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Human Fertility in Russia Since the Nineteenth Century

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HUMAN FERTILITY IN RUSSIA SINCE THE NINETEENTH CENTURY

This book is the fifth in a series on
the decline of fertility in Europe.
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Princeton University.

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Preface

In 1963 a plan was formulated at the Office of Population Research at Princeton University to document the decline in the rate of childbearing in Europe, province by province. In nearly every one of the more than seven hundred European provinces women today are bearing no more than half the number of children born a few generations earlier; however, the timing and the pace of this nearly universal decline in fertility differs widely from area to area. The principal purpose of the European Fertility Project is a better understanding of the circumstances that have contributed to a lower rate of childbearing, circumstances that may be of considerable interest for rapidly growing populations today. An incidental purpose is to record and analyze a significant feature of the recent social history of every European population.

The project has taken the form of a series of country studies carried out at Princeton and by colleagues at other American universities and in Europe. The studies utilize the same set of fertility measures, and each aims to cover the period from the beginning of the modern decline to its end, or in some instances, to the present. This is the sixth book to present results of research on the fertility of particular European populations. The first five—*A Century of Portuguese Fertility* and *A History of Italian Fertility during the Last Two Centuries* by Massimo Livi-Bacci, *The Decline of Fertility in Germany, 1871-1939* by John Knodel, *The Decline of Belgian Fertility, 1800-1970* by Ron J. Lesthaeghe, and *The Female Population of France in the Nineteenth Century* by Etienne van de Walle—have dealt with geographic subdivisions within countries in Southern or Western Europe. Other studies of Great Britain, Switzerland, Scandinavia, and a second volume on France are in process. In addition to books and articles on national populations, a conference is planned (in 1979) at which there will be a summary presentation of province-by-province statistics for all of Europe and a series of papers dealing with particular features of European fertility history, such as rural-urban differences, the geographical clustering of fertility patterns, and the relations to education and infant mortality.

This study of the decline in the rate of childbearing among the popu-

lations that now constitute the Soviet Union deals in greatest detail with Europeans, but it also extends into Asia to encompass peoples who at the time of the 1917 Revolution had ways of life and demographic characteristics that were non-European. As the reader will see, this diversity of the Soviet population has had a strong continuing effect on trends in fertility.

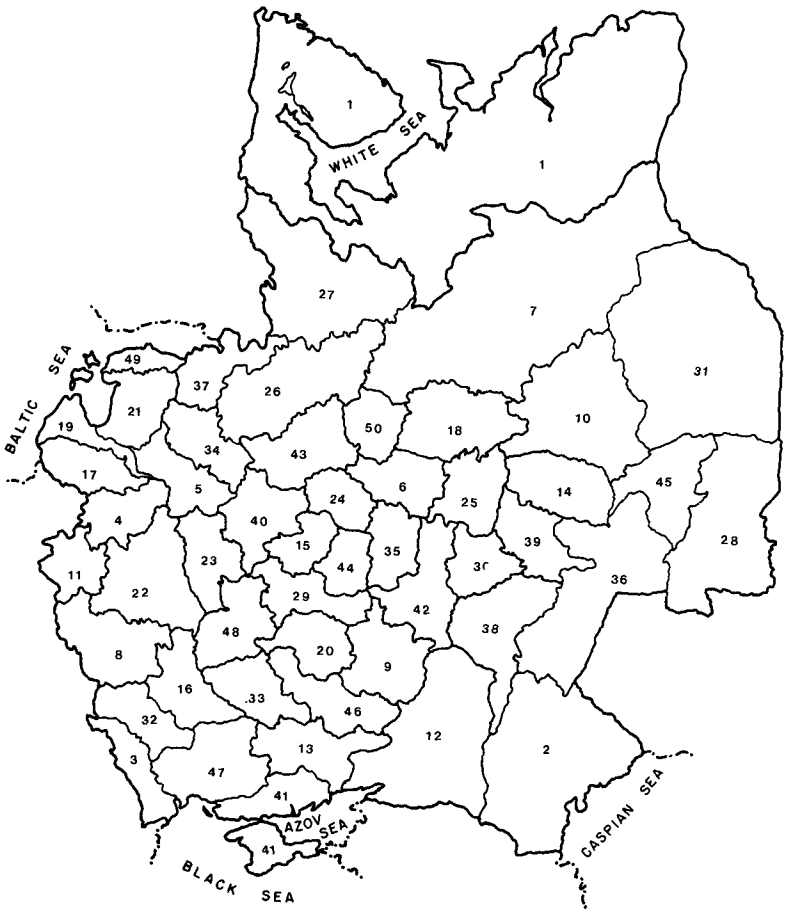
A special statement about the statistical data employed in this study is required. A large mass of basic statistics has been assembled over a period of some thirteen years, primarily by Erna Härm. Intensive adjustments and estimates have been made because of gaps and defects in what has been recorded and published. The statistical material most directly related to our conclusions is presented in the maps, figures, and tables in this volume. The sources from which the basic fertility indexes were calculated are listed in Appendix D; the methods of adjustment and estimation employed are described in Appendix A; and supplementary data on fertility of the unmarried are presented in Appendix C. This material, extensive though it may appear, is only a small tip of a large iceberg. The computer printouts that we have accumulated would make a pile at least thirty feet high, and we also have many folders of xeroxed or photostated tables. The primary data and basic adjustments that existed in machine-readable form and that are most likely to be useful have been stored on magnetic tape at the Princeton University Computer Center. A catalog listing the contents of the material on tape appears in the April 1979 issue of *Population Index*, together with information about how a copy of the tape may be obtained.

Advice and help in diverse forms for this research has come from many sources. Warren Eason made a particularly valuable contribution by insisting that the non-European populations could not be omitted from the study. For several years he has exchanged data and ideas with the Office of Population Research as he has pursued somewhat parallel research interests. Michael Stoto and T. James Trussell devised the programs for calculating the ellipses that help to summarize the changing distribution of fertility; Donald McNeil also gave valuable technical advice. Helena Choynacka contributed useful ideas about the cause of differences in age at marriage in Russia and also made available data that she had assembled. Daniel Baumol and John Chow contributed extensive statistical calculations and other skilled research assistance.

Etienne van de Walle, Massimo Livi-Bacci, John Knodel, and Ron Lesthaeghe, the authors of the earlier books in the series, provided helpful models for our analysis and useful ideas and comments at various stages. Andrejs Plakans generously supplied unpublished data from his own research. Plakans, Trussell, Bryan Boulier, Jane Menken, D. Peter Mazur, and Gilbert Rozman suggested corrections of fact, wording, or statistical procedure after reading the manuscript. Noreen Goldman and Hannah Kaufman helped to make final corrections in calculations and statistical analysis. Richard Boscarino prepared the figures and maps. Anne Ryder typed most of the manuscript, cheerfully persisting through several drafts of most chapters and often working from notoriously illegible handwriting.

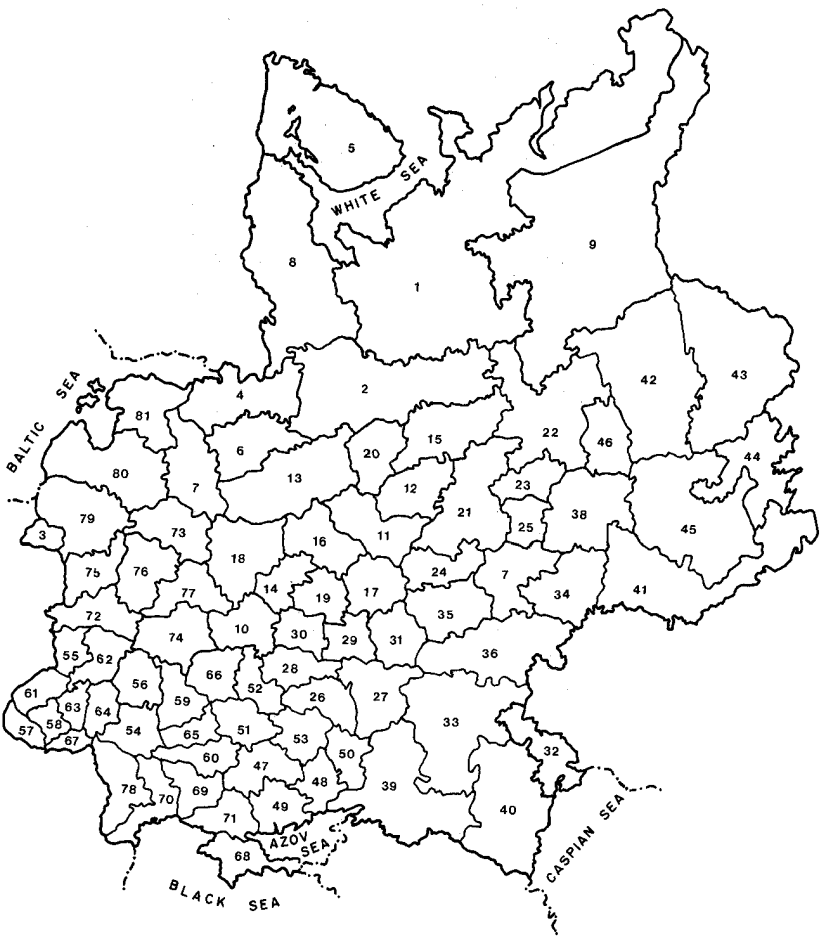
The European Fertility Project was initiated with the help of a modest grant from the Population Council that enabled Coale, while on leave in Italy in 1963, to visit several Eastern European capitals in search of data and possible cooperation on the prospective project; by support from the Rockefeller Foundation in 1964 for an exploratory phase; by a two-year grant from the National Science Foundation; by six and a half years of support from the National Institute of Child Health and Human Development; and by a grant from the Rockefeller Foundation to fund the last stages of the project. None but the authors is responsible for the defects and errors that remain in this book.

Ansley J. Coale
Barbara A. Anderson
Erna Härm



Provinces of European Russia, 1897

1. Archangel
2. Astrakhan
3. Bessarabia
4. Vilna
5. Vitebsk
6. Vladimir
7. Vologda
8. Volhynia
9. Voronezh
10. Vyatka
11. Grodno
12. Don
13. Ekaterinoslav
14. Kazan
15. Kaluga
16. Kiev
17. Kovno
18. Kostroma
19. Kurland
20. Kursk
21. Livonia
22. Minsk
23. Mogilev
24. Moscow
25. Nizhni Novgorod
26. Novgorod
27. Olonets
28. Orenburg
29. Orel
30. Penza
31. Perm
32. Podolsk
33. Poltava
34. Pskov
35. Ryazan
36. Samara
37. St. Petersburg
38. Saratov
39. Simbirsk
40. Smolensk
41. Tavrida
42. Tambov
43. Tver
44. Tula
45. Ufa
46. Kharkov
47. Kherson
48. Chernigov
49. Estonia
50. Yaroslavl



Provinces of European Russia, 1959

1. Archangel
2. Vologda
3. Kaliningrad
4. Leningrad
5. Murmansk
6. Novgorod
7. Pskov
8. Karelian ASSR
9. Komi ASSR
10. Briansk
11. Vladimir
12. Ivanov
13. Kalinin
14. Kaluga
15. Kostroma
16. Moscow
17. Ryazan
18. Smolensk
19. Tula
20. Yaroslavl
21. Gorkii
22. Kirov
23. Mari ASSR
24. Mordvian ASSR
25. Chuvash ASSR
26. Belgorod
27. Voronezh
28. Kursk
29. Lipetsk
30. Orel
31. Tambov
32. Astrakhan
33. Volgograd
34. Kuibishev
35. Penza
36. Saratov
37. Ulianov
38. Tatar ASSR
39. Rostov
40. Kalmyk ASSR
41. Orenburg
42. Perm
43. Sverdlov
44. Cheliabinsk
45. Bashkir ASSR
46. Udmurt ASSR
47. Dnepropetrovsk
48. Donets
49. Zaporczhie
50. Lugansk
51. Poltava
52. Sumy
53. Kharkov
54. Vinnitza
55. Volhynia
56. Zhitomir
57. Trans Carpathian
58. Ivan Franko
59. Kiev
60. Kirov
61. Lvov
62. Rovensk
63. Ternopol
64. Khmelnitskii
65. Cherkassy
66. Chernigov
67. Chernovits
68. Crimean
69. Nikolaev
70. Odessa
71. Kherson
72. Brest
73. Vitebsk
74. Gomel
75. Grodno
76. Minsk
77. Mogilev
78. Moldavia
79. Lithuania
80. Latvia
81. Estonia

HUMAN FERTILITY IN RUSSIA SINCE THE NINETEENTH CENTURY

CHAPTER 1: Introduction

In the last two centuries, two widely occurring basic changes in the dynamics of population have profoundly modified the lifetime experience of individuals and the structure of the societies in which they live: a dramatic increase in the average duration of life; and a dramatic decrease in the average number of children women bear by the end of their potentially fertile years. The mean length of life has increased as the risk of dying has been reduced at every age because of increases in real income and improvements in preventive and curative medicine; the number of children born has declined as married couples have been successful in deliberate efforts to restrict childbearing. The decline in mortality has in many instances doubled the mean duration of life, and the decline in fertility has frequently reduced by one-half the number of children women bear.

The decrease in mortality began in Western Europe in the late eighteenth century with rather modest declines in death rates, and it has continued up to the present. Once death rates began to fall in Latin America, Asia, and Africa (much later, often only within the past few decades), the reductions were frequently very large. The fall in death rates has by now become so general that it has been shared by every national population in the world. The decrease in fertility—the sustained modern decline that is associated with the spread of voluntary birth control—became evident on a national scale in France by the beginning of the nineteenth century, and perhaps began at about the same time in the United States.[1] In Western European countries other than France, the decline began in the second half of the nineteenth century. It began later in Southern and Eastern Europe—in Albania, as late as the post-World War II period. Before 1910, large decreases in fertility had been initiated in most overseas areas populated by Europeans, including (in addition to the United States) Canada, Argentina, Australia, and New Zealand. A very large fall has also occurred in Japan, although the date of its beginning is hard to determine from the available records.

The decline in fertility has been a universal feature of the recent history of all countries that are usually accepted as the most highly developed, that is, those characterized by a fully modern organization of society and economic life. Fertility has also begun to fall, usually at a faster rate than was experienced by European populations, in many

countries that are not so highly modernized. Unlike the decline in mortality, however, a reduction in fertility has not yet started in all national populations. Little or no change is evident in some populations in Asia (none in Bangladesh, parts of India, and Afghanistan, for example), in Africa (for example, no change in virtually all of tropical Africa, nor in parts of north Africa), nor in Latin America (little change, for example, in Bolivia, Peru, and, until very recently at least, Mexico).

Lower mortality has an obvious implication of great importance to the individual: longer life itself. Lower death rates also mean that siblings and friends survive rather than die at an early age. With present-day low mortality rates, a child usually reaches his adult years without experiencing the death of a brother, sister, or close friend, and frequently with both parents still alive—all outcomes of childhood life that would have been exceptional a few generations back. Parents now rarely lose children, and the early disruption of marriage by death of a spouse has become uncommon. The forces that have reduced mortality have also brought reductions in chronic fever and other debilitating or painful consequences of infectious disease. To the individual child, lower fertility means that he grows up in the company of fewer siblings. When low fertility is combined with low mortality, children more frequently have living parents and grandparents, but young adults have fewer children, and older adults fewer grandchildren.

Reduced fertility and mortality affect society as a whole, first of all by increasing the rate of growth and altering the age structure of the population. The decline in mortality, which often precedes the fall in fertility, has caused a truly exceptional increase in global population. In 170 years the population of the world has increased from 1 billion to 4 billion; under the most favorable combinations of fertility and mortality of earlier eras the global population would not have doubled in this interval. The greatest acceleration of growth has been in the recent experience of the less developed countries, where mortality has dropped very sharply and fertility has not yet fallen. Mexico's population has doubled from 30 to 60 million in just 20 years.

The greatest alteration in age distribution resulting from these changes in vital rates is a shift to an older population, caused by the decline in fertility; indeed, the reduction in mortality alone, concentrated as it is at the younger ages, makes a population younger. This com-

positional change has reduced the fraction of children (for example, in the United States the proportion under 15 has fallen from 49.8 percent in 1800 to 28.5 percent), increased the median age (from 16 to 28 years in the United States) and caused a rise in the proportion that is aged (the proportion over 65 has risen from less than 2 percent to nearly 10 percent). The social effects of altered age composition extend from changes in the burden of dependency to the subtler differences in atmosphere that distinguish an old population from a young one. In Mexico City or Bangkok, it is the children who are numerically predominant; in Vienna or Stockholm, it is the aged. This feature, as well as differences in language, climate, and appearance of buildings, creates a difference in tone that is quite evident to the visitor.

There has been much speculation about the causes of the reductions in the birth and death rates. The best known set of ideas is the theory of the demographic transition (sometimes called the vital revolution), which finds a persuasive association between the reduction of mortality and fertility and the altered social and economic conditions that are a natural part of the change to modern technology and industrial organization. Many of the ideas that constitute the theory of the demographic transition were developed by European social scientists before World War I and were fully elaborated in Europe and America in the 1930s, 1940s, and 1950s. The demographic transition is invoked in simplified form today to support various positions in politicized debates concerning the best strategy for moderating very high fertility in the less developed countries. "Development is the best contraceptive"—obviously a distillation of the theory—was one of the popular slogans at the World Population Conference in Bucharest in 1974.

The demographic transition is an interpretation of trends in fertility and mortality in a few European countries that had conveniently available data. This interpretation is buttressed by detailed information about particular subpopulations, such as patients at birth control clinics and respondents in select surveys. In 1962, at Princeton University, John Knodel and Nathaniel Iskandar collaborated in studying the decline in fertility, at the national level, in a number of European countries. They made the surprising discovery that the decline in marital fertility in Hungary began at about the same time, and proceeded at about the same pace, as in England and Wales. In Hungary in 1880 the population was still predominantly rural, deaths of children under