# NATIONAL INCOME, 1929–32

## LETTER

### FROM

## THE ACTING SECRETARY OF COMMERCE

#### TRANSMITTING

IN RESPONSE TO SENATE RESOLUTION NO. 220
(72D CONG.) A REPORT ON NATIONAL
INCOME, 1929–32

**SUBMITTED BY MR. LA FOLLETTE**

IN THE SENATE OF THE UNITED STATES,
*January 23 (calendar day, January 31), 1934.*

*Ordered,* That the report of the Acting Secretary of Commerce on national income, 1929–32, transmitted to the Senate on January 4, 1934, in response to Senate Resolution 220, Seventy-second Congress, be printed as a Senate document.

Attest:

EDWIN A. HALSEY,
*Secretary.*

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**SUBMITTED BY MR. LA FOLLETTE**

IN THE SENATE OF THE UNITED STATES,
*February 28 (calendar day, March 7), 1934.*

*Ordered,* That certain illustrations prepared in the Department of Commerce subsequent to the transmittal to the Senate of the report on national income, 1929–32, be incorporated as a part of said report and printed.

Attest:

EDWIN A. HALSEY,
*Secretary.*

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# LETTER OF TRANSMITTAL

DEPARTMENT OF COMMERCE,
*Washington, January 3, 1934.*

The PRESIDENT OF THE SENATE.

SIR: I have the honor to transmit herewith a Report on National Income, 1929-32, made pursuant to Senate Resolution 220, Seventy-second Congress, first session. This report was prepared by the Division of Economic Research, Bureau of Foreign and Domestic Commerce, in close cooperation with the National Bureau of Economic Research, Inc., of New York City.

Sincerely yours,

JOHN DICKINSON,
*Acting Secretary of Commerce.*

# ACKNOWLEDGMENT

# NATIONAL INCOME, 1929-32

## CHAPTER I

## CONCEPT, SCOPE, AND METHOD

### 1. NATIONAL INCOME PRODUCED AND NATIONAL INCOME PAID OUT

Year in, year out the people of this country, assisted by the stock of goods in their possession, render a vast volume of work toward the satisfaction of their wants. Some of this work eventuates in commodities, such as coal, steel, clothing, furniture, automobiles; other takes the form of direct, personal services, such as are rendered by physicians, lawyers, Government officials, domestic servants, and the like. Both types of activity involve an effort on the part of an individual and an expenditure of some part of the country's stock of goods. If all commodities produced and all personal services rendered during the year are added at their market value, and from the resulting total we subtract the value of that part of the nation's stock of goods which was expended (both as raw materials and as capital equipment) in producing this total, then the remainder constitutes the net product of the national economy during the year. It is referred to as national income produced, and may be defined briefly as that part of the economy's end-product which is attributable to the efforts of the individuals who comprise a nation.

In return for these efforts, the individuals receive some compensation, either in money or in kind. If such money receipts and the money equivalents of the receipts in kind are added, the resulting total constitutes national income paid out.[1] This latter would equal national income produced, in total and in parts, only if every distinguishable group of services rendered were at once compensated at the money value which the result of these services fetches in the market. This condition, however, rarely materializes. A manufacturing corporation whose net product (gross product minus the cost of materials and allowance for use of durable equipment) amounts to $1,000,000, may pay out only $900,000 in wages, salaries, rents and royalties, dividends, and interest, and retain $100,000 as corporate savings; or, on the contrary (as happened in 1930 and later years), it may pay out in the forms listed above a sum in excess of its net product, thus sustaining a loss (negative savings). Similarly, a proprietor of an unincorporated establishment, e.g., a retail store, may withdraw as his income an amount larger or smaller than his net product, thus incurring a negative or positive saving. In general, the difference

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[1] In the case of most payments, for example, wages and salaries, income paid out measures the flow of money or goods to individuals directly. But in the case of interest and dividends, especially the former, we had to measure under income paid out not only payments made directly to individuals as such, but also receipts of interest and dividends by savings organizations, which may be treated as associations of individuals for the purpose of better management of their property incomes. Among such associations are life insurance companies, foundations, savings banks and savings departments of commercial banks, building and loan associations. The volume of property income received by these organizations in 1929 may be estimated as running between 2.5 and 3.0 billion dollars. (See also ch. IV, pp. 35-36.)

between national income produced and national income paid out is that the former does, and the latter does not, include savings by business establishments.

In the estimates presented below an attempt is made to measure both national income produced and national income paid out.

## 2. THE CLASSIFICATION OF NATIONAL INCOME

The efforts of individuals in producing commodities or rendering personal services to other individuals differ in type as well as in the field of application. The efforts of a manual worker in a steel plant, compensated by wages, obviously differ in character from those of a bond-holding investor compensated by an interest payment on the bond. Such distinctions of the type of activity yield a classification of the national income by types of payment, i.e., wages, salaries, dividends, interest, etc. Another distinction, that of activities of similar type (e.g., manual labor) by the industrial fields in which they are rendered (e.g., manufacturing, mining, etc.), is also important, since the different weight in the nation's end-product of the various industries constitutes an important characteristic of the national economy. Such distinctions of the industries in which services are rendered result in a classification of national income by industrial sources. The details of each of these two classifications are determined largely by the relative importance of the categories distinguished and by the availability of data for each of the categories. As adopted in the present study, these two classifications are as follows:

A. Classification by types of payment.
   I. Labor incomes.
      1. Wages (money and money value of food, board, and other perquisites and gratuities).
      2. Salaries (same as 1, including also commissions).
      3. Other labor income.
         (a) Compensation for injury (paid to employees).
         (b) Pensions.
   II. Property incomes (paid to individuals).[1]
      4. Interest.
      5. Dividends.
   III. Entrepreneurial incomes.
      6. Withdrawals by individual entrepreneurs.
      7. Business savings (positive or negative).
         (a) Individual entrepreneurs.
         (b) Corporations.

Items 1 through 6 constitute national income paid out; by adding 7 we obtain national income produced.

B. Classification by industrial sources:
   I. Agriculture.
      1. Total.
   II. Mines, quarries, and oil wells.
      2. Bituminous coal.
      3. Anthracite coal.
      4. Metalliferous mines.
      5. Oil wells and natural gas.
      6. Quarrying and nonmetallic mines.

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[1] Net rents and royalties usually classified as a type of property income were defined by us as an entrepreneurial income from the industry of real estate inclusive of individual holdings (thus falling under item 6). Since in most cases the receipts of rents and royalties are connected with the obligation of managing the property in question, a great deal is to be said for classifying them not as a functional income type, but on a par with other functional types of income originating in a specific industrial field.

B. Classification by industrial sources—Continued.
 III. Electric light and power and gas.
   7. Electric light and power.
   8. Manufactured gas.
 IV. Manufacturing industries.
   9. Food, beverages, and tobacco.
   10. Textiles and leather.
   11. Paper, printing, and publishing.
   12. Chemicals and petroleum refining.
   13. Construction materials and furniture.
   14. Metals and metal products.
   15. Miscellaneous manufacturing.
 V. Construction.
   16. Total.
 VI. Transportation.
   17. Railroads (including Pullman and express).
   18. Water transportation.
   19. Street railways.
   20. Motor transportation.
   21. Other transportation.
 VII. Communication.
   22. Telegraphs.
   23. Telephones.
 VIII. Distributive trades.
   24. Wholesale trade.
   25. Retail trade.
 IX. Finance.
   26. Banking.
   27. Insurance.
   28. Real estate, inclusive of individual holdings.
 X. Government.
   29. Federal.
   30. State and county.
   31. Municipal.
 XI. Service.
   32. Amusement and recreation.
   33. Professional service.
   34. Personal service.
   35. Domestic service.
   36. Business service.
   37. Miscellaneous service.
 XII. Miscellaneous.

## 3. SCOPE AND CONTENTS OF NATIONAL INCOME FURTHER DEFINED

The above detailed classifications provide a fair description of the various groups of services which are included, at their market value, in the national income. But they are far from an exhaustive account of the possible contents and scope of the national income measurement. The boundaries of a "nation" in "national" income are still to be defined; and a number of other services, in addition to those listed above, might also be considered a proper part of the national economy's end-product. The brief discussion below attempts to define more precisely the scope and character of the national income measures presented in this report.

(a) *The boundaries of a nation.*—The available data do not permit a strictly uniform definition of the territorial scope for the diverse parts of the national income. But, by and large, the estimates presented below refer to income produced by the inhabitants and corporations of the continental United States. To this total is added property income received by the inhabitants of this country from securities and direct investments in foreign enterprises, and from it is subtracted the property income received by foreigners from securities or

direct investments in enterprises domiciled in the United States. This adjustment for the international flow of property incomes can be made only for the national income total and not separately for its various constituent parts.

(b) *Services of housewives and other members of the family.*—The volume of services rendered by housewives and other members of the household toward the satisfaction of wants must be imposing indeed, when totaled for the 30 million families comprising the population of this country; and the item is thus large enough to affect materially any estimate of national income. But the organization of these services render them an integral part of family life at large, rather than of the specifically business life of the nation. Such services are, therefore, quite removed from those which gainfully occupied groups undertake to perform in return for wages, salaries, or profits. It was considered best to omit this large group of services from national income, especially since no reliable basis is available for estimating their value. This omission, unavoidable though it is, lowers the value of national income measurements as indexes of the nation's productivity in conditions of recent years when the contraction of the market economy was accompanied by an expansion of activity within the family.

(c) *Services of owned durable goods.*—Durable goods, such as houses, automobiles, furniture, etc., yield some net service, i.e., income, to their possessors which is not enjoyed by a person who must hire these goods whenever he desires to use them. There would seem to be some ground, therefore, for including the value of such services in the national income total. On the other hand, the net yield from the possession of durable goods is not exactly equivalent, as most incomes are, to a receipt of purchasing power, capable of being spent by the recipient in any way he pleases. A still weightier objection to the inclusion of the value of these services in our income totals is the fact that, as a rule, such durable goods (with the possible exception of houses), are not bought by the household with the idea of a net yield in mind, in the same way as bonds would be purchased. It would be erroneous to treat the net income from durable goods as if it were equivalent to investment income. For these reasons, and because of difficulties in arriving at a reliable estimate of the items involved, the net yield of all durable goods owned by the households was disregarded.

(d) *Earnings from odd jobs.*—Odd jobs are numerous, and the returns they bring may amount to a substantial sum. Some of the people engaged on such odd jobs are reported in the Census as gainfully occupied, others are not. At any rate, the available data permit only a most inadequate estimate of the earnings from odd jobs; and these earnings are largely omitted from the national income totals presented in this report. This omission results in our estimates somewhat exaggerating the relative decline in national income from 1929 to 1932; if, as appears from all indications, the number of people engaged on odd jobs has increased materially during the depression and the earnings from these jobs have either increased or failed to decline as deeply as the other constituent parts of the national income total.

(e) *Relief and charity.*—The distribution of money or goods as relief and charity does not usually imply the performance of any service by the recipients; although if relief is confined only to the groups formerly employed, it may be treated as a species of compensation for

past services and thus a belated bona fide income. Usually, however, relief and charity, distributed primarily according to need, may be considered a pure draft upon other incomes and cannot be included as part of the national income total. The one exception to this rule, however, is the portion of relief and charity that is paid out of corporate or business earnings (from which they are usually deducted as contributions in arriving at the net income figure). In such a case, relief and charity form one of the unaccounted for parts of the net product of the national economy, and should be added into the national income total, preferably at the source where the funds originate. This, however, is not possible, since existing data do not allow us to ascertain the precise source of relief and charity funds.

(f) *Changes in the value of assets.*—Changes in the value of assets that are not handled in a professional capacity arise as a reflection of a change in net income, whether actual or forecast, of a change in the riskless rate of return, or as a result of some general changes unrelated to the basic course of economic life. The inclusion of gains and losses yielded by such changes in asset values would therefore be either a duplication, since it would amount to counting both a change in net income and the change in capitalization of that income, or a distortion of the national income estimate as a measure of the economic system's end-product. On the other hand, incomes derived from such changes in asset value as are caused by professional handling, are a compensation for such professional services, and thus properly a constituent part of the national income total. The estimates in the present report include such incomes derived by groups professionally occupied in the handling of assets. But in all other cases gains and losses on sale of assets have been eliminated, insofar as the data permitted.

(g) *Earnings from illegal pursuits.*—In determining which efforts of individuals may or may not be classified as services for the purpose of including their value in the national income total, the estimator must perforce follow the overt expression of social opinion as embodied in the nation's legal code. That many illegal acts are of some benefit to one group or another and are being paid for, is no proof that these acts constitute a service from the social point of view. On the contrary, their very illegality, allowing for the lag of the legal statute behind public opinion, implies their disserviceability to society at large. The investigator, unless he wishes to impose his own scale of values, cannot, therefore, treat earnings from such illegal pursuits as burglary, theft, illicit drug traffic, bootlegging, etc., as bona fide parts of the national income. Such exclusion does not imply, of course, that all lawful pursuits are necessarily serviceable from the social viewpoint, when the latter is defined in terms of some specific criteria. It does mean that legality is understood as an absence of distinct social condemnation, and that all lawful activities are to be given that benefit of doubt which the market place is eager to bestow upon anything that succeeds in fetching a price.

## 4. USES AND ABUSES OF NATIONAL INCOME MEASUREMENTS

The valuable capacity of the human mind to simplify a complex situation in a compact characterization becomes dangerous when not controlled in terms of definitely stated criteria. With quantitative measurements especially, the definiteness of the result

suggests, often misleadingly, a precision and simplicity in the outlines of the object measured. Measurements of national income are subject to this type of illusion and resulting abuse, especially since they deal with matters that are the center of conflict of opposing social groups where the effectiveness of an argument is often contingent upon oversimplification.

From the definition of national income presented and discussed above it is obvious that a measure of income produced sheds a good deal of light on the productivity of the nation; that income received measures the same productivity as reflected in the flow of means of purchase to the nation's members; and that when total income paid out is adjusted for changes in the value of money and apportioned per capita, the result is illuminating of movements in the nation's economic welfare. Comparison of such income measurements for different nations, or for the same nation for different years, yields valuable indications of spatial and temporal differences in national productivity and economic welfare. Moreover, various single groups of services or drafts may be compared with the country's total to indicate their relative weight in or draft upon the latter.

These constitute highly valuable uses of national income measurements, but only if the results are interpreted with a full realization of the definition of national income assumed, either explicitly or implicitly, by the measurement. Thus, the estimates submitted in the present study define income in such a way as to cover primarily only efforts whose results appear on the market place of our economy. A student of social affairs who is interested in the *total* productivity of the nation, including those efforts which, like housewives' services, do not appear on the market, can therefore use our measures only with some qualifications. Secondly, the present study's measures of national income, like all such studies, estimates the value of commodities and direct services at their market price. But market valuation of commodities and especially of direct services depends upon the personal distribution of income within the nation. Thus in a nation with a rich upper class, the personal services to the rich are likely to be valued at a much higher level than the very same services in another nation, characterized by a more equitable personal distribution of income. A student of social affairs who conceives of a nation's end-product as undistorted by the existing distribution of income, would again have to qualify and change our estimates, possibly in a marked fashion. Thirdly, the present study's estimate of national income produced is based in part, like most existing estimates, upon the prevalent legal and accounting distinction between gross and net income of business enterprises. To a student of social affairs whose concept of net productivity does not agree with the prevailing practices of separating net from gross income, especially by corporations, our estimates will obviously present a somewhat distorted picture of the nation's net product.

All these qualifications upon estimates of national income as an index of productivity are just as important when income measurements are interpreted from the point of view of economic welfare. But in the latter case additional difficulties will be suggested to anyone who wants to penetrate below the surface of total figures and market values. Economic welfare cannot be adequately measured unless the personal distribution of income is known. And no income measurement undertakes to estimate the reverse side of income, that is, the

intensity and unpleasantness of effort going into the earning of income. The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income as defined above.

The abuses of national income estimates arise largely from a failure to take into account the precise definition of income and the methods of its evaluation which the estimator assumes in arriving at his final figures. Notions of productivity or welfare as understood by the user of the estimates are often read by him into the income measurement, regardless of the assumptions made by the income estimator in arriving at the figures. As a result we find all too commonly such inferences that a decline of 30 percent in the national income (in terms of "constant" dollars) means a 30 percent decline in the total productivity of the nation, and a corresponding decline in its welfare. Or that a nation whose total income is twice the size of the national income of another country is twice "as well off", can sustain payments abroad twice as large or can carry a debt burden double in size. Such statements can obviously be true only when qualified by a host of "ifs."

A similar failure to take into account the investigator's basic assumptions underlies another widely prevalent abuse of national income measures, involved in estimating the draft or "burden" which this or that particular type of expenses (e.g., government expenses, payments on bonded debt, etc.) constitutes of the country's total end-product. Every payment included in the national income is ipso facto a draft or a "burden" upon national income. For example, net receipts by physicians from medical practice, are both an addition to national income and a draft upon individual incomes from which such receipts originate. Since we estimate the value of personal services or commodities at their market value it follows that any payment for productive services contributes just as much to the national income total as it takes away from it. No items included in national income can, therefore, be conceived as "pure" draft.

The full meaning of a statement that such payments as interest on bonds or taxes for government services are a "burden" or draft upon national income is that actually no services are being rendered in return for these payments. That an increasing weight in the national income of payments on fixed debt or of salaries of government officials is not hailed as an increased contribution to national income lies in the implicit assumption, not always true, that the services contributed by creditors or government officials have not increased proportionately, and that, therefore, a heavier burden was added upon other income recipients without an increased benefit.

Such assumptions are accepted all too easily because they are based upon a natural but erroneous identification of national income with business or personal income. From the standpoint of a business firm or person, the income of employees, private or public, is likely to appear as a draft. But from the vantage point of national economy as a whole, which is used by a national income investigator, no payment that is included in national income can be considered as a pure draft upon the country's end-product. This can be true only of payments not included, such as charity, earnings from illegal pursuits, and the like. All that the national income estimator can say is that this or the other part of the national total has increased or declined more than the others. That this rise or decline implies a larger or smaller burden upon the national economy can be established

only on the basis of such additional assumptions as have been formulated above, assumptions which are not a proper part of the national income estimate and which are far from being self-evident.

## 5. METHODS OF ESTIMATE, SOURCES, AND ACCURACY OF NATIONAL INCOME FIGURES

The discussion above has shown that measures of national income are clearly conditioned by the estimator's idea of productivity and valuation; and that consequently one must be careful in interpreting the results.    In order to make intelligent interpretation possible, national income estimates must distinguish clearly the component parts of the total, breaking down the latter in as great detail as the available data permit.    Such a break-down will enable any student to recast the totals and to obtain new combinations, most satisfactory for the interpretive purpose at hand.

The desire to present the national income figures in full detail and the lack or availability of data have largely determined the method of estimating followed in the present report.    Since a classification by industrial sources and types of payment was requested, it was decided to build up the estimate of income created in each industry as the sum total of the component parts of its net product, that is, wages, salaries, interest and dividend payments, etc., taking care to restrict the figures only to the payments which were directed to individuals and not to other business establishments.    Such an estimate of income originating in each industry by types of payment could, theoretically, be arrived at in one of three ways: By studying commodities and services produced; by tabulating incomes received by individuals; by measuring consumption and saving by individuals. Since data are available primarily on the production of commodities and services and on payments incurred in the process of such production, the first method was followed for the most part, supplemented by the second whenever need arose.    This procedure was thus similar to that followed by the National Bureau of Economic Research,[3] except that a more detailed break-down was made possible in the present report by additional data available for recent years. The procedure is also quite similar to that adopted by the Federal Trade Commission,[4] but with a substantially more complete division by types of payments and industrial categories and a more precise elimination of a possible duplication of some of the items.

The method followed and sources of data employed in deriving each of the numerous items composing the national total are described concisely in appendix A.    As may be seen at a glance, a list of the most important sources would include all the recent censuses, especially those of Agriculture (1929), Mining (1929), Manufacturing (1929 and 1931), Distribution (1929), Construction (1929), Occupations (1929 and 1919), Electrical Industries (1927 and 1932), Education (1930); the reports on Statistics of Income of the Internal Revenue Office, supplemented by special tabulations requested for the purpose of this report; the annual reports of the Comptroller of the Currency and the Federal Reserve Board's reports on member bank expenditures; the reports on Receipts and Expenditures of the Federal Government, as well as the annual volumes of the Financial Statistics

[3] The latest publication is The National Income and Its Purchasing Power, by W. I. King, New York, 1930.
[4] See National Wealth and Income, Washington, D.C., 1926.

of States and Financial Statistics of Cities; the Bureau of Labor Statistics indexes of employment and pay rolls in a number of industries; the Department of Agriculture estimates and supporting data on income from agriculture; the reports of the Interstate Commerce Commission on railroads and other public utilities accounting to it; State data on employment and compensation, especially those of Pennsylvania, New York, and Ohio; and a multitude of other sources too numerous to mention.

For some of the constituent parts of the total, indicated in the classifications above, the available data are abundant and reliable; for others both direct and indirect information is quite scanty and the resulting estimate is subject to a wide margin of error. It is of importance to note the areas of the national economy in which formidable difficulties were encountered for lack of precise data:

(a) For the fields of construction, water transportation and motor transportation, trade, almost all of finance, and of service, and even for government proper, data are on the whole scanty. And, of course, the miscellaneous field is by its very nature a confession of the limitations which the data impose on the national income estimator.

(b) Even for those industrial fields for which data were comparatively good, there was difficulty in measuring property income on a basis comparable to that of labor incomes. This was due to the fact that the industrial classification of Statistics of Income (the richest source of data on property incomes) is necessarily quite different from the classifications of our industrial data.

(c) There was general paucity of data on entrepreneurial incomes, and the estimates relating to this income type are the ones most subject to doubt.

(d) The estimates for 1932, especially those for property incomes, are preliminary in character and may be revised somewhat when final data for 1932 become available.

The national income total is thus an amalgam of accurate and approximate estimates rather than a unique, highly precise measurement. This difference in reliability of estimates of various parts is one more reason why those parts should be carefully distinguished and presented separately, rather than thrown together into a gross total with a resulting obfuscation of the degree of accuracy to which such a total is subject. It is recognized that in a number of the many industrial fields distinguished in this report, the estimates are at best only well-considered guesses. But it was thought preferable to carry the industrial classification to the utmost possible detail, and thus reveal, even if approximately, the different movements which are likely to be concealed in larger group totals.

In view of the approximate character of the national income figures caution should be exercised in interpreting differences or changes shown by these figures. Small differences or changes in national income estimates should not be taken as an unequivocal indication that differences actually exist or that changes have actually occurred. It is practically impossible to evaluate precisely the possible error involved in each of the numerous partial estimates. But anyone who is desirous of using the figures submitted in this report is urged to familiarize himself with the methods and sources employed in arriving at the estimates. Only then will he be able to form a considered judgment of the technical adequacy of the estimates from the point of view of the prospective use to which they are to be put.

# CHAPTER II

## NATIONAL INCOME, 1929–32

### 1. NATIONAL INCOME AND ITS CHANGES

Estimates of the total national income of this country for the years 1929–32 are presented in table 1. As previously indicated, the figures for 1932 are provisional in character, especially for property incomes; and may be revised, when final data for the year become available.

TABLE 1.—*National income, paid out and produced*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Income paid out | 81,136 | 75,410 | 63,247 | 48,891 | 100.0 | 92.9 | 78.0 | 60.3 |
| 2 | Business savings | 1,896 | −5,065 | −8,604 | −9,529 | | | | |
| 3 | Income produced | 83,032 | 70,345 | 54,643 | 39,365 | 100.0 | 84.7 | 65.8 | 47.4 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |
| 5 | Bureau of Labor Statistics wholesale price index | | | | | 100.0 | 90.7 | 76.6 | 68.0 |

The movement of the totals from 1929 to 1932 exhibits clearly the striking effect of the present depression. The volume of net income paid out to individuals shrank by 40 percent during this period of 3 years. The longest series of authoritative annual estimates of national income for this country, that by Dr. Willford I. King, back to 1909, covers only one major depression.[1] The corresponding decline, from 1920 to 1921, amounted to a drop of 14.4 percent from the peak, as over against the shrinkage of 40 percent shown in the present depression.

Savings by unincorporated business establishments, corporations, and individual entrepreneurs which in 1929 were positive to the extent of 1.9 billion dollars, have, in the years following, turned into losses which by 1932 rose to the total of 9.5 billion dollars. Care must be taken not to confuse the term "savings" used here with the common notion of business profits and losses. By our definition, given in chapter I, an enterprise enjoys a positive saving when it pays out in wages, salaries, interest, dividends, and other types of income received by individuals an amount smaller than the margin between its gross intake from industrial operations and the cost of goods (including in the latter all business costs not appearing as income

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[1] Realized income, as defined by Dr. King, includes, besides income paid out, also income imputed to possessors of durable goods. This imputed income amounted in 1927 to 4.8 billion dollars. See The National Income and Its Purchasing Power (National Bureau of Economic Research, 1930), p. 379. The estimates presented in this bulletin should not be treated as a direct continuation of the series published in that book; nor should the estimates for 1929 given in table 1 be compared with Dr. King's estimates for earlier years. The present figures utilize the data in the census of 1929 and much additional information not available to Dr. King at the time his study was made. The National Bureau of Economic Research is at present engaged in revising Dr. King's series back to 1909. When this revision is completed, a continuous series of comparable measurements from 1909 through 1932 will be available.

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streams). On the other hand, an enterprise sustains a loss (negative saving) when the volume of its payments to various income recipients is greater than its gross margin. The usual notion of business profit and loss defines them as the residual share before and not after payment of dividends or of entrepreneurial withdrawals.

It must also be noted that the measurement of business savings is conditioned by the accounting practices of the country's business establishments. These practices, in an attempt to provide a conservative basis for business policy, may give rise to a picture of income changes which will appear distorted to an observer looking to criteria beyond those set by the business world itself. Thus, the prevalent rule of valuing inventories at cost or market, whichever is lower, may, in a period of rapidly declining prices, serve to reduce the savings of enterprises, although for logical consistency with the measurements in periods of rising prices it might be advisable to value inventories on a cost basis only. Similarly, the prevailing practice of straight-line depreciation based on cost of the fixed assets may mean, in a period of declining prices, not capital preservation but capital accumulation by the enterprise.

Another element of uncertainty in the measurement of business savings is due to the inability of estimating accurately the volume of actual withdrawals by individual entrepreneurs, as distinct from the net profits or losses sustained in their business. Thus, in the case of agriculture, withdrawals by farm operators were assumed to equal the wage allowance for operators and family labor, there being no direct information on withdrawals made by farm operators for their living expenses; and in other industries entrepreneurial withdrawals were usually estimated on the basis of a salary allowance. The error in our estimate of business savings that can result from such crude approximations may possibly be of considerable magnitude. Thus, the volume of business savings in agriculture for 1929 is estimated at 1.2 billion dollars, accounting for about 60 percent of the total business savings for that year. If agriculture (the most important industrial source of business savings of individual entrepreneurs) is omitted, the total business savings in 1929 amount to 700 million dollars, and negative savings in 1932 to 8.3 billion dollars.

These are only some of the reasons why one should be careful in interpreting the estimates of business savings as an element in the measurement of national income produced. On the other hand, it must be remembered that these savings are in themselves a highly important factor in shaping policies in the business economy. Granted that under such conditions as characterized the recent years net losses of enterprises may have been exaggerated by accounting practices, yet the effect of such losses upon the activities of the entrepreneurial class can hardly be overestimated. A large business loss in an economy so dependent upon the stimulus of the profit incentive as ours is both a symptom of and a factor in the gravity of the present depression.

If the estimates of national income produced are accepted with all the qualifications that attach to its measurement, the totals show a decline considerably greater than that in national income paid out, the percentages of the contraction from 1929 to 1932 being 53 and 40 percent, respectively. This disparity suggests at first the inference that to some extent, possibly exaggerated by the figures in table 1,

the flow of net income to individuals was sustained through a draft by the business enterprises upon their capital and surplus. But this appears to be a misleading description of the situation during recent years. The business losses may have resulted from a failure of certain costs, beside those constituting direct income payments to individuals, to decline as greatly as did the volume of business. A partial confirmation of this interpretation may be found in the accounts of corporations reported in Statistics of Income. The combined items of bad debts, depreciation, and depletion, amounted to 5.4 billion dollars in each of the 3 years 1929, 1930, and 1931, while gross sales plus gross profits from operations other than those tabulated as gross sales have declined from 147 billion dollars in 1929 to 123 in 1930 and to 97 in 1931, a total decline of about 33 percent. These figures refer to corporations only and do not cover agriculture or unincorporated trade and construction, all of which show considerable business losses in recent years. It thus appears reasonable to suggest that a large part of the business losses incurred in 1931 and 1932 may be imputed not to the sustention of income payments to individuals but to the coverage of other, rather rigid costs.

The estimates presented in table 1 do not include a number of items which have been considered by other investigators as parts of national income. Of these, one of the most important is imputed net rental, i.e., income accruing to people living in their own homes. For 1930, such net rentals could be estimated as amounting to about 2.7 billion dollars (if we allow for owned homes a gross rental equal to the average rental in leased homes, and a ratio of net to gross rentals of 66.7 percent); and even this large total does not include imputed rent on owned farm homes. But there is some doubt as to the propriety of including this item, since the ownership of a home combined with its possession does not constitute a participation by the proprietor in the economic activity of the nation in the same recognized fashion as does his work for wages, profit, or salary, or his capital investment in industry. For similar reasons, such an item as interest on durable goods owned has also been omitted. This last item was estimated by Dr. King at about 3 billion dollars in 1927.[2]

Another item of some interest is that of relief expenditures. Recent estimates of relief expenditures set them at 85 million dollars in 1929, 150 million in 1930, 300 million in 1931, and 500 million in 1932.[3]

The special report by the Department of Commerce on Relief Expenditures by Governmental and Private Organizations, 1929 and 1931, indicates that in cities of over 30,000 the percentage of government expenditures to total expenditures on relief was about 60 in the first quarters of 1929 and 1931. If this percentage is true for the country as a whole for 1932, it would appear that government relief expenditures in 1932 amounted to about 300 million dollars. If such expenditures were covered from taxation of business establishments (rather than from taxation of individuals), this volume should be considered as flowing indirectly from the business system through the government into the hands of individuals. But the allocation of these funds to their specific origin is a rather arbitrary task.

[2] See The National Income and Its Purchasing Power, National Bureau of Economic Research, New York, 1930, p. 379.
[3] Charles E. Persons, Calculation of Relief Expenditures, Proceedings of the American Statistical Association, March 1933, p. 71.

Thus, the estimates of national income presented in table 1 are incomplete in failing to include a number of items. But these omissions are relatively minor, and in regard to most of them considerable doubt exists as to the propriety of their inclusion. Were the measurement of these items a task easily and reliably performed with the available data, such estimates would have been presented. But in view of the difficulties, and often the impossibility of presenting a reliable estimate of these items, it was considered advisable to omit them.

The contraction of national income after 1929 was due at least in part to a decline in the price level, and an adjustment for price changes is obviously in order. But such an attempt to measure national income paid out or produced in dollar volume at constant prices could not be made in a satisfactory fashion. Net income paid out to individuals should be adjusted for changes in the cost of living. But the best available index of the cost of living, that of the Bureau of Labor Statistics, refers only to urban wage earners, and is perhaps unsatisfactory even for those, its weights being based on a survey taken 15 years ago.[4] For other economic groups, with the exception of farmers, current data on the cost of living are absent. Net income produced could best be adjusted by an all-inclusive price index, covering both commodities and services, at wholesale and at retail. But no such all-inclusive, authoritative index is available.

If, nevertheless, it is wanted to obtain some approximate notion of the movement in national income total adjusted for price changes, the contraction in income paid out may be compared with the decline shown by the Bureau of Labor Statistics index of the cost of living. This comparison suggests that the purchasing power of net income paid out declined slightly in 1930; that by 1931 the decline from 1929 was in the neighborhood of 10 percent of the 1929 level; and that by 1932, the contraction in purchasing power of income paid out may have amounted to 25 percent of the 1929 volume. A similar comparison can be made of national income produced and the Bureau of Labor Statistics index of wholesale prices. The latter index probably shows a larger decline from 1929 to 1932 than would have been indicated by a more inclusive price index. The comparison suggests that the volume of income produced, at a constant price level, must have declined in 1930 by about 6 percent from the 1929 level; by 1931 the decline may have been from 15 to 20 percent of the same level; and by 1932 from 30 to 40 percent.

## 2. DISTRIBUTION BY TYPES OF PAYMENT

The estimates of total national income, striking as they are in absolute volume and the extent of indicated changes during recent years, are of little value in themselves to anyone trying to interpret their significance. It is necessary to know their distribution by various important categories before a full understanding of their import can be reached. We shall first consider the distribution of national income paid out by types of payment, and then the movement of both income paid out and produced by the various industrial sources from which it originated.

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[4] The Bureau of Labor Statistics is engaged at present in revising its cost of living index, and it is hoped that the index will be improved materially in the near future.

Tables 2 and 3 and chart I present the distribution of national income paid out into wages, salaries, dividends, interest, etc. Net rents and royalties paid to individuals have been included with entrepreneurial withdrawals in our general classification. But for the benefit of those students who are inclined to define them as property income, the estimates in question have been segregated in tables 2 and 3.

TABLE 2.—*National income paid out, by types of payment* [1]

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries (selected industries)[3] | 5,702 | 5,661 | 4,738 | 3,383 | 100.0 | 99.3 | 83.1 | 59.3 |
| 2 | Wages (same as in line 1)[3] | 17,179 | 14,210 | 10,542 | 6,840 | 100.0 | 82.7 | 61.4 | 39.8 |
| 3 | Salaries or wages (all other industries) | 29,052 | 27,794 | 24,622 | 20,302 | 100.0 | 95.7 | 84.8 | 69.9 |
| 4 | Total labor income [3] | 52,793 | 48,582 | 40,896 | 31,533 | 100.0 | 92.0 | 77.5 | 59.7 |
| 5 | Dividends | 5,964 | 5,795 | 4,313 | 2,588 | 100.0 | 97.2 | 72.3 | 43.4 |
| 6 | Interest | 5,677 | 5,815 | 5,649 | 5,491 | 100.0 | 102.4 | 99.5 | 96.7 |
| 7 | Total property income [4] | 12,206 | 12,226 | 10,498 | 8,472 | 100.0 | 100.2 | 86.0 | 69.4 |
| 8 | Net rents and royalties | 4,116 | 3,475 | 2,752 | 1,865 | 100.0 | 84.4 | 66.9 | 45.3 |
| 9 | Entrepreneurial withdrawals | 12,020 | 11,127 | 9,102 | 7,024 | 100.0 | 92.6 | 75.7 | 58.4 |
| 10 | Total entrepreneurial income | 16,136 | 14,602 | 11,853 | 8,890 | 100.0 | 90.5 | 73.5 | 55.1 |
| 11 | Total income paid out | 81,136 | 75,410 | 63,247 | 48,894 | 100.0 | 92.9 | 78.0 | 60.3 |

[1] The grand totals in this and the following tables are obtained by an addition of the totals for each industrial field. The income subtotals by industrial fields are primarily in thousands of dollars, while the subtotals of gainfully engaged are usually in actual numbers. But the subtotals entered in Tables 2 to 30 are either in millions of dollars (for income) or in thousands of persons (for numbers engaged). These subtotals do not, therefore, add up exactly to the grand totals given.
[3] Includes mining, manufacturing, construction, steam railroads, Pullman, railway express, and water transportation.
[3] Includes also employees' pensions and compensation for injury.
[4] Includes also net balance of international flow of property incomes.

TABLE 3.—*Percentage distribution of national income, by types of payment*

| Line | Item | Percentages of total income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries (selected industries) [1] | 7.0 | 7.5 | 7.5 | 6.9 |
| 2 | Wages (same as in line 1) [1] | 21.2 | 18.8 | 16.7 | 14.0 |
| 3 | Salaries or wages (all other industries) | 35.8 | 36.9 | 38.9 | 41.5 |
| 4 | Total labor income [3] | 65.1 | 64.4 | 64.7 | 64.5 |
| 5 | Dividends | 7.4 | 7.7 | 6.8 | 5.3 |
| 6 | Interest | 7.0 | 7.7 | 8.9 | 11.2 |
| 7 | Total property income [3] | 15.0 | 16.2 | 16.6 | 17.3 |
| 8 | Net rents and royalties | 5.1 | 4.6 | 4.4 | 3.8 |
| 9 | Entrepreneurial withdrawals | 14.8 | 14.8 | 14.4 | 14.4 |
| 10 | Total entrepreneurial income | 19.9 | 19.4 | 18.7 | 18.2 |
| 11 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

[1] Includes mining, manufacturing, construction, steam railroads, Pullman, railway express, and water transportation.
[3] Includes also employees' pensions and compensation for injury.
[3] Includes also net balance of international flow of property incomes.

When the big functional divisions of national income are considered, a significant difference appears between property incomes, on one hand, and labor and entrepreneurial incomes, on the other. Thus, total labor income declined from 1929 to 1932 by 40 percent, total entrepreneurial income by 45 percent, but property incomes have held up in comparison, the decline from 1929 to 1932 having been only 31 percent. It is obvious that payments to property holders formed a relatively increasing cost to the economic system as a whole.

CHART I

# INCOME BY TYPE OF PAYMENT
## ALL INDUSTRIES

BILLIONS
OF
DOLLARS

NET RENTS & ROYALTIES
NET INTERNATIONAL BALANCE

INTEREST

DIVIDENDS

ENTREPRENEURIAL
WITHDRAWALS

OTHER LABOR INCOME

OTHER SALARIES
AND WAGES

SALARIES*
(Selected Industries)

WAGES*
(Selected Industries)

1929　1930　1931　1932

EXCESS PRODUCED

EXCESS WITHDRAWN
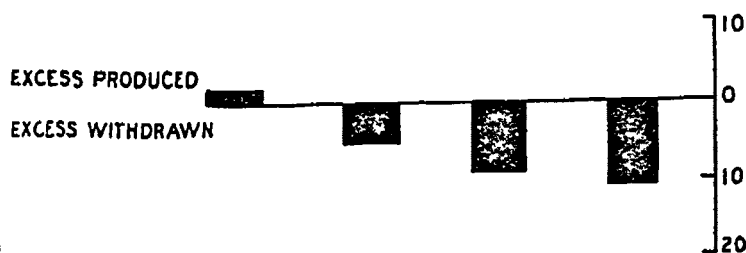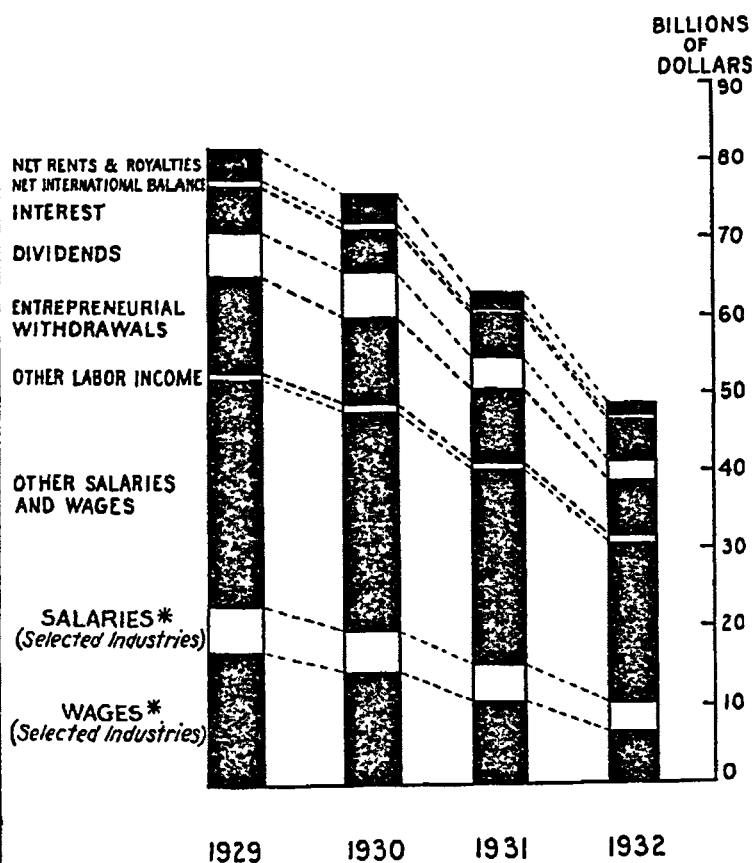
* For industries for which a segregation of salaries and wages is possible.

D.D.7476

Within labor income itself, there is a significant difference in movement between salaries and wages. For those basic industries for which the distinction between these two types of labor income could be made, total salaries showed a decline of 41 percent between 1929 and 1932, while total wages declined by 60 percent. It is also to be noted that the decline in salaries began substantially only in 1931, while that in wages was already marked in 1930. The cumulative burden of the depression was thus much greater in the case of the wage earning group than for the salary earners. A similar difference in movement between wages and salaries may be expected to characterize other branches, where a clear distinction between the two labor groups exists.

No less a significant difference in movement characterizes the two types of property incomes. Interest payments increased in 1930, and showed but an insignificant decline by 1932. This indicated stability of interest flow may have been exaggerated by an insufficient allowance for defaults in some industries, but hardly to an extent to affect the totals considerably. Dividends declined slightly in 1930, thus lagging in movement behind wages, but were cut drastically in 1931 and especially in 1932. The resistance to contraction of interest payments served, however, to hold up the total property income to a relative level in 1932 which was higher than any other functional income type.

In entrepreneurial incomes, the least reliable group of estimates, there is also an interesting difference in movement between net rents and royalties and withdrawals by entrepreneurs, the former showing a much more marked drop than the latter. The fact that total entrepreneurial incomes declined even more than did labor incomes is not surprising if it is remembered that the largest single group of entrepreneurs are the farmers, who suffered very heavily in the depression; and that another large group is in the field of construction, an industry in which contraction has been most severe.

The disparate trends in the various income groups appear clearly in chart II. The relative weight of the various types of income in total income paid out is shown clearly in the percentage distribution in table 3. The share of labor incomes is, on the whole, fairly constant, the result being probably due to the fact that the rise in the proportion of salaries was offset by the decline in the share of wages. The percentage constituted by property income rose from 1929 to 1932, this rise being accounted for largely by interest payments on fixed debt. The share of entrepreneurial incomes declined, primarily because of the drop in the relative proportion of rents and royalties. If net rents and royalties are added to property income, the decline in absolute volumes from 1929 to 1932 amounts not to 30 percent but to 36 percent; but the share of property incomes in the total paid out still shows a slight rise between 1929 and 1932.

National income paid out formed an income stream flowing for the most part directly to individuals. But only in the case of employees and entrepreneurs can we estimate without duplication the number of individuals who participated in the process of income creation and who received the income paid out. These estimates are presented in table 4.

CHART II

## TREND OF INCOME PAID OUT
## BY TYPE OF PAYMENT

PERCENT
120
110
100
90
80
70
60
50
40
0

1929    1930    1931    1932

INTEREST

TOTAL LABOR INCOME

ENTREPRENEURIAL WITHDRAWALS

NET RENTS & ROYALTIES

DIVIDENDS

WAGES *

D.D.7475
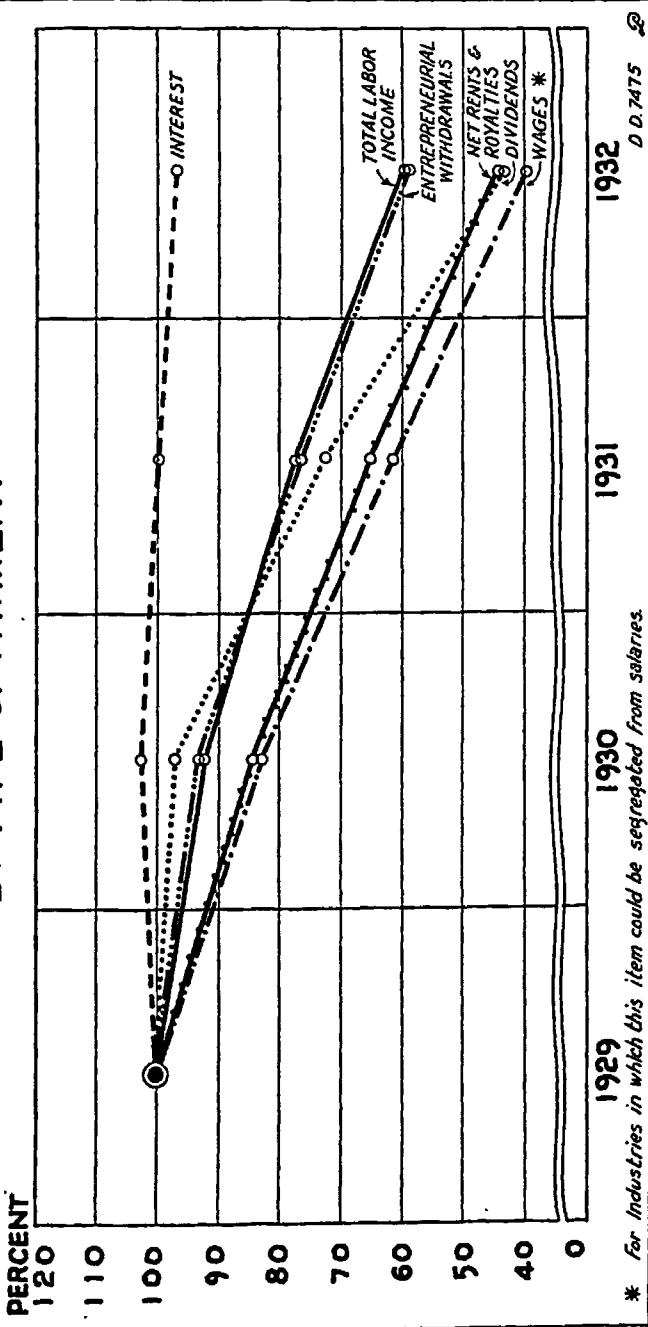
* For industries in which this item could be segregated from salaries.

TABLE 4.—*Number of people engaged* [1]

| Line | Item | Absolute numbers (thousands) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees (selected industries) [2] | 2,221 | 2,187 | 1,915 | 1,556 | 100.0 | 98.4 | 86.2 | 70.0 |
| 2 | Wage earners (same industries as in line 1) [2] | 12,219 | 10,677 | 8,890 | 7,131 | 100.0 | 87.4 | 72.8 | 58.4 |
| 3 | Salaried employees or wage earnsre (all other industries) | 20,765 | 20,057 | 18,544 | 16,767 | 100.0 | 96.6 | 89.3 | 80.7 |
| 4 | All employees | 35,205 | 32,921 | 29,349 | 25,453 | 100.0 | 93.5 | 83.4 | 72.3 |
| 5 | Entrepreneurs | 9,020 | 8,889 | 8,704 | 8,677 | 100.0 | 98.5 | 96.5 | 96.2 |
| 6 | All gainfully employed | 44,225 | 41,609 | 38,053 | 34,131 | 100.0 | 94.5 | 86.0 | 77.2 |

[1] In this table, and all subsequent tables relating to number of people employed or engaged, the annual estimates are averages for the calendar year. The numbers represent in some industries a full time equivalent.
[2] Includes mining, manufacturing, construction, steam railroads, Pullman, railway express, and water transportation.

Here again salary and wage earners can be segregated for only a few basic industries; and in those the employment opportunities of salary earners appear to have been reduced less than those of wage earners. For all employees the decline in numbers employed amounted in 1932 to 30 percent from the peak of 1929. The estimates of the number of entrepreneurs engaged are much less reliable. The very concept of employment or active participation is not quite clear in the case of individual entrepreneurs. And for lack of available data, it was necessary to assume in a number of industrial groups a constant number of entrepreneurs for the years after 1930. The slight decline shown in the number of individual entrepreneurs is thus only a minimum indication of the contraction in their number which would be shown if the definition of active participation could be applied more thoroughly.

The totals in table 4 afford some measure of the extent of unemployment resulting from the present depression. Thus, the estimate of 41.8 million gainfully engaged shown for 1930 should be compared with the total of 47.1 million gainfully occupied [5] shown by the Census of Occupations as of April 1, 1930. These totals do not include farm family labor. The number of unemployed in 1930 may thus be estimated as amounting to 5.3 million; in 1931 to 9.0 million; and in 1932 to 13.0 million. These estimates take no account of the increase in the number of employables in 1931 and 1932 who may have to be added to the number gainfully occupied in 1930 and thus to the number of unemployed in 1931 and 1932. If this annual increase in the number of employables be estimated at 703,000 (the annual increment in gainfully occupied from 1920 to 1930, the totals in the 2 years having been corrected for farm family labor), the estimated number of unemployed in 1931 rises to 9.7 million and in 1932 to 14.4 million. On the same basis, the estimated number of unemployed in 1929 would be 2.2 million. There was thus almost a sevenfold increase in the volume of unemployment during the 3 years of the present depression.

[5] Gainful workers, in the usage of the Census of Occupations, include all persons who usually follow a gainful occupation, although they may not have been employed when the census was taken. Gainfully engaged are the workers employed and enterpreneurs actively participating in any industrial activity. In estimating the number of gainfully engaged we reduced, wherever possible, the number of partially employed to an equivalent number of fully employed.

Labor incomes, the totals of which have been presented in table 2, were thus paid out to or withdrawn by a greatly shrunk army of active participants in the economic activities of the nation. It is important to observe the movement in income paid out, when reduced to per employee figures. The results are presented in table 5.

TABLE 5.—*Per capita income of employees and the cost of living*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees (selected industries) [1] | $2,567 | $2,589 | $2,474 | $2,175 | 100.0 | 100.9 | 96.4 | 84.7 |
| 2 | Wage earners (same industries as in line 1) [1] | 1,406 | 1,331 | 1,186 | 959 | 100.0 | 94.7 | 84.4 | 68.2 |
| 3 | Salaried employees or wage earners (all other industries) | 1,399 | 1,386 | 1,328 | 1,211 | 100.0 | 99.1 | 94.9 | 86.6 |
| 4 | All employees | 1,475 | 1,448 | 1,360 | 1,199 | 100.0 | 98.2 | 92.2 | 81.3 |
| 5 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

[1] Includes mining, manufacturing, construction, steam railroads, Pullman, railway express, and water transportation.

The decline in the average income of employees has also been substantial, so that even those who remained on the pay rolls could contribute to their individual or family expenses a smaller volume of money. But this drop in average income was not any greater than the decline in the cost of living. The comparison with the Bureau of Labor Statistics cost of living index suggests that the average compensation has on the whole retained its purchasing power in 1930; and that there was even a slight gain in the purchasing power of the average compensation in 1931, the gain shrinking somewhat in 1932. It must be remembered, however, that the per capita incomes presented in table 5 refer largely to earners employed full time; and should not be interpreted as an average payment made to each earner on the pay roll.

Moreover, in the few basic industrial divisions where salaries and wages could be distinguished, the decline in the average wage was much more drastic than that in the average salary. In these industries, the purchasing power of the average wage declined in 1930 and 1931, but especially strikingly in 1932. One is led to infer that in other industries which suffered from the depression, the average wage has been cut more than the average salary. The depression seems to have put its greatest burden upon those who, in view of their already low position on the economic scale, could least afford to lose.

## 3. DISTRIBUTION BY INDUSTRIAL SOURCES

Knowledge of the general features of economic depressions leads one to expect that various industrial divisions have suffered unequally in the drastic contraction which characterized the period covered by the present report. Some industries, sheltered from the pressure of changing conditions, have continued to give employment and pay out only moderately changed volumes of income to labor and capital engaged in them. Others, more exposed to adverse changes in competitive markets and supplying services which can easily be dispensed

with in bad times, must have shown shrinkages in employment and income greatly in excess of the total for the economic system as a whole.

The distribution of income by the industrial divisions from which it originated offers little difficulty in the case of labor and entrepreneurial incomes. But in the case of interest and dividends, the existence of intercorporate holdings of securities, the prevalence of integrated corporations deriving income from more than one industrial field, and the difficulty of reconciling the industrial classification of the corporate data in Statistics of Income with that in the industrial censuses, render the allocation by industrial sources a task that can be solved only approximately. In using the estimates submitted in tables 6 to 11 it must, therefore, be remembered that for a part of the totals involved, the industrial classification could not be carried through in a clear-cut fashion.

The differential movement in total employment, inclusive of the entrepreneurs attached, in various industrial divisions is given in tables 6 and 7 and portrayed graphically in charts III and IV. The industrial classification in the present chapter distinguishes only the 12 broad divisions, the detailed grouping being presented and discussed in chapters V to XVI.

TABLE 6.—*Number of people engaged, by industrial divisions*

| Line | Item | Absolute numbers (thousands) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 7,592 | 7,511 | 7,448 | 7,288 | 100.0 | 98.9 | 98.1 | 96.0 |
| 2 | Mining | 1,068 | 980 | 819 | 644 | 100.0 | 91.7 | 76.6 | 60.3 |
| 3 | Electric light and power and gas | 336 | 311 | 322 | 283 | 100.0 | 102.3 | 95.7 | 84.0 |
| 4 | Manufacturing | 10,023 | 8,860 | 7,566 | 6,257 | 100.0 | 88.4 | 75.5 | 62.4 |
| 5 | Construction | 1,528 | 1,378 | 1,054 | 673 | 100.0 | 90.2 | 69.0 | 44.1 |
| 6 | Transportation | 3,073 | 2,846 | 2,493 | 2,140 | 100.0 | 92.6 | 81.1 | 69.6 |
| 7 | Communication | 533 | 520 | 449 | 402 | 100.0 | 97.5 | 84.2 | 75.5 |
| 8 | Trade | 7,163 | 6,785 | 6,177 | 5,619 | 100.0 | 91.7 | 86.2 | 78.4 |
| 9 | Finance | 1,422 | 1,388 | 1,275 | 1,135 | 100.0 | 97.6 | 89.7 | 79.8 |
| 10 | Government | 3,003 | 3,156 | 3,127 | 3,122 | 100.0 | 105.1 | 104.1 | 104.0 |
| 11 | Service | 5,535 | 5,276 | 4,810 | 4,283 | 100.0 | 95.3 | 86.8 | 77.3 |
| 12 | Miscellaneous | 2,948 | 2,766 | 2,515 | 2,285 | 100.0 | 93.8 | 85.3 | 77.5 |
| 13 | Total | 44,225 | 41,809 | 38,053 | 34,131 | 100.0 | 94.5 | 86.0 | 77.2 |

TABLE 7.—*Percentage distribution of number of people engaged, by industrial divisions*

| Line | Item | Percentages of total number engaged | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 17.2 | 18.0 | 19.6 | 21.3 |
| 2 | Mining | 2.4 | 2.3 | 2.2 | 1.9 |
| 3 | Electric light and power and gas | .8 | .8 | .8 | .8 |
| 4 | Manufacturing | 22.7 | 21.2 | 19.9 | 18.3 |
| 5 | Construction | 3.5 | 3.3 | 2.8 | 2.0 |
| 6 | Transportation | 6.9 | 6.8 | 6.5 | 6.3 |
| 7 | Communication | 1.2 | 1.2 | 1.2 | 1.2 |
| 8 | Trade | 16.2 | 16.2 | 16.2 | 16.5 |
| 9 | Finance | 3.2 | 3.3 | 3.4 | 3.3 |
| 10 | Government | 6.8 | 7.5 | 8.2 | 9.1 |
| 11 | Service | 12.5 | 12.6 | 12.6 | 12.6 |
| 12 | Miscellaneous | 6.7 | 6.6 | 6.6 | 6.7 |
| 13 | Total | 100.0 | 100.0 | 100.0 | 100.0 |

CHART III



INCOME PAID OUT
BY
INDUSTRIES

BILLIONS
OF
DOLLARS

MISCELLANEOUS
COMMUNICATION
ELEC.LGT.&POWER&GAS
MINING
CONSTRUCTION
AGRICULTURE
GOVERNMENT
TRANSPORTATION
SERVICE
FINANCE
TRADE
MANUFACTURING

90
80
70
60
50
40
30
20
10
0

1929    1930    1931    1932

D.D 7487

37265—34——3

CHART IV

TREND OF INCOME PAID OUT BY
MAJOR INDUSTRIAL DIVISIONS
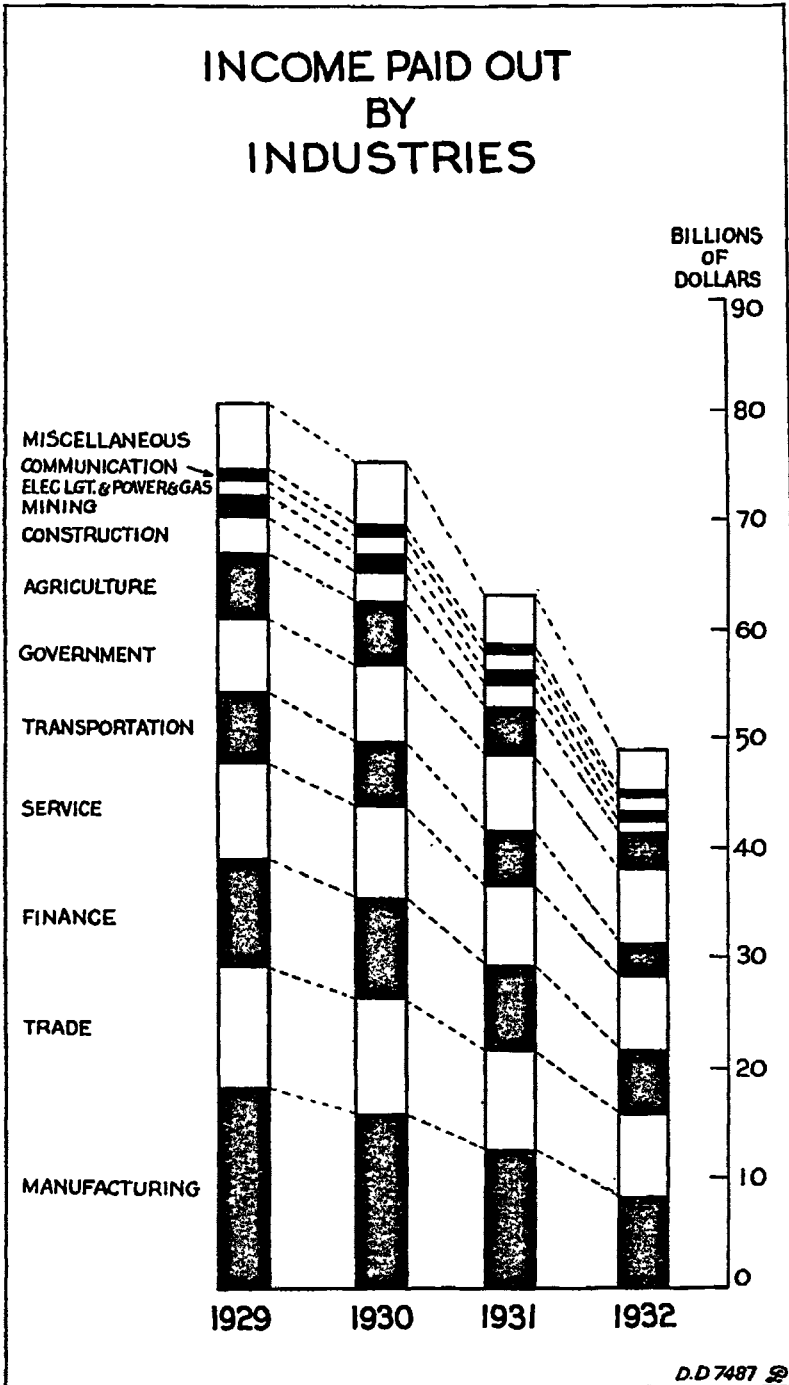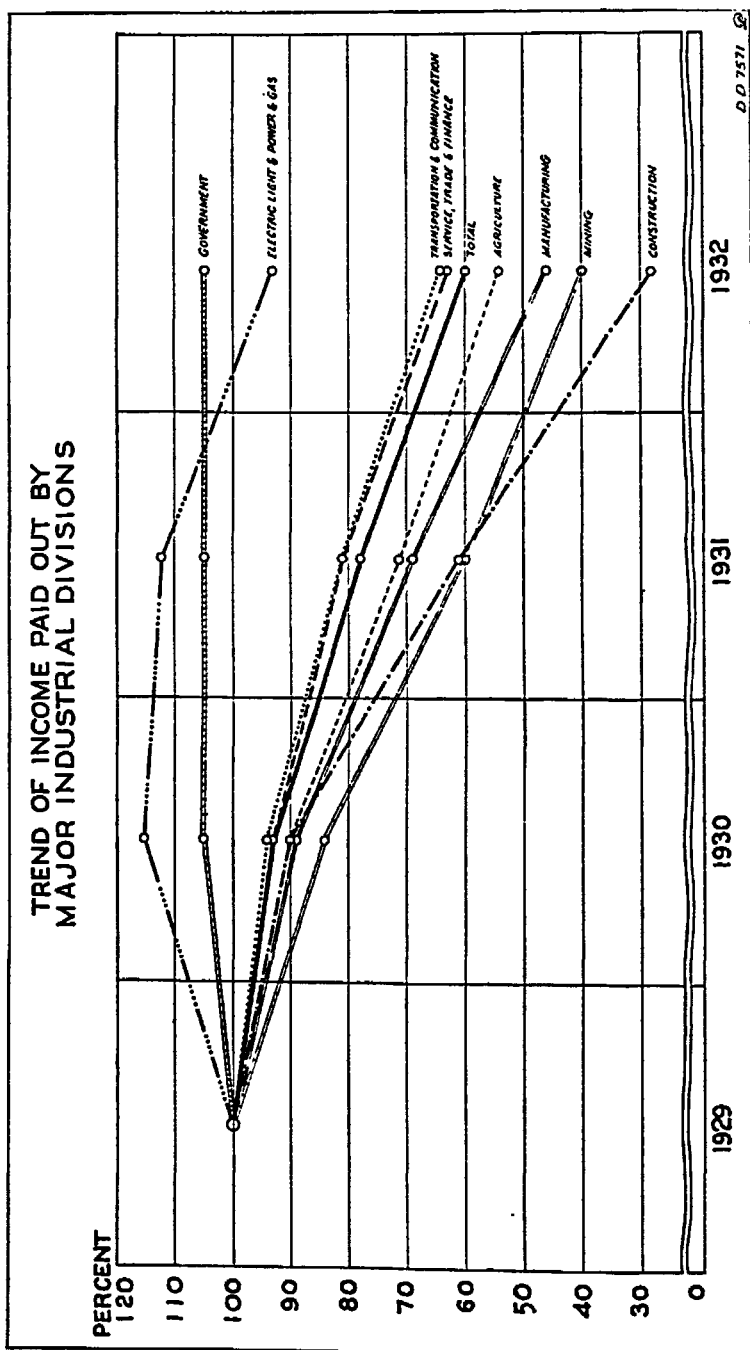
The greatest reduction in the number of people engaged occurred in three basic branches: construction, mining, and manufacturing, especially in the former.   The great decline in the demand for housing, industrial construction, and durable goods in general must have been responsible for the particular severity with which the depression affected these three branches.   If a similar decline in number of people engaged did not occur in agriculture, it was due to the different organization of this industry, with the large number of its small independent entrepreneurs and the impossibility of shifting the burden to any considerable extent by passing it on to the employees in the industry.   On the other hand, two groups escaped the effects of the depression, as far as employment is concerned.   In government, the readjustment was most delayed, due to the general, and to a considerable extent justifiable, slowness of the government mechanism in adapting itself to the changes in the business system proper; and, of course, it may be questioned whether government activity should be curtailed rather than extended during a business depression.   In electric light and power and gas employment declined but little, due to the fact that the growth in the use of electric energy had largely offset the effect of the depression.   Moreover, the stability of the industry's operating revenues due to the rigidity of its rate structure prevented the decline in income and resulting unemployment from going very far.

Table 7 reflects the shift in the proportional importance of the industrial divisions as judged by the numbers engaged in them.   Agriculture and government show the most marked rise, while construction, manufacturing, and mining account for a declining proportion of the working population of the country.

Broadly, similar differences in the impact of the depression upon the various industrial divisions appear when we study the other aspects of income.   This is particularly the case in gross income, which can be measured for some of the industrial divisions in our classification.

TABLE 8.—*Gross income at current prices, selected industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 12,060 | 9,809 | 7,265 | 5,103 | 100.0 | 81.3 | 60.2 | 42. |
| 2 | Mining | 3,989 | 3,248 | 2,104 | 1,718 | 100.0 | 81.4 | 52.7 | 43. |
| 3 | Electric light and power and gas | 2,383 | 2,438 | 2,402 | 2,244 | 100.0 | 102.3 | 100.8 | 94. |
| 4 | Manufacturing | 68,468 | 54,741 | 39,973 | 25,796 | 100.0 | 80.0 | 58.4 | 37. |
| 5 | Construction | 6,971 | 5,573 | 3,808 | 1,700 | 100.0 | 79.9 | 54.6 | 24. |
| 6 | Transportation [1] | 8,009 | 6,903 | 5,628 | 4,377 | 100.0 | 86.2 | 70.3 | 54. |
| 7 | Communication | 1,422 | 1,429 | 1,360 | 1,184 | 100.0 | 100.5 | 95.6 | 83. |
| 8 | Trade | 118,407 | 102,205 | 87,875 | 72,590 | 100.0 | 86.3 | 74.2 | 61. |
| 9 | Recreation and amusement | 2,219 | 1,916 | 1,688 | 1,459 | 100.0 | 86.3 | 76.1 | 65. |

[1] Includes only steam railroads, Pullman, common-carrier busses, street railways, and pipe lines.

TABLE 9.—*Gross income at 1929 prices, selected industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 12,060 | 11,566 | 12,518 | 12,349 | 100.0 | 95.9 | 103.8 | 102.4 |
| 2 | Mining | 3,989 | 3,435 | 2,912 | 2,461 | 100.0 | 86.1 | 73.0 | 61.7 |
| 3 | Electric light and power and gas | 2,383 | 2,375 | 2,278 | 2,039 | 100.0 | 99.7 | 95.6 | 85.6 |
| 4 | Manufacturing | 68,468 | 59,560 | 51,116 | 37,589 | 100.0 | 87.0 | 74.7 | 54.9 |
| 5 | Construction | 6,971 | 6,262 | 4,882 | 2,297 | 100.0 | 89.8 | 70.0 | 33.0 |
| 6 | Transportation [1] | 8,009 | 7,045 | 5,881 | 4,700 | 100.0 | 88.0 | 73.4 | 58.7 |
| 7 | Communication | 1,422 | 1,383 | 1,301 | 1,185 | 100.0 | 97.2 | 91.5 | 83.3 |
| 8 | Trade | 118,407 | 110,295 | 111,384 | 105,107 | 100.0 | 93.1 | 94.1 | 88.8 |

[1] Includes only steam railroads, Pullman, common-carrier busses, street railways, and pipe lines.

Gross income is defined here in the same way as it is used in income tax statistics, namely, as the total intake from the industrial operations of the business establishments (sales by manufacturing, mining, and trading concerns, operating revenues of public utility companies, sales and value of produce retained in the case of farmers). The measurement of this volume in current prices reveals again the comparatively favorable situation of the electric light and power and gas group, and also that of the communication industry (telephone and telegraph). The branches which suffered most from a decline in gross income are agriculture, mining, manufacturing, and especially construction.

In the case of gross income by industrial divisions, some correction for changes in prices may be attempted with somewhat greater precision than is possible in the case of net income (see table 9). When such a price adjustment is introduced, it becomes clear how great a part of the contraction in the gross income was due to the fall of prices. In one important industrial division, viz., agriculture, there was no decline in quantity output altogether. In others, notably electric light and power and gas, communication, and trade, the decline from 1929 to 1932 was not in excess of 15 percent. But in other basic divisions even quantity output showed a marked shrinkage during the period. The decline in mining from 1929 to 1932 was about 40 percent, in manufacturing 45 percent, in construction 67 percent, and in the selected branches of transportation 41 percent.

Tables 10, 11, 12, and 13, which show income paid out, business savings, and income produced by industrial divisions, confirm the impression of the differences in movement already suggested in connection with the estimates of number of people engaged and of gross income. The greatest shrinkage in income paid out occurred in construction, mining, manufacturing, and agriculture. The volume of income payments by government shows again no effect of the depression. In the case of electric light and power and gas, net income paid out again suffered but a comparatively moderate decline from 1929 to 1932.

TABLE 10.—*Income paid out, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 6,361 | 5,720 | 4,517 | 3,459 | 100.0 | 89.9 | 71.0 | 54.4 |
| 2 | Mining | 2,123 | 1,779 | 1,278 | 837 | 100.0 | 83.8 | 60.2 | 39.4 |
| 3 | Electric light and power and gas | 1,306 | 1,503 | 1,461 | 1,216 | 100.0 | 115.1 | 111.9 | 93.1 |
| 4 | Manufacturing | 18,157 | 16,141 | 12,490 | 8,373 | 100.0 | 88.9 | 68.8 | 46.1 |
| 5 | Construction | 3,135 | 2,825 | 1,897 | 864 | 100.0 | 90.1 | 60.5 | 27.6 |
| 6 | Transportation | 6,660 | 6,202 | 5,236 | 4,020 | 100.0 | 93.1 | 78.6 | 60.4 |
| 7 | Communication | 912 | 943 | 887 | 797 | 100.0 | 103.4 | 97.3 | 87.4 |
| 8 | Trade | 11,238 | 10,424 | 9,103 | 7,326 | 100.0 | 92.8 | 81.0 | 65.2 |
| 9 | Finance | 10,054 | 9,265 | 8,006 | 6,183 | 100.0 | 92.1 | 79.6 | 61.5 |
| 10 | Government | 6,456 | 6,763 | 6,792 | 6,796 | 100.0 | 104.8 | 105.2 | 105.3 |
| 11 | Service | 8,479 | 7,968 | 6,731 | 5,273 | 100.0 | 94.0 | 79.4 | 62.2 |
| 12 | Miscellaneous | 6,255 | 5,877 | 4,850 | 3,750 | 100.0 | 94.0 | 77.5 | 60.0 |
| 13 | Total | 81,136 | 75,410 | 63,247 | 48,894 | 100.0 | 92.9 | 78.0 | 60.3 |

TABLE 11.—*Percentage distribution of income paid out, by industrial divisions*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 7.8 | 7.6 | 7.1 | 7.1 |
| 2 | Mining | 2.6 | 2.4 | 2.0 | 1.7 |
| 3 | Electric light and power and gas | 1.6 | 2.0 | 2.3 | 2.5 |
| 4 | Manufacturing | 22.4 | 21.4 | 19.7 | 17.1 |
| 5 | Construction | 3.9 | 3.7 | 3.0 | 1.8 |
| 6 | Transportation | 8.2 | 8.2 | 8.3 | 8.2 |
| 7 | Communication | 1.1 | 1.3 | 1.4 | 1.6 |
| 8 | Trade | 13.9 | 13.8 | 14.4 | 15.0 |
| 9 | Finance | 12.4 | 12.3 | 12.7 | 12.6 |
| 10 | Government | 8.0 | 9.0 | 10.7 | 13.9 |
| 11 | Service | 10.5 | 10.6 | 10.6 | 10.8 |
| 12 | Miscellaneous | 7.7 | 7.8 | 7.7 | 7.7 |
| 13 | Total | 100.0 | 100.0 | 100.0 | 100.0 |

Business savings could not be established for the government, since its whole system of accounting is such that it was impossible within the scope of the present study to segregate properly the government's capital expenditures from its current expenditures. Consequently, one could not treat the excess of government expenditures over revenues as a reliable indication of losses sustained and covered from the extension of the government debt. With this division omitted, the differences in the movement of business savings shown in table 10, confirm the distinctions made above. The only exception is the considerable size of business losses sustained in the electric light and power and gas group, and the comparatively small size of the same losses in the field of construction.

TABLE 12.—*Business savings, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 1,177 | −100 | −651 | −1,227 |
| 2 | Mining | −247 | −464 | −546 | −310 |
| 3 | Electric light and power and gas | −17 | −278 | −283 | −258 |
| 4 | Manufacturing | 1,197 | −1,850 | −2,813 | −2,501 |
| 5 | Construction | −48 | −181 | −229 | −410 |
| 6 | Transportation | 360 | −121 | −368 | −435 |
| 7 | Communication | 107 | 44 | 10 | −57 |
| 8 | Trade | 115 | −939 | −1,737 | −1,918 |
| 9 | Finance | −421 | −617 | −1,394 | −1,569 |
| 10 | Service | −26 | −142 | −209 | −460 |
| 11 | Miscellaneous | −302 | −417 | −383 | −383 |
| 12 | Total | 1,896 | −5,065 | −8,604 | −9,529 |

Net income produced, shown by industrial divisions in table 13, reflects most strikingly, and probably in a somewhat exaggerated form, the full effect of the depression on the dollar volume of income. In agriculture, mining, and manufacturing, the decline from 1929 to 1932 was almost 75 percent and in construction over 85 percent. The decline in transportation, trade, and finance (the latter inclusive of net rents and royalties) approximated 50 percent of the 1929 level. And only in electric light and power and gas and in communication was the shrinkage limited to about 25 percent of the 1929 level. Finally, in income paid to individuals by government agencies, no decline appears at all.

TABLE 13.—*Income produced, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 7,538 | 5,620 | 3,866 | 2,232 | 100.0 | 74.6 | 51.3 | 29.6 |
| 2 | Mining | 1,876 | 1,315 | 732 | 527 | 100.0 | 70.1 | 39.0 | 28.1 |
| 3 | Electric light and power and gas | 1,289 | 1,225 | 1,178 | 958 | 100.0 | 95.0 | 91.4 | 74.3 |
| 4 | Manufacturing | 19,354 | 14,292 | 9,677 | 5,873 | 100.0 | 73.8 | 50.0 | 30.3 |
| 5 | Construction | 3,087 | 2,644 | 1,667 | 454 | 100.0 | 85.6 | 54.0 | 14.7 |
| 6 | Transportation | 7,020 | 6,082 | 4,868 | 3,583 | 100.0 | 86.6 | 69.4 | 51.0 |
| 7 | Communication | 1,019 | 987 | 897 | 740 | 100.0 | 97.1 | 88.5 | 73.2 |
| 8 | Trade | 11,353 | 9,484 | 7,366 | 5,408 | 100.0 | 83.5 | 64.9 | 47.6 |
| 9 | Finance | 9,633 | 8,648 | 6,612 | 4,614 | 100.0 | 89.8 | 68.6 | 47.9 |
| 10 | Government | 6,456 | 6,763 | 6,792 | 6,796 | 100.0 | 104.8 | 105.2 | 105.3 |
| 11 | Service | 8,453 | 7,828 | 6,522 | 4,813 | 100.0 | 92.6 | 77.1 | 56.9 |
| 12 | Miscellaneous | 5,953 | 5,460 | 4,467 | 3,367 | 100.0 | 91.7 | 75.0 | 56.6 |
| 13 | Total | 83,032 | 70,345 | 54,643 | 39,365 | 100.0 | 84.7 | 65.8 | 47.4 |

When the movement of net income is compared with changes in gross income (in those industrial divisions in which data permit such comparisons), it is found that in most branches income paid out declined during recent years less than did gross income. But in all branches income produced declined more than did gross income, thus suggesting the inference that the cost items not covered under income produced (i.e., cost of goods, taxes, depreciation and depletion, bad debts, interest payments to other business establishments, rents to other business establishments) have declined much less than did gross incomes. This is but another confirmation of the inference that the negative savings shown in tables 1 and 12 are only partly to be accounted for by a sustention of net income payments. They are to be explained to a large extent by the covering of such rigid cost items as do not appear, at least directly, in the form of incomes paid to individuals.

# CHAPTER III

## LABOR AND ENTREPRENEURIAL INCOME

The discussion in chapters III through XVI is in the nature of refinement upon the broad conclusions established in chapter II. The present chapter and chapter IV following deal with the broad divisions by types of payment. Chapters V through XVI deal with each of the 12 industrial divisions established in our classification of national income by industrial sources.

### 1. LABOR INCOME

Individual entrepreneurs are important in but a few of the industrial divisions of the country's economic system. With the exception of agriculture, trade, service, and to some extent transportation, industries are organized upon the principle of separation of ownership from active participation in the process of production. The distribution of the number of employees among the various industrial divisions appears, therefore, quite similar to the distribution of the total number of people engaged, as may be seen from a comparison of table 14 with table 6. For some industrial divisions, such as electric light and power and gas, communication, and government, the figures in the two tables are identical. Consequently, contraction of employment, which appears as a result of the depression, tends to show the same differences in movement among the various divisions. The constant volume of employment in the government field, the moderate contraction in public utilities, other than transportation, the very drastic shrinkage in construction—these all confirm the observations made in chapter II.

TABLE 14.—*Number of employees (full-time equivalent), by industrial divisions*

| Line | Item | Absolute numbers (thousands) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 2,027 | 1,890 | 1,748 | 1,484 | 100.0 | 93.2 | 86.2 | 73.2 |
| 2 | Mining | 1,054 | 966 | 804 | 630 | 100.0 | 91.6 | 76.3 | 59.8 |
| 3 | Electric light and power and gas | 336 | 344 | 322 | 283 | 100.0 | 102.3 | 95.7 | 84.0 |
| 4 | Manufacturing | 9,890 | 8,752 | 7,474 | 6,192 | 100.0 | 88.5 | 75.6 | 62.6 |
| 5 | Construction | 1,360 | 1,210 | 886 | 505 | 100.0 | 89.0 | 65.2 | 37.2 |
| 6 | Transportation | 2,905 | 2,672 | 2,320 | 1,979 | 100.0 | 92.0 | 79.9 | 68.1 |
| 7 | Communication | 533 | 520 | 449 | 402 | 100.0 | 97.5 | 84.2 | 75.5 |
| 8 | Trade | 5,562 | 5,350 | 4,964 | 4,489 | 100.0 | 96.2 | 89.2 | 80.7 |
| 9 | Finance [1] | 1,422 | 1,388 | 1,275 | 1,135 | 100.0 | 97.6 | 89.7 | 79.8 |
| 10 | Government | 3,003 | 3,156 | 3,127 | 3,122 | 100.0 | 105.1 | 104.1 | 104.0 |
| 11 | Service | 4,858 | 4,596 | 4,148 | 3,628 | 100.0 | 94.6 | 85.4 | 74.7 |
| 12 | Miscellaneous | 2,255 | 2,077 | 1,833 | 1,605 | 100.0 | 92.1 | 81.3 | 71.2 |
| 13 | Total | 35,205 | 32,921 | 29,349 | 25,453 | 100.0 | 93.5 | 83.4 | 72.3 |

[1] Includes insurance agents.

Total labor income paid out, which includes, in addition to compensation paid to active employees, compensation for injury and pensions (a comparatively small item), shows in all branches, with

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the exception of government, a greater decline than does the number of employees (see table 15). Here, again, the difference in the impact of depression upon the various industrial groups stands out very clearly. It is interesting to observe, however, that in addition to construction, mining, and manufacturing, labor incomes in agriculture are also among those which show the greatest shrinkage since 1929.

TABLE 15.—*Labor income paid out, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 1,313 | 1,112 | 807 | 523 | 100.0 | 84.7 | 61.5 | 39.8 |
| 2 | Mining | 1,639 | 1,413 | 1,024 | 677 | 100.0 | 86.2 | 62.5 | 41.3 |
| 3 | Electric light and power and gas | 531 | 550 | 515 | 384 | 100.0 | 103.7 | 97.1 | 72.3 |
| 4 | Manufacturing | 14,954 | 12,969 | 10,113 | 6,961 | 100.0 | 86.5 | 67.5 | 46.5 |
| 5 | Construction | 2,620 | 2,291 | 1,535 | 689 | 100.0 | 87.5 | 58.6 | 26.3 |
| 6 | Transportation | 4,970 | 4,521 | 3,783 | 2,867 | 100.0 | 91.0 | 76.2 | 57.7 |
| 7 | Communication | 713 | 722 | 649 | 542 | 100.0 | 101.3 | 91.0 | 76.1 |
| 8 | Trade | 8,209 | 7,687 | 6,837 | 5,597 | 100.0 | 93.6 | 83.3 | 68.2 |
| 9 | Finance [1] | 3,246 | 3,167 | 2,798 | 2,223 | 100.0 | 97.6 | 86.2 | 68.5 |
| 10 | Government | 4,984 | 5,280 | 5,352 | 5,277 | 100.0 | 105.9 | 107.4 | 105.9 |
| 11 | Service | 5,932 | 5,524 | 4,700 | 3,713 | 100.0 | 93.1 | 79.2 | 62.6 |
| 12 | Miscellaneous | 3,652 | 3,345 | 2,778 | 2,079 | 100.0 | 91.6 | 76.1 | 56.9 |
| 13 | Total | 52,793 | 48,582 | 40,696 | 31,533 | 100.0 | 92.0 | 77.5 | 59.7 |

[1] Includes compensation of insurance agents.

Per capita incomes of employees, shown in table 16, are interesting both for absolute differences in average compensation shown from one industrial division to the next, and for the difference in movement. The highest per capita compensation in 1929, that in finance, is probably exaggerated somewhat by the inclusion of insurance agents, but would nevertheless remain the highest average, even omitting the latter. The low average compensation in agriculture also conforms to our general knowledge of the various industries.

TABLE 16.—*Per capita income of employees, by industrial divisions*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | $648 | $588 | $462 | $352 | 100.0 | 90.7 | 71.3 | 54.3 |
| 2 | Mining | 1,531 | 1,438 | 1,248 | 1,049 | 100.0 | 93.9 | 81.5 | 68.5 |
| 3 | Electric light and power and gas | 1,561 | 1,581 | 1,580 | 1,339 | 100.0 | 101.3 | 101.2 | 85.8 |
| 4 | Manufacturing | 1,508 | 1,474 | 1,344 | 1,115 | 100.0 | 97.7 | 89.1 | 73.9 |
| 5 | Construction | 1,904 | 1,866 | 1,695 | 1,315 | 100.0 | 98.0 | 89.0 | 69.1 |
| 6 | Transportation | 1,681 | 1,658 | 1,596 | 1,409 | 100.0 | 98.6 | 94.9 | 83.8 |
| 7 | Communication | 1,319 | 1,369 | 1,419 | 1,320 | 100.0 | 103.8 | 107.6 | 100.1 |
| 8 | Trade | 1,474 | 1,435 | 1,375 | 1,245 | 100.0 | 97.4 | 93.3 | 84.5 |
| 9 | Finance [1] | 2,282 | 2,282 | 2,193 | 1,958 | 100.0 | 100.0 | 96.1 | 85.8 |
| 10 | Government | 1,466 | 1,473 | 1,483 | 1,448 | 100.0 | 100.5 | 101.2 | 98.8 |
| 11 | Service | 1,216 | 1,196 | 1,126 | 1,015 | 100.0 | 98.4 | 92.6 | 83.5 |
| 12 | Miscellaneous | 1,615 | 1,605 | 1,507 | 1,285 | 100.0 | 99.4 | 93.3 | 79.6 |
| 13 | All industries | 1,475 | 1,448 | 1,360 | 1,199 | 100.0 | 98.2 | 92.2 | 81.3 |
| 14 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

[1] Includes insurance agents.

Marked declines in the per capita compensation of employees occurred in agriculture, mining, construction, and manufacturing; while per capita incomes in the communication and government

groups remained comparatively unchanged. The decline in payment of farm workers cannot be compared with the changes in the cost of living index of the Bureau of Labor Statistics. For the other branches the comparison suggests that, with the exception of mining, there was little contraction in the purchasing power of the average income of employees in 1930 or 1931. But in 1932 the situation changed materially. In mining, manufacturing, and construction there occurred a drop in average compensation greater than the decline in the cost of living, with a resulting contraction in the purchasing power of even the employed and working class.

It is somewhat misleading to speak of employees and of their average compensation as if they formed a homogeneous group with an equal distribution of ability and compensation. There are obviously marked gradations in status and compensation, which ought to be studied fully in order to learn more precisely the nature of recent changes in the flow of labor incomes. To begin with, available data permit a distinction of the salary earning from the wage earning group in four basic industrial divisions. The difference in the impact of the depression upon employment and earnings of these two groups is shown clearly in tables 17 through 19.

Table 17 indicates that in every one of the branches the reduction in the number of employed salary earners was more moderate than the contraction in the number of wage earners. In none of the branches did a significant reduction in the number of salary earners set in until after 1930, while the numbers of wage earners had already been reduced in 1930 by at least 10 percent from the 1929 level. In every year and in every branch, the employment index of salary earners (in terms of the 1929 volume as 100) was higher than the employment index of wage earners. The cumulative effect of unemployment upon wage earners, with its early increase in 1930 and greater proportions throughout the following period, was much more burdensome than it was upon the salary earners.

TABLE 17.—*Number of salaried employees and wage earners, selected industrial divisions*

| Line | Item | Absolute numbers (thousands) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Mining: | | | | | | | | |
| | Salaried employees | 99 | 98 | 84 | 68 | 100.0 | 99.5 | 85.1 | 68.8 |
| | Wage earners | 956 | 868 | 721 | 562 | 100.0 | 90.8 | 75.4 | 58.8 |
| 2 | Manufacturing: | | | | | | | | |
| | Salaried employees | 1,503 | 1,491 | 1,321 | 1,084 | 100.0 | 99.2 | 87.9 | 72.1 |
| | Wage earners | 8,387 | 7,260 | 6,152 | 5,108 | 100.0 | 86.6 | 73.4 | 60.9 |
| 3 | Construction: | | | | | | | | |
| | Salaried employees | 155 | 157 | 119 | 73 | 100.0 | 101.2 | 77.0 | 46.9 |
| | Wage earners | 1,205 | 1,053 | 767 | 433 | 100.0 | 87.4 | 63.7 | 35.9 |
| 4 | Transportation:[1] | | | | | | | | |
| | Salaried employees | 465 | 440 | 391 | 331 | 100.0 | 94.8 | 84.1 | 71.2 |
| | Wage earners | 1,672 | 1,496 | 1,250 | 1,028 | 100.0 | 89.5 | 74.8 | 61.5 |
| 5 | Total: | | | | | | | | |
| | Salaried employees | 2,221 | 2,187 | 1,915 | 1,556 | 100.0 | 98.4 | 86.2 | 70.0 |
| | Wage earners | 12,219 | 10,677 | 8,890 | 7,131 | 100.0 | 87.4 | 72.8 | 58.4 |

[1] Includes only steam railroads, Pullman, railway express, and water transportation.

The same difference, only more intensified, appears in the movement of salaries and wages for the same industrial divisions (see table 18). The volume of salary payments in 1930 was about the

same as in 1929 and declined by 1932 to roughly 60 percent of the 1929 volume except in construction. The volume of wages had already suffered in 1930 a drop of almost 20 percent from the preceding year, and by 1932 its decline amounted to about 60 percent of the 1929 level. This greater decline of wages as compared with salaries appeared in each of the four industrial divisions in every year.

TABLE 18.—*Salaries and wages paid, selected industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Mining: | | | | | | | | |
| | Salaries | 247 | 243 | 216 | 150 | 100.0 | 98.3 | 87.4 | 60.8 |
| | Wages | 1,367 | 1,146 | 788 | 511 | 100.0 | 83.9 | 57.7 | 37.4 |
| 2 | Manufacturing: | | | | | | | | |
| | Salaries | 4,013 | 4,030 | 3,378 | 2,429 | 100.0 | 100.4 | 84.2 | 60.5 |
| | Wages | 10,899 | 8,866 | 6,669 | 4,474 | 100.0 | 81.3 | 61.2 | 41.1 |
| 3 | Construction: | | | | | | | | |
| | Salaries | 455 | 451 | 321 | 167 | 100.0 | 99.2 | 70.7 | 36.7 |
| | Wages | 2,134 | 1,806 | 1,181 | 498 | 100.0 | 84.7 | 55.4 | 23.3 |
| 4 | Transportation:[1] | | | | | | | | |
| | Salaries | 988 | 937 | 824 | 637 | 100.0 | 94.8 | 83.4 | 64.5 |
| | Wages | 2,781 | 2,391 | 1,903 | 1,357 | 100.0 | 86.0 | 68.5 | 48.8 |
| 5 | Total: | | | | | | | | |
| | Salaries | 5,702 | 5,661 | 4,738 | 3,383 | 100.0 | 99.3 | 83.1 | 59.3 |
| | Wages | 17,179 | 14,210 | 10,542 | 6,840 | 100.0 | 82.7 | 61.4 | 39.8 |

[1] Includes only steam railroads, Pullman, railway express, and water transportation.

Table 19 indicates that in spite of the fact that in 1929 the average salary ran from 30 to 100 percent higher than the average wage in the designated industrial divisions, the reduction in the average salary was proportionately smaller than in the average wage. Indeed, the average compensation of salary earners was not seriously affected until 1932, the last year of the period studied, while the average wage had already been materially cut in 1931, and in mining as early as 1930. The figures thus suggest rather forcibly the greater impact of the depression upon the wage earners, the large body of our working population who are likely to feel most painfully any contraction in their otherwise none-too-high incomes.

TABLE 19.—*Per capita salaries and wages, selected industrial divisions*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Mining: | | | | | | | | |
| | Salary | $2,504 | $2,474 | $2,571 | $2,210 | 100.0 | 98.8 | 102.7 | 88.3 |
| | Wage | 1,430 | 1,321 | 1,094 | 900 | 100.0 | 92.4 | 76.5 | 63.6 |
| 2 | Manufacturing: | | | | | | | | |
| | Salary | 2,669 | 2,703 | 2,556 | 2,241 | 100.0 | 101.3 | 95.8 | 84.0 |
| | Wage | 1,300 | 1,221 | 1,084 | 876 | 100.0 | 93.9 | 83.4 | 67.4 |
| 3 | Construction: | | | | | | | | |
| | Salary | 2,937 | 2,879 | 2,695 | 2,297 | 100.0 | 98.0 | 91.8 | 78.2 |
| | Wage | 1,771 | 1,715 | 1,540 | 1,151 | 100.0 | 96.8 | 87.0 | 65.0 |
| 4 | Transportation:[1] | | | | | | | | |
| | Salary | 2,126 | 2,127 | 2,108 | 1,924 | 100.0 | 100.0 | 99.2 | 90.5 |
| | Wage | 1,663 | 1,598 | 1,523 | 1,319 | 100.0 | 96.1 | 91.6 | 79.3 |
| 5 | Above industries: | | | | | | | | |
| | Salary | 2,567 | 2,589 | 2,474 | 2,175 | 100.0 | 100.9 | 96.4 | 84.7 |
| | Wage | 1,406 | 1,331 | 1,186 | 959 | 100.0 | 94.7 | 84.4 | 68.2 |

[1] Includes only steam railroads, Pullman, railway express, and water transportation.

A comparison of the average salary and wage in the four industrial divisions in table 19 with the movement of the Bureau of Labor Statistics cost of living index, indicates that the average salary (with the exception of that in construction in 1932) has gained in purchasing power. It is doubtful, however, whether this particular index of the cost of living is a proper measure to use in the case of salary earners. But in the case of average wages a material reduction in purchasing power was noted in mining and manufacturing in 1931, and in all the four industrial divisions in 1932.

It is important to consider whether the results of the comparisons in tables 17 to 19 can be extended to the differential movement of salaries and wages in the other industrial divisions. In some of the latter such a distinction would not be significant (agriculture, government, and partly finance). As to those fields in which there does exist a definite cleavage between the salaried and wage earning group, the inference should be based upon the movement of total labor income. Where its movement is similar to that in one of the industrial divisions in table 18, we may infer, with some plausibility, that the differential movement of salaries and wages is also similar. In those other divisions, salary earners must have also suffered a smaller contraction of income than did wage earners.

It would be interesting to carry the distinction somewhat further and attempt to segregate the salaried employees themselves into principal and others. There is little doubt that with the development of big corporations and the separation of ownership from management, the principal corporate officers remain employees only in the formal sense of the word. They are performing entrepreneurial functions, and by virtue of their powers, are entrepreneurs in all but the title. The inclusion of their compensation in labor income is thus to a considerable extent misleading. And if their compensation could be segregated, it would deserve special classification. Such a segregation is possible, however, only for a few industrial divisions and mostly for a single year. Table 20 presents these figures for six industries. In all, except steam railroads, number and compensation refer to what the Census designates as principal corporate officers. In railroads the group includes, in addition to the latter, some of the upper managerial personnel, such as division superintendents.

TABLE 20.—*Number and salaries of principal officers and of other salaried employees, selected industrial divisions*

| Line | Item | Year | Number of principal officers | Number of other salaried employees | Salaries of principal officers (thousands of dollars) | Other salaries (thousands of dollars) | Average salary of principal officers | Average salary of other salaried workers |
|---|---|---|---|---|---|---|---|---|
| 1 | Mining | 1929 | 6,384 | 46,947 | 31,375 | 107,648 | $4,915 | $2,293 |
| 2 | Manufacturing | 1929 | 169,227 | 1,334,052 | 1,132,027 | 2,850,938 | 6,689 | 2,160 |
| 3 | Railroads, steam | 1929 | 28,217 | 368,368 | 129,779 | 705,518 | 4,599 | 1,915 |
| 4 | Wholesale trade | 1929 | 65,739 | 1,539,303 | 385,222 | 2,624,908 | 5,860 | 1,705 |
| 5 | Street railways | 1927 | 1,723 | 26,122 | 8,770 | 47,877 | 5,090 | 1,833 |
| 6 | Telegraph | 1927 | 90 | 26,100 | 871 | 37,423 | 9,678 | 1,434 |

It may be seen that the average salary in the principal group is much higher than that of all other salary earners, the ratios running from about 7 to 1 in telegraphs, to 2.2 to 1 in mining. In point of

numbers, the principal group amounts to about one tenth of the total, except telegraphs, where it is less than 1 percent of the total, and in wholesale trade where it is about 4 percent. We thus have a small fraction of the total body of employees in receipt of average compensation running to about 4 to 10 times as high as that of the average wage earner.

Some light on the movement of incomes of these employees may be gathered from the item "compensation of officers" reported by corporations to the income tax authorities and tabulated in Statistics of Income. Data are available at present only through 1931, and are compared with the movement of total salaries for selected industrial branches in table 21.

TABLE 21.—*Compensation of corporate officers and total salaries, selected industrial divisions*

| Line | Item | Absolute numbers (thousands of dollars) | | | Percentages of 1929 | | |
|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1929 | 1930 | 1931 |
| | COMPENSATION OF OFFICERS | | | | | | |
| 1 | Mining | 56, 310 | 50, 856 | 44, 976 | 100. 0 | 90. 3 | 79. 9 |
| 2 | Manufacturing | 1, 171, 888 | 1, 095, 929 | 935, 348 | 100. 0 | 93. 5 | 79. 8 |
| 3 | Construction | 163, 933 | 158, 401 | 129, 629 | 100. 0 | 96. 6 | 79. 1 |
| 4 | Water transportation | 12, 131 | 10, 798 | 10, 249 | 100. 0 | 89. 0 | 94. 5 |
| 5 | Air transportation | 1, 426 | 1, 740 | 2, 448 | 100. 0 | 122. 0 | 171. 7 |
| | TOTAL SALARIES | | | | | | |
| 6 | Mining | 246, 881 | 242, 774 | 215, 735 | 100. 0 | 98. 3 | 87. 4 |
| 7 | Manufacturing | 4, 012, 965 | 4, 030, 394 | 3, 377, 528 | 100. 0 | 100. 4 | 84. 2 |
| 8 | Construction | 454, 604 | 451, 142 | 321, 193 | 100. 0 | 99. 2 | 70. 7 |
| 9 | Water transportation | 92, 607 | 84, 630 | 74, 377 | 100. 0 | 91. 4 | 80. 3 |
| 10 | Air transportation | 6, 501 | 8, 202 | 10, 245 | 100. 0 | 126. 2 | 157. 6 |

In most cases, compensation of officers (which includes bonuses and other types of compensation besides salaries) shows a greater decline after 1929 than does the volume of total salaries paid (except in construction, water transportation, and air transportation in 1931). The differences, however, are comparatively mild, and one wonders whether great significance is to be attributed to them. It must be remembered that compensation of officers is a deduction item, and the importance of its precise statement in the income tax return declines as a corporation incurs losses. There might be thus a bias toward more incomplete reporting of compensation of officers. But even disregarding this possible bias, it appears that the salaries of the principal officers are not cut to any significantly greater proportions than are those of the salary earning body as a whole. There is thus no tendency to distribute the burden of economy according to capacity to bear.

## 2. ENTREPRENEURIAL INCOMES

It was suggested in chapter II, and it is obvious from the description of sources and methods of estimates in appendix A, that our figures on number and incomes of individual entrepreneurs, with the exception of those for agriculture and service, are at best but well-considered guesses. Little importance is, therefore, to be attributed to the minor changes in numbers or incomes which appear in tables 22 through 24.

Thus, to the fact that the total number of entrepreneurs shows but little decline from 1929 to 1932 is not to be attributed too much sig-

nificance. But this failure of the total to contract does show that for farmers and entrepreneurs in the field of service, bad business does not bring with it an immediate separation from activity, for the simple reason that one's economic activity is bound with the whole pattern of life, in which changes cannot be made very easily. What does occur is a marked contraction of income.

TABLE 22.—*Number of entrepreneurs, by industrial divisions*

| Line | Item | Absolute numbers (thousands) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 5,565 | 5,621 | 5,700 | 5,804 | 100.0 | 101.0 | 102.4 | 104.3 |
| 2 | Mining, manufacturing, and construction | 315 | 290 | 274 | 247 | 100.0 | 92.0 | 87.0 | 78.3 |
| 3 | Transportation | 169 | 174 | 173 | 161 | 100.0 | 103.1 | 102.5 | 95.6 |
| 4 | Trade | 1,601 | 1,435 | 1,213 | 1,130 | 100.0 | 89.6 | 75.7 | 70.6 |
| 5 | Service | 677 | 680 | 662 | 656 | 100.0 | 100.3 | 97.8 | 96.8 |
| 6 | Miscellaneous | 692 | 689 | 682 | 680 | 100.0 | 99.5 | 98.5 | 98.2 |
| 7 | Total | 9,020 | 8,889 | 8,704 | 8,677 | 100.0 | 98.5 | 96.5 | 96.2 |

The estimates in table 23 indicate a very marked shrinkage in income produced by individual entrepreneurs, the most conspicuous being in the basic fields of agriculture, mining, manufacturing, construction, and trade. That in all these fields individual entrepreneurs have been drawing during recent years upon their capital appears plausible. It is quite possible that the estimates exaggerate the losses sustained by individual entrepreneurs, especially in fields other than agriculture and service, where we had to use the corporate profit-and-loss ratio in order to arrive at the estimates. For unincorporated establishments, with their much smaller capital per establishment, it may have been impossible to sustain such a relative loss (proportionately to the volume of business) as can be sustained by a large corporation with capital reserves. It is, therefore, important to exercise caution in using these estimates.

TABLE 23.—*Income produced and withdrawals by entrepreneurs, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | WITHDRAWALS | | | | | | | | |
| 1 | Agriculture | 4,519 | 4,096 | 3,218 | 2,460 | 100.0 | 90.6 | 71.2 | 54.4 |
| 2 | Mining, manufacturing, and construction | 887 | 811 | 626 | 364 | 100.0 | 91.5 | 70.8 | 41.0 |
| 3 | Transportation | 299 | 313 | 295 | 240 | 100.0 | 104.8 | 98.6 | 80.3 |
| 4 | Trade | 2,402 | 2,181 | 1,817 | 1,512 | 100.0 | 90.8 | 75.7 | 62.9 |
| 5 | Service | 2,345 | 2,235 | 1,868 | 1,428 | 100.0 | 95.3 | 79.7 | 60.9 |
| 6 | Miscellaneous | 1,568 | 1,489 | 1,275 | 1,021 | 100.0 | 95.0 | 81.3 | 65.1 |
| 7 | Total | 12,020 | 11,127 | 9,102 | 7,024 | 100.0 | 92.6 | 75.7 | 58.4 |
| | INCOME PRODUCED | | | | | | | | |
| 8 | Agriculture | 5,696 | 3,996 | 2,567 | 1,233 | 100.0 | 70.2 | 45.1 | 21.6 |
| 9 | Mining, manufacturing, and construction | 766 | 356 | 81 | −217 | 100.0 | 46.5 | 10.5 | _____ |
| 10 | Transportation | 298 | 296 | 272 | 208 | 100.0 | 99.2 | 91.1 | 69.8 |
| 11 | Trade | 2,505 | 1,843 | 966 | 515 | 100.0 | 73.6 | 38.6 | 20.5 |
| 12 | Service | 2,348 | 2,201 | 1,763 | 1,261 | 100.0 | 93.7 | 75.1 | 53.7 |
| 13 | Miscellaneous | 1,568 | 1,489 | 1,275 | 1,021 | 100.0 | 95.0 | 81.3 | 65.1 |
| 14 | Total | 13,181 | 10,181 | 6,923 | 4,021 | 100.0 | 77.2 | 52.5 | 30.5 |

If the estimate of income produced rests upon insecure foundations, the estimate of income withdrawn is still more approximate, for it is very difficult to penetrate within the individual entrepreneur's economy and discover how much he withdraws for his personal and family needs. Indeed, many an entrepreneur does not know it himself. We had to base our estimates of withdrawals upon either the total volume of salaries or salaries and wages, or the ratio of compensation of officers and dividends paid to the corporate volume of business applied to the volume of business by unincorporated establishments.

The decline in withdrawals, based as it was largely upon the movement of employee incomes, moves quite similarly to the latter. Of more interest are the per capita withdrawals shown in table 24. The differences in absolute size of these average withdrawals among the various industrial divisions seem significant. The higher average in the field of service, with its large body of professional people, and the low return in agriculture appear to conform to our general knowledge of the economic areas. Less importance is to be attributed to the differences in movement of the per capita withdrawals, although the greater decline of this figure in agriculture, and in the combined groups of mining, manufacturing, and construction, does appear of some significance. On the other hand, the relatively favorable movement of the average in trade may be due to an overestimate of the decline in numbers, and a resulting overestimate of the per capita withdrawals.

TABLE 24.—*Per capita withdrawals of entrepreneurs, by industrial divisions*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture_____ | $812 | $729 | $565 | $421 | 100.0 | 89.8 | 69.6 | 52.2 |
| 2 | Mining, manufacturing, and construction_____ | 2,815 | 2,798 | 2,291 | 1,474 | 100.0 | 99.4 | 81.4 | 52.4 |
| 3 | Transportation_____ | 1,775 | 1,803 | 1,708 | 1,491 | 100.0 | 101.6 | 96.3 | 84.0 |
| 4 | Trade_____ | 1,500 | 1,520 | 1,498 | 1,338 | 100.0 | 101.3 | 99.9 | 89.2 |
| 5 | Service_____ | 3,461 | 3,289 | 2,821 | 2,177 | 100.0 | 95.0 | 81.5 | 62.9 |
| 6 | Miscellaneous_____ | 2,264 | 2,161 | 1,870 | 1,502 | 100.0 | 95.5 | 82.6 | 66.3 |
| 7 | Average_____ | 1,333 | 1,252 | 1,046 | 810 | 100.0 | 93.9 | 78.5 | 60.8 |

## PROPERTY INCOME

It was indicated in chapter II that the allocation of property income paid to individuals by industrial sources from which they originate offers difficulties for two reasons: (1) in the case of vertically integrated corporations, the data on property income do not permit as fine an allocation by industrial sources as is possible in the case of data on production and on labor income; (2) with intercorporate holdings of securities, interest and dividends paid out by a given corporation do not necessarily flow into the hands of individuals but may be received by another corporation. The first difficulty cannot be overcome precisely, since it is impossible, and to some extent undesirable, to refine the property income measurement to any greater degree than is adopted by the corporate unit itself. It is possible, however, to solve the second problem in a satisfactory, if somewhat cumbersome, fashion.

In the case of individual payments, the available data permit one to distinguish for every corporate group the volume of dividends received and that of cash dividends paid (total dividend payments). It is then possible to establish for every corporate group the volume of dividends originated—i.e., the volume paid out of operating revenues as distinct from a transfer of dividends received on security holdings. These dividends originated are not the volume of dividends paid by the given corporate group directly to individuals; they are the contribution by the given corporate group to the total fund of dividends which go to individuals. How much a given corporate group paid out directly to individuals in property income could be ascertained only if the distribution of securities of this particular group between individuals and business establishments were known. Such data are not available. Consequently, it is only when one adds together the volume of dividends originated in each corporate group that the volume of dividend payments received by individuals becomes known.

In arriving at the volume of dividends paid to individuals the adjustment is made for dividend receipts by corporations only. Possible receipts of dividends by unincorporated business establishments are neglected.

In the case of interest payments two assumptions are made: (1) That interest on short-term debt (of less than 2 years' duration), with the exception of interest on savings deposits, is all paid to corporations or business establishments and none to individuals directly; (2) that with the exception of holdings by public utility companies, bond and mortgage holdings of industrial corporations are confined primarily to government securities. Here, again, as in the case of dividends, the estimated interest originated is equal to total interest payments on long-term debt minus receipts of interest on bonds held by the given corporate group; and here, again, interest payments

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originated do not measure the volume of payments by the given corporate group directly to individuals, but the original contribution by the given corporate group to the total fund of interest payments going to individuals.

When dividends and interest originated in various industrial groups are added up, the resulting total is an estimate of property-income payments received by individuals. Even then, however, it does not constitute a volume of payments made directly to individuals, each taken singly. Part of these payments is received by savings banks, life insurance companies, charitable and educational foundations, building and loan associations. All these organizations were treated in this report as associations of individuals for the purpose of a better management of their savings. The volume of payments going to these associations was assumed to accrue to the benefit of the individuals and was not segregated from the total, the available data not easily permitting such a segregation. The approximate magnitude of this part may be gaged from the fact that in 1929 the income from investments of banks (commercial and savings) was 900 million dollars, of life insurance companies, 800 million, and of building and loan associations about 500 million.[1] Since a considerable volume of interest payments are received also by private universities, hospitals, charitable foundations, etc., the totals of property income thus diverted from going directly to individuals may have amounted in 1929 to between 2.5 to 3 billion dollars, thus constituting about 25 percent of the total property income paid to individuals. The flow of property income to individuals may thus be divided into two unequal streams—the larger flowing directly into the hands of individuals, the other flowing into the hands of various types of savings and nonprofit organizations to be eventually transferred to individual consumers.

Table 25 summarizes the movement of property incomes originating in the various industrial divisions of the country's economic system. It may be seen that the biggest contributions to the total property income fund come from manufacturing, transportation (i.e., primarily steam railroads), finance (i.e., primarily interest on mortgage debt on real estate), and government. These four groups together account for about two thirds of the total in 1929 and in 1932.

TABLE 25.—*Dividends and interest payments originated, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 529 | 512 | 492 | 476 | 100.0 | 96.8 | 93.0 | 90.0 |
| 2 | Mining | 414 | 293 | 184 | 113 | 100.0 | 70.7 | 44.5 | 27.3 |
| 3 | Electric light and power and gas | 775 | 953 | 946 | 832 | 100.0 | 122.8 | 122.0 | 107.3 |
| 4 | Manufacturing | 2,792 | 2,867 | 2,127 | 1,255 | 100.0 | 102.7 | 76.2 | 45.0 |
| 5 | Construction | 79 | 101 | 53 | 14 | 100.0 | 127.5 | 67.3 | 18.2 |
| 6 | Transportation | 1,390 | 1,368 | 1,153 | 912 | 100.0 | 98.4 | 82.9 | 65.6 |
| 7 | Communication | 199 | 221 | 238 | 254 | 100.0 | 111.1 | 119.8 | 127.9 |
| 8 | Trade | 626 | 555 | 449 | 218 | 100.0 | 88.6 | 71.7 | 34.8 |
| 9 | Finance | 2,692 | 2,623 | 2,457 | 2,094 | 100.0 | 97.4 | 91.3 | 77.8 |
| 10 | Government | 1,472 | 1,483 | 1,439 | 1,520 | 100.0 | 100.8 | 97.8 | 103.2 |
| 11 | Service | 202 | 200 | 162 | 133 | 100.0 | 103.4 | 80.4 | 65.7 |
| 12 | Miscellaneous | 1,035 | 1,042 | 797 | 650 | 100.0 | 100.7 | 77.0 | 62.8 |
| 13 | Total | 12,206 | 12,226 | 10,498 | 8,472 | 100.0 | 100.2 | 86.0 | 69.4 |

[1] The estimate for banks is derived by applying an average rate of return to the item of investment reported on the balance sheets of banks in the Annual Report of the Comptroller of the Currency. The estimate for life insurance companies is taken from the summary of their accounts in the Life Insurance Year Books of the Spectator Co. The estimate for building and loan associations is obtained by applying a 6 percent rate to the volume of urban mortgage real estate debt held by them in 1929, as estimated in Internal Debts of the United States, Evans Clark, editor, New York, 1933, ch. 3, p. 69.

In three of the industrial divisions there was an actual increase in the volume of net property incomes originated: government, electric light and power and gas, and communication (i.e., primarily the telephone industry). Surprisingly enough, the volume of payments originated in agriculture declined only moderately. But this was due to the preponderance of fixed debt and absence of dividend payments in the field; besides, the estimate in this field by the Department of Agriculture takes no account of defaults. An especially drastic contraction in the volume of payments occurred in mining, manufacturing, construction, and trade—all fields in which the funded debt is of small magnitude as compared with capital stock, and in which, therefore, a reduction in payment was possible without throwing the enterprises into bankruptcy or exposing them to the mercy of the creditors. It is to be noted that in these fields the decline in property income originated was more, rather than less, drastic than that in labor and entrepreneurial incomes (with the exception of manufacturing in 1930, dividend payments having held up in that year). Thus, the failure of total property income to decline as much as did total labor and entrepreneurial income was due partly to the sustention of property incomes by the public utilities other than transportation, partly to the general sustention of interest payments on bonds and mortgage debt.

Tables 26 and 27 summarize the estimates of the volume of dividend payments paid by and originating in the various industrial divisions. A comparison of the totals shows that of some 8 billion dollars of total dividend payments, more than one quarter is received by corporations, and only about 6 billion dollars are paid out to individuals and savings associations. Comparing dividends, total and originated, branch by branch, it may be observed that the biggest recipients of dividends from other corporations must be within the groups of manufacturing, electric light and power and gas, and especially the miscellaneous group (which includes holding companies and lessors, investment trusts, etc.).

TABLE 26.—*Total dividend payments, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 27 | 20 | 21 | 21 | 100.0 | 75.5 | 77.8 | 77.8 |
| 2 | Mining | 425 | 303 | 173 | 95 | 100.0 | 71.2 | 40.8 | 22.3 |
| 3 | Electric light and power and gas | 739 | 830 | 751 | 578 | 100.0 | 112.2 | 101.6 | 78.2 |
| 4 | Manufacturing | 3,161 | 3,165 | 2,289 | 1,288 | 100.0 | 100.1 | 72.4 | 40.8 |
| 5 | Construction | 76 | 109 | 60 | 6 | 100.0 | 144.3 | 79.2 | 7.8 |
| 6 | Transportation | 844 | 819 | 602 | 342 | 100.0 | 97.0 | 71.3 | 40.6 |
| 7 | Communication | 172 | 199 | 213 | 207 | 100.0 | 116.2 | 123.8 | 120.8 |
| 8 | Trade | 625 | 561 | 433 | 176 | 100.0 | 89.8 | 69.3 | 28.2 |
| 9 | Finance | 923 | 803 | 709 | 490 | 100.0 | 87.0 | 76.8 | 53.1 |
| 10 | Service | 135 | 129 | 95 | 69 | 100.0 | 95.5 | 70.3 | 51.4 |
| 11 | Miscellaneous | 1,036 | 1,045 | 624 | 611 | 100.0 | 101.0 | 60.2 | 59.0 |
| 12 | Total | 8,162 | 7,984 | 5,969 | 3,884 | 100.0 | 97.8 | 73.1 | 47.6 |

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TABLE 27.—*Dividend payments originated, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 20 | 13 | 17 | 17 | 100.0 | 65.0 | 85.0 | 85.0 |
| 2 | Mining | 365 | 249 | 138 | 72 | 100.0 | 68.2 | 37.9 | 19.7 |
| 3 | Electric light and power and gas | 413 | 565 | 506 | 383 | 100.0 | 137.0 | 122.6 | 92.8 |
| 4 | Manufacturing | 2,577 | 2,617 | 1,896 | 1,048 | 100.0 | 101.5 | 73.6 | 40.7 |
| 5 | Construction | 62 | 85 | 40 | 4 | 100.0 | 135.8 | 64.0 | 6.3 |
| 6 | Transportation | 740 | 693 | 475 | 240 | 100.0 | 93.7 | 64.2 | 32.5 |
| 7 | Communication | 155 | 182 | 200 | 201 | 100.0 | 117.0 | 128.6 | 129.7 |
| 8 | Trade | 566 | 497 | 386 | 163 | 100.0 | 87.8 | 68.2 | 28.9 |
| 9 | Finance | 775 | 665 | 591 | 421 | 100.0 | 85.8 | 76.6 | 54.3 |
| 10 | Service | 104 | 103 | 71 | 53 | 100.0 | 98.8 | 67.8 | 50.4 |
| 11 | Miscellaneous | 187 | 127 | -10 | -14 | 100.0 | 68.0 | | |
| 12 | Total | 5,964 | 5,795 | 4,313 | 2,588 | 100.0 | 97.2 | 72.3 | 43.4 |

Dividends being the elastic part of property incomes, their movement by industrial divisions reflects the differential impact of the depression upon the various sectors of our economic system. The greatest contraction in volume originated occurred in mining, manufacturing, construction, trade, transportation, and the miscellaneous group. The basic fields of mining, manufacturing, and construction have been shown to have been affected most in the movement of other types of income. The appearance on the list of the miscellaneous group, trade and transportation is not very significant, since in these branches dividend income is of auxiliary importance and as such may have been allowed to reflect depression conditions more than would have been the case in a substantial income stream. Electric light and power and gas, and the communication fields, show the least effects of the depression.

It is of interest to note that the decline in dividends originated has been somewhat more drastic than in dividends paid out, especially in 1932. While the difference is rather small, it does suggest that corporate holders of capital stock were more fortunate in their choice than the individual holders.

Interest payments paid and originated by industrial divisions are shown in tables 28 and 29. There is much less difference between the two measures of interest payments than there is between those for dividends, partly because there is actually much less intercorporate holding of bonds than of stocks, partly because of the assumption made by us that only government securities are held by industrial corporations. There is thus little difference in movement between table 28 and table 29.

TABLE 28.—*Total interest payments on long-term debt, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 509 | 499 | 475 | 459 | 100.0 | 98.0 | 93.3 | 90.2 |
| 2 | Mining | 60 | 54 | 54 | 48 | 100.0 | 89.7 | 89.6 | 80.3 |
| 3 | Electric light and power and gas | 365 | 392 | 443 | 452 | 100.0 | 107.5 | 121.3 | 123.4 |
| 4 | Manufacturing | 307 | 327 | 306 | 277 | 100.0 | 106.5 | 99.7 | 90.2 |
| 5 | Construction | 21 | 21 | 17 | 13 | 100.0 | 98.6 | 83.3 | 64.8 |
| 6 | Transportation | 700 | 722 | 723 | 714 | 100.0 | 103.1 | 103.2 | 101.9 |
| 7 | Communication | 71 | 69 | 61 | 64 | 100.0 | 97.2 | 86.2 | 90.2 |
| 8 | Trade | 72 | 76 | 75 | 65 | 100.0 | 105.5 | 104.1 | 89.7 |
| 9 | Finance | 2,194 | 2,215 | 2,106 | 1,905 | 100.0 | 100.9 | 96.0 | 86.8 |
| 10 | Government | 1,472 | 1,483 | 1,439 | 1,520 | 100.0 | 100.8 | 97.8 | 103.2 |
| 11 | Service | 99 | 107 | 93 | 81 | 100.0 | 108.2 | 93.8 | 81.9 |
| 12 | Miscellaneous | 331 | 358 | 305 | 305 | 100.0 | 108.2 | 92.3 | 92.2 |
| 13 | Total | 6,202 | 6,323 | 6,097 | 5,902 | 100.0 | 102.0 | 98.3 | 95.2 |

TABLE 29.—*Interest payments on long-term debt originated, by industrial divisions*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Agriculture | 500 | 490 | 475 | 459 | 100.0 | 98.0 | 93.3 | 90.2 |
| 2 | Mining | 48 | 44 | 46 | 41 | 100.0 | 90.1 | 94.5 | 84.4 |
| 3 | Electric light and power and gas | 363 | 388 | 440 | 450 | 100.0 | 106.9 | 121.4 | 123.9 |
| 4 | Manufacturing | 215 | 250 | 230 | 208 | 100.0 | 116.6 | 107.4 | 96.7 |
| 5 | Construction | 17 | 17 | 14 | 11 | 100.0 | 97.4 | 79.3 | 61.6 |
| 6 | Transportation | 650 | 675 | 678 | 672 | 100.0 | 103.7 | 104.2 | 103.3 |
| 7 | Communication | 44 | 39 | 38 | 53 | 100.0 | 90.1 | 88.3 | 121.8 |
| 8 | Trade | 61 | 58 | 63 | 54 | 100.0 | 95.7 | 104.3 | 89.8 |
| 9 | Finance | 1,917 | 1,958 | 1,863 | 1,674 | 100.0 | 102.1 | 97.2 | 87.3 |
| 10 | Government | 1,472 | 1,483 | 1,439 | 1,520 | 100.0 | 100.8 | 97.8 | 103.2 |
| 11 | Service | 98 | 106 | 92 | 80 | 100.0 | 108.3 | 93.9 | 82.0 |
| 12 | Miscellaneous | 253 | 299 | 270 | 270 | 100.0 | 105.5 | 95.5 | 95.5 |
| 13 | Total | 5,677 | 5,815 | 5,619 | 5,491 | 100.0 | 102.4 | 99.5 | 96.7 |

The biggest contributors to the total fund of interest payments are the divisions of finance (which includes payments on real estate mortgage debt), government, transportation (i.e., primarily steam railroads), and agriculture, with its farm mortgages. These four divisions account for about 80 percent of the total.

The effect of the depression upon these interest payments is observable only in a few branches, viz., construction, mining, finance, service—all of which, with the exception of finance, are not very important in the total. The public utilities as a whole, including railroad transportation, appear not only to have sustained their interest payments but even increased them after 1929, especially the electric light and power and gas industry. There was scarcely any change in interest payments by government agencies through 1932, and but a slight decline, quite possibly underestimated, in the case of agriculture. As a result, total payment of interest to individuals shows but a slight decline in 1932 as compared with 1929; and a similar statement can be made in regard to gross interest payments.

Since property income declined during the period under study to an extent more moderate than did labor incomes, it is interesting to ascertain how these two types of payment are distributed among groups distinguished by the size of their total income. Are property incomes received primarily by the richer groups in our economy, and did, therefore, the less appreciable contraction of these income streams tend to favor the higher income classes as against the low income groups?

A partial answer to this question may be obtained from the tabulation of income tax returns by individuals. These returns are classified by the size of net income reported, and for each of the net income groups the items of wages and salaries, dividends, interest and other income, and net rents and royalties are added up separately. The resulting totals are complete only for individuals reporting net income above $5,000. It may be seen, then, what proportion of the country's total wages and salaries, dividends, interest, and rents and royalties paid to individuals is accounted for by these comparatively well-to-do groups with a net income of over $5,000. The results of this comparison are shown in table 30.

TABLE 30.—*Percentage of total wages and salaries, dividends, interest, and rents and royalties received by individuals reporting net income of over $5,000*

| Line | Item | 1929 | 1930 | 1931 | 1932 |
|---|---|---|---|---|---|
| | **WAGES AND SALARIES** | | | | |
| 1 | Total (millions of dollars)_____ | 51, 933 | 47, 664 | 39, 901 | 30, 525 |
| 2 | Received by individuals reporting net income over | | | | |
| | $5,000 (millions of dollars)_____ | 5, 179 | 4, 408 | 3, 320 | 2, 072 |
| 3 | Percentage of (2) to (1)_____ _____ | 10. 0 | 9. 2 | 8. 3 | 6. 8 |
| | **DIVIDENDS** | | | | |
| 4 | Total (millions of dollars)_____ | 5, 964 | 5, 795 | 4, 313 | 2, 588 |
| 5 | Received by individuals reporting net income over | | | | |
| | $5,000 (millions of dollars)_____ | 4, 247 | 3, 709 | 2, 584 | 1, 513 |
| 6 | Percentage of (5) to (4)_____ | 71.2 | 64. 0 | 59. 9 | 58. 4 |
| | **INTEREST** | | | | |
| 7 | Total (millions of dollars)_____ | 5, 677 | 5, 815 | 5, 649 | 5, 491 |
| 8 | Received by individuals reporting net income over | | | | |
| | $5,000 (millions of dollars)[1]_____ | 1, 298 | 1, 056 | 775 | 535 |
| 9 | Percentage of (8) to (7)_____ | 22. 9 | 18. 2 | 13. 7 | 9. 7 |
| | **RENTS AND ROYALTIES** | | | | |
| 10 | Total (millions of dollars)_____ | 4, 116 | 3, 475 | 2, 752 | 1, 865 |
| 11 | Received by individuals reporting net income over | | | | |
| | $5,000 (millions of dollars)_____ | 649 | 479 | 306 | 160 |
| 12 | Percentage of (11) to (10)_____ | 15. 8 | 13. 8 | 11. 1 | 8. 6 |

[1] Excludes wholly tax-exempt interest.

Only a small fraction of wages and salaries is reported by this group. A much larger proportion of dividends, ranging from 71 percent in 1929 to 58 percent in 1932, is received by individuals with net income above $5,000. The proportion in the case of interest is appreciably smaller than in the case of dividends, but that may largely be due to the fact that a considerable fraction of interest payments is retained by savings banks, life insurance companies, foundations, private universities, building and loan associations, etc. It may be suggested that over 2 billion dollars in interest was received by these organizations in 1929. It is difficult to say to what particular income classes the eventual benefits from these various associations accrue. But it goes without saying that were such a study to be made, the percentage of interest payments going to the higher income groups would have to be raised beyond those shown in table 30. Low percentages are shown also for net rents and royalties, but here, again, some of them are received by the savings associations; however, there may well be considerable receipts of rents among groups with net income below $5,000.

It must also be noted that the net-income classes used by Statistics of Income are based upon a net income inclusive of gains and losses from sale of capital assets and profit and loss from business operations. The effect of such inclusion was during recent years to shift individuals in the upper income levels into low net income classes. To the decline of the percentages after 1929 is therefore not to be attributed too much significance.

Table 30 suggests rather forcibly that, by and large, a much more considerable proportion of property incomes than of labor incomes is received by individuals with net income above $5,000—a group which constitutes the richer stratum of our income recipient population. The fact, therefore, that property incomes showed a smaller decline than did labor incomes allows the inference that even quantitatively the burden of the depression, when measured by decline of income paid out, was greater upon the low income classes than upon the high income groups. That the decline in welfare which this contraction in incomes spelt to their recipients was much greater in the case of the low income groups than in the higher income classes, appears beyond reasonable doubt.

# CHAPTER V

## AGRICULTURE

While the last half century witnessed a marked decline in the importance of agriculture in the economic system of this country, farming still occupies a place of prominence. According to the census for 1930, the farm population amounted to 30.4 million people out of the country's total population of 122.8 million, thus accounting for 24.8 percent; in the same year, the number of people gainfully employed in agriculture was 10.5 million of the country's total of 48.8 million, a matter of 21.5 percent.

Farm population has increased during recent years, especially in 1931 and 1932 (see table 31). The number of persons leaving farms for cities declined from an annual average of 2.15 millions during the years 1925–29 to 1.40 millions during 1930–32; while between the same periods the average number of persons arriving annually at farms from cities has risen from 1.55 to only 1.66 millions.[1] Thus, the data suggest that the increase in farm population was due more to the fact that the farm-reared people remained on the farm than to city people moving to the farm. However, the depression not only tended to discourage the farm boy and the farm girl from going to the city and seeking employment, but practically forced many who had gone to the city in prosperous years to return to the farm for subsistence. The movement back to the farm or to rural communities was probably greater than indicated by the available data. It is a common observation that many abandoned houses and farmsteads throughout the country have been reoccupied. These people probably are not adequately represented in the returns on questionnaires sent out to farmers by the Department of Agriculture.

The number of farms has shown little change; and, accordingly, the number of farm operators in table 31 shows scarcely any movement.[2] What did change was the opportunity open to farmers to engage in occupations other than farming. As a result the proportion of farm operators' time employed in occupations other than agriculture has declined, and the theoretical number of farmers devoting full time to agriculture has risen slightly from 1929 to 1932.

Since the increase in farm population was due primarily to a larger proportion of the growing generation staying on the farm, and the number of farms remained approximately the same, it was reasonable to infer that the rise in farm population resulted in increasing numbers

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[1] See The Agricultural Situation, U.S. Department of Agriculture, May 1933, pp. 4–5.

[2] These estimates tend, however, to omit subsistence farms. Although agriculture on the whole has not been a profitable industry in the past 3 years, and there has been no encouragement for expanding agricultural production generally by the addition of new lands under cultivation, many families have returned to the land for aid and subsistence. Consequently, while there has been no great change in the number of farm business units, that is, in the number of farm operating units that would classify under the census as a farm, there probably are many more people living upon the land. It is even more difficult to secure accurate data as to the number of farms than to determine accurately the number of people living in the country on farms. The number of farm units of 3 acres or more of land has probably increased more than indicated by reports from farmers. But the increase has been in subsistence farming and not in commercial agriculture.

of farm workers, both wage earners and family labor. The estimate for these two groups combined shows a rise of 12 percent between 1929 and 1932, from 4.3 to 4.8 millions. This rise, of course, took place in the number of persons in these particular occupational groups, and not in the number of persons actually employed. In the case of farm wage earners, the only group in the farming industry for which employment has definite meaning, the equivalent number of fully employed (i.e., through the complete season of a farm worker's employment) declined from about 2 millions in 1929 to 1.5 millions in 1932.

Gross income, that is, the money value of all goods produced by farmers, excluding crops fed to livestock, has shown a precipitous drop from 1929 to 1932, the total decline amounting to 58 percent of the 1929 total (see table 32). During the past quarter of a century, the only decline in gross agricultural income at all comparable with the present took place between 1919 (gross income of 16,935 million dollars) and 1921 (8,927 million dollars), a drop of 47 percent.

This decline in gross income from total agricultural production was apportioned unequally among the various groups of farm products. The income from some groups, such as dairy products, poultry and eggs, fruits and vegetables, did not decline as deeply as the total. In other groups, notably grains, and cotton and cottonseed, the decline in gross income was most marked. It is of some significance that those groups of farm products in which gross income declined least were largely commodities of domestic consumption, commodities which, on the whole, are little processed before sale to ultimate consumers. On the other hand, the groups of farm products in which the decline in gross income was most marked were commodities of which a large share flows to the world markets and in which a considerable volume of transportation and processing intervenes before the product reaches the final consumer.

The drastic contraction in gross income from agriculture was not due to any material decline in the volume of goods produced by farmers, but almost exclusively to the decline in prices received by farmers for their produce. This is shown clearly in table 33, which presents indexes of the quantity volume of farm production for sale and for consumption in the farm home, production fed to livestock or used for seed being excluded.

In two commodity groups there was an actual rise from 1929 to 1932 in the volume produced (fruits and vegetables and dairy products), while in others there was a most insignificant drop in 1932 (poultry products and meat animals). Grains did show a decline in the quantity of output, but even that was true primarily of 1932 as against 1931, and the decline was only a small fraction of the steady drop shown in the dollar value of the gross income. The total volume of output of farm produce showed but a small decline in 1932 from 1931, and was higher than that for 1929 or for 1930.

If farmers were a self-contained group, that is, if they supplied their needs for living and production exclusively with farm products, the decline in the money value of their income in the face of a constant commodity volume of their production, would imply no adverse change in their economic position (in absence of a sharp rise in farm population). But farmers have to buy production materials and equipment as well as a number of necessities of life from industries

other than agriculture; and they are carrying financial obligations, both to private finance and to the government. The prices of all these goods and services supplied to the farmers by other industries have declined much less sharply than have the prices received by farmers for their products. As a result the residual share of farm wage earners and independent farm operators has suffered a marked decline. These facts are brought out prominently in tables 34, 35, and 36.

Table 34 shows the apportionment of agricultural gross income among payments to other industries, the allowance for replacement of farm operators' capital consumed in production, and the net income of the group engaged in farming, i.e., farm wage earners and independent farm operators. It should be noted at the outset that the various groups of farmers' expenses are estimated by the Department of Agriculture not as payments actually made but as deductions that should be allowed in proper accounting in arriving at net income. Hence, the figures in table 34 do not take account of defaults on rent, interest, or taxes; of failure to pay for labor or for current production expenses; or of the disparity between capital expenditures and the charges for depreciation and obsolescence.

Payments to other industries or economic groups include not only disbursements to manufacturers and other entrepreneurs who supply farmers with productive equipment and materials (current production expenses), but also those to the land-owning group (rent), to the financial organizations or individuals who supply capital (interest), and to the government (taxes) which supplies other services. The deductions going into all these various channels have declined between 1929 and 1932 by the following percentages: current production expenses, 45; rent, 49; interest, only 13; and taxes, only 20. None of these declines was as marked as that in gross income, and as a result the share of these various expenses in gross income has risen appreciably, especially so in the case of interest and taxes.

˙ The total share of payments to other industries or economic groups in the gross income increased from 34 percent in 1929 to 49 percent in 1932. This rise took place not because farmers were buying a volume of commodities and services larger relatively to the quantity volume of their output but because the prices they were paying for these commodities and services had not fallen as low as the prices they were receiving for their own products. This was manifestly the case with such payments as rent and taxes. As to interest, the Department of Agriculture estimates that the indebtedness of farm operators declined from 9,482 million dollars at the beginning of 1929 to 8,375 million dollars at the beginning of 1932.[3] The average interest rate paid by farmers has thus declined from 6.02 percent in 1929 to about 5.92 percent in 1932, a relative drop of only 1.7 percent. Similarly, prices paid by farmers for commodities used in production declined by only 26 percent between 1929 and 1932,[4] as contrasted with a drop of 59 percent in prices received by farmers for their products. The value of farmers' current production expenses, adjusted for price changes, thus shows a decline of 26 percent from 1929 to 1932.

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[3] See Income from Farm Production in the United States, mimeograph release by the Bureau of Agricultural Economics, April 1933, table 8.
[4] See indexes of prices paid and received by farmers in current issues of the Agricultural Situation or Crops and Markets.

The allowance for depreciation and obsolescence is an estimate of the cost of farmers' depreciable capital (buildings used in production, farm equipment, and tools) consumed in current farm operations. This allowance is estimated on the basis of the average life of the capital goods in question, and may, therefore, be at variance with the actual situation during the recent years, deeply affected as they were by the agricultural depression. The depression may have resulted in farmers abnormally prolonging the useful life of some of these capital goods, and thus reducing the allowable depreciation rate. Or, some capital goods may have been discarded completely because of the costliness of their operation, and hence the base to which the depreciation and obsolescence rates are to be applied may be somewhat narrower than the one used in the present estimate.

Including the depreciation and obsolescence allowance as it is presented in table 34, the combined deductions from gross income rose from 42 percent of the total in 1929 to 65 percent in 1932. The residual share of net income remaining for farm laborers and independent farm operators consequently shows a drastic decline. Farm wages have, on the whole, accounted for a fairly constant ratio of gross income through the 4 years. But the share of independent farm operators has not only declined in absolute figures to less than one fourth of the amount in 1929, but has dropped in relation to gross income from 47 percent in 1929 to 25 percent in 1932.

The constituent parts of farm wages and farm operators' net income appear in table 35. It is to be seen that a substantial part of net income from agricultural production is derived in the form of commodities or services. Thus, in 1929, of the total net income produced by farm operators and workers (compensation of employees, labor allowance of operators, and business savings), or 7,009 million dollars, 1,751 million dollars, or about one quarter, was paid in commodities or services (1,393 million dollars' worth of commodities retained by farmers for own consumption, 239 million dollars' worth of commodities consumed as board by farm workers, and 119 million dollars' worth of perquisites [5] to farm wage earners). The cash received by farmers for their products in 1929 accounted for 76 percent of the net income produced by them and the products retained by them for their own consumption (excluding board of farm laborers) for only 24 percent. By 1932, the relative importance of cash and commodity incomes had been reversed, the percentages being 32 and 68, respectively. The same result does not appear for the income of farm workers, the Department of Agriculture assuming a constant proportion between the value of the board and perquisites and the cash payment to farm wage earners.

The total net income produced in agriculture includes not only the labor income of farm owners and the entrepreneurial income of farm operators, but also such property income shares as interest and dividends, almost exclusively the former. The total net income produced in agriculture, when computed on a basis comparable to net income in other industries, includes, therefore, in addition to farm wages and operators' net income, interest payments on mortgage indebtedness (but not payments of interest on bank loans, which are

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[5] Lodging, laundry, use of garage or stable when furnished, and in case of married wage earners garden plot and lodging of family.

considered an expense paid to another industry, and not to an income-recipient group) and a small volume of dividend payments. The addition of these items in table 35 changes but little the movement of net income produced.

The full significance of the decline in income from agriculture cannot be gaged until the money figures are adjusted for changes in prices of those products on which the money incomes are spent. An attempt to carry through this adjustment is made in table 37.

It may be seen that the income of farm workers suffered a substantial decline, even when allowance is made for a decline in the prices of the products upon which these incomes are spent. This decline of 35 percent in total income of farm workers appears the more serious when it is considered that the number, whether employed or unemployed, must have risen during the same period about 12 percent. It is curious that the volume of board since 1929 has showed little decline, in view of the decline in the number of farm workers fully employed. This suggests that the adjustment of the value of board by the index of prices received by farmers "overcorrects" the figures for the price decline.

The drop in farm operators' net income remains most substantial, even when allowance is made for the fall in prices paid by them for subsistence products. This decline of over 50 percent in commodity value of their net income is to be compared with an almost complete absence of decline in the commodity volume of their gross income. Here again, the increased importance of commodities in the net income is obvious, commodities accounting for 79 percent of the net income in 1932. This change was due not only to the shrinkage of cash receipts from sales; farmers have been retaining a larger proportion of their produce for their own consumption, obviously under the influence of the unfavorable market situation for their goods. Thus, the quantity volume of commodities retained by farmers for their own consumption increased by 47 percent between 1929 and 1932, while the quantity volume of total farm output has changed little between these two dates.

All estimates discussed in the text above deal with the net income produced in the farm industry, and not with income actually withdrawn by the farm operators. The existing information does not permit a reliable estimate of income withdrawn by farmers. The most reasonable assumption that could be made would be to consider as income withdrawn by farmers an amount equal to the wages of operators and family labor, as estimated in table 35. Consequently, the savings from the farm business as such would be given by the estimates in column 3 of table 35, which show that net losses have been sustained in 1930, 1931, and 1932.

The figures in tables 35 and 37 raise the question as to how farm operators subsisted in the face of the failure to earn an income sufficient to cover even their labor services at a hired labor hand's rate. It should be noted that net income per farm operator, even in 1929 dollars, amounted in 1932 to slightly less than $450, a figure distinctly below the minimum subsistence level for a family. The answer lies in the fact that net income from farming is not the only source of subsistence; that farmers receive income from occupations other than farming; that at least during 1931 and 1932 (if not during 1930) farm operators were drawing upon their capital; that numerous defaults of payment

CHART V



INCOME BY TYPE OF PAYMENT
AGRICULTURE
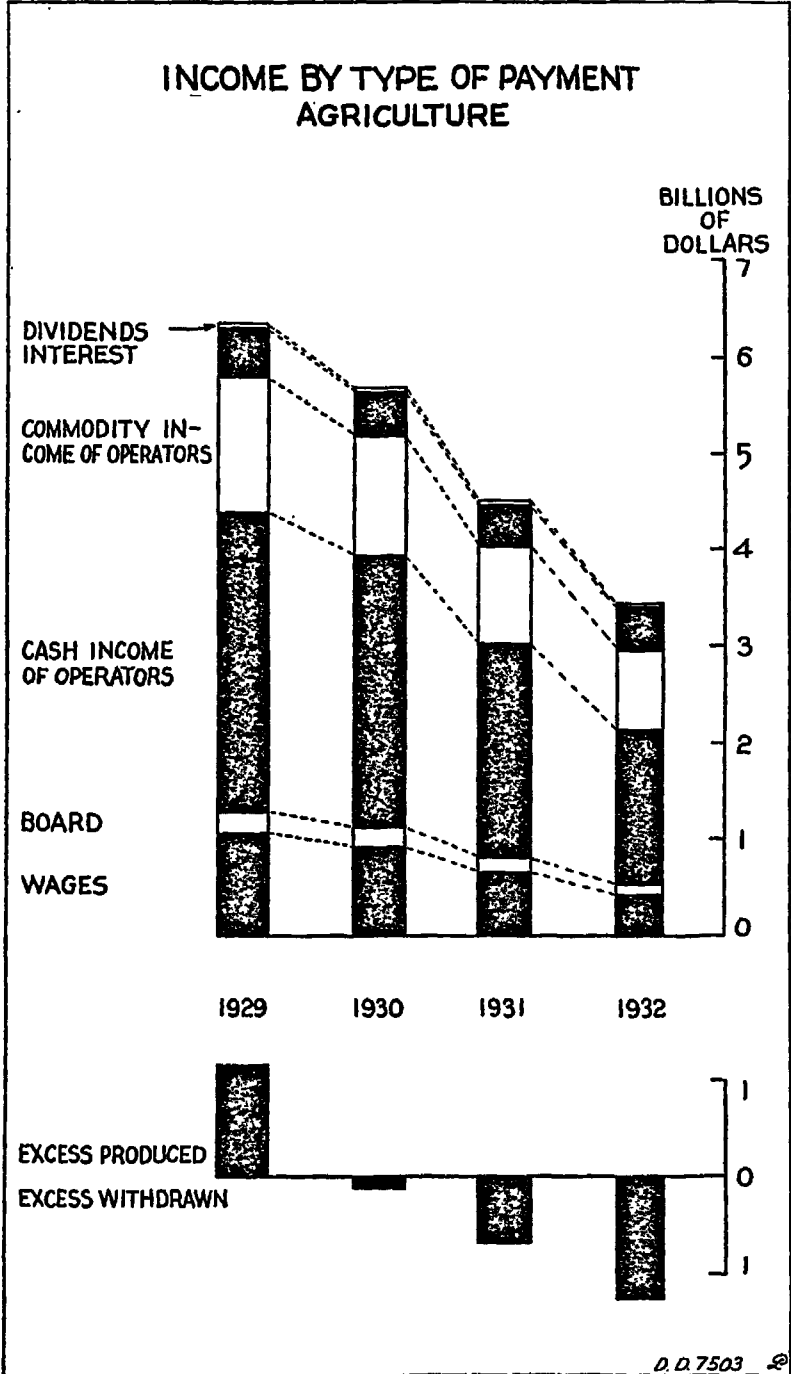
of rent, interest, taxes, and other obligations have occurred. Some partial data serve to support these statements. Thus farmers' capital expenditures on building and equipment amounted to 1,254 million dollars in 1929, exceeding the depreciation and obsolescence allowance in that year by 342 million dollars. In 1932, similar capital expenditures fell to 278 million dollars, and were short of the depreciation and obsolescence allowance for that year by 527 million dollars. The percentage of land and buildings owned by farm operators fell from 70 at the beginning of 1929 to 68.7 at the beginning of 1932.[6] Forced sales of farms for delinquent taxes, foreclosure of mortgages, bankruptcies, etc., were 19.5 per thousand farms in 1929 and 41.7 in 1932.[7] None of these changes is registered in table 34, which is built upon the assumption of full payment of the various expense items as well as of depreciation and obsolescence.

[6] See Income from Farm Production in the United States, mimeographed release of the Bureau of Agricultural Economics, April 1933, tables 4 and 8.
[7] See the Farm Real Estate Situation, 1931-32. Circular No. 261, U.S. Department of Agriculture, January 1933, table 8, p. 37.

# SUMMARY TABLES, AGRICULTURE

### TABLE 31.—*Number of people engaged in farming*

| Line | Item | Absolute numbers (thousands) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Total farm population | 30,213 | 30,377 | 30,913 | 31,742 | | | | |
| 2 | Number gainfully occupied | 10,427 | 10,484 | 10,669 | 10,955 | 100.0 | 100.5 | 102.3 | 105.1 |
| 3 | Farmers—owners and tenants | 6,029 | 6,012 | 6,009 | 6,031 | 100.0 | 99.7 | 99.7 | 100.0 |
| 4 | Farmers—equivalent full time | 5,495 | 5,547 | 5,622 | 5,722 | 100.0 | 100.9 | 102.3 | 104.1 |
| 5 | Managers and other salaried employees | 70 | 74 | 78 | 82 | 100.0 | 105.4 | 111.0 | 116.4 |
| 6 | Wage earners—gainfully occupied | 2,694 | 2,738 | 2,853 | 3,015 | 100.0 | 101.6 | 105.9 | 111.9 |
| 7 | Unpaid family labor | 1,633 | 1,660 | 1,729 | 1,828 | 100.0 | 101.7 | 105.9 | 111.9 |
| 8 | Wage earners—equivalent full time | 2,077 | 1,890 | 1,748 | 1,484 | 100.0 | 93.2 | 86.2 | 73.2 |

### TABLE 32.—*Gross income from agricultural production by groups (at current prices)*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Grains | 1,401 | 925 | 741 | 258 | 100.0 | 66.0 | 52.9 | 18.4 |
| 2 | Fruits, nuts, and vegetables | 1,707 | 1,605 | 1,272 | 963 | 100.0 | 94.0 | 74.5 | 56.4 |
| 3 | Cotton and cottonseed | 1,547 | 870 | 489 | 417 | 100.0 | 56.2 | 31.6 | 27.0 |
| 4 | Other crops (including sugar and tobacco) | 908 | 794 | 566 | 435 | 100.0 | 87.4 | 62.3 | 47.9 |
| 5 | Total crops | 5,563 | 4,194 | 3,068 | 2,073 | 100.0 | 75.4 | 55.2 | 37.3 |
| 6 | Cattle and calves | 1,111 | 951 | 681 | 502 | 100.0 | 85.6 | 61.3 | 45.2 |
| 7 | Hogs | 1,531 | 1,350 | 912 | 538 | 100.0 | 88.2 | 59.5 | 35.1 |
| 8 | Poultry and eggs | 1,230 | 1,050 | 809 | 603 | 100.0 | 85.4 | 65.8 | 49.0 |
| 9 | Dairy products | 2,323 | 2,031 | 1,614 | 1,260 | 100.0 | 87.4 | 69.5 | 54.2 |
| 10 | Other livestock and livestock products (including sheep and wool) | 302 | 233 | 181 | 127 | 100.0 | 77.2 | 59.9 | 42.1 |
| 11 | Total livestock and its products | 6,497 | 5,615 | 4,197 | 3,030 | 100.0 | 86.4 | 64.6 | 46.6 |
| 12 | Total crops and livestock | 12,060 | 9,809 | 7,265 | 5,103 | 100.0 | 81.3 | 60.2 | 42.3 |

### TABLE 33.—*Indexes of gross income from agricultural production (at 1929 prices)*

| Line | Item | Percentages of 1929 | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Grains | 100.0 | 79.9 | 101.5 | 50.5 |
| 2 | Fruits and vegetables | 100.0 | 80.9 | 103.3 | 108.0 |
| 3 | Cotton and cottonseed | 100.0 | 79.9 | 72.8 | 85.2 |
| 4 | Meat animals | 100.0 | 101.4 | 101.2 | 97.5 |
| 5 | Poultry products | 100.0 | 107.8 | 108.9 | 97.4 |
| 6 | Dairy products | 100.0 | 99.4 | 103.6 | 108.4 |
| 7 | Total (includes also tobacco, wool, and hay) | 100.0 | 95.9 | 103.8 | 102.4 |

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TABLE 34.—*Apportionment of gross income from agricultural production*

[Millions of dollars]

| Line | Item | 1929 | 1930 | 1931 | 1932 |
|---|---|---|---|---|---|
| 1 | Gross income | 12,060 | 9,809 | 7,265 | 5,103 |
| 2 | Current production expenses | 1,949 | 1,838 | 1,350 | 1,069 |
| 3 | Rent | 1,110 | 911 | 692 | 570 |
| 4 | Interest | 571 | 558 | 524 | 497 |
| 5 | Taxes | 489 | 480 | 465 | 389 |
| 6 | Total payments to other industries | 4,119 | 3,796 | 3,031 | 2,525 |
| 7 | Depreciation and obsolescence | 912 | 892 | 843 | 805 |
| 8 | Wages | 1,313 | 1,112 | 807 | 523 |
| 9 | Operators' net income [1] | 5,716 | 4,009 | 2,584 | 1,250 |

[1] Includes a small amount of compensation of farm managers and other salaried employees, also cash dividends paid.

TABLE 35.—*Income paid out and produced, agriculture*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Cash wages (including perquisites) | 1,074 | 910 | 660 | 428 | 100.0 | 84.7 | 61.5 | 39.9 |
| 2 | Board allowance | 239 | 202 | 147 | 95 | 100.0 | 84.5 | 61.5 | 39.7 |
| 3 | Total compensation of employees | 1,313 | 1,112 | 807 | 523 | 100.0 | 84.7 | 61.5 | 39.8 |
| 4 | Dividends | 20 | 13 | 17 | 17 | 100.0 | 65.0 | 85.0 | 85.0 |
| 5 | Interest on mortgage debt | 509 | 499 | 475 | 459 | 100.0 | 98.0 | 93.3 | 90.2 |
| 6 | Total property income | 529 | 512 | 492 | 476 | 100.0 | 96.8 | 93.0 | 90.0 |
| 7 | Commodity income of operators | 1,393 | 1,224 | 1,015 | 847 | 100.0 | 87.9 | 72.9 | 60.8 |
| 8 | Cash labor allowance of operators | 3,126 | 2,872 | 2,203 | 1,613 | 100.0 | 91.9 | 70.5 | 51.6 |
| 9 | Total labor allowance of operators | 4,519 | 4,096 | 3,218 | 2,460 | 100.0 | 90.6 | 71.2 | 54.4 |
| 10 | Total income paid out | 6,361 | 5,720 | 4,517 | 3,459 | 100.0 | 89.9 | 71.0 | 54.4 |
| 11 | Business savings | 1,177 | −100 | −651 | −1,227 | | | | |
| 12 | Total income produced | 7,538 | 5,620 | 3,866 | 2,232 | 100.0 | 74.6 | 51.3 | 29.6 |

TABLE 36.—*Percentage distribution of income paid out, agriculture*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Compensation of employees | 20.6 | 19.4 | 17.9 | 15.1 |
| 2 | Dividends | .3 | .2 | .4 | .5 |
| 3 | Interest on mortgage debt | 8.0 | 8.7 | 10.5 | 13.3 |
| 4 | Total property income | 8.3 | 9.0 | 10.9 | 13.8 |
| 5 | Commodity income of operators | 21.9 | 21.4 | 22.5 | 24.5 |
| 6 | Cash withdrawals of operators | 49.1 | 50.2 | 48.8 | 46.6 |
| 7 | Total withdrawals of operators | 71.0 | 71.6 | 71.2 | 71.1 |
| 8 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 37.—*Labor and entrepreneurial income from agricultural production (at 1929 prices)*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | FARM WAGES | | | | | | | | |
| 1 | Cash and perquisites | 1,074 | 964 | 819 | 623 | 100.0 | 89.8 | 76.3 | 58.0 |
| 2 | Board | 239 | 238 | 253 | 230 | 100.0 | 99.6 | 105.9 | 96.2 |
| 3 | Total | 1,313 | 1,202 | 1,072 | 853 | 100.0 | 91.5 | 81.7 | 65.0 |
| | INCOME OF FARM OPERATORS | | | | | | | | |
| 4 | Cash | 4,303 | 2,936 | 1,926 | 561 | 100.0 | 68.2 | 44.8 | 13.0 |
| 5 | Commodity | 1,393 | 1,443 | 1,750 | 2,051 | 100.0 | 103.6 | 125.6 | 147.2 |
| 6 | Total | 5,696 | 4,379 | 3,676 | 2,612 | 100.0 | 76.9 | 64.5 | 45.9 |

# CHAPTER VI

## MINES AND QUARRIES

### 1. THE INDUSTRY AS A WHOLE

Mines and quarries, as defined in this report, are a collective name for all industries engaged in the extraction of minerals and metals and in a limited processing of these products at or near the mines in order to make them suitable for smelting, manufacturing, or other purposes. More substantial processes of transforming the products, such as smelting and refining of metals, the making of cement, lime, gypsum, etc., and processing of stone are definitely excluded, as belonging to the field of manufacturing. This definition is the one followed by the Census of Mines and Quarries, and the data of this census underlie a number of the estimates presented below.

The mining and quarrying industry seems at first to be a conglomeration of separate industrial groups that have little in common with each other. Included in it are branches whose products eventually satisfy the needs of ultimate consumers, such as anthracite and petroleum; and branches whose products are eventually transformed into producers' goods, such as iron and some of the nonferrous ores which form the raw materials for our industrial machinery. In some mining industries the product does not require much processing before it is ready for consumption, e.g., coal; in others it goes through numerous transformations. Some branches of the mining industry are regionally concentrated (e.g., anthracite), others are widely dispersed (stone quarries). Some of the mining industries are well organized and dominated by a few large corporations; others are in a demoralized state, resulting from interregional competition and overcapacity. In short, there appears at first little unity in the mining and quarrying industry as a whole. It is therefore important to study separately the various groups in the industry.

But it is also important to study the industry as a whole, because in spite of all their differences the subgroups under mining and quarrying do have significant elements in common. They are largely industries supplying raw materials rather than finished products, being in this respect in the same class with agriculture. But, unlike farmers, the producers in mining and quarrying have much greater technical control over the volume of output; and they do supply, more than does agriculture, the manufacturing industries which turn out durable goods—a highly significant section of our industrial system. The industry is also distinguished by the fact that all its processes are attached to the location of the original resources. This distinguishes mining and quarrying from some manufacturing industries which turn out semifinished products, e.g., partly raw materials. The location factor materially influences the institutional organization of the mining industry and colors the life of the people who actively participate in it.

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As judged by the number of people engaged in them, mines and quarries and oil wells do not constitute one of the big industrial groups. Table 38 shows an average employment in the industry in 1929 of about 1.1 million, including the small number of independent entrepreneurs. The Census of Occupations shows about 1.15 million gainfully employed, attached to mining. On the whole, then, the industry accounts for between 2 and 3 percent of the total gainfully occupied population of the country.

The effects of the depression are seen in a decline in the total number of people in the industry to 60 percent of the 1929 level, with the result that about 400,000 men have been contributed to the army of unemployed. The decline in employment took place unequally among the various groups of employees. In the salaried group an appreciable drop did not occur until 1931, and even by 1932 the contraction was milder than in the total. It is in the wage earning group that the decline assumed significant proportions as early as 1930, and by 1932 reached the greatest magnitude, a drop of over 40 percent from 1929. This disparity in the effects of depression on the employment of the two labor groups will be found in many other industries.

The gross income of the mining industry, i.e., the value of their production, has also shown an appreciable decline during the depression, as a result of both a decline in prices and in quantity volume of output (see table 39). The quantity volume of production dropped by 1932 to slightly over 60 percent of the 1929 level, thus moving in rough similarity to the number of people engaged in the industry. The dollar value of output at current prices dropped much more; by 1932, it was less than half of the 1929 figure. Indeed, the percentage decline in the gross income from mining was even more appreciable than that in agriculture.

Such a decline in the quantity and dollar volume of the industry's activity was necessarily passed on to the income of the people who participate in the industry by rendering labor services, provide its capital, or undertake its entrepreneurial responsibilities (see table 40 and chart VI).

The total volume of net income paid out seems to have moved with the dollar volume of gross income, declining by 1932 to 40 percent of the 1929 level. In this movement the various groups of income recipients have fared unequally. The salaried employees suffered no appreciable shrinkage in total income until 1931, and were subject to the severest cut between 1931 and 1932. Wages were reduced as early as 1930 and dropped by 1932 to the strikingly low level of 37 percent of the 1929 volume. As usual, interest payment on fixed debt held up well, but dividends were cut sharply in 1930 and by 1932 dwindled to less than one fifth of the 1929 total. The groups favored in the decline were salaried employees and bondholders while the burden of the contraction fell most heavily on wage earners and stockholders, the results being obviously much graver in the case of the former group than in the latter. This disparity in the contraction movement resulted in a shift in the percentage distribution of income paid out, as shown in table 41.

While net income paid out declined as much as gross income, even such incomes as were paid could be sustained only by drawing upon the industry's capital and former savings. Table 40 shows that even

CHART VI

# INCOME BY TYPE OF PAYMENT
# MINES AND QUARRIES

MILLIONS
OF
DOLLARS

INTEREST

DIVIDENDS

ENTREPRENEURIAL
WITHDRAWALS
OTHER LABOR INCOME
SALARIES

WAGES

2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0

1929    1930    1931    1932

EXCESS PRODUCED

EXCESS WITHDRAWN

0

200

400

D.D 7485
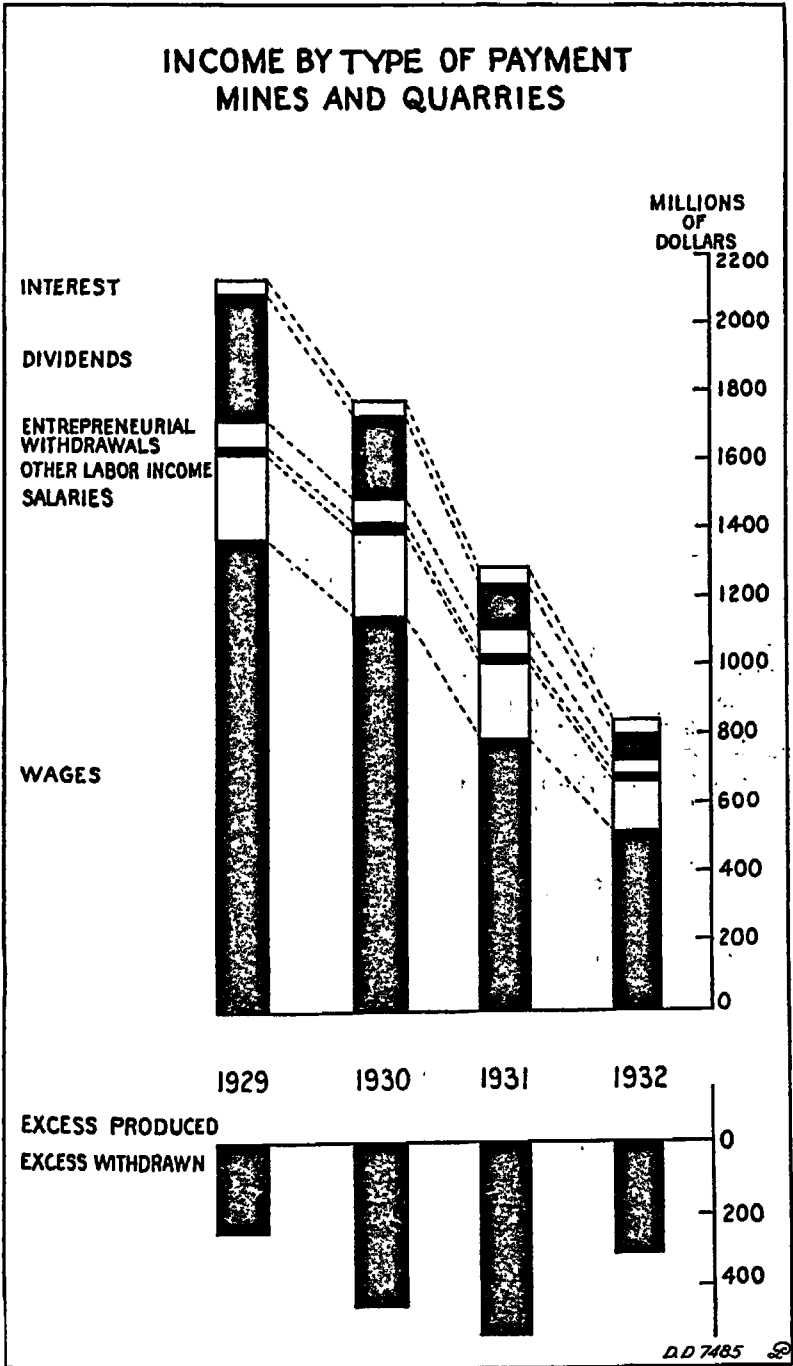
in as prosperous a year as 1929, the industry as a whole had nega-
tive savings, the income paid out being larger than the total profits
made in that year. The extent of these negative savings of corpora-
tions and individual entrepreneurs increased during 1930 and 1931,
although it must be noted that the estimate of savings of individual
entrepreneurs is at best a well-considered guess. The volume of these
negative savings was cut in 1932, but this indicated change should
be considered with much reservation.

At any rate, the income produced in the industry (as distinct from
net income paid out) declined much more than did the gross income.
Income produced covers primarily labor expenses, current service on
capital debt, and entrepreneurial incomes. It does not cover such
business expenses as taxes, rents and royalties, cost of materials and
supplies, and depreciation and depletion charges. It is obvious that
the much greater decline of income produced as compared with gross
income is an indication of the fact that these other cost items failed
to drop as much as did the value of output. This should have been
true of rents and royalties, some of the taxes, and especially of the
depreciation charges. Thus, according to Statistics of Income, cor-
porations in the mining and quarries group paid in 1929, 91 million
dollars in taxes other than income tax, and charged off 228 million
dollars for depreciation. By 1931, taxes declined to 74 million dollars,
and depreciation charges to 195 million dollars, a drop of about 20
and 15 percent, respectively. But the decline in gross income during
this 2 year period amounted to 47 percent. The considerable weight
of the comparatively rigid cost elements in the mining and quarrying
industry must have been greatly responsible for the negative savings
shown, and must have contributed to the severe contraction in the
volume of operations, employment, and income paid out.

The difference in the severity of the decline in the incomes of the
salaried and wage earning classes appears to be especially clear when
we compute changes in per capita salaries and wages, and compare
them with the movement of the Bureau of Labor Statistics index of
the cost of living (see table 42). It may be seen from table 42
that those salaried employees who were fortunate enough to stay on
the pay roll were enjoying an income of the same and even augmented
purchasing power (if the cost of living index may be taken as char-
acteristic of the living expenses of the salaried class). On the contrary,
among wage earners, even the fortunate minority that remained
employed had its average compensation cut beyond the decline in the
cost of living. The resulting drop in the purchasing power of the per
capita wage was more marked in 1931 than it was in 1930, and became
still worse in 1932 as compared with 1931.

## 2. SUBGROUPS UNDER MINING AND QUARRYING

The differences in organization and economic characteristics of the
various subgroups under mining and quarrying suggest a significant
divergence in the movement of employment and incomes in these
subgroups. Table 43 which presents estimates of employment indi-
cates clearly the magnitude of this divergence.

The total number of employees shows the most drastic decline in
metal mines, with nonmetal mines and quarries a somewhat removed
second. Both of these groups supply primarily raw materials that

go into industrial machinery, construction, and generally durable goods. On the other hand, anthracite mines and oil and gas wells, whose products find preponderant use directly among ultimate consumers, show a smaller contraction in employment. But it is surprising that in the bituminous coal mines, which produce what is primarily an industrial raw material, employment registers the smallest decline of all. This suggests that in this group, more than in any other, an attempt must have been made to retain workers on the pay roll, possibly by reducing the working time and sharing work.

Of the two groups of employees, the salaried workers have suffered a smaller contraction in employment than the wage earners in every group with the exception of bituminous coal mining. This exception may again be due to the fact that the reduction of the working time and the sharing of work in this industry was practiced primarily among the wage earners rather than among the salaried people. At the other extreme stands the group of oil and gas wells, in which the contraction in the number of employed wage earners appears to have been as drastic as in the nonmetal group, while the number of salaried employees was cut only half as much as that of wage earners.

The difference in the severity of the decline in employment in the various mining industries was due largely to differences in the impact of the depression upon their gross income (see table 44).

The smallest decline in gross income occurred in anthracite mining, which group showed a drop from 1929 to 1932 slightly over 40 percent. The severest drop occurred in metal mines in which the gross income in 1932 was only one sixth of the total in 1929. In the oil and gas wells group the drop in 1930 and 1931 was as great as (or greater than) in the other groups, with the exception of metal mines; but by 1932, their gross income, when converted into a percentage of the 1929 level, made the second best showing. By and large then, the movement of gross income in the mining industry showed the expected differences between producers' and consumers' goods. The peculiar movement of gross income in oil and gas wells may have been due to the fact that in this part of the mining industry, under the competitive organization that prevailed in the early years of the depression, the individual producers could not curtail output sufficiently for fear of the loss of oil by the pumping activities of the neighboring wells or by seepage.

When the estimates of gross income are presented in quantity units the picture changes somewhat (see table 45). With one significant exception, viz., gold, all mining groups show a substantial decline in the volume of output. The decline was smallest in natural gas and petroleum, with anthracite a somewhat distant third. In iron ore, copper, and other metals volumes of output reached strikingly low levels in 1932.

With such a drastic decline in money and commodity volumes of output, there naturally came a severe contraction in the income paid to labor, capital, and entrepreneurial activity (see table 46). The decline in the volume of wages paid was much more severe in every mining group than was the contraction in the volume of salaries. Especially striking was the drop of wages in metal and the nonmetal groups, while the anthracite group shows again the mildest decline in income paid out. The same difference in the severity of the decline is shown by the five branches of the industry in total labor incomes.

The amount of property incomes which originated in the industry (i.e., amount paid out minus the property income derived from security holdings of the concerns in the group) has also shown a drastic decline, but this decline took place primarily in the elastic area of property incomes, viz., dividend payments (see table 47). In the flow of dividends there was the familiar difference in the severity of decline between the more favorably situated branches, such as anthracite and oil and gas, and the most affected branches, such as the metal mining industry. In interest payments on fixed debt the movement was quite different. The amount originated has increased in anthracite and in metal mining; partly because the payments could not be reduced without throwing the enterprises into bankruptcy, partly because of liquidation of fixed interest securities held by the concerns (government bonds), and the consequently greater extent to which interest payments on outstanding bonds were made out of the results of the industrial processes proper. The relative proportion of interest payments to dividend payments seems to be highest (in 1929) in the coal mining groups, and lowest in metal mines. It is, therefore, of significance that metal mines were the only group in which the decline in property income was more drastic than that in gross income (compare with table 44). In all other branches the tendency was for the decline in property income to be smaller than the drop in gross income.

It is interesting to observe the effect of the depression on the relative share of various types of income in the total volume paid out (see table 48). Salaries claimed an increasing proportion of that volume in practically every branch of the industry, this being especially true in metals, nonmetal mines, and the bituminous coal group. Wages showed a decline in most branches (anthracite, bituminous coal, oil and gas, and even nonmetal). Only in metal mines, which suffered the most drastic decline in the flow of total income, the relative share of wages shows a rise. The share of property income remained fairly constant in most branches, with the exception of the metal group, in which it shows a marked decline. By and large then, it is the salaried group, and the bondholders who were favored during the general decline in incomes. The wage earning group seems to have lost ground; and since for them contraction was from an absolutely low level with which the group started, there must have been a striking increase of the economic burden carried by the wage earning group.

The decline in total income paid out in various branches of the mining and quarrying industry ranges from 44 to 47 percent in anthracite and oil and gas, to 84 percent in metal mines (see table 49). But great as this contraction in incomes was, it was prevented from being still more drastic through a draft by the enterprises upon their capital and former savings. Unstable as the income flow proved to be in the industry, the firms did make some contribution toward stability by drawing upon their capital and not allowing income paid out to decline as much as did income produced. The largest absolute amounts drawn in such fashion from capital are recorded for the oil and gas wells and the metal mines. By 1932 the metal and nonmetal mines were paying incomes primarily out of capital, the percentage ratio of business losses to total income paid out being over 200 in metal mines and about 90 in nonmetal mines. The smallest relative contribution out of capital was made in the anthracite

group. It must be remembered, however, in all this discussion that the determination of business savings is subject to all the limitations of corporate accounting. The only correction introduced was to subtract profits and losses from sales of capital assets. As a result business savings are computed under conditions assisting preservation of the nominal value of capital; thus, e.g., the depreciation and obsolescence charges are likely to be kept the same, since in these years there was seldom revaluation of fixed, wastable assets. It is thus possible to show negative savings in a situation which, if a structural revaluation of assets were to take place, might have shown a positive business saving.

In comparing table 49 with table 44 one sees that in every single branch of the mining industry, income produced has declined much more than gross income. This indicates that the total of cost items, other than those recorded under income produced (cost of materials and supplies, taxes, depreciation and depletion charges, rents and royalties, short-term interest payments, etc.) must have declined to a smaller extent than did the industry's gross income. Even income paid out (as distinct from income produced) has declined in most branches as much as did gross income, if not slightly more (with the exception of the oil and gas group).

The full bearing of the reduced incomes upon the industry's employed workers can be measured when the per capita salary or wage is compared with some approximation of the cost of living. The comparison in table 50 shows that the salaried employees who remained on the pay roll enjoyed increased purchasing power in all the branches except nonmetals; and that the same was true of wage earners in anthracite mines and oil and gas wells. But in the other three branches, especially bituminous coal mines, the per capita compensation declined much more than did the cost of living as measured by the Bureau of Labor Statistics index. This particularly conspicuous effect of the depression on the per capita wage in bituminous coal mines (one would expect to see the average wage in metal and nonmetal mines and quarries take the lowest dip) confirms the suggestion made above concerning the possible prevalence of work sharing among wage earners in bituminous coal mines. It is also worth noting that the lowering of the purchasing power of the average wage in bituminous coal, metal mines, and nonmetal mines and quarries was becoming progressively worse from year to year. The purchasing power of the average wage was, in each of these three branches, lower in 1930 than in 1929, lower in 1931 than in 1930, and lower in 1932 than in 1931.

## SUMMARY TABLES, MINES AND QUARRIES

TABLE 38.—*Number of people engaged, mining and quarrying industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | 98,613 | 98,124 | 83,903 | 67,882 | 100.0 | 99.5 | 85.1 | 68.8 |
| 2 | Wage earners | 955,547 | 867,642 | 720,527 | 562,257 | 100.0 | 90.8 | 75.4 | 58.8 |
| 3 | Total number of employees | 1,054,160 | 965,766 | 804,430 | 630,139 | 100.0 | 91.6 | 76.3 | 59.8 |
| 4 | Entrepreneurs | 14,109 | 14,109 | 14,109 | 14,109 | 100.0 | 100.0 | 100.0 | 100.0 |
| 5 | Total number engaged | 1,068,269 | 979,875 | 818,539 | 644,248 | 100.0 | 91.7 | 76.6 | 60.3 |

TABLE 39.—*Gross income, mining and quarrying industry*

| Line | Item | Absolute numbers | | | |
|---|---|---|---|---|---|
| | | 1920 | 1930 | 1931 | 1932 |
| 1 | Total value of production (thousands of dollars) | 3,989,254 | 3,247,912 | 2,103,620 | 1,717,760 |
| 2 | Index of value (1929=100) | 100.0 | 81.4 | 52.7 | 43.1 |
| 3 | Index of quantity production (1929=100) | 100.0 | 86.1 | 73.0 | 61.7 |

TABLE 40.—*Income paid out and produced, mining and quarrying industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 246,881 | 242,774 | 215,735 | 15,031 | 100.0 | 98.3 | 87.4 | 60.8 |
| 2 | Wages | 1,366,566 | 1,146,124 | 787,966 | 511,261 | 100.0 | 83.9 | 57.7 | 37.4 |
| 3 | Other labor income | 25,729 | 24,023 | 20,386 | 16,004 | 100.0 | 93.4 | 79.2 | 62.2 |
| 4 | Total compensation of employees | 1,639,176 | 1,412,921 | 1,024,087 | 677,296 | 100.0 | 86.2 | 62.5 | 41.3 |
| 5 | Dividends | 365,323 | 249,060 | 138,473 | 71,964 | 100.0 | 68.2 | 37.9 | 19.7 |
| 6 | Interest | 48,359 | 43,571 | 45,718 | 40,825 | 100.0 | 90.1 | 94.5 | 84.4 |
| 7 | Total property income paid out | 413,682 | 292,631 | 184,191 | 112,789 | 100.0 | 70.7 | 44.5 | 27.3 |
| 8 | Withdrawals of entrepreneurs | 70,217 | 73,222 | 69,334 | 46,573 | 100.0 | 104.3 | 98.7 | 66.3 |
| 9 | Total income paid out | 2,123,075 | 1,778,774 | 1,277,612 | 836,658 | 100.0 | 83.8 | 60.2 | 39.4 |
| 10 | Corporate savings | −214,639 | −336,868 | −380,528 | −262,253 | | | | |
| 11 | Business savings of individuals | −32,801 | −127,368 | −165,268 | −47,294 | | | | |
| 12 | Total income produced | 1,875,635 | 1,314,538 | 731,816 | 527,111 | 100.0 | 70.1 | 39.0 | 28.1 |

TABLE 41.—*Percentage distribution of income paid out, mining and quarrying industry*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 11.6 | 13.6 | 16.9 | 17.9 |
| 2 | Wages | 64.3 | 64.4 | 61.7 | 61.1 |
| 3 | Other labor income | 1.2 | 1.4 | 1.6 | 1.9 |
| 4 | Total compensation of employees | 77.2 | 79.4 | 80.2 | 81.0 |
| 5 | Dividends | 17.2 | 14.0 | 10.8 | 8.6 |
| 6 | Interest | 2.3 | 2.4 | 3.6 | 4.9 |
| 7 | Total property income paid out | 19.5 | 16.5 | 14.4 | 13.5 |
| 8 | Withdrawals of entrepreneurs | 3.3 | 4.1 | 5.4 | 5.6 |
| 9 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

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TABLE 42.—*Per capita income of employees, mining and quarrying industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | $2,504 | $2,474 | $2,571 | $2,210 | 100.0 | 98.8 | 102.7 | 88.3 |
| 2 | Wage earners | 1,430 | 1,321 | 1,094 | 909 | 100.0 | 92.4 | 76.5 | 63.6 |
| 3 | All active employees | 1,531 | 1,438 | 1,248 | 1,049 | 100.0 | 93.9 | 81.5 | 68.5 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## DETAILED TABLES, MINES AND QUARRIES

TABLE 43.—*Number of employees, various branches of the mining and quarrying industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees, anthracite | 8,370 | 8,411 | 7,802 | 6,361 | 100.0 | 100.5 | 93.2 | 76.0 |
| 2 | Salaried employees, bituminous | 23,686 | 21,491 | 19,144 | 15,508 | 100.0 | 90.7 | 80.8 | 65.5 |
| 3 | Salaried employees, metal | 9,758 | 9,406 | 6,979 | 4,651 | 100.0 | 96.4 | 71.5 | 47.7 |
| 4 | Salaried employees, nonmetal | 11,517 | 11,247 | 9,389 | 7,370 | 100.0 | 97.7 | 81.5 | 64.0 |
| 5 | Salaried employees, oil and gas | 45,282 | 47,569 | 40,589 | 33,992 | 100.0 | 105.1 | 89.6 | 75.1 |
| 6 | Wage earners, anthracite | 146,603 | 136,927 | 118,015 | 91,627 | 100.0 | 93.4 | 80.5 | 62.5 |
| 7 | Wage earners, bituminous | 460,192 | 429,819 | 382,880 | 310,169 | 100.0 | 93.4 | 83.2 | 67.4 |
| 8 | Wage earners, metal | 119,765 | 99,644 | 70,781 | 43,714 | 100.0 | 83.2 | 59.1 | 36.5 |
| 9 | Wage earners, nonmetal | 96,471 | 81,325 | 65,021 | 47,271 | 100.0 | 84.3 | 67.4 | 49.0 |
| 10 | Wage earners, oil and gas | 132,516 | 119,927 | 83,830 | 69,476 | 100.0 | 90.5 | 63.3 | 52.4 |
| 11 | Total number of employees, anthracite | 154,973 | 145,338 | 125,817 | 97,988 | 100.0 | 93.8 | 81.2 | 63.2 |
| 12 | Total number of employees, bituminous | 483,878 | 451,310 | 402,024 | 325,677 | 100.0 | 93.3 | 83.1 | 67.3 |
| 13 | Total number of employees, metal | 129,523 | 109,050 | 77,760 | 48,365 | 100.0 | 84.2 | 60.0 | 37.3 |
| 14 | Total number of employees, nonmetal | 107,988 | 92,572 | 74,410 | 54,641 | 100.0 | 85.7 | 68.9 | 50.6 |
| 15 | Total number of employees, oil and gas | 177,798 | 167,496 | 124,419 | 103,468 | 100.0 | 94.2 | 70.0 | 58.2 |

TABLE 44.—*Gross income at current prices, various branches of the mining and quarrying industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Value of production, anthracite | 384,854 | 353,681 | 295,568 | 221,676 | 100.0 | 91.9 | 76.8 | 57.6 |
| 2 | Value of production, bituminous | 966,694 | 807,189 | 597,417 | 422,445 | 100.0 | 83.5 | 61.8 | 43.7 |
| 3 | Value of production, metal | 633,821 | 396,133 | 224,373 | 105,848 | 100.0 | 62.5 | 35.4 | 16.7 |
| 4 | Value of production, nonmetal | 407,462 | 347,565 | 253,849 | 143,019 | 100.0 | 85.3 | 62.3 | 35.1 |
| 5 | Value of production, oil and gas | 1,596,423 | 1,343,339 | 732,413 | 824,772 | 100.0 | 84.1 | 45.9 | 51.7 |

TABLE 45.—*Quantity of output, various branches of the mining and quarrying industry*

| Line | Item | Absolute numbers (thousands) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Anthracite_____short tons.. | 73,828 | 69,385 | 59,646 | 49,900 | 100.0 | 94.0 | 80.8 | 67.6 |
| 2 | Bituminous_____do.... | 534,989 | 467,526 | 382,089 | 305,667 | 100.0 | 87.4 | 71.4 | 57.1 |
| 3 | Copper_____pounds.. | 2,002,663 | 1,394,399 | 1,042,711 | 544,010 | 100.0 | 69.6 | 52.1 | 27.2 |
| 4 | Lead_____short tons.. | 672 | 574 | 390 | 255 | 100.0 | 85.4 | 58.0 | 37.9 |
| 5 | Zinc_____do.... | 612 | 489 | 292 | 207 | 100.0 | 79.9 | 47.7 | 33.8 |
| 6 | Gold_____troy ounces.. | 2,208 | 2,286 | 2,396 | 2,449 | 100.0 | 103.5 | 108.5 | 110.9 |
| 7 | Silver_____do.... | 61,323 | 50,748 | 30,932 | 23,981 | 100.0 | 82.7 | 50.4 | 39.1 |
| 8 | Iron_____long tons.. | 75,603 | 55,201 | 28,516 | 5,331 | 100.0 | 73.0 | 37.7 | 7.1 |
| 9 | Stone_____short tons.. | 141,110 | 126,996 | 97,933 | 66,234 | 100.0 | 90.0 | 69.4 | 46.9 |
| 10 | Clay_____do.... | 4,347 | 3,963 | 2,519 | 1,618 | 100.0 | 91.2 | 57.9 | 37.2 |
| 11 | Phosphate rock_____long tons.. | 3,761 | 3,926 | 2,535 | 1,701 | 100.0 | 104.4 | 67.4 | 45.2 |
| 12 | Sand and gravel_____short tons.. | 222,572 | 197,052 | 153,479 | 89,000 | 100.0 | 88.5 | 69.0 | 40.0 |
| 13 | Sulphur_____long tons.. | 2,437 | 1,990 | 1,377 | 1,109 | 100.0 | 81.7 | 56.5 | 45.5 |
| 14 | Petroleum_____barrels.. | 1,007,323 | 898,011 | 851,081 | 781,845 | 100.0 | 89.1 | 84.5 | 77.6 |
| 15 | Natural gas_____M cubic feet.. | 1,917,693 | 1,943,421 | 1,686,436 | 1,518,000 | 100.0 | 101.3 | 87.9 | 79.2 |

TABLE 46.—*Total compensation of employees, various branches of the mining and quarrying industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries, anthracite_____ | 21,282 | 20,121 | 18,858 | 14,848 | 100.0 | 94.5 | 88.6 | 69.8 |
| 2 | Salaries, bituminous_____ | 58,647 | 52,095 | 44,065 | 34,336 | 100.0 | 88.8 | 75.1 | 58.5 |
| 3 | Salaries, metal_____ | 27,342 | 25,518 | 18,076 | 11,241 | 100.0 | 93.3 | 66.1 | 41.1 |
| 4 | Salaries, nonmetal_____ | 31,765 | 29,928 | 23,172 | 15,470 | 100.0 | 94.2 | 72.9 | 48.7 |
| 5 | Salaries, oil and gas_____ | 107,845 | 115,112 | 111,564 | 74,136 | 100.0 | 106.7 | 103.4 | 68.7 |
| 6 | Wages, anthracite_____ | 236,088 | 218,972 | 171,046 | 125,362 | 100.0 | 92.8 | 72.5 | 53.1 |
| 7 | Wages, bituminous_____ | 576,619 | 468,791 | 331,556 | 205,276 | 100.0 | 81.3 | 57.5 | 35.6 |
| 8 | Wages, metal_____ | 184,554 | 143,932 | 82,680 | 39,864 | 100.0 | 78.0 | 44.8 | 21.6 |
| 9 | Wages, nonmetal_____ | 118,756 | 94,174 | 63,416 | 34,677 | 100.0 | 79.3 | 53.4 | 29.2 |
| 10 | Wages, oil and gas_____ | 250,549 | 220,235 | 139,268 | 106,082 | 100.0 | 87.9 | 55.6 | 42.3 |
| 11 | Total compensation of employees, anthracite_____ | 260,964 | 242,813 | 193,465 | 143,359 | 100.0 | 93.0 | 74.1 | 54.9 |
| 12 | Total compensation of employees, bituminous_____ | 647,410 | 531,883 | 385,169 | 246,745 | 100.0 | 82.2 | 59.5 | 38.1 |
| 13 | Total compensation of employees, metal | 214,780 | 171,966 | 102,526 | 52,129 | 100.0 | 80.1 | 47.7 | 24.3 |
| 4 | Total compensation of employees, nonmetal_____ | 152,646 | 125,986 | 88,140 | 51,171 | 100.0 | 82.5 | 57.7 | 33.5 |
| 15 | Total compensation of employees, oil and gas_____ | 362,948 | 339,798 | 254,293 | 183,398 | 100.0 | 93.6 | 70.1 | 50.5 |

TABLE 47.—*Property income originated, various branches of the mining and quarrying industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Dividends, anthracite_____ | 15,607 | 13,202 | 9,420 | 7,067 | 100.0 | 84.6 | 60.4 | 45.3 |
| 2 | Dividends, bituminous_____ | 26,843 | 23,998 | 15,584 | 7,528 | 100.0 | 89.4 | 58.1 | 28.0 |
| 3 | Dividends, metal_____ | 195,077 | 92,571 | 37,788 | 6,427 | 100.0 | 47.5 | 19.4 | 3.3 |
| 4 | Dividends, nonmetal_____ | 58,405 | 40,245 | 38,479 | 19,882 | 100.0 | 68.9 | 65.9 | 34.0 |
| 5 | Dividends, oil and gas_____ | 69,391 | 79,044 | 37,202 | 31,060 | 100.0 | 113.9 | 53.6 | 44.8 |
| 6 | Interest, anthracite_____ | 8,646 | 8,061 | 10,523 | 9,269 | 100.0 | 93.2 | 121.7 | 107.2 |
| 7 | Interest, bituminous_____ | 16,935 | 14,752 | 13,103 | 10,996 | 100.0 | 87.1 | 77.4 | 64.9 |
| 8 | Interest, metal_____ | 2,315 | 3,153 | 5,587 | 5,405 | 100.0 | 136.2 | 241.3 | 233.5 |
| 9 | Interest, nonmetal_____ | 10,615 | 9,151 | 5,534 | 5,562 | 100.0 | 86.2 | 52.1 | 52.4 |
| 10 | Interest, oil and gas_____ | 9,848 | 8,454 | 10,971 | 9,593 | 100.0 | 85.8 | 111.4 | 97.4 |
| 11 | Total property income paid out, anthracite_____ | 24,253 | 21,263 | 19,943 | 16,336 | 100.0 | 87.7 | 82.2 | 67.4 |
| 12 | Total property income paid out, bituminous_____ | 43,778 | 38,750 | 28,687 | 18,524 | 100.0 | 88.5 | 65.5 | 42.3 |
| 13 | Total property income paid out, metal | 197,392 | 95,724 | 43,375 | 11,832 | 100.0 | 48.5 | 22.0 | 6.0 |
| 14 | Total property income paid out, nonmetal_____ | 69,020 | 49,396 | 44,013 | 25,444 | 100.0 | 71.6 | 63.8 | 36.9 |
| 15 | Total property income paid out, oil and gas_____ | 79,239 | 87,498 | 48,173 | 40,653 | 100.0 | 110.4 | 60.8 | 51.3 |

TABLE 48.—*Percentage distribution of income paid out, various branches of the mining and quarrying industry*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries, anthracite | 7.5 | 7.6 | 8.8 | 9.3 |
| 2 | Salaries, bituminous | 8.4 | 9.1 | 10.5 | 12.8 |
| 3 | Salaries, metal | 6 6 | 9.5 | 12.3 | 17.5 |
| 4 | Salaries, nonmetal | 14.1 | 16.7 | 17.1 | 19.7 |
| 5 | Salaries, oil and gas | 21.5 | 23.5 | 30.7 | 28.0 |
| 6 | Wages, anthracite | 82.7 | 82.8 | 80.0 | 78.4 |
| 7 | Wages, bituminous | 82.8 | 81.5 | 79.3 | 76.5 |
| 8 | Wages, metal | 44.7 | 53.6 | 56.4 | 62.0 |
| 9 | Wages, nonmetal | 52.6 | 52.5 | 46.9 | 44.1 |
| 10 | Wages, oil and gas | 50.0 | 44.9 | 38.3 | 40.1 |
| 11 | Total property income paid out, anthracite | 8.5 | 8.0 | 9.3 | 10.2 |
| 12 | Total property income paid out, bituminous | 6.3 | 6.7 | 6.9 | 6.9 |
| 13 | Total property income paid out, metal | 47.8 | 35.7 | 29.6 | 18.4 |
| 14 | Total property income paid out, nonmetal | 30.5 | 27.5 | 32.5 | 32.3 |
| 15 | Total property income paid out, oil and gas | 15.8 | 17.8 | 13.8 | 15.4 |

TABLE 49.—*Income paid out and produced, various branches of the mining and quarrying industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Income paid out, anthracite | 285,609 | 264,446 | 213,755 | 159,969 | 100.0 | 92.6 | 74.8 | 56.0 |
| 2 | Income paid out, bituminous | 696,748 | 575,570 | 418,032 | 268,522 | 100.0 | 82.6 | 60.0 | 38.5 |
| 3 | Income paid out, metal | 413,049 | 268,508 | 146,481 | 64,321 | 100.0 | 65.0 | 35.5 | 15.6 |
| 4 | Income paid out, nonmetal | 225,977 | 179,444 | 135,298 | 78,715 | 100.0 | 79 4 | 59.9 | 34.8 |
| 5 | Income paid out, oil and gas | 501,264 | 490,331 | 363,552 | 264,637 | 100.0 | 97.8 | 72.5 | 52.8 |
| 6 | Savings, anthracite | −13,783 | −7,653 | −9,723 | −13,094 | | | | |
| 7 | Savings, bituminous | −50,340 | −62,124 | −61,490 | −39,080 | | | | |
| 8 | Savings, metal | −49,834 | −113,101 | −108,113 | −122,035 | | | | |
| 9 | Savings, nonmetal | −23,602 | −23,760 | −53,236 | −53,429 | | | | |
| 10 | Savings, oil and gas | −109,881 | −257,598 | −313,234 | −81,909 | | | | |
| 11 | Income produced, anthracite | 271,826 | 256,793 | 204,032 | 146,875 | 100.0 | 94.5 | 75.1 | 54.0 |
| 12 | Income produced, bituminous | 646,408 | 513,446 | 356,542 | 229,442 | 100.0 | 79.4 | 55.2 | 35.5 |
| 13 | Income produced, metal | 363,215 | 155,407 | 38,368 | −57,714 | 100.0 | 42.8 | 10.6 | |
| 14 | Income produced, nonmetal | 202,375 | 155,684 | 82,062 | 25,286 | 100.0 | 76.9 | 40.5 | 12.5 |
| 15 | Income produced, oil and gas | 391,383 | 232,733 | 50,318 | 182,728 | 100.0 | 59.5 | 12.9 | 46.7 |

TABLE 50.—*Per capita income of employees, various branches of the mining and quarrying industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Average salary, anthracite | $2,543 | $2,392 | $2,417 | $2,334 | 100 0 | 94.1 | 95.0 | 91.8 |
| 2 | Average salary, bituminous | 2,476 | 2,424 | 2,302 | 2,214 | 100.0 | 97.9 | 93.0 | 89.4 |
| 3 | Average salary, metal | 2,802 | 2,713 | 2,590 | 2,417 | 100 0 | 96.8 | 92.4 | 86.3 |
| 4 | Average salary, nonmetal | 2,758 | 2,661 | 2,468 | 2,099 | 100.0 | 96.5 | 89.5 | 76.1 |
| 5 | Average salary, oil and gas | 2,382 | 2,420 | 2,749 | 2,181 | 100.0 | 101.6 | 115.4 | 91.6 |
| 6 | Average wage, anthracite | 1,610 | 1,599 | 1,449 | 1,368 | 100.0 | 99.3 | 90.0 | 85.0 |
| 7 | Average wage, bituminous | 1,253 | 1,091 | 866 | 662 | 100.0 | 87.1 | 69.1 | 52.8 |
| 8 | Average wage, metal | 1,541 | 1,445 | 1,168 | 912 | 100.0 | 93.8 | 75.8 | 59.2 |
| 9 | Average wage, nonmetal | 1,231 | 1,158 | 975 | 734 | 100.0 | 94.1 | 79.2 | 59.6 |
| 10 | Average wage, oil and gas | 1,891 | 1,836 | 1,661 | 1,527 | 100.0 | 97.1 | 87.8 | 80.8 |
| 11 | Average compensation of all active employees, anthracite | 1,661 | 1,645 | 1,509 | 1,431 | 100.0 | 99.0 | 90.8 | 86.2 |
| 12 | Average compensation of all active employees, bituminous | 1,313 | 1,154 | 934 | 736 | 100.0 | 87.9 | 71.1 | 56.1 |
| 13 | Average compensation of all active employees, metal | 1,636 | 1,554 | 1,296 | 1,057 | 100.0 | 95.0 | 79.2 | 64 6 |
| 14 | Average compensation of all active employees, nonmetal | 1,394 | 1,341 | 1,164 | 918 | 100.0 | 96.2 | 83.5 | 65.9 |
| 15 | Average compensation of all active employees, oil and gas | 2,016 | 2,002 | 2,016 | 1,742 | 100.0 | 99.3 | 100.0 | 86.4 |
| 16 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

# CHAPTER VII

## ELECTRIC LIGHT AND POWER AND MANUFACTURED GAS

The electric light and power industry sells the bulk of its product to industrial and commercial consumers, while the manufactured gas industry satisfies largely the needs of domestic consumers. We should, therefore, expect the impact of the depression to be more pronounced in the electric light and power industry, and to some extent this expectation is confirmed by the estimates in tables 51 to 57. That the difference in the movement of incomes in the two industries was not greater than that shown, appears to be due to the contrast between the industries in the rapidity of their growth. The increase in the use of electric light and power during recent years was appreciably greater than the growth in the consumption of manufactured gas. Thus gross revenues of electric light and power stations tripled between 1919 and 1929, and the number of kilowatt-hours sold was, in 1929, 2.6 [1] times the 1919 figure. On the other hand, the value of products of the manufactured gas industry in 1929 was only 1.6 [2] times the 1919 value.

The Census of Occupations for 1930 shows 114,930 gainfully occupied classified under gas works, and 289,255 classified under electric light and power plants. This yields a total of 404,185; a number almost 70,000 in excess of the average number estimated employed during 1929 (see table 51), the excess being shown primarily for the manufactured-gas industry. The comparison suggests that some unemployment characterized the latter industry even in 1929.

The decline in the number of employees shown in table 51 is on the whole rather moderate, and appears to have occurred later than in most basic industries. A marked contraction of employment did not occur until 1932, and even in that year it was mild when compared with the decline of 40 to 60 percent observed in mining.

The explanation of such a comparatively favorable showing of employment in the two industries lies in the movement of their revenues and gross products (see table 52). In the electric light and power field, the number of kilowatt-hours sold to domestic consumers showed a marked rise from 1929 to 1932, while the volume of energy sold at retail to commercial consumers was larger in 1930 and 1931 than in 1929, and only slightly below the level of the latter year in 1932. True, the number of kilowatt-hours sold at wholesale to commercial consumers showed an appreciable decline of 30 percent by 1932. But since the rates to domestic service and to commercial consumers at retail are higher than the wholesale rates, the total revenue, as contrasted with kilowatt-hours sold, was larger in 1930 and 1931 than in 1929, and only 5 percent below the level of the latter year in 1932. In manufactured gas, neither the revenue nor the

[1] See Survey of Current Business, Annual Supplement for 1932, pp. 142-143.
[2] See Census of Manufactures, successive issues, 1919-29.

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**CHART VII**



INCOME BY TYPE OF PAYMENT
ELECTRIC LIGHT AND POWER AND GAS

MILLIONS
OF
DOLLARS

INTEREST

DIVIDENDS

OTHER LABOR INCOME

SALARIES & WAGES

1929    1930    1931    1932

EXCESS PRODUCED

EXCESS WITHDRAWN
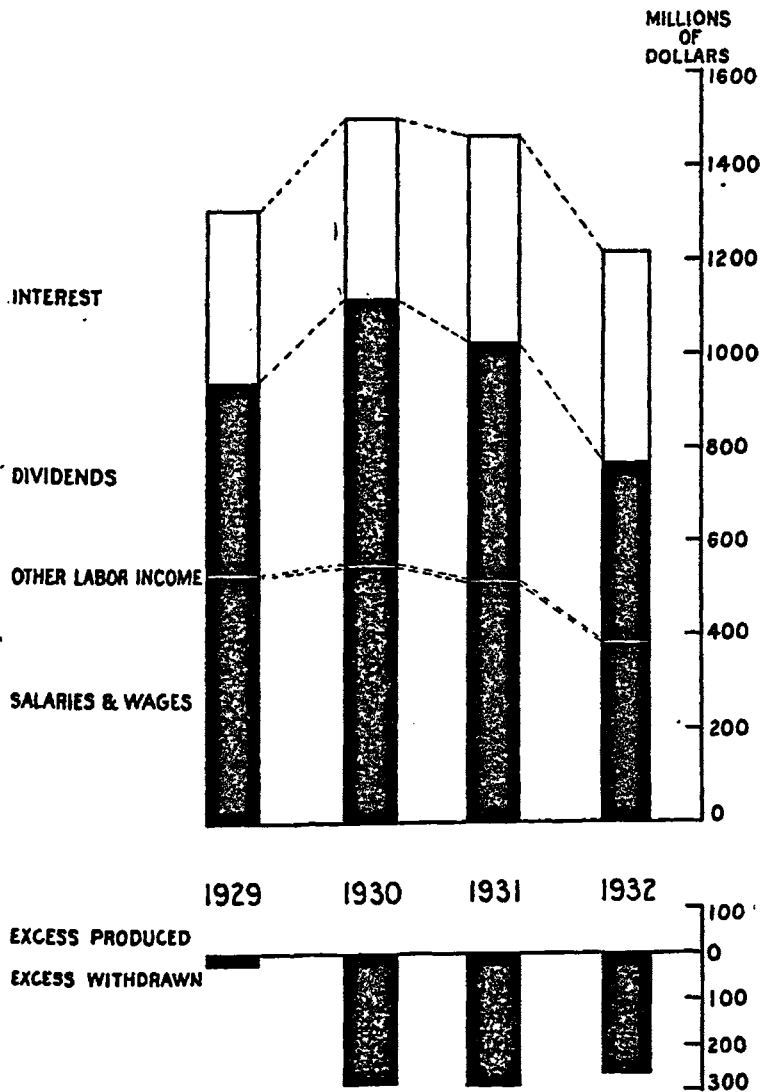
D.D.7483

number of cubic feet sold, showed a marked decline until 1932, in which year both volumes were about 10 percent below the 1929 level.

The contraction in labor incomes paid out by electric light and power plants was moderate in comparison with the cut in salaries and wages in other industrial fields. But in view of the very slight decline in operating revenue, this reduction in labor incomes appears to have been a response by the industry to the general fall in prices and depressed conditions in the labor market rather than to the pressure of declining gross incomes. This is especially true of the years 1931 and 1932. In the former, labor incomes fell to 97 percent of 1929 levels while revenues were above the 1929 total. In 1932, total compensation of employees fell to 71 percent of the 1929 figure while revenues were down to only 94.5 percent of 1929.

As contrasted with labor incomes, property incomes paid out by the electric light and power industry rose to considerable heights in 1930 and 1931 as compared with 1929, and even in 1932 were in excess of the 1929 volume. Curiously enough this rise was taking place at the time when the enterprises were drawing upon their capital and previously accumulated surplus, this draft being especially large in 1930 and 1931. As a result, while income paid out rose more and fell less than did operating revenue (except during 1932), income produced showed a much greater decline than gross income.

Similar tendencies were characteristic of the gas industry (see table 54). Here also labor incomes, while they show no appreciable drop until 1932, declined in that year much more than did operating revenue. Here also property incomes paid out showed a substantial rise as compared with 1929, and in distinction from the electric light and power industry, showed no decline even in 1932. Here also the payments of income exceeded the volume of income produced, so that even in 1929 a corporate negative saving appears to have been sustained. The volume of the latter increased markedly in 1931, and became still larger in 1932.

As a result of such movements, the relative share of labor income in the total paid out declined materially (see table 56). In the electric light and power industry the share of labor income declined from about 40 percent in 1929 to about 30 in 1932; in manufactured gas there is a similar drop from 47 percent to 37. The share of property income paid out gained accordingly.

The per capita figures for labor incomes (see table 57) indicate that there has been no reduction in average compensation until 1932; and that in the latter year the reduction in labor incomes took place primarily by a reduction in employment. Throughout the period, but especially in 1930 and 1931, the purchasing power of the compensation paid to the employees on the pay roll was higher than that in 1929.

## SUMMARY TABLES, ELECTRIC LIGHT AND POWER AND MANUFACTURED GAS

TABLE 51.—*Number of employees, electric light and power and gas industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Number of employees—electric light and power | 271,796 | 279,916 | 259,842 | 225,557 | 100.0 | 103.0 | 95.6 | 83.0 |
| 2 | Number of employees—gas | 64,639 | 64,122 | 62,182 | 56,947 | 100.0 | 99.2 | 96.2 | 88.1 |
| 3 | Total number of employees in the industry | 336,435 | 344,038 | 322,024 | 282,504 | 100.0 | 102.3 | 95.7 | 84.0 |

TABLE 52.—*Gross income, electric light and power and gas industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Revenue from ultimate consumers—electric light and power (thousands of dollars) | 1,938,521 | 1,990,956 | 1,967,034 | 1,832,598 | 100.0 | 102.7 | 101.5 | 94.5 |
| 2 | Kilowatt-hours sold—electric light and power (millions): | | | | | | | | |
| 3 | (a) Domestic service | 9,774 | 11,019 | 11,784 | 11,986 | 100.0 | 112.7 | 120.5 | 122.6 |
| 4 | (b) Commercial, retail | 13,108 | 13,944 | 13,827 | 12,930 | 100.0 | 106.4 | 105.5 | 98.6 |
| 5 | (c) Commercial, wholesale | 44,326 | 41,619 | 38,098 | 31,187 | 100.0 | 93.9 | 85.9 | 70.4 |
| 6 | (d) Railroads, street and interurban | 5,047 | 4,996 | 4,607 | 4,175 | 100.0 | 99.0 | 91.3 | 82.7 |
| 7 | (e) Total | 75,294 | 74,908 | 71,688 | 63,762 | 100.0 | 99.5 | 95.2 | 84.7 |
| 8 | Revenue from ultimate consumers—gas (thousands of dollars): | | | | | | | | |
| 9 | (a) Domestic | 340,449 | 341,741 | 335,429 | 325,350 | 100.0 | 100.4 | 98.5 | 95.6 |
| 10 | (b) Industrial and commercial | 89,685 | 87,877 | 82,298 | 69,138 | 100.0 | 98.0 | 91.8 | 77.1 |
| 11 | (c) Total | 444,115 | 446,756 | 435,390 | 411,289 | 100.0 | 100.6 | 98.0 | 92.6 |
| 12 | Cubic feet sold—gas (millions): | | | | | | | | |
| 13 | (a) Domestic | 281,201 | 282,768 | 276,976 | 263,020 | 100.0 | 100.6 | 98.5 | 93.5 |
| 14 | (b) Industrial and commercial | 103,490 | 99,667 | 92,248 | 73,929 | 100.0 | 96.3 | 89.1 | 71.4 |
| 15 | (c) Total | 401,154 | 403,153 | 391,197 | 358,876 | 100.0 | 100.5 | 97.5 | 89.5 |

TABLE 53.—*Income paid out and produced, electric light and power industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 425,633 | 443,947 | 411,850 | 303,052 | 100.0 | 104.3 | 96.8 | 71.2 |
| 2 | Other labor income | 4,260 | 4,738 | 4,787 | 4,031 | 100.0 | 111.2 | 112.4 | 94.6 |
| 3 | Total compensation of employees | 429,893 | 448,685 | 416,637 | 307,083 | 100.0 | 104.4 | 96.9 | 71.4 |
| 4 | Dividends | 346,418 | 497,291 | 429,034 | 306,948 | 100.0 | 143.6 | 123.8 | 88.6 |
| 5 | Interest | 316,602 | 339,118 | 387,743 | 396,237 | 100.0 | 107.1 | 122.5 | 125.2 |
| 6 | Total property income paid out | 663,020 | 836,409 | 816,777 | 703,185 | 100.0 | 126.2 | 123.2 | 106.1 |
| 7 | Total income paid out | 1,092,913 | 1,285,094 | 1,233,414 | 1,010,268 | 100.0 | 117.6 | 112.9 | 92.4 |
| 8 | Corporate savings | 4,716 | −250,373 | −231,032 | −197,210 | | | | |
| 9 | Total income produced | 1,097,629 | 1,034,721 | 1,002,382 | 813,058 | 100.0 | 94.3 | 91.3 | 74.1 |

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TABLE 54.—*Income paid out and produced, manufactured gas industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 99,557 | 100,030 | 96,880 | 75,227 | 100.0 | 100.5 | 97.3 | 75.6 |
| 2 | Other labor income | 1,200 | 1,372 | 1,571 | 1,579 | 100.0 | 114.3 | 130.9 | 131.6 |
| 3 | Total compensation of employees | 100,757 | 101,402 | 98,451 | 76,806 | 100.0 | 100.6 | 97.7 | 76.2 |
| 4 | Dividends | 66,298 | 67,947 | 76,905 | 75,850 | 100.0 | 102.5 | 116.0 | 114.4 |
| 5 | Interest | 46,106 | 48,509 | 52,587 | 53,273 | 100.0 | 105.2 | 114.1 | 115.5 |
| 6 | Property income paid out | 112,404 | 116,456 | 129,492 | 129,123 | 100.0 | 103.0 | 115.2 | 114.9 |
| 7 | Total income paid out | 213,161 | 217,858 | 227,943 | 205,929 | 100.0 | 102.2 | 106.9 | 96.6 |
| 8 | Corporate savings | −21,538 | −27,373 | −52,275 | −61,143 | | | | |
| 9 | Total income produced | 191,623 | 190,485 | 175,668 | 144,786 | 100.0 | 99.4 | 91.7 | 75.6 |

TABLE 55.—*Income paid out and produced, electric light and power and gas industries*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 525,190 | 543,977 | 508,730 | 378,279 | 100.6 | 103.6 | 96.9 | 72.0 |
| 2 | Other labor income | 5,460 | 6,110 | 6,358 | 5,610 | 100.0 | 111.9 | 116.4 | 102.7 |
| 3 | Total compensation of employees | 530,650 | 550,067 | 515,088 | 383,889 | 100.0 | 103.7 | 97.1 | 72.3 |
| 4 | Dividends | 412,716 | 565,238 | 505,939 | 382,798 | 100.0 | 137.0 | 122.6 | 92.8 |
| 5 | Interest | 362,708 | 387,627 | 440,330 | 449,510 | 100.0 | 106.9 | 121.4 | 123.9 |
| 6 | Total property income paid out | 775,424 | 952,865 | 946,269 | 832,308 | 100.0 | 122.8 | 122.0 | 107.3 |
| 7 | Total income paid out | 1,306,074 | 1,502,952 | 1,461,357 | 1,216,197 | 100.0 | 115.1 | 111.9 | 93.1 |
| 8 | Corporate savings | −16,822 | −277,746 | −283,307 | −258,353 | | | | |
| 9 | Total income produced | 1,289,252 | 1,225,206 | 1,178,050 | 957,844 | 100.0 | 95.0 | 91.4 | 74.3 |

TABLE 56.—*Percentage distribution of income paid out, electric light and power and gas industries*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| | ELECTRIC LIGHT AND POWER | | | | |
| 1 | Salaries and wages | 38.9 | 34.5 | 33.4 | 30.0 |
| 2 | Other labor income | .4 | .4 | .4 | .4 |
| 3 | Total compensation of employees | 39.3 | 34.9 | 33.8 | 30.4 |
| 4 | Dividends | 31.7 | 38.7 | 34.6 | 30.4 |
| 5 | Interest | 29.0 | 26.4 | 31.4 | 39.2 |
| 6 | Property income paid out | 60.7 | 65.1 | 66.2 | 69.6 |
| 7 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |
| | MANUFACTURED GAS | | | | |
| 8 | Salaries and wages | 46.7 | 45.9 | 42.5 | 36.5 |
| 9 | Other labor income | .6 | .6 | .7 | .8 |
| 10 | Total compensation of employees | 47.3 | 46.5 | 43.2 | 37.3 |
| 11 | Dividends | 31.1 | 31.2 | 33.7 | 36.8 |
| 12 | Interest | 21.6 | 22.3 | 23.1 | 25.9 |
| 13 | Property income paid out | 52.7 | 53.5 | 56.8 | 62.7 |
| 14 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |
| | ELECTRIC LIGHT AND POWER AND GAS | | | | |
| 15 | Total salaries and wages | 40.2 | 36.2 | 34.8 | 31.1 |
| 16 | Other labor income | .4 | .4 | .4 | .5 |
| 17 | Total compensation of employees | 40.6 | 36.6 | 35.2 | 31.6 |
| 18 | Dividends | 31.6 | 37.6 | 34.6 | 31.5 |
| 19 | Interest | 27.8 | 25.8 | 30.1 | 37.0 |
| 20 | Total property income paid out | 59.4 | 63.4 | 64.8 | 68.4 |
| 21 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 57.—*Per capita income of employees, electric light and power and gas industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | All active employees—electric light and power | $1,566 | $1,586 | $1,585 | $1,344 | 100.0 | 101.3 | 101.2 | 85.8 |
| 2 | All active employees—gas | 1,540 | 1,560 | 1,558 | 1,321 | 100.0 | 101.3 | 101.2 | 85.8 |
| 3 | All active employees in the industry | 1,561 | 1,581 | 1,580 | 1,339 | 100.0 | 101.3 | 101.2 | 85.8 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

# CHAPTER VIII

## MANUFACTURING

### 1. THE INDUSTRY AS A WHOLE

The manufacturing industry, as defined in this report, covers the same field that is covered by the Census of Manufactures, with the following significant exceptions: (a) the manufacture of heating and illuminating gas is discussed in chapter VII; (b) the group of railroad repair shops is covered in the estimates for railroad transportation; (c) moving picture production is classified with recreation and amusement. Also, some industries which the Census of Manufactures reports but does not include in the manufacturing total, viz., power laundries, and cleaning and dyeing establishments, are classified with domestic and personal service. All these omissions lend greater homogeneity to the group of manufacturing industries.

Judged by the number of people engaged, the manufacturing industry constitutes the second largest single area in our economic system. Table 58 shows an average employment in 1929 of 9.9 million, and the addition of the small group of individual entrepreneurs brings the total to about 10 million people. The ascertainment of a corresponding number of gainfully occupied from the Census of Occupations is not easy, because of lack of comparability in the classifications. However, grouping together all the industrial branches in the Census of Occupations which correspond roughly to the industries covered in table 58, we obtain an estimate of gainfully employed attached to manufacturing of 11 million people. This total includes motion picture production, excluded from manufacturing in table 58 (about 20,000 employed in 1929), but, on the other hand, does not take into account the 1.3 million gainfully occupied for whom no industrial affiliation is shown. Rough as the comparison is, it suggests the existence of a considerable volume of unemployment in manufacturing industries in 1929. This volume of unemployed would appear to approximate 1 million people, if the industrial attachment of gainfully occupied shown in the Census of Occupations may be relied upon.

Since 1929 the number of unemployed has multiplied. The total number of employees had declined by 1932 to slightly over 60 percent of the 1929 level, with a resulting addition to the army of unemployed of some 3.7 million men. As was the case in mining, the contraction of employment opportunities was much more drastic for wage earners than for the salaried employees. The number of wage earners declined substantially by 1930, and was 61 percent of the 1929 level in 1932; while the number of employed salary earners showed a substantial drop only in 1931, and declined by 1932 to 72 percent of the 1929 total. Among the individual entrepreneurs the shrinkage must have been considerable. The estimates of their number in table 58 are to be taken only as rough approximations. But the substantial decline which they indicate appears quite plausible.

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The influence of the depression on gross income, i.e., volume of sales of the manufacturing industry, is measured in table 59. A drastic decline took place in the dollar value at current prices, the volume in 1932 being only 38 percent of the 1929 level. When adjustment is made for the drop in wholesale prices, the extent of the decline is diminished although it still remains substantial. It is interesting to observe that, as in many other industries, there is some similarity in movement between volume of employment and the commodity volume of gross income. The relatives in line 5 of table 58 and line 4 of table 59 are close to each other through 1931, but in 1932 output fell much more than did employment.

The movement of various parts of net income paid out accords with their behavior in mining and in a number of other basic industries (see table 60 and chart VIII). Salaries declined much less than wages, and began their downward movement only in 1931, while wages sustained a drop of 20 percent in 1930. Dividends, the most elastic part of property income, rose in 1930 as compared with 1929, but declined markedly in 1931, and suffered a drop in 1932 more severe than that in any other part of income paid out. Interest payments on long-term debt, as may have been expected, felt the influence of the depression very slightly in 1930 and 1931, and only the cumulative pressure resulting in failures brought down the volume in 1932 by the small margin of 3 percent below the 1929 level. Total property income in manufacturing industry moved largely with dividend payments, the latter outweighing interest payments by the ratio of 10 to 1 (in 1929). Withdrawals of individual entrepreneurs appear to have declined even more than did labor incomes, a movement to be explained largely by a drastic reduction in the number.

Income produced has declined much more than income paid out, the latter being sustained by drafts upon the industry's capital and surplus. These drafts, shown in table 60 as corporate and individual business losses (negative savings), appear first in 1930, and reach large absolute volumes by 1932. This is due partly to the presence of such rigid costs as the allowance for depreciation and obsolescence, taxes (other than income), bad debts, etc. But it must also be noted that in these industries labor incomes did not decline as much as did the volume of sales, indicating that in part they also constituted a rigid, overhead type of costs. This was true primarily of salaries, since the decline of wages follows pretty closely the contraction of gross income.

The divergence in the rate of decline among various parts of income paid out resulted in a shift in the relative weight of these parts (see table 61). Salaries and interest on long-term debt have claimed a greater share of the total; while the proportional weight of wages and dividends has shown an appreciable shrinkage.

The significance of the decline in labor income for the employed group appears in the per capita figures presented in table 62. It may be seen that the per capita earnings of the employed wage earner declined more appreciably than the cost of living, while the per capita earnings of the salaried employee declined to a smaller extent than did the cost of living. As a result the purchasing power of the employed salary earner rose after 1929, especially in 1931, but declined from 1931 to 1932. The purchasing power of the employed wage

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CHART VIII



INCOME BY TYPE OF PAYMENT
MANUFACTURING
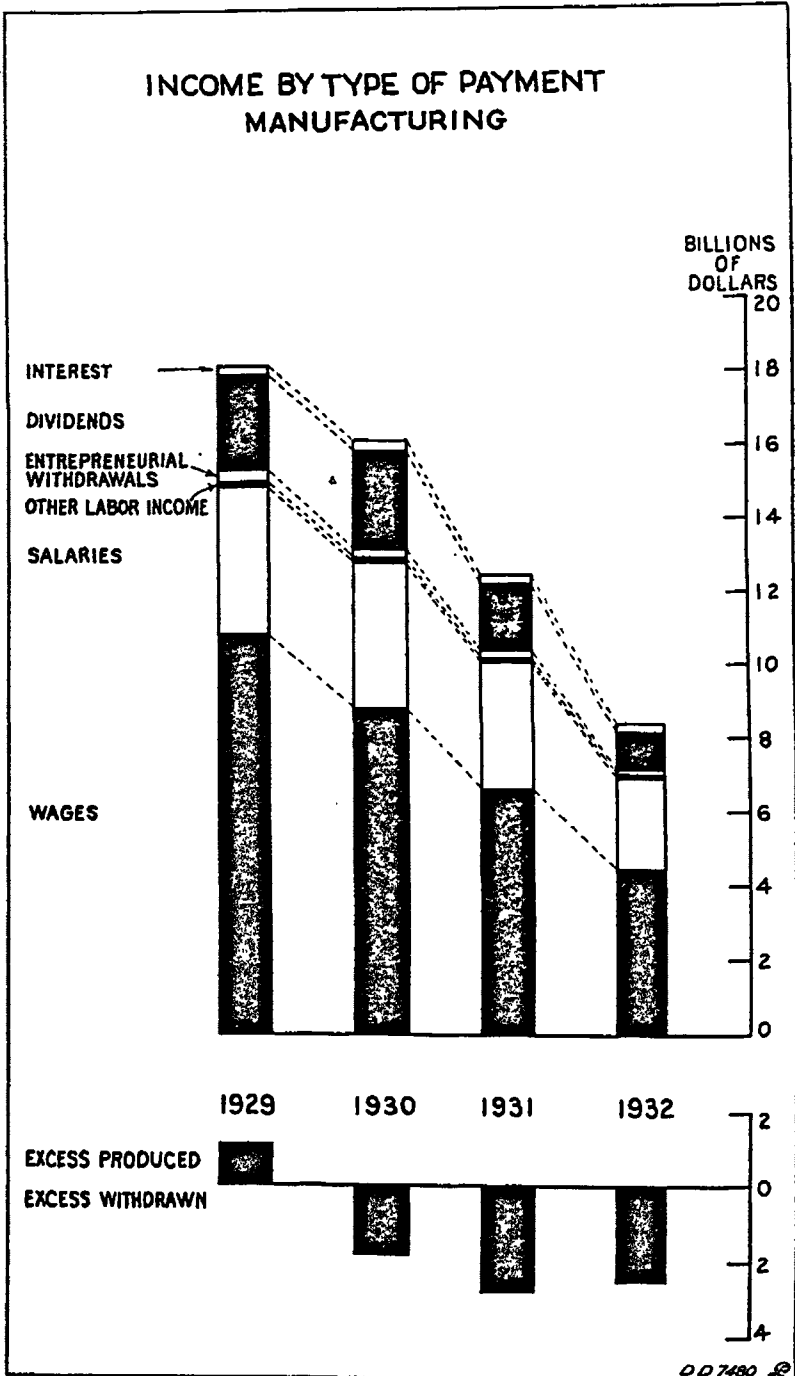
earner declined after 1929, and has shown a most severe drop from 1931 to 1932, when it dropped from about 95 percent of the 1929 level to slightly over 80 percent of that level in 1932.

## 2. SUBGROUPS OF MANUFACTURING INDUSTRY

The Census of Manufactures distinguishes over 300 separate industrial branches, and a still more detailed classification could presumably be made. But it is neither possible nor advisable to refine our income estimates so as to be able to distinguish separate industries. Important distinctions appear very clearly in the small number of large subgroups which we distinguish. The main line of cleavage runs primarily in terms of the durability of the commodity in question; secondarily, in terms of the distinction between producers' and consumers' goods. The groups of food and tobacco, paper, printing, and publishing, and, to a smaller extent, chemicals and petroleum refining, produce primarily perishable goods and supply, for the most part, the needs of ultimate consumers. The textile and leather group turns out semidurable goods primarily for the ultimate consumer. The construction materials and furniture, metals and machinery, and miscellaneous (primarily machinery) groups produce goods that go both to ultimate and to industrial consumers, but all these goods are quite durable in character. We find, consequently, that the impact of the depression upon these three divisions in manufacturing is quite different; that the most drastic contraction is found in those industries that turn out durable goods, and the mildest contraction in those industries that turn out perishable commodities.

The difference appears clearly in the movement of employment (see table 63). The decline between 1929 and 1932 in the total number of employees in the food and tobacco, and paper, printing, and publishing groups is only about 20 percent, while in construction materials and furniture and metals and metal products it amounts to 54 and 48 percent, respectively. The same divergence appears in the movement of both wage earners and salaried employees. The number of wage earners in the perishable products groups declined much less than did the number in the durable products groups; and the same is true of salaried employees. Finally, it must be observed that the difference in contraction of employment between the salary earners and wage earners which was observed for manufacturing as a whole is true when the comparison is carried through by branches. In every one of the branches and in every year (with the exception of textiles and leather for 1932) the employment of the salary earners shows less of a decline from the 1929 level than does employment of wage earners.

The varying susceptibility of the different groups in manufacturing to the influence of the depression appears also in the decline in the dollar value of their output (see table 64). The most drastic contraction by 1932 is shown in metal and metal products, with construction materials and furniture little better. Paper, printing, and publishing, and food and tobacco again show the smallest decline, although even in these branches the shrinkage in the dollar value of output from 1929 to 1932 amounts to 44 to 46 percent. As in the case of employment, the textiles and leather group seems to occupy

an intermediate position, with a decline in gross income larger than in the case of the perishable products groups but smaller than that in the durable goods industries.

The adjustment of the dollar volume of output for price changes indicates a much more moderate contraction than would appear from the dollar value figures, but intensifies the difference in the movement among the various branches (see table 65). Whereas in dollar values the largest and smallest declines between 1929 and 1932 were 77 percent for metals and metal products and 44 percent for paper, printing, and publishing, the similar range in the quantity volume of output is between 71 percent decline for metals and metal products and a 12 percent decline for food and tobacco. The reason is, of course, in the greater elasticity of prices of perishable goods as against prices of durable commodities. The dollar volume of output in durable goods during these years was the product of a greatly contracted quantity output multiplied by a price that did not fall as much as did prices of other manufactured goods; while the dollar volume of output of perishable commodities during the same period was the product of a moderately reduced quantity output multiplied by a price that fell rather substantially.

It is interesting to compare by branches the movement of employment (table 63) and the changes in the quantity volume of output (table 65). In textiles and leather, and construction materials and furniture, employment and quantity output moved, on the whole, together. In food and tobacco, through all the years, paper, printing, and publishing through 1930, and chemicals and petroleum refining through 1931, the volume of employment declined appreciably more than did the volume of output, indicating an increase in output per employee. In metals and metal products, and in the miscellaneous group, especially the former, employment declined much less than the quantity volume of output, suggesting a decline in output per employee. In short, those industries which showed least contraction in volume of output seemed to have reduced employment more than was indicated by the shrinkage in their production; while the reverse was true of industries in which the fall in volume of output was severest of all.

The movement of labor incomes paid out by the various branches of the manufacturing industry reflects again the differences among them in the severity of the contraction of their gross incomes (see table 66). Again, the decline is smallest in food and tobacco, paper, printing and publishing, and chemicals and petroleum refining; it is most severe in construction materials and furniture, and metals and metal products. Again, in every branch and in every year, the incomes paid to salary earners declined less from the 1929 levels than did payments to wage earners.

Just as we compared number of employees with quantity output, so we can compare, branch by branch, labor incomes paid out with the dollar volume of output. This comparison shows that with the exception of construction materials in 1932, and the chemical and petroleum group in 1930, in every year the total labor incomes paid show a smaller decline from the 1929 level than do the dollar values of output. The inference is that labor incomes have become to a considerable extent an irreducible overhead cost. The interesting part is that this statement is true not only of salaries, but even of wages

in a number of industries. In only two groups, construction materials and the miscellaneous group, did wages decline pari passu with the drop in the value of output. In the others, wages formed in every year a larger fraction of total value of output than they did in 1929.

The movement of property income originated in the various branches of manufacturing shows some significant departures from the differential pattern of gross income and labor incomes (see table 67). It is true that the decline from 1929 to 1932 in property incomes is greatest in the same two branches which show the severest contraction also in other respects, viz., construction materials and furniture, and metals and metal products, and that the smallest decline appears in the group of food and tobacco. But, on the other hand, there is a striking contraction in the otherwise favorably appearing groups of paper, printing and publishing, and textiles and leather; while chemicals and petroleum refining do not show a substantial reduction in property incomes until 1932. It would seem then that corporate organization and the size of concerns in the industry, in addition to the volume of business, have some effect upon the industry's dividend paying policy.

It is interesting to note that property income originated has in a number of industries shown a smaller decline than that registered by the dollar value of output. This was true not only of such comparatively well-situated branches as food and tobacco, but also of chemicals and petroleum refining, metals and metal products, and the miscellaneous group.

The shift in the relative weight in the total net income paid out of the various important income types is shown by industrial branches in table 68. In all branches the relative weight of salary payments increased during this period, the rise being especially marked in the metals and metal products and in the construction materials and furniture groups. Wages seem to have lost ground in most industries. With the exception of paper, printing, and publishing and textiles and leather, the percentage of net income paid out to wage earners declined, both in industries which suffered most from the depression and in those which fared favorably as compared with others. The share of property incomes increased in food and tobacco, chemicals and petroleum refining, and somewhat in the miscellaneous group. It showed a distinct decline in the other four groups. On the whole, then, it was the salary earners and partly property income recipients who gained at the expense of wage earners in the general decline of net income paid out.

Table 69 demonstrates to what an extraordinary extent the flow of income paid out was sustained at the expense of the industry's capital and surplus; or, expressing it differently, to what extent other cost items, besides those covered under income paid out, failed to decline more than did gross income received so as to compensate for sustained income payments. Income paid out did decline less than the dollar value of output in every one of the branches distinguished, especially in chemicals and petroleum refining. But the other costs obviously failed to compensate for it; and some of them (depreciation, bad debts, and taxes other than income taxes) have probably remained much more rigid than income paid out itself. As a result, negative savings appeared in every branch in 1930

and increased to striking proportions in 1932. Consequently, income produced shows astounding declines. In metals and metal products the income produced in 1932 was less than one fifth of that in 1929, in construction materials and furniture, one eighth. By far the best showing was made by the food and tobacco group.

The per capita wages and salaries in the various branches of manufacturing are shown in table 70; and are instructive both in the absolute differences from industry to industry and in the divergence in their movements after 1929. Thus, it is interesting to observe ·that average salaries vary much less from industrial branch to industrial branch than do wages. The lowest and the highest average salary in 1929 were $2,340 and $2,879, respectively, a range of slightly over 20 percent of the lower figure; in wages the range in the same year was from $1,043 to $1,562, a difference of about 50 percent of the lower figure. Secondly, the average wage declined from the 1929 level more than did the average salary. This was true of every branch during every one of the years after 1929 except food and tobacco in 1930. And, finally, average wages and salaries declined much more in the durable goods industries than they did in the perishable goods branches.

When the decline in the average wage and salary is compared with the movement of the Bureau of Labor Statistics cost of living index, it becomes apparent that the average compensation of the employed salary earner retained its purchasing power in all branches, and has increased it in some (food and tobacco, chemicals and petroleum refining, paper, printing, and publishing). The average wage has increased in purchasing power in the same groups (food and tobacco, paper, printing, and publishing, and chemicals and petroleum refining). But in the others it suffered a decline in purchasing power, in textiles and leather in 1930 and especially in 1932; in construction materials and furniture in 1931, and especially in 1932; in metals and metal production throughout, but especially in 1932; and in the miscellaneous group, especially in 1932. Thus, even for the wage earners fortunate enough to remain on the pay rolls, the depression became especially intensified in 1932.

# SUMMARY TABLES, MANUFACTURING

### TABLE 58.—*Number of people engaged, manufacturing industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | 1,503,279 | 1,491,355 | 1,321,489 | 1,084,033 | 100.0 | 99.2 | 87.9 | 72.1 |
| 2 | Wage earners | 8,386,738 | 7,260,280 | 6,152,340 | 5,107,900 | 100.0 | 86.6 | 73.4 | 60.9 |
| 3 | Total number of employees | 9,890,017 | 8,751,635 | 7,473,829 | 6,191,933 | 100.0 | 88.5 | 75.6 | 62.6 |
| 4 | Entrepreneurs | 133,173 | 108,108 | 92,365 | 64,693 | 100.0 | 81.2 | 69.4 | 48.6 |
| 5 | Total number engaged | 10,023,190 | 8,859,743 | 7,566,194 | 6,256,626 | 100.0 | 88.4 | 75.5 | 62.4 |

### TABLE 59.—*Gross income, manufacturing industry, at current and at 1929 prices*

| Line | Item | 1929 | 1930 | 1931 | 1932 |
|---|---|---|---|---|---|
| 1 | Value of production, at current prices (thousands of dollars) | 68,468,192 | 54,740,796 | 39,972,829 | 25,796,205 |
| 2 | Value of production, at current prices (1929=100) | 100.0 | 80.0 | 58.4 | 37.8 |
| 3 | Value of production, at 1929 prices (thousands of dollars) | 68,468,192 | 59,559,596 | 51,115,915 | 37,588,713 |
| 4 | Value of production, at 1929 prices (1929=100) | 100.0 | 87.0 | 74.7 | 54.9 |

### TABLE 60.—*Income paid out and produced, manufacturing industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 4,012,965 | 4,030,394 | 3,377,528 | 2,429,235 | 100.0 | 100.4 | 84.2 | 60.5 |
| 2 | Wages | 10,898,641 | 8,865,751 | 6,669,451 | 4,474,107 | 100.0 | 81.3 | 61.2 | 41.1 |
| 3 | Other labor income | 72,755 | 72,360 | 65,917 | 57,741 | 100.0 | 99.5 | 90.6 | 79.4 |
| 4 | Total compensation of employees | 14,984,361 | 12,968,505 | 10,112,896 | 6,961,083 | 100.0 | 86.5 | 67.5 | 46.5 |
| 5 | Dividends | 2,577,121 | 2,616,817 | 1,896,142 | 1,047,917 | 100.0 | 101.5 | 73.6 | 40.7 |
| 6 | Interest | 214,619 | 250,350 | 230,413 | 207,536 | 100.0 | 116.6 | 107.4 | 96.7 |
| 7 | Total property income paid out | 2,791,740 | 2,867,167 | 2,126,555 | 1,255,453 | 100.0 | 102.7 | 76.2 | 45.0 |
| 8 | Withdrawals of entrepreneurs | 380,644 | 305,478 | 250,516 | 156,884 | 100.0 | 80.3 | 65.8 | 41.2 |
| 9 | Total income paid out | 18,156,745 | 16,141,150 | 12,489,967 | 8,373,420 | 100.0 | 88.9 | 68.8 | 46.1 |
| 10 | Corporate savings | 1,217,924 | −1,685,420 | −2,607,022 | −2,281,725 | | | | |
| 11 | Business savings of individuals | −20,539 | −164,152 | −206,440 | −218,928 | | | | |
| 12 | Total income produced | 19,354,130 | 14,291,578 | 9,676,505 | 5,872,767 | 100.0 | 73.9 | 50.0 | 30.3 |

### TABLE 61.—*Percentage distribution of income paid out, manufacturing industry*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 22.1 | 25.0 | 27.0 | 29.0 |
| 2 | Wages | 60.0 | 54.9 | 53.4 | 53.4 |
| 3 | Other labor income | .4 | .4 | .5 | .7 |
| 4 | Total compensation of employees | 82.5 | 80.3 | 81.0 | 83.1 |
| 5 | Dividends | 14.2 | 16.2 | 15.2 | 12.5 |
| 6 | Interest | 1.2 | 1.6 | 1.8 | 2.5 |
| 7 | Total property income paid out | 15.4 | 17.8 | 17.0 | 15.0 |
| 8 | Withdrawals of entrepreneurs | 2.1 | 1.9 | 2.0 | 1.9 |
| 9 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

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TABLE 62.—*Per capita income of employees, manufacturing industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | $2,669 | $2,703 | $2,556 | $2,241 | 100.0 | 101.3 | 95.8 | 84.0 |
| 2 | Wage earners | 1,300 | 1,221 | 1,084 | 876 | 100.0 | 93.9 | 83.4 | 67.4 |
| 3 | All active employees | 1,508 | 1,474 | 1,344 | 1,115 | 100.0 | 97.7 | 89.1 | 73.9 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## DETAILED TABLES, MANUFACTURING

TABLE 63.—*Number of employees, various branches of the manufacturing industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **SALARIED EMPLOYEES** | | | | | | | | |
| 1 | Food and tobacco | 144,948 | 142,113 | 132,495 | 118,132 | 100.0 | 98.0 | 91.4 | 81.5 |
| 2 | Paper, printing and publishing | 238,788 | 246,281 | 227,030 | 203,629 | 100.0 | 103.1 | 95.1 | 85.3 |
| 3 | Textiles and leather | 178,470 | 171,140 | 152,282 | 129,768 | 100.0 | 95.9 | 85.3 | 72.7 |
| 4 | Construction materials and furniture | 119,400 | 108,745 | 88,974 | 65,824 | 100.0 | 91.1 | 74.5 | 55.1 |
| 5 | Chemicals and petroleum refining | 92,825 | 93,722 | 83,788 | 72,102 | 100.0 | 101.0 | 90.3 | 77.7 |
| 6 | Metals and metal products | 444,646 | 452,706 | 390,718 | 295,021 | 100.0 | 101.8 | 87.9 | 66.3 |
| 7 | Miscellaneous and rubber | 75,839 | 69,952 | 63,051 | 49,327 | 100.0 | 92.2 | 83.1 | 65.0 |
| | **WAGE EARNERS** | | | | | | | | |
| 8 | Food and tobacco | 869,366 | 816,743 | 746,872 | 687,213 | 100.0 | 93.9 | 85.9 | 79.0 |
| 9 | Paper, printing and publishing | 591,381 | 568,909 | 509,264 | 455,954 | 100.0 | 96.2 | 86.1 | 77.1 |
| 10 | Textiles and leather | 2,054,344 | 1,834,303 | 1,707,200 | 1,507,179 | 100.0 | 89.3 | 83.1 | 73.4 |
| 11 | Construction materials and furniture | 1,204,800 | 957,259 | 733,507 | 542,653 | 100.0 | 79.5 | 60.9 | 45.0 |
| 12 | Chemicals and petroleum refining | 385,019 | 355,950 | 315,111 | 272,906 | 100.0 | 92.4 | 81.8 | 70.9 |
| 13 | Metals and metal products | 2,867,340 | 2,392,736 | 1,865,895 | 1,422,472 | 100.0 | 83.4 | 65.1 | 49.6 |
| 14 | Miscellaneous and rubber | 414,488 | 334,380 | 274,491 | 219,523 | 100.0 | 80.7 | 66.2 | 53.0 |
| | **TOTAL NUMBER OF EMPLOYEES** | | | | | | | | |
| 15 | Food and tobacco | 1,014,314 | 958,856 | 879,367 | 805,345 | 100.0 | 94.5 | 86.7 | 79.4 |
| 16 | Paper, printing and publishing | 830,169 | 815,190 | 736,294 | 659,583 | 100.0 | 98.2 | 88.7 | 79.5 |
| 17 | Textiles and leather | 2,232,814 | 2,005,443 | 1,859,482 | 1,636,947 | 100.0 | 89.8 | 83.3 | 73.3 |
| 18 | Construction materials and furniture | 1,324,200 | 1,066,004 | 822,481 | 608,477 | 100.0 | 80.5 | 62.1 | 46.0 |
| 19 | Chemicals and petroleum refining | 477,844 | 449,672 | 398,899 | 345,008 | 100.0 | 94.1 | 83.5 | 72.2 |
| 20 | Metals and metal products | 3,311,986 | 2,845,442 | 2,256,613 | 1,717,493 | 100.0 | 85.9 | 68.1 | 51.9 |
| 21 | Miscellaneous and rubber | 490,327 | 404,332 | 337,542 | 268,850 | 100.0 | 82.5 | 68.8 | 54.8 |

TABLE 64.—*Gross income at current prices, various branches of the manufacturing industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **VALUE OF PRODUCTION** | | | | | | | | |
| 1 | Food and tobacco | 13,269,831 | 11,808,963 | 9,363,767 | 7,155,210 | 100.0 | 89.0 | 70.6 | 53.9 |
| 2 | Paper, printing and publishing | 5,062,391 | 4,637,861 | 3,839,984 | 2,831,909 | 100.0 | 91.6 | 75.9 | 55.9 |
| 3 | Textiles and leather | 11,503,108 | 8,901,655 | 7,217,695 | 5,081,170 | 100.0 | 77.4 | 62.7 | 44.2 |
| 4 | Construction materials and furniture | 5,153,180 | 3,859,053 | 2,591,111 | 1,645,480 | 100.0 | 74.9 | 50.3 | 31.9 |
| 5 | Chemicals and petroleum refining | 6,894,500 | 6,550,689 | 4,437,796 | 2,498,101 | 100.0 | 95.0 | 64.4 | 36.2 |
| 6 | Metals and metal products | 23,819,139 | 16,832,156 | 10,989,529 | 5,531,964 | 100.0 | 70.7 | 46.1 | 23.2 |
| 7 | Miscellaneous and rubber | 2,766,043 | 2,150,419 | 1,532,947 | 1,052,371 | 100.0 | 77.7 | 55.4 | 38.0 |
| 8 | Total | 68,468,192 | 54,740,796 | 39,972,829 | 25,796,205 | 100.0 | 80.0 | 58.4 | 37.8 |

TABLE 65.—*Gross income at 1929 prices, various branches of the manufacturing industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **VALUE OF PRODUCTION** | | | | | | | | |
| 1 | Food and tobacco | 13,269,831 | 13,034,175 | 12,535,163 | 11,710,655 | 100.0 | 98.2 | 94.5 | 88.3 |
| 2 | Paper, printing and publishing | 5,062,391 | 4,576,401 | 4,292,908 | 3,670,233 | 100.0 | 90.4 | 84.8 | 72.5 |
| 3 | Textiles and leather | 11,503,108 | 9,934,883 | 9,649,325 | 8,155,971 | 100.0 | 86.4 | 83.9 | 70.9 |
| 4 | Construction materials and furniture | 5,153,180 | 4,096,659 | 3,159,891 | 2,217,626 | 100.0 | 79.5 | 61.3 | 43.0 |
| 5 | Chemicals and petroleum refining | 6,894,500 | 7,311,037 | 6,673,377 | 3,630,961 | 100.0 | 106.0 | 96.8 | 52.7 |
| 6 | Metals and metal products | 23,819,139 | 18,375,716 | 13,067,216 | 6,932,286 | 100.0 | 77.1 | 54.9 | 29.1 |
| 7 | Miscellaneous and rubber | 2,766,043 | 2,230,725 | 1,738,035 | 1,270,979 | 100.0 | 80.6 | 62.8 | 45.9 |
| 8 | Total | 68,468,192 | 59,559,596 | 51,115,915 | 37,588,713 | 100.0 | 87.0 | 74.7 | 54.9 |

TABLE 66.—*Salaries and wages paid, various branches of the manufacturing industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **SALARIES** | | | | | | | | |
| 1 | Food and tobacco | 339,191 | 330,839 | 298,909 | 246,541 | 100.0 | 97.5 | 88.1 | 72.7 |
| 2 | Paper, printing and publishing | 596,000 | 625,061 | 551,456 | 440,246 | 100.0 | 104.9 | 92.5 | 73.9 |
| 3 | Textiles and leather | 513,759 | 482,444 | 409,943 | 302,619 | 100.0 | 93.9 | 79.8 | 58.9 |
| 4 | Construction materials and furniture | 323,868 | 293,720 | 227,062 | 143,365 | 100.0 | 90.7 | 70.1 | 44.3 |
| 5 | Chemicals and petroleum refining | 246,818 | 255,674 | 228,322 | 175,785 | 100.0 | 103.6 | 92.5 | 71.2 |
| 6 | Metals and metal products | 1,199,151 | 1,255,354 | 991,642 | 649,931 | 100.0 | 104.7 | 82.7 | 54.2 |
| 7 | Miscellaneous and rubber | 193,741 | 184,463 | 164,626 | 107,484 | 100.0 | 95.2 | 85.0 | 55.5 |
| | **WAGES** | | | | | | | | |
| 8 | Food and tobacco | 996,722 | 937,551 | 802,012 | 650,511 | 100.0 | 94.1 | 80.5 | 65.3 |
| 9 | Paper, printing and publishing | 923,702 | 881,212 | 748,567 | 584,631 | 100.0 | 95.4 | 81.0 | 63.3 |
| 10 | Textiles and leather | 2,142,018 | 1,777,875 | 1,530,175 | 1,091,553 | 100.0 | 83.0 | 71.4 | 51.0 |
| 11 | Construction materials and furniture | 1,372,200 | 1,034,462 | 693,067 | 378,522 | 100.0 | 75.4 | 50.5 | 27.6 |
| 12 | Chemicals and petroleum refining | 523,282 | 471,942 | 395,739 | 303,254 | 100.0 | 90.2 | 75.6 | 58.0 |
| 13 | Metals and metal products | 4,392,050 | 3,337,910 | 2,187,808 | 1,265,005 | 100.0 | 76.0 | 49.8 | 28.8 |
| 14 | Miscellaneous and rubber | 548,667 | 424,799 | 312,083 | 200,631 | 100.0 | 77.4 | 56.9 | 36.6 |
| | **TOTAL COMPENSATION OF EMPLOYEES** | | | | | | | | |
| 15 | Food and tobacco | 1,344,251 | 1,277,611 | 1,110,048 | 906,023 | 100.0 | 95.0 | 82.6 | 67.4 |
| 16 | Paper, printing and publishing | 1,522,945 | 1,509,859 | 1,303,358 | 1,028,025 | 100.0 | 99.1 | 85.6 | 67.5 |
| 17 | Textiles and leather | 2,660,146 | 2,264,552 | 1,944,078 | 1,397,607 | 100.0 | 85.1 | 73.1 | 52.5 |
| 18 | Construction materials and furniture | 1,710,369 | 1,340,765 | 929,309 | 527,987 | 100.0 | 78.4 | 54.3 | 30.9 |
| 19 | Chemicals and petroleum refining | 778,069 | 736,533 | 633,757 | 468,559 | 100.0 | 94.7 | 81.5 | 62.8 |
| 20 | Metals and metal products | 5,621,875 | 4,623,365 | 3,206,695 | 1,938,581 | 100.0 | 82.2 | 57.0 | 34.5 |
| 21 | Miscellaneous and rubber | 746,269 | 612,981 | 480,083 | 311,037 | 100.0 | 82.1 | 64.3 | 41.7 |

TABLE 67.—*Property income originated, various branches of the manufacturing industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **DIVIDENDS** | | | | | | | | |
| 1 | Food and tobacco | 401,580 | 434,369 | 367,282 | 327,703 | 100.0 | 108.2 | 91.5 | 81 6 |
| 2 | Paper, printing and publishing | 189,984 | 179,511 | 131,694 | 47,705 | 100.0 | 94.5 | 69.3 | 25.1 |
| 3 | Textiles and leather | 216,462 | 168,569 | 125,245 | 63,328 | 100.0 | 77.9 | 57.9 | 29.3 |
| 4 | Construction materials and furniture | 181,219 | 139,311 | 84,352 | 28,506 | 100.0 | 76.9 | 46 5 | 15 7 |
| 5 | Chemicals and petroleum refining | 485,653 | 600,412 | 459,558 | 327,311 | 100.0 | 123.6 | 94.6 | 67.4 |
| 6 | Metals and metal products | 983,545 | 990,274 | 652,920 | 205,307 | 100.0 | 100.7 | 66 4 | 20.9 |
| 7 | Miscellaneous and rubber | 118,678 | 104,371 | 75,091 | 48,037 | 100.0 | 87.9 | 63.3 | 40 5 |
| | **INTEREST** | | | | | | | | |
| 8 | Food and tobacco | 48,274 | 49,409 | 43,404 | 43,486 | 100.0 | 102.4 | 89.9 | 90 1 |
| 9 | Paper, printing and publishing | 32,166 | 33,665 | 31,311 | 30,483 | 100.0 | 104.7 | 97.3 | 94 8 |
| 10 | Textiles and leather | 11,694 | 11,790 | 10,406 | 9,516 | 100.0 | 100.8 | 89.0 | 81 4 |
| 11 | Construction materials and furniture | 20,583 | 23,962 | 22,830 | 16,333 | 100.0 | 116.4 | 110.9 | 79.4 |
| 12 | Chemicals and petroleum refining | 31,915 | 41,097 | 52,894 | 44,504 | 100.0 | 128.8 | 165.7 | 139 4 |
| 13 | Metals and metal products | 49,722 | 67,166 | 47,767 | 45,359 | 100.0 | 135.1 | 96.1 | 91.2 |
| 14 | Miscellaneous and rubber | 20,265 | 23,261 | 21,801 | 17,855 | 100.0 | 114.8 | 107.6 | 88 1 |
| | **TOTAL PROPERTY INCOME PAID OUT** | | | | | | | | |
| 15 | Food and tobacco | 449,854 | 483,778 | 410,686 | 371,189 | 100 0 | 107.5 | 91 3 | 82.5 |
| 16 | Paper, printing and publishing | 222,150 | 213,176 | 163,005 | 78,188 | 100.0 | 96 0 | 73.4 | 35.2 |
| 17 | Textiles and leather | 228,156 | 180,359 | 135,651 | 72,844 | 100.0 | 79.1 | 59.5 | 31.9 |
| 18 | Construction materials and furniture | 201,802 | 163,273 | 107,182 | 44,859 | 100.0 | 80.9 | 53.1 | 22.2 |
| 19 | Chemicals and petroleum refining | 517,568 | 641,509 | 512,452 | 371,815 | 100.0 | 123.9 | 99.0 | 71.8 |
| 20 | Metals and metal products | 1,033,267 | 1,057,440 | 700,687 | 250,666 | 100 0 | 102 3 | 67.8 | 24.3 |
| 21 | Miscellaneous and rubber | 138,943 | 127,632 | 96,892 | 65,892 | 100 0 | 91.9 | 69.7 | 47.4 |

TABLE 68.—*Percentage distribution of income paid out, various branches of the manufacturing industry*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| | **SALARIES** | | | | |
| 1 | Food and tobacco | 17.9 | 17.8 | 18 7 | 18.6 |
| 2 | Paper, printing and publishing | 33.4 | 35.6 | 36.8 | 39.1 |
| 3 | Textiles and leather | 17.2 | 19.2 | 19.1 | 20.0 |
| 4 | Construction materials and furniture | 16.3 | 18 9 | 21.3 | 24 3 |
| 5 | Chemicals and petroleum refining | 18.9 | 18.4 | 19.8 | 20.3 |
| 6 | Metals and metal products | 17.9 | 22.0 | 25.2 | 29.4 |
| 7 | Miscellaneous and rubber | 21.4 | 24.3 | 27.9 | 28.0 |
| | **WAGES** | | | | |
| 8 | Food and tobacco | 52.5 | 50.5 | 50.1 | 49.2 |
| 9 | Paper, printing and publishing | 51.8 | 50.1 | 50.0 | 52.0 |
| 10 | Textiles and leather | 71.7 | 70.8 | 71.3 | 72.0 |
| 11 | Construction materials and furniture | 69.2 | 66.5 | 65.0 | 64.3 |
| 12 | Chemicals and petroleum refining | 40.0 | 33.9 | 34.3 | 35.1 |
| 13 | Metals and metal products | 65.6 | 58.4 | 55.6 | 57.3 |
| 14 | Miscellaneous and rubber | 60 7 | 56 1 | 53.0 | 52.2 |
| | **PROPERTY INCOME PAID OUT** | | | | |
| 15 | Food and tobacco | 23.7 | 26.1 | 25.7 | 28.0 |
| 16 | Paper, printing and publishing | 12.5 | 12.1 | 10.9 | 6.9 |
| 17 | Textiles and leather | 7.6 | 7.2 | 6.3 | 4.8 |
| 18 | Construction materials and furniture | 10.2 | 10.5 | 10.1 | 7.6 |
| 19 | Chemicals and petroleum refining | 39.6 | 46.1 | 44.4 | 43.0 |
| 20 | Metals and metal products | 15.4 | 18.5 | 17.8 | 11.4 |
| 21 | Miscellaneous and rubber | 15.4 | 16.8 | 16.4 | 17.2 |

TABLE 69.—*Income paid out and produced, various branches of the manufacturing industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **INCOME PAID OUT** | | | | | | | | |
| 1 | Food and tobacco | 1,898,193 | 1,856,020 | 1,600,168 | 1,323,328 | 100.0 | 97.8 | 84.3 | 69.7 |
| 2 | Paper, printing and publishing | 1,783,883 | 1,757,595 | 1,496,764 | 1,125,035 | 100.0 | 98.5 | 83.9 | 63.1 |
| 3 | Textiles and leather | 2,985,478 | 2,510,350 | 2,146,175 | 1,516,270 | 100.0 | 84.1 | 71.9 | 50.8 |
| 4 | Construction materials and furniture | 1,983,887 | 1,554,536 | 1,066,385 | 588,830 | 100.0 | 78.4 | 53.7 | 29.7 |
| 5 | Chemicals and petroleum refining | 1,308,511 | 1,391,072 | 1,154,034 | 864,581 | 100.0 | 106.3 | 88.2 | 66.1 |
| 6 | Metals and metal products | 6,691,889 | 5,710,881 | 3,931,757 | 2,207,981 | 100.0 | 85.3 | 58.8 | 33.0 |
| 7 | Miscellaneous and rubber | 904,467 | 757,857 | 589,116 | 384,131 | 100.0 | 83.8 | 65.1 | 42.5 |
| | **BUSINESS SAVINGS** | | | | | | | | |
| 8 | Food and tobacco | 70,315 | −53,848 | −148,807 | −240,062 | | | | |
| 9 | Paper, printing and publishing | 100,858 | −29,025 | −113,756 | −95,540 | | | | |
| 10 | Textiles and leather | −63,353 | −527,434 | −475,339 | −449,850 | | | | |
| 11 | Construction materials and furniture | −50,828 | −261,471 | −348,827 | −378,220 | | | | |
| 12 | Chemicals and petroleum refining | 278,754 | −341,938 | −541,527 | −313,377 | | | | |
| 13 | Metals and metal products | 901,835 | −442,416 | −1,001,870 | −825,563 | | | | |
| 14 | Miscellaneous and rubber | −40,196 | −193,440 | −183,336 | −108,041 | | | | |
| | **INCOME PRODUCED** | | | | | | | | |
| 15 | Food and tobacco | 1,968,508 | 1,802,172 | 1,451,361 | 1,083,266 | 100.0 | 91.6 | 73.7 | 55.0 |
| 16 | Paper, printing and publishing | 1,884,741 | 1,728,570 | 1,383,008 | 1,029,495 | 100.0 | 91.7 | 73.4 | 54.6 |
| 17 | Textiles and leather | 2,922,125 | 1,982,916 | 1,670,836 | 1,066,420 | 100.0 | 67.9 | 57.2 | 36.5 |
| 18 | Construction materials and furniture | 1,933,059 | 1,293,065 | 717,558 | 210,610 | 100.0 | 66.9 | 37.1 | 10.9 |
| 19 | Chemicals and petroleum refining | 1,587,265 | 1,049,134 | 612,507 | 551,204 | 100.0 | 66.1 | 38.6 | 34.7 |
| 20 | Metals and metal products | 7,593,724 | 5,268,465 | 2,929,857 | 1,382,418 | 100.0 | 69.4 | 38.6 | 18.2 |
| 21 | Miscellaneous and rubber | 864,271 | 564,417 | 405,780 | 186,090 | 100.0 | 65.3 | 47.0 | 21.5 |

TABLE 70.—*Per capita income of employees, various branches of the manufacturing industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **AVERAGE SALARY** | | | | | | | | |
| 1 | Food and tobacco | $2,340 | $2,328 | $2,256 | $2,087 | 100.0 | 99.5 | 96.4 | 89.2 |
| 2 | Paper, printing and publishing | 2,496 | 2,538 | 2,429 | 2,162 | 100.0 | 101.7 | 97.3 | 86.6 |
| 3 | Textiles and leather | 2,879 | 2,819 | 2,692 | 2,332 | 100.0 | 97.9 | 93.5 | 81.0 |
| 4 | Construction materials and furniture | 2,712 | 2,701 | 2,552 | 2,178 | 100.0 | 99.6 | 94.1 | 80.3 |
| 5 | Chemicals and petroleum refining | 2,659 | 2,728 | 2,725 | 2,438 | 100.0 | 102.6 | 102.5 | 91.7 |
| 6 | Metals and metal products | 2,697 | 2,773 | 2,538 | 2,203 | 100.0 | 102.8 | 94.1 | 81.7 |
| 7 | Miscellaneous and rubber | 2,555 | 2,637 | 2,611 | 2,179 | 100.0 | 103.2 | 102.2 | 85.3 |
| | **AVERAGE WAGE** | | | | | | | | |
| 8 | Food and tobacco | 1,146 | 1,148 | 1,074 | 947 | 100.0 | 100.2 | 93.7 | 82.6 |
| 9 | Paper, printing and publishing | 1,562 | 1,549 | 1,470 | 1,282 | 100.0 | 99.2 | 94.1 | 82.1 |
| 10 | Textiles and leather | 1,043 | 969 | 896 | 724 | 100.0 | 92.9 | 85.9 | 69.4 |
| 11 | Construction materials and furniture | 1,139 | 1,081 | 945 | 698 | 100.0 | 94.9 | 83.0 | 61.3 |
| 12 | Chemicals and petroleum refining | 1,359 | 1,326 | 1,256 | 1,111 | 100.0 | 97.6 | 92.4 | 81.8 |
| 13 | Metals and metal products | 1,532 | 1,395 | 1,173 | 889 | 100.0 | 91.1 | 76.6 | 58.0 |
| 14 | Miscellaneous and rubber | 1,324 | 1,270 | 1,137 | 914 | 100.0 | 95.9 | 85.9 | 69.0 |
| | **AVERAGE COMPENSATION PER ACTIVE EMPLOYEE** | | | | | | | | |
| 15 | Food and tobacco | 1,317 | 1,323 | 1,252 | 1,114 | 100.0 | 100.5 | 95.1 | 84.6 |
| 16 | Paper, printing and publishing | 1,831 | 1,848 | 1,766 | 1,554 | 100.0 | 100.9 | 96.5 | 84.9 |
| 17 | Textiles and leather | 1,189 | 1,127 | 1,043 | 852 | 100.0 | 94.8 | 87.7 | 71.7 |
| 18 | Construction materials and furniture | 1,281 | 1,246 | 1,119 | 858 | 100.0 | 97.3 | 87.4 | 67.0 |
| 19 | Chemicals and petroleum refining | 1,612 | 1,618 | 1,564 | 1,388 | 100.0 | 100.4 | 97.0 | 86.1 |
| 20 | Metals and metal products | 1,688 | 1,614 | 1,409 | 1,115 | 100.0 | 95.6 | 83.5 | 66.1 |
| 21 | Miscellaneous and rubber | 1,514 | 1,507 | 1,412 | 1,146 | 100.0 | 99.5 | 93.3 | 75.7 |
| 22 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

# CHAPTER IX

## CONSTRUCTION

The construction industry, as defined in this report, includes construction or alteration of buildings, roads, bridges, and other engineering structures, in so far as such work is done by construction companies, but not by industrial or government organizations with the help of their own forces. Thus, income from a large volume of construction by railroads, telephone companies, pipe line companies, Federal, State, and city governments, and others, is not included in the income estimates presented below, but forms a part of the total income originating in steam railroads, the telephone industry, pipe line companies, etc. The distinction thus made between construction defined institutionally, as it is in the present report, and construction defined functionally, results in a striking difference in the volumes involved. Thus all construction, defined functionally, amounted in 1929 to about 11.5 billion dollars (estimated by the Federal Employment Stabilization Board), while the volume of contract construction (i.e., accounted for by construction firms) is estimated as only about 7 billion dollars.

The Census of Construction for 1929 was the first Nation-wide tally of the industry taken since 1900, and provides a great deal of information underlying the estimates given below. But a comparison of the census totals with other information available on the volume of contract construction (reports by the F. W. Dodge Co. on the value of contracts awarded, estimates by the Federal Employment Stabilization Board of the volume of construction, data by the Census of Occupations on the number of gainfully occupied attached to the industry, data from the Censuses of Manufactures and Distribution on the volume of construction materials produced and consumed) lead to the conclusion that the census failed to cover the industry completely. Instead of a volume of construction of 5.8 billion dollars in 1929, indicated by the census, it appeared more reasonable to assume a volume of 7 billion dollars (see appendix A, notes to table 72). Consequently, the average number of employees in the industry and the labor incomes, as derived from the Census of Construction, were raised by slightly over 20 percent, to take care of the shortage in covering.

The Census of Occupations reports 2,574,968 gainfully occupied attached to the building industry, and 454,824 classified under construction and maintenance of roads, sewers, and bridges. While the latter figure probably includes a number of gainfully occupied not engaged in construction or repair, this excess is more than offset by the number of casual workers in the construction field counted among the 1.3 million gainfully occupied for whom no industrial attachment is given. We have thus a total of slightly over 3 million gainfully occupied attached to the construction industry, while the number engaged in 1929 as shown in table 71 is only slightly over

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1.5 million. But the Census of Occupations totals must include a very large proportion of construction workers engaged by the public utilities, government, or other nonconstruction firms for work on their own account. If we assume that all such workers were classified by the Census of Occupations under the two classifications mentioned above, the number of wage earners in table 71 should, for the purpose of comparison, be raised by 64 percent (the percentage excess in 1929 of total construction over contract construction). This would raise the total number engaged in construction to 2.3 millions, still leaving a surplus of 700,000 unemployed. This does not appear to be an excessive surplus, since the seasonality in the industry is considerable, and since by 1929 the volume of construction was already on the decline from the peak of 1928.

The decline in employment in the construction industry shown by table 71 is striking, even though for lack of data we are forced to the somewhat improbable assumption that the number of entrepreneurs attached to the industry remained the same. The number of wage earners has shrunk by 1932 to slightly more than one third of the volume in 1929, with the result that the industry contributed about 850,000 men to the army of unemployed. As is the case in other industries, the number of salaried employees has shown a milder decline. But even for the latter group the contraction from 1929 to 1932 amounted to over 50 percent of the 1929 level.

Table 72 indicates the drastic decline which took place during the period in the volume of contract construction. The drop was especially marked in private construction, which in 1932 was about one seventh of the volume in 1929.[1] Public utility and government construction done on a contract basis declined somewhat less, but even there the volume in 1932 was only slightly over one third of the level of 1929. Of course, both public utilities and the government cut down on construction contracts much more than they did on construction work done by their own forces. Thus the decline for these two groups shown in table 72 is a combined result of a decline in total public and public utility construction and of the shift in favor of construction done on own account.

The adjustment of the dollar volume for the changes in building costs serves to reduce the decline between 1929 and 1932 (see table 73). But even with this adjustment, the volume of contract construction shows a total drop from 1929 of 67 percent.

The bearing of this striking contraction of the industry upon income originated in it is shown in table 74 and chart IX. Labor income had declined by 1932 to slightly more than one quarter of the 1929 volume, with the customary disparity in movement in favor of salaries appearing again. Property incomes did not begin to decline until 1931, but suffered a drastic contraction by 1932. The estimate of withdrawals by individual entrepreneurs is based on the movement of salaries (the only basis available in the present state of the data), and thus reflects the changes in that particular part of labor income. The total income paid out did not decline as much as gross income produced, the latter being judged by the dollar volume of total construction. But negative savings are shown for the industry

[1] These estimates are based on the volume of contracts awarded, and there is some lag between actual construction and the date of award of the contract.

CHART IX



INCOME BY TYPE OF PAYMENT
CONSTRUCTION

BILLIONS
OF
DOLLARS

INTEREST
DIVIDENDS

ENTREPRENEURIAL
WITHDRAWALS

OTHER LABOR INCOME

SALARIES

WAGES

EXCESS WITHDRAWN

1929      1930      1931      1932

3

2

1

0
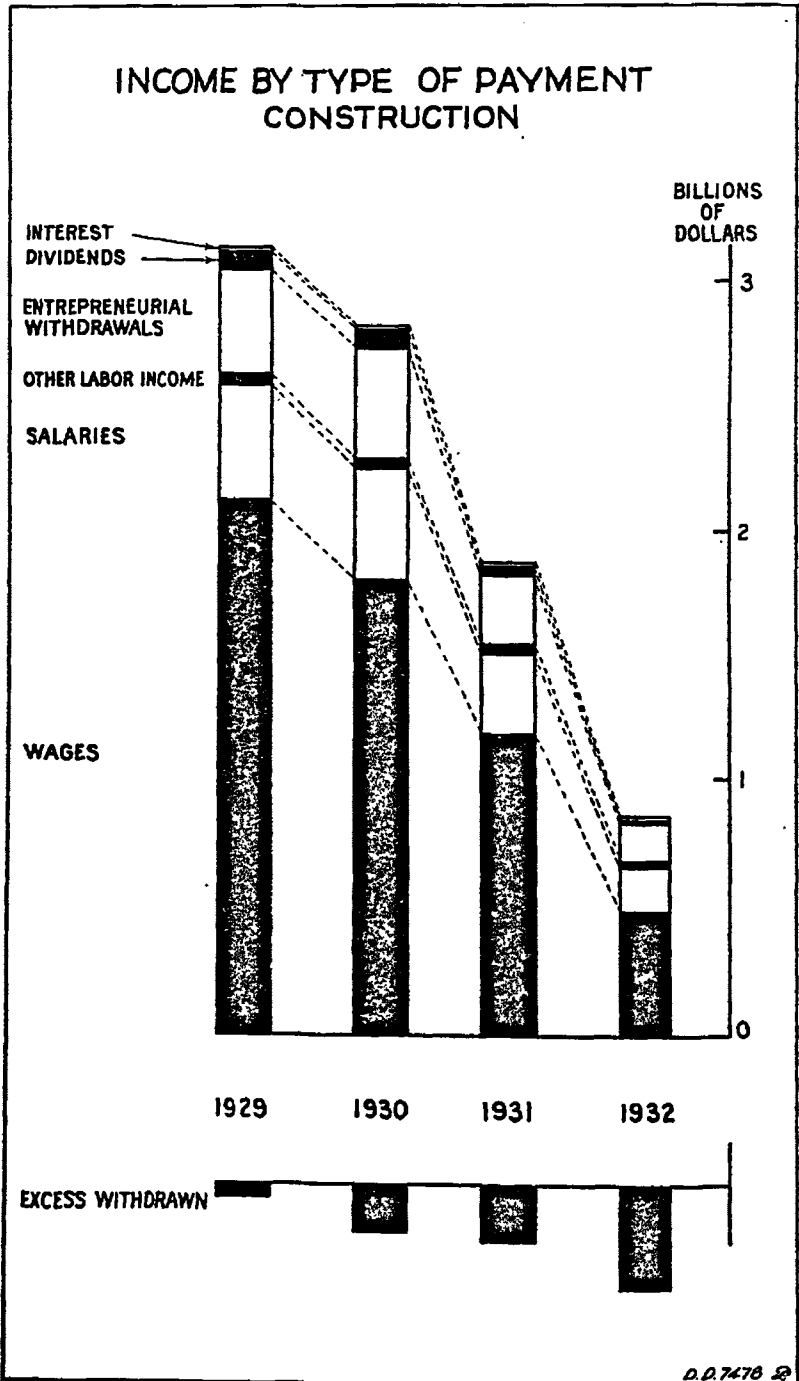
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even in 1929. They increased in 1930 and 1932. As a result, income produced dropped much more than did income paid out. Indeed, income produced moved in close similarity to gross income (compare with table 72).

Labor and entrepreneurial incomes account for over 95 percent of income paid out in the industry (see table 75). Since entrepreneurial incomes and salaries are assumed to move similarly, and salaries show greater resistance to the contraction than do wages, the combined share of entrepreneurial income and salaries in the total paid out grew from 28.4 percent in 1929 to 37.8 percent in 1932; while the share of wages declined between the same 2 years from 68 to 58 percent.

The reduction of labor incomes to a per capita basis (see table 76) indicates that the average compensation of a salary earner declined to about the same extent as did the cost of living, so that the purchasing power of the average salary remained approximately the same from 1929 through 1932. The same stability of purchasing power of the average compensation was also true of the employed wage earners, but only through 1931. In 1932, per capita wages declined materially, much beyond the decline in the cost of living; with the result that the purchasing power of the average wage dropped by about 17 percent between 1931 and 1932.

# SUMMARY TABLES, CONSTRUCTION

## TABLE 71.—*Number of people engaged, construction industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | 154,785 | 156,701 | 119,181 | 72,584 | 100.0 | 101.2 | 77.0 | 46.9 |
| 2 | Wage earners | 1,204,916 | 1,053,097 | 766,930 | 432,566 | 100.0 | 87.4 | 63.7 | 35.9 |
| 3 | Total number of employees | 1,359,701 | 1,209,798 | 886,111 | 505,150 | 100.0 | 89.0 | 65.2 | 37.2 |
| 4 | Entrepreneurs | 167,811 | 167,811 | 167,811 | 167,811 | 100.0 | 100.0 | 100.0 | 100.0 |
| 5 | Total number engaged | 1,527,512 | 1,377,609 | 1,053,922 | 672,961 | 100.0 | 90.2 | 69.0 | 44.1 |

## TABLE 72.—*Total volume of contract construction (at current building costs)*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Private construction | 4,114 | 2,475 | 1,535 | 587 | 100.0 | 60.2 | 37.3 | 14.3 |
| 2 | Public utility construction | 974 | 1,056 | 775 | 379 | 100.0 | 108.4 | 79.6 | 38.9 |
| 3 | Public construction | 1,883 | 2,042 | 1,498 | 734 | 100.0 | 108.4 | 79.6 | 39.0 |
| 4 | Total construction | 6,971 | 5,573 | 3,808 | 1,700 | 100.0 | 79.9 | 54.6 | 24.4 |

## TABLE 73.—*Total volume of contract construction (at 1929 building costs)*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Private construction | 4,114 | 2,781 | 1,968 | 793 | 100.0 | 67.6 | 47.8 | 19.3 |
| 2 | Public utility construction | 974 | 1,187 | 994 | 512 | 100.0 | 121.9 | 102.1 | 52.6 |
| 3 | Public construction | 1,883 | 2,294 | 1,921 | 992 | 100.0 | 121.8 | 102.0 | 52.7 |
| 4 | Total construction | 6,971 | 6,262 | 4,882 | 2,297 | 100.0 | 89.8 | 70.0 | 33.0 |

## TABLE 74.—*Income paid out and produced, construction industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 454,604 | 451,142 | 321,193 | 166,725 | 100.0 | 99.2 | 70.7 | 36.7 |
| 2 | Wages | 2,133,649 | 1,806,320 | 1,180,976 | 497,698 | 100.0 | 84.7 | 55.4 | 23.3 |
| 3 | Other labor income | 31,291 | 33,591 | 32,539 | 24,851 | 100.0 | 107.4 | 104.0 | 79.4 |
| 4 | Total compensation of employees | 2,619,544 | 2,291,053 | 1,534,708 | 689,274 | 100.0 | 87.5 | 58.6 | 26.3 |
| 5 | Dividends | 62,315 | 84,594 | 39,901 | 3,944 | 100.0 | 135.8 | 64.0 | 6.3 |
| 6 | Interest | 17,076 | 16,631 | 13,537 | 10,526 | 100.0 | 97.4 | 79.3 | 61.6 |
| 7 | Total property income paid out | 79,391 | 101,225 | 53,438 | 14,470 | 100.0 | 127.5 | 67.3 | 18.2 |
| 8 | Withdrawals of entrepreneurs | 436,249 | 432,759 | 308,428 | 160,103 | 100.0 | 99.2 | 70.7 | 36.7 |
| 9 | Total income paid out | 3,135,184 | 2,825,037 | 1,896,574 | 863,847 | 100.0 | 90.1 | 60.5 | 27.6 |
| 10 | Corporate savings | 20,263 | −17,186 | −53,430 | −95,558 | | | | |
| 11 | Business savings of individuals | −68,179 | −164,009 | −175,837 | −314,479 | | | | |
| 12 | Total income produced | 3,087,268 | 2,643,842 | 1,667,307 | 453,810 | 100.0 | 85.6 | 54.0 | 14.7 |

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TABLE 75.—*Percentage distribution of income paid out, construction industry*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 14.5 | 16.0 | 16.9 | 19.3 |
| 2 | Wages | 68.1 | 63.9 | 62.3 | 57.6 |
| 3 | Other labor income | 1.0 | 1.2 | 1.7 | 2.9 |
| 4 | Total compensation of employees | 83.6 | 81.1 | 80.9 | 79.8 |
| 5 | Dividends | 2.0 | 3.0 | 2.1 | .5 |
| 6 | Interest | .5 | .6 | .7 | 1.2 |
| 7 | Total property income paid out | 2.5 | 3.6 | 2.8 | 1.7 |
| 8 | Withdrawals of entrepreneurs | 13.9 | 15.3 | 16.3 | 18.5 |
| 9 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 76.—*Per capita income of employees, construction industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | $2,937 | $2,879 | $2,695 | $2,297 | 100.0 | 98.0 | 91.8 | 78.2 |
| 2 | Wage earners | 1,771 | 1,715 | 1,540 | 1,151 | 100.0 | 96.8 | 87.0 | 65.0 |
| 3 | All active employees | 1,904 | 1,866 | 1,695 | 1,315 | 100.0 | 98.0 | 89.0 | 69.1 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

# TRANSPORTATION

## 1. THE INDUSTRY AS A WHOLE

The transportation industry, more than most general groups distinguished so far, offers during recent years a picture of conflicting trends among the various branches which in common satisfy the demand for movement across space. It includes specific industries which differ in a large number of aspects: In the rate of their current technical progress, in relative size, in the degree of control exercised by the government over them, in the character of needs which they satisfy. Transportation is a collective name that embraces steam railroads, one of the largest industrial branches of the country, which satisfies a diversified demand for both short- and long-distance transportation of both commodities and people; an industry closely regulated by the government, and one in which technical progress appears largely to be a matter of the past. On the other hand, there is motor transportation, which is still growing rapidly and which is much less subject to governmental regulation. Then there is such a small but rapidly expanding branch as air transportation, so far confined primarily to passengers and mail; water transportation, one of the oldest branches of the industry; and, finally, such a narrowly specific group as pipe lines. It may be seen that the total for the transportation industry is bound to conceal large divergences in movement among the constituent parts. The discussion of the industry as a whole can, therefore, be only a brief introduction to the analysis of changes in the specific branches.

The field as covered in the present chapter fails to include all transportation. Two minor branches had to be classified with the miscellaneous group, because the available data did not allow even rough estimates of net income involved. These branches were harbor craft, in the water transportation division, and taxicabs, in the motor transportation division. On the other hand, the estimates below cover more than just transportation. The available data do not permit a clear, functional segregation of industrial activity. Consequently, estimates of income produced in the steam railroad branch include not only the value of services rendered by railroads in transporting commodities and people, but also the value of services of steam railroad employees engaged in the construction, repair, and maintenance of track, equipment, and buildings. Similarly, the estimates for motor and water transportation include the income of employees of firms engaged in these fields who spend their time in the repair and maintenance of equipment. This is a result of that institutional type of classification by industrial groups which is forced upon us by the character of the available information.

The Census of Occupations lists about 2.9 million people who may be classified as attached to the field of transportation, as the latter

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is defined in the present chapter.[1]  This total includes gainfully occupied in the harbor craft and in the taxicab business but, on the other hand, it excludes construction workers engaged by railroads on own account, repair men in motor transportation, etc.  The addition of this body would probably raise the number of gainfully occupied somewhat above the 3.1 million employed in 1929, which is shown in table 77.

The movement of employment for the various groups of people engaged in the industry shows substantial effects of the depression, although not as marked as those in manufacturing, mining, or construction.  As in other industrial groups, so here the employment of salary earners has not been reduced as much as that of wage earners. The puzzling feature at first is the absence of any material decline in the otherwise small number of entrepreneurs in the industry.  But most of these independent employers are in the motor transportation field, which felt the effects of the depression much less than did the big field of steam railroads.

The labor income of the body of employees in the field showed a much more drastic contraction than did their numbers (see table 78).  Total compensation showed an accelerating decline from 1929 resulting in a volume in 1932 about 42 percent below the 1929 level. Again, for those areas in the field for which the distinction of salaries and wages was possible, the salaries declined less than wages; although even in the former the decline from the 1929 level amounted to over one third.

Of the property incomes, dividends showed a marked contraction after 1930, and by 1932 were down to less than one third of the 1929 level.  But interest payments, which in this group are relatively more important than in most other industrial divisions, showed no effect of the depression.  In every year after 1929 they were at a level higher than that for the year of prosperity; with the result that the combined property income declined to a smaller extent than did labor income.  This comparatively favorable movement of property income was observed also in some other industrial groups, but in the latter the general effect of the depression on gross income and labor compensation was much less marked than in the present field.

Total income paid out declined by 1932 to 60 percent of the 1929 volume, and, as in all other industries, income produced declined more.  Negative savings appeared in 1930 and reached large proportions in 1932.  The contraction in income produced brought the volume by 1932 to about one half of that of 1929.  A summary of changes in the various parts of income produced and paid out is presented graphically on chart X.

Table 79 reflects the shift in the proportional weight of the various functional types of income in total income paid out.  Salaries, where such could be segregated, have claimed a growing share, although the increase was not material.  On the other hand, the share of wages declined appreciably—from 42 percent of total income paid out in 1929 to 34 in 1932.  The total share of labor has also shown a decline even though this fall was reduced somewhat by the resistance of salaries to contraction.  The most striking change, however, was the

[1] This total is an addition of the following numbers (in thousands): 18, air transportation; 62, express companies; 25, pipe lines; 1,583, steam railroads; 195, street railroads; 483, truck, transfer, and cab companies; 300, water transportation; 12, other and not specific transportation and communication; and 226, car and railroad shops.

CHART X



INCOME BY TYPE OF PAYMENT
TRANSPORTATION

BILLIONS
OF
DOLLARS

INTEREST

DIVIDENDS

ENTREPRENEURIAL
WITHDRAWALS

OTHER LABOR INCOME

SALARIES OR WAGES

SALARIES ⱱ

WAGES ⱱ

1929     1930     1931     1932

EXCESS PRODUCED

EXCESS WITHDRAWN

ⱱ   *Steam railroads, pullman, railway express and water transportation.*
ⱱ   *Other branches of transportation.*

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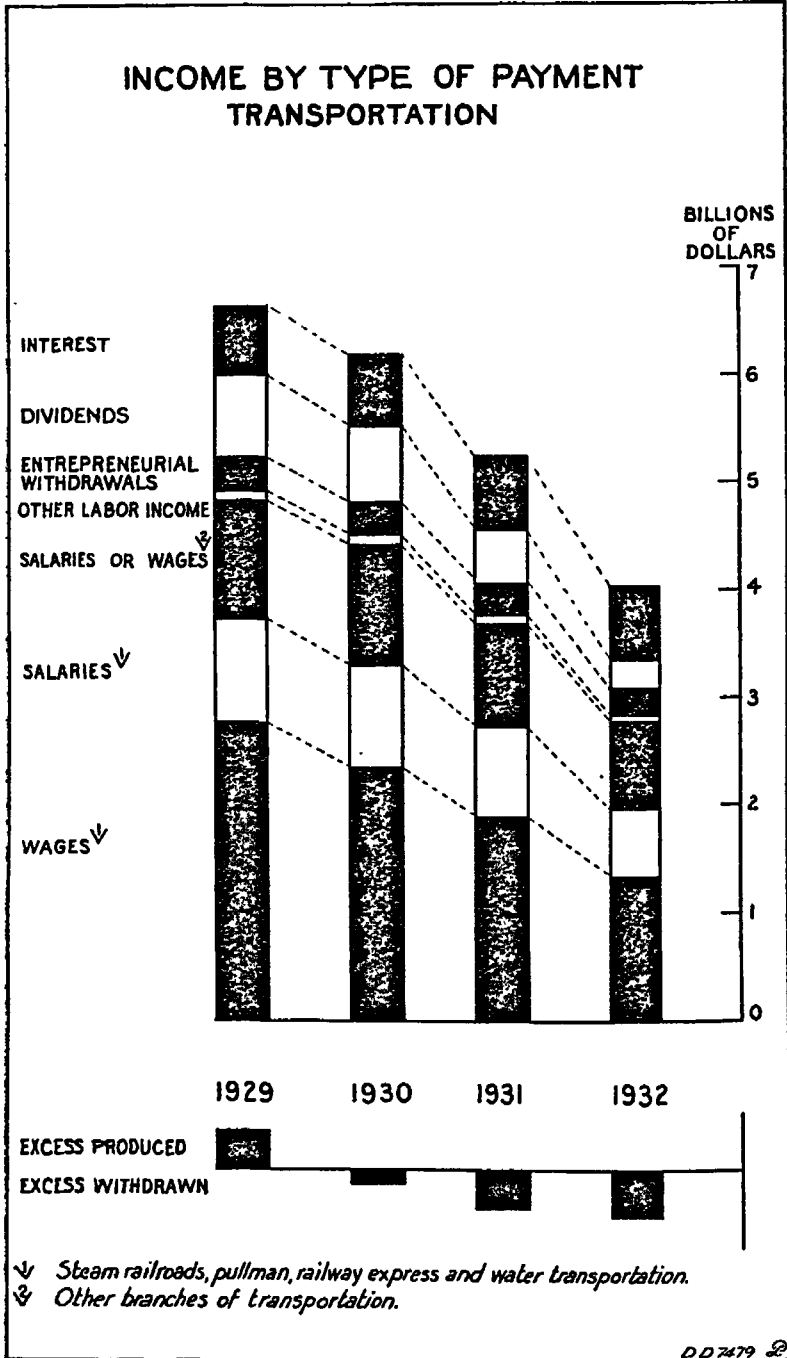
rise in the share claimed by interest payments on long-term debts, which almost doubled between 1929 and 1932. Property income as a whole rose slightly.

The reduction of labor compensation to a per capita basis shows that the decline in the average income of employed workers was not as great as in the cost of living. This was particularly true of the average salaries, the purchasing power of which must have increased appreciably between 1930 and 1931. The average wage, on the whole, kept pace with the declining cost of living, indicating that the purchasing power of the per capita income of the employed wage earners remained fairly constant throughout the period.

## 2. SUBGROUPS OF THE TRANSPORTATION INDUSTRY

The varying effect of the depression on the different groups which can be distinguished in the light of available data appears quite clearly in the differential movement of employment shown in table 81. The branches which suffered the greatest decline in employment are steam railroads, water transportation, and electric railways. In the first two, commodity transportation is the most important part of the business, and that is likely to decline during depression more than would the demand for transportation of persons. In the case of steam railroads the additional aggravating factor was the competition of motor truck and bus transportation. And in the case of electric railways, i.e., street cars, the competition of busses was obviously a primary factor in their poor showing. On the other hand, air transportation shows a striking increase in the number of employees, the case of a rapidly growing industry partially supported by government subsidies, which aided it in withstanding the effects of even such a severe depression as the present one. A comparatively favorable showing is made also by motor transportation, the extension of the bus business and of motor truck traffic reducing the impact of the depression upon the total passenger and commodity traffic.

Gross income at current prices could be measured for only some of the branches in the field (see table 82). But the figures do serve to indicate the extent to which gross income held up in the field of bus and motor truck transportation as compared with steam railroads and electric railways. The significant differences appear, however, more clearly in the measure of the quantity volume of activity in table 83. Here, again, we have a striking rise in the activity of air transport, and what appears to be a fairly good showing by the common-carrier busses. As against this, the drastic decline in railway freight traffic and in waterway tonnage is a reflection of the contraction that has taken place in the volume of production in the basic industries.

It is interesting to observe that the decline in ton-miles of revenue freight appears to have been greater than that in the quantity output of the three basic branches of our industrial system that supply the bulk of commodity traffic, viz, agriculture, mining, and manufacturing. It was observed in chapter V (table 33) that there was scarcely any decline in the gross volume of agricultural production, when adjusted for price changes. In mining, as table 39 indicates, the decline in quantity output from 1929 to 1932 was 38 percent. In manufacturing, the same decline between the 2 years was 45 percent (table 59).

In none of these branches was the decline as great as that of 48 percent shown in ton-miles of revenue freight. (It is to be remembered that farm products account for a considerable proportion of railroad tonnage.) It thus appears reasonable to infer that railroad traffic declined more than quantity production of commodities; and that the demand for railroad transportation must have been reduced by the competition of trucks and by the fact that freight charges, which failed to decline with the drop in commodity prices, formed an increasing cost margin which made transportation in certain areas of the economic system too expensive.

In the compensation of employees the same disparity appears among the various divisions of the transportation field (see table 84). Labor incomes in railroad and water transportation fell off most. Indeed, in the former field the decline in labor incomes, especially wages, followed very closely the movement of operating revenue shown in table 82. If total labor income in that field did form a slightly increasing fraction of the gross income, this was due to the comparatively favorable showing of salaries, which declined much less than wages. Again, air transportation shows an appreciable increase in labor income paid out; and the next favorable showing is made by motor transportation.

In interest and dividends paid out, the movement of the total is determined primarily by changes in two fields, steam railroads and the street railways, which together accounted for about 85 percent of the total for the group (in 1929). In both these fields dividends suffered a drastic contraction, but with some significant differences in the timing of the movement. In steam railroads, dividends showed scarcely any change from 1929 to 1930, but declined precipitously in 1931 and 1932. In street railways, the decline was manifest as early as 1930, with a much milder decline from 1930 to 1931, and again an intensified drop from 1931 to 1932. In interest payments there was even a more marked difference between the two fields. In steam railways, interest payments originating in the field increased, and in 1932 were 6 percent above the 1929 level. In local street railways interest payments declined in 1931 and by 1932 were 13 percent below the 1929 volume. The differences between the two fields in both types of income may be interpreted as a reflection of the financial strength of steam railroads as compared with local traction, which suffered from competition to a much greater extent and for a longer period than did steam railways.

In the other fields there was the general reaction of dividend payments to the depression, with the exception of the small group of aviation companies which are closely tied up with corporations in other fields. There was also the usual lack of response on the part of interest payments.

As a result of the sustention of interest payments, property income originated in the steam railroad field did not decline as drastically as did the same payments in the field of water transportation or street railways. The differences in this respect among the various fields are therefore not as marked as in other types of income payments; especially so because, in the small field of air transportation, the affiliation of corporations with corporations in other fields does not permit a reliable study of property incomes.

Table 86 tends to confirm the general impression obtained in other industrial fields as to the relative gain or loss of various income types. The weight of salaries in total income paid out definitely increased during these years, while that of wages declined. The share of total labor incomes declined in steam railroads, somewhat in motor transportation, and in pipe lines. The movement in pipe lines is generally highly similar to the movement in the oil and gas branch of mining, and the group of chemicals and petroleum refining in manufacturing. The share of labor incomes increased in electric railways and in air transportation, but the results for the latter field are misleading. Property income has gained a greater share in steam railroads and pipe lines.

In all branches of the transportation field negative savings appeared in 1930, and income produced declined more than income paid out (see table 87). But it is of some interest to note that the volume of negative savings shown by the various branches of the field relative to volumes of income paid out or income produced was not as high as that in some basic branches of our industrial system. Thus the ratio of negative savings to income paid out shown in 1932 runs about 10 percent (with the exception of air transportation, for which these figures having little meaning). But the same ratio in 1932 in manufacturing industry was about 25 percent (see table 60).

The per capita compensation of employees on the pay rolls of the various transportation branches shows a decline from 1929 smaller than that in the index of the cost of living (see table 88). This was especially true of salary earners, and of the labor body taken as a whole. Where wages could be measured separately from salaries (steam railroads and water transportation), it can be seen that the per capita income declined pari passu with the cost of living. On the whole, then, the influence of the depression on the average income of the employed worker in the industry was much milder than in a number of other basic branches of our industrial system.

Tables 89 to 109 present further details on income paid out and produced in the various branches of the transportation field. Steam railroads, railway express, and Pullman are each treated separately. In the field of water transportation the tables distinguish foreign and coastwise shipping, inland waterways, lake transportation, and stevedoring and longshoring. In the motor transportation field a distinction is made between sightseeing busses, common-carrier busses, and motor-truck transportation.

Comments on all these tables would be out of place here, where only general observations are summarized. One might note, however, the importance in the water transportation field of the stevedoring and longshoring branch, in point of number of employees; the fact that as regards employment and salaries and wages, the field of foreign and coastwise shipping has shown a smaller decline than did transportation on inland waterways, and appeared especially favorable as compared with transportation on the Great Lakes. In the motor transportation field, the preponderant importance of motor truck transportation may be noted; as well as the fact that as compared with common-carrier and sightseeing busses, the decline in employment and compensation of labor was much greater in the field of motor trucking, a natural reflection of the difference between business demand and demand by ultimate consumers.

TABLE 77.—*Number of people engaged, transportation industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees [1] | 464,579 | 440,331 | 390,696 | 331,012 | 100.0 | 94.8 | 84.1 | 71.2 |
| 2 | Wage earners [1] | 1,671,569 | 1,496,474 | 1,249,823 | 1,028,154 | 100.0 | 89.5 | 74.8 | 61.5 |
| 3 | Salaried employees or wage earners [2] | 768,417 | 735,652 | 679,587 | 619,666 | 100.0 | 95.7 | 88.4 | 80.6 |
| 4 | All employees | 2,904,565 | 2,672,457 | 2,320,106 | 1,978,832 | 100.0 | 92.0 | 79.9 | 68.1 |
| 5 | Entrepreneurs | 168,508 | 173,773 | 172,764 | 161,130 | 100.0 | 103.1 | 102.5 | 95.6 |
| 6 | Total number engaged | 3,073,073 | 2,846,230 | 2,492,870 | 2,139,962 | 100.0 | 92.6 | 81.1 | 69.6 |

[1] Steam railroads, Pullman, railway express, and water transportation.
[2] Other branches of transportation.

TABLE 78.—*Income paid out and produced, transportation industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries [1] | 987,719 | 936,652 | 823,572 | 636,920 | 100.0 | 94.8 | 83.4 | 64.5 |
| 2 | Wages [1] | 2,780,542 | 2,391,472 | 1,903,310 | 1,356,514 | 100.0 | 86.0 | 68.5 | 48.8 |
| 3 | Salaries or wages [2] | 1,115,473 | 1,104,081 | 975,139 | 794,982 | 100.0 | 99.0 | 87.4 | 71.3 |
| 4 | Other labor income | 86,688 | 89,191 | 86,449 | 78,525 | 100.0 | 102.9 | 99.7 | 90.6 |
| 5 | Total compensation of employees | 4,970,422 | 4,521,396 | 3,788,470 | 2,866,941 | 100.0 | 91.0 | 76.2 | 57.7 |
| 6 | Dividends | 739,737 | 692,997 | 474,721 | 240,326 | 100.0 | 93.7 | 64.2 | 32.5 |
| 7 | Interest | 650,485 | 674,701 | 677,965 | 672,009 | 100.0 | 103.7 | 104.2 | 103.3 |
| 8 | Total property income paid out | 1,390,222 | 1,367,698 | 1,152,686 | 912,335 | 100.0 | 98.4 | 82.9 | 65.6 |
| 9 | Withdrawals of entrepreneurs | 299,121 | 313,356 | 295,067 | 240,279 | 100.0 | 104.8 | 98.6 | 80.3 |
| 10 | Total income paid out | 6,659,765 | 6,202,450 | 5,236,223 | 4,019,555 | 100.0 | 93.1 | 78.6 | 60.4 |
| 11 | Corporate savings | 360,569 | −103,233 | −344,639 | −404,210 | | | | |
| 12 | Business savings of individuals | −659 | −17,299 | −23,249 | −32,056 | | | | |
| 13 | Total income produced | 7,019,675 | 6,081,918 | 4,868,335 | 3,583,289 | 100.0 | 86.6 | 69.4 | 51.0 |

[1] Steam railroads, Pullman, railway express, and water transportation.
[2] Other branches of transportation.

TABLE 79.—*Percentage distribution of income paid out, transportation industry*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries [1] | 14.8 | 15.1 | 15.7 | 15.8 |
| 2 | Wages [1] | 41.8 | 38.6 | 36.3 | 33.7 |
| 3 | Salaries or wages [2] | 16.7 | 17.8 | 18.6 | 19.8 |
| 4 | Other labor income | 1.3 | 1.4 | 1.7 | 2.0 |
| 5 | Total compensation of employees | 74.6 | 72.9 | 72.4 | 71.3 |
| 6 | Dividends | 11.1 | 11.2 | 9.1 | 6.0 |
| 7 | Interest | 9.8 | 10.9 | 12.9 | 16.7 |
| 8 | Total property income paid out | 20.9 | 22.1 | 22.0 | 22.7 |
| 9 | Withdrawals of entrepreneurs | 4.5 | 5.1 | 5.6 | 6.0 |
| 10 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

[1] Steam railroads, Pullman, railway express, and water transportation.
[2] Other branches of transportation.

TABLE 80.—*Per capita income of employees, transportation industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Average salary [1] | $2,126 | $2,127 | $2,108 | $1,924 | 100.0 | 100.0 | 99.2 | 90.5 |
| 2 | Average wage [1] | 1,663 | 1,598 | 1,523 | 1,319 | 100.0 | 96.1 | 91.6 | 79.3 |
| 3 | Average income per active employee | 1,681 | 1,658 | 1,596 | 1,409 | 100.0 | 98.6 | 94.9 | 83.8 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

[1] Steam railroads, Pullman, railway express, and water transportation.

## DETAILED TABLES, TRANSPORTATION

TABLE 81.—*Number of employees, various branches of the transportation industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees, steam railroads [1] | 422,570 | 399,718 | 353,884 | 298,131 | 100.0 | 94.6 | 83.7 | 70.6 |
| 2 | Salaried employees, water transportation | 42,009 | 40,613 | 36,812 | 32,881 | 100.0 | 96.7 | 87.6 | 78.3 |
| 3 | Wage earners, steam railroads [1] | 1,418,021 | 1,254,862 | 1,047,579 | 853,255 | 100.0 | 88.5 | 73.9 | 60.2 |
| 4 | Wage earners, water transportation | 253,548 | 241,612 | 202,244 | 174,899 | 100.0 | 95.3 | 79.8 | 69.0 |
| 5 | All employees, steam railroads [1] | 1,840,591 | 1,654,580 | 1,401,463 | 1,151,386 | 100.0 | 89.9 | 76.1 | 62.6 |
| 6 | All employees, water transportation | 295,557 | 282,225 | 239,056 | 207,780 | 100.0 | 95.5 | 80.9 | 70.3 |
| 7 | All employees, motor transportation | 494,875 | 471,744 | 440,390 | 411,865 | 100.0 | 95.3 | 89.0 | 83.2 |
| 8 | All employees, street railways | 246,323 | 236,417 | 213,032 | 184,613 | 100.0 | 96.0 | 86.5 | 74.9 |
| 9 | All employees, air transportation | 3,150 | 4,585 | 5,818 | 5,788 | 100.0 | 145.6 | 184.7 | 183.7 |
| 10 | All employees, pipe lines | 24,069 | 22,906 | 20,347 | 17,400 | 100.0 | 95.2 | 84.5 | 72.3 |

[1] Inclusive of Pullman and railway express.

TABLE 82.—*Gross income, various branches of the transportation industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Gross operating revenues, steam railroads | 6,373,004 | 5,356,484 | 4,246,385 | 3,170,000 | 100.0 | 84.0 | 66.6 | 49.7 |
| 2 | Gross operating revenues, Pullman Co. | 82,384 | 76,234 | 62,558 | 43,366 | 100.0 | 92.5 | 75.9 | 52.6 |
| 3 | Gross operating revenues, express companies | 144,954 | 132,405 | 117,582 | 90,284 | 100.0 | 91.3 | 81.1 | 62.3 |
| 4 | Gross revenue, common-carrier busses | 395,000 | 400,250 | 370,000 | 348,800 | 100.0 | 101.3 | 93.7 | 88.3 |
| 5 | Gross revenue, motor trucks | 1,707,235 | 1,749,621 | 1,557,239 | 1,245,792 | 100.0 | 102.5 | 91.2 | 73.0 |
| 6 | Gross revenue, street railways | 907,001 | 831,845 | 726,186 | 603,332 | 100.0 | 91.7 | 80.1 | 66.5 |
| 7 | Gross revenue, pipe lines | 251,411 | 237,910 | 222,944 | 211,789 | 100.0 | 94.6 | 88.7 | 84.2 |

TABLE 83.—*Quantity volume of activity, various branches of the transportation industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Ton-miles revenue freight, steam railways (millions) | 450,189 | 385,815 | 311,073 | 235,376 | 100.0 | 85.7 | 69.1 | 52.3 |
| 2 | Passenger miles, steam railways (millions) | 31,165 | 26,876 | 21,933 | 17,001 | 100.0 | 86.2 | 70.4 | 54.6 |
| 3 | Berth passengers carried, Pullman Co. (thousands) | 21,000 | 18,500 | 14,600 | 10,200 | 100.0 | 88.1 | 69.5 | 48.6 |
| 4 | Chair passengers carried, Pullman Co. (thousands) | 12,400 | 10,900 | 8,400 | 5,600 | 100.0 | 87.9 | 67.7 | 45.2 |
| 5 | Bus miles, common-carrier busses (thousands) | 1,750,000 | 1,825,000 | 1,804,600 | 1,797,000 | 100.0 | 104.3 | 103.1 | 102.7 |
| 6 | Passengers carried, street railways (thousands) | 11,323,888 | 10,534,246 | 9,510,948 | 8,392,441 | 100.0 | 93.0 | 84.0 | 74.1 |
| 7 | Barrels of oil carried, pipe lines (thousands) | 1,150,351 | 1,172,165 | 1,127,796 | 1,120,848 | 100.0 | 101.4 | 97.5 | 96.9 |
| 8 | Number of passengers, air transportation | 173,405 | 417,505 | 522,345 | 540,681 | 100.0 | 240.8 | 301.2 | 311.8 |
| 9 | Waterway traffic, Panama Canal (thousands of long tons) | 14,845 | 13,204 | 10,339 | 7,777 | 100.0 | 88.9 | 69.6 | 52.4 |
| 10 | Waterway traffic, river (thousands of short tons) | 42,661 | 38,413 | 24,359 | 14,945 | 100.0 | 90.0 | 57.1 | 35.0 |
| 11 | Waterway traffic, ocean (thousands of net tons) | 31,907 | 31,949 | 26,568 | 23,777 | 100.0 | 100.1 | 83.3 | 74.5 |

TABLE 84.—*Compensation of employees, various branches of the transportation industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries, steam railroads[1] | 895,112 | 852,022 | 749,195 | 573,614 | 100.0 | 95.2 | 83.7 | 64.1 |
| 2 | Salaries, water transportation | 92,607 | 84,630 | 74,377 | 63,306 | 100.0 | 91.4 | 80.3 | 68.4 |
| 3 | Wages, steam railroads[1] | 2,331,868 | 1,997,651 | 1,583,515 | 1,111,316 | 100.0 | 85.7 | 67.9 | 47.7 |
| 4 | Wages, water transportation | 448,674 | 393,821 | 319,795 | 245,198 | 100.0 | 87.8 | 71.3 | 54.6 |
| 5 | Salaries and wages, steam railroads[1] | 3,226,980 | 2,849,673 | 2,332,710 | 1,684,930 | 100.0 | 88.3 | 72.3 | 52.2 |
| 6 | Salaries and wages, water transportation | 541,281 | 478,451 | 394,172 | 308,504 | 100.0 | 88.4 | 72.8 | 57.0 |
| 7 | Salaries and wages, motor transportation | 636,002 | 635,734 | 563,747 | 466,612 | 100.0 | 100.0 | 88.6 | 73.4 |
| 8 | Salaries and wages, street railways | 422,858 | 412,478 | 358,135 | 283,643 | 100.0 | 97.5 | 84.7 | 67.1 |
| 9 | Salaries and wages, air transportation | 9,295 | 12,618 | 16,172 | 15,255 | 100.0 | 135.8 | 174.0 | 164.1 |
| 10 | Salaries and wages, pipe lines | 47,318 | 43,251 | 37,085 | 29,472 | 100.0 | 91.4 | 78.4 | 62.3 |
| 11 | Other labor income, steam railroads[1] | 59,776 | 59,745 | 57,880 | 51,413 | 100.0 | 99.9 | 96.8 | 86.0 |
| 12 | Other labor income, water transportation | 9,636 | 10,428 | 10,520 | 9,779 | 100.0 | 108.2 | 109.2 | 101.5 |
| 13 | Other labor income, motor transportation | 12,862 | 14,132 | 13,274 | 13,466 | 100.0 | 109.9 | 103.2 | 104.7 |
| 14 | Other labor income, street railways | 3,957 | 4,362 | 4,143 | 3,235 | 100.0 | 110.2 | 104.7 | 81.8 |
| 15 | Other labor income, pipe lines | 457 | 524 | 632 | 632 | 100.0 | 114.7 | 138.3 | 138.3 |
| 16 | Total compensation of employees, steam railroads[1] | 3,286,756 | 2,909,418 | 2,390,590 | 1,736,343 | 100.0 | 88.5 | 72.7 | 52.8 |
| 17 | Total compensation of employees, water transportation | 550,917 | 488,879 | 404,692 | 318,283 | 100.0 | 88.7 | 73.5 | 57.8 |
| 18 | Total compensation of employees, motor transportation | 648,864 | 649,866 | 577,021 | 480,078 | 100.0 | 100.2 | 88.9 | 74.0 |
| 19 | Total compensation of employees, street railways | 426,815 | 416,840 | 362,278 | 286,878 | 100.0 | 97.7 | 84.9 | 67.2 |
| 20 | Total compensation of employees, air transportation | 9,295 | 12,618 | 16,172 | 15,255 | 100.0 | 135.8 | 174.0 | 164.1 |
| 21 | Total compensation of employees, pipe lines | 47,775 | 43,775 | 37,717 | 30,104 | 100.0 | 91.6 | 78.9 | 63.0 |

[1] Includes Pullman and railway express.

TABLE 85.—*Property income originated, various branches of the transportation industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Dividends, steam railroads[1] | 438,771 | 434,889 | 257,131 | 64,477 | 100.0 | 99.1 | 58.6 | 14.7 |
| 2 | Dividends, water transportation | 28,580 | 30,189 | 19,651 | 5,934 | 100.0 | 105.6 | 68.8 | 20.8 |
| 3 | Dividends, motor transportation | 36,838 | 31,895 | 25,912 | 20,863 | 100.0 | 86.6 | 70.3 | 56.6 |
| 4 | Dividends, street railways | 148,214 | 98,987 | 85,258 | 38,165 | 100.0 | 66.8 | 57.5 | 25.7 |
| 5 | Dividends, air transportation | −22 | −172 | 202 | 156 | | | | |
| 6 | Dividends, pipe lines | 87,356 | 97,209 | 86,567 | 110,731 | 100.0 | 111.3 | 99.1 | 126.8 |
| 7 | Interest, steam railroads[1] | 521,113 | 536,053 | 549,012 | 551,451 | 100.0 | 102.9 | 105.4 | 105.8 |
| 8 | Interest, water transportation | 6,095 | 7,034 | 11,278 | 10,939 | 100.0 | 115.4 | 185.0 | 179.5 |
| 9 | Interest, motor transportation | 17,647 | 19,479 | 18,303 | 17,209 | 100.0 | 110.4 | 103.7 | 97.5 |
| 10 | Interest, street railways | 103,236 | 109,726 | 96,819 | 90,021 | 100.0 | 106.3 | 93.8 | 87.2 |
| 11 | Interest, air transportation | 214 | 235 | −378 | −361 | | | | |
| 12 | Interest, pipe lines | 2,180 | 2,174 | 2,931 | 2,750 | 100.0 | 99.7 | 134.4 | 126.1 |
| 13 | Total property income paid out, steam railroads[1] | 959,884 | 970,942 | 806,143 | 615,928 | 100.0 | 101.2 | 84.0 | 64.2 |
| 14 | Total property income paid out, water transportation | 34,675 | 37,223 | 30,929 | 16,873 | 100.0 | 107.3 | 89.2 | 48.7 |
| 15 | Total property income paid out, motor transportation | 54,485 | 51,374 | 44,215 | 38,072 | 100.0 | 94.3 | 81.2 | 69.9 |
| 16 | Total property income paid out, street railways | 251,450 | 208,713 | 182,077 | 128,186 | 100.0 | 83.0 | 72.4 | 51.0 |
| 17 | Total property income paid out, air transportation | 192 | 63 | −176 | −205 | | | | |
| 18 | Total property income paid out, pipe lines | 89,536 | 99,383 | 89,498 | 113,481 | 100.0 | 111.0 | 100.0 | 126.7 |

[1] Includes Pullman and railway express.

TABLE 86.—*Percentage distribution of income paid out, various branches of the transportation industry*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries, steam railroads[1] | 21.1 | 22.0 | 23.4 | 24.4 |
| 2 | Salaries, water transportation | 15.7 | 16.0 | 17.0 | 18.7 |
| 3 | Wages, steam railroads[1] | 54.9 | 51.5 | 49.5 | 47.2 |
| 4 | Wages, water transportation | 76.1 | 74.4 | 72.8 | 72.6 |
| 5 | Salaries and wages, steam railroads[1] | 76.0 | 73.4 | 73.0 | 71.6 |
| 6 | Salaries and wages, water transportation | 91.9 | 90.4 | 89.9 | 91.4 |
| 7 | Salaries and wages, motor transportation | 63.7 | 62.9 | 61.7 | 61.7 |
| 8 | Salaries and wages, street railways | 62.3 | 65.9 | 65.8 | 68.3 |
| 9 | Salaries and wages, air transportation | 98.0 | 99.5 | 101.1 | 101.4 |
| 10 | Salaries and wages, pipe lines | 34.5 | 30.2 | 29.2 | 20.5 |
| 11 | Property income paid out, steam railroads[1] | 22.6 | 25.0 | 25.2 | 26.2 |
| 12 | Property income paid out, water transportation | 5.9 | 7.0 | 7.1 | 5.0 |
| 13 | Property income paid out, motor transportation | 5.5 | 5.1 | 4.8 | 5.0 |
| 14 | Property income paid out, street railways | 37.1 | 33.4 | 33.4 | 30.9 |
| 15 | Property income paid out, air transportation | 2.0 | .5 | −1.1 | −1.4 |
| 16 | Property income paid out, pipe lines | 65.2 | 69.4 | 70.4 | 79.0 |

[1] Includes Pullman and railway express.

TABLE 87.—*Income paid out and produced, various branches of the transportation industry*

| Line | Item | Absolute numbers (thousands of of dollars) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Income paid out, steam railroads [1] | 4, 246, 640 | 3, 880, 360 | 3, 196, 733 | 2, 352, 271 | 100. 0 | 91. 4 | 75. 3 | 55. 1 |
| 2 | Income paid out, water transportation | 589, 235 | 529, 432 | 438, 546 | 337, 648 | 100. 0 | 89. 9 | 74. 4 | 57. 3 |
| 3 | Income paid ont, motor transportation | 998, 827 | 1, 011, 266 | 913, 378 | 755, 037 | 100. 0 | 101. 2 | 91. 4 | 75. 7 |
| 4 | Income paid out, street railways | 678, 265 | 625, 553 | 544, 355 | 415, 064 | 100. 0 | 92. 2 | 80. 3 | 61. 2 |
| 5 | Income paid out, air transportation | 9, 487 | 12, 681 | 15, 996 | 15, 050 | 100. 0 | 133. 7 | 168. 6 | 158. 6 |
| 6 | Income paid out, pipe lines | 137, 311 | 143, 158 | 127, 215 | 143, 585 | 100. 0 | 104. 3 | 92. 6 | 104. 6 |
| 7 | Business savings, steam railroads [1] | 392, 185 | −22, 298 | −232, 260 | −251, 772 | | | | |
| 8 | Business savings, water transportation | 10, 135 | −22, 758 | −27, 612 | −43, 996 | | | | |
| 9 | Business savings, motor transportation | −6, 259 | −37, 114 | −46, 287 | −64, 432 | | | | |
| 10 | Business savings, street railways | −47, 403 | −10, 743 | −40, 614 | −15, 512 | | | | |
| 11 | Business savings, air transportation | −7, 056 | −18, 968 | −9, 811 | −9, 811 | | | | |
| 12 | Business savings, pipe lines | 18, 308 | −8, 651 | −5, 304 | −50, 743 | | | | |
| 13 | Income produced, steam railroads [1] | 4, 638, 825 | 3, 858, 062 | 2, 964, 473 | 2, 100, 499 | 100. 0 | 83. 2 | 63. 9 | 45. 3 |
| 14 | Income produced, water transportation | 599, 370 | 506, 674 | 410, 934 | 293, 652 | 100. 0 | 84. 5 | 68. 6 | 49. 0 |
| 15 | Income produced, motor transportation | 992, 568 | 974, 152 | 867, 091 | 691, 505 | 100. 0 | 98. 1 | 87. 4 | 69. 7 |
| 16 | Income produced, street railways | 630, 862 | 614, 810 | 497, 741 | 399, 552 | 100. 0 | 97. 5 | 78. 9 | 63. 3 |
| 17 | Income produced, air transportation | 2, 431 | −6, 287 | 6, 185 | 5, 239 | | | | |
| 18 | Income produced, pipe lines | 155, 619 | 134, 507 | 121, 911 | 92, 842 | 100. 0 | 86. 4 | 78. 3 | 59. 7 |

[1] Includes Pullman and railway express.

TABLE 88.—*Per capita income of employees, various branches of the transportation industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Average salary, steam railroads [1] | $2, 118 | $2, 132 | $2, 117 | $1, 924 | 100. 0 | 100. 7 | 100. 0 | 90. 8 |
| 2 | Average salary, water transportation | 2, 204 | 2, 084 | 2, 020 | 1, 925 | 100. 0 | 94. 6 | 91. 7 | 87. 3 |
| 3 | Average wage, steam railroads [1] | 1, 644 | 1, 592 | 1, 512 | 1, 302 | 100. 0 | 96. 8 | 92. 0 | 79. 2 |
| 4 | Average wage, water transportation | 1, 770 | 1, 630 | 1, 581 | 1, 402 | 100. 0 | 92. 1 | 89. 3 | 79. 2 |
| 5 | Average pay, all active employees, steam railroads [1] | 1, 753 | 1, 722 | 1, 664 | 1, 463 | 100. 0 | 98. 2 | 94. 9 | 83. 5 |
| 6 | Average pay, all active employees, water transportation | 1, 831 | 1, 695 | 1, 649 | 1, 485 | 100. 0 | 92. 6 | 90. 1 | 81. 1 |
| 7 | Average pay, all active employees, motor transportation | 1, 285 | 1, 348 | 1, 280 | 1, 133 | 100. 0 | 104. 9 | 99. 6 | 88. 2 |
| 8 | Average pay, all active employees, street railways | 1, 717 | 1, 745 | 1, 681 | 1, 536 | 100. 0 | 101. 6 | 97. 9 | 89. 5 |
| 9 | Average pay, all active employees, air transportation | 2, 951 | 2, 752 | 2, 780 | 2, 638 | 100. 0 | 93. 3 | 94. 2 | 89. 3 |
| 10 | Average pay, all active employees, pipe lines | 1, 966 | 1, 888 | 1, 823 | 1, 694 | 100. 0 | 96. 0 | 92. 7 | 86. 2 |
| 11 | Bureau of Labor Statistics cost of living index | | | | | 100. 0 | 97. 4 | 88. 9 | 80. 4 |

[1] Includes Pullman and railway express.

## DETAILED TABLES, STEAM RAILROADS

### TABLE 89.—*Number of employees, steam railroads*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaried employees | 28,217 | 27,659 | 25,013 | 20,956 | 100.0 | 98.0 | 88.6 | 74.3 |
| 2 | Other salaried employees | 368,368 | 347,159 | 306,539 | 258,240 | 100.0 | 94.2 | 83.2 | 70.1 |
| 3 | All salaried employees | 396,585 | 374,818 | 331,552 | 279,196 | 100.0 | 94.5 | 83.6 | 70.4 |
| 4 | Wage earners | 1,355,877 | 1,196,741 | 998,911 | 812,267 | 100.0 | 88.3 | 73.7 | 59.9 |
| 5 | Total number of employees | 1,752,462 | 1,571,559 | 1,330,463 | 1,091,463 | 100.0 | 89.7 | 75.9 | 62.3 |

### TABLE 90.—*Income paid out and produced, steam railroads*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaries | 129,779 | 129,416 | 117,458 | 91,652 | 100.0 | 99.7 | 90.5 | 70.6 |
| 2 | Other salaries | 705,518 | 666,901 | 582,660 | 445,213 | 100.0 | 94.5 | 82.6 | 63.1 |
| 3 | Total salaries | 835,297 | 796,317 | 700,118 | 536,865 | 100.0 | 95.3 | 83.8 | 64.3 |
| 4 | Wages | 2,231,916 | 1,906,693 | 1,506,354 | 1,056,085 | 100.0 | 85.4 | 67.5 | 47.3 |
| 5 | Other labor income | 58,285 | 58,180 | 56,271 | 49,846 | 100.0 | 99.8 | 96.5 | 85.5 |
| 6 | Total compensation of employees | 3,125,498 | 2,761,190 | 2,262,743 | 1,642,796 | 100.0 | 88.3 | 72.4 | 52.6 |
| 7 | Dividends | 399,092 | 424,809 | 257,082 | 58,423 | 100.0 | 106.4 | 64.4 | 14.6 |
| 8 | Interest | 520,904 | 534,504 | 547,375 | 549,850 | 100.0 | 102.6 | 105.1 | 105.6 |
| 9 | Total property income paid out | 919,996 | 959,313 | 804,457 | 608,273 | 100.0 | 104.3 | 87.4 | 66.1 |
| 10 | Total income paid out | 4,045,494 | 3,720,503 | 3,067,200 | 2,251,069 | 100.0 | 92.0 | 75.8 | 55.6 |
| 11 | Corporate savings | 420,548 | −17,951 | −235,600 | −245,001 | | | | |
| 12 | Total income produced | 4,466,042 | 3,702,552 | 2,831,600 | 2,006,068 | 100.0 | 82.9 | 63.4 | 44.9 |

### TABLE 91.—*Percentage distribution of income paid out, steam railroads*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaries | 3.2 | 3.5 | 3.9 | 4.1 |
| 2 | Other salaries | 17.5 | 17.9 | 19.0 | 19.8 |
| 3 | Total salaries | 20.7 | 21.4 | 22.9 | 23.9 |
| 4 | Wages | 55.2 | 51.2 | 49.1 | 46.9 |
| 5 | Other labor income | 1.4 | 1.6 | 1.8 | 2.2 |
| 6 | Total compensation of employees | 77.3 | 74.2 | 73.8 | 73.0 |
| 7 | Dividends | 9.8 | 11.4 | 8.4 | 2.6 |
| 8 | Interest | 12.9 | 14.4 | 17.8 | 24.4 |
| 9 | Total property income paid out | 22.7 | 25.8 | 26.2 | 27.0 |
| 10 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

### TABLE 92.—*Per capita income of employees, steam railroads*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaried employees | $4,599 | $4,679 | $4,696 | $4,374 | 100.0 | 101.7 | 102.1 | 95.1 |
| 2 | Other salaried employees | 1,915 | 1,921 | 1,901 | 1,724 | 100.0 | 100.3 | 99.3 | 90.0 |
| 3 | All salaried employees | 2,106 | 2,125 | 2,112 | 1,923 | 100.0 | 100.9 | 100.3 | 91.3 |
| 4 | Wage earners | 1,646 | 1,593 | 1,508 | 1,300 | 100.0 | 96.8 | 91.6 | 79.0 |
| 5 | All active employees | 1,750 | 1,720 | 1,658 | 1,459 | 100.0 | 98.3 | 94.7 | 83.4 |
| 6 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## DETAILED TABLES, RAILWAY EXPRESS

TABLE 93.—*Number of employees, railway express*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaried employees | 2,300 | 2,377 | 2,336 | 2,010 | 100.0 | 103.3 | 101.6 | 87.4 |
| 2 | Other salaried employees | 18,185 | 17,119 | 15,258 | 12,966 | 100.0 | 94.1 | 83.9 | 71.3 |
| 3 | All salaried employees | 20,485 | 19,496 | 17,594 | 14,976 | 100.0 | 95.2 | 85.9 | 73.1 |
| 4 | Wage earners | 39,609 | 35,816 | 30,011 | 25,100 | 100.0 | 90.4 | 75.8 | 63.4 |
| 5 | Total number of employees | 60,094 | 55,312 | 47,635 | 40,076 | 100.0 | 92.0 | 79.3 | 66.7 |

TABLE 94.—*Income paid out and produced, railway express*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaries | 6,158 | 6,143 | 5,682 | 4,549 | 100.0 | 99.8 | 92.3 | 73.9 |
| 2 | Other salaries | 32,003 | 29,597 | 26,551 | 20,000 | 100.0 | 92.5 | 83.0 | 62.5 |
| 3 | Commissions | 9,629 | 8,155 | 6,513 | 4,804 | 100.0 | 84.7 | 67.6 | 49.9 |
| 4 | Total compensation, other salaried employees | 41,632 | 37,752 | 33,064 | 24,804 | 100.0 | 90.7 | 79.4 | 59.6 |
| 5 | Total compensation, all salaried employees | 47,790 | 43,895 | 38,746 | 29,353 | 100.0 | 91.8 | 81.1 | 61.4 |
| 6 | Wages | 65,858 | 58,820 | 50,874 | 37,103 | 100.0 | 89.3 | 77.2 | 56.3 |
| 7 | Other labor income | 1,491 | 1,565 | 1,609 | 1,567 | 100.0 | 105.0 | 107.9 | 105.1 |
| 8 | Total compensation of employees | 115,139 | 104,280 | 91,229 | 68,023 | 100.0 | 90.6 | 79.2 | 59.1 |
| 9 | Dividends | 590 | 70 | 70 | 64 | 100.0 | 11.9 | 11.9 | 10.8 |
| 10 | Interest | 1,259 | 1,651 | 1,670 | 1,668 | 100.0 | 131.1 | 132.6 | 132.5 |
| 11 | Total property income paid out | 1,849 | 1,721 | 1,740 | 1,732 | 100.0 | 93.1 | 94.1 | 93.7 |
| 12 | Total income paid out | 116,988 | 106,001 | 92,969 | 69,755 | 100.0 | 90.6 | 79.5 | 59.6 |
| 13 | Corporate savings | −115 | 36 | 1 | −5 | ........ | ........ | ........ | ........ |
| 14 | Total income produced | 116,873 | 106,037 | 92,970 | 69,750 | 100.0 | 90.7 | 79.5 | 59.7 |

TABLE 95.—*Percentage distribution of income paid out, railway express*

| Line | Item | Percentage of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaries | 5.3 | 5.8 | 6.1 | 6.5 |
| 2 | Other salaries | 27.4 | 27.9 | 28.6 | 28.7 |
| 3 | Commissions | 8.2 | 7.7 | 7.0 | 6.9 |
| 4 | Total compensation, other salaried employees | 35.6 | 35.6 | 35.6 | 35.6 |
| 5 | Total compensation, all salaried employees | 40.9 | 41.4 | 41.7 | 42.1 |
| 6 | Wages | 56.3 | 55.5 | 54.7 | 53.2 |
| 7 | Other labor income | 1.3 | 1.5 | 1.7 | 2.2 |
| 8 | Total compensation of employees | 98.4 | 98.4 | 98.1 | 97.5 |
| 9 | Dividends | .5 | .1 | .1 | .1 |
| 10 | Interest | 1.1 | 1.6 | 1.8 | 2.4 |
| 11 | Total property income paid out | 1.6 | 1.6 | 1.9 | 2.5 |
| 12 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 96.—*Per capita income of employees, railway express*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaried employees | $2,677 | $2,584 | $2,432 | $2,263 | 100.0 | 96.5 | 90.8 | 84.5 |
| 2 | Other salaried employees | 2,289 | 2,205 | 2,167 | 1,913 | 100.0 | 96.3 | 94.7 | 83.6 |
| 3 | All salaried employees | 2,333 | 2,251 | 2,202 | 1,960 | 100.0 | 96.5 | 94.4 | 84.0 |
| 4 | Wage earners | 1,663 | 1,642 | 1,693 | 1,478 | 100.0 | 98.7 | 101.8 | 88.9 |
| 5 | All active employees | 1,891 | 1,857 | 1,881 | 1,658 | 100.0 | 98.2 | 99.5 | 87.7 |
| 6 | Bureau of Labor Statistics cost of living index | ........ | ........ | ........ | ........ | 100.0 | 97.4 | 88.9 | 80.4 |

## DETAILED TABLES, PULLMAN CO.

### TABLE 97.—*Number of employees, Pullman Co.*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaried employees | 276 | 258 | 247 | 246 | 100.0 | 93.5 | 89.5 | 89.1 |
| 2 | Other salaried employees | 5,224 | 5,146 | 4,491 | 3,713 | 100.0 | 98.5 | 86.0 | 71.1 |
| 3 | All salaried employees | 5,500 | 5,404 | 4,738 | 3,959 | 100.0 | 98.3 | 86.1 | 72.0 |
| 4 | Wage earners | 22,535 | 22,305 | 18,627 | 15,888 | 100.0 | 99.0 | 82.7 | 70.5 |
| 5 | Total number of employees | 28,035 | 27,709 | 23,365 | 19,847 | 100.0 | 98.8 | 83.3 | 70.8 |

### TABLE 98.—*Income paid out and produced, Pullman Co.*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaries | 939 | 937 | 876 | 742 | 100.0 | 99.8 | 93.3 | 79.0 |
| 2 | Other salaries | 11,086 | 10,873 | 9,455 | 6,654 | 100.0 | 98.1 | 85.3 | 60.0 |
| 3 | Total salaries | 12,025 | 11,810 | 10,331 | 7,396 | 100.0 | 98.2 | 85.9 | 61.5 |
| 4 | Wages | 34,094 | 32,138 | 26,287 | 18,128 | 100.0 | 94.3 | 77.1 | 53.2 |
| 5 | Total compensation of employees | 46,119 | 43,948 | 36,618 | 25,524 | 100.0 | 95.3 | 79.4 | 55.3 |
| 6 | Dividends | 39,089 | 10,010 | −21 | 5,990 | 100.0 | 25.6 | | 15.3 |
| 7 | Interest | −1,050 | −102 | −33 | −67 | | | | |
| 8 | Total property income paid out | 38,039 | 9,908 | −54 | 5,923 | 100.0 | 26.0 | | 15.6 |
| 9 | Total income paid out | 84,158 | 53,856 | 36,564 | 31,447 | 100.0 | 64.0 | 43.4 | 37.4 |
| 10 | Corporate savings | −28,248 | −4,383 | 3,339 | −6,766 | | | | |
| 11 | Total income produced | 55,910 | 49,473 | 39,903 | 24,681 | 100.0 | 88.5 | 71.4 | 44.1 |

### TABLE 99.—*Percentage distribution of income paid out, Pullman Co.*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaries | 1.1 | 1.7 | 2.4 | 2.4 |
| 2 | Other salaries | 13.2 | 20.2 | 25.9 | 21.2 |
| 3 | Total salaries | 14.3 | 21.9 | 28.3 | 23.5 |
| 4 | Wages | 40.5 | 59.7 | 71.9 | 57.6 |
| 5 | Total compensation of employees | 54.8 | 81.6 | 100.1 | 81.2 |
| 6 | Dividends | 46.4 | 18.6 | −.1 | 19.0 |
| 7 | Interest | −1.2 | −.2 | −.1 | −.2 |
| 8 | Total property income paid out | 45.2 | 18.4 | −.1 | 18.8 |
| 9 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

### TABLE 100.—*Per capita income of employees, Pullman Co.*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Principal salaried employees | $3,402 | $3,632 | $3,547 | $3,016 | 100.0 | 106.8 | 104.3 | 88.7 |
| 2 | Other salaried employees | 2,122 | 2,113 | 2,105 | 1,792 | 100.0 | 99.6 | 99.2 | 84.4 |
| 3 | All salaried employees | 2,186 | 2,185 | 2,180 | 1,868 | 100.0 | 100.0 | 99.7 | 85.5 |
| 4 | Wage earners | 1,513 | 1,441 | 1,411 | 1,141 | 100.0 | 95.2 | 93.3 | 75.4 |
| 5 | All active employees | 1,645 | 1,586 | 1,567 | 1,286 | 100.0 | 96.4 | 95.3 | 78.2 |
| 6 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## DETAILED TABLES, WATER TRANSPORTATION

TABLE 101.—*Number of employees, foreign and coastwise water transportation*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | 21,403 | 21,379 | 19,987 | 18,935 | 100.0 | 99.9 | 93.4 | 88.5 |
| 2 | Wage earners | 54,841 | 52,131 | 46,725 | 42,608 | 100.0 | 95.1 | 85.2 | 77.7 |
| 3 | Total number of employees | 76,244 | 73,510 | 66,712 | 61,543 | 100.0 | 96.4 | 87.5 | 80.7 |

TABLE 102.—*Compensation of active employees, foreign and coastwise water transportation*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 46,099 | 42,648 | 39,022 | 34,802 | 100.0 | 92.5 | 84.6 | 75.5 |
| 2 | Wages | 60,710 | 54,548 | 46,811 | 37,902 | 100.0 | 89.9 | 77.1 | 62.4 |
| 3 | Total compensation of active employees | 106,809 | 97,196 | 85,833 | 72,704 | 100.0 | 91.0 | 80.4 | 68.1 |

TABLE 103.—*Number of employees, inland waterway transportation*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | 11,451 | 11,172 | 10,279 | 9,181 | 100.0 | 97.6 | 89.8 | 80.2 |
| 2 | Wage earners | 19,484 | 18,127 | 15,292 | 13,272 | 100.0 | 93.0 | 78.5 | 68.1 |
| 3 | Total number of employees | 30,935 | 29,299 | 25,571 | 22,453 | 100.0 | 94.7 | 82.7 | 72.6 |

TABLE 104.—*Compensation of active employees, inland waterway transportation*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 24,838 | 23,636 | 21,177 | 17,646 | 100.0 | 95.2 | 85.3 | 71.0 |
| 2 | Wages | 20,921 | 19,095 | 15,801 | 12,282 | 100.0 | 91.3 | 75.5 | 58.7 |
| 3 | Total compensation of active employees | 45,759 | 42,731 | 36,978 | 29,928 | 100.0 | 93.4 | 80.8 | 65.4 |

TABLE 105.—*Number of employees, Great Lakes water transportation*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | 9,155 | 8,062 | 6,546 | 4,765 | 100.0 | 88.1 | 71.5 | 52.0 |
| 2 | Wage earners | 16,723 | 14,354 | 10,727 | 7,519 | 100.0 | 85.8 | 64.1 | 45.0 |
| 3 | Total number of employees | 25,878 | 22,416 | 17,273 | 12,284 | 100.0 | 86.6 | 66.7 | 47.5 |

TABLE 106.—*Compensation of active employees, Great Lakes water transportation*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 21,670 | 18,346 | 14,178 | 10,858 | 100.0 | 84.7 | 65.4 | 50.1 |
| 2 | Wages | 17,043 | 14,178 | 10,183 | 7,014 | 100.0 | 83.2 | 59.7 | 41.2 |
| 3 | Total compensation of active employees | 38,713 | 32,524 | 24,361 | 17,872 | 100.0 | 84.0 | 62.9 | 46.2 |

## DETAILED TABLES, MOTOR TRANSPORTATION

TABLE 107.—*Number of people engaged, motor transportation*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Sightseeing busses, employees | 2,592 | 2,248 | 2,560 | 2,422 | 100.0 | 86.7 | 98.8 | 93.4 |
| 2 | Common-carrier busses, employees | 112,000 | 110,000 | 108,000 | 104,000 | 100.0 | 98.2 | 96.4 | 92.9 |
| 3 | Motor trucks, employees | 380,283 | 359,496 | 329,830 | 305,443 | 100.0 | 94.5 | 86.7 | 80.3 |
| 4 | Total number of employees | 494,875 | 471,744 | 440,390 | 411,865 | 100.0 | 95.3 | 89.0 | 83.2 |
| 5 | Entrepreneurs, motor trucks | 167,979 | 173,255 | 172,289 | 160,703 | 100.0 | 103.1 | 102.6 | 95.7 |
| 6 | Total number engaged | 662,854 | 644,999 | 612,679 | 572,568 | 100.0 | 97.3 | 92.4 | 86.4 |

TABLE 108.—*Total compensation of employees, motor transportation*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages, sightseeing busses | 3,705 | 3,321 | 3,600 | 3,070 | 100.0 | 89.6 | 97.2 | 82.9 |
| 2 | Salaries and wages, common-carrier busses | 154,891 | 157,183 | 148,176 | 133,744 | 100.0 | 101.5 | 95.7 | 86.3 |
| 3 | Salaries and wages, motor trucks | 477,406 | 475,230 | 411,971 | 329,798 | 100.0 | 99.5 | 86.3 | 69.1 |
| 4 | Total salaries and wages | 636,002 | 635,734 | 563,747 | 466,612 | 100.0 | 100.0 | 88.6 | 73.4 |
| 5 | Other labor income | 12,862 | 14,132 | 13,274 | 13,466 | 100.0 | 109.9 | 103.2 | 104.7 |
| 6 | Total compensation of employees | 648,864 | 649,866 | 577,021 | 480,078 | 100.0 | 100.2 | 88.9 | 74.0 |

TABLE 109.—*Per capita income of employees, motor transportation*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|------|------|------|------|------|------|------|------|------|------|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | All active employees, sightseeing busses | $1,429 | $1,477 | $1,406 | $1,268 | 100.0 | 103.4 | 98.4 | 88.7 |
| 2 | All active employees, common-carrier busses | 1,383 | 1,429 | 1,372 | 1,286 | 100.0 | 103.3 | 99.2 | 93.0 |
| 3 | All active employees, motor trucks | 1,255 | 1,322 | 1,249 | 1,080 | 100.0 | 105.3 | 99.5 | 86.1 |
| 4 | All active employees in the industry | 1,285 | 1,348 | 1,280 | 1,133 | 100.0 | 104.9 | 99.6 | 88.2 |
| 5 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## COMMUNICATION

The field of communication, defined inclusively, covers telephones, telegraph, and postal service. But in this country, as in many others, postal service is a function of the Government, and is managed on lines which do not make it comparable to an industry run for profit. The income flowing from the postal service industry is included as a separate part with the total income estimates for the government group. The field of communication remains, therefore, limited to the telephone and telegraph industries, the latter inclusive of radio cables.

The two are quite distinct in size, in the economic nature of the demand which they satisfy, and somewhat in the character of their organization. The telephone industry is by far the larger of the two. It satisfies primarily the demand of ultimate consumers, while the largest part of demand for the services of the telegraph industry comes from business enterprises. Finally, the telephone industry in this country is dominated by an integrated corporate system; while in the field of telegraphs there has been, during recent years, intensive competition between two big corporations.

The Census of Occupations for 1930 shows 578,602 gainfully occupied classified under telegraph and telephone. This figure is quite close to that shown in table 110 as the average number employed in 1929. Since that year there has been a decline in employment, somewhat more moderate in the telephone industry than in the telegraph field; but in both industries the contraction of employment was much more moderate than in most other basic industrial fields. The contraction did not begin until 1931, and the number employed in 1932 was only about 24 percent below the 1929 level, as compared with declines of 40 to 60 percent in mining, manufacturing, and construction.

The success of the industries in withstanding the effects of the business depression is shown especially clearly in table 111. The operating revenue of the telephone industry showed no decline until 1932, in which year it fell to a level about 10 percent below that of 1929. Similarly, the number of telephone messages showed no decline until 1932, in which year it dropped to a level about 5 percent below that of 1929. The comparison of the dollar and quantity volume of business in the industry suggests that charges must have held up, and that the small contraction which did occur took place mostly in the more expensive long-distance messages.

In the telegraph field, because of the business character of the demand, the contraction in gross income was much more material. Operating revenue declined by 1932 to about 60 percent of the 1929 level, and only a somewhat smaller contraction occurred in the number of messages. Also, the decline in the gross income of the industry began in 1930, instead of being delayed until 1932 as was the case in telephones.

The contraction in labor incomes paid by the telephone industry was quite moderate compared with the cuts that labor sustained

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in other industrial fields (see table 112). But in view of the fact that operating revenue did not decline until 1932, and then by only 10 percent, the contraction of labor incomes in 1931 by 8 percent and in 1932 by 22 percent (as compared with the 1929 level) showed that the industry took advantage of the fall in the cost of living and a depression labor market in order to reduce its labor costs. Contrasted with this decline in labor incomes was the marked rise in property incomes paid out. Dividends, the most important part of property incomes in the telephone industry, rose by 1932 to 148 percent of the 1929 level; and, as a result, total income paid out in 1932 was only about 8 percent below the volume for 1929.

The exceptional position of the telephone industry during the depression is still more clearly marked in the fact that it showed positive savings even through 1931, and only a comparatively small volume of negative savings in 1932. However, its savings had declined materially by 1930, and consequently the total income produced showed a marked decline in 1931. A comparison of income produced with gross income (compare with table 111) revealed that in telephones, as in most other industries, the former declined more than did the latter, reflecting the rigidity of some cost items.

The telegraph industry shows no such exceptional behavior during this depression period. Labor incomes declined appreciably, even though the contraction did not begin until 1931. Similarly, property incomes, primarily dividends, fell off drastically in 1931, and by 1932 were down to one third of the 1929 level. Total income paid out in 1932 was only 60 percent of the 1929 volume, and, as contrasted with the telephone industry, telegraphs began to show negative savings as early as 1930. Income produced in the industry moved together with operating revenue through 1931; but in 1932 it declined more than operating revenue, suggesting that some rigid cost items became of greater weight as the total gross income dropped to the low absolute levels of 1932.

A summary of changes in incomes for the field as a whole is presented graphically on chart XI.

The difference in the response to the depression in the two industries resulted in a difference in shift which occurred in the relative proportion of various income groups (see table 115). In the telephone industry the share of labor incomes in the total paid out declined from 77 percent in 1929 to 65 percent in 1932, while that of property income rose correspondingly from 23 to 35. In the telegraph industry, the share of labor incomes showed a tendency to rise after 1930, with the result that by 1932 labor incomes accounted for 91 percent of the total paid out as compared with 83 percent in 1929. Correspondingly, the share of property incomes declined from 17 percent in 1929 to 9 percent in 1932.

The per capita incomes of employees who were retained on the pay rolls show a rise from 1929 to 1931 and a moderate decline in 1932 (see table 116). This movement indicates that there must have been a shift among employees in favor of the higher paid group, the reduction of employment, when it occurred, taking place preponderantly among the lower paid divisions. A comparison of the per capita compensation with the cost of living suggests that the purchasing power of the per capita salary has risen after 1929.

CHART XI

## INCOME BY TYPE OF PAYMENT
## COMMUNICATION

MILLIONS
OF
DOLLARS

INTEREST

DIVIDENDS

OTHER LABOR INCOME

SALARIES & WAGES

1929    1930    1931    1932

EXCESS PRODUCED

EXCESS WITHDRAWN

D.D.7482
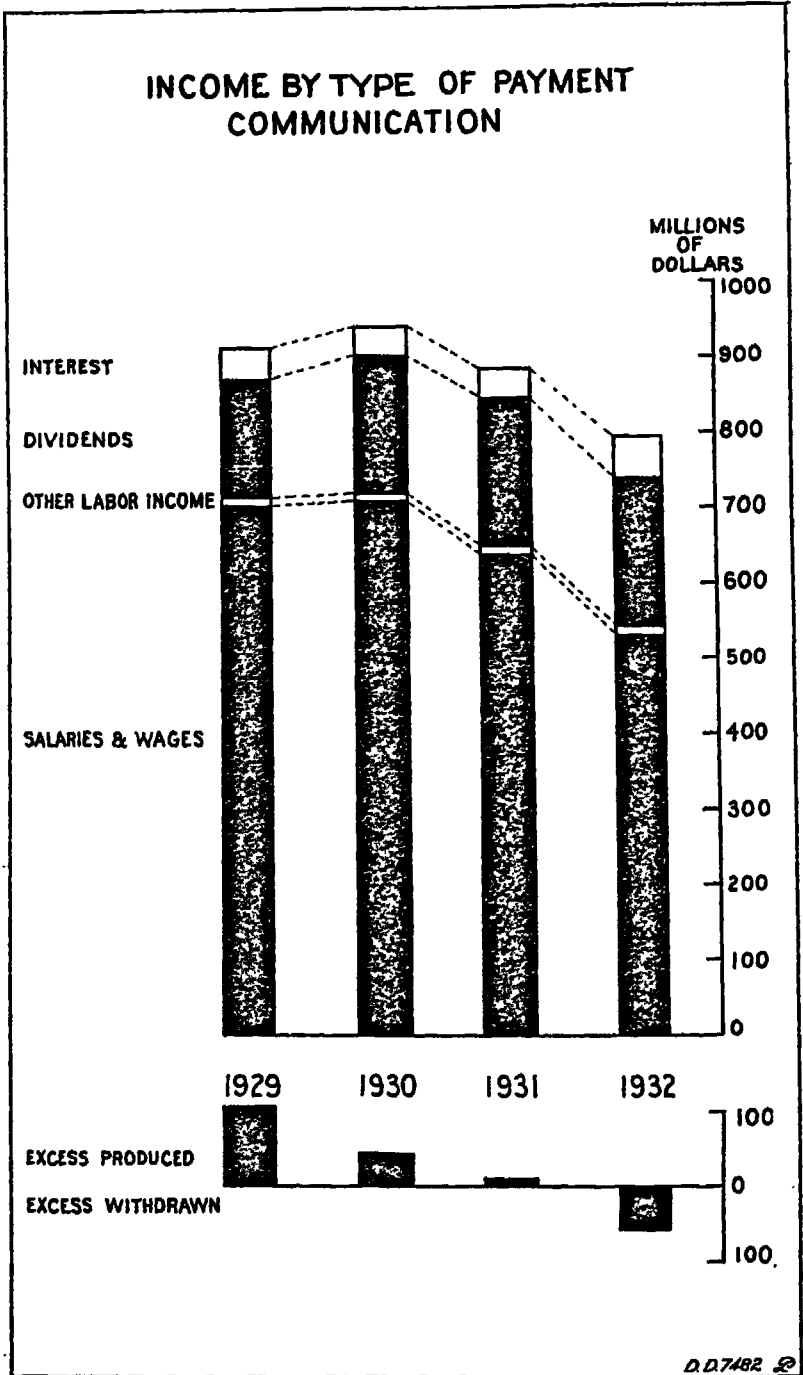
## SUMMARY TABLES, COMMUNICATION

TABLE 110.—*Number of employees, communication industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Number of employees, telephone | 436,420 | 425,532 | 367,573 | 334,085 | 100.0 | 97.5 | 84.2 | 76.6 |
| 2 | Number of employees, telegraph | 96,314 | 93,999 | 81,049 | 68,348 | 100.0 | 97.6 | 84.2 | 71.0 |
| 3 | Number of employees, communication industries | 532,734 | 519,531 | 448,622 | 402,433 | 100.0 | 97.5 | 84.2 | 75.5 |

TABLE 111.—*Gross income and number of messages, communication industries*

| Line | Item | Absolute numbers (thousands) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Operating revenue, telephone | $1,203,139 | $1,232,076 | $1,193,959 | $1,055,801 | 100.0 | 102.4 | 99.2 | 87.8 |
| 2 | Operating revenue, telegraph | $219,218 | $197,210 | $165,996 | $128,225 | 100.0 | 190.0 | 75.7 | 58.5 |
| 3 | Operating revenue, communication industries | $1,422,357 | $1,429,286 | $1,359,955 | $1,184,026 | 100.0 | 100.5 | 95.6 | 83.2 |
| 4 | Number of messages, telephone | 34,496,531 | 34,048,242 | 32,857,593 | 30,048,365 | 100.0 | 98.7 | 95.2 | 87.1 |
| 5 | Number of messages, telegraph | 257,591 | 229,393 | 182,616 | 160,984 | 100.0 | 89.1 | 70.9 | 62.5 |

TABLE 112.—*Income paid out and produced, telephone industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 585,864 | 592,787 | 533,070 | 455,224 | 100.0 | 101.2 | 91.0 | 77.7 |
| 2 | Other labor income | 7,553 | 7,803 | 9,051 | 8,592 | 100.0 | 103.3 | 119.8 | 113.8 |
| 3 | Total compensation of employees | 593,417 | 600,590 | 542,121 | 463,816 | 100.0 | 101.2 | 91.4 | 78.2 |
| 4 | Dividends | 134,443 | 159,510 | 189,061 | 198,546 | 100.0 | 118.6 | 140.6 | 147.7 |
| 5 | Interest | 39,804 | 33,997 | 33,014 | 47,677 | 100.0 | 85.4 | 82.9 | 119.8 |
| 6 | Total property income paid out | 174,247 | 193,507 | 222,075 | 246,223 | 100.0 | 111.1 | 127.4 | 141.3 |
| 7 | Total income paid out | 767,664 | 794,097 | 764,196 | 710,039 | 100.0 | 103.4 | 99.5 | 92.5 |
| 8 | Corporate savings | 93,712 | 50,221 | 15,020 | −48,738 | | | | |
| 9 | Total income produced | 861,376 | 844,318 | 779,216 | 661,301 | 100.0 | 98.0 | 90.5 | 76.8 |

TABLE 113.—*Income paid out and produced, telegraph industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 116,734 | 118,385 | 103,344 | 75,850 | 100.0 | 101.4 | 88.5 | 65.0 |
| 2 | Other labor income | 2,388 | 2,570 | 2,787 | 2,438 | 100.0 | 107.6 | 116.7 | 102.1 |
| 3 | Total compensation of employees | 119,122 | 120,955 | 106,131 | 78,288 | 100.0 | 101.5 | 89.1 | 65.7 |
| 4 | Dividends | 20,762 | 22,134 | 10,572 | 2,713 | 100.0 | 106.6 | 50.9 | 13.1 |
| 5 | Interest | 3,774 | 5,264 | 5,449 | 5,398 | 100.0 | 139.5 | 144.4 | 143.0 |
| 6 | Total property income paid out | 24,536 | 27,398 | 16,021 | 8,111 | 100.0 | 111.7 | 65.3 | 33.1 |
| 7 | Total income paid out | 143,658 | 148,353 | 122,152 | 86,399 | 100.0 | 103.3 | 85.0 | 60.1 |
| 8 | Corporate savings | 13,748 | −6,284 | −4,866 | −8,322 | | | | |
| 9 | Total income produced | 157,406 | 142,069 | 117,286 | 78,077 | 100.0 | 90.3 | 74.5 | 49.6 |

TABLE 114.—*Income paid out and produced, communication industries*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 702,598 | 711,172 | 636,414 | 531,074 | 100.0 | 101.2 | 90.6 | 75.6 |
| 2 | Other labor income | 10,536 | 11,024 | 12,454 | 11,329 | 100.0 | 104.6 | 118.2 | 107.5 |
| 3 | Total compensation of employees | 713,134 | 722,196 | 648,868 | 542,403 | 100.0 | 101.3 | 91.0 | 76.1 |
| 4 | Dividends | 155,205 | 181,644 | 199,633 | 201,259 | 100.0 | 117.0 | 128.6 | 129.7 |
| 5 | Interest | 43,578 | 39,261 | 38,463 | 53,075 | 100.0 | 90.1 | 88.3 | 121.8 |
| 6 | Total property income paid out | 198,783 | 220,905 | 238,096 | 254,334 | 100.0 | 111.1 | 119.8 | 127.9 |
| 7 | Total income paid out | 911,917 | 943,101 | 886,964 | 796,737 | 100.0 | 103.4 | 97.3 | 87.4 |
| 8 | Corporate savings | 107,460 | 43,937 | 10,154 | -57,060 | | | | |
| 9 | Total income produced | 1,019,377 | 987,038 | 897,118 | 739,677 | 100.0 | 96.8 | 88.0 | 72.6 |

TABLE 115.—*Percentage distribution of income paid out, communication industries*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| | **TELEPHONE** | | | | |
| 1 | Salaries and wages | 76.3 | 74.6 | 69.8 | 64.1 |
| 2 | Other labor income | 1.0 | 1.0 | 1.2 | 1.2 |
| 3 | Total compensation of employees | 77.3 | 75.6 | 70.9 | 65.3 |
| 4 | Dividends | 17.5 | 20.1 | 24.7 | 28.0 |
| 5 | Interest | 5.2 | 4.3 | 4.3 | 6.7 |
| 6 | Total property income paid out | 22.7 | 24.4 | 29.1 | 34.7 |
| 7 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |
| | **TELEGRAPH** | | | | |
| 8 | Salaries and wages | 81.3 | 79.8 | 84.6 | 87.8 |
| 9 | Other labor income | 1.7 | 1.7 | 2.3 | 2.8 |
| 10 | Total compensation of employees | 82.9 | 81.5 | 86.9 | 90.6 |
| 11 | Dividends | 14.5 | 14.9 | 8.7 | 3.1 |
| 12 | Interest | 2.6 | 3.5 | 4.5 | 6.2 |
| 13 | Total property income paid out | 17.1 | 18.5 | 13.1 | 9.4 |
| 14 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |
| | **COMMUNICATIONS** | | | | |
| 15 | Salaries and wages | 77.0 | 75.4 | 71.8 | 66.7 |
| 16 | Other labor income | 1.2 | 1.2 | 1.4 | 1.4 |
| 17 | Total compensation of employees | 78.2 | 76.6 | 73.2 | 68.1 |
| 18 | Dividends | 17.0 | 19.3 | 22.5 | 25.3 |
| 19 | Interest | 4.8 | 4.2 | 4.3 | 6.7 |
| 20 | Total property income paid out | 21.8 | 23.4 | 26.8 | 31.9 |
| 21 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 116.—*Per capita income of employees, communication industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | All active employees, telephone | $1,342 | $1,393 | $1,450 | $1,363 | 100.0 | 103.8 | 108.0 | 101.6 |
| 2 | All active employees, telegraph | 1,212 | 1,259 | 1,275 | 1,110 | 100.0 | 103.9 | 105.2 | 91.6 |
| 3 | All active employees in industry | 1,319 | 1,369 | 1,419 | 1,320 | 100.0 | 103.8 | 107.6 | 100.1 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

# CHAPTER XII

## WHOLESALE AND RETAIL TRADE

For purposes of estimating labor and entrepreneurial incomes, wholesale and retail trade are defined in a way similar to that of the Census of Distribution of 1930. It is therefore advisable to begin this chapter by citing the comments of the Bureau of the Census on the scope of its coverage in wholesale and retail trade:

Wholesale trade . . . embraces all establishments engaged in the purchase, sale, or distribution of goods on a wholesale basis. In addition to wholesalers of the conventional type, the census covers wholesalers rendering limited services, such as desk jobbers or drop shippers and cash-and-carry wholesalers, and the whole range of organizations engaged in wholesale trade or operating on a wholesale basis, and performing wholesale functions, including brokers, commission merchants, chain-store warehouses, manufacturers' sales branches, selling agents, etc. The term has also been used to include assemblers and country buyers of farm products, such as elevators, country buyers, cooperative marketing associations, and the like. While brokers, commission merchants, manufacturers' sales branches and chain-store warehouses are in certain respects unlike wholesale merchants, they perform wholesale functions in general and have been classed in the wholesale field. Concerns selling goods to such industrial consumers as manufacturing plants, public utilities, oil-well companies, mining concerns, railroads, and the like, are also regarded as establishments engaged in wholesale trade. Thus . . . the wholesale field covers nearly all merchandising concerns, with the exception of retail establishments. (See Wholesale Distribution, Summary for the United States, p. 7.)

Retail distribution is the process of purveying goods to ultimate consumers for consumption or utilization, together with services incidental to the sale of goods. For census purposes, however, this definition was restricted. Wholly service businesses, such as laundries, dry cleaners, etc.; professions, such as medicine and the law; and public utilities, such as water, gas, and electricity—all were excluded. Also excluded were bakeries, planing mills, lumber yards manufacturing their own lumber and millwork, power laundries, cleaning and dyeing establishments, and hotel dining rooms, all these groups being covered in other censuses. Finally, supply houses and most of the machinery dealers and dealers in iron and steel products, leather, findings, and junk, have been included with wholesale rather than with retail trade. (See Retail Distribution, Summary for the United States, pp. 10–11.)

Property income in the distributive trades is estimated from corporate data, which do not allow one to establish the property income for exactly the same area that is involved in labor and entrepreneurial incomes. Thus, Statistics of Income (which is our richest source of data on corporate incomes) classifies restaurants not with retail trade, but with hotels, laundries, and other domestic services. Similarly, manufacturers' retail sales branches are likely to be classified under manufacturing rather than under retail trade. For wholesale trade, also, manufacturers' sales branches, warehouses, elevators, assemblers and country buyers are likely to be classified in corporate

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statistics either under manufacturing or under transportation. The segregation of all these groups is next to impossible, and as a result, property incomes under wholesale and retail trade cover a smaller area than do labor and entrepreneurial incomes. Still, in distributive trades pure property incomes are generally small as compared with other types of income; and the restriction of the area for which these property incomes are measured is likely to have but a negligible effect upon the income totals for retail and wholesale trade as a whole.

However, even the estimates of labor and entrepreneurial incomes in these fields are to be taken cautiously because of their tentative character. The Census of Distribution for 1930 provides us with basic materials for our estimates. But this census was the first Nation-wide enumeration of the distributive field, and is likely to suffer from the usual defect of first censuses, viz., incompleteness. The estimates of labor incomes for years other than 1929 are largely a result of carrying forward Census of Distribution totals with the help of employment and pay roll indexes of the Bureau of Labor Statistics. But the Bureau's sample of retail and wholesale concerns is too small in size and too unequal in regional distribution to reflect faithfully the movement in so wide a field. The estimates of entrepreneurial income, which is especially important in retailing, have to be based upon scattered samples covering only a small fraction of the total field of trade. In 1929 over half of the total volume of sales were accounted for by unincorporated establishments. Consequently, while the estimates presented below are probably the best that could be derived from the available data, they are less reliable than those for such fields as manufacturing and railroad transportation, and should be interpreted with caution.

Wholesale and retail trade combined account for a substantial proportion of the gainfully occupied population of this country. Table 117 shows an employment total of over 7 million in 1929, even after the number of partially employed has been reduced to an equivalent number of full-time employed. It is difficult to establish from the Census of Occupations the number of gainfully occupied attached to trade, because in this census restaurants are not included with trade but are combined with hotels and boarding houses. Omitting this group of independent restaurants (i.e., restaurants not attached to hotels, which in table 117 are included in retail trade), we find in the Census of Occupations a total number of gainfully occupied in trade of about 6.5 million,[1] or about one eighth of the total number of gainfully occupied in this country. Since the number of full time employees in restaurants and eating places was about 420 thousand, the number reported as employed in trade minus the restaurants is about 6.7 million in 1929, as against 6.5 million gainfully occupied reported as of April 1, 1930. This excess of employed over gainfully occupied appears puzzling at first sight, but it must be remembered that the Census of Occupations shows over 1.3 million gainfully occupied for whom there is no industrial attachment, and that the Census of Distribution classified as full time employees those who work full time through the day, but not necessarily all through the year. In the latter census, even though the number employed is an

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[1] The number is obtained by adding 5,353 thousand listed under wholesale and retail trade, 86 thousand under other and not specified trade, 498 thousand under automobile agencies, 424 thousand under garages, greasing stations, etc., 31 thousand under grain elevators, and 59 thousand under warehouses and cold storage.

average of the numbers reported on each of the four quarters, it may still include employees whose main industrial attachment is not in the distributive trades.

The estimates cited above suggest that in 1929 the number of gainfully occupied but unemployed people attached to trade must have been rather small. The developments during the following years changed this situation materially. The number of both employees and independent entrepreneurs has shown a material shrinkage, the totals declining more than 20 percent from 1929 to 1932 in both retail and wholesale trade. Contrary to what one would expect, the estimates show a greater drop in the number employed in retail as compared with wholesale trade. This result is due to the much more appreciable decline in the number of entrepreneurs in retail trade as compared with wholesale. When only employees are considered, it is seen that by 1932 their number declined 21 percent in wholesale and only 18.5 percent in the retail field.

In distributive trades, as in all other branches of economic activity, the decline during recent years in the number employed was both a cause and an effect of the shrinkage in gross income. The movement of gross income, both in current prices and as adjusted for price changes, is shown for wholesale and retail trade in table 118. It must be noted that the estimates in lines 1 and 4 are derived from data for wholesalers only, thus excluding the activity of agents, brokers, manufacturers' sales branches, etc. In 1929 sales by wholesalers accounted for only 29.6 billion dollars out of a total for wholesale trade of 69.5 billion dollars. It is therefore quite possible that the decline in gross income for wholesale trade may misrepresent somewhat the movement of wholesale trade as a whole, since there might have been a shift in the relative proportion of the total wholesale business done by wholesalers proper. This qualification is not true of the estimates for the retail field.[2] In current prices, the sales in both branches of trade have declined steadily from the peak in 1929, the decline in wholesale trade being a shade more appreciable than that in retail trade. The correction for price changes shows that the drop in the quantity volume of trade was, on the whole, rather mild. Curiously enough this decline took place mostly between 1929 and 1930, especially with regard to retail trade. One is unable to say definitely whether this showing is due to some vagaries of the statistical procedure followed or is a true reflection of the situation.

The movement of the various parts of income paid out in wholesale trade shows a departure from the usual pattern (see table 119) in that property income showed a much more material drop than did labor incomes. This was due to a drastic contraction of dividends, and to the fact that interest payments on long-term debt, which in this industry as in others showed no decline, form but a small part of total property income. As in other industries, income produced showed a much more material drop than income paid out. One hesitates to trust this result too much, because the movement of business savings is so much dependent upon the estimate of entrepreneurial withdrawals—an estimate which is at best but a well-considered guess.

[2] The estimates of the volume of retail and wholesale trade prepared by the Cost Analysis Division were available also for separate groups. But the study of these estimates by subgroups indicated that their basis was insufficient to yield reliable figures, and the resulting measurements show a lack of correspondence to such other, more reliable symptoms of volume of trade as sales by farmers, output of the manufacturing industry, etc.

Table 120 shows the apportionment of income paid out and produced in retail trade, the results being quite similar to those for wholesale trade. Here, also, pure property incomes declined much more sharply than did labor incomes; and, again, as in wholesale trade, the income produced fell off much more sharply than income paid out; and the result is subject to the same doubt as in the case of wholesale trade. The only feature that appears to distinguish the movements of the various parts of income in retail trade from that in wholesale trade, is the much greater decline of withdrawals by entrepreneurs in the former. This is due largely to the more drastic decline in the number of individual entrepreneurs in retail as compared with the wholesale field.

Table 121 and chart XII summarize the movement of income paid out and produced in distributive trades as a whole. It is of some interest to compare it with table 118, which shows the movement of gross income in the same field. It appears from this comparison that income paid out declined less than gross income in every one of the 3 years following 1929. Thus, total sales dropped in 1930 to 86 percent of the 1929 volume, while income paid out dropped to only 93 percent of the 1929 figure; similar percentages are 74 and 81 for 1931, and 61 and 65 for 1932. But income produced in the industry appears to have declined more than did gross income, especially in the later years. Thus, by 1931 income produced was 65 percent of the 1929 level; gross income, 74 percent; the same figures for 1932 were 48 percent and 61 percent, respectively. Since income produced forms a substantial part of the mark-up by the distributive trades over the cost of goods (the other parts are such items as rent, depreciation charges, payments to other business units except those for goods purchased for sale), it becomes obvious that the gross margin in the distributive trades must have declined during the depression, rather than risen. This indeed is shown by the estimates of gross margin, provided by the Cost Analysis Division of the Bureau of Foreign and Domestic Commerce, and used by us in arriving at business savings and losses. These gross margins, in percentages of sales, show in retail trade a drop from 28.5 in 1929 to 27.8 in 1932; and in wholesale trade (wholesalers only) a decline from 13.8 percent in 1929 to 12.7 in 1932.

This evidence, which is presented here for careful and critical consideration, suggests considerable doubt as to the tenability of the assertion, made widely during recent years, that during the depression retail prices of commodities lagged materially behind wholesale prices. If gross margins, when expressed in percentages of final prices, remain unchanged, then the prices charged by retailers and wholesalers should have moved with the prices paid by them. The sources of a disparity in movement between prices charged by manufacturers and prices charged to ultimate consumers by retailers could, under the conditions described above, be only two: (a) The increase in the number of hands through which a commodity passes from a manufacturer to ultimate consumer, with a consequent cumulation of a larger number of gross margins; (b) since commodities are held in stock by the distributive trades, retailers and wholesalers may have added the mark-up to the original purchase price of the commodities, which, in a period of declining prices, is higher than the current price. The first factor could hardly have been operative

CHART XII

## INCOME BY TYPE OF PAYMENT
## TRADE

BILLIONS
OF
DOLLARS

INTEREST
DIVIDENDS

ENTREPRENEURIAL
WITHDRAWALS

OTHER LABOR INCOME

SALARIES & WAGES

1929   1930   1931   1932

EXCESS PRODUCED

EXCESS WITHDRAWN
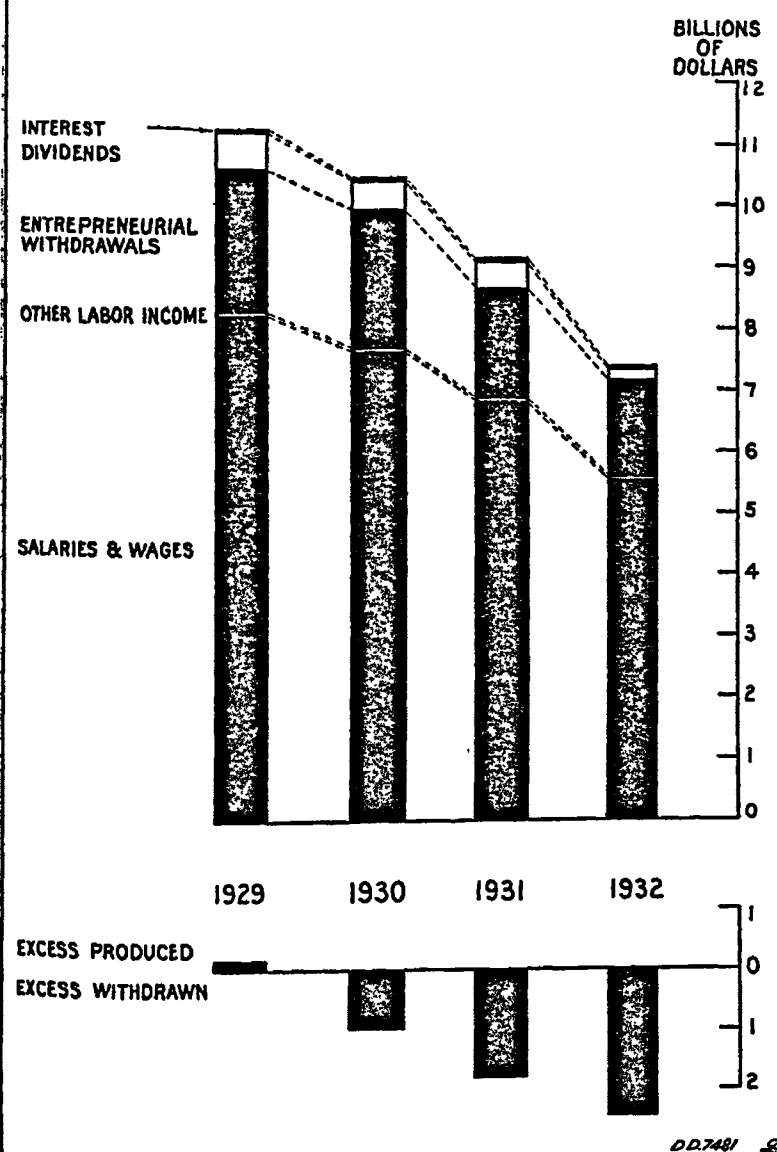
D.D.7481

during the recent depression. The second might have exercised its influence, but it could not have been sufficiently important to cancel the opposite influence of a declining relative gross margin.

It is thus strongly suggested by the evidence of tables 118 and 121 that there was little disparity between the movement of prices charged by producers of finished commodities and that of prices charged for the same commodities by retailers. The general impression of such disparity between retail and wholesale prices may arise from comparing indexes of which one is heavily weighted with unfinished commodity prices, while the other covers only finished products. At any rate, the estimates presented call for further examination of the relation between prices paid by distributive trades and prices charged by them to ultimate consumers.

While some shifts occurred in the relative proportion of income flowing to the various groups employed in the distributive trades, these shifts were not very marked (see table 122). In both wholesale and retail trade, the proportion of labor incomes in the total paid out has increased slightly, while the share of property income has dropped materially. In wholesale trade, withdrawals of entrepreneurs accounted for a growing share of income paid out, but the changes should not be considered significant, in view of the precarious basis of the estimates. In retail trade, entrepreneurial incomes remained on the same level, or declined slightly.

While the total volume of labor income originating in the distributive trades has shown a substantial decline, the per capita incomes have shown no such marked drop. (It must again be noted that the number of part-time employees has been reduced to an equivalent number of full-time employees.) At any rate, the decline in the per capita income of the various employee groups in trade has not been as great as the drop in the Bureau of Labor Statistics cost of living index. If this latter measure may be assumed to be typical of the cost of living of employees in distributive trades, it appears that the real earnings of those who had the good fortune to remain in full time employment have increased slightly as compared with 1929.

# SUMMARY TABLES, TRADE

### TABLE 117.—*Number of people engaged, wholesale and retail trade*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **WHOLESALE TRADE** | | | | | | | | |
| 1 | Employees | 1,605,042 | 1,545,639 | 1,400,484 | 1,264,649 | 100.0 | 96.3 | 87.3 | 78.8 |
| 2 | Entrepreneurs | 90,772 | 85,000 | 83,000 | 80,000 | 100.0 | 93.6 | 91.4 | 88.1 |
| 3 | Total number engaged | 1,695,812 | 1,630,639 | 1,483,484 | 1,344,649 | 100.0 | 96.2 | 87.5 | 79.3 |
| | **RETAIL TRADE** | | | | | | | | |
| 4 | Employees | 3,956,823 | 3,804,810 | 3,563,046 | 3,224,373 | 100.0 | 96.2 | 90.0 | 81.5 |
| 5 | Entrepreneurs | 1,510,607 | 1,350,000 | 1,130,000 | 1,050,000 | 100.0 | 89.4 | 74.8 | 69.5 |
| 6 | Total number engaged | 5,467,430 | 5,154,810 | 4,693,046 | 4,274,373 | 100.0 | 94.3 | 85.8 | 78.2 |
| | **WHOLESALE AND RETAIL TRADE** | | | | | | | | |
| 7 | Employees | 5,561,865 | 5,350,449 | 4,963,530 | 4,489,022 | 100.0 | 96.2 | 89.2 | 80.7 |
| 8 | Entrepreneurs | 1,601,379 | 1,435,000 | 1,213,000 | 1,130,000 | 100.0 | 89.6 | 75.7 | 70.6 |
| 9 | Total number engaged | 7,163,244 | 6,785,449 | 6,176,530 | 5,619,022 | 100.0 | 94.7 | 86.2 | 78.4 |

### TABLE 118.—*Gross income, wholesale and retail trade*

| Line | Item | Absolute numbers (millions of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Net sales at current prices, wholesale trade | 69,292 | 58,205 | 50,375 | 41,090 | 100.0 | 84.0 | 72.7 | 59.3 |
| 2 | Net sales at current prices, retail trade | 49,115 | 44,000 | 37,500 | 31,500 | 100.0 | 89.6 | 76.4 | 64.1 |
| 3 | Net sales at current prices, wholesale and retail trade | 118,407 | 102,205 | 87,875 | 72,590 | 100.0 | 86.3 | 74.2 | 61.3 |
| 4 | Net sales, 1929 prices, wholesale trade | 69,292 | 64,173 | 65,764 | 60,426 | 100.0 | 92.6 | 94.9 | 87.2 |
| 5 | Net sales, 1929 prices, retail trade | 49,115 | 46,122 | 45,620 | 44,681 | 100.0 | 93.9 | 92.9 | 91.0 |
| 6 | Net sales, 1929 prices, wholesale and retail trade | 118,407 | 110,295 | 111,384 | 105,107 | 100.0 | 93.1 | 94.1 | 88.8 |

### TABLE 119.—*Income paid out and produced, wholesale trade*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 3,010,130 | 2,880,166 | 2,507,608 | 2,009,688 | 100.0 | 95.7 | 83.3 | 66.8 |
| 2 | Other labor income | 1,995 | 2,188 | 2,148 | 1,791 | 100.0 | 109.7 | 107.7 | 89.8 |
| 3 | Total compensation of employees | 3,012,125 | 2,882,354 | 2,509,756 | 2,011,479 | 100.0 | 95.7 | 83.3 | 66.8 |
| 4 | Dividends | 199,784 | 177,557 | 131,499 | 14,806 | 100.0 | 88.9 | 65.8 | 7.4 |
| 5 | Interest | 15,386 | 6,692 | 18,396 | 17,225 | 100.0 | 43.5 | 119.6 | 112.0 |
| 6 | Total property income paid out | 215,170 | 184,249 | 149,895 | 32,031 | 100.0 | 85.6 | 69.7 | 14.9 |
| 7 | Withdrawals of individual entrepreneurs | 579,182 | 546,582 | 495,148 | 423,829 | 100.0 | 94.4 | 85.5 | 73.2 |
| 8 | Total income paid out | 3,806,477 | 3,613,185 | 3,154,799 | 2,467,339 | 100.0 | 94.9 | 82.9 | 64.8 |
| 9 | Corporate savings | 21,847 | −233,839 | −321,511 | −206,032 | | | | |
| 10 | Business savings of individuals | 44,690 | −229,744 | −332,698 | −213,201 | | | | |
| 11 | Total income produced | 3,873,014 | 3,149,602 | 2,500,590 | 2,048,106 | 100.0 | 81.3 | 64.6 | 52.9 |

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TABLE 120.—*Income paid out and produced, retail trade*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 5,189,670 | 4,796,499 | 4,317,377 | 3,577,300 | 100.0 | 92.4 | 83.2 | 68.9 |
| 2 | Other labor income | 7,542 | 8,619 | 9,377 | 7,735 | 100.0 | 114.3 | 124.3 | 102.6 |
| 3 | Total compensation of employees | 5,197,212 | 4,805,118 | 4,326,754 | 3,585,035 | 100.0 | 92.5 | 83.3 | 69.0 |
| 4 | Dividends | 365,835 | 319,294 | 254,466 | 148,446 | 100.0 | 87.3 | 69.6 | 40.6 |
| 5 | Interest | 45,189 | 51,251 | 44,784 | 37,192 | 100.0 | 113.4 | 99.1 | 82.3 |
| 6 | Total property income paid out | 411,024 | 370,545 | 299,270 | 185,638 | 100.0 | 90.2 | 72.8 | 45.2 |
| 7 | Withdrawals of entrepreneurs | 1,822,890 | 1,634,850 | 1,322,100 | 1,087,800 | 100.0 | 89.7 | 72.5 | 59.7 |
| 8 | Total income paid out | 7,431,126 | 6,810,513 | 5,948,124 | 4,858,473 | 100.0 | 91.6 | 80.0 | 65.4 |
| 9 | Corporate savings | −9,980 | −367,349 | −563,857 | −714,577 | | | | |
| 10 | Business savings of individuals | 58,576 | −108,329 | −518,570 | −783,895 | | | | |
| 11 | Total income produced | 7,479,722 | 6,334,835 | 4,865,697 | 3,360,001 | 100.0 | 84.7 | 65.1 | 44.9 |

TABLE 121.—*Income paid out and produced, wholesale and retail trade*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 8,199,800 | 7,676,665 | 6,824,985 | 5,586,988 | 100.0 | 93.6 | 83.2 | 68.1 |
| 2 | Other labor income | 9,537 | 10,807 | 11,525 | 9,526 | 100.0 | 113.3 | 120.8 | 99.9 |
| 3 | Total compensation of employees | 8,209,337 | 7,687,472 | 6,836,510 | 5,596,514 | 100.0 | 93.6 | 83.3 | 68.2 |
| 4 | Dividends | 565,619 | 496,851 | 385,985 | 163,252 | 100.0 | 87.8 | 68.2 | 28.9 |
| 5 | Interest | 60,575 | 57,943 | 63,180 | 54,417 | 100.0 | 95.7 | 104.3 | 59.8 |
| 6 | Total property income paid out | 626,194 | 554,794 | 449,165 | 217,669 | 100.0 | 88.6 | 71.7 | 34.8 |
| 7 | Withdrawals of entrepreneurs | 2,402,072 | 2,181,432 | 1,817,248 | 1,511,629 | 100.0 | 90.8 | 75.7 | 62.9 |
| 8 | Total income paid out | 11,237,603 | 10,423,698 | 9,102,923 | 7,325,812 | 100.0 | 92.8 | 81.0 | 65.2 |
| 9 | Corporate savings | 11,867 | −601,188 | −885,368 | −920,609 | | | | |
| 10 | Business savings of individuals | 103,266 | −338,073 | −851,268 | −907,096 | | | | |
| 11 | Total income produced | 11,352,736 | 9,484,437 | 7,366,287 | 5,498,107 | 100.0 | 83.5 | 64.9 | 47.6 |

TABLE 122.—*Percentage distribution of income paid out, wholesale and retail trade*

| Line | Item | Wholesale | | | | Retail | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Percentages of income paid out | | | | Percentages of income paid out | | | |
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 79.1 | 79.7 | 79.5 | 81.5 | 69.8 | 70.4 | 72.6 | 73.6 |
| 2 | Other labor income | .1 | .1 | .1 | .1 | .1 | .1 | .2 | .2 |
| 3 | Total compensation of employees | 79.1 | 79.8 | 79.6 | 81.5 | 69.9 | 70.6 | 72.7 | 73.8 |
| 4 | Dividends | 5.2 | 4.9 | 4.2 | .6 | 4.9 | 4.7 | 4.3 | 3.1 |
| 5 | Interest | .4 | .2 | .6 | .7 | .6 | .8 | .8 | .8 |
| 6 | Total property income paid out | 5.7 | 5.1 | 4.8 | 1.3 | 5.5 | 5.4 | 5.0 | 3.8 |
| 7 | Withdrawals of entrepreneurs | 15.2 | 15.1 | 15.7 | 17.2 | 24.5 | 24.0 | 22.2 | 22.4 |
| 8 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 123.—*Per capita income of employees, wholesale and retail trade*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | All employees, wholesale trade | $1,875 | $1,863 | $1,791 | $1,589 | 100.0 | 99.4 | 95.5 | 84.7 |
| 2 | All employees, retail trade | 1,312 | 1,261 | 1,212 | 1,109 | 100.0 | 96.1 | 92.4 | 84.5 |
| 3 | All employees, total trade | 1,474 | 1,435 | 1,375 | 1,245 | 100.0 | 97.4 | 93.3 | 84.5 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

# CHAPTER XIII

## FINANCE

### 1. GENERAL COMMENTS

Finance is a collective name for those branches of our economic system which engage in the issuance, disposition, or trade in monetary funds or claims to property or income. These branches form almost a complete economic world of their own, with numerous functional and institutional distinctions. Among them are commercial banks and savings banks, commodity and security brokers, investment houses and joint-stock land banks, installment finance companies, and personal loan companies; all types of insurance companies; and, finally, real estate, trading, and management companies. Were proper data available for these numerous branches of the field of finance, an interesting study could be made of the role which they play in the creation of the country's national income. But for a number of important divisions of the field, data of the kind necessary for preparation of income estimates are almost completely absent. This is true of commodity and security brokerage, personal finance, building and loan associations, investment and private banks. Because of these forced omissions, it does not seem advisable to treat and discuss the field of finance as a whole. A graphical summary of the estimates is presented however, in chart XIII.

If the estimates below fail to cover the complete field by a substantial margin, they, on the other hand, cover an important branch of economic activity not usually classified as finance. Under real estate we include the management of small individual holdings. The primary sources of our data on corporate real estate include not only trading in real estate, but also the companies which manage the property; and, besides, they cover not only real estate companies but also patent-holding companies which collect royalties. Accordingly, our estimates in this field extend to both trading in and managing of real estate property and to the holding and managing of patents. The managing functions are more of an industrial pursuit, not usually associated with finance as such.

In the field of finance there is a problem in the ascertainment of income which should be discussed before any figures for separate divisions are analyzed. The problem arises from the difficulty of defining the source of income in the field. A commercial bank performs various functions, each of which may yield the bank and its stockholders net income. These activities are the advance of short-term credit to business organizations; the supply of foreign exchange and trade facilities; acting in a fiduciary capacity if it is a trust company; and, finally, it may derive funds from investments in stocks and bonds. Obviously, the bank produces or assists in the production of services in the first three functions; but in the last function, that of receiving interest and dividends on securities,

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it acts largely as an association of individuals. The income which it thus receives is either paid out or accrues to the individual depositors in the banks who draw interest on their deposits (primarily time deposits). It is therefore permissible to disregard both the receipts by commercial banks from their investments in stocks and bonds (which payments have already been measured at their industrial source) and the payments of banks to individuals on their deposits (which are a duplication of the receipts by banks of investment income).

The same view appears more clearly acceptable in the case of savings banks and life insurance companies. Both are largely associations of individuals for a better preservation and utilization of their savings. In the case of both institutions interest and dividends are received, and accrue or are paid out to the members of those institutions, i.e., to depositors in savings banks and to policyholders in insurance companies. In both groups some original net income is created, viz, the services which are rendered by the personnel of the companies, and the additional capital contributed by stockholders (the latter in joint-stock savings banks and insurance companies). But the amount received in interest and dividends does not constitute any original income created by the companies, and neither do their payments to depositors and policyholders. Of course, it is quite possible that savings banks and insurance companies pay out in a given year to depositors and policyholders an amount smaller or larger than the amount of interest and dividend receipts minus the expenses involved (on labor and outside capital). In this respect our failure to study the precise apportionment of the property incomes originated (and tabulated by us) elsewhere, as between the tills and expense accounts of the banks and insurance companies and the pockets of individuals, prevents us from saying that the full amount originated has actually been paid to individuals. But the available data do not permit such a precise apportionment. We are forced to declare that we know the volume of property income eventually reaching the individuals either as such, or as banded in such savings associations as banks, insurance companies, and all other associations of individuals of this type, which derive and spend property income in similar fashion (among them charitable and educational foundations).

In carrying out the viewpoint just developed, the estimates below cover for life insurance companies and all banks only labor incomes produced and dividends paid to stockholders. In the case of banks, since most of their business activity is in the field of short-term credit (rather than investments), the corporate savings were also taken into account. The other divisions distinguished, viz., insurance companies other than life (fire and marine, casualty, etc.) and real estate, including individual holdings, were treated as regular industrial branches, in which, therefore, receipts of property income were considered deduction items, and in which the payments of property income were considered fully.

## 2. THE BANKING INDUSTRY

The estimates for banking, presented in tables 124 to 128, while they fail to include private banks, industrial banks, and a few banking organizations engaged in personal finance, do cover the preponderant

CHART XIII

# INCOME BY TYPE OF PAYMENT
## BANKING,* REAL ESTATE AND INSURANCE

BILLIONS
OF
DOLLARS

NET RENTS TO
INDIVIDUALS

INTEREST

DIVIDENDS

OTHER LABOR INCOME

SALARIES & WAGES
AND COMMISSIONS

1929    1930    1931    1932

EXCESS WITHDRAWN
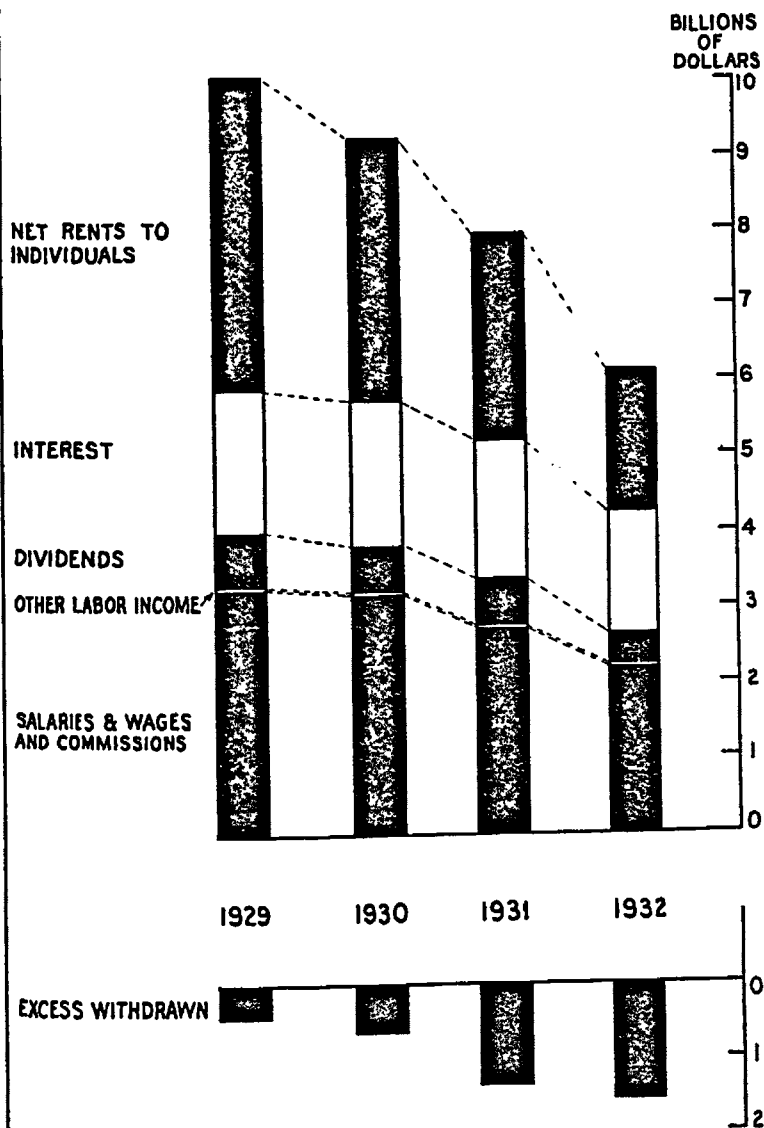
*Commercial*

D.D. 7501

part of the field. The general designation "commercial banks" includes national and State banks, loan and trust companies, savings banks, and joint-stock land banks. Under "other banks" are subsumed the activities of such semigovernmental institutions in the field as the Federal Reserve banks, the Federal farm credit banks, the intermediate credit banks, etc. The Census of Occupations reports 625,000 gainfully occupied in the field of banking and brokerage. Since brokerage is not covered in table 124, it may be seen that the estimates can fail to cover only an insignificant fraction of the field.

In contrast to the stability of numbers employed in other banks, the employment in commercial banks showed a marked contraction after 1930, reaching by 1932 a level about one fifth below that of 1929. This was probably a result of both a contraction in the number of banks through failures, and of reduction in the number of employees in the surviving banks. It is a significant symptom of the severity of the present depression to find such a large contraction in employment in a field usually so stable as banking.

An appreciable decline occurred also in the compensation of employees of commercial banks, although the estimates, based as they are on the movement of salaries in other industries, are but well-considered guesses. In respect of both employment and labor incomes, the "other" banks exhibit a marked stability.

Table 126 shows, in addition to labor income, two other income divisions—dividends paid to bank stockholders, and corporate savings. Both show clearly the effects of the depression. Dividends declined by 1932 to two thirds of their amount in 1929, a substantial reduction, but not as drastic as that prevailing in a number of industrial branches. Corporate savings, which were positive in 1929, turned into losses in 1930, with the losses rising to striking volumes by 1932. It is also to be considered that these are losses after payment of dividends of surviving banks, and that the figures do not reflect the losses in banks that failed. On the other hand, the fact that negative savings shown appear so large as compared with total income paid out, should not be attributed much significance, since a large volume of income passing through the hands of the banks is not included in the tables.

The percentage distribution of income paid out shows no significant shift as between labor incomes and dividends paid (see table 127).

### 3. THE INSURANCE FIELD

The insurance field, one of the most stable sections of our economic system, gives employment to about half a million people. The Census of Occupations lists 507,000 gainfully occupied in the field, a figure close to the 456,000 shown in table 129. The depression seems to have affected employment but little—even of the office employees, who are on a strictly salary basis, the moderate decline in fire, marine, and casualty insurance companies having been largely offset by the slight increase in the number of office employees in life insurance companies. The number of licensed agents has also increased slightly, with the result that total employment in the field in 1932 was only 4 percent below the 1929 level.

In the movement of labor income there was a significant difference between the compensation of office employees and that of agents (see tables 130 and 135). In the life insurance field the compensation of office personnel has increased even more than did their number. In

other insurance companies the decline in compensation kept pace with the decline in numbers, so that per capita incomes (shown in table 135) indicate by 1932 but a small decline as compared with those in 1929. In both fields the average income of office employees has held up well as compared with the decline in the cost of living, suggesting an increased purchasing power of the average compensation. Contrasted with it is the material drop in the compensation of agents, which amounted by 1932 to about 20 percent from the 1929 level in life insurance, and to 30 percent in other insurance. This decline appears to be a reflection of the contraction in the volume of new business and of a drop in commissions on already written insurance canceled under the pressure of bad times. Since the number of agents in the field increased slightly, the per capita return of agents must have suffered a contraction of about 30 percent between 1929 and 1932.

In life insurance the only other income recorded is the small volume of dividend payments to stockholders by joint-stock companies (see table 131). These payments dropped by 1932 to somewhat less than two thirds of the 1929 volume, but, of course, exercised but little effect upon the total income originated. As a result, the percentage distribution of income paid out shows little shift between labor and property incomes (see table 133), but it does show a substantial change in favor of compensation of office employees as over against payments to agents.

In the field of insurance other than life, the interesting feature is the negative character of property incomes (see table 132) illustrating the well-known fact that the premiums charged do not cover fully the underwriting risk, and are supplemented by the gains made by the companies on their investments. These gains must have been affected by the depression, with the result that negative savings appear in 1930 and persist in 1931 and 1932. Total income paid out declined by 1932 to the extent of one third from the 1929 level, reflecting primarily the decline in labor incomes. Total income produced declined still more materially, indicating that both dividends and labor incomes were partly sustained by draft upon the capital and surplus of the companies. The proportional share of labor incomes in the totals paid out shows a significant rise from 1929 to 1932 (see table 134), while the negative share of interest rises, indicating that income paid out was covered to a greater extent from the investment rather than from the premium incomes of the companies.

## 4. REAL ESTATE

The field of real estate includes not only trading in real estate property but management of apartment houses, office buildings, and of small individual holdings (among the latter those cases in which an owner rents out a part of his house or land to other people). In addition, there is some inclusion of income from patents, held either by individuals or by corporations. The field is therefore wide and none too homogeneous. Also, the available data are comparatively scanty; and while the estimates presented below are the best that we could arrive at with the available data, the lacunae in information are serious enough to allow the possibility of substantial error.

The number of people in the industry as shown in table 136 is estimated from the Census of Occupations, with some allowance for unem-

ployment. While the income estimates cover net rental receipts by individual owners of real estate, their number is not shown as engaged in the industry, since to most of them the management of their houses or land is only a secondary pursuit. The movement between 1929 and 1932 is estimated on the basis of what is essentially a combined manufacturing and trade employment index for the wage earners, and of the movement of salary earners in manufacturing for the salaried group. These estimates are submitted as the most plausible opinion on the changes in employment in this field.

The same is true of the estimated volume of salaries as shown in table 137. But the volume of wages is based on a specific sample of compensation for janitors, one of the biggest groups of wage earners in the field. The drastic decline of the volume of wages appears plausible, in view of the well-known severe impact of the depression on the real estate industry. The same effect appears in the volume of dividends originating in the industry, which declined by 1932 to less than one third of the volume in 1929. Strikingly enough, interest payments on debt of corporations show no such decline, as judged by the volumes reported to the Income Tax Bureau. But interest payments on mortgages on real estate property owned by individuals did show a significant decline. This difference in movement of the two groups of interest payments is due to the assumption that the defaults of interest payments on individuals' mortgages were much larger than were those shown by the corporate debt. Finally, there was a striking decline in net rents and royalties received by individuals. It is possible that this estimated decline is exaggerated by the fact that insufficient allowance was made for nonreporting. But general information relating to the real estate field does not suggest any doubts but that the decline in net income from that industry during recent years must have been striking. The drop of total net income paid out by 1932 to 42 percent from the 1929 level does not therefore appear exaggerated. The large volume of corporate losses and the growing volume of individual losses appears as another manifestation of the same phenomenon.

In the percentage distribution of income paid out, the most striking feature is the growth of the share of interest payments on mortgage debt, both corporate and individual (see table 138). Their combined weight has increased from 27 percent of total net income paid out in 1929 to 41 percent in 1932. The greatest offsetting decline occurred in the share of individuals' net rents and royalties, whose ratio to net income declined from 55 percent in 1929 to 43 in 1932.

Of the per capita incomes shown in table 139 that for wage earners is most reliable as a specific measure of payments in the field. Although the rather low average wage in 1929 shows a considerable decline from 1929 to 1932, the purchasing power of that wage shows a definite decline only in the last year of the period.

TABLE 124.—*Number of employees, banking industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Number of employees, commercial banks... | 374,780 | 363,317 | 330,237 | 298,636 | 100.0 | 96.9 | 88.1 | 79.7 |
| 2 | Number of employees, other banks... | 11,324 | 11,349 | 11,288 | 11,145 | 100.0 | 100.2 | 99.7 | 98.4 |
| 3 | Total number of employees.... | 386,104 | 374,666 | 341,525 | 309,781 | 100.0 | 97.0 | 88.5 | 80.2 |

TABLE 125.—*Total compensation of employees, banking industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages, commercial and savings banks, joint-stock land banks... | 648,015 | 629,263 | 560,169 | 455,689 | 100.0 | 97.1 | 86.4 | 70.3 |
| 2 | Salaries and wages, all other banks... | 20,112 | 20,647 | 20,910 | 20,590 | 100.0 | 102.7 | 104.4 | 102.4 |
| 3 | Salaries and wages in the industry... | 668,127 | 649,910 | 581,079 | 476,279 | 100.0 | 97.3 | 87.0 | 71.3 |
| 4 | Other labor income in the industry... | 1,187 | 1,406 | 1,558 | 1,558 | 100.0 | 118.4 | 131.3 | 131.3 |
| 5 | Total compensation of employees in the industry... | 669,314 | 651,316 | 582,637 | 477,837 | 100.0 | 97.3 | 87.0 | 71.4 |

TABLE 126.—*Income paid out and produced, commercial banking*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages... | 648,015 | 629,263 | 560,169 | 455,689 | 100.0 | 97.1 | 86.4 | 70.3 |
| 2 | Other labor income... | 1,187 | 1,406 | 1,558 | 1,558 | 100.0 | 118.4 | 131.3 | 131.3 |
| 3 | Total compensation of employees. | 649,202 | 630,669 | 561,727 | 457,247 | 100.0 | 97.1 | 86.5 | 70.4 |
| 4 | Dividends... | 466,755 | 449,831 | 410,790 | 310,827 | 100.0 | 96.4 | 88.0 | 66.6 |
| 5 | Total income paid out... | 1,115,957 | 1,080,500 | 972,517 | 768,074 | 100.0 | 96.8 | 87.1 | 68.8 |
| 6 | Corporate savings... | 132,677 | −37,503 | −328,627 | −461,807 | | | | |
| 7 | Total income produced... | 1,248,634 | 1,042,997 | 643,890 | 306,267 | 100.0 | 83.5 | 51.6 | 24.5 |

TABLE 127.—*Percentage distribution of income paid out, commercial banking*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages... | 58.1 | 58.2 | 57.6 | 59.3 |
| 2 | Other labor income... | .1 | .2 | .2 | .2 |
| 3 | Total compensation of employees... | 58.2 | 58.5 | 57.8 | 59.5 |
| 4 | Dividends... | 41.8 | 41.6 | 42.2 | 40.5 |
| 5 | Total income paid out... | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 128.—*Per capita income of employees, banking industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | All active employees, commercial and savings banks, joint-stock land banks | $1,729 | $1,732 | $1,696 | $1,526 | 100.0 | 100.2 | 98.1 | 88.3 |
| 2 | All active employees, all other banks | 1,776 | 1,819 | 1,852 | 1,847 | 100.0 | 102.4 | 104.3 | 104.0 |
| 3 | All active employees in the industry | 1,730 | 1,735 | 1,701 | 1,537 | 100.0 | 100.3 | 98.3 | 88.8 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## SUMMARY TABLES, INSURANCE

TABLE 129.—*Number of employees, insurance field*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Life, office employees | 70,778 | 74,005 | 75,440 | 75,440 | 100.0 | 104.6 | 106.6 | 106.6 |
| 2 | Fire and marine, office employees | 48,996 | 47,451 | 43,853 | 40,007 | 100.0 | 96.8 | 89.5 | 81.7 |
| 3 | Casualty, office employees | 84,707 | 82,835 | 78,160 | 64,075 | 100.0 | 97.8 | 92.3 | 75.6 |
| 4 | Total office employees | 204,481 | 204,291 | 197,453 | 179,522 | 100.0 | 99.9 | 96.6 | 87.8 |
| 5 | Licensed agents | 251,350 | 259,287 | 258,191 | 258,191 | 100.0 | 103.2 | 102.7 | 102.7 |
| 6 | Total number of employees | 455,831 | 463,578 | 455,644 | 437,713 | 100.0 | 101.7 | 100.0 | 96.0 |

TABLE 130.—*Compensation of employees, insurance field*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | LIFE INSURANCE COMPANIES | | | | | | | | |
| 1 | Salaries of officers and employees | 106,520 | 113,628 | 118,406 | 118,702 | 100.0 | 106.7 | 111.2 | 111.4 |
| 2 | Salaries (and expenses) of agents | 224,901 | 220,238 | 199,022 | 146,274 | 100.0 | 97.9 | 88.5 | 65.0 |
| 3 | Commissions | 274,503 | 277,311 | 258,002 | 252,543 | 100.0 | 101.0 | 94.0 | 92.0 |
| 4 | Total compensation | 605,924 | 611,177 | 575,430 | 517,519 | 100.0 | 100.9 | 95.0 | 85.4 |
| | ALL OTHER INSURANCE COMPANIES | | | | | | | | |
| 5 | Salaries of employees | 262,354 | 262,215 | 246,146 | 193,673 | 100.0 | 99.9 | 93.8 | 73.8 |
| 6 | Agents' compensation | 592,121 | 572,895 | 518,593 | 409,679 | 100.0 | 96.8 | 87.6 | 69.2 |
| 7 | Total compensation | 854,475 | 835,110 | 764,739 | 603,352 | 100.0 | 97.7 | 89.5 | 70.6 |
| | ALL INSURANCE | | | | | | | | |
| 8 | Salaries of employees | 368,874 | 375,843 | 364,552 | 312,375 | 100.0 | 101.9 | 98.8 | 84.7 |
| 9 | Compensation of agents | 1,091,525 | 1,070,444 | 975,617 | 808,496 | 100.0 | 98.1 | 89.4 | 74.1 |
| 10 | Total compensation | 1,460,399 | 1,446,287 | 1,340,169 | 1,120,871 | 100.0 | 99.0 | 91.8 | 76.8 |

TABLE 131.—*Income paid out, life insurance field*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries of officers and employees | 106,520 | 113,628 | 118,406 | 118,702 | 100.0 | 106.7 | 111.2 | 111.4 |
| 2 | Salaries of agents | 224,901 | 220,238 | 199,022 | 146,274 | 100.0 | 97.9 | 88.5 | 65.0 |
| 3 | Commissions | 274,503 | 277,311 | 258,002 | 252,543 | 100.0 | 101.0 | 94.0 | 92.0 |
| 4 | Total compensation of employees | 605,924 | 611,177 | 575,430 | 517,519 | 100.0 | 100.9 | 95.0 | 85.4 |
| 5 | Dividends paid | 22,260 | 21,917 | 16,984 | 13,971 | 100.0 | 98.5 | 76.3 | 62.8 |
| 6 | Total income paid out | 628,184 | 633,094 | 592,414 | 531,490 | 100.0 | 100.8 | 94.3 | 84.6 |

TABLE 132.—*Income paid out and produced, insurance other than life*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages, office employees | 262,354 | 262,215 | 246,146 | 193,673 | 100.0 | 99.9 | 93.8 | 73.8 |
| 2 | Agents' compensation | 592,121 | 572,895 | 518,593 | 409,679 | 100.0 | 96.8 | 87.6 | 69.2 |
| 3 | Total compensation of employees | 854,475 | 835,110 | 764,739 | 603,352 | 100.0 | 97.7 | 89.5 | 70.6 |
| 4 | Dividends | 47,405 | 39,073 | 43,789 | 28,307 | 100.0 | 82.4 | 92.4 | 59.7 |
| 5 | Interest | −117,146 | −104,957 | −107,615 | −107,615 | | | | |
| 6 | Total property income paid out | −69,741 | −65,884 | −63,826 | −79,308 | | | | |
| 7 | Total income paid out | 784,734 | 769,226 | 700,913 | 524,044 | 100.0 | 98.0 | 89.3 | 66.8 |
| 8 | Corporate savings | 7,205 | −84,939 | −100,274 | −100,274 | | | | |
| 9 | Total income produced | 791,939 | 684,287 | 600,639 | 423,770 | 100.0 | 86.4 | 75.8 | 53.5 |

TABLE 133.—*Percentage distribution of income paid out, life insurance field*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries of officers and employees | 17.0 | 17.9 | 20.0 | 22.3 |
| 2 | Salaries of agents | 35.8 | 34.8 | 33.6 | 27.5 |
| 3 | Commissions | 43.7 | 43.8 | 43.6 | 47.5 |
| 4 | Total compensation of employees | 96.5 | 96.5 | 97.1 | 97.4 |
| 5 | Dividends paid | 3.5 | 3.5 | 2.9 | 2.6 |
| 6 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 134.—*Percentage distribution of income paid out, insurance other than life*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries of officers and office employees | 33.4 | 34.1 | 35.1 | 37.0 |
| 2 | Agents' compensation | 75.5 | 74.5 | 74.0 | 78.2 |
| 3 | Total compensation of employees | 108.9 | 108.6 | 109.1 | 115.1 |
| 4 | Dividends | 6.0 | 5.1 | 6.2 | 5.4 |
| 5 | Interest | −14.9 | −13.6 | −15.4 | −20.5 |
| 6 | Total property income paid out | −8.9 | −8.6 | −9.1 | −15.1 |
| 7 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 135.—*Per capita income of office employees, insurance field*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | All office employees, life insurance companies | $1,505 | $1,535 | $1,570 | $1,573 | 100.0 | 102.0 | 104.3 | 104.5 |
| 2 | All office employees, all other insurance companies | 1,962 | 2,013 | 2,017 | 1,861 | 100.0 | 102.6 | 102.8 | 94.9 |
| 3 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## SUMMARY TABLES, REAL ESTATE

TABLE 136.—*Number of employees, real estate (inclusive of individual holdings)*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | 297,239 | 294,880 | 261,264 | 214,378 | 100.0 | 99.2 | 87.9 | 72.1 |
| 2 | Wage earners | 282,664 | 254,423 | 216,260 | 173,008 | 100.0 | 90.0 | 76.5 | 61.2 |
| 3 | Total number of employees | 579,903 | 549,303 | 477,524 | 387,386 | 100.0 | 94.7 | 82.3 | 66.8 |

TABLE 137.—*Income paid out and produced, real estate (inclusive of individual holdings)*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 793,331 | 797,061 | 667,791 | 480,421 | 100.0 | 100.5 | 84.2 | 60.6 |
| 2 | Wages | 322,802 | 272,741 | 206,961 | 144,289 | 100.0 | 84.5 | 64.1 | 44.7 |
| 3 | Total compensation of employees | 1,116,133 | 1,069,802 | 874,752 | 624,710 | 100.0 | 95.8 | 78.4 | 56.0 |
| 4 | Dividends | 238,339 | 153,796 | 122,286 | 67,582 | 100.0 | 64.5 | 51.3 | 28.4 |
| 5 | Interest on corporate long-term debt | 358,683 | 405,484 | 407,281 | 366,843 | 100.0 | 113.0 | 113.5 | 102.3 |
| 6 | Interest on individuals' mortgages | 1,675,883 | 1,657,585 | 1,563,233 | 1,414,556 | 100.0 | 98.9 | 93.3 | 84.4 |
| 7 | Total property income paid out | 2,272,905 | 2,216,865 | 2,092,800 | 1,848,981 | 100.0 | 97.5 | 92.1 | 81.3 |
| 8 | Net rentals of individuals | 4,116,137 | 3,474,759 | 2,751,664 | 1,865,160 | 100.0 | 84.4 | 66.9 | 45.3 |
| 9 | Total income paid out | 7,505,175 | 6,761,426 | 5,719,216 | 4,338,851 | 100.0 | 90.1 | 76.2 | 57.8 |
| 10 | Corporate savings | −374,646 | −286,240 | −351,550 | −302,560 | | | | |
| 11 | Business savings of individuals | −185,946 | −208,275 | −613,413 | −704,617 | | | | |
| 12 | Total income produced | 6,944,583 | 6,266,911 | 4,754,253 | 3,331,674 | 100.0 | 90.2 | 68.5 | 48.0 |

TOTAL 138.—*Percentage distribution of income paid out, real estate (inclusive of individual holdings)*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 10.6 | 11.8 | 11.7 | 11.1 |
| 2 | Wages | 4.3 | 4.0 | 3.6 | 3.3 |
| 3 | Total compensation of employees | 14.9 | 15.8 | 15.3 | 14.4 |
| 4 | Dividends | 3.2 | 2.3 | 2.1 | 1.6 |
| 5 | Interest on corporate long-term debt | 4.8 | 6.0 | 7.1 | 8.5 |
| 6 | Interest on individuals' mortgages | 22.3 | 24.5 | 27.3 | 32.6 |
| 7 | Total property income paid out | 30.3 | 32.8 | 36.6 | 42.6 |
| 8 | Net rentals of individuals | 54.8 | 51.4 | 48.1 | 43.0 |
| 9 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 139.—*Per capita income of employees, real estate (inclusive of individual holdings)*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaried employees | $2,669 | $2,703 | $2,556 | $2,241 | 100.0 | 101.3 | 95.8 | 84.0 |
| 2 | Wage earners | 1,142 | 1,072 | 957 | 834 | 100.0 | 93.9 | 83.8 | 73.0 |
| 3 | Average income, all active employees | 1,925 | 1,948 | 1,832 | 1,613 | 100.0 | 101.2 | 95.2 | 83.8 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

# CHAPTER XIV

## GOVERNMENT

There may be some doubt as to the propriety of classifying government (Federal, State, county and city) as a branch of the country's economic system, and of treating its activity as an economic pursuit. Indeed, the motive of immediate profit, which characterizes private industry, is conspicuously absent from the activity of the government. But, on the other hand, various government agencies do perform an important function in the economic life of the nation. Even were government not engaged, as it so extensively is, in such obviously industrial activities as postal service, public education, and construction; even were its activity confined to protection (army, navy, and police), fire prevention, legislation, and judicial settlement of disputes, we would still have to say that these purely governmental functions are of real value in the economic life of the nation, and that they give rise to income which should be taken into account.

But how should this income be measured? In most private industrial activities (industry being defined in the broadest sense to include trade, professional pursuits, etc.), charges for the services rendered by industry to consumers and payments by the industry to its labor and capital are established on a comparatively free market. This permits the inference that the payments made measure, if roughly, the value of services produced. But the charges by the government to business units and to individuals are not established on the free market, since the government has the right to and does tax, not in accordance with services rendered but in accordance with ability to pay. Neither are payments by government for labor and capital employed by it fixed under conditions closely similar to those found in the case of private enterprises. Moreover, it is not possible to reappraise the value of government services according to the rule of the market place, for the reason that certain activities become government functions because they can not be left to the operation of the free market forces.

There is thus only one way out of the difficulty: To declare that the actual payments by the government to labor and capital employed by it measure the net volume of services rendered. Income originating in the field of government activity is thus equal to the payments to employees plus interest payments on government debt. The other expenses of the government on supplies, materials, etc., cannot be counted, just as we do not count in the income originating in private industry the value of raw materials and other commodities consumed. Nor can we establish for the government the volume of savings—i.e., excess or deficiency of gross receipts over expenditures. The government may spend more than its current receipts and increase its debt, and still this would not necessarily signify any negative saving since the government's capital expenditures may result in an addition to the country's tangible wealth equal to or greater than the increase in the public debt. The data available until recently do not permit a simple segregation of current and capital expenditures of the government. A more intensive investigation of this question, as well as a

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functional analysis of governmental activity in greater detail than is given in the estimates below, could not be undertaken within the limits of the present report.

The number of people engaged in government service, exclusive of public education, in 1929 was, as shown in table 140, about 2 million, while the Census of Occupations reports only 1.33 million gainfully occupied classified under public service and postal service. This apparent discrepancy is accounted for by the fact that the present estimates include a number of temporary workers, largely in the construction field (reduced to equivalent full time). In chapter VII the number of workers engaged in both public and public utility construction in 1929 was estimated as about 800,000, of which number the proportionate share of public construction may be estimated as about 250,000.

In the field of postal service the Census of Occupations lists only 284,000 gainfully occupied, while our estimates show an average of 371,000 employed in 1929 (see table 146). Again, the Census of Occupations shows only 133,000 soldiers, sailors, and marines, while our estimates obtained from the War and Navy Departments indicate the number engaged in the Army and the Navy in 1929 as 280,000 (see table 146). The discrepancy may be largely due to the number of soldiers, sailors, and marines not residing within the continental United States at the time of the census. A correction for all these missing groups would bring the figures of the Census of Occupations to 1.81 million, as against 1.93 million shown in table 140, an agreement close enough, in view of the difficulties of the industrial classification in the Census of Occupations. Finally, there are another million employees in the field of public education. Thus, all told, government service accounts for 3 million employees, or over 7 percent of the total gainfully occupied population of the country.

The volume of employment in government during these years shows extreme stability. The only group to show a marked decline is that of city government employees after 1930. But this decline, which appears mild when compared with the drastic contraction of employment in most industrial branches, is more than offset by the slight rise in the numbers employed in other government branches.

The volume of salaries, wages, and other labor income fails similarly to reflect any effect of the depression (see table 141). Indeed, in some government branches, such as State, county, and city, salaries and wages have shown a greater increase or a smaller decline than did employment. However, the precarious basis of some of these estimates does not warrant reliance upon such differences. What does stand out and appears subject to little doubt is that through 1932 labor incomes paid out by all government divisions, except city, showed, if anything, a slight rise; and that in the case of cities the decline that began in 1931 resulted in a level in 1932 which was but slightly below that of 1929.

Per capita income of active employees in government service shows little change from 1929 to 1932 (see table 142). Since during the same period, especially after 1930, the cost of living appears to have declined materially, there was a corresponding gain in the purchasing power of the average compensation of government employees.

Neither were there appreciable changes in the volume of interest payments on government debt (see table 143). There was a consistent rise in interest payments by State and county governments.

CHART XIV



INCOME BY TYPE OF PAYMENT
GOVERNMENT
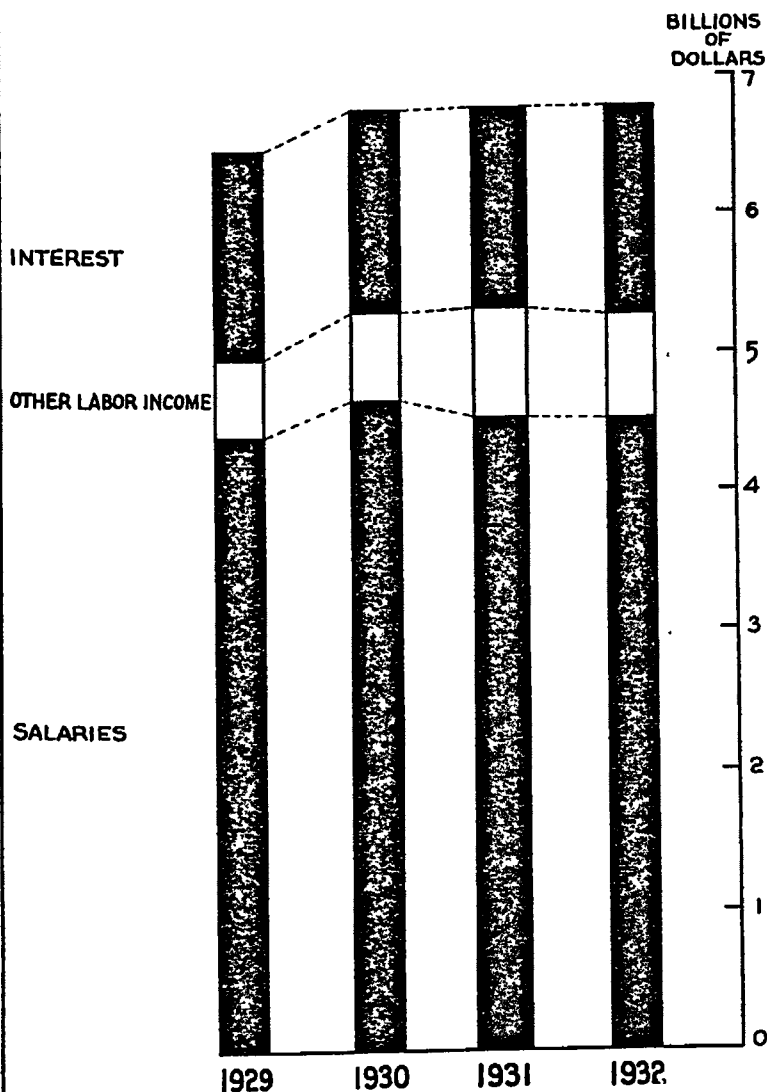
But the absolute volume of their payments appears small as compared with the Federal interest payments, which declined appreciably from 1929 to 1931, but rose again in 1932. As a result of these diverse movements, total interest payments declined slightly in 1931 and rose slightly in 1932.

Table 144 and chart XIV summarize the volume of income paid out by the government. The imposing total of 6.5 to 6.8 billion dollars shows the government to be one of the biggest income producing branches of our economic system. Its failure to decline during these years was partly due to the cumbersome nature of the mechanism determining the economic policy of the government; and also partly due to the fact that as distinct from other branches of activity the demand for government services (with the possible exception of Postal Service) shows little decline during depressions. Indeed, during such years, when private initiative slackens and strains develop in the social fabric, the demand for government services is likely to rise.

Table 145 indicates that the proportional allocation of net income paid out among various types of income showed little change during these years.

Tables 146 to 154 provide some detailed break-down of labor incomes originating with the various divisions of the government organizations. Unfortunately, the data available did not permit a more detailed functional analysis of the activity of the various government agencies. It is interesting to note, however, that of the total number of employees in the Federal Government service, about one third are engaged in such a typically industrial activity as Postal Service; that another third is comprised in the Army and the Navy; and that civil service accounts for only somewhat less than one third of Federal employees (see table 141). A somewhat similar division exists in respect to salaries and wages paid by the Federal Government, although Army and Navy pay rolls and subsistence account for only a quarter of the total the rest being divided about equally between postal and civil service (see table 147). The reason for this is, of course, the lower per capita compensation of the Army and the Navy, which appears clearly in table 148.

No such functional analysis, rough as it is, could be carried through for State and county government activities. But tables 148 to 150 segregate State government from county. It is to be seen that the State governments account for almost twice as many employees as do the counties; and that State pay roll is about 80 percent larger than that of the counties. For city government a distinction could be made between policemen, firemen, and civil employees proper. It may be seen that the former two groups account for slightly over one quarter of the total number employed (see table 152), but the salaries of the same two groups account for over one third of the total salaries and wages paid to municipal employees (see table 153). This is due to the rather high per capita incomes of policemen and firemen as compared with the average compensation of civil municipal employees (see table 154).

In the various parts of income originating in government activity there is little shift in the constituent parts which the available data permitted us to distinguish. The impression of stability that the estimates produce is partly a reflection of the conspicuous inertia of the income streams for which government is responsible; but it may be partly due to the crudity of our estimates, forced upon us by the character of the available information.

## SUMMARY TABLES, GOVERNMENT

TABLE 140.—*Number of employees, government service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Federal | 933,040 | 955,821 | 964,490 | 952,419 | 100.0 | 102.4 | 103.4 | 102.1 |
| 2 | State and county | 351,450 | 363,262 | 364,631 | 388,809 | 100.0 | 103.4 | 103.8 | 110.6 |
| 3 | City | 650,158 | 710,703 | 624,046 | 591,505 | 100.0 | 109.3 | 96.0 | 91.0 |
| 4 | Public education | 1,068,624 | 1,126,585 | 1,174,118 | 1,189,188 | 100.0 | 105.4 | 109.9 | 111.3 |
| 5 | Total number of employees | 3,003,272 | 3,156,371 | 3,127,285 | 3,121,921 | 100.0 | 105.1 | 104.1 | 104.0 |

TABLE 141.—*Total compensation of employees, government service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | Salaries and wages: | | | | | | | | |
| 1 | Federal | 1,397,619 | 1,428,137 | 1,437,829 | 1,425,401 | 100.0 | 102.2 | 102.9 | 102.0 |
| 2 | State and county | 477,516 | 499,865 | 520,339 | 533,841 | 100.0 | 104.7 | 109.0 | 111.8 |
| 3 | City | 973,851 | 1,078,137 | 981,624 | 895,539 | 100.0 | 110.7 | 100.8 | 92.0 |
| 4 | Public education | 1,554,060 | 1,643,389 | 1,699,500 | 1,664,732 | 100.0 | 105.7 | 109.4 | 107.1 |
| | Pensions: | | | | | | | | |
| 5 | Federal | 418,627 | 453,411 | 517,095 | 548,193 | 100.0 | 108.3 | 123.5 | 131.0 |
| 6 | State and county | 72,665 | 75,786 | 78,545 | 79,466 | 100.0 | 104.3 | 108.1 | 109.4 |
| 7 | City (including schools) | 89,554 | 101,066 | 117,345 | 129,445 | 100.0 | 112.9 | 131.0 | 144.5 |
| | Total compensation: | | | | | | | | |
| 8 | Federal | 1,816,246 | 1,881,548 | 1,954,924 | 1,973,594 | 100.0 | 103.6 | 107.6 | 108.7 |
| 9 | State and county | 550,181 | 575,651 | 598,884 | 613,307 | 100.0 | 104.6 | 108.9 | 111.5 |
| 10 | City | 1,063,405 | 1,179,203 | 1,098,969 | 1,024,984 | 100.0 | 110.9 | 103.3 | 96.4 |
| 11 | Public education | 1,554,060 | 1,643,389 | 1,699,500 | 1,664,732 | 100.0 | 105.7 | 109.4 | 107.1 |

TABLE 142.—*Per capita income of active employees, government service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Federal | $1,498 | $1,494 | $1,491 | $1,497 | 100.0 | 99.7 | 99.5 | 99.9 |
| 2 | State and county | 1,359 | 1,376 | 1,427 | 1,373 | 100.0 | 101.3 | 105.0 | 101.0 |
| 3 | City | 1,498 | 1,517 | 1,573 | 1,514 | 100.0 | 101.3 | 105.0 | 101.1 |
| 4 | Public education | 1,454 | 1,459 | 1,447 | 1,400 | 100.0 | 100.3 | 99.5 | 96.3 |
| 5 | All government | 1,466 | 1,473 | 1,483 | 1,448 | 100.0 | 100.5 | 101.2 | 98.8 |
| 6 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

TABLE 143.—*Total interest paid, government service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Federal | 671,396 | 637,468 | 609,132 | 652,110 | 100.0 | 94.9 | 90.7 | 97.1 |
| 2 | State | 97,784 | 106,126 | 111,202 | 111,582 | 100.0 | 108.5 | 113.7 | 114.1 |
| 3 | County | 143,087 | 150,843 | 148,037 | 154,717 | 100.0 | 105.4 | 103.5 | 108.1 |
| 4 | City | 560,129 | 589,005 | 570,996 | 601,399 | 100.0 | 105.2 | 101.9 | 107.4 |
| 5 | Total | 1,472,396 | 1,483,442 | 1,439,367 | 1,519,808 | 100.0 | 100.8 | 97.8 | 103.2 |

TABLE 144.—*Income paid out, government service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 4,403,046 | 4,649,528 | 4,639,292 | 4,519,513 | 100.0 | 105.6 | 105.4 | 102.6 |
| 2 | Other labor income | 580,846 | 630,263 | 712,985 | 757,104 | 100.0 | 108.5 | 122.7 | 130.3 |
| 3 | Total compensation of employees | 4,983,892 | 5,279,791 | 5,352,277 | 5,276,617 | 100.0 | 105.9 | 107.4 | 105.9 |
| 4 | Interest | 1,472,396 | 1,483,442 | 1,439,367 | 1,519,808 | 100.0 | 100.8 | 97.8 | 103.2 |
| 5 | Total income paid out | 6,456,288 | 6,763,233 | 6,791,644 | 6,796,425 | 100.0 | 104.8 | 105.2 | 105.3 |

TABLE 145.—*Percentage distribution of income paid out, government service*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries | 68.2 | 68.7 | 68.3 | 66.5 |
| 2 | Other labor income | 9.0 | 9.3 | 10.5 | 11.1 |
| 3 | Total compensation of employees | 77.2 | 78.1 | 78.8 | 77.6 |
| 4 | Interest | 22.8 | 21.9 | 21.2 | 22.4 |
| 5 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 146.—*Number of employees, Federal Government service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1031 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Army | 137,360 | 137,472 | 138,648 | 133,038 | 100.0 | 100.1 | 100.9 | 96.9 |
| 2 | Navy | 142,507 | 144,396 | 144,466 | 141,814 | 100.0 | 101.3 | 101.4 | 99.5 |
| 3 | Postal service | 370,988 | 372,718 | 371,483 | 369,866 | 100.0 | 100.5 | 100.1 | 99.7 |
| 4 | Civil service | 282,185 | 301,235 | 309,893 | 307,701 | 100.0 | 106.8 | 109.8 | 109.0 |
| 5 | Total number of employees | 933,040 | 955,821 | 964,490 | 952,419 | 100.0 | 102.4 | 103.4 | 102.1 |

TABLE 147.—*Salaries and wages including payments in kind, Federal Government service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Army | 154,129 | 155,716 | 154,160 | 149,259 | 100.0 | 101.0 | 100.0 | 96.8 |
| 2 | Navy | 181,864 | 185,638 | 186,199 | 181,366 | 100.0 | 102.1 | 102.4 | 99.7 |
| 3 | Postal service | 555,252 | 558,137 | 554,754 | 552,210 | 100.0 | 100.5 | 99.9 | 99.5 |
| 4 | Civil service | 506,374 | 528,646 | 542,716 | 542,566 | 100.0 | 104.4 | 107.2 | 107.1 |
| 5 | Total salaries and wages | 1,397,619 | 1,428,137 | 1,437,829 | 1,425,401 | 100.0 | 102.2 | 102.9 | 102.0 |

TABLE 148.—*Per capita income of active employees, Federal Government service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1031 | 1932 |
| 1 | Army | $1,122 | $1,133 | $1,112 | $1,122 | 100.0 | 101.0 | 99.1 | 100.0 |
| 2 | Navy | 1,276 | 1,286 | 1,289 | 1,279 | 100.0 | 100.8 | 101.0 | 100.2 |
| 3 | Postal service | 1,497 | 1,497 | 1,493 | 1,493 | 100.0 | 100.0 | 99.7 | 99.7 |
| 4 | Civil service | 1,794 | 1,755 | 1,751 | 1,763 | 100.0 | 97.8 | 97.6 | 98.3 |
| 5 | All employees | 1,498 | 1,494 | 1,491 | 1,497 | 100.0 | 99.7 | 99.5 | 99.9 |
| 6 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.0 | 80.4 |

TABLE 149.—*Number of employees, State and county government service (excluding education)*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | State | 227,523 | 235,122 | 236,086 | 251,813 | 100.0 | 103.3 | 103.8 | 110.7 |
| 2 | County | 123,922 | 128,140 | 128,545 | 136,996 | 100.0 | 103.4 | 103.7 | 110.6 |
| 3 | Total number of employees | 351,450 | 363,262 | 364,631 | 388,809 | 100.0 | 103.4 | 103.8 | 110.6 |

TABLE 150.—*Salaries paid, State and county government service (excluding education)*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | State | 302,840 | 316,944 | 330,048 | 338,689 | 100.0 | 104.7 | 109.0 | 111.8 |
| 2 | County | 174,676 | 182,921 | 190,291 | 195,152 | 100.0 | 104.7 | 108.9 | 111.7 |
| 3 | Total salaries paid | 477,516 | 499,865 | 520,339 | 533,841 | 100.0 | 104.7 | 109.0 | 111.8 |

TABLE 151.—*Per capita income of active employees, State and county government service (excluding education)*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | State | $1,331 | $1,348 | $1,398 | $1,345 | 100.0 | 101.3 | 105.0 | 101.1 |
| 2 | County | 1,410 | 1,428 | 1,480 | 1,425 | 100.0 | 101.3 | 105.0 | 101.1 |
| 3 | All employees | 1,359 | 1,376 | 1,427 | 1,373 | 100.0 | 101.3 | 105.0 | 101.0 |
| 4 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

TABLE 152.—*Number of employees, city government service (excluding education)*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Policemen | 104,061 | 110,379 | 110,408 | 110,541 | 100.0 | 106.1 | 106.1 | 106.2 |
| 2 | Firemen | 80,763 | 85,271 | 85,633 | 82,724 | 100.0 | 105.6 | 106.0 | 102.4 |
| 3 | Civil employees | 465,334 | 515,053 | 428,005 | 398,240 | 100.0 | 110.7 | 92.0 | 85.6 |
| 4 | Total number of employees | 650,158 | 710,703 | 624,046 | 591,505 | 100.0 | 109.3 | 96.0 | 91.0 |

TABLE 153.—*Salaries paid, city government service (excluding education)*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Policemen | 215,861 | 232,397 | 243,468 | 232,437 | 100.0 | 107.2 | 112.3 | 107.2 |
| 2 | Firemen | 159,613 | 171,176 | 175,664 | 165,574 | 100.0 | 107.2 | 110.1 | 103.7 |
| 3 | Civil employees | 597,377 | 674,564 | 562,492 | 497,528 | 100.0 | 112.9 | 94.2 | 83.3 |
| 4 | Total salaries paid | 973,851 | 1,078,137 | 981,624 | 895,539 | 100.0 | 110.7 | 100.8 | 92.0 |

TABLE 154.—*Per capita income of active employees, city government service (excluding education)*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Policemen | $2,084 | $2,105 | $2,205 | $2,103 | 100.0 | 101.0 | 105.8 | 100.9 |
| 2 | Firemen | 1,976 | 2,007 | 2,051 | 2,002 | 100.0 | 101.6 | 103.8 | 101.3 |
| 3 | Civil employees | 1,284 | 1,310 | 1,314 | 1,249 | 100.0 | 102.0 | 102.3 | 97.3 |
| 4 | All employees | 1,498 | 1,517 | 1,573 | 1,514 | 100.0 | 101.3 | 105.0 | 101.1 |
| 5 | Bureau of Labor Statistics cost of living index | -------- | -------- | -------- | -------- | 100.0 | 97.4 | 88.9 | 80.4 |

# CHAPTER XV

## SERVICE

The income estimates for the service industries presented in this chapter have two primary limitations which must be borne in mind when the data are utilized; first, some branches of activity normally considered as belonging in this group have been omitted for reasons cited below, the figures therefore understating the income resulting from all service activities; secondly, because of the economic organization, or lack of organization, in these industries it was not possible to find as satisfactory data and bases for estimation as are available for most other industrial groups. There is thus a larger margin of error in the estimates presented below.[1]

The field of service, as defined in this report, includes business establishments and individuals engaged in the rendering of direct services to final consumers. We exclude, however, services directly connected with some other major industrial activity and dealt with heretofore, and in addition some not previously covered but for which fairly reasonable bases of income estimation are not available. The two primary types of activity excluded are represented by such services as public education and medical services of public hospitals and of industrial establishments (excluded because already treated under government and specific industry chapters), and such services as hand laundering, boarding-house operation, advertising agency operation, and the activity of a number of professional groups, all of which were excluded because the investigators were unable to discover satisfactory bases for a specific estimate of their incomes.

While the service industries are extremely varied, both in functions and organization, they possess a number of characteristics in common which justify a combined grouping. Their product is immediately "perishable" and cannot be stored. It is the result primarily of labor and labor-entrepreneurial activity and produces but little property income. At the other extreme from the mining and quarrying industries, which are governed in nature and location by the natural placement of the raw material and which yield products mainly for use or further elaboration by other industries, the service industries require the performance of almost all of the productive activity for, and in close proximity to, the final consumer. Their geographic distribution therefore follows, in general, the distribution of population. As most of them require direct contact with the final consumer, they are characterized by organization into a multiplicity of small independent units, responsive to individual and changing requirements. All of these characteristics leave their imprint on the movement of income derived from this source.

The nature of the service industries, as suggested above, renders the classification of persons engaged and of income difficult (and in some

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[1] It is anticipated that a great improvement in this respect can be made after the 1933 census of business establishments, which will cover a large section of the service industries.

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cases impossible). Particularly, the differentiation between entre-
.preneurs and employees, and between entrepreneurial income and
salaries and wages in several groups has been made approximately
or not at all, while no attempt has been made in the majority of
cases to segregate salaries and wages.

## 1. THE INDUSTRY AS A WHOLE

The service industries in the aggregate furnished employment in
1929 for about five million salaried employees and wage earners and
another two thirds of a million individual entrepreneurs, the group
from the employment standpoint thus ranking close to wholesale and
.retail trade after manufacturing and agriculture. There was a decline
in employment of a fourth by 1932, which was somewhat greater than
in trade, but less than in the manufacturing industries. The number
of entrepreneurs has changed but slightly during the depression ac-
cording to the most reliable data at hand. The result may be due
partly to a paucity of data and the assumption for some groups,
especially professional service, that the number of entrepreneurs has
remained constant after 1930. On the other hand, it does appear
reasonable to assume continued additions to the ranks of entrepre-
neurs to an extent sufficient to offset any departures from the field.

Total income paid out by the service industries in 1929 amounted to
eight and a half billion dollars or 10.6 percent of the total for all
industries (see table 161 and chart XV). It is interesting to note
that practically all of this income was derived from labor or labor-
entrepreneurial sources, property income accounting for but 2 to 3
percent of the total. The decline of about 38 percent from 1929 to
1932 was, therefore, more characteristic of the general salary and
wage decline than of the movement of total income produced or paid
out. In common with many other industries, income withdrawals
during the 4 years exceeded the amount produced.

The industries considered in this chapter have been grouped as
follows: recreation and amusement, professional, personal, domestic,
business, and miscellaneous. A comparison of the number of persons
engaged in each of these groups will be found in table 155. Domestic
servants account for nearly half of the total number, although
receiving only a fourth of the total income (see table 161). The
professions, including only independent practitioners and their
employees, claim less than a fourth in numbers, and receive almost
40 percent of the total income. In this connection the per capita
income data in tables 157 and 159 should be noted. Further analysis
is presented under each group.

## 2. RECREATION AND AMUSEMENT

Included in the recreation and amusement group are legitimate
theaters (including vaudeville and concert halls), motion picture
production, motion picture theaters, radio broadcasting, and other,
the latter consisting of bowling alleys, pool halls, amusement parks,
and similar establishments. Social and athletic clubs, fraternal
organizations, and such recreational or semiamusement enterprises as
are not predominantly commercial in character have been excluded
and classified with the miscellaneous services.

The commercial amusement industries have a number of general
characteristics which distinguish them somewhat from other forms

CHART XV

## INCOME BY TYPE OF PAYMENT
## SERVICE

BILLIONS
OF
DOLLARS

INTEREST

DIVIDENDS

ENTREPRENEURIAL
WITHDRAWALS

OTHER LABOR INCOME

SALARIES & WAGES

9
8
7
6
5
4
3
2
1
0

1929    1930    1931    1932

EXCESS PRODUCED

EXCESS WITHDRAWN

1
0
1
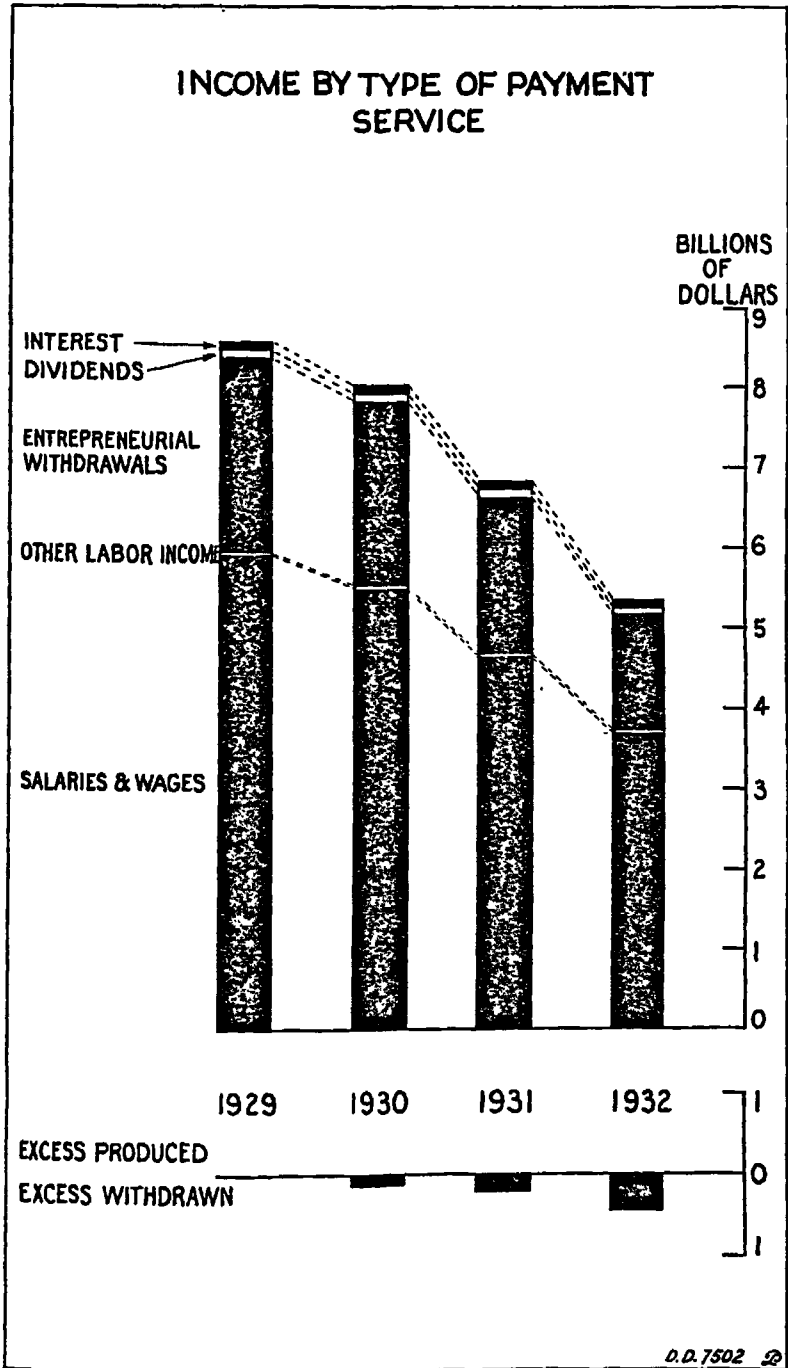
D.D. 7502

of service.  The function being entertainment, there must be constantly supplied a novelty and change, in detail if not in form; this requisite, combined with rapid shifts in popular fancy and the luxury character of the industry, make the business of supplying this demand economically hazardous.

An examination of the gross income received by each of the major groups of amusement industries as shown in table 164 brings out the changing emphasis of popular demand with particular reference to the years of depression since 1929.  It will be noted that the dominant form of commercial entertainment in recent years has been the motion picture, which has itself changed in form from "silent" to "sound", thus encroaching upon part of the popular demand formerly supplied by the legitimate theater, and has added the attraction of stage shows, thus absorbing some of the demand formerly supplied by vaudeville houses.  The effects of the continuance of this shift since 1929 are registered in income; while the gross income of motion picture houses declined about 44 percent in 4 years, legitimate theater receipts fell off 64 percent.  It will also be noted in tables 167 and 169 that the comparative decline in salaries and wages paid was 32 and 71 percent, respectively, and although corporate losses exceeded dividends each year in the legitimate field, it was not until 1932 that this situation came about in the motion picture group.  The gross income in motion picture production increased from 1929 to 1932, being influenced by the shift to more costly sound picture production. The sharp drop in radio broadcasting gross income from 1929 to 1930 may be caused by a reclassification of corporations; the increase thereafter representing the actual continued expansion of a rapidly growing new industry.

The amusement group accounts for the employment of half a million persons, or between 8 and 9 percent of the total engaged in service industries (see table 163).  Over 60 percent of the employees are in motion picture theaters.  The most striking features of the trend since 1929 are the rise in employment in radio broadcasting and the drastic falling off in legitimate theaters, a decline of over 65 percent by 1932.  In motion picture production, the casual employment and compensation of most of the eleven thousand odd "extras" listed with the Hollywood central casting office have been excluded.  The number of entrepreneurs, in the absence of definite indication of change, was assumed to remain constant throughout the period.

About 79 percent of the total income paid out by the amusement group as a whole in 1929 went to salary and wage earners (see table 166).  This proportion has diminished slightly to 78 percent in 1932, while property income, with interest payments larger each year, has increased.  Business withdrawals have decreased as a proportion of the total.

The per capita income of employees as shown in table 172 indicates wide variations as between the individual industries.  The motion picture production group received over twice the general average and has declined the most since 1929.  The average for legitimate theaters was somewhat higher than for the group in 1929.  The general average for the group has declined in about the same degree as the cost of living, so that the 73 percent who were still employed in 1932 were relatively about as well off as in 1929.

### 3. PROFESSIONAL SERVICE

The professional services in this group include religious, private education, private curative (including private hospitals and private practice, medical, dental, and so forth), and private legal and engineering services. Excluded were architectural, literary, and such services for which adequate data were lacking.

Many of the estimates in this field were derived from samples obtained from ten thousand odd questionnaires returned in a special survey conducted for this purpose. Tabulations of these returns for several professions will be found in appendix E.

Perhaps the outstanding characteristics of the professional services are the long period of training required and the special qualifications that must be possessed by those wishing to engage in practice, which tends to make the numbers engaged rather stable. There are also the individual nature of the services rendered and professional ethics, which require the assumption of individual responsibility and confine incorporation in this field mainly to business aspects, such as hospital operation.

The characteristics mentioned above make a segregation of entrepreneurs, professional employees, and other employees difficult, and in some cases, impossible. The shift from the professional employee to the entrepreneur status, and vice versa, is much more simple than in other industries, as training rather than any large amount of capital is the primary requirement.

The total number of persons engaged in independent professional service was one and a third millions in 1929 (see table 173), accounting for almost a fourth of the service industries total. The number has remained fairly stable, with a small increase in 1930 and a slight falling off in 1931 and 1932. A rough classification indicates a constancy in the number of entrepreneurs, with the possibility that some of the employees dropped in 1931 and 1932 shifted to the entrepreneurial group. The bases for estimation of the comparative trends are not sufficiently well founded however to permit more than a rough suggestion of plausibility.

Total income paid out in the professional services amounted to about three and a half billion dollars in 1929, or roughly 40 percent of the total for all service industries. The decline in this income from 1929 to 1932 was about 30 percent (see table 174). Property income accounted for only 1 percent of the total income paid out, and although a small item, it is interesting to note that in this industry dividends were so drastically curtailed in years following 1929 as to change negative savings into positive.

The number of clergymen (see table 175) was assumed to increase since 1929 at the same rate as from 1920 to 1930 shown in the Census of Occupations, 1930, and the compensation paid was estimated from averages in several sample studies. The figures are therefore tentative, but all evidence available supports the remarkably small decline shown in salaries paid and the rising volume of pensions paid.

In the field of private education also, the numbers employed and compensation paid have been remarkably well maintained during the depression, actually increasing up to 1931 (see tables 176 and 177). This suggests the reflection of favor on the part of students' parents, who chose to curtail their demands first in other fields, and

the fact that a considerable part of the gross income from which payments are made in this field (as in the case of religion) are derived from endowments and other property sources, the income from which held up well until 1932.

The number of employees in private education is somewhat larger than the number of clergymen. A little over a third of the total number engaged are in universities, colleges, and professional schools, with only a few less in the elementary grade schools. The other private education group is made up of teachers' colleges and normal schools, junior colleges, a few schools of reform and for the deaf and blind, and correspondence and business schools.

Average compensation paid in private education (see table 178) varies markedly between the different groups, the relatively low payment in elementary and secondary schools reflecting a difference in the training required and a high proportion of denominational control and operation. Average compensation for the group increased in 1930 and declined but slightly in 1931 and 1932, leaving those engaged in the industry relatively better off than they were in 1929.

The curative professions provide employment for about seven hundred thousand people (see tables 179 and 182), the largest single group being trained nurses on private duty, followed by the physicians and surgeons group. There are a little over half as many dentists in private practice as there are doctors. The "other professions" group includes osteopaths, chiropractors, chiropodists, optometrists, veterinary surgeons, etc., while the other semiprofessional category covers primarily masseurs and religious healers.

The total number of persons engaged in the private practice group was assumed to remain constant after 1930, this being the most plausible guess that could be made. Income produced and withdrawn, however (see table 180), dropped a third from 1929 to 1932. Compensation paid in private hospitals held up better than income in private practice, corresponding more to the trend of dentists' employees in the latter group. Per capita income figures (see tables 181 and 182) indicate a decline in employees' incomes of less than the drop in living costs since 1929, but a much more drastic decline in the incomes of independent practitioners.

There are somewhat more lawyers than doctors in the United States (see table 183). In the absence of more precise information, the number was assumed to increase from 1929 to 1930 at the same rate as from 1020 to 1930, as shown by the Census of Occupations, 1930, and remain constant in subsequent years. Average compensation derived from a sample indicates a probable lower per capita return than is the case with physicians and surgeons.

The number of consulting engineers presented in table 186 is relatively small, and represents an approximation of the number in independent private practice. A much larger proportion of employees than in other professional services will be noted, as well as the high per capita withdrawals (see table 188) in 1929 and the precipitous decline thereafter.

#### 4. PERSONAL SERVICE

The personal service industries account for over a million gainfully employed, or about a fifth of the service group (see table 189).

Included in this class are hotels, power laundries, cleaning and dyeing establishments, and barber and beauty shops, with a fairly even distribution of persons engaged among them, if laundries and cleaning and dyeing establishments are considered together. The number of entrepreneurs shown is not complete as it was found impossible to segregate this group from employees in barber shops and beauty shops; the number of employees in this group is, of course, correspondingly overstated.

Total income produced in the personal service industries as a whole amounted to a billion and a half dollars in 1929 and declined nearly 40 percent by 1932. Income paid out exceeded that produced in each year, leaving a net loss to be made up out of previously built-up surplus and assets, or new borrowings.

With the exception of barber and beauty shops, the industries in this group are characterized by relatively large establishments, with considerable capital outlay per establishment; their property income is therefore comparatively large and amounts to over 6 percent of the total income paid out (see table 192). Reflecting primarily an overdevelopment of hotel facilities as indicated in figures of room occupancy, the industry has been in difficulty for some time, with dividends paid out in each year from 1929 on being drawn from surplus and assets, or from the creation of new indebtedness.

Employee compensation in hotels includes a considerable amount of gratuities and income received in kind, and that for barber and beauty shops includes an estimate of gratuities. Average compensation is fairly uniform throughout the separate sections (see table 191), except for power laundries which employ a large proportion of female help. The decline since 1929 for the group as a whole has been slightly more than that in the cost of living, with the greatest decrease in the hotel group and the least in power laundries where compensation was already comparatively low in 1929.

## 5. DOMESTIC SERVICE

Employment in domestic service is the largest in any of the major groupings of the service industries presented in this chapter, the almost two and a third million persons engaged in 1929 representing 42 percent of the total for all groups (see table 193). Due to the comparatively low average compensation paid and the lack of entrepreneurial activity and property income, the total income paid out, amounting to two and a quarter billion dollars in 1929, was only 26 percent of the total paid out by all groups. The decline in average compensation was greater than that in the cost of living, leaving the 60 percent of this group still employed in 1932 relatively worse off than in 1929.

## 6. BUSINESS SERVICE

The employment and labor income estimates in the business service group include only the following fields: independent private practice accounting, trade associations, and chambers of commerce. Data for other business services, such as employment and advertising agencies and stenographic and mimeographing services, are included with corporation property income estimates in the miscellaneous group, however, as it was found impossible to make a segregation essential to a strictly comparable classification.

The business service group, as defined above, provides employment for less than a hundred thousand persons, two thirds of whom are in the trade association group (see table 196). Salaries and wages paid were 112 million dollars in 1929 out of a total income paid out amounting to just under 150 millions. The decline in salaries and wages paid up to 1932 was much greater than in employment, but per capita income was only about 6 percent less than in 1929, after having increased in 1930. These indications, and particularly the individual trends shown in table 198, are based on estimates subject to a large margin of error, and cannot be accepted with a great degree of assurance. It is in accord with all other evidence at hand, however, that salary and wage rates were well maintained up to 1932.

## 7. MISCELLANEOUS SERVICE

The employment and labor income estimates for this group are based upon data for the state of Ohio raised for the country as a whole upon the basic assumption that these services bore the same relation to retail commodity sales in the United States as in Ohio, with minor adjustments for comparative wage rates and so forth. Both the magnitude of the estimates and the trends are controlled by the Ohio sample, and this should be borne in mind constantly with reference to this group.

The individual industries included here are photography, undertaking, mausoleum and cemetery operation, social service agencies, athletic, yacht, and country clubs, Y.M.C.A.'s, Y.W.C.A.'s, and other services not accounted for elsewhere. Most of these services are of a type not easily curtailed or dispensed with, while social and welfare agencies have had a special reason for increasing since 1929. The number of employees was about a quarter of a million in 1929 and probably increased, or at least did not decline greatly, during the 3 following years (see table 200). The estimated average compensation of employees is probably fairly near the actual situation for 1929 but the trend shown since that year, except that there was probably very little per capita decline, is open to question as far as the country as a whole is concerned.

The limitations mentioned above do not apply to the property income data for corporations, but property income in this group as in most service industries was a small portion (about 2 percent in 1929) of total income paid out (see table 201).

TABLE 155.—*Number of people engaged, service industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **EMPLOYEES** | | | | | | | | |
| 1 | Recreation and amusement | 407,105 | 399,115 | 333,055 | 295,691 | 100.0 | 98.0 | 81.8 | 72.6 |
| 2 | Professional [1][2] | 759,789 | 772,591 | 761,343 | 736,127 | 100.0 | 101.7 | 100.2 | 96.9 |
| 3 | Personal [3] | 1,072,477 | 1,041,430 | 970,807 | 860,772 | 100.0 | 97.1 | 90.5 | 80.3 |
| 4 | Domestic | 2,309,480 | 2,078,555 | 1,766,315 | 1,412,878 | 100.0 | 90.0 | 76.5 | 61.2 |
| 5 | Business | 57,856 | 56,545 | 50,636 | 43,114 | 100.0 | 97.7 | 87.5 | 74.5 |
| 6 | Miscellaneous | 251,173 | 247,693 | 265,619 | 278,965 | 100.0 | 98.6 | 105.8 | 111.1 |
| 7 | Total | 4,857,880 | 4,596,229 | 4,147,775 | 3,627,547 | 100.0 | 94.6 | 85.4 | 74.7 |
| | **ENTREPRENEURS** | | | | | | | | |
| 8 | Recreation and amusement | 48,089 | 43,247 | 36,652 | 34,201 | 100.0 | 89.9 | 76.2 | 71.1 |
| 9 | Professional [3] | 544,629 | 559,645 | 559,645 | 559,645 | 100.0 | 102.8 | 102.8 | 102.8 |
| 10 | Personal [3] | 39,743 | 36,069 | 31,214 | 29,109 | 100.0 | 90.8 | 78.5 | 73.2 |
| 11 | Business | 5,010 | 5,050 | 5,050 | 5,050 | 100.0 | 100.8 | 100.8 | 100.8 |
| 12 | Miscellaneous | 39,919 | 35,675 | 29,623 | 27,747 | 100.0 | 89.4 | 74.2 | 69.5 |
| 13 | Total | 677,390 | 679,686 | 662,184 | 655,752 | 100.0 | 100.3 | 97.8 | 96.8 |
| | **TOTAL** | | | | | | | | |
| 14 | Recreation and amusement | 455,194 | 442,362 | 369,707 | 329,892 | 100.0 | 97.2 | 81.2 | 72.5 |
| 15 | Professional | 1,304,418 | 1,332,536 | 1,320,988 | 1,295,772 | 100.0 | 102.2 | 101.3 | 99.3 |
| 16 | Personal | 1,112,220 | 1,077,499 | 1,002,021 | 889,881 | 100.0 | 96.9 | 90.1 | 80.0 |
| 17 | Domestic | 2,309,480 | 2,078,555 | 1,766,315 | 1,412,878 | 100.0 | 90.0 | 76.5 | 61.2 |
| 18 | Business | 62,866 | 61,595 | 55,686 | 48,164 | 100.0 | 98.0 | 88.6 | 76.6 |
| 19 | Miscellaneous | 291,092 | 283,368 | 295,242 | 306,712 | 100.0 | 97.3 | 101.4 | 105.4 |
| 20 | Total | 5,535,270 | 5,275,915 | 4,809,959 | 4,283,299 | 100.0 | 95.3 | 86.9 | 77.4 |

[1] Including clergymen.
[2] Some professional employees classified with entrepreneurs.
[3] Barber and beauty shop entrepreneurs classified with employees.

TABLE 156.—*Labor income paid out, service industries*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **SALARIES AND WAGES** | | | | | | | | |
| 1 | Recreation and amusement | 690,777 | 653,156 | 525,516 | 408,532 | 100.0 | 94.6 | 76.1 | 59.1 |
| 2 | Professional [1] | 1,179,818 | 1,206,093 | 1,149,875 | 1,042,189 | 100.0 | 102.2 | 97.5 | 88.3 |
| 3 | Personal [2] | 1,428,426 | 1,352,382 | 1,172,233 | 899,094 | 100.0 | 94.7 | 82.1 | 62.9 |
| 4 | Domestic | 2,219,031 | 1,865,988 | 1,396,085 | 946,984 | 100.0 | 84.1 | 62.9 | 42.7 |
| 5 | Business | 111,683 | 117,220 | 102,859 | 77,920 | 100.0 | 105.0 | 92.1 | 69.8 |
| 6 | Miscellaneous | 277,060 | 303,428 | 325,014 | 308,355 | 100.0 | 109.5 | 117.3 | 111.3 |
| 7 | Total | 5,906,815 | 5,498,267 | 4,671,582 | 3,683,074 | 100.0 | 93.1 | 79.1 | 62.4 |
| | **OTHER LABOR INCOME** | | | | | | | | |
| 8 | Recreation and amusement | 1,062 | 931 | 929 | 770 | 100.0 | 87.7 | 87.5 | 72.5 |
| 9 | Professional [1] | 21,003 | 21,916 | 24,754 | 26,354 | 100.0 | 104.3 | 117.9 | 125.5 |
| 10 | Personal [3] | 3,255 | 3,111 | 3,013 | 3,008 | 100.0 | 95.6 | 92.6 | 92.4 |
| 11 | Total | 25,320 | 25,958 | 28,696 | 30,132 | 100.0 | 102.5 | 113.3 | 119.0 |
| | **TOTAL LABOR INCOME** | | | | | | | | |
| 12 | Recreation and amusement | 691,839 | 654,087 | 526,445 | 409,302 | 100.0 | 94.5 | 76.1 | 59.2 |
| 13 | Professional [1] | 1,200,821 | 1,228,009 | 1,174,629 | 1,068,543 | 100.0 | 102.3 | 97.8 | 89.0 |
| 14 | Personal [2] | 1,431,681 | 1,355,493 | 1,175,246 | 902,102 | 100.0 | 94.7 | 82.1 | 63.0 |
| 15 | Domestic | 2,219,031 | 1,865,988 | 1,396,085 | 946,984 | 100.0 | 84.1 | 62.9 | 42.7 |
| 16 | Business | 111,683 | 117,220 | 102,859 | 77,920 | 100.0 | 105.0 | 92.1 | 69.8 |
| 17 | Miscellaneous | 277,060 | 303,428 | 325,014 | 308,355 | 100.0 | 109.5 | 117.3 | 111.3 |
| 18 | Total | 5,932,135 | 5,524,225 | 4,700,278 | 3,713,206 | 100.0 | 93.1 | 79.2 | 62.6 |

[1] Excluding income of employees classified with entrepreneurs.
[2] Including entrepreneurial income in barber and beauty shops.

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TABLE 157.—*Per capita income of employees, service industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Recreation and amusement | $1,697 | $1,637 | $1,578 | $1,382 | 100.0 | 96.5 | 93.0 | 81.4 |
| 2 | Professional | 1,553 | 1,560 | 1,510 | 1,416 | 100.0 | 100.5 | 97.2 | 91.2 |
| 3 | Personal | 1,332 | 1,299 | 1,207 | 1,045 | 100.0 | 97.5 | 90.6 | 78.5 |
| 4 | Domestic | 961 | 898 | 790 | 670 | 100.0 | 93.4 | 82.2 | 69.7 |
| 5 | Business | 1,930 | 2,073 | 2,031 | 1,807 | 100.0 | 107.4 | 105.2 | 93.6 |
| 6 | Miscellaneous | 1,103 | 1,225 | 1,224 | 1,105 | 100.0 | 111.1 | 111.0 | 100.2 |
| 7 | All service industries | 1,216 | 1,196 | 1,126 | 1,015 | 100.0 | 98.4 | 92.6 | 83.5 |
| 8 | Bureau of Labor Statistics cost of living index | -------- | -------- | -------- | -------- | 100.0 | 97.4 | 88.9 | 80.4 |

TABLE 158.—*Entrepreneurial withdrawals, service industries*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Recreation and amusement | 117,001 | 102,279 | 75,503 | 55,737 | 100.0 | 87.4 | 64.5 | 47.6 |
| 2 | Professional [1] | 2,015,366 | 1,936,209 | 1,636,832 | 1,235,821 | 100.0 | 96.1 | 81.2 | 61.3 |
| 3 | Personal [2] | 77,221 | 68,315 | 53,813 | 44,304 | 100.0 | 88.5 | 69.7 | 57.4 |
| 4 | Business | 37,335 | 36,623 | 31,512 | 27,906 | 100.0 | 98.1 | 84.4 | 74.7 |
| 5 | Miscellaneous | 97,802 | 91,934 | 70,325 | 63,735 | 100.0 | 94.0 | 71.9 | 65.2 |
| 6 | Total | 2,344,725 | 2,235,360 | 1,867,985 | 1,427,503 | 100.0 | 95.3 | 79.7 | 60.9 |

[1] Including some professional employees and salaries and wages.
[2] Excluding barber and beauty shop entrepreneurs and withdrawals.

TABLE 159.—*Average withdrawals per entrepreneur, service industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Recreation and amusement | $2,433 | $2,365 | $2,060 | $1,630 | 100.0 | 97.2 | 84.7 | 67.0 |
| 2 | Professional [1] | 3,700 | 3,460 | 2,925 | 2,208 | 100.0 | 93.5 | 79.1 | 59.7 |
| 3 | Personal [2] | 1,943 | 1,894 | 1,724 | 1,522 | 100.0 | 97.5 | 88.7 | 78.3 |
| 4 | Business | 7,452 | 7,252 | 6,240 | 5,526 | 100.0 | 97.3 | 83.7 | 74.2 |
| 5 | Miscellaneous | 2,450 | 2,577 | 2,374 | 2,297 | 100.0 | 105.2 | 96.9 | 93.8 |
| 6 | All service industries | 3,461 | 3,289 | 2,821 | 2,177 | 100.0 | 95.0 | 81.5 | 62.9 |
| 7 | Bureau of Labor Statistics cost of living index | -------- | -------- | -------- | -------- | 100.0 | 97.4 | 88.9 | 80.4 |

[1] Including some professional employees and salaries and wages.
[2] Excluding barber and beauty shop enterpreneurs and withdrawals.

TABLE 160.—*Property income originated, service industries*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Recreation and amusement | 66,353 | 84,724 | 69,167 | 61,026 | 100.0 | 127.7 | 104.2 | 92.0 |
| 2 | Professional | 31,926 | 15,733 | 9,935 | 6,672 | 100.0 | 49.3 | 31.1 | 20.9 |
| 3 | Personal | 95,364 | 100,302 | 75,737 | 57,264 | 100.0 | 105.2 | 79.4 | 60.0 |
| 4 | Miscellaneous | 8,377 | 8,077 | 7,605 | 7,678 | 100.0 | 96.4 | 90.8 | 91.7 |
| 5 | Total | 202,020 | 208,836 | 162,444 | 132,640 | 100.0 | 103.4 | 80.4 | 65.7 |

TABLE 161.—*Income paid out and produced, service industries*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **INCOME PAID OUT** | | | | | | | | |
| 1 | Recreation and amusement | 875,193 | 841,090 | 671,115 | 526,065 | 100.0 | 96.1 | 76.7 | 60.1 |
| 2 | Professional | 3,248,113 | 3,179,951 | 2,821,396 | 2,311,036 | 100.0 | 97.9 | 86.9 | 71.2 |
| 3 | Personal | 1,604,266 | 1,524,110 | 1,304,796 | 1,003,670 | 100.0 | 95.0 | 81.3 | 62.6 |
| 4 | Domestic | 2,219,031 | 1,865,988 | 1,396,085 | 946,984 | 100.0 | 84.1 | 62.9 | 42.7 |
| 5 | Business | 149,018 | 153,843 | 134,371 | 105,826 | 100.0 | 103.2 | 90.2 | 71.0 |
| 6 | Miscellaneous | 383,259 | 403,439 | 402,944 | 379,768 | 100.0 | 105.3 | 105.1 | 99.1 |
| 7 | Total | 8,478,880 | 7,968,421 | 6,730,707 | 5,273,349 | 100.0 | 94.0 | 79.4 | 62.1 |
| | **BUSINESS SAVINGS** | | | | | | | | |
| 8 | Recreation and amusement | 27,184 | −59,685 | −120,967 | −361,324 | | | | |
| 9 | Professional | −4,383 | 11,663 | −13,386 | 19,590 | | | | |
| 10 | Personal | −48,586 | −89,686 | −72,925 | −114,527 | | | | |
| 11 | Business | 1,623 | 369 | −1,762 | −3,924 | | | | |
| 12 | Miscellaneous | −1,647 | −4,992 | −126 | −88 | | | | |
| 13 | Total | −25,809 | −142,331 | −209,166 | −460,273 | | | | |
| | **INCOME PRODUCED** | | | | | | | | |
| 14 | Recreation and amusement | 902,377 | 781,405 | 550,148 | 164,741 | 100.0 | 86.6 | 61.0 | 18.3 |
| 15 | Professional | 3,243,730 | 3,191,614 | 2,808,010 | 2,330,626 | 100.0 | 98.4 | 86.6 | 71.9 |
| 16 | Personal | 1,555,680 | 1,434,424 | 1,231,871 | 889,143 | 100.0 | 92.2 | 79.2 | 57.2 |
| 17 | Domestic | 2,219,031 | 1,865,988 | 1,396,085 | 946,984 | 100.0 | 84.1 | 62.9 | 42.7 |
| 18 | Business | 150,641 | 154,212 | 132,609 | 101,902 | 100.0 | 89.1 | 88.0 | 67.6 |
| 19 | Miscellaneous | 381,612 | 398,447 | 402,818 | 379,680 | 100.0 | 104.4 | 105.6 | 99.5 |
| 20 | Total | 8,453,071 | 7,826,090 | 6,521,541 | 4,813,076 | 100.0 | 92.6 | 77.1 | 56.9 |

TABLE 162.—*Percentage distribution of income paid out, service industries*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| | **COMPENSATION OF EMPLOYEES** | | | | |
| 1 | Recreation and amusement | 79.0 | 77.8 | 78.4 | 77.8 |
| 2 | Professional | 37.0 | 38.6 | 41.6 | 46.2 |
| 3 | Personal | 89.2 | 88.9 | 90.1 | 89.9 |
| 4 | Domestic | 100.0 | 100.0 | 100.0 | 100.0 |
| 5 | Business | 74.9 | 76.2 | 76.5 | 73.6 |
| 6 | Miscellaneous | 72.3 | 75.2 | 80.7 | 81.2 |
| 7 | All service industries | 70.0 | 69.3 | 69.8 | 70.4 |
| | **ENTREPRENEURIAL WITHDRAWALS** | | | | |
| 8 | Recreation and amusement | 13.4 | 12.2 | 11.3 | 10.6 |
| 9 | Professional | 62.0 | 60.9 | 58.0 | 53.5 |
| 10 | Personal | 4.8 | 4.5 | 4.1 | 4.4 |
| 11 | Business | 25.1 | 23.8 | 23.5 | 26.4 |
| 12 | Miscellaneous | 25.5 | 22.8 | 17.5 | 16.8 |
| 13 | All service industries | 27.7 | 28.1 | 27.8 | 27.1 |
| | **PROPERTY INCOME ORIGINATED** | | | | |
| 14 | Recreation and amusement | 7.6 | 10.1 | 10.3 | 11.6 |
| 15 | Professional | 1.0 | .5 | .4 | .3 |
| 16 | Personal | 5.9 | 6.6 | 5.8 | 5.7 |
| 17 | Miscellaneous | 2.2 | 2.0 | 1.9 | 2.0 |
| 18 | All service industries | 2.4 | 2.6 | 2.4 | 2.5 |

## DETAILED TABLES, RECREATION AND AMUSEMENT

TABLE 163.—*Number of people engaged, recreation and amusement industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| | **EMPLOYEES** | | | | | | | | |
| 1 | Legitimate theaters | 49,035 | 39,470 | 25,990 | 16,663 | 100.0 | 80.5 | 53.0 | 34.0 |
| 2 | Motion picture production | 19,602 | 16,093 | 14,329 | 11,467 | 100.0 | 82.1 | 73.1 | 58.5 |
| 3 | Motion picture theaters | 285,915 | 285,915 | 245,000 | 225,400 | 100.0 | 100.0 | 85.7 | 78.8 |
| 4 | Radio broadcasting | 9,322 | 9,993 | 10,664 | 11,345 | 100.0 | 107.2 | 114.4 | 121.7 |
| 5 | Other recreation and amusement | 43,231 | 47,644 | 37,072 | 30,816 | 100.0 | 110.2 | 85.8 | 71.3 |
| 6 | Total number of employees | 407,105 | 399,115 | 333,055 | 295,691 | 100.0 | 98.0 | 81.8 | 72.6 |
| | **ENTREPRENEURS** | | | | | | | | |
| 7 | Total number of entrepreneurs | 48,089 | 43,247 | 36,652 | 34,201 | 100.0 | 89.9 | 76.2 | 71.1 |
| | **TOTAL NUMBER ENGAGED** | | | | | | | | |
| 8 | Total number engaged | 455,194 | 442,362 | 369,707 | 329,892 | 100.0 | 97.2 | 81.2 | 72.5 |

TABLE 164.—*Gross income, various branches of the recreation and amusement industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Legitimate theaters | 250,494 | 166,000 | 129,646 | 88,937 | 100.0 | 66.3 | 51.8 | 35.5 |
| 2 | Motion picture production | 307,768 | 379,129 | 396,478 | 396,500 | 100.0 | 123.2 | 128.8 | 128.8 |
| 3 | Motion picture theaters | 1,250,000 | 1,000,000 | 850,000 | 700,000 | 100.0 | 80.0 | 68.0 | 56.6 |
| 4 | Radio broadcasting [1] | 172,082 | 125,239 | 130,543 | 136,078 | 100.0 | 72.8 | 75.9 | 79.1 |
| 5 | Other recreation and amusement | 238,203 | 245,250 | 181,657 | 137,074 | 100.0 | 103.0 | 76.3 | 57.5 |
| 6 | Total recreation and amusement | 2,218,547 | 1,915,618 | 1,688,324 | 1,458,589 | 100.0 | 86.3 | 76.1 | 65.7 |

[1] The decline from 1929 to 1930 probably due to reclassification of corporations rather than actual falling off.

TABLE 165.—*Income paid out and produced, recreation and amusement industry*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 690,777 | 653,156 | 525,516 | 408,532 | 100.0 | 94.6 | 76.1 | 59.1 |
| 2 | Other labor income | 1,062 | 931 | 929 | 770 | 100.0 | 87.7 | 87.5 | 72.5 |
| 3 | Total compensation of employees | 691,839 | 654,087 | 526,445 | 409,302 | 100.0 | 94.5 | 76.1 | 59.2 |
| 4 | Dividends | 34,617 | 49,554 | 36,141 | 29,263 | 100.0 | 143.1 | 104.4 | 84.5 |
| 5 | Interest | 31,736 | 35,170 | 33,026 | 31,763 | 100.0 | 110.8 | 104.1 | 100.1 |
| 6 | Total property income paid out | 66,353 | 84,724 | 69,167 | 61,026 | 100.0 | 127.7 | 104.2 | 92.0 |
| 7 | Withdrawals of entrepreneurs | 117,001 | 102,279 | 75,503 | 55,737 | 100.0 | 87.4 | 64.5 | 47.6 |
| 8 | Total income paid out | 875,193 | 841,090 | 671,115 | 526,065 | 100.0 | 96.1 | 76.7 | 60.1 |
| 9 | Corporate savings | 25,854 | −27,624 | −64,195 | −260,705 | | | | |
| 10 | Business savings of individuals | 1,330 | −32,061 | −56,772 | −100,529 | | | | |
| 11 | Total income produced | 902,377 | 781,405 | 550,148 | 164,741 | 100.0 | 86.6 | 61.0 | 18.3 |

TABLE 166.—*Percentage distribution of income paid out, recreation and amusement industry*

| Line | Item | Percentages of income paid out | | | |
|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 78.9 | 77.7 | 78.3 | 77.7 |
| 2 | Other labor income | .1 | .1 | .1 | .1 |
| 3 | Total compensation of employees | 79.0 | 77.8 | 78.4 | 77.8 |
| 4 | Dividends | 4.0 | 5.9 | 5.4 | 5.6 |
| 5 | Interest | 3.6 | 4.2 | 4.9 | 6.0 |
| 6 | Total property income paid out | 7.6 | 10.1 | 10.3 | 11.6 |
| 7 | Withdrawals of entrepreneurs | 13.4 | 12.2 | 11.3 | 10.6 |
| 8 | Total income paid out | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE 167.—*Income paid out and produced,[1] legitimate theaters*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 116,752 | 94,255 | 59,960 | 34,026 | 100.0 | 80.7 | 51.4 | 29.1 |
| 2 | Other labor income | 161 | 130 | 113 | 76 | 100.0 | 80.7 | 70.2 | 47.2 |
| 3 | Total compensation of employees | 116,913 | 94,385 | 60,073 | 34,102 | 100.0 | 80.7 | 51.4 | 29.2 |
| 4 | Dividends | 3,426 | 2,908 | 396 | 54 | 100.0 | 84.9 | 11.6 | 1.6 |
| 5 | Interest | 2,920 | 2,046 | 1,528 | 1,170 | 100.0 | 70.1 | 52.3 | 40.1 |
| 6 | Total property income paid out | 6,346 | 4,954 | 1,924 | 1,224 | 100.0 | 78.1 | 30.3 | 19.3 |
| 7 | Total income paid out | 123,259 | 99,339 | 61,997 | 35,326 | 100.0 | 80.6 | 50.3 | 28.7 |
| 8 | Corporate savings | −6,496 | −6,968 | −6,439 | −14,908 | | | | |
| 9 | Total income produced | 116,763 | 92,371 | 55,558 | 20,418 | 100.0 | 79.1 | 47.6 | 17.5 |

[1] Exclusive of individual entrepreneurial income.

TABLE 168.—*Income paid out and produced, motion picture production*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 85,028 | 62,496 | 51,867 | 31,630 | 100.0 | 73.5 | 61.0 | 37.2 |
| 2 | Other labor income | 400 | 294 | 244 | 149 | 100.0 | 73.5 | 61.0 | 37.3 |
| 3 | Total compensation of employees | 85,428 | 62,790 | 52,111 | 31,779 | 100.0 | 73.5 | 61.0 | 37.2 |
| 4 | Dividends | 7,131 | 19,809 | 12,431 | 7,801 | 100.0 | 277.8 | 174.3 | 109.4 |
| 5 | Interest | 9,838 | 12,799 | 12,804 | 13,122 | 100.0 | 130.1 | 130.2 | 133.4 |
| 6 | Total property income paid out | 16,969 | 32,608 | 25,235 | 20,923 | 100.0 | 192.2 | 148.7 | 123.3 |
| 7 | Total income paid out | 102,397 | 95,398 | 77,346 | 52,702 | 100.0 | 93.2 | 75.5 | 51.5 |
| 8 | Corporate savings | 23,007 | 183 | −16,193 | −81,605 | | | | |
| 9 | Total income produced | 125,404 | 95,581 | 61,153 | −28,903 | 100.0 | 76.2 | 48.8 | |

TABLE 169.—*Income paid out and produced,[1] motion picture theaters*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 427,443 | 428,587 | 355,005 | 289,188 | 100.0 | 100.3 | 83.1 | 67.7 |
| 2 | Other labor income | 440 | 440 | 498 | 482 | 100.0 | 100.0 | 113.2 | 109.5 |
| 3 | Total compensation of employees | 427,883 | 429,027 | 355,503 | 289,670 | 100.0 | 100.3 | 83.1 | 67.7 |
| 4 | Dividends | 13,245 | 15,707 | 14,926 | 14,184 | 100.0 | 118.6 | 112.7 | 107.1 |
| 5 | Interest | 14,107 | 15,018 | 14,191 | 13,737 | 100.0 | 106.5 | 100.6 | 97.4 |
| 6 | Total property income paid out | 27,352 | 30,725 | 29,117 | 27,921 | 100.0 | 112.3 | 106.5 | 102.1 |
| 7 | Total income paid out | 455,235 | 459,752 | 384,620 | 317,591 | 100.0 | 101.0 | 84.5 | 69.8 |
| 8 | Corporate savings | 2,585 | 2,842 | −13,944 | −76,996 | | | | |
| 9 | Total income produced | 457,820 | 462,594 | 370,676 | 240,595 | 100.0 | 101.0 | 81.0 | 52.6 |

[1] Exclusive of individual entrepreneurial income.

TABLE 170.—*Income paid out and produced, radio broadcasting*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 9,605 | 14,332 | 19,067 | 23,794 | 100.0 | 149.2 | 198.5 | 247.7 |
| 2 | Other labor income | 8 | 13 | 18 | 13 | 100.0 | 162.5 | 225.0 | 162.5 |
| 3 | Total compensation of employees | 9,613 | 14,345 | 19,085 | 23,807 | 100.0 | 149.2 | 198.5 | 247.7 |
| 4 | Dividends | 3,453 | 6,081 | 5,270 | 5,298 | 100.0 | 174.6 | 151.3 | 152.1 |
| 5 | Interest | -353 | -108 | 151 | 152 | | | | |
| 6 | Total property income paid out | 3,130 | 5,973 | 5,421 | 5,450 | 100.0 | 190.8 | 173.2 | 174.1 |
| 7 | Total income paid out | 12,743 | 20,318 | 24,506 | 29,257 | 100.0 | 159.4 | 192.3 | 229.6 |
| 8 | Corporate savings | 12,882 | -12,050 | -10,112 | -21,261 | | | | |
| 9 | Total income produced | 25,625 | 8,268 | 14,394 | 7,996 | 100.0 | 32.3 | 56.2 | 31.2 |

TABLE 171.—*Income paid out and produced,[1] other recreation and amusement*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 51,949 | 53,486 | 39,617 | 29,891 | 100.0 | 103.0 | 76.3 | 57.5 |
| 2 | Other labor income | 53 | 54 | 56 | 50 | 100.0 | 101.9 | 105.7 | 94.3 |
| 3 | Total compensation of employees | 52,002 | 53,540 | 39,673 | 29,944 | 100.0 | 103.0 | 76.3 | 57.6 |
| 4 | Dividends | 7,332 | 5,049 | 3,115 | 1,926 | 100.0 | 68.9 | 42.5 | 26.3 |
| 5 | Interest | 5,224 | 5,415 | 4,352 | 3,582 | 100.0 | 103.7 | 83.3 | 68.6 |
| 6 | Total property income paid out | 12,556 | 10,464 | 7,470 | 5,509 | 100.0 | 83.3 | 59.5 | 43.9 |
| 7 | Total income paid out | 64,558 | 64,004 | 47,143 | 35,452 | 100.0 | 99.1 | 73.0 | 54.9 |
| 8 | Corporate savings | -6,124 | -11,631 | -17,507 | -66,025 | | | | |
| 9 | Total income produced | 58,434 | 52,373 | 29,636 | -30,573 | 100.0 | 89.6 | 50.7 | |

[1] Exclusive of individual entrepreneurial income.

TABLE 172.—*Per capita income of employees, recreation and amusement industry*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | All employees, legitimate theaters | $2,381 | $2,388 | $2,307 | $2,042 | 100.0 | 100.3 | 96.9 | 85.8 |
| 2 | All employees, motion picture production | 4,338 | 3,853 | 3,620 | 2,758 | 100.0 | 89.5 | 83.4 | 63.6 |
| 3 | All employees, motion picture theaters | 1,495 | 1,499 | 1,449 | 1,283 | 100.0 | 100.3 | 96.9 | 85.8 |
| 4 | All employees, other recreation and amusement | 1,202 | 1,123 | 1,069 | 970 | 100.0 | 93.4 | 88.9 | 80.7 |
| 5 | All employees in the industry | 1,097 | 1,655 | 1,578 | 1,382 | 100.0 | 97.5 | 93.0 | 81.4 |
| 6 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## DETAILED TABLES, PROFESSIONAL SERVICE

TABLE 173.—*Number of people engaged, professional service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Employees [1] | 759,789 | 772,891 | 761,343 | 736,127 | 100.0 | 101.7 | 100.2 | 96.9 |
| 2 | Entrepreneurs [2] | 544,629 | 559,645 | 559,645 | 559,645 | 100.0 | 102.8 | 102.8 | 102.8 |
| 3 | Total number engaged | 1,304,418 | 1,332,536 | 1,320,988 | 1,295,772 | 100.0 | 102.2 | 101.3 | 99.3 |

[1] Including clergymen and many small individual entrepreneurs.
[2] Includes legal professional employees.

TABLE 174.—*Income paid out and produced, professional service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 1,179,818 | 1,206,093 | 1,149,875 | 1,042,189 | 100.0 | 102.2 | 97.5 | 88.3 |
| 2 | Other labor income | 21,003 | 21,916 | 24,754 | 26,354 | 100.0 | 104.3 | 117.9 | 125.5 |
| 3 | Total compensation of employees | 1,200,821 | 1,228,009 | 1,174,629 | 1,068,543 | 100.0 | 102.3 | 97.8 | 89.0 |
| 4 | Dividends | 28,718 | 12,489 | 7,321 | 4,292 | 100.0 | 43.5 | 25.5 | 14.9 |
| 5 | Interest | 3,208 | 3,244 | 2,614 | 2,380 | 100.0 | 101.1 | 81.5 | 74.2 |
| 6 | Total property income paid out | 31,926 | 15,733 | 9,935 | 6,672 | 100.0 | 49.3 | 31.1 | 20.9 |
| 7 | Withdrawals of entrepreneurs | 2,015,366 | 1,936,209 | 1,636,832 | 1,235,821 | 100.0 | 96.1 | 81.2 | 61.3 |
| 8 | Total income paid out | 3,248,113 | 3,179,951 | 2,821,396 | 2,311,036 | 100.0 | 97.9 | 86.9 | 71.2 |
| 9 | Corporate savings | −24,109 | −8,901 | 2,035 | 32,500 | | | | |
| 10 | Business savings of individuals | 19,726 | 20,564 | −15,421 | −12,910 | | | | |
| 11 | Total income produced | 3,243,730 | 3,191,614 | 2,808,010 | 2,330,626 | 100.0 | 98.4 | 86.6 | 71.9 |

TABLE 175.—*Number and compensation of people engaged, religious service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Number of clergymen | 146,690 | 148,848 | 151,006 | 153,164 | 100.0 | 101.5 | 102.9 | 104.4 |
| 2 | Salaries paid clergymen (thousands of dollars) | 389,156 | 392,291 | 386,887 | 380,833 | 100.0 | 100.8 | 99.4 | 97.9 |
| 3 | Other labor income of clergymen (thousands of dollars) | 17,864 | 18,657 | 21,412 | 22,947 | 100.0 | 104.4 | 119.9 | 128.5 |
| 4 | Total compensation of clergymen (thousands of dollars) | 407,020 | 410,948 | 408,299 | 403,780 | 100.0 | 101.0 | 100.3 | 99.2 |
| 5 | Per capita salary (dollars) | 2,653 | 2,636 | 2,562 | 2,486 | 100.0 | 99.4 | 96.6 | 93.7 |

TABLE 176.—*Number of employees, private education*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Universities, etc | 68,263 | 71,634 | 71,862 | 71,115 | 100.0 | 104.9 | 105.3 | 104.2 |
| 2 | Secondary | 31,219 | 30,791 | 31,499 | 31,180 | 100.0 | 98.6 | 100.9 | 99.9 |
| 3 | Elementary | 68,661 | 67,857 | 69,361 | 69,458 | 100.0 | 98.8 | 101.0 | 101.2 |
| 4 | Other | 14,674 | 15,082 | 15,206 | 14,425 | 100.0 | 102.8 | 103.6 | 98.3 |
| 5 | Total private education | 182,817 | 185,364 | 187,928 | 186,178 | 100.0 | 101.4 | 102.8 | 101.8 |

TABLE 177.—*Total compensation of employees, private education*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Universities, etc | 107,765 | 116,298 | 114,555 | 112,048 | 100.0 | 107.9 | 106.3 | 104.0 |
| 2 | Secondary | 24,867 | 24,928 | 25,288 | 24,776 | 100.0 | 100.2 | 101.7 | 99.6 |
| 3 | Elementary | 35,505 | 35,855 | 35,770 | 34,880 | 100.0 | 101.0 | 100.7 | 98.2 |
| 4 | Other | 19,648 | 20,415 | 19,812 | 17,888 | 100.0 | 103.9 | 100.8 | 91.0 |
| 5 | Total private education | 187,785 | 197,496 | 195,425 | 189,592 | 100.0 | 105.2 | 104.1 | 101.0 |

TABLE 178.—*Per capita income of active employees, various branches of private education*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Universities, etc_____ | $1,549 | $1,594 | $1,563 | $1,543 | 100.0 | 102.9 | 100.9 | 99.6 |
| 2 | Secondary_____ | 781 | 793 | 787 | 779 | 100.0 | 101.5 | 100.8 | 99.7 |
| 3 | Elementary_____ | 508 | 519 | 507 | 494 | 100.0 | 102.2 | 99.8 | 97.2 |
| 4 | Other_____ | 1,339 | 1,354 | 1,303 | 1,240 | 100.0 | 101.1 | 97.3 | 92.6 |
| 5 | Total private education_____ | 1,010 | 1,048 | 1,022 | 1,000 | 100.0 | 103.8 | 101.2 | 99.0 |
| 6 | Bureau of Labor Statistics cost of living index_____ | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

TABLE 179.—*Number of people engaged, curative professional service (private practice)*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Physicians and surgeons_____ | 119,324 | 120,865 | 120,865 | 120,865 | 100.0 | 101.3 | 101.3 | 101.3 |
| 2 | Dentists_____ | 63,322 | 64,678 | 64,678 | 64,678 | 100.0 | 102.1 | 102.1 | 102.1 |
| 3 | Other professions_____ | 58,896 | 59,564 | 59,564 | 59,564 | 100.0 | 101.1 | 101.1 | 101.1 |
| 4 | Trained nurses on private duty_____ | 142,000 | 149,365 | 149,365 | 149,365 | 100.0 | 105.2 | 105.2 | 105.2 |
| 5 | Other semiprofessional service, curative_ | 13,000 | 13,207 | 13,207 | 13,207 | 100.0 | 101.6 | 101.6 | 101.6 |
| 6 | Dentists' employees_____ | 72,538 | 74,126 | 69,646 | 62,248 | 100.0 | 102.2 | 96.0 | 85.8 |
| 7 | Total number engaged_____ | 469,080 | 481,805 | 477,325 | 469,927 | 100.0 | 102.7 | 101.8 | 100.2 |

TABLE 180.—*Income paid out and produced,[1] curative professional service (private practice)*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Net income, physicians and surgeons_____ | 668,453 | 641,431 | 549,211 | 416,017 | 100.0 | 96.0 | 82.2 | 62.2 |
| 2 | Net income, dentists_____ | 289,698 | 283,354 | 245,388 | 180,581 | 100.0 | 95.8 | 82.9 | 61.0 |
| 3 | Net income, other professions_____ | 180,410 | 173,309 | 149,182 | 111,451 | 100.0 | 96.1 | 82.7 | 61.8 |
| 4 | Net income, trained nurses on private duty_____ | 170,400 | 170,724 | 146,975 | 109,783 | 100.0 | 100.2 | 86.3 | 64.4 |
| 5 | Net income, other semiprofessions__ | 16,000 | 15,475 | 13,326 | 9,951 | 100.0 | 96.7 | 83.3 | 62.2 |
| 6 | Compensation paid to dentists' employees_____ | 77,471 | 79,167 | 72,919 | 60,505 | 100.0 | 102.2 | 94.1 | 78.1 |
| 7 | Total income paid out_____ | 1,402,432 | 1,363,460 | 1,177,001 | 888,288 | 100.0 | 97.2 | 83.9 | 63.3 |

[1] Exclusive of property income.

TABLE 181.—*Per capita income withdrawn, curative professional service (private practice)*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Physicians and surgeons_____ | $5,602 | $5,307 | $4,544 | $3,442 | 100.0 | 94.7 | 81.1 | 61.4 |
| 2 | Dentists_____ | 4,575 | 4,381 | 3,794 | 2,792 | 100.0 | 95.8 | 82.9 | 61.0 |
| 3 | Other professions_____ | 3,063 | 2,910 | 2,505 | 1,871 | 100.0 | 95.0 | 81.8 | 61.1 |
| 4 | Trained nurses on private duty_____ | 1,200 | 1,143 | 984 | 735 | 100.0 | 95.3 | 82.0 | 61.3 |
| 5 | Other semiprofessions_____ | 1,231 | 1,172 | 1,009 | 753 | 100.0 | 95.2 | 82.0 | 61.2 |
| 6 | Dentists' employees_____ | 1,068 | 1,068 | 1,047 | 972 | 100.0 | 100.0 | 98.0 | 91.0 |
| 7 | Total number engaged_____ | 2,990 | 2,830 | 2,466 | 1,890 | 100.0 | 94.6 | 82.5 | 63.2 |
| 8 | Bureau of Labor Statistics cost of living index_____ | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

TABLE 182.—*Number and compensation of people engaged, private hospitals*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Number engaged | 227,593 | 230,393 | 231,029 | 226,093 | 100.0 | 101.2 | 101.5 | 99.3 |
| 2 | Compensation (thousands of dollars) | 268,317 | 271,617 | 258,295 | 230,376 | 100.0 | 101.2 | 96.3 | 85.9 |
| 3 | Per capita income (dollars) | 1,179 | 1,179 | 1,118 | 1,019 | 100.0 | 100.0 | 94.8 | 86.4 |

TABLE 183.—*Number of people engaged, legal professional service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Lawyers | 135,694 | 139,059 | 139,059 | 139,059 | 100.0 | 102.5 | 102.5 | 102.5 |
| 2 | Nonprofessional employees | 78,647 | 80,777 | 80,682 | 81,346 | 100.0 | 102.7 | 102.6 | 103.4 |
| 3 | Total number engaged | 214,341 | 219,836 | 219,741 | 220,405 | 100.0 | 102.6 | 102.5 | 102.8 |

TABLE 184.—*Income produced and paid out,[1] legal professional service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Entrepreneurial income [2] | 561,366 | 541,913 | 439,565 | 351,541 | 100.0 | 96.5 | 78.3 | 62.6 |
| 2 | Compensation paid to nonprofessional employees | 126,936 | 128,597 | 128,768 | 122,588 | 100.0 | 101.3 | 101.4 | 96.6 |
| 3 | Total income produced and paid out | 688,302 | 670,510 | 568,333 | 474,129 | 100.0 | 97.4 | 82.6 | 68.9 |

[1] Exclusive of property income.
[2] Includes professional employees.

TABLE 185.—*Per capita income, legal professional service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Lawyers | $4,137 | $3,897 | $3,161 | $2,528 | 100.0 | 94.2 | 76.4 | 61.1 |
| 2 | Nonprofessional employees | 1,614 | 1,592 | 1,596 | 1,507 | 100.0 | 98.6 | 98.9 | 93.4 |
| 3 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

TABLE 186.—*Number of people engaged, consulting engineering service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Consulting engineers | 12,393 | 12,907 | 12,907 | 12,907 | 100.0 | 104.1 | 104.1 | 104.1 |
| 2 | Employees, professional and other | 51,504 | 53,383 | 41,052 | 27,098 | 100.0 | 103.6 | 79.7 | 52.6 |
| 3 | Total number engaged | 63,897 | 66,290 | 53,959 | 40,005 | 100.0 | 103.7 | 84.4 | 62.6 |

TABLE 187.—*Income paid out and produced,[1] consulting engineering service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Withdrawals of consulting engineers | 129,039 | 110,003 | 93,185 | 56,497 | 100.0 | 85.2 | 72.2 | 43.8 |
| 2 | Compensation paid to employees | 133,292 | 140,184 | 110,923 | 61,702 | 100.0 | 105.2 | 83.2 | 46.3 |
| 3 | Total income paid out | 262,331 | 250,187 | 204,108 | 118,199 | 100.0 | 95.4 | 77.8 | 45.1 |
| 4 | Business savings | 19,726 | 20,564 | -15,421 | -12,910 | | | | |
| 5 | Total income produced | 282,057 | 270,751 | 188,687 | 105,289 | 100.0 | 96.0 | 66.9 | 37.3 |

[1] Exclusive of property income.

TABLE 188.—*Per capita income, consulting engineering service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Consulting engineers | $10,412 | $8,523 | $7,220 | $4,377 | 100.0 | 81.9 | 69.3 | 42.0 |
| 2 | Employees, professional and other | 2,588 | 2,626 | 2,702 | 2,277 | 100.0 | 101.5 | 104.4 | 88.0 |
| 3 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

# DETAILED TABLES, PERSONAL SERVICE

TABLE 189.—*Number of people engaged, personal service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Number of employees, hotels | 377,148 | 374,131 | 346,976 | 297,947 | 100.0 | 99.2 | 92.0 | 79.0 |
| 2 | Number of employees, power laundries | 255,151 | 247,790 | 234,803 | 216,270 | 100.0 | 97.1 | 92.0 | 84.8 |
| 3 | Number of employees, cleaning and dyeing establishments | 71,812 | 66,193 | 59,720 | 48,780 | 100.0 | 92.2 | 83.2 | 67.9 |
| 4 | Number of employees, barber and beauty shops [1] | 368,366 | 353,316 | 329,308 | 297,775 | 100.0 | 95.9 | 89.4 | 80.8 |
| 5 | Total number of employees | 1,072,477 | 1,041,430 | 970,807 | 860,772 | 100.0 | 97.1 | 90.5 | 80.3 |
| 6 | Number of entrepreneurs | 39,743 | 36,069 | 31,214 | 29,109 | 100.0 | 90.8 | 78.5 | 73.2 |
| 7 | Total number engaged | 1,112,220 | 1,077,499 | 1,002,021 | 889,881 | 100.0 | 96.9 | 90.1 | 80.0 |

[1] Includes many individual entrepreneurs.

TABLE 190.—*Compensation of employees, personal service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages, hotels | 511,529 | 486,188 | 410,863 | 296,685 | 100.0 | 95.0 | 80.3 | 58.0 |
| 2 | Salaries and wages, power laundries | 278,684 | 268,612 | 241,445 | 200,982 | 100.0 | 96.4 | 86.6 | 72.1 |
| 3 | Salaries and wages, cleaning and dyeing establishments | 101,135 | 91,519 | 74,190 | 52,360 | 100.0 | 90.5 | 73.4 | 51.8 |
| 4 | Salaries and wages, barber and beauty shops [1] | 537,078 | 506,063 | 445,735 | 349,067 | 100.0 | 94.2 | 83.0 | 65.0 |
| 5 | Total salaries and wages | 1,428,426 | 1,352,382 | 1,172,233 | 899,094 | 100.0 | 94.7 | 82.1 | 62.9 |
| 6 | Other labor income, hotels | 1,629 | 1,811 | 1,874 | 1,747 | 100.0 | 111.2 | 115.0 | 107.2 |
| 7 | Other labor income, power laundries | 1,526 | 1,202 | 1,046 | 1,166 | 100.0 | 78.8 | 68.5 | 76.4 |
| 8 | Other labor income, cleaning and dyeing establishments | 95 | 92 | 86 | 90 | 100.0 | 96.8 | 90.5 | 94.7 |
| 9 | Other labor income, barber and beauty shops | 5 | 6 | 7 | 5 | 100.0 | 120.0 | 140.0 | 100.0 |
| 10 | Total other labor income | 3,255 | 3,111 | 3,013 | 3,008 | 100.0 | 95.6 | 92.6 | 92.4 |
| 11 | Total compensation, hotels | 513,158 | 487,999 | 412,737 | 298,432 | 100.0 | 95.1 | 80.4 | 58.2 |
| 12 | Total compensation, power laundries | 280,210 | 269,814 | 242,491 | 202,148 | 100.0 | 96.3 | 86.5 | 72.1 |
| 13 | Total compensation, cleaning and dyeing establishments | 101,230 | 91,611 | 74,276 | 52,450 | 100.0 | 90.5 | 73.4 | 51.8 |
| 14 | Total compensation, barber and beauty shops [1] | 537,083 | 506,069 | 445,742 | 349,072 | 100.0 | 94.2 | 83.0 | 65.0 |
| 15 | Total compensation | 1,431,681 | 1,355,493 | 1,175,246 | 902,102 | 100.0 | 94.7 | 82.1 | 63.0 |

[1] Includes income of many individual entrepreneurs.

TABLE 191.—*Per capita income of employees, personal service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Hotels | $1,356 | $1,300 | $1,184 | $996 | 100.0 | 95.9 | 87.3 | 73.5 |
| 2 | Power laundries | 1,092 | 1,084 | 1,028 | 929 | 100.0 | 99.3 | 94.1 | 85.1 |
| 3 | Cleaning and dyeing establishments | 1,408 | 1,383 | 1,242 | 1,073 | 100.0 | 98.2 | 88.2 | 76.2 |
| 4 | Barber and beauty shops [1] | 1,458 | 1,432 | 1,354 | 1,172 | 100.0 | 98.2 | 92.9 | 80.4 |
| 5 | Total | 1,332 | 1,299 | 1,207 | 1,045 | 100.0 | 97.5 | 90.6 | 78.5 |
| 6 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

[1] Includes many individual entrepreneurs.

TABLE 192.—*Income paid out and produced, personal service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 1,428,426 | 1,352,382 | 1,172,233 | 899,094 | 100.0 | 94.7 | 82.1 | 62.9 |
| 2 | Other labor income | 3,255 | 3,111 | 3,013 | 3,008 | 100.0 | 95.6 | 92.6 | 92.4 |
| 3 | Total compensation of employees | 1,431,681 | 1,355,493 | 1,175,246 | 902,102 | 100.0 | 94.7 | 82.1 | 63.0 |
| 4 | Dividends | 34,903 | 35,489 | 21,387 | 12,889 | 100.0 | 101.7 | 61.3 | 36.9 |
| 5 | Interest | 60,461 | 64,813 | 54,350 | 44,375 | 100.0 | 107.2 | 89.9 | 73.4 |
| 6 | Total property income paid out | 95,364 | 100,302 | 75,737 | 57,264 | 100.0 | 105.2 | 79.4 | 60.0 |
| 7 | Withdrawals of entrepreneurs | 77,221 | 68,315 | 53,813 | 44,304 | 100.0 | 88.5 | 69.7 | 57.4 |
| 8 | Total income paid out | 1,604,266 | 1,524,110 | 1,304,796 | 1,003,670 | 100.0 | 95.0 | 81.3 | 62.6 |
| 9 | Corporate savings | −29,279 | −66,235 | −41,516 | −65,200 | | | | |
| 10 | Business savings of individuals | −19,307 | −23,451 | −31,409 | −49,327 | | | | |
| 11 | Total income produced | 1,555,680 | 1,434,424 | 1,231,871 | 889,143 | 100.0 | 92.2 | 79.2 | 57.2 |

# DETAILED TABLES, DOMESTIC SERVICE

TABLE 193.—*Number of employees, domestic service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Chauffeurs | 93,726 | 84,355 | 71,683 | 57,339 | | | | |
| 2 | Cooks, female | 255,828 | 230,248 | 195,660 | 156,509 | | | | |
| 3 | Cooks, male | 16,188 | 14,569 | 12,381 | 9,903 | | | | |
| 4 | Housekeepers | 194,679 | 175,213 | 148,892 | 119,099 | | | | |
| 5 | Laundresses | 351,505 | 316,358 | 268,835 | 215,042 | | | | |
| 6 | Nurses, not trained | 152,558 | 137,304 | 116,678 | 93,331 | | | | |
| 7 | Waiters | 1,248 | 1,123 | 954 | 763 | | | | |
| 8 | Waitresses | 10,813 | 9,732 | 8,270 | 6,615 | | | | |
| 9 | Other servants | 1,232,935 | 1,109,653 | 942,962 | 754,277 | | | | |
| 10 | Total | 2,309,480 | 2,078,555 | 1,766,315 | 1,412,878 | 100.0 | 90.0 | 76.5 | 61.2 |

TABLE 194.—*Compensation of employees, domestic service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Chauffeurs | 120,250 | 99,201 | 73,332 | 48,681 | 100.0 | 82.5 | 61.0 | 40.5 |
| 2 | Cooks, female | 260,433 | 217,124 | 162,593 | 112,530 | 100.0 | 83.4 | 62.4 | 43.2 |
| 3 | Cooks, male | 27,487 | 22,247 | 16,170 | 11,329 | 100.0 | 80.9 | 58.8 | 41.2 |
| 4 | Housekeepers | 199,741 | 167,854 | 128,494 | 89,920 | 100.0 | 84.0 | 64.3 | 45.0 |
| 5 | Laundresses | 313,191 | 275,864 | 208,885 | 134,616 | 100.0 | 88.1 | 66.7 | 43.0 |
| 6 | Nurses, not trained | 135,014 | 111,079 | 81,091 | 54,879 | 100.0 | 82.3 | 60.1 | 40.6 |
| 7 | Waiters | 1,179 | 1,003 | 731 | 463 | 100.0 | 85.1 | 62.0 | 39.3 |
| 8 | Waitresses | 8,942 | 7,328 | 5,300 | 3,532 | 100.0 | 82.0 | 59.4 | 39.5 |
| 9 | Other servants | 1,152,794 | 964,288 | 719,480 | 491,034 | 100.0 | 83.6 | 62.4 | 42.6 |
| 10 | Total | 2,219,031 | 1,865,988 | 1,396,085 | 946,984 | 100.0 | 84.1 | 62.9 | 42.7 |

TABLE 195.—*Per capita income of employees, domestic service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Chauffeurs | $1,283 | $1,176 | $1,023 | $849 | 100.0 | 91.7 | 79.7 | 66.2 |
| 2 | Cooks, female | 1,018 | 943 | 831 | 719 | 100.0 | 92.6 | 81.6 | 70.6 |
| 3 | Cooks, male | 1,698 | 1,527 | 1,306 | 1,144 | 100.0 | 89.9 | 76.9 | 67.4 |
| 4 | Housekeepers | 1,026 | 958 | 863 | 755 | 100.0 | 93.4 | 84.1 | 73.6 |
| 5 | Laundresses | 891 | 872 | 777 | 626 | 100.0 | 97.9 | 87.2 | 70.3 |
| 6 | Nurses, not trained | 885 | 809 | 695 | 588 | 100.0 | 91.4 | 78.5 | 66.4 |
| 7 | Waiters | 945 | 893 | 766 | 607 | 100.0 | 94.5 | 81.1 | 64.2 |
| 8 | Waitresses | 827 | 753 | 642 | 534 | 100.0 | 91.1 | 77.6 | 64.6 |
| 9 | Other servants | 935 | 869 | 763 | 651 | 100.0 | 92.9 | 81.6 | 69.6 |
| 10 | Total | 961 | 898 | 790 | 670 | 100.0 | 93.4 | 82.2 | 69.7 |
| 11 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

## DETAILED TABLES, BUSINESS SERVICE

TABLE 196.—*Number of people engaged, business service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Number of employees, accounting [1] | 11,393 | 11,594 | 10,307 | 9,070 | 100.0 | 101.8 | 90.5 | 79.6 |
| 2 | Number of employees, trade associations [1] | 41,463 | 40,118 | 35,570 | 29,403 | 100.0 | 96.8 | 85.8 | 70.9 |
| 3 | Number of employees, chambers of commerce | 5,000 | 4,833 | 4,759 | 4,641 | 100.0 | 96.7 | 95.2 | 92.8 |
| 4 | Total number of employees | 57,856 | 56,545 | 50,636 | 43,114 | 100.0 | 97.7 | 87.5 | 74.5 |
| 5 | Number of entrepreneurs, accounting | 5,010 | 5,050 | 5,050 | 5,050 | 100.0 | 100.8 | 100.8 | 100.8 |
| 6 | Total number engaged | 62,866 | 61,595 | 55,686 | 48,164 | 100.0 | 98.0 | 88.6 | 76.6 |

[1] Estimated full-time equivalent.

TABLE 197.—*Compensation of employees, business service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages, accounting | 26,648 | 27,408 | 23,644 | 19,346 | 100.0 | 102.9 | 88.7 | 72.6 |
| 2 | Salaries and wages, trade associations | 77,535 | 82,562 | 72,315 | 52,249 | 100.0 | 106.5 | 93.3 | 67.4 |
| 3 | Salaries and wages, chambers of commerce | 7,500 | 7,250 | 6,900 | 6,325 | 100.0 | 96.7 | 92.0 | 84.3 |
| 4 | Total salaries and wages | 111,683 | 117,220 | 102,859 | 77,920 | 100.0 | 105.0 | 92.1 | 69.8 |

TABLE 198.—*Per capita income of employees, business service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Accounting | $2,339 | $2,364 | $2,294 | $2,133 | 100.0 | 101.1 | 98.1 | 91.2 |
| 2 | Trade associations | 1,870 | 2,058 | 2,033 | 1,777 | 100.0 | 110.1 | 108.7 | 95.0 |
| 3 | Chambers of commerce | 1,500 | 1,500 | 1,450 | 1,363 | 100.0 | 100.0 | 96.7 | 90.9 |
| 4 | Total | 1,930 | 2,073 | 2,031 | 1,807 | 100.0 | 107.4 | 105.2 | 93.6 |
| 5 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

TABLE 199.—*Income paid out and produced,[1] business service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 111,683 | 117,220 | 102,859 | 77,920 | 100.0 | 105.0 | 92.1 | 69.8 |
| 2 | Withdrawals of entrepreneurs | 37,335 | 36,623 | 31,512 | 27,906 | 100.0 | 98.1 | 84.4 | 74.7 |
| 3 | Total income paid out | 149,018 | 153,843 | 134,371 | 105,826 | 100.0 | 103.2 | 90.2 | 71.0 |
| 4 | Business savings of individuals | 1,623 | 369 | −1,762 | −3,924 | | | | |
| 5 | Total income produced | 150,641 | 154,212 | 132,609 | 101,902 | 100.0 | 89.1 | 88.0 | 67.6 |

[1] Exclusive of property income.

## DETAILED TABLES, MISCELLANEOUS SERVICE

TABLE 200.—*Number of people engaged and average compensation of employees, miscellaneous service*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Number of employees | 251,173 | 247,693 | 265,619 | 278,965 | 100.0 | 98.6 | 105.8 | 111.1 |
| 2 | Individual entrepreneurs | 39,919 | 35,675 | 29,623 | 27,747 | 100.0 | 89.4 | 74.2 | 69.5 |
| 3 | Total number engaged | 291,092 | 283,368 | 295,242 | 306,712 | 100.0 | 97.3 | 101.4 | 105.4 |
| 4 | Average compensation of employees (dollars) | 1,103 | 1,225 | 1,224 | 1,105 | 100.0 | 111.1 | 111.0 | 100.2 |
| 5 | Bureau of Labor Statistics cost of living index | | | | | 100.0 | 97.4 | 88.9 | 80.4 |

TABLE 201.—*Income paid out and produced, miscellaneous service*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 277,080 | 303,428 | 325,014 | 308,355 | 100.0 | 109.5 | 117.3 | 111.3 |
| 2 | Dividends | 6,210 | 5,678 | 5,941 | 6,216 | 100.0 | 91.4 | 95.7 | 100.1 |
| 3 | Interest | 2,167 | 2,399 | 1,664 | 1,462 | 100.0 | 110.7 | 76.8 | 67.5 |
| 4 | Total property income paid out | 8,377 | 8,077 | 7,605 | 7,678 | 100.0 | 96.4 | 90.8 | 91.7 |
| 5 | Withdrawals of entrepreneurs | 97,802 | 91,934 | 70,325 | 63,735 | 100.0 | 94.0 | 71.9 | 65.2 |
| 6 | Total income paid out | 383,259 | 403,439 | 402,944 | 379,768 | 100.0 | 105.3 | 105.1 | 99.1 |
| 7 | Corporate savings | −1,647 | −4,992 | −126 | −88 | | | | |
| 8 | Total income produced | 381,612 | 398,447 | 402,818 | 379,680 | 100.0 | 104.4 | 105.6 | 99.5 |

# CHAPTER XVI

## MISCELLANEOUS INDUSTRIES

In any estimate of national income by parts, the investigator sets up some controlling figures which will permit him at the end to ascertain, if only approximately, whether he has covered completely all economic activities of an income creating type. In the present report such controlling figures are the number of gainfully occupied shown by the Census of Occupations and the totals of property incomes shown by corporations reported in Statistics of Income. If from the total number gainfully occupied we subtract the estimated number of unemployed and thus obtain the number of gainfully employed, the complete totals of labor and entrepreneurial incomes should refer to this latter number. Similarly, all corporate groups reported in Statistics of Income should be included in the estimated income totals. Of course, even then there is no assurance that the resulting estimates are all inclusive; but at least they are complete in the light of the most inclusive statistical surveys available.

The estimates for miscellaneous industries are then a measure of the residual which has not been accounted for heretofore under the various industrial divisions. The items entered in this miscellaneous group are partly specific and partly undefined. The specific items include fishing, forestry, taxicabs, brokerage, personal finance, miscellaneous professional groups (such as architects, sculptors, artists, authors, etc.), private water companies; and for property incomes, the net balance of the international movement of dividends and interest. But there is also a large undefined group, which appears because in the Census of Occupations about 1.3 million gainfully occupied are not distributed by their industrial affiliation; and because in Statistics of Income there is a small group of corporations which are not classified by any industrial grouping.

The estimates of number of people actually employed in these miscellaneous pursuits (as distinct from the number gainfully occupied) had to be made primarily on the basis of a tentatively assumed similarity between the miscellaneous group and some other industrial division for which precise observation is possible. The same method had to be used in connection with labor and entrepreneurial incomes of the groups in question. On property incomes the data available in Statistics of Income and other sources permit a much more exact measurement.

While the estimates of number employed and various types of income in the miscellaneous industries have been prepared by parts (some six subgroups have been distinguished), it was considered advisable to present only the totals for the group as a whole.

Table 202 indicates that some 2.9 million people were engaged in the miscellaneous industries in 1929; that about 70 percent of them can be classified as employees and the rest as entrepreneurs; that

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total employment declined by 22 percent from 1929 to 1932, there having occurred a 30 percent decline in the number of employees engaged, and only a slight contraction in the number of entrepreneurs.

Total income paid out and produced in the group are shown in table 203 and chart XVI. The group accounts for 6.3 billion dollars, or about 8 percent of the national income paid out. There is a rather substantial volume of property and entrepreneurial incomes, the combined percentage of the two in total income paid out being higher than the customary figure in most industrial divisions. The decline in total income paid out was almost exactly the same as for industry as a whole, equal by 1932 to about 40 percent of the 1929 level. Both property income and entrepreneurial income appear to have declined more moderately than did total income. But it is doubtful whether one should attribute much significance to the testimony of estimates in this group. A miscellaneous group is, after all, a confession of inability on the part of the investigator to measure adequately a certain sector of the economic system. While it is valuable to have those missing parts measured, if only very roughly, the resulting measurements are more important as pieces needed to complete the picture of the total than as a reliable indication of the internal movements within the miscellaneous group itself.

CHART XVI

INCOME BY TYPE OF PAYMENT
MISCELLANEOUS

BILLIONS
OF
DOLLARS

DIVIDENDS & INTER-
EST (*International*)

INTEREST

DIVIDENDS

ENTREPRENEURIAL
WITHDRAWALS

OTHER LABOR INCOME

SALARIES & WAGES

1929    1930    1931    1932

EXCESS WITHDRAWN
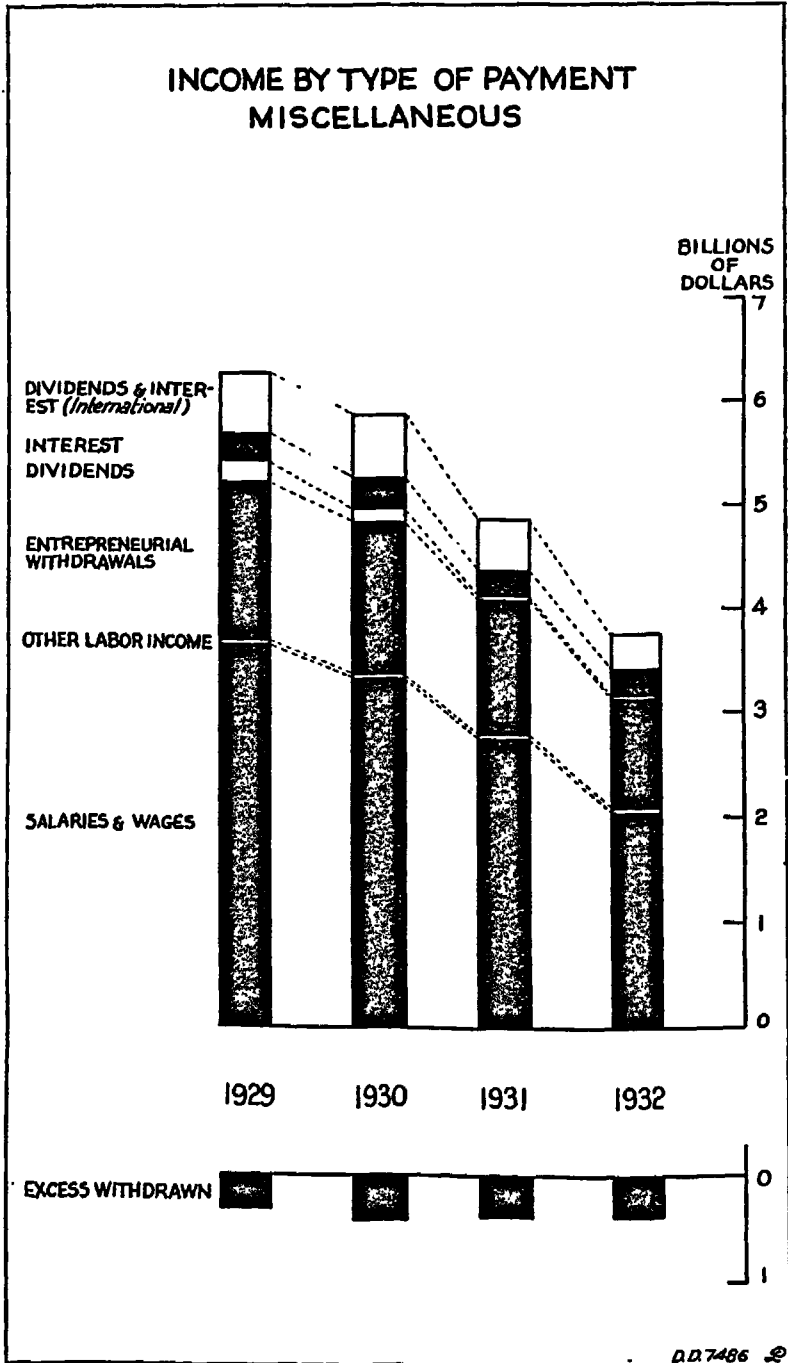
D.D.7486

# SUMMARY TABLES, MISCELLANEOUS INDUSTRIES

## TABLE 202.—*Number of people engaged, miscellaneous industries*

| Line | Item | Absolute numbers | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Employees | 2,255,292 | 2,076,715 | 1,832,640 | 1,605,103 | 100.0 | 92.1 | 81.3 | 71.2 |
| 2 | Entrepreneurs | 692,395 | 689,015 | 681,870 | 679,834 | 100.0 | 99.5 | 98.5 | 98.2 |
| 3 | Total number engaged | 2,947,687 | 2,765,760 | 2,514,510 | 2,284,937 | 100.0 | 93.8 | 85.3 | 77.5 |

## TABLE 203.—*Income paid out and produced, miscellaneous industries*

| Line | Item | Absolute numbers (thousands of dollars) | | | | Percentages of 1929 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| 1 | Salaries and wages | 3,641,258 | 3,332,161 | 2,762,386 | 2,063,314 | 100.0 | 91.5 | 75.9 | 56.7 |
| 2 | Other labor income | 10,733 | 13,228 | 15,568 | 15,568 | 100.0 | 123.2 | 145.0 | 145.0 |
| 3 | Total compensation of employees | 3,651,991 | 3,345,389 | 2,777,954 | 2,078,882 | 100.0 | 91.6 | 76.1 | 56.9 |
| 4 | Dividends | 186,966 | 127,173 | −9,800 | −13,742 | 100.0 | 68.0 | | |
| 5 | Interest | 283,123 | 298,804 | 270,359 | 270,359 | 100.0 | 105.5 | 95.5 | 95.5 |
| 6 | Dividends and interest (international) | 565,000 | 616,000 | 536,000 | 393,000 | 100.0 | 109.0 | 94.9 | 69.6 |
| 7 | Total property income | 1,035,089 | 1,041,977 | 796,559 | 649,617 | 100.0 | 100.7 | 77.0 | 62.8 |
| 8 | Withdrawals of entrepreneurs | 1,567,873 | 1,489,331 | 1,275,184 | 1,021,377 | 100.0 | 95.0 | 81.3 | 65.1 |
| 9 | Total income paid out | 6,254,953 | 5,876,697 | 4,849,697 | 3,749,876 | 100.0 | 94.0 | 77.5 | 60.0 |
| 10 | Corporate savings | −301,647 | −417,170 | −382,913 | −382,913 | | | | |
| 11 | Total income produced | 5,953,306 | 5,459,527 | 4,466,744 | 3,366,963 | 100.0 | 91.7 | 75.0 | 56.6 |

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# APPENDIXES

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# APPENDIX A

## SOURCES AND METHODS OF ESTIMATE BY INDUSTRIAL DIVISIONS

Per capita salaries and wages are obtained by dividing salaries and wages, inclusive of subsistence, commissions, and gratuities, by the number of salaried and wage workers. The cost of living index used in the tables relating to per capita income (in industries other than agriculture) is derived from the United States Bureau of Labor Statistics semiannual index as given in the Monthly Labor Review, February 1933. The average index for the calendar year is obtained by taking an average of the December figure for the preceding year, December figure and June figure of the given year, the latter given double weight.

Tables 1 to 30, inclusive, are based upon data given in the detailed tables presented in the industrial divisions. Wherever additional data are used specific references are given in the text.

### I. AGRICULTURE

#### TABLE 31

*Line 1.*—Figures for population are taken from Agricultural Situation, May 1933, table 2, page 5. Averages for the year are computed.

*Line 2.*—The number gainfully employed is given for 1930 in the Census of Occupations, Gainful Workers by Industry and Occupation, table 2, page 412. The estimates for the other years are based upon the ratio in 1930 of the gainfully employed to total farm population.

*Line 3.*—The number of farmers and tenants is given for 1930 in the Census of Occupations, Gainful Workers by Industry and Occupation, table 2, page 412. For the other years the estimates are based upon the ratio in 1930 of the number of farmers to the number of farms other than those operated by managers, applied to the estimated number of such farms. The total number of farms is estimated by the Department of Agriculture as is the number of managed farms in 1929. The number of managed farms in later years is estimated on the basis of the average annual increase in the number of farm managers from 1925–30 as reported in the Census of Agriculture. The number of other farms is taken as the difference between the total and the managed farms.

*Line 4.*—The number of equivalent full-time farmers is obtained for 1929 by subtracting from the total given in line 3, the estimated number of full time equivalents of farmers working part time in other occupations. The latter figure is a weighted average of the number of farm operators working for pay 25 days or more as reported in table 45, page 601, of the Abstract of the Fifteenth Census.

*Line 5.*—The number of managers and other salaried employees in 1930 is given in the Census of Occupations, table 2, page 412, and estimated for the other years on the basis of the ratio in 1930 of the number of managers and other salaried employees to the number of managed farms, applied to the estimated number of managed farms in the other years.

*Lines 6 and 7.*—The number of wage earners gainfully employed and the number of unpaid family laborers are both given for 1930 in the Census of Occupations, table 2, page 412. The difference between the total number of gainfully employed and the estimated number of farmers and managers and other salaried employees is divided into wage earners and unpaid family labor, on the assumption that the ratio between the two in 1930 holds for the other years.

*Line 8.*—The number of full time wage earners is obtained by dividing total cash wages and an allowance for board by the average full time wage without board (excluding perquisites). This latter average is derived from the estimate by the Department of Agriculture of wage compensation of farm operators. See table 8, Income from Farm Production in the United States, April 1933. The total wage compensation is divided by the number of farms.

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TABLE 32

Data on gross income are from the Income from Farm Production, mimeographed release of the Bureau of Agricultural Economics, April 1933; and for calendar years from a special tabulation by the Department of Agriculture. See memorandum from the Bureau of Agricultural Economics attached at the end of these comments.

TABLE 34

*Line 1.*—Data on gross income are from a special tabulation by the Department of Agriculture. See memorandum attached at the end of these comments.

*Lines 2, 7, and 9.*—Gross income, current production expense, depreciation and obsolescence, and the net income of operators are all from table 6 in the Income from Farm Production, mimeographed release of the Bureau of Agricultural Economics, April 1933.

*Line 3.*—The estimates for rent were supplied by C. M. Purves of the Department of Agriculture, by letter.

*Line 4.*—The estimates are equal to 75 percent of interest paid on mortgage debt (after allowing 10 percent for debt on farm dwellings) plus total interest on bank loans. Both of these estimates were supplied by Mr. Purves of the Department of Agriculture.

*Line 5.*—Taxes paid are given in table 5 of the Income from Farm Production. It is assumed that 70 percent of all taxes are paid by farm operators.

*Line 8.*—Cash wages paid are taken from table 5 of the Income from Farm Production. The figures are equivalent to cash wages paid plus an allowance of 25 percent for board and an additional 12½ percent for perquisites furnished to hired labor.

TABLE 35

*Line 4.*—Dividends are net originating in the industry and are estimated as the difference between total dividends paid and dividends received. Table 16, Statistics of Income for 1929 and 1930 shows gross income of agriculture and related industries and of agriculture only. The ratio of the agriculture figure to the total is applied to total dividend figures as given in table 14 (1929-30) and table 13 (1931), Statistics of Income to obtain agriculture dividends. The 1932 net dividends are assumed to be the same as for 1931.

*Line 5.*—Interest on mortgage indebtedness is estimated at 90 percent of the total interest on mortgage indebtedness (10 percent on farm homes) as given in a letter from Mr. Purves of the Department of Agriculture.

*Line 7.*—The total value of products retained for consumption is given in Table 2, Income from Farm Production. The value used by farm operators is the difference between this total and the estimate of the allowance for board furnished to hired labor.

*Line 8.*—The difference between line 9 and line 7.

*Line 9.*—Total wages of operators and family labor are given in table 8 of Income from Farm Production.

*Line 11.*—The difference between operators' net income and withdrawals is net income available for dividends. The subtraction of dividends from this item leaves business savings.

TABLE 37

*Lines 1 and 4.*—Cash income items are adjusted for price changes by means of the Department of Agriculture index of prices paid by farmers for commodities used in living.

*Lines 2 and 5.*—Board and commodity items are adjusted for price changes by means of the Department of Agriculture index of farm prices.

ESTIMATES OF GROSS FARM INCOME ON A CALENDAR YEAR BASIS, 1929-32

[From the Division of Statistical and Historical Research, Bureau of Agricultural Economics]

In order to place the estimates of gross farm income from agricultural production on a calendar year basis, it is only necessary to revise the incomes derived from those crops which are only partially marketed in the calendar year in which they are produced and partially in the following calendar year, as estimates of income from livestock and from most perishable crops are already on a calendar year basis. The most important crops that are not all marketed in the calendar year when produced are grains, cotton and cottonseed, apples, citrus fruits, pota-

toes, sweetpotatoes, and tobacco. Farm marketings are the principal source of data by which such a revision can be made. In setting up a method of estimating monthly farm income from marketings of agricultural products available data have been used to measure monthly fluctuations in marketings and adjusted to represent total marketings of each commodity. For example, the monthly marketings of wheat have been measured by the receipts at primary markets east of the Continental Divide and inspections of wheat at far northwestern markets. If for any given crop year these equaled 80 percent of all wheat estimated to be sold, the monthly marketings were multiplied by 1.25 so they would equal the total annual sales of wheat for the crop year. Then multiplying these adjusted monthly marketings by the monthly price received by producers for wheat gave the value of wheat marketed each month, from which cash income on a calendar year basis was determined.

For most of the important crops the monthly marketing data are sufficient for making a fairly reliable estimate of the sales of particular crops within the calendar year. In some cases, however, satisfactory data are not available. In the case of grain sorghums, for example, data as to monthly marketings are not available and the distribution of income within the calendar year had to be determined by other methods. As grain sorghums are harvested in the fall about the same time as corn, the sales of this grain were distributed monthly the same as for corn. The determination of the calendar year income of some of the other crops was made in a similar manner.

The proportion of the crops consumed by the farm family also had to be considered in estimating gross income. In 1929 this amounted to 10 percent of total income from crops. However, a large proportion of this income was from perishable fruits and vegetables, most of which are consumed in the calendar year in which produced, the value of farm gardens alone amounting to nearly 50 percent of the imputed income from crops consumed on the farm. The only crops which were not primarily consumed in the same calendar year as produced are corn, wheat, potatoes, and forest products. In estimating the human food consumption of corn, wheat, and potatoes it was assumed that consumption was the same each month. Thus multiplying the annual consumption by the unweighted average of monthly prices for a calendar year gave the value of corn, wheat, and potatoes consumed on the farm each year. Having no definite basis upon which to make monthly estimates, the value of forest products (firewood) for any crop year was divided evenly between the calendar years.

The combined estimates of cash income and income from crops consumed by the family are shown on a calendar year basis in the accompanying table. The most marked changes are in the income from grains, cotton and cottonseed, where a large proportion of the crops is carried over into the following year or years. No adjustment was made for sugar crops as they are practically all marketed in the calendar year. The items included in "other crops" were also left unadjusted, except for imputed income from home consumption of forest products, as so little information is available on the monthly marketings of the commodities falling in this group that no accurate adjustments could be made.

A significant point to be observed in using estimates of farm income on the calendar year basis is that the income from some crops produced in a particular year remains to be realized through consumption and marketing within the next calendar year. The perishable crops are produced, marketed, and/or consumed mostly within the calendar year. About 75 percent of the wheat crop is marketed in the year in which produced, and about 80 percent of the cotton crop, but only 30 percent of the corn crop. Consequently, the production of the calendar year should not all be directly related to income of the same, but also in part to the following calendar year. It is mainly on this account that the Bureau of Agricultural Economics of the Department of Agriculture has in the past estimated income from crops on a crop year basis.

The inventory of supplies of crop products on hand becomes of more significance in estimating the income on a calendar year basis than it does upon a crop year basis; the supply on hand at the end of the crop year is at the lowest level for the season and ignoring the changes in stocks from that at the beginning to that at the end of the season is, as a rule, of no great consequence, but breaking the season at the end of a calendar year finds the supplies of corn and some other crops on hand at nearly the peak of the season. The difference between the supplies on hand at the beginning and end of the calendar year may be much greater than would be the case at the beginning and end of the crop marketing season. Furthermore, in the case of feed grains the proportion of supply to be marketed or consumed as food is indeterminate, and may vary considerably from year to year. This point also was considered important in originally deciding to use the crop year rather than the calendar year in estimating crop income.

Although the shifting of our estimates of farm income to a straight calendar year basis does not involve a change in our method of handling income from live-stock, it should be observed that the inventory problem is also of some importance with reference to livestock. The end of the calendar year breaks into the season of the heaviest slaughter of hogs, just a little past the peak. The hogs, lambs, and cattle on feed at the end of the season to be marketed for slaughter within a few months are mainly, of course, products of the calendar year and represent accumulations of consumable goods. As in the case of crops, the significant point is how much these stocks or inventories, at the end of the year, may vary from year to year; but that variation may be a small percentage of the total production of the year. In livestock there is also a problem similar to that in the case of corn in that the number of animals on hand at the end of the year intended for slaughter for consumption within a few months cannot be easily determined.

Changes in the number of animals intended for breeding or to be fed out mainly within the next calendar year present a real problem in handling inventories and in analyzing the marketings of a year in relation to the production of that year. For example, when cattle herds are being built up, the proportion of the animals on hand at the beginning of the year that are intended for production purposes will be high in relation to the total, but in years in which the herds are being decreased that proportion will be low. The marketings in years in which the herds are being built up will be short of production, and in years in which they are being reduced, in excess of production.

In using estimates of agricultural income on a calendar year basis, some of the points discussed above should be taken into consideration, to avoid some of the confusion that may arise in using the data without observing the important limitations as to their utility. These estimates on a calendar year basis are likely in themselves to give rise to some confusion because of the fact that the official estimates of agricultural income have been upon a different basis. The Department of Agriculture is considering replacing its previous estimates on the crop year basis with estimates on the calendar year basis, recognizing the need of a calendar year estimate to fit in with such estimates of income from other sources. Agricultural income has already been included in many unofficial estimates of national income on the calendar year basis, but should estimating annual national income become a function of the Government, and these estimates including agriculture begin to be widely used as official estimates, it will raise some doubt as to the advisability of a Department of Agriculture publishing currently an independent and perhaps different figure, even though it may be the more useful in analyzing agricultural conditions.

*Estimates of gross income from farm production, by groups of commodities, on a crop year and calendar year basis, 1929-32*

[Millions of dollars]

| Crop | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Crop year | Calendar year | Crop year | Calendar year | Crop year | Calendar year | Crop year | Calendar year |
| Grains | 1,283 | 1,401 | 779 | 925 | 474 | 741 | 322 | 258 |
| Fruits and nuts | 706 | 691 | 567 | 578 | 453 | 456 | 340 | 349 |
| Vegetables | 1,132 | 1,016 | 943 | 1,027 | 724 | 816 | 596 | 614 |
| Sugar crops | 85 | 85 | 94 | 94 | 69 | 69 | 68 | 68 |
| Cotton and seed | 1,389 | 1,547 | 751 | 870 | 528 | 489 | 431 | 417 |
| Tobacco | 266 | 282 | 212 | 244 | 132 | 156 | 111 | 118 |
| Other crops | 540 | 541 | 453 | 456 | 334 | 341 | 245 | 249 |
| Total crops | 5,421 | 5,563 | 3,799 | 4,194 | 2,714 | 3,068 | 2,113 | 2,073 |
| Total livestock | 6,497 | 6,497 | 5,615 | 5,615 | 4,197 | 4,197 | 3,030 | 3,030 |
| Grand total | 11,918 | 12,060 | 9,414 | 9,809 | 6,911 | 7,265 | 5,143 | 5,103 |

Source: Division of Statistical and Historical Research, Bureau of Agricultural Economics.

## II. MINING AND QUARRYING

Estimates of income from mining have been made for the five branches separately. These are (1) anthracite, (2) bituminous coal, (3) metal mines, (4) nonmetal mines and quarries and (5) oil and gas wells. A small group, containing data for lessors and holders, is included with the nonmetal mines and quarries.

The figures for all mining are summations of the individual items for the derivation of which explanations are given below. The methods used in estimating several items, not shown separately for the various branches, follow immediately.

## TABLE 38

*Line 4*—(a) *Anthracite mines.*—The number of entrepreneurs in 1929 is given in table 2, page 254, of the Census of Mines and Quarries, 1929, and assumed to be the same in 1930, 1931, and 1932.

(b) *Bituminous coal mines.*—The number of entrepreneurs in 1929 is given in table 2, page 254, of the Census of Mines and Quarries, 1929, and assumed to be the same for 1930, 1931, and 1932.

(c) *Metal mines.*—The number of entrepreneurs is given for 1929 in table 30, page 44 of Census of Mines and Quarries, 1929, and assumed to be the same for 1930, 1931, and 1932.

(d) *Nonmetal mines and quarries.*—The number of entrepreneurs in 1929 is given in table 30, page 44, of the Census of Mines and Quarries, 1929, and assumed to be the same for 1930, 1931, and 1932.

(e) *Oil and gas wells.*—In the Census of Occupations, 1930, page 423, a figure for the number of owners, operators, and proprietors of oil and gas wells is given. This is assumed to be the number of entrepreneurs for each of the years 1929–32.

## TABLE 39

*Line 1.*—Total value of production is a summation of the values for the five branches as given in table 44.

*Line 3.*—The index of mineral production is that of the Federal Reserve Board, published in recent issues of the Federal Reserve Bulletin.

## TABLE 40

*Line 3.*—Other labor income includes compensation for injuries and pensions. Compensation for injuries is estimated separately for each of the branches as follows: on the basis of data for sample States the ratio of compensation for injuries to wage payments is derived for 1929 and applied to the total wage bill to give a preliminary estimate of compensation for injuries in 1929 for each of the branches. This estimate is adjusted to the estimate for all mining by the ratio of the estimate for all mining to the added total for the various branches. For all mining in 1930, 1931, and 1932, estimates are based upon the trend of compensation payments by the sample States. The figures for various branches are estimated on the basis of the ratio of compensation of injuries to wage payments, adjusted in each year to the estimated total for all mining. Pension estimates are those by M. W. Latimer of the Industrial Relations Counsellors, Inc. They are given for 1931 and estimated by us for 1929 and 1930 at the same ratio to total unclassified pensions as for 1931. Pension payments in 1932 are assumed to be the same as in 1931.

*Line 8*—(a) *Anthracite mines.*—For 1929, withdrawals of individual entrepreneurs are an average of two estimates. The first is obtained as the product of the number of entrepreneurs and the estimated average annual salary of salaried employees. The second is based upon the withdrawal ratio for corporate mines, i.e., the ratio of dividends plus compensation of officers to total sales as reported in the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. This ratio is applied to the value of production for noncorporate mines as reported in table 12, page 270, of the Census of Mines and Quarries, 1929. The final estimate for 1929 is extrapolated for the years 1930, 1931, and 1932, with the total salary payments used as index.

(b) *Bituminous coal mines.*—Withdrawals of entrepreneurs in 1929 are obtained as the product of the estimated annual average withdrawal and the number of entrepreneurs. The average withdrawal is equal to the average of the annual wage and salary as derived from the census. For 1930, 1931, and 1932, withdrawals are estimated with the salary bill in the industry used as index.

(c) *Metal mines.*—In 1929 the total withdrawals of individual entrepreneurs are estimated as the product of the number and the average salary paid in the industry. Withdrawals for later years are estimated with total salaries used as index.

(d) *Nonmetal mines and quarries.*—Withdrawals of individual entrepreneurs in 1929 are computed as the product of the estimated number of entrepreneurs

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and the estimated average salary. The later years are based on total salaries as index.

(e) *Oil and gas wells.*—Withdrawals of individual entrepreneurs in 1929 are based upon two estimates of the average withdrawal per entrepreneur. In the first estimate the average withdrawal is assumed to be equal to the average salary paid in the industry. The second is based upon the withdrawal ratio for corporations, i.e., the ratio of dividends plus compensation of officers to total sales, derived from the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. This ratio is applied to the estimated noncorporate sales (total value of production as given in Mineral Resources minus gross sales of corporations as given in Statistics of Income) to give a figure for total withdrawals in 1929. The total is divided by the estimated number of entrepreneurs to give the average withdrawal. The final estimate of average withdrawal is an arithmetic average of the two figures. For 1930, 1931, and 1932 total withdrawals are extrapolated on the basis of the total salary bill for the industry.

## TABLE 43

*Line 1.*—For 1929 the number of salaried employees in anthracite mining, including those at producing mines and in central administrative offices, is reported in the Census of Mines and Quarries, 1929, tables 19 and 20, page 279. For 1930, 1931, and 1932 the number of salaried workers in Pennsylvania reported annually in the Report on Productive Industries, issued by the Department of Internal Affairs of the State of Pennsylvania, is used as an index for extrapolation.

*Line 2.*—For 1929 the number of salaried employees in bituminous coal mining includes those at producing mines and in central administrative offices as reported in tables 19 and 20, page 279, of the Census of Mines and Quarries, 1929. Extrapolation for 1930, 1931, and 1932 is based upon the ratio of the number of salaried workers to the number of wage workers. This ratio is derived from the census in 1929 and extrapolated for 1930 and 1931 on the basis of the ratio of the combined numbers of salaried workers and wage workers for Pennsylvania, West Virginia, and Illinois. The Pennsylvania data are given in the Annual Report on Productive Industries; the West Virginia data in the Annual Reports of the Department of Mines; and the Illinois data in the Coal Report published annually by the Illinois Department of Mines and Minerals. For 1932 only the data for Pennsylvania and Illinois are available for use as an index of the ratio of the number of salaried workers to wage workers.

*Line 3.*—The number of salaried employees in metal mines includes those at producing mines, nonproducing mines, and in central administrative offices and is given for 1929 in the Census of Mines and Quarries, 1929, table 17, page 23, for central administrative offices; in table 28, page 42, for nonproducing mines, and in table 30, page 44, for producing mines. Estimates for 1930, 1931, and 1932 are on the basis of the ratio of salaried workers to wage workers, given in the census in 1929 and extrapolated for the later years on the basis of the ratio of number of salaried workers to wage workers in nonmetal mines and quarries.

*Line 4.*—The number of salaried employees in nonmetal mines and quarries is given in the same tables as the number in metal mines in the 1929 census. It is estimated for 1930, 1931, and 1932 on the basis of the ratio of the number of salaried workers to the number of wage workers, derived from the census for 1929 and extrapolated on the basis of the ratio for Pennsylvania. The Pennsylvania data on employment are given in the Annual Report on Productive Industries, issued by the Department of Internal Affairs.

*Lines 5 and 10.*—For 1929–32, the totals for oil and gas wells are based upon sample data covering approximately 40 percent of the industry (on the basis of value of production). The sample employment figures are raised by the ratio of total value of production to value of production of the sample companies.

*Lines 6 to 9.*—For each branch of mining the number of wage earners employed directly by the mine owners is given in the census of Mines and Quarries, 1929. The numbers in coal mines are given in table 28, page 42, and in table 19, page 279, and those in metal and nonmetal mines and quarries in table 28, page 42, and table 30, page 44. To these figures an allowance for the number of wage workers engaged in contract work is added. In the census, the total expenditure for contract work is also given in tables 28 and 30. According to F. E. Berquist of the Coal Division of the Bureau of the Census, 90 percent of total contract work can be assumed to be wages. On this basis the estimate for wages paid in contract work is computed. The number of wage workers in contract work is estimated by dividing into the total wage figure the average annual wage,

derived from the census data on wages and the number of wage workers. The resulting figure is added to the number of wage earners reported in the census to give the estimated total of the number of wage earners in 1929. The estimates for 1930, 1931, and 1932 are based upon the United States Bureau of Labor Statistics index of employment as reported in recent issues of Trend of Employment.

## TABLE 44

*Lines 1 to 4.*—Value of production is given in the Census of Mines and Quarries, 1929, table 30, page 44, and extrapolated for 1930, 1931, and 1932, using as an index the mineral resources data for the same products.

*Line 5.*—The value of production of oil and gas wells is a total of value of petroleum and natural gasoline, as given in Mineral Resources for 1931 and Minerals Yearbook, 1932–33, and value of natural gas as estimated by applying to the quantity the average value at the well per cubic foot. The price data were supplied by G. R. Hopkins of the Bureau of Mines.

## TABLE 45

The quantity figures for 1929 and 1930, are taken from Mineral Resources, 1931 summary. For 1931 and 1932, they are taken from Minerals Yearbook, 1932–33. In all cases, except for sulphur and iron, they are production figures. The sulphur and iron data are for shipments only.

## TABLE 46

*Lines 1 and 2.*—Total salaries paid in coal mines in 1929 are taken from the Census of Mines and Quarries, 1929, table 20, page 279, and table 27, page 286, and include salaries paid in central administrative offices and at producing mines. For 1930, 1931, and 1932, the figures for salaries in Pennsylvania as given in the Annual Report on Productive Industries, issued by the Department of Internal Affairs are used as a basis of extrapolation for anthracite figures. For bituminous coal figures in 1930, 1931, and 1932, two estimates are made and averaged to obtain the final estimate. The first is based upon the ratio of salaries to value of production, given for 1929 and extrapolated on the basis of the Pennsylvania ratio. The Pennsylvania ratio is derived from figures for salaries and value of production given in the Annual Report on Productive Industries, issued by the Department of Internal Affairs. In the second estimate, salaries are obtained as the product of the number of salaried employees multiplied by their estimated average annual salary. The average annual salary is derived for 1929 from the census data and extrapolated for the later years on the basis of the average salary paid in Pennsylvania. Average salary in Pennsylvania is based upon the total salary bill and number of salaried workers given in Report on Productive Industries issued by the Department of Internal Affairs.

*Line 3.*—The 1929 figure for total salaries is a sum of the figures for salaries in producing and nonproducing mines and central administrative offices as given in table 17, page 23, table 28, page 42, and table 30, page 44 of the Census of Mines and Quarries, 1929. It is estimated for 1930, 1931, and 1932 on the basis of the estimated total number of salaried employees and their average annual pay. Average annual pay in 1929 is derived from the census and in the later years based upon the average salary computed for coal and nonmetal mines.

*Line 4.*—Total salaries for 1929 are taken from the same sources as salaries in metal mines (line 3). For 1930, 1931, and 1932 the estimate is equal to the product of the number of salaried employees and their average annual compensation. Average annual salary is derived from the census in 1929 and extrapolated on the basis of Pennsylvania data. The Pennsylvania figures are given in the Report on Productive Industries, issued by the Department of Internal Affairs.

*Line 5.*—The salary figures reported by sample companies are used as a basis for estimating totals. They are raised by the ratio of total value of production to value of production of the sample companies.

*Line 6.*—Total wages for 1929 are reported in table 2, page 254, of the Census of Mines and Quarries, 1929, and to this figure is added 90 percent of the amount of contract work also reported here, which 90 percent is assumed to be wages paid. For 1930, 1931, and 1932, two preliminary estimates of wages are made. The first is based upon the United States Bureau of Labor Statistics index of pay rolls as reported in recent issues of Trend of Employment, and the second is based upon the wages reported annually in the Report on Productive Industries

issued by the Pennsylvania Department of Internal Affairs.   The final estimate is an average of the two.

*Line 7.*—Total wages in 1929 are taken from the Census of Mines and Quarries, 1929.   Wages for nonproducing mines are given in table 28, page 42, for producing mines in table 2, page 254.   To these two items, 90 percent of the amount of contract work, also reported in table 2, page 254, is added, to yield an estimate of total wages paid in 1929.   For 1930, 1931, and 1932, the estimates are based on the United States Bureau of Labor Statistics index of pay rolls, reported in recent issues of Trend of Employment.

*Lines 8 and 9.*—Total wages paid in 1929 are equal to the sum of those in producing mines, given in table 30, page 44, those in nonproducing mines, given in table 28, page 42, and 90 percent of the value of contract work in both producing and nonproducing mines as reported in the same tables.   For 1930, 1931, and 1932, the figures are extrapolated by means of the Bureau of Labor Statistics index of pay rolls, published in recent issues of Trend of Employment.

*Line 10.*—The wage totals reported by sample companies are used as basis for estimating totals.   They are raised by means of the ratio of total value of production to value of production of sample companies.

## TABLE 47

*Lines 1 to 5.*—Dividends are net, originating in the industry, and are estimated as the difference between total dividends paid and dividends received.   They are taken from a special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income.   For 1932, total dividends paid are estimated on the basis of the 1931–32 change in dividends of a corporate sample, and net dividends are assumed to have the same ratio to total dividends as in 1931.

*Lines 6 to 10.*—Interest is that on long-term debt and is also a net figure.   For mining it is assumed that the only long-term investments of corporations are the Government holdings, and the interest on these bonds, reported in the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, is therefore deducted from the estimated total interest item.   Total interest paid is computed in 1929, 1930, and 1931 as the product of total funded debt and an average interest rate.   The interest rate is derived from a group of sample corporations.   Long-term debt for anthracite corporations filing balance sheets is given for 1931 in a special break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, and assumed to be the same percent of all mining debt in 1929 as in 1930.   These figures are raised to include the debt of corporations not filing balance sheets, on the basis of the ratio of the number of income tax returns to the number of balance sheets reported separately for corporations having net income and those having no net income.   The estimate of total interest for 1932 is made on the basis of the 1931–32 change in the corporate sample, and net interest is assumed to have the same ratio to total interest as in 1931.

## TABLE 49

*Lines 1 to 5.*—Total income paid out is a summation of total compensation of employees, property income, and withdrawals of individual entrepreneurs.

*Lines 6 to 10.*—Business savings include the savings of both corporations and individual entrepreneurs.

(a) Corporate savings in 1929, 1930, and 1931 are estimated as the difference between net profit after taxes and total dividends paid.   Net profit after taxes is given in a special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, and adjusted for gains and losses from the sale of real estate, stocks, bonds, and other assets.   In 1929 the losses from these sales are assumed to be zero.   For 1932 corporate savings are estimated on the basis of preliminary Statistics of Income data for all mines on statutory net income plus interest received on Government holdings minus Federal taxes and net profit from the sale of assets, which is assumed to be equal to the 1931 figure.   The distribution among the various branches is made on the basis of preliminary estimates for each branch derived by means of a corporate sample.

(b) Business savings or losses of individuals are estimated as the difference between their estimated net income and their withdrawals.   Net income in 1929, 1930, and 1931 is estimated by applying to the value of production of noncorporate mines the ratio of total long-term interest paid plus corporate statutory net income (adjusted for net profit from sale of real estate, stocks, bonds, and other assets) plus compensation of officers to gross sales as derived from the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income.

The value of coal production of noncorporate mines is given for 1929 in the census and assumed to be in the same ratio to total production in the later years. The noncorporate value of metal and nonmetal mine production is derived from the census. In table 30, page 44, of the census, the total value of production is given and is extrapolated with the Mineral Resources value figures as index. From table 10, page 14, a ratio of noncorporate to total value of production is derived and applied to the estimated total value in 1929 and later years, to give the value of production by noncorporate metal and nonmetal mines and quarries. The noncorporate value of oil and gas production is equal to the difference between the total value of production as given in table 44 and the corporate sales reported in the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. The estimate of individuals' business savings in 1932 is based upon the percentage change from 1931 to 1932 in corporate savings applied to individual savings in 1931.

## III. ELECTRIC LIGHT AND POWER AND GAS

### TABLE 51

*Line 1.*—A preliminary release of the Census of Electrical Industries for Electric Light and Power Stations for 1932 shows the total number of employees in that year. The Bureau of Labor Statistics index of employment found in recent issues of Trend of Employment is converted to a 1932 base and is used to extrapolate the total figure back through 1929.

*Line 2.*—On pages 751–763 of volume II of the 1929 Census of Manufactures is given the number employed in 1929 in the manufactured gas industry. Annual Statistics of the American Gas Association indicate the number of employees for the years 1929–32. The number of employees in all establishments and those in municipal companies as shown in the census are both extrapolated on the basis of the American Gas Association figures, and the number of employees in municipal plants is subtracted from the total for the final estimates of employees in commercial plants.

### TABLE 52

*Lines 1 to 7.*—Data are from recent issues of the Survey of Current Business, the yearly figures being totals of the monthly.

*Lines 8 to 15.*—These data are from Annual Statistics of the American Gas Association.

### TABLE 53

*Line 1.*—Total salaries, wages, and number of employees for 1927 appear on pages 7 and 8, respectively, of the 1927 Census of Electrical Industries for Central Electric Light and Power Stations. From these data an average compensation is computed for this year. A special release of the same census showing comparable data for 1932 permits the computation of average compensation for 1932. The Bureau of Labor Statistics indexes of pay rolls and employment, as given in recent issues of Trend of Employment have been divided, one by the other to provide an index of average compensation. It has been assumed that the average compensation for 1929 is the same as that for 1927. It is to be noted that in manufactured gas the average compensation per employee showed a change smaller than 2 percent between 1927 and 1929. The 1929 figure has been carried through 1931 by means of the index of average compensation. The product of the average compensation and the number of employees yields total salaries and wages.

*Line 2.*—Other labor income consists of pensions and compensations for injuries. M. W. Latimer of the Industrial Relations Counsellors, Inc., has made estimates of pensions for public utilities for 1929, 1930, and 1931, and for the electric light and power industry for 1931. The ratio of the electric light and power pensions to all public utility pensions in 1931 is assumed to hold for the earlier years; 1932 pensions are considered the same as for 1931.

Replies to questionnaires sent to the States provide data on compensation for injuries for electric light and power establishments and for electric railways. The 1929 ratio of salaries and wages in the sample States to total salaries and wages is applied to the compensation payments of the sample States to obtain total compensation figures. This 1929 total is carried through 1932 by means of an index of compensation payments in sample States. A break-down of the total into payments by the electric light and power industry and by electric railways is made on the basis of the ratio of salaries and wages of each industry to the total.

*Line 4.*—Dividends are net, originating in the industry, and represent the difference between total cash dividends paid and dividends received. Both these

items are given in a special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, furnished by the Treasury Department. Total dividends for 1932 are estimated on the basis of the 1931–32 percentage change in a corporate sample selected from Moody's Manual of Public Utilities. The ratio of net to total dividends in 1932 is assumed to be the same as in 1931.

*Line 5.*—Interest is net, originating in the industry. The rate of interest obtained for a corporate sample taken from Moody's Manual of Public Utilities is applied to total long-term debt of the industry. This latter figure is arrived at by raising the long-term debt for corporations submitting balance sheets, as reported in special data from the Treasury Department for 1929, 1930, and 1931, to cover long-term debt of all corporations. The raising coefficient used is based upon the ratio of the number of income tax returns to the number of balance sheets for net income and deficit classes for transportation and other public utilities corporations as shown in table 19 (1929–30) and table 15 (1931), Statistics of Income. Total interest paid on long-term debt in 1932 is estimated on the basis of the 1931–32 corporate change in the corporate sample. From total interest paid is deducted interest received, which item is found in a special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. For 1932 it has been assumed to represent the same percent of the total interest paid as in 1931.

*Line 8.*—Corporate savings or losses are the difference between net income and total dividends paid. Net income is obtained by adding to compiled net profit, after taxes, the loss from sale of real estate, stocks, bonds, and other assets and deducting profit from sale of same. In 1929, where the loss is not shown, it has been regarded as zero. Items mentioned are given in a special tabulation of table 14 (1929–30) and table 13 (1931), Statistics of Income. The 1932 net income figure has been estimated on the basis of the 1931–32 percentage change in a corporate sample as taken from Moody's Manual of Public Utilities.

### TABLE 54

*Line 1.*—Total salaries and wages and number of employees for municipal and other gas establishments are given on pages 751–763 of volume II of the 1929 Census of Manufactures. Data for commercial companies are obtained by subtracting from the total figures those for the municipal concerns. An estimate of the average compensation in 1929 is extrapolated through 1932 by means of an index of the average compensation of electric light and power employees. Total salaries and wages for all years are the result of multiplying the number of employees by the average compensation payment.

*Line 2.*—Other labor income is a total of the item for pensions and that for compensation for injuries.

The 1931 figure for pensions is an estimate made by M. W. Latimer of the Industrial Relations Counsellors, Inc. Figures for other years have been computed by a procedure similar to that followed in making the electric light and power estimates.

Estimates on compensation for injuries are based on wage data. These are given for 1929 on page 26, volume I, of the 1929 Census of Manufactures and in the preliminary release of that census for 1931. By using an index of wages in all other chemical manufacturing, wages in gas manufacturing have been estimated for all years. Computation of compensation for injuries for gas establishments has been made on the assumption that the proportion of such payments by gas companies would be the same as the ratio of gas wages to all chemical wages.

*Lines 4, 5, and 8.*—Same methods and sources are used as for table 53, lines 4, 5, and 8. Treasury data are for artificial and natural gas, but the percentage of natural gas is assumed to be negligible. Corporate samples are taken from Moody's Manual of Industrials.

### IV. MANUFACTURING

The manufacturing industry has been divided into seven groups. These groups represent, to a large extent, combinations of groupings as given in the 1929 Census of Manufactures, pages 336–345.

1. The food and tobacco group combines the census group 1 and cigars and cigarettes and tobacco from group 16.

2. The paper, printing, and publishing group combines the census groups 4 and 5.

3. The textile and leather group combines the census groups 2 and 9, with an addition of the following items from group 16: Artificial and preserved flowers

and plants; feathers, plumes, and manufacturers thereof; fur goods, dressed furs, hair work, and men's straw hats.

4. The construction materials group combines the census groups 3 and 10.

5. The chemicals and petroleum refining group combines the census groups 6 and 7 with the exclusion from the latter group of manufactured gas, illuminating and heating.

6. The metals and metal products group is a total of the census groups 11, 12, 13, and 14 with the addition of brooms and brushes, other than rubber, from group 16 and the exclusion from group 14 of aircraft and parts.

7. The miscellaneous and rubber group combines the census group 8 and all items included by the census in group 16 not allocated to other groups. The item for motion pictures, not including projection in theaters, has been excluded entirely from manufacturing.

The census group 15, railroad repair shops, has also been excluded from the manufacturing industry.

Tables for total manufacturing are, in most part, summations of totals for the various groups.

For items to which this statement does not apply or for which there is no breakdown of the industry into its various groups, a description of methods and sources follows immediately.

### TABLE 58

*Line 1.*—To the summation of the number of salaried employees in the various groups is added the number of employees in central administrative offices. Since this item is not allocable to the various groups, it appears only in the total for manufacturing. It is given for 1929 on page 43 of the Census of Manufactures, 1929, volume I, and estimated for 1930, 1931, and 1932 on the basis of the other salaried employee figures.

*Line 4.*—The number of proprietors and firm members engaged in 1929 in the manufacture of each product is given in the Census of Manufactures, 1929, volume I, pages 310–323. The total number for each group is obtained by adding together the industries comprising that group as outlined above. The estimates for 1930 and 1931 are based upon the number of establishments given in the census and extrapolated by means of one of several indexes. The choice of index depended upon the comparison of the trend of the index to be used with the trend of the number of establishments. The procedure used for each of the subgroups is given below.

(a) *Food and tobacco.*—An index of the value of production has been obtained by multiplying the Federal Reserve Board index of production for food (1932 Annual Supplement of the Survey of Current Business, p. 11 and Federal Reserve Bulletin, February 1933, p. 108), by the Bureau of Labor Statistics index of wholesale prices (Wholesale Prices, December and year, 1932, U.S. Department of Labor, p. 1). The number of establishments in 1929 and 1931, respectively, is given in the 1929 Census of Manufactures, pages 96–105 and 1931 Census of Manufactures preliminary release dated December 30, 1932. The number of establishments in 1930 and 1932 have been estimated by applying to the number in 1931, the percentage change from 1930 to 1931 and from 1931 to 1932 in the index of the value of production.

The number of establishments owned by corporations in 1929 is also shown in the 1929 Census of Manufactures, pages 96–105. The number of corporations is considered to be the same as the number of income tax returns filed with the Treasury Department. This information is given in table 16 (1929–30) and table 14 (1931), Statistics of Income, and in the preliminary release for 1932. The number of establishments per corporation in 1929 has been estimated and applied to the number of corporations in the later years to obtain the number of establishments owned by corporations in these years.

The difference between the total number of establishments and the establishments owned by corporations is assumed to represent the number of establishments owned by individuals, partnerships, etc.

The number of individually owned establishments per proprietor in 1929 has been estimated and the result applied to the number of individually owned establishments in 1930, 1931, and 1932 to obtain the number of entrepreneurs.

(b) *Paper, printing, and publishing.*—The same method and sources have been used as in the food and tobacco group, with the exception that the number of establishments has been interpolated in 1930 and extrapolated for 1932 on the basis of the percentage change in the Federal Reserve Board index of production from 1930 to 1931 and from 1931 to 1932, respectively.

(c) *Textiles and leather.*—Same method and sources as in paper, printing, and publishing. In the matter of the index of production, it has been necessary to combine the textile index and the leather index. A weighted average of the two is obtained by using the 1929 number of establishments as weights throughout.

(d) *Construction materials and furniture.*—Instead of estimating the total number of establishments on the basis of the percentage change in the index of production 1930–31, the number of construction materials establishments is based on the percentage change in gross sales of corporations. These data are given in table 14 (1929–30) and table 13 (1931), Statistics of Income.

In other respects the procedure and sources are the same as those outlined for textiles and leather, with the further exception that the 1932 estimate of the number of entrepreneurs is based on the assumption that the percentage change from 1931 to 1932 is equal to that from 1930 to 1931.

(e) *Chemicals and petroleum refining.*—The methods and sources are the same as those used in the construction materials estimates.

(f) *Metal and metal products.*—Same methods and sources as those outlined in construction materials are used here.

(g) *Miscellaneous and rubber.*—Same sources and methods as in construction materials are used here.

## TABLE 60

*Line 1.*—To the summation of total salaries are added the salaries paid at central administrative offices as shown for 1929 on page 43, of the 1929 Census of Manufactures. This item does not permit of allocation to the various branches of manufacturing and so appears only in totals for the industry. It is estimated for 1930, 1931, and 1932 with the total of other salaries used as index.

*Line 3.*—This item is a total of pensions and compensation for injuries.

(a) Pension estimates have been made by M. W. Latimer, Industrial Relations Counsellors, Inc., for the entire manufacturing industry for the years 1929–31, and for each group of the industry for 1931. The ratio of each group to the total in 1931 has been applied to the totals for the earlier years to obtain estimates of pensions paid in each of the various groups. In each instance it has been assumed that pensions for 1932 are the same as for 1931.

Basic data for the estimates of compensation for injuries have been furnished by questionnaires sent out to the State governments. The ratio of compensation payments to wage payments in the entire industry and in the various groups has been computed for all reporting States. The ratio obtained has then been applied to wage payments for the United States to arrive at total compensation payments. Owing to the fact that a greater number of States reported data for all manufacturing than for the various groups, there is a discrepancy between the total obtained by multiplying the ratio of compensation to wages by wages for the whole industry, and the added total of the product of this ratio and the wages in the separate groups. This discrepancy is distributed among the seven groups of the industry in proportion to each group's share of the added total. The final compensation figure for each group is a total of that originally obtained, plus the amount of the discrepancy apportioned to it. On the basis of this final compensation figure, the adjustment is made separately for each year.

Total compensation payments are estimated by means of an index of total compensation payments in all reporting States. By this index, the 1929 estimate of total compensation is extrapolated through 1932.

*Line 8.*—Total entrepreneurial withdrawals have been estimated in different ways for the various subgroups of manufacturing, the choice being made after consideration of the reasonableness of the average withdrawal when compared with the average volume of business of the noncorporate establishments.

(a) *Food and tobacco.*—Total entrepreneurial withdrawals are estimated by multiplying the number of entrepreneurs by the average compensation of salaried employees.

(b) *Paper, printing, and publishing.*—Same method as for food and tobacco.

(c) *Textiles and leather.*—Dividends paid by corporations and the compensation of officers of corporations (table 14 (1929–30) and table 13 (1931), Statistics of Income) have been totaled as an approximation of the withdrawals in corporations in 1929. The ratio of this figure to the value of the product of corporate enterprises (1929 Census of Manufactures, pp. 96–103) has been applied to the value of the product of individual enterprises (1929 Census of Manufactures, pp. 96–103) to obtain an estimate of the withdrawals of individuals. The average withdrawal per entrepreneur has been extrapolated through 1932 with the average compensation of salaried employees as an index and multiplied by the number of entrepreneurs to give total entrepreneurial withdrawals in 1932.

(d) *Construction materials and furniture.*—Same method as for food and tobacco.

(e) *Chemical and petroleum refining.*—Total withdrawals are based on the 1929 estimates of average withdrawal per entrepreneur. The first estimate is that outlined under textiles and leather and the second is that used in food and tobacco. An arithmetic average of the estimates is extrapolated on the basis of the average compensation per salaried employee and multiplied by the number of entrepreneurs.

(f) *Metal and metal products.*—Same method as for food and tobacco.

(g) *Miscellaneous and rubber.*—Same method as for textiles and leather.

### TABLE 63

*Lines 1 to 6.*—The total number of salaried employees for 1929 is given on pages 310–323 of the 1929 Census of Manufactures. In estimating figures for the later years, the following method has been used: the ratio of salaried employees to wage earners in 1929 is estimated and extrapolated through 1932 on the basis of the ratio of salaried employees to wage earners in Pennsylvania, New York, and Ohio. The ratio obtained has been applied to the number of wage earners for 1930, 1931, and 1932 to give the number of salaried workers for these years. Pennsylvania data are from the Pennsylvania Bureau of Statistics in their Report on Productive Industries for respective years. New York data are for a number of representative factories as given in the November issues of the New York State Industrial Bulletin for respective years. From the total number of employees in New York factories is subtracted the number of office employees to obtain the number of wage earners. The 1929 Ohio figures are taken from Bulletin on Rates of Wages, etc., of the Industrial Commission of Ohio. Figures for later years are from special data furnished by the Industrial Commission. The number of superintendents and managers in Ohio is not available for inclusion in the computations.

*Line 7.*—Same method and sources as for lines 1 to 6, with the exception that the 1929–32 extrapolation of the ratio of salaried workers to wage earners has been based on figures for Pennsylvania and Ohio only, there being no comparable miscellaneous manufacturing group for New York.

*Lines 8 to 14.*—The number of wage earners in 1929 and 1931 is given in the 1929 Census of Manufactures, pages 21–34 and the 1931 Census of Manufactures preliminary release dated December 30, 1932. The index of these figures has been interpolated for 1930 and extrapolated for 1932 by means of the Federal Reserve Board index of employment (Federal Reserve Bulletin, recent issues) on the assumption that the percentage change from 1930 to 1931 and from 1931 to 1932 would be the same for both indexes. The resulting index has been used to extrapolate the 1929 number of wage earners. Wherever a manufacturing group is in itself a composite of two or more groups, each lesser group has been estimated separately and the results combined for a final total; e.g., the number of wage earners in food factories has been based on the index of employment in food factories. Wage earners in tobacco factories have been estimated by using the index of employment in tobacco factories. A summation of both figures gives the total number of wage earners in the food and tobacco group.

### TABLE 64

*Lines 1 to 7.*—The value of the product of each group of manufacturing for 1929 and 1931 is found in the Census of Manufactures, 1929, pages 96–103 and the Census of Manufactures, 1931, preliminary release dated December 20, 1932. The 1930 interpolation is based upon the proportionate change from 1929 to 1930 and from 1929 to 1931 in gross sales of corporations for each group as reported in table 14 (1929–30) and table 13 (1931), Statistics of Income.

### TABLE 65

*Line 1.*—The estimated value of production has been adjusted for price changes by means of the United States Bureau of Labor Statistics index of wholesale prices of foods.

*Line 2.*—The index of production in paper and printing is that of the Federal Reserve Board as given in recent issues of the Federal Reserve Bulletin. It was applied to the 1929 dollar value as given in table 64.

*Line 3.*—The index of prices used for adjustment is a weighted average of textiles and leather goods.

*Line 4.*—The index of prices used for adjustment is a weighted average of brick and tile, portland cement, lumber, and other building materials.

*Line 5.*—The price index used for adjustment is a weighted average of the indexes for petroleum products, paints, chemicals, and drugs.

*Line 6.*—The price index used for adjustment is that for metal and metal products.

*Line 7.*—The price index used for adjustment is a weighted average of those for auto tires and tubes and other miscellaneous products.

## TABLE 66

*Lines 1 to 6.*—Total salaries for 1929 are obtained by adding salaries as shown in the 1929 Census of Manufactures, pages 310–323. The average salary paid in 1929 is computed and extrapolated through 1932 on the basis of the index of the average salary payments in Pennsylvania, New York, and Ohio. The resulting estimate of the average salary is multiplied by the number of salaried workers to give the figures for total salaries. Pennsylvania data are taken from the Report on Productive Industries of the Pennsylvania Bureau of Statistics for respective years. The New York data are for a number of representative factories and the total salary figure is estimated by multiplying the weekly average salary by 52 and by the number of salaried workers as given in the November issues of the New York State Industrial Bulletin. The Ohio figures appear in the 1929 Bulletin on Rates of Wages, etc., and in special tabulations furnished by the Industrial Commission for the subsequent years. Salaries of superintendents and managers are not included in the Ohio computations.

*Line 7.*—Same sources and methods are used as in lines 1 to 6 with the exception that the 1929 average salary payment is extrapolated through 1932 on the basis of the index of the average salary payments in Pennsylvania and Ohio, there being no comparable miscellaneous group for New York factories.

*Lines 8 to 14.*—Wages for 1929 and 1931 are found in the 1929 Census of Manufactures, pages 310–323 and the 1931 Census of Manufactures preliminary release dated December 20, 1932. These figures, first converted to indexes have been interpolated for 1930 and extrapolated for 1932 by the use of the Federal Reserve Board indexes of pay rolls, on the assumption that the percentage change from 1930 to 1931 and from 1931 to 1932 would be the same for both indexes. By means of the resulting index, the 1929 figure for wages has been extrapolated through 1932. Wherever a manufacturing group is in itself a composite of two or more subgroups each subgroup has been estimated separately; e.g., wages in food factories have been estimated separately. Wages in tobacco factories have likewise been estimated separately. The summation of the two represents total wages in the food and tobacco group.

## TABLE 67

*Lines 1 to 7.*—Dividends are net originating in the industry. Net dividends represent the balance of total cash dividends paid and dividends received. Both items are found for 1929, 1930, and 1931 in table 14 (1929–30) and table 13 (1931), Statistics of Income. Total cash dividends paid in 1932 have been estimated by applying to the 1931 total the ratio of the change from 1931 to 1932 in a corporate sample (taken from Moody's Manual of Industrials). Net dividends for 1932 have been estimated by applying to total dividends the 1931 ratio of net to total.

*Lines 8 to 14.*—Interest is net interest on long-term debt originating in the industry. Net interest represents the difference between total interest paid and interest received. For manufacturing corporations it is assumed that all long-term interest received is that on Government bond holdings. This item is reported in table 14 (1929–30) and table 13 (1931), Statistics of Income. Table 19 (1929–30) and table 15 (1931), Statistics of Income show total long-term debt of corporations submitting balance sheets. This figure is raised to allow for long-term debt of all corporations, by applying the ratio of the number of companies filing income tax returns to those submitting balance sheets for classes reporting net income and those reporting no net income. The interest rate derived from a corporate sample (taken from Moody's Manual of Industrials) is applied to the estimated total long-term debt to give total interest paid. Total interest for 1932 is estimated on the basis of the 1931–32 percentage change of total interest payments in the corporate sample. It is assumed that the ratio of net interest to total interest in 1932 is the same as for 1931.

TABLE 69

Total business savings are a sum of the savings of corporations and those of individuals. The corporate savings have been estimated as the difference between net income and total dividends paid. The methods used for each subgroup are given below.

*Lines 8 to 14.*—(a) *Corporate savings.*—The difference between net income of corporations and total cash dividends paid represents savings. Table 14 (1929–30) and table 13 (1931), Statistics of Income, show net profits after taxes and profit and loss from sale of real estate, stocks, bonds, and other assets. The net profit figure has been adjusted by subtracting the difference between profit and loss items from sale of assets. In 1929 where the loss is not reported, it has been considered as zero. The 1932 estimate of net income is based on the preliminary Statistics of Income data for statutory net income of corporations plus estimates of interest and dividends received as computed with a corporate sample as index, minus estimated Federal taxes and net profit from the sale of assets (assumed to be the same as in 1931).

(b) *Individuals' savings.*—The difference between net income of entrepreneurs and entrepreneurial withdrawals gives savings of individuals. Net income of entrepreneurs is estimated as follows: Total long-term interest paid plus the compensation of officers of corporations plus corporate statutory net income (table 14 (1929–30) and table 13 (1931), Statistics of Income), the latter figure adjusted by subtracting the difference between profit and loss from sale of real estate, stocks, bonds, and other assets, where reported divided by gross sales (table 14 (1929–30) and table 13 (1931), Statistics of Income) gives an approximation of a profit ratio for individuals. This ratio is then applied to the estimated value of the product of factories owned by individuals, partnerships, etc., to give the estimate for net income of entrepreneurs. The value of the product of factories owned by individuals, partnerships, etc., in 1929 (1929 Census of Manufactures, pp. 96–103) is divided into the total value of the product in that year and the resulting ratio applied to the total value for 1930 and 1931 to give the estimated value of product of noncorporate factories. To obtain the 1932 entrepreneurial savings, the ratio of the 1931–32 change in corporate savings has been applied to the 1931 entrepreneurial savings.

## V. CONSTRUCTION

TABLE 71

*Line 1.*—The number of salaried employees in 1929 is not reported by all establishments in the Census of Construction. The figures for reporting establishments for number and total salaries are given in table 5, page 88. From these an average salary is derived which, divided into the estimated total salary bill of establishments with an annual volume of $25,000 or more as given in table IX, page 23, results in the estimated number of employees in establishemts with an annual volume of $25,000 and over. On the basis of the ratio of work done by own force reported for establishments with annual volumes of over $25,000 and under $25,000 in table VII, page 20, this estimate is stepped up to include all establishments reporting to the census. The resulting figure is raised on the basis of the ratio of the estimated total contract construction volume to the census volume to give the total number of salaried employees in 1929. It is extrapolated for 1930, 1931, and 1932 on the basis of the ratio of salaried workers to wage workers in nonmetal mining, applied to the ratio for construction in 1929.

*Line 2.*—The number of wage earners in establishments with annual volume of $25,000 or more is given for 1929 in table XVI, page 32 of the Census of Construction. The number in the smaller establishments is derived by dividing into total wages as given in table VII, page 20, the average wage derived from the data for the larger concerns. The total is raised by the ratio of the estimated total volume of construction under contract to the volume reported in the census to give total number of wage earners employed in 1929. Estimates for 1930, 1931, and 1932 are averages of two preliminary estimates. The first is based on a six-State employment index compiled by the Federal Employment Stabilization Board and the second on an index of the value of construction contracts adjusted for changes in building costs. The F. W. Dodge Corporation contract figures and the Turner Construction Co. index of construction costs are used in this adjustment.

*Line 4.*—The number of entrepreneurs for 1930 is taken from the Census of Occupations and is a total of builders and building contractors and owners, operators, and proprietors of the building industry, and of contractors, builders, and

proprietors of concerns in construction and maintenance of roads, streets, sewers, and bridges as given in table 2, pages 424 and 544. It is assumed to be the same for the other years.

### TABLE 72

*Line 1.*—The estimate of private contract construction is a total of the Dodge contract figures for residential, commercial, factory, and religious and memorial buildings for 37 States, raised by the Federal Employment Stabilization Board to include the other 11 States, plus farm contract construction. Total farm construction is estimated by the Department of Agriculture. The ratio of contract to total farm construction is assumed to be 50 percent in 1929 and is extrapolated for 1930, 1931, and 1932, the ratio of contract to total construction for State, county, and city work being used as index.

*Lines 2 and 3.*—The estimate of total public and public utility contract construction for 1929 is based upon the Census of Construction. In table 2, page 73, the public and public utility total may be segregated from all business, under general contract or done directly for owner, distributed by class. The ratio of public and public utility to the total is thus derived, and applied to the total volume of construction by establishments with more than $25,000 annual volume, to obtain public and public utility contracts by companies with annual volume of $25,000 or more. For construction by establishments with less than $25,000 annual volume, table 12, page 165, a break-down of general contracts by class, shows that 90 percent of the volume is for buildings. The other 10 percent is public and public utility construction. Of the building construction it is assumed that the same percentage is public and public utility as in the group of larger establishments. These ratios applied to the total volume of construction under general contract or directly for owner by establishments with annual volume of less than $25,000, given in table VII, page 20, yield an estimate of total public and public utility construction by the smaller establishments in 1929. The total for all establishments is then derived and extrapolated for 1930, 1931, and 1932 on the basis of the F. W. Dodge figures for volume of contracts awarded in the public and public utility fields. The break-down of the total into public and public utility construction is made on the assumption that the public construction done directly for the Government is in the same proportion to the total, as the Government figure for total construction, by general contractors, including subcontracts let, is to that total (table 2, page 42). This 1929 estimate of public construction is extrapolated for 1930, 1931, and 1932 by the same index as total public and public utility contract construction. Public utility contract construction is the difference between the total public and public utility construction and the estimated public construction.

### TABLE 73

The volume of contract construction is adjusted for price changes on the basis of the Turner Construction Co.'s index of construction costs.

### TABLE 74

*Line 1.*—Total salaries paid in 1929 are based upon the figures for establishments with annual volumes of $25,000 or more as given in Census of Construction, table IX, page 23; and raised on the basis of the ratio of total volume of contract construction to the volume of those establishments with annual volumes of $25,000 or more. The estimates for 1930, 1931, and 1932 are based upon the average salary paid and the estimated number of salaried employees. The average salary in 1929 is derived from the Census, and for the later years is based upon the average salary in nonmetal mines.

*Line 2.*—Total wages in 1929 are based on the Census of Construction figure given in table VII, page 20, and raised to include all contract construction. Estimates for 1930, 1931, and 1932 are an arithmetic mean of two preliminary estimates. The first is the product of the average wage and the number of wage earners. The average wage is the Census figure extrapolated on the basis of the Ohio index of average wage, adjusted to the six-State employment index. The second estimate is made with the F. W. Dodge figures on value of contracts awarded used as index.

*Line 3.*—Other labor income includes compensation for injuries only. There are no figures available on pensions in the construction industry. Compensation for injuries to employees is based on data obtained by questionnaires from sample States. These figures on compensation in 1929 are raised by the ratio of wages paid in the United States to wages paid in the sample States as reported in the

Census of Construction.    Estimates for 1930, 1931, and 1932 are based on the trend indicated by the sample data.

*Line 5.*—Dividends are net originating in the industry, i.e., the difference between the total paid and dividends received.    They are taken from table 14 (1929–30) and table 13 (1931), Statistics of Income, after an adjustment for shipbuilding dividends has been made.    In the present industrial classification shipbuilding is included with metals and metal products in the manufacturing group while in the Treasury Department's classification it is included with construction. The estimates of shipbuilding figures for 1929, 1930, and 1931 are based upon the ratios of shipbuilding gross income to total construction gross income for net income and deficit classes as reported in table 16 (1929–30) and table 14 (1931), Statistics of Income.    The estimates for construction proper are the differences between the total construction and shipbuilding figures.    The estimate of dividends paid in 1932 is based upon sample corporation data.

*Line 6.*—Interest is a net interest originating and it is assumed that in the construction field the only holdings of corporations are Government securities. Total interest is estimated for 1929, 1930, and 1931, by applying to the value of long-term debt (reported in table 19 (1929–30) and table 15 (1931), Statistics of Income), and raised by the ratios of the number of income tax returns to the number of balance sheets submitted by net income and deficit classes and adjusted for shipbuilding as explained above) the interest rate derived from a sample of construction corporations.    Interest receipts on Government securities are given in table 14 (1929–30) and table 13 (1931), Statistics of Income, and adjusted for shipbuilding also.    The 1932 estimates of total and net interest payments are based on sample data.

*Line 8.*—The withdrawals of entrepreneurs in 1929 are based upon the average withdrawal estimated separately for proprietors of establishments with annual volumes of more than $25,000 and those with less.    The total number of entrepreneurs is broken down into the two groups on the basis of the data in the Census of Construction on the number in each size group.    The number of proprietors of reporting establishments with over $25,000 annual volume is given in table 5, page 88.    Their number is raised on the basis of the ratio of the total number of establishments to the number reporting.    The total number of establishments with less than $25,000 annual volume is given in table VII, page 20. From this figure is subtracted the difference between the total number of active construction corporations reported in table 16 (1929–30) and table 14 (1931), Statistics of Income, and the number of corporations reported in table 1, page 12 of the Census of Construction.    It is assumed that there is one entrepreneur per establishment.    The total number of entrepreneurs is broken down in the ratio derived from the Census of Construction of those with establishments of less than $25,000 annual volume and those with more.    To the estimated number of entrepreneurs with the larger volume is applied the average salary reported in table 5, page 88, and to the smaller entrepreneurs is applied the average of the average wage and the average salary in construction to give total withdrawals in 1929. This total is extrapolated for 1930, 1931, and 1932, with total salary payments as index.

*Line 10.*—Corporate savings in 1929, 1930, and 1931 are estimated as the difference between net profits after taxes and total dividends paid as reported in table 14 (1929–30) and table 13 (1931), Statistics of Income.    Net profits are adjusted for profits and losses from the sale of assets.    In 1929, when losses are not reported, they are assumed to be zero.    All figures are exclusive of shipbuilding.    The estimate of corporate savings in 1932 is based upon the preliminary Statistics of Income figure for statutory net income, stepped up to the total, plus interest received on Government holdings minus Federal taxes and net profit from the sale of assets (assumed to be equal to the 1931 figure).    The difference between the resulting figure and net dividends paid is assumed to be corporate savings for 1932.

*Line 11.*—Business savings of individuals for 1929, 1930, and 1931 are estimated as the difference between net income and withdrawals of entrepreneurs. Net income is estimated by applying to the volume of noncorporate business the ratio of net profit derived from corporate data.    From a special tabulation of the Census of Construction the volume of corporate business by establishments of more than $25,000 is obtained.    To this is added an estimate of corporate business of smaller concerns made by multiplying the number of corporations with less than $25,000 volume (the difference between the total reported in Statistics of Income and the number reported in the Construction Census) by the average volume of business done by these small concerns.    Noncorporate business is the difference between total contract construction and corporate business and the ratio to the total is assumed to be the same for all 4 years.

The ratio of net profit to sales is derived from gross sales plus profit from operation other than sales and total long-term interest paid plus corporate statutory net income plus compensation of officers, all adjusted for shipbuilding. ·From statutory net income is subtracted the profit from sale of real estate, stocks, bonds, and other assets, and to it is added the loss from same. The estimate of individuals' business savings in 1932 is based upon the percentage change from 1931 to 1932 in corporate savings applied to individuals' savings in 1931.

## VI. TRANSPORTATION

All items, except gross revenue, shown in the summary tables for steam railroads, Pullman, and express are the sums of tables 89 to 100, inclusive; for water transportation, the sums of tables 101 to 106, inclusive, plus stevedore and longshore operations; for motor transportation, they are the sums of tables 107 to 109, inclusive.

### TABLE 77

*Line 5.*—It is assumed that there are individual entrepreneurs only in the motor trucking and water transportation industries and that the other fields are entirely corporate. After much discussion with men familiar with the motor trucking industry it was estimated that about 30 percent of the trucks in this industry are owned by corporations and the other 70 percent by individuals and partners. It was further estimated that the assumption of an average of two trucks per individual owner or partner would be fairly accurate and on this basis it was estimated that there were 35 percent as many entrepreneurs as trucks, the number of which is given in the notes on motor transportation.

The Census of Occupations of 1930 reports 518 owners, operators, and proprietors in the water transportation industry. This figure is projected for the other years on the basis of the number of corporation officers for each year as shown in the special analysis of the Interstate Commerce Commission data on inland water transportation.

### TABLE 78

*Line 9.*—Entrepreneurial withdrawals are estimated for the motor trucking and water transportation industries only. For motor trucking it consists of only two parts. One is the return to owners for their labor contribution, i.e., assuming that each owner is a driver and his labor income is equal to the average wage for drivers. To estimate the withdrawal of owners, the compensation paid to corporation officers plus dividends paid are multiplied by the ratio of receipts of other than corporations to receipts of corporations. The difference between the estimated total receipts and receipts by corporations, furnished by the Treasury Department, equaled the receipts by other than corporations.

The 1926 Census of Water Transportation shows that 8.9 percent of the tonnage capacity of the industry was owned by other than corporations. This ratio has been gradually declining from the time of the 1916 Census and roughly projecting the trend, it is estimated that for the 4 years under study the proportion of capacity owned by individuals and partnerships probably varies around 8 percent of the capacity owned by corporations. This 8 percent is applied to the total compensation of corporation officers plus dividends paid to arrive at an estimate of withdrawals of entrepreneurs in 1929. Compensation of corporation officers in this industry is made available by the Treasury Department for the first 3 years. The 1929 figure is extrapolated through 1932 by means of the index of total salaries paid.

### TABLE 81

*Line 4.*—The Bureau of Marine Development of the United States Shipping Board has an estimate of stevedore operations in Great Lakes and coastal ports, based on Cargo Handling and Longshore Labor Conditions, published by the Department of Labor and Commercial Statistics—Water-Borne Commerce of the United States, published by the War Department. The former publication is the result of a thorough study of labor conditions among stevedores and longshoremen and of labor costs of loading and unloading various types of cargo. The latter publication consists of statistics of cargo handled in various ports by types of cargo. From these two studies the Bureau has estimated the total costs of loading and unloading cargo for each year and also the labor required and men engaged in the work, based on expert opinions of the extent of part time employment. These estimates included coastal and Great Lakes ports only and on the basis of tonnage handled in inland ports relative to all other ports, the estimate

was raised to include all ports in the United States. Total number was adjusted to full time equivalent on the basis of the number of man-years required in this industry.

*Line 8.*—Basic data for number of employees are given for 1927 in the Census of Electric Railways, 1927, pages 153 and 179 and for 1932 in a preliminary release of the Census of Electric Railways, 1932. Interpolations for the intervening years are made proportionate to the change from year to year in the number of employees as estimated by the American Transit Association.

*Line 9.*—The data on the number of employees other than officers of corporations are from the Air Commerce Bulletin, May 1, 1933. Officers are estimated on the basis of returns from questionnaires sent to air transport corporations.

*Line 10.*—Total number of employees is equal to the sum of employees of interstate and intrastate pipe lines. For interstate companies the figures are given in Selected Financial and Operating Data from Annual Reports of pipe line companies, a mimeographed release of the Interstate Commerce Commission. The number employed by intrastate companies is a total of the replies to questionnaires sent to public service commissions of Kansas, Montana, New Mexico, and Texas.

## TABLE 82

*Line 1.*—Data for 1929, 1930, and 1931 are given in Statement 53 of Statistics of Railways. The 1932 figure for gross revenue is based upon class I data as reported in summary 1 of Preliminary Abstract of Statistics of Common Carriers for 1932. The 1932 figures for ton and passenger miles are based on class I data reported in Monthly Revenue Traffic Statistics.

*Lines 2 and 3.*—Figures are given in Summaries 3 and 4 of Preliminary Abstract of Statistics of Common Carriers for 1929, 1930, and 1931 and 1932.

*Line 4.*—These data are reported in Bus Facts for 1933, a publication of the National Association of Motor Bus Operators.

*Line 5.*—This is an estimate based upon the ratio of profit to expenses as derived from corporate data and applied to Mr. Tufts' estimates of total costs in 1930. Profits plus costs equal gross receipts. For the other years the estimates are based on the change in the corporate receipts for the different years. Further explanation of this item can be found in the general description of the procedure followed in arriving at the motor transportation estimates.

*Line 6.*—The data on operating revenues and number of passengers carried are compilations made by the American Transit Association, appearing in recent issues of the Survey of Current business.

*Line 7.*—These data are for interstate companies only and are given in Selected Financial and Operating Data from Annual Reports of pipe line companies.

## TABLE 83

*Lines 1 and 2.*—Same source as table 82, line 1.
*Lines 3 and 4.*—Same source as table 82, line 2.
*Line 5.*—Same source as table 82, line 4.
*Line 6.*—Same source as table 82, line 6.
*Line 7.*—Same source as table 82, line 7.
*Line 8.*—Same source as table 81, line 9.
*Lines 9, 10, and 11.*—Series appearing in Survey of Current Business.

## TABLE 84

*Line 4.*—This item represents the labor cost of loading and unloading cargo, i.e., stevedoring and longshoring costs, as estimated by the United States Shipping Board and explained in table 81, line 4.

*Line 8.*—Same source as table 81, line 8.

*Line 9.*—Salaries paid to the operating and office personnel are estimated as the product of the number and the average salary, the latter as reported by sample companies. Salaries paid to pilots are a product of the number and their average salary as reported in Air Commerce Bulletin, May 1, 1933. All other employees' salaries are estimated on the basis of their number and their average wage. Their average weekly wage in 1931 is given in the Monthly Labor Review of August 1932 and extrapolated by means of mechanics' wages as reported in the Air Commerce Bulletin, May 1, 1933.

*Line 10.*—Same source as table 81, line 10.

*Line 12.*—The United States Employees' Compensation Commission administers the Longshoreman Act which concerns the payment of compensation for

injuries to longshoremen while working on vessels. Those working on the docks are not covered by this act but are included in the scope of State compensation acts. The Commission has furnished data on the amount of payments for each year. Generally there are about as many workers on the docks as on the vessels for loading and unloading cargo, but the danger of injuries is greater on vessels. For this reason it is assumed that those on the docks received half as much compensation as those on the boats. Estimates are made for regular vessel employees on the basis of the ratios of number of vessel employees to the number of longshoremen and stevedores for each year. The estimate of pensions paid was provided for 1929, 1930, and 1931 by M. W. Latimer of Industrial Relations Counsellors, Inc. Pensions for 1932 are assumed to be the same as for 1931.

*Line 14.*—Other labor income includes compensation for injuries and pensions. Data on compensation for injuries are from replies to questionnaires sent to the various States which provide such figures for electric light and power establishments and electric railways. The 1929 ratio of salaries and wages in the sample States to total salaries and wages is applied to the compensation payments in the sample States to obtain total compensation figures. This 1929 total is extrapolated through 1932 by means of the index of compensation payments in the sample States. The break-down of the total into payments by the electric light and power industry and by the electric railways is made on the basis of the ratio of the salaries and wages in each field to the total. Pensions paid by the electric railways have been provided by M. W. Latimer of the Industrial Relations Counsellors, Inc., for 1931 and are assumed to be in the same ratio to his estimates of payments by all public utilities other than steam railways for that year and for 1929 and 1930. The pensions paid in 1932 are carried at the same figure as in 1931.

*Line 15.*—Other labor income in the pipe line industry consists of pensions only. M. W. Latimer of the Industrial Relations Counsellors, Inc., has prepared an estimate for pensions paid by pipe line companies in 1931 and estimates for all public utilities other than railways for 1929, 1930, and 1931. The ratio of pensions paid by pipe lines to pensions paid by public utilities is assumed to be the same in 1929 and 1930 as in 1931. Total pensions paid by pipe line companies are carried at the same figure in 1932 as in 1931.

## · TABLE 85

*Line 2.*—Dividends are net, originating in the industry, i.e., the net difference between the dividends received and the dividends paid as obtained from special analyses furnished by the Income Tax Division of the Treasury Department. In 1932, the figure is an estimate based on the change in dividend disbursements of a sample of corporations in this field.

*Line 3.*—Dividends are net, originating in the industry, i.e., dividends paid minus dividends received by the reporting companies. For the first 3 years, the figures are those obtained from the Income Tax Division of the Treasury Department. For 1932, it was assumed that the 1931–32 decline was the same as the 1930–31 decline for motor trucks, and for bus transportation the data are based on a corporate sample.

*Lines 4 and 5.*—Dividend payments are net originating in the industry and are equivalent to the difference between total dividends paid and dividends received. Both items are reported for in the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, and extrapolated for 1932 on the basis of a corporate sample.

*Line 6.*—Total dividends for 1929-32 are taken from the Interstate Commerce Commission release, Selected Financial and Operating Data from Annual Reports for interstate companies and from replies to questionnaires sent to various State public service commissions for intrastate companies. Dividends received in 1929, 1930, and 1931 are estimated on the assumption that they are in the same ratio to dividend receipts of "all other public utility companies" as total cash dividends of pipe line companies are to total cash dividends of "all other public utility companies." Data for this latter group are given for 1929, 1930, and 1931 in a special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, and contain the pipe line companies. The 1932 net dividends originating are assumed to be in the same ratio to total dividends as in 1931.

*Line 8.*—The interest presented represents that paid on long-term debt less the interest received from holdings of Government securities. The funded debt totals for the first 3 years are from the Treasury Department (raised to cover corporations not submitting balance sheets), whereas the 1932 figure has been esti-

mated on the basis of a sample of corporations in the field. This sample also furnishes the rates of interest, which, applied to the funded debt, yield estimates of interest payments. The ratio of interest originating in the group to total interest paid in 1931 applied to total interest paid in 1932 gives the interest originating in the industry for 1932.

*Line 9.*—Interest represents the total paid on long-term debt less interest received from holdings of Government bonds. The volume of long-term debt is equivalent to the figures reported in a special break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, adjusted up to the total on the basis of the ratio of the number of income tax returns to the number of balance sheets for net income and deficit classes for the entire transportation group. The rate of interest is assumed to be 6 percent each year. The 1932 figure for bus transportation is estimated on the basis of a corporate sample and that for motor trucking is estimated as the result of the assumption that the 1931 to 1932 percentage change is the same as the 1930 to 1931 percentage change.

*Lines 10 and 11.*—Interest is net, originating in the industry, and is estimated from total interest payments and estimated interest receipts on long-term debt. Total interest on long-term debt is equal to the product of the average interest rate, derived from sample data, and the estimated total long-term debt for the industry. Figures for long-term debt are given in the special break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, and adjusted up to the total on the basis of the ratio of the number of income tax returns to the number of balance sheets for net income and deficit classes as given in Statistics of Income for the transportation and other public utility group. From the Census of Electric Railways, 1927, pages 110 and 151, total interest payments on funded debt and interest receipts are taken, net interest payments derived and their ratio to total interest payments computed. This ratio is applied to the estimates of total interest paid in 1929–32 to give net interest.

*Line 12.*—Total interest is estimated for interstate companies on the basis of the value of funded debt reported in Selected Financial and Operating Data from Annual Reports and average interest rates computed from sample data appearing in Moody's. For intrastate companies the data are totals of replies to questionnaires. Net interest originating in the industry is considered equivalent to total interest.

## TABLE 87

*Line 8.*—Corporate savings for the first 3 years are obtained from a break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income supplied by the Treasury Department. They are equivalent to net profits after taxes (adjusted for profit and loss from sale of assets) minus dividends paid. The 1932 estimate is based on the results of a sample of corporations in the industry. Business savings of individuals are assumed to be proportionately the same as for corporations and the 8 percent used in line 9, table 78, is applied to the corporate figures just described.

*Line 9.*—Corporate savings for the first 3 years are estimated as the difference between net profit after taxes after adjusting for profit and loss from sale of assets, reported in the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, and dividend payments. For 1932, it was assumed that the 1931 to 1932 and the 1930 to 1931 percentage changes are similar for motor trucking. For bus transportation the 1932 figure is based on a corporate sample. The business savings of individuals in the motor trucking industry are derived by applying to the corporate savings, the ratios of noncorporate receipts to corporate receipts following the same method as used in line 9, table 78.

*Line 10.*—Corporate savings are equivalent to net profits after taxes minus dividends. These data are given in a special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. The net-profit item is adjusted for profit and loss from the sale of real estate, stocks, bonds, and other assets. Loss from such sales in 1929 is assumed to be zero. The estimate of corporate savings for 1932 is based upon the percentage change from 1931 to 1932 in a corporate sample.

*Line 11.*—For 1929, 1930, and 1931 the derivation of corporate savings is the same as in electric railways. The estimate for 1932 is assumed to be equal to the 1931 figure.

*Line 12.*—Corporate savings are equal to the difference between net income and total dividends paid. Net income is taken from the same sources as total dividends (see comment on line 6, table 85).

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## A. STEAM RAILWAYS, PULLMAN AND EXPRESS

### TABLES 89, 93, AND 97

*Lines 1 to 5.*—Railway total employment is given for 1929, 1930, and 1931 in statement 16–A of Statistics of Railways. For 1932, the estimate is based on class I railway data in Monthly Wage Statistics. The break-down into principal salaried workers, other salaried workers, and wage workers is based on the classification of class I data as given in Monthly Wage Statistics. The Pullman Co. and express companies data are given for 1929, 1930, 1931, and 1932 in Preliminary Abstract of Statistics of Common Carriers, summaries 3 and 4. Averages are taken of figures reported for beginning and end of year.

### TABLES 90, 94, AND 98

*Lines 1–2.*—For 1929 and 1930, compensation for class I railways is given in statement 16 of Statistics of Railways. Compensation for class I switching and terminal companies is taken from Monthly Wage Statistics. Compensation for class II and III railways and switching and terminal companies is based on ratio of the number of class II and III employees to the number of class I employees. For 1931, compensation for class I railways is given in statment 16 of Statistics of Railways; all other compensation figures have been obtained directly from Mr. Casey of the Interstate Commerce Commission. The 1932 total compensation figure for railways is based on class I data reported in Monthly Wage Statistics. The break-down into principal salaried workers, other salaried workers, and wage workers is based on class I data in Monthly Wage Statistics. Express companies data are given in Preliminary Abstract of Statistics of Common Carriers, 1929, 1930, 1931, and 1932. Pullman Co. data have been obtained from Mr. Casey of the Interstate Commerce Commission.

### TABLE 94

*Line 3.*—Commissions paid by express companies are reported in Preliminary Abstract of Statistics of Common Carriers, 1929, 1930, 1931, and 1932.

### TABLES 90, 94, AND 98

*Line 4 (line 6 in table 94).*—Same sources as for lines 1–2 are used here. Gratuities to waiters are estimated at 15 percent in 1929 and 1930 and 10 percent in 1931 and 1932 of the gross revenue from dining and buffet-car service and hotel and restaurant service for class I railways and switching and terminal companies. The class I figures are assumed to be totals. For 1929, 1930, and 1931 they are given in Statistics of Railways, in statement 35 for class I railways and in statement 35–A for class I switching and terminal companies. The 1932 figure for class I railways is given in summary I of Preliminary Abstract of Statistics of Common Carriers. Gratuities to Pullman Co. porters are derived from questionnaires and represent the total of average tips per berth and chair passenger derived from questionnaires applied to the number of such passengers reported in Preliminary Abstract of Statistics of Common Carriers.

*Line 5 (line 7 in table 94).*—Other labor income consists of (*a*) compensation for injuries and (*b*) relief and pensions. The small item of operating expense of relief departments of railways is included here also.

(*a*) The employees' share of compensation for injuries is taken at 67.28 percent of the total, which is the percentage given by C. A. Luty, of the Railway Express Agency. For 1929, 1930, and 1931 the total compensation for injuries to which this ratio is applied is based upon compensation for injuries by class I railways reported in statement 37 of Statistics of Railways. Figures for class I railways are stepped up on the basis of the ratio of operating revenues for all railways and switching and terminal companies to operating revenues for class I railways. The operating revenues for 1929 for class II railways are given on page 170, for class III on page 180, and for switching and terminal companies on pages 192–3 of Statistics of Railways. For 1930 and 1931 they are given in statements 55A, 55B, and 55C, respectively. For 1932, the compensation for injuries for class I railways is taken from summary 1 of Preliminary Abstract of Statistics of Common Carriers, and stepped up by the ratio of total operating revenue to class I operating revenue in 1931. The total for express companies is given in summary 3 of Preliminary Abstract of Statistics of Common Carriers for 1929, 1930, 1931, and 1932.

(*b*) Pensions and relief department expenses are given for class I railways for 1929, 1930, and 1931 in statement 37 of Statistics of Railways and for 1932

in summary 1 of Preliminary Abstract of Statistics of Common Carriers. They are stepped up to include all railways on the basis of the ratio of total compensation to class I compensation. Pensions for express companies are given in Preliminary Abstract of Statistics of Common Carriers for 1929, 1930, 1931, and 1932.

*Line 7 (line 9 in table 94, and line 6 in table 98).*—Dividends are net, originating in the industry, i.e., difference between total dividend appropriations and dividend income. Figures for these two items for all railways for 1929, 1930, and 1931 are given in statement 34 of Statistics of Railways. The 1932 figures are estimated on the basis of class I dividend appropriations and income reported in summary 1 of Preliminary Abstract of Statistics of Common Carriers. Pullman and express company data are given in summaries 3 and 4 of Preliminary Abstract of Statistics of Common Carriers, for 1929, 1930, and 1932.

*Line 8 (line 10 in table 94 and line 7 in table 98).*—Interest is net long-term interest originating in the industry. Short-term interest is considered a business expense item and not included here. For 1929, 1930, and 1931 interest paid on funded debt and interest received on funded debt by railways are given in statement 34 of Statistics of Railways. For 1932 they are based on the figures for class I railways reported in summary 1 of Preliminary Abstract of Statistics of Common Carriers. Pullman and express company data are given in summaries 3 and 4 of Preliminary Abstract of Common Carriers.

*Line 11 (line 13 in table 94 and line 10 in table 98).*—Corporate savings are estimated as the difference between net income and total dividends paid. Total dividends paid are computed in connection with line 7 above (and line 9 in table 94 and line 6 in table 98). Net income is given for railways for 1929, 1930, and 1931 in statement 34 of Statistics of Railways and estimated for 1932 on the basis of class 1 railways data for net operating income, other income, and total income deductions as reported in summary 1 of Preliminary Abstract of Statistics of Common Carriers for 1929, 1930, 1931, and 1932.

## B. WATER TRANSPORTATION

This industry was at first divided into six groups, to show operations by foreign carriers, coastwise carriers, inland-waterway carriers, lake carriers, harbor craft and stevedores and longshoremen. Later the foreign and coastwise groups were consolidated for expediency in making the estimates. Data on harbor craft and harbor operations are so sparse and capricious that it was not possible to make any estimates which would be substantiated in fact. Therefore, estimates were made for four groups and the harbor group was omitted and will be included in the miscellaneous group.

One of the major problems involved concerns the element of duplication. Many water transportation companies engage in traffic operations in more than one of the above-defined groups. An effort has been made to place these companies in that group in which their activities are dominant. Many companies employ their own stevedores, while others contract this type of work to concerns engaged only in loading and unloading the cargo. For this reason stevedoring and longshoring are considered as one separate and distinct group and eliminated from the other groups.

Assistance in gathering the statistics was rendered by the shipping section, Transportation Division of the Bureau of Foreign and Domestic Commerce; the United States Shipping Board; the Bureau of Navigation of the Department of Commerce; and the Interstate Commerce Commission. The Interstate Commerce Commission Annual Report on Water Carriers consists mostly of inland, Great Lakes, and coastwise carriers, about 120 companies reporting annually. In a specially prepared analysis these reports are broken down into number and pay of workers in specific occupations and in different shipping operations, i.e., on vessels, on shore, in offices, etc. Thus it is possible to determine the relationship between the number of salaried workers and wage earners on vessels and on shore and also the relationship between salaries and wages of the same.

In tables 81-88 the estimates for Great Lakes, inland, and foreign and coastwise shipping and stevedoring are combined. Harbor craft are not included, nor do the totals include the data for operations of vessels under 1,000 gross tons capacity engaged in foreign and coastwise water transportation. These groups are necessarily omitted here due to an absolute lack of data.

(a) *Foreign and coastwise water carriers.*—The Bureau of Marine Development of the United States Shipping Board has compiled data on the total number of employees, pay rolls, and subsistence costs for all foreign and coastwise vessels of 1,000 gross tons and over, which include most of the vessels engaged in this group.

No data are available on vessels under this size, and therefore the estimates are exclusive of this group.

This same Bureau has also furnished an itemized list of various costs and expenses of a sample of companies in this group. From this sample, it is found that in 1932 for foreign and coastwise shipping, the shore pay rolls equal 38.55 percent of the vessel pay rolls, whereas for all shipping, this ratio is 110.48 percent. The ratio for all shipping, extrapolated through 1929 on the basis of the Interstate Commerce Commission special analysis, furnishes a trend from which the foreign and coastwise ratio can be projected through 1929. By applying the resulting ratios to the vessel pay rolls, the shore pay rolls are determined and the sum of the two equals the total pay rolls on vessels and on shore of all foreign and coastwise carriers.

As regards employment, the Interstate Commerce Commission report shows that for all water transportation the number of shore employees in 1932 is equivalent to 61.53 percent of the vessel employees. Assuming that the above relationship between vessel and shore employees' wages holds in this case, in 1932 the number of shore employees is found to equal 21.47 percent of the vessel employees of foreign and coastwise companies. For earlier years the trend of the Interstate Commerce Commission ratios of shore to vessel employees is used. As a result of this procedure, the total number of employees on vessels and on shore is obtained.

### TABLE 101

*Line 1.*—To compute the breakdown between salaried workers and wage earners both on vessels and on shore, the Interstate Commerce Commission special analysis is used, i.e., the ratios of salaried workers to all employees on vessels and on shore are applied to the total number of vessel and shore employees.

*Line 2.*—The same method as in line 1, using ratio of wage earners to total.

*Line 3.*—This represents the total of vessel employees as given by the United States Shipping Board plus the number of shore employees estimated by the above-described method.

### TABLE 102

The ratios of salaries and of wages to total pay rolls for both vessel and shore personnel are obtained from the Interstate Commerce Commission special analysis and applied to the total pay rolls for each group.

To salaries and wages is added subsistence of vessel employees. The figure for total subsistence is provided by the United States Shipping Board and broken down into payments to salaried workers and wage earners on the basis of the ratio of the numbers of same obtaining in the Interstate Commerce Commission Special Analysis. Included also with wages are gratuities, data for which are likewise furnished by the United States Shipping Board.

(b) *Inland waterway carriers.*—For this group, the only available data consist of the Interstate Commerce Commission Annual Reports and "Inland Waterway Freight Transportation Lines in the United States", United States Department of Commerce, Domestic Commerce Series No. 32, which includes a list of all inland carriers as of 1930 and their capacity. About 40 companies listed in the Interstate Commerce Commission Annual Reports are included in this census of the industry.

The general method followed here is to determine what proportion of the total capacity of all inland carriers is represented by the 40 companies mentioned above and then to raise the compensation and employees of these 40 companies to include all the inland carriers. For this purpose it is necessary to determine a common measurement of capacity, since capacity has been reported in gross registered tons, net tons, cases, and gallons.

Propelling equipment all being in gross and net tons separately, the net tons are used. Barges are presented in net tons, gallons, and cases. No one seems to know what is meant by "cases." We have, therefore, ascertained the cubic foot capacity of the boats reported on this basis; and by using another sample, obtained the number of cubic feet in a ton and in this manner converted case capacity to ton capacity. Data obtained from the United States Shipping Board supply a basis for converting gallon capacity to ton capacity.

The next step is to raise the compensation and employment figures for the 40-company sample to include all inland carriers.

It happens that for all inland water carriers the net tonnage of propelling equipment is around 200,000 and the net tonnage of barge equipment over 500,000. In the sample the amounts are about 54,000 and 31,000, respectively. There is no crew expense attached to the operation of barges, but only to propelling equip-

ment. Therefore, we cannot merely add both tonnages in the sample for comparison with both tonnages for all the carriers.

While barges do not add to crew costs, at least not to an appreciable extent, nevertheless the more business a carrier handles the more will be its office expense, not absolutely but relatively. If a company runs a 1,000-ton vessel and then adds a barge of the same capacity its crew expenses will not be increased but its shore personnel, disregarding longshoremen, will be added to. We have arbitrarily assumed that in such a situation the administrative, office, traffic, etc., expense would increase by a figure approximating 33⅓ percent. It seems fairly reasonable that if the carrier's business was doubled, the shore employee costs would tend to increase by about one third. The ratio should not be any greater because most barge cargo is of a large scale nature. If it should be less, then the excess compensates for a possibly necessary addition to the propelling equipment crew for pulling a barge.

The Interstate Commerce Commission Annual Reports show that of all employee pay rolls, an average of 49.72 percent goes to those on vessels and 50.28 percent to those on land, exclusive of stevedores. One third of this shore employee pay roll will equal 16.76 percent. Therefore, for the estimates of salaries and wages the tonnage of barge equipment is given a weight of 16.76 and the tonnage of propelling equipment a weight of 100 in combining the two. The ratio of the total tonnage to the sample tonnage is the basis for stepping up the salaries and wages in the sample to include salaries and wages of all inland waterway employees.

### TABLE 103

*Lines 1 and 2.*—From the Interstate Commerce Commission special analysis the ratios of salaried workers and of wage earners to all employees are obtained and applied to the estimate of all employees in the industry.

*Line 3.*—The total number of employees of which lines 1 and 2 are the component parts is the estimate arrived at by raising the total number of employees in the sample companies to include all companies. The method used is similar to that outlined for the estimate of salaries and wages. Here, however, barge equipment is given a weight of 12.04 which is one third of 36.12 percent, the proportion of all employees on shore.

### TABLE 104

The ratios of salaries and of wages to total pay rolls, as determined from the Interstate Commerce Commission special analysis, are applied to the estimated total pay rolls. To salaries and wages is added subsistence cost of vessel employees which is based on the subsistence cost reported by Great Lakes carriers. The average subsistence per officer and per crew member, applied to the number of inland waterway officers and crew, yields subsistence to salaried workers and wage earners, respectively.

(c) *Lake carriers.*—A report submitted by the Lake Carriers Association presents complete income and employment data for those employed on the vessels of its members. The Association submitted a list of nonmembers to whom questionnaires were sent and from about one third of whom complete reports were received. By using a shipping directory, it is possible to determine the tonnage capacity of all vessels of nonmembers and the tonnage capacity of vessels of those nonmembers who submitted reports. On the basis of tonnage capacity it is possible to raise the figures of the reporting firms to include figures for those who did not report. These estimates added to the report of the Lake Carriers Association give an estimate for the vessel operations of all lake carriers.

### TABLE 105

*Line 1.*—Having obtained the data for vessel operations as described above, it is then necessary to make estimates for shore personnel and income. The Interstate Commerce Commission special analysis distributions of employees and compensation for each of the 4 years, as between vessels and shore, are applied to obtain the totals for those not on vessels. This analysis permits a further break-down of shore employees and their pay into salaried and wage classes. Therefore, this line represents the number of salaried workers on vessels as determined from the Lake Carriers Association report and the questionnaires to nonmembers, plus the salaried workers on shore, as estimated by applying the distributions in the Interstate Commerce Commission special analysis.

*Line 2.*—For determining the number of wage earners, the same method as used in line 1 is followed.

TABLE 106

. The same method is followed as in the preceding table, using the Lake Carriers Association report, questionnaires to nonmembers, and the Interstate Commerce Commission special analysis on salary and wage data. The Lake Carriers Association report and the questionnaires to nonmembers include data on subsistence cost of officers and crews on vessels, which item, adjusted to include subsistence of all nonmembers, is added to the estimate of salaries and wages.

### C. MOTOR TRANSPORTATION

Motor transportation includes common carrier busses, sight-seeing busses, and motor trucks, the labor income for each of which is estimated separately and totaled. The property income includes a small amount of dividends and interest paid by taxicab companies which could not be segregated. This is true also of corporate savings.

Greatest difficulty was encountered in estimating income in the motor truck industry. A general description of the methods used is given here in addition to specific notes which follow.

In Facts and Figures of the Automobile Industry, published by the National Automobile Chamber of Commerce, the total truck registration in the United States is given for each year. In 1930 the Bureau of Public Roads of the Department of Agriculture made a highway survey in 11 Western States determining the type of traffic on the highways. The proportion of for-hire trucks to all trucks was obtained and this percentage when applied to total truck registrations gives an estimate of the total number of for-hire trucks in the country for the 4 years 1929-32, in rounded numbers, of 480,000, 495,000, 493,000, and 459,000, successively. In the American Transportation Problem, published by the Brookings Institution, it is estimated that the number of for-hire trucks in the United States in 1930 was about one half million, while the American Trucking Association estimates for the past 3 years vary around the same figure, so that the above estimates seem to be fairly accurate.

Warner Tufts, a close student of the motor transportation industry, has developed some formulas on mileage, costs, and pay rolls for trucks of varying sizes. These formulas are based on actual data which he has been able to compile from a number of different sources and are representative of the year 1930. In order to apply Mr. Tufts' formulas it is necessary to estimate the number of for-hire trucks of different sizes. For this purpose the Facts and Figures of the Automobile Industry lists of the annual production of trucks in eight size classifications are used. The production for the 7 years from 1926 to 1932, inclusive, has been totaled for each class and distribution of the aggregate into these classes was taken to represent the size distribution of for-hire trucks. This distribution, applied to the estimated total number of for-hire trucks for each year, yields an estimate of the number of for-hire trucks in each of the eight size classes.

Mr. Tufts' formulas provide a basis for converting capacity to gross weight per truck and finding the average annual mileage per truck, total cost per mile, and the average annual pay roll per truck. Thus for each of the classes of truck capacities as determined above the gross weight and the annual mileage per truck are determined. The cost per mile times the average annual mileage in each size group resulted in an estimate of cost of operation per truck in each size group. This figure multiplied by the number of trucks in each group in 1930 gives the total cost for each group and when aggregated give an estimate of total cost of for-hire motor truck operation in the United States in 1930. These cost estimates include all costs of running the concerns from gasoline and wage expenses to provisions for depreciation of equipment.

To arrive at estimates of gross receipts in the industry it is necessary to revert to the Treasury Department's corporate statistics in the cartage and storage industry as described above. This is accomplished by applying the ratio of profit to expenses in 1930 in the corporate group to the estimated total costs to determine the estimated profit for the industry. This when added to the total costs yields an estimate of total receipts. For years other than 1930 total receipts are based on the change that takes place in the corporate group receipts for those years.

The formulas provided by Warner Tufts also permit the finding of the total pay roll per truck of different size, and having estimates of the number of trucks in each size class, it is possible to make an estimate of the total pay roll in the industry in 1930. The ratio of pay rolls to total receipts in that year is applied to total receipts in the other 3 years to get total labor cost estimates, which vary

from 687 million dollars in 1929 to 502 million dollars in 1932. Total estimated receipts for the 4 years, 1929–32, are 1,707 million dollars, 1,557 million dollars, and 1,246 million dollars, respectively. The ratio of pay rolls to receipts was 40.26 percent, which compares favorably with the 39.27 percent figure in Motor Truck Freight Transportation, United States Department of Commerce, Domestic Commerce Series 66, a survey of costs of for-hire motor truck operations.

For employment and employee income there are very little data available and some of the assumptions are based merely on the opinions of the expert authorities who could be located and questioned. Various sources estimate that in 1930 there were approximately 90 percent as many drivers, including owner-drivers, as trucks in the industry. This ratio is estimated to be 95 in 1929, and 85 in both 1931 and 1932. At the present time, December 1933, the Bureau of Labor Statistics of the Department of Labor is conducting a survey of this industry and from a preliminary sample it is found that currently there are approximately 82 drivers per hundred trucks in the industry.

## TABLE 107

*Line 1.*—The number of employees in sight-seeing bus companies is estimated by assuming that for every bus in operation there are 1.1 times as many drivers, conductors, lecturers, etc., as there are busses; that there are one quarter as many general garage men; and that there are two fifths as many repair men. The number of administrative and office personnel is based upon the ratio of number of such to number of busses operated, as given for common-carrier busses. The data on personnel are from the National Association of Motor Bus Operators. The number of busses in operation are reported in Bus Facts for 1933. They are averages for the year. The employees of sight-seeing busses work only 6 months of the year. We therefore convert the estimated number to full time equivalents by dividing by 2.

*Line 2.*—The number of employees in common-carrier bus companies is from estimates by Warner Tufts, of the National Association of Motor Bus Operators.

*Line 3.*—This is a sum of the estimated number of officers, other salaried workers, drivers, and helpers on trucks. The individual estimates have been made as follows: The number of corporation officers is estimated on the basis of two such persons for each of the corporations included in this group by the Treasury Department. The number of other salaried workers, as described above, is obtained by arriving at a total sum paid to such workers and assuming their salary is equivalent to that estimated for drivers. It is assumed that for every 100 trucks in the industry there were 95 drivers in 1929, 90 in 1930, and 85 in both 1931 and 1932, with 1 other wage earner for each 10 trucks throughout the period.

*Line 5.*—For explanation see notes on line 5, table 77.

## TABLE 108

*Line 1.*—Salaries and wages are estimated as the product of the number of full time equivalents and the average salary and wage for the various occupational groups as reported for common-carrier busses by Warner Tufts, of the National Association of Motor Bus Operators.

*Line 2.*—For 1929 and 1930, the estimates are based on labor costs per bus for city and intercity busses and the number of each type in operation. These figures are from Mr. Tufts, who also estimates that for 1931 and 1932 the average wage fell 4 percent from 1930 to 1931 and 10 percent from 1930 to 1932. With the estimated average wage and the number of employees in these years the total wage and salary bill is calculated.

*Line 3.*—As explained in the general note above, total pay roll is estimated on the basis of its ratio to gross receipts.

*Line 5.*—This item includes pensions and compensation for injuries. The estimate for pensions has been prepared for 1931 by M. W. Latimer, of the Industrial Relations Counsellors, Inc., and estimated for 1929 and 1930 by us on the assumption that the ratio of pensions paid by motor transportation companies to pensions paid by all public utilities other than steam railroads is the same for all 3 years. Pensions paid in 1932 are assumed to be the same as in 1931. The item of compensation for injuries is based on sample State data for motor trucking only. Several States report the sum of the compensation payments in this industry, and the ratio of the total number of truck drivers in the United States, as reported in the 1930 Census of Occupations, to the number in these reporting States is applied to the compensation payments in these

States in this industry.   The resulting estimate is stepped up to include the entire
motor transportation industry on the basis of total pay rolls.

## VII. COMMUNICATIONS

### TABLE 110

*Line 1.*—The number of employees in 1927 is given on page 3 of the 1927
Census of Electrical Industries, Telephones, and in 1932, in a preliminary release
for that year.   The Interstate Commerce Commission in its Selected Financial
and Operating Data for telephone companies for 1927 and later years also shows
the number of employees.   The 1927 and 1932 ratios of the Census figures to the
Interstate Commerce Commission figures are connected by a straight line inter-
polation and applied to the Interstate Commerce Commission figures for the
intervening years to obtain the number of employees in those years.

*Line 2.*—The total number of telegraph employees is a summation of employees
in land and ocean cable systems and wireless systems.   The number of em-
ployees, exclusive of those in wireless systems, is found for 1927 on page 11 of the
1927 Census of Electrical Industries, Telegraphs.   On page 26 of the same source
is given the number employed in wireless systems in 1927.   A preliminary release
of the 1932 Census of Electrical Industries, Telegraphs, indicates the number of
employees in land and ocean cable systems for 1932.   On the basis of the 1927
ratio of wireless workers to other than wireless workers, a 1932 figure for wireless
employees is estimated.   Annual reports of the Interstate Commerce Commission
giving Selected Financial and Operating Data for telegraph companies show
figures for the number of telegraph employees for the years 1927-32.   The ratios
of the Census data to the Interstate Commerce Commission data in 1927 and 1932
are connected by a straight line yielding ratios for the intervening years.   These
ratios are applied to the Interstate Commerce Commission totals for these
years to yield the final estimate of number employed.

### TABLE 111

*Line 1.*—Page 10 of the 1927 Census of Electrical Industries, Telephones, and
the 1932 preliminary release show the operating revenue of the industry for
those years.   Figures for the intervening years are estimated by applying to the
operating revenue of the Bell System as given in Bell Telephone Securities for
respective years, the straight line interpolated ratios of the Census data to those
for the Bell System.

*Line 2.*—The Census of Electrical Industries, Telegraphs, for 1927 and the
preliminary release for 1932 give the operating revenue for land and ocean cable
systems for these years.   The 1927 Census also shows operating revenue for wire-
less systems.   The 1932 wireless figure is estimated on the basis of the 1927-32
change in the land and ocean cable totals.   A summation of revenue for land and
ocean cable systems and wireless systems gives the total for the telegraph industry.
The yearly Interstate Commerce Commission publication of Selected Financial
and Operating Data for telegraph companies gives operating revenues for the
years 1927-32.   The ratio of the Census data to the Interstate Commerce Com-
mission data is the same for 1927 as for 1932, and on this basis the Interstate
Commerce Commission data are stepped up for 1929, 1930, and 1931.

*Line 4.*—The number of messages for 1927 appears in the 1927 Census of Elec-
trical Industries, Telephones, on page 10 and for 1932 in the preliminary release
of the census for that year.   The number has been interpolated for the intervening
years by using the 1927 and 1932 ratios of Bell System calls to all calls and con-
necting the two ratios on a straight line basis.   Data for the Bell System are
contained in the annual publication, Bell Telephone Securities.

*Line 5.*—The number of wireless messages plus the number of land and ocean
cable messages represents the total number of telegraph messages.   The ratio of
wireless messages to land and ocean cable messages is assumed to be the same in
1932 as in 1927.   The data for these years are given in Census of Electrical
Industries, Telegraphs, for 1927, pages 6 and 25 and the preliminary release for
1932.   The ratio in 1927 and 1932 of these Census figures to those of the Interstate
Commerce Commission as found in Selected Financial and Operating Data of
telegraph companies for respective years is connected by a straight line.   The
resulting ratios are applied to the Interstate Commerce Commission figures
for 1929, 1930, and 1931.

<center>TABLE 112</center>

*Line 1.*—Total salaries and wages for 1927 as given in the 1927 Census of Electrical Industries, Telephones, have been adjusted by subtracting the Census figure for the Bell System and adding salaries and wages of the Bell System as obtained from the American Telephone & Telegraph Co.  By using the Bell System salaries and wages as an index for the later years, the 1927 final figure of total salaries and wages is extrapolated through 1932.

*Line 2.*—Annual reports of the American Telephone & Telegraph Co. list the amounts paid by the telephone industry in pensions, sickness and accident disability benefits, and death benefits, all of which have been summated to obtain other labor income.

*Line 4.*—Dividends are net, originating in the industry.  From total cash dividends paid are subtracted dividends received, the balance being the net figure.  The ratio of operating revenue of the Bell System to that of the entire industry is applied to total dividends of the Bell System to obtain total dividends paid by the industry.  Total dividends received are given for 1922 on page 49 of the Census of Electrical Industries, Telephones, for that year.  This 1922 figure is extrapolated through 1932 by using the index of the nonoperating revenue of the Bell System as given annually in Bell Telephone Securities.

*Line 5.*—Interest is net, originating in the industry.  From total interest paid on long-term debt is subtracted interest received on long-term debt.  Methods and sources used in making the estimates are the same as those used in line 4.

*Line 8.*—Net income minus total dividends paid represents corporate savings.  The 1922 ratio of the net income of the Bell System to that of the entire industry is applied to the net income of the Bell System for 1929 and subsequent years.  The 1922 Census of Electrical Industries, Telephones, gives the net income for the industry in that year.  Bell System statistics appear in Bell Telephone Securities for respective years.

<center>TABLE 113</center>

*Line 1.*—On pages 11 and 26, respectively, of the 1927 Census of Electrical Industries, Telegraphs, are shown salaries and wages for land and ocean cable systems and for wireless systems.  To obtain the 1932 figure for wireless systems, the 1927 ratio of salaries and wages of wireless systems to those of other than wireless systems is applied to the 1932 figures for land and ocean cable telegraphs, as it appears in the 1932 preliminary release of the Census of Electrical Industries, Telegraphs.  A total of the figures for each system represents salaries and wages for the entire industry.  The 1929, 1930, and 1931 figures represent an arithmetic average of two estimates.  For the first estimate 1927 and 1932 ratios of total salaries and wages to salaries and wages of the Western Union Telegraph Co. are connected by a straight line, and the resulting ratios applied to the intervening years.  Western Union Telegraph Co. data are from J. W. Rahde of that company and represent monthly compensation multiplied by 12.

The second estimate is based on average compensation.  The method followed in estimating total salaries and wages is employed in estimating average compensation.  The average, multiplied by the number of employees, yields total salaries and wages.

*Line 2.*—Pensions and disability benefits paid by the Western Union Telegraph Co., as reported by J. W. Rahde, are raised to include all pensions and benefits, on the basis of the ratio of the number of employees in the Western Union to the total number in the industry.

*Line 4.*—Dividends are net, originating in the industry, constituting the difference between total cash dividends paid and dividends received.  The 1927 Census of Electrical Industries, Telegraphs, pages 6 and 10, respectively, gives total dividends paid and dividends received in 1927.  Annual reports of the Interstate Commerce Commission on Selected Financial and Operating Data of telegraph companies show total dividends paid 1929–32.  The ratio of the Census figure for dividends paid to the Interstate Commerce Commission figure for same in 1927 is applied to the Interstate Commerce Commission data for the later years.  The 1927 ratio of net dividends to total dividends is then applied to the estimates of total dividends.

*Line 5.*—Interest is net, originating in the industry.  The rate of interest paid on long-term debt of the Western Union Telegraph Co. is applied to the long-term debt for all companies.  Basic data are given in the Interstate Commerce Commission Annual Reports of Selected Financial and Operating Data on telegraph companies.  Interest received is considered negligible since it is practically all on short-term loans.

*Line 8.*—Net income minus total dividends paid represents corporate savings. The 1927 ratio of net income as given in the Census of Electrical Industries, Telegraphs, to net income as given in the Interstate Commerce Commission reports on Selected Financial and Operating Data of telegraph companies is applied to Interstate Commerce Commission figures for later years.

## TABLE 114

*Line 2.*—In addition to pensions and benefits this item includes compensation for injuries, basic data for which are from replies to questionnaires sent to State governments. The 1927 ratio of the total number of telephones to the number in the sample States reporting compensation is applied to the 1929 figure for compensation in the sample States, to obtain a total compensation figure for 1929. Total compensation for the later years is arrived at by using an index of compensation payments in the sample States for 1929-32.

## VIII. WHOLESALE AND RETAIL TRADE

### TABLE 117

*Line 1.*—The number of employees has been estimated in two parts, principal salaried officers and other employees. For 1929, the number of principal salaried employees is the figure for "executives" given on page 100 of the Census of Wholesale Distribution, Summary for the United States. Extrapolation for 1930 and 1931 is based upon the estimated number of active corporations engaged in wholesale trade. The number of active wholesale corporations is derived from the number of corporations filing income tax returns as reported in table 16 (1929-30) and table 14 (1931), Statistics of Income. The mixed groups of trade corporations, e.g., "Wholesale and retail" and "All other" are divided in the same ratio as the allocable wholesale and retail gross sales. The 1932 figure for principal employees is estimated on the assumption that the ratio of principal to all other employees in 1931 applies in 1932.

For 1929, the number of other employees is taken as the difference between the total number and the number of executives, reported on page 100 of the Census of Wholesale Distribution, Summary for the United States. Estimates for 1930, 1931, and 1932 are based upon the United States Bureau of Labor Statistics index of employment in wholesale trade as reported in Trend of Employment.

*Line 2.*—For 1929, the number of entrepreneurs is equal to the number of proprietors and firm members, given on page 100 of the Census of Wholesale Distribution, Summary for the United States. The estimates for 1930, 1931, and 1932 are those of the Cost Analysis Section of the Bureau of Foreign and Domestic Commerce.

*Line 4.*—The total number of employees is a sum of the estimated number of principal officers and of other employees. The number of principal salaried employees for 1929, 1930, and 1931 is estimated on the basis of the number of active retail corporations. The number of corporations is derived from table 16 (1929-30) and table 14 (1931), Statistics of Income. It is assumed, on the basis of a sample, that there are two officers to a corporation. The 1932 estimate is made by applying to the 1932 figure for other employees the ratio of principal to other employees for 1931.

The number of other employees in retail trade in 1929 is taken as the difference between the total number of employees (full and part time) as given in table 1A, page 47, of Census of Retail Distribution, part I, and the estimated number of principal employees. The number of part time employees is adjusted to the equivalent number of full time employees on the basis of the ratio of full time to part time salary. The estimates for 1930, 1931, and 1932 are based upon the United States Bureau of Labor Statistics index of employment in retail trade as given in Trend of Employment.

*Line 5.*—The number of entrepreneurs is given for 1929 in table 1A, page 47, of Census of Retail Distribution, part I, and estimated for 1930, 1931, and 1932 by the Cost Analysis Section of the Bureau of Foreign and Domestic Commerce.

### TABLE 118

*Line 1.*—Total wholesale sales for 1929 are given in Table 1, page 69, of the Census of Wholesale Distribution, Summary for the United States. The estimates for 1930, 1931, and 1932 are based upon the figures for sales by wholesalers only, provided by the Cost Analysis Section of the Bureau of Foreign and Domestic Commerce.

*Line 2.*—The figures for net sales in 1929 are given in table 1A, page 47, of the Census of Retail Distribution, part I, and for 1930, 1931, and 1932 estimated by the Cost Analysis Section of the Bureau of Foreign and Domestic Commerce.

*Line 4.*—Total sales are adjusted for price changes by means of the general wholesale price index of the United States Bureau of Labor Statistics, published in the Wholesale Price Bulletin.

*Line 5.*—Total retail sales are adjusted by a weighted average of the indexes of retail prices of food, clothing, and house furnishings (see the United States Bureau of Labor Statistics cost of living indexes as given in the Monthly Labor Review for February 1933).

## TABLE 119

*Line 1.*—Total salaries and wages are a sum of principal salaries and other salaries and wages.  Principal salaries for 1929 are given in table 10, page 100, of the Census of Wholesale Distribution, Summary for the United States.  Figures for the compensation of officers of wholesale trade corporations derived from a special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, are used as an index to extrapolate the salaries of principal employees from 1929 through 1931.  The 1932 figure for principal salaries is estimated on the assumption that the ratio in that year, of principal salaries to other salaries is the same as in 1931.

Other salaries and wages for 1929 are given in table 10, page 100, of the Census of Wholesale Distribution, Summary for the United States.  Estimates for 1930, 1931, and 1932 are based upon the United States Bureau of Labor Statistics index of pay rolls in wholesale trade, reported in Trend of Employment.

*Line 2.*—Other labor income consists of (*a*) pensions, and (*b*) compensation for injuries.

(*a*) Pensions for 1929, 1930, and 1931 are derived from estimates supplied by Murray W. Latimer, of Industrial Relations Counsellors, Inc.  For 1931 he has figures for pensions paid in wholesale trade and for 1929, 1930, and 1931 figures for pensions in a group of miscellaneous industries.  The ratio in 1929 and 1930 of pensions in wholesale trade to pensions in all miscellaneous industries is assumed to be the same as the ratio for 1931.  Pensions for 1932 are estimated at the same figure as for 1931.

(*b*) Compensation for injuries to employees in 1929 is based upon the ratio of compensation payments to wage payments for sample States applied to estimated total wage payments for the country.  The sample data are the results of a questionnaire sent out by the Bureau of Foreign and Domestic Commerce, Department of Commerce.  On the basis of sample data, indexes of compensation payments are computed for total trade, wholesale trade, and retail trade and applied to the 1929 estimates of compensation for all trade, wholesale trade, and retail trade.  The wholesale and retail trade estimates are then brought in line with the figures for all trade.

*Line 4.*—Dividends paid are net, originating in the industry, i.e., the difference between total dividend appropriations and dividend income for 1929, 1930, and 1931.  The data for total dividend payments and dividend receipts in the wholesale trade group are derived from a special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income.  The 1932 figure for net dividends paid is based upon the total dividend payments to a sample group of corporations, and the assumption that the ratio of net dividends to total dividends is the same as that for 1931.

*Line 5.*—Interest is net long-term interest originating in the industry.  The only interest income received considered here is that on Government securities held by wholesale trading corporations.  For 1929, 1930, and 1931 total interest paid is computed by applying the average interest rate, derived from data for sample companies in the field to the estimated total long-term debt.  A break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, is available for these years and shows the value of long-term debt reported, which figure is stepped up on the basis of the ratio of the number of income tax returns to the number of balance sheets reported separately for those corporations having net income and those having no net income.  The 1932 figure for net interest is based upon the total interest payments of a sample group of corporations and the assumption that the ratio of net interest to total interest is the same as for 1931.

*Line 7.*—Withdrawals by individual entrepreneurs are estimated for 1929, 1930, and 1931 by applying to the estimated sales by individuals the ratio of dividends plus compensation of officers to corporate sales as derived from the break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income.

The volume of noncorporate sales is estimated on the assumption that the ratio of corporate to total sales, given in the Census of Wholesale Distribution for 1929 remains the same in the later years. The 1932 figure for withdrawals is estimated by using the product of the average withdrawal and the number of entrepreneurs as an index. The average withdrawal is based on the 1929 census figure and the Bureau of Labor Statistics indexes of employment and pay rolls.

*Line 9.*—Corporate savings for 1929, 1930, and 1931 are derived from the break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. They are equivalent to the net profit after taxes, adjusted for the gains and losses from the sale of real estate, stocks, bonds, and other assets, minus total dividends paid. In 1929 it is assumed the losses from the sale of assets are zero. The 1932 corporate loss figure is estimated on the basis of the preliminary Statistics of Income figure for all trade for statutory net income, stepped up to the total, plus interest received on Government holdings minus Federal taxes and net profit from the sale of assets (assumed to be equal to the 1931 figure). The difference between the resulting figure and net dividends paid is equal to corporate savings for 1932 for all trade. The division into wholesale and retail trade is made on the basis of preliminary estimates derived by means of a corporate sample.

*Line 10.*—Business savings of individuals are estimated as the difference between net income and withdrawals. Net income for 1929, 1930, and 1931 is estimated by applying to the estimated noncorporate sales the ratio of total long-term interest paid plus corporate statutory net income (adjusted for gains and losses from sale of assets) plus compensation of officers to corporate sales as derived from the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. The estimate of loss of individual entrepreneurs for 1932 is made by applying to the 1931 figure the percentage change in corporate loss from 1931 to 1932.

### TABLE 120

*Line 1.*—Salaries and wages are estimated as the sum of principal salaries and of other salaries and wages. Principal salaries in 1929, 1930, and 1931 are assumed to be equivalent to compensation of officers as derived from the break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. In 1932 it is assumed that the ratio of principal salaries to other salaries is the same as in 1931.

Other salaries and wages in 1929 are estimated as the difference between total salaries reported in table 1A, page 47, of the Census of Retail Distribution, part I, and the estimated principal salaries. The figures for 1930, 1931, and 1932 are averages of two estimates. The first is based upon the Bureau of Labor Statistics index of pay rolls, applied to the 1929 pay roll figure. The second estimate is based upon the percentage "wage cost", as estimated by the Cost Analysis Section of the Bureau of Foreign and Domestic Commerce. These percentages are adjusted to exclude the principal salaries and applied to the estimated sales figures to give the second estimate of salaries and wages paid.

*Line 2.*—Other labor income consists of (a) pensions and (b) compensation for injuries. For the derivation of these estimates see above, Wholesale Trade, table 119, line 2.

*Line 4.*—Dividends paid are net originating in the industry, i.e., the difference between total dividends paid and dividends received. For 1929, 1930, and 1931 the data for total dividend payments and dividend receipts in the retail trade group are derived from a special breakdown of table 14 (1929–30) and table 13 (1931), Statistics of Income. The 1932 figure for net dividends paid is based upon the total dividend payments of a sample group of corporations, and the assumption that the ratio of net to total dividends is the same as that for 1931.

*Line 5.*—Interest is net long-term interest originating in the industry. The only interest on long-term securities considered as income received is that on holdings of Government securities. For 1929, 1930, and 1931 total interest on long-term debt is estimated by applying to the estimated total par value an average interest rate derived from a group of sample corporations in the field. The estimated total long-term debt is computed by stepping up the figure derived from a breakdown of table 19 (1929–30) and table 15 (1931), Statistics of Income, on the basis of the ratio of the number of income-tax returns to the number of balance sheets tabulated, reported separately for corporations having net income and those having no net income. The 1932 figure for net interest is based upon the total interest payments of a sample group of corporations and the assumption that the ratio of net interest to total is the same as in 1931.

*Line 7.*—Withdrawals of individual entrepreneurs are estimated as the product of the average annual withdrawal per proprietor in retail trade and the estimated number of entrepreneurs. The 1929 withdrawal is estimated from the total as given in table 2A, page 51, of the Census of Retail Distribution, part I, and extrapolated on the basis of the Bureau of Labor Statistics indexes of employment and pay rolls.

*Line 9.*—For 1929, 1930, and 1931, corporate savings are derived from the breakdown of table 14 (1929–30) and table 13 (1931), Statistics of Income. They are equivalent to net profit after taxes, adjusted for gains or losses from the sale of real estate, stocks, bonds, or other assets, minus total dividends paid. It is assumed that the losses on the sale of assets in 1929 are zero. The 1932 figure for corporate loss is estimated in the same manner as the wholesale figure, for which see the explanation of table 119, line 9.

*Line 10.*—Business savings of individuals are estimated as the difference between their net income and withdrawals. Net income of individuals in retail trade is based upon estimated profit ratios and the estimated noncorporate sales. The profit ratios are equal to the sum of the ratio of net profits to sales and the ratio of the salary equivalent of proprietors to sales, both of which have been supplied by the Cost Analysis Section of the Bureau of Foreign and Domestic Commerce. The net sales of noncorporate establishments are estimated for 1929, 1930, and 1931 as the difference between total sales, as computed by the Cost Analysis Section, and corporate sales, given for 1929 in table 12A, page 89, Census of Retail Distribution, part I, and extrapolated for 1930 and 1931 on the basis of the corporate sales derived from the breakdown of table 14 (1929–30) and table 13 (1931), Statistics of Income. The 1932 estimate for noncorporate sales is based upon the assumption that the ratio to the total retail sales is the same as in 1931.

## IX. FINANCE

### A. BANKING

The estimates of the number of employees and of their salaries refer to all national and State banks, loan and trust companies, stock and mutual savings banks, joint-stock land banks, Federal Reserve banks, Federal land banks, and Federal intermediate credit banks.

Estimates for all other items are given in the table for commercial banks only, i.e., exclusive of Federal Reserve banks, Federal land banks, and Federal intermediate credit banks.

### TABLE 124

*Line 1.*—The number of employees in commercial banks other than joint-stock land banks in 1929 is estimated by dividing into the total salary bill the estimated average annual compensation. The average compensation figure used in 1929 is that for Federal Reserve banks, data for which are found on page 155 of the 1929 Federal Reserve Board Annual Report. For the later years it is extrapolated by means of the arithmetic average of the per capita payment to salaried workers in steam railways and the per capita payment to all employees in wholesale trade. The figures for joint-stock land banks are from Russell Engberg of the Federal Farm Credit Administration.

*Line 2.*—Banks included here are the Federal Reserve banks, Federal land banks, and Federal intermediate credit banks. Figures for Federal Reserve banks are taken from the annual reports of the Federal Reserve Board, 1930, page 13, and 1932, page 33, and are exclusive of employees engaged on work for the Reconstruction Finance Corporation. Data for the other banks are from Mr. Engberg.

### TABLE 125

*Line 1.*—This item is a total of salaries and wages in commercial banks, savings banks, and joint-stock land banks. Salaries and wages for commercial banks are estimated on the basis of their ratio to loans and investments as reported for Federal Reserve member banks for 1929, 1930, and 1931 in the Federal Reserve Bulletin of July 1931, pages 424, 428, and June 1932, pages 394, 399. This ratio is applied to the total loans and investments as given in the Annual Report of the Comptroller of the Currency, 1929, pages 112–119; 1930, pages 94–101; 1931, pages 129–137; 1932, pages 77–85. The 1932 ratio for member banks is assumed to be the same as for 1931. For savings banks, salaries and wages are estimated on the basis of the ratio of salaries to total deposits for mutual savings banks in 10 States, applied to the total deposits for all savings banks. The sample data for the 10 States are taken from various State banking reports on file at the Department of Commerce. Total deposits are published in the

Annual Report of the Comptroller of the Currency, 1929, pages 680–687; 1930, pages 724–731; 1931, pages 986–993; 1932, pages 530–537. Total salaries paid by joint-stock land banks are reported by Mr. Engberg. They include a small amount of directors' fees.

*Line 2.*—This item includes the salaries and wages of Federal Reserve banks given in the Annual Report of the Federal Reserve Board; 1929, page 155; 1930, page 162; 1931, page 156; and 1932, page 88; and the salaries and wages of Federal land banks and Federal intermediate-credit banks as reported by Mr. Engberg. The latter figures also include a small amount of directors' fees.

*Line 4.*—Other labor income in banking consists of pensions only. M. W. Latimer, of the Industrial Relations Counsellors, Inc., has estimated the pensions paid in all finance in 1929, 1930, and 1931. For 1931 Mr. Latimer has provided an estimate of pensions for banks separately and on the basis of the ratio of bank pensions to total finance pensions, bank pensions are estimated for 1929 and 1930. The 1932 pensions are assumed to be the same as those for 1931.

### TABLE 126

*Line 2.*—Since commercial banks, savings banks, and joint-stock land banks comprise the major part of the banking industry, and the item for pensions is not allocable to the various kinds of banks, it is considered as being paid entirely by the above-mentioned group.

*Line 4.*—Dividends are totals and for 1929, 1930, and 1931 for commercial banks, are from a break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. Total dividends paid in 1932 are estimated by applying to the 1931 dividend figure the percentage change in total dividends obtained as follows: Total dividends are computed by applying to the value of capital stock paid in, as given in the Annual Report of the Comptroller of the Currency, 1929, pages 112–119; 1930, pages 94–101; 1931, pages 129–137; 1932, pages 77–85, the estimated dividend rate, derived for 1931 from member bank data reported for 1931 in the Federal Reserve Bulletin, June 1932, pages 394–399, and extrapolated for 1932 on the basis of the bank dividend rate, compiled by Moody's and published in the Survey of Current Business.

*Line 6.*—Net income less total cash dividends paid shows corporate savings. Both items are taken from special tabulations of income tax data made by the Treasury Department for 1929, 1930, and 1931. The final net income figure is the result of adding to net profit after taxes, the loss from sale of real estate, stocks, and bonds, and subtracting profit from the sale of same. Computation for stock savings banks, corporate savings, figures for which are included in the income tax data, are made on the basis of the ratio of resources of stock savings banks to total resources of national, State, loan and trust, stock savings, and joint-stock land banks, applied to the estimated corporate savings of this group. This is done on the assumption that corporate savings of savings banks are an accrual to the credit of depositors and therefore a transfer item. Estimates for 1932 are based on the increase in the surplus and undivided profits accounts of national, State, loan and trust, and joint-stock land banks as reported by the Comptroller of the Currency.

#### B. INSURANCE

### TABLE 129

*Line 1.*—Figures for 1929, 1930, and 1931 are from the Association of Life Insurance Presidents. Their estimates for 1932 are not available; it is assumed that the number of office employees remains the same as for 1931.

*Lines 2 and 3.*—The number is derived by dividing the total salary bill by the average salary, the latter based on the replies to questionnaires sent to sample companies.

*Line 5.*—The basic figure for 1930 is taken from the Census of Occupations, 1930, chapter V, table 2, page 564, and extrapolated by the series of licensed agents reported by the Association of Life Insurance Presidents.

### TABLE 130

*Lines 1, 2, and 3.*—Data are taken from the Life Insurance Yearbook, published by the Spectator Co. for respective years.

*Line 5.*—Total salaries paid are estimated separately for fire and marine, and casualty and all other insurance companies on the basis of replies to questionnaires sent to sample companies regarding total salaries. The sample total is stepped up on the basis of the ratio of all premiums received to premiums re-

ceived by the sample companies. Data on premiums are reported in the Fire and Marine Insurance Yearbook and the Casualty and Miscellaneous Insurance Yearbook for respective years.

*Line 6.*—Agents' compensation is estimated on the basis of the ratio of agents' compensation to total premiums written by companies reporting to the National Board of Fire Underwriters. This ratio is applied to the total premiums received. The data are given in the insurance yearbooks.

## TABLE 131

*Line 5.*—Dividends paid are totals paid to stockholders only, and are given in the Life Insurance Yearbook for the respective years.

## TABLE 132

*Line 4.*—Dividends are net, originating in the industry, and are equivalent to the difference between dividends paid and dividends received. For 1929, 1930, and 1931 the data are taken from a break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. The 1932 estimate is made with total dividends as reported in the Fire and Marine Insurance Yearbook and in the Casualty and Miscellaneous Insurance Yearbook as an index.

*Line 5.*—Interest is net, originating in the industry, and equal to the difference between total interest on long-term debt paid and interest received. Interest paid in 1929–31 is based on the amount of funded debt reported in a break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, and an average interest rate for insurance company bonds. Interest receipts in 1929–31, for insurance companies other than life are taken as the total interest receipts given in the break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, on the assumption that the short-term interest receipts are negligible. The 1932 figure for net interest is assumed to be the same as the one for 1931.

*Line 8.*—Corporate savings are equal to net profits after taxes, adjusted for profit and loss from the sale of real estate, stocks, bonds, and other assets, less dividends paid. These data are given for 1929–31 in the break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income. Loss on the sale of assets is considered zero in 1929. The amount of corporate savings in 1932 is assumed to be equal to the 1931 figure.

### C. REAL ESTATE

## TABLE 136

*Line 1.*—The number of salaried people in 1930 is taken from the industrial classification of the Census of Occupations, 1930, chapter V, table 2, pages 564–566, and is equal to the total of the proprietory, professional, and clerical groups under real estate, and those under domestic service who may be classified as engaged in care and maintenance of buildings. Extrapolations for the other years are made with the use of the number of salaried workers in manufacturing as index.

*Line 2.*—The source of the number of wage workers in 1930 is the same as for line 1, and the total is the sum of those in the skilled and unskilled groups of the real estate industrial branch and those in the same groups under domestic service which may be classified as engaged in care and maintenance of buildings. An adjustment for unemployment is made on the basis of the ratio of numbers employed to total gainfully occupied for the domestic service group. Extrapolations for later years are made with the combined index of employment derived from the employment estimates explained in appendix F.

## TABLE 137

*Line 1.*—Total salaries are estimated as the product of the average number and the average annual salary. The average annual salary used is that derived from the manufacturing data.

*Line 2.*—Total wages are estimated as the product of the average number and the average annual wage. The average annual wage is a figure for janitors based on data obtained by questionnaires from public and private employment agencies throughout the country.

*Line 4.*—Dividends are net, originating in the industry, and for 1929, 1930, and 1931 are estimated similarly to the dividends paid by insurance companies other than life. The 1932 figure is based on the percentage change from 1931 to 1932 in the net manufacturing dividends paid.

*Line 5.*—Interest on corporate debt is a net figure also, and for 1929-31 both total interest payments and interest receipts as given in the break-down of table 14 (1929-30) and table 13 (1931), Statistics of Income, are used to arrive at the net figure. It is assumed that the short-term interest in both items is negligible. The 1932 estimate is made with the net interest item for the manufacturing industry as an index.

*Line 6.*—Interest payments on mortgages on individually owned property are based on the estimated total mortgage debt as given in The Internal Debts of the United States, publication of the Twentieth Century Fund, Inc., from which the corporate long-term debt for the real estate field, as given in a break-down of table 19 (1929-30) and table 15 (1931), Statistics of Income, is subtracted. To the remainder, the average interest rate for various industrial fields is applied to yield the total interest payments on individual urban mortgage debt. Those industrial fields are chosen in which the interest rate on corporate debt in 1929 approached 6 percent. The interest paid on mortgages of farm homes is estimated by the Department of Agriculture.

*Line 8.*—In 1929 the net rentals paid to individuals are estimated as the sum of (1) total agricultural rents minus rents received by agricultural corporations and after an allowance of. 25 percent to cover expenses; (2) mining, construction, retail and wholesale trade rent items, as reported in the various censuses; and (3) estimated rent paid on urban leased homes as derived from the Bulletin on Families in the Census of Population, 1930. The gross items in groups (2) and (3) are reduced by the rent receipts of corporations, as given in Statistics of Income, and adjusted to give a net figure for rent received by individuals on the assumption that the ratio of net to gross is two thirds. Extrapolation for the later years is made with the rents and royalties received by individuals (adjusted on the basis of the ratio of dividends reported by individuals to net dividends paid by corporations) and reported in table 7 of Statistics of Income as index.

*Line 10.*—Corporate savings for 1929, 1930, and 1931 are estimated similarly to corporate savings of insurance companies other than life. The 1932 estimate is made by extrapolating the net profit before dividends on the basis of the preliminary data on net income for the finance group, contained in the advance Statistics of Income data for 1932, and subtracting from the resulting figure the total dividends as estimated above.

*Line 11.*—The estimate of business savings of individuals for 1929, 1930, and 1931 is made by applying to the gross rentals of individuals the ratio of profits to gross rental for corporations. The estimate for 1932 is based on the percentage change from 1931 to 1932 in the corporate savings figure. The gross rental receipts of individuals in 1929, 1930, and 1931 are estimated on the basis of the net rents and royalties (for method of estimation see line 8, above) to gross rentals. The ratio of net rental to gross rental is assumed to be two thirds in 1929 and extrapolated by the ratios given for 1929, 1930, 1931, and 1932 for office buildings in the Accounting Experience and Exchange Report (annual) of the Association of Building Operators and Managers.

## X. GOVERNMENT

The derivation of estimates of number and compensation of employees in Federal, State and county, and city service is described in the notes to tables 146, 147, 149, 150, 152, and 153.

### TABLE 140

*Line 4.*—The number of employees in public education includes both the teaching and the administrative staff. For public elementary and high schools the estimates are based upon figures for a large sample of city school systems, which report to the National Education Association every other school year the number of employees of each type and their median salaries. It is estimated by the National Education Association that these sample cities make up 80 percent of all city white schools. The totals for these sample cities are stepped up to include all city school systems. The raising to totals for all elementary and high schools is carried through on the basis of the ratio in the 1930 Survey of Education of the total number of teaching positions to the number in the city schools. The resulting estimates are for the school years 1928/29, 1930/31, and 1932/33. Interpolations for 1929/30 and 1931/32 are made along a straight line. For the year 1930/31 the National Education Association obtained data from the colored schools also and estimates for the other years are made with the number of employees in white schools as index. These two figures are totaled and estimates

for the calendar years obtained by weighting the given year three and the following year one and averaging. To the resulting total an estimate of the number of school bus drivers is added. (They are not included in the National Education Association surveys.) From the United States Office of Education the number of bus drivers in 1930 is obtained. It is estimated for the other years on the basis of the number of school busses in operation as reported in Bus Transportation Census, published by McGraw Hill.

For higher public education, i.e., junior colleges, normal schools, teachers' colleges, and universities, data for total expenses are obtained from the United States Office of Education, Biennial Survey of Education 1928–30 for the school years 1927/28 and 1929/30, and by special tabulation for 1931/32. The intervening years are interpolated. Salaries and wages and the ratios of salaries to total expense for private colleges in 1929–30 have been obtained by special tabulation. These ratios applied to the total expense item for all public schools above high school give total wages and salaries paid, for four groups of employees (1) teaching staff, (2) research staff, (3) plant, and (4) administrative and control. The number of teaching staff is reported by the United States Office of Education in the Biennial Survey and is interpolated for other years. The number on the research staff is obtained by dividing the total salaries paid to the group by the average teacher's salary. The total of plant and administration salaries is divided by the average salary obtained by questionnaire from seven colleges and universities to give the estimated number of employees in the branches. School years are averaged to give calendar years by giving the school year ending in the calendar year double weight and the following year, single.

## TABLE 141

*Line 4.*—The sources and methods used here are similar to those used in estimating the number in public education. For elementary and high schools the stepping up ratio is derived from the 1930 Survey of Education figures for total salaries (teaching staff) and for salaries in city school systems. The compensation of bus drivers is obtained by applying to the estimated number the average annual wage estimated in the section on Motor Transportation. The derivation of salaries in the public schools above high schools is explained in detail in notes to table 140, line 4.

*Line 5.*—Pensions paid by the Federal Government are reported for fiscal years by the Administrator of Veterans' Affairs. Estimates for calendar years are obtained by averaging the fiscal years.

*Line 6.*—Pensions paid by States are given for fiscal years in the Financial Statistics of States for 1929, 1930, 1931 and derived from reports for 33 States for 1932. Estimates for calendar years are derived by averaging two fiscal years. The 1932 calendar year figure is assumed to be equal to the fiscal year amount. County pension payments are estimated by applying to the State pensions the ratio of county to State total salary figures.

*Line 7.*—Pensions by city governments include the pensions paid in the public school system. For cities of 30,000 or more the figures are reported in Financial Statistics of Cities for 1929, 1930, and 1931 (preliminary release) and estimated for 1932 on the basis of data for 70 cities already available. These figures are stepped up to include all cities and schools on the basis of the ratio of total salary payments of cities to the salary payments of cities of 30,000 or more.

## TABLE 143

*Line 1.*—Total interest paid by the Federal Government on long-term debt is given for fiscal years in the Report of the Secretary of the Treasury on the State of the Finances. To this is added the interest paid depositors in the Postal Savings System, as given in the Annual Report of the Comptroller of the Currency for fiscal years 1929, 1930, 1931, and 1932 and in a letter from the Director of Postal Savings for 1933. Averages are derived for calendar years.

*Line 2.*—Interest payments by State governments are reported for fiscal years in Financial Statistics of States for 1929, 1930, and 1931. The figures for the fiscal year ended June 30, 1932, are based upon interest payment by 33 States only, and the calendar year estimate is assumed to be the same as the fiscal year.

*Line 3.*—Interest payments by county governments are based upon the ratio of county interest payments to State and city interest payments in 1929. For 1929 the National Industrial Conference Board has an estimate of total interest paid by States and local governments in its bulletin dated February 20, 1933. From this total, State and city interest payments are subtracted, the ratio of

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county to State and city interest computed and applied to the total of State and city interest payments in later years to obtain county interest payments in these years.

*Line 4.*—From Financial Statistics of Cities for 1929, 1930, and 1931, interest payments for cities with population of 30,000 or more are given. The 1932 estimates are based upon figures for 70 cities already available. On the basis of the per capita interest payments for these cities of 30,000 or more and the estimated total urban population, total interest payments by city government are computed.

## TABLE 146

*Line 1.*—The number in the Army military personnel on June 30 of each year was reported to the Bureau of Foreign and Domestic Commerce by the personnel officer of the War Department.

*Line 2.*—The number in the Navy military personnel includes the Navy, Marine Corps, and Coast Guard. The number in the Marine Corps and Coast Guard was reported by the personnel officers of the respective departments by telephone. The number in the Navy proper, is obtained by averaging the average numbers for the fiscal years as reported by Rear Admiral C. J. Peoples, Paymaster General of the Navy.

*Line 3.*—The number in postal service does not include those in temporary field service. These latter are employed by individual postmasters and no report on their number is made. Their compensation, however, is included with the total salaries paid. The estimates here given are a total as of June 30, of the number listed by the Civil Service Commission and those excluded from the list. These figures are obtained from the Annual Report of the Civil Service Commission.

*Line 4.*—The number in executive civil service is also for June 30, and is obtained from the Civil Service Commission's reports for 1929, 1930, 1931, and 1932. To these figures are added the numbers in the legislative and judicial branches, the estimates for which for 1929, 1930, and 1931 are from the Congressional Record of March 17, 1932. The estimates for the legislative and judicial branches on June 30, 1932, are derived from the average numbers for the fiscal year ended June 30, 1932, as given in a tabulation made December 6, 1932, by the Bureau of the Budget, and those for the fiscal year ended June 30, 1933, as contained in the President's message transmitting the Budget, January 3, 1934.

## TABLE 147

*Line 1.*—The compensation of the Army is a total of cash payments and the allowance for subsistence. Figures are originally given for fiscal years and averaged. The cash payments for the fiscal years 1929, 1930, 1931, and 1932 were provided in a letter from Maj. Gen. F. W. Coleman, Chief of Finance, War Department, and extrapolated for the fiscal year 1933 on the basis of the change in the pay of the Army from 1932 to 1933 as reported in the Combined Statement of the Receipts and Expenditures, etc., of the United States for 1932 and by letter from the Treasury Department for 1933. The figures for value of subsistence for the fiscal years are taken directly from the Combined Statement of the Receipts and Expenditures, etc., and the totals of pay and subsistence for fiscal years are averaged to give totals for calendar years.

*Line 2.*—The pay of the Navy includes that of the Marine Corps and the Coast Guard. The figures for the Marine Corps and Coast Guard cash pay are taken from the Combined Statement of Receipts and Expenditures, etc., of the United States and averaged to obtain estimates for calendar years. The figures for cash pay including rental and subsistence allowance for the Navy for fiscal years 1929, 1930, 1931, 1932, and 1933 were provided in a letter from C. J. Peoples, Paymaster General of the Navy. In Rear Admiral Peoples' letter figures for the value of subsistence of the Navy are also given for the fiscal years 1929-33. The value of subsistence of the Marine Corps is based upon the per capita figures for the Army and Navy and the estimated number in the Marine Corps.

*Line 3.*—The total pay of the Postal Service for the fiscal years 1929, 1930, 1931, and 1932 is a summation of the personal service items given in the special table Audited Expenditures—Service of the Post Office Department in Combined Statement of Receipts and Expenditures, etc., of the United States. Averages of fiscal years are taken to obtain estimates for the calendar years 1929, 1930, and 1931. The estimate of total pay for 1932 is made by applying to the number of employees on June 30, 1932, the average annual salary derived for 1931 from total pay and number of employees.

*Line 4.*—Total civil service pay is a total for executive, legislative, and judicial branches and includes the pay of the Public Health Service and Coast and Geodetic Survey. The total pay of the judicial and legislative branches for the fiscal years 1929, 1930, and 1931 is taken from the Congressional Record of March 17, 1932. For the fiscal year 1932 the items are taken from a tabulation made by the Bureau of the Budget on December 6, 1932. For all other civil service the total salaries for the fiscal year 1932 (given in this same table) including those of temporary employees, are considered basic; and extrapolated back to 1929 on the basis of a list of salary payments recorded as such in the Combined Statement of Receipts and Expenditures, etc., of the United States for the respective years. Fiscal year figures are averaged and estimates for calendar years 1929, 1930, and 1931 derived. From the 1931 data on total pay and number of employees in civil service an average annual figure is derived and multiplied by the number of employees on June 30, 1932, to yield an estimate of total salaries in civil service in 1932.

## TABLE 149

*Line 1.*—The number of employees in State government includes the full time equivalent of part time employees. On the basis of data given in the National Municipal Review supplement, Extent, Costs, and Significance of Public Employment in the United States, by W. E. Mosher and S. Polah, the estimated full time average annual salary in 1926 is computed and estimated for 1929, 1930, 1931, and 1932 using as index the average full time annual salary for city employees (see notes to table 152). The number of employees is computed by dividing the total wage and salary bill (the derivation of which is given below (see table 150)) by this average full time salary.

*Line 2.*—The number of employees in county government is the average of two estimates. The first is derived from the total wage and salary bill estimation of which is given below (see notes to table 150), and the average full time salary for State employees. The second is based upon the total compensation and the average full time salary of city employees.

## TABLE 150

*Line 1.*—Total salaries paid by State governments are computed first for fiscal years ending June 30, the period for which 32 of the 48 States file reports. From basic data given in the National Municipal Review supplement, Extent, Costs and Significance of Public Employment in the United States, by W. E. Mosher and S. Polah, the ratio of total salaries including full and part time work to the operating budget, exclusive of education, for each State in 1926 is computed. This ratio is assumed to remain constant for the entire period studied. From Financial Statistics of States for 1929, 1930, and 1931 the figures for operating budgets, excluding education, are taken. Total salaries are computed for each State and summated. Financial Statistics of States for 1932 are available for only 33 States. Estimates of the total operating budget for the United States in 1932 are made on the basis of this sample, and total salaries computed. Figures for calendar years are averages of the two overlapping fiscal years. The estimate for the 1932 calendar year is assumed to be equivalent to the figure for the fiscal year ending June 30, 1932.

*Line 2.*—Total salaries of county government are based upon State data also. In the 1932 Census of Debt and Taxation, for which data for 27 States are available at present, figures for both county and State expenditures are given. The ratio of county to State expenditures is computed from these data and applied to the total operating budgets of all States for the calendar years (as derived for line 1 above) to give the estimated operating costs of county government for calendar years. From data published in the supplement to the National Municipal Review, Extent, Costs, and Significance of Public Employment in the United States, by W. E. Mosher and S. Polah, the 1926 ratio of total salaries (full and part time) to the operating budget is derived and assumed to be constant for 1929, 1930, 1931, and 1932. This ratio, applied to the estimated total operating cost, yields an estimate of total salaries for the 4 years.

## TABLE 152

*Line 1.*—The number of policemen is estimated on the basis of data for sample cities of various population groups (see tabulation of data in appendix). The sample data were obtained by questionnaire, and have been stepped up on the basis of the ratio of the total population for each group to the population of the sample cities in the group.

*Line 2.*—Same method as for line 1.

*Line 3.*—The number of full time civil employees in 1929 is estimated in the same way as the number of policemen and firemen, on the basis of sample data. To the resulting number, however, is added the full time equivalent of the part time employees. The ratio of part time years to full time years in 1929 is assumed to be the same as in 1926 for which year William S. Mosher and Sophie Polah in the National Municipal Review 1932, Supplement volume XXI, no. 1, Extent, Costs, and Significance of Public Employment in the United States computed the ratio. This ratio is applied to the number of full time employees in 1929 and the total number of employees (including the full time equivalent of part time employees) is derived. On the basis of this number and the total wage and salary figure (for the derivation of which see the notes for table 153) the average full time salary for 1929 is computed and extrapolated with the average salary for police and firemen as index. The total number of employees in 1930, 1931, and 1932 is estimated by dividing the total wages and salaries by the average annual full time salary.

### TABLE 153

*Lines 1, 2, and 4.*—Estimates of total salaries are totals for full and part time employment. They are based upon sample data, secured by questionnaire and stepped up on the basis of the ratio of total population to population of the sample cities. The analysis of the returned questionnaires indicates that the cities tended to report total salaries and wages paid, inclusive of compensation to temporary employees; but that in reporting the numbers they tended to exclude temporary employees.

## XI. SERVICE

### A. RECREATION AND AMUSEMENTS

### TABLE 163

*Line 1.*—Retail trade in Canada, 1930, Preliminary Summary, reports the average salary and wage in theaters other than motion picture, which figure is raised by the ratio of the average salary and wage in retail trade in the United States Census of Distribution, Retail Trade, United States Summary, to the same for Canada and divided into the total salaries and wages, as shown in table 167, line 1.

*Line 2.*—The number of salaried employees and wage earners listed in the 1929 Census of Manufactures is extrapolated by means of the index of employment in motion picture production and developing. This index, which appears in California State Unemployment Commission's Report and Recommendations, November 1932, page 168, is adjusted for changed base year.

*Line 3.*—From the Motion Picture Almanac, 1931, page 7, is derived the number of employees for 1931 which is extrapolated by an index of total employment in all branches obtained from Motion Picture Statistics, Motion Picture Section, United States Department of Commerce.

*Line 4.*—This represents the estimated total number of regular duty employees derived from National Association of Broadcasters, The Economics of Broadcasting (manuscript), 1933.

*Line 5.*—The number of superintendents and managers in bowling alleys, pool rooms and amusement parks (assuming one per establishment) as reported in Fluctuation in Employment, Ohio, has been raised to a total for the United States by the ratio of Ohio retail employees to all retail employees, basic data for which ratio are given in Census of Distribution, Retail Trade, United States Summary. To the resulting number is added the number of bookkeepers, stenographers, office clerks, salesmen, and wage earners raised to a United States total and adjusted to full time equivalent by the ratio of the average salary and wage paid to the average salary and wage paid full time employees, as derived from Census of Distribution, Retail Trade, United States Summary.

*Line 7.*—This is a total of the number of individual theater owners as estimated by Motion Picture Section, United States Department of Commerce and the number of billiard room, dance hall, pleasure resort, race track, etc., keepers; Census of Occupations, Gainful Workers by Industry extrapolated by an index of retail trade entrepreneurs, as provided by the Cost Analysis Section, Bureau of Foreign and Domestic Commerce.

TABLE 164

*Line 1.*—The estimated gross receipts of 1930, are taken from J. F. Steiner's *Americans at Play*, Recent Social Trends Monographs, 1933 extrapolated by an index of gross income of legitimate theater corporations, data for which appear in special tabulations of Statistics of Income.

*Line 2.*—This item equals gross profits from operations shown in table 14 (1929–30) and table 13 (1931), Statistics of Income. Motion Picture Section, United States Department of Commerce estimated that there was no change from 1931 to 1932.

*Line 3.*—These estimates have been furnished by the Motion Picture Section, United States Department of Commerce.

*Line 4.*—Gross income is taken from Statistics of Income, special tabulations, and has been extrapolated for 1932, assuming the same percentage change from 1931 to 1932 as between 1930 and 1931.

*Line 5.*—Salaries and wages paid as shown in table 171 have been raised by the ratio of receipts to salaries and wages in amusements, as reported in Retail Trade in Canada, 1930, and adjusted for the United States by the comparative ratios of salaries and wages to receipts from commodity sales, derived from Census of Distribution, Retail Trade, United States Summary, 1930, to the same for Canada.

TABLE 165

*Line 7.*—Withdrawals of entrepreneurs are the product of the estimated number and their average salary. The average salary is that derived from data on the compensation of officers given in the break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, and their number is the result of an estimate of two to each theater corporation and one to each other amusement corporation. The 1930–31 percentage change in total withdrawals is applied to the 1931 figure for the estimate of 1932 total withdrawals.

*Line 10.*—Business savings of individual entrepreneurs are estimated as the difference between their net income and withdrawals. Net income is based on the ratio of statutory net income, adjusted for net profit from sale of assets, plus the compensation of officers plus total long-term interest paid to gross income of corporations applied to noncorporate volume of business, estimated as the difference between the total (see table 164) and the corporate figures supplied by the Income Tax Bureau. The figure for 1932 is estimated on the basis of the 1930–31 percentage change applied to the 1931 figure.

TABLE 167

*Line 1.*—The ratio of salaries and wages to receipts in theaters other than motion picture, Retail Trade in Canada, 1930, Preliminary Summary, adjusted by the comparative ratios of salaries and wages to receipts in retail trade in Canada and in the United States, Census of Distribution, Retail Trade, United States Summary, is applied to the estimated gross receipts in legitimate and vaudeville theaters in the United States (Recent Social Trends, vol. II, p. 949). This yields an estimate for 1929. The ratio of this estimate to salaries and wages paid in motion picture theaters, table 169, line 1, extrapolated by an index of the ratio of compensation of officers in legitimate theaters to the same for motion picture theaters (taken from break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income) is applied to the estimated salaries and wages in motion-picture theaters, table 169, line 1, to yield an estimate for the other years.

*Line 2.*—Compensation for injuries is estimated by applying the ratio of such compensation to salaries and wages in service industries (adjusted for amusements by the New York State ratio) as determined by a special survey, to the salaries and wages, line 1.

*Line 4.*—Table 14 (1929–30) and table 13 (1931), Statistics of Income, show cash dividends paid and dividends received. The difference equals net dividends paid, with 1932 extrapolated on the basis of a corporate sample.

*Line 5.*—The volume of bonded debt and mortgages for all recreation and amusement shown in a break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, was raised to total with ratio of returns reporting balance sheets (with net and with no net income) to total returns (with net and with no net income) and multiplied by the average interest rate paid determined from a corporate sample, less interest received from Federal, State, and municipal bonds, Statistics of Income, table 14, with 1932 resulting from the extrapolation of the above items. The distribution among the subgroups is based on the distribution of gross income as given in table 16 (1929–30) and table 14 (1931), Statistics of Income.

*Line 8.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, shows compiled net profit after taxes, from which were deducted net gain from sale of assets and cash dividends paid for 1929, 1930, and 1931. Estimates for 1932 are based on the preliminary Statistics of Income figure for all service for statutory net income, stepped up to the total, plus interest received on Government holdings minus Federal taxes and net profit from the sale of assets (assumed to be equal to the 1931 figure). The difference between the resulting figure and net dividends paid is equal to corporate savings for 1932 for all service. The distribution among the various subgroups is made on the basis of preliminary estimates derived by applying to the 1931 figure the 1930–31 percentage change.

### TABLE 168

*Line 1.*—The Census of Manufactures shows total motion picture production salaries and wages. These were extrapolated by using motion picture production and developing pay roll index, California State Unemployment Commission, Report and Recommendations, November 1932, page 168, adjusted for changed base year.

*Line 2.*—Compensation for injuries was estimated by applying the ratio of such compensation to salaries and wages in all manufactures, determined in a special survey, to the total line 1.

*Line 4.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, shows cash dividends paid and dividends received. The difference equals net dividends paid, with 1932 extrapolated on basis of a corporate sample.

*Line 5.*—The sources and methods used are the same as those outlined above for table 167, line 5.

*Line 8.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, shows compiled net profit after taxes. From this was deducted net profit from sale of assets and cash dividends paid. Estimates for 1932 are made similarly to those for legitimate theaters.

### TABLE 169

*Line 1.*—Number of employees, table 163, line 3, was multiplied by average salary and wage in "theatres", Fluctuation in Employment, Ohio.

*Line 2.*—Compensation for injuries was estimated by applying the ratio of such compensation to salaries and wages in service industries (adjusted for amusements by the New York State ratio) as determined by a special survey, to the salaries and wages, line 1.

*Line 4.*—From a break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, cash dividends received were deducted from cash dividends paid with 1932 extrapolated on the basis of a corporate sample.

*Line 5.*—The sources and methods used are the same as those outlined above for table 167, line 5.

*Line 8.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, presents compiled net profit after taxes from which was deducted net gain from sale of assets and cash dividends paid. The estimate for 1932 is made similarly to that for legitimate theaters.

### TABLE 170

*Line 1.*—The estimated total pay roll of individual stations plus network stations was reported by National Association of Broadcasters, The Economics of American Broadcasting (manuscript) 1933.

*Line 2.*—The ratio of compensation for injuries to salaries and wages in the communications industry, derived from a special survey, was applied to the salaries and wages, line 1 above.

*Line 4.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, shows cash dividends paid and dividends received. The difference represents net dividends paid, with 1932 extrapolated on basis of a corporate sample.

*Line 5.*—A break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, shows bonded debt and mortgages which are raised to total with ratio of returns reporting balance sheets (with net and with no net income) to total returns (with net and with no net income) and multiplied by the average interest rate paid determined from a corporate sample. From this was deducted interest received on Federal, State, and municipal bonds, with 1932 resulting from extrapolation of above items.

*Line 8.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, shows compiled net profit after taxes from which was deducted net

profit from sale of assets and cash dividends paid in 1929, 1930, and 1931. The 1932 estimate is made similarly to that for legitimate theaters.

## TABLE 171

*Line 1.*—Salaries paid superintendents and managers of bowling alleys, pool rooms, and amusement parks in Ohio, Fluctuation in Employment, Ohio, were raised to total for the United States by the ratio of commodity sales, Census of Distribution, Retail Trade, United States Summary for Ohio to the same for the United States, and adjusted by the ratio of the average wage paid in retail trade in Ohio to that in the United States. To this were added salaries paid bookkeepers, stenographers, office clerks, and salesmen and wages derived in a similar fashion from the Ohio reports.

*Line 2.*—Compensation for injuries was estimated by applying the ratio of such compensation to salaries and wages in service industries (adjusted for amusements by the New York state ratio) as determined by a special survey, to the salaries and wages, line 1.

*Line 4.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, shows cash dividends paid and dividends received. The difference represents net dividends paid, with 1932 extrapolated on basis of a corporate sample.

*Line 5.*—The sources and methods used are the same as those outlined above for table 167, line 5.

*Line 8.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, shows compiled net profit after taxes for 1929, 1930, and 1931. From this was deducted net profit from sale of assets and cash dividends paid. The 1932 estimate is made similarly to that for legitimate theaters.

### B. PROFESSIONAL SERVICE

## TABLE 174

*Line 4.*—This represents cash dividends paid less dividends received from stock of domestic corporations, both shown in a break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, with 1932 extrapolated on the basis of the percentage change from 1930 to 1931.

*Line 5.*—A break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, shows bonded debt and mortgages, which were raised to total with the ratio of returns reporting balance sheets to total returns (with net and with no net income), and multiplied by the average interest rate paid as determined in a corporate sample. From this was deducted interest received on Federal, State, and municipal bonds, with 1932 resulting from extrapolating above items.

*Line 9.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, shows compiled net profits after taxes for 1929, 1930, and 1931. From this was deducted net profit from sale of assets and cash dividends paid. The 1932 estimate is made similarly to that for legitimate theaters.

## TABLE 175

*Line 1.*—The number of clergymen, reported in the Census of Occupations, 1930, was estimated for the other years by applying the average annual increase since 1920.

*Line 2.*—The salaries paid in cash to Catholic clergymen were estimated from a survey of the dioceses raised to totals by the ratio of clergymen in the reporting dioceses to the total for the United States given in The Official Catholic Directory. For non-Catholic clergy the number of Catholic clergy was deducted from the total, line 1, and the resulting number multiplied by the average salary derived from reports from the Congregational, Christian, Protestant Episcopal, Methodist Episcopal, South and Southern Baptist churches. To this was added the sum of other cash income and income in kind of Catholic clergymen derived the same as for Catholic clergy salaries, and the rental value of parsonages furnished non-Catholic clergy as estimated as a ratio to salaries paid by the Protestant Episcopal Church.

*Line 3.*—Pensions of non-Catholic clergy were estimated by the ratio of pensions to salaries in the Congregational and Christian Churches applied to estimated non-Catholic salaries paid, line 2.

## TABLE 176

*Line 1.*—The number of teachers was reported in the Biennial Survey of Education 1928 and 1930, volume II chapter IV, pages 11–12 and special tabulations. Intervening years were interpolated along a straight line, 1932/33 decline from

College Salaries, 1932–33. Other employees are derived from the salaries and wages paid for administration and general control and for plant maintenance (table 177, line 1) divided by the average pay of a sample of seven large colleges and universities.

*Line 2.*—The number of principals in Catholic high schools and academies was taken as equivalent to one per establishment, as reported in the Directory of Catholic Colleges and Schools, extrapolated on the basis of an index of the number of principals in Catholic elementary schools shown in a special survey of the Catholic dioceses. To this was added the number of principals in non-Catholic private high schools derived by applying the ratio of principals to teachers in Catholic elementary schools to the estimated teachers in non-Catholic secondary schools. The number of teachers in Catholic high schools and academies reported in the Directory of Catholic Colleges and Schools was extrapolated by an index of the number of elementary school teachers reported in a special survey of the Catholic dioceses. Teachers in non-Catholic schools were estimated by deducting the above from the number of teachers in all private high schools reported in the Biennial Survey of Education, Bulletin 1931, No. 20, table 5, extrapolated by the same index as above. The total number of administrative and plant employees in non-Catholic schools was derived from the salaries and wages paid such employees (estimated by the ratio of such salaries and wages to the same for teachers in a sample of seven large colleges and universities applied to the teachers' salary and wage estimate for non-Catholic secondary schools) divided by the average salary and wage of administrative and plant employees in a sample of seven large colleges and universities. To the number of wage earners thus obtained was added the Catholic school estimate derived from the ratio of other employees (excluding principals) to teachers given in a special survey of Catholic dioceses, applied to the total number of Catholic teachers derived above.

*Line 3.*—The number of principals in Catholic elementary schools was derived from a special survey of Catholic dioceses and the Directory of Catholic Colleges and Schools. The number of principals in non-Catholic elementary schools was taken at a rate of one per school of this type reported in Statistics of Private Elementary Schools, United States Office of Education, Bulletin 1933, No. 2, advance pages, extrapolated by an index of the number of principals in Catholic elementary schools. The number of teachers in Catholic elementary schools was derived from the number reported in the Directory of Catholic Colleges and Schools extrapolated by an index of teachers reported in a special survey of Catholic dioceses. For non-Catholic schools, the number of teachers in this type of school reported in Statistics of Private Elementary Schools was extrapolated with the same index as for Catholic school teachers. The number of wage earners in Catholic elementary schools was derived from a ratio of such employees to teachers reported in a special survey of Catholic dioceses applied to the total estimate for teachers. The same ratio was applied to the estimate of non-Catholic school teachers to obtain the number of non-Catholic school wage earners.

*Line 4.*—The ratio of the number of instructors and other employees in a special survey of four large commercial schools to the total reported in Statistics of Private Commercial and Business Schools was applied to the data for each year in the special survey. An estimate for correspondence schools was derived by raising the salaries and wages paid in a large representative school on the basis of the ratio of its gross income to the estimated total gross income of all correspondence schools as given by the National Home Study Council. The average salary and wage paid by the sample school was divided into the total salary and wage estimate to obtain the number of employees. The number of teachers in private teachers' colleges and normal schools and in private junior colleges was reported in the Biennial Survey of Education (special tabulation) and of instructors in all schools for delinquents, mentally deficient, deaf, and blind persons were reported in United States Office of Education Circulars 70, 75, 76, and 83 (1933), in each case adjusted for private schools only with the ratio of expenditures for education and salaries in private as compared with public schools. Intervening years were interpolated and academic years converted to calendar year basis. The number of other employees was derived from the salaries paid for administration and for plant maintenance in private teachers' colleges and normal schools and in private junior colleges reported in the Biennial Survey of Education (special tabulation) and divided by the average salary and wage of other than teaching employees in a sample of seven large private colleges and universities. The number of other employees in other private schools was estimated by applying the ratio of these to instructors in teachers' colleges, etc., to the estimated number

of instructors in other schools. The intervening years were interpolated and academic years converted to calendar year basis.

## TABLE 177

*Line 1.*—A special tabulation of the Biennial Survey of Education was made to give salaries paid for administration and general control. Intervening years were interpolated. Teachers' salaries were obtained from a special tabulation of the Biennial Survey of Education. Intervening years interpolated; 1932 change from College Salaries, 1932–33. To these totals were added pensions derived from the ratio of pensions to salaries and wages in a sample of seven large colleges and universities applied to the total above.

*Line 2.*—The average cash salary paid principals in Catholic elementary schools found in a special survey of Catholic dioceses was applied to the total estimated principals in Catholic high schools and academies. To this was added the estimate for non-Catholic schools based on the number of principals and an average salary derived from the average salary of public elementary school teachers, raised by the ratio of principal to teacher average salaries in Catholic secondary schools. For teachers, the average cash salary paid teachers in Catholic elementary schools found in a special survey of Catholic dioceses was applied to the total estimated number in Catholic high schools and academies. To this was added the estimate for non-Catholic schools based on the number of teachers and the average salary of public elementary school teachers. For wage earners, the ratio of cash wages paid to teachers' cash salaries in a special survey of elementary schools in Catholic dioceses was applied to the estimated salaries paid teachers. To this was added the estimate for non-Catholic secondary schools based on the salaries and wages for administration and for plant maintenance reported in the Biennial Survey of Education, interpolated and adjusted for calendar years, less the salaries paid principals of non-Catholic secondary schools, line 1 above. For payments in kind, to the estimated number of Catholic secondary school teachers was applied the average payment in kind received by elementary teachers reported in a special survey of Catholic dioceses.

*Line 3.*—The cash salaries paid principals in Catholic elementary schools reported in a special survey of Catholic dioceses raised to the total on the basis of the number of principals was added to salaries paid in non-Catholic elementary schools based on the number of principals applied to the average teacher salary in public elementary schools raised by the ratio of principal to teacher average salaries in Catholic elementary schools reporting in a special survey. For teachers, the cash salaries paid teachers in Catholic elementary schools reported in a special survey of the Catholic dioceses raised to the total on the basis of the ratio of number of teachers in the survey to the number given in the Directory of Catholic Colleges and Schools was added to salaries paid non-Catholic elementary school teachers derived from the number reported in Statistics of Private Elementary Schools applied to the average salary of public elementary school teachers. For wage earners, the ratio of cash wages paid to teachers' salaries paid determined from a special survey of Catholic dioceses was applied to the estimated teachers' wages above. For other income, the income in kind of Catholic elementary school employees derived from a special survey of the Catholic dioceses raised as for cash salaries, above, was added to the pensions paid in all private elementary schools estimated by applying to the estimated total salaries and wages the ratio of pensions to salaries and wages in public elementary schools.

*Line 4.*—The salaries of teachers in commercial and business schools given in a sample of four large schools was raised to a total by applying the ratio of instructors in all reporting schools in Statistics of Private Commercial and Business Schools to the number in the sample schools. For other employees, the salaries and wages of other employees in a sample of four large schools raised to a total as above were added to the salaries and wages paid in a large representative correspondence school raised to a total by a ratio of the gross volume of business of all correspondence schools estimated by the National Home Study Council to that of the sample school. To this were added the salaries of teachers in private teachers' colleges and normal schools and private junior colleges reported in the Biennial Survey of Education (special tabulation), with intervening years interpolated, and the expenditures for education (almost entirely salaries) in private residential schools for blind, deaf, delinquent, etc., reported in United States Office of Education Circulars Nos. 70, 75, 76, and 83 (1933) and interpolated. Academic years were converted to calendar years. To this were added salaries and wages paid for administration and for plant maintenance, as for teachers above, added to the same for other private schools based on the approximate

ratio of such salaries and wages to salaries of teachers.    Adjustment was made
from academic to calendar years.

## TABLE 179

*Line 1.*—The American Medical Directory listed the number of physicians and
surgeons in the United States in 1929 and 1931 and the average of these 2 years
was assumed to be representative of 1930.    Due to advance employment oppor-
tunities, tending to offset the normal increase, it was assumed that the number
of physicians was the same in 1931 and 1932 as in 1930.    It was estimated by
Maurice Leven in The Income of Physicians, publication no. 24 of the Committee
on the Costs of Medical Care, that at the end of 1929 the number of private prac-
titioners equaled 78.24 percent of the total number of physicians and surgeons.
This ratio when applied to the total number for each year gave the number engaged
in private practice.
*Line 2.*—The total number of dentists for 1930 was taken from the 1930 Census
of Occupations and interpolated for 1929 on the basis of the change from the 1920
census to the 1930 census.    Here also the number was assumed constant after
1930.    In Medical Care and the American People, publication no. 28 of the
Committee on the Costs of Medical Care, it was estimated that in 1929 the private
practitioners equaled 91.03 percent of the total number of dentists and this
percentage when applied to the above estimates of the total number for each
year yielded the number of private practitioners for the years 1929 to 1932,
inclusive.
*Line 3.*—Other professions in the field include osteopaths, veterinary surgeons,
chiropractors, chiropodists, optometrists, naturopaths, etc.    The number of
osteopaths and veterinarians was taken from the Census of Occupations for 1930
and estimated for 1929 on the basis of the 1920 to 1930 change.    In Medical
Facilities in the United States, by Allon Peebles, abstract of publication no. 3
of the Committee on the Costs of Medical Care, the number of persons engaged in
these other professions are estimated for 1929.    The estimates for the 3 succeed-
ing years were based on the trend in the number of physicians, dentists, osteo-
paths, and veterinarians.
*Line 4.*—The Census of Occupations for 1930 lists the total number of trained
nurses and the estimate for 1929 was based on the change between the 1920
census and the 1930 census and the number assumed constant from 1930 to
1932, inclusive.    In Medical Care and the American People, publication no. 28
of the Committee on the Costs of Medical Care, the number of trained nurses on
private duty was estimated at 142,000 for 1929.    The ratio of this figure to the
above estimated total in the same year was applied to the estimated totals in
the other years to arrive at annual estimates of trained nurses on private duty.
*Line 5.*—This group consists of masseurs and religious healers, and the 1929
figure was taken from Medical Facilities in the United States, by Allon Peebles,
abstract of publication no. 3 by the Committee on the Costs of Medical Care.
For the later years the estimates were based on the trend in the number of
physicians, dentists, osteopaths, and veterinarians.
*Line 6.*—The Bureau of Foreign and Domestic Commerce sent questionnaires
to a sample of dentists all over the United States.    Information on the num-
ber of full time and part time employees was obtained for each year from 1929
through 1932.    The ratios of full and part time employees to the number of
dentists as obtained from the sample were applied to the number of dentists
each year.    The part time workers were converted to a full time equivalent on
the basis of their average salary compared to full time salaries.    Some pro-
fessional assistants are undoubtedly included in this number but there was no
basis for estimating their number.    No data were available for estimating the
number of persons employed by the other professional persons in this field.

## TABLE 180

*Line 1.*—The Bureau of Foreign and Domestic Commerce sent questionnaires
to a sample group of physicians and doctors all over the United States requesting
data on their gross and net income for each year from 1929 to 1932, inclusive.
The average net income thus obtained for each year was multiplied by the num-
ber engaged in private practice in each year.
*Line 2.*—The net income of dentists for the year 1929 was assumed to be the
estimated income as presented by Maurice Leven in the Income of Physicians,
publication no. 24 of the Committee on the Costs of Medical Care.    A large number
of questionnaires was sent to dentists but the sample appeared to have a marked

bias so the average income from this sample was not used, but the trend of the net income for the 4 years was used and applied to the above figure.

*Line 3.*—In Medical Facilities in the United States, by Allon Peebles, abstract of publication no. 3 of the Committee on the Costs of Medical Care, the average income in 1929 was obtained for osteopaths, chiropodists, and chiropractors. From these estimates an estimated average income for the rest of the group was made except for veterinarians. The report of the committee on education of the American Veterinary Medical Association included an estimate of the average income of practicing veterinarians in 1931. The average incomes for the professional classes in this group were estimated for other than 1929 (1931 for veterinarians) on the basis of the trend in the average incomes of physicians and dentists. The average income for the entire group for each year was multiplied by the estimated number employed in each year.

*Line 4.*—In Medical Care and the American People, publication no. 28 of the Committee on the Costs of Medical Care, the average income for trained nurses was estimated at $1,200 for the year 1929, based on various sample surveys. The trend in the average income for the succeeding years was assumed to be the same as the trend in the average income of physicians and dentists. The average income for each year was multiplied by the number employed each year.

*Line 5.*—In Medical Facilities in the United States, by Allon Peebles, abstract of publication no. 3 of the Committee on the Costs of Medical Care, the average income in 1929 for those in this group was estimated and the estimates for the succeeding years were based on the trend of incomes of physicians and dentists. The estimated average income each year was multiplied by the estimated number employed each year.

*Line 6.*—The dental survey furnished the average incomes for full time employees and for part time employees in each year and these were multiplied by the estimated number of full and part time employees.

## TABLE 181

*Line 1.*—This figure represents the average net income of physicians, which was obtained from the survey described in the preceding table.

*Line 2.*—The per capita net income of dentists was derived from the Income of Physicians for 1928, which average was assumed to be representative of 1929 and projected on the basis of the trend in the income of dentists included in our survey.

*Line 3.*—The derivation of the average net income for this group was explained in line 3 of the preceding table.

*Line 4.*—As explained in line 4 of the preceding table, the average income of trained nurses was taken from Medical Care and the American People for 1929 and projected on the basis of the trend in the average net income of physicians and dentists.

*Line 5.*—The per capita income for this group was explained in line 5 of the preceding table.

*Line 6.*—Obtained in the dental survey.

Federal, State, and municipal hospitals having been included in the data on governments, these estimates are only for private hospitals, i.e., operated by individuals, corporations, fraternities, churches, and independent hospital associations. Most of the basic material used in making the estimates was derived from various publications of the Committee on the Costs of Medical Care. A few additional studies on hospital costs and operations were also used.

On page 5 of Medical Care and the American People, publication no. 28 of the Committee on the Costs of Medical Care, the number of hospital beds for non-Government hospitals was reported for 1930. This number was extrapolated for 1929, 1931, and 1932 on the basis of the trend in the number of hospital beds in Ohio, as shown in the annual reports of the Ohio Department of Health, and in the hospitals included in the annual reports of the United Hospital Fund of New York. These latter two publications also included average operating costs per bed for the 4 years, 1929–32, and these two samples were combined to arrive at an estimated operating cost per bed in the United States for the 4 years. The estimated number of beds times the average operating cost per bed gave an estimate of total operating costs.

Ratios of pay rolls to operating costs were available from two sources, i.e., the reports of the United Hospital Fund of New York and a special study of 16 hospitals published on page 5 of the March 1932 issue of Hospital Management. From these two sources ratios of pay rolls to operating costs were estimated and when applied to the estimated total operating costs yielded estimates of total pay rolls for the 4 years.

A study of wages and personnel in 1928 in 279 hospitals was made by the United States Personnel Classification Board and published as Document 602, Seventieth Congress, second session.   The given occupations were regrouped into the following six classes: Principal officers and professional employees; other salaried workers; graduate nurses on the hospital staff; wage earners; internes, and student nurses.   The distribution of the total pay roll as between these groups was applied to the estimated total pay roll for 1929 in the United States. For the following years the distribution was varied arbitrarily, based on the characteristics found in other industries, i.e., relatively larger portions of the total pay roll going to the salaried groups as the depression continued to force total pay rolls downward.   Applying those distributions, the pay rolls to each of the 6 groups for each of the 4 years were determined.

Average wages and salaries by occupations were available from the above survey of the United States Personnel Classification Board and from two studies in Hospital Management, August 1931, page 19, and November 1931, page 51. With these three sources as a basis, arbitrary average wages and salaries were determined for each of the occupational groups for the 4 years and when divided into the total pay roll for each group, gave the estimated number employed.

## TABLE 182

*Line 1.*—See general description above for method of derivation.

*Line 2.*—The distribution of total pay rolls for 1929 was taken from the United States Personnel Classification Board's publication and applied to the estimates of total pay rolls in all non-Government hospitals in the United States as described above.   Estimates of maintenance are included here.   The results of a survey of 17 hospitals in 13 States, published on page 17 of the August 1932 issue of Hospital Management, included data on the number of employees in different occupations who received maintenance from the hospitals in addition to money compensation.   The ratios of the number in each class receiving maintenance to the total reported in each class were applied to the estimated total number employed in the United States by classes.   This gave the number of hospital employees getting maintenance along with their salary.

In connection with the domestic and personal service group, questionnaires were sent to public and private employment offices all over the country to get wages paid, including maintenance and wages paid without maintenance.   The difference between these two figures was taken as representative of costs of maintenance and as a weekly rate it was $6.30 for both 1929 and 1930; $5.71 in 1931, and $5 for 1932.   These weekly rates were placed on an annual basis by using 50 weeks, assuming the hospital employees left the hospitals an average of two weeks each year.   This procedure assumes the maintenance costs of an employee in a household to be the same as an employee in a hospital and may be high.

## TABLE 183

*Line 1.*—The 1930 Census of Occupations lists the total combined number of lawyers, judges, and justices.   The number in this group was estimated for 1929 on the basis of the change from the 1920 census to the 1930 census and assumed the same for 1931 and 1932 as for 1930.   In the statistics of occupations by industries, the 1930 Census of Occupations gave the number of lawyers in the professional service field, and the ratio of this group to the total number of lawyers, judges, and justices for 1930 was applied for each year.

The Bureau of Foreign and Domestic Commerce sent out over 6,000 questionnaires to a sample group of lawyers taken from the Martindale-Hubbell Lawyers Directory.   From the results of this survey the number of both full and part time professional and nonprofessional employees was obtained.   The part time professional and nonprofessional workers were converted to a full time equivalent on the basis of the ratio of their average salaries to the average salaries of full time workers.   The number of professional employees per partner or individual practitioner was used to estimate the total number of independent lawyers in the professional service field and the number of lawyers who worked for other lawyers in this field.

*Line 2.*—From the survey of lawyers described in line 1, the number of nonprofessional employees per partner or individual practitioner was ascertained for each year and applied to the total number of partners and individual employers.

## TABLE 184

*Line 1.*—To obtain an estimated average net income for lawyers, various sources were studied and the average income for lawyers who were graduated from land grant colleges was used as a base after being adjusted by the ratio of the net income of physicians formed from our survey to the net income of physicians who were graduated from land grant colleges. This average representing 1928 was obtained from the Survey of Land Grant Colleges and Universities in the United States, published in 1930 by the United States Department of the Interior, Office of Education. The 1928 average was assumed to be the same in 1929 and was projected forward on the basis of the trend of accountants' net income derived from the questionnaire returns.

*Line 2.*—From the questionnaires received from lawyers, the average salary for nonprofessional employees was taken and this average was multiplied by the number of nonprofessional employees as given in the preceding table.

## TABLE 186

*Line 1.*—Four classes of engineers are listed in the 1930 Census of Occupations, namely, civil, electrical, mechanical, and mining. In the industrial classification of occupations is listed the number of each of these groups in the professional service field. The latter figures represent those engineers who were unattached to other industries and presumably were mostly engaged in consulting activities.

The Bureau of Foreign and Domestic Commerce sent questionnaires to over 3,000 consulting engineers selected from various association directories. The number of full and part time employees was requested on these schedules. The number of part time workers was converted to a full time equivalent from the ratio of their average salary to the average salary of full time employees. Thus the number of full time employees per partner or individual employer was obtained. This number was divided into two groups—professional and nonprofessional. Having the total number of engineers in professional service in 1930 and the ratio of professional employees to employers for each year it was thus possible to apply the ratio to the total and determine how many of the total were partners or individual employers and how many were salaried employees in 1930. The number of employers was estimated for 1929 on the basis of the 1920–30 trend derived from the Census of Occupations, while no change was assumed for 1931 and 1932 due to lack of employment and unemployment data in this field.

*Line 2.*—The survey of engineers supplied the data for the ratio of employees to employers for each year and these ratios were applied to the estimated number of consulting engineers for each year as shown in line 1 of this table.

## TABLE 187

*Line 1.*—From the questionnaire replies, the average net income and the average withdrawals per partner or individual were calculated. A larger group reported net income than reported both net income and withdrawals. From the schedules reporting both, the ratio of withdrawals to net income was obtained and applied to the average net income derived from the entire group reporting. This line represents the average withdrawal per consulting engineer multiplied by the estimated number of consulting engineers as given in the preceding table.

*Line 2.*—The questionnaires sent to engineers also included requests for information on the average salary paid to employees. The average so obtained was multiplied by the number of employees as given in the preceding table.

*Line 4.*—Business savings represent the difference between net income and withdrawals, both of which were included on the questionnaire.

### C. PERSONAL SERVICE

## TABLE 189

*Line 1.*—This was taken from the Census of Hotels, special tabulations for full time and part time hotels with estimates for hotels not covered therein (under 25 rooms), with duplication in employment in part time hotels eliminated by a ratio estimated from the same source, and extrapolated with the Bureau of Labor Statistics index of employment in hotels.

*Line 2.*—From the Census of Manufactures, Power Laundries, the number of salaried officers and employees was extrapolated by ratios to wage earners, laundry and dry cleaning, Fluctuation in Employment, Ohio, applied to estimated wage earners and added to the number of wage earners given in the same census source, extrapolated by the Bureau of Labor Statistics index of employment in power laundries adjusted to 1931 census data.

*Line 3.*—From the Census of Manufactures, Cleaning and Dyeing, the number of salaried officers and employees was obtained and extrapolated by ratios to wage earners, as reported in laundry and dry cleaning, Fluctuation in Employment, Ohio, applied to estimated wage earners and added to the number of wage earners given in the same census source, extrapolated by Bureau of Labor Statistics index of employment in establishments adjusted to 1931 census data. These were raised by the ratio of total volume of business including plants under $5,000 to the census total estimated by N. I. Stone, unpublished report, Research and Planning Division, National Recovery Administration.

*Line 4.*—The number of gainfully occupied barbers, hairdressers, and manicurists in the Census of Occupations, 1930 was adjusted for employment with the Census of Unemployment, 1930 and extrapolated with the adjusted Bureau of Labor Statistics index of employment in retail trade.

*Line 6.*—The number of full time and part time hotel proprietors and firm members taken from the Census of Hotels, 1930, was added to the estimated number of hotels not covered, same source, and extrapolated by the index of entrepreneurs in retail trade, table 117, line 5. To this was added the number of proprietors and firm members in power laundries and in dyeing and cleaning establishments, given in the Census of Manufactures, 1929, extrapolated with an index of the decline in the number of establishments, Census of Manufactures, 1931, preliminary report, interpolated for 1930 and extrapolated for 1932 on a straight line.

## TABLE 190

*Line 1.*—From the Census of Hotels, special tabulations for full time and part time hotels with estimates for hotels not covered therein (under 25 rooms) were extrapolated with the Bureau of Labor Statistics index of pay rolls in hotels. Gratuities and the value of board and lodging furnished were estimated as ratios to total sales from a survey of representative hotels by Horwath and Horwath.

*Line 2.*—From the Census of Manufactures, Power Laundries, the salaries paid were extrapolated by the ratio to wages paid reported in laundering and dry cleaning, Fluctuations in Employment, Ohio, and applied to estimated wages and added to wages paid given in the same census source, extrapolated by the Bureau of Labor Statistics index of pay rolls in power laundries adjusted to 1931 census data.

*Line 3.*—From the Census of Manufactures, Cleaning and Dyeing, the salaries paid were extrapolated by ratio to wages paid reported in laundering and dry cleaning, Fluctuations in Employment, Ohio, and applied to estimated wages and added to wages paid given in the same census source, extrapolated by the Bureau of Labor Statistics index of pay rolls in cleaning and dyeing establishments adjusted to 1931 census data. The totals were raised by the ratio of the total volume of business including plants under $5,000 to the census total estimated by N. I. Stone, unpublished report, Research and Planning Division, National Recovery Administration.

*Line 4.*—The average wage paid barbers and hairdressers given in Fluctuations in Employment, Ohio, 1929, was raised to the average for the United States with the ratio of average wages in retail trade in the United States to the average in Ohio reported in Census of Distribution, Retail Trade, United States Summary, 1929, adjusted by the ratio of average wages similarly estimated in laundering and cleaning and dyeing to the average wage in these industries for the United States in the Census of Manufactures, 1929. Gratuities were estimated by a ratio to salaries and wages as supplied by the Division of Research and Planning, National Recovery Administration.

*Lines 6 to 9.*—Compensation for injuries was based upon the ratio of compensation to salaries and wages paid in sample reports from State compensation commissions applied to the total salary and wage estimate for the United States.

## TABLE 192

*Line 4.*—Cash dividends paid less dividends received from stock of domestic corporations, were obtained from a break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, with 1932 extrapolated, assuming the same percentage change from 1931 to 1932 as from 1930 to 1931.

*Line 5.*—A break-down of table 19 (1929–30) and table 15 (1931), Statistics of Income, reported bonded debt and mortgages, which were raised to total with ratio of returns reporting balance sheets to total returns and multiplied by the average interest rates paid determined in a corporate sample. From this was deducted interest received on Federal, State, and municipal bonds, with 1932 resulting from extrapolation of above items.

*Line 7.*—Total withdrawals of entrepreneurs were estimated as the product of their number and the average income of salaried workers in laundries and cleaning and dyeing establishments and of all employees in hotels.

*Line 9.*—A break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, showed compiled net profits after taxes from which was deducted the net profit from sale of assets, and the cash dividends paid for 1929, 1930, and 1931. The 1932 estimate is made similarly to that for legitimate theaters.

*Line 10.*—The ratio of statutory net income, adjusted for realized changes in value of assets plus compensation of officers plus long-term interest paid to corporate volumes of business was applied to unincorporated volume of business, less withdrawals, line 7. The 1932 estimate was based on the percentage change in corporate savings.

### D. DOMESTIC SERVICE

#### TABLE 193

*Lines 1 to 9.*—The number of employees in the different classes of domestic service from the Census of Occupations, 1930, was adjusted for employment by the Census of Unemployment, 1930, and extrapolated with an index based on the trend of the ratio of unemployment from above and from the Census of Unemployment, 19 Cities, 1931. See appendix for further explanation.

#### TABLE 194

*Lines 1 to 9.*—The average wages paid, with room, with board or with both, were obtained by a special survey of governmental and private employment agencies. From a total of 35 returns the average wage reported in each geographic region was weighted by the number of that class of employee in each region to obtain an average for the United States. These averages were applied to the estimated number of employed as given in table 193 to give total wages paid.

### E. BUSINESS SERVICE

#### TABLE 196

*Line 1.*—The number of accountants and auditors in professional service is given in Census of Occupations, 1930, and estimated for 1929 by the average annual increase from 1920 to 1930, same source, and assumed constant thereafter. Proprietors are segregated from employees by ratios derived from a special survey. (See appendix E, table 11.)

*Line 2.*—The average salary and wage paid was obtained from a special survey of commercial organizations and was applied to the estimated total salaries and wages, table 197, line 2.

*Line 3.*—The average salary and wage estimated by the commercial organization division, United States Chamber of Commerce, was applied to the estimated salaries and wages, table 197, line 3.

*Line 5.*—See line 1, above.

#### TABLE 197

*Line 1.*—The average salary and wage of employees was obtained from a special survey of accountants, appendix E, table 11, and applied to the estimated number of employees, table 196, line 1.

*Line 2.*—The ratio of salaries and wages to gross expenditures was derived from a special survey of commercial organizations and was applied to gross expenditures of all trade associations estimated by the Trade Association Section, United States Department of Commerce, and extrapolated with an index of the trend in the special survey above.

*Line 3.*—The ratio of salaries and wages paid to gross income was derived from a survey of chambers of commerce by the Commercial Organization Division, United States Chamber of Commerce, and was applied to gross income derived from the same survey.

*Lines 2 and 4.*—The average income and withdrawal of accountants were derived from a special survey, appendix E, table 9, and applied to their number.

### F. MISCELLANEOUS SERVICE

#### TABLE 200

*Line 1.*—The number of employees in each group given in Fluctuations in Employment, Ohio, 1929, and special tabulations for subsequent years was raised to the total for the United States by the ratio of retail trade employees in the United States to the same in Ohio, reported in the Census of Distribution, Retail Trade, United States Summary, 1929, adjusted by the ratio of similarly estimated employees in laundering and cleaning and dyeing to the numbers given in these industries for the United States in the Census of Manufactures, 1929.

*Line 2.*—From the numbers of photographers in professional service and of undertakers and cemetery keepers given in Census of Occupations, 1930, was deducted the estimated number of employees in these occupations determined as in line 1 above.

#### TABLE 201

*Line 1.*—Same sources as table 200, line 1.

*Lines 2 and 3.*—Same source as table 192, lines 4 and 5.

*Line 5.*—The average income of salaried employees in Fluctuations in Employment, Ohio, adjusted for the United States by the ratio of salaries and wages in retail trade, United States to Ohio, reported in the Census of Distribution 1929, United States Summary, was applied to the estimated number of individual entrepreneurs for 1929 extrapolated with an index of entrepreneurs in retail trade.

*Line 7.*—Same source as table 192, line 9.

### XII. MISCELLANEOUS

#### TABLE 202

The number of employees and entrepreneurs in forestry is taken from the Census of Occupations, 1930, chapter 7. The estimate of employees is adjusted for unemployment with the Census of Unemployment, 1930, and extrapolated by means of the Federal Reserve Board index of employment in sawmills and millwork. The number of entrepreneurs is kept constant.

The basic figure of 50,000 for all persons engaged on harbor craft is derived from the Census of Occupations, 1930, after making several adjustments in the total water transportation group. Extrapolation for the other years is on the basis of the water transportation employment index. It is assumed that one third of the number are entrepreneurs and the others, employees.

The total number of people engaged in the taxicab field is estimated on the assumption that there are 1½ people for each cab. The total number of cabs is based on registration in various cities, persons per cab, and the total urban population. Of the total number engaged it is assumed, on the basis of a New York City survey, that 25 percent are entrepreneurs. The 1932 figure is estimated to be the same as in 1931.

The number of employees engaged in the brokerage business is derived from the total for banking and brokerage reported in the Census of Occupations, 1930. From this total, our estimate of banking employees is subtracted. It is assumed that the number of entrepreneurs in the brokerage field in all years is 30,000 (based on the number of individual returns from finance business in Statistics of Income). The net figure after subtracting entrepreneurs is adjusted for unemployment and extrapolated on the basis of an index of the trend of unemployment based on data in the Census of Unemployment, 1930, and from the Census of Unemployment, 19 Cities, 1931.

This also includes all persons engaged in professional pursuits in the professional service industry not included in the preceding analysis. In the 1930 Census of Occupations, the occupation by industry break-down in this field permits a break-down between the number of persons in independent professional service and the number of employees in this field. From these totals it is necessary to exclude all those employees included in other fields, such as school teachers, college presidents, etc., and all those previously accounted for such as lawyers, physicians, dentists, engineers, etc. The balance represents the number of employers or individual practitioners for 1930. The number for each of the other

years is based on the trend in the professions previously covered, i.e., lawyers, engineers, physicians, etc. This group includes architects, authors, chemists, inventors, artists, etc. The number of all other employees in the professional service industry is estimated for 1930 by the same method as used in line 1, for employers and individual practitioners.

The total number listed under "not specified industries and services" in the Census of Occupations, 1930, chapter 7, is adjusted for unemployment and extrapolated by means of an index compiled after estimating the trend in unemployment from the Census of Unemployment, 1930, and the Census of Unemployment, 19 Cities, 1931.

The number of fishermen is reported in the Census of Occupations, 1930, chapter 7, and assumed to be constant for all years. The number of individuals in hand trades is reported in the Census of Occupations, 1930, chapter 7, and assumed to be constant for all years.

### TABLE 203

*Line 1.*—See explanation of line 8, below.

*Line 2.*—Other income includes unclassified pensions, pensions paid by finance other than banking, and nonallocable pensions, as estimated by M. W. Latimer of the Industrial Relations Counsellors, Inc., for 1929, 1930, and 1931. The 1932 figure is assumed to be equal to the 1931 estimate.

*Line 4.*—Dividends paid are net originating in the industry and estimated as the difference between total paid and total received. Included here are the figures for fishing and forestry, public utilities not covered elsewhere, stock and bond brokers, loan and financing companies, business service, and corporations not elsewhere classified. The data are taken from a break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, and 1932 assumed to be the same as 1931.

*Line 5.*—Interest is net interest paid and estimated as the difference between total interest on long-term debt and interest receipts on Government holdings. The industries covered are the same as for dividends. Long-term debt, as given in the break-down of table 19 (1929–30) and table 15·(1931), Statistics of Income, is stepped up to the total on the basis of the ratio of the number of income tax returns to the number of balance sheets reported separately for corporations having net income and those having no net income. An average interest rate of 6 percent is used. Interest payments in 1932 are assumed to be equal to the 1931 figure.

*Line 6.*—This is the net balance of international interest and dividend payments as reported in The Balance of International Payments of the United States in 1932, issued by the Bureau of Foreign and Domestic Commerce.

*Line 8.*—All income figures for individuals, employees, and employers, are a product of the estimated number and an average income. The average pay in lumber factories is assumed to be the average income of employees in forestry. The average salary paid in lumber factories is used for entrepreneurial income. The average pay in water transportation is used for both employees and entrepreneurs in harbor craft. The average pay of truck drivers is used for both employees and entrepreneurs in the taxicab business. The average salary paid in manufacturing is used for brokerage business. The average salary paid to dental, legal, and engineering employees is used for miscellaneous professional employees. The average pay of all manufacturing employees is used for unclassified. A memorandum from the Bureau of Fisheries gives income and number of fishermen for 1929, 1930, and 1931, from which an average income is derived. The 1932 figure is assumed to be equal to the 1931 estimate. The average pay of all manufacturing employees is used here for independent hand trades. The average income of entrepreneurs from the finance business is estimated on the basis of Statistics of Income data on individual returns and extrapolated for the later years with average legal withdrawals as index. For miscellaneous professionals the average withdrawals of legal, engineering, and curative professions is used.

*Line 10.*—Corporate savings are estimated as the difference between net income after taxes, adjusted for net profit from sale of assets, and total dividends paid. They include the figures for the industrial fields listed in the note on line 4, above. The data are given in the special break-down of table 14 (1929–30) and table 13 (1931), Statistics of Income, and assumed to be the same in 1932 as in 1931.

# APPENDIX B

TABLE 1.—*Corporation income tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Mining and Quarrying."—Metal mining, anthracite, bituminous coal, and oil and gas; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory deficit, tax, and net profit after deducting tax*

[Composite for returns showing net income and no net income but excluding returns filed (for inactive corporations]

| Distribution | Metal mining | Anthracite | Bituminous coal | Oil and gas | Nonmetallic and others | Total |
|---|---|---|---|---|---|---|
| **1929** | | | | | | |
| **A. Receipts, taxable income:** | | | | | | |
| Gross sales | $1,124,814,191 | $292,237,433 | $885,346,412 | $796,705,353 | $463,509,967 | $3,652,015,406 |
| Profit or loss from sales: | | | | | | |
|   Returns showing profit | 423,186,081 | 70,203,196 | 163,915,029 | 337,764,150 | 102,632,757 | 1,187,601,813 |
|   Returns showing loss | 1,419,623 | 70,453 | 2,180,343 | 4,987,630 | 533,258 | 9,251,213 |
|   Profits less losses [1] | 421,707,168 | 70,132,743 | 161,734,686 | 332,776,514 | 102,099,499 | 1,178,410,600 |
| Gross profits from operations other than amounts tabulated as gross sales | 31,839,202 | 7,865,745 | 51,570,040 | 74,238,908 | 48,960,723 | 214,474,678 |
| Interest | 13,397,887 | 1,711,035 | 10,492,333 | 13,438,558 | 5,787,030 | 44,857,439 |
| Rents | 2,903,712 | 4,636,410 | 13,952,936 | 2,801,674 | 7,070,490 | 30,145,258 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 4,807,429 | 921,809 | 6,174,100 | 29,180,040 | 7,780,285 | 48,563,723 |
| Miscellaneous receipts | 10,365,813 | 3,728,083 | 19,598,530 | 45,744,323 | 17,460,551 | 97,197,320 |
| **B. Receipts, tax-exempt income:** | | | | | | |
| Dividends on capital stock of domestic corporations | 23,744,785 | 4,985,121 | 4,073,105 | 11,561,630 | 14,470,427 | 59,735,077 |
| Interest on Federal, State, and municipal bonds | 4,118,086 | 1,220,971 | 2,725,702 | 1,052,574 | 1,754,807 | 11,478,140 |
| **C. Total compiled receipts [2]** | 1,215,663,105 | 317,062,717 | 965,133,178 | 976,383,169 | 555,794,882 | 4,059,067,041 |
| **D. Statutory deductions:** | | | | | | |
| Cost of goods sold | 703,049,033 | 222,104,710 | 722,611,726 | 463,028,809 | 201,510,408 | 2,374,204,806 |
| Compensation of officers | 6,212,002 | 1,767,005 | 15,001,603 | 14,888,950 | 18,439,907 | 56,300,028 |
| Interest paid | 29,747,607 | 10,230,153 | 27,839,020 | 22,913,687 | 20,532,453 | 111,263,829 |
| Taxes paid other than income tax | 31,291,023 | 14,408,753 | 19,000,464 | 14,892,533 | 11,182,533 | 91,455,969 |
| Bad debts | 1,775,553 | 1,275,036 | 2,810,809 | 3,107,710 | 2,561,082 | 11,530,190 |
| Depreciation | 49,089,871 | 17,705,461 | 49,127,688 | 80,619,988 | 31,886,570 | 228,329,784 |
| Depletion | 80,488,928 | 7,250,456 | 18,483,467 | 100,484,593 | 30,045,709 | 242,753,213 |
| Loss from sale of real estate, stocks, and bonds [3] | | | | | | |
| Miscellaneous deductions | 120,961,351 | 33,596,824 | 142,253,238 | 225,830,471 | 117,266,250 | 638,910,134 |
| **E. Total statutory deductions** | 1,022,605,968 | 308,428,388 | 968,738,224 | 932,566,812 | 493,427,098 | 3,755,766,490 |
| **F. Compiled net profit less net loss** | 193,087,137 | 8,634,329 | [4]3,605,046 | 42,816,347 | 62,367,784 | 303,300,551 |
| **G.** Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 27,862,871 | 6,212,092 | 7,668,507 | 13,214,213 | 16,225,234 | 71,213,217 |
| **H. Statutory net income less statutory net deficit** | 165,224,266 | 2,422,237 | [4]11,303,853 | 29,602,134 | 46,142,550 | 232,087,334 |
| **I.** Net loss for prior year deducted by concerns reporting net income for 1929 | 6,523,707 | 659,720 | 2,628,807 | 7,371,675 | 3,301,031 | 20,488,030 |
| **J.** Statutory net income (H) less statutory net loss for prior year (I) | 158,700,469 | 1,762,517 | [4]13,932,660 | 22,230,459 | 42,838,519 | 211,599,301 |
| **K. Total tax** | 20,053,890 | 1,339,703 | 3,940,062 | 10,437,571 | 8,547,482 | 44,818,708 |
| **L. Compiled net profit (F) less total tax (K)** | 173,033,247 | 7,294,536 | [4]7,545,108 | 32,378,770 | 53,820,302 | 258,981,783 |

| | | | | | |
|---|---|---|---|---|---|
| **Cash and stock dividends distributed:** | | | | | |
| Cash dividends | 425,038,202 | 72,875,124 | 80,952,900 | 31,815,442 | 20,592,358 | 218,822,378 |
| Stock dividends | 39,440,798 | 7,116,871 | 7,354,872 | 433,575 | 75,650 | 24,468,830 |
| Total dividends distributed | 464,508,000 | 70,991,905 | 88,307,772 | 32,249,017 | 20,668,008 | 243,291,298 |
| **1930** | | | | | |
| **A. Receipts, taxable income:** | | | | | |
| Gross sales | 2,625,837,600 | 396,112,930 | 426,394,693 | 790,983,014 | 290,916,093 | 721,130,270 |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | 790,102,028 | 165,461,636 | 217,294,143 | 142,682,636 | 66,808,110 | 167,845,603 |
| Returns showing loss | 15,247,151 | 1,881,298 | 5,391,389 | 3,073,100 | 203,291 | 4,002,007 |
| Profits less losses [1] | 744,854,877 | 163,600,338 | 211,892,754 | 139,603,430 | 60,604,819 | 163,753,536 |
| Gross profits from operations other than amounts tabulated as gross sales | 121,680,472 | 36,019,325 | 43,560,427 | 37,022,545 | 2,248,191 | 7,205,981 |
| Interest | 29,930,361 | 5,478,703 | 7,502,837 | 8,660,804 | 1,480,004 | 6,716,813 |
| Rents | 32,932,271 | 6,935,337 | 5,107,330 | 14,124,149 | 1,435,661 | 2,329,794 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 65,701,444 | 6,991,021 | 50,823,200 | 3,676,815 | 2,528,484 | 1,771,924 |
| Miscellaneous receipts | 64,998,072 | 9,044,677 | 20,022,471 | 15,855,209 | 5,673,135 | 14,402,580 |
| **B. Receipts, tax-exempt income:** | | | | | | |
| Dividends on capital stock of domestic corporations | 63,680,883 | 8,759,228 | 24,001,028 | 4,459,756 | 8,106,623 | 8,074,248 |
| Interest on Federal, State, and municipal bonds | 10,100,521 | 1,052,003 | 1,759,529 | 2,699,030 | 903,938 | 3,085,412 |
| **C. Total compiled receipts [2]** | 3,000,560,921 | 471,593,224 | 579,391,535 | 877,452,921 | 316,382,219 | 764,717,025 |
| **D. Statutory deductions:** | | | | | | |
| Cost of goods sold | 1,880,692,813 | 232,522,182 | 214,501,939 | 651,980,194 | 224,311,774 | 557,376,734 |
| Compensation of officers | 50,850,407 | 17,634,864 | 11,892,565 | 14,511,263 | 1,471,075 | 5,346,725 |
| Interest paid | 85,410,756 | 18,671,220 | 17,762,039 | 25,277,672 | 10,259,838 | 13,439,987 |
| Taxes paid other than income tax | 82,080,737 | 11,360,648 | 12,118,680 | 16,824,990 | 12,055,094 | 28,829,510 |
| Bad debts | 11,277,077 | 3,181,172 | 3,165,315 | 3,473,802 | 1,007,567 | 450,121 |
| Depreciation | 194,444,464 | 31,034,507 | 63,171,883 | 45,900,807 | 11,153,431 | 42,681,866 |
| Depletion | 182,045,522 | 22,711,280 | 76,587,550 | 15,982,025 | 0,305,136 | 61,018,925 |
| Loss from sale of real estate, stocks, and bonds | 33,608,516 | 7,418,040 | 10,423,007 | 12,548,052 | 1,110,513 | 3,188,727 |
| Miscellaneous deductions | 460,080,907 | 95,008,670 | 184,370,532 | 125,804,202 | 31,527,853 | 02,270,632 |
| **E. Total statutory deductions** | 2,900,220,218 | 441,145,004 | 563,003,289 | 912,304,298 | 296,172,381 | 774,511,276 |
| **F. Compiled net profit less net loss** | 19,340,705 | 30,448,220 | 16,388,246 | [4]34,911,347 | 17,200,838 | [4]9,704,251 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income** | 63,681,701 | 10,411,231 | 25,850,557 | 7,169,595 | 9,100,501 | 11,159,660 |
| **H. Statutory net income less statutory net deficit** | [4]44,340,998 | 20,030,989 | [4]9,462,811 | [4]42,071,042 | 8,109,277 | [4]20,953,911 |
| **I. Net loss for prior year deducted by concerns reporting net income for 1930** | 8,775,954 | 2,026,614 | 3,873,661 | 1,866,829 | 666,519 | 341,331 |
| **J. Statutory net income (H) less statutory net loss for prior year (I)** | [4]53,117,952 | 18,010,375 | [4]13,336,072 | 43,939,871 | 7,442,758 | [4]21,295,242 |
| **K. Total tax** | 21,474,405 | 6,650,146 | 7,722,634 | 2,637,057 | 1,269,900 | 3,187,459 |
| **L. Compiled net profit (F) less total tax (K)** | [4]2,133,789 | 23,792,075 | 8,664,312 | [4]37,548,404 | 15,930,938 | [4]12,981,710 |
| **Cash and stock dividends distributed:** | | | | | | |
| Cash dividends | 302,041,370 | 49,003,677 | 103,135,313 | 28,468,405 | 21,398,833 | 100,645,142 |
| Stock dividends | 12,614,082 | 2,720,684 | 3,493,349 | 304,972 | | 6,095,077 |
| Total dividends distributed | 315,265,452 | 51,724,361 | 106,628,662 | 28,763,377 | 21,398,833 | 106,740,219 |

[1] "Gross sales" less "cost of goods sold" (shown under statutory deductions).
[2] Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.
[3] Not available.
[4] Deficit.

TABLE 1.—*Corporation income tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Mining and Quarrying"—Metal mining, anthracite, bituminous coal, and oil and gas; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory deficit, tax, and net profit after deducting tax*—Continued

| Distribution | Metal mining | Anthracite | Bituminous coal | Oil and gas | Nonmetallic and others | Total |
|---|---|---|---|---|---|---|
| **1931** | | | | | | |
| **A. Receipts, taxable income:** | | | | | | |
| Gross sales¹ | $439,651,335 | $322,034,680 | $508,902,744 | $366,200,423 | $283,127,996 | $1,981,517,387 |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | 93,750,071 | 60,924,969 | 96,882,242 | 133,282,805 | 111,313,099 | 507,183,496 |
| Returns showing loss | 6,441,783 | 199,836 | 3,492,541 | 2,488,116 | 1,752,657 | 14,374,832 |
| Profits less losses | 92,308,288 | 65,721,833 | 93,330,701 | 130,794,690 | 109,591,142 | 492,808,654 |
| Gross profits from operations other than amounts tabulated as gross sales | 8,656,072 | 3,872,000 | 21,820,002 | 41,385,395 | 32,240,376 | 107,073,854 |
| Interest | 4,483,803 | 5,030,405 | 6,855,777 | 6,458,838 | 4,056,982 | 21,352,905 |
| Rents | 2,155,553 | 541,907 | 11,820,801 | 2,009,810 | 3,733,723 | 24,810,355 |
| Profits from sale of real estate, stocks, bonds, and other capital assets² | 1,057,834 | | 889,272 | 12,242,077 | 3,811,222 | 18,642,312 |
| Miscellaneous receipts | 5,550,763 | 3,323,195 | 10,357,655 | 8,641,360 | 9,279,505 | 37,152,478 |
| **B. Receipts, tax-exempt income:** | | | | | | |
| Dividends on capital stock of domestic corporations | 4,003,645 | 8,171,131 | 4,046,249 | 13,898,612 | 4,721,747 | 34,841,384 |
| Interest on Federal, State, and municipal bonds | 2,143,063 | 436,868 | 2,160,490 | 1,780,279 | 1,380,144 | 7,920,814 |
| **C. Total compiled receipts³** | 468,304,008 | 347,478,029 | 626,801,903 | 452,700,704 | 341,800,603 | 2,237,211,570 |
| **D. Statutory deductions:** | | | | | | |
| Cost of goods sold | 347,343,017 | 256,910,056 | 475,513,043 | 235,405,733 | 173,330,804 | 1,488,708,733 |
| Compensation of officers | 4,793,186 | 1,659,074 | 12,382,611 | 9,905,680 | 16,165,138 | 44,970,495 |
| Interest paid | 13,303,630 | 12,641,546 | 21,197,174 | 23,549,156 | 15,328,070 | 86,018,652 |
| Taxes paid other than income tax | 22,523,720 | 14,631,480 | 14,494,358 | 12,092,355 | 10,185,808 | 73,925,721 |
| Bad debts | 1,229,335 | 815,401 | 3,042,763 | 3,170,350 | 5,959,059 | 14,226,897 |
| Depreciation | 34,280,288 | 12,585,682 | 43,009,130 | 74,859,461 | 20,521,027 | 194,303,658 |
| Depletion | 33,920,584 | 2,448,857 | 10,219,845 | 41,436,821 | 10,348,633 | 108,350,743 |
| Loss from sale of real estate, stocks, and bonds | 2,439,613 | | 9,380,310 | 13,030,223 | 5,841,200 | 30,688,314 |
| Miscellaneous deductions | 73,486,014 | 32,733,645 | 82,142,788 | 143,492,701 | 70,215,857 | 408,071,016 |
| **E. Total statutory deductions** | 533,345,417 | 310,484,370 | 668,391,020 | 557,010,701 | 349,129,501 | 2,449,258,069 |
| **F. Compiled net profit less net loss** | ⁴65,041,349 | 6,993,659 | ⁴41,529,037 | ⁴105,203,907 | ⁴7,265,860 | ⁴212,046,490 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations on capital stock of domestic corporations to arrive at statutory net income** | 6,148,708 | 6,607,990 | 6,215,739 | 15,678,891 | 6,110,891 | 42,762,228 |
| **H. Statutory net income less statutory net deficit** | ⁴71,190,057 | ⁴1,614,340 | ⁴47,744,760 | ⁴120,652,788 | ⁴13,376,757 | ⁴254,698,718 |
| **I. Net loss for prior year deducted by concerns reporting net income for 1931** | 780,244 | 526,383 | 586,528 | 2,521,425 | 1,830,712 | 6,231,290 |
| **J. Statutory net income (H) less statutory net loss for prior year (I)** | ⁴71,976,301 | ⁴2,140,723 | ⁴48,331,292 | ⁴123,494,223 | ⁴15,207,469 | ⁴261,060,008 |
| **K. Total tax** | 1,003,377 | 622,316 | 1,038,874 | 1,033,622 | 3,511,606 | 7,211,106 |
| **L. Compiled net profit (F) less total tax (K)** | ⁴66,046,726 | ⁴6,371,314 | ⁴42,567,901 | ⁴106,237,529 | ⁴10,776,874 | ⁴219,257,696 |
| Cash and stock dividends distributed: | | | | | | |
| Cash dividends | 41,791,701 | 17,590,856 | 19,630,124 | 51,100,785 | 43,201,495 | 173,314,051 |
| Stock dividends | 774 | 17,700 | 415,490 | 301,513 | 4,214,722 | 4,980,205 |
| Total dividends distributed | 41,792,475 | 17,608,556 | 20,045,620 | 51,402,298 | 47,446,207 | 178,295,160 |

¹ "Gross sales" less "cost of goods sold" (shown under statutory deductions.)
² Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.
³ Not available.
⁴ Deficit.

TABLE 2.—*Corporation income tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Transportation and Other Public Utilities":—water transportation, aerial transportation, autobus lines, cartage and storage, telephone and telegraph, radio broadcasting, water companies, and all other public utilities; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*

[Composite for returns showing net income and no net income but excluding returns filed for inactive corporations]

| Distribution | Steam railroads | Electric railways | Water transportation and related industries | Aerial transportation | Autobus lines, taxicabs, and sightseeing companies | Cartage and storage |
|---|---:|---:|---:|---:|---:|---:|
| **1929** | | | | | | |
| **A. Receipts, taxable income:** | | | | | | |
| Gross sales | | | | | | |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | | | | | | |
| Returns showing loss | | | | | | |
| Profits less losses | | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $4,602,730,338 | $978,675,984 | $476,664,745 | $34,746,254 | $225,781,935 | $782,684,217 |
| Interest | 111,356,015 | 23,197,357 | 7,200,002 | 1,662,507 | 840,446 | 12,461,472 |
| Rents | 89,256,104 | 60,619,703 | 6,490,921 | 354,788 | 2,461,840 | 23,325,901 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 22,359,301 | 4,174,295 | 3,824,455 | 331,677 | 2,863,779 | 12,308,306 |
| Miscellaneous receipts | 140,032,786 | 11,909,204 | 8,577,792 | 1,692,161 | 5,279,773 | 17,056,454 |
| **B. Receipts, tax-exempt income:** | | | | | | |
| Dividends on capital stock of domestic corporations | 214,908,308 | 12,759,037 | 4,824,629 | 281,408 | 1,838,300 | 4,388,225 |
| Interest on Federal, State, and municipal bonds | 14,953,236 | 3,316,305 | 1,745,637 | 30,245 | 25,604 | 827,522 |
| **C. Total compiled receipts** | 7,285,590,198 | 1,094,742,035 | 509,348,381 | 39,099,100 | 242,031,700 | 883,142,100 |
| **D. Statutory deductions:** | | | | | | |
| Cost of goods sold | | | | | | |
| Compensation of officers | 8,840,547 | 7,093,850 | 12,130,088 | 1,424,312 | 9,483,109 | 35,088,353 |
| Interest paid | 608,913,186 | 130,401,608 | 12,165,787 | 479,748 | 3,338,499 | 22,910,736 |
| Taxes paid other than income tax | 330,805,024 | 47,822,076 | 4,491,236 | 320,462 | 5,570,103 | 17,085,032 |
| Bad debts | 3,455,673 | 882,634 | 1,438,044 | 70,137 | 630,800 | 4,164,777 |
| Depreciation | 189,701,283 | 50,441,514 | 33,350,279 | 5,777,957 | 31,020,111 | 45,039,452 |
| Depletion | 3,954,453 | 20,587 | 42,000 | 11,870 | 72,877 | 68,285 |
| Less from sale of real estate, stocks and bonds | | | | | | |
| Miscellaneous deductions | 5,160,867,640 | 603,813,316 | 393,321,697 | 36,180,695 | 185,033,354 | 674,027,089 |
| **E. Total statutory deductions** | 6,296,714,606 | 960,535,574 | 455,947,001 | 44,276,181 | 235,229,003 | 709,290,283 |
| **F. Compiled net profit less net loss** | 988,875,592 | 134,206,461 | 52,401,380 | ²6,177,021 | 6,802,768 | 83,851,817 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income** | 229,861,634 | 16,075,402 | 6,570,466 | 311,743 | 1,864,003 | 5,215,747 |
| **H. Statutory net income less statutory net deficit** | 759,013,988 | 118,131,059 | 45,830,914 | ²6,488,764 | 4,938,790 | 48,636,070 |
| **I. Net loss for prior year deducted by concerns reporting net income for 1929** | 16,103,180 | 715,066 | 5,354,396 | 387,680 | 941,905 | 2,014,000 |
| **J. Statutory net income (H) less statutory net loss for prior year (I)** | 742,910,772 | 117,415,993 | 40,476,518 | ²6,876,441 | 3,996,894 | 46,621,161 |

¹ Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in Schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.   ² Deficit.   ³ Not available.

TABLE 2.—Corporation income tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Transportation and Other Public Utilities":—water transportation, aerial transportation, autobus lines, cartage and storage, telephone and telegraph, radio broadcasting, water companies, and all other public utilities; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax—Continued

| Distribution | Steam railroads | Electric railways | Water transportation and related industries | Aerial transportation | Autobus lines, taxicabs, and sightseeing companies | Cartage and storage |
|---|---|---|---|---|---|---|
| **1929** | | | | | | |
| K. Total tax | $36,196,697 | $16,462,620 | $3,787,072 | $288,304 | $1,075,409 | $6,101,328 |
| L. Compiled net profit (F) less total tax (K) | 902,078,905 | 117,743,841 | 46,613,408 | ² 6,465,325 | 5,727,384 | 47,090,489 |
| Cash and stock dividends distributed: | | | | | | |
| Cash dividends | 502,810,096 | 160,972,653 | 33,404,887 | 259,490 | 6,577,040 | 36,487,099 |
| Stock dividends | 4,592 | 277,835 | 213,139 | 48,728 | 360,017 | 2,930,496 |
| Total dividends distributed | 502,814,688 | 161,250,498 | 33,618,026 | 308,224 | 6,937,057 | 39,417,595 |
| **1930** | | | | | | |
| A. Receipts, taxable income: | | | | | | |
| Gross sales | | | | | | |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | | | | | | |
| Returns showing loss | | | | | | |
| Profits less losses | | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | 5,619,289,020 | 888,699,817 | 407,917,027 | 44,276,930 | 233,239,021 | 802,126,051 |
| Interest | 98,914,807 | 20,746,094 | 4,850,185 | 2,192,278 | 916,125 | 6,021,000 |
| Rents | 46,782,541 | 52,010,007 | 4,054,778 | 602,254 | 3,146,906 | 10,363,150 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 4,275,339 | 3,775,283 | 3,370,005 | 1,100,981 | 653,048 | 3,303,802 |
| Miscellaneous receipts | 87,959,489 | 12,349,374 | 10,009,869 | 1,669,605 | 6,354,417 | 12,077,023 |
| B. Receipts, tax-exempt income: | | | | | | |
| Dividends on capital stock of domestic corporations | 203,575,536 | 17,724,738 | 5,458,667 | 443,833 | 3,680,693 | 3,030,874 |
| Interest on Federal, State, and municipal bonds | 12,034,141 | 2,488,010 | 1,463,861 | 28,880 | 23,947 | 613,642 |
| C. Total compiled receipts | 6,073,730,963 | 997,791,933 | 438,132,152 | 50,323,781 | 247,022,246 | 847,639,201 |
| D. Statutory deductions: | | | | | | |
| Cost of goods sold | | | | | | |
| Compensation of officers | 9,018,908 | 5,710,901 | 10,798,338 | 1,736,927 | 8,760,050 | 36,212,052 |
| Interest paid | 610,600,220 | 115,161,457 | 11,035,522 | 2,059,410 | 4,667,478 | 21,866,205 |
| Taxes paid other than income tax | 309,326,792 | 41,309,532 | 4,144,205 | 572,017 | 17,261,802 | 17,195,545 |
| Bad debts | 1,811,502 | 1,487,638 | 657,311 | 410,300 | 668,595 | 5,467,944 |
| Depreciation | 180,303,980 | 74,560,110 | 30,173,648 | 7,519,567 | 30,191,058 | 45,274,892 |
| Depletion | 8,101,250 | | 8,398 | | 46,114 | 30,356 |
| Loss from sale of real estate, stocks, and bonds | 5,258,769 | 1,255,525 | 4,909,368 | 1,289,907 | 2,389,188 | 2,288,869 |
| Miscellaneous deductions | 4,478,739,180 | 635,631,257 | 350,343,443 | 55,520,983 | 100,607,145 | 695,114,893 |
| Total statutory deductions | 5,605,169,601 | 874,516,520 | 421,070,191 | 69,002,911 | 250,432,079 | 823,447,476 |
| E. | | | | | | |
| F. Compiled net profit less net loss | 470,561,362 | 123,275,413 | 17,061,961 | ¹ 18,679,160 | ²2,509,833 | 24,191,725 |
| G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 215,609,677 | 20,213,348 | 6,922,428 | 472,713 | 3,004,640 | 4,144,516 |

| | | | | | |
|---|---|---|---|---|---|
| H. Statutory net income less statutory net deduct. | 224,051,685 | 103,062,068 | 10,139,533 | 19,151,893 ² | 6,114,473 ² | 20,047,209 |
| I. Net loss for prior year deducted by concerns reporting net income for 1930 | 766,004 | 339,051 | 376,816 | 631,540 | 633,309 | 1,725,301 |
| J. Statutory net income (H) less statutory net loss for prior year (I) | 253,295,591 | 102,723,014 | 9,762,717 | 19,782,403 ² | 16,647,782 ² | 18,321,008 |
| K. Total tax | 41,024,053 | 14,788,930 | 4,017,743 | 177,255 | 659,285 | 4,123,010 |
| L. Compiled net profit (F) less total tax (K) | 429,637,309 | 108,498,433 | 13,044,218 | 18,850,405 ² | 3,169,088 ² | 20,063,700 |
| Cash and stock dividends distributed: | | | | | | |
|   Cash dividends | 640,915,928 | 114,711,985 | 35,647,886 | 271,749 | 6,824,147 | 32,283,434 |
|   Stock dividends | 10,378,400 | 518,380 | 9,362,550 | 65,100 | 420,834 | 2,770,937 |
| Total dividends distributed | 651,294,328 | 117,230,365 | 45,010,436 | 326,819 | 7,251,101 | 35,003,371 |
| **A. Receipts, taxable income:** 1931 | | | | | | |
|   Gross sales | | | | | | |
|   Profit or loss from sales: | | | | | | |
|     Returns showing profit | | | | | | |
|     Returns showing loss | | | | | | |
|     Profits less losses | | | | | | |
|   Gross profits from operations other than amounts tabulated as gross sales | 4,564,167,523 | 734,760,690 | 330,151,089 | 60,825,787 | 210,963,769 | 713,027,701 |
|   Interest | 82,318,108 | 9,338,037 | 5,057,683 | 2,351,235 | 1,351,300 | 4,214,131 |
|   Rents | 44,257,349 | 12,491,164 | 4,899,075 | 600,712 | 2,220,307 | 14,021,871 |
|   Profits from sale of real estate, stocks, and bonds, and other capital assets | 3,418,164 | 956,713 | 540,843 | 174,540 | 663,170 | 1,597,722 |
|   Miscellaneous receipts | 29,379,028 | 9,799,301 | 5,205,717 | 976,034 | 2,436,659 | 12,045,737 |
| **B. Receipts, tax-exempt income:** | | | | | | |
|   Dividends on capital stock of domestic corporations | 113,670,844 | 17,220,203 | 2,995,263 | 590,809 | 3,019,229 | 6,907,340 |
|   Interest on Federal, State, and municipal bonds | 14,470,553 | 2,041,510 | 1,778,745 | 557,873 | 25,407 | 436,661 |
| **C. Total compiled receipts ¹** | 4,851,710,450 | 787,010,627 | 360,529,557 | 72,085,096 | 220,680,111 | 755,811,232 |
| **D. Statutory deductions:** | | | | | | |
|   Cost of goods sold | | | | | | |
|   Compensation of officers | 6,854,941 | 6,205,560 | 10,248,850 | 2,448,084 | 7,530,209 | 34,692,497 |
|   Interest paid | 624,244,907 | 95,513,749 | 13,630,731 | 2,205,102 | 4,493,707 | 20,404,900 |
|   Taxes paid other than income tax | 323,978,308 | 36,755,773 | 4,331,312 | 650,074 | 7,225,364 | 17,116,976 |
|   Bad debts | 1,799,592 | 73,779,982 | 706,116 | 303,110 | 878,207 | 6,758,592 |
|   Depreciation | 216,535,013 | 7,045 | 35,550,226 | 1,850 | 4,144 | 49,807,250 |
|   Depletion | 14,187,402 | 1,764,004 | 9,822 | 44,405 | 2,893,780 | 44,405 |
|   Loss from sale of real estate, stocks, and bonds | | | 8,528,838 | | | 3,541,039 |
|   Miscellaneous deductions | 3,700,139,370 | 508,750,605 | 295,855,306 | 65,373,689 | 170,500,441 | 607,243,508 |
| **E. Total statutory deductions** | 4,803,372,109 | 722,253,748 | 308,062,213 | 85,640,629 | 224,023,798 | 739,728,500 |
| **F. Compiled net profit less net loss** | 41,661,710 ² | 65,350,879 | 8,432,646 ² | 13,461,643 ² | 3,337,085 ² | 14,082,066 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income** | 128,150,197 | 19,261,722 | 4,774,009 | 1,148,772 | 3,044,726 | 7,401,010 |
| H. Statutory net income less statutory net deficit | 169,811,907 ² | 46,092,157 ² | 13,204,655 ² | 14,610,315 ² | 6,382,411 ² | 6,078,056 ² |
| I. Net loss for prior year deducted by concerns reporting net income for 1931 | 1,071,237 | 336,408 | 846,140 | 383,053 | 745,415 | 2,200,229 |
| J. Statutory net income (H) less statutory net loss for prior year (I) | 170,883,144 ² | 45,738,740 ² | 14,052,745 ² | 14,993,388 ² | 17,127,826 ² | 2,401,357 ² |
| K. Total tax | 12,514,339 | 10,299,774 | 2,475,914 | 250,427 | 496,750 | 3,319,076 |
| L. Compiled net profit (F) less total tax (K) | 64,176,040 ² | 65,057,105 | 10,908,660 ² | 13,711,070 ² | 3,824,435 ² | 10,763,500 |
| Cash and stock dividends distributed: | | | | | | |
|   Cash dividends | 324,078,109 | 102,478,225 | 22,646,191 | 792,979 | 5,217,052 | 30,680,677 |
|   Stock dividends | 358,500 | 15,241 | 913,472 | 33 | 111,237 | 500,068 |
| Total dividends distributed | 325,034,009 | 102,493,466 | 23,559,663 | 793,012 | 5,328,289 | 31,181,246 |

¹ Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in Schedule L of the return, except interest on tax exempt obligations and dividends on stock of domestic corporations    ² Deficit.    ³ Not available.

*TABLE 3.—Corporation income-tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Transportation and other public utilities"—Water transportation, aerial transportation, autobus lines, cartage and storage, telephone and telegraph, radio broadcasting, water companies, and all other public utilities; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*

[Composite for returns showing net income and no net income but excluding returns filed for inactive corporations]

| Distribution | Electric light and power companies | Gas companies, artificial and natural | Water companies | Telephone and telegraph companies | Radio broadcasting companies | All other public utility companies |
|---|---|---|---|---|---|---|
| **1929** | | | | | | |
| A. Receipts, taxable income: | | | | | | |
| Gross sales: | | | | | | |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | $2,217,125,174 | $408,401,262 | $79,032,273 | $1,858,007,183 | $172,081,654 | $847,797,680 |
| Returns showing loss | 85,591,906 | 12,882,027 | 2,025,150 | 35,274,362 | 592,193 | 40,289,106 |
| Profits less losses | 40,991,378 | 3,893,864 | 1,234,872 | 31,456,633 | 334,288 | 31,772,188 |
| Gross profits from operations other than amounts tabulated as gross sales | | | | | | |
| Interest | 25,391,447 | 1,240,640 | 435,470 | 2,576,041 | 8,428 | 27,342,562 |
| Rents | 35,859,580 | 10,531,943 | 1,703,168 | 446,803,336 | 9,903,404 | 11,753,438 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | | | | | | |
| Miscellaneous receipts | | | | | | |
| B. Receipts, tax-exempt income: | | | | | | |
| Dividends on capital stock of domestic corporations | 263,431,008 | 58,246,939 | 17,138,500 | 170,177,976 | 1,146,931 | 71,689,311 |
| Interest on Federal, State, and municipal bonds | 1,931,521 | 175,371 | 175,215 | 3,555,830 | 503,131 | 2,240,601 |
| C. Total compiled receipts[1] | 2,675,325,134 | 555,012,051 | 101,744,648 | 2,540,976,233 | 184,625,089 | 1,032,864,784 |
| D. Statutory deductions: | | | | | | |
| Cost of goods sold | | | | | | |
| Compensation of officers | 12,340,592 | 4,740,870 | 2,365,494 | 5,007,983 | 1,676,458 | 6,035,414 |
| Interest paid | 370,710,017 | 57,021,465 | 14,036,702 | 107,510,010 | 413,544 | 123,517,170 |
| Taxes paid other than income tax | 136,032,002 | 23,095,908 | 6,510,263 | 75,013,850 | 957,001 | 45,584,791 |
| Bad debts | 6,972,357 | 2,094,848 | 350,276 | 8,808,747 | 205,027 | 2,815,193 |
| Depreciation | 247,227,381 | 45,346,349 | 8,911,420 | 208,558,559 | 3,249,636 | 83,939,206 |
| Depletion | 9,319,136 | 7,718,170 | 2,335 | 4,909 | | 7,343,118 |
| Loss from sale of real estate, stocks, and bonds[2] | | | | | | |
| Miscellaneous deductions | 1,200,164,094 | 303,809,665 | 32,909,899 | 1,669,082,955 | 188,437,102 | 554,435,639 |
| E. Total statutory deductions | 1,983,685,570 | 443,849,243 | 65,175,333 | 2,074,896,043 | 185,052,848 | 824,575,431 |
| F. Compiled net profit less net loss | 691,639,555 | 111,162,808 | 36,560,290 | 466,070,290 | 10,572,241 | 208,299,353 |
| G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 270,362,589 | 68,422,310 | 17,313,715 | 179,733,906 | 1,650,062 | 73,920,912 |
| H. Statutory net income less statutory net deficit | 421,276,966 | 52,740,498 | 10,255,545 | 286,345,494 | 17,922,179 | 134,350,441 |
| I. Net loss for prior year deducted by concerns reporting net income for 1929 | 13,703,094 | 1,289,311 | 1,116,948 | 845,029 | 581,927 | 4,709,970 |
| J. Statutory net income (H) less statutory net loss for prior year (I) | 407,573,572 | 51,452,187 | 18,133,597 | 265,499,555 | 17,340,252 | 129,649,471 |
| K. Total tax | 46,683,306 | 6,915,638 | 2,022,647 | 31,405,513 | 2,057,028 | 17,360,284 |
| L. Compiled net profit (F) less total tax (K) | 644,956,180 | 104,217,170 | 34,540,013 | 434,013,777 | 17,514,013 | 100,023,060 |

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| **Cash and stock dividends distributed:** | | | | | | |
| Cash dividends | 614,818,688 | 124,545,137 | 29,604,192 | 344,183,491 | 4,629,088 | 234,396,835 |
| Stock dividends | 20,063,896 | 131,394 | 97,047 | 2,372,501 | 11,080 | 13,626,260 |
| Total dividends distributed | 634,912,574 | 124,676,521 | 29,701,239 | 346,566,052 | 4,640,768 | 246,022,854 |
| **1930** | | | | | | |
| **A. Receipts, taxable income:** | | | | | | |
| Gross sales: | | | | | | |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | | | | | | |
| Returns showing loss | | | | | | |
| Profits less losses | | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | 2,425,921,529 | 553,981,893 | 88,422,382 | 1,851,009,984 | 125,238,677 | 770,675,859 |
| Interest | 96,413,474 | 19,705,369 | 1,129,018 | 42,089,328 | 908,187 | 40,466,010 |
| Rents | 35,955,870 | 7,703,269 | 955,909 | 28,141,768 | 783,472 | 29,708,870 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 13,492,985 | 2,694,340 | 1,201,958 | 2,512,378 | 27,501 | 2,417,892 |
| Miscellaneous receipts | 58,853,203 | 7,290,217 | 1,047,213 | 587,981,450 | 22,170,634 | 21,688,134 |
| **B. Receipts, tax-exempt income:** | | | | | | |
| Dividends on capital stock of domestic corporations | 192,849,625 | 71,441,231 | 12,813,216 | 166,732,428 | 118,752 | 61,861,004 |
| Interest on Federal, State, and municipal bonds | 4,110,706 | 389,974 | 59,700 | 6,733,766 | 209,597 | 1,985,554 |
| **C. Total compiled receipts [1]** | 2,827,577,313 | 668,106,293 | 105,629,495 | 2,685,201,063 | 149,526,820 | 935,003,332 |
| **D. Statutory deductions:** | | | | | | |
| Cost of goods sold | 12,357,772 | 4,874,352 | 1,879,955 | 4,370,586 | 2,851,675 | 6,720,295 |
| Compensation of officers | 423,160,625 | 73,008,450 | 15,558,210 | 125,642,838 | 1,777,936 | 129,070,718 |
| Interest paid | 162,533,835 | 28,212,307 | 6,149,760 | 81,134,657 | 1,741,184 | 34,438,068 |
| Taxes paid other than income tax | 7,830,084 | 2,366,578 | 175,319 | 11,092,547 | 800,437 | 1,935,211 |
| Bad debts | 277,657,638 | 58,054,623 | 8,722,353 | 233,937,167 | 407,503 | 69,595,334 |
| Depreciation | 6,384,730 | 8,016,381 | 064 | 18,573 | 215,700 | 4,049,349 |
| Depletion | 11,817,898 | 2,337,320 | 14,638,691 | 1,197,469 | | 2,113,786 |
| Loss from sale of real estate, stocks, and bonds | | | | | | |
| Miscellaneous deductions | 1,442,390,222 | 370,830,273 | 30,365,393 | 1,620,907,041 | 141,455,507 | 554,093,149 |
| **E. Total statutory deductions** | 2,344,163,504 | 547,700,194 | 88,488,843 | 2,278,200,848 | 165,290,122 | 801,168,897 |
| **F. Compiled net profit less net loss** | 483,413,809 | 120,405,099 | 19,140,652 | 407,000,246 | [3]5,703,302 | 133,834,435 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income** | 196,960,333 | 71,830,205 | 12,873,015 | 173,486,194 | 388,340 | 63,846,558 |
| **H. Statutory net income less statutory net deficit** | 286,453,476 | 48,574,904 | 6,267,637 | 233,534,051 | [3]6,161,051 | 69,987,877 |
| **I. Net loss for prior year deducted by concerns reporting net income for 1930** | 5,123,633 | 985,201 | 94,072 | 161,069 | 187,014 | 2,695,430 |
| **J. Statutory net income (H) less statutory net loss for prior year (I)** | 281,329,843 | 47,589,693 | 6,172,965 | 233,372,982 | [3]6,339,665 | 67,292,447 |
| **K. Total tax** | 41,971,281 | 8,132,708 | 2,549,613 | 29,410,603 | 274,985 | 10,437,809 |
| **L. Compiled net profit (F) less total tax (K)** | 441,442,628 | 112,372,301 | 16,591,030 | 378,589,642 | [3]6,038,287 | 123,306,026 |
| **Cash and stock dividends distributed:** | | | | | | |
| Cash dividends | 690,140,768 | 139,388,371 | 63,719,348 | 368,668,365 | 6,200,223 | 223,103,792 |
| Stock dividends | 6,411,657 | 3,376,832 | 2,743,436 | 757,334 | 45,000 | 3,388,629 |
| Total dividends distributed | 696,552,415 | 142,765,203 | 66,462,784 | 369,425,699 | 6,245,223 | 226,492,021 |

[1] Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from those items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.

[2] Not available.

[3] Deficit.

TABLE 3.—*Corporation income-tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Transportation and other public utilities".—Water transportation, aerial transportation, autobus lines, cartage and storage, telephone and telegraph, radio broadcasting, water companies, and all other public utilities; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Continued

| Distribution | Electric light and power companies | Gas companies, artificial and natural | Water companies | Telephone and telegraph companies | Radio broadcasting companies | All other public utility companies |
|---|---|---|---|---|---|---|
| **1931** | | | | | | |
| A. Receipts, taxable income: | | | | | | |
| Gross sales: | | | | | | |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | 2,460,903,628 | 314,688,377 | 123,415,375 | 1,690,312,671 | 130,542,560 | 600,828,715 |
| Returns showing loss | 113,459,203 | 26,890,783 | 2,418,887 | 35,511,878 | 758,810 | 14,579,629 |
| Profits less losses | 30,343,238 | 3,717,078 | 1,369,561 | 25,122,605 | 1,084,994 | 17,855,020 |
| Gross profits from operations other than amounts tabulated as gross sales | | | | | | |
| Interest | 8,047,848 | 420,439 | 950,308 | 1,230,476 | 73,506 | 595,263 |
| Rents | 22,668,943 | 6,955,419 | 702,705 | 30,243,221 | 3,566,440 | 4,287,329 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | | | | | | |
| Miscellaneous receipts | | | | | | |
| B. Receipts, tax-exempt income: | | | | | | |
| Dividends on capital stock of domestic corporations | 172,819,120 | 72,457,716 | 18,874,100 | 161,832,022 | 963,031 | 43,465,414 |
| Interest on Federal, State, and municipal bonds ¹ | 1,867,022 | 421,814 | 65,383 | 9,706,069 | 103,556 | 1,570,199 |
| C. Total compiled receipts ¹ | 2,825,329,392 | 655,250,020 | 147,915,469 | 1,923,901,841 | 137,092,003 | 682,690,569 |
| D. Statutory deductions: | | | | | | |
| Cost of goods sold | | | | | | |
| Compensation of officers | 11,611,723 | 4,537,256 | 1,850,118 | 3,558,169 | 3,034,038 | 4,750,918 |
| Interest paid | 540,705,432 | 80,072,373 | 18,871,317 | 120,797,070 | 1,573,881 | 103,781,407 |
| Taxes paid other than income tax | 168,473,289 | 30,403,888 | 6,678,694 | 96,185,370 | 1,707,130 | 40,203,980 |
| Bad debts | 18,283,285 | 2,864,135 | 603,371 | 12,110,805 | 1,255,184 | 1,027,108 |
| Depreciation | 314,435,246 | 64,900,916 | 12,330,843 | 240,425,832 | 7,820,048 | 61,106,417 |
| Depletion | 5,631,912 | 8,455,907 | | 5,391 | 6,235 | 3,613,000 |
| Loss from sale of real estate, stocks and bonds | 23,182,346 | 3,311,224 | 388,273 | 8,840,991 | 537,308 | 974,208 |
| Miscellaneous deductions | 1,352,905,035 | 359,749,691 | 83,115,570 | 1,071,373,531 | 125,000,753 | 400,896,669 |
| E. Total statutory deductions | 2,435,266,368 | 554,296,887 | 123,963,370 | 1,559,312,108 | 140,945,703 | 625,953,707 |
| F. Compiled net profit less net loss | 390,062,991 | 100,953,133 | 24,052,099 | 364,049,673 | †3,852,800 | 56,936,962 |
| G. Less tax-exempt interest and dividends on capital stock of domestic corporations | 174,705,742 | 72,879,530 | 18,939,573 | 171,540,991 | 1,066,887 | 45,044,613 |
| H. Statutory net income less statutory net deficit | 215,354,252 | 28,073,603 | 5,112,526 | 103,106,682 | †4,919,387 | 11,892,249 |
| I. Net loss for prior year deducted by concerns reporting net income for 1931 | 3,242,597 | 735,316 | 63,727 | 113,982 | 106,393 | 932,856 |
| J. Statutory net income (H) less statutory net loss for prior year (I) | 212,113,355 | 27,339,287 | 5,048,789 | 102,991,700 | †5,025,780 | 10,059,393 |
| K. Total tax | 31,377,204 | 6,747,022 | 1,460,001 | 21,338,090 | 499,072 | 8,807,639 |
| L. Compiled net profit (F) less total tax (K) | 355,683,700 | 94,206,111 | 22,592,038 | 340,201,583 | †4,341,872 | 48,129,273 |

| Cash and stock dividends distributed: | Wholesale | Retail | Wholesale and retail | Commission | All other | Total trade |
|---|---|---|---|---|---|---|
| Cash dividends | 601,853,232 | 149,362,694 | 41,732,910 | 379,227,550 | 6,232,732 | 131,613,814 |
| Stock dividends | 2,894,820 | 1,046,376 | 173,763 | 330,147 | 42,655 | 9,807,102 |
| Total dividends distributed | 604,748,052 | 150,408,970 | 41,906,717 | 379,557,697 | 6,275,387 | 141,420,976 |

¹ Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest obligations and dividends on stock of domestic corporations. ² Not available. ³ Deficit.

TABLE 4.—*Corporation income tax returns for 1929, 1930, and 1931, filed by concerns whose predominant business is classified under "Trade—wholesale, retail, wholesale and retail, and commission," showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*

[Composite for returns showing net income and no net income, but excluding returns filed for inactive corporations]

| Distribution | Wholesale | Retail | Wholesale and retail | Commission | All other | Total trade |
|---|---|---|---|---|---|---|
| **1929** | | | | | | |
| A. Receipts, taxable income: | | | | | | |
| Gross sales | $14,056,300,218 | $18,880,062,017 | $4,877,672,250 | $1,835,565,780 | $1,910,849,094 | $42,190,350,571 |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | 1,870,136,090 | 4,084,147,522 | 984,275,857 | 155,122,353 | 449,230,602 | 8,146,913,354 |
| Returns showing loss | 7,676,377 | 2,770,056 | 453,021 | 685,241 | 2,388,815 | 13,970,515 |
| Profits less losses ¹ | 1,808,460,683 | 4,681,371,466 | 983,822,834 | 154,437,109 | 446,841,847 | 8,134,933,530 |
| Gross profits from operations other than amounts tabulated as gross sales | 88,856,125 | 169,234,402 | 25,445,373 | 180,230,746 | 51,984,065 | 178,750,711 |
| Interest | 41,888,378 | 67,618,118 | 15,930,034 | 10,780,221 | 7,719,448 | 182,942,833 |
| Rents | 17,039,191 | 105,039,433 | 13,664,071 | 2,428,731 | 15,072,007 | 154,143,493 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 20,682,881 | 21,927,341 | 6,028,161 | 4,260,907 | 4,171,074 | 50,979,434 |
| Miscellaneous receipts | 104,391,307 | 183,210,143 | 35,570,408 | 19,171,298 | 19,765,072 | 302,099,128 |
| B. Receipts, tax-exempt income: | | | | | | |
| Dividends on capital stock of domestic corporations | 20,341,382 | 20,172,647 | 4,494,306 | 9,014,371 | 5,134,770 | 69,257,482 |
| Interest on Federal, State, and municipal bonds | 3,355,054 | 6,490,334 | 55,770 | 576,073 | 393,007 | 11,776,238 |
| C. Total compiled receipts ² | 15,252,754,510 | 19,454,661,035 | 4,679,761,029 | 2,071,052,220 | 2,048,080,104 | 43,500,308,910 |
| D. Statutory deductions: | | | | | | |
| Cost of goods sold | 13,087,839,635 | 14,198,691,151 | 3,683,740,422 | 1,681,128,677 | 1,494,007,847 | 34,055,416,732 |
| Compensation of officers | 266,665,449 | 451,050,897 | 96,411,168 | 66,914,175 | 76,107,713 | 957,239,391 |
| Interest paid | 87,328,290 | 122,037,131 | 29,005,587 | 18,782,519 | 19,703,764 | 276,867,281 |
| Taxes paid other than income tax | 43,142,910 | 117,028,455 | 27,182,978 | 4,734,802 | 12,722,080 | 204,811,224 |
| Bad debts | 88,752,394 | 102,035,361 | 24,798,884 | 14,162,599 | 14,004,766 | 243,803,094 |
| Depreciation | 61,316,521 | 101,579,181 | 46,390,592 | 6,207,757 | 25,348,128 | 299,841,179 |
| Depletion | 503,569 | 973,629 | 298,559 | 23,280 | 285,650 | 2,084,702 |
| Miscellaneous deductions | 1,395,888,036 | 3,018,906,659 | 783,788,899 | 220,844,838 | 366,053,205 | 6,665,383,637 |

¹ "Gross sales" less "Cost of goods sold" (shown under statutory deductions).
² Includes net profits from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in Schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.

TABLE 4.—*Corporation income tax returns for 1929, 1930, and 1931, filed by concerns whose predominant business is classified under "Trade—wholesale, retail, wholesale and retail, and commission," showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Continued

| Distribution | Wholesale | Retail | Wholesale and retail | Commission | All other | Total trade |
|---|---|---|---|---|---|---|
| **1929** | | | | | | |
| E. Total statutory deductions | $15,031,435,803 | $10,072,304,454 | $1,670,026,079 | $2,021,788,056 | $2,009,283,148 | $42,705,438,140 |
| F. Compiled net profit less net loss | 221,313,713 | 382,356,681 | 109,134,950 | 40,203,570 | 38,796,050 | 800,870,770 |
| G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 23,690,430 | 20,068,981 | 5,550,070 | 9,550,444 | 5,527,783 | 71,033,720 |
| H. Statutory net income less statutory net deficit | 107,622,277 | 355,687,600 | 103,584,874 | 39,073,126 | 33,260,173 | 729,837,050 |
| I. Net loss for prior year deducted by concerns reporting net income for 1929 | 11,817,673 | 17,221,544 | 6,643,378 | 2,500,855 | 4,033,542 | 42,252,092 |
| J. Statutory net income (H) less statutory net loss for prior year (I) | 185,771,004 | 338,466,056 | 96,911,490 | 37,196,271 | 29,235,031 | 687,594,058 |
| K. Total tax | 30,450,981 | 53,439,841 | 12,701,835 | 5,775,545 | 5,691,443 | 107,148,048 |
| L. Compiled net profit (F) less total tax (K) | 190,807,729 | 329,017,740 | 96,343,115 | 43,488,025 | 33,105,613 | 603,722,122 |
| Cash and stock dividends distributed: | | | | | | |
| Cash dividends | 187,312,520 | 331,046,010 | 65,855,902 | 31,751,092 | 25,910,891 | 624,976,414 |
| Stock dividends | 23,583,756 | 50,026,345 | 9,475,445 | 4,904,103 | 4,119,072 | 97,711,711 |
| Total dividends distributed | 195,894,285 | 384,672,355 | 75,331,347 | 36,657,285 | 30,030,853 | 722,588,125 |
| **1930** | | | | | | |
| A. Receipts, taxable income: | | | | | | |
| Gross sales | 12,488,654,223 | 16,601,884,007 | 4,137,323,208 | 1,500,719,659 | 1,259,202,221 | 36,083,773,317 |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | 1,015,232,600 | 4,154,843,496 | 894,784,519 | 144,288,401 | 313,580,050 | 7,122,735,078 |
| Returns showing loss | 19,364,327 | 15,338,691 | 2,061,609 | 4,130,039 | 2,705,073 | 43,650,073 |
| Profits less losses [1] | 1,505,866,270 | 4,130,504,805 | 892,722,910 | 140,158,362 | 310,890,053 | 7,070,133,039 |
| Gross profits from operations, other than amounts tabulated as gross sales | 66,150,883 | 132,837,620 | 15,044,346 | 159,329,726 | 47,465,218 | 420,820,763 |
| Interest | 40,526,883 | 62,313,767 | 15,832,296 | 18,027,010 | 5,707,303 | 142,401,325 |
| Rents | 15,928,511 | 104,704,047 | 13,690,811 | 3,094,613 | 14,945,853 | 164,451,865 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 7,633,660 | 9,185,917 | 4,937,983 | 1,297,092 | 1,391,812 | 24,446,304 |
| Miscellaneous receipts | 65,626,083 | 188,120,441 | 32,624,489 | 17,673,483 | 14,884,972 | 318,836,073 |
| B. Receipts, tax-exempt income: | | | | | | |
| Dividends on capital stock of domestic corporations | 31,667,856 | 15,001,311 | 5,403,775 | 8,701,888 | 3,212,947 | 63,987,777 |
| Interest on Federal, State, and municipal bonds | 3,234,375 | 3,223,847 | 902,050 | 10,576,046 | 417,993 | 18,354,301 |
| C. Total compiled receipts [2] | 12,719,316,979 | 17,119,368,957 | 4,225,754,998 | 1,815,318,522 | 1,347,318,300 | 37,227,077,815 |
| D. Statutory deductions: | | | | | | |
| Cost of goods sold | 10,892,687,914 | 12,462,379,202 | 3,214,000,298 | 1,456,561,296 | 952,281,024 | 20,008,509,764 |
| Compensation of officers | 252,170,892 | 419,609,727 | 91,552,278 | 63,692,210 | 61,203,811 | 888,318,024 |
| Interest paid | 78,500,300 | 120,048,938 | 23,827,925 | 17,076,176 | 13,440,811 | 257,906,208 |
| Taxes paid other than income tax | 57,147,349 | 121,764,243 | 30,268,320 | 4,929,041 | 9,649,681 | 223,749,614 |

| | | | | | |
|---|---|---|---|---|---|
| Bad debts | 98,210,891 | 102,413,103 | 27,939,053 | 14,744,096 | 12,201,917 | 255,511,052 |
| Depreciation | 63,756,517 | 169,534,971 | 49,852,596 | 5,773,164 | 19,787,212 | 308,704,460 |
| Depletion | 570,735 | 552,412 | 721,078 | 21,543 | 167,510 | 2,040,178 |
| Loss from sale of real estate, stocks, and bonds | 15,849,170 | 26,596,473 | 3,452,923 | 4,083,543 | 3,536,040 | 53,518,760 |
| Miscellaneous deductions | 1,275,513,510 | 3,696,436,355 | 743,261,146 | 233,511,180 | 284,032,020 | 6,231,074,211 |
| E. Total statutory deductions | 12,734,422,374 | 17,110,335,422 | 4,220,476,624 | 1,800,788,255 | 1,357,310,615 | 37,212,333,190 |
| F. Compiled net profit less net loss | ³15,105,395 | 33,535 | ³5,278,464 | 14,530,207 | ³9,092,246 | ³5,255,375 |
| G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 34,902,231 | 18,225,158 | 6,305,825 | 19,277,934 | 3,630,030 | 82,342,078 |
| H. Statutory net income less statutory net deficit | ³50,007,620 | ³18,191,623 | ³1,027,361 | ³4,747,667 | 13,623,170 | ³87,597,463 |
| I. Net loss for prior year deducted by concerns reporting net income for 1930 | | | | | | |
| Statutory net income (H) less statutory net loss for prior year (I) | 6,457,990 | 7,611,878 | 2,087,472 | 1,305,290 | 2,739,798 | 20,202,437 |
| K. Total tax | ³58,405,025 | ³25,803,501 | ³3,114,833 | ³6,142,947 | ³16,362,974 | ³107,889,690 |
| L. Compiled net profit (F) less total tax (K) | 17,367,314 | 33,567,294 | 7,555,104 | 3,366,270 | 2,309,799 | 64,165,780 |
| Cash and stock dividends distributed: | ³32,472,709 | ³33,533,749 | ³2,276,040 | ³11,163,988 | ³12,302,045 | ³60,421,155 |
| Cash dividends | 160,245,857 | 289,470,070 | 65,752,545 | 29,344,236 | 16,017,228 | 550,838,936 |
| Stock dividends | 15,052,468 | 28,455,501 | 9,048,008 | 6,842,087 | 1,706,663 | 61,704,727 |
| Total dividends distributed | 175,298,325 | 317,034,571 | 75,400,553 | 36,186,323 | 17,723,801 | 622,543,663 |
| **1931** | | | | | | |
| Receipts, taxable income: | | | | | | |
| Gross sales | 10,001,027,325 | 14,165,475,506 | 3,290,133,349 | 903,638,929 | 1,054,161,709 | 29,504,424,008 |
| Profit or loss from sales: | | | | | | |
| Returns showing profit | 1,367,837,847 | 3,573,460,257 | 714,784,023 | 81,801,100 | 201,030,103 | 5,908,013,330 |
| Returns showing loss | 20,027,391 | 14,087,493 | 2,693,422 | 3,337,208 | 3,037,727 | 44,983,241 |
| Profits less losses ¹ | 1,347,810,456 | 3,558,472,764 | 712,090,601 | 78,463,802 | 207,002,376 | 5,953,930,089 |
| Gross profits from operations other than amounts tabulated as gross sales | 60,333,457 | 106,131,663 | 12,868,542 | 135,737,287 | 42,543,063 | 366,314,012 |
| Interest | 38,706,240 | 54,751,960 | 10,897,080 | 11,679,510 | 4,250,172 | 120,252,971 |
| Rents | 14,073,700 | 105,016,893 | 11,009,006 | 2,335,230 | 11,485,577 | 144,541,406 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 4,957,395 | 31,432,935 | 2,138,418 | 600,334 | 1,345,505 | 40,490,887 |
| Miscellaneous receipts | 86,333,883 | 228,297,517 | 27,729,743 | 13,686,452 | 14,041,618 | 370,088,913 |
| B. Receipts, tax-exempt income: | | | | | | |
| Dividends on capital stock of domestic corporations | 24,082,620 | 12,497,333 | 3,248,725 | 5,508,104 | 2,003,049 | 47,340,791 |
| Interest on Federal, State, and municipal bonds | 2,984,780 | 7,728,180 | 636,343 | 479,747 | 278,816 | 12,107,886 |
| C. Total compiled receipts ² | 10,331,558,110 | 14,711,331,997 | 3,388,961,215 | 1,073,591,653 | 1,180,110,499 | 30,005,553,474 |
| D. Statutory deductions: | | | | | | |
| Cost of goods sold | 8,743,216,809 | 10,607,002,742 | 2,678,042,748 | 825,176,037 | 797,069,423 | 23,550,496,819 |
| Compensation of officers | 220,670,198 | 363,846,652 | 82,559,113 | 51,799,459 | 56,431,151 | 775,306,573 |
| Interest paid | 65,915,986 | 107,000,083 | 22,672,528 | 9,537,376 | 12,720,508 | 217,846,381 |
| Taxes paid other than income tax | 48,472,119 | 122,163,012 | 24,685,551 | 8,684,910 | 9,249,514 | 200,145,106 |
| Bad debts | 99,116,391 | 106,611,079 | 32,685,078 | 13,064,424 | 12,831,822 | 264,198,794 |
| Depreciation | 62,252,705 | 174,269,994 | 49,556,611 | 4,935,445 | 21,578,493 | 312,593,258 |
| Depletion | 694,336 | 1,180,222 | 4,313,521 | 20,369 | 124,122 | 6,341,560 |

¹ "Gross sales" less "Cost of goods sold" (shown under statutory deductions).
² Includes net profits from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in Schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.
³ Deficit.

TABLE 4.—*Corporation income tax returns for 1929, 1930, and 1931, filed by concerns whose predominant business is classified under "Trade—wholesale, retail, wholesale and retail, and commission"; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Continued

| Distribution | Wholesale | Retail | Wholesale and retail | Commission | All other | Total trade |
|---|---|---|---|---|---|---|
| **1931** | | | | | | |
| D. Statutory deductions—Continued | | | | | | |
| Loss from sale of real estate, stocks, and bonds | $87,170,591 | $32,572,030 | $5,055,803 | $6,683,325 | $8,613,275 | $140,095,114 |
| Miscellaneous deductions | 1,190,321,012 | 3,395,896,351 | 612,780,491 | 172,640,038 | 257,853,022 | 5,638,477,814 |
| E. Total statutory deductions | 10,524,831,057 | 14,910,441,165 | 3,412,221,534 | 1,097,846,393 | 1,170,461,330 | 31,111,501,429 |
| F. Compiled net profit less net loss | ¹183,272,887 | ¹199,109,108 | ¹58,270,319 | ¹13,934,740 | ¹46,340,831 | ¹500,947,885 |
| G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 27,067,410 | 20,225,523 | 3,885,008 | 5,987,911 | 2,282,785 | 59,448,677 |
| H. Statutory net income less statutory net deficit | ¹220,340,307 | ¹219,334,691 | ¹57,155,387 | ¹19,942,651 | ¹48,623,596 | ¹565,304,632 |
| I. Net loss for prior year deducted by concerns reporting net income for 1931 | 7,602,629 | 7,170,473 | 1,630,883 | 1,459,740 | 1,315,892 | 19,179,617 |
| J. Statutory net income (H) less statutory net loss for prior year (I) | ¹227,942,930 | ¹220,505,164 | ¹58,786,270 | ¹21,402,391 | ¹49,939,488 | ¹684,570,249 |
| K. Total tax | 10,142,175 | 27,825,578 | 4,679,903 | 1,843,837 | 1,316,643 | 45,708,136 |
| L. Compiled net profit (F) less total tax (K) | ¹203,415,072 | ¹226,934,740 | ¹57,950,222 | ¹15,798,577 | ¹47,657,474 | ¹551,056,091 |
| Cash and stock dividends distributed: | | | | | | |
| Cash dividends | 128,489,020 | 235,898,144 | 40,294,978 | 15,640,892 | 13,002,671 | 433,325,505 |
| Stock dividends | 5,097,291 | 6,340,303 | 1,938,740 | 1,424,685 | 1,713,263 | 10,514,282 |
| Total dividends distributed | 133,586,311 | 242,238,447 | 42,233,718 | 17,065,577 | 14,715,934 | 449,839,787 |

¹ Deficit.

TABLE 5.—*Corporation income-tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under "Service—Domestic, Amusements, Professional, and Business;" showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*

[Composite for all returns]

| Distribution | Domestic | Amusements | Professional | Business | All other |
|---|---|---|---|---|---|
| **1929** | | | | | |
| **A.** Receipts, taxable income: | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing loss | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $1, 665, 274, 085 | $1, 003, 903, 542 | $329, 596, 464 | $627, 278, 414 | $172, 812, 672 |
| Interest | 9, 400, 374 | 12, 192, 451 | 5, 230, 999 | 11, 308, 276 | 2, 577, 451 |
| Rents | 96, 384, 923 | 50, 212, 874 | 4, 797, 815 | 3, 262, 321 | 4, 089, 846 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 5, 690, 638 | 14, 500, 267 | 6, 863, 651 | 4, 410, 669 | 2, 972, 029 |
| Miscellaneous receipts | 28, 401, 399 | 43, 978, 363 | 12, 638, 778 | 8, 940, 615 | 5, 577, 737 |
| **B.** Receipts, tax-exempt income: | | | | | |
| Dividends on capital stock of domestic corporations | 5, 266, 678 | 14, 430, 633 | 8, 597, 917 | 30, 194, 363 | 1, 123, 063 |
| Interest on Federal, State, and municipal bonds | 415, 000 | 225, 282 | 225, 737 | 395, 980 | 208, 895 |
| **C.** Total compiled receipts [1] | 1, 810, 833, 097 | 1, 139, 443, 412 | 367, 951, 361 | 685, 790, 638 | 189, 361, 713 |
| **D.** Statutory deductions: | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 76, 878, 618 | 26, 210, 504 | 41, 924, 864 | 53, 459, 292 | 19, 499, 995 |
| Interest paid | 73, 186, 993 | 43, 266, 030 | 7, 389, 932 | 4, 956, 745 | 4, 015, 177 |
| Taxes paid other than income tax | 43, 173, 109 | 23, 051, 493 | 4, 010, 644 | 4, 275, 075 | 2, 645, 449 |
| Bad debts | 5, 771, 545 | 3, 179, 702 | 3, 969, 378 | 5, 345, 658 | 2, 642, 734 |
| Depreciation | 96, 434, 291 | 68, 366, 193 | 10, 703, 850 | 10, 686, 931 | 6, 455, 900 |
| Depletion | 207, 163 | 107, 597 | 22, 163 | 29, 985 | 59, 862 |
| Miscellaneous deductions | 1, 491, 719, 303 | 890, 646, 124 | 275, 685, 393 | 527, 831, 378 | 144, 275, 988 |
| **E.** Total statutory deductions | 1, 787, 371, 025 | 1, 054, 827, 643 | 343, 706, 224 | 606, 585, 064 | 179, 595, 105 |
| **F.** Compiled net profit less net loss | 23, 462, 072 | 84, 615, 769 | 24, 245, 137 | 79, 205, 574 | 9, 766, 608 |
| **G.** Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 5, 681, 678 | 14, 655, 915 | 8, 823, 654 | 30, 590, 343 | 1, 331, 978 |
| **H.** Statutory net income less statutory net deficit | 17, 780, 394 | 69, 959, 854 | 15, 421, 483 | 48, 615, 231 | 8, 434, 630 |
| **I.** Net loss for prior year deducted by concerns reporting net income for 1929 | 5, 925, 426 | 6, 671, 722 | 1, 024, 770 | 2, 388, 796 | 865, 119 |
| **J.** Statutory net income (H) less statutory net loss for prior year (I) | 11, 854, 968 | 63, 288, 132 | 14, 396, 713 | 46, 226, 435 | 7, 569, 511 |
| **K.** Total tax | 6, 879, 762 | 11, 578, 249 | 4, 173, 878 | 5, 891, 581 | 1, 108, 829 |
| **L.** Compiled net profit (F) less total tax (K) | 16, 582, 310 | 73, 037, 520 | 20, 071, 259 | 73, 313, 993 | 8, 657, 779 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 40, 169, 595 | 45, 564, 267 | 37, 316, 376 | 46, 151, 710 | 7, 333, 189 |
| Stock dividends | 3, 420, 940 | 948, 738 | 1, 060, 683 | 901, 662 | 1, 037, 563 |
| Total dividends distributed | 43, 590, 535 | 46, 513, 005 | 38, 377, 059 | 47, 053, 372 | 8, 370, 752 |

[1] Includes net profits from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income, other than interest on tax-exempt obligations and dividends on stock of domestic corporations as reported in schedule L of the return.

TABLE 5.—*Corporation income-tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under "Service—Domestic, Amusements, Professional, and Business;" showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Continued

| Distribution | Domestic | Amusements | Profes-sional | Business | All other |
|---|---|---|---|---|---|
| **1930** | | | | | |
| **A. Receipts, taxable income:** | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing loss | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $1, 658, 869, 674 | $1, 044, 967, 880 | $299, 715, 505 | $620, 977, 780 | $162, 536, 709 |
| Interest | 8, 126, 849 | 11, 450, 934 | 3, 475, 758 | 10, 738, 889 | 2, 212, 355 |
| Rents | 99, 189, 004 | 45, 368, 509 | 4, 744, 013 | 3, 410, 580 | 3, 888, 741 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 5, 037, 719 | 12, 204, 365 | 2, 203, 833 | 2, 371, 253 | 2, 037, 046 |
| Miscellaneous receipts | 29, 636, 187 | 36, 599, 194 | 9, 471, 471 | 27, 807, 923 | 4, 658, 944 |
| **B. Receipts, tax-exempt income:** | | | | | |
| Dividends on capital stock of domestic corporations | 4, 929, 041 | 15, 869, 531 | 4, 428, 845 | 27, 515, 296 | 423, 408 |
| Interest on Federal, State, and municipal bonds | 446, 608 | 199, 059 | 494, 253 | 443, 291 | 203, 203 |
| **C. Total compiled receipts [1]** | 1, 806, 235, 082 | 1, 166, 659, 472 | 324, 533, 678 | 693, 205, 012 | 176, 050, 406 |
| **D. Statutory deductions:** | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 76, 525, 811 | 25, 707, 741 | 40, 314, 588 | 54, 273, 964 | 19, 010, 145 |
| Interest paid | 76, 859, 594 | 48, 133, 814 | 5, 488, 748 | 4, 671, 108 | 3, 717, 589 |
| Taxes paid other than income tax | 46, 808, 636 | 24, 228, 509 | 3, 424, 759 | 3, 808, 191 | 2, 650, 301 |
| Bad debts | 10, 750, 602 | 2, 952, 956 | 5, 081, 449 | 5, 797, 375 | 2, 636, 313 |
| Depreciation | 102, 517, 591 | 61, 987, 067 | 10, 919, 679 | 11, 644, 813 | 6, 291, 222 |
| Depletion | 54, 505 | 57, 186 | 22, 728 | 2, 427 | 19, 679 |
| Loss from sale of real estate, stocks and bonds | 8, 003, 288 | 7, 270, 088 | 2, 836, 497 | 2, 654, 409 | 640, 071 |
| Miscellaneous deductions | 1, 507, 899, 564 | 938, 108, 543 | 246, 628, 892 | 548, 565, 802 | 137, 698, 278 |
| **E. Total statutory deductions** | 1, 829, 428, 591 | 1, 108, 445, 934 | 314, 747, 310 | 631, 418, 089 | 172, 663, 598 |
| **F. Compiled net profit less net loss** | ¹ 23, 193, 509 | 58, 213, 538 | 9, 786, 338 | 61, 846, 923 | 3, 386, 808 |
| **G.** Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 5, 375, 649 | 16, 068, 590 | 4, 923, 098 | 27, 958, 587 | 716, 611 |
| **H.** Statutory net income less statutory net deficit | ¹ 28, 569, 158 | 42, 144, 948 | 4, 863, 240 | 33, 888, 336 | 2, 670, 197 |
| **I.** Net loss for prior year deducted by concerns reporting net income for 1930 | 2, 406, 583 | 4, 324, 065 | 1, 175, 127 | 1, 598, 936 | 425, 744 |
| **J.** Statutory net income (H) less statutory net loss for prior year (I) | ¹ 30, 975, 741 | 37, 820, 883 | 3, 688, 113 | 32, 289, 400 | 2, 244, 453 |
| **K.** Total tax | 5, 594, 487 | 9, 510, 030 | 2, 401, 442 | 5, 317, 518 | 881, 276 |
| **L.** Compiled net profit (F) less total tax (K) | ¹ 28, 787, 996 | 48, 703, 508 | 7, 384, 896 | 56, 529, 405 | 2, 505, 532 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 40, 412, 571 | 59, 342, 472 | 16, 918, 405 | 43, 304, 376 | 6, 100, 872 |
| Stock dividends | 6, 437, 781 | 1, 292, 890 | 284, 368 | 2, 637, 980 | 626, 773 |
| Total dividends distributed | 46, 850, 352 | 60, 635, 362 | 17, 202, 773 | 45, 942, 356 | 6, 727, 645 |

¹ Includes net profits from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income, other than interest on tax-exempt obligations and dividends on stock of domestic corporations as reported in schedule L of the return.

TABLE 5.—*Corporation income-tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under "Service—Domestic, Amusements, Professional and Business;" showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Continued

| Distribution | Domestic | Amusements | Profes-sional | Business | All other |
|---|---|---|---|---|---|
| **1931** | | | | | |
| A. Receipts, taxable income: | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing loss | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $1,460,558,830 | $1,017,981,263 | $226,265,346 | $521,817,330 | $167,766,229 |
| Interest | 8,900,895 | 15,654,457 | 2,484,086 | 8,518,925 | 3,209,282 |
| Rents | 80,648,844 | 42,882,299 | 2,724,376 | 2,543,705 | 3,070,003 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 1,830,016 | 2,850,952 | 753,330 | 489,737 | 1,762,320 |
| Miscellaneous receipts | 19,511,150 | 27,770,346 | 4,412,264 | 8,513,415 | 4,276,324 |
| B. Receipts, tax-exempt income: | | | | | |
| Dividends on capital stock of domestic corporations | 3,348,613 | 17,801,605 | 1,304,775 | 18,925,895 | 642,189 |
| Interest on Federal, State, and municipal bonds | 414,595 | 179,867 | 291,078 | 327,641 | 365,071 |
| C. Total compiled receipts [1] | 1,575,218,943 | 1,125,120,789 | 238,235,255 | 561,136,648 | 181,091,418 |
| D. Statutory deductions: | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 69,818,632 | 22,163,312 | 31,770,047 | 49,038,372 | 19,374,178 |
| Interest paid | 70,458,315 | 51,557,041 | 4,830,418 | 5,152,184 | 3,764,351 |
| Taxes paid other than income tax | 44,913,064 | 27,179,372 | 2,943,919 | 3,477,509 | 2,826,243 |
| Bad debts | 8,920,920 | 3,749,701 | 4,196,103 | 6,225,802 | 3,255,416 |
| Depreciation | 101,674,704 | 62,431,458 | 9,328,913 | 10,740,341 | 6,434,046 |
| Depletion | 308,912 | 59,461 | 44,637 | 54,079 | 58,003 |
| Loss from sale of real estate, stocks, and bonds | 20,375,881 | 8,356,371 | 2,872,102 | 13,362,581 | 4,710,330 |
| Miscellaneous deductions | 1,340,066,875 | 957,045,134 | 189,887,375 | 453,616,825 | 143,432,563 |
| E. Total statutory deductions | 1,656,627,303 | 1,132,541,850 | 245,873,514 | 541,667,692 | 183,855,100 |
| F. Compiled net profit less net loss | [2] 81,408,360 | [2] 7,421,061 | [2] 7,638,259 | 19,468,956 | [2] 2,763,682 |
| G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 3,763,208 | 17,981,472 | 1,595,853 | 19,253,536 | 1,007,260 |
| H. Statutory net income less statutory net deficit | [2] 85,171,568 | [2] 25,402,533 | [2] 9,234,112 | 215,420 | [2] 3,770,942 |
| I. Net loss for prior year deducted by concerns reporting net income for 1931 | 1,617,932 | 3,166,033 | 742,222 | 1,049,896 | 370,672 |
| J. Statutory net income (H) less statutory net loss for prior year (I) | [2] 86,789,500 | [2] 28,568,566 | [2] 9,976,334 | [2] 834,476 | [2] 4,141,614 |
| K. Total tax | 3,389,259 | 3,496,432 | 903,503 | 2,545,796 | 745,594 |
| L. Compiled net profit (F) less total tax (K) | [2] 84,797,619 | [2] 10,917,493 | [2] 8,541,762 | 16,923,160 | [2] 3,509,276 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 24,735,532 | 48,671,522 | 8,625,744 | 27,104,766 | 6,582,513 |
| Stock dividends | 829,121 | 253,157 | 284,101 | 8,871,960 | 246,882 |
| Total dividends distributed | 25,564,653 | 48,924,679 | 8,909,845 | 35,976,726 | 6,892,395 |

[1] Includes net profits from the sale of real estate, stocks, bonds, etc. and other capital assets, but not gross receipts from these items. Excludes nontaxable income, other than interest on tax-exempt obligations and dividends on stock of domestic corporations as reported in schedule L of the return.
[2] Deficit.

TABLE 6.—*Corporation income-tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Amusements"—Theaters, legitimate, vaudeville; motion-picture producers, motion-picture theaters; and other amusements; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*

[Composite for returns showing net income and no net income but excluding returns filed for inactive corporations]

| Distribution | Theaters—legitimate and vaudeville | Motion-picture producers | Motion-picture theaters | Other amuse-ments | Total amuse-ments |
|---|---|---|---|---|---|
| **1929** | | | | | |
| **A. Receipts, taxable income:** | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing loss | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $91,395,666 | $307,767,907 | $441,335,143 | $163,404,826 | $1,003,903,542 |
| Interest | 731,052 | 2,383,278 | 7,830,756 | 1,247,365 | 12,192,451 |
| Rents | 4,768,291 | 10,435,363 | 26,926,663 | 8,082,557 | 50,212,874 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 2,014,053 | 8,940,143 | 2,481,943 | 1,064,128 | 14,500,267 |
| Miscellaneous receipts | 3,799,714 | 9,675,645 | 22,162,788 | 8,340,216 | 43,978,363 |
| **B. Receipts, tax-exempt income:** | | | | | |
| Dividends on capital stock of domestic corporations | 1,100,921 | 4,242,448 | 7,701,638 | 1,385,626 | 14,430,633 |
| Interest on Federal, State, and municipal bonds | 138,070 | 8,426 | 23,312 | 55,474 | 225,282 |
| **C. Total compiled receipts [1]** | 103,947,767 | 343,453,210 | 508,462,243 | 183,580,192 | 1,139,443,412 |
| **D. Statutory deductions:** | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 2,464,922 | 4,117,980 | 9,610,741 | 10,016,861 | 26,210,504 |
| Interest paid | 3,527,510 | 9,296,319 | 24,293,820 | 6,148,381 | 43,266,030 |
| Taxes paid other than income tax | 2,900,935 | 3,317,647 | 10,876,775 | 5,956,136 | 23,051,493 |
| Bad debts | 117,899 | 450,868 | 1,638,434 | 972,501 | 3,179,702 |
| Depreciation | 4,276,993 | 27,346,046 | 24,040,855 | 12,702,299 | 68,366,193 |
| Depletion | 1,120 | 770 | 61,056 | 44,651 | 107,597 |
| Loss from sale of real estate, stocks, and bonds [3] | | | | | |
| Miscellaneous deductions | 89,918,638 | 250,273,174 | 407,821,086 | 142,632,326 | 890,646,124 |
| **E. Total statutory deductions** | 103,208,017 | 294,802,804 | 478,343,667 | 178,473,155 | 1,054,827,643 |
| **F. Compiled net profit less net loss** | 739,750 | 48,650,406 | 30,118,576 | 5,107,037 | 84,615,769 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income** | 1,238,991 | 4,250,874 | 7,724,950 | 1,441,100 | 14,655,915 |
| **H. Statutory net income less statutory net deficit** | [3] 499,241 | 44,399,532 | 22,393,626 | 3,665,937 | 69,959,854 |
| **I. Net loss for prior year deducted by concerns reporting net income for 1929** | 1,402,614 | 2,202,126 | 1,971,770 | 1,095,212 | 6,671,722 |
| **J. Statutory net income (H) less statutory net loss for prior year (I)** | [3] 1,901,855 | 42,197,406 | 20,421,856 | 2,570,725 | 63,288,132 |
| **K. Total tax** | 694,252 | 5,330,474 | 4,104,616 | 1,448,907 | 11,578,249 |
| **L. Compiled net profit (F) less total tax (K)** | 45,498 | 43,319,932 | 26,013,960 | 3,658,130 | 73,037,520 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 4,526,819 | 11,373,014 | 20,946,714 | 8,717,720 | 45,564,267 |
| Stock dividends | 89,500 | 27,592 | 625,306 | 206,340 | 948,738 |
| Total dividends distributed | 4,616,319 | 11,400,606 | 21,572,020 | 8,924,060 | 46,513,005 |

[1] Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.
[2] Not available.
[3] Deficit.

TABLE 6.—*Corporation income-tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Amusements"—Theaters, legitimate, vaudeville; motion-picture producers, motion-picture theaters; and other amusements; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Continued

| Distribution | Theaters—legitimate and vaudeville | Motion-picture producers | Motion-picture theaters | Other amusements | Total amusements |
|---|---|---|---|---|---|
| **1930** | | | | | |
| **A.** Receipts, taxable income: | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing loss | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $60,582,636 | $379,128,539 | $444,832,219 | $160,424,486 | $1,044,967,880 |
| Interest | 476,100 | 2,038,341 | 7,873,678 | 1,062,815 | 11,450,934 |
| Rents | 4,074,539 | 12,682,806 | 21,271,424 | 7,339,740 | 45,368,509 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 488,741 | 1,241,459 | 9,717,734 | 756,431 | 12,204,365 |
| Miscellaneous receipts | 1,416,821 | 8,920,857 | 21,448,723 | 4,812,793 | 36,599,194 |
| **B.** Receipts, tax-exempt income: | | | | | |
| Dividends on capital stock of domestic corporations | 552,568 | 6,688,302 | 7,960,880 | 667,781 | 15,869,531 |
| Interest on Federal, State, and municipal bonds | 60,262 | 14,006 | 78,761 | 46,031 | 199,059 |
| **C.** Total compiled receipts[1] | 67,651,667 | 410,714,310 | 513,183,419 | 175,110,076 | 1,166,659,472 |
| **D.** Statutory deductions: | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 2,032,392 | 4,658,694 | 9,840,751 | 9,175,904 | 25,707,741 |
| Interest paid | 2,086,618 | 15,760,523 | 23,922,760 | 6,363,945 | 48,133,844 |
| Taxes paid other than income tax | 1,652,738 | 4,823,386 | 11,463,162 | 6,289,223 | 24,228,509 |
| Bad debts | 59,856 | 789,327 | 667,967 | 1,435,806 | 2,952,956 |
| Depreciation | 3,039,314 | 20,244,275 | 24,193,629 | 14,504,849 | 61,987,067 |
| Depletion | | | 12,395 | 44,791 | 57,186 |
| Loss from sale of real estate, stocks, and bonds | 1,256,401 | 1,521,269 | 3,057,961 | 1,434,457 | 7,270,088 |
| Miscellaneous deductions | 61,468,237 | 332,826,568 | 402,236,838 | 141,576,900 | 938,108,543 |
| **E.** Total statutory deductions | 71,595,554 | 380,624,042 | 475,400,463 | 160,825,875 | 1,108,445,934 |
| **F.** Compiled net profit less net loss | [2]3,943,887 | 30,090,268 | 37,782,956 | [2]5,715,799 | 58,213,538 |
| **G.** Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 612,830 | 6,702,308 | 8,039,641 | 713,811 | 16,068,590 |
| **H.** Statutory net income less statutory net deficit | [2]4,556,717 | 23,387,960 | 29,743,315 | [2]6,429,610 | 42,144,948 |
| **I.** Net loss for prior year deducted by concerns reporting net income for 1930 | 485,780 | 871,486 | 2,217,685 | 749,114 | 4,324,065 |
| **J.** Statutory net income (H) less statutory net loss for prior year (I) | [2]5,042,497 | 22,516,474 | 27,525,630 | [2]7,178,724 | 37,820,883 |
| **K.** Total tax | 330,597 | 3,689,832 | 4,612,931 | 876,670 | 9,510,030 |
| **L.** Compiled net profit (F) less total tax (K) | [2]4,274,484 | 26,400,436 | 33,170,025 | [2]6,592,469 | 48,703,508 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 3,460,521 | 26,496,891 | 23,568,078 | 5,716,982 | 59,342,472 |
| Stock dividends | 631,665 | 24,006 | 448,056 | 189,163 | 1,292,890 |
| Total dividends distributed | 4,092,186 | 26,520,897 | 24,116,134 | 5,906,145 | 60,635,362 |

[1] Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.
[2] Deficit.

TABLE 6.—*Corporation income-tax returns for 1929, 1930, and 1931 filed by concerns whose predominant business is classified under the following subdivisions of "Amusements"—Theaters, legitimate, vaudeville; motion-picture producers, motion-picture theaters; and other amusements; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Continued

| Distribution | Theaters— legitimate and vaude- ville | Motion- picture producers | Motion- picture theaters | Other amuse- ments | Total amuse- ments |
|---|---|---|---|---|---|
| **1931** | | | | | |
| **A. Receipts, taxable income:** | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing loss | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $47,320,019 | $396,478,284 | $139,414,047 | $134,768,013 | $1,017,981,263 |
| Interest | 481,777 | 4,411,393 | 9,767,805 | 993,482 | 15,654,457 |
| Rents | 2,602,941 | 13,589,267 | 21,615,181 | 5,074,910 | 42,882,299 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 179,347 | 103,377 | 1,767,412 | 800,816 | 2,850,952 |
| Miscellaneous receipts | 845,834 | 14,785,784 | 7,678,962 | 4,459,766 | 27,770,346 |
| **B. Receipts, tax-exempt income:** | | | | | |
| Dividends on capital stock of domestic corporations | 481,821 | 12,579,162 | 4,408,225 | 332,397 | 17,801,605 |
| Interest on Federal, State, and municipal bonds | 70,884 | 17,635 | 52,488 | 38,857 | 179,867 |
| **C. Total compiled receipts [1]** | 51,982,623 | 441,964,905 | 484,704,120 | 146,469,141 | 1,125,120,789 |
| **D. Statutory deductions·** | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 1,458,808 | 3,235,603 | 9,233,558 | 8,235,343 | 22,163,312 |
| Interest paid | 1,312,912 | 20,531,388 | 22,904,403 | 6,808,338 | 51,557,041 |
| Taxes paid other than income tax | 1,303,565 | 7,743,100 | 11,744,565 | 6,388,142 | 27,179,372 |
| Bad debts | 94,362 | 748,196 | 1,961,360 | 945,783 | 3,749,701 |
| Depreciation | 2,469,970 | 22,133,602 | 24,931,880 | 12,896,006 | 62,431,458 |
| Depletion | 1,511 | 8,517 | 14,877 | 34,556 | 59,461 |
| Loss from sale of real estate, stocks, and bonds | 329,326 | 5,315,503 | 911,788 | 1,799,754 | 8,356,371 |
| Miscellaneous deductions | 50,593,133 | 378,326,258 | 404,118,117 | 124,007,626 | 957,045,134 |
| **E. Total statutory deductions** | 57,563,587 | 438,042,167 | 475,820,648 | 161,115,548 | 1,132,541,850 |
| **F. Compiled net profit less net loss** | [3]5,580,964 | 3,922,738 | 8,883,572 | [3]14,646,407 | [3]7,421,061 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income** | 552,705 | 12,596,800 | 4,460,713 | 371,254 | 17,981,472 |
| **H. Statutory net income less statutory net deficit** | [3]6,133,669 | [3]8,674,062 | 4,422,859 | [3]15,017,661 | [3]25,402,533 |
| **I. Net loss for prior year deducted by concerns reporting net income for 1931** | 111,745 | 44,410 | 2,365,226 | 644,652 | 3,166,033 |
| **J. Statutory net income (H) less statutory net loss for prior year (I)** | [3]6,245,414 | [3]8,718,472 | 2,057,633 | [3]15,662,313 | [3]28,568,566 |
| **K. Total tax** | 130,216 | 318,401 | 2,638,115 | 409,700 | 3,496,432 |
| **L. Compiled net profit (F) less total tax (K)** | [3]5,711,180 | 3,604,337 | 6,245,457 | [3]15,056,107 | [3]10,917,493 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 877,591 | 25,009,553 | 19,333,918 | 3,450,460 | 48,671,522 |
| Stock dividends | 3,600 | 69,725 | 164,766 | 15,066 | 253,167 |
| Total dividends distributed | 881,191 | 25,079,278 | 19,498,684 | 3,465,526 | 48,924,679 |

[1] Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.

[3] Deficit.

TABLE 7.—*Corporation income-tax returns for 1929, 1930, and 1931, filed by concerns whose predominant business is classified under the following subdivisions of "Finance"—Stock and bond brokers, real estate and realty holding companies, life insurance, other insurance and loan companies; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*

[Composite for returns showing net income and no net income but excluding returns filed for inactive corporations]

| Distribution | Stock and bond brokers | Real estate and realty holding companies | Life insurance companies | Other insurance companies | Loan and financing companies |
|---|---|---|---|---|---|
| **1929** | | | | | |
| **A. Receipts, taxable income:** | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing loss | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $3,403,822,869 | $591,241,015 | $3,076,439 | $1,740,063,241 | $1,521,656,733 |
| Interest | 100,050,384 | 145,430,129 | 727,807,037 | 92,145,615 | 510,934,058 |
| Rents | 14,183,983 | 1,341,954,696 | 21,516,963 | 10,667,272 | 63,857,836 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 194,721,004 | 187,363,737 | 245,431 | 48,286,686 | 385,204,814 |
| Miscellaneous receipts | 52,637,600 | 87,527,226 | 4,707,735 | 47,609,795 | 116,256,753 |
| **B. Receipts, tax-exempt income:** | | | | | |
| Dividends on capital stock of domestic corporations | 147,289,868 | 94,948,568 | 15,041,103 | 53,177,641 | 614,758,997 |
| Interest on Federal, State, and municipal bonds | 11,795,834 | 7,222,125 | 40,374,607 | 31,982,528 | 32,616,616 |
| **C. Total compiled receipts [1]** | 3,924,501,547 | 2,455,687,516 | 812,769,315 | 2,023,933,778 | 3,245,285,807 |
| **D. Statutory deductions:** | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 44,685,074 | 146,240,329 | 573,038 | 18,812,884 | 133,843,571 |
| Interest paid | 103,579,437 | 511,335,177 | 9,811,473 | 7,208,613 | 335,467,513 |
| Taxes paid other than income tax | 11,320,831 | 303,408,967 | 9,596,467 | 43,646,217 | 41,206,416 |
| Bad debts | 13,986,893 | 52,384,344 | 9,801 | 2,351,001 | 50,959,048 |
| Depreciation | 8,300,868 | 193,889,859 | 8,827,696 | 3,569,024 | 27,827,789 |
| Depletion | 24,902 | 2,758,372 | | | 3,259,991 |
| Loss from sale of real estate, stocks, and bonds [2] | | | | | |
| Miscellaneous deductions | 3,527,519,077 | 1,066,688,707 | 623,876,058 | 1,771,360,208 | 1,572,560,936 |
| **E. Total statutory deductions** | 3,709,417,082 | 2,276,705,755 | 652,694,533 | 1,846,947,947 | 2,165,125,264 |
| **F. Compiled net profit less net loss** | 215,081,465 | 178,981,761 | 160,074,782 | 176,985,831 | 1,080,160,543 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income** | 159,085,702 | 102,170,713 | 55,415,710 | 85,160,169 | 647,375,613 |
| **H. Statutory net income less statutory net deficit** | 55,998,763 | 76,811,048 | 104,659,072 | 91,825,662 | 432,784,930 |
| **I. Net loss for prior year deducted by concerns reporting net income for 1929** | 2,825,519 | 24,859,761 | 2,991 | 2,522,808 | 8,269,805 |
| **J. Statutory net income (H) less statutory net loss for prior year (I)** | 53,173,244 | 51,951,287 | 104,656,081 | 89,302,854 | 424,515,125 |
| **K. Total tax** | 34,996,168 | 32,976,140 | 12,096,590 | 20,911,130 | 67,741,520 |
| **L. Compiled net profit (F) less total tax (K)** | 180,088,297 | 146,005,621 | 147,978,192 | 156,074,701 | 1,012,419,023 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 147,449,568 | 333,287,576 | 20,856,594 | 100,582,684 | 693,952,933 |
| Stock dividends | 25,165,623 | 106,179,970 | | 20,202,483 | 420,225,672 |
| Total dividends distributed | 172,615,191 | 439,467,546 | 20,856,594 | 120,785,167 | 1,114,178,605 |

[1] Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.
[2] Not available.

TABLE 7.—*Corporation income-tax returns for 1929, 1930, and 1931, filed by concerns whose predominant business is classified under the following subdivisions of "Finance"—Stock and bond brokers, real estate and realty-holding companies, life insurance, other insurance, and loan companies; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Contd.

| Distribution | Stock and band brokers | Real estate and realty holding companies | Life insurance companies | Other insurance companies | Loan and financing companies |
|---|---|---|---|---|---|
| **1930** | | | | | |
| **A. Receipts, taxable income:** | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing losses | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $2,729,704,953 | $406,640,883 | $70,845,732 | $1,632,124,322 | $814,334,309 |
| Interest | 100,253,027 | 134,898,220 | 807,775,553 | 92,276,139 | 499,144,648 |
| Rents | 25,189,872 | 1,476,266,408 | 24,824,998 | 12,339,160 | 52,983,304 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 84,861,181 | 105,545,328 | 79,864 | 10,853,105 | 102,207,014 |
| Miscellaneous receipts | 29,604,936 | 58,890,257 | 2,413,977 | 91,523,309 | 101,012,780 |
| **B. Receipts, tax-exempt income:** | | | | | |
| Dividends on capital stock of domestic corporations | 180,517,926 | 74,693,458 | 25,767,469 | 64,002,843 | 669,901,101 |
| Interest on Federal, State, and municipal bonds | 12,093,747 | 5,412,477 | 36,126,381 | 24,130,190 | 43,893,377 |
| **C. Total compiled receipts [1]** | 3,162,225,642 | 2,202,347,031 | 968,833,974 | 1,927,249,068 | 2,283,476,533 |
| **D. Statutory deductions:** | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 44,451,465 | 131,718,522 | 391,043 | 26,133,830 | 128,381,131 |
| Interest paid | 97,772,966 | 545,793,929 | 12,087,470 | 12,664,176 | 333,930,357 |
| Taxes paid other than income tax | 15,103,521 | 311,985,226 | 13,754,039 | 42,026,993 | 39,605,942 |
| Bad debts | 15,622,978 | 24,781,313 | 226,830 | 3,923,219 | 65,264,134 |
| Depreciation | 7,987,885 | 218,759,929 | 9,605,794 | 4,603,729 | 27,406,612 |
| Depletion | 56,630 | 2,169,548 | | | 1,823,841 |
| Loss from sale of real estate, stocks, and bonds | 194,216,821 | 86,225,454 | 643,248 | 24,408,485 | 228,962,032 |
| Miscellaneous deductions | 3,035,945,563 | 957,291,800 | 774,968,039 | 1,798,438,534 | 850,778,906 |
| **E. Total statutory deductions** | 3,411,157,829 | 2,278,725,721 | 811,677,069 | 1,912,198,966 | 1,676,153,855 |
| **F. Compiled net profit less net loss** | [2] 248,932,187 | [2] 16,378,690 | 157,156,905 | 15,050,102 | 607,322,678 |
| **G. Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income** | 192,611,673 | 80,105,935 | 62,893,850 | 88,133,033 | 713,794,478 |
| **H. Statutory net income less statutory net deficit** | [2] 441,543,860 | [2] 96,484,625 | 94,263,055 | [2] 73,082,931 | [2] 106,471,800 |
| **I. Net loss for prior year deducted by concerns reporting net income for 1930** | 4,696,722 | 21,966,515 | 551 | 3,690,567 | 8,835,406 |
| **J. Statutory net income (H) less statutory net loss for prior year (I)** | [2] 446,240,582 | [2] 118,451,140 | 94,262,504 | [2] 76,773,498 | [2] 115,307,206 |
| **K. Total tax** | 7,110,770 | 22,052,602 | 12,843,266 | 10,469,054 | 20,193,763 |
| **L. Compiled net profit (F) less total tax (K)** | [2] 256,042,957 | [2] 38,431,292 | 144,313,639 | 4,581,048 | 578,128,915 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 144,198,006 | 228,488,890 | 22,589,288 | 103,075,559 | 608,632,356 |
| Stock dividends | 84,090,935 | 9,097,621 | 725,000 | 7,203,000 | 40,529,612 |
| Total dividends distributed | 228,288,941 | 237,586,511 | 23,314,288 | 110,278,559 | 739,161,968 |

[1] Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.

[2] Deficit.

TABLE 7.—*Corporation income-tax returns for 1929, 1930, and 1931, filed by concerns whose predominant business is classified under the following subdivisions of "Finance"—Stock and bond brokers, real estate and realty holding companies, life insurance, other insurance and loan companies; showing analysis of compiled receipts and statutory deductions, also net profit (or net loss), statutory net income less statutory net deficit, tax, and net profit after deducting tax*—Contd.

| Distribution | Stock and bond brokers | Real estate and realty holding companies | Life insurance companies | Other insurance companies | Loan and financing companies |
|---|---|---|---|---|---|
| **1931** | | | | | |
| **A.** Receipts, taxable income: | | | | | |
| Gross sales | | | | | |
| Profit or loss from sales: | | | | | |
| Returns showing profit | | | | | |
| Returns showing loss | | | | | |
| Profits less losses | | | | | |
| Gross profits from operations other than amounts tabulated as gross sales | $1,627,152,343 | $311,054,210 | $22,749,124 | $1,662,946,555 | $599,402,594 |
| Interest | 72,345,834 | 116,028,903 | 843,774,704 | 98,793,004 | 335,840,932 |
| Rents | 14,444,777 | 1,400,431,035 | 25,603,988 | 15,405,166 | 42,052,313 |
| Profits from sale of real estate, stocks, bonds, and other capital assets | 19,514,789 | 55,378,636 | 40,551 | 3,211,763 | 30,230,984 |
| Miscellaneous receipts | 16,008,292 | 68,014,532 | 1,984,691 | 21,318,622 | 75,286,127 |
| **B.** Receipts, tax-exempt income: | | | | | |
| Dividends on capital stock of domestic corporations | 112,321,240 | 47,603,654 | 27,280,254 | 67,051,745 | 478,849,337 |
| Interest on Federal, State, and municipal bonds | 10,392,944 | 6,740,635 | 50,846,869 | 21,512,565 | 22,242,791 |
| **C.** Total compiled receipts [1] | 2,072,170,219 | 2,005,251,605 | 972,280,181 | 1,890,239,420 | 1,583,905,078 |
| **D.** Statutory deductions: | | | | | |
| Cost of goods sold | | | | | |
| Compensation of officers | 34,402,876 | 109,677,678 | 560,115 | 17,963,405 | 110,163,437 |
| Interest paid | 64,765,655 | 530,050,983 | 14,020,018 | 19,953,496 | 234,340,146 |
| Taxes paid other than income tax | 10,343,841 | 335,223,575 | 14,219,950 | 40,682,176 | 29,843,327 |
| Bad debts | 29,442,295 | 52,518,025 | 149,223 | 6,409,616 | 76,647,580 |
| Depreciation | 7,236,167 | 231,501,523 | 10,867,235 | 5,926,956 | 27,580,893 |
| Depletion | 130,800 | 1,821,031 | 798 | 1,430 | 1,291,942 |
| Loss from sale of real estate, stocks, and bonds | 358,367,476 | 160,117,238 | 2,305,778 | 73,357,955 | 368,977,089 |
| Miscellaneous deductions | 2,012,446,570 | 856,592,663 | 794,860,050 | 1,778,625,991 | 679,902,381 |
| **E.** Total statutory deductions | 2,517,135,680 | 2,277,502,716 | 836,983,167 | 1,942,921,025 | 1,528,746,795 |
| **F.** Compiled net profit less net loss | [2] 444,965,461 | [2] 272,251,111 | 135,297,014 | [2] 52,681,605 | 55,158,283 |
| **G.** Less tax-exempt interest and dividends on capital stock of domestic corporations to arrive at statutory net income | 122,704,184 | 54,344,289 | 78,127,123 | 88,564,310 | 501,092,128 |
| **H.** Statutory net income less statutory net deficit | [2] 567,669,645 | [2] 326,595,400 | 57,169,891 | [2] 141,245,915 | [2] 445,933,845 |
| **I.** Net loss for prior year deducted by concerns reporting net income for 1931 | 9,303,468 | 13,329,570 | 271 | 1,708,129 | 6,474,138 |
| **J.** Statutory net income (H) less statutory net loss for prior year (I) | [2] 576,973,113 | [2] 339,924,970 | 57,169,620 | [2] 142,954,044 | [2] 452,407,983 |
| **K.** Total tax | 1,949,127 | 14,146,882 | 10,348,096 | 6,897,448 | 13,434,566 |
| **L.** Compiled net profit (F) less total tax (K) | [2] 446,914,585 | [2] 286,397,993 | 124,948,918 | [2] 59,579,053 | 41,723,717 |
| Cash and stock dividends distributed: | | | | | |
| Cash dividends | 76,554,501 | 169,889,741 | 18,250,508 | 110,841,045 | 469,418,305 |
| Stock dividends | 1,598,245 | 6,313,164 | 626,339 | 4,076,933 | 14,926,665 |
| Total dividends distributed | 78,152,746 | 176,202,905 | 18,876,847 | 114,917,978 | 484,344,970 |

[1] Includes net profit from the sale of real estate, stocks, bonds, etc., and other capital assets, but not gross receipts from these items. Excludes nontaxable income reported in schedule L of the return, except interest on tax-exempt obligations and dividends on stock of domestic corporations.

[2] Deficit.

*Corporation income-tax returns for 1930 and 1931 filed by concerns whose predominant business is classified under certain subdivisions of the following major industrial groups: Mining and quarrying; transportation and other public utilities; trade; service, and finance; showing the number of balance sheets tabulated, the bonded debt and mortgages, and capital stock*

[Composite for returns showing net income and no net income but excluding returns filed for inactive corporations]

| Disposition | Number of balance sheets | Bonded debt and mortgages | Capital stock | |
|---|---|---|---|---|
| | | | Preferred | Common |
| **1930** | | | | |
| Mining and quarrying: | | | | |
| Metal mining—iron, copper, lead, zinc, gold, silver, quicksilver | 624 | $114,491,343 | $103,428,485 | $1,529,925,417 |
| Coal: | | | | |
| Anthracite | 99 | 174,493,695 | 16,653,935 | 183,156,042 |
| Bituminous, lignite, and peat | 1,062 | 307,618,234 | 115,754,512 | 997,728,126 |
| Oil and gas | 3,169 | 176,700,562 | 88,169,046 | 1,293,294,809 |
| Transportation and other public utilities: | | | | |
| Transportation and related activities: | | | | |
| Water transportation and related activities—Ocean and fresh-water lines, canals, docking, drawbridge operating, lighterage, salvaging, piloting, wharfing, lessors | 1,483 | 155,941,597 | 70,140,842 | 330,425,019 |
| Aerial transportation | 498 | 4,243,814 | 7,138,815 | 122,049,642 |
| Autobus lines, taxicabs, and sightseeing companies | 1,740 | 33,960,148 | 45,901,025 | 106,210,277 |
| Steam railroads | 524 | 14,127,002,186 | 768,282,093 | 9,385,135,197 |
| Electric railways | 687 | 2,296,634,714 | 331,158,484 | 1,821,825,213 |
| Electric light and power companies | 802 | 6,521,695,167 | 2,389,308,790 | 4,606,587,155 |
| Gas companies, artifical and natural | 428 | 938,353,681 | 303,055,508 | 1,354,995,786 |
| Cartage and storage; food storage; packing and shipping; local transportation and related industries, n.e.c. | 6,889 | 288,062,176 | 88,543,645 | 418,933,777 |
| Other public utilities: | | | | |
| Telephone and telegraph companies | 2,007 | 1,583,814,683 | 313,158,547 | 2,869,274,101 |
| Radiobroadcasting companies | 271 | 3,075,693 | 37,616,295 | 71,449,619 |
| Water companies | 1,023 | 457,160,576 | 179,786,845 | 196,771,940 |
| All other public utilities—Terminal stations, pipe lines, toll bridges and toll roads, irrigation systems, etc | 896 | 2,329,338,023 | 863,736,926 | 1,683,160,069 |
| Trade: | | | | |
| Wholesale | 22,276 | 294,563,648 | 669,100,566 | 2,232,711,388 |
| Retail | 71,059 | 745,745,180 | 806,703,750 | 3,510,988,906 |
| Wholesale and retail | 9,825 | 169,658,444 | 220,961,361 | 841,423,201 |
| Commission | 6,215 | 24,961,796 | 73,071,799 | 346,363,144 |
| All other | 10,417 | 95,935,358 | 74,924,591 | 396,928,232 |
| Service: | | | | |
| Domestic service—laundries, hotels, restaurants, etc | 11,431 | 1,022,892,163 | 267,349,009 | 724,993,206 |
| Total amusements | 5,815 | 553,203,304 | 114,268,810 | 749,753,594 |
| Professional service—curative, educational, engineering, legal, etc | 5,045 | 58,387,023 | 58,318,650 | 280,476,875 |
| Business service—detective bureaus, trade shows, mimeographing, publishing directories, advertising, etc | 4,570 | 41,924,769 | 57,233,412 | 192,712,334 |
| Finance: | | | | |
| Banking and related industries: | | | | |
| Stock and bond brokers, investment brokers, investment bankers, and investment trusts | 4,127 | 476,664,279 | 711,152,746 | 2,378,991,870 |
| Real estate and realty holding companies—realty development, holding, or leasing; realty trust, etc | 63,412 | 7,837,535,667 | 786,461,077 | 5,338,860,571 |
| Insurance companies: | | | | |
| Life insurance—mutual or stock companies | 482 | 129,513 | ------------ | 185,411,447 |
| Other insurance—accident, casualty, fire, marine, title, etc | 1,227 | 254,426,419 | 8,540,050 | 729,772,216 |
| Other finance: | | | | |
| Loan companies—building and loan associations; mortgage, note, or pawn brokers; insurance agents, promoters, stock syndicates, foreign exchange, and finance, n.e.c. | 23,333 | 2,270,747,575 | 2,292,078,531 | 7,712,792,046 |

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*Corporation income-tax returns for 1930 and 1931 filed by concerns whose predominant business is classified under certain subdivisions of the following major industrial groups: Mining and quarrying; transportation and other public utilities; trade; service, and finance; showing the number of balance sheets tabulated, the bonded debt and mortgages, and capital stock*—Continued

| Disposition | Number of balance sheets | Bonded debt and mortgages | Capital stock | |
|---|---|---|---|---|
| | | | Preferred | Common |
| **1931** | | | | |
| **Mining and quarrying:** | | | | |
| Metal mining—iron, copper, lead, zinc, gold, silver, quicksilver | 548 | $145,348,333 | $117,903,411 | $1,318,393,611 |
| Coal: | | | | |
| Anthracite | 78 | 212,423,131 | 16,212,562 | 207,812,454 |
| Bituminous, lignite, and peat | 1,801 | 274,353,650 | 115,854,502 | 878,359,615 |
| Oil and gas | 3,016 | 220,635,854 | 158,433,892 | 1,326,360,916 |
| **Transportation and other public utilities:** | | | | |
| Transportation and related activities: | | | | |
| Water transportation and related activities—ocean- and fresh-water lines, canals, docking, drawbridge operating, lighterage, salvaging, piloting, wharfing; lessors | 1,441 | 239,145,945 | 72,112,215 | 367,766,120 |
| Aerial transportation | 437 | 2,903,028 | 15,837,284 | 104,382,178 |
| Autobus lines, taxicabs, and sightseeing companies | 1,647 | 32,651,809 | 49,296,215 | 102,694,443 |
| Steam railroads | 510 | 12,337,212,824 | 1,024,665,776 | 7,753,727,734 |
| Electric railways | 637 | 1,983,364,278 | 300,817,670 | 1,800,430,156 |
| Electric light and power companies | 687 | 7,403,384,049 | 2,969,032,504 | 4,672,257,488 |
| Gas companies, artificial and natural | 379 | 1,025,397,340 | 306,302,291 | 1,390,422,702 |
| Cartage and storage; food storage; packing and shipping; local transportation and related industries, n.e.c. | 6,785 | 269,225,365 | 82,580,386 | 406,286,306 |
| Other public utilities: | | | | |
| Telephone and telegraph companies | 1,792 | 1,463,839,650 | 294,235,071 | 2,848,529,796 |
| Radiobroadcasting companies | 266 | 4,840,342 | 37,591,411 | 45,312,821 |
| Water companies | 1,015 | 505,168,384 | 88,841,601 | 238,244,540 |
| All other public utilities—terminal stations, pipe lines, toll bridges and toll roads, irrigation systems, etc. | 861 | 1,757,047,339 | 560,639,024 | 1,010,194,595 |
| **Trade:** | | | | |
| Wholesale | 21,325 | 335,915,052 | 607,442,483 | 2,095,339,740 |
| Retail | 66,768 | 725,940,663 | 760,545,658 | 3,272,514,305 |
| Wholesale and retail | 9,990 | 134,723,078 | 181,456,823 | 791,589,650 |
| Commission | 5,612 | 24,963,096 | 60,573,348 | 295,705,739 |
| All other | 10,171 | 93,323,873 | 72,762,985 | 382,352,910 |
| **Service:** | | | | |
| Domestic service—laundries, hotels, restaurants, etc. | 11,173 | 932,327,768 | 264,066,849 | 719,454,759 |
| Total amusements | 5,390 | 577,890,196 | 95,691,130 | 730,985,283 |
| Professional service—curative, educational, engineering, legal, etc. | 4,453 | 50,299,563 | 27,476,019 | 226,025,928 |
| Business service—detective bureaus, trade shows, mimeographing, publishing directories, advertising, etc. | 4,251 | 40,727,074 | 50,776,283 | 176,083,095 |
| **Finance:** | | | | |
| Banking and related industries: | | | | |
| Stock and bond brokers, investment brokers, investment bankers, and investment trusts | 3,264 | 405,867,330 | 559,634,235 | 1,694,086,574 |
| Real estate and realty holding companies—realty development, holding, or leasing; realty trust, etc. | 61,662 | 7,743,297,729 | 807,471,202 | 5,259,758,862 |
| Insurance companies: | | | | |
| Life insurance—mutual or stock companies | 437 | | | 177,599,349 |
| Other insurance—accident, casualty, fire, marine, title, etc. | 1,221 | 282,021,234 | 8,082,500 | 764,564,141 |
| Other finance: | | | | |
| Loan companies—building and loan associations: mortgage, note, or pawn brokers; insurance agents, promoters, stock syndicates, foreign exchange, and finance, n.e.c. | 22,067 | 2,054,446,208 | 2,103,187,453 | 5,156,186,862 |

# APPENDIX D

TABLE 1.—*Returns from questionnaires on grand total of city employees; includes municipal public utilities, excludes schools*

### GROUP 1.—CITIES WITH POPULATION OF OVER 500,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
| Detroit, Mich | 31,045 | $59,792,053 | 31,501 | $57,368,147 | 19,997 | $40,727,492 | 20,412 | $55,160,000 |
| Chicago, Ill | 24,667 | 61,519,795 | | | 23,732 | 60,464,203 | 23,000 | 57,514,638 |
| Los Angeles, Calif | 16,406 | 32,952,164 | 16,816 | 33,152,489 | 16,680 | 33,054,431 | 17,430 | 29,777,125 |
| Cleveland, Ohio | 8,018 | 15,731,949 | 8,990 | 15,994,724 | 11,172 | 16,081,687 | 9,531 | 14,875,977 |
| Baltimore, Md | 9,442 | 14,278,759 | 9,735 | 15,110,238 | 10,139 | 15,367,772 | | |
| Pittsburgh, Pa | 6,695 | 11,079,234 | 6,875 | 12,624,393 | 6,493 | 12,980,755 | 6,049 | 10,597,915 |
| Buffalo, N.Y | 7,133 | 12,951,108 | 6,956 | 13,381,067 | 7,358 | 13,423,882 | 6,831 | 12,451,029 |

### GROUP 2.—CITIES WITH POPULATION OF 300,000 TO 500,000

| City | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
|---|---|---|---|---|---|---|---|---|
| Cincinnati, Ohio | 4,097 | $6,248,737 | 4,358 | $6,317,518 | 4,494 | $6,541,613 | 4,339 | $6,322,827 |
| Newark, N.J | 6,184 | 11,459,921 | 6,420 | 11,687,708 | 6,867 | 12,130,538 | 6,663 | 12,517,403 |
| Seattle, Wash | 6,229 | 11,889,011 | 6,305 | 11,964,720 | 5,965 | 12,184,235 | 5,472 | 9,903,402 |
| Rochester, N.Y | 3,885 | 6,153,305 | 3,973 | 6,415,234 | 4,111 | 6,657,476 | 4,033 | 6,151,962 |
| Louisville, Ky | 3,122 | 4,230,183 | 3,314 | 4,414,018 | 3,227 | 4,324,754 | 2,191 | 3,339,586 |
| Portland, Oreg | 2,340 | 4,584,258 | 2,369 | 4,610,252 | 2,375 | 4,611,893 | 2,277 | 3,811,083 |

### GROUP 3.—CITIES WITH POPULATION OF 100,000 TO 300,000

| City | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
|---|---|---|---|---|---|---|---|---|
| Columbus, Ohio | 2,119 | $3,623,215 | 2,117 | $3,582,441 | 2,043 | $3,558,744 | 1,893 | $4,241,228 |
| Houston, Tex | 2,227 | 2,951,063 | 2,203 | 3,067,516 | 2,180 | 3,262,233 | 1,849 | 2,303,180 |
| Oakland, Calif | 1,985 | 3,735,745 | 2,165 | 4,095,038 | 1,895 | 3,748,342 | 2,158 | 3,570,000 |
| Providence, R.I | 2,984 | 4,598,934 | 3,339 | 4,874,842 | 3,500 | 4,886,084 | 3,229 | 5,108,785 |
| Birmingham, Ala | 1,565 | 2,143,868 | 1,619 | 2,105,061 | 1,500 | 1,843,627 | 1,267 | 1,269,454 |
| Yonkers, N.Y | 2,100 | 3,478,084 | 2,150 | 3,821,795 | 2,150 | 4,124,042 | 1,850 | 4,037,660 |

### GROUP 4.—CITIES WITH POPULATION OF 50,000 TO 100,000

| City | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
|---|---|---|---|---|---|---|---|---|
| Allentown, Pa | 395 | $595,500 | 375 | $571,000 | 421 | $613,000 | 510 | $657,035 |
| Savannah, Ga | 989 | 1,206,538 | 998 | 1,223,848 | 1,001 | 1,228,604 | 938 | 1,102,309 |
| Saginaw, Mich | 574 | 923,952 | 613 | 950,026 | 627 | 955,677 | | |
| Manchester, N.H | 961 | 1,134,839 | 1,175 | 1,122,044 | 1,377 | 1,244,036 | 867 | 1,016,863 |
| Lincoln, Nebr | 246 | 406,823 | 254 | 407,606 | 275 | 445,611 | 606 | 786,180 |
| Huntington, W.Va | 250 | 401,738 | 259 | 406,760 | 271 | 414,558 | 238 | 333,100 |
| Pueblo, Colo | 219 | 353,773 | 217 | 358,031 | 205 | 343,612 | 283 | 421,497 |
| Binghamton, N.Y | 611 | 1,096,399 | 648 | 1,161,250 | 656 | 1,166,984 | 671 | 1,190,280 |

### GROUP 5.—CITIES WITH POPULATION OF 30,000 TO 50,000

| City | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
|---|---|---|---|---|---|---|---|---|
| Pittsfield, Mass | 376 | $366,224 | 467 | $399,765 | 580 | $429,934 | 1,981 | $1,062,240 |
| Waterloo, Iowa | 275 | 326,538 | 268 | 343,578 | 389 | 344,604 | 229 | 327,540 |
| Port Arthur, Tex | 134 | 235,433 | 142 | 243,477 | 175 | 297,273 | 120 | 135,360 |
| Dearborn, Mich | 299 | 702,577 | 335 | 852,408 | 356 | 859,913 | 519 | 898,707 |
| Phoenix, Ariz | 584 | 916,500 | 565 | 954,482 | 607 | 1,004,958 | 530 | 714,792 |
| Wichita Falls, Tex | 308 | 415,902 | 303 | 429,287 | 225 | 335,032 | 190 | 280,230 |

### GROUP 6.—CITIES WITH POPULATION OF 10,000 TO 30,000

| City | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
|---|---|---|---|---|---|---|---|---|
| Alhambra, Calif | 219 | $361,091 | 240 | $392,077 | 236 | $379,654 | 189 | $270,351 |
| Bangor, Maine | 367 | 410,241 | 381 | 440,901 | 383 | 448,079 | 274 | 390,382 |
| Great Falls, Mont | 235 | 267,826 | 234 | 272,100 | 226 | 277,246 | | |
| Salem, Oreg | 112 | 133,284 | 120 | 146,552 | 124 | 147,393 | 97 | 151,645 |
| Albuquerque, N.Mex | 94 | 172,767 | 94 | 186,126 | 94 | 172,598 | 157 | 183,526 |
| Huntington Park, W.Va | 81 | 125,347 | 90 | 133,490 | 105 | 155,459 | 88 | 139,968 |
| Mason City, Iowa | 113 | 186,870 | 117 | 194,034 | 119 | 193,940 | 130 | 208,720 |
| Pittsburg, Kans | 75 | 123,850 | 73 | 119,596 | 64 | 103,622 | 67 | 100,858 |
| Medford, Oreg | 65 | 81,952 | 74 | 98,330 | 72 | 96,569 | 60 | 84,829 |

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TABLE 1.—*Returns from questionnaires on grand total of city employees; includes municipal public utilities, excludes schools*—Continued

### GROUP 7.—CITIES WITH POPULATION OF 5,000 TO 10,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
| Monterey, Calif | 109 | $91,100 | 110 | $98,564 | 108 | $102,494 | 91 | $83,858 |
| Ottawa, Kans | 77 | 85,999 | 77 | 84,061 | 77 | 86,659 | 80 | 88,967 |
| Antigo, Wis | 60 | 70,795 | 67 | 72,269 | 60 | 69,347 | 58 | 57,099 |
| Iola, Kans | | | 70 | 63,576 | 65 | 59,556 | 66 | 52,751 |
| Athens, Ohio | 29 | 32,933 | 26 | 32,396 | 25 | 31,567 | 50 | 50,903 |
| Fredericksburg, Va | 63 | 64,416 | 69 | 68,915 | 70 | 68,931 | 76 | 62,075 |
| Las Vegas, Nev | 21 | 27,316 | 25 | 35,840 | 32 | 58,240 | 37 | 59,680 |

### GROUP 8.—CITIES WITH POPULATION OF 2,500 TO 5,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| Glassboro, N.J | 20 | $20,602 | 20 | $20,992 | 20 | $20,992 | 20 | $20,992 |
| Crisfield, Md | | | 16 | 18,247 | | | 15 | 15,820 |
| Port Townsend, Wash | 19 | 20,122 | 19 | 26,110 | 19 | 26,313 | | |
| Benwood, W.Va | 17 | 23,799 | 17 | 23,890 | 18 | 23,611 | 18 | 15,113 |
| Cooperstown, N.Y | 14 | 13,953 | 14 | 14,513 | 12 | 13,322 | 13 | 12,876 |
| Lehi, Utah | 30 | 6,083 | 32 | 9,830 | 32 | 10,658 | 31 | 9,902 |
| Claremont, Calif | 25 | 22,105 | 25 | 23,796 | 25 | 25,560 | 21 | 20,695 |
| Forest City, N.C | 34 | 19,273 | 34 | 18,246 | 31 | 16,218 | 31 | 9,956 |

TABLE 2.—*Returns from questionnaires on police departments*

### GROUP 1.—CITIES WITH POPULATION OF OVER 500,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
| New York, N.Y | 17,954 | $42,714,230 | 18,905 | $44,896,067 | 19,664 | $56,557,817 | 19,716 | $56,071,554 |
| Chicago, Ill | 6,464 | 16,360,262 | 6,719 | 16,522,861 | 6,681 | 16,544,220 | 6,478 | 12,706,108 |
| Philadelphia, Pa | 5,652 | 9,921,041 | 5,712 | 11,203,564 | 5,714 | 11,626,543 | 5,493 | 10,525,814 |
| Detroit, Mich | 3,942 | 9,895,220 | 4,096 | 10,353,603 | 3,800 | 8,786,649 | 4,011 | 7,831,368 |
| Los Angeles, Calif | 2,595 | 6,615,652 | 2,672 | 6,244,734 | 2,658 | 6,273,082 | 2,680 | 5,773,728 |
| Cleveland, Ohio | 1,444 | 3,712,286 | 1,444 | 3,676,907 | 1,560 | 3,713,584 | 1,585 | 3,414,281 |
| St. Louis, Mo | 1,867 | 4,771,005 | 1,850 | 4,779,849 | 1,868 | 4,791,815 | 2,284 | 4,779,532 |
| Baltimore, Md | 1,883 | 4,201,484 | 1,886 | 4,224,930 | 1,886 | 4,236,915 | 2,046 | 4,479,536 |
| Boston, Mass | 2,485 | 5,059,562 | 2,620 | 5,281,992 | 2,621 | 5,331,139 | 2,622 | 5,240,625 |
| Pittsburgh, Pa | 1,288 | 2,683,013 | 1,376 | 3,126,315 | 1,268 | 3,366,893 | 1,141 | 2,514,880 |
| San Francisco, Calif | | | | | 1,366 | 3,391,215 | 1,351 | 3,296,327 |
| Milwaukee, Wis | 1,023 | 2,076,507 | 1,077 | 2,176,352 | 1,125 | 2,436,370 | 1,133 | 2,433,894 |
| Buffalo, N.Y | 1,306 | 2,956,865 | 1,294 | 2,908,755 | 1,290 | 2,904,263 | 1,265 | 2,878,458 |

### GROUP 2.—CITIES WITH POPULATION OF 300,000 TO 500,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| Washington, D.C | 1,262 | $2,740,700 | 1,262 | $2,722,110 | 1,265 | $2,725,080 | 1,335 | $3,170,814 |
| Minneapolis, Minn | 551 | 1,131,468 | 544 | 1,197,733 | 546 | 1,188,720 | 500 | 1,062,880 |
| Cincinnati, Ohio | 676 | 1,239,153 | 644 | 1,262,839 | 651 | 1,247,631 | 624 | 1,169,325 |
| Newark, N.J | 1,323 | 3,282,776 | 1,417 | 3,281,413 | 1,416 | 3,426,649 | 1,410 | 3,450,077 |
| Kansas City, Mo | 779 | 1,060,749 | 685 | 1,209,125 | 678 | 1,099,924 | 619 | 845,942 |
| Seattle, Wash | 636 | 1,377,603 | 639 | 1,394,713 | 677 | 1,490,700 | 666 | 1,345,288 |
| Rochester, N.Y | 478 | 1,029,709 | 483 | 1,041,112 | 490 | 1,045,421 | 450 | 1,039,287 |
| Louisville, Ky | 496 | 813,592 | 509 | 845,057 | 495 | 834,243 | 481 | 809,655 |
| Portland, Oreg | 435 | 997,440 | 456 | 1,016,023 | 458 | 1,031,177 | 462 | 1,042,165 |

TABLE 2.—*Returns from questionnaires on police departments*—Continued

GROUP 3.—CITIES WITH POPULATION OF 100,000 TO 300,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
| Columbus, Ohio | 361 | $697,584 | 361 | $698,292 | 342 | $680,307 | 338 | $652,997 |
| Denver, Colo | 420 | 813,560 | 421 | 820,929 | 413 | 821,505 | 403 | 793,587 |
| Houston, Tex | 362 | 523,131 | 342 | 575,755 | 348 | 621,556 | 328 | 473,312 |
| Oakland, Calif | 399 | 986,095 | 393 | 993,060 | 305 | 948,468 | 365 | 917,534 |
| St. Paul, Minn | 340 | 633,831 | 348 | 636,064 | 334 | 602,547 | 361 | 640,233 |
| Atlanta, Ga | | | | | 427 | 830,000 | 430 | 744,162 |
| Providence, R.I | 588 | 1,220,758 | 602 | 1,258,809 | 612 | 1,268,065 | 566 | 1,262,198 |
| Worcester, Mass | 389 | 916,553 | 414 | 942,266 | 416 | 962,579 | 430 | 969,673 |
| Hartford, Conn | 352 | 707,626 | 403 | 773,742 | 403 | 796,893 | 454 | 789,868 |
| Springfield, Mass | 313 | 679,253 | 325 | 690,753 | 336 | 705,501 | 334 | 706,800 |
| Flint, Mich | 171 | 366,252 | 174 | 376,008 | 167 | 340,116 | 138 | 185,340 |
| Birmingham, Ala | 294 | 551,619 | 292 | 565,333 | 272 | 493,628 | 232 | 317,505 |
| Yonkers, N.Y | 305 | 781,715 | 313 | 854,907 | 314 | 931,115 | 325 | 934,741 |
| Bridgeport, Conn | 291 | 716,725 | 288 | 707,173 | 286 | 700,883 | 280 | 692,768 |

GROUP 4.—CITIES WITH POPULATION OF 50,000 TO 100,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
| Sacramento, Calif | 120 | $285,081 | 123 | $259,244 | 124 | $292,450 | 122 | $282,098 |
| Allentown, Pa | 96 | 171,000 | 98 | 178,924 | 98 | 180,000 | 101 | 178,810 |
| Savannah, Ga | 163 | 245,777 | 168 | 257,948 | 165 | 247,979 | 162 | 234,578 |
| Rockford, Ill | 76 | 152,042 | 75 | 152,916 | 83 | 161,537 | 93 | 126,968 |
| Saginaw, Mich | 105 | 194,372 | 117 | 207,503 | 116 | 199,716 | | |
| Manchester, N.H | 123 | 237,077 | 119 | 216,458 | 124 | 246,404 | 113 | 225,531 |
| Lincoln, Nebr | 48 | 71,180 | 50 | 72,208 | 58 | 81,552 | 52 | 87,463 |
| Huntington, W.Va | 68 | 122,484 | 63 | 120,977 | 73 | 129,287 | 74 | 119,032 |
| Pueblo, Colo | 55 | 102,237 | 55 | 103,346 | 51 | 104,011 | 48 | 85,681 |
| Binghamton, N.Y | 102 | 218,747 | 123 | 248,090 | 127 | 248,779 | 126 | 254,691 |

GROUP 5.—CITIES WITH POPULATION OF 30,000 TO 50,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
| Pittsfield, Mass | 51 | $136,969 | 61 | $138,716 | 61 | $140,910 | 66 | $133,853 |
| New Castle, Pa | 45 | 86,078 | 45 | 85,500 | 46 | 84,560 | 44 | 73,811 |
| Stockton, Calif | 54 | 121,316 | 54 | 122,145 | 54 | 123,535 | 54 | 118,451 |
| Waterloo, Iowa | 31 | 54,639 | 32 | 55,212 | 33 | 57,035 | 33 | 55,676 |
| Port Arthur, Tex | 20 | 40,313 | 22 | 41,336 | 24 | 42,972 | 11 | 17,268 |
| Dearborn, Mich | 99 | 270,971 | 113 | 297,788 | 118 | 307,529 | 117 | 256,293 |
| Jackson, Miss | 45 | 87,215 | 45 | 93,175 | 45 | 92,318 | | |
| Phoenix, Ariz | 70 | 140,428 | 71 | 141,692 | 76 | 150,951 | 76 | 131,024 |
| Clifton, N.J | 44 | 111,816 | 59 | 142,006 | 57 | 148,752 | 60 | 152,687 |
| Jamestown, N.Y | 54 | 98,403 | 63 | 112,138 | 61 | 116,580 | 55 | 96,460 |
| Portsmouth, Va | 45 | 81,381 | 45 | 81,115 | 45 | 79,759 | 45 | 81,350 |
| Wichita Falls, Tex | 39 | 69,420 | 39 | 70,135 | 34 | 53,423 | 30 | 48,246 |

GROUP 6.—CITIES WITH POPULATION OF 10,000 TO 30,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
| Alhambra, Calif | 36 | $63,182 | 42 | $72,567 | 44 | $73,915 | 30 | $60,432 |
| Bangor, Maine | 34 | 57,653 | 36 | 71,045 | 42 | 72,593 | 42 | 74,081 |
| Great Falls, Mont | 28 | 50,158 | 26 | 56,988 | 27 | 55,737 | 26 | 40,402 |
| Salem, Oreg | 20 | 33,206 | 22 | 34,376 | 23 | 34,408 | 20 | 31,620 |
| Albuquerque, N.Mex | 21 | 36,847 | 21 | 39,797 | 21 | 43,876 | 19 | 43,876 |
| Appleton, Wis | 20 | 32,410 | 21 | 34,000 | 22 | 36,895 | 22 | 37,398 |
| Johnson City, Tenn | 17 | 24,851 | 21 | 26,847 | 15 | 28,868 | 15 | 24,000 |
| Huntington Park, Calif | 29 | 53,888 | 31 | 54,508 | 33 | 62,714 | 30 | 47,910 |
| Marion, Ind | 32 | 46,836 | 30 | 51,562 | 28 | 46,000 | 30 | 47,750 |
| Mason City, Iowa | 22 | 36,247 | 22 | 37,447 | 22 | 38,485 | 21 | 38,481 |
| St. Cloud, Minn | 18 | 30,000 | 18 | 30,240 | 18 | 30,240 | 16 | 30,779 |
| Berlin, N.H | 24 | 43,457 | 25 | 46,400 | 24 | 43,873 | 24 | 41,943 |
| Findlay, Ohio | 16 | 26,025 | 16 | 26,687 | 16 | 24,449 | 14 | 18,197 |
| Pittsburg, Kans | 11 | 19,110 | 11 | 19,140 | 8 | 14,100 | 9 | 14,100 |
| Cheyenne, Wyo | 15 | 22,730 | 15 | 23,078 | 14 | 24,095 | 19 | 30,380 |
| Grand Forks, N.Dak | 17 | 27,300 | 17 | 27,300 | 17 | 27,300 | 18 | 24,755 |
| Modesto, Calif | 20 | 27,094 | 25 | 29,042 | 20 | 27,742 | 17 | 27,607 |
| Atchison, Kans | 15 | 21,906 | 14 | 23,158 | 14 | 22,633 | 14 | 19,920 |
| Medford, Oreg | 8 | 12,811 | 8 | 14,352 | 8 | 14,439 | 8 | 12,931 |
| Hudson, N.Y | | | | | 18 | 32,800 | 18 | 32,800 |

TABLE 2.—*Returns from questionnaires on police departments*—Continued

GROUP 7.—CITIES WITH POPULATION OF 5,000 TO 10,000

| City | 1929 Number | 1929 Total salaries | 1930 Number | 1930 Total salaries | 1931 Number | 1931 Total salaries | 1932 Number | 1932 Total salaries |
|---|---|---|---|---|---|---|---|---|
| Monterey, Calif | 11 | $22,035 | 11 | $22,584 | 12 | $23,633 | 10 | $17,447 |
| Ottawa, Kans | 7 | 9,191 | 7 | 9,286 | 7 | 8,972 | 7 | 8,880 |
| Red Wing, Minn | 10 | 13,146 | 10 | 13,099 | 10 | 13,191 | 8 | 12,489 |
| Carthage, Mo | 4 | 5,220 | 4 | 5,220 | 4 | 5,220 | 5 | 6,063 |
| Lansdale, Pa | 3 | 5,200 | 3 | 5,200 | 3 | 5,200 | | |
| Antigo, Wis | 7 | 9,700 | 7 | 10,188 | 6 | 9,773 | 6 | 8,889 |
| Twin Falls, Idaho | 7 | 8,731 | 8 | 14,588 | 8 | 14,635 | 8 | 9,600 |
| Iola, Kans | 7 | 8,460 | 6 | 7,760 | 6 | 6,910 | 6 | 6,258 |
| Athens, Ohio | 3 | 4,585 | 3 | 5,541 | 3 | 5,580 | 7 | 6,142 |
| Yankton, S.Dak | 5 | 7,800 | 5 | 7,800 | 6 | 9,300 | 5 | 7,800 |
| Fredericksburg, Va | 6 | 9,954 | 6 | 9,280 | 6 | 9,491 | 6 | 9,278 |
| Hinton, W.Va | 7 | 8,700 | 6 | 8,530 | 5 | 6,595 | 5 | 6,400 |
| Hancock, Mich | 6 | 5,084 | 6 | 5,754 | 6 | 7,034 | 5 | 5,936 |
| Las Vegas, Nev | 5 | 11,460 | 7 | 15,600 | 9 | 18,600 | 12 | 25,800 |
| Brigham City, Utah | 4 | 4,258 | 4 | 4,224 | 4 | 4,250 | | |

GROUP 8.—CITIES WITH POPULATION OF 2,500 TO 5,000

| City | 1929 Number | 1929 Total salaries | 1930 Number | 1930 Total salaries | 1931 Number | 1931 Total salaries | 1932 Number | 1932 Total salaries |
|---|---|---|---|---|---|---|---|---|
| Martinsville, Ind | 3 | $3,900 | 3 | $3,900 | 3 | $3,900 | 3 | $3,983 |
| Glassboro, N.J | 3 | 4,680 | 3 | 4,920 | 3 | 4,920 | 3 | 4,920 |
| Geneva, Ill | | | 5 | 9,095 | 6 | 9,493 | 5 | 8,193 |
| Dunn, N.C | 4 | 5,520 | 4 | 5,537 | 4 | 4,615 | 4 | 4,632 |
| Carthage, N.Y | 4 | 6,273 | 4 | 6,539 | 4 | 6,414 | 3 | 4,544 |
| Roanoke, Ala | 4 | 3,840 | 4 | 3,840 | 4 | 3,840 | | |
| Camas, Wash | 2 | 3,420 | 2 | 3,420 | 2 | 3,420 | | |
| Lamar, Colo | 2 | 3,480 | 2 | 3,480 | 3 | 4,140 | 3 | 4,000 |
| Forest City, N.C | 2½ | 3,734 | 2½ | 3,564 | 2½ | 3,024 | 2 | 2,132 |
| Benwood, W.Va | 4 | 7,740 | 4½ | 9,193 | 5 | 9,317 | 6 | 6,000 |
| Port Townsend, Wash | 3 | 3,710 | 3 | 4,280 | 3 | 4,310 | | |
| Souderton, Pa | 2 | 2,300 | 2 | 2,300 | 2 | 2,300 | 2 | 2,433 |
| Crisfield, Md | 4 | 3,493 | 4 | 3,882 | 4 | 3,803 | 4 | 3,344 |
| Glendale, Ariz | | | 3 | 4,200 | | | | |
| Wallace, Idaho | 3 | 3,697 | 3 | 4,138 | 3 | 3,699 | 2 | 3,825 |
| Jasonville, Ind | 3 | 4,680 | 3 | 4,680 | 3 | 4,680 | 2 | 2,192 |
| Rochester, Mich | 1½ | 2,662 | 2 | 3,368 | 1 | 1,800 | 1 | 1,372 |
| Bowie, Tex | | | 3 | 3,020 | | | | |
| Cooperstown, N.Y | 2 | 1,381 | 2 | 2,090 | 2 | 2,600 | 2 | 2,380 |
| Lehi, Utah | 2 | 2,260 | 2 | 2,280 | 2 | 2,280 | 2 | 2,040 |
| Perry, Fla | | | 3 | 2,880 | | | | |
| Dillon, S.C | 3 | 2,944 | 3 | 2,465 | 2 | 2,471 | 2 | 2,182 |
| Claremont, Calif | 2½ | 4,065 | 2½ | 4,129 | 2½ | 4,194 | 4 | 5,460 |
| Paso Robles, Calif | 2 | 3,900 | 2 | 3,900 | 2 | 3,900 | 2 | 3,600 |

TABLE 3.—*Returns from questionnaires on fire departments*

GROUP 1.—CITIES WITH POPULATION OF OVER 500,000

| City | 1929 Number | 1929 Total salaries | 1930 Number | 1930 Total salaries | 1931 Number | 1931 Total salaries | 1932 Number | 1932 Total salaries |
|---|---|---|---|---|---|---|---|---|
| New York, N.Y | 7,295 | $18,860,053 | 7,521 | $19,615,088 | 7,669 | $23,332,839 | 7,638 | $23,181,848 |
| Chicago, Ill | 2,657 | 7,377,562 | 2,602 | 7,506,734 | 2,720 | 7,217,920 | 2,627 | 5,660,219 |
| Philadelphia, Pa | 2,168 | 4,197,977 | 2,152 | 4,545,798 | 2,065 | 4,666,069 | 1,971 | 3,765,823 |
| Detroit, Mich | 2,010 | 5,072,003 | 2,045 | 5,121,336 | 1,702 | 4,136,523 | 1,672 | 3,267,939 |
| Los Angeles, Calif | 1,620 | 4,099,556 | 1,732 | 4,230,268 | 1,733 | 4,293,193 | 1,731 | 3,914,897 |
| Cleveland, Ohio | 1,058 | 2,660,066 | 1,049 | 2,642,505 | 1,059 | 2,622,896 | 1,051 | 2,394,736 |
| St. Louis, Mo | 908 | 2,001,960 | 907 | 1,999,980 | 931 | 2,055,360 | 958 | 1,994,575 |
| Baltimore, Md | 1,446 | 2,568,860 | 1,447 | 2,716,685 | 1,447 | 2,718,635 | 1,447 | 2,548,835 |
| Boston, Mass | 1,643 | 3,575,812 | 1,735 | 3,749,710 | 1,745 | 3,768,940 | 1,747 | 3,742,504 |
| Pittsburgh, Pa | 938 | 1,994,119 | 996 | 2,409,958 | 903 | 2,402,578 | 889 | 1,842,095 |
| San Francisco, Calif | | | | | 1,205 | 3,036,697 | 1,212 | 2,973,918 |
| Milwaukee, Wis | 779 | 1,631,680 | 799 | 1,692,076 | 803 | 1,801,234 | 792 | 1,789,363 |
| Buffalo, N.Y | 986 | 2,283,905 | 988 | 2,286,886 | 984 | 2,280,017 | 932 | 2,204,690 |

TABLE 3.—*Returns from questionnaires on fire departments*—Continued

GROUP 2.—CITIES WITH POPULATION OF 300,000 TO 500,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|------|------|------|------|------|------|------|------|------|
| | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
| Washington, D.C | 884 | $1,865,842 | 884 | $1,867,439 | 884 | $1,897,000 | 872 | $2,154,883 |
| Minneapolis, Minn | 555 | 1,183,394 | 556 | 1,250,661 | 557 | 1,249,270 | 500 | 1,126,782 |
| Cincinnati, Ohio | 684 | 1,253,963 | 683 | 1,267,708 | 673 | 1,254,015 | 644 | 1,197,675 |
| Newark, N.J | 898 | 2,298,131 | 906 | 2,315,296 | 936 | 2,328,441 | 915 | 2,292,909 |
| Kansas City, Mo | 489 | 894,525 | 481 | 798,053 | 490 | 801,083 | 488 | 749,354 |
| Seattle, Wash | 744 | 1,570,946 | 752 | 1,589,927 | 765 | 1,613,940 | 690 | 1,438,553 |
| Rochester, N.Y | 517 | 1,123,467 | 518 | 1,125,576 | 521 | 1,136,376 | 517 | 1,126,672 |
| Louisville, Ky | 340 | 574,523 | 345 | 590,289 | 341 | 576,510 | 342 | 587,165 |
| Portland, Oreg | 519 | 1,246,806 | 519 | 1,262,146 | 520 | 1,255,264 | 521 | 1,252,122 |

GROUP 3.—CITIES WITH POPULATION OF 100,000 TO 300,000

| City | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
|------|------|------|------|------|------|------|------|------|
| Columbus, Ohio | 371 | $733,277 | 370 | $729,041 | 353 | $711,863 | 353 | $688,546 |
| Denver, Colo | 417 | 793,550 | 415 | 811,838 | 417 | 819,128 | 414 | 813,584 |
| Houston, Tex | 340 | 563,252 | 350 | 649,231 | 356 | 664,880 | 371 | 516,850 |
| Oakland, Calif | 397 | 985,221 | 382 | 991,844 | 376 | 977,052 | 378 | 969,226 |
| St. Paul, Minn | 468 | 820,384 | 465 | 825,039 | 462 | 842,537 | 476 | 868,320 |
| Atlanta, Ga | | | | | 346 | 743,000 | 331 | 628,036 |
| Providence, R.I | 486 | 1,022,749 | 486 | 1,055,475 | 487 | 1,056,651 | 478 | 1,063,801 |
| Worcester, Mass | 470 | 828,990 | 472 | 839,839 | 495 | 852,774 | 365 | 854,410 |
| Hartford, Conn | 288 | 657,423 | 288 | 682,694 | 289 | 692,950 | 330 | 697,164 |
| Springfield, Mass | 345 | 794,224 | 349 | 784,849 | 362 | 812,760 | 374 | 829,389 |
| Flint, Mich | 150 | 332,412 | 160 | 354,300 | 160 | 338,112 | 157 | 206,927 |
| Birmingham, Ala | 300 | 606,618 | 301 | 603,469 | 291 | 549,968 | 205 | 374,027 |
| Yonkers, N.Y | 179 | 442,535 | 179 | 403,375 | 179 | 530,839 | 175 | 517,052 |
| Bridgeport, Conn | 258 | 645,334 | 266 | 659,235 | 260 | 658,452 | 245 | 637,762 |

GROUP 4.—CITIES WITH POPULATION OF 50,000 TO 100,000

| City | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
|------|------|------|------|------|------|------|------|------|
| Sacramento, Calif | 181 | $451,910 | 183 | $451,114 | 192 | $468,510 | 186 | $454,703 |
| Allentown, Pa | 54 | 98,500 | 54 | 105,000 | 56 | 108,000 | 63 | 105,776 |
| Savannah, Ga | 130 | 205,365 | 130 | 205,235 | 131 | 206,550 | 131 | 195,675 |
| Rockford, Ill | 100 | 201,874 | 100 | 202,067 | 100 | 202,770 | 100 | 150,655 |
| Saginaw, Mich | 108 | 197,638 | 114 | 204,596 | 114 | 199,604 | | |
| Manchester, N.H | 131 | 235,690 | 132 | 216,982 | 133 | 238,976 | 118 | 225,882 |
| Lincoln, Nebr | 86 | 137,344 | 94 | 141,408 | 103 | 162,946 | 102 | 163,557 |
| Huntington, W.Va | 91 | 157,268 | 89 | 157,473 | 89 | 156,858 | 90 | 146,608 |
| Pueblo, Colo | 58 | 103,305 | 58 | 107,084 | 62 | 103,040 | 52 | 93,158 |
| Binghamton, N.Y | 136 | 272,309 | 146 | 297,181 | 146 | 299,493 | 146 | 303,686 |

GROUP 5.—CITIES WITH POPULATION OF 30,000 TO 50,000

| City | Number | Total salaries | Number | Total salaries | Number | Total salaries | Number | Total salaries |
|------|------|------|------|------|------|------|------|------|
| Pittsfield, Mass | 58 | $118,408 | 58 | $119,558 | 64 | $128,279 | 64 | $134,233 |
| New Castle, Pa | 40 | 75,429 | 42 | 77,156 | 41 | 76,399 | 42 | 73,521 |
| Stockton, Calif | 124 | 242,847 | 105 | 230,060 | 104 | 227,202 | 105 | 217,303 |
| Waterloo, Iowa | 49 | 85,246 | 49 | 85,233 | 49 | 85,010 | 49 | 81,509 |
| Port Arthur, Tex | 42 | 71,647 | 42 | 71,982 | 40 | 69,105 | 22 | 24,852 |
| Dearborn, Mich | 63 | 179,851 | 79 | 203,239 | 80 | 209,487 | 82 | 183,702 |
| Jackson, Miss | 53 | 92,733 | 53 | 100,461 | 53 | 99,811 | | |
| Phoenix, Ariz | 63 | 129,380 | 64 | 138,660 | 64 | 138,082 | 64 | 122,372 |
| Clifton, N.J | 33 | 77,677 | 48 | 113,088 | 47 | 119,489 | 59 | 142,369 |
| Jamestown, N.Y | 69 | 120,534 | 71 | 128,056 | 70 | 127,135 | 69 | 115,637 |
| Portsmouth, Va | 39 | 73,938 | 39 | 74,919 | 39 | 74,691 | 39 | 75,628 |
| Wichita Falls, Tex | 66 | 101,120 | 63 | 101,099 | 41 | 81,360 | 44 | 62,944 |

TABLE 3.—*Returns from questionnaires on fire departments*—Continued

GROUP 6.—CITIES WITH POPULATION OF 10,000 TO 30,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| | Num-ber | Total sala-ries | Num-ber | Total sala-ries | Num-ber | Total sala-ries | Num-ber | Total sala-ries |
| Albambra, Calif. | 34 | $73,832 | 37 | $78,447 | 38 | $78,438 | 36 | $59,976 |
| Bangor, Maine | 44 | 67,982 | 48 | 79,653 | 49 | 80,870 | 47 | 74,520 |
| Great Falls, Mont. | 31 | 60,128 | 30 | 60,525 | 30 | 62,628 | 30 | 51,803 |
| Salem, Oreg. | 37 | 55,291 | 39 | 62,511 | 46 | 59,492 | 37 | 65,520 |
| Albuquerque, N.Mex. | 29 | 45,648 | 29 | 45,544 | 29 | 48,064 | 28 | 48,064 |
| Appleton, Wis. | 32 | 36,149 | 32 | 46,000 | 33 | 57,260 | 33 | 95,120 |
| Johnson City, Tenn. | 19 | 12,229 | 20 | 18,743 | 27 | 19,431 | 14 | 24,300 |
| Huntington Park, Calif. | 10 | 18,412 | 10 | 22,050 | 20 | 28,863 | 20 | 32,414 |
| Marion, Ind. | 50 | 80,978 | 50 | 81,259 | 50 | 81,000 | 50 | 81,589 |
| Mason City, Iowa | 19 | 32,503 | 19 | 33,184 | 21 | 35,075 | 18 | 34,952 |
| St. Cloud, Minn. | 27 | 45,600 | 27 | 45,600 | 27 | 45,600 | 23 | 42,555 |
| Berlin, N.H. | 64 | 33,196 | 64 | 38,201 | 64 | 39,860 | 61 | 38,670 |
| Findlay, Ohio | 21 | 34,648 | 21 | 36,005 | 21 | 35,785 | 21 | 27,579 |
| Pittsburg, Kans. | 18 | 29,460 | 18 | 29,460 | 14 | 23,220 | 14 | 23,220 |
| Cheyenne, Wyo. | 17 | 31,162 | 18 | 30,817 | 18 | 32,484 | 19 | 31,318 |
| Grand Forks, N.Dak. | 16 | 25,740 | 16 | 25,920 | 16 | 25,920 | 16 | 23,408 |
| Modesto, Calif. | 30 | 27,039 | 30 | 27,568 | 30 | 27,421 | 30 | 25,595 |
| Atchison, Kans. | 22 | 32,427 | 23 | 32,108 | 23 | 32,200 | 21 | 31,298 |
| Medford, Oreg. | 8 | 11,536 | 8 | 13,370 | 8 | 13,757 | 8 | 11,902 |

GROUP 7.—CITIES WITH POPULATION OF 5,000 TO 10,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| Ottawa, Kans. | 7 | $9,350 | 7 | $9,379 | 7 | $9,230 | 7 | $9,317 |
| Red Wing, Minn. | 13 | 17,833 | 13 | 18,007 | 13 | 18,045 | 11 | 16,484 |
| Carthage, Mo. | 10 | 12,660 | 10 | 12,660 | 10 | 12,660 | 10 | 12,660 |
| Antigo, Wis. | 10 | 14,780 | 10 | 14,788 | 10 | 15,025 | 9 | 12,867 |
| Twin Falls, Idaho | 7 | 11,972 | 8 | 12,393 | 8 | 12,064 | 8 | 9,600 |
| Iola, Kans. | 4 | 4,920 | 4 | 5,105 | 4 | 4,770 | 4 | 4,440 |
| Athens, Ohio | 2 | 2,520 | 2 | 2,520 | 2 | 2,520 | 3 | 3,540 |
| Fredericksburg, Va. | 2 | 3,019 | 2 | 3,185 | 2 | 3,117 | 2 | 3,137 |
| Monterey, Calif. | | | | | | | 4 | 6,126 |
| Hinton, W.Va. | | | | | | | 2 | 2,200 |

GROUP 8.—CITIES WITH POPULATION OF 2,500 TO 5,000

| City | 1929 | | 1930 | | 1931 | | 1932 | |
|---|---|---|---|---|---|---|---|---|
| Martinsville, Ind. | 4 | $4,650 | 4 | $4,650 | 4 | $4,650 | 4 | $4,650 |
| Glassboro, N.J. | 1 | 1,560 | 1 | 1,560 | 1 | 1,560 | 1 | 1,560 |
| Geneva, Ill. | | | | | | | 2 | 2,148 |
| Carthage, N.Y. | 1 | 1,664 | 1 | 1,702 | 1 | 1,675 | 1 | 1,649 |
| Camas, Wash. | 2 | 2,000 | 2 | 3,000 | 2 | 3,000 | | |
| Lamar, Colo. | 1 | 780 | 1 | 780 | 1 | 600 | 1 | 1,200 |
| Benwood, W.Va. | 2 | 3,320 | 2½ | 3,500 | 2 | 3,237 | 2 | 1,860 |
| Port Townsend, Wash. | 1½ | 1,714 | 2½ | 2,992 | 2½ | 3,053 | | |
| Crisfield, Md. | 1 | 1,040 | 1 | 1,040 | 1 | 1,025 | 1 | 915 |
| Wallace, Idaho | 6 | 7,244 | 6 | 7,320 | 6 | 7,384 | 5 | 6,973 |
| Rochester, Mich. | | | | | | | 2 | 1,357 |
| Bowie, Tex. | | | 1 | 900 | | | | |
| Lehi, Utah | 1 | 900 | 1 | 900 | | | | |
| Dillon, S.C. | | | | | | | 1 | 1,020 |
| Claremont, Calif. | | | | | | | 1 | 720 |

# APPENDIX E

TABLE 1.—*Biennial survey of education, special tabulation of salaries and wages paid, private universities, colleges and professional schools*

| State | Instruction | | | Administration and general control | | Physical plant operation and maintenance | | Total salaries and wages | |
|---|---|---|---|---|---|---|---|---|---|
| | 1927–28 | 1929–30 | 1931–32 | 1929–30 | 1931–32 | 1929–30 | 1931–32 | 1929–30 | 1931–32 |
| | $500,735 | $499,750 | $489,568 | $146,992 | $125,668 | $55,610 | $40,147 | $702,352 | $664,413 |
| Alabama | 270,639 | 223,838 | 137,321 | 60,981 | 45,181 | 8,677 | 9,634 | 293,496 | 192,036 |
| Arizona | | | | | | | | | |
| Arkansas | | | | | | | | | |
| California | 3,818,160 | 4,171,790 | 2,105,935 | 818,945 | 375,618 | 369,524 | 288,247 | 5,360,259 | 2,770,800 |
| Colorado | 376,445 | 470,915 | 482,690 | 103,625 | 118,899 | 41,044 | 38,409 | 615,584 | 640,057 |
| Connecticut | 2,796,953 | 2,607,708 | 3,362,605 | 400,464 | 555,192 | 318,407 | 546,531 | 3,326,570 | 4,464,388 |
| Delaware | | | | | | | | | |
| District of Columbia | 904,813 | 1,299,962 | 1,621,651 | 246,689 | 209,541 | 157,036 | 96,188 | 1,703,687 | 2,017,380 |
| Florida | 305,753 | 394,034 | 379,760 | 64,217 | 105,083 | 20,347 | 24,522 | 478,698 | 520,307 |
| Georgia | 1,161,043 | 863,355 | 1,285,281 | 676,447 | 249,228 | 236,811 | 66,540 | 1,776,614 | 1,631,027 |
| Idaho | 69,709 | 83,252 | 87,225 | 19,662 | 22,821 | 7,452 | 9,371 | 110,360 | 119,417 |
| Illinois | 6,413,668 | 6,863,841 | 4,763,713 | 2,237,019 | 1,001,211 | 324,242 | 518,617 | 9,425,102 | 6,273,641 |
| Indiana | 1,633,252 | 1,613,478 | 1,020,738 | 214,490 | 403,676 | 382,481 | 73,205 | 2,210,455 | 2,307,617 |
| Iowa | 1,493,014 | 1,300,020 | 1,095,002 | 238,534 | 226,385 | 95,754 | 101,102 | 1,636,208 | 1,422,039 |
| Kansas | 822,428 | 844,090 | 751,106 | 171,711 | 159,758 | 87,385 | 70,041 | 1,103,180 | 980,005 |
| Kentucky | 643,451 | 695,945 | 387,610 | 102,509 | 116,450 | 51,701 | 30,040 | 910,535 | 543,100 |
| Louisiana | 930,379 | 932,784 | 962,691 | 183,147 | 186,101 | 68,815 | 77,443 | 1,184,740 | 1,220,135 |
| Maine | 434,874 | 451,609 | 606,273 | 71,829 | 85,508 | 87,402 | 49,820 | 610,540 | 641,091 |
| Maryland | 2,148,027 | 2,220,111 | 2,192,049 | 240,512 | 85,102 | 199,825 | 170,157 | 2,660,478 | 2,055,308 |
| Massachusetts | 5,001,207 | 10,132,954 | 11,086,818 | 1,135,006 | 1,620,877 | 1,096,181 | 1,843,005 | 12,904,141 | 15,161,040 |
| Michigan | 934,996 | 856,015 | 992,202 | 170,237 | 191,516 | 69,007 | 73,052 | 1,055,259 | 1,266,770 |
| Minnesota | 1,000,140 | 1,037,062 | 1,213,550 | 204,145 | 270,424 | 132,573 | 167,765 | 1,433,780 | 1,041,709 |
| Mississippi | | 353,406 | 305,384 | 77,881 | 77,087 | 31,609 | 14,112 | 467,890 | 307,483 |
| Missouri | 1,713,447 | 2,182,045 | 1,783,309 | 277,297 | 278,253 | 229,055 | 223,597 | 2,688,987 | 2,265,249 |
| Montana | 27,000 | 28,390 | 42,711 | 6,900 | 12,380 | 1,800 | 1,924 | 36,090 | 56,045 |
| Nebraska | 671,638 | 650,733 | 560,927 | 104,128 | 135,725 | 64,754 | 68,750 | 810,613 | 765,402 |
| Nevada | | | | | | | | | |
| New Hampshire | 851,743 | 1,014,230 | 1,053,660 | 145,999 | 144,641 | | 15,151 | 1,160,229 | 1,213,452 |
| New Jersey | 1,342,108 | 1,498,784 | 2,090,272 | 165,246 | 254,553 | 308,767 | 412,564 | 1,972,797 | 2,757,389 |
| New Mexico | | | | | | | | | |
| New York | 14,452,670 | 19,955,104 | 17,599,391 | 2,919,285 | 3,116,555 | 2,295,545 | 2,182,368 | 25,103,034 | 22,898,314 |
| North Carolina | 1,387,038 | 1,498,324 | 1,770,769 | 298,770 | 313,410 | 135,593 | 176,459 | 1,932,087 | 2,260,658 |
| North Dakota | 61,294 | 67,612 | 66,107 | 4,500 | 4,800 | | 5,693 | 72,112 | 76,600 |
| Ohio | 4,971,821 | 5,161,953 | 5,156,124 | 1,026,601 | 1,057,780 | 440,970 | 532,278 | 6,629,124 | 6,740,182 |
| Oklahoma | 207,625 | 349,708 | 281,226 | 90,272 | 86,500 | 21,897 | 12,547 | 431,877 | 350,279 |
| Oregon | 363,813 | 332,570 | 401,645 | 67,861 | 75,967 | 21,801 | 27,779 | 422,322 | 505,391 |
| Pennsylvania | 10,176,281 | 10,651,381 | 10,925,248 | 1,364,197 | 1,300,392 | 719,254 | 1,066,550 | 12,734,532 | 13,298,400 |
| Rhode Island | 571,921 | 578,085 | 728,576 | 108,459 | 115,870 | 6,000 | 102,257 | 692,644 | 946,703 |

TABLE 2.—*Gross and net income of physicians, 1929–32*

[Sample survey of members of American Medical Association]

| State | Returns | Gross income from practice | | | | Net income from practice | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | 47 | $252,229 | $197,045 | $172,448 | $138,967 | $129,404 | $106,882 | $88,676 | $61,901 |
| Arizona | 10 | 78,703 | 76,730 | 68,109 | 53,594 | 50,609 | 50,400 | 43,204 | 30,382 |
| Arkansas | 20 | 92,349 | 67,601 | 61,515 | 53,861 | 56,257 | 38,439 | 32,539 | 32,609 |
| California | 204 | 2,415,135 | 2,344,779 | 2,181,000 | 1,747,118 | 1,328,680 | 1,250,505 | 1,159,094 | 885,652 |
| Colorado | 20 | 125,079 | 125,143 | 114,588 | 89,519 | 82,112 | 78,021 | 70,773 | 48,357 |
| Connecticut | 25 | 201,716 | 272,575 | 290,733 | 205,385 | 172,794 | 156,081 | 128,675 | 103,053 |
| Delaware | 2 | 6,820 | 6,701 | 6,797 | 6,086 | 4,515 | 4,410 | 4,071 | 4,314 |
| District of Columbia | 4 | 219,300 | 187,762 | 224,419 | 206,668 | 142,006 | 134,287 | 144,961 | 129,576 |
| Florida | 30 | 270,043 | 310,948 | 283,569 | 231,218 | 176,551 | 204,031 | 169,350 | 131,360 |
| Georgia | 32 | 271,262 | 245,027 | 217,208 | 186,403 | 161,103 | 139,058 | 107,194 | 95,654 |
| Idaho | 3 | 24,772 | 20,279 | 14,953 | 9,090 | 12,416 | 9,433 | 6,170 | 4,197 |
| Illinois | 163 | 1,640,434 | 1,530,559 | 1,348,703 | 1,024,218 | 930,727 | 874,908 | 762,581 | 521,155 |
| Indiana | 76 | 661,506 | 611,111 | 630,319 | 380,816 | 390,211 | 357,022 | 296,087 | 197,678 |
| Iowa | 57 | 420,529 | 388,528 | 352,369 | 274,404 | 282,370 | 210,643 | 109,083 | 104,680 |
| Kansas | 30 | 287,143 | 257,580 | 212,854 | 163,603 | 195,982 | 171,218 | 130,703 | 105,084 |
| Kentucky | 27 | 229,484 | 194,665 | 172,848 | 143,188 | 139,990 | 117,104 | 120,594 | 83,665 |
| Louisiana | 22 | 225,089 | 216,636 | 108,306 | 105,930 | 137,463 | 136,325 | 90,947 | 91,056 |
| Maine | 19 | 176,503 | 175,637 | 145,703 | 124,157 | 117,930 | 116,235 | 180,630 | 72,705 |
| Maryland | 28 | 369,897 | 328,690 | 307,557 | 249,110 | 220,028 | 196,903 | 365,005 | 138,956 |
| Massachusetts | 65 | 701,247 | 666,870 | 630,227 | 573,490 | 429,775 | 305,330 | 287,690 | 310,210 |
| Michigan | 45 | 433,818 | 628,679 | 521,487 | 302,601 | 224,540 | 363,871 | 208,180 | 109,947 |
| Minnesota | 21 | 146,680 | 123,901 | 301,412 | 284,958 | 265,648 | 244,883 | 45,113 | 147,332 |
| Mississippi | 63 | 605,841 | 660,347 | 98,631 | 75,340 | 76,422 | 65,461 | 327,668 | 38,457 |
| Missouri | | 685,336 | | | | | | | 265,487 |
| Montana | 7 | 32,400 | 36,017 | 23,920 | 22,828 | 17,128 | 16,792 | 7,689 | 7,463 |
| South Carolina | | 895,076 | 670,700 | 725,321 | 530,294 | 138,414 | 105,946 | 34,469 | 33,341 |
| South Dakota | | 271,140 | 366,721 | 217,990 | 263,803 | 39,545 | 74,161 | 23,763 | 13,605 |
| Tennessee | | 2,256,773 | 1,844,019 | 1,722,990 | 1,434,564 | 296,576 | 288,110 | 121,374 | 235,707 |
| Texas | | 2,355,839 | 2,032,356 | 1,817,053 | 1,616,321 | 362,401 | 273,569 | 142,966 | 176,295 |
| Utah | | 248,137 | 254,253 | 214,696 | 220,484 | 14,400 | 16,000 | 17,809 | 19,011 |
| Vermont | | 346,187 | 358,757 | 228,141 | 274,193 | 69,536 | 72,215 | 12,340 | 38,182 |
| Virginia | | 1,439,436 | 1,460,965 | 1,121,513 | 1,118,299 | 216,150 | 237,055 | 105,612 | 71,773 |
| Washington | | 344,930 | 405,402 | 228,766 | 338,013 | 70,303 | 89,863 | 67,726 | 45,706 |
| West Virginia | | 352,303 | 292,702 | 258,443 | 237,655 | 74,096 | 41,804 | 13,243 | 19,764 |
| Wisconsin | | 1,474,397 | 1,607,814 | 1,205,138 | 1,299,579 | 105,751 | 211,639 | 96,506 | 75,498 |
| Wyoming | | | | | | | | | |
| **Total** | | 114,816,117 | 111,132,084 | 89,652,733 | 84,494,524 | 15,748,908 | 14,813,450 | 9,824,080 | 9,414,471 |

TABLE 2.—*Gross and net income of physicians, 1929–32*—Continued

| State | Returns | Gross income from practice | | | | Net income from practice | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Nebraska | 20 | $313,050 | $312,038 | $261,215 | $209,465 | $165,480 | $159,345 | $131,748 | $95,300 |
| Nevada | 6 | 35,442 | 24,910 | 24,713 | 18,904 | 25,737 | 20,420 | 14,425 | 13,969 |
| New Hampshire | 13 | 142,002 | 132,943 | 113,424 | 98,834 | 107,409 | 96,163 | 79,284 | 64,181 |
| New Jersey | 50 | 607,477 | 640,895 | 600,735 | 457,502 | 305,218 | 377,527 | 342,352 | 230,425 |
| New Mexico | 3 | 6,237 | 4,282 | 3,209 | 1,842 | 5,029 | 3,262 | 2,830 | 1,891 |
| New York | 217 | 2,297,597 | 2,166,915 | 2,070,231 | 1,748,261 | 1,347,025 | 1,257,600 | 1,173,143 | 889,185 |
| North Carolina | 25 | 135,954 | 128,112 | 110,460 | 98,832 | 83,501 | 77,272 | 67,048 | 54,129 |
| North Dakota | 12 | 58,299 | 49,826 | 34,940 | 28,617 | 40,763 | 32,127 | 19,058 | 16,059 |
| Ohio | 123 | 1,081,934 | 1,071,872 | 865,008 | 701,768 | 619,883 | 529,580 | 448,586 | 330,721 |
| Oklahoma | 33 | 191,392 | 182,656 | 186,973 | 120,601 | 117,492 | 97,774 | 96,066 | 66,006 |
| Oregon | 29 | 210,743 | 205,469 | 192,083 | 143,410 | 124,475 | 111,148 | 94,181 | 63,180 |
| Pennsylvania | 183 | 1,727,707 | 1,604,610 | 1,461,188 | 1,180,777 | 1,108,140 | 984,463 | 833,707 | 598,646 |
| Rhode Island | 17 | 220,445 | 197,405 | 200,770 | 175,800 | 156,810 | 130,222 | 134,637 | 115,764 |
| South Carolina | 18 | 132,316 | 116,531 | 107,282 | 92,100 | 73,643 | 69,960 | 59,066 | 51,710 |
| South Dakota | 10 | 121,902 | 104,830 | 85,170 | 56,982 | 69,349 | 58,083 | 42,599 | 26,230 |
| Tennessee | 38 | 371,372 | 331,174 | 290,212 | 230,110 | 201,324 | 180,511 | 148,266 | 112,022 |
| Texas | 133 | 1,415,454 | 1,352,589 | 1,201,402 | 951,210 | 825,851 | 700,185 | 641,123 | 483,023 |
| Utah | 9 | 80,132 | 73,559 | 59,515 | 46,070 | 39,528 | 34,511 | 24,010 | 10,780 |
| Vermont | 7 | 46,502 | 48,010 | 42,799 | 37,028 | 20,910 | 31,548 | 27,415 | 23,812 |
| Virginia | 45 | 392,951 | 360,617 | 329,777 | 272,225 | 240,002 | 210,887 | 100,923 | 148,666 |
| Washington | 41 | 681,555 | 727,109 | 632,510 | 496,731 | 352,703 | 406,076 | 318,840 | 225,777 |
| West Virginia | 13 | 106,212 | 95,601 | 81,737 | 63,971 | 63,971 | 56,316 | 45,583 | 34,103 |
| Wisconsin | 46 | 330,829 | 331,455 | 317,974 | 237,600 | 207,808 | 210,078 | 177,749 | 145,951 |
| Wyoming | 3 | 19,100 | 18,800 | 10,300 | 15,100 | 11,800 | 11,700 | 10,600 | 9,400 |
| Miscellaneous | 22 | 180,723 | 171,184 | 153,908 | 138,802 | 100,480 | 92,818 | 82,038 | 64,074 |
| Total | 2,263 | 22,302,592 | 20,458,173 | 18,513,307 | 14,967,419 | 12,670,401 | 12,009,501 | 10,284,000 | 7,789,462 |

TABLE 3.—*Gross and net income of dentists, 1929–32*

[Sample survey of members of American Dental Association]

| State | Returns | Gross income from practice | | | | Net income from practice | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | 6 | $36,643 | $32,583 | $26,344 | $18,223 | $21,403 | $21,815 | $15,006 | $17,754 |
| Arizona | 4 | 42,932 | 34,608 | 33,430 | 28,186 | 26,441 | 20,240 | 19,649 | 15,271 |
| Arkansas | 13 | 77,729 | 66,680 | 60,608 | 47,595 | 44,390 | 40,728 | 35,480 | 24,747 |
| California | 108 | 1,049,304 | 1,066,133 | 920,911 | 712,562 | 584,116 | 600,816 | 510,600 | 336,641 |
| Colorado | 26 | 163,736 | 169,441 | 154,247 | 120,850 | 94,171 | 99,739 | 90,343 | 70,213 |
| Connecticut | 25 | 219,707 | 214,458 | 188,699 | 150,040 | 132,472 | 130,337 | 116,745 | 79,951 |
| Delaware | 3 | 30,568 | 27,750 | 21,843 | 20,501 | 19,144 | 18,011 | 13,290 | 12,133 |
| District of Columbia | 10 | 107,353 | 101,506 | 95,577 | 83,639 | 61,402 | 57,506 | 51,578 | 43,173 |
| Florida | 18 | 128,392 | 131,303 | 122,938 | 98,749 | 67,552 | 82,546 | 68,840 | 53,181 |
| Georgia | 15 | 107,483 | 103,841 | 92,626 | 74,027 | 56,761 | 53,187 | 48,553 | 32,944 |
| Idaho | 4 | 37,222 | 34,244 | 29,649 | 19,983 | 22,863 | 21,145 | 17,182 | 10,671 |
| Illinois | 121 | 1,020,430 | 982,874 | 838,453 | 632,082 | 605,705 | 582,359 | 490,947 | 348,740 |
| Indiana | 28 | 147,791 | 136,039 | 118,427 | 95,759 | 89,831 | 82,045 | 71,933 | 63,648 |
| Iowa | 43 | 261,793 | 261,817 | 215,748 | 154,986 | 161,658 | 168,992 | 128,069 | 84,049 |
| Kansas | 23 | 147,267 | 139,558 | 121,934 | 88,771 | 82,835 | 82,282 | 75,823 | 50,644 |
| Kentucky | 16 | 92,742 | 87,326 | 72,533 | 61,465 | 52,256 | 49,778 | 40,947 | 32,502 |
| Louisiana | 3 | 30,687 | 32,560 | 34,549 | 28,580 | 14,444 | 13,151 | 15,145 | 10,892 |
| Maine | 12 | 121,942 | 123,217 | 130,174 | 101,627 | 59,455 | 69,116 | 70,627 | 52,906 |
| Maryland | 13 | 139,291 | 126,385 | 119,727 | 99,433 | 82,922 | 76,665 | 73,951 | 59,974 |
| Massachusetts | 48 | 469,003 | 439,855 | 426,766 | 356,824 | 260,370 | 253,434 | 230,348 | 187,587 |
| Michigan | 42 | 337,254 | 285,569 | 261,589 | 199,227 | 207,178 | 169,451 | 159,733 | 118,645 |
| Minnesota | 62 | 404,600 | 428,186 | 353,096 | 263,649 | 249,060 | 229,158 | 202,866 | 146,885 |
| Mississippi | 11 | 67,992 | 60,397 | 51,572 | 38,310 | 38,013 | 33,612 | 32,241 | 20,899 |
| Missouri | 40 | 217,820 | 213,260 | 184,278 | 147,256 | 124,581 | 123,112 | 106,730 | 76,435 |
| Montana | 7 | 51,627 | 47,482 | 42,396 | 33,679 | 31,604 | 28,267 | 24,900 | 17,983 |
| Nebraska | 14 | 158,786 | 138,181 | 125,992 | 88,859 | 94,165 | 78,537 | 71,195 | 47,674 |
| Nevada | 5 | 39,636 | 35,679 | 33,670 | 24,743 | 24,585 | 22,942 | 20,784 | 14,509 |
| New Hampshire | 16 | 110,670 | 106,218 | 104,395 | 89,415 | 67,197 | 63,158 | 61,339 | 51,096 |
| New Jersey | 51 | 574,066 | 562,199 | 493,936 | 392,100 | 321,242 | 305,006 | 259,181 | 194,030 |
| New Mexico | 3 | 21,404 | 26,800 | 27,543 | 19,436 | 16,139 | 19,097 | 19,054 | 13,487 |
| New York | 127 | 1,752,323 | 1,700,796 | 1,506,992 | 1,270,078 | 988,312 | 951,501 | 844,864 | 638,459 |
| North Carolina | 12 | 91,239 | 83,549 | 68,875 | 46,809 | 54,091 | 44,937 | 37,388 | 39,020 |
| North Dakota | 13 | 83,461 | 75,822 | 64,439 | 49,644 | 46,236 | 45,849 | 37,098 | 29,487 |
| Ohio | 100 | 715,313 | 696,955 | 587,547 | 467,055 | 443,969 | 410,280 | 347,041 | 262,247 |
| Oklahoma | 17 | 145,638 | 129,518 | 108,622 | 77,826 | 56,202 | 79,688 | 61,669 | 27,797 |
| Oregon | 18 | 142,416 | 134,936 | 114,297 | 80,481 | 87,213 | 82,386 | 69,011 | 43,597 |
| Pennsylvania | 86 | 813,965 | 751,905 | 646,089 | 500,715 | 477,240 | 440,418 | 378,252 | 269,428 |
| Rhode Island | 7 | 46,701 | 48,063 | 42,524 | 35,619 | 26,663 | 27,516 | 22,924 | 19,048 |
| South Carolina | 7 | 44,439 | 43,988 | 35,817 | 31,234 | 24,035 | 23,047 | 17,647 | 15,616 |
| South Dakota | 14 | 115,095 | 119,469 | 100,809 | 77,602 | 71,785 | 75,419 | 62,361 | 45,190 |
| Tennessee | 14 | 105,505 | 92,541 | 85,149 | 66,584 | 52,067 | 49,570 | 40,497 | 30,758 |
| Texas | 35 | 338,837 | 313,295 | 269,890 | 199,522 | 192,446 | 181,681 | 147,316 | 107,176 |
| Utah | 2 | 13,000 | 13,476 | 13,235 | 9,416 | 8,860 | 9,298 | 7,921 | 5,837 |
| Vermont | 3 | 10,434 | 9,233 | 7,770 | 7,624 | 6,673 | 5,905 | 4,698 | 1,979 |
| Virginia | 19 | 152,426 | 146,245 | 138,213 | 121,669 | 87,972 | 85,914 | 80,840 | 66,448 |
| Washington | 28 | 236,344 | 215,224 | 175,789 | 130,863 | 131,791 | 113,034 | 93,634 | 70,410 |
| West Virginia | 14 | 105,368 | 98,489 | 81,792 | 62,023 | 65,945 | 59,915 | 48,057 | 36,029 |
| Wisconsin | 14 | 109,249 | 107,497 | 89,376 | 74,426 | 59,791 | 61,670 | 48,570 | 41,233 |
| Wyoming | 4 | 25,625 | 28,643 | 29,468 | 19,793 | 14,968 | 17,325 | 16,227 | 11,108 |
| Miscellaneous | 9 | 66,994 | 64,770 | 62,680 | 55,115 | 45,310 | 46,029 | 39,538 | 33,176 |
| Total | 1,333 | 11,533,245 | 11,096,643 | 9,793,023 | 7,674,596 | 6,691,524 | 6,407,614 | 5,548,632 | 4,083,307 |

**TABLE 4.**—*Net income and withdrawals of dentists, 1929-32*

[Sample survey of members of American Dental Association]

| State | Re-turns | Net income from practice | | | | Net income withdrawn | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | 1 | $5,000 | $6,500 | $5,000 | $3,000 | $5,000 | $6,500 | $5,000 | $3,000 |
| Arizona | 1 | 10,100 | 8,112 | 7,670 | 7,160 | 10,000 | 8,000 | 7,500 | 7,000 |
| Arkansas | 10 | 37,954 | 34,730 | 30,387 | 21,213 | 36,581 | 33,730 | 29,370 | 20,103 |
| California | 87 | 438,155 | 447,013 | 384,418 | 270,515 | 396,119 | 409,026 | 353,446 | 250,069 |
| Colorado | 11 | 40,802 | 39,368 | 38,107 | 28,512 | 39,703 | 38,470 | 36,186 | 27,998 |
| Connecticut | 24 | 129,259 | 127,670 | 114,305 | 78,252 | 123,947 | 121,959 | 110,482 | 76,274 |
| Delaware | 2 | 12,710 | 11,163 | 7,512 | 6,591 | 12,330 | 11,163 | 7,512 | 6,498 |
| District of Columbia | 6 | 29,351 | 28,560 | 25,472 | 21,345 | 19,684 | 21,171 | 19,730 | 16,928 |
| Florida | 10 | 38,528 | 40,246 | 39,211 | 29,084 | 36,453 | 38,583 | 38,880 | 29,058 |
| Georgia | 9 | 43,435 | 40,327 | 34,939 | 21,712 | 41,658 | 40,070 | 34,101 | 21,620 |
| Idaho | 1 | 5,200 | 4,261 | 2,756 | 1,783 | 5,200 | 4,261 | 2,756 | 1,753 |
| Illinois | 70 | 362,243 | 343,754 | 288,143 | 209,929 | 346,736 | 336,303 | 278,188 | 194,532 |
| Indiana | 16 | 55,001 | 48,721 | 44,001 | 39,717 | 54,451 | 48,278 | 43,132 | 32,439 |
| Iowa | 23 | 82,440 | 78,441 | 58,740 | 38,469 | 69,166 | 71,573 | 50,726 | 35,799 |
| Kansas | 12 | 41,322 | 42,668 | 39,035 | 28,201 | 35,499 | 39,672 | 35,776 | 25,631 |
| Kentucky | 10 | 30,409 | 29,849 | 25,124 | 20,411 | 25,412 | 25,212 | 21,083 | 18,092 |
| Louisiana | 1 | 3,876 | 4,154 | 4,544 | 2,966 | 500 | 1,000 | 1,000 | 300 |
| Maine | 7 | 30,062 | 32,426 | 34,051 | 23,212 | 20,531 | 28,217 | 30,402 | 21,934 |
| Maryland | 5 | 49,407 | 45,563 | 41,446 | 35,246 | 47,988 | 45,552 | 41,115 | 34,024 |
| Massachusetts | 28 | 176,629 | 170,301 | 152,081 | 121,028 | 172,109 | 162,744 | 149,237 | 119,303 |
| Michigan | 24 | 113,745 | 92,791 | 81,127 | 59,794 | 109,525 | 84,123 | 79,605 | 58,841 |
| Minnesota | 41 | 185,577 | 175,196 | 152,610 | 113,795 | 174,322 | 164,935 | 146,086 | 100,386 |
| Mississippi | 6 | 16,397 | 16,563 | 15,670 | 11,653 | 15,919 | 16,562 | 14,834 | 11,435 |
| Missouri | 25 | 81,436 | 85,423 | 70,271 | 52,934 | 79,053 | 82,934 | 68,510 | 52,304 |
| Montana | 4 | 19,953 | 16,396 | 14,791 | 11,112 | 18,425 | 16,171 | 14,136 | 10,501 |
| Nebraska | 7 | 51,923 | 46,275 | 41,160 | 28,360 | 48,191 | 43,467 | 30,843 | 28,270 |
| Nevada | 4 | 21,654 | 20,230 | 18,099 | 12,292 | 21,654 | 20,230 | 18,099 | 12,292 |
| New Hampshire | 10 | 39,785 | 38,437 | 34,118 | 27,231 | 39,785 | 38,437 | 34,118 | 27,231 |
| New Jersey | 37 | 245,613 | 234,228 | 190,900 | 148,840 | 203,204 | 216,450 | 182,821 | 136,237 |
| New Mexico | 3 | 17,130 | 19,007 | 19,054 | 13,487 | 16,967 | 18,610 | 18,536 | 13,022 |
| New York | 74 | 647,646 | 559,834 | 496,456 | 358,226 | 584,070 | 525,481 | 457,232 | 333,628 |
| North Carolina | 3 | 12,371 | 10,699 | 7,877 | 7,761 | 11,828 | 10,012 | 7,309 | 7,031 |
| North Dakota | 9 | 32,280 | 34,717 | 28,324 | 22,919 | 20,249 | 33,346 | 26,066 | 19,417 |
| Ohio | 68 | 335,617 | 310,587 | 255,385 | 201,656 | 319,058 | 300,915 | 249,591 | 196,445 |
| Oklahoma | 11 | 63,582 | 58,148 | 44,010 | 16,377 | 63,582 | 57,448 | 44,010 | 15,982 |
| Oregon | 11 | 59,274 | 54,899 | 50,723 | 29,577 | 54,321 | 50,531 | 47,195 | 27,179 |
| Pennsylvania | 50 | 295,705 | 270,343 | 238,411 | 158,810 | 276,007 | 262,809 | 222,508 | 154,486 |
| Rhode Island | 6 | 25,389 | 26,048 | 21,413 | 18,480 | 21,921 | 22,184 | 19,746 | 16,628 |
| South Carolina | 5 | 13,213 | 12,867 | 13,749 | 7,549 | 11,521 | 12,359 | 10,466 | 8,915 |
| South Dakota | 10 | 53,620 | 57,327 | 46,939 | 35,852 | 45,612 | 50,637 | 42,771 | 35,752 |
| Tennessee | 4 | 19,189 | 20,830 | 14,400 | 10,754 | 19,187 | 20,829 | 14,400 | 10,754 |
| Texas | 22 | 144,524 | 129,262 | 114,979 | 77,636 | 133,832 | 117,580 | 106,775 | 74,066 |
| Utah | 1 | 3,500 | 3,500 | 3,000 | 2,280 | 3,300 | 3,300 | 2,800 | 2,000 |
| Vermont | 2 | 5,472 | 4,905 | 3,798 | 3,622 | 5,472 | 4,905 | 3,798 | 3,622 |
| Virginia | 13 | 69,092 | 65,594 | 60,971 | 47,316 | 65,226 | 62,082 | 58,014 | 46,156 |
| Washington | 17 | 82,972 | 67,704 | 54,223 | 40,328 | 74,867 | 63,829 | 49,530 | 38,569 |
| West Virginia | 10 | 50,385 | 44,795 | 35,323 | 26,068 | 45,772 | 41,281 | 30,016 | 19,860 |
| Wisconsin | 8 | 32,082 | 31,254 | 25,307 | 22,714 | 31,563 | 29,144 | 24,911 | 22,078 |
| Wyoming | 3 | 11,168 | 13,125 | 11,727 | 7,807 | 10,900 | 12,884 | 11,563 | 7,807 |
| Miscellaneous | 3 | 16,347 | 15,010 | 13,887 | 11,562 | 13,885 | 15,325 | 13,764 | 10,843 |
| Total | 823 | 4,388,533 | 4,119,911 | 3,564,644 | 2,595,148 | 4,053,285 | 3,890,284 | 3,351,678 | 2,450,122 |

TABLE 5.—*Number and compensation of dental assistants, 1929–32*

[Sample survey of members of American Dental Association]

| State | Returns | Number of assistants, full time | | | | Number of assistants, part time | | | | Salaries and wages paid assistants, full time | | | | Salaries and wages paid assistants, part time | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | 4 | 6 | 6 | 6 | 6 | 1 | 2 | 3 | 3 | $2,275 | $2,508 | $2,168 | $1,771 | $39 | $156 | $174 | $900 |
| Arizona | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 3 | 3 | 3,096 | 3,391 | 3,615 | 3,183 | 1,200 | 1,200 | 1,000 | 801 |
| Arkansas | 10 | 8 | 8 | 7 | 6 | 3 | 4 | 3 | 3 | 3,063 | 2,610 | 2,587 | 2,470 | 812 | 1,320 | 860 | 7,682 |
| California | 76 | 79 | 83 | 77 | 69 | 22 | 23 | 21 | 23 | 99,027 | 100,999 | 85,917 | 72,778 | 6,077 | 7,022 | 7,673 | 3,557 |
| Colorado | 18 | 17 | 17 | 18 | 14 | 1 | 3 | 1 | 3 | 18,243 | 18,706 | 17,612 | 11,500 | 177 | 553 | 228 | 140 |
| Connecticut | 16 | 15 | 16 | 17 | 17 | 9 | 12 | 8 | 1 | 16,218 | 16,612 | 14,635 | 14,812 | 9,403 | 8,006 | 7,061 | 3,557 |
| Delaware | 2 | 3 | 1 | 2 | 2 | 1 | 4 | 1 | | 1,652 | 340 | 1,320 | 1,320 | 37 | 1,230 | 207 | |
| District of Columbia | 6 | 7 | 7 | 7 | 6 | 1 | 1 | 1 | 5 | 6,831 | 7,371 | 7,835 | 6,308 | | 624 | 520 | 4,527 |
| Florida | 12 | 11 | 11 | 11 | 10 | 5 | 5 | 5 | 3 | 8,700 | 8,670 | 8,670 | 8,603 | 3,119 | 3,337 | 2,931 | 704 |
| Georgia | 9 | 12 | 12 | 11 | 10 | 4 | 3 | 2 | 3 | 9,575 | 9,708 | 8,964 | 7,986 | 612 | 1,347 | 806 | 290 |
| Idaho | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2,804 | 2,500 | 1,062 | 975 | 180 | 192 | 648 | 8,392 |
| Illinois | 67 | 63 | 63 | 85 | 46 | 20 | 22 | 25 | 23 | 69,711 | 69,391 | 61,122 | 42,478 | 10,499 | 11,307 | 11,687 | 3,628 |
| Indiana | 26 | 22 | 23 | 20 | 12 | 6 | 5 | 6 | 12 | 9,654 | 8,975 | 7,255 | 6,168 | 1,920 | 1,579 | 1,627 | 302 |
| Iowa | 10 | 11 | 13 | 11 | 9 | 6 | 7 | 11 | 4 | 14,413 | 15,541 | 13,363 | 7,950 | 2,224 | 2,477 | 4,074 | 357 |
| Kansas | 11 | 4 | 6 | 5 | 5 | 4 | 4 | 4 | 3 | 10,114 | 10,766 | 9,208 | 3,202 | 523 | 473 | 933 | |
| Kentucky | 8 | 8 | 5 | 5 | 5 | 1 | 3 | 3 | 2 | 3,284 | 2,902 | 2,732 | 2,713 | 1,006 | 876 | 382 | 722 |
| Louisiana | 8 | 16 | 16 | 17 | 14 | 1 | 1 | 1 | 2 | 2,048 | 3,057 | 3,803 | 4,203 | 320 | 226 | 816 | 2,020 |
| Maine | 7 | 9 | 9 | 8 | 8 | 3 | 3 | 1 | 14 | 19,162 | 16,152 | 16,188 | 13,636 | 1,507 | 1,464 | 1,234 | 4,818 |
| Maryland | 8 | 31 | 30 | 28 | 26 | 12 | 12 | 13 | 14 | 13,002 | 11,098 | 9,802 | 9,199 | 3,398 | 3,110 | 4,208 | 3,298 |
| Massachusetts | 31 | 24 | 29 | 19 | 16 | 7 | 8 | 11 | 17 | 31,024 | 30,715 | 20,974 | 26,849 | 2,242 | 2,576 | 4,521 | 4,668 |
| Michigan | 27 | 41 | 38 | 35 | 29 | 8 | 12 | 14 | | 25,326 | 19,442 | 18,151 | 12,980 | 1,359 | 2,381 | 6,150 | |
| Minnesota | 46 | 5 | 5 | 14 | 4 | 7 | 1 | 6 | 2 | 30,456 | 31,117 | 29,058 | 21,043 | | | | 880 |
| Mississippi | 4 | 14 | 14 | | 3 | 1 | 6 | 1 | 1 | 3,643 | 3,457 | 2,922 | 1,807 | 1,168 | 960 | 670 | 164 |
| Missouri | 18 | 14 | 14 | 13 | 13 | 6 | 6 | 6 | 4 | 13,840 | 13,862 | 13,862 | 11,950 | 53 | 164 | 164 | 2,116 |
| Montana | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | | 3,224 | 3,154 | 2,705 | 2,310 | 5,016 | 2,972 | 3,482 | |
| Nebraska | 10 | 11 | 11 | 11 | 7 | 7 | 3 | 7 | 6 | 18,968 | 11,070 | 9,680 | 7,066 | 300 | 300 | 300 | 1,776 |
| Nevada | 1 | 1 | 1 | 1 | 1 | 1 | | | | 800 | 800 | 800 | 800 | 2,183 | 1,965 | 1,484 | 3,740 |
| New Hampshire | 10 | 10 | 10 | 11 | 11 | 8 | 6 | 6 | 6 | 7,721 | 7,744 | 8,453 | 7,924 | 2,757 | 3,387 | 3,439 | 300 |
| New Jersey | 34 | 38 | 38 | 34 | 29 | 29 | 9 | 10 | 1 | 47,863 | 49,141 | 42,113 | 34,846 | 12,777 | 11,075 | 11,754 | 11,099 |
| New Mexico | 2 | 1 | 1 | 1 | 1 | | | | 1 | 1,200 | 1,210 | 1,296 | 921 | 2,400 | 1,920 | 1,500 | 1,460 |
| New York | 85 | 116 | 118 | 111 | 103 | 29 | 25 | 26 | 32 | 162,613 | 182,300 | 181,761 | 160,607 | 1,082 | 890 | 1,280 | 800 |
| North Carolina | 10 | 8 | 8 | 8 | 8 | 3 | 3 | 5 | 4 | 8,650 | 9,005 | 8,515 | 6,879 | 11,911 | 11,921 | 10,155 | 9,280 |
| North Dakota | 6 | 5 | 5 | 4 | 6 | 1 | 2 | 1 | 3 | 4,586 | 4,559 | 3,361 | 3,166 | 600 | 1,242 | 923 | 1,021 |
| Ohio | 61 | 52 | 53 | 50 | 43 | 18 | 23 | 23 | 23 | 38,000 | 41,392 | 34,457 | 27,419 | 1,302 | 1,498 | 1,770 | 468 |
| Oklahoma | 12 | 14 | 12 | 12 | 11 | 4 | 2 | 4 | 4 | 10,605 | 9,060 | 9,060 | 7,403 | 7,817 | 4,120 | 8,620 | 10,151 |
| Oregon | 13 | 6 | 6 | 7 | 7 | 2 | 4 | 5 | 2 | 8,063 | 7,836 | 7,010 | 6,951 | 416 | 416 | 741 | 741 |
| Pennsylvania | 54 | 63 | 63 | 55 | 46 | 24 | 15 | 19 | 21 | 77,305 | 79,074 | 61,648 | 48,766 | 8,361 | 3,207 | 8,100 | 1,947 |
| Rhode Island | 8 | 4 | 4 | 4 | 7 | 2 | 3 | 3 | 7 | 3,614 | 4,093 | 2,947 | 2,572 | | | | |
| South Carolina | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 3,147 | 3,185 | 3,282 | 2,902 | | | | |

TABLE 5.—*Number and compensation of dental assistants, 1929–32*—Continued

| State | Returns | Number of assistants, full time | | | | Number of assistants, part time | | | | Salaries and wages paid assistants, full time | | | | Salaries and wages paid assistants, part time | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| South Dakota | 11 | 8 | 10 | 10 | 9 | 4 | 1 | 1 | 2 | $7,407 | $8,763 | $8,304 | $6,613 | $1,603 | $370 | $305 | $343 |
| Tennessee | 7 | 7 | 7 | 8 | 8 | 3 | 3 | 1 | | 11,180 | 8,388 | 7,880 | 6,334 | 650 | 738 | 108 | |
| Texas | 29 | 33 | 30 | 29 | 26 | 8 | 7 | 8 | 6 | 23,860 | 24,365 | 19,708 | 15,987 | 4,408 | 3,022 | 4,025 | 2,033 |
| Utah | 2 | 1 | 1 | 1 | | 1 | | 1 | | 150 | 150 | 515 | 277 | 200 | 200 | 100 | 100 |
| Vermont | 1 | | | | | 1 | | 1 | 1 | | | | | 175 | 175 | 100 | 100 |
| Virginia | 11 | 9 | 9 | 9 | 8 | 6 | 6 | 6 | 7 | 7,821 | 8,151 | 7,856 | 6,912 | 1,400 | 1,477 | 1,572 | 2,081 |
| Washington | 19 | 10 | 16 | 12 | 10 | 7 | 8 | 10 | 11 | 24,332 | 20,894 | 13,081 | 10,797 | 4,866 | 5,072 | 5,914 | 6,797 |
| West Virginia | 8 | 6 | 6 | 8 | 4 | 3 | 2 | 2 | 2 | 3,942 | 4,155 | 3,556 | 2,075 | 405 | 346 | 909 | 136 |
| Wisconsin | 9 | 7 | 7 | 8 | 8 | 3 | 2 | 3 | | 4,880 | 4,725 | 5,191 | 4,701 | 842 | 1,704 | 1,094 | 715 |
| Wyoming | 2 | 2 | 2 | 2 | 2 | | 4 | | | 1,076 | 1,070 | 1,070 | 1,056 | | | | |
| Miscellaneous | 3 | 3 | 3 | 3 | 3 | | | | | 5,448 | 5,174 | 5,233 | 4,982 | | | | |
| Total | 835 | 849 | 850 | 783 | 694 | 274 | 278 | 283 | 301 | 906,316 | 907,844 | 819,885 | 674,791 | 114,715 | 114,117 | 121,690 | 100,698 |

TABLE 6.—*Gross and net income of engineers, unincorporated, 1929–32*

[Sample survey of unincorporated consulting engineers]

| State | Returns | Number of partners or individuals | | | | Gross annual receipts | | | | Net income from practice | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | 1 | 1 | 1 | 1 | 1 | $8,177 | $8,129 | $8,970 | $5,600 | $6,454 | $8,146 | $7,092 | $5,405 |
| Arizona | 1 | 3 | 2 | 2 | 2 | 11,917 | 7,417 | 3,206 | 3,376 | 5,099 | 1,031 | 876 | 673 |
| Arkansas | 5 | 5 | 5 | 5 | 5 | 64,246 | 48,734 | 17,712 | 4,237 | 24,403 | 14,710 | 6,451 | 1,078 |
| California | 55 | 66 | 69 | 69 | 69 | 976,291 | 876,012 | 697,031 | 462,327 | 487,650 | 395,445 | 203,035 | 182,685 |
| Colorado | 9 | 12 | 4 | 13 | 4 | 22,695 | 11,410 | 14,345 | 10,856 | 20,457 | 9,200 | 12,328 | 9,131 |
| Connecticut | | | | | 13 | 98,856 | 74,235 | 72,288 | 37,708 | 55,122 | 40,707 | 43,750 | 23,787 |
| Delaware | 1 | 2 | 2 | 2 | 2 | 16,000 | 14,000 | 10,000 | 15,000 | 5,800 | 4,600 | 5,300 | 4,000 |
| District of Columbia | 4 | 10 | 10 | 10 | 9 | 102,352 | 143,556 | 140,678 | 102,520 | 61,750 | 74,489 | 68,210 | 26,038 |
| Florida | 4 | 4 | 4 | 4 | 4 | 40,850 | 28,985 | 14,108 | 7,800 | 9,236 | 8,644 | 6,092 | 4,478 |
| Georgia | 4 | 4 | 4 | 5 | 5 | 73,794 | 90,632 | 37,311 | 10,743 | 35,755 | 46,813 | 18,415 | 6,318 |
| Idaho | | | | | | | | | | | | | |
| Illinois | 11 | 13 | 12 | 12 | 13 | 892,674 | 528,631 | 406,886 | 235,757 | 165,352 | 113,069 | 137,410 | 58,183 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Indiana | 10,296 | 10,313 | 4,500 | 4,200 | 44,757 | 47,800 | 30,728 | 45,554 | 2 | 2 | 2 | 2 | 2 |
| Iowa | 1,367 | 2,230 | 2,700 | 2,850 | 2,614 | 5,248 | 4,500 | 4,900 | 1 | 1 | 1 | 1 | 1 |
| Kansas | | | | | | | | | | | | | |
| Kentucky | | | | | | | | | | | | | |
| Louisiana | | | 3,500 | 1,800 | 3,800 | 8,500 | 21,000 | 28,000 | 1 | 1 | 1 | 1 | 1 |
| Maine | −1,462 | 5,000 | 3,500 | 3,500 | 4,409 | 25,608 | 18,563 | 50,200 | 1 | 1 | 1 | 1 | 1 |
| Maryland | 19,108 | 34,728 | 41,019 | 40,436 | 45,937 | 74,612 | 78,316 | 76,130 | 4 | 4 | 4 | 4 | 4 |
| Massachusetts | 86,018 | 175,746 | 397,162 | 418,013 | 445,553 | 752,592 | 1,224,091 | 1,152,331 | 23 | 37 | 36 | 35 | 33 |
| Michigan | 20,088 | 53,836 | 97,690 | 84,019 | 66,589 | 175,294 | 221,962 | 229,690 | 16 | 16 | 15 | 15 | 15 |
| Minnesota | 7,839 | 37,492 | 33,504 | 38,077 | 57,380 | 108,025 | 118,316 | 122,727 | 6 | 8 | 6 | 5 | 6 |
| Mississippi | 2,400 | 2,400 | 3,000 | 3,000 | 2,400 | 2,400 | 3,000 | 4,850 | 1 | 1 | 1 | 1 | 1 |
| Missouri | 74,932 | 95,847 | 130,467 | 115,242 | 318,806 | 421,610 | 605,674 | 516,927 | 12 | 19 | 16 | 16 | 16 |
| Montana | 157 | 285 | 986 | 1,265 | 1,369 | 3,927 | 5,481 | 6,382 | 1 | 1 | 1 | 1 | 1 |
| Nebraska | 2,985 | 9,344 | 13,050 | 11,499 | 11,499 | 35,818 | 57,758 | 55,532 | 3 | 4 | 4 | 4 | 3 |
| Nevada | 400 | 1,025 | 4,700 | 5,300 | 500 | 1,400 | 6,400 | 6,000 | 1 | 1 | 1 | 1 | 1 |
| New Hampshire | | | | | | | | | | | | | |
| New Jersey | 35,201 | 38,327 | 113,229 | 201,470 | 128,068 | 193,913 | 319,320 | 433,173 | 9 | 10 | 16 | 16 | 15 |
| New Mexico | | | | | | | | | | | | | |
| New York | 633,050 | 1,338,921 | 2,664,452 | 2,886,975 | 2,232,510 | 4,288,250 | 6,609,651 | 7,658,616 | 90 | 139 | 141 | 139 | 137 |
| North Carolina | 6,356 | 1,550 | 8,328 | 6,841 | 17,029 | 14,678 | 33,346 | 39,353 | 3 | 3 | 3 | 3 | 3 |
| North Dakota | | | | | | | | | | | | | |
| Ohio | 50,438 | 97,650 | 107,494 | 145,509 | 147,238 | 226,150 | 233,090 | 317,005 | 13 | 15 | 15 | 15 | 15 |
| Oklahoma | 12,982 | 12,658 | 6,700 | 13,199 | 17,070 | 19,588 | 14,504 | 20,174 | 3 | 3 | 3 | 3 | 3 |
| Oregon | 7,242 | 13,365 | 30,242 | 34,882 | 19,817 | 44,703 | 105,705 | 88,730 | 3 | 4 | 4 | 4 | 4 |
| Pennsylvania | 131,005 | 218,039 | 255,712 | 327,560 | 439,090 | 623,842 | 718,222 | 780,667 | 25 | 34 | 34 | 34 | 34 |
| Rhode Island | | | | | | | | | | | | | |
| South Carolina | 51,700 | 1,069 | 42,777 | 205,890 | 175,029 | 273,691 | 335,058 | 504,021 | 1 | 9 | 10 | 9 | 9 |
| South Dakota | | 1,000 | 2,000 | 2,000 | 500 | 1,500 | 3,700 | 3,000 | 1 | 1 | 1 | 1 | 1 |
| Tennessee | 17,813 | 13,271 | 40,981 | 73,222 | 51,966 | 181,881 | 221,857 | 260,608 | 3 | 6 | 6 | 7 | 6 |
| Texas | 27,963 | 21,937 | 36,944 | 44,975 | 62,790 | 91,025 | 104,844 | 128,328 | 4 | 8 | 8 | 8 | 8 |
| Utah | | | | | | | | | | | | | |
| Vermont | | | | | | | | | | | | | |
| Virginia | 5,609 | 1,700 | 12,000 | 10,000 | 7,252 | 2,000 | 30,000 | 21,000 | 1 | 1 | 1 | 1 | 1 |
| Washington | 7,500 | 17,023 | 26,344 | 30,417 | 8,400 | 24,353 | 38,292 | 42,928 | 5 | 10 | 10 | 10 | 10 |
| West Virginia | 23,602 | 5,200 | 8,000 | 36,000 | 83,279 | 5,700 | 8,700 | 41,000 | 1 | 1 | 1 | 1 | 1 |
| Wisconsin | | 24,957 | 51,340 | 70,005 | | 98,468 | 125,270 | 200,700 | 4 | 5 | 5 | 5 | 5 |
| Wyoming | | | | | | | | | | | | | |
| Miscellaneous | 4,472 | 3,858 | 8,979 | 17,057 | 19,562 | 14,008 | 48,601 | 77,047 | 2 | 2 | 2 | 2 | 2 |
| Total | 1,573,767 | 2,837,778 | 4,805,227 | 5,713,849 | 6,314,774 | 9,205,038 | 13,180,200 | 15,145,103 | 330 | 476 | 475 | 471 | 466 |

TABLE 7.—*Net income and withdrawals of engineers, unincorporated, 1929-32*

[Sample survey of unincorporated consulting engineers]

| State | Returns | Net income from practice | | | | Net income withdrawn | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | | | | | | | | | |
| Arizona | 1 | $5,099 | $1,631 | $876 | $673 | $5,099 | $1,631 | $864 | $689 |
| Arkansas | 3 | 24,403 | 14,710 | 6,451 | 1,078 | 24,403 | 14,710 | 6,451 | 1,078 |
| California | 20 | 226,837 | 212,550 | 163,886 | 105,860 | 221,518 | 235,665 | 183,523 | 125,106 |
| Colorado | | | | | | | | | |
| Connecticut | 5 | 32,570 | 31,037 | 33,730 | 23,798 | 35,343 | 32,039 | 36,798 | 23,798 |
| Delaware | 1 | 5,800 | 4,600 | 5,300 | 4,000 | 6,200 | 5,800 | 4,700 | 4,600 |
| District of Columbia | 4 | 29,733 | 48,429 | 35,367 | 11,558 | 26,823 | 38,056 | 35,257 | 19,186 |
| Florida | 3 | 9,236 | 9,644 | 6,092 | 4,478 | 9,236 | 9,644 | 6,092 | 4,478 |
| Georgia | 2 | 13,267 | 28,023 | 10,495 | 6,537 | 12,103 | 24,963 | 8,552 | 6,008 |
| Idaho | | | | | | | | | |
| Illinois | 6 | 100,232 | 61,848 | 53,202 | 11,201 | 90,300 | 57,898 | 45,302 | 19,626 |
| Indiana | | | | | | | | | |
| Iowa | 1 | 2,850 | 2,700 | 2,230 | 1,367 | 2,850 | 2,700 | 2,230 | 1,367 |
| Kansas | | | | | | | | | |
| Kentucky | 1 | 1,800 | | | | 15,000 | 15,000 | 5,000 | 5,000 |
| Louisiana | | | | | | | | | |
| Maine | | | | | | | | | |
| Maryland | 2 | 24,186 | 19,935 | 14,888 | 5,148 | 24,186 | 19,935 | 14,888 | 5,148 |
| Massachusetts | 9 | 328,545 | 291,960 | 118,715 | 52,358 | 264,037 | 204,634 | 220,168 | 107,806 |
| Michigan | 4 | 62,922 | 49,516 | 49,942 | 22,488 | 56,802 | 54,311 | 42,887 | 23,416 |
| Minnesota | 2 | 38,077 | 33,504 | 37,492 | 7,839 | 12,564 | 19,855 | 20,154 | 7,820 |
| Mississippi | 1 | 3,600 | 3,000 | 2,400 | 2,400 | 3,600 | 3,000 | 2,400 | 2,400 |
| Missouri | 7 | 50,540 | 117,224 | 83,067 | 66,464 | 115,541 | 97,491 | 117,331 | 76,274 |
| Montana | 1 | 1,265 | 986 | 285 | 157 | 1,265 | 986 | 285 | 157 |
| Nebraska | 2 | 7,469 | 7,150 | 8,294 | 2,985 | 7,469 | 7,150 | 8,294 | 3,396 |
| Nevada | 1 | 5,300 | 4,700 | 1,025 | 400 | 5,300 | 4,700 | 1,025 | 400 |
| New Hampshire | | | | | | | | | |
| New Jersey | 5 | 177,133 | 91,362 | 21,935 | 25,116 | 156,657 | 133,339 | 73,948 | 40,795 |
| New Mexico | | | | | | | | | |
| New York | 52 | 2,420,103 | 2,249,193 | 1,035,325 | 494,192 | 2,027,861 | 1,919,153 | 1,095,044 | 673,759 |
| North Carolina | 1 | 4,536 | 4,127 | 1,239 | 773 | 4,536 | 4,127 | 1,239 | 773 |
| North Dakota | | | | | | | | | |
| Ohio | 5 | 106,457 | 71,414 | 70,686 | 42,072 | 105,254 | 62,059 | 70,864 | 39,130 |
| Oklahoma | 1 | 5,250 | 4,228 | 7,102 | 7,279 | 5,250 | 4,228 | 7,102 | 7,279 |
| Oregon | 3 | 34,882 | 30,242 | 13,365 | 7,242 | 28,399 | 35,911 | 17,545 | 7,387 |
| Pennsylvania | 14 | 227,362 | 157,267 | 148,154 | 85,446 | 160,092 | 190,405 | 146,380 | 110,260 |
| Rhode Island | | | | | | | | | |
| South Carolina | 1 | 205,809 | 42,777 | 1,099 | 51,700 | 219,002 | 192,056 | 110,779 | 58,881 |
| South Dakota | | | | | | | | | |
| Tennessee | 3 | 73,222 | 40,981 | 13,271 | 17,813 | 53,208 | 40,591 | 36,311 | 15,172 |
| Texas | 4 | 44,975 | 36,944 | 21,937 | 27,993 | 34,475 | 35,994 | 28,230 | 24,193 |
| Utah | | | | | | | | | |
| Vermont | | | | | | | | | |
| Virginia | | | | | | | | | |
| Washington | 2 | 23,594 | 18,984 | 10,506 | 2,526 | 16,620 | 18,969 | 13,506 | 3,485 |
| West Virginia | | | | | | | | | |
| Wisconsin | 1 | 16,300 | 11,600 | 8,800 | 7,400 | 16,300 | 11,600 | 8,800 | 7,400 |
| Wyoming | | | | | | | | | |
| Total | 168 | 4,343,444 | 3,702,266 | 1,987,156 | 1,100,341 | 3,767,383 | 3,588,600 | 2,380,049 | 1,426,267 |

TABLE 8.—Number and compensation of employees, engineers (unincorporated), 1929–32

[Sample survey of unincorporated consulting engineers]

| State | Returns | Employees, full time | | | | Employees, part time | | | | Salaries and wages, full time | | | | Salaries and wages, part time | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | | | | | | | | | | | | | | | | | |
| Arizona | 1 | 1 | 1 | 1 | 1 | 1 | 6 | | | $1,200 | $995 | $978 | $1,200 | $2,464 | $1,631 | | $50 |
| Arkansas | 3 | 9 | 7 | 3 | | 14 | 13 | 6 | | 20,700 | 16,100 | 4,500 | | 6,800 | 5,250 | $2,200 | 200 |
| California | 36 | 70 | 70 | 63 | 37 | 67 | 82 | 57 | 47 | 186,385 | 183,375 | 157,628 | 80,618 | 35,673 | 33,670 | 40,521 | 20,780 |
| Colorado | | | | | | | | | | | | | | | | | |
| Connecticut | 7 | 15 | 13 | 11 | 7 | 8 | 6 | 5 | | 35,201 | 20,275 | 21,741 | 15,330 | 2,694 | 1,023 | 2,636 | 712 |
| Delaware | 1 | 4 | 4 | 3 | 4 | 3 | 2 | 2 | 2 | 4,000 | 4,000 | 2,200 | 3,400 | 1,500 | 1,000 | 1,000 | 1,000 |
| District of Columbia | 5 | 6 | 6 | 13 | 13 | 7 | 4 | 1 | 3 | 10,244 | 13,045 | 31,194 | 28,691 | 4,535 | 5,309 | 6,145 | 5,946 |
| Florida | 4 | 9 | 9 | 1 | | 20 | 13 | 3 | 2 | 16,931 | 8,153 | 1,078 | | 9,437 | 5,278 | 2,280 | 1,458 |
| Georgia | 4 | 12 | 10 | 6 | | 8 | 8 | 5 | 4 | 16,780 | 22,447 | 11,061 | | 3,763 | 7,658 | 1,802 | 906 |
| Idaho | | | | | | | | | | | | | | | | | |
| Illinois | 20 | 9 | 17 | 11 | 12 | 11 | 9 | 13 | 14 | 32,600 | 30,300 | 24,893 | 35,590 | 6,960 | 4,909 | 7,854 | 4,527 |
| Indiana | 2 | 12 | 10 | 11 | 6 | 2 | 2 | 2 | 2 | 22,883 | 22,120 | 21,078 | 12,095 | 1,200 | 1,050 | 2,161 | 660 |
| Iowa | 1 | | | | | | | | | | | | | | | | |
| Kansas | | | | | | | | | | | | | | | | | |
| Kentucky | 1 | 2 | 2 | 1 | 1 | | | | | 21,000 | 21,000 | 6,500 | 5,000 | | | | |
| Louisiana | 1 | 4 | | | | 2 | 6 | | | 9,000 | | | | 2,000 | 3,000 | | |
| Maine | | | | | | | | | | | | | | | | | |
| Maryland | 4 | 14 | 15 | 14 | 10 | 29 | 3 | 4 | 10 | 30,236 | 28,864 | 29,725 | 21,451 | 1,377 | 548 | 1,552 | 1,912 |
| Massachusetts | 20 | 133 | 137 | 96 | 88 | 13 | 35 | 23 | 18 | 313,166 | 347,292 | 208,840 | 98,610 | 20,833 | 18,276 | 10,086 | 6,042 |
| Michigan | 6 | 33 | 41 | 27 | 11 | 8 | 21 | 27 | 6 | 82,270 | 95,886 | 61,322 | 19,232 | 6,341 | 12,926 | 15,459 | 2,362 |
| Minnesota | 6 | 16 | 15 | 14 | 9 | 2 | 5 | 2 | 8 | 32,797 | 31,193 | 30,025 | 23,851 | 6,353 | 3,014 | 1,683 | 6,013 |
| Mississippi | 1 | 1 | | | | | | | | 1,000 | | | | 200 | | | |
| Missouri | 11 | 99 | 98 | 83 | 50 | 32 | 24 | 20 | 18 | 240,310 | 234,722 | 208,053 | 111,202 | 31,374 | 21,711 | 14,763 | 16,497 |
| Montana | 1 | 3 | 2 | 2 | | 5 | 3 | 1 | 1 | 5,008 | 4,297 | 3,579 | 3,080 | 387 | 256 | 169 | 57 |
| Nebraska | 3 | 9 | 10 | 6 | 2 | 6 | 5 | 3 | 2 | 17,100 | 17,300 | 11,900 | 2,408 | 3,049 | 2,091 | 604 | 566 |
| Nevada | | | | | | | | | | | | | | | | | |
| New Hampshire | | | | | | 10 | 7 | 12 | 19 | | | | | 4,860 | 3,252 | 5,041 | 12,371 |
| New Jersey | 9 | 150 | 109 | 77 | 42 | | | | | 289,642 | 239,416 | 166,913 | 83,492 | | | | |
| New Mexico | | | | | | | | | | | | | | | | | |
| New York | 90 | 711 | 711 | 535 | 362 | 210 | 344 | 307 | 126 | 2,178,497 | 2,198,072 | 1,724,786 | 916,310 | 184,636 | 343,580 | 279,453 | 115,418 |
| North Carolina | 4 | 19 | 13 | 13 | 8 | 8 | 7 | 6 | 5 | 86,753 | 36,413 | 29,500 | 16,200 | 3,219 | 4,115 | 3,057 | 6,902 |
| North Dakota | | | | | | | | | | | | | | | | | |
| Ohio | 13 | 47 | 41 | 28 | 23 | 14 | 12 | 11 | 10 | 93,181 | 73,252 | 74,529 | 55,811 | 4,748 | 3,460 | 4,686 | 4,157 |
| Oklahoma | 1 | 1 | 1 | 1 | 1 | 5 | 6 | 5 | 5 | 1,600 | 1,600 | 1,600 | 1,600 | 4,025 | 848 | 128 | 308 |
| Oregon | 3 | 3 | 5 | 2 | | 4 | 11 | | | 6,200 | 10,000 | 3,700 | | 3,000 | 9,500 | | 2,110 |
| Pennsylvania | 20 | 85 | 81 | 72 | 63 | 58 | 49 | 44 | 33 | 176,874 | 177,560 | 153,506 | 100,034 | 32,800 | 33,600 | 35,807 | 21,273 |
| Rhode Island | | | | | | | | | | | | | | | | | |
| South Carolina | 1 | 62 | 59 | 46 | 26 | 23 | 21 | 32 | 30 | 160,637 | 151,711 | 119,168 | 66,319 | 7,687 | 7,058 | 33,703 | 31,405 |
| South Dakota | 1 | 1 | | | | 1 | 1 | | | | | | | 200 | 200 | | |

TABLE 8.—*Number and compensation of employees, engineers (unincorporated), 1929-32*—Continued

| State | Returns | Employees, full time | | | | Employees, part time | | | | [Salaries and wages, full time] | | | | Salaries and wages, full time | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Tennessee | 3 | 38 | 45 | 22 | 12 | 14 | 12 | 14 | 8 | $61,904 | $96,184 | $43,750 | $15,740 | $7,024 | 7,994 | $4,571 | $2,042 |
| Texas | 0 | 16 | 15 | 10 | 9 | 12 | 10 | 9 | 9 | 50,722 | 37,089 | 37,218 | 19,400 | 4,610 | 2,675 | 3,030 | 3,740 |
| Utah | 1 | | | | | 1 | 1 | 1 | 1 | | | | | 212 | 37 | 221 | 188 |
| Vermont | | | | | | | | | | | | | | | | | |
| Virginia | 1 | 6 | 14 | 3 | 3 | | | | | 7,600 | 12,000 | 1,200 | 1,200 | 1,883 | 3,251 | 861 | 524 |
| Washington | 8 | 10 | 7 | 4 | | 6 | 6 | 6 | 3 | 12,642 | 7,241 | 8,000 | 6,000 | 4,250 | 4,250 | 2,250 | 2,250 |
| West Virginia | 2 | 10 | 8 | 24 | 21 | 10 | 8 | 6 | 4 | 10,000 | 8,000 | 60,897 | 47,233 | 6,427 | 7,151 | 941 | 340 |
| Wisconsin | 5 | 40 | 26 | | | 17 | 11 | | 2 | 112,183 | 62,917 | | | | | | |
| Wyoming | | 1 | | 1 | 1 | 10 | 10 | 10 | 10 | 1,300 | 1,130 | 1,040 | 1,040 | | | | |
| Miscellaneous | 1 | | | | | | | | | | | | | 24,736 | 15,843 | 3,356 | 5,040 |
| Total | 307 | 1,070 | 1,008 | 1,208 | 784 | 632 | 762 | 640 | 405 | 4,321,400 | 4,221,949 | 3,264,582 | 1,785,341 | 440,987 | 577,021 | 501,780 | 287,362 |

TABLE 9.—*Gross and net income of public accountants, 1929-32*

[Sample survey of public accountants]

| State | Returns | Offices operated | Offices reported | Partners or firm members | | | | Gross annual receipts | | | | Net income from practice | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | 5 | 5 | 5 | 6 | 6 | 7 | 7 | $56,783 | $59,607 | $52,352 | $52,063 | $32,689 | $30,369 | $34,400 | $34,745 |
| Arizona | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 90,368 | 69,181 | 58,189 | 42,032 | 50,052 | 34,528 | 27,417 | 18,553 |
| Arkansas | 5 | 5 | 5 | 9 | 9 | 9 | 9 | 177,439 | 131,016 | 143,752 | 104,213 | 102,351 | 57,205 | 74,160 | 43,199 |
| California | 52 | 52 | 52 | 81 | 77 | 75 | 73 | 1,029,455 | 664,956 | 943,506 | 691,698 | 491,623 | 476,172 | 417,823 | 312,551 |
| Colorado | 9 | 9 | 9 | 14 | 15 | 15 | 15 | 135,034 | 136,831 | 140,933 | 122,227 | 169,329 | 82,656 | 71,903 | 91,490 |
| Connecticut | 12 | 12 | 12 | 14 | 14 | 15 | 15 | 357,907 | 338,127 | 284,411 | 245,093 | 117,049 | 154,511 | 114,553 | 107,601 |
| Delaware | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 15,910 | 17,049 | 13,767 | 18,828 | 10,518 | 11,452 | 9,631 | 13,984 |
| District of Columbia | 10 | 10 | 10 | 16 | 15 | 15 | 16 | 223,221 | 250,428 | 271,522 | 216,053 | 117,029 | 152,728 | 160,305 | 110,002 |
| Florida | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 176,236 | 130,675 | 102,234 | 85,566 | 69,526 | 60,000 | 45,039 | 37,024 |
| Georgia | 9 | 12 | 11 | 15 | 15 | 14 | 14 | 203,729 | 191,057 | 135,756 | 102,640 | 73,088 | 90,727 | 54,563 | 48,133 |
| Idaho | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 24,094 | 21,582 | 22,833 | 17,469 | 11,375 | 10,215 | 5,640 | 3,424 |
| Illinois | 41 | 53 | 53 | 75 | 77 | 75 | 76 | 1,953,411 | 1,707,147 | 1,468,799 | 1,208,045 | 405,136 | 412,060 | 301,574 | 307,449 |
| Indiana | 10 | 10 | 10 | 15 | 15 | 15 | 14 | 407,686 | 430,130 | 417,880 | 372,795 | 147,017 | 136,327 | 152,505 | 153,247 |
| Iowa | 8 | 13 | 13 | 11 | 11 | 11 | 11 | 153,275 | 155,305 | 157,009 | 151,694 | 65,625 | 60,703 | 54,495 | 65,216 |
| Kansas | 2 | 3 | 2 | 4 | 4 | 4 | 4 | 62,025 | 45,600 | 60,185 | 54,827 | 25,146 | 17,845 | 27,338 | 20,051 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kentucky | 8 | 8 | 8 | 18 | 18 | 18 | 17 | 260,196 | 267,774 | 211,670 | 173,213 | 144,782 | 140,845 | 115,358 | 92,027 |
| Louisiana | 9 | 9 | 9 | 14 | 14 | 14 | 17 | 150,714 | 137,227 | 113,568 | 96,630 | 88,051 | 78,062 | 64,137 | 65,003 |
| Maine | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Maryland | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 90,700 | 102,702 | 85,073 | 68,320 | 38,311 | 42,845 | 33,276 | 30,298 |
| Massachusetts | 43 | 48 | 48 | 74 | 73 | 70 | 70 | 1,272,559 | 1,202,261 | 1,016,408 | 864,193 | 566,701 | 483,755 | 307,300 | 317,461 |
| Michigan | 29 | 27 | 27 | 34 | 38 | 38 | 30 | 605,212 | 530,390 | 421,509 | 335,433 | 255,711 | 210,452 | 101,166 | 146,135 |
| Minnesota | 7 | 9 | 9 | 13 | 14 | 14 | 13 | 124,739 | 136,678 | 125,113 | 108,183 | 67,095 | 74,233 | 60,469 | 47,731 |
| Mississippi | 4 | 4 | 4 | 7 | 7 | 7 | 7 | 63,594 | 118,642 | 46,946 | 32,956 | 34,345 | 40,414 | 22,302 | 22,120 |
| Missouri | 13 | 16 | 16 | 18 | 18 | 18 | 18 | 395,097 | 400,446 | 379,184 | 312,431 | 153,919 | 143,736 | 125,071 | 105,707 |
| Montana | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 70,395 | 63,892 | 50,212 | 47,302 | 39,285 | 28,032 | 24,498 | 20,372 |
| Nebraska | 5 | 5 | 5 | 8 | 8 | 8 | 8 | 86,951 | 70,041 | 75,653 | 53,899 | 51,180 | 32,470 | 42,058 | 28,078 |
| Nevada | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| New Hampshire | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 27,412 | 32,741 | 36,901 | 29,115 | 17,500 | 18,850 | 15,951 | 14,086 |
| New Jersey | 25 | 31 | 31 | 37 | 36 | 35 | 35 | 821,656 | 784,030 | 724,883 | 619,307 | 351,413 | 296,582 | 284,447 | 215,485 |
| New Mexico | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 23,361 | 31,451 | 26,602 | 20,576 | 8,730 | 13,880 | 9,211 | 8,281 |
| New York | 128 | 173 | 175 | 242 | 210 | 247 | 244 | 6,673,193 | 6,819,464 | 5,521,542 | 4,430,413 | 2,619,321 | 2,643,315 | 1,976,888 | 1,450,510 |
| North Carolina | 6 | 7 | 7 | 10 | 10 | 11 | 10 | 127,143 | 145,840 | 161,302 | 104,888 | 29,702 | 29,337 | 33,937 | 11,135 |
| North Dakota | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 25,807 | 25,123 | 18,361 | 9,028 | 10,894 | 9,511 | 7,315 | 4,177 |
| Ohio | 19 | 24 | 24 | 38 | 37 | 39 | 30 | 661,847 | 642,057 | 637,702 | 503,008 | 221,702 | 200,740 | 160,063 | 135,890 |
| Oklahoma | 9 | 16 | 15 | 17 | 18 | 19 | 17 | 231,266 | 285,506 | 209,399 | 122,465 | 72,008 | 61,829 | 55,831 | 40,321 |
| Oregon | 8 | 5 | 5 | 7 | 6 | 6 | 6 | 30,568 | 30,946 | 21,987 | 23,928 | 23,928 | 22,310 | 17,313 | 18,084 |
| Pennsylvania | 32 | 35 | 31 | 47 | 45 | 48 | 45 | 939,345 | 890,819 | 310,522 | 270,741 | 417,404 | 358,342 | 275,462 | 255,681 |
| Rhode Island | 4 | 5 | 5 | 10 | 8 | 8 | 8 | 147,056 | 149,334 | 125,191 | 111,691 | 71,327 | 61,634 | 48,851 | 37,715 |
| South Carolina | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 47,533 | 41,170 | 40,558 | 41,025 | 25,087 | 18,302 | 18,007 | 21,932 |
| South Dakota | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6,000 | 5,700 | 3,000 | 2,000 | 2,500 | 3,107 | 2,000 | 1,500 |
| Tennessee | 8 | 9 | 9 | 8 | 8 | 8 | 8 | 102,405 | 97,272 | 67,409 | 57,800 | 34,390 | 32,107 | 18,723 | 15,725 |
| Texas | 15 | 18 | 19 | 29 | 28 | 28 | 27 | 435,647 | 407,272 | 433,178 | 339,320 | 172,419 | 102,239 | 145,420 | 140,003 |
| Utah | 3 | 3 | 4 | 6 | 6 | 6 | 6 | 75,174 | 83,770 | 90,338 | 74,975 | 32,235 | 36,981 | 49,320 | 27,664 |
| Vermont | 9 | 12 | 12 | 12 | 12 | 12 | 12 | 140,851 | 152,284 | 141,561 | 122,815 | 68,561 | 67,022 | 50,157 | 48,975 |
| Virginia | 15 | 16 | 16 | 21 | 21 | 21 | 21 | 237,039 | 231,961 | 203,461 | 157,040 | 130,030 | 100,420 | 84,292 | 61,541 |
| Washington | 7 | 7 | 7 | 10 | 10 | 10 | 10 | 69,902 | 70,073 | 67,182 | 45,744 | 47,634 | 49,970 | 49,300 | 31,077 |
| West Virginia | 11 | 11 | 11 | 25 | 26 | 26 | 26 | 187,753 | 188,702 | 173,351 | 142,444 | 88,829 | 83,483 | 70,841 | 60,570 |
| Wisconsin | 4 | 5 | 5 | 6 | 5 | 5 | 5 | 88,258 | 58,694 | 45,399 | 40,250 | 34,151 | 39,203 | 31,475 | 27,999 |
| Wyoming | 4 | 4 | 4 | 7 | 7 | 7 | 7 | 100,389 | 102,384 | 81,400 | 65,283 | 47,734 | 40,800 | 34,716 | 26,091 |
| Miscellaneous | | | | | | | | | | | | | | | |
| Total | 618 | 731 | 728 | 1,021 | 1,015 | 1,021 | 1,031 | 19,407,914 | 19,022,080 | 15,911,481 | 12,988,788 | 7,939,135 | 7,434,407 | 6,001,682 | 4,895,046 |

TABLE 10.—*Net income and withdrawals of public accountants, 1929-32*

| State | Re-turns | Net income from practice | | | | Withdrawals by firm members | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Alabama | 4 | $28,259 | $25,643 | $29,036 | $28,588 | $27,759 | $25,143 | $28,536 | $28,088 |
| Arizona | 3 | 50,052 | 34,528 | 27,417 | 18,566 | 44,481 | 36,395 | 30,483 | 19,923 |
| Arkansas | 5 | 102,351 | 57,205 | 74,150 | 43,199 | 92,803 | 58,249 | 74,401 | 45,674 |
| California | 32 | 394,758 | 407,284 | 356,653 | 262,955 | 364,859 | 346,219 | 323,101 | 250,709 |
| Colorado | 8 | 74,357 | 78,047 | 69,382 | 57,462 | 73,547 | 78,197 | 65,979 | 58,257 |
| Connecticut | 7 | 166,328 | 152,314 | 112,153 | 105,001 | 142,468 | 139,539 | 121,721 | 106,285 |
| Delaware | 1 | 10,518 | 11,482 | 9,638 | 13,984 | 10,518 | 11,482 | 9,638 | 13,984 |
| District of Columbia | 7 | 100,179 | 137,241 | 151,446 | 109,809 | 88,598 | 137,994 | 160,996 | 68,213 |
| Florida | 6 | 47,498 | 36,667 | 28,601 | 20,407 | 42,328 | 33,120 | 29,435 | 21,473 |
| Georgia | 9 | 73,088 | 60,627 | 54,563 | 48,133 | 76,824 | 78,198 | 61,871 | 50,701 |
| Idaho | 2 | 8,863 | 7,807 | 3,339 | 2,157 | 10,100 | 8,600 | 6,750 | 5,865 |
| Illinois | 34 | 452,107 | 372,930 | 240,482 | 281,012 | 491,358 | 448,185 | 406,542 | 381,110 |
| Indiana | 8 | 65,634 | 93,485 | 110,207 | 67,944 | 93,411 | 85,018 | 88,505 | 195,771 |
| Iowa | 6 | 58,461 | 53,587 | 43,419 | 49,489 | 46,837 | 48,128 | 46,558 | 42,880 |
| Kansas | 2 | 25,146 | 17,845 | 27,358 | 20,051 | 14,548 | 13,403 | 19,634 | 16,397 |
| Kentucky | 6 | 136,811 | 141,225 | 108,408 | 87,796 | 133,632 | 126,538 | 104,019 | 83,689 |
| Louisiana | 5 | 56,129 | 43,985 | 42,035 | 57,583 | 53,992 | 44,576 | 41,768 | 57,932 |
| Maine | | | | | | | | | |
| Maryland | 3 | 25,357 | 27,566 | 17,984 | 19,087 | 31,080 | 29,543 | 27,521 | 23,060 |
| Massachusetts | 32 | 464,992 | 387,488 | 321,129 | 240,572 | 441,869 | 418,175 | 341,444 | 287,605 |
| Michigan | 23 | 261,463 | 219,772 | 175,847 | 131,278 | 231,421 | 220,557 | 182,033 | 142,419 |
| Minnesota | 6 | 61,176 | 67,086 | 53,667 | 42,691 | 59,265 | 66,079 | 56,506 | 40,452 |
| Mississippi | 4 | 34,385 | 49,444 | 22,392 | 22,120 | 31,473 | 43,134 | 25,608 | 17,066 |
| Missouri | 11 | 132,023 | 125,842 | 114,020 | 89,531 | 118,564 | 110,305 | 104,506 | 89,731 |
| Montana | 3 | 34,585 | 25,832 | 21,488 | 23,372 | 30,030 | 29,725 | 25,359 | 27,677 |
| Nebraska | 4 | 43,097 | 27,124 | 37,371 | 22,925 | 33,850 | 28,680 | 40,446 | 25,758 |
| Nevada | | | | | | | | | |
| New Hampshire | 3 | 17,506 | 18,850 | 15,951 | 14,986 | 15,125 | 18,929 | 15,497 | 16,240 |
| New Jersey | 22 | 302,810 | 250,651 | 242,635 | 183,259 | 257,096 | 234,489 | 186,996 | 207,773 |
| New Mexico | 1 | 8,736 | 13,880 | 9,211 | 8,281 | 7,896 | 8,788 | 6,213 | 9,874 |
| New York | 101 | 2,340,894 | 2,350,398 | 1,780,694 | 1,285,940 | 2,191,153 | 2,186,019 | 1,849,741 | 1,558,692 |
| North Carolina | 5 | 29,045 | 27,622 | 33,531 | 11,008 | 44,324 | 43,763 | 56,188 | 42,523 |
| North Dakota | 2 | 10,894 | 9,511 | 7,315 | 4,177 | 8,476 | 8,506 | 6,213 | 4,054 |
| Ohio | 17 | 215,702 | 195,240 | 145,068 | 131,090 | 253,712 | 265,735 | 195,888 | 195,609 |
| Oklahoma | 7 | 64,859 | 54,205 | 49,806 | 34,733 | 74,790 | 89,803 | 74,630 | 49,200 |
| Oregon | 3 | 13,487 | 14,510 | 10,913 | 10,034 | 13,396 | 13,218 | 10,905 | 7,596 |
| Pennsylvania | 24 | 335,019 | 289,799 | 240,967 | 215,287 | 317,769 | 285,362 | 249,947 | 217,367 |
| Rhode Island | 3 | 67,548 | 58,359 | 38,064 | 35,443 | 65,591 | 53,256 | 45,978 | 38,411 |
| South Carolina | 2 | 18,977 | 14,500 | 12,759 | 18,771 | 18,977 | 14,500 | 12,759 | 18,771 |
| South Dakota | 1 | 2,500 | 3,400 | 2,000 | 1,500 | 2,500 | 3,400 | 2,000 | 1,500 |
| Tennessee | 6 | 30,040 | 27,362 | 15,296 | 12,110 | 25,558 | 25,003 | 18,289 | 15,250 |
| Texas | 12 | 149,271 | 135,504 | 134,084 | 126,842 | 152,204 | 130,320 | 134,211 | 123,495 |
| Utah | 3 | 33,295 | 36,981 | 49,326 | 27,604 | 27,253 | 28,121 | 41,275 | 24,655 |
| Vermont | | | | | | | | | |
| Virginia | 6 | 55,351 | 55,647 | 39,142 | 37,623 | 47,143 | 49,908 | 50,147 | 42,636 |
| Washington | 12 | 113,491 | 94,999 | 81,248 | 53,787 | 109,198 | 109,864 | 85,573 | 70,268 |
| West Virginia | 4 | 30,843 | 33,468 | 35,136 | 20,420 | 30,046 | 30,084 | 33,058 | 20,307 |
| Wisconsin | 9 | 79,829 | 74,983 | 62,841 | 53,076 | 107,950 | 108,648 | 91,167 | 84,717 |
| Wyoming | 3 | 32,251 | 37,703 | 30,375 | 27,149 | 19,000 | 16,000 | 15,000 | 14,000 |
| Miscellaneous | 3 | 42,785 | 38,072 | 33,268 | 21,454 | 37,516 | 34,392 | 31,454 | 23,922 |
| Total | 480 | 6,902,750 | 6,497,700 | 5,321,815 | 4,200,346 | 6,615,602 | 6,433,380 | 5,636,489 | 4,887,579 |

TABLE 11.—*Number and compensation of employees, public accounting, 1929–32*

| State | Returns | Offices operated | Offices reported | Employees, full time 1929 | 1930 | 1931 | 1932 | Employees, part time 1929 | 1930 | 1931 | 1932 | Salaries and wages, full time 1929 | 1930 | 1931 | 1932 | Salaries and wages, part time 1929 | 1930 | 1931 | 1932 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 4 | 4 | 4 | 6 | 6 | 5 | 5 | 2 | 2 | 4 | 3 | $12,116 | $9,078 | $7,482 | $6,968 | $1,491 | $1,844 | $1,050 | $2,078 |
| Arizona | 3 | 3 | 3 | 8 | 6 | 5 | 5 | 17 | 9 | 8 | 5 | 10,597 | 15,345 | 14,206 | 8,023 | 2,350 | 4,160 | 3,468 | 1,573 |
| Arkansas | 4 | 4 | 4 | 13 | 13 | 12 | 10 | 2 | 2 | 2 | 1 | 32,289 | 32,543 | 29,823 | 24,314 | 1,349 | 1,747 | 1,183 | 43 |
| California | 52 | 52 | 52 | 75 | 74 | 70 | 90 | 41 | 41 | 41 | 44 | 152,806 | 147,328 | 143,200 | 115,664 | 21,370 | 17,411 | 13,197 | 15,470 |
| Colorado | 9 | 9 | 9 | 15 | 15 | 18 | 15 | 2 | 2 | 4 | 4 | 27,817 | 23,705 | 32,298 | 23,565 | 2,920 | 2,920 | 4,698 | 5,121 |
| Connecticut | 12 | 12 | 12 | 51 | 51 | 46 | 37 | 1 |  |  | 3 | 130,901 | 131,042 | 118,929 | 85,822 | 600 | 600 | 1,000 | 1,700 |
| Delaware | 1 | 1 | 1 | 1 | 1 | 1 |  | 1 |  |  |  | 2,070 | 1,203 | 1,381 | 1,412 | 288 |  |  | 286 |
| District of Columbia | 10 | 10 | 10 | 23 | 23 | 24 | 19 | 10 | 4 | 8 | 8 | 44,040 | 45,536 | 48,043 | 38,374 | 3,635 | 2,929 | 2,790 | 1,660 |
| Florida | 8 | 8 | 8 | 23 | 19 | 16 | 11 | 18 | 16 | 8 | 8 | 68,745 | 48,080 | 40,652 | 40,652 | 8,433 | 1,680 | 1,789 | 1,789 |
| Georgia | 11 | 12 | 11 | 27 | 22 | 21 | 17 | 16 | 16 | 8 | 1 | 55,701 | 53,721 | 46,280 | 31,096 | 8,062 | 16,844 | 6,958 | 2,378 |
| Idaho | 3 | 4 | 4 |  |  |  |  |  |  |  |  | 2,400 |  |  |  | 1,750 | 1,652 | 1,143 | 459 |
| Illinois | 41 | 53 | 53 | 153 | 140 | 124 | 110 | 90 | 80 | 77 | 102 | 400,063 | 305,226 | 318,834 | 288,343 | 33,306 | 27,708 | 10,895 | 31,746 |
| Indiana | 10 | 10 | 13 | 27 | 57 | 69 | 37 | 22 |  | 16 | 18 | 162,984 | 176,979 | 168,007 | 77,111 | 12,571 | 13,022 | 10,028 | 12,073 |
| Iowa | 8 | 13 | 13 | 17 | 23 | 31 | 25 | 25 | 29 | 32 | 30 | 46,878 | 56,853 | 52,003 | 50,718 | 10,689 | 8,206 | 16,241 | 11,733 |
| Kansas | 2 | 3 | 3 | 29 | 13 | 14 | 20 | 2 | 2 | 3 | 2 | 28,015 | 21,109 | 28,456 | 20,228 | 50 | 60 | 150 | 75 |
| Kentucky | 8 | 8 | 8 | 20 | 22 | 27 | 26 | 15 | 14 | 11 | 14 | 81,678 | 82,920 | 63,089 | 54,022 | 8,666 | 8,660 | 5,183 | 6,765 |
| Louisiana | 8 | 9 | 9 | 21 | 22 | 18 | 11 | 14 | 13 | 8 | 8 | 40,085 | 38,049 | 32,007 | 14,408 | 4,006 | 2,946 | 2,302 | 3,233 |
| Maine |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 5 | 6 | 6 | 13 | 14 | 14 | 13 |  |  |  |  | 20,100 | 33,312 | 30,508 | 23,624 | 6,254 | 9,665 | 3,430 | 1,506 |
| Massachusetts | 43 | 48 | 49 | 187 | 178 | 164 | 166 | 107 | 109 | 81 | 72 | 390,708 | 393,072 | 359,530 | 297,529 | 59,300 | 52,155 | 31,344 | 25,895 |
| Michigan | 29 | 33 | 33 | 80 | 71 | 68 | 40 | 68 | 64 | 48 | 46 | 174,743 | 101,388 | 110,208 | 94,320 | 34,755 | 27,001 | 20,737 | 18,862 |
| Minnesota | 7 | 4 | 4 | 38 | 30 | 23 | 24 | 6 | 8 | 10 | 10 | 49,522 | 38,386 | 34,400 | 34,400 | 6,165 | 6,282 | 4,490 | 3,840 |
| Mississippi | 4 | 4 | 4 | 5 | 13 | 4 | 3 | 6 | 8 | 3 | 3 | 18,100 | 44,100 | 14,100 | 9,100 | 3,927 | 11,464 | 1,529 | 6,335 |
| Missouri | 13 | 16 | 10 | 35 | 59 | 60 | 52 | 21 | 14 | 23 | 23 | 142,079 | 152,344 | 150,597 | 113,432 | 35,521 | 37,308 | 35,757 | 28,790 |
| Montana | 4 | 7 | 7 | 10 | 9 | 8 | 6 | 5 | 14 | 10 | 13 | 16,300 | 16,300 | 10,283 | 8,813 | 5,713 | 4,196 | 3,340 | 2,309 |
| Nebraska | 5 | 5 | 5 | 14 | 13 | 9 | 8 |  | 6 | 8 | 7 | 25,862 | 22,043 | 16,016 | 12,043 | 1,507 | 2,181 |  | 3,202 |
| Nevada | 3 | 3 | 3 | 3 | 3 | 6 | 5 |  |  |  |  | 4,400 | 8,427 | 8,634 | 8,701 | 672 |  |  |  |
| New Hampshire | 1 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 568 |
| New Jersey | 25 | 31 | 31 | 109 | 111 | 105 | 97 | 20 | 18 | 28 | 17 | 280,558 | 290,752 | 244,004 | 230,538 | 10,527 | 11,232 | 11,945 | 7,689 |
| New Mexico | 1 | 1 | 1 | 5 | 6 | 4 | 2 | 2 | 2 |  |  | 10,209 | 14,277 | 11,463 | 8,067 | 500 | 500 | 500 | 500 |
| New York | 126 | 175 | 175 | 600 | 639 | 560 | 480 | 221 | 141 | 82 | 92 | 1,497,306 | 1,635,042 | 1,338,401 | 1,075,672 | 104,637 | 64,879 | 45,952 | 69,181 |
| North Carolina | 7 | 7 | 7 | 31 | 30 | 32 | 22 |  | 3 | 2 | 3 | 41,541 | 52,587 | 61,901 | 39,635 | 176 | 447 | 390 | 178 |
| North Dakota | 2 | 2 | 2 |  |  |  | 2 |  |  |  |  | 11,935 | 8,438 | 8,438 | 2,720 |  |  |  |  |
| Ohio | 19 | 23 | 22 | 91 | 80 | 70 | 70 | 25 | 27 | 24 | 16 | 212,701 | 180,897 | 196,554 | 164,213 | 15,767 | 12,681 | 9,309 | 4,882 |
| Oklahoma | 9 | 16 | 15 | 39 | 44 | 31 | 20 | 10 | 9 | 8 | 7 | 83,970 | 115,931 | 80,241 | 38,264 | 17,949 | 12,132 | 9,075 | 4,424 |
| Oregon | 6 | 6 | 6 | 5 | 9 | 5 | 1 | 3 | 3 | 3 | 2 | 2,999 | 2,720 | 2,720 | 1,603 | 1,000 | 900 | 800 | 1,603 |
| Pennsylvania | 26 | 35 | 31 | 100 | 103 | 98 | 89 | 34 | 42 | 30 | 23 | 254,485 | 228,575 | 215,527 | 108,270 | 40,083 | 39,050 | 28,949 | 31,825 |
| Rhode Island | 4 | 3 | 3 | 22 | 24 | 25 | 23 | 2 | 6 | 5 | 1 | 53,348 | 63,231 | 53,231 | 48,625 | 3,000 | 3,000 | 1,009 | 3,000 |
| South Carolina | 3 | 3 | 3 | 6 | 6 | 5 | 4 | 1 | 2 | 1 | 3 | 13,000 | 14,470 | 14,500 | 11,800 | 400 | 300 |  | 463 |
| South Dakota | 1 | 1 | 1 |  |  |  |  | 2 | 1 | 1 |  |  |  |  |  | 800 | 1,200 |  | 50 |
| Tennessee | 9 | 9 | 9 | 13 | 10 | 10 | 8 | 11 | 12 |  | 7 | 23,118 | 19,750 | 14,562 | 13,619 | 10,328 | 15,214 | 7,415 | 5,810 |

TABLE 11.—*Number and compensation of employees, public accounting, 1929–32*—Continued

| State | Returns | Offices operated | Offices reported | Employees, full time | | | | Employees, part time | | | | Salaries and wages, full time | | | | Salaries and wages, part time | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 | 1929 | 1930 | 1931 | 1932 |
| Texas | 14 | 19 | 19 | 44 | 45 | 40 | 33 | 31 | 40 | 33 | 40 | $114,450 | $121,619 | $111,501 | $85,010 | $15,444 | $22,438 | $17,144 | $18,863 |
| Utah | 3 | 4 | 4 | 15 | 10 | 15 | 15 | 9 | 9 | 10 | 9 | 30,304 | 34,122 | 36,473 | 34,533 | 2,286 | 3,008 | 3,934 | 3,658 |
| Vermont | | | | | | | | | | | | | | | | | | | |
| Virginia | 9 | 12 | 12 | 22 | 23 | 25 | 20 | 14 | 20 | 10 | 20 | 41,678 | 52,761 | 55,892 | 40,244 | 7,352 | 4,355 | 4,028 | 2,391 |
| Washington | 14 | 16 | 16 | 34 | 33 | 27 | 22 | 15 | 15 | 12 | 22 | 69,083 | 66,139 | 60,872 | 48,821 | 10,863 | 13,887 | 10,908 | 7,672 |
| West Virginia | 5 | 7 | 7 | 2 | 2 | 2 | 1 | | 5 | | 1 | 2,318 | 3,886 | 1,830 | 1,200 | 3,594 | 3,228 | 3,777 | 3,326 |
| Wisconsin | 7 | 11 | 11 | 19 | 19 | 18 | 17 | | 10 | 10 | | 29,708 | 31,510 | 28,019 | 28,405 | 12,935 | 13,583 | 14,054 | 8,343 |
| Wyoming | 3 | 5 | 5 | 9 | 6 | 5 | 0 | | | | 14 | 12,499 | 12,971 | 11,120 | 10,433 | | | | |
| Miscellaneous | 4 | 4 | 4 | 10 | 17 | 16 | 14 | 7 | 15 | 6 | 7 | 32,415 | 32,757 | 24,703 | 19,130 | 1,823 | 3,940 | 2,265 | 2,818 |
| Total | 699 | 737 | 728 | 2,132 | 2,124 | 1,945 | 1,686 | 960 | 853 | 707 | 698 | 4,080,308 | 5,021,980 | 4,462,135 | 3,596,153 | 541,306 | 487,829 | 371,873 | 367,693 |

# APPENDIX F

## EMPLOYMENT ESTIMATES

The only available monthly estimates of unemployment for the United States are those prepared and published by the American Federation of Labor, and these are not broken down by any industrial classification. The study requires estimates of the number employed in each of many industrial groups, and for a number of these there are no prevailing indexes of employment. Therefore, it was necessary for the purpose of this study to make employment estimates for the domestic and personal service group and others for which employment data are lacking.

The particular industries for which these estimates were prepared were not covered in any of the censuses of 1929, i.e., Manufacturing, Construction, and Distribution. It was, therefore, necessary to use the 1930 Census of Occupations and 1930 Census of Unemployment as the basis for the estimates. It must be recognized at the outset that taking a house-to-house census is inherently different from taking a census of industrial establishments, as far as the results are concerned. For instance, the 1929 Census of Manufactures gave the number of persons engaged by manufacturing concerns producing more than an established minimum of products, which result included over 99 percent of all workers in manufacturing. The 1930 Census of Occupations reported the number of persons who said that their industrial connection was in the field of manufacturing. It was found that the number of gainful workers in manufacturing, shown in the Census of Occupations industrial classification, less the number reported unemployed in this group, as shown in the 1930 Census of Unemployment, was not comparable to the number engaged in manufacturing in 1929, as shown by the Census of Manufactures, carried forward to April 1930 by employment indexes. Even more accentuated was the difference found by comparing the 1929 Census of Construction and the 1930 Census of Occupations data on construction.

The above material is presented for the purpose of pointing out the possibility of error in using the Census of Occupations industrial classification. It is natural that when an individual is questioned about his industrial connection, he will cite the nature of his immediate work. Thus a man may state that he works in a garage when actually it is the garage of a large wholesale trade or construction or steel concern and would appear among the latter in a census of industrial establishments. In the service industries the errors in this regard are not likely to be as great as in manufacturing, trade, or construction and our interest lies primarily in the service group. Although cognizant of the error involved, there was no other choice for us but to use the 1930 Censuses of Occupations and Unemployment as a basis.

### THE UNEMPLOYMENT CENSUSES

The first requirement was to determine the number of persons employed as of a certain date. The United States census in April 1930 reported the number of gainful workers in each industry on the first of that month and also the number unemployed in each group on the same date. The unemployed persons were classified into seven categories, A to G, inclusive. For our purposes it was necessary to find out how many of those listed as gainful workers were not receiving pay nor were on the pay roll of any firm at the time of the enumeration.

Class A consisted of persons out of a job, able to work and looking for a job and all of this group were regarded as being unemployed.

Class B were persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle. This group includes those working part time and those who were promised to be recalled when business picked up. All those idle under 1 week were considered as working part time and the balance were counted as unemployed.

Class C included persons out of a job and unable to work and all of these were counted as unemployed.

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Class D was composed of persons having jobs but idle on account of sickness or disability. Undoubtedly all of this group were not being retained on the company pay roll and all those idle over 2 weeks were regarded as unemployed.

Class E includes persons out of a job and not looking for work and all were classed as unemployed. There might be a question as to whether persons in this class and also class D should have been considered as gainful workers, but since they were included in the number of gainful workers, it was necessary to regard them as unemployed.

Class F included those who had jobs but were voluntarily idle, without pay. They may have been vacationing on their own time. Only those unemployed for over 2 weeks were counted as unemployed, for if idle for that long, it is likely that they were not included as employed in the employment index for the month.

Class G consisted of persons having jobs and drawing pay, though not at work on the day prior to the enumeration. For the purposes of this study the entire group was regarded as being employed.

While these decisions are somewhat arbitrary, nevertheless they appear to be well founded for defining the number of persons unemployed from our viewpoint. By this process, it was possible to determine the number of persons reported unemployed by the census in the United States in April 1930, the number in the special enumeration area of 19 cities, covered in the January 1931 Unemployment Census, and also in the same special enumeration area in April 1930. For the special enumeration area in April 1930 and January 1931, break-downs for duration of idleness were limited to classes A and B so that the United States data for April 1930 had to be applied in determining what proportions were idle over 2 weeks in classes D and F. The number of unemployed was then deducted from the number of gainful workers on these dates and in these areas to arrive at the number of persons employed.

## ADJUSTING THE BASE NUMBER OF EMPLOYED

Because of the United States census data available for April 1930 it was decided to use that month as the basis of the estimates. When the results of the April 1930 Census of Unemployment were made public there was a great deal of discussion among statisticians regarding the reliability of the figures. Many persons believed there was a deficiency in the number reported as unemployed and this situation was at least in part the reason for the Unemployment Census being taken in January 1931 in 19 selected cities.

The Bureau of Labor Statistics and Federal Reserve Board Indexes of Employment in most industries are generally accepted as being indicative of employment changes. If these indexes are accepted as accurate then it is possible to study the accuracy of the April 1930 or the January 1931 Unemployment Census by using the same areas in April 1930 as those used in January 1931.

Using six indexes of employment generally comparable to similar classifications in the census, it was possible to check the accuracy of one census against the other. The indexes used were the Federal Reserve Board unadjusted factory employment index; Bureau of Labor Statistics wholesale and retail trade employment indexes combined by proper weighting; and the Bureau of Labor Statistics indexes of telephone and telegraph, steam railroad, street railroad, and hotel employment. These indexes covered approximately 57 percent of all the gainful workers in the special enumeration area.

According to the censuses, employment in the special enumeration area in April 1930 was 116.49 percent of what it was in January 1931 in the industries covered by the six indexes used. The indexes showed that April 1930 employment should have been only 114.75 percent of January 1931.

These indexes represent only wage earners in most cases, so that it was necessary to make adjustments for salaried employees also. Ohio and Pennsylvania publish annual data on employment of both salaried workers and wage earners. An analysis was made of the employment index of wage earners and the index of salaried workers and wage earners combined and the relationship between these two indexes was applied to the above results. With this adjustment it was found that employment in April 1930 should have been 113.66 percent of the employment in January 1931. Therefore, if the January 1931 census was correct, the number reported employed in April 1930 had to be reduced to 97.799 percent of its previous level.

By applying the above methods we come to the necessary conclusion that if the employment indexes are accurate either the April 1930 Census of Unemployment was deficient or else the January 1931 Census of Unemployment reported an excessive number of unemployed persons. One or the other must be

accepted as being correct if we are going to proceed with unemployment and employment estimates. As previously stated, this is a highly controversial matter but probably the weight of authority would tend toward accepting the January 1931 Census of Unemployment as being the better of the two, particularly due to the method of enumeration used in the two censuses. Thus, assuming the January 1931 census as accurate and the employment indexes revealing the correct changes between the two dates, the April 1930 census results have been corrected accordingly.

Applying the correction ratio of 97.799 to the number reported employed in April 1930, we find that the number reported unemployed is increased from 3,388,360 to 4,388,587, an increase of approximately 1 million, or 29.52 percent. While this correction appears to be very large and is subject to some degree of error, it has not been arrived at without careful and prolonged analysis and thought. It is granted that the 57 percent of gainful workers covered by the indexes may not reflect what happened in the remaining 43 percent but there are no indexes for checking the other 43 percent to the special enumeration area. Then, also, it may be stated that these six indexes reflect employment changes for the whole country and the changes may be different for the special enumeration area. The investigator realizes these shortcomings but is also cognizant of the need for making the best use of all available material in order to get results.

## THE ESTIMATES

What has been explained so far covers only the work and methods involved in establishing a basis for estimating employment for the years 1929–32 in certain industries for the purpose of this study. There were nine industries involving over 12 million gainful workers for which either no employment indexes or only indexes for part of the period were available. Because of this lack of data it was necessary to resort to new methods of estimating the trend of employment for these industries and it was for this purpose that the present study was undertaken.

There were three factors available for consideration in making the estimates:

1. The percentage of unemployment in April 1930.
2. The employment decline from April 1930 to January 1931.
3. General knowledge of the varying incidence of unemployment among the various industrial groups as the depression continued and unemployment increased.

Prior to making any estimate, a combined index of the retail trade, wholesale trade and factory employment indexes was prepared and corrected for seasonal variations by use of a 12 month moving average. The same was done for a combined retail and wholesale trade index.

Each of the industries under consideration was taken separately and its extent of unemployment in April 1930 and the decline of employment from that date to January 1931 were studied in relation to other single or combined series for which indexes were available. In the domestic service field, employment opportunities tend to vary directly with the change in general business activity and general employment conditions. Probably during the early part of a depression the adjustment in this field of activity takes place in wage rates rather than in the number employed. As the depression continues, the adjustments become more significant in employment. It was found that the percentage of unemployment in April 1930 in this field was lower than in the combined fields of trade and manufacturing, but the April 1930 to January 1931 decline in employment was greater in the former than in the latter. These figures tend to substantiate the above statement about the lagging tendency in this field.

Thus, for estimating the employment trend and the annual index in the domestic service group, the combined trade and manufacturing employment index was used as a base. On the basis of the above described data and deductions, it was assumed that, as the depression continued, the employment decline in this field was more rapid than was the decline in trade and manufacturing. The resulting employment index for the group was assumed to be representative of each occupation in the group.

This method was used in the employment estimates made in the miscellaneous industries as presented in the final chapter of the text. For these miscellaneous industries the employment trend in the combined trade and manufacturing industries was used without further revisions. The same method was also used in several other service industries.

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