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Growth of Industrial Production in the Soviet Union

BY

G. WARREN NUTTER

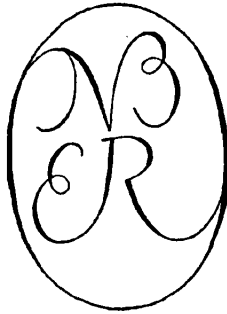
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IN THE SOVIET UNION**

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To Jane, my wife
For her sympathy and understanding

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Preface

THIS is the second in a series of reports setting forth results of the study of Soviet economic growth begun in 1954 under a grant from the Rockefeller Foundation. It deals with industry and appropriately appears after Professor Gregory Grossman's appraisal of official Soviet statistics on industrial output.

Our work has been based ultimately on official Soviet sources, and it has been complicated by the changes in Soviet policy on publishing statistics that have taken place during our six years of research. As new statistics appeared beginning in 1956, we revised our analysis to take account of them, at least of those published through 1959. An older sample of data still provides the basis for one or two subsidiary statistical analyses noted in the text, where complete revision would have taken more time than the minor refinement in results warranted. As for the new Soviet data appearing in 1960, we have been able to incorporate only selected items because of the advanced stage of our work at the time of their release.

The basic data used in this study are given in our appendixes. Additional materials from Soviet sources of different types and dates have been compiled into a six-part abstract (*Statistical Abstract of Industrial Output in the Soviet Union, 1913-1955*, Parts 1-5, New York, National Bureau of Economic Research, 1956; and *Supplement* to same, 1957), which supplements the present volume. Many of the figures in our appendixes are given more precisely than their accuracy warrants, the extra places being provided to reduce the rounding error in statistics that others may wish to derive. For example, the production indexes in Appendix D are generally given to four or more significant places, but in the text we have usually rounded them to the nearest percentage point and annual average rates of growth derived from them to the nearest tenth of a point. As is always the case in working with figures of varying and essentially unknown degrees of accuracy, it is neither possible nor desirable to be entirely consistent in assigning significant places to basic or derived statistics. Rounding rules are necessarily rather arbitrary.

In transcribing Russian words into the Roman alphabet, we have used the Library of Congress transliteration system, except that diphthong marks have been eliminated and the apostrophe has been used for the hard as well as the soft sign. We have deviated from

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this system only where common usage has established a different transliteration, as the names of some well-known persons, or where a transliteration made by others is cited, as the names of Russian authors of books translated by others. Russian words are followed by an English translation the first time they appear in a chapter. For publications in Russian, our translation of the title is given in brackets following the title in Russian. For publications originally in Russian but translated into another language, the title is given only in the language of translation.

In working with Russian materials, I was almost a blind man seeing through the eyes of others, who fortunately had not only full command of the language and the literature but also exceptional competence in economic statistics. Israel Borenstein and Adam Kaufman were my principal colleagues, and the study owes much to them.

Many others also participated. Professor Alexander Erlich and Dr. Nestor Terleckyj both made substantial contributions to our research work at an early stage. Professor John H. Young prepared a valuable report on Soviet military production, and Nicholas DeWitt on the Soviet cement industry. Professor Stanley Zyzniewski was very helpful in supplying information on Soviet reparations and various historical matters, Maude Pech in calculating the statistics we have used on industrial productivity in the United States, and Harold Wool in preparing a report on Soviet population and labor force. None of these persons can, of course, be held responsible for the use made of their work. Marie-Christine Culbert has been an ideal editor and general assistant, aided by Julia Kamermacher. Charlotte Wasserman and Murray Feshbach handled statistical operations during part of the study, Martha Jones managed the many IBM computations, and Robert S. Johnson indexed the book. Finally, H. Irving Forman has done his usual fine job of preparing charts.

I am indebted to many of the Bureau Board and staff for detailed comments and suggestions: Moses Abramovitz, Arthur F. Burns, Solomon Fabricant, Raymond W. Goldsmith, Albert J. Hettinger, Jr., F. Thomas Juster, Hal B. Lary, Geoffrey H. Moore, Harry Scherman, George J. Stigler, and Leo Wolman. Drafts were widely circulated among scholars, particularly specialists in Soviet studies, and helpful comments were received from Edward L. Allen, James M. Buchanan, John M. Cassels, Ronald Coase, Gregory Grossman, Naum Jasny, Alec Nove, James R. Schlesinger, and John

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H. Young. These reviewers have helped us to repair many mistakes and to make many improvements, though each undoubtedly still has his own reservations about, and objections to, the final result. We regret that other scholars in the Soviet field whose views we solicited did not find it possible to give similar help to the study.

Finally, the University of Virginia, through the Wilson Gee Institute for Research in the Social Sciences and the Thomas Jefferson Center for Studies in Political Economy, has been generous in its support in the form of facilities, personnel, and financial aid, relieving somewhat the heavy burden borne by the National Bureau.

G. WARREN NUTTER

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