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# CONCENTRATION IN CANADIAN MANUFACTURING INDUSTRIES

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# BY GIDEON ROSENBLUTH QUEEN'S UNIVERSITY



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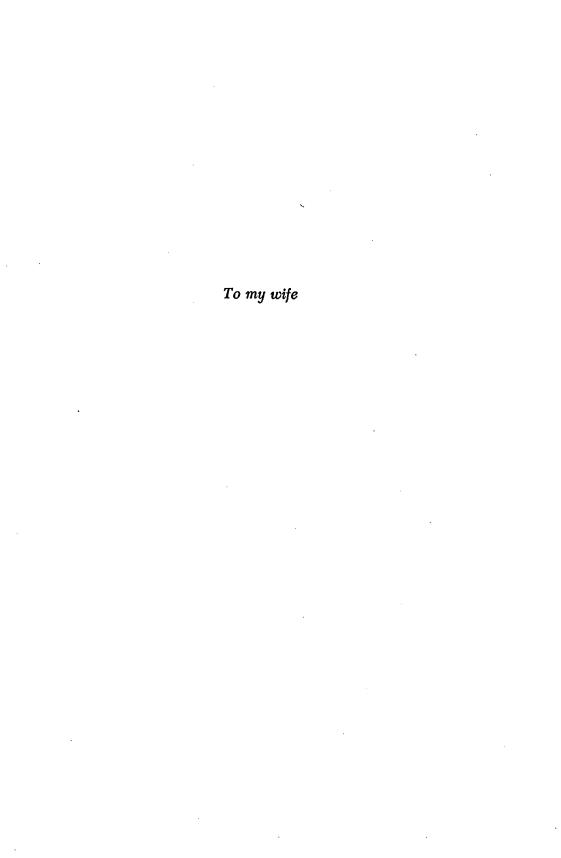
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#### PREFACE

The analysis of the industrial structure of economies—the number, sizes, activities of business units and their changes through time—is still in an early stage of development. Much of the literature is concerned exclusively with either description or theory, and neither empirical nor theoretical workers have made many concessions to the needs of the other group.

Nor can it be said that the basic information is adequate: business units are too often treated as epiphenomena which the student of output, employment, efficiency, and the like need not take into account. The first United States census of business units—and the United States has unusually rich statistical sources—was taken in 1954. For other countries there is in general even less information than for the United States, but the Canadian census of manufactures, which has, since 1917, been taken annually, is an exception to this rule.

The present study is mainly descriptive, but I have attempted to relate differences in concentration among industries and countries, as well as changes over time, to relevant theories in economic literature, or such modifications of them as the data suggest. The results should be of interest not only to those concerned with problems of concentration and monopoly, but also to students of firm size, economies of scale, industrial growth trends, the relation between plants and firms, and other aspects of industrial structure.

While the major part of the study is concerned with Canada, and relates only to the single year, 1948, there are good reasons for believing that its results are more widely applicable in both time and space. Both this study and others suggest considerable stability of concentration patterns over periods of a decade or more, much similarity of concentration patterns in the manufacturing industries of the United States, Britain, and Canada, and even greater similarity of firm-size patterns. It is therefore reasonable to believe that the forces determining firm size and concentration are in considerable degree similar in industrialized countries, and theoretical considerations reinforce this belief. This does not mean that the results of our study can be applied blindly to other countries, but they should suggest useful working hypotheses.

The basic research for this study was completed some years ago. Since data for much of the analysis are available only for the year

1948, no systematic attempt has been made to bring the background material or the time series up to a more recent date. References to the "present time" and the "postwar period" should therefore be understood to mean the end of 1948 and the period ending at that time.

The concentration data for 1948 are comparable to those compiled for United States manufacturing industries from the censuses of 1935 and 1947, and for British manufacturing industries in 1935. They are estimated from firm-size distributions compiled by the Dominion Bureau of Statistics from returns of the Census of Manufactures for 1948. My thanks for this special compilation are due to Herbert Marshall, the Dominion Statistician, Nathan Keyfitz, who developed the method of compilation, and Barbara Mercer who supervised the compilation and answered innumerable requests for changes and additional information with great patience and efficiency.

An earlier version of this study, using the same materials but less sensitive statistical methods, was deposited as a doctoral dissertation at Columbia University in February 1953. The research was begun in 1950, while I held a research training fellowship from the Social Science Research Council, and continued during my tenure as research associate with the National Bureau of Economic Research in 1951–1952. The assistance of these institutions is gratefully acknowledged.

Valuable advice and criticism were obtained from Professor Arthur R. Burns at Columbia University, Simon Goldberg at the Dominion Bureau of Statistics, and the research staff and associates of the National Bureau. I should like to mention particularly Daniel Holland and Marshall Robinson, with whom I shared an office during a crucial period of research. My greatest debt is to Professor George J. Stigler, who not only made many useful suggestions during the initial research, but also patiently read repeated drafts of the manuscript, and forced me to improve it by his sound advice, thorough criticism, encouragement, and sheer prodding. In spite of his efforts, many faults remain, for which I am alone responsible.

Special thanks are due to Joseph Zapadinsky, Victor Zarnowitz, and John Hooper, who helped me with the calculations.

GIDEON ROSENBLUTH

Queen's University, Ontario January, 1956

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