰The immigration figure was calculated as residual because it was thought that this figure contained the majority of the discrepancy between the census and population estimate figures. The figure does not include persons temporarily present in Russia (amounting to only 249,800).

¹¹Many observers have expressed skepticism at the population total revealed by the census in Chechnya. At the time of the 1989 census, Chechnya and Ingushetia were combined into the Chechen-Ingush Autonomous Republic and had a population of 1,270,000. In 1992, when population figures for the separate units were first published, Chechnya had a population of 1,098,000 and Ingushetia had a population of 210,000. Since then, Ingushetia has grown to 469,000 through a combination of high rates of natural increase and in-migration, a large portion from neighboring Chechnya. The census total for Ingushetia was less than one percent higher than the January 2002 population estimate. The January 2002 pre-census estimate for Chechnya was 625,000, manifesting a steady population decline from 1992. However, the 2002 census shows a population of 1,100,300 in Chechnya, a figure some dispute given the two wars in the region during the 1990s and the mass exodus of the Russian population and many Chechens as well (Abdullaev, 2003; see also Trofimov, 2002).

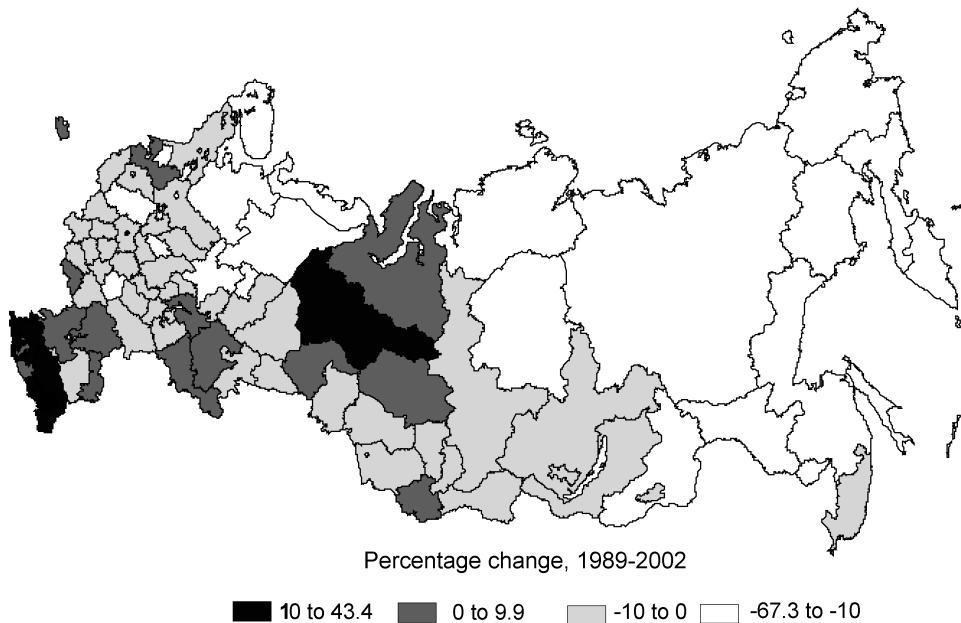


Fig. 1. Intercensal population change, January 12, 1989 to October 9, 2002.

Conversely, three-quarters of Russia's regions recorded population declines for the period, including 23 that had declines of above 10 percent. Several regions sustaining population losses of this magnitude were in central Russia (e.g., Pskov, Ivanovo, Tula, and Tver'), and logged a large excess of deaths over births during the period, as a result of older age structures. However, the majority of regions that experienced the most substantial population declines during the period were peripheral regions in Siberia, the Far East, and the European North that were the source regions for large-scale internal migration. The two most distant (northeasterly) regions, Magadan and Chukotka, experienced the largest population declines of 53 and 67 percent, respectively. Outmigration from these regions over the intercensal period was a consequence of Russia's transition to a market economy, which rendered development of many peripheral regions unsustainable. These two regions, as well as others with large declines, were among those that deviated most widely from the official 2002 population estimate, with the census figures showing much smaller populations than the estimates. For instance, in Chukotka, the January 1, 2002 population estimate, the last before the census, was 74,000, itself representing a 55 percent decline since the 1989 census. However, the census revealed an even smaller population of only 53,600. The reason for the discrepancy was the fact that many migrants who left Siberia and the North failed to register when doing so.

Only two of the seven Federal Districts registered population increases. The Central District had a modest gain of 0.2 percent, whereas the population of the Southern District increased by 11.6 percent, mainly through migration. Actually, had it not been for the large increase in the population of Moscow, the Central District would have declined in population size as well. It was, again, the peripheral federal districts that declined the most—the North-west, Siberian, and Far East.

Table 2. Intercensal Population Change in Russia, 1989–2002

Region	January 12, 1989 (thous.)	October 9, 2002 (thous.)	Intercensal population change, 1989-2002 (thous.)	Intercensal population change, 1989-2002 (percent)	Deviation from 2002 estimate (thous.)	Deviation from 2002 estimate (percent)
RUSSIAN FEDERATION	147,022	145,182	-1,840	-1.3	1,228	0.9
Central Federal District	37,920	37,991	71	0.2	1,509	4.1
Belgorod Oblast	1,378	1,512	134	9.8	14	1.0
Bryansk Oblast	1,470	1,379	-91	-6.2	-31	-2.2
Vladimir Oblast	1,649	1,525	-124	-7.5	-49	-3.1
Voronezh Oblast	2,467	2,379	-88	-3.6	-36	-1.5
Ivanovo Oblast	1,294	1,149	-145	-11.2	-42	-3.5
Kaluga Oblast	1,064	1,041	-23	-2.2	-18	-1.7
Kostroma Oblast	804	738	-67	-8.3	-29	-3.7
Kursk Oblast	1,335	1,236	-99	-7.4	-49	-3.8
Lipetsk Oblast	1,230	1,213	-17	-1.3	-16	-1.3
Moscow Oblast	6,646	6,627	-19	-0.3	217	3.4
Orel Oblast	889	861	-28	-3.2	-23	-2.6
Ryazan' Oblast	1,348	1,228	-120	-8.9	-27	-2.2
Smolensk Oblast	1,154	1,051	-104	-9.0	-48	-4.3
Tambov Oblast	1,322	1,180	-142	-10.8	-61	-4.9
Tver' Oblast	1,663	1,473	-190	-11.4	-79	-5.1
Tula Oblast	1,862	1,676	-186	-10.0	-14	-0.8
Yaroslavl' Oblast	1,469	1,368	-101	-6.9	-18	-1.3
Moscow City	8,876	10,358	1,482	16.7	1,819	21.3
Northwest Federal District	15,237	13,986	-1,251	-8.2	-273	-1.9
Karelian Republic	790	717	-73	-9.3	-39	-5.2
Komi Republic	1,251	1,019	-232	-18.5	-98	-8.8
Arkhangel'sk Oblast	1,570	1,336	-234	-14.9	-93	-6.5
Nenets Autonomous Okrug ^a	54	42	-13	-23.1	-4	-7.8
Vologda Oblast	1,349	1,270	-79	-5.9	-31	-2.4
Kaliningrad Oblast	871	955	84	9.7	12	1.3
Leningrad Oblast	1,654	1,671	17	1.0	21	1.3
Murmansk Oblast	1,165	893	-272	-23.3	-85	-8.7
Novgorod Oblast	751	695	-56	-7.5	-16	-2.3
Pskov Oblast	845	761	-84	-10.0	-17	-2.2
St.Petersburg City	4,991	4,669	-322	-6.4	73	1.6
Southern Federal District	20,536	22,914	2,378	11.6	1,443	6.7
Adygey Republic	432	447	15	3.5	2	0.4
Dagestan Republic	1,802	2,584	782	43.4	405	18.6
Ingushetia Republic ^b	469	..	3	0.6

(table continues)

Table 2. Continued

Region	January 12, 1989 (thous.)	October 9, 2002 (thous.)	Intercensal population change, 1989-2002 (thous.)	Intercensal population change, 1989-2002 (percent)	Deviation from 2002 estimate (thous.)	Deviation from 2002 estimate (percent)
Kabardino-Balkar Republic	754	901	147	19.4	119	15.2
Kalmyk Republic	322	292	-30	-9.2	-13	-4.1
Karachay-Cherkess Republic	415	440	25	6.0	12	2.7
North Ossetian Republic	633	710	77	12.1	32	4.7
Chechnya Republic ^b	1,270	1,100	-170	-13.4	475	76.0
Krasnodar Kray	4,621	5,124	503	10.9	136	2.7
Stavropol' Kray	2,410	2,731	321	13.3	88	3.3
Astrakhan' Oblast	992	1,007	15	1.5	-2	-0.2
Volgograd Oblast	2,593	2,703	110	4.2	66	2.5
Rostov Oblast	4,292	4,407	115	2.7	121	2.8
Volga Federal District	31,785	31,158	-627	-2.0	-484	-1.5
Bashkortostan Republic	3,943	4,103	160	4.1	12	0.3
Mari-El Republic	749	728	-21	-2.8	-22	-2.9
Mordvinian Republic	964	889	-75	-7.8	-21	-2.3
Tatarstan Republic	3,642	3,780	138	3.8	12	0.3
Udmurt Republic	1,606	1,571	-36	-2.2	-46	-2.8
Chuvash Republic	1,338	1,314	-24	-1.8	-32	-2.4
Kirov Oblast	1,694	1,504	-190	-11.2	-56	-3.6
Nizhegorod Oblast	3,739	3,524	-215	-5.8	-74	-2.1
Orenburg Oblast	2,171	2,178	7	0.3	-22	-1.0
Penza Oblast	1,505	1,453	-52	-3.4	-51	-3.4
Perm' Oblast	3,091	2,824	-267	-8.6	-100	-3.4
Komi-Permyak Aut. Okrug ^a	158	136	-22	-14.0	-12	-8.2
Samara Oblast	3,263	3,240	-23	-0.7	-19	-0.6
Saratov Oblast	2,684	2,669	-15	-0.5	-8	-0.3
Ul'yanovsk Oblast	1,396	1,382	-14	-1.0	-58	-4.0
Urals Federal District	12,526	12,382	-145	-1.2	-139	-1.1
Kurgan Oblast	1,103	1,020	-83	-7.5	-54	-5.0
Sverdlovsk Oblast	4,707	4,490	-217	-4.6	-55	-1.2
Tyumen' Oblast	3,098	3,266	168	5.4	-6	-0.2
Khanty-Mansiy Aut. Okrug ^a	1,282	1,433	151	11.8	9	0.6
Yamal-Nenets Aut. Okrug ^a	495	507	12	2.5	-2	-0.3
Chelyabinsk Oblast	3,618	3,606	-12	-0.3	-23	-0.6

(table continues)

Table 2. Continued

Region	January 12, 1989 (thous.)	October 9, 2002 (thous.)	Intercensal population change, 1989-2002 (thous.)	Intercensal population change, 1989-2002 (percent)	Deviation from 2002 estimate (thous.)	Deviation from 2002 estimate (percent)
Siberian Federal District	21,068	20,064	-1,004	-4.8	-478	-2.3
Altay Republic	191	203	12	6.2	-2	-1.0
Buryat Republic	1,038	981	-57	-5.5	-38	-3.7
Tuva Republic	308	306	-3	-0.8	-5	-1.5
Khakass Republic	567	546	-21	-3.7	-30	-5.2
Altay Kray	2,631	2,607	-24	-0.9	-14	-0.5
Krasnoyarsk Kray	3,039	2,966	-73	-2.4	-49	-1.6
Taymyr Autonomous Okrug ^a	56	40	-16	-28.9	-4	-9.5
Evenki Autonomous Okrug ^a	25	18	-7	-29.2	0	-1.7
Irkutsk Oblast	2,825	2,582	-243	-8.6	-131	-4.8
Ust'-Orda Buryat Aut. Okrug ^a	136	135	-1	-0.5	-8	-5.4
Kemerovo Oblast	3,171	2,900	-271	-8.5	-41	-1.4
Novosibirsk Oblast	2,779	2,692	-87	-3.1	-25	-0.9
Omsk Oblast	2,142	2,079	-63	-2.9	-48	-2.2
Tomsk Oblast	1,002	1,046	44	4.4	-15	-1.4
Chita Oblast	1,375	1,156	-219	-15.9	-81	-6.5
Aga Buryat Autonomous Okrug ^a	77	72	-5	-6.2	-8	-9.8
Far East Federal District	7,950	6,687	-1,263	-15.9	-351	-5.0
Sakha Republic (Yakutia)	1,094	948	-146	-13.3	-35	-3.6
Primorskiy Kray	2,256	2,068	-188	-8.3	-57	-2.7
Khabarovsk Kray	1,598	1,435	-163	-10.2	-51	-3.4
Amur Oblast	1,050	903	-148	-14.0	-80	-8.1
Kamchatka Oblast	472	359	-113	-24.0	-21	-5.6
Koryak Autonomous Okrug ^a	40	25	-15	-37.5	-3	-10.7
Magadan Oblast	392	183	-209	-53.4	-46	-20.2
Sakhalin Oblast	710	547	-164	-23.0	-38	-6.4
Jewish Autonomous Oblast	214	191	-23	-10.8	-4	-2.1
Chukotka Autonomous Okrug	164	54	-110	-67.3	-20	-27.6

^aOkrug populations are included in the totals of the preceding oblast or kray of which they are a part.

^bFor 1989, the figure shown for Chechnya is a combined population of Chechniya and Ingushetia.

Sources: 1989 and 2002 population (estimate) totals are from Goskomstat Rossii, 2002, pp. 22-24; 2003 population totals (October 2002 population census) are from Goskomstat Rossii, 2003a, Table 1, as accessed from Goskomstat Rossii website [www.gks.ru; April 25, 2003].

Observers have noted that Russia has long had a rather unusual rank-size distribution of its urban areas (Hill and Gaddy, forthcoming).¹² This is partially the result of decades of central planning and attempts to control population movements within the country as well as to restrict the growth of certain urban areas in search of the “optimal” city size. Russia deviates from this general rank-size rule in two respects. One is the relative absence of “medium-sized” cities. Moscow and St. Petersburg were rather large cities at 8.9 and 5.0 million, respectively at the time of the 1989 census, but after the two metropolitan cities the third-largest city was Novosibirsk with a much smaller population of 1.4 million. Second, in most countries that deviate from the general rank-size rule, it is because the largest or primate city is larger than “predicted” by the rule. In Russia, based upon Zipf’s Law, Moscow should actually have been larger than it was.

However, not surprising to those who live or travel there, the population of Moscow recently has been growing rather precipitously, instead of declining as indicated by pre-census estimates. The 2002 census revealed that the population of Moscow had grown to 10,358,000, an increase of 1,482,000 from the 1989 census and 21 percent higher than the January 2002 population estimate. In post-Soviet Russia, investment and economic growth has been highly concentrated in a few select regions and cities, with Moscow leading in both respects. The census confirms that people are following suit and concentrating in the capital along with money and economic opportunity. Thus, even barely a decade away from central planning, the rank-size distribution of Russian cities seems to be moving closer to the predicted pattern.¹³

According to the 2002 census, a larger share of the Russian population resides in Moscow than at any time since the country’s first census and perhaps at any time in Russian history (Fig. 2). St. Petersburg was larger than Moscow at the time of the first All-Russian Census of Population in 1897, when it was still the capital of the Russian Empire. But by the time of the first Soviet census in 1926, when the capital had been moved back to Moscow after a two-century absence, Moscow had surpassed St. Petersburg in population size and has grown steadily larger in size and share of the Russian population ever since. While St. Petersburg’s share of Russia’s total population reached 3.2 percent in 1939 and has remained at about that level ever since, including in the 2002 census, Moscow’s share has grown from 2.2 percent in 1926 to 7.1 percent in 2002. This increasing concentration in Russia’s primate city is in spite of repeated efforts during the Soviet period as well as post-Soviet period to restrict entry into the capital.¹⁴

In fact, of the 13 “millionaire” cities in the 2002, only four have gained in population, led by Moscow with a 17 percent increase since the 1989 census.¹⁵ All others, including St.

¹²“Zipf’s Law” for cities, or the rank-size distribution rule, holds that in most countries, the largest city is twice the size of the second largest, three times as big as the third largest, four times as large as the fourth largest and so on. This is most easily visualized on a logarithmic scale, where the cities would lie roughly on a straight line with a slope of -1. There is no strong theoretical basis for this and the “law” actually holds for a variety of social and economic phenomena. For cities, it is an observation that tends to apply across countries at a variety of different levels of economic development. For an assessment of the change in this distribution in Russia during the period from 1970 to 1999, see Iyer (2003).

¹³The study by Iyer (2003) suggests that cities in western (but not eastern) Russia are in fact evolving toward a rank-size distribution more closely resembling that described by Zipf.

¹⁴Even in present-day Moscow, those desiring to reside in the city legally must register with city authorities (e.g., see Vendina, 2002, p. 228).

¹⁵The others gaining population are Kazan’ (2 percent), Rostov (6 percent), and Volgograd (2 percent) (see Smolyakova and Nevinnaya, 2003, p. 6).

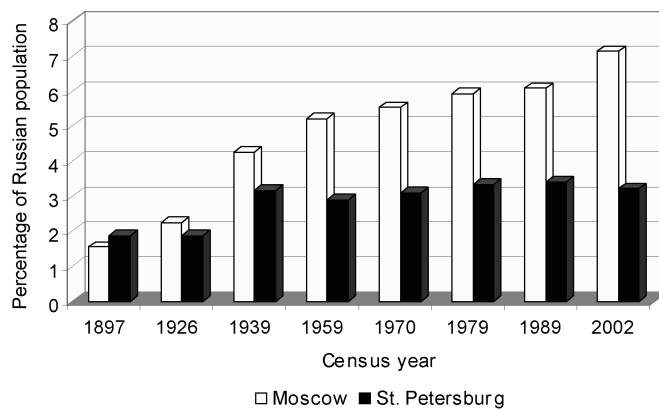


Fig. 2. Moscow and St. Petersburg as a share of the Russian population, 1897–2002.

Petersburg, declined in population size over the period. In fact, it appears from these preliminary data that with the exception of Moscow, there has been a general movement down the urban hierarchy. Combined, all other cities with a population of one million or more declined by four percent. Cities with one-half million to one million inhabitants declined by 12 percent and those with one-quarter to a half million by 3 percent. Conversely, the population of cities of 100,000 to 250,000 residents increased by seven percent. Overall, the percentage of the Russian population residing in cities remained the same as in 1989, at 73 percent.¹⁶ Given that many of the largest cities have experienced very negative rates of natural increase over the past decade, it is difficult to determine from these preliminary data how much of the differential population growth among cities within the urban hierarchy is due to natural increase and how much to migration. Perhaps when more detailed data become available it may be possible to identify flows up and down the urban hierarchy and between urban and rural areas.

At the other end of the urban spectrum is the increasing number of abandoned villages or “ghost towns.” In the census results showing the grouping of urban areas and villages, these “ghosts” are listed as villages “*bez naseleniya*” (without population). The expectation prior to the census was that such villages contained people and were included in the official list of populated places for enumeration. However, when the census takers arrived, they either found nobody living in them or no permanent residents. These 13,032 abandoned villages constituted 8.4 percent of all villages in Russia. Another 34,803 rural settlements had less than 10 residents. Thus, nearly one-third of Russian villages are either “dead” or will soon be extinct. The bulk are located in the central part of the country in the Central, Northwest, and Volga districts—areas containing some of the highest percentage shares of elderly population in the country (see Heleniak, 2003, pp. 329–331). These villages are losing population as the last elderly persons living in them die and the youth migrate to the nearby urban areas.

Elsewhere in Russia, the ghost town phenomenon reflects other causes. Not surprisingly, the regions with the largest share of empty villages were found in the two peripheral regions with the largest percentage population declines, Magadan and Chukotka, where one-third of

¹⁶The absolute urban and rural populations recorded by the 2002 census are 106,470,200 urban (73.3 percent of the total) and 38,711.7 rural (26.7 percent).

all villages had been abandoned. Many of these empty villages continue to be supplied with electricity, gas, and other services, a costly drain on the Russian state budget.

CONCLUDING NOTE

Despite the seeming shortcomings of Russia's first post-Soviet census (e.g., the count in Chechnya), it does provide useful insights into demographic change during the transition period that are indicative of the post-Soviet economic transition—the growth of Moscow, the emptying of peripheral settlements, and large-scale migration from the non-Russian states to Russia. While critics have pointed to the flaws in the Russian census, the total in fact was closer to the last, pre-census population estimate than was the case with the 2000 United States census. As stated previously, more complete analysis of the veracity of the census will have to await publication of more detailed results; 14 printed volumes are scheduled for release starting in early October 2003 and running through the end of the year. Much of the data will first appear in electronic form on Goskomstat's website. They will present additional information on such topics as marital status, language, nationality, citizenship, source of income, employment and occupation, fertility, and migration. Combined, these should provide valuable insights into the processes of demographic, social, and economic change transpiring in Russia during this tumultuous period in its history.

REFERENCES

- Abdullaev, Nabi**, "2002 Census Shows Empty Villages and Empty Nests," *Moscow Times*, April 30, 2003 [<http://www.moscow.times.ru>].
- Goskomstat Rossii**, *Demograficheskiy yezhegodnik Rossii 2002 (Demographic Yearbook of Russia 2002)*. Moscow, Russia: Goskomstat Rossii, 2002.
- Goskomstat Rossii**, "O predvaritel'nykh itogakh Vserossiyskoy perepisi naseleniya 2002 goda (Preliminary Results of the 2002 Russian Population Census)" [<http://www.gks.ru>], accessed April 25, 2003a.
- Goskomstat Rossii**, *Statisticheskii byulleten' No. 1 (Statistical Bulletin No. 1)*. Moscow, Russia: Goskomstat Rossii, May 2003b, 222-239.
- Goskomstat Rossii**, *Rossiya v tsifrakh: kratkiy statisticheskii sbornik (Russia in Figures: Short Statistical Handbook)*. Moscow, Russia: Goskomstat Rossii, 2003c.
- Heleniak, Timothy**, "Geographic Aspects of Population Aging in the Russian Federation," *Eurasian Geography and Economics*, **44**, 5:325-347, July–August 2003.
- Hill, Fiona and Clifford Gaddy**, *The Siberian Curse: How Communist Planners Left Russia Out in the Cold*. Washington, DC: The Brookings Institution, forthcoming.
- Iyer, Seema D.**, "Increasing Unevenness in the Distribution of City Sizes in Post-Soviet Russia," *Eurasian Geography and Economics*, **44**, 5:348-367, July–August 2003.
- Myers, Steven Lee**, "Russia Takes Stock of a Nation's Transformation," *New York Times*, September 29, 2002, YNE3.
- Rowland, Richard H.**, "Regional Population Change in Kazakhstan during the 1990s and the Impact of Nationality Population Patterns: Results from the Recent Census of Kazakhstan," *Post-Soviet Geography and Economics*, **42**, 8:571-614, December 2001.
- Rowland, Richard H.**, "National and Regional Population Trends in Kyrgyzstan, 1989–1999," *Eurasian Geography and Economics*, **43**, 7:529-581, October–November 2002.
- Rowland, Richard H.**, "Population Trends in Belarus and the Impact of Chernobyl', 1989–2002," *Eurasian Geography and Economics*, **44**, 4:245-286, June 2003.

- Shpak, Anna**, “‘The Database We’ve Collected is Quite Adequate’ (interview with Vice-Chairman of the Russian State Statistical Committee Sergey Kolesnikov), *Vremya novostey*, October 18, 2002, 9 (translated in *Current Digest of the Post-Soviet Press*, November 13, 2002, 5).
- Smirnov, Alexander**, “Census Workers Admit Mass Forgeries,” *Gazeta.ru*, October 22, 2002 [<http://gazeta.ru>].
- Smolyakova, Tatyana and Irina Nevinnaya**, “Russia Has Counted Its Population: 145 Million People, and 13 Cities with a Million or More Population,” *Rossiyskaya gazeta*, April 25, 2003, 6-7 (translated in *Current Digest of the Post-Soviet Press*, May 28 and June 4, 2003, 5-7).
- Trofimov, Anton**, “Chechnya Is Growing Faster than Russia,” *Nezavisimaya gazeta*, October 17, 2002, 1-2 (translated in *Current Digest of the Post-Soviet Press*, November 13, 2002, p. 6).
- UNPD (United Nations Population Division)**, *World Population Prospects: The 2002 Revision*, 26 February 2003 [<http://www.un.org/esa/population/unpop.htm>], accessed August 11, 2003.
- Vendina, Olga**, “Social Polarization and Ethnic Segregation in Moscow,” *Eurasian Geography and Economics*, 43, 3:216-243, April–May 2002.
- Wines, Michael**, “Rise of H.I.V. in Russia is Quickening, Official Says,” *New York Times*, May 22, 2003, A11.