The
Carl Beck
Papers
in Russian &
East European Studies

Number 1207

Richard H. Rowland

Regional Population Trends in the Former USSR, 1939–51, and the Impact of World War II

Richard H. Rowland is Professor of the Department of Geography at California State University, San Bernardino. He would like to thank Jane Rowland for her excellent typing.

No. 1207, August, 1997

ISSN 0889-275X

The Carl Beck Papers
Editors: William Chase, Bob Donnorummo, Ronald H. Linden
Managing Editor: Eileen L. O'Malley
Cover design: Mike Savitski

Submissions to *The Carl Beck Papers* are welcome. Manuscripts must be in English, double-spaced throughout, and less than 120 pages in length. Acceptance is based on anonymous review. Mail submissions to: Editor, *The Carl Beck Papers*, Center for Russian and East European Studies, 4G-17 Forbes Quadrangle, University of Pittsburgh, Pittsburgh, PA 15260.

Introduction

The Soviet Union probably suffered greater population losses than any other country during World War II. Estimated deaths plus estimates of nonbirths place total population losses at probably more than 40 million.[1] Although the last census of the USSR prior to the war was taken in 1939, or fairly close to the eve of the war, the first postwar census was not completed until twenty years later in 1959 or nearly fifteen years after the end of the war, by which time the prewar population had been reached and surpassed by nearly 20 million.[2]

Fortunately, however, reflecting the substantial increase in the publication of historical data on the USSR since the mid-1980s, both national and regional population estimates have been published in the late 1980s for 1951 in Naseleniye SSSR, 1987.[3] They include estimates not only for the total population, but for the urban and rural populations as well. These 1951 data thus take on special significance because they are the earliest post-World War II official and comprehensive estimates of the regional population and allow for the temporally closest investigation of the impact of World War II on regional population trends. Indeed, as will be seen, the 1951 population was still clearly below that of either 1939 or 1959 and much closer to the nadir of World War II than to the 1959 level. Moreover, the eastward deportation of many nationalities in association with the war was more detectable in the 1951 data.

Accordingly, the purpose of my essay is to describe and analyze broadly regional total, urban, and rural population trends in the former USSR during 1939-51. In addition, I will investigate regional population distribution, redistribution, and urbanization, as well as make comparisons with other periods, both preceding and subsequent.

My regional framework is the nineteen economic regions of the USSR in 1961, which I have used in other studies (Fig. 1).[4] These regions have in turn been amalgamated into two sets of larger macroregions: the Western and Eastern USSR, as

well as four quadrants. These four include Northern European USSR, which is largely the forested areas of European Russia, as well as the Baltic States, Belarus, and northern Ukraine; the European Steppe, or regions along the Black Sea, including the southern Ukraine and southern European Russia; the Russian East or "Siberia," the area of Russia east of the Ural Mountains to the Pacific Ocean; and the Non-Slavic South, the chiefly Moslem and desert areas in the south. Although I will emphasize macroregion and economic region trends, relevant subregional or oblast-level trends will also be highlighted.

Data Problems and Adjustments

Although recently published regional population estimates for 1951 are the chief stimulus for this study, in very recent years the seemingly more reliable census data for 1939 have become quite controversial. In particular, somewhat contemporaneous with the recently published results from the previously repressed census of 1937, it has been generally estimated that the actual population of the Soviet Union in 1939 was roughly 2-3 million less than the official January 1939 census population.

More specifically, the 1939 census has been recently published retrospectively.[5] Previously, the chief source of the 1939 data was that published in limited fashion in the 1959 census.[6] Furthermore, some of these recent publications have included critical discussions of, and adjustments to, the official published results of the 1939 census, as have a number of other, sometimes overlapping, sources.[7]

These sources come to roughly the same conclusion. Namely, the adjusted population of the USSR in January 1939 was probably about 167.3–168.9 million, or 2–3 million less than the "inflated" official 170.6 million actually published in the census.[8] It is generally believed that the official 1939 figure was used in order to conceal the population losses associated with the collectivization, famines, and purges of the 1930s.[9]

However, as can be readily determined, the difference of 2-3 million actually represents only about 1-2 percent of whichever 1939 population is used. In comparison, there was probably a difference of 5 million (2 percent) between the official population reported in the 1990 census of the United States (249 million) and the probable actual population (254 million).[10] Therefore, the error or inflation of the official 1939 census total is not necessarily that great. It should also be noted that the official 170.6 million-based 1939 results have continued to be used, even very recently in a 1993 article by a member of the Russian Academy of Sciences.[11]

A further problem concerns the estimate of the 1939 population in postwar boundaries, namely, those of 1951, 1959, and subsequently to the end of the USSR in 1991, or in the area of the current fifteen independent states combined. Following the German invasion of Poland on September 1, 1939, the USSR quickly expanded, eventually regaining some areas such as the western Ukraine, western Belorussia, and the Baltic States, plus annexing other areas, albeit small, which had never been part of the Russian Empire or the USSR, such as part of East Prussia. Altogether, these areas, as will be seen, contained more than 20 million people.

According to 1939 data published in the 1959 census in the early 1960s, the 1939 population in 1959 boundaries was 190,677,890 as compared to 170,557,093 in January 1939 boundaries, or 20.1 million more. The 1939 population in 1959 boundaries was again used in the major publication in the 1970s that will also be utilized in this paper (190,678,000).[12]

However, studies which I have conducted, beginning in the mid-1960s, long ago adjusted for the fact that the 190 million+ figure did not include populations for Kaliningrad Oblast of Russia (part of East Prussia); Zakarpatskaya or Transcarpathia Oblast of the southwest of the western Ukraine (Karpatoruss or Ruthenia of Czechoslovakia); the southern part of Sakhalin Oblast of the Far East (Karafuto of Japan); and the Tuva Republic of East Siberia.[13] Altogether, these four areas had a combined estimated population of roughly 2.4 million people (2,399,255), bringing the total estimated 1939 population in recent boundaries of the USSR to 193,077,145.[14]

Thus, the 1939 population in the postwar boundaries should be roughly 22.5 million more than any 1939 population in January 1939 boundaries, not just 20.1 million more.

Although some of the studies noted earlier have also attempted to adjust downward the 1939 population for later rather than January 1939 boundaries, peculiarly, it still appears that even these estimates for the postwar USSR still do not include the population of these four areas. Estimates by Andreyev, Darskiy, and Khar'kova generally result in a population of roughly 188-189 million (188.2 and 188.8) or about 2 million less than the originally published 190.7 million.[15] This is basically in accordance with their downward adjustment of approximately 2 million from 170.6 million to roughly 168.4–168.9 million.[16] Indeed, although they acknowledge the incorporation of these four areas, they still peculiarly arrive at a figure of only 188–189 million.[17] Furthermore, even official statistical publications at the end of the Soviet period still used the 190,678,000 figure and thus did not include estimates for these four areas.[18]

Furthermore, whether the 1939 population is estimated at 167–169 million or 170 million makes very little difference in the overall average annual change rate of the population between 1939 and 1951. As noted above, our estimated 1939 population for the USSR in its postwar boundaries was roughly 193.1 million. Since, as just noted, the revised population for the USSR as of 1939 in current boundaries has been estimated at, more specifically, 188–189 million, or roughly 2 million less than the official 190.7 million, this revised downward-adjusted 1939 population plus East Prussia, Karpatoruss, Karafuto, and Tuva could be then estimated at about 191.2 million.[19] This figure would entail a change rate of −0.4 percent per year to 181.6 million in 1951, which is virtually the same as the −0.5 rate based on 193.1 million, which will be used in this study (table 1). Even if the 1939 total was further downgraded to one based on the "original" figure of 167.3 million, which is accepted by some, the expanded 1939 total of 189.8 million rather than 191.2 or 193.1 million would result in a nearly comparable average annual rate of change of −0.3 percent per year.[20] These negligible differences in the 1939–51 growth rates, along with the fact

that the percentage error was not extraordinarily great (only approximately 1 percent), make it possible to conclude that the official 1939 data can still be used. The ranges of only 0.1 or 0.2 percentage points, from −0.5 to −0.4 or −0.3 percent per year, are the same or virtually the same as that in the United States between 1980 and 1990. The U.S. population in 1980 was 227 million while the official and perhaps actual populations in 1990 were 249 and roughly 254 million, respectively. The two 1990 figures would result in 1980–90 average annual change rates of 1.0 and 1.1 percent per year, a difference of 0.1 percentage points.

This contention is especially relevant to this study of regional population change. Although much 1937 and 1939 census data have now been published, I am not aware of any regional or oblast-level 1939 data that have also been readjusted downward to compensate for the "inflation." Namely, any "newly published" geographical 1939 data continue to be those based upon the official figure of 170 million.[21]

Therefore, I assume that there would also be virtually no difference at the regional level, even if regionally downward-adjusted data were provided at the oblast level, since the differences between the official and downward-adjusted national populations were minimal, based on percentage differences. The 1939 data used in this study will utilize the official 1939 regional populations as originally published, although the long-available 1939 figures published in the 1959 census will be used since they are in recent oblast boundaries rather than the boundaries of the late 1930s. However, as noted above (see note 2), data for 1939 used in this study will come specifically from Naseleniye SSSR, 1973 rather than the 1959 census itself. These data are virtually identical to those in the 1959 census but I use them because, like those for 1951, they are rounded to the nearest thousand. Moreover, they provide 1939 and 1959 populations, as do those for 1951, for the few units created since the 1959 census itself (for example, Mangyshlak Oblast of Kazakhstan). Peculiarly, however, even Naseleniye SSSR, 1973 and later sources, like the 1959 census itself, still did not contain 1939 estimates for four units mentioned above.[22] As already noted, estimates for these four areas were derived earlier by Leasure and Lewis and have been added

to the 1939 data in the 1959 census.[23] More specifically, for the four relevant economic regions (Northwest, Southwest, East Siberia, and Far East), an inflation ratio was calculated between the complete 1939 total population figures presented both in Leasure and Lewis and in Lewis and Rowland with those provided in the 1959 census, the chief source of 1939 census data (both the Leasure-Lewis and Lewis-Rowland figures and the 1959 census figures for 1939 are to the last digit).[24] The rounded and incomplete estimates for the four economic regions in 1939 were then, in turn, multiplied by the corresponding inflation ratio to provide a complete rounded population estimate for these four regions in 1939.[25] It should also be added that these adjustments were relatively inconsequential, because in no case did any of the four units comprise more than 10 percent of the population of the corresponding region (inflation ratios ranged from 1.02 to 1.11).

As well as being rounded, the 1939 regional and oblast-level populations presented in Naseleniye SSSR, 1973 in some cases differ very slightly from the 1939 figures in the 1959 census, and thus also used in my earlier studies, by a few thousand people. These differences are apparently due to some minor boundary changes between the publication of the 1959 census per se in 1962–63 and that of Naseleniye SSSR, 1973 in 1975.[26] Also, even though some new oblasts had been formed after the 1959 census, by the mid-1970s they were few in number (for example, Mangyshlak from the formerly larger Gur'yev Oblast of Kazakhstan). Overall, units of the mid-1970s, which are the basis of the 1939 and 1959 populations used here, largely correspond to those for the 1951 data published in the late 1980s. Unfortunately, any subsequent changes that might affect the 1939 estimates cannot be immediately detected for all oblast-level units and regions used for 1951 in Naseleniye SSSR, 1987, because this more recent and latter volume does not provide oblast-level estimates for 1939, but instead only for 1951 and some years thereafter. Union republic-level data, however, suggest that there were probably no subsequent changes.[27]

Another minor adjustment necessary for 1939 was an estimation of the urban and rural populations for the four units, and, thus, their corresponding regions. The

units (Kaliningrad, Zakarpatskaya, Southern Sakhalin, and Tuva), which were outside the USSR in 1939, did not necessarily have the same official urban definition of the corresponding republic of the USSR. Therefore, for operational purposes, I assumed that the level of urbanization (that is, the percentage of the total population residing in urban centers) for each of the four corresponding economic regions according to the nearly complete data in Naseleniye SSSR, 1973 also existed for the four areas in question. This resulted in complete regional estimates for the official urban and rural populations.[28]

Finally, regarding postwar regional population data, it should be added that some regional population estimates were published in the 1950s for the late 1940s and 1950s. However, comprehensive official estimates were not provided until 1956, and estimates based on other sources were incomplete or indirect.[29]

Resulting national and regional population trends and patterns for 1939-51 to be discussed subsequently are shown in tables 1–6 and figures 2–8. These discussions will be followed by sections devoted briefly to 1951–59 trends and to comparisons with intercensal trends over the last century.

Total Population Trends, 1939–51

National

Between 1939 and 1951, the total population of the USSR declined by more than 11 million people (−11,499,000) or by −0.5 percent per year, from 193,102,000 to 181,603,000 (table 1). Recently published annual estimates place the population nadir at roughly 170 million at the beginning of 1946, nearly 25 million below 1939. Andreyev, Darskiy, and Khar'khova estimate the population of the USSR at the end of 1945 at 170.5 million, while Gel'fand estimates it at 168.7 million.[30] However, although the population increased thereafter, by 1951 it was still more than 11 million below the 1939 level and roughly 15 million below the 196.7 million at the beginning of 1941 (the war began in the USSR in June 1941).[31] In contrast, the population of the

USSR in 1959 was 208.8 million. Thus, the 1951 population was still much closer to the 1946 low than to the 1959 figure, giving it greater relevance in assessing the immediate impact of the war. Indeed, the 1951 population of 181.6 million, which is also used by Gel'fand, was roughly equivalent to the estimates of the middle of the war years, namely, mid-1943. The estimated population of January 1943, which included the culmination of the Battle of Stalingrad, was 186.5 million, while that for January 1944 was 179.9 million, resulting in a mid-year average estimate of 183.2 million.[32]

Regional

Not unexpectedly, the western regions experienced the greatest population declines between 1939 and 1951, as the bulk of the fighting and war losses took place there (tables 1 and 2). The maximum eastern front line extended from just east of the Finnish border to the besieged Leningrad in the northwest, then to just a few miles west of Moscow, southeastward to Stalingrad, and through most of the North Caucasus.[33] In terms of the economic regions, the West, Belorussia, Moldavia, the Southwest, South and Donetsk-Dnepr all fell completely within the front-line. In addition, the front line area covered the western fringe of the Northwest (plus all of Kaliningrad Oblast), the western halves of the Center and Central Chernozem, the northwestern half of the North Caucasus and a small segment of the southwestern Volga.

The Western USSR experienced the greatest overall loss, and all the regions with population decline were found there (table 1). The population of the Western USSR declined by more than 15 million people (−0.9 percent per year), from roughly 146 million in 1939 to 131 million in 1951. In fact, its 1951 population was barely higher (by 200,000) than that for a quarter century earlier in 1926.[34] In contrast, the Eastern USSR managed to increase in population from 1939 to 1951 by more than 3 million people (0.6 percent per year) from roughly 47 million to 51 million.

Among the quadrants, the western Northern European USSR also clearly had the greatest decline (table 1). Its population fell by more than 13 million (−1.1 percent per year) during 1939–51, and its 1951 population was more than 4 million below that of 1926.[35] The western European Steppe experienced a lesser decline of nearly 2 million or by −0.5 percent per year.

In contrast, the more eastern and southern quadrants, the Russian East and the Non-Slavic South, both experienced population increases (table 1). The Russian East experienced the greatest growth of the two, both in absolute and relative terms, with the total population increasing by more than 2 million (0.6 percent per year). The population of the Non-Slavic South increased by only about 1 million (0.3 percent per year).

Furthermore, within the three western macroregions —Western USSR, Northern European USSR and the European Steppe—all economic regions experienced population decline between 1939 and 1951. Conversely, all economic regions of the Eastern USSR, Russian East, and Non-Slavic South had increases, except for the Transcaucasus of the Non-Slavic South, which is also located in the Western USSR (table 2, fig. 2).

Among the economic regions, a clear majority (13, or more than two-thirds) declined in population and, as just noted, all these regions were located in the western or European macroregions (table 2). The greatest rate of decline was experienced in the Northwest Region, where the average annual decline rate was more than 2 percent (−2.1). In absolute terms, its population declined by −2.7 million, surpassed only, as will be seen, by the Southwest Region. Within the Northwest, most oblast-level units declined in population. The greatest rate of decline, −8.3 percent per year, occurred in Kaliningrad Oblast, whose population was cut by 774,000 or to less one-half its 1939 level, from more than 1 million to only 455,000. Its rate and absolute declines were both clearly the greatest for any oblast-level units in the USSR. However, its 1939 population was one of the few not provided in official Soviet statistics, and is based instead on estimates by Leasure and Lewis. Nonetheless, a separate procedure seems

to support that earlier estimate, and thus, the basic extent of the decline of Kaliningrad Oblast.[36] The decline here reflected the flight of an estimated 500,000 Germans from East Prussia during World War II.[37] Other sharp annual rates of decline in the Northwest were experienced by Novgorod (−3.7 percent), Pskov (−3.3), and Vologda (−2.2) Oblasts. The greater rates of decline for Novgorod and Pskov reflected their extreme western location and locations completely (Pskov) or largely (Novgorod) within the front line. The well-known tragedy of besieged Leningrad is also apparent, as the city, which, like Moscow, has oblast-level status, declined by roughly −500,000 or −1.4 percent per year; its decline will be discussed in greater detail later in the urban section. Leningrad Oblast, which excludes the city, also declined sharply by −2.1 percent per year, due in part to the evacuation of more than 400,000 Finns from the Karelian Isthmus, an area just north of Leningrad City between the Gulf of Finland and Lake Ladoga, which was annexed by the USSR from Finland. To a lesser degree, the decline was caused by the transfer of a few thousand Finnic Ingrians, also called Izhori Ingermanlanders.[38] These movements were, of course, in conjunction with the Russo-Finnish War in the early 1940s. Paradoxically, the Northwest also contained a unit of fairly rapid growth during 1939–51, the Komi ASSR, 3.0 percent per year. This very probably was due to the expansion of coal production in the remote Pechora Coal Basin during World War II.[39] Increases were also experienced by Murmansk Oblast (1.2 percent per year) and the Karelian ASSR (0.2 percent per year). Growth in all three units was enhanced by the fact that they were each located either completely (Komi) or largely (Murmansk Oblast and Karelia) behind the front line.[40] Furthermore, many of these northern areas included forced labor camps, especially the Pechora Coal Basin.[41]

The second greatest rate of decline (−1.7 percent per year) was experienced by the Central Chernozem Region of Russia, traditionally a region of slow growth or decline and high out-migration even during peacetime.[42] Its absolute decline (−1,877,000) was the fourth greatest of any of the economic regions, and unlike the Northwest, <u>all</u> component units here also had declines, especially Orel, Kursk,

Voronezh, and Tambov Oblasts (roughly 2–3 percent annually each). The western half of this region also was within the front line and experienced considerable devastation during World War II. Indeed, it included the tank battle in the Kursk-Orel-Belgorod area, one of the most decisive and important Soviet victories.[43]

The third greatest relative decline and the greatest absolute decline was experienced by the Southwest Region in northwestern Ukraine. Its rate of decline was −1.3 percent per year, while its absolute decline was nearly 3 million (−2.9). These figures largely reflect its location in the extreme west, completely within the front line; its relatively high share of the Soviet Jewish population and the Jewish extermination policies of the invading Germans; and the evacuation of its large population of Poles. Not unexpectedly, the greatest oblast-level rates of decline occurred in the extreme western portions of the Southwest, areas belonging to interwar Poland: Ternopol', L'vov, Rovno, and Ivano-Frankovsk (−2.0 to −0.5 percent per year each). All remaining oblasts of the Southwest also had population decline, except Kiev City, which like Moscow and Leningrad, had oblast-level status.

The next two greatest economic regional rates of decline were also in the far west of the USSR and completely within the front line: Belorussia (−1.2 percent per year) and the South Region in the Ukraine (−1.1). Except for Minsk City, all units of Belorussia experienced declines, especially Vitebsk, Gomel', and Mogilev Oblasts (−1.7 to −2.5 each), also reflecting a large Jewish presence. Within the South, the greatest declines occurred in the Crimea (−2.2) and Odessa (−1.6) Oblasts. The sharp decline of the Crimea, which includes the Black Sea resort of Yalta, reflects its population of Crimean Tatars, one of the nationalities deported eastward after being accused of collaborating with the Germans; that for Odessa reflects the presence of a large Jewish population.[44] The evacuation of Black Sea Germans also played a role.[45]

Regarding Jewish regional populations in 1939, according to the 1939 census, Ukraine, which falls into the Southwest, South, and Donetsk-Dnepr Regions, and Belorussia contained the majority (63.0 percent or 1.9 million of 3 million) of the Jews

of the USSR as of January 1939.[46] There were also substantial Jewish populations in the present-day western Ukraine and western Belarus, which were in eastern Poland.

The next greatest declines were experienced by regions that were all in Russia and either partly or wholly behind the front line: the Volgo-Vyatsk (−0.9 percent per year), and Center and Volga (−0.8 each) Regions. As the Volgo-Vyatsk was completely behind the front line, its sharp decline is partly due to traditional chronic population decline or slow growth and high out-migration. Indeed, all units of this region experienced declines, despite being beyond the front line.

In addition to a sharp rate of decline, the Center Region also had the third greatest absolute decline (−2,236,000), the latter reflecting its being the most populous of the economic regions. The fact that only the western portion of the region was occupied by the Germans was especially apparent in oblast variations in rates of population change. The highest rate of decline was experienced by the extreme western Smolensk Oblast, which borders on Belorussia. Its rate of −4.0 percent per year was, after Kaliningrad Oblast, the greatest for any oblast-level unit in the USSR during 1939–51, although the sparsely populated unit of the yet-to-be-formed Mangyshlak Oblast in western Kazakhstan also had a rate of −4.0 percent per year. The sharp decline for Smolensk Oblast can be attributed in part to its location on the main invasion route from Poland and Belorussia to Moscow. Not unexpectedly, other units in the Center with sharp declines were also located in the southern or western parts of the region. These included Ryazan' and Kaluga Oblasts (−2.4 percent per year each) and Kalinin Oblast (−2.3). Conversely, Moscow City, which was never reached by the Germans, had a population increase of 1.4 percent per year, from 4,542,000 to 5,347,000. Its absolute increase of 805,000 was the largest for any oblast-level unit in the USSR. Tula Oblast was the only other unit of the Center to have an increase, but it was only by 8,000 (+0.0 percent per year). The absence of a decline, despite its location largely within the front line, may reflect the rapid expansion of the damaged Moscow Coal Basin right after World War II.[47] Oblasts with relatively small declines

were either partly or wholly behind the front line to the northeast: Vladimir, Moscow (excluding Moscow City), and Ivanovo.

The Volga Region was largely but not wholly behind the front line. Not unexpectedly, the greatest rate of decline was experienced by Volgograd Oblast (−1.8 percent per year), which, of course, contains the city of Stalingrad, now Volgograd, site of perhaps the turning point and most famous battle of the war in the USSR. Other relatively sharp declines occurred in units straddling or west of the Volga River, although they were still behind the front line: Astrakhan', Saratov, and Penza Oblasts (each roughly −1.0 to −1.5 percent per year). The relatively sharp decline for Saratov Oblast (-1.3) greatly reflects the fact that it contained most of the area constituting the former Volga-German ASSR, which was the home of the Volga Germans, one of the many nationalities deported eastward, here an estimated 400,000.[48] The Volga Germans were long-time settlers, having arrived in the 1760s, and numbered roughly 367,000 in the ASSR in 1939.[49]

One unit of the Volga Region actually had a population increase, Kuybyshev Oblast (0.8 percent per year). Most of this oblast was east of the Volga River and included the city of Kuybyshev, which benefitted during the war when it became the Soviet diplomatic capital.[50]

A relatively sharp rate of decline also occurred in the North Caucasus Region of Russia (−0.6 percent per year). The greater share of the region was occupied by the Germans, and it also contained a number of ethnic minorities who were deported eastward after being accused of collaboration. These included the Chechens (of currently troubled Chechnya), Ingush, Karachay, Balkars, and Kalmyks. Their respective numbers in 1939 were roughly 408,000, 92,000, 76,000, 43,000, and 134,000.[51] The greatest rates of decline occurred in units having both of these attributes (German occupation and a deported nationality): the Chechen-Ingush ASSR, −3.9 percent per year, a rate of decline surpassed by only three other oblasts; and the Kalmyk ASSR, −3.1 percent per year. However, the next greatest decline was experienced by the Dagestan ASSR, −1.7 percent per year. Although it contained a

number of non-Russian nationalities, it was completely behind the front line and was not directly involved in the deportations. Nonetheless, it lost population indirectly, when 60,000 Dagestan mountaineers were moved into the vacuum of the Chechen-Ingush ASSR.[52]

The next greatest decline in the North Caucasus Region occurred in Stavropol' Kray (−1.2 percent per year), which includes Karachayevo-Cherkess Autonomous Oblast, home of the deported Karachay, although the Cherkess were not deported (unfortunately 1951 data are not available for the autonomous oblasts or autonomous okrugs).[53] One unit of the North Caucasus, Krasnodar Kray, had a population increase (0.4 percent per year), perhaps partly due to the fact that even though it was largely occupied by the Germans, its small nationality population, the Adygey of Adygey Autonomous Oblast, were not deported. Two other units based on non-Russian nationalities, the Kabardino-Balkar ASSR and North Ossetian ASSR, experienced only relatively slight declines (−0.2 and −0.5, respectively), perhaps because even though the Balkars were deported, the Kabardinians and Ossetians were not.

Four other regions also experienced population decline between 1939 and 1951: the Donetsk-Dnepr Region in eastern Ukraine and the West or Baltic Region (−0.3 percent per year each), and Moldavia and the Transcaucasus (−0.2 each). Declines for the first three regions are somewhat understandable given their extreme western location and occupation by the Germans, although the first two did include some units with increases. However, it is somewhat surprising that the Transcaucasus, which was beyond the front, also had a decline. Further investigation reveals that the decline was exclusively confined to Azerbaijan (−0.7 percent per year). Although it was beyond the front line, one author suggests that the Azerbaijani were disproportionately highly represented in the Red Army and may have suffered relatively high losses in the fighting in the Caucasus and at Stalingrad.[54] Moreover, Azerbaijani Turks may have been treated almost as badly by the Germans as were the Jews, and some also fought on the German side.[55] The decline may also be partly explained by the sharp fall in oil production in the Baku oil fields between 1940 and 1945.[56] These oil fields—the

foremost oil fields in the world at the turn of the century and the leading ones of the USSR throughout the first half of the twentieth century—were a major destination sought by the Germans, but never reached.[57] However, the population decline of Azerbaijan was confined to the rural population, which makes the linkage between oil decline, typically an urban activity, and total and rural decline somewhat more questionable.

At the other end of the spectrum, six regions had population increases during 1939–51, each of which was in the Eastern USSR and, of course, behind the European front line. The most rapid rate of growth was experienced by the sparsely populated Far East Region (1.2 percent per year). Although its rapid growth could be explained by its being the most distant from the European theater of war, it was, on the other hand, the closest of the regions to Japan. Since the USSR did not declare war on Japan until August 1945, however, there was very little actual fighting and losses were relatively small.[58] Sakhalin Oblast, the southern part of which belonged to Japan in 1939 (Karafuto), clearly had the greatest rate of increase (3.4 percent per year) perhaps due to an influx of Russians after the reincorporation of South Sakhalin into the USSR after World War II.[59] However, even the Far East contained some units with declines: Amur and Magadan Oblasts (−0.3 percent per year each). The latter is the most northeastern oblast in the USSR and especially infamous as a site of forced labor camps, perhaps most notably in the Kolyma gold fields.[60]

The next most rapid rate of growth was experienced by Kazakhstan (0.9 percent per year). Within this region, the most rapid growth occurred in Karaganda (4.0 percent per year) and Dzhezkazgan (3.9) Oblasts, which were also the most rapidly growing oblasts in the USSR as a whole, excluding some individual cities with oblast-level status (for example, Dushanbe of Tajikistan). It should also be noted that during 1939–51, Dzhezkazgan was part of Karanganda Oblast and became a separate oblast only in the early 1970s. Karaganda Oblast especially benefited in World War II from the expansion of coal and iron-and-steel production.[61] Dzhezkazgan contains one of the major copper mining areas in the former USSR, and its rapid growth may reflect

the expansion of copper output after completion of a railway in 1940.[62] Despite the overall growth of Kazakhstan, a few oblasts actually declined in population, the greatest decline occurring in Mangyshlak Oblast on the Caspian Sea (−4.0), although it had very few people (only 42,000 in 1939 and 26,000 in 1951). As noted above, the sharp rate of decline here was the second greatest of any oblast-level unit in the USSR (tied with Smolensk). (Since this decline was exclusively confined to the rural population, it will be discussed in more detail in the section on rural population change.)

After Kazakhstan, the next greatest rates of increase occurred in two major regions of Russia: West Siberia (0.8 percent per year) and the Urals (0.6). Within West Siberia, all units had population increases, but clearly the largest occurred in Kemerovo Oblast (2.3 percent per year). Much like the Karaganda area of Kazakhstan, this can be attributed to the rapid buildup of coal and iron-and-steel production during World War II in the Kuznets Basin.[63]

Although the Urals did not have the most rapid rate of population growth between 1939 and 1951, it was notable in that it had the greatest absolute population increase of any of the nineteen regions. Indeed, it was the only economic region to have an increase in excess of 1 million (1,110,000). Like Kazakhstan and West Siberia, the Urals also benefited greatly from the evacuation of industrial production during World War II. Over one thousand factories were dismantled and shifted eastward during the war, and nearly half went to the Urals.[64] The impact was clearly evident at the oblast level in the Urals where the most rapid population growth occurred in highly industrialized Chelyabinsk Oblast (2.4 percent per year). Iron and steel production expanded at Magnitogorsk and Chelyabinsk, both during and after the war.[65] The next most rapid growth (1.9 percent per year) and greatest absolute increase in the Urals (657,000) occurred in another major industrial area, Sverdlovsk Oblast. On the other hand, despite the appreciable growth of this region during 1939 and 1951, it also contained four units with population decline.

Finally, only relatively slow population growth occurred in a sleeping giant, Central Asia (0.3 percent per year), and East Siberia (0.2). Central Asia would, of

course, subsequently explode to become the most rapidly growing and populous of all the nineteen regions in the latter half of the twentieth century, due chiefly to its high fertility.[66] Three of the four republics, now independent states, experienced growth during 1939–51, the most rapid being in Kirgiziya or Kyrgyzstan (1.6 percent per year). However, the overall growth of the region was kept low because the most populous republic with the majority of the region's population, Uzbekistan, barely grew (0.1 percent per year). In addition, Turkmenistan, the least populous of the four, experienced a decline (−0.2 percent per year). It is also of interest to note that even an area so remote from the fighting during World War II as Central Asia apparently also declined in population during the war years per se.[67] Such a decline may have been partly related to the fact that Central Asian peoples, like the Azerbaijani, were reportedly disproportionately highly represented in the Red Army.[68]

Total Regional Population Redistribution, 1939–51

Regional population change rate trends in turn influence regional population redistribution trends. Regions with total change rates above the national average have increasing percentage shares of the total population, while regions with change rates below the average have declining shares. Accordingly, the total population of the USSR shifted eastward during 1939–51 (table 1). In particular, the share of the population in the Eastern USSR increased by 3.6 percentage points, from 24.4 percent in 1939 to 28.0 percent in 1951, while, the share residing in the Western USSR declined by −3.6 points, from 75.6 to 72.0 percent.

Among the quadrants, share increases occurred in the Russian East and Non-Slavic South (table 1). The share for the Russian East increased the greatest, by 2.4 points from 15.8 to 18.2 percent, while that for the Non-Slavic South increased by 1.3 points, from 12.8 to 14.1 percent. As the European Steppe experienced no change

(16.9 percent in both 1939 and 1951), the only quadrant to experience a share decline was Northern European USSR, one which, of course, was quite substantial: −3.8 points, from 54.6 to 50.8 percent.

Among the economic regions, most regions with positive shifts were in the Eastern USSR, and such shifts were the largest of any of the regions (table 1; fig. 3). The greatest shifts were to the Urals (1.1 percentage points), West Siberia and Kazakhstan (0.7 points each), Central Asia (0.5), and East Siberia and the Far East (0.3 each).

Outside these eastern regions, the only other regions to experience positive shifts were the Donetsk-Dnepr (0.2 points), the West (0.1), and the Transcaucasus (0.1). Each of these three regions represented the somewhat unusual situation of having absolute population declines but increasing shares of the total population of the USSR, simply because their rates of decline were less than the corresponding rate of decline for the USSR as a whole.

The greatest share declines among economic regions all occurred in the Western USSR and Northern European USSR. These included the Northwest (−1.1 percentage points), the Southwest (−0.9 points), the Central Chernozem (−0.7), the Center (−0.4), Belorussia (−0.3), and the Volgo-Vyatsk and Volga (−0.2 each).

Despite the overall eastward redistribution of the population of the USSR, the greatest shares of the total population still resided in western regions in 1951 (tables 1 and 2; fig. 4). The Western USSR still contained roughly three-fourths (72.0 percent) of the total population, while among the quadrants Northern European USSR still contained a slight majority (50.8 percent). Similarly, the two most populous economic regions in 1951 were in the Western USSR, the Center (12.7 percent) and the Southwest (10.3). The Center was still the only region to have more than 20 million people.

However, given the regional growth and redistribution trends discussed above, the Urals of the Eastern USSR had now emerged as the third most populous region with 8.6 percent of the total population, whereas in 1939 it ranked fourth. Nonetheless,

the next most populous regions and highest shares in 1951 were again in the Western USSR: the Donetsk-Dnepr (7.8 percent) and the Volga (6.1 percent). However, portending future events, when it would become the most populous region in the USSR in the 1980s, Central Asia had now moved up to become the sixth most populous region in 1951 with 6.0 percent of the total population. On the other hand, given its especially sharp population decline, the Northwest, with 5.3 percent in 1951, had dropped from the fifth to eighth most populous region in a matter of only twelve years.

Overall, despite the cataclysmic events, population losses, and regional population shifts of the 1940s, the regional distribution of the population of the USSR in 1951 was still very similar to that of 1939. Based upon the nineteen regions, the rank correlation coefficient (r_s) between the percentage distributions in 1939 and 1951 was a very high and positive 0.966 (the 5 percent significance level for an n of nineteen is $\pm$.462).

Urban Population Trends, 1939–51

National

Despite the plight and population losses of such war-torn large cities as Leningrad and Stalingrad during World War II, the urban population of the USSR and most of its regions actually increased between 1939 and 1951. Indeed, as will be seen in the following section, it was the rural population that suffered the most during 1939–51, which is partly to be expected since the clear majority, roughly 60–70 percent, of the total population still resided in rural areas.

Between 1939 and 1951, the urban population of the USSR increased by more than 11 million people, or by 1.4 percent per year, from 61,341,000 to 73,005,000. All macroregions and all but four of the nineteen economic regions also had urban population increases (tables 3 and 4).

Regional

Not surprisingly, the Eastern USSR experienced a much greater urban increase than the Western USSR (table 3). Between 1939 and 1951, the urban population of the Eastern USSR increased by 3.4 percent per year, from nearly 15 million to more than 22 million. In contrast, the urban population of the Western USSR increased by only 0.7 percent per year, from roughly 47 to 51 million. The absolute increase for the Western USSR was roughly half (56.1 percent) that of the Eastern USSR and accounted for only about one-third (35.9 percent) of the urban population growth of the USSR, even though the Western USSR contained the vast majority of the urban population in both 1939 and 1951 (76.0 and 69.6 percent).

Among the quadrants, the Russian East and Non-Slavic South clearly had the greatest rates of urban population increase (table 3). The urban growth rate of the Russian East (3.5 percent per year) was the highest of the four quadrants, and alone accounted for nearly one-half (47.3 percent) of the urban population increase of the USSR between 1939 and 1951, even though it contained only about one-fifth of the urban population of the USSR in 1939 and 1951 (17.3 and 22.1 percent, respectively). The Non-Slavic South had an urban growth rate of 2.7 percent per year, but the rates in the other two quadrants were lower. However, of these two, Northern European USSR, which had the greatest rate of total population decline of any of the quadrants, had a higher urban growth rate (0.8 percent per year) than the European Steppe (0.3). This was probably due, in part, to the fact that the European Steppe, which was the most urbanized of the four quadrants in 1939, had a greater share of its area occupied by the Germans than any of the other quadrants.

At the economic region level, the greatest rates of urban growth occurred almost exclusively in regions of the Eastern USSR, Russian East, and Non-Slavic South (table 4; fig. 5). The most rapid rate was experienced by West Siberia (4.0 percent per year). Relatively rapid urban growth was widespread throughout this region, as each of the five component units had rates of 3.3 to 4.4 percent per year. The most rapid rates

were in Novosibirsk and Kemerovo Oblasts (4.4 and 4.0 percent per year, respectively). The former can probably be attributed to the expansion of the city of Novosibirsk, now the largest Siberian city east of the Urals, while the growth of Kemerovo Oblast undoubtedly reflects the expansion of coal and iron-and-steel production in the Kuznets Basin before, during, and after World War II.[69] West Siberia was also a major destination of deported Germans.[70]

The next most rapid rate of urban growth occurred in Kazakhstan (3.8 percent per year). Most units of Kazakhstan experienced urban growth between 1939 and 1951. By far the most rapid was in Tselinograd Oblast of Northern Kazakhstan, whose urban population more than quadrupled (11.9 percent per year). This was in fact the most rapid rate of urban growth of any oblast-level unit in the USSR between 1939 and 1951. Tselinograd Oblast was, like West Siberia and a number of units of Kazakhstan, a major destination of deported Chechens, Ingush, Crimean Tatars, and Germans, although according to the 1970 census the majority of Germans here resided in rural areas.[71] A number of other oblasts of Kazakhstan, almost exclusively in Northern Kazakhstan, experienced the next greatest rates of urban growth of roughly 6 percent per year each. These included Karaganda (5.9), which also had the greatest absolute urban population increase of any of the oblasts of Kazakhstan. The substantial urban process here reflects, as noted above, the expansion of coal and iron-and-steel production, as well as an influx of deported Germans and other nationalities.[72]

The next most rapid rate of urban growth was experienced by the Urals (3.7 percent per year). Moreover, the Urals had clearly the greatest absolute urban population increase of any of the economic regions. Its urban population grew by nearly 3 million (2,778,000), which alone accounted for nearly one-fourth (23.8 percent) of the urban population increase of the USSR between 1939 and 1951; this share was more than twice the Urals' share of the urban population of the USSR in 1939 and 1951 (8.0 and 10.6 percent, respectively). In addition, the Urals' absolute urban increase exceeded the second greatest regional increase by more than 1 million (Center: 1,568,000). All units of the Urals also experienced appreciable urban growth

rates, the most rapid being in Kurgan Oblast (7.6 percent per year). The next highest rates were in Chelyabinsk (4.2), Orenburg (4.1), Perm (3.8), and Sverdlovsk (3.4) Oblasts. As noted earlier, Chelyabinsk and Sverdlovsk Oblasts, in particular, were major areas of industrial expansion during World War II.[73] Indeed, the absolute urban population increases of Sverdlovsk and Chelyabinsk Oblasts (786,000 and 680,000, respectively) were the greatest for any oblast-level units in the USSR during 1939–51. The rapid urban growth of Orenburg Oblast reflects the considerable expansion of mineral production there during this period.[74]

One other region, the Far East, also had an urban growth rate of more than 3.0 percent per year (3.3) between 1939 and 1951. All units also experienced urban population increase; by far the most rapid rate occurred in Magadan Oblast (11.6 percent per year). This rate was the second greatest for any oblast-level unit during 1939–51, which again may reflect the presence of the Kolyma goldfields and forced labor.[75] In addition, as will be seen, Magadan Oblast had a sharp rural population decline, suggesting that urban growth may also have been related to a reclassification of some rural settlements to urban status. It also reflects the very low base urban population of Magadan Oblast in 1939 (31,000), most of which (27,000) was then in the city of Magadan. By 1959, the city would account for only roughly one-third of the urban population there (62,000 of 191,000), suggesting that the urban growth of the oblast to 125,000 in 1951 occurred chiefly beyond Magadan City.[76] Sakhalin Oblast had a rapid urban growth rate of 5.9 percent per year, which probably again reflected the influx of Russians with the reincorporation of South Sakhalin from Japan.[77]

The next highest urban growth rate was experienced by Central Asia (2.8 percent per year). All republics and most other component units had urban population increases. Among the republics, the most rapid urban growth occurred in Kirgiziya (5.2 percent per year), and Tajikistan (4.4), while among oblast-level units there were numerous examples of very rapid urban growth of roughly 5–10 percent per year, especially by Syr-Dar'ya Oblast (9.8). The urban growth of many units here reflects their very small base urban populations in 1939 (only 4,000–30,000 in some cases).

The next most rapid rates of urban growth were found in regions of the Western USSR: the Volgo-Vyatsk (2.6 percent per year), and the West (2.5), and within the latter all three republics experienced clear urban growth.

Although the next highest rate of urban growth occurred in the remaining eastern region, East Siberia (2.3 percent per year), it was followed by regions in the Western USSR: the Volga (2.1), Moldavia (2.0), and the Transcaucasus (1.8). Within the Volga Region, Kuybyshev Oblast had the greatest urban growth rate (3.9), which again reflects its largely east-of-the-Volga location and the shift of many governmental functions to the city of Kuybyshev.[78] Also, despite the devastation associated with the Battle of Stalingrad, the urban population of Volgograd Oblast did increase by a small amount (0.2 percent per year). In the Transcaucasus, the only unit to have an urban population decline was the city of Baku, although only slightly (−0.1 percent per year), reflecting, as noted earlier, a decline in oil production during World War II.[79] However, Baku's official total and rural populations increased.

Although the next highest regional urban growth rate was well below those just discussed, it was, nonetheless, quite notable: 1.2 percent per year in the Center. The urban increase here occurred despite the devastation during World War II, especially of the western part. The absolute urban population increase of the Center (1,568,000) was surpassed only by that of the Urals. Indeed, some units had increases approaching 3 percent per year, most notably, Tula Oblast (2.7), and Moscow (excluding Moscow City) and Ryazan' Oblasts (2.6 each). The absolute urban population increase for Moscow Oblast (609,000) was exceeded only by those previously noted for Sverdlovsk and Chelyabinsk Oblasts of the Urals. Moreover, although the population of Moscow City increased by "only" 0.7 percent per year, its absolute urban population actually increased by more than 400,000 between 1939 and 1951 (by 431,000, from 4,542,000 to 4,973,000), in part because it was never reached and devastated by the Germans.[80] In fact, the combined urban population increase for Moscow City and Oblast of more than 1 million (1,040,000) clearly exceeded those of Sverdlovsk and Chelyabinsk oblasts separately, which were the leaders in this regard otherwise. On the downside,

one unit of the Center, Smolensk Oblast, not surprisingly, experienced sharp urban population decline (−2.5 percent per year). It will be recalled that it is in western part of the region and on the main invasion route between Belorussia and Moscow.

At the other end of the spectrum, four economic regions experienced urban population decline between 1939 and 1951. Although the war was largely if not wholly to blame, this was nonetheless an extraordinary situation for a country which has generally had rapid and regionally universal urban growth during its intercensal periods. The four regions with urban decline were all in the extreme west and had roughly comparable rates: Belorussia (−0.6 percent per year), the Northwest and Southwest (−0.5 each), and the South (−0.4). These declines are not surprising given the presence of Leningrad in the Northwest, the large Jewish urban populations in the other three regions, and German occupation of all four wholly or in part.[81]

Within Belorussia, the greatest rates of urban decline occurred in Vitebsk (−2.1 percent per year), Mogilev (−1.5), Grodno (−1.3) and Gomel' (−1.1) Oblasts, major concentrations of urban Jews.[82] On the other hand, the three remaining oblasts of Belorussia managed to experience urban population increase, including Minsk City (1.6). This foreshadowed the eventual postwar explosive growth of this old, previously relatively stagnant city.[83]

The Northwest and Southwest had the next greatest rates of urban population decline. However, their absolute urban declines (−355,000 and −293,000 respectively) exceeded that of Belorussia (−129,000), and were, in fact, the two greatest such declines among economic regions in the USSR. Within the Northwest, urban population decline was almost exclusively confined to Kaliningrad Oblast, Leningrad City, and Novgorod Oblast. The urban population of Kaliningrad Oblast declined by −7.0 percent per year, the greatest rate of urban decline of any oblast-level unit in the USSR, while its absolute urban decline (−332,000) was surpassed only by Leningrad City. These declines for Kaliningrad Oblast again reflect the German evacuation of former East Prussia.

It is estimated that a half million to a million people died during the 900-day siege of Leningrad by the Germans, or more than the losses for Hiroshima and Nagasaki combined.[84] Overall, between 1939 and 1951, the population of the city declined by −1.4 percent per year. Moreover, its absolute decline of more than one half million (−518,000) from 3,401,000 in 1939 to 2,883,000 in 1951 was the greatest for any oblast-level unit of the USSR during this period, and its population at the end of 1943 had dropped to only about 600,000.[85] Novgorod Oblast's urban population decline (−0.7) reflects the fact that the classic old city of Novgorod was occupied by the Germans.[86]

However, except for these three oblast-level units, the remaining seven units of the Northwest actually experienced urban population increase between 1939 and 1951. The highest rates occurred in the Komi (7.2 percent per year) and Karelian (4.9) ASSRs. Komi, as noted earlier, experienced a significant expansion of coal production in, and forced labor to, the Pechora Basin during the war.[87] Both units were also completely or largely behind the front line.

Urban decline in the Southwest probably reflects its large Jewish population, as well as Polish population transfers. In fact, its absolute urban decline of nearly −300,000 was surpassed only by that of the Northwest. In addition, a slight majority of the oblast-level units of the Southwest (8 of 15) also experienced urban population decline. The majority of these units were in areas almost exclusively outside the interwar USSR, but were instead annexed later, chiefly from Poland. Indeed, it is estimated that approximately 1 million Poles moved from these areas, which are now in the western Southwest, to the newly reconstituted postwar Poland.[88] The greatest relative urban decline (−4.4 percent per year) occurred in one of these areas, Ternopol' Oblast, a rate surpassed only by that of Kaliningrad Oblast of the Northwest. The next greatest rates of urban decline also occurred in units that were in interwar Poland: Ivano-Frankovsk, Volynsk, L'vov, and Rovno oblasts (−1.6 to −2.7). Cities in these areas had relatively large Jewish populations prior to World War II.[89] Other oblasts with urban population decline in the Southwest (Zhitomir, Chernigov, and Vinnitsa,

−1.1 to −0.3) also had relatively large Jewish populations : roughly 10 to 34 percent of the urban population in units of 1939.[90] On the other hand, it is noteworthy that even the devastated and largest city of the Southwest, Kiev, ultimately increased by 0.4 percent per year, from 851,000 in 1939 to 897,000 in 1951, even though it is estimated that its population had declined to roughly 300,000 by 1942–43.[91] Kiev's decline during the war years per se also reflects its relatively large prewar Jewish population, comprising more than one-fourth (26.5 percent) of the population of the city in 1939. Babi Yar, the infamous site of where thousands of Jews were exterminated, is just outside Kiev.[92]

The remaining region to experience urban population decline between 1939 and 1951 was the South. The decline here was exclusively confined to Crimea and Odessa Oblasts. The urban decline of each reflects not only the removal of Crimean Tatars and Black Sea Germans, primarily from rural areas, but also, of course, the large Jewish population in the city of Odessa.[93] It is estimated that the population of Odessa was roughly halved from 604,000 in 1939 to only 300,000 in 1942–43.[94]

Rural Population Trends, 1939–51

National

Perhaps even more striking than the generally universal urban population increases during 1939–51 were the nationally and regionally universal rural population decreases during the same period. It is not surprising that the war losses would especially occur in rural areas, since that is where the clear majority of the Soviet population then resided. Between 1939 and 1951, the rural population of the USSR declined by more than 23 million (−23,163,000) or by −1.7 percent per year, from 131,761,000 to only 108,598,000. Not only did all regions experienced rural population decline, but most oblast-level units of the USSR also had rural declines. However, such declines were not exclusively due to World War II; they occurred prior

to 1939 and after 1945 in the USSR as a whole and in many of its regions and oblast-level units.[95]

Regional

The Western USSR had a greater rate of rural population decline than the Eastern USSR, although the decline for the latter was itself not insignificant (table 5). Between 1939 and 1951, the rural population of the Western USSR declined by −1.9 percent per year, and in absolute terms by nearly −20 million, from roughly 99 million to only 80 million. This decline accounted for more than four-fifths (83.7 percent) of the total rural population decline of the USSR during 1939–51. The rural population decline of the Eastern USSR was a not unappreciable −1.1 percent per year, or nearly −4 million, from roughly 32 to 29 million.

Each of the four quadrants also experienced decided rural population declines between 1939 and 1951 (table 5). Indeed, each had a rate of decline of at least roughly 1 percent per year or greater and an absolute decline of more than 1 million. The greatest decline occurred, not unexpectedly, in Northern European USSR. The rural population here fell by −2.1 percent per year, or by more than 16 million, from 74 to 58 million. The absolute decline here alone accounted for more than two-thirds (69.8 percent) of the total rural population decline of the USSR during this period.

Somewhat peculiarly, the next greatest rate of rural population decline occurred in the Russian East, the quadrant with the most rapid total and urban growth between 1939 and 1951. The rural population here declined by −1.4 percent per year. Its absolute decline of roughly −3 million, from 20 to 17 million, was also the second greatest of the four quadrants and accounted for roughly one-eighth (12.9 percent) of the rural population decline of the USSR. As will be seen, such a decline was widespread and relatively uniform throughout the four economic regions of this quadrant. The European Steppe had the next greatest rate of rural population decline

(−1.1 percent per year), and even the Non-Slavic South experienced a notable rate of decline (−0.8 percent per year).

The fact that all quadrants had decided rural population declines suggests that variations among economic regions in rural population change were not as strongly related to the direct impact of World War II as were those for the total and urban populations (table 6; fig. 6). Most of the economic regions with the greatest rates of rural decline were partly or wholly behind the front line. The r_s between total and rural change during 1939–51 based on the nineteen regions was "only" 0.543, while that between total and urban change was a much higher 0.840. Furthermore, the r_s between urban and rural change was an even weaker 0.231. This again reflects the substantial rural depopulation already underway throughout much of the USSR prior to the war due to industrialization and rural-to-urban migration.

The most rapid rate of rural population decline between 1939 and 1951 was experienced by the Northwest, −3.9 percent per year, or by −2,394,000 from 6,450,000 to 4,056,000. Not surprisingly, by far the greatest decline occurred in German-evacuated Kaliningrad Oblast (−9.8 percent per year). This rate of decline was surpassed, as will be seen, only by that of Magadan Oblast in the Far East (−10.3 percent per year). The rural population of Kaliningrad Oblast was cut by −442,000, from 642,000 in 1939 to 200,000 in 1951, or only about one-third of its 1939 level.

In addition, except for Leningrad City, whose very small officially rural population increased slightly, all other units of the Northwest also had rural population declines. These included Novgorod (−4.8 percent per year), Leningrad (−4.1), and Pskov (−4.0) Oblasts, all areas devastated by the German occupation. Within the Northwest, the Karelian ASSR and Vologda Oblast also experienced sharp rural decline even though both were partly or wholly beyond the front line.

Economic regions with the next greatest rates of rural population decline were also partly or wholly behind the front line and were traditional regions of long-term rural depopulation both before and after the war. These included the Center (−2.5 percent per year), Volga (−2.2), and Volgo-Vyatsk and Central Chernozem (−2.1 each).

Within the Center, the greatest rate of rural population decline occurred (−4.4 percent per year), not surprisingly, in Smolensk Oblast . Sharp rural population declines (roughly −3 percent per year each) were also experienced by Kalinin, Ryazan', Kaluga, Yaroslavl', and Moscow Oblasts, even though all but Kaluga were wholly or partly beyond the front line. All other units of the Center also experienced sharp rural decline except Moscow City, whose official rural population increased from 0 in 1939 to 374,000 in 1951.

Moreover, the Center clearly had the greatest absolute rural population decline of any of the nineteen economic regions. Its rural population declined by nearly 4 million, from roughly 15 to 11 million. Indeed, its decline alone accounted for nearly one-sixth (16.4 percent) of the total rural decline of the USSR between 1939 and 1951.

In addition, given the fact that the Center had the second largest rural population of any economic region after, as will be discussed later, the Southwest, absolute oblast-level rural declines here were particularly great. Indeed, given the Southwest's greater fragmentation into numerous smaller oblasts, the greatest oblast-level absolute rural declines occurred in the Center. In particular, the rural declines of Moscow, Smolensk, and Kalinin Oblasts (−734,000, −665,000 and −622,000, respectively) were the three greatest for any oblast-level units in the USSR between 1939 and 1951, Kalinin being tied in this respect with the Bashkir ASSR of the Urals.

The next greatest rate of rural decline occurred in the Volga Region, a decline of more than 2 million from roughly 9 to 7 million. All units here had rural decline and, not surprisingly, the highest rates were in Saratov and Volgograd Oblasts (−3.2 and −3.0 percent per year, respectively), owing to the deportation of the predominantly rural Volga Germans in the former case, and wartime devastation in the latter case.[96]

The next two highest rates of rural population decline were experienced by the Central Chernozem and Volgo-Vyatsk Regions, traditionally areas of long-term rural depopulation. There was decided rural decline in every unit of these two regions (−1.0 to −2.9 percent per year). Given the fact that, unlike the Volgo-Vyatsk, the Central Chernozem was located partly within the zone occupied by the Germans, it contained

the unit with the greatest rate of decline of these two regions, specifically, the occupied Orel Oblast, whose rural population declined by −2.9 percent per year. Within the Central Chernozem, sharp rural declines also occurred in Kursk, Voronezh, and Tambov Oblasts (−2 to −2.4 each). Kursk was in the occupied zone and, as mentioned above, the site of a major tank battle.[97] However, within the Volgo-Vyatsk Region, Kirov Oblast had a rural decline of −2.7 percent per year, even though it was never occupied, reflecting its tradition of high rural depopulation.

Although the next greatest rate of rural population decline occurred in the West or Baltic States, (−1.8 percent per year), a region completely occupied by the Germans, it was followed by two eastern regions with relatively rapid total and urban population growth: the Urals (−1.7 percent per year) and the Far East (−1.5). In both cases, the combination of appreciable urban growth coupled with rural decline suggests relatively substantial local rural-to-urban migration. In addition, the reclassification of settlements from rural to urban may have also contributed to their rural declines.

Indeed, within the Urals, every unit had rural population decline, perhaps partly due to the expansion of industrial activity and jobs. The greatest rate of rural decline occurred in Kurgan Oblast (−2.6 percent per year), which had, as mentioned earlier, by far the greatest rate of urban growth. The Bashkir ASSR, Orenburg Oblast, and the Udmurt ASSR had the next greatest rates of rural decline (−2.3, −2.0 and −1.7 percent per year, respectively). The absolute rural decline for the Bashkir ASSR (−622,000) was tied for the third greatest in the USSR. However, lest one might conclude that the decline occurred chiefly among the ethnic Bashkirs, it should be pointed out that it appears instead to have been largely among ethnic Russians and Tatars, most probably Volga Tatars, not Crimean Tatars.[98] These four units also were the only ones in the Urals to also have total population decline between 1939 and 1951.

Within the Far East, all units except Kamchatka Oblast also had rural declines. By far the highest rate occurred in Magadan Oblast (−10.3 percent per year), the greatest such decline for any oblast-level unit in the USSR during 1939–51. Indeed, the rural population of Magadan Oblast was cut by roughly 100,000 or about two-thirds,

from 142,000 to 41,000. As noted earlier, this may have been due to some rural-to-urban reclassification. However, it may also reflect relatively high population losses in the labor camps, which were apparently chiefly classified as rural, at least in the late 1930s.[99]

The next greatest rates of regional rural decline, −1.4 percent per year for four regions, occurred in more western regions, specifically the Southwest and South of the Ukraine and the North Caucasus and Transcaucasus. In fact, the Southwest had the second greatest absolute rural population decline of any of the economic regions (−2,648,000), which accounted for more than one-tenth (11.4 percent) of the total rural population decline of the USSR during 1939–51, partly reflecting the fact that it had the largest rural population of the economic region. Within the Southwest all units had rural decline, except Kiev City. The highest rates occurred in the extreme western oblasts of L'vov, Ternopol', Rovno, and Ivano-Frankovsk (−1.9 to −2.3 percent per year each), due in part to wartime devastation and the evacuation of Poles from these reincorporated or newly incorporated regions of interwar Poland into the USSR.[100]

Within the South, the greatest rate of rural decline was in Crimea Oblast (−3.7 percent per year), a result of the deportation of the predominantly rural Crimean Tatars.[101] Odessa Oblast also had an appreciable rate of rural decline (−2.2 percent per year), partly reflecting the evacuation of Black Sea Germans.[102]

Within the North Caucasus, all units had rural population decline. The highest rates occurred, as might be expected, in units which were occupied by the Germans and from which predominantly rural indigenous nationalities were deported.[103] These included the Chechen-Ingush ASSR (−6.3 percent per year, a rate surpassed by only those mentioned earlier for Magadan and Kaliningrad oblasts), the Kalmyk ASSR (−3.5), and the Dagestan ASSR (−2.3), as well as Stavropol' Kray, which contains Karachayevo-Cherkess Autonomous Oblast (−1.9). In 1939, over 90 percent of the Chechens, Ingush, Kalmyks, Dagestanis, and Karachay resided in rural areas.[104] However, as noted above the Dagestanis were not deported eastward, but, instead, were moved into the vacuum of the Chechen-Ingush ASSR. That the North Caucasus

did not have an even greater rate of rural decline in the face of these sharp unit declines was due to the fact that the unit with the largest rural population, Krasnodar Kray, had only a minimal decline. More specifically, it had nearly one-third (32.2 percent) of the rural population of the North Caucasus in 1939, but only a minuscule rate of rural decline (−0.1 percent per year), even though it was almost completely occupied by the Germans. This may be, in part, because the Adygey, a predominantly rural non-Russian nationality, were not deported. Moreover, the Adygey population was small, and ethnic Russians comprised the overwhelming majority (87.4 percent) of the rural population of Krasnodar Kray in 1939.[105] Thus, the lack of a major deported nationality in the rural areas probably partly accounted for this minimal rural decline in comparison to other units of the North Caucasus. It will also be recalled that Krasnodar Kray was the only unit of the North Caucasus to have total population increase between 1939 and 1951.

Finally, the slowest rates of rural decline (−0.5 to −1.3 percent per year) occurred in both western and eastern regions: Belorussia, East Siberia, West Siberia, Donetsk-Dnepr, Moldavia, Central Asia, and Kazakhstan. The lack of greater rates of rural decline for Belorussia, Donetsk-Dnepr, and Moldavia are somewhat surprising given the fact that each was completely within the front line. The slowest specific rates of rural decline occurred not only in Moldavia (−0.6 percent per year) but also in Central Asia (−0.6) and Kazakhstan (−0.5).

The relatively slow rates of rural decline for Central Asia and Kazakhstan reflect not only their location behind the front line, but also the relatively high fertility of the predominantly rural Turkic-Muslim nationalities. In addition, each region was a major destination of the deported nationalities, who were, as touched upon earlier, predominantly rural in their homelands.[106] The lesser rural declines for West Siberia and East Siberia may have also been partly due to each being deportee destinations as well.[107] Within these last seven regions, the most notable oblast-level unit of rural decline was Mangyshlak Oblast of extreme western Kazakhstan, −5.8 percent per year, surpassed only in the USSR by Magadan and Kaliningrad Oblasts and the

Chechen-Ingush ASSR. Gur'yev and Ural'sk Oblasts, the two other units of the extreme west of Kazakhstan, had fairly sharp rates of rural decline as well (−3.6 and −3.1, respectively), and, altogether, these were the three greatest oblast-level rates of rural decline in Kazakhstan. Despite their western location and partial bordering on Russia, the majority of their rural populations was comprised of ethnic Kazakhs. In 1939, Kazakhs were 77.1 percent of the rural population of Gur'yev Oblast, which was later subdivided into the Gur'yev and Mangyshlak Oblasts investigated here, and 60.5 percent of Zapadno-Kazakhstan Oblast, the previous name of Ural'sk Oblast. In contrast, ethnic Kazakhs comprised only 44.0 percent of the rural population of Kazakhstan as a whole in 1939.[108] In addition, the rural Kazakh shares in these two oblasts of 1939 were two of the three highest in Kazakhstan, with that for Gur'yev Oblast, which, as noted, includes Mangyshlak, being the highest in Kazakhstan.[109] Therefore, it is possible to conclude that the relatively sharp rural declines in extreme western Kazakhstan were related to the status of the population of Kazakhs as a whole. This population was declining in the 1930s and perhaps into the war years due to the forced settling of these nomadic peoples and even their emigration eastward out of the USSR, as well as to the sizeable mobilization of Kazakhs for military service during World War II.[110] Indeed, during 1939–59, although the rural Kazakh population of Kazakhstan did manage to increase, it did so only very slowly (0.4 percent per year). Furthermore, the populations of rural Kazakhs of both Gur'yev and Ural'sk oblasts actually declined during 1939–59.[111]

Urbanization Trends, 1939–51

National

Rates of urban and rural population change, in turn, influence the urbanization process. The level of urbanization refers to the percentage of the total population residing in urban centers; for the level to increase, the rate of urban population change

must exceed that of the rural and total populations. Thus, the urbanization process can be viewed as a "battle" between urban change on the one hand and rural and total change on the other. In a sense, this section of the essay summarizes some of the major trends discussed earlier.

Given the presence of urban population growth and rural population decline for the USSR as a whole and in virtually all its regions, the rapid urbanization process underway in the 1930s continued during the war-torn period of 1939–51 (tables 3 and 4). For the USSR as a whole, the percentage of the total population residing in urban centers, or the level of urbanization increased from 31.8 to 40.2 percent or by 8.4 points. All regions also had increases in urbanization, despite the fact that some had urban population decline. This unusual situation of urbanization without urban growth is, of course, due to the fact that the rate of urban population decline was not as great as the rate of rural population decline. Most oblast-level units also had urbanization level increases.

Regional

The greatest regional urbanization increases generally occurred in the eastern regions. Eastern USSR urbanization grew by 12.5 points, from 31.2 percent in 1939 to 43.7 percent in 1951 (table 3), due to the combination of relatively rapid urban growth and appreciable rural decline. In contrast, the level for the Western USSR increased by only 7.0 points, from 31.9 to 38.9 percent.

Among the quadrants, clearly the greatest urbanization increase occurred in the Russian East, where the level rose by 14.1 points, from 34.8 to 48.9 percent (table 3), again reflecting the combination of both rapid urban growth and decided rural decline. It was followed by the largely eastern Non-Slavic South (9.0 points), and Northern European USSR (7.6 points). The slowest urbanization clearly occurred in the

European Steppe, whose level increased by only 4.0 points, a reflection of its having the slowest urban growth rate of any of the quadrants.

Not unexpectedly, the greatest urbanization increases occurred in some eastern regions, although a number of western regions also ranked high in this regard (table 4; fig. 7). The largest increases were in the Urals, the Far East, West Siberia, and Kazakhstan, the regions that also had the four highest rates of urban growth. They also had rural population decline, and usually not insignificant, further enhancing the urbanization process.

The level for the Urals rose by 15.5 points, from 34.1 to 49.6 percent. Not surprisingly, the greatest increase occurred in the unit with both the most rapid urban growth and highest rate of rural decline, Kurgan Oblast: 17.3 points, from 9.9 to 27.2 percent. Orenburg, Chelyabinsk, Perm', and Sverdlovsk oblasts had increases in the range of 12.0 to 15.3 percentage points.

Urbanization in the Far East increased by 14.0 points, from 49.7 to 63.7 percent. By far the greatest increase occurred in Magadan Oblast—57.4, points from 17.9 to 75.3 percent—the largest for any oblast-level unit in the USSR between 1939 and 1951. This was due not only to its extraordinarily rapid urban growth, but also to sharp rural decline. The urbanization level of West Siberia rose by 13.9 points, from 30.3 to 44.2 percent, and that for Kazakhstan by 11.5 points. Within Kazakhstan, there were especially high increases in Tselinograd Oblast (28.7 points), and Vostochno-Kazakhstan Oblast (21.6).

Although the four greatest regional urbanization increases occurred in the Eastern USSR, the next largest generally took place in the Western USSR, specifically, in the West, Volga, Center, Volgo-Vyatsk, and Northwest Regions, roughly 10–11 points each, although East Siberia also had an increase in this range. Within these regions, the Komi ASSR of the Northwest had the second greatest oblast-level increase in the USSR (31.6, from 9.1 to 40.7). It is also of interest that even Smolensk Oblast of the Center and Kaliningrad Oblast of the Northwest had urbanization increases, despite sharp urban population declines in both, due to even sharper rural declines.

At the other end of the spectrum, some regions, especially the extreme western regions, had only minimal increases in urbanization levels. The lowest (1.4 to 2.7 points each) were experienced by Belorussia, the Southwest, the South, and Donetsk-Dnepr, each of which, except the Donetsk-Dnepr, had urban population decline, again reflecting wartime devastation and loss of Jewish population.

In the remaining regions of intermediate urbanization level increases there were some instances of considerable oblast-level unit increases. Most notable was the Chechen-Ingush ASSR of the North Caucasus (19.0 percentage points), chiefly reflecting the sharp rural population decline after deportation of the predominantly rural indigenous nationalities. It should also be noted that of the more than one hundred oblast-level units of the USSR, only eleven had urbanization level declines between 1939 and 1951. The greatest occurred in the Tuva ASSR of East Siberia (−13.7 points), but none of the rest had declines below roughly −7 points.[112]

With the universal regional increases in urbanization levels between 1939 and 1951, a number of regions approached or even surpassed 50.0 percent in 1951, although the vast majority were still below this mark. In fact, the USSR as a whole and all of the macroregions still had levels below 50.0 percent, with the level for the USSR in 1951 being 40.2 percent (table 3). However, in contrast to 1939, given the more rapid urbanization and urban growth of eastern regions, some regions there had become the most urbanized. Indeed, the Eastern USSR was now more urbanized than the Western USSR, 43.7 percent as compared to 38.9 percent.

Similarly, even though it was not the most urbanized quadrant in 1939, the Russian East emerged as the most urbanized quadrant in 1951 (48.9 percent; table 3). The European Steppe dropped to second place (42.9 percent), while the remaining two quadrants Northern European USSR and the Non-Slavic South, had roughly comparable levels (37.4 and 36.1).

Although all macroregions were still less than 50.0 percent urbanized, some economic regions now had crossed the 50.0 percent mark (table 4; fig. 8). Indeed, whereas in 1939 only one region, the Donetsk-Dnepr, had surpassed this mark, by

1951 four had done so. The most urbanized region was now the Far East, whose level actually exceeded 60.0 percent (63.7). Within the Far East, Magadan Oblast had the highest level (75.3 percent), despite having the region's lowest level in 1939, while Khabarovsk Kray had a level of 70.0 percent. The high level for the Far East reflects not so much the presence of great urban areas, but instead the meager prospects for agriculture throughout the greater part of the region, especially the Arctic north, and thus a relatively small rural population and share. Much of Magadan Oblast, in particular, is above the Arctic Circle. Indeed, the Far East had the smallest rural population of all the nineteen regions in both 1939 and 1951.

In contrast, the next highest urbanization levels in 1951 occurred in regions with great urban-industrial concentrations, the Northwest (58.0 percent), Center (53.5), and Donetsk-Dnepr (53.1). The high level for the Northwest chiefly reflects the presence of Leningrad City, which, as noted earlier, still had nearly 3 million people in 1951, despite an overall decline of a half million from 1939 to 1951. However, it also reflects the presence of a unit with a very high level associated with meager agricultural prospects; namely, Murmansk Oblast (87.2 percent), which, like Magadan Oblast, is mostly above the Arctic Circle. The high level for the Center, of course, was due chiefly to the presence of the city of Moscow, which in 1951 had a population of 5.3 million. That for the Donetsk-Dnepr reflects the fact that it was the chief heavy industrial region of the USSR and includes such highly industrialized coal and iron-and-steel producing areas as the Donets Basin (Donbas). Indeed, the most highly urbanized units were in the Donbas: Donetsk and Voroshilovgrad Oblasts (78.4 and 66.8 percent, respectively).

The three next most urbanized regions were all located in the Eastern USSR: the Urals (49.6 percent), East Siberia (45.5), and West Siberia (44.2). The Urals thus had a level of virtually 50 percent. Not surprisingly, the most urbanized units included major urban centers and industrial complexes: Chelyabinsk and Sverdlovsk Oblasts (74.1 and 71.6 percent, respectively). Although no unit of East Siberia had a level of

60.0 percent or over, Kemerovo Oblast in West Siberia clearly had the highest level (67.3 percent), reflecting its inclusion of the industrialized Kuznets Basin.

Despite the rapid urban growth and urbanization of the nation as a whole and many of its regions, by the mid-twentieth century the USSR still contained many regions and units with very low levels of urbanization, indeed ones more characteristic of underdeveloped countries. The lowest regional levels in 1951 occurred in two far western regions, both of which still had levels of less than one-fifth: Moldavia (17.5 percent), and the Central Chernozem (18.6 percent). These levels reflected minimal urban-industrial development as well as relatively favorable agricultural resources in that both are in the chernozem soil belt. Four other regions still had less than one-third of their population residing in urban centers. These included a number of other western regions, Belorussia, the Southwest, and Volgo-Vyatsk, as well as an eastern one, Central Asia.[113]

Epilogue, 1951–59

Although this study is concerned primarily with population trends in the former USSR during 1939–51, it is of interest to also use the recently published 1951 population estimates to investigate briefly national and regional trends during the remainder of the 1950s up to the 1959 census. These trends, to the best of my knowledge, have never been discussed before. Results are shown in tables 7 and 8, and comparisons with 1939–51 are shown in tables 9 and 10. As with the 1939 data, I use the rounded estimates for 1959 in Naseleniye SSSR, 1973 instead of the more specific figures in the census itself.

National Trends

As might be expected, during 1951–59 population growth rather than decline again occurred in the USSR as a whole. Between 1951 and 1959, the total population increased by roughly 27 million, from 181.6 to 208.8 million (1.7 percent per year). Every region, both macroregion and economic, also experienced growth and, of course, all had rates of change above those of 1939–51.

Regional Trends

As suggested earlier, the Eastern USSR continued to have a higher rate of change than the Western USSR. In fact, its average annual growth rate was virtually twice that of its western counterpart (2.7 and 1.3 percent per year, respectively).

However, unlike 1939–51 and the first half of the century overall, the Russian East no longer had the most rapid growth. It was now surpassed by the Non-Slavic South, which grew by a very rapid 3.0 percent per year as compared to 2.4 for the Russian East. The Non-Slavic South would, of course, be the most rapidly growing quadrant until the downfall of the USSR.[114] The western European Steppe also had an above average rate of growth during 1951–59 and one almost equal to that of the Russian East (2.1 percent per year), whereas during 1939–51 they were diametrically opposed (−0.5 for the European Steppe and 0.6 for the Russian East). The Non-Slavic South and European Steppe also had the greatest upsurges in their total population growth rate from 1939–51 to 1951–59 (2.7 and 2.6 points, respectively). During 1951–59, Northern European USSR clearly had the slowest growth of the four quadrants (1.0 percent per year), and it was the only quadrant to have a 1959 population less than that of 1939. On the other hand, its absolute total population increase during 1951–59 was the greatest of any of the quadrants, roughly 7.7 million

as compared to nearly comparable increases of 7.1 million for the Russian East and 6.8 million for the Non-Slavic South.

Among economic regions, the most rapid rates of total population change also continued to occur in the east. However, unlike 1939–51, the region with the most rapid growth was not in the Russian East, but instead was Kazakhstan of the Non-Slavic South (3.8 percent per year). This reflected not only the relatively high fertility among the indigenous Moslem Kazakhs but also the increased in-migration with the New Lands Program (see below). However, the next most rapid rates of growth did occur in regions of the Russian East: the Far East (3.6) and East Siberia (3.1). In addition, Central Asia had a rate approaching 3 percent per year (2.8) and would be consistently the most rapidly growing region after 1959.[115]

On the other hand, relatively rapid rates of 2.0 to 2.5 percent per year now occurred in some western regions as well. Foremost were Moldavia, the North Caucasus, and Transcaucasus (2.4 each), the Northwest (2.2), South (2.1), and Donetsk-Dnepr (2.0). The rate for the Northwest was especially notable because it had the greatest rate of decline of any region during 1939–51. The upsurge of 4.3 percentage points in its rate of change, from −2.1 percent per year to 2.2 during 1951–59, was by far the largest of any region. This great relative upsurge was partly due to the fact that Kaliningrad Oblast, which had a very sharp rate of decline (−8.3 percent per year) during 1939–51, grew rapidly during 1951–59, increasing in population from 455,000 to 611,000 (3.7 percent per year), resulting in an upsurge of 12.0 points. Such rapid growth was probably chiefly due to an influx of Russians to this formerly primarily German area. The South and North Caucasus also had relatively great upsurges of 3.2 and 3.0 points, respectively. The latter may be attributed in part to the return of previously deported nationalities in the late 1950s following the death and denunciation of Stalin and to their rehabilitation in 1957, including the Chechens.[116]

The slowest rates of growth during 1951–59 were also in the Western USSR. They specifically occurred in the Central Chernozem (only 0.2 percent per year), Belorussia (0.5), and the Volgo-Vyatsk (0.6). Despite these very slow rates of growth

during 1951–59, the majority of economic regions (13) still had rates that were higher than even the highest one of 1939–51.

As a result of these regional trends, the population of the USSR generally continued its eastern shift. The share residing in the Eastern USSR increased by 2.2 percentage points, but, even though the share of the Russian East also increased (by 1.0 points), it was exceeded for the first time by the also largely eastern Non-Slavic South (1.5 points), which would be the leading quadrant in this regard to the end of the USSR.[117] The slowing of the eastern shift was also revealed by the fact that the average annual percentage point shifts to the Eastern USSR and Russian East during 1951–59 were both lower than during 1939–51 (−0.02 and −0.07, respectively; table 9). The greatest negative shifts during 1951–59 occurred away from the Western USSR (−2.2 points) and Northern European USSR (−2.9), although unlike 1939–51, the European Steppe actually had a positive shift (0.5).

Patterns among economic regions further reflect the shift to the Non-Slavic South. The greatest regional redistribution shifts during 1951–59 were clearly to Kazakhstan (0.7 points) and Central Asia (0.6). The next highest shifts (0.3 each) were also to a southern region, as well as to eastern ones (the Transcaucasus, Urals, East Siberia, and Far East).

However, of considerable interest is the fact that a positive shift also occurred in the Northwest (0.2). Indeed, its relative upsurge of 0.12 points from the greatest negative shift, −0.09 points per year during 1939–51, to 0.03 during 1951–59 was by far the largest for any region. This was due to the growth of units that had appreciable population declines during 1939–51, most notably Kaliningrad Oblast and Leningrad City.

Otherwise, the greatest negative shifts during 1951–59 still occurred in some western regions, especially the Center (−0.8 points), Southwest (−0.6), Central Chernozem (−0.5) and Belorussia (−0.4). Furthermore, the Center also had the greatest relative shift decline from 1939–51 to 1951–59 (−0.07 points).

Urban Population

With respect to regional urban growth during 1951–59, the USSR and all regions, not unexpectedly, had rates above those for 1939–51. The average annual national urban growth rate was 3.9 percent per year, or 2.5 percentage points above that for 1939–51.

Although the Eastern USSR still had a higher rate of urban growth than the Western USSR (4.3 and 3.8 percent per year, respectively), the gap was small and relatively rapid urban growth was now again characteristic of many western regions as well as eastern ones. Indeed, among the quadrants, the most rapid urban growth during 1951–59 occurred in the western European Steppe (4.6 percent per year). However, it was followed closely by the Non-Slavic South (4.5) and Russian East (4.2), and Northern European USSR was close behind (3.4). The Western USSR, European Steppe, and Northern European USSR also all had much greater urban growth upsurges (3.1, 4.3, and 2.6 percentage points, respectively) than did the Eastern USSR, Non-Slavic South, and Russian East (0.9, 1.8, and 0.7, respectively).

The west-east mixture of rapid urban growth during 1951–59 was also apparent in the economic regions. The most rapid urban growth occurred in Moldavia (5.4 percent per year), Kazakhstan (5.2), East Siberia (4.9), the South (4.7), the Donetsk-Dnepr, Belorussia and the Far East (4.6 each), and the North Caucasus (4.5). The greatest relative upsurges from 1939–51 occurred in the extreme western Belorussia (5.2 percentage points), South (5.1), Donetsk-Dnepr (4.5), Southwest (4.4), Central Chernozem (4.1), and Northwest (4.0), all of which reflect somewhat expected peacetime readjustments after World War II. The relatively rapid urban growth in many extreme western regions during 1951–59 also shows the beginning of increased industrial investment in the older, western areas after World War II.[118] The relatively rapid urban growth of Kazakhstan was probably due to the expansion that began in the late 1950s with the onset of the New Lands Program.

The relatively rapid urban growth and upsurge of the Donetsk-Dnepr or Eastern Ukraine was also notable, given its relatively high level of urbanization and industrialization and its large base urban population. This was probably owing to the reconstruction and expansion of industrial equipment and mines following the destruction and eastward shift of much of the equipment during World War II.[119] Unlike Kazakhstan, however, it did not have rapid rural growth but instead had the greatest rate of rural decline during 1951–59. This suggests not only strong local rural-to-urban migration, but also, in the case of the Donetsk-Dnepr, perhaps some reclassification of settlements from rural to urban, as urban boundary changes and reclassification were not uncommon there.[120]

During 1951–59, the slowest urban growth occurred in the Center. However, even its rate of 2.5 percent per year was more rapid than the Soviet average during 1939–51 and higher than that of all but six regions during 1939–51. Its relatively slow urban growth was partly due to its having by far the largest urban population of any region in 1951.

Rural Population

During 1951–59, the rural population of the USSR managed to increase after its especially sharp decline during 1939–51. However, it just barely did so, by only +0.0 percent per year and by only about 250,000 people overall out of a total rural population of about 109 million. In addition, its relative upsurge (1.7 percentage points) from 1939–51 was less than that of the total (2.2) and urban (2.5) populations. After 1959, rural population decline continued until the end of the USSR.[121]

Regionally, the most rapid rural growth was largely confined to the Eastern USSR: the Non-Slavic South, Central Asia, and Kazakhstan. In fact, without the appreciable rural increase in Central Asia and Kazakhstan, the rural population of the

USSR would have continued its long-term decline during 1951–59 instead of barely increasing overall.

During 1951–59, the rural population of the Eastern USSR increased by 1.3 percent per year, while that of the Western USSR declined by −0.4. Among quadrants, the Non-Slavic South clearly had the highest rate (2.1), while the rural population of the Russian East only barely increased (0.5). The rural populations of the European Steppe and Northern European USSR continued to decline (−0.1 and −0.6, respectively).

Among economic regions, Kazakhstan and Central Asia also had by far the most rapid rates of rural growth (2.9 and 2.0 percent per year, respectively), both reflecting high fertility, and in the case of Kazakhstan, an influx of migrants through the New Lands or Virgin and Idle Lands Program starting in the late 1950s. The goal of this program, perhaps the chief agricultural program of the post-Stalin era, was to cultivate the "virgin and idle" lands, chiefly in Northern Kazakhstan and adjacent parts of Russia (Urals and West Siberia), consisting of roughly 100 million acres—an area approximately the size of California![122] Indeed, during 1951–59, the rural population of Tselinograd Oblast, focal area of the New Lands Program (Tselinograd literally means "Virgin City"), grew by 4.5 percent per year, considerably faster than Kazakhstan as a whole. Overall, absolute rural population growth for Central Asia and Kazakhstan combined between 1951–59 was roughly 2.4 million, and, thus, the total rural population of the USSR declined by more than 2 million outside these two regions. The next highest regional rates of rural change were in the much lower range of 0.0 to 1.3 percent per year.

Moreover, during 1951–59, a majority of the economic regions (10) continued to have rural population decline. The sharpest rates occurred in the Donetsk-Dnepr (−2.0 percent per year), Moldavia (−1.6) and Center and Central Chernozem (−1.2 each).

Nonetheless, most regions, including all macroregions and seventeen economic regions had a rural upsurge from 1939–51 to 1951–59. The greatest took place in the

Northwest (3.9 percentage points) and Kazakhstan (3.4). The appreciable increase for the North Caucasus (2.4) reflects the late 1950s return of the predominantly rural and previously deported nationalities. For example, during 1951–59, the rural population of the Chechen-Ingush ASSR increased by 6.6 percent per year, after declining by the nearly comparable and sharp rate of −6.3 percent per year during 1939–51, an upsurge of 12.9 percentage points! Only the Donetsk-Dnepr and Moldavia had rural rates lower than those of 1939–51.

Urbanization

Finally, the USSR and all regions continued to have increasing levels of urbanization during 1951–59. However, unlike 1939–51, the greatest increases during 1951–59 generally occurred in the western regions rather than eastern ones. Specifically, the increase for the Western USSR exceeded that of the Eastern USSR (8.2 and 6.1 percentage points, respectively). In addition, among quadrants, the greatest urbanization increases took place in the European Steppe (9.4) and Northern European USSR (7.9), with the lowest clearly being in the Non-Slavic South (4.5).

Similarly, among economic regions, the greatest urbanization increases occurred in the more western Donetsk-Dnepr (12.7 points), Volga (9.4), and South (9.2), while the lowest occurred in Central Asia (4.2). The relatively slower urbanization process of the Eastern USSR generally reflects the increasing demographic dominance here of Central Asia, which, having relatively rapid rural growth, impeded the urbanization process. This pattern of the slow urbanization and relatively rapid rural increase of Central Asia would continue to the end of the USSR.[123]

Also, generally speaking, western regions had upsurges in their increases of urbanization during 1951–59 as compared to 1939–51, while eastern ones had lower urbanization increases. The Donetsk-Dnepr had the greatest increase: its average annual urbanization change during 1951–59 was 1.36 points higher than 1939–51, further

reflecting its combination of rapid urban growth and rural population decline. The next greatest upsurges were also in the extreme west: Belorussia (0.96), and South (0.92). The increasing urban process in the extreme western regions would continue after 1959 because Soviet industrial plans continued to give more emphasis to these regions.[124] The greatest urbanization pace declines took place in eastern regions, specifically, the Urals (−0.44) and Far East (−0.43). This is not unexpected given their high levels of urbanization and somewhat "inflated" urbanization increases during 1939–51 with the eastward movements of industry to behind the front line during World War II.

Total Regional Population Growth, Distribution, and Redistribution Patterns of 1939–51 in Comparison to Other Periods

In this section I will compare the population change and redistribution trends and patterns of 1939–51 with preceding and succeeding intercensal periods from 1897 to 1989, the years of the first census of the Russian Empire and the most recent and last census of the USSR. These include the intercensal periods of 1897–1926, 1926–39, 1939–59, 1959–70, 1970–79, and 1979–89.[125] The residual subperiod of 1951–59 just discussed will also be touched upon briefly when appropriate. This century-long comparative framework will be largely limited to the total population. Unfortunately, urban and rural comparisons are impeded by the lack of a comparable urban definition for 1939–51 and 1897–1989. Official definitions prior to 1939, especially that of 1897, are not necessarily similar to those of 1939, 1951, and onward to 1989. Furthermore, areas outside the Russian Empire in 1897 and the USSR in 1926 include numerous other urban definitions. Although I have been involved in studies with a comparable 15,000-and-over definition for the last century, this definition, unfortunately, cannot be applied to 1939–51 since data are not available for individual centers of 15,000+

in 1951.[126] Nonetheless, it is possible to make very broad comparisons of urban and rural change and urbanization.

Regarding total population change, it should not be surprising that the overall population decline during 1939–51 was in itself unusual, because during every intercensal period from 1897 to 1989, the total population of the USSR did manage to increase. In addition, the population decline between 1939 and 1951 in a clear majority of the economic regions (13 of 19) was not approached in any intercensal period. Excluding the overall 1939–59 intercensal period, which had six regions with decline, the period with the greatest number of declining regions was 1926–39 with three. Regions with the most rapid growth and decline during 1939–51 were also notable: the highest growth rate, 1.2 percent per year for the Far East, was clearly lower than the rates for the most rapidly growing regions in any intercensal period. Moreover, the greatest rates of decline, −2.1 percent per year for the Northwest and −1.7 for the Central Chernozem, were greater than those for any region in any intercensal period.

Another question to be addressed is to what extent regional patterns underway during the immediate pre-1939 periods were upset by World War II, as reflected in the regional trends discussed earlier for 1939–51. The answer, it appears, is that there was generally not much disruption of regional population trends and shifts going on prior to 1939, particularly since the eastward shift of 1939–51 was already well underway.

First, there was a substantial similarity between regional variations in population change rates of 1939–51 with those of 1926–39. In both periods the Eastern USSR had a higher change rate than the Western USSR. Similarly, among the quadrants, the rankings were identical in both: the Russian East had the highest change rate followed by the Non-Slavic South, European Steppe and Northern European USSR.

Second, based on economic regions, there was a fairly high positive correlation between 1926–39 and 1939–51 regional rates of total population change. The rank correlation coefficient (r_s) between the two was 0.571. The fact that it was not higher was chiefly due to Kazakhstan. It had the second highest growth rate during 1939–51,

but ranked a distant seventeenth during 1926–39, and actually was one of only three regions to have a population decline during 1926–39. This again reflects the appreciable population losses among the indigenous Kazakhs in association with the settling of these traditionally nomadic peoples during the collectivization of the 1930s. Indeed, Kazakhstan was the only region to have both a population decline during 1926–39 and an increase during 1939–51. If Kazakhstan is eliminated, the r_s catapults to 0.756. The chief other region which impeded an even higher correlation was the Northwest, which among the nineteen regions had an intermediate rank of 9.5 during 1926–39, but, of course, had the greatest rate of decline or lowest ranking rate during 1939–51.

Another comparison between regions during 1926–39 and 1939–51 reveals that, with the above noted exception of Kazakhstan, all macroregions and economic regions experienced a declining rate of change from 1926–39 to 1939–51. Among the macroregions, there was not much variation in the percentage point decline in the average annual rate of change from 1926–39 to 1939–51. The rate for the Eastern USSR declined by -1.4 points, while that for the Western USSR declined by -1.8 points. Similarly, among the quadrants, the Russian East and Non-Slavic South had declines of -1.6 points, while the declines for the European Steppe and Northern European USSR were not only identical but very close to the other two quadrants, -1.8 points each.

Among the nineteen economic regions, Kazakhstan had the only point increase, while the range of the rate declines for the other eighteen regions was from -3.7 to -0.6 points. The greatest decline (-3.7) occurred in the Far East, followed by the Northwest (-3.6 points), Transcaucasus (-2.8), Belorussia (-2.5), Volgo-Vyatsk (-2.4), and Center (-2.3).

The relatively immediate postwar perspective of 1951–59, just discussed, also suggests little interruption of ongoing trends. To repeat, during 1926–39, 1939–51, and 1951–59, the Eastern USSR had a higher rate of change than the Western USSR and among quadrants, the only deviation was that during 1951–59, the Non-Slavic South

had the highest rate of change, surpassing that of the leader of 1926–39 and 1939–51, the Russian East. The other two quadrants followed earlier patterns with Northern European USSR still having the lowest rate of change (1.0 percent per year during 1951–59), one which was lower than that of the European Steppe (2.1).

Furthermore, the correlation between total population change rates among the nineteen economic regions for 1939–51 and 1951–59 was even higher than that between 1926–39 and 1939–51. Specifically, the r_s was 0.707 versus the somewhat Kazakhstan-distorted r_s of 0.571 for 1926–39 versus 1939–51. This upsurge was chiefly due to the fact that Kazakhstan's rank was virtually identical for 1939–51 (second) and 1951–59 (first), as compared to, as noted above, only seventeenth for 1926–39. In addition, despite the emphasis in this study on the advantages of using the 1939–51 period rather than the longer 1939–59 intercensal period, there was, a high degree of similarity between regional growth rates of both periods (r_s = 0.954), reflecting, of course, that the majority of the years (12 of 20) of the 1939–59 period were during 1939–51. It will also be remembered that all regions had change rate increases, or accelerations, from 1939–51 to 1951–59, in sharp contrast to the near universal decreases (except for Kazakhstan) from 1926–39 to 1939–51.

It is also useful to compare regional population redistribution trends of 1939–51 with those of other periods. Obviously, given regional rate change similarities between 1939–51 and the immediately preceding and succeeding periods of 1926–39 and 1951–59, regional redistribution patterns discussed earlier for 1939–51 were generally also similar to those of both 1926–39 and 1951–59. For example, at the macroregion level, in all three periods, the Eastern USSR, Russian East, and Non-Slavic South had increasing shares of the total population, while Northern European USSR had declining shares. Similarly, among economic regions, those in the east generally had increasing shares of the total population, while most in the west generally had declining shares. However, there were some noteworthy deviations. First, although regions of the Russian East typically had the greatest increases during 1939–51, between 1926 and 1939, and especially between 1951 and 1959 and thereafter, the greatest single shift

was to a region of the Non-Slavic South, specifically, to Central Asia (1926–39 and after 1959) and Kazakhstan (1951–59). These patterns reflect the fact that although the population of the USSR was shifting to the Russian East prior to 1939 and World War II, when the war was over, the population shifted more strongly to other areas. Indeed, the 1951–59 trends show the beginning of the slowing redistribution trend to the Russian East, one which turned to a negative shift during the overall 1959–89 period with net out-migration.[127]

Further reflecting a shift away from Siberia, some western regions, to repeat, also had positive shifts during 1951–59. The most notable case perhaps was the Northwest, which had positive shifts during both 1926–39 and 1951–59, but, of course, had the greatest negative shift during 1939–51.

In previous studies, I investigated regional redistribution trends based on two aggregate measures: the coefficient of redistribution and the dissimilarity index.[128] The coefficient of redistribution is an aggregate measure of overall redistribution based on the summation of the positive redistribution shifts or differentials for each period. The dissimilarity or segregation index is a measure of the degree of regional population concentration in each year in comparison to both a theoretically equal regional percentage distribution of the population and the percentage distribution of the land area of the regions. This, in turn, is calculated by summing the positive differentials between the actual percentage distribution of the population and these two other percentage distributions.[129] In all cases here, the coefficients and indexes are based specifically on the nineteen regions.

Results suggest that with respect to these indicators the 1939–51 period did not strongly deviate from other periods. First, although the coefficient of redistribution for 1939–51, 4.0 or on an average annual basis, 0.33 points per year, was one of the greatest of any of the periods, it was surpassed by that of some other periods.[130] Indeed, the greatest average annual coefficient of redistribution was actually during 1926–39 (0.42), and those for 1951–59 (0.39) and 1959–70 (0.35) also exceeded that for 1939–51. In addition, although the dissimilarity indices declined from 1939 to

1951, suggesting a continuation of the deconcentration of the total population of the USSR which took place from 1897 to 1939, the degree of deconcentration from 1939 to 1951 was appreciable but not extraordinary. Between 1939 and 1951, the dissimilarity index based on an equal population distribution declined by −0.9 points from 21.1 to 20.2, or by −0.08 points per year. This 1939–51 decline was exceeded greatly by that of 1926–39 (−0.18), although it was the second greatest for any of the periods from 1897 to 1989. Somewhat similarly, although the dissimilarity index based on the land area distribution of the regions declined by −1.7 or −0.14 points per year, from 55.5 in 1939 to 53.8 in 1951, such a decline indicative of deconcentration was surpassed in extent by some other periods. Specifically, the greatest decline again occurred during 1926–39 (−0.21 points per year) and a greater decline also occurred during 1951–59 (−0.20). In short, although the 1939–51 period did witness considerable regional population redistribution and deconcentration according to these aggregate measures, the greatest period in these regards in all cases was still the immediately preceding period of 1926–39.

Even the individual greatest regional shifts for 1939–51 were generally not the greatest in the 1897–1989 period. At the grossest level they admittedly were. The average annual percentage point shifts to the Eastern USSR during 1939–51 (0.30 points per year) and from the Western USSR (−0.30), were the greatest in the 1897–1989 period. However, although the shift to the Russian East during 1939–51 (0.20 points per year) was the greatest in the 1897–1951 period, it was surpassed or equalled by the Non-Slavic South during 1959–70 (0.28), 1970–79 (0.22), and 1979–89 (0.20). Furthermore, the greatest positive shift of any of the economic regions during 1939–51, 0.09 points per year for the Urals, was substantially surpassed in a number of other cases, in particular, by Central Asia during 1979–89 (0.18), 1970–79 (0.17) and 1959–70 (0.15). Similarly but conversely, the greatest negative shift among economic regions during 1939–51, −0.09 points per year for the Northwest, was also surpassed in other cases, specifically by the Southwest and the Central Chernozem during 1926–39 (−0.13 and −0.10 points per year, respectively).

As noted above, comparisons of urban and rural trends during 1939–51 with those of all intercensal periods from 1897 to 1989 are impeded by the lack of urban definitional comparability throughout all periods of concern. Nonetheless, keeping this shortcoming in mind, I will hazard some very general comparisons.[131] Despite these definitional concerns, it should be pointed out that there is a great overlap and thus at least rough similarity between different definitions; for example, in 1959, the vast majority (79.8 percent) of the official urban population of the USSR resided in centers of 15,000+, the comparable definition I have used in other studies. Not unexpectedly, it appears that the national urban and rural rates of change (1.4 and −1.7 percent per year) during 1939–51 were only equal to or lower than those of any intercensal period during 1897–1989. The most rapid urban growth undoubtedly was during 1926–39, roughly 7 percent per year, probably the most rapid ever of any major region of the world. Not only was the 1939–51 urban rate only about one-fifth of that, but it appears that it was essentially equal to the lowest intercensal rate of 1.4 during 1979–89 (official definitions). The lowest rural rate of declines were −0.8 percent per year during 1970–79 and −0.9 during the overlapping 1939–59 periods (both also official definitions), and thus the 1939–51 rural rate was clearly below the lowest intercensal rates. The urbanization increase during 1939–51, 0.70 percentage points per year, however, appeared to be clearly surpassed only by those of 1926–39 and, of course, the 1951–59 subperiod, both about one point per year. It was roughly approached or equaled by the urbanization increases of 1939–59, 1959–70 and 1970–79 and it clearly surpassed those of the first and last intercensal periods of 1897–1926 and 1979–89 (roughly 0.1 and 0.4 points per year, respectively). Thus, in summary, it appears that the urban growth rate of 1939–51 did not exceed rates of any intercensal periods, and the rural decline rate was clearly sharper than those of any intercensal period; on the other hand, the urbanization increase during 1939–51 was clearly surpassed only by that of 1926–39.

Summary and Conclusions

This essay has investigated regional population trends in the former USSR between 1939 and 1951 and the impact of World War II on such trends. Results indicated that between 1939 and 1951 the total population of the USSR and most of its regions declined. Declines, however, were confined to the western regions, which experienced not only substantial deaths in association with the German invasion, but also the evacuation of such groups as Germans, Finns, and Poles, in association with the incorporation of areas into the USSR. Eastern regions, on the other hand, managed to increase in population. As a result of these regional trends, the population of the USSR shifted from west to east, although the bulk of the population still resided in the west in 1951.

Despite overall total population decline during 1939–51, the urban population of the USSR and most of its regions increased during 1939–51. The greatest rates of increase occurred primarily in the eastern regions, although some western regions also had above-average urban growth. The sharpest rates of urban decline were witnessed in the extreme western regions, reflecting the Jewish holocaust and the out-migration of Germans and Poles.

On the other hand, the rural population of the USSR as a whole and in all of its regions declined between 1939 and 1951. Furthermore, unlike regional variations in total and urban population change, a relatively clear west-east dichotomy was not as apparent from the rural perspective. The greatest rural declines did occur in the more western regions, including the Chechen-Ingush ASSR and other units where the indigenous peoples were deported due to accusations of collaborating with the Germans. However, fairly sharp rates of rural decline also occurred in a number of eastern regions.

As a result of these variations in total, urban, and rural population change, the level of urbanization of the USSR as a whole and of every region increased between 1939 and 1951. The greatest urbanization increases generally occurred in the eastern

regions, although appreciable increases also characterized some western regions. However, the very lowest urbanization increases were also in western regions, especially Belorussia and the Southwest, further reflecting sharp Jewish population losses in each.

By 1951, two-fifths of the total population of the USSR now resided in urban centers. Although the highest level was in the Far East, the only other regions with urban majorities were all in the west, specifically the Northwest, Center, and Donetsk-Dnepr.

During the immediately following period of 1951–59, virtually all regional rates of population change, not unexpectedly, accelerated from corresponding ones of 1939–51. Furthermore, the unionwide total, urban, and rural populations all increased during 1951–59, although the rural population did so just barely. The eastward shift and the shift to urban areas also continued during 1951–59. However, the predominant regional shift during 1951–59 was no longer to the Russian East or Siberia but, instead, to the Non-Slavic South, a shift that would continue to the end of the Soviet period.

A broader historical perspective revealed that, despite the cataclysmic effects of World War II, regional trend variations were not fundamentally different from nor did they alter those of other periods. Indeed, although the 1939–51 period witnessed a fairly great redistribution and continuation of the regional deconcentration of the total population of the USSR, this period did not have the greatest amount of population redistribution and deconcentration of any of the periods between 1897 and 1989. The chief distinctive features of 1939–51, in contrast to other periods, were the declining population in the USSR as a whole and in the clear majority of the regions and the "last hurrah" of the predominant regional shift to Siberia.

In conclusion, I hope that future studies will make use of the recently published 1951 estimates and other sources to explore in greater detail many of the areas addressed in this essay. I also hope that relatively complete regional population estimates for the early to mid-1940s will be made and published, although their reliability in such a chaotic period would, of course, be quite questionable.

TABLE 1
Total Population Change, Distribution, and Redistribution by Macroregion: 1939-51

Region	Total Population		Average Annual Percentage Change	Percentage Distribution[a]		Percentage Point Change[b]	
	1939	1951	1939-51	1939	1951	1939-51	Average Annual
Western USSR	145,989,000	130,797,000	-0.9	75.6	72.0	-3.6	-0.30
Eastern USSR	47,113,000	50,806,000	0.6	24.4	28.0	3.6	0.30
Northern European USSR	105,416,000	92,330,000	-1.1	54.6	50.8	-3.8	-0.32
European Steppe	32,546,000	30,614,000	-0.5	16.9	16.9	0.0	0.00
Russian East	30,489,000	33,016,000	0.6	15.8	18.2	2.4	0.20
Non-Slavic South	24,651,000	25,643,000	0.3	12.8	14.1	1.3	0.11
USSR Total	193,102,000	181,603,000	-0.5	100.1	100.0		

Notes: a. Region's total population as a percentage of the total population of the USSR.

b. Difference resulting from the percentage distribution in later year, here 1951, minus the percentage distribution in earlier year, here 1939. The average annual change is the total change or difference divided by the number of years, here 12.

Sources:

Data for 1951 come from Gosudarstvennyy Komitet SSSR po Statistike (Goskomstat SSSR), Naseleniye SSSR, 1987 (Moscow: Finansy i statistika, 1988), pp. 16-42; data for 1939 come from Tsentral'noye Statisticheskoye Upravleniye pri Sovete Ministrov SSSR (TsSU SSSR), Naseleniye SSSR, 1973 (Moscow: Izdatel'stvo "Statistika", 1975), pp. 14-25. For sources and procedures involving 1939 estimates for areas not included in this latter source, see "Data Problems and Adjustments" of this paper.

TABLE 2
Total Population Change, Distribution, and Redistribution by Economic Region: 1939-51

Region	Total Population		Average Annual Percentage Change	Percentage Distribution[a]		Percentage Point Change[b]	
	1939	1951	1939-51	1939	1951	Total 1939-51	Average Annual
Northwest	12,403,000	9,654,000	-2.1	6.4	5.3	-1.1	-0.09
West	5,817,000	5,619,000	-0.3	3.0	3.1	0.1	0.01
Center	25,309,000	23,073,000	-0.8	13.1	12.7	-0.4	-0.03
Volgo-Vyatsk	8,695,000	7,837,000	-0.9	4.5	4.3	-0.2	-0.02
Central Chernozem	10,439,000	8,562,000	-1.7	5.4	4.7	-0.7	-0.06
Volga	12,120,000	11,024,000	-0.8	6.3	6.1	-0.2	-0.02
Belorussia	8,912,000	7,781,000	-1.2	4.6	4.3	-0.3	-0.03
Moldavia	2,452,000	2,392,000	-0.2	1.3	1.3	0.0	0.00
Southwest	21,721,000	18,780,000	-1.3	11.2	10.3	-0.9	-0.08
South	4,863,000	4,297,000	-1.1	2.5	2.4	-0.1	-0.01
Donetsk-Dnepr	14,720,000	14,146,000	-0.3	7.6	7.8	0.2	0.02
North Caucasus	10,511,000	9,779,000	-0.6	5.4	5.4	0.0	0.00
Transcaucasus	8,027,000	7,853,000	-0.2	4.2	4.3	0.1	0.01
Urals	14,446,000	15,556,000	0.6	7.5	8.6	1.1	0.09
West Siberia	7,936,000	8,748,000	0.8	4.1	4.8	0.7	0.06
East Siberia	5,289,000	5,444,000	0.2	2.7	3.0	0.3	0.03
Far East	2,818,000	3,268,000	1.2	1.5	1.8	0.3	0.03
Kazakhstan	6,082,000	6,813,000	0.9	3.1	3.8	0.7	0.06
Central Asia	10,542,000	10,977,000	0.3	5.5	6.0	0.5	0.04
USSR Total	193,102,000	181,603,000	-0.5	99.9	100.0		

Notes: a and b, see table 1.

Sources: See table 1.

TABLE 3
Urban Population Change and Urbanization by Macroregion: 1939-51

Region	Urban Population		Average Annual Percentage Change	Level of Urbanization[a]		Percentage Point Change[b]	
	1939	1951	1939-51	1939	1951	Total 1939-51	Average Annual
Western USSR	46,632,000	50,825,000	0.7	31.9	38.9	7.0	0.58
Eastern USSR	14,709,000	22,180,000	3.4	31.2	43.7	12.5	1.04
Northern European USSR	31,397,000	34,489,000	0.8	29.8	37.4	7.6	0.63
European Steppe	12,646,000	13,126,000	0.3	38.9	42.9	4.0	0.33
Russian East	10,614,000	16,134,000	3.5	34.8	48.9	14.1	1.18
Non-Slavic South	6,684,000	9,256,000	2.7	27.1	36.1	9.0	0.75
USSR Total	61,341,000	73,005,000	1.4	31.8	40.2	8.4	0.70

Notes: a. Urban population, official definitions, as a percent of the total population.

b. Difference resulting from the level of urbanization in later year, here 1951, minus the level of urbanization in earlier year, here 1939. The average annual change is the total change divided by the number of years, here 12.

Sources: See table 1.

TABLE 4
Urban Population Change and Urbanization by Economic Region: 1939-51

Region	Urban Population		Average Annual Percentage Change	Level of Urbanization[a]		Percentage Point Change[b]	
	1939	1951	1939-51	1939	1951	Total 1939-51	Average Annual
Northwest	5,953,000	5,598,000	-0.5	48.0	58.0	10.0	0.83
West	1,677,000	2,257,000	2.5	28.8	40.2	11.4	0.95
Center	10,772,000	12,340,000	1.2	42.6	53.5	10.9	0.91
Volgo-Vyatsk	1,778,000	2,427,000	2.6	20.4	31.0	10.6	0.88
Central Chernozem	1,455,000	1,591,000	0.7	13.9	18.6	4.7	0.39
Volga	3,367,000	4,303,000	2.1	27.8	39.0	11.2	0.93
Belorussia	1,855,000	1,726,000	-0.6	20.8	22.2	1.4	0.12
Moldavia	328,000	418,000	2.0	13.4	17.5	4.1	0.34
Southwest	4,540,000	4,247,000	-0.5	20.9	22.6	1.7	0.14
South	1,785,000	1,693,000	-0.4	36.7	39.4	2.7	0.23
Donetsk-Dnepr	7,426,000	7,507,000	0.1	50.4	53.1	2.7	0.23
North Caucasus	3,107,000	3,508,000	1.0	29.6	35.9	6.3	0.53
Transcaucasus	2,589,000	3,210,000	1.8	32.3	40.9	8.6	0.72
Urals	4,930,000	7,708,000	3.7	34.1	49.6	15.5	1.29
West Siberia	2,405,000	3,870,000	4.0	30.3	44.2	13.9	1.16
East Siberia	1,878,000	2,475,000	2.3	35.5	45.5	10.0	0.83
Far East	1,401,000	2,081,000	3.3	49.7	63.7	14.0	1.17
Kazakhstan	1,690,000	2,675,000	3.8	27.8	39.3	11.5	0.96
Central Asia	2,405,000	3,371,000	2.8	22.8	30.7	7.9	0.66
USSR Total	61,341,000	73,005,000	1.4	31.8	40.2	8.4	0.70

Notes: a and b, see table 3.

Sources: See table 1.

TABLE 5 Rural Population Change by Macroregion: 1939-51			
Region	Rural Population		Average Annual Percentage Change
	1939	1951	1939-51
Western USSR	99,357,000	79,972,000	-1.9
Eastern USSR	32,404,000	28,626,000	-1.1
Northern European USSR	74,019,000	57,841,000	-2.1
European Steppe	19,900,000	17,488,000	-1.1
Russian East	19,875,000	16,882,000	-1.4
Non-Slavic South	17,967,000	16,387,000	-0.8
USSR Total	131,761,000	108,598,000	-1.7

Sources: See table 1.

TABLE 6 Rural Population Change by Economic Region: 1939-51			
Region	Rural Population		Average Annual Percentage Change
	1939	1959	1939-51
Northwest	6,450,000	4,056,000	-3.9
West	4,140,000	3,362,000	-1.8
Center	14,537,000	10,733,000	-2.5
Volgo-Vyatsk	6,917,000	5,410,000	-2.1
Central Chernozem	8,984,000	6,971,000	-2.1
Volga	8,753,000	6,721,000	-2.2
Belorussia	7,057,000	6,055,000	-1.3
Moldavia	2,124,000	1,974,000	-0.6
Southwest	17,181,000	14,533,000	-1.4
South	3,078,000	2,604,000	-1.4
Donetsk-Dnepr	7,294,000	6,639,000	-0.8
North Caucasus	7,404,000	6,271,000	-1.4
Transcaucasus	5,438,000	4,643,000	-1.4
Urals	9,516,000	7,848,000	-1.7
West Siberia	5,531,000	4,878,000	-1.1
East Siberia	3,411,000	2,969,000	-1.2
Far East	1,417,000	1,187,000	-1.5
Kazakhstan	4,392,000	4,138,000	-0.5
Central Asia	8,137,000	7,606,000	-0.6
USSR Total	131,761,000	108,598,000	-1.7

Sources: See table 1.

TABLE 7
Regional Population Patterns by Macroregion: 1951-59

Region	1959 % Distribution of Total Population[a]	% Point Redistribution 1951-59[b]		Average Annual % Change			Level of Urban-ization[c]	Percentage Point Change[d] 1951-59	
		Total	Average Annual	Total	Urban	Rural	1959	Total	Avg. Annual
Western USSR	69.8	-2.2	-0.28	1.3	3.8	-0.4	47.1	8.2	1.03
Eastern USSR	30.2	2.2	0.28	2.7	4.3	1.3	49.8	6.1	0.76
Northern European USSR	47.9	-2.9	-0.36	1.0	3.4	-0.6	45.3	7.9	0.99
European Steppe	17.4	0.5	0.06	2.1	4.6	-0.1	52.3	9.4	1.18
Russian East	19.2	1.0	0.13	2.4	4.2	0.5	56.2	7.3	0.91
Non-Slavic South	15.5	1.5	0.19	3.0	4.5	2.1	40.6	4.5	0.56
USSR Total	100.1			1.7	3.9	+0.0	47.9	7.7	0.96

Notes: a. See note a, table 1
b. See note b, table 1
c. See note a, table 3
d. See note b, table 3

Sources: See table 1 (1959 data come from the same source as 1939 data).

TABLE 8
Regional Population Patterns by Economic Region: 1951-59

Region	1959 % Distribution of Total Population[a]	% Point Redistribution 1951-59[b]		Average Annual % Change			Level of Urbanization[c]	Percentage Point Change[d] 1951-59	
		Total	Average Annual	Total	Urban	Rural	1959	Total	Average Annual
Northwest	5.5	0.2	0.03	2.2	3.5	+0.0	64.6	6.6	0.83
West	2.9	-0.2	-0.03	0.8	3.1	-1.0	48.3	8.1	1.01
Center	11.9	-0.8	-0.10	0.8	2.5	-1.2	60.8	7.3	0.91
Volgo-Vyatsk	4.0	-0.3	-0.04	0.6	3.6	-0.9	39.0	8.0	1.00
Central Chernozem	4.2	-0.5	-0.06	0.2	4.8	-1.2	26.9	8.3	1.04
Volga	6.0	-0.1	-0.01	1.5	4.2	-0.5	48.4	9.4	1.18
Belorussia	3.9	-0.4	-0.05	0.5	4.6	-1.0	30.8	8.6	1.08
Moldavia	1.4	0.1	0.01	2.4	5.4	-1.6	22.3	4.8	0.60
Southwest	9.7	-0.6	-0.08	1.0	3.9	-0.0	28.7	6.1	0.76
South	2.4	0.0	0.00	2.1	4.7	+0.0	48.6	9.2	1.15
Donetsk-Dnepr	7.9	0.1	0.01	2.0	4.6	-2.0	65.8	12.7	1.59
North Caucasus	5.6	0.2	0.03	2.4	4.5	1.0	42.4	6.5	0.81
Transcaucasus	4.6	0.3	0.04	2.4	3.8	1.3	45.9	5.0	0.63
Urals	8.9	0.3	0.04	2.3	3.8	0.5	56.4	6.8	0.85
West Siberia	4.9	0.1	0.01	1.9	4.1	-0.3	52.9	8.7	1.09
East Siberia	3.3	0.3	0.04	3.1	4.9	1.3	52.5	7.0	0.88
Far East	2.1	0.3	0.04	3.6	4.6	1.3	69.6	5.9	0.74
Kazakhstan	4.5	0.7	0.09	3.8	5.2	2.9	43.8	4.5	0.56
Central Asia	6.6	0.6	0.08	2.8	4.4	2.0	34.9	4.2	0.53
USSR Total	100.3			1.7	3.9	+0.0	47.9	7.7	0.96

Notes: See tables 1, 3, and 7.

Sources: See tables 1 and 7.

TABLE 9
Percentage Point Changes in Average Annual Rates by Macroregion: 1939-51 to 1951-59

Region	Average Annual Percentage Point Redistribution	Average Annual Percentage Change			Average Annual Percentage Point Change in Urbanization
		Total	Urban	Rural	
Western USSR	0.02	2.2	3.1	1.5	0.45
Eastern USSR	-0.02	2.1	0.9	2.4	-0.28
Northern European USSR	-0.04	2.1	2.6	1.5	0.36
European Steppe	0.06	2.6	4.3	1.0	0.85
Russian East	-0.07	1.8	0.7	1.9	-0.27
Non-Slavic South	0.08	2.7	1.8	2.9	-0.19
USSR Total		2.2	2.5	1.7	0.26

Note: In each, "percentage point changes" are the differences resulting from the average annual change for 1951-59 minus the average annual change for 1939-51.

Sources: See tables 1 and 7.

TABLE 10
Percentage Point Change in Average Annual Rates by Economic Region:
1939-51 to 1951-59

Region	Average Annual Percentage Point Redistribution	Average Annual Percentage Change			Average Annual Percentage Point Change in Urbanization
		Total	Urban	Rural	
Northwest	0.12	4.3	4.0	3.9	0.00
West	-0.04	1.1	0.6	0.8	0.06
Center	-0.07	1.6	1.3	1.3	0.00
Volgo-Vyatsk	-0.02	1.5	1.0	1.2	0.12
Central Chernozem	0.00	1.9	4.1	0.9	0.65
Volga	0.01	2.3	2.1	1.7	0.25
Belorussia	-0.02	1.7	5.2	0.3	0.96
Moldavia	0.01	2.6	3.4	-1.0	0.26
Southwest	0.00	2.3	4.4	1.4	0.62
South	0.01	3.2	5.1	1.4	0.92
Donetsk-Dnepr	-0.01	2.3	4.5	-1.2	1.36
North Caucasus	0.03	3.0	3.5	2.4	0.28
Transcaucasus	0.03	2.6	2.0	2.7	-0.09
Urals	-0.05	1.7	0.1	2.2	-0.44
West Siberia	-0.05	1.1	0.1	0.8	-0.07
East Siberia	0.01	2.9	2.6	2.5	0.05
Far East	0.01	2.4	1.3	2.8	-0.43
Kazakhstan	0.03	2.9	1.4	3.4	-0.40
Central Asia	0.04	2.5	1.6	2.6	-0.13
USSR Total		2.2	2.5	1.7	0.26

Note: See note to table 9.

Sources: See tables 1 and 7.

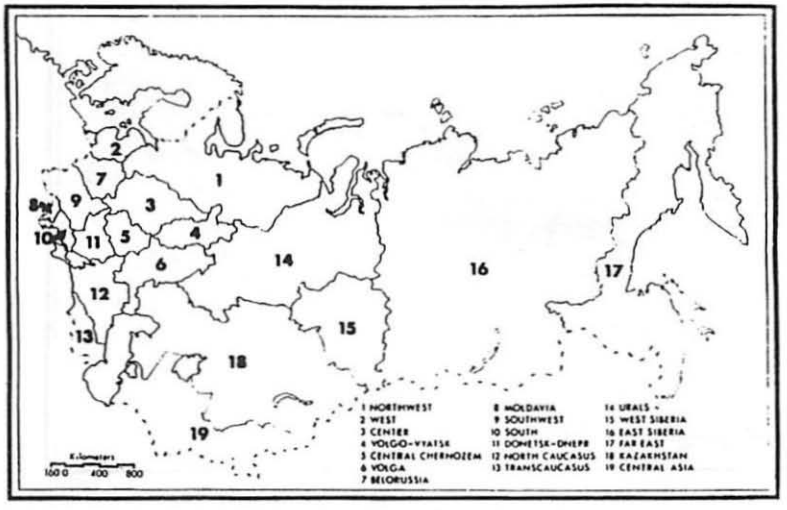

FIGURE 1. Economic and Macroregions as of 1961: Western USSR (regions 1-13); Eastern USSR (14-19); Northern European USSR (1-7 and 9); European Steppe (8 and 10-12); Russian East (14-17); and Non-Slavic South (13 and 18-19).

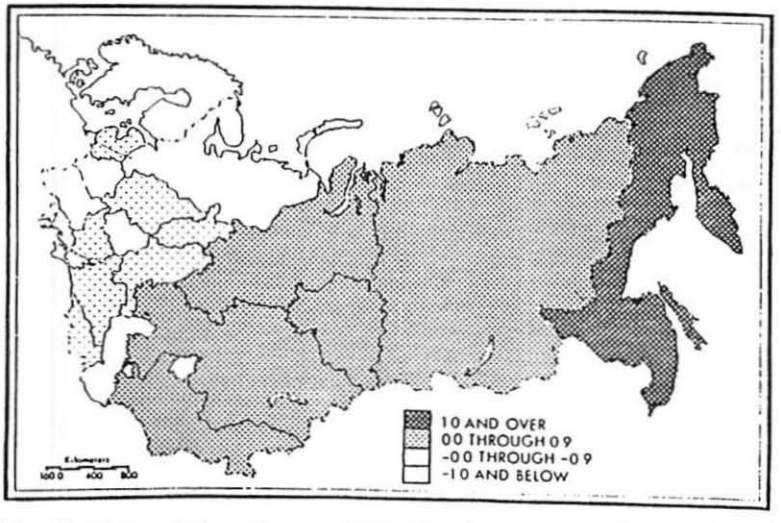

FIGURE 2. Total Population Change, 1939–51: Average annual percentage change in total population, 1939–51.

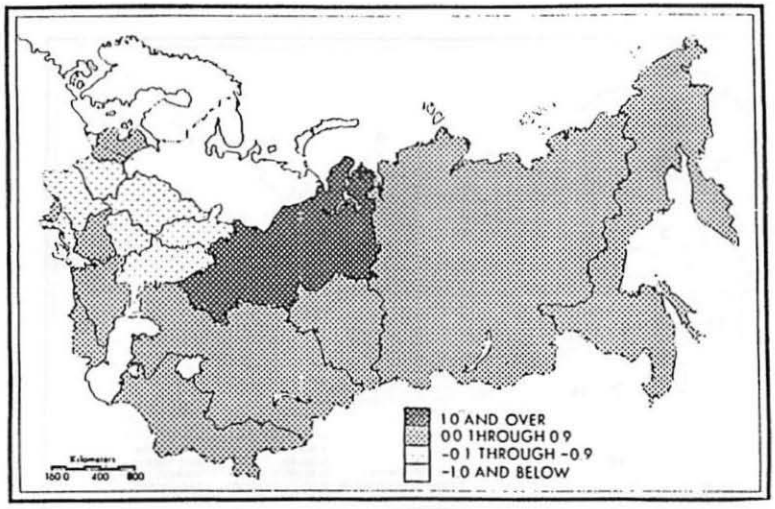

FIGURE 3. Change in Total Population Distribution, 1939–51: Percentage point change in percent of total population, 1939–51.

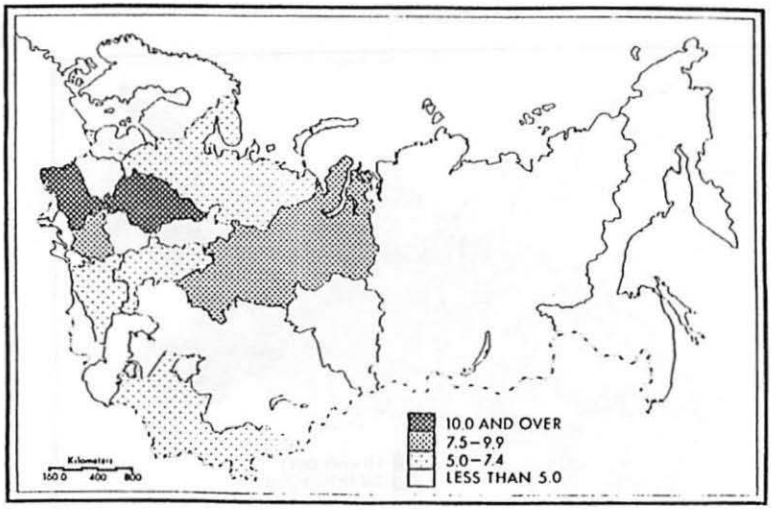

FIGURE 4. Total Population Distribution, 1951: Percentage distribution of total population, 1951.

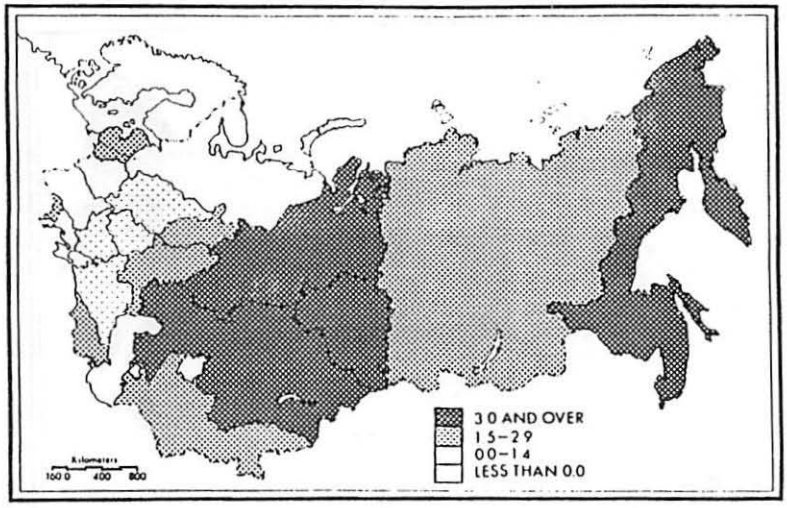

FIGURE 5. Change in Urban Population, 1939–51: Average annual percentage change in urban population, 1939–51.

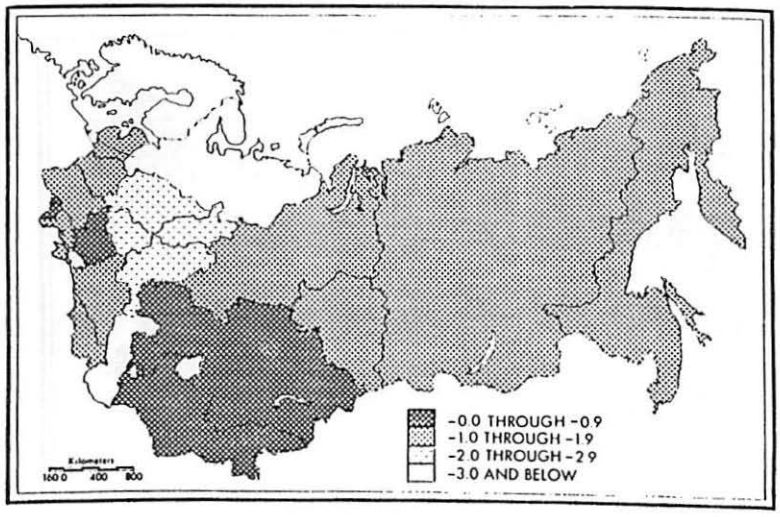

FIGURE 6. Change in Rural Population, 1939–51: Average annual percentage change in rural population, 1939–51.

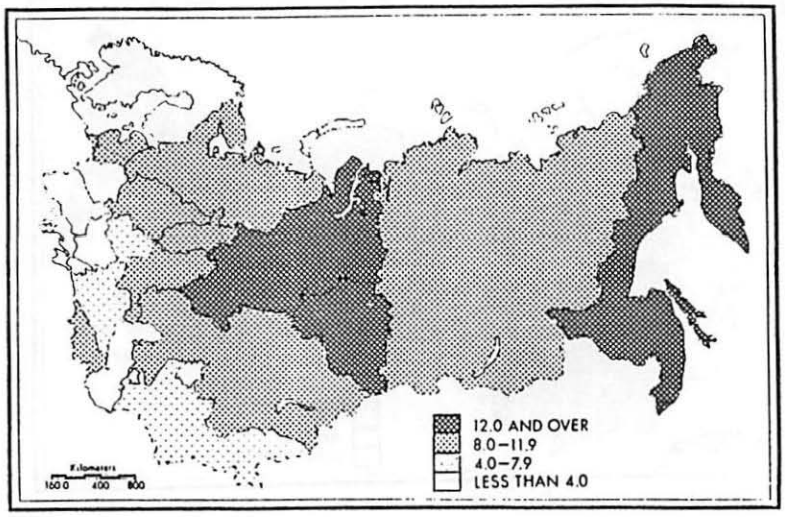

FIGURE 7. Change in Level of Urbanization, 1939–51: Percentage point change in percent of total population residing in urban centers, 1939–51.

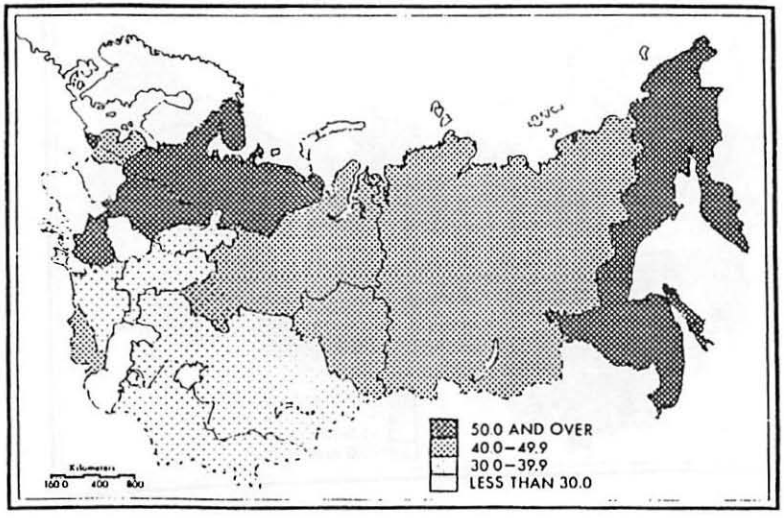

FIGURE 8. Level of Urbanization, 1951: Percent of total population residing in urban centers, 1951.

Notes

1. It is beyond the scope of this paper to address the long-existing and ongoing discussions and estimates of population losses during World War II. Some recent estimates place deaths at more than 25 million and nonbirths at 16 million. See V. S. Gel'fand, *Naseleniye SSSR za 50 Let (1941–1990)* (Perm': Izdatel'stvo Permskogo Universiteta, 1992), pp. 17–20 and 264–75, which includes an estimate of 16 million non-births by B. Sokolov, *Tsena pobedy: Velikaya Otechestvennaya: neizvestnoye ob izvestnom* (Moscow: Moskovskiy rabochiy, 1991); Ye. Andreyev, L. Darskiy and T. Khar'kova, "Otsenka lyudakikh poter' v period Velikoy Otechestvennoy Voyny," *Vestnik statistiki* 10 (1990): 25–27; Ye. M. Andreyev, L. Ye. Darskiy, and T. L. Khar'kova, *Naseleniye Sovetskogo Soyuza, 1922–1991* (Moscow: "Nauka," 1993), pp. 74–79. Both studies by Andreyev et al. estimate deaths at 26.6 million.

2. The 1939 census data used here will come from Tsentral'noye Statisticheskoye Upravleniye pri Sovete Ministrov SSSR (TsSU SSSR), *Naseleniye SSSR, 1973* (Moscow: Izdatel'stvo "Statistika," 1975), pp. 10–13. This source also includes data for 1959. Data for 1939 and 1959 were also published in the 1959 census itself: TsSU SSSR, *Itogi vsesoyuznoy perepisi naseleniya 1959 goda: SSSR* (Moscow: Gosstatizdat, 1962), pp. 20–29. As will be seen later, the first source, which will be the one used here, provides, like the 1951 estimates, rounded populations. These figures are virtually identical to those published for 1939 and 1959 in the 1959 census itself.

3. Gosudarstvennyy Komitet SSSR po Statistike (Goskomstat SSSR), *Naseleniye SSSR, 1987* (Moscow: Finansy i statistika, 1988), pp. 16–33.

4. For example, see Robert A. Lewis and Richard H. Rowland, *Population Redistribution in the USSR: Its Impact on Society, 1897–1977* (New York: Praeger, 1970); Richard H. Rowland and Robert A. Lewis, "Regional Population Growth and Redistribution in the U.S.S.R., 1970–79," *Canadian Studies in Population* 9 (1982): 71–93; and Richard H. Rowland, "National and Regional Population Trends in the USSR, 1979–89: Preliminary Results from the 1989 Census," *Soviet Geography* 30, 9 (November 1989): 635–69.

5. TsSU Gosplana SSSR, *Chislennost' naseleniya SSSR na 17 yanvarya 1939 g.* (Moscow: Gosstadizdat, 1941), which has recently been put out on microfiche by East-View publications, Minneapolis, MN; Rossiyskaya Akademiya Nauk (RAN), *Vsesoyuznaya perepis' naseleniya 1939 goda: osnovnyye itogi* (Moscow: "Nauka," 1992); Akademiya Nauk SSSR (ANSSSR), *Materialy k serii, "Narody Sovetskogo Soyuza": perepis' 1939 goda*, 15 parts (Moscow, 1990).

6. TsSU SSSR, *Itogi, 1959.*

7. RAN, *Vsesoyuznaya;* ANSSSR, *Materialy;* Andreyev, Darskiy, and Khar'kova, *Naseleniye.* Discussions of the 1939 census by Andreyev et al. are also available elsewhere; see Evgeny M. Andreev, Leonid E. Darsky, and Tatiana L. Khar'kova, "Population Dynamics: Consequences of Regular and Irregular Changes," in Wolfgang Lutz, Sergei Scherbov, and Andrei Volkov, eds., *Demographic Trends and Patterns in the Soviet Union Before 1991* (London: Routledge, 1994), pp. 423–40; and Ye. M. Andreyev, L. Ye. Darskiy, and T. L. Khar'kova, "Opyt otsenki chislennosti naseleniya SSSR, 1926–1941 gg.: Kratkiye rezul'taty issledovaniya," *Vestnik statistiki* 7 (1990): 34–36; Yu. A. Polyakov, V. B. Zhiromskaya, and I. N. Kiselev, "Polveka molchaniya (Vsesoyuznaya perepis' naseleniya 1937 g.)," *Sotsiologicheskiye issledovaniya* 6 (1990): 3–25; 7 (1990): 50–70; 8 (1990): 30–52. These articles have also been translated; see Iurii Aleksandrovich Poliakov, Valentina Borisovna Zhiromskaia, and Igor' Nikolaevich Kiselev, "A Half-Century of Silence, the 1937 Census," *Russian Studies in History* 31, 1 (Summer 1992): 10–98 (the three articles are presented as three parts in this one issue which also includes a brief synopsis in an "Introduction" by Robert E. Johnson, guest editor, pp. 1–9); V. V. Tsaplin, "Statistika zhertv Stalinizma v 30-e gody," *Voprosy istorii* 4 (April 1989): 175–81; A. Volkov, "Iz istorii perepisi naseleniya 1937 goda," *Vestnik statistiki* 8 (1990): 45–56; S. G. Wheatcroft and R. W. Davies, "Population," in R. W. Davies, Mark Harrison, and S. G. Wheatcroft, eds., *The Economic Transformation of the Soviet Union, 1913–1945* (Cambridge: Cambridge University Press, 1994), p. 72.

8. Andreyev, Darskiy, and Khar'kova (*Naseleniye*, p. 33) estimate a population of 168.4–168.9 million, with even these figures including upward adjustments of over 1 million from an "original" 167 million (0.6 million for people temporarily away from home and not recorded elsewhere, as well as another 0.5 million for undercounting). The final official Soviet total of 170.6 million was based on upward adjustments of 1.1 and 1.7 million from a base of 167.7 million, respectively. However, Polyakov, Zhiromskaya and Kiselev ("Polveka" [1990], p. 51; also "A Half," p. 97) evidently accept no upward adjustment but instead stay with the lower "original" new figure of 167.3 million, whereas even Andreyev et al. apparently admitted that some upward adjustments were necessary, but just not as great as those in the official Soviet totals. It should be noted that the official Soviet adjustments started from the base of 167.3 or 167.7 million, which were, in turn, based on earlier upward adjustments of 8.2 million, from 159.1 million to 167.3 million; specifically, of 2.3 million for the population in remote regions, 3.7 million recorded by the NKVD and 2.1 million recorded by the military (Andreyev, Darskiy, and Khar'kova, *Naseleniye*, p. 31). See also Wheatcroft and Davies, "Population," p. 72, for a discussion of these adjustments.

9. Johnson, "Introduction," p. 7; Andreyev, Darskiy, and Khar'kova, *Naseleniye*, p. 31.

10. Gary L. Peters and Robert P. Larkin, *Population Geography* (Dubuque, Iowa: Kendall/Hunt, 1993), p. 64; *Population Today* 19, 6 (June 1991): 6; 19, 7/8 (July/August 1991): 3; and 19, 9 (September 1991): 3.

11. A. A. Shevyakov, "Vsesoyuznaya perepis' naseleniya 1939 g. mogla i ne sostoyat'sya," *Sotsiologicheskiye issledovaniya* 5 (1993): 3–13.

12. TsSU SSSR, *Itogi, 1959; Naseleniye*, pp. 14–25.

13. J. William Leasure and Robert A. Lewis, *Population Changes in Russia and the USSR: A Set of Comparable Territorial Units* (San Diego: San Diego State College Press, 1966), pp. 27 and 38; Lewis and Rowland, *Population*, p. 442.

14. Estimates were 1,197,452 for Kaliningrad; 848,906 for Zakarpatskaya, 258,739 for southern Sakhalin and 94,158 for Tuva. See Leasure and Lewis, *Population*, p. 38.

15. Andreyev, Darskiy, and Khar'kova, *Naseleniye*, pp. 118–31.

16. *Ibid.*, p. 33.

17. *Ibid.*, pp. 50–53.

18. For example, see Goskomstat SSSR, *Naseleniye*, p. 8.

19. Andreyev, Darskiy, and Khar'kova, *Naseleniye*, p. 118.

20. For example, see RAN, *Vsesoyuznaya*.

21. TsSU SSSR, *Naseleniye*, pp. 14–25.

22. *Ibid.*; Goskomstat SSSR, *Naseleniye*, p. 8.

23. Leasure and Lewis, *Population*, p. 38; Lewis and Rowland, *Population*, p. 442.

24. Leasure and Lewis, *Population*, p. 27; Lewis and Rowland, *Population*, p. 442; TsSU SSSR, *Itogi, 1959*.

25. Based on the inflation procedures, estimated 1939 total populations for the four units were 1,229,000 for Kaliningrad; 835,000 for Zakarpatskaya; 256,000 for southern Sakhalin and 104,000 for Tuva. Each is very close to those provided by Leasure and Lewis, *Population,* p. 38 (see also n. 14).

26. TsSU SSSR, *Naseleniye*, pp. 14–25; TsSU SSSR, *Itogi, 1959*

27. Annual population estimates for union republics are provided in *Naseleniye SSSR, 1987* for, among other years, 1939, and 1950–87. A comparison of estimates for 1939 for each of the fifteen republics in *Naseleniye SSSR, 1987* shows them to be identical to those provided in *Naseleniye SSSR, 1973,* suggesting that no subsequent changes have been made for 1939 since the publication of *Naseleniye SSSR, 1973.* See TsSU SSSR, *Naseleniye,* pp. 10–11; Goskomstat SSSR, *Naseleniye,* pp. 8–15.

28. Although the urban and thus also rural populations used here will be those based on official urban definitions, which varied by republic and employed both size and functional criteria, it should be noted that in past studies, my coauthor and I estimated the urban population based on a comparable definition of 15,000 or more people for 1939 as well as the other census years of 1897, 1926, 1959, and 1970. However, data are not available for individual centers in 1951, which would allow the 15,000+ definition to be used here. See, for example, Lewis and Rowland, *Population,* p. 444.

29. Official estimates for 1956 were published in TsSU SSSR, *Narodnoye khozyaystvo SSSR v 1956 godu* (Moscow, 1957), pp. 24–29. These data were investigated in Michael K. Roof and Frederick A. Leedy, "Population Redistribution in the Soviet Union, 1939-1956," *Geographical Review* 49, 2 (April 1959): 208–21. Shabad estimated regional and oblast-level populations for 1947 based on electoral district lists for the 1947 republic elections; see Theodore Shabad, *Geography of the USSR: A Regional Survey* (New York: Columbia University Press, 1951), pp. 499–505. In addition, regional and oblast-level population data were estimated by Shimkin for 1955 based on the number of retail stores and stores per capita; see Demitri B. Shimkin, "Demographic Changes and Socio-Economic Forces Within the Soviet Union, 1939–1959," in *Population Trends in Eastern Europe, the USSR and Mainland China* (New York: Milbank Memorial Fund, 1969), pp. 226–53. Much more recently, oblast-level estimates were published in 1991 for June 1945, or right after the end of the war, but these estimates are not for current political units, as are data for 1939, 1951, 1959, and thereafter (the same source also includes electoral-based data for noncurrent units to 1951). However, these 1945 and post-1945 estimates appear to be incomplete. Not only do they explicitly exclude people which were not distributed by the political units, but the total national population based on these estimates for the USSR

in June 1945 was only 152,082,100, or roughly 20 million below the estimated population of the USSR (170,000,000); the latter is based on the average of estimates provided by Gel'fand, for January 1945 and January 1946 (173,504,800 and 168,667,100, respectively, and thus an average of 171,085,950). See Akademiya Nauk SSSR (ANSSSR), *Tsenzy 1945–1951* (Moscow, 1991), pp. 81–86; Gel'fand, *Naseleniye,* pp. 51 and 54.

30. Andreyev, Darskiy, and Khar'kova, *Naseleniye,* pp. 74 and 126; Gel'fand, *Naseleniye,* p. 54.

31. Gel'fand, *Naseleniye,* p. 39.

32. *Ibid.,* pp. 45 and 48.

33. See Shimkin, "Demographic," pp. 228–29; Frank Lorimer, *The Population of the Soviet Union: History and Prospects* (Geneva: League of Nations, 1946), map between pp. 194 and 195.

34. Lewis and Rowland, *Population,* p. 442.

35. *Ibid.*

36. According to the Leasure and Lewis estimates the 1939 population of yet-to-be-formed Kaliningrad Oblast was 1,197,452, while the estimate I derive using the inflation procedure discussed earlier is 1,229,000. I have checked this basic estimate of roughly 1.2 million by investigating population data for 1939 in the more than forty units of East Prussia. Results suggest that 1,200,433 people were located in the sixteen units that fell completely or mainly in the future Kaliningrad Oblast, with the remainder being in present-day Poland. This figure is, obviously, very close to Leasure and Lewis's as well as to the "inflated" total used here, further supporting the very sharp decline of Kaliningrad Oblast during 1939–51. See Leasure and Lewis, *Population,* pp. 1 and 38; Statistischen Reichsamt, *Statistischen jahrbuch für das Deutsche Reich, 1941/42* (Berlin, 1942), p. 10; Goettingen Research Committee, *Eastern Germany, A Handbook, vol. 3, Economy* (Wuerzburg, West Germany: Holzner-Verlag, 1960), folded map inside back cover.

37. Eugene M. Kulischer, *Europe on the Move: War and Population Changes, 1917–47* (New York: Columbia University Press, 1948), pp. 272–302.

38. *Ibid.,* pp. 264, 269, 303.

39. Theodore Shabad, *Basic Industrial Resources of the USSR* (New York: Columbia University Press, 1969), p. 119.

40. Shimkin, "Demographic," pp. 228–29; Lorimer, *The Population,* map between pp. 194 and 195.

41. Robert Conquest, *The Great Terror: A Reassessment* (New York: Oxford University Press, 1990), pp. 329–30.

42. Lewis and Rowland, *Population,* p. 75.

43. B. H. Liddell Hart, *History of the Second World War* (New York: Putnam, 1971), pp. 480–91; Alexander Werth, *Russia at War, 1941–1945,* (New York: Carroll & Graf, 1964), pp. 679–87.

44. Robert A. Lewis, Richard H. Rowland, and Ralph S. Clem, *Nationality and Population Change in Russia and the USSR: An Evaluation of Census Data, 1897–1970* (New York: Praeger, 1976), pp. 223–31 and 240; and Kulischer, *Europe,* p. 303.

45. Kulischer, *Europe,* p. 267.

46. RAN, *Vsesoyuznaya,* pp. 57–71.

47. Shabad, *Basic,* p. 94.

48. Kulischer, *Europe,* pp. 297 and 303; Fred C. Koch, *The Volga Germans in Russia and the Americas, from 1763 to the Present* (University Park, PA: Pennsylvania State University Press, 1977), map facing title page; Glavnoye Upravleniye Geodezii i Kartografii pri Sovete Ministrov SSSR, *Atlas SSSR* (Moscow, 1986), pp. 35 and 40.

49. RAN, *Vsesoyuznaya,* p. 67.

50. Winston S. Churchill, *The Hinge of Fate* (Boston: Houghton Mifflin, 1950), p. 63.

51. Kulischer, *Europe,* pp. 297–99 and 303; Robert Conquest, *The Nation Killers* (London: Macmillan, 1970), p. 64; RAN, *Vsesoyuznaya,* pp. 57–58.

52. Kulischer, *Europe,* pp. 299 and 303.

53. *Ibid.*, pp. 298–99 and 303.

54. Audrey L. Alstadt, *The Azerbaijani Turks: Power and Identity Under Russian Rule* (Stanford, CA: Hoover Institution Press, 1992), pp. 153–54.

55. *Ibid.*, pp. 156–58.

56. Shabad, *Basic,* p. 148.

57. Liddell Hart, *History,* p. 253.

58. *Ibid.*, p. 694; Werth, *Russia,* pp. 1027–45.

59. Shabad, *Geography,* p. 314.

60. Robert Conquest, *Kolyma: The Arctic Death Camps* (New York: Viking Press, 1978).

61. Shabad, *Basic,* pp. 285–86.

62. *Ibid.*, p. 288.

63. *Ibid.*, pp. 234–39.

64. Lorimer, *The Population,* p. 195; John Barber and Mark Harrison, *The Soviet Home Front, 1941–1945: A Social and Economic History of the USSR in World War II* (London: Longman, 1991), p. 130.

65. Shabad, *Basic,* pp. 214–33.

66. Rowland, "National," pp. 639–50.

67. M. K. Karakhanov, *Nekapitalisticheskiy put' razvitiya i problemy narodonaseleniya* (Tashkent: Izdatel'stvo "FAN" Uzbekskoy SSR, 1983), pp. 226–28.

68. Alstadt, *The Azerbaijani,* pp. 153–54.

69. Shabad, *Basic,* pp. 234–39.

70. Conquest, *The Nation,* pp. 108–09; Ingeborg Fleischhauer and Benjamin Pinkus, *The Soviet Germans: Past and Present* (New York: St. Martin's Press, 1986), pp. 103–04.

71. Fleischauer and Pinkus, *The Soviet,* pp. 103–04. Germans are not listed by oblast-level units in 1959, but the 1970 census indicates that in 1970, for Kazakhstan as a whole, only 40.4 percent resided in urban centers, with the share in Tselinograd Oblast being an even lesser 34.1 percent. See TsSU SSSR, *Itogi vsesoyuznoy perepisi naseleniya 1970 goda, vol. 4, Natsional'nyy sostav naseleniya SSSR* (Moscow: "Statistika," 1973).

72. Shabad, *Basic,* pp. 285–86.

73. *Ibid.*, pp. 214–33.

74. *Ibid.*, pp. 227–29.

75. *Ibid.*, p. 273; Paul Dibb, *Siberia and the Pacific: A Study of Economic Development and Trade Prospects* (New York: Praeger, 1972), pp. 127–28 and 178; Conquest, *Kolyma.*

76. In fact, Magadan City was the only official urban center here in 1939. It attained that status only in that year (a gap of 4,000 people is thus unaccounted for) and, peculiarly, no other settlement became an official urban center until after 1951, many in 1953 and others thereafter, making the oblast's 1951 urban population of 125,000 also somewhat peculiar. Indeed, Magadan Oblast was not established until 1953, and in 1939 it was part of Khabarovsk Kray. See Prezidium Verkhovnogo Soveta Soyuza SSSR, *SSSR: Administrastivno-territorial'noye deleniye soyuznykh respublik, yanvar' 1965 goda* (Moscow: "Izdatel'stvo Sovetov deputatov trudyashchikhsya SSSR," 1965), pp. 119–22; Shabad, *Geography,* p. 323.

77. Shabad, *Geography,* pp. 329–32.

78. Churchill, *The Hinge.*

79. Shabad, *Basic,* p. 148.

80. Lorimer, *The Population,* map between pp. 194 and 195.

81. Not unexpectedly, Jews were by far the most urbanized Soviet nationality in 1939: 86.9 percent resided in urban centers. RAN, *Vsesoyuznaya,* pp. 57–58.

82. In units of 1939, Jews comprised between 20 and 25 percent of the urban populations of Gomel', Mogilev, and Vitebsk Oblasts and were the second most populous nationality in urban centers in each oblast after Belorussians, with Russians being third. The other oblast, Grodno, was in Poland in 1939, but Jews also comprised large shares in cities here (for example, Grodno itself, 42.6 percent in 1931) in the 1930s. See *Ibid.*, pp. 70–71; Jacob Lestchinsky, "The Jews in the Cities of the Republic of Poland," *Yivo Annual of Jewish Social Science* 1 (1946): 165–66.

83. Chauncy D. Harris, *Cities of the Soviet Union: Studies in Their Functions, Size, Density, and Growth* (Chicago: Rand McNally, 1970), pp. 322 and 324.

84. Harrison Salisbury, *The 900 Days: The Siege of Leningrad* (New York: Harper & Row, 1969), pp. 513–17; Wheatcroft and Davies, "Population," p. 79.

85. Salisbury, *The 900,* pp. 515–16. It should be added that 1951 populations for individual cities are only available for Leningrad and the fifteen union republic capitals. Along with Leningrad, the only other ones to decline between 1939 and 1951 were Vil'nyus of Lithuania and Ashkhabad of Turkmenistan, although Baku of Azerbaijan had an officially "urban," but not total, slight decline. Thus, it is not possible to trace 1939–51 population trends for most individual cities.

86. Liddell Hart, *History,* p. 576.

87. Shabad, *Basic,* pp. 119–20; Conquest, *The Great Terror,* pp. 329–30.

88. Kulischer, *Europe,* p. 302.

89. For example, in 1931 Jews comprised from 32 to 56 percent of the population of the Polish cities of Tarnopol (Ternopol'), Stanisławów (now Ivano-Frankovsk), Łuck (Lutsk of Volynsk), Lwów (L'vov) and Równe; Lestchinsky, "The Jews," pp. 165–66.

90. RAN, *Vsesoyuznaya,* pp. 68–69.

91. Lorimer, *The Population,* p. 19.

92. RAN, *Vsesoyuznaya,* p. 69; Werth, *Russia,* p. 767.

93. Kulischer, *Europe,* pp. 267 and 303; Conquest, *The Nation,* pp. 64–66; RAN, *Vsesoyuznaya,* pp. 67 and 69.

94. Lorimer, *The Population,* p. 196.

95. Lewis and Rowland, *Population,* p. 369; TsSU SSSR, *Naseleniye,* pp. 14–15.

96. In 1939, nearly 90 percent (85.8) of the Germans of the Volga German ASSR resided in rural areas, and they accounted for the vast majority (66.3 percent) of the rural population there. RAN, *Vsesoyuznaya,* p. 67.

97. Werth, *Russia,* pp. 679–87.

98. In 1939, the two most populous rural nationalities of Bashkiria were actually Russians (897,880) and Tatars (703,890), with Bashkirs being next (632,170). However, by 1959, Russians had declined by nearly 300,000 to 600,265, and Tatars by over 100,000 to 526,567, whereas Bashkirs increased slightly to 637,023; RAN, *Vsesoyuznaya,* p. 65 and TsSU SSSR, *Itogi vsesoyuznoy perepisi naseleniya 1959 goda: RSFSR.* (Moscow: Gosstatizdat, 1963).

99. Death rates in Siberian labor camps were evidently well above the average for both local urban and rural populations. In addition, according to the 1937 census, the majority of the population counted in contingents B (chiefly the Gulag staff) and V or C (those actually detained) of the NKVD of Khabarovsk Oblast of the Far Eastern Kray (Magadan Oblast did not exist then) were located in rural areas (60.8 percent). Edwin Bacon, "Glasnost' and the Gulag: New Information on Soviet Forced Labour Around World War II," *Soviet Studies* 44, 6 (1992): 1076 and 1080; Polyakov, Zhiromskaya, and Kiselev, "Polveka" 8 (1990), pp. 36–37 (also "A Half," pp. 80–81).

100. Kulischer, *Europe,* p. 302.

101. *Ibid.,* pp. 298–99 and 303; Conquest, *The Nation,* pp. 63–65. In 1939, nearly three-fourths (72.7 percent) of the Tatars of the Crimea ASSR resided in rural areas, and they were the second largest nationality in the rural areas of this ASSR, accounting for nearly one-third (29.4 percent) of its rural population. See RAN, *Vsesoyuznaya,* p. 67.

102. Kulischer, *Europe,* p. 267. In 1939, the vast majority (88.6 percent) of the Germans of Odessa Oblast in 1939 boundaries resided in rural areas, although Ukrainians comprised the clear majority (75.8 percent) of the rural population of the oblast. RAN, *Vsesoyuznaya,* p. 69.

103. Kulischer, *Europe,* pp. 298-99; Conquest, *The Nation,* pp. 63-65.

104. In 1939, the following percentages resided in rural areas: Chechens (92.0), Ingush (90.5), Kalmyks (91.8), Dagestanis (91.4), and Karachay (92.7). RAN, *Vsesoyuznaya,* pp. 57-58.

105. *Ibid.,* p. 59.

106. Conquest, *The Nation,* pp. 95-111.

107. *Ibid.*

108. RAN, *Vsesoyuznaya,* pp. 75-79.

109. Kzyl-Orda Oblast had a rural Kazakh share of 69.6 percent.

110. Martha Brill Olcott, *The Kazakhs* (Stanford, CA: Hoover Institution Press, 1987), pp. 176-98; Lorimer, *The Population,* p. 140; Lewis, Rowland, and Clem, *Nationality,* p. 233.

111. RAN, *Vsesoyuznaya,* pp. 57 and 75; TsSU SSSR, *Itogi, 1959...SSSR* and *Itogi vsesoyuznoy perepisi naseleniya 1959 goda: Kazakhskaya SSSR.* (Moscow: Gosstatizdat, 1963).

112. The others included Ternopol', Ivano-Frankovsk, and Volynsk of the Southwest, and Grodno of Belorussia—all were in interwar Poland and had relatively large Jewish urban shares—and a few of the oblast-level cities that also technically had small rural populations: Moscow of the Center, Leningrad of the Northwest, Baku of the Transcaucasus, and Tashkent, Frunze and Dushanbe of Central Asia.

113. Although no oblast-level unit in the USSR with an official urban population had an urbanization level of less than 6.0 percent in 1951, it should be noted that there was still one unit that had no official 1951 urban population and thus was 100 percent rural: Turgay Oblast of Kazakhstan, which was formed in 1970 and did not exist as a separate oblast in 1951 itself, but instead was then part of Kustanay and Severo-Kazakhstan Oblasts.

114. Lewis and Rowland, *Population,* pp. 73 and 75; Rowland and Lewis, "Regional," pp. 73-74; Rowland, "National," pp. 640 and 642.

115. *Ibid.*

116. Conquest, *The Nation,* pp. 141–63.

117. Lewis and Rowland, *Population,* p. 49; Rowland and Lewis, "Regional," p. 76; Rowland, "National," p. 640.

118. Allan Rodgers, "The Locational Dynamics of Soviet Industry," *Annals of the Association of American Geographers* 64, 2 (June 1974): pp. 233–36.

119. Shabad, *Basic,* pp. 175–94.

120. Harris, *Cities,* pp. 382–85.

121. Rowland and Lewis, "Regional," p. 73; Rowland, "National," p. 657.

122. Paul E. Lydolph, *Geography of the U.S.S.R.* (Elkhart Lake, WI: Misty Valley Publishing, 1990), pp. 206–08.

123. Rowland and Lewis, "Regional," pp. 74 and 84; Rowland, "National," pp. 653 and 659.

124. Rowland and Lewis, "Regional," p. 84; Rowland, "National," p. 653.

125. For 1897–1926, 1926–39, and 1959–70, see Lewis and Rowland, *Population,* pp. 42–157; for 1970–79, Rowland and Lewis, "Regional," pp. 71–81; and for 1979–89, Rowland, "National," pp. 635–50; also, Richard H. Rowland, "Regional Population Growth and Redistribution in Russia and the USSR: A Century Perspective from the 1880's to the 1980's," paper presented at the Fourth World Congress for Soviet and East European Studies, Harrogate, England, July 1990.

126. For a discussion of these urban definition problems and adjustments, see Lewis and Rowland, *Population,* pp. 158–278.

127. Lewis and Rowland, *Population,* pp. 111–51; Rowland and Lewis, "Regional," pp. 85–89; Richard H. Rowland, "Economic Region Net Migration Patterns in the USSR: 1979-89," *Soviet Geography,* 31, 9 (November 1990): pp. 657–78.

128. Lewis and Rowland, *Population,* pp. 81–83; Rowland and Lewis, "Regional Population," pp. 79–81; Rowland, "National," pp. 649–50; Rowland, "Regional."

129. With respect to the dissimilarity index involving a theoretically equal population distribution, one minor adjustment was made. An equal regional percentage distribution for nineteen regions is 5.3 percent in each (100.0 divided by 19). However, summation of 5.3 percent per se results in a total of 100.7 percent, which is not in the more normally allowable range of 99.8 to 100.2 given rounding errors. Therefore, negative differentials were also summed, and their absolute value was averaged with the sum of the positive differentials.

130. As an example of the calculation of these aggregate measures, reference to the next to last column in table 2 shows that the summation of the positive differentials here equals 4.0 (from 0.1 for the West through 0.5 for Central Asia).

131. These relatively crude comparisons are based upon, Lewis and Rowland, *Population,* pp. 109, 211, 361; Rowland and Lewis, "Regional," pp. 73 and 84; and Rowland, "National," pp. 653 and 657.