# The Future of the Soviet Economy: 1978-1985

Edited by Holland Hunter



# The Future of the Soviet Economy: 1978-1985

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The Future of the Soviet Economy: 1978-1985 edited by Holland Hunter

Where will the Soviet economy be heading in the 1980s? How is the economy likely to react to slowed growth in the labor force and increased pressure for supplies of energy and raw materials? This volume, growing out of papers prepared for the October 1977 national conference of the American Association for the Advancement of Slavic Studies, offers an integrated exposition of these issues. The authors use historical evidence and macroeconometric models of the Soviet economy as bases from which to view the future, assessing the possible results of the interaction between Soviet policy and potential developments.

Holland Hunter is professor of economics and chairman of the Economics Department at Haverford College. He is also senior consultant to the Strategic Studies Center of SRI-International. His analyses of the Soviet economy have appeared in numerous books and articles and in the compendia issued in 1959, 1966, 1969, and 1976 by the Joint Economic Committee of Congress on the Soviet economy.



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edited by Holland Hunter

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### PREFACE

This joint enterprise began as a session at the October 1977 national convention of the American Association for the Advancement of Slavic Studies. The panel discussion was organized under the leadership of John P. Hardt, Congressional Research Service, Library of Congress. The participants agreed to convert their compact reports into chapters in a book designed to provide a balanced evaluation of current prospects for the Soviet economy. Though all the authors heavy responsibilities in carry their respective organizations, they agreed to revise and augment their papers within three months. The Westview Press in turn offered unusually prompt production of a book using camera-ready copy. We thus sought to avoid the long delays that often afflict the published outcomes of scholarly meetings. Slight slippage in deadlines has enabled us to incorporate evidence up through the end of February, 1978.

The analysis in this book is based on primary evidence, mainly in published Soviet books and periodicals. Footnotes provide selected references at key points and also suggest a few supplementary or alternative treatments. The views expressed in the chapters represent the opinions of the respective authors and do not necessarily reflect the views of their organizations. Most of the referenced sources are readily available. Working papers relating to SOVMOD, the SRI-WEFA macroeconometric model of the Soviet economy, are available from SRI International, 1611 North Kent Street, Arlington, VA 22209. The cited reports issued by the Office of Economic Research, Central Intelligence Agency, are available from Photoduplication Service, Library of Congress, Washington, D.C. 20540.

As editor I acknowledge with gratitude the equanimity of the principal authors as they responded quite flexibly to suggestions for prompt changes. We are all especially grateful for the precision and craftsmanship displayed by Linda Langley in preparing the camera-ready copy.

#### HOLLAND HUNTER



## INTRODUCTION Holland Hunter Haverford College

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This book is an effort to assess the Soviet midterm economic future. Some will feel the effort itself is doubtful. Assessing the future is even harder than assessing the past. Prudence has traditionally suggested that one should wait for the dust to settle before evaluating complex situations. But today's decisions require judgments concerning prospective developments, and cautious decision makers can benefit from systematic efforts to review plausible future possibilities. It is in this spirit that the following analyses are offered.

Assessment of future possibilities is gaining in rigor as new techniques make it possible to ask and answer questions with greater precision. The future-oriented analyses in this book reflect the use of powerful new methods. They rest, first of all, on a painstakingly assembled base of quantitative evidence covering the last 20 years. They make use, secondly, of quantitative models of the Soviet economy. Disaggregated models of an economy, like those in this book, have several marked advantages:

- They enforce simultaneous attention to all major aspects of the interrelated stocks and flows of economic activity;
- They demand consistency among these parts as they evolve over time; and
- They permit experimentation: hypothetical changes can be introduced into the model, and their impact can be traced throughout the economy and into subsequent periods.

Economic modeling therefore provides an orderly framework in which to conduct cautious forays into the future. The forays are disciplined by the economy's structural inheritance and constrained by the economy's short-run technological rigidities. Numerous independent assumptions can be linked logically within a framework that tests for consistency and feasibility. A detailed and flexible extension of the present into the future becomes possible.(1)

In this book we do not present single-valued predictions about the Soviet economic future. We offer instead a systematic preview of plausible outcomes generated by alternative possibilities over the next five or ten years. The possibilities are of two kinds. First there are the objective factors that will condition Soviet economic activity, such as the weather, the availability of fuels and raw materials, the size and composition of the population, and the structure of world trade. Alternative prospects here have been specified, and potential trends have been spelled out in some detail. Secondly, there are the behavioral responses that can be made by Soviet authorities, Soviet consumers, and all those engaged in Soviet economic activities. Here too the analyst can propose any number of well-specified assumptions and investigate the consequences for the economy if the responses occur.

As the analyst traces the outcomes generated by alternative assumptions, concerning both the objective factors and the behavioral responses, he produces a number of scenarios, each one a case study placed in the future. It is neither necessary nor desirable to reject all but the one scenario considered most likely to occur. The full set becomes an avenue to improved understanding. The testing process itself builds up a valuable body of future-oriented, yet empirical, evidence concerning the structure and properties of the economy being studied. One develops an appreciation of its contours, of its points of flexibility and rigidity. Having canvassed a wide variety of hypothetical challenges and responses, one emerges with an almost clinical feel for the economy's range of sensitivity, i.e., the upper and lower limits of its plausible reactions to potential developments.

In thus assessing the future we cannot hope for tidy truths. Our goal is limited to providing "advance evidence"

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(1)

For an impressive example of disaggregated, future-oriented analysis using an interindustry, intertemporal model, see Clopper Almon, Jr., et al., <u>1985</u>: <u>Interindustry Forecasts of the American Economy</u>, Lexington: D.C. Heath, 1974. concerning a range of plausible potential developments, placed in a coherent and consistent framework. If the effort seems rash, it can be defended as a basis for improving the decisions that must be made today -- decisions whose impact will carry forward into the period we are examining. Decisions with future consequences deserve to have light thrown on the era in which those consequences will unfold. Bv the same token it is clear that efforts like ours are never completed. We must recognize the need for regular updating and revision of our projections. The half-life of this volume therefore may be something like two-to-four years. That is why we have sought prompt publication and express gratitude for our publisher's efficiency. That is also why we cheerfully expect rather prompt obsolescence of our insights.

#### THE PRESENT OUTLOOK FOR THE SOVIET ECONOMY

The Soviet GNP will grow at reduced rates in the 1980s. A gradual decline in growth rates has been evident over the past two decades and it seems clear that the trend will continue. This is not to say that the overall GNP is likely to become absolutely smaller; an impressive upward potential is still visible. It does seem clear, however, that the rate of overall expansion in output is likely to be modest during the 1980s, especially in comparison with the rapid growth rates of the past.

Another major feature of the Soviet economy in the 1980s will be the growing pressure of burgeoning demands on Soviet energy supplies. The USSR contains massive energy resources, and during the 1980's they will be drawn on to support the domestic economy, to supply the needs of Eastern Europe, and to earn hard currency abroad. But these demands in the aggregate will increasingly strain short-run availabilities. In addition, the outlook for bringing new deposits into production five or ten years from now is distinctly unfavorable. Extraction costs are rising and the threat of real shortages is visible on the horizon.

During the 1980s shortages of labor will be a serious problem. The cohorts of young men and women entering the labor force will be substantially smaller in the mid-eighties than they have been over the last two decades, while there will also be substantial exits from the labor force as large cohorts retire. Moreover, the regional availabilities of labor will not match up well with the geographic pattern of demands for labor as presently foreseen.

The strains generated by interaction between the state's demands for continued growth, on the one hand, and constrained

additional supplies of energy and labor, on the other, extend also into the agricultural sector, the defense sector, and Soviet external economic relations. Soviet state farms and collective farms currently absorb very large flows of current inputs without producing an adequate flow of output. Institutional malfunctioning prevents efficient performance in Soviet agriculture. The Soviet defense sector, by contrast, appears to be turning out an impressive flow of national defense services, drawing on the best resources the economy can provide. In both areas, however, some specific policy changes could have the effect of releasing a substantial volume of resources and thus relieving some of the strains on tight labor and energy supplies. Soviet foreign trade presents still another prospect -- that of a more marginal factor without much capacity to relieve strains in the 1980s.

What is the detailed evidence that leads to these expectations? In the chapters that follow, seven knowledgeable students of the Soviet economy set forth the underlying statistical and other evidence, evaluate its solidity, and reflect on its implications. While the book does not analyze every aspect of the Soviet economy, it does scrutinize the major factors that will shape overall trends. These analyses also give considerable attention to the likely direction of Soviet responses to key economic problems. On the basis of past policies and current Soviet discussion of plans and intentions, a number of alternative Soviet policy directions are specified and investigated.

Interacting with the underlying trends in resource availabilities, the alternative policies generate alternative expansion paths with distinctively different contents. Each expansion-path outcome incorporates detailed answers to "what-if" questions that have been phrased with great specificity. Users of our results will thus be able to select the variants most appropriate for their needs. As actual events preempt the field of our assumptions, many of the possibilities previously entertained will be closed off. By the same token other scenarios will become more likely, and needed revisions will become more obvious. If subsequent analyses are facilitated by our current efforts, we will feel that our attempt in 1978 to assess the Soviet economy in the 1980s has made a worthwhile contribution.

#### RATIONALE AND PLAN OF THE BOOK

A study of this kind faces an optimization problem in relation to extent of coverage and selection of topics. Detailed and exhaustive analysis, however desirable in principle, nevertheless is constrained by capacity limits in staffing, in available time, and in publisher's hospitality. My co-authors and I would have welcomed attention to several aspects of the Soviet economy that are slighted here: the construction sector, transport and communications, regional trends, the second economy, and others. Within existing limitations, however, we have tried to identify and evaluate the key forces at work -- and the major sectoral trends reflecting them -- so that an accurate and balanced assessment of broad outcomes can emerge. As the reader will see, it is a tentative view, offered with firmness as to the implications of recent trends but readily modifiable as events unfold.

Chapter 2, "Cutput Trends: Prospects and Problems," takes an economywide view. It begins by noting a persistent downward trend in Soviet output growth as the basic problem to be examined. Two methodological approaches are applied to current Soviet evidence, and their implications are contrasted with Soviet output targets for the year 1980. The chapter next considers major constraints on growth during the 1980s. examines the impact of demographic constraints, rising It costs, and materials shortcomings. The role of imported technology in offsetting these constraints is evaluated. Next, some policy options in the area of investment and manpower allocation are investigated. Alternative growth paths are derived as consequences of implementing specific policies. The results of the computations are assessed as to likelihood and significance.

Chapter 3, "The USSR and the World Economy in the 1980s," begins by reviewing the major interrelationships between the domestic Soviet economy and the outside world. The current and prospective pattern of imports and exports is summarized, together with associated financial flows. Chapter 3 then employs a macroeconometric model to provide a baseline projection, year by year, of Soviet foreign trade. It incorporates existing trends and a series of assumptions tested for their plausibility and operational consistency. With this baseline solution as a reference point, three problem scenarios are investigated to see how much difference they would make for the overall economy if they occur. The implications of the exercises lead to some concluding reflections.

Chapter 4, "The Outlook for Soviet Agriculture," deals with a large and ailing sector of the economy. The authors present a careful review of actual farm and food supply conditions as they presently exist and are slated to evolve by 1980. The chapter then examines potential for greater efficiency and increased agricultural output resulting from some possible changes in the 1980s. The chapter also reviews prospects and potential strains in the interaction between

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