Hart, Schaffner & Marx Prize Essays

XLVI

SECULAR MOVEMENTS IN PRODUCTION AND PRICES
THEIR NATURE AND THEIR BEARING UPON
CYCLICAL FLUCTUATIONS

SECULAR MOVEMENTS IN PRODUCTION PRICES PRICES

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THEIR NATURE AND THEIR BEARLING
UPON CYCLICAL FLUCTUATIONS

BY

SIMON S. KUZNETS, Ph.D.



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PREFACE

THIS series of books owes its existence to the generosity of Messrs. Hart, Schaffner & Marx, of Chicago, who have desired to encourage a wider interest in the study of economic and commercial subjects. For this purpose they have delegated to the undersigned committee the task of selecting or approving of topics, making announcements, and awarding prizes annually for those who wish to compete.

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AUTHOR'S PREFACE

THE present investigation attempts to inquire into the nature of the long-time movements in production and prices, as well as into their influence on cyclical fluctuations. It attempts to establish some uniformly observed characteristics of the so-called secular movements, and in the process to draw analytic distinctions between different groups of these movements. The latter are studied as they appear in the available statistical series of various countries. The aim is to formulate these movements in such a way as not only to reveal their common characteristics, but also to facilitate measurements of the relation between cyclical oscillations and the underlying secular changes.

A definite hypothesis concerning characteristics of industrial growth forms the basis of our statistical description of long-time movements. This hypothesis is derived from a preliminary observation of the wide field of statistical evidence and from material furnished by the chronicles of specific industries. The exact formulation of this tentative generalization and the historico-statistical material on which it rests are presented in Chapter I.

The conclusions of the first chapter furnish a definite approach to the methods of statistical analysis which can be applied to the body of available material. A consideration, however, of some of the general principles of statistical description of long-time movements makes clearer the exact type of analysis to pursue. This consideration forms the contents of Chapter II.

Chapter III presents the body of statistical data drawn from five countries; United States, Great Britain, Belgium, Germany, and France. Altogether about 60 series of industrial output and 35 series of prices are analyzed. The secular movements are segregated from the cyclical oscillations and are analyzed into two distinct groups of changes, the primary and the secondary. Each pair of production and price series is accompanied by brief comments drawn from the history of the particular industry whose output and prices are described quantitatively.

The measurable characteristics and the nature of the

secondary secular movements, whose existence is established in Chapter III, are discussed in Chapter IV. The discussion inquires into the causes of these secondary secular movements in production and prices, and deals with the question whether they can properly be called major cycles. The appendix to the chapter surveys the more important theories of major cycles set forth by various writers.

In Chapter V, the influence of secular movements on the cyclical oscillations is studied statistically. The aim is to discover the existence or absence of correlation between the rapidity of secular growth and the amplitude of cyclical oscillations.

The theoretical connection of these two measures of forces as revealed by contemporary business cycle theory is treated in Chapter VI.

The concluding chapter deals briefly with the theoretical significance of the results of the investigation and attempts to evaluate them in the light of economic theory, both past and present.

The investigation was begun in the summer of 1925, and was carried on uninterruptedly to the end of the calendar year 1926, during which time I enjoyed the opportunities of a research fellow of the Social Science Research Council. The study was not completed, however, before the summer of 1927, and has been materially revised since. Throughout these years I profited much by the help of many kind friends. Professor Wesley C. Mitchell was an inspiring and kind critic whose interest was of great assistance. To him especially I wish to express my deeply felt gratitude. Professor Henry Schultz and Dr. Hans Staehle read the manuscript and made a number of valuable suggestions. Dr. Dorothy S. Thomas's friendly interest was frequently most helpful. Professor Edwin F. Gay suggested a recasting of the manuscript which resulted in a considerable improvement. Mr. Irving Allen has gone through the arduous task of stylistic editing. And in the tedious labor of reading the proofs I was greatly relieved by the kind help of Miss Edith Handler. To all these friends I express my sincere thanks.

SIMON KUZNETS

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