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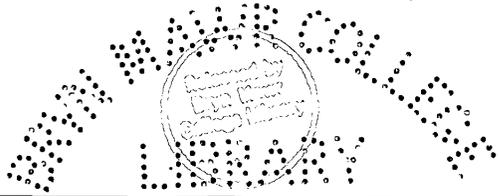
Capital

Consumption and Adjustment

by Solomon Fabricant

National Bureau of

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7. A copy of this resolution shall, unless otherwise determined by the Board, be printed in each copy of every Bureau publication.

(Resolution of October 25, 1926, revised February 6, 1933)

Preface

THIS study of the records of capital consumption and capital adjustment in the United States since 1918 grew out of other studies of the National Bureau of Economic Research and is intimately related to them. It may be considered a part of the National Bureau's analysis of capital formation, essential if we are to determine net changes in the nation's capital. It is also a part of the National Bureau's studies of national income. One term in the formula defining national income is investigated, namely, the amount of the gross national product necessary to maintain capital intact. Further, our study is related to the National Bureau's work on profits and costs; one type of overhead cost is analyzed.

From another point of view, the study may be considered as concerned with a part of that broad theory of value of which the theory of market value is but a section. Not all valuation goes on in the market place. A valuation process is involved in the recording of business changes other than those arising immediately from transactions with other enterprises. A summary explanation of this process is the theory of book value. This also we touch upon.

The investigation is restricted in several ways, partly from choice, partly because of inadequacy of data. We have confined ourselves to a study of fixed capital. Of fixed capital, we concentrate upon tangible goods. With respect to the fixed capital account, we consider chiefly the negative items. And in studying these negative items, we devote ourselves to data for the last two decades, a relatively short period in American history

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and one that may not be assumed to be either representative of other periods or normal.

First we develop the concept of capital consumption, distinguishing it from total capital change, which includes also capital adjustment. Then we assemble the records of capital consumption at hand—records of depreciation, depletion, obsolescence, repairs, fire losses, etc. Their nature is considered, as well as the sort of modification necessary to adapt them to a broader economic view of things. As far as possible, certain of these modifications are applied to the available data in order to secure economic measures of capital consumption. We then turn to data on capital adjustment—records of retirements, revaluations, gains and losses on the sale of fixed assets—and consider their economic significance. Finally, in an appendix, we apply what we have learned in measuring capital consumption and capital adjustment to the interpretation of book values of capital assets, and changes in these book values.

Some of the estimates published in this volume have appeared in preliminary form in other National Bureau publications: *Bulletin 60*, Measures of Capital Consumption, 1919–1933 (June 30, 1936); *Bulletin 62*, Revaluations of Fixed Assets, 1925–1934 (December 7, 1936); *National Income and Capital Formation, 1919–1935* (1937); and *Commodity Flow and Capital Formation*, Vol. I. (1938). As the work progressed revisions were made whenever new data were unearthed or methods refined. These improvements explain changes in the figures at successive dates.

Grateful acknowledgment is made of invaluable assistance rendered throughout the study by Maude Elise Remy; and in certain phases by Mildred G. Uhrbrock and Corolynn Lee. For the charts I am indebted to H. Irving Forman. The manuscript was read and constructive criticisms made by Charles A. Bliss, Milton Friedman, Simon Kuznets, Frederick C. Mills and William H. Shaw of the National Bureau staff; by George O. May, a Director of the National Bureau; and by Bishop C. Hunt. Martha Anderson carefully edited the entire

manuscript. Harry White, Chief of the Statistical Unit, Bureau of Internal Revenue, patiently answered many questions and made available certain unpublished data. Detailed information concerning the Department of Agriculture depreciation estimates was unhesitatingly provided by O. C. Stine and C. M. Purves of the Bureau of Agricultural Economics. To all these I give my thanks. To Frederick C. Mills I owe, in addition, a debt that transcends this volume and that is impossible to acknowledge adequately. My deepest obligation with respect to the present monograph is to Simon Kuznets, in whose work on capital formation this study originated and to which it constitutes but an appendix.

July 1938

Solomon Fabricant

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