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# Labor in the United States

## Basic Statistics for Social Security

By W. S. WOYTINSKY

A  
REPORT PREPARED FOR THE  
COMMITTEE ON SOCIAL SECURITY

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## FOREWORD

THE INITIATION of unemployment compensation and old age insurance in the United States created needs for new types of industrial, occupational and employment statistics. Existing official statistics, such as the basic occupational data provided by the decennial censuses, were designed to meet various other purposes but did not give adequate information on a number of important points to guide the administration of the social insurances.

A sharp distinction between statistics relating to employers and self-employed persons on the one hand, and to employees on the other, is particularly important inasmuch as contributions and benefits are based on the earnings of employees, while employers are responsible for paying taxes and for submitting reports on wage payments. Social insurance operations are also concerned with industrial groups rather than with individual occupations, and for certain purposes require classifications of data by size of establishment rather than for industries as a whole. Employers and employees are not sharply segregated in currently available official statistics, the basic classification used in past censuses is largely occupational rather than industrial, and the size of establishment groupings heretofore used do not correspond with the coverage provisions of many of the new state unemployment compensation laws.

The Committee on Social Security therefore concluded that one of the primary tasks of its research staff should be the reclassification and retabulation of census and other data into categories more usable and pertinent for social security administration and of greater significance for labor market and general economic analyses. An integral part of this undertaking was an analysis by sex, race, age, industry, class of work, size of establishment, and expected period of work of the gainful workers included in and excluded from the old-age and unemployment insurance programs. The extent to which workers may be expected to shift back and forth between covered and non-covered industries and establishments was also extensively explored.

Any reclassification or adaptation of statistical data in the light of new concepts and of new needs which were non-existent when the data were collected necessarily involves many hazards. The resulting materials have been prepared with conscientious care and a high degree of skill but are frankly presented as estimates which are subject to qualifications both because of the difficulties of adaptation and because of the basic limitations of some of the underlying data. Modifications will doubtlessly follow in the course of further study or when more precise data become available.

It is believed that the investigation has thrown much light upon the problem of planning the 1940 census and other statistical undertakings in a way which will be more directly useful for social insurance administration in the future. In the meantime it has contributed materially in the development of a body of working tools, however rough these may be in part, for use in immediate administrative processes and in the evaluation of the economic effects of the social security program.

The scope of Mr. Woytinsky's study is more fully defined in his Introduction. A part of his materials were made available to technicians in this and related fields in a preliminary report published by the Committee on Social Security in December 1936, and reissued in July 1937, under the title, *The Labor Supply in the United States*. In view of the availability of this preliminary report, a number of the detailed basic tables presented in it have been abridged in the present volume. An additional body of materials developed in the course of this investigation, dealing with the impact of problems of seasonal unemployment upon the social insurances, will be presented in a separate report which will be published by the Committee on Social Security under the title, *Seasonal Variations in Employment in the United States*.

An acknowledgment of especial indebtedness is due to J. Frederic Dewhurst who initiated and guided this study while director of the Committee on Social Security and who aided immeasurably in the final preparation and review of the manuscript, and to Stuart A. Rice, Chairman of the Central Statistical Board, who first directed the author's attention to the statistical problems involved in the inauguration of the social security program. Appreciation is expressed also for the critical observations and suggestions given by Aryness Joy, J. Parker Bursk, Robert Nathan,

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and Frederick Stephan, and for the suggestions and courteous cooperation of J. Douglas Brown and Leo Wölman, and of many members of the staffs of the Social Security Board, the Bureau of the Census, the Bureau of Labor Statistics and the Department of Agriculture. The occupational statistics for the year 1930 used in the first part of the study were reclassified under the author's direction by Helen Anderson. Mary Charles Cole performed the arduous task of editing the manuscript in detail and of preparing it for publication.

While the study has been sponsored by the Committee on Social Security the resulting report has not been submitted to the Committee for formal review or approval. The statements and conclusions of the author are therefore entirely his own and do not necessarily reflect the opinions or attitudes of the members of the Committee or of the Social Science Research Council.

PAUL WEBBINK, *Director*  
Committee on Social Security  
Social Science Research Council

June 1, 1938

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## INTRODUCTION

THE ADMINISTRATION of old-age insurance and unemployment compensation requires comprehensive information on the number and distribution of employers and employees, and on shifts of workers among industries and occupations. Inasmuch as the statistics being collected by social security agencies for administrative purposes cannot provide all the information required, they must be supplemented by the more extensive data of the censuses of population, of unemployment, the industrial censuses, and other enumerations. These general statistics are especially necessary when administrative agencies are facing new and unexplored problems at the beginning of their activity. However, because the needs which dictated the outlines of these censuses do not coincide with the needs of social security administration, census data must be rearranged and retabulated, sometimes interpolated, and almost always critically interpreted before they can be used by social security agencies.

There is nothing unusual in this approach to statistical sources. The President's Committee on Economic Security, in preparing the outline of the Social Security Act, had to do statistical pioneering before it could visualize how this or that provision of the Act would work. In the every-day activity of the new agencies, and particularly whenever plans are being considered for the development and extension of present social security laws, a further rearrangement of existing statistics will be required.

The purpose of this volume is to extract from several statistical sources data which are *basic* for social security. In attempting to carry out this purpose, available census reports have been examined, retabulated, and interpreted from the point of view of three fundamental provisions of the Social Security Act. They are:

(1) That taxes shall be collected upon the income of *employees* and upon the amount of wages paid by *employers*. (Social Security Act, Title VIII)

(2) That from the funds collected, annuities shall be paid to former *employees* upon reaching the age of sixty-five. (Social Security Act, Title II)



(3) That a special excise tax shall be imposed on *employers* of eight or more, with the provision that similar contributions paid by employers into a state unemployment fund may be credited against 90 per cent of the excise tax. (Social Security Act, Title IX)

The Act therefore applies exclusively to persons who either receive or pay *salaries or wages*. Consequently basic statistics for social security concern *salary and wage earners* on the one hand, and *employers* on the other, and both groups should be clearly separated from the rest of the working population. However, not all salary and wage earners are covered by the Social Security Act, the exemptions being established by the definition of the term "employment."

Title II concerning old-age insurance (Sec. 210, b) provides:

"The term 'employment' means any service of whatever nature, performed within the United States by an employee for his employer, except—

- (1) Agricultural labor;
- (2) Domestic service in a private home;
- (3) Casual labor not in the course of the employer's trade or business;
- (4) Service performed as an officer or member of the crew of a vessel documented under the laws of the United States or of any foreign country;
- (5) Service performed in the employ of the United States Government or of an instrumentality of the United States;
- (6) Service performed in the employ of a State, a political subdivision thereof, or an instrumentality of one or more States or political subdivisions;
- (7) Service performed in the employ of a corporation, community chest, fund, or foundation, organized and operated exclusively for religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private shareholder or individual."

Title VIII (old-age insurance) exempts from taxes wages paid for

"Service performed by an individual who has attained the age of sixty-five."

Title IX (unemployment compensation) exempts from the excise tax wages paid for

"Service performed by an individual in the employ of his son, daughter, or spouse, and service performed by a child under the age of twenty-one in the employ of his father or mother."

Only the last two provisions are based on the personal status of the employee. All other exemptions relate to service of whatever kind performed, in specified industries, or in specified groups of establishments, or for specified groups of employers. These exemptions are *industrial* rather than *occupational* in their nature, and consequently the provisions of the Act relating to them require the classification of employers and salary and wage earners by *industry*.

Up to now no clear distinction between employers and employees has been made in the decennial censuses, which have placed primary emphasis on the occupation or kind of work performed by respondents rather than on their economic status and industrial affiliation. Consequently, the occupational groups defined in the population census do not correspond to the groups specified in the Social Security Act.

The industrial censuses use classifications which more nearly meet the needs of social security administration. But unfortunately these censuses provide only fragmentary information on employment, as they do not cover all industries. Furthermore, the industrial censuses fail to show the distribution of employed workers by sex and age, particularly important features for the social security program.

In order to present in a usable form statistics which are basic for social security, the 1930 occupational statistics have been reclassified and retabulated. The outline used is tentative, but it is hoped that it will show how future statistical inquiries, especially the 1940 Census, may provide more useful information for the administration of modern social legislation.

Book One of the present study deals with occupational statistics which have been interpreted as statistics of the *supply of labor*. Book Two deals with industrial employment statistics which have been regarded as statistics of the *demand for labor*.

In Book One an attempt has been made to derive from available occupational statistics information on the workers included in old-age insurance, on those excluded, and on those who shift between insured and uninsured pursuits. In Chapter I problems relating to occupational classification are discussed, and a method of adjusting 1930 occupational statistics to the concepts and needs of social security administration is suggested. In accordance with

the proposed outline, a distribution of the working population by industry and by class of work, sex, race, and age is presented in the next four chapters. In Chapter VI the tabulation of gainful workers by class of work is used as the starting point for an analysis of median ages, and of the expected period of work and of employment in insured industries. The next two chapters, likewise based on the retabulated occupational statistics, contain a discussion of typical shifts of workers from one class of work to another, especially from the salary and wage earner class to independent pursuits and from insured to uninsured occupations. The effects of these shifts upon old-age insurance are also discussed. In Chapter IX an estimate is made of future changes in the working population and of the probable number and distribution of persons who will be registered for old-age insurance in the coming decades.

Book One is based essentially on the 1930 Census of Population. The attention paid to figures which are now eight years old seems to be justified by the following considerations:

(1) The next census of population will not be taken until 1940 and its reports will probably not become available before 1942. Therefore, for the next four years the 1930 occupational statistics will remain the principal source of information on the socio-economic structure of the working population.

(2) Obviously the composition of the working population at present differs from what it was in 1930. But it is easier to measure recent developments if conditions at the starting point are clarified.

(3) Not all characteristics of the population vary appreciably from year to year. This is true, for example, with respect to differences in the distribution of the several classes of workers by sex, age, and race. Such comparatively stable features are examined with particular attention in this volume.

(4) More recent data supplied by local enumerations cannot replace the last general census of population. They do provide valuable amendments but the premise of a useful amendment is that the data amended are themselves usable.

Book Two deals with industrial statistics of employment, namely, data of the Censuses of Agriculture, Mines, Manufactures, Construction, Distribution, Business, etc. The extent to which data from these censuses are comparable to occupational statistics and the question as to whether these two sources may be combined and used alternatively, is discussed in Chapter X.

In the next chapter a systematic comparison of industrial and occupational statistics is made for a score of industries and it is shown that, in so far as the limits of industries are similarly determined, the statistics of the two sources agree fairly well. Chapter XII deals with the distribution of employees by size-classes of establishments, and attempts to reduce the different size classifications used by several censuses to a common denominator, i.e. number of employees. Particular attention is paid to the method of estimating the number of small establishments, a question of special significance for unemployment compensation in view of the exclusion of small firms. Chapter XIII summarizes the findings of the two preceding chapters and shows the distribution of employers and employees in insured and uninsured industries, distinguishing regular from intermittent employers. The effects of the size limit exemption provided by state unemployment compensation laws are likewise discussed in this chapter.

The attempt to scrutinize systematically the scope of the industrial censuses is justified by the fact that they constitute the principal source of basic statistics of employment. To be sure, workers are classified in these statistics by *establishments* rather than by *employers*, and this will cause considerable difficulties for social security statisticians. However, with an adjustment for chain stores and multi-unit concerns, industrial census reports provide reliable information not only on the number and distribution of salaried employees and wage earners, but also on the number and distribution of employing units. In this double quality industrial statistics belong to the necessary scientific equipment of social security agencies.

The interpretation of available statistics in the present study is preceded by methodological discussions deemed necessary because of the kind of data examined and the kind of information required for the administration of social insurance. Almost all statistics analyzed in the following pages refer to the United States as a whole. Most social security agencies, however, deal with regional and state statistics rather than with national totals, and for them the methodological discussions will be of greater use than the descriptive and analytical chapters.

Finally, it may be well at the outset to emphasize that various estimates which appear in the following pages represent only the

best obtainable approximations. Any attempt to recast and recompute data gathered for one purpose in order to meet a new and different purpose inevitably involves the use of many assumptions and it is therefore impossible to claim definitiveness or precise accuracy for the resulting figures.

The original outline of this study included also a discussion of seasonal variations in employment which greatly affect unemployment compensation administration as well as other forms of social insurance. In view of the special character of this discussion, which is based on sources and methods completely different from those used in Books One and Two, this part of the study will be published separately.

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