

**Problems in**

**Measurement of Expenditures**

**on Selected Items of**

**Supplementary Employee Remuneration**

Manufacturing Establishments, 1953

**Bulletin No. 1186**

**UNITED STATES DEPARTMENT OF LABOR**

**James P. Mitchell, Secretary**

**BUREAU OF LABOR STATISTICS**

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## Foreword

In undertaking an exploratory study of the problems involved in measuring expenditures on supplementary employee remuneration in manufacturing industries, the U. S. Department of Labor's Bureau of Labor Statistics has ventured into another new and complex area of statistical research. During recent years, representatives of other Government agencies and the public have urged the Bureau to collect data on supplementary remuneration to round out its statistics of average earnings, wage rates, and related wage practices. Knowledge in this field is needed also for international studies; the International Labor Organization, for example, has evidenced marked interest in the development of data on the magnitude of wage supplements in this and other countries.

As the principal agency of the Federal government for the development of labor statistics, the Bureau could not remain indifferent to the questions raised with respect to the magnitude of these expenditures. Before any comprehensive study could be made, however, it was necessary to explore the availability of records, the willingness and ability of industry to provide data, the quality of expenditure data, and other matters of methodology and definition. This pilot study was undertaken with financial assistance from the National Bureau of Economic Research, Inc., and was confined to manufacturing establishments. Despite its shortcomings, which are underscored throughout this report, the study has been rewarding to the staff of the Bureau of Labor Statistics as I hope it will be to the readers of this analysis of the results.

Further work by the Bureau of Labor Statistics in measuring expenditures on supplementary remuneration undoubtedly will be shaped by the experience gained in this survey. Although the development of specific survey techniques will depend on a more intensive analysis of the data in this report, and perhaps on additional exploratory investigations, the Bureau is now assured that surveys of expenditures on supplementary employee remuneration, carefully limited in scope, are technically feasible. It is expected that the ability of employers to supply the necessary data from available records will grow over time under the stimulus of an increasing realization that such recordkeeping is useful for business purposes and widespread public interest in expenditure data.

A cautionary note may be in order: As the report itself makes abundantly clear, the expenditure data summarized in the following pages relate only to those establishments reporting the existence of, and data for, the particular practice in question. They do not include firms incurring no expenditures for a particular item and those unable or unwilling to report expenditures. Hence, the data on average expenditures for any particular item are not applicable to manufacturing as a whole. They are presented because they have a bearing on questions of methodology which were of primary importance in this survey.



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Ewan Clague  
Commissioner of Labor Statistics



## Preface

Over the past 15 years supplementary wage benefits, commonly referred to as fringe benefits, have grown steadily as expenditure items for employers and as sources of income, leisure and security for workers. Although the Bureau of Labor Statistics and other organizations have attempted to keep abreast of this movement through studies of the types of practices in effect and their prevalence, comparatively little has been done in measuring the supplement to wages that these benefits represent or the employer expenditures that they entail.

A number of private organizations have made studies of "fringe-benefit" expenditures for the use of their membership or for general distribution. Probably the most widely circulated reports are those issued by the Chamber of Commerce of the United States for the years 1947, 1949, 1951, and 1953.\*

Two major questions must be answered before effective work can be done on measuring expenditures for all supplementary benefits. The first involves the conceptual difficulties created by the absence of a commonly accepted definition of "fringe" or supplementary benefits. Which practices and types of expenditures do these terms cover? Opinions within and between labor and management circles differ widely.

The second problem relates to whether useful and reliable data on expenditures can be obtained from company records for all benefits in effect, or for a fixed package, or for specific items.

This exploratory study, confined to manufacturing establishments, deals with the problems of measuring expenditures, not with defining "fringe benefits." Largely because of the conceptual difficulties noted above, the study bears the cumbersome title of "Problems in Measurement of Expenditures on Selected Items of Supplementary Employee Remuneration." In other words, this is essentially a study of the methodological problems encountered in surveying company expenditures on a predetermined list of items which, although not necessarily classifiable as fringe benefits, are nonetheless significant forms of employer expenditures for labor. The items to be studied were selected by the Bureau of Labor Statistics.

It is important to emphasize that the term "expenditures" is not intended as a measure of actual costs to the employer nor of the value of the benefits to the workers. The measurement of the real

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\* See, for example, Fringe Benefits, 1953, Chamber of Commerce of the United States, Washington, D. C., 1954.

## Preface - Continued

costs connected with a particular practice must take into account offsetting savings of various types (which, as in the case of some premium pay items, may equal or exceed expenditures) and, possibly, additional related expenses not included in the expenditure total. For example, a paid vacation policy obviously involves an expenditure of money by the employer. Total "expenditures" represent the sum of the vacation payments to individual workers. However, this does not reflect the net cost of a vacation policy. There are offsetting savings, which may include the amount of "cover-up" or "made-up" work, the resultant increase in productivity during the remainder of the year, a reduction in absenteeism, and a reduction in labor turnover. On the other hand, additional expenses may arise through the substitution, training, and transfer of workers during the vacation season, the hiring of less efficient replacements, the loss of production during the vacation season, the legally required payments such as the social security tax which apply to vacation pay as well as to regular wages, and the administrative costs involved. A vacation shutdown, however, may eliminate training and replacement costs, permit uninterrupted maintenance and repair work, and, if coinciding with a slack period or seasonal lull, favorably affect the employer's experience rating under State unemployment compensation laws. The determination of the net cost of a vacation policy is manifestly a complicated accounting problem. This study deals with the problems involved in measuring employer expenditures for paid vacations and other items, without attempting to evaluate costs to the employer or the benefits derived by the employee.

Although the Bureau has long been interested in this field of inquiry, and as early as 1951 undertook a study of selected supplementary expenditures in the basic steel industry, this pilot study was initiated at the request of, and with the cooperation of, the National Bureau of Economic Research, Inc., as part of that organization's long-range study of the movement of wage rates and earnings in the United States. In common with other users of wage statistics, the National Bureau of Economic Research wanted to know more about the size and significance of the supplementary wage benefits which have come into general use in recent years, and requested the Bureau of Labor Statistics to undertake what is essentially a ground-breaking survey. The cooperation of the National Bureau of Economic Research is gratefully acknowledged.

The study was conducted by the Bureau of Labor Statistics' Division of Wages and Industrial Relations. Techniques for the selection of the sample and the tabulation of the data were devised and supervised by Samuel E. Cohen. Joseph W. Bloch directed the study, with the assistance of Don Q. Crowther, and prepared the report.

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## Problems in Measurement of Expenditures on Selected Items of Supplementary Employee Remuneration

### Summary

No single study, however extensive, can provide definitive answers to all survey problems in a complex field of statistical investigation. All survey work in the social sciences, indeed, requires a constant process of adaptation to change in the field of inquiry and in survey techniques. The present survey was limited in terms of industrial coverage, objectives, and method. It was hoped, however, that the study would advance appreciably the knowledge of the problems and conditions to be taken into account in surveys of expenditures on certain selected items of supplementary employee remuneration. This modest expectation, in the judgment of the Bureau, was realized. This section attempts briefly to summarize the detailed analysis of the nature and findings of this exploratory study. Those readers with more than a casual interest in the methodological problems to which the report is directed are urged to examine the body of the report.

The survey was designed basically to throw light on a variety of methodological problems, such as the nature of records on selected expenditure items maintained by employers, company practice with respect to the summarization of these records and the calculation of expenditures in the absence of specific expenditure records, the willingness of employers to supply actual or calculated data in response to a mail inquiry, and related questions. Light was also sought on the question of factors making for variations in expenditures among employers for particular items, and on the most useful ways of presenting expenditure data.

It was not intended that the survey should develop definitive estimates of actual expenditures for the universe of establishments (manufacturing as a whole) to which the survey related. The body of the report contains many cautionary notes to this effect. On the other hand, it was essential that a systematic survey be undertaken; that is, it was necessary for the pilot survey to approximate, within limits, the procedures and conditions of a survey designed to produce those estimates.

The principal departure from standard mail survey procedures in the pilot study was the absence of provision for field followup of nonrespondents, and for a limited field check on those who did report. Such followup clearly would have to be undertaken in a survey designed to develop expenditure estimates applicable to a defined universe of firms. The nature of the nonresponse to the pilot survey was, however, susceptible of some analysis, as the body of the report

shows. Had larger resources been available for the pilot study, additional inquiries could have been directed to the respondents, particularly with regard to variations in accounting procedures. As suggested earlier, however, no single survey can probe into all aspects of a field of statistical measurement, and the pilot survey in the form in which it developed was unusually demanding upon respondents and the Bureau.

### Scope and Method of Survey

Any survey requires that basic decisions be taken with respect to its scope. The pilot study was limited to manufacturing, and the sample was so drawn as to represent all size groups (a minimum size limit of 20 employees was set for the survey), all geographic regions, and all manufacturing industries. In principle, the size of the sample was such that complete response would have permitted the presentation of data reasonably representative of manufacturing as a whole; even with complete response, the size of the sample would not have permitted the showing of separate data for particular industries. Complete response, of course, was not expected. It was hoped that the response would be sufficiently great to permit examination of the problems to which the survey was directed.

The sample was selected on an establishment basis, but multi-plant companies were given an option of reporting for all plants combined.

In terms of employee coverage the study was designed to cover production and related workers.

The items of supplementary remuneration selected for study were:

- Paid vacations
- Paid holidays
- Paid sick leave
- Premium pay for overtime—daily, weekly,  
or for work on specific days as such
- Premium pay for work on holidays
- Shift premium pay
- Pension plans
- Insurance, health, and welfare plans
- Legally required payments—Old Age and  
Survivors Insurance, unemployment com-  
pensation, workmen's compensation, and  
State temporary disability insurance.

These items of supplementary remuneration are among the most common; they account for a large part of total expenditures, however such expenditures are defined; except for those required by law, they are subject to collective bargaining. They represent important types of company expenditures going to workers, or paid on their behalf, and not accounted for in straight-time wage rates.

A number of payroll and man-hour aggregates were requested to permit the computation of various expenditure ratios.

The survey was not limited to the reporting of actual expenditure data. Employers were requested, where possible, to estimate or calculate expenditures in the absence of actual expenditure records, and to indicate how the estimates were made.

The survey proper was conducted essentially by mail. However, the questionnaire was pretested by personal visits to a small number of firms. In the actual survey, an initial visit to a group of key companies was made by Bureau representatives to review the form and instructions with company representatives who were responsible for supplying the data. Questionnaires were mailed in April 1954, and data were requested for the calendar year 1953. One followup letter was sent to all nonrespondents.

Editing of the returns resulted in a comparatively large number of requests by the Bureau for clarification of data or for omitted data. The response to these requests was satisfactory in terms of the number of replies and the additional or clarifying data submitted.

### Survey Results

Response to the Questionnaire.—As measured in terms of usable questionnaires, a response rate of 50 percent (550 returns out of 1,105 solicited) was obtained. Especially in view of the length and complexity of the questionnaire, this response rate to a mail inquiry is encouraging evidence of interest among respondents in the content of the survey and of their ability to provide all or part of the basic data required.

The response rate was relatively low for industry groups in which small establishments predominate, for low-wage industry groups, and for establishments located in the South. Size, wage level, and location obviously are not completely independent variables. For example, the lowest rate of response was for the apparel industry group. Apparel is characterized by small establishments, comparatively low wages in some branches of the industry, and the location of important segments of the industry in the Southern region. A relatively low rate of response was obtained also from companies with plants in more than one region.

The response to the survey was analyzed in terms of a number of important characteristics of manufacturing as a whole. Thus, about 75 percent of the establishments responding reported collective bargaining contracts covering a majority of their production and related workers. On the basis of other Bureau information on contract coverage, this proportion appears to be slightly above the level for all manufacturing. Similarly, the response from high-wage as compared with low-wage establishments, and from establishments which

tend to have many rather than few supplementary practices, appears to have been somewhat greater, on the average, than the actual proportions in manufacturing. The differences, however, were comparatively small, and the upward bias was not judged to be significant.

The net impression is that the problem of a representative sample of establishments in manufacturing would not be especially formidable. The pilot survey indicated clearly the major directions in which supplementation of the returns to a mail inquiry would have to be made, and this information is of great use in survey planning. A survey by mail designed to develop expenditure data representative of manufacturing would, of course, require the use of personal visits to nonrespondents and spot checks of the returns of respondents. If data were to be published separately by industry group, the sample would have to be considerably larger than that employed in this pilot study. The costs of such a study would be substantially greater than those incurred in the present effort.

Records and Reporting Practices.—A major purpose of the study was to learn the prevalence among manufacturing establishments of the maintenance of expenditure and/or time records for the selected items of employee remuneration, and of the ability to supply actual or estimated data from these records.

Recordkeeping.—By and large, the recordkeeping practices were encouraging for those with an interest in developing systematic data on supplementary remuneration. There was, of course, considerable variation in practice. Records were most commonly maintained, as was anticipated, for legally required payments. There was a tendency in recordkeeping to combine premium pay for overtime with premium pay for holiday work. With respect to pensions, payments made for past service liability frequently were combined with payments for current service. For insurance and welfare items, records were often maintained for a combination of items (the "welfare package", which might consist of hospitalization, surgical, and other benefits) rather than for each item separately. In the case of shift premium pay, the proportion of establishments not keeping records was exceptionally high, suggesting that many companies view shift premiums as part of basic wages for payroll accounting purposes. About half of the respondents indicated that separate expenditure records for each of the selected items in effect in the establishment were kept. Excluding premium pay, the proportion was increased to approximately 70 percent.

Summarization of Records.—The vast majority of establishments keeping expenditure records summarized the individual records for their own or other uses. This was true also with respect to time records for the premium pay and other payroll items, such as overtime or paid holidays. Where time records are available, a basis is provided for estimating expenditures in the absence of actual expenditure records.

Provision of Data from Records.—While information on recordkeeping practices as such is important, the crucial question, in terms of expenditure studies, is the willingness and ability of respondents to provide the requested data from their records. For example, records may exist on shift work, but the summarization of these records (on either a time or expenditure basis) for a period of a year may be excessively time consuming. A closely related consideration is the quality of the information provided.

Actually, about 75 percent or more of the establishments keeping expenditure records provided actual expenditures for paid vacations, paid holidays, and the legally required items. Most companies could not provide actual figures on the insurance components. About 30 percent of the respondents provided actual expenditure figures for all selected items listed and in effect. Another 46 percent provided some actual and some estimated figures or, in a few cases, made estimates for every item. In the remaining 24 percent of the reports, data were absent for one or more of the items in effect. The corresponding proportions for the category "all selected items except premium pay" were 45 percent, 42 percent, and 13 percent.

Where estimates were provided, the methods most commonly used were (1) calculating expenditures on the basis of related data; e.g., applying an average wage rate to available data on man-hours; or (2) prorating expenditures as between production and related workers and all employees or the particular grouping of employees covered by the records of the establishment. In general, the methods of estimation or calculation appeared reasonable. The differences between actual and estimated or calculated expenditure ratios, as presented in the aggregate for all reporting establishments, were slight.

Quality of the Response.—The accuracy and reliability of the individual responses were difficult factors to assess in the absence of on-the-spot checks. Matching company practices against expenditures provided a rough measure of reliability. A number of overstatements, understatements, and omissions were brought to the attention of respondents and were corrected by this method. For example, data reported on man-hours of vacation taken and paid for, in conjunction with average hourly earnings derived from the aggregate payroll and man-hour data also reported, provided a check on reported vacation expenditures; similar cross-checks could be made on some of the other items. It may be, however, that many errors in reporting were not detected, particularly where reported expenditures fell within the range of possible expenditures for the practices in effect.

What effect such reporting errors as were made might have on aggregate data can only be surmised. It is obvious that it would take a substantial number of errors in the same direction to affect significantly the type of expenditure ratios computed in this study. An analysis of the expenditure ratios for the items which could be matched with practices failed to disclose any concentration of errors, upwards or downwards. However, no evaluation of the precision of the aggregate responses for these items was possible, mainly because of the variety of factors affecting expenditure levels in individual establishments. For some items, particularly pensions and health and insurance plans, the data collected in this survey provided no basis for judgment regarding the reliability of the response.

Records and Survey Planning.—Obviously, the mass of information accumulated on the recordkeeping practices, and on the willingness and ability of employers to provide actual or estimated expenditure data are basic for survey planning. In another study, for instance, it might be necessary to request a total expenditure figure for insurance, rather than a breakdown by component, such as hospitalization, surgical, and the like.

It should be recognized, at the same time, that recordkeeping practices are not static. This pilot study revealed that employers do, in fact, widely maintain the types of records required by the survey, a reflection of the increasing importance of

supplementary expenditures and of employers' need for knowledge of their magnitude. It is reasonable to expect that such interest will result in further refinements of recordkeeping.

Factors Affecting Expenditure Levels.—The final portion deals with some of the factors accounting for variations among establishments and groups of establishments in expenditure levels for the selected items. This type of analysis could be presented in meaningful form only by the use of ratios commonly employed to compare expenditures among establishments.

As emphasized repeatedly, later, expenditure ratios in this study are not applicable to manufacturing as a whole. The response was not completely representative of manufacturing; moreover, the averages shown for individual items relate only to establishments reporting expenditures for such items.

However, the sizable body of expenditure information which was gathered can be validly used to throw light on a variety of questions important for survey planning. For example, the dispersion that can be expected in a value or series of values (like expenditures for paid vacations) has practical implications for sample design.

Specifically, 524 establishments reported expenditures for paid vacations. How do these expenditures (in terms, for example, of cents per payroll hour) vary by such factors as size of establishment, wage level, or collective bargaining status? The analysis of the data provides extremely suggestive, even though tentative, answers to questions of this type. It seems clear that the results of the analysis of expenditure variations from this particular study show at least the minimum range within which variation in expenditure ratios will occur in manufacturing. A distribution of expenditure ratios for a particular item among a thousand establishments might reveal a greater range than that shown by the present study; obviously the range would not be smaller.

Significant information on factors making for variations in expenditures among firms and on the range of expenditures that can be anticipated in this type of survey is developed in the final section of the report. Some brief general findings on expenditure variation follow:

1. The survey found considerable variation among establishments in expenditure levels for the same item, whether expressed in cents per hour, percent of payroll, or dollars per year per employee.

2. Some of the factors accounting for variations among establishments in expenditure ratios for a particular item are type of practice, eligibility requirements, wage level, man-hours of employment, and gross payrolls.

3. Many of the factors influencing gross expenditures levels and the computed expenditure ratios among establishments also account for changes in the same establishment from one year to another. Changes in the volume of overtime work, for example, not only make for changes in expenditures for premium pay but also affect the percent-of-payroll ratios for other items. The most unstable expenditures are likely to be for premium pay for overtime and shift work, since expenditures depend on the volume of such work. Expenditures for pensions are also likely to exhibit year-to-year variations which are not caused by changes in the type of plan in effect.

4. The data lent themselves to analysis of variations in expenditures by size of establishment, industry group (classified by wage level), collective bargaining status, region, type of practice, and earnings level. However, the tentative relationships derived from this analysis are much too complex for any generalized summary.

## Purpose, Method, and Scope of Survey

The techniques of wage rate surveys have been developed and refined over a long period of time. In contrast, the technique of surveying employer expenditures on supplementary or nonwage remuneration, such as paid vacations and pensions, is still in a rudimentary stage. This study was undertaken to explore the problems involved in surveying such expenditures.

Since efficient survey techniques rest on a foundation of knowledge about the subject studied, this exploration necessarily deals with the magnitude and range of expenditures for selected items among a substantial number of establishments, and the variations in expenditure levels among manufacturing industry groups, large and small firms, establishments with similar practices, etc. It was not expected, however, that this survey would yield expenditure data sufficiently reliable or precise to represent all manufacturing establishments from which the sample was drawn or to be used for purposes other than the limited ones for which the study was planned.

On the purely methodological problems, the Bureau of Labor Statistics wanted to find out, within the limitations of a single survey necessarily restrained in its demands upon employer cooperation and the Bureau's resources:

1. Whether expenditure records are maintained;
2. Whether time records for certain items are maintained;
3. How frequently these expenditure and time records are aggregated or summarized by the company;
4. The willingness of employers to respond to an inquiry concerning records and expenditures;
5. How employers calculate or estimate expenditures in the absence of actual expenditure records;
6. Whether employers could and would supply actual or estimated annual expenditure totals for selected items;
7. Whether calculated or estimated figures are reliable in the aggregate;
8. How these practices differ among industries, large and small companies, union and nonunion companies, etc.;

9. Which ways of presenting expenditure data are feasible, and
10. If expenditure surveys are feasible, can they be conducted, in whole or in part, by means of mail surveys.

### Method

Basic to the Bureau's approach were several considerations of special importance to the Bureau, but perhaps not of equal importance to other organizations having an interest in expenditure data. The Bureau is primarily concerned with the development of statistics on expenditures in a form consistent with its data on occupational wage rates and average hourly and weekly earnings. This meant, among other things, that (1) the study would deal with production and related workers only rather than with all employees; (2) the object of ultimate expenditure surveys would be to estimate expenditures in terms of cents per hour, percent of payroll, and similar averaging ratios rather than in aggregate dollar volume; (3) it would be sufficient to concentrate on expenditures for specific types or combinations of supplementary remuneration rather than on 'all' supplementary expenditures, a concept which, at the present time, defies definition; (4) the survey approach would be principally on an establishment rather than on a company basis; and (5) the study would be limited to manufacturing industries, thus avoiding the additional complexities expected from coverage of nonmanufacturing industries. It was, however, also important to recognize that the resources available for the study were relatively small; that the survey would have to be conducted by mail rather than by field visit; that the amount of information sought would have to be limited—in short, that the survey might not yield conclusive data on the problems studied nor wholly reliable data on many aspects of these problems.

The objectives and mechanics of the study and many of its limitations are implicit in the questionnaire devised by the Bureau, which is reproduced, with accompanying instructions, in the appendix.<sup>1</sup> The definitions of the concepts and terms used are contained in the instructions; these should be consulted freely in reading this report and interpreting the data.

It may be helpful at this point to explain some of the reasoning and decisions that went into the design and scope of the questionnaire. A major premise, of course, was that the longer and more difficult a mail questionnaire was, the poorer would be the response.<sup>2</sup>

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<sup>1</sup> The Bureau received assistance from some management and union representatives in drafting the questionnaire and the instructions.

<sup>2</sup> By Bureau mail questionnaire standards, the questionnaire used was both long and difficult.

1. Production and Related Workers.—The definition is identical with that used by the Bureau for its regular monthly and annual production-worker employment series for manufacturing industries and by other Government agencies. Although data covering all employees (including office, supervisory, and executive personnel) may be easier to obtain, particularly for such items as pension and insurance expenditures, other problems would be raised. Expenditure ratios applying to all employees would have doubtful significance in the context of the Bureau's work in wage rates and earnings and the uses to which these data are put. Some respondents offered other suggestions on coverage, such as hourly rated workers, workers covered by collective bargaining agreements, or all employees covered by the Fair Labor Standards Act.

2. Gross Payroll (II-A).—As defined, gross payroll includes the expenditures for all items of supplementary remuneration for which data are requested, with the exception of pension, insurance, and legally required payments. Since it is exceptionally difficult to define such concepts as "straight-time payroll" or "payroll for hours worked" in such a way as to exclude all possible types of supplementary remuneration, the Bureau considered it more feasible to ask for gross payrolls. If required, expenditures for the payroll items covered in the questionnaire could be deducted from gross payrolls to obtain a uniform "adjusted payroll" figure.

3. Total Man-Hours (II-B).—As with gross payroll, total man-hours include the hours for which expenditures such as vacation pay, holiday pay, and sick leave pay were incurred. Although the term "hours actually worked" has been used in some private expenditure surveys, the same difficulties would arise in defining this term as in defining straight-time payroll. More uniform results could be obtained by requesting information on total vacation man-hours paid for and taken (III-A-2), total holiday man-hours paid for but not worked (III-B-2), and total sick-leave hours paid for (III-C-2); the sum of these hours could be deducted from total man-hours to arrive at an adjusted man-hours figure which, although not to be defined as "hours actually worked," provides a basis for calculating a cents-per-hour ratio with specific meaning in expenditure analysis.

4. Plant Practices (III).—This section of the questionnaire was included for two reasons: (1) To provide a basis for detecting omissions or gross errors in the expenditure data supplied by the respondents, and (2) to provide a basis for explaining some of the variations among companies in expenditures for a specific item, or, as in the case of insurance and pension plans, for variation in recordkeeping practices. Information was requested on actual practices in 1953 rather than on policy. Knowing that company policy on paid vacations, for example, was to provide 1 week for 1 year of service, 2 weeks for 5 years, and 3 weeks for 15 years, throws considerably less light on actual expenditures than knowing how many workers received 1 week, 2 weeks, and 3 weeks.

The amount of information requested in this section, however, is substantially less than is needed to detect all errors in reporting and, especially, to explain fully the variations in expenditure levels among establishments. At best, only certain variables can be accounted for, particularly in insurance and pension expenditures. The amount of information required to explain with reasonable adequacy the variations among companies in these expenditures is probably beyond the bounds of any single survey.

5. Selected Items of Supplementary Remuneration (IV).—The items of supplementary remuneration selected for study were:

- Paid vacations
- Paid holidays
- Paid sick leave
- Premium pay for overtime—daily, weekly,  
or for work on specific days as such<sup>3</sup>
- Premium pay for work on holidays
- Shift premium pay
- Pension plans
- Insurance, health, and welfare plans
- Legally required payments—Old Age and  
Survivors Insurance, unemployment com-  
pensation, workmen's compensation, and  
State temporary disability insurance.

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<sup>3</sup> The payment of time and one-half for work in excess of 40 hours in the workweek is required by the Fair Labor Standards Act for workers engaged in interstate commerce or in the production of goods for interstate commerce. The Public Contracts Act, which applies to work on Government contracts in excess of \$10,000, also calls for time and one-half for hours in excess of 8 per day. Thus, weekly overtime pay, and where applicable, daily overtime pay, may warrant consideration as "legally required payments." However, collective bargaining agreements and company personnel practice have modified the definition of 40 hours of work as expressed in FLSA by substantially liberalizing the definition of "hours worked" for purposes of qualifying for overtime payments. For example, holidays and excused leave are widely counted as time worked for overtime pay purposes. Moreover, the practice of paying premium rates for all hours worked on Saturdays and Sundays, regardless of the number worked during the week, is becoming more prevalent. Assuming that it is desirable to account for the "legally required" portion of overtime pay, it would be necessary, but virtually impossible in a survey of this nature, to separate from the variety of overtime pay practices in American industry that portion which is based strictly on Government regulations.

Obviously, this is a restricted list. Under the assumption that the selection of items would have to be limited so as not to overburden the employer respondents, these items were selected because they are among the most common supplementary remuneration items; they account for a large part of total supplementary expenditures, however such a total is defined; and, with the exception of legally required payments, they are subject to collective bargaining. The Bureau's wage and industrial relations studies have for some time covered these items in terms of company and union policies; hence, it seemed logical to venture into the field of expenditure study in terms of these practices.

Some private surveys have utilized a longer list or have relied upon the employer to account for all supplementary expenditures, as he would define them; some, including the surveys of the Chamber of Commerce of the United States, either have omitted premium pay of all types from the scope of the practices studied, or have presented premium pay expenditures apart from other expenditures. Since the term "fringe benefits" has been used in other surveys and might be applied to this study because of the convenience of that expression, it is important to emphasize that in the selection of these items the Bureau did not intend to imply that they should be considered as "fringe benefits" or even as "benefits" to workers.<sup>4</sup> For this study, the items selected represent types of company expenditures going to workers, or paid on their behalf, which would not be accounted for in straight-time wage rates.

The selected items presented no unusual problems of definition, except for the overlap between holiday pay and premium pay for holiday work. Since it was necessary to separate expenditures incurred through the recognition of paid holidays and those resulting from work on paid holidays, it was also necessary to define holiday premium pay expenditures as the amount paid in excess of double time (see instructions). For insurance, health, and welfare plans, net rather than gross expenditures were requested (see instructions). For this category and for pensions, costs incurred by the establishment in the administration of these plans were excluded, partly because of the difficulty of obtaining information (this administrative work is frequently tied in with other personnel functions) and partly because other practices studied also entail administrative costs which are not accounted for in the expenditure figures requested.

A number of minor classification problems arising from the emphasis on expenditures for selected items rather than for all supplements combined were ignored in a choice between attaining a higher degree of precision in definition and further complication of the questionnaire. This was the case in such instances of overlapping

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<sup>4</sup> It should be noted that the terms "fringe" and "benefits" do not appear in the questionnaire and instructions.

expenditure classifications as shift premiums in vacation and holiday pay and overtime on holidays, and in problems peculiar to establishments on continuous operations.

6. Measures to be Computed.—For each of the items of supplementary remuneration covered, the following computations were planned for each establishment:

Percent of payroll	=	$\frac{\text{Item expenditure}}{\text{Gross payroll}} \times 100$
Cents-per-payroll hour	=	$\frac{\text{Item expenditure}}{\text{Total man-hours}}$
Cents-per-adjusted-payroll hour	=	$\frac{\text{Item expenditure}}{\text{Total man-hours (less vacation, holiday, and sick leave hours)}}$
Dollars per year per employee	=	$\frac{\text{Item expenditure}}{\text{Average number of production and related workers for the year}}$

For purposes of analysis, certain additional computations, based on the payroll and plant practice data requested, were planned. These included: Average vacation per employee, average vacation per employee receiving paid vacation, shift premium hours as a percent of total payroll hours, and gross average hourly earnings.

7. Estimating Expenditures.—In a departure from usual Bureau practice, the respondents, in the absence of actual records, were requested to estimate or calculate expenditures for production and related workers and to indicate the basis upon which these estimates were made. This was done for two reasons: (1) To find out how companies estimated expenditures in the absence of expenditure records, and (2) to be able to identify and to evaluate the data which were estimated. Undoubtedly, this device increased the response to the survey; many companies, however, remained reluctant to attempt such estimation.

### The Sample Design

The decision to limit the study to manufacturing industries, and to cover all manufacturing industries (rather than one), was made to obtain the maximum information concerning methodological problems for the minimum investment of resources. The inclusion of nonmanufacturing industries would have spread the survey too thinly and would have made it necessary to consider a multitude of problems peculiar to such industries as retail trade and construction. On the other

hand, limiting the survey to one manufacturing industry, or to a segment of an industry, while possibly producing more conclusive data, would leave too large an unexplored area.

The sample of establishments to which the questionnaire was sent was selected to represent all size groups above the minimum size limit of 20 employees set for the survey, all geographic regions, and all manufacturing industries. Starting with a list of establishments for each state, the method followed was to select, on a systematic basis, the number of establishments required so that each size group was represented in proportion to its relative importance in terms of employment, as follows:

<u>Size of establishment</u>	<u>Sampling rate</u>
10,000 or more employees ----	All
2,500 - 9,999 employees ----	Every 2d establishment
1,000 - 2,499 employees ----	Every 8th establishment
500 - 999 employees -----	Every 15th establishment
250 - 499 employees -----	Every 36th establishment
100 - 249 employees -----	Every 90th establishment
20 - 99 employees -----	Every 360th establishment
Under 20 employees -----	Not covered

The size of the sample resulting from this design (approximately 1,100 establishments) was such that the rate of response, a key problem to be studied, could be ascertained for the various component groups. In principle, if all establishments were to return usable and reliable questionnaires, estimates of practices and expenditure levels, reasonably representative of manufacturing as a whole, could be derived. However, separate estimates for each particular industry would not be practicable with a sample of this size. Such a response, of course, was not expected.<sup>5</sup> What was hoped for was a return of about 500 usable questionnaires, broadly representative of the sample, which would provide an adequate basis for examining the problems to which the study was directed. The conclusions arrived at might be tentative but they would represent an advance over present knowledge. This rate of response, it was believed, would be sufficient to reflect relatively uncommon situations. The nature and characteristics of the response and nonresponse are examined later.

The method of selection yielded a number of establishments of the same multiplant company or a single establishment of a multiplant company. Presurvey discussions with a number of management

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<sup>5</sup> The techniques normally used in the Bureau's industry wage surveys conducted by means of mail questionnaires, in which non-responding establishments are covered by actual plant visits, were not applied to this study because of the costs involved and the limited objectives of the study.

representatives had pointed to the probability that many multiplant companies would have exceptional difficulty in providing this type of information, particularly on insurance and pension expenditures, for a single plant or an arbitrary combination of plants. Allowing such companies the option of providing information for all plants combined, it was believed, would facilitate response. In the instance of a selection of a single plant, this was accomplished by the following instruction in the box heading of the questionnaire:

In the case of multiplant companies, a report covering the plant identified on the accompanying letter would be preferred. However, multiplant companies may report for all plants if records are maintained on that basis. Whichever alternative is selected, it is essential that all of the information supplied relate to the same unit.

When more than one plant of a company was selected, a flyer was attached to the questionnaire with the following instruction:

A separate report for each plant is preferred.

If your supplementary remuneration programs and practices, as well as the types of records kept, are the same in each plant, and if you feel that a single report for one plant would be representative of your company, then such a report for one plant may be furnished.

If expenditure records on supplementary employee remuneration items are kept on a companywide basis, and if you prefer to make one report covering all plants of the company, such a report will be acceptable.

The questionnaires were mailed in April 1954, which allowed ample time for companies to have completed their normal summarization or review of expenditures for the calendar year 1953.

In accordance with usual Bureau practice in mail wage surveys, a selected group of key companies were visited by Bureau representatives for the purpose of putting the questionnaire in the hands of the appropriate official, explaining the background and purpose of the study, and working out arrangements for single-plant or multi-plant reporting.

One followup letter was sent to all nonrespondents. Preliminary editing of the returns necessitated a number of requests for clarification of data or for omitted data. Unfortunately, due to time and staff limitations, this could not be done in all instances of omissions or of apparent discrepancies, as the following analysis will show.

The findings of the survey are discussed in this report under three main headings: Characteristics of the Response; Establishment Records and Reporting Practices; and Factors Affecting Expenditure Levels.

## Characteristics of the Response

The feasibility of a mail questionnaire survey of this type should be evaluated with respect to: (1) Rate of response, or the proportion of the companies solicited for cooperation which returned usable questionnaires; (2) balance, or the structure of the response as compared with the structure of the original sample, and (3) the reliability of the data as to the manner in which questions were interpreted, the ability of the respondents to provide the type of information requested, and the care exercised in computing or compiling the data. Because no fixed standards exist against which these factors can be measured in a study of this type, evaluations must necessarily be tentative.

### Rate of Response

The survey yielded a response rate of 50 percent, or 550 returns out of 1,105 solicited. The rate of response here is measured by the usable questionnaires received. A usable questionnaire was not necessarily a complete one. The letter accompanying the questionnaire, and the box heading on the questionnaire itself, urged companies to answer as many questions as possible and to indicate the reasons for their inability to answer other questions. Many companies thus returned partially completed questionnaires. These returns were classified as usable if the basic data on payrolls, man-hours, and employment were supplied and if Section IV, dealing with records and expenditures for selected items, was answered at least in part. A number of questionnaires were eliminated because of multiple discrepancies or omissions in the data requested, which indicated inability on the part of the respondent to supply reliable information.

The rate of return by industry group (table 1) revealed relatively low response levels for some groups, notably those in which small establishments predominate, e.g., apparel manufacturers (21 percent) and lumber and wood products companies (29 percent). Variations among specific industries within industry groups were of course much wider than these data show. However, the significance of the differences in response rates among industries, insofar as an all-manufacturing survey is concerned, is centered in the totals for

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<sup>6</sup> To facilitate the analysis of response rates and the substantive data reported, the manufacturing industries covered were divided into three groups, in accordance with industry gross average hourly earnings data compiled by the Bureau for the year 1953. The groupings were established, arbitrarily, as follows: Group I—less than \$1.65 an hour; Group II—\$1.65 to \$1.89; Group III—\$1.90 and over. For convenience in discussion, the terms "low wage," "medium wage," and "high wage" groups will be used.

the three wage groupings into which the industries were classified.<sup>6</sup> The average rate of return for the low-wage group amounted to 42 percent as against 54 and 55 percent, respectively, for the medium- and high-wage groups. The question of whether this differential return has an appreciable effect on average expenditure levels will be examined later.

On a regional basis, returns lower than the average were received from companies in the South, comprising the South Atlantic, East South Central, and West South Central States (table 2). On the whole, variations in response among regions were not large. However, a relatively low rate of response from companies with plants in more than one region was encountered. This appeared to be due to the difficulties of reporting in multiplant situations and (perhaps a related factor) to the unwillingness of several large multiplant companies to participate in the survey.

Although the low response rate (25 percent) for establishments employing fewer than 100 production workers, as shown in table 3, may reflect the inability of small companies to report information of the type requested, it conforms to the usual experience of agencies conducting mail questionnaire surveys. Significantly, however, the response from plants employing between 100 and 500 workers (50 percent) was close to the average for the larger establishments.

### Multiplant Reporting

Multiplant companies responding to the questionnaire had the option of providing information for a single plant (separate reports if more than one plant was selected in the sample) or of providing data for a combination of plants or for all plants. Although it was not possible to identify all of the establishments in the sample which were part of a multiplant organization, it would appear from the returns that multiplant companies preferred combination reporting to providing data for selected individual plants. Of the 550 usable questionnaires, 96 covered more than 1 plant—37 covered 2 plants, 38 covered from 3 to 10 plants, 9 covered more than 10 plants, and 12 covered an unreported quantity. Only 16 multiunit companies furnished separate plant reports—13 provided 2 reports, and 3 provided 3 reports.<sup>7</sup>

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<sup>7</sup> As a consequence of multiplant or companywide reporting in a substantial number of cases, the coverage of the survey can be described precisely neither in terms of establishments nor of companies. Strictly speaking, the 550 schedules represent 550 reporting units (whether company or establishment). However, since the bulk of the returns represent establishments, that term is used in this report for sake of convenience.

TABLE 1.—Rate of return of usable questionnaires by industry group

Industry group <sup>1</sup>	Number solicited	Usable returns	
		Number	Percent
All industries .....	1,105	550	50
Group I .....	426	180	42
Food and kindred products .....	96	44	46
Tobacco .....	8	6	75
Textiles .....	98	51	52
Apparel .....	85	18	21
Lumber and wood products .....	42	12	29
Furniture and fixtures .....	28	15	54
Leather and leather products .....	28	16	57
Miscellaneous manufacturing .....	41	18	44
Group II .....	318	171	54
Paper and allied products .....	41	29	71
Chemicals and allied products .....	52	27	52
Stone, clay, and glass products .....	48	25	52
Fabricated metal products .....	80	41	51
Electrical equipment .....	71	35	49
Professional and scientific equipment .....	26	14	54
Group III .....	361	199	55
Ordnance and accessories .....	9	5	56
Printing and publishing .....	45	16	36
Petroleum and coal products .....	19	6	32
Rubber products .....	12	6	50
Primary metal industries .....	74	50	68
Machinery (except electrical) .....	120	68	57
Transportation equipment .....	82	48	59

<sup>1</sup> For industry groupings, see footnote 6, page 17.

TABLE 2.—Rate of return of usable questionnaires by region

Region	Number solicited	Usable returns	
		Number	Percent
All regions .....	1,105	550	50
Interregional .....	66	23	35
New England .....	115	59	51
Middle Atlantic .....	268	136	51
East North Central .....	307	168	55
West North Central .....	69	39	57
South Atlantic .....	108	48	44
East South Central .....	49	23	47
West South Central .....	43	16	37
Mountain .....	8	3	38
Pacific .....	72	35	49

TABLE 3.—Rate of return of usable questionnaires by size of unit covered

Size of unit covered	Number solicited	Usable returns	
		Number	Percent
All units .....	1,105	550	50
20 to 99 employees .....	166	42	25
100 to 499 employees .....	315	159	50
500 to 999 employees .....	178	80	45
1,000 to 4,999 employees .....	336	205	61
5,000 employees and over .....	110	64	58

Multiplant reporting was especially predominant in the chemicals and primary metals industries. In number of workers covered, the multiplant reports accounted for a disproportionate share of the total response. This factor among others precluded the presentation of data in terms of number of workers.

### Other Characteristics of the Response

Requesting data for the calendar year appeared to present relatively minor difficulties.<sup>8</sup> Only seven reports covered a fiscal period differing from the calendar year.

A few reports covered a group of workers other than production and related workers. Of these, the most common deviation was the coverage of all employees, followed by "hourly employees" only. These questionnaires, however, appeared to be internally consistent with respect to the information reported and were therefore included among the usable questionnaires.

The accuracy and reliability of the information supplied are difficult factors to assess, as will be stressed at various points in this report. This was undoubtedly a complex questionnaire to many companies; probably a large part of the sample had never before responded to such an inquiry concerning expenditures for supplementary remuneration. Many responses appeared to indicate that the cooperating company normally did not compile precise expenditure data for its own purposes. In a large sense, therefore, the survey was an experimental one, both to the Bureau and to the respondents, and must be evaluated in that light.<sup>9</sup>

The questionnaires were examined for inadvertent omissions and for obvious discrepancies. Omission of expenditure data for legally required payments was, of course, readily detected; inadvertent omission of other expenditure data became obvious when the practice was reported to be in effect. Discrepancies in payroll, man-hour, and employment data, and in practices and expenditure levels, were less apparent and could be recognized only when the error appeared to be large. In general, overstatement was more

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<sup>8</sup> The questionnaire requested data for the calendar year 1953. However, if data had to be computed on another basis, respondents were asked to write in the period covered by the report. Reference to certain problems in calendar year reporting will be made later in this report in connection with legally required payments.

<sup>9</sup> In letters accompanying questionnaires, some companies expressed concern about their own lack of exact data. One large multiplant company requested a number of blank forms in order to conduct its own survey among its many plants. Other companies expressed an interest in appropriate accounting procedures.

easily detected than understatement. About 115 letters<sup>10</sup> seeking clarification of data or requesting omitted figures were sent to respondents; all but a few were answered satisfactorily. Probably because omissions or discrepancies in legally required benefits were most readily detected, these were most frequently mentioned in the supplementary letters of inquiry, most of which covered more than one item. Other leading subjects of inquiry were (in order of frequency) insurance expenditures, shift premiums, pension expenditures, and holiday pay expenditures. A few clearly questionable entries on premium overtime expenditures were later excluded from the tabulated data.<sup>11</sup>

### The Final Sample

The 550 usable questionnaires, discussed above with respect to industry, region, size of establishment, and multiplant coverage, constituted the sample upon which analysis was based. It is important to examine the representativeness of this sample in relation to a question pertinent to all expenditure surveys: Were establishments with higher wages, more supplementary practices, more liberal practices, and therefore larger expenditures on supplementary remuneration more likely than other establishments to respond to this questionnaire?

There are two ways of approaching this issue: (1) By visiting the nonresponding companies to obtain sufficient information to determine whether the response is biased and in what manner; or (2) to compare the characteristics of the final sample with what is known about manufacturing as a whole. Since the resources available for this pilot study were limited, the second alternative was used.

If the existence of collective bargaining, in itself, is an indication of the types and levels of expenditures, the sample appears to be adequate in this regard. Approximately 75 percent of the 550 establishments covered reported collective bargaining agreements in effect for a majority of production and related workers. A corresponding proportion covering manufacturing establishments in 17 major labor market areas recently surveyed by the Bureau was 74 percent.<sup>12</sup>

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<sup>10</sup> One of the major reasons for sending these letters was to find out if the companies could supply the missing data or could explain the discrepancies. This practice necessarily had to be restricted to obvious errors and by no means assumed reliability of data in other questionnaires.

<sup>11</sup> Despite instructions to the contrary, a few reporting companies apparently included all payments for overtime hours instead of only the premium part of such payments.

<sup>12</sup> See *Extent of Collective Agreements in 17 Labor Markets, 1953-54*, Monthly Labor Review, January 1955.

The most recent Bureau estimate of the proportion of manufacturing plant employment covered by collective bargaining agreements, based on 1946 data, was approximately 70 percent.<sup>13</sup> Although these 3 ratios are not directly comparable for a number of reasons, it would appear that the proportion of organized establishments represented in this sample does not deviate appreciably from the "true" proportion; at the most it would appear that unionized firms are slightly overrepresented.

As to the prevalence of individual benefits, no significant bias is revealed in the final sample. All establishments, of course, were obligated to make the legally required payments. All establishments, presumably, were covered by the Fair Labor Standards Act provisions on the payment of premium overtime rates. A substantial proportion of the establishments reported overtime hours worked during the course of the year. An analysis of the prevalence of voluntary or negotiated practices (paid vacations, holidays, sick leave, shift premiums, insurance, and pension plans), based on the 550 questionnaires, indicated that, on the whole, establishments in the low-wage group and establishments in the South tended to have fewer such practices in effect. The prevalence of these practices was also greater in the larger establishments.<sup>14</sup> Thus, to the extent that low-wage establishments, small establishments, and establishments in the South are underrepresented in the sample (tables 1, 2, and 3), there is a presumption of an upward bias.

However, the slight effect of a bias of this type can be demonstrated by consideration of an extreme case—the effect underrepresentation of small establishments has on the overall prevalence of pension plans. Only 17 percent of the establishments with fewer than 100 workers reported a pension plan in effect, as compared with 84 percent of the establishments with 5,000 or more workers; for all establishments combined, the percentage amounted to 56.4. Applying a weight of 2 to the small establishments (or assuming a response twice as large as actual) would reduce the proportion of establishments with pension plans to 53.5 percent, a drop of approximately 3 percentage points.<sup>15</sup> If the purpose of the survey were to compute average cents-per-hour expenditures covering all establishments in the sample, the difference between the actual returns and returns adjusted in this manner to account for the underrepresentation of small establishments would be in the neighborhood of one-fifth of a cent, assuming equivalent levels of pension expenditures for small and large establishments.

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<sup>13</sup> See *Extent of Collective Bargaining and Union Recognition, 1946*, BLS Bull. 909.

<sup>14</sup> Industry, region, size of establishment, and unionization are, of course, interrelated factors.

<sup>15</sup> On the other hand, the adoption of a cutoff point for the survey of 100 workers would increase the proportion to 59.6 percent.

For the response as a whole, establishments in the following proportions reported supplementary practices in effect: Paid vacations 99 percent; paid holidays 90 percent; sick leave 19 percent; pension plans 56 percent; and some type of insurance 93 percent. These figures offer no evidence of significant upward bias on the basis of such information as is available concerning the prevalence of these practices in manufacturing industries.<sup>16</sup> This is not to say that these proportions are truly reflective of the universe of manufacturing establishments employing 20 or more workers; the question considered here, as previously noted, is simply whether the response is significantly overweighted by establishments with extensive supplementary benefits. The necessarily qualified answer is that if there is an upward bias in practices, it is not sufficiently large to have an appreciable effect on the type of aggregate data presented in this report.

Since the level of wages is a factor affecting expenditure levels for some items, an overstatement of expenditures in cents per hour might be inferred if the response were weighted overwhelmingly by the high-wage establishments in each industry. By computing gross average hourly earnings for each questionnaire (gross payrolls divided by total man-hours) and by averaging these figures for each industry and for all questionnaires, a combined average of \$1.83 was obtained. The Bureau's series on gross average hourly earnings showed an average of \$1.77 for all manufacturing in 1953, or a difference of approximately 3 percent. The sample averages exceeded the Bureau's basic figures for 11 industry groups and were lower for 5. These averages are computed in different ways; assuming, however, that the averages are comparable, an overrepresentation of high-wage establishments would be indicated. Here, again, the difference is small; and as it becomes further diluted in the expenditure ratios computed, it may well be considered negligible.

Although the above analysis indicates that this survey response is not significantly biased in the direction of high-wage firms and firms with exceptional benefit programs, such a probability should not be discounted for other samples or for subgroupings among the 550 questionnaires covered in this report. The desirability of excluding establishments with fewer than 100 employees from expenditure surveys is immediately presented as a practice meriting serious consideration.

### The Nonresponse

As mentioned previously, the nonresponse was not surveyed, hence its characteristics cannot be definitely determined. By inference and by assuming that the original sample was truly representative of all manufacturing, the nonresponse could be presumed to have

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<sup>16</sup> Chiefly, the Bureau's community wage surveys and studies of union agreement provisions.

characteristics which are the inverse of those noted above for the response—that is, a higher proportion of small establishments, perhaps somewhat less unionization, perhaps fewer benefits, perhaps a lower average wage level (all of which are related factors). The nonresponse, however, is comprised of two parts (1) the establishments which failed to respond at all to the Bureau's requests, and (2) the establishments which submitted unusable questionnaires or letters explaining why they could not or would not participate in the survey. Over 170 replies of the latter type were received; an analysis of these replies should shed some light on the matter of nonresponse.<sup>17</sup>

Clearly, an important cause of nonresponse or inadequate response was the lack of company records or the amount of time required to summarize available records. As one personnel director wrote:

The amount of time involved that would be required to give you sufficient information . . . would be extremely demanding upon us. Our records are not kept in a manner so that the basic information that you are requesting would be immediately available. . . . In order to gather this information for you would involve, in addition to my own time and members of my department, some time spent by the chief accountant, chief payroll clerk, chief time-keeper and members of their departments.

An official of a large multiplant company stated:

Our main problem stems from the lack of summaries or breakdowns on the specific items on which information is desired. In most instances, it would mean culling the records for 1953 to develop the data, which would be a long tedious task. In other instances, no attempt is made to keep a separate record of the expenditure in question. The questions on pension and insurance plans cannot be answered because we have national coverage involving all types and classifications of employees with no attempt made to break down expenditures by individual units.

In part, difficulties arose in meeting the requirements of the questionnaire, particularly with respect to its limitation to production and related workers. For example:

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<sup>17</sup> As was to be expected, a number of establishments in the original sample were out of business, employed fewer than 20 workers at the time of the survey, or could not be located (classified as nonresponse).

While benefits paid to or on behalf of individuals can be traced to basic records such as clock cards, earnings records, and insurance premium listing statements, we do not have general ledger summaries of amounts paid to "production and related workers." In many instances, the supplemental payments are charged to the same accounts as regular earnings. . . . Premium payments are not segregated from regular earnings in our accounting.

Another official wrote:

The information requested in this survey could be obtained, if necessary, but it would take considerable time and effort to segregate and accumulate the data for production and related workers.

Many of the unusable questionnaires received reflected the difficulties indicated above plus a reluctance to estimate expenditure levels in the absence of precise records.

Refusal to respond at all is, of course, a factor in all voluntary surveys. In this case, several companies expressed to Bureau representatives a lack of interest or usefulness in the subject studied; some thought that the availability of this type of information could be used to their disadvantage in collective bargaining. Such nonrespondents who objected in principle to this survey are believed to be a small minority.



## Establishment Records and Reporting Practices

A major purpose of this pilot study was to determine the prevailing practice among manufacturing establishments with respect to (1) keeping separate records of their expenditures on the selected items of employee remuneration, (2) frequency with which records were summarized or aggregated for the establishments' own purposes, (3) ability to provide data on actual expenditures from these records in the form requested, and (4) methods used in estimating expenditures in the absence of precise records and the general reliability of such estimates.

The reasons for investigating these practices can be summarized briefly. If a substantial proportion of establishments do not keep separate records but, perhaps, account for all expenditures combined under such broad categories as "direct labor" or "overhead," then voluntary expenditure surveys would obviously be impractical. If establishments do not follow the practice of aggregating basic records such as timecards and payroll columns for their own purposes, expenditure surveys requesting annual data would impose an especially heavy burden upon respondents. If establishments cannot supply the type of data requested in this survey, despite the indication that records of some type were kept and summarized, perhaps a different approach might be required. These considerations led to another pertinent question: Are establishment approximations adequate for some purposes? Is it reasonable to assume, for example, that the vast majority of establishments, particularly those which engage in collective bargaining, have a fairly good notion of the amount of expenditures connected with any practice? Such estimates can be derived, in the absence of actual expenditure records, from related information. For example, annual expenditures for 6 paid holidays equal 8 hours a day, times the average hourly rate, times the average number of employees eligible for paid holidays, times 6.

### Expenditure Records

The establishments surveyed were asked the following questions: (1) Do you keep separate expenditure records for each of the selected items covering production and related workers? (2) If you keep such records, how often do you summarize the entries? A "yes" or "no" answer was requested for the first; the period for which summaries were made (e.g., monthly, quarterly, etc.) for the second. Obviously, descriptions of accounting procedures and definitions were not sought.<sup>18</sup> A "yes" answer to the first question was interpreted

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<sup>18</sup> This is not to minimize the need for the development of more uniform accounting procedures among establishments if a higher degree of precision in measuring or comparing expenditure levels is ever to be attained. In the course of this survey, many establishments expressed to the Bureau an interest in the development of standard procedures for maintaining expenditure records.

simply to mean that records of expenditures for the item were available, in whatever form the establishment chose to keep them. A "no" answer can be interpreted in two ways, that (1) separate expenditure records were not kept, or (2) no separation was made between production and related workers and other employees. The information for "all selected items" and for "all selected items excluding premium pay" shown in the accompanying tables represent a composite of the individual entries on the questionnaire.

The response revealed considerable variation in recordkeeping practices among the items studied, with the best showing, as might be expected, for the legally required payments (table 4). The tendency to combine premium pay for overtime with premium pay for holiday work, past with current pension credits, and particularly the various insurance and welfare items, was notable. Possibly no separation was practicable in these instances. The exceptionally high "not kept" rate shown for shift premium pay, the supplementary benefit most likely to be restricted to production and related workers, may be accounted for, in part, by the practice of including shift premium pay directly in basis wages for shift workers for payroll accounting purposes. About half of the establishments surveyed indicated that separate records were kept for each of the selected items in effect in the establishments. Excluding premium pay, the proportion was increased to approximately 70 percent.

The vast majority of the establishments which kept expenditure records summarized the individual entries for their own or other uses (table 5). Considering surveys of expenditures for a full year, which appears thus far to be the most practical period of coverage, it would seem that the most troublesome problem lies in accumulating such payroll items as premium pay for overtime, shift premium pay, and vacation and holiday payments. On the other hand, coverage of a single month or a quarter may depend upon whether an appropriate method of apportioning certain items like pension expenditures could be worked out.

### Time Records

In the absence of expenditure records, it was assumed that time records could be utilized as a basis for computing expenditure totals. As table 6 indicates, this possibility appears most fruitful for the premium pay items, for which time records were kept by higher proportions of establishments than was the case with expenditure records. Although a somewhat higher proportion of establishments summarized expenditure records, the general practice with time records (table 7) did not differ markedly from that for expenditure records (table 5).

A related matter was the response to the questions on vacation, holiday, sick leave, and shift premium practices in part III of the questionnaire. On the whole, the response appeared to be

TABLE 4.—Keeping of expenditure records for production and related workers by item, 1953

Item	Number of establishments with practices in effect	Number of establishments in which expenditure records were—				
		Kept	Not kept	Kept for item in combination with others	Kept for some items <sup>1</sup>	Not reported
Vacations, holidays, and sick leave -----	544	477	29	-	38	-
Paid vacations -----	544	499	31	13	-	1
Paid holidays -----	495	432	48	14	-	1
Paid sick leave -----	103	77	20	3	-	3
Premium pay -----	<sup>2</sup> 541	344	46	-	145	6
Premium pay for overtime -----	<sup>2</sup> 539	391	45	95	-	8
Premium pay for work on holidays -----	<sup>2</sup> 324	139	78	95	-	12
Shift premium pay -----	439	273	125	22	-	19
Total expenditures for pensions -----	310	251	40	-	2	17
Past service credits -----	221	100	32	77	-	12
Current service credits -----	308	175	40	77	-	16
Insurance, health, and welfare -----	513	443	51	3	9	7
Fixed contributions -----	94	89	4	-	-	1
Life insurance -----	411	189	54	159	-	9
Accidental death and dismemberment -----	245	66	30	145	-	4
Accident and sickness benefits -----	350	148	45	153	-	4
Hospitalization -----	388	118	49	216	-	5
Surgical -----	382	102	48	228	-	4
Medical (other than surgical) -----	200	32	26	139	-	3
Other -----	98	19	17	62	-	-
Legally required payments -----	550	487	25	-	34	4
Old Age and Survivors Insurance -----	550	493	35	16	-	6
Unemployment compensation <sup>3</sup> -----	550	492	36	16	-	6
Workmen's compensation -----	541	489	42	3	-	7
State temporary disability insurance -----	47	36	7	3	-	1
All selected items -----	550	270	7	-	273	-
All selected items excluding premium pay -----	550	393	8	-	149	-

<sup>1</sup> Applies only to totals of items in each category.

<sup>2</sup> Based on response to questions on records and expenditures, and does not necessarily reflect prevalence of practice in 1953.

<sup>3</sup> Federal and State.

TABLE 5.—Establishment practice in summarizing expenditure records for production and related workers by item, 1953

Item	Number of establishments keeping records	Number of establishments in which expenditure records were summarized—							
		Each pay period	Monthly	Quarterly	Semi-annually	Annually	Not summarized	Some summarized; others not <sup>1</sup>	Not reported
Vacations, holidays, and sick leave <sup>2</sup> .....	477	208	107	12	6	112	10	7	15
Paid vacations .....	499	224	106	12	7	114	18	-	18
Paid holidays .....	432	245	103	10	2	41	16	-	15
Paid sick leave .....	77	25	28	6	-	13	4	-	1
Premium pay <sup>2</sup> .....	344	213	66	7	-	17	13	17	11
Premium pay for overtime .....	391	257	76	9	1	19	18	-	11
Premium pay for work on holidays .....	139	84	25	3	-	5	20	-	2
Shift premium pay .....	273	169	52	6	-	10	26	-	10
Total expenditures for pensions <sup>2</sup> .....	251	14	67	6	1	139	5	-	19
Past service credits .....	100	2	19	4	1	67	-	-	7
Current service credits .....	175	12	56	5	1	85	4	-	12
Insurance, health, and welfare <sup>2</sup> .....	443	29	281	11	3	80	10	-	29
Fixed contribution .....	89	10	61	1	-	8	2	-	7
Life insurance .....	189	10	117	2	1	45	6	-	8
Accidental death and dismemberment .....	66	2	44	-	-	15	3	-	2
Accident and sickness benefits .....	148	14	91	4	-	32	6	-	1
Hospitalization .....	118	3	83	4	-	21	4	-	3
Surgical .....	102	2	70	1	-	21	4	-	4
Medical (other than surgical) .....	32	1	21	-	-	8	2	-	-
Other .....	19	-	12	-	-	4	2	-	1
Legally required payments <sup>2</sup> .....	487	31	132	87	9	211	4	8	5
Old Age and Survivors Insurance .....	493	80	165	175	-	61	6	-	6
Unemployment compensation .....	492	50	148	131	-	151	6	-	6
Workmen's compensation .....	489	39	200	50	24	158	8	-	10
State temporary disability insurance .....	36	3	18	11	-	2	1	-	1
All selected items <sup>2</sup> .....	270	7	45	25	1	162	1	29	-
All selected items excluding premium pay <sup>2</sup> .....	393	7	68	37	2	256	4	19	-

<sup>1</sup> Applies only to totals of items in each category.<sup>2</sup> Where establishment practice differed among the items comprising the totals, the longest period was selected for tabulation.

TABLE 6 —Keeping of time records for production and related workers by selected items, 1953

Item	Number of establishments with practices in effect	Number of establishments in which time records were—				
		Kept	Not kept	Kept for item in combination with others	Kept for some items <sup>1</sup>	Not reported
Vacations, holidays, and sick leave .....	544	452	56	-	35	1
Paid vacations .....	544	464	67	12	-	1
Paid holidays .....	495	417	65	12	-	1
Paid sick leave .....	103	80	17	3	-	3
Premium pay .....	<sup>2</sup> 541	398	35	-	103	5
Premium pay for overtime .....	<sup>2</sup> 539	408	34	90	-	7
Premium pay for work on holidays .....	<sup>2</sup> 324	172	52	89	-	11
Shift premium pay .....	439	309	93	19	-	18

<sup>1</sup> Applies only to totals of items in each category.<sup>2</sup> Based on response to questions on records and expenditures, and does not necessarily reflect prevalence of practice in 1953.

TABLE 7.—Establishment practice in summarizing time records for production and related workers by selected items, 1953

Item	Number of establishments keeping records	Number of establishments in which time records were summarized—							
		Each pay period	Monthly	Quarterly	Semi-annually	Annually	Not summarized	Some summarized; others not <sup>2</sup>	Not reported
Vacations, holidays, and sick leave <sup>1</sup> .....	451	202	71	11	5	94	34	19	15
Paid vacations .....	464	213	68	13	6	103	43	-	18
Paid holidays .....	417	243	65	10	1	37	45	-	16
Paid sick leave .....	80	36	13	5	-	10	13	-	3
Premium pay <sup>1</sup> .....	398	235	49	10	-	17	43	35	9
Premium pay for overtime .....	408	270	56	10	1	20	41	-	10
Premium pay for work on holidays .....	172	107	19	3	-	6	32	-	5
Shift premium pay .....	309	186	37	4	-	9	58	-	15

<sup>1</sup> Where establishment practice differed among the items comprising the totals, the longest period was selected for tabulation.

<sup>2</sup> Applies only to totals of items in each category.

TABLE 8.—Nature of expenditure figures reported by item, 1953

Item	Number of establishments with practices in effect	Number of establishments reporting—				
		Actual expenditure figure	Estimated expenditure figure	Some actual; some estimated <sup>1</sup>	No expenditures incurred	No information
Vacations, holidays, and sick leave .....	544	408	64	56	-	16
Paid vacations .....	544	452	72	-	-	20
Paid holidays .....	495	362	109	-	1	23
Paid sick leave .....	103	63	24	-	1	15
Premium pay .....	<sup>2</sup> 541	292	61	101	2	85
Premium pay for overtime .....	<sup>2</sup> 539	346	60	-	5	128
Premium pay for work on holiday .....	<sup>2</sup> 324	70	33	-	86	135
Shift premium pay .....	439	223	138	-	5	73
Total expenditures for pensions .....	310	196	71	4	4	35
Past service credits .....	221	72	32	-	6	111
Current service credits .....	308	144	41	-	3	120
Insurance, health, and welfare .....	513	334	130	18	-	31
Fixed contribution .....	94	75	17	-	-	2
Life insurance .....	411	128	68	-	7	208
Accidental death and dismemberment .....	245	36	28	-	6	175
Accident and sickness benefits .....	350	102	51	-	3	194
Hospitalization .....	388	77	47	-	1	263
Surgical .....	382	63	40	-	2	277
Medical (other than surgical) .....	200	17	15	-	1	167
Other .....	98	9	13	-	-	76
Legally required payments .....	550	387	65	72	-	26
Old Age and Survivors Insurance .....	550	422	94	-	-	34
Unemployment compensation <sup>3</sup> .....	550	414	101	-	1	34
Workmen's compensation .....	541	411	106	-	-	24
State temporary disability insurance .....	47	31	7	-	-	9
All selected items .....	550	165	14	240	-	131
All selected items excluding premium pay .....	550	250	17	211	-	72

<sup>1</sup> Applies only to totals of items in each category.

<sup>2</sup> Based on response to questions on records and expenditures, and does not necessarily reflect prevalence of practice in 1953.

<sup>3</sup> Federal and State.

satisfactory. For example, it was possible to compute the average length of vacation for 97 percent of the establishments with a vacation policy in effect. It was possible to compute the relationship between shift premium hours and total payroll hours for 95 percent of the establishments reporting shift premium expenditures. In all cases, adjusted payroll hours (total payroll hours less vacation, holiday, and sick leave hours) were computed, although in a number of questionnaires estimates of hours were provided by the respondents or estimates were computed by the Bureau (by dividing the expenditures for the item by the establishment's gross average hourly earnings).<sup>19</sup>

On the whole, the recordkeeping practices of manufacturing establishments, as reflected in these data, should be encouraging to those with a long-range interest in surveying expenditures for supplementary employee remuneration. Several establishments indicated that appropriate records would be kept if the Bureau planned regular surveys; it is probable, moreover, that the current widespread discussion of supplementary expenditures will stimulate management to plan for finer breakdowns of company expenditures.

#### Actual and Estimated Expenditures

The real measure of the feasibility of collecting expenditure data, at least by means of mail questionnaire, is not recordkeeping practice as such but the ability of the respondent to provide the specific type of data requested from his records. This ability is determined by a number of factors including, chiefly, the form in which the establishment's records are kept and the respondent's willingness to take the trouble to make the necessary summaries from basic records. As one respondent wrote, in explaining the omission of shift premium expenditures: "It would necessitate adding all of our employee clock cards for the year to get that information." Many establishments which reported the keeping of records and their regular summarization nonetheless provided estimated rather than actual expenditure figures, presumably because of various problems inherent in their records or in the type of data requested.

The highest rate of response with actual expenditure figures derived from company records was found for paid vacations, paid

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<sup>19</sup> Such estimating was considered adequate for the purpose since it would take a substantial number of large errors in the same direction to have a significant effect on the aggregate.

holidays, and the legally required payments.<sup>20</sup> For these items, about 75 percent or more of the establishments keeping records provided actual expenditure figures (table 8). As expected, most establishments could not provide actual figures on the insurance components, including many which had indicated that separate records were kept. Apparently it was also difficult to estimate the separate expenditures. The response on total pension expenditures was substantially better than on past and current service credits separately. The very low rate of actual figures for premium pay for work on holidays, and the correspondingly high proportion of cases where no expenditures were incurred during the year or expenditures were not reported, are attributable largely to the restricted definition of premium pay for holiday work used in this survey, as previously explained. It is also likely that some of the establishments not providing data on overtime expenditures incurred no expenditures during the year but failed to indicate this on the questionnaire.

Only about 30 percent of the establishments covered in the survey provided actual expenditure figures for all items listed and in effect. Another 46 percent provided some actual and some estimated figures on the questionnaire or, in a few cases, made estimates for every item. In the balance of the reports (24 percent), total expenditures could not be computed because of the absence of data for one or more of the items in effect. The corresponding proportions for the category "all selected items excluding premium pay" were 45 percent, 42 percent, and 13 percent. Slightly more than 60 percent of the establishments which had indicated that records were kept for each type of expenditure were able to provide actual data on expenditure for each item.

Accepting the type of expenditure figures reported as a measure of an establishment's ability to provide such data, rather than its recordkeeping practices alone, variations among different establishment groups can be roughly appraised. For example, do establishments with a majority of workers covered by collective bargaining agreements keep better records and are they better able to provide actual data than nonunion establishments, possibly as a consequence of their needs in negotiating on these practices?

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<sup>20</sup> One of the accounting problems not anticipated in the formulation of the questionnaire was the difference between legally required payments made during 1953 and the liability incurred for that year. For example, where quarterly payment to the Government is the rule, the expenditures made during 1953 may actually cover the fourth quarter of 1952 and the first three quarters of 1953. Thus, if employment in the fourth quarter of 1953 differs markedly from the corresponding period of 1952, some distortion in expenditure ratios such as "percent of payroll" is created.

The comparison between union and nonunion establishments was most conveniently made in terms of the reporting on item group totals (table 9). A higher proportion of unionized establishments reported actual expenditures for all item totals except premium pay; however, the differences were much too narrow to be conclusive. Indeed, the most striking aspect of this comparison was the similarity rather than the differences in these percentages; this similarity was all the more remarkable in the light of the small sample used.

Considerably more variation was shown among establishments in the different size groups studied (table 10). Certain tendencies were notable; for example, smaller establishments showed a higher proportion of actual reports on insurance, pensions, and legally required expenditures, whereas the reverse seemed to be the case, or differences were not clear, for the payroll item groups—premium pay and vacations, holidays, and sick leave. For "all selected items excluding premium pay," the percentage of actual figures diminished as the size group became larger, which was, perhaps, a reflection of the differences in the number of items in effect among the size groups.

An analysis of the type of response on insurance and pension expenditures by the financing arrangements in effect revealed that for both items actual expenditures were reported for a slightly higher proportion of establishments with noncontributory plans than by those with contributory plans.

A substantial proportion of the respondents offered reasons for failing to provide either an actual or an estimated expenditure figure for an item in effect (table 11). The chief reason, underscoring the response on the keeping of expenditure records (table 4), was that expenditures for the given item were combined with expenditures for another item or other items in the company's records and on this questionnaire. For item groups and for all items combined, the lack of some data prevented a number of establishments from providing an expenditure figure or an estimate. The inability or unwillingness to prorate expenditures to workers in a particular plant or to production and related workers accounted for other omissions.

Respondents providing estimated figures were requested to describe briefly the method or basis of their calculations and most of these respondents complied with this request (table 12). Most prevalent among the methods used were (1) calculating expenditures on the basis of related data, i. e., applying an average rate or a predetermined cost to available data on the number of hours, days, weeks, months, or workers involved, and (2) prorating expenditures as between production and related workers and all employees or the particular grouping of employees covered by the records of the establishment. Experience in previous years was a guide in some cases.

TABLE 9.—Nature of expenditure figures reported for item groups by union status, 1953

Item group and union status	Number of establishments with practices in effect <sup>1</sup>	Percent <sup>2</sup> of establishments reporting—			
		Actual expenditure figure	Estimated expenditure figure	Some actual; some estimated	No expenditure figure <sup>3</sup>
<b>Vacations, holidays, and sick leave:</b>					
Union establishments .....	413	77	12	10	2
Nonunion establishments .....	126	70	13	13	5
<b>Premium pay <sup>4</sup>:</b>					
Union establishments .....	411	54	10	19	16
Nonunion establishments .....	125	54	14	16	15
<b>Total expenditures for pensions:</b>					
Union establishments .....	248	63	22	1	13
Nonunion establishments .....	61	62	26	2	10
<b>Insurance, health and welfare:</b>					
Union establishments .....	399	65	26	4	5
Nonunion establishments .....	109	63	24	3	10
<b>Legally required payments:</b>					
Union establishments .....	416	71	12	13	4
Nonunion establishments .....	129	67	12	15	6
<b>All selected items:</b>					
Union establishments .....	416	31	2	43	24
Nonunion establishments .....	129	28	3	46	23
<b>All selected items excluding premium pay:</b>					
Union establishments .....	416	46	3	39	12
Nonunion establishments .....	129	43	2	38	17

<sup>1</sup> Excludes 5 establishments for which union status was not reported.

<sup>2</sup> Percentages not rounded to add to 100.

<sup>3</sup> Includes some cases of "no expenditures incurred." See table 8.

<sup>4</sup> Based on response to questions on records and expenditures, and does not necessarily reflect prevalence of practice in 1953.

TABLE 10.—Nature of expenditure figures reported for item groups by size of establishment, 1953

Item group and size of establishment	Number of establishments with practices in effect	Percent <sup>1</sup> of establishments reporting—			
		Actual expenditure figure	Estimated expenditure figure	Some actual; some estimated	No expenditure figure <sup>2</sup>
<b>Vacations, holidays, and sick leave:</b>					
Under 100 employees .....	39	54	21	21	5
100 - 499 employees .....	157	73	9	15	3
500 - 999 employees .....	79	70	14	13	4
1,000 - 4,999 employees .....	205	83	10	5	2
5,000 and over .....	64	73	17	8	2
<b>Premium pay<sup>3</sup>:</b>					
Under 100 employees .....	41	56	24	10	10
100 - 499 employees .....	155	49	11	24	16
500 - 999 employees .....	78	59	10	13	18
1,000 - 4,999 employees .....	203	53	7	21	19
5,000 and over .....	64	63	17	13	8
<b>Total expenditures for pensions:</b>					
Under 100 employees .....	7	71	-	-	29
100 - 499 employees .....	52	63	21	2	13
500 - 999 employees .....	40	68	25	5	3
1,000 - 4,999 employees .....	157	62	24	1	13
5,000 and over .....	54	61	24	-	15
<b>Insurance, health, and welfare:</b>					
Under 100 employees .....	30	80	17	-	3
100 - 499 employees .....	141	72	18	3	6
500 - 999 employees .....	77	69	27	3	1
1,000 - 4,999 employees .....	201	59	29	5	6
5,000 and over .....	64	58	30	2	11
<b>Legally required payments:</b>					
Under 100 employees .....	42	88	-	7	5
100 - 499 employees .....	159	70	6	18	6
500 - 999 employees .....	80	81	11	8	-
1,000 - 4,999 employees .....	205	68	13	14	5
5,000 and over .....	64	53	31	9	6
<b>All selected items:</b>					
Under 100 employees .....	42	36	-	40	24
100 - 499 employees .....	159	30	-	50	20
500 - 999 employees .....	80	36	1	43	20
1,000 - 4,999 employees .....	205	26	3	41	30
5,000 and over .....	64	33	9	39	19
<b>All selected items excluding premium pay:</b>					
Under 100 employees .....	42	50	-	36	14
100 - 499 employees .....	159	51	1	36	13
500 - 999 employees .....	80	46	1	48	5
1,000 - 4,999 employees .....	205	42	3	39	16
5,000 and over .....	64	39	13	33	16

<sup>1</sup> Percentages not rounded to add to 100.

<sup>2</sup> Includes some cases of "no expenditures incurred." See table 8.

<sup>3</sup> Based on response to questions on records and expenditures, and does not necessarily reflect prevalence of practice in 1953.

TABLE 11.—Reasons offered for failure to report expenditures by item, 1953

Item	Number of establishments not reporting	Number of establishments not reporting because—						Reason not reported
		Data for plant not available <sup>1</sup>	Data for production workers not available <sup>2</sup>	Data for item not available <sup>3</sup>	Records not summarized	Some data lacking <sup>4</sup>	Other reasons	
Vacations, holidays, and sick leave .....	16	-	2	-	2	11	-	1
Paid vacations .....	20	-	2	14	2	-	-	2
Paid holidays .....	23	-	2	14	2	-	-	5
Paid sick leave .....	15	-	1	4	2	-	-	8
Premium pay .....	85	1	1	-	1	68	-	14
Premium pay for overtime .....	128	1	1	96	2	-	7	21
Premium pay for work on holidays .....	135	1	1	97	3	-	-	33
Shift premium pay .....	73	1	2	24	3	-	2	41
Total expenditures for pensions .....	35	6	13	1	-	1	-	14
Past service credits .....	111	6	7	89	-	-	-	9
Current service credits .....	120	6	13	89	-	-	-	12
Insurance, health, and welfare .....	31	5	9	1	-	8	1	7
Fixed contribution .....	2	1	1	-	-	-	-	-
Life insurance .....	208	6	8	183	-	-	1	10
Accidental death and dismemberment .....	175	2	5	164	-	-	-	4
Accident and sickness benefits .....	194	6	7	178	-	-	-	3
Hospitalization .....	263	4	8	245	-	-	-	6
Surgical .....	277	4	8	260	-	-	-	5
Medical (other than surgical) .....	167	2	2	159	-	-	-	4
Other .....	76	1	-	74	-	-	-	1
Legally required payments .....	26	2	5	-	-	14	-	5
Old Age and Survivors Insurance .....	34	3	6	17	-	-	-	8
Unemployment compensation .....	34	2	6	17	-	-	1	8
Workmen's compensation .....	24	3	8	3	-	-	-	10
State temporary disability insurance .....	9	1	2	4	-	-	-	2
All selected items .....	131	-	1	-	-	130	-	-
All selected items excluding premium pay .....	72	-	1	-	-	71	-	-

<sup>1</sup> Company could not segregate establishment data from companywide data.

<sup>2</sup> Establishment could not segregate data for production and related workers from data for all employees.

<sup>3</sup> Figure was combined and reported with other expenditure items.

<sup>4</sup> Applies only to totals of items in each category.

TABLE 12.—Methods of estimating expenditures by item, 1953

Item	Number of establishments providing estimated figures	Number of establishments in which estimates were arrived at by—						Method not reported
		Calculating on basis of related data <sup>1</sup>	Prorating among employees <sup>2</sup>	Prorating among plants	Past experience	Other methods	Methods varied among items <sup>3</sup>	
Vacations, holidays, and sick leave -----	64	40	8	-	1	3	8	4
Paid vacations -----	72	49	6	-	1	11	-	5
Paid holidays -----	109	78	9	-	1	13	-	8
Paid sick leave -----	24	14	4	-	-	2	-	4
Premium pay -----	61	27	8	-	1	4	10	11
Premium pay for overtime -----	60	25	8	-	1	8	-	18
Premium pay for work on holidays -----	33	20	1	-	1	6	-	5
Shift premium pay -----	138	111	10	-	2	6	-	9
Total expenditures for pensions -----	71	15	27	6	1	11	1	10
Past service credits -----	32	7	15	3	-	5	-	2
Current service credits -----	41	10	17	3	-	7	-	4
Insurance, health, and welfare -----	130	35	49	2	6	20	2	16
Fixed contribution -----	17	9	5	-	-	1	-	2
Life insurance -----	68	17	19	4	7	13	-	8
Accidental death and dismemberment -----	28	6	4	1	4	6	-	7
Accident and sickness benefits -----	51	14	16	3	4	7	-	7
Hospitalization -----	47	17	13	-	1	7	-	9
Surgical -----	40	17	9	-	2	6	-	6
Medical (other than surgical) -----	15	6	1	1	2	4	-	1
Other -----	13	4	3	-	-	4	-	2
Legally required payments -----	65	9	27	4	1	8	8	8
Old Age and Survivors Insurance -----	94	25	38	4	2	10	-	15
Unemployment compensation -----	101	24	42	5	3	12	-	15
Workmen's compensation -----	106	15	32	7	10	20	-	22
State temporary disability insurance -----	7	3	2	-	-	1	-	1
All selected items -----	14	1	4	-	-	-	8	1
All selected items excluding premium pay -----	17	1	4	-	-	-	11	1

<sup>1</sup> Estimate was arrived at by applying an average rate or predetermined cost to appropriate number of hours, days, weeks, months, workers, etc.

<sup>2</sup> Arrived at by using ratio of production and related workers to total employees.

<sup>3</sup> Applies only to totals of items in each category.

Although these methods of estimation appear to be quite reasonable, they have shortcomings in precision, at least in principle. Using an average hourly or weekly wage and the average number of workers in computing holiday and vacation expenditures, for example, may fail to take account of absenteeism, ineligibility, or other factors affecting such expenditures. Prorating expenditures may result in a disproportionate share being attributed to one group because of differences in earnings levels, programs, etc. Other possibilities, including simple arithmetical errors, may also influence these estimates. However, recognizing the possibilities of overstatement, understatement or error, the question insofar as expenditure surveys are concerned remains: Are estimates so unreliable as to introduce an appreciable overall bias into aggregate expenditure data and, if so, in what direction? This question will be examined, along with other factors affecting expenditure levels, in the following section.



## Factors Affecting Expenditure Levels

Expenditure levels for selected items of supplementary remuneration and ratios of expenditures to payrolls, man-hours, and employment vary widely among manufacturing establishments. The remainder of this report is devoted to an examination of the factors making for these differences among individual establishments in levels of expenditures and variations among establishment groups classified by industry, size, unionization, type of practice, and earnings levels. The question of actual as against estimated or calculated expenditure reporting, raised in the previous section, will be examined in connection with aggregate data.

It is important to emphasize that the primary purpose of this analysis is to provide guides for the development of survey techniques. The data shown in the accompanying tables and referred to in the text are not presented as measures of expenditure levels applicable to manufacturing as a whole. Among responding establishments, those incurring no expenditures for the particular items studied and those unable to provide expenditure data were omitted from these tabulations. No attempt was made to correct for the varying response rates among industries and among establishments of different sizes, as discussed earlier in this report. A cautionary note is appended to each table in order to discourage or prevent the use of these data outside of their relationship to this exploratory study.

However, the large body of expenditure information developed in the survey can be validly used to throw light on a variety of questions important for survey planning. For example, the dispersion that can be expected in a value or series of values (e.g., expenditures for paid vacations) to be derived from a survey has practical implications for sample design. The analysis of expenditure variations in this particular study shows at least the minimum range within which variation in expenditure ratios are likely to occur in manufacturing. A distribution of expenditure ratios among a larger group of establishments might reveal a greater range; obviously the range would not be smaller.

### Establishment Expenditure Levels

As the tables accompanying this report show, there is a wide range among establishments in expenditure levels for the same item as expressed in cents per hour, percent of payroll, and dollars per year per employee. To account for this range, it is necessary to consider, first, the factors making for variations among establishments in the dollar volume of expenditures and, second, the effect on relative expenditure levels of the conversion to the ratios commonly used to compare expenditures among establishments.

The type of practice and the length of time the practice was in effect (the full year or less) are but two of many factors determining an establishment's annual expenditure for the item. The number of workers employed is obviously a primary determinant. However, assuming the same employment level among establishments, a variety of other factors appear to account for the differences in expenditures among establishments with the same paid holiday or paid vacation practice or identical insurance and welfare programs for the entire year. Listed below are some of these factors, other than size of the labor force.<sup>21</sup>

**Some Factors Accounting for Variations Among Establishments in Expenditures for Selected Items of Supplementary Employee Remuneration (Other Than Size of Labor Force)**

Paid vacations

- Type of vacation policy
- Eligibility requirements
- Length-of-service distribution of labor force
- Number of hours paid for in vacation week
- Wage level
- Method of vacation payment (e.g., regular weekly pay, percent of annual earnings, etc.)
- Turnover of labor

Paid holidays

- Number of paid holidays
- Practice regarding payment for holidays falling on nonscheduled workday
- Eligibility requirements
- Wage level
- Method of computing day's pay under incentive wage systems
- Turnover and seasonal fluctuations in employment
- Absenteeism in holiday week

Premium pay for overtime (including premium pay for weekend work)

- Volume of overtime work
- Practice regarding daily overtime and work on Saturday and Sunday as such
- Premium rate paid
- Wage level

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<sup>21</sup> Differences in accounting procedures, which may apply to all of the items, although perhaps in varying degrees, add another complication to any precise explanation of differences in expenditure levels.

Shift premium pay

Volume of shift work  
 Shift premiums paid  
 Wage level (where premiums are expressed as  
 as percent of hourly rate)

Pension plans (excluding administrative costs)

Type of program (provisions for vesting, disability and early retirement, normal retirement age, etc.)  
 Level of benefits  
 Method of funding (pay-as-you-go, profit-sharing, etc.)  
 Amount of employee contributions, if any  
 Rate and amount of funding of past service liability under self-insured funded plans  
 Service, sex, and age composition of covered employees  
 Eligibility requirements  
 Rate of retirement; rate of mortality; return on investments, etc.

Insurance, health, and welfare plans (net expenditures, excluding administrative costs)

Type of benefits provided (life insurance, hospitalization, etc.)  
 Level and duration of benefits  
 Coverage of dependents and retired workers  
 Amount of employee contributions, if any  
 Age and sex composition of covered employees and nature of work  
 Eligibility requirements  
 Claim experience  
 Wage level  
 Contingency reserves; varying premium charges, etc.

Legally required payments

Rate (where experience rating or individual State requirements are factors)  
 Earnings level  
 Location (re State temporary disability laws)  
 Company practice (when payments are made, prepayment, delinquency and fines, etc.)

All other things being equal—i.e., type of practice, eligibility requirements, wage levels, etc.—the conversion of equivalent dollar expenditures into cents per hour, percent of payroll, and dollars per year per employee introduces the largely unrelated influence of differences in annual man-hours and gross payrolls and

in the nature of employment.<sup>22</sup> The effect of differences in man-hours is illustrated by a simple hypothetical example of two establishments with the same paid holiday practice, employment, average hourly earnings level, and expenditures, but with a different volume of hours paid for during the year, as follows:

	<u>Establishment A</u>	<u>Establishment B</u>
Average employment .....	500	500
Average hourly earnings .....	\$2.00	\$2.00
Expenditures for 6 paid holidays (6 × 8 × \$2 × 500) .....	\$48,000	\$48,000
Average man-hours per year .....	2,100	2,000
Gross payroll .....	\$2,100,000	\$2,000,000
Expenditures per payroll hour: (Expenditures) .....	4.57¢	4.8¢
(Total man-hours)		
Percent of payroll: (Expenditures) .....	2.29%	2.4%
(Gross payroll)		

If we were to assume, further, that Establishment A averaged 100 hours of overtime work per employee (included in the 2,100 hours), paid for at time and one-half, the difference between the two establishments in percent of payroll would be widened, as follows:

	<u>Establishment A</u>	<u>Establishment B</u>
Gross payroll .....	\$2,150,000	\$2,000,000
Percent of payroll .....	2.23%	2.4%

In the above example, expenditures for paid holidays per employee would be identical for the two establishments (\$96). However, employment practices vary so widely between establishments, owing to turnover, absenteeism, seasonality, etc., that it is unrealistic to assume either a real equality in average employment levels or equivalent annual expenditures for a given average employment level. In other words, there is usually an appreciable difference between dividing expenditures by average employment and dividing expenditures by the number of workers actually sharing in the expenditure. Thus, expenditures per year per employee are also subject to a distortion arising from the conversion. Using the above example, this distortion can be illustrated simply by assuming that out of the

<sup>22</sup> For an extended discussion of these problems, see Computing the Costs of Fringe Benefits, National Industrial Conference Board, Studies in Personnel Policy, No. 128, 1952.

average of 500 employees for Establishment B an average of 50 employees did not receive 6 paid holidays, by reason of short-term employment, absenteeism, etc. Thus:

	<u>Establishment A</u>	<u>Establishment B</u>
Average employment -----	500	500
Average number receiving holiday pay -----	500	450
Expenditures for 6 paid holidays -----	\$48,000	\$43,200
Average per employee (Expenditures) ( <u>500</u> ) -----	\$96.00	\$86.40

Many of the factors influencing gross expenditure levels and the computed expenditure ratios among establishments also account for changes in the same establishment from one year to another. Changes in the volume of overtime work, for example, not only make for changes in expenditures for premium pay but also affect the percent-of-payroll ratios for other items. Even with the same practices in effect, it is apparent that establishment expenditures for a given item in cents per hour would fluctuate from year to year, possibly simply as a consequence of a rise or fall in total man-hours. The most unstable expenditures are likely to be for premium pay for overtime and shift work, since expenditures depend largely on the volume of such work; and expenditures for pensions, particularly for funding of past service liability and for profit-sharing trust funds, which may be determined in large measure by the profit position of the establishment and by changes in tax laws.

#### Average Expenditure Ratios

With the wide range of expenditure ratios among establishments, an arithmetic average of the establishment ratios provides the most convenient device for determining whether there are significant differences in expenditures between establishments grouped according to a common characteristic. As previously explained, this survey was not designed to permit the calculation of any average expenditure level applicable to all manufacturing or to the separate industry groups. However, to measure the differences in expenditures among establishments according to the characteristics usually considered important in sampling techniques, such as size, or in connection with a particular practice, the computation of a single figure representative of the array was necessary.

A choice between two types of averages was presented. One was to compute, if possible, averages applying to all establishments in the survey, including establishments with zero expenditures (i.e., no practice in effect or no expenditures incurred) and, by some method

of inference, the establishments which could not report expenditures for particular items. The alternative method, which was adopted in this survey, was to compute averages covering only establishments reporting an expenditure.<sup>23</sup>

The chief advantage of an average of expenditure ratios, aside from its greater flexibility in use, lay in permitting the examination of expenditure variations apart from variations in the prevalence of the individual practices. Comparisons among establishment groups in pension expenditures, for example, would thus be limited to establishments having a pension plan in effect (and able to report expenditures for the year). The special character of such averages and their limitations should be borne in mind; obviously the data discussed in the following pages should not be imputed to any larger sample or group of establishments which would include establishments without the particular practice in effect.

Actual and Estimated Reporting.—In the previous section of this report, the question was raised as to whether the reporting of estimated or calculated figures in place of actual figures introduced an appreciable bias into aggregate data. Comparisons of average expenditure ratios between establishments providing actual figures and those providing estimated figures showed relatively slight and inconsistent differences for the items studied. Virtually no significant difference was reflected by the averages for actual figures and for all reporting establishments combined; that is, the inclusion of estimated figures had only a negligible effect on overall data.

In cents-per-payroll hour, the largest differences between the averages for actual figures and for all reports among the individual items (excluding "all selected items" and "all selected items excluding premium pay") amounted to 0.2 cents for total premium pay (table 13). For all other items, the averages were identical or differed by 0.1 cent. In average percent of payroll, no difference

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<sup>23</sup> The formulas for computing the ratios used—cents-per-payroll hour, cents-per-adjusted-payroll hour, percent of payroll, and expenditures per employee per year—were described in the first section of this report. The average ratio is a simple arithmetic average of the establishment ratios, which was the averaging device contemplated in the sample design. This form of average is influenced by the size (employment) of the establishments in the sample because of the varying proportions of establishments in each size class that were included. For example, an establishment employing 100 workers had an equivalent weight in the tabulations to one of 1,000 workers. However, the small establishment had only about one-tenth the chance of inclusion of the larger establishment. Thus, each block of 1,000 workers—e.g., those in 10 establishments of 100 workers each or in 1 establishment of 1,000 workers—had approximately equal influence on the averages.

TABLE 13.—Average expenditures per payroll hour for reporting establishments only\* by item and nature of report, 1953

Item	All reports		Actual figures		Estimated figures		Some actual; some estimated <sup>1</sup>	
	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures	Average per payroll hour (cents)
Vacation, holidays, and sick leave -----	528	9.2	408	9.1	64	9.3	56	10.0
Paid vacations -----	524	5.8	452	5.8	72	5.6	-	-
Paid holidays -----	471	3.4	362	3.4	109	3.6	-	-
Paid sick leave -----	87	1.7	63	1.7	24	1.7	-	-
Premium pay -----	454	9.1	292	8.9	61	8.5	101	9.8
Premium pay for overtime -----	406	7.2	346	7.3	60	6.7	-	-
Premium pay for work on holidays -----	103	.5	70	.5	33	.5	-	-
Shift premium pay -----	361	2.4	223	2.5	138	2.4	-	-
Total expenditures for pensions -----	271	7.0	196	6.9	71	7.4	4	( <sup>2</sup> )
Past service credits -----	104	3.8	72	3.9	32	3.7	-	-
Current service credits -----	185	4.9	144	4.9	41	4.9	-	-
Insurance, health, and welfare -----	482	3.1	334	3.1	130	3.1	18	( <sup>2</sup> )
Fixed contribution -----	92	2.9	75	2.9	17	( <sup>2</sup> )	-	-
Life insurance -----	196	.8	128	.9	68	.8	-	-
Accidental death and dismemberment -----	64	.1	36	.1	28	.1	-	-
Accidental and sickness benefits -----	153	1.1	102	1.2	51	.9	-	-
Hospitalization -----	124	1.1	77	1.1	47	1.0	-	-
Surgical -----	103	.5	63	.6	40	.5	-	-
Medical (other than surgical) -----	32	.3	17	( <sup>2</sup> )	15	( <sup>2</sup> )	-	-
Other -----	22	.6	9	( <sup>2</sup> )	13	( <sup>2</sup> )	-	-
Legally required payments -----	524	6.5	387	6.5	65	6.2	72	6.4
Old Age and Survivors Insurance -----	516	2.5	422	2.5	94	2.5	-	-
Unemployment compensation -----	515	2.3	414	2.3	101	2.2	-	-
Workmen's compensation -----	517	1.6	411	1.7	106	1.5	-	-
State temporary disability insurance -----	38	.7	31	.7	7	( <sup>2</sup> )	-	-
All selected items -----	419	30.8	165	29.7	14	( <sup>2</sup> )	240	31.4
All selected items excluding premium pay ----	478	22.2	250	20.8	17	( <sup>2</sup> )	211	23.6

<sup>1</sup> Applies only to totals of items in each category.

<sup>2</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

greater than 0.1 percent appeared; most of the averages were identical (table 14). The stability of the averages for all reports combined is further illustrated by the data on expenditures per employee per year (table 15) which revealed a maximum difference (for total premium pay) of \$4 a year per employee as measured against an average expenditure level of close to \$200.

The averages for actual and estimated reports, as shown in these three tables, were remarkably close, considering the small number of observations upon which they were based. Differences of these small magnitudes can be caused by a number of factors other than estimating errors. In short, no evidence of a consistent bias, upwards or downwards, was presented by these comparisons.

On the other hand, the averages for vacations, holiday, and sick leave expenditures combined, for total premium pay, for "all selected items," and for "all selected items excluding premium pay," which were based on figures in part actual and in part estimated, were consistently higher than the averages based upon all reports (tables 13, 14, 15). This may have been, in part, the consequence of reporting errors, although it is impossible to determine to what extent the errors lay in the estimated portion of these figures. An overlap of the establishment's actual figures and its estimates may have been responsible for an overstatement in these totals. It is also possible that the establishments reporting on this basis had more individual items in effect than the establishments providing actual figures. At any rate, the impact of these figures on the averages for all reports was slight or negligible.<sup>24</sup>

Without dismissing as inconsequential the problem attached to obtaining estimated expenditures and the need for more exhaustive scrutiny of establishment reporting of expenditures based in part on estimates, there appears to be no pressing need to present actual and estimated data separately in the tabulations accompanying this report. In the accompanying discussion, the conclusions drawn from the combined data would not be significantly different if they were to be based solely on actual figures.

Expenditures per Adjusted Payroll Hour.—As previously noted, establishment expenditures can be related, with meaning, either to total man-hours paid for (cents-per-payroll hour) or to an adjusted hours total omitting the vacation, holiday, and sick leave hours paid for and taken (cents-per-adjusted-payroll hour). In the accompanying tables, one or the other cents-per-hour ratio was used, but not

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<sup>24</sup> It is noteworthy that in the case of total premium pay the averages for the estimated and the partially estimated figures differed in opposite directions from the average of actual figures.

TABLE 14.—Average expenditures as percent of payroll for reporting establishments only\* by item and nature of report, 1953

Item	All reports		Actual figures		Estimated figures		Some actual; some estimated <sup>1</sup>	
	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures	Average percent of payroll
Vacations, holidays, and sick leave -----	528	4.9	408	4.8	64	4.8	56	5.3
Paid vacations -----	524	3.1	452	3.1	72	2.9	-	-
Paid holidays -----	471	1.8	362	1.8	109	1.9	-	-
Paid sick leave -----	87	.9	63	.8	24	.9	-	-
Premium pay -----	454	4.8	292	4.7	61	4.7	101	5.2
Premium pay for overtime -----	406	3.9	346	3.9	60	3.8	-	-
Premium pay for work on holidays -----	103	.3	70	.3	33	.3	-	-
Shift premium pay -----	361	1.2	223	1.2	138	1.2	-	-
Total expenditures for pensions -----	271	3.5	196	3.5	71	3.8	4	( <sup>2</sup> )
Past service credits -----	104	1.9	72	1.9	32	2.0	-	-
Current service credits -----	185	2.5	144	2.4	41	2.5	-	-
Insurance, health, and welfare -----	482	1.7	334	1.7	130	1.7	18	( <sup>2</sup> )
Fixed contribution -----	92	1.6	75	1.6	17	( <sup>2</sup> )	-	-
Life insurance -----	196	.5	128	.5	68	.4	-	-
Accidental death and dismemberment -----	64	( <sup>3</sup> )	36	( <sup>3</sup> )	28	( <sup>3</sup> )	-	-
Accident and sickness benefits -----	153	.6	102	.6	51	.5	-	-
Hospitalization -----	124	.6	77	.6	47	.6	-	-
Surgical -----	103	.3	63	.3	40	.3	-	-
Medical (other than surgical) -----	32	.1	17	( <sup>2</sup> )	15	( <sup>2</sup> )	-	-
Other -----	22	.4	9	( <sup>2</sup> )	13	( <sup>2</sup> )	-	-
Legally required payments -----	524	3.6	387	3.7	65	3.3	72	3.6
Old Age and Survivors Insurance -----	516	1.4	422	1.4	94	1.4	-	-
Unemployment compensation -----	515	1.3	414	1.4	101	1.2	-	-
Workmen's compensation -----	517	.9	411	.9	106	.8	-	-
State temporary disability insurance -----	38	.4	31	.4	7	( <sup>2</sup> )	-	-
All selected items -----	419	16.5	165	15.9	14	( <sup>2</sup> )	240	17.0
All selected items excluding premium pay -----	478	11.9	250	11.3	17	( <sup>2</sup> )	211	12.6

<sup>1</sup> Applies only to totals of items in each category.

<sup>2</sup> Number of establishments too small to justify computation of an average.

<sup>3</sup> Less than 0.05 percent.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 15.—Average expenditures per year per employee for reporting establishments only\* by item and nature of report, 1953

Item	All reports		Actual figures		Estimated figures		Some actual; some estimated <sup>1</sup>	
	Number of establishments reporting expenditures	Average per year per employee	Number of establishments reporting expenditures	Average per year per employee	Number of establishments reporting expenditures	Average per year per employee	Number of establishments reporting expenditures	Average per year per employee
Vacations, holidays, and sick leave -----	528	\$192	408	\$190	64	\$193	56	\$210
Paid vacations -----	524	120	452	120	72	118	-	-
Paid holidays -----	471	72	362	71	109	75	-	-
Paid sick leave -----	87	37	63	37	24	37	-	-
Premium pay -----	454	196	292	192	61	188	101	210
Premium pay for overtime -----	406	158	346	159	60	148	-	-
Premium pay for work on holidays -----	103	12	70	11	33	13	-	-
Shift premium pay -----	361	51	223	52	138	49	-	-
Total expenditures for pensions -----	271	149	196	148	71	155	4	( <sup>2</sup> )
Past service credits -----	104	81	72	83	32	77	-	-
Current service credits -----	185	104	144	104	41	106	-	-
Insurance, health, and welfare -----	482	65	334	65	130	65	18	( <sup>2</sup> )
Fixed contribution -----	92	59	75	59	17	( <sup>2</sup> )	-	-
Life insurance -----	196	18	128	18	68	17	-	-
Accidental death and dismemberment -----	64	2	36	2	28	3	-	-
Accident and sickness benefits -----	153	23	102	25	51	18	-	-
Hospitalization -----	124	22	77	22	47	21	-	-
Surgical -----	103	11	63	12	40	11	-	-
Medical (other than surgical) -----	32	6	17	( <sup>2</sup> )	15	( <sup>2</sup> )	-	-
Other -----	22	12	9	( <sup>2</sup> )	13	( <sup>2</sup> )	-	-
Legally required payments -----	524	135	387	136	65	128	72	132
Old Age and Survivors Insurance -----	516	52	422	52	94	52	-	-
Unemployment compensation -----	515	47	414	48	101	46	-	-
Workmen's compensation -----	517	34	411	35	106	31	-	-
State temporary disability insurance -----	38	15	31	15	7	( <sup>2</sup> )	-	-
All selected items -----	419	649	165	627	14	( <sup>2</sup> )	240	663
All selected items excluding premium pay -----	478	464	250	434	17	( <sup>2</sup> )	211	496

<sup>1</sup> Applies only to totals of items in each category.

<sup>2</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

both.<sup>25</sup> The general relationship between the averages computed on the basis of total man-hours and of adjusted man-hours is shown in table 16. On the whole (and considering the possible effects of rounding), the averages based on adjusted man-hours were about 5 percent higher than those based on total payroll hours.

Variations by Size of Establishment.—Although expenditures varied widely among establishments in each of the five size classifications used, on the average large establishments had higher expenditure ratios than small establishments on the sum of all the items of supplementary employee remuneration studied and on most of the individual voluntary practices. The reverse order, however, held for specific items such as premium pay for overtime and legally required payments. These relationships are set forth in terms of cents-per-payroll hour (table 17) and percent of payroll (table 18).

For paid vacations, paid holidays, paid sick leave, and the total for this group, cents-per-hour and percent-of-payroll averages increased progressively with the increase in the size classification. For example, average expenditures per payroll hour for paid vacations ranged from 4 cents for establishments with fewer than 100 workers to about 7 cents for establishments with more than 5,000 workers. In percent of payroll, the corresponding range was from 2.4 percent to 3.5 percent. Although the size variations in cents per hour were undoubtedly influenced by differences in earnings levels, the variation in percent of payroll for these items indicates that, on the average, practices among the size classes differed in their liberality or in their effect.

Expenditures for overtime premium pay reflected a contrary tendency; that is, in cents per hour and percent of payroll the averages decreased somewhat as the size category increased, with but one exception. However, average expenditures for shift premium pay were markedly higher for the larger establishments, as was average total premium pay.

Pension expenditures per hour and as a percent of payroll were not notably different among the size classes; for insurance benefits, cents-per-hour expenditures were higher for the larger establishments, but percent-of-payroll averages were at approximately the same level.

Legally required payments represented a progressively smaller percent of payroll, on the average, as the establishment-size groupings increased. The same situation was reflected in terms of cents

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<sup>25</sup> Similarly, expenditures per employee per year are not shown for all breakdowns.

TABLE 16.—Difference between average expenditures per payroll hour and average expenditures per adjusted payroll hour, <sup>1</sup> for reporting establishments only\* by item, 1953

Item	Average per payroll hour (cents)	Average per adjusted payroll hour <sup>1</sup> (cents)	Difference	
			Cents	Percent <sup>2</sup>
Vacations, holidays, and sick leave -----	9.2	9.8	0.6	6.5
Paid vacations -----	5.8	6.1	.3	
Paid holidays -----	3.4	3.7	.3	
Paid sick leave -----	1.7	1.9	.2	
Premium pay -----	9.1	9.5	.4	4.4
Premium pay for overtime -----	7.2	7.6	.4	
Premium pay for work on holidays -----	.5	.6	.1	
Shift premium pay -----	2.4	2.6	.2	
Total expenditures for pensions -----	7.0	7.4	.4	5.7
Past service credits -----	3.8	4.0	.2	
Current service credits -----	4.9	5.2	.3	
Insurance, health, and welfare -----	3.1	3.3	.2	6.5
Fixed contribution -----	2.9	3.1	.2	
Life insurance -----	.8	.9	.1	
Accidental death and dismemberment -----	.1	.1	-	
Accident and sickness benefits -----	1.1	1.2	.1	
Hospitalization -----	1.1	1.1	-	
Surgical -----	.5	.6	.1	
Medical (other than surgical) -----	.3	.3	-	
Other -----	.6	.7	.1	
Legally required payments -----	6.5	6.8	.3	4.6
Old Age and Survivors Insurance -----	2.5	2.6	.1	
Unemployment compensation -----	2.3	2.4	.1	
Workmen's compensation -----	1.6	1.7	.1	
State temporary disability insurance -----	.7	.8	.1	
All selected items -----	30.8	32.5	1.7	5.5
All selected items excluding premium pay -----	22.2	23.5	1.3	5.9

<sup>1</sup> Adjusted payroll hours = total payroll hours less vacation, holiday, and sick leave hours paid for and taken.

<sup>2</sup> Computed only for totals of items in each category.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 17.—Expenditures per payroll hour for reporting establishments only\*  
by item and size of establishment, 1953

Item and size of establishment	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures of—										
			Under 2 cents	2 and under 4 cents	4 and under 6 cents	6 and under 8 cents	8 and under 10 cents	10 and under 12 cents	12 and under 14 cents	14 and under 16 cents	16 and under 18 cents	18 and under 20 cents	20 cents and over
Vacations, holidays, and sick leave	528	9.2	22	35	49	78	122	103	60	33	13	10	3
Under 100 employees	37	6.3	6	3	9	6	7	4	1	1	-	-	-
100 - 499 employees	152	7.4	12	17	23	32	34	20	6	7	1	-	-
500 - 999 employees	76	8.8	3	4	7	15	21	13	6	3	2	1	1
1,000 - 4,999 employees	200	10.5	1	11	9	17	51	54	30	13	6	7	1
5,000 and over	63	12.0	-	-	1	8	9	12	17	9	4	2	1
Paid vacations	524	5.8	34	98	158	140	63	22	7	2	-	-	-
Under 100 employees	39	4.0	9	13	9	6	1	1	-	-	-	-	-
100 - 499 employees	150	4.6	19	45	50	21	11	4	-	-	-	-	-
500 - 999 employees	76	5.4	5	15	27	24	3	-	1	1	-	-	-
1,000 - 4,999 employees	197	6.6	1	21	59	67	31	13	4	1	-	-	-
5,000 and over	62	7.2	-	4	13	22	17	4	2	-	-	-	-
Paid holidays	471	3.4	61	245	147	17	-	1	-	-	-	-	-
Under 100 employees	31	2.7	9	16	5	1	-	-	-	-	-	-	-
100 - 499 employees	124	3.0	26	70	25	3	-	-	-	-	-	-	-
500 - 999 employees	70	3.3	11	37	20	1	-	1	-	-	-	-	-
1,000 - 4,999 employees	186	3.7	11	98	69	8	-	-	-	-	-	-	-
5,000 and over	60	3.9	4	24	28	4	-	-	-	-	-	-	-
Paid sick leave	87	1.7	56	23	7	-	-	1	-	-	-	-	-
Under 100 employees	5	(1)	4	-	1	-	-	-	-	-	-	-	-
100 - 499 employees	19	.8	18	1	-	-	-	-	-	-	-	-	-
500 - 999 employees	11	(1)	8	3	-	-	-	-	-	-	-	-	-
1,000 - 4,999 employees	32	2.1	19	9	3	-	-	1	-	-	-	-	-
5,000 and over	20	2.5	7	10	3	-	-	-	-	-	-	-	-
Premium pay	454	9.1	49	64	52	60	56	47	36	22	26	16	26
Under 100 employees	37	7.4	9	7	4	3	2	4	4	-	2	-	2
100 - 499 employees	130	8.4	24	17	14	17	20	6	7	7	7	4	7
500 - 999 employees	64	8.4	9	10	11	6	5	7	3	1	7	1	4
1,000 - 4,999 employees	164	9.7	7	24	22	25	14	16	19	9	8	10	10
5,000 and over	59	10.3	-	6	1	9	15	14	3	5	2	1	3
Overtime premium pay	406	7.2	68	77	64	49	41	30	26	20	14	3	14
Under 100 employees	35	7.5	9	6	3	3	4	3	3	-	2	-	2
100 - 499 employees	125	7.5	28	22	14	16	9	8	6	10	4	1	7
500 - 999 employees	60	6.9	13	9	10	6	8	4	2	2	4	1	1
1,000 - 4,999 employees	145	7.2	18	28	28	17	15	11	13	7	3	1	4
5,000 and over	41	6.7	-	12	9	7	5	4	2	1	1	-	-
Premium pay for work on holidays	103	.5	94	8	1	-	-	-	-	-	-	-	-
Under 100 employees	3	(1)	1	2	-	-	-	-	-	-	-	-	-
100 - 499 employees	20	.2	20	-	-	-	-	-	-	-	-	-	-
500 - 999 employees	18	.5	17	1	-	-	-	-	-	-	-	-	-
1,000 - 4,999 employees	50	.6	45	4	1	-	-	-	-	-	-	-	-
5,000 and over	12	(1)	11	1	-	-	-	-	-	-	-	-	-
Shift premium pay	361	2.4	170	138	27	21	5	-	-	-	-	-	-
Under 100 employees	7	(1)	5	1	1	-	-	-	-	-	-	-	-
100 - 499 employees	92	1.4	66	24	2	-	-	-	-	-	-	-	-
500 - 999 employees	49	2.1	27	17	2	3	-	-	-	-	-	-	-
1,000 - 4,999 employees	159	2.7	65	67	12	12	3	-	-	-	-	-	-
5,000 and over	54	3.9	7	29	10	6	2	-	-	-	-	-	-
Pensions (total)	271	7.0	43	40	43	52	35	24	10	8	2	7	7
Under 100 employees	5	(1)	-	1	1	1	-	-	-	1	-	-	1
100 - 499 employees	45	6.8	4	6	10	12	5	4	-	2	-	1	1
500 - 999 employees	39	7.0	7	7	5	6	5	4	1	2	-	1	1
1,000 - 4,999 employees	136	6.7	26	21	22	25	18	7	7	2	2	3	3
5,000 and over	46	7.7	6	5	5	8	7	9	2	1	-	2	1
Insurance (total)	482	3.1	131	202	108	34	5	2	-	-	-	-	-
Under 100 employees	29	2.8	12	12	2	2	1	-	-	-	-	-	-
100 - 499 employees	132	3.0	47	38	38	7	1	1	-	-	-	-	-
500 - 999 employees	76	3.1	22	30	18	6	-	-	-	-	-	-	-
1,000 - 4,999 employees	188	3.2	40	93	38	14	3	-	-	-	-	-	-
5,000 and over	57	3.4	10	29	12	5	-	1	-	-	-	-	-

See footnote at end of table.

TABLE 17.—Expenditures per payroll hour for reporting establishments only\*  
by item and size of establishment, 1953 - Continued

Item and size of establishment	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures of—										
			Under 2 cents	2 and under 4 cents	4 and under 6 cents	6 and under 8 cents	8 and under 10 cents	10 and under 12 cents	12 and under 14 cents	14 and under 16 cents	16 and under 18 cents	18 and under 20 cents	20 cents and over
Legally required payments -----	524	6.5	-	62	213	126	74	28	10	7	3	1	-
Under 100 employees -----	40	7.7	-	4	9	9	11	3	2	1	1	-	-
100 - 499 employees -----	150	6.7	-	17	56	33	29	8	3	2	2	-	-
500 - 999 employees -----	80	7.0	-	10	20	29	9	6	3	3	-	-	-
1,000 - 4,999 employees -----	194	6.1	-	22	90	50	21	8	1	1	-	1	-
5,000 and over -----	60	5.5	-	9	38	5	4	3	1	-	-	-	-
Old Age and Survivors Insurance -----	516	2.5	63	445	8	-	-	-	-	-	-	-	-
Under 100 employees -----	42	2.4	10	32	-	-	-	-	-	-	-	-	-
100 - 499 employees -----	146	2.4	33	111	2	-	-	-	-	-	-	-	-
500 - 999 employees -----	77	2.6	8	68	1	-	-	-	-	-	-	-	-
1,000 - 4,999 employees -----	192	2.6	12	175	5	-	-	-	-	-	-	-	-
5,000 and over -----	59	2.6	-	59	-	-	-	-	-	-	-	-	-
Unemployment compensation -----	515	2.3	254	182	75	4	-	-	-	-	-	-	-
Under 100 employees -----	42	2.8	16	13	12	1	-	-	-	-	-	-	-
100 - 499 employees -----	148	2.4	66	55	27	-	-	-	-	-	-	-	-
500 - 999 employees -----	77	2.6	31	31	14	1	-	-	-	-	-	-	-
1,000 - 4,999 employees -----	190	2.1	99	72	18	1	-	-	-	-	-	-	-
5,000 and over -----	58	1.8	42	11	4	1	-	-	-	-	-	-	-
Workmen's compensation -----	517	1.6	388	89	22	9	6	2	1	-	-	-	-
Under 100 employees -----	40	2.4	23	11	2	3	-	1	-	-	-	-	-
100 - 499 employees -----	147	2.0	97	31	12	3	3	1	-	-	-	-	-
500 - 999 employees -----	79	1.8	55	18	3	1	2	-	-	-	-	-	-
1,000 - 4,999 employees -----	191	1.3	158	25	5	1	1	-	1	-	-	-	-
5,000 and over -----	60	1.1	55	4	-	1	-	-	-	-	-	-	-
State temporary disability insurance -----	38	.7	35	2	1	-	-	-	-	-	-	-	-
Under 100 employees -----	7	(1)	7	-	-	-	-	-	-	-	-	-	-
100 - 499 employees -----	11	(1)	9	1	1	-	-	-	-	-	-	-	-
500 - 999 employees -----	4	(1)	4	-	-	-	-	-	-	-	-	-	-
1,000 - 4,999 employees -----	12	(1)	11	1	-	-	-	-	-	-	-	-	-
5,000 and over -----	4	(1)	4	-	-	-	-	-	-	-	-	-	-
	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures of—										
			Under 10 cents	10 and under 15 cents	15 and under 20 cents	20 and under 25 cents	25 and under 30 cents	30 and under 35 cents	35 and under 40 cents	40 and under 45 cents	45 and under 50 cents	50 cents and over	
All selected items -----	419	30.8	18	34	33	50	54	72	65	41	26	26	
Under 100 employees -----	32	22.8	3	6	7	4	4	4	1	1	2	-	
100 - 499 employees -----	127	26.9	8	15	16	20	14	18	21	9	2	4	
500 - 999 employees -----	64	30.2	3	7	5	9	6	10	9	5	6	4	
1,000 - 4,999 employees -----	144	34.1	3	6	5	16	20	27	26	18	9	14	
5,000 and over -----	52	36.8	1	-	-	1	10	13	8	8	7	4	
All selected items excluding premium pay -----	478	22.2	51	53	90	116	89	38	26	8	2	5	
Under 100 employees -----	36	15.8	11	8	7	5	4	-	-	1	-	-	
100 - 499 employees -----	139	19.0	22	24	30	37	11	9	5	-	-	1	
500 - 999 employees -----	76	21.9	8	9	16	17	15	4	4	2	-	1	
1,000 - 4,999 employees -----	173	24.7	9	10	29	47	43	18	9	4	2	2	
5,000 and over -----	54	27.1	1	2	8	10	16	7	8	1	-	1	

<sup>1</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 18.—Expenditures as percent of payroll for reporting establishments only\*  
by item and size of establishment, 1953

Item and size of establishment	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures of—										
			Under 1 percent	1 and under 2 percent	2 and under 3 percent	3 and under 4 percent	4 and under 5 percent	5 and under 6 percent	6 and under 7 percent	7 and under 8 percent	8 and under 9 percent	9 and under 10 percent	10 percent and over
Vacation, holidays, and sick leave	528	4.9	8	19	36	76	125	124	99	27	11	3	-
Under 100 employees	37	3.6	3	3	6	10	8	3	3	1	-	-	-
100 - 499 employees	152	4.3	4	12	13	31	42	26	19	3	2	-	-
500 - 999 employees	76	4.8	1	2	6	11	22	15	13	3	3	-	-
1,000 - 4,999 employees	200	5.3	-	2	10	17	42	65	47	12	2	3	-
5,000 and over	63	5.8	-	-	1	7	11	15	17	8	4	-	-
Paid vacations	524	3.1	8	67	156	199	79	14	1	-	-	-	-
Under 100 employees	39	2.4	3	12	13	7	2	1	1	-	-	-	-
100 - 499 employees	150	2.7	4	33	59	37	14	3	-	-	-	-	-
500 - 999 employees	76	2.9	1	12	23	28	12	-	-	-	-	-	-
1,000 - 4,999 employees	197	3.4	-	7	47	99	36	8	-	-	-	-	-
5,000 and over	62	3.5	-	3	14	28	15	2	-	-	-	-	-
Paid holidays	471	1.8	37	233	186	15	-	-	-	-	-	-	-
Under 100 employees	31	1.5	5	18	6	2	-	-	-	-	-	-	-
100 - 499 employees	124	1.8	12	61	45	6	-	-	-	-	-	-	-
500 - 999 employees	70	1.8	7	32	30	1	-	-	-	-	-	-	-
1,000 - 4,999 employees	186	1.9	9	94	79	4	-	-	-	-	-	-	-
5,000 and over	60	1.9	4	28	26	2	-	-	-	-	-	-	-
Paid sick leave	87	.9	51	30	5	-	1	-	-	-	-	-	-
Under 100 employees	5	( <sup>1</sup> )	3	1	1	-	-	-	-	-	-	-	-
100 - 499 employees	19	.4	18	1	-	-	-	-	-	-	-	-	-
500 - 999 employees	11	( <sup>1</sup> )	8	2	1	-	-	-	-	-	-	-	-
1,000 - 4,999 employees	32	1.0	16	14	1	-	1	-	-	-	-	-	-
5,000 and over	20	1.2	6	12	2	-	-	-	-	-	-	-	-
Premium pay	454	4.8	32	60	44	61	67	50	37	30	27	20	26
Under 100 employees	37	4.7	6	7	4	2	5	3	2	3	-	1	4
100 - 499 employees	130	4.8	16	18	8	14	20	11	11	9	6	7	10
500 - 999 employees	64	4.5	5	10	10	8	5	7	5	5	3	1	5
1,000 - 4,999 employees	164	5.0	5	21	17	28	18	20	15	11	12	10	7
5,000 and over	59	4.9	-	4	5	9	19	9	4	2	6	1	-
Overtime premium pay	406	3.9	57	58	73	55	44	30	30	22	13	10	14
Under 100 employees	35	4.7	7	5	3	2	6	3	2	2	-	1	4
100 - 499 employees	125	4.2	25	14	16	15	9	10	7	10	8	5	6
500 - 999 employees	60	3.7	8	9	13	6	9	4	4	2	2	1	2
1,000 - 4,999 employees	145	3.7	17	20	31	24	14	10	13	8	3	3	2
5,000 and over	41	3.2	-	10	10	8	6	3	4	-	-	-	-
Premium pay for work on holidays	103	.3	92	11	-	-	-	-	-	-	-	-	-
Under 100 employees	3	( <sup>1</sup> )	1	2	-	-	-	-	-	-	-	-	-
100 - 499 employees	20	.1	19	1	-	-	-	-	-	-	-	-	-
500 - 999 employees	18	.3	17	1	-	-	-	-	-	-	-	-	-
1,000 - 4,999 employees	50	.3	44	6	-	-	-	-	-	-	-	-	-
5,000 and over	12	( <sup>1</sup> )	11	1	-	-	-	-	-	-	-	-	-
Shift premium pay	361	1.2	147	158	38	16	1	1	-	-	-	-	-
Under 100 employees	7	( <sup>1</sup> )	4	2	-	1	-	-	-	-	-	-	-
100 - 499 employees	92	.8	57	32	3	-	-	-	-	-	-	-	-
500 - 999 employees	49	1.1	24	20	3	2	-	-	-	-	-	-	-
1,000 - 4,999 employees	159	1.3	54	78	18	8	1	-	-	-	-	-	-
5,000 and over	54	1.9	8	26	14	5	-	1	-	-	-	-	-
Pensions (total)	271	3.5	41	36	45	54	35	23	10	11	6	2	8
Under 100 employees	5	( <sup>1</sup> )	-	1	1	-	1	-	-	-	1	1	-
100 - 499 employees	45	3.8	3	5	10	12	5	2	2	2	2	1	1
500 - 999 employees	39	3.6	7	4	7	5	6	1	1	1	-	-	2
1,000 - 4,999 employees	136	3.3	25	20	21	28	19	8	6	4	-	-	5
5,000 and over	46	3.7	6	6	6	9	5	7	1	4	2	-	-
Insurance (total)	482	1.7	112	206	111	40	5	7	1	-	-	-	-
Under 100 employees	29	1.7	7	10	9	2	1	-	-	-	-	-	-
100 - 499 employees	132	1.8	38	41	32	16	1	4	-	-	-	-	-
500 - 999 employees	76	1.7	21	29	20	4	2	-	-	-	-	-	-
1,000 - 4,999 employees	188	1.7	35	96	40	13	1	3	-	-	-	-	-
5,000 and over	57	1.6	11	30	10	5	-	-	1	-	-	-	-

See footnote at end of table.

TABLE 18.—Expenditures as percent of payroll for reporting establishments only \*  
by item and size of establishment, 1953 - Continued

Item and size of establishment	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures of—										
			Under 1 percent	1 and under 2 percent	2 and under 3 percent	3 and under 4 percent	4 and under 5 percent	5 and under 6 percent	6 and under 7 percent	7 and under 8 percent	8 and under 9 percent	9 and under 10 percent	10 percent and over
Legally required payments -----	524	3.6	-	30	182	126	100	51	19	10	4	2	-
Under 100 employees -----	40	4.8	-	1	3	10	9	10	4	1	1	1	-
100 - 499 employees -----	150	4.1	-	4	33	39	37	18	10	5	3	1	-
500 - 999 employees -----	80	3.9	-	2	21	25	15	10	4	3	-	-	-
1,000 - 4,999 employees -----	194	3.2	-	14	86	47	33	12	1	1	-	-	-
5,000 and over -----	60	2.7	-	9	39	5	6	1	-	-	-	-	-
Old Age and Survivors													
Insurance -----	516	1.4	8	495	12	1	-	-	-	-	-	-	-
Under 100 employees -----	42	1.5	1	38	3	-	-	-	-	-	-	-	-
100 - 499 employees -----	146	1.5	3	138	4	1	-	-	-	-	-	-	-
500 - 999 employees -----	77	1.4	1	73	3	-	-	-	-	-	-	-	-
1,000 - 4,999 employees -----	192	1.4	3	187	2	-	-	-	-	-	-	-	-
5,000 and over -----	59	1.3	-	59	-	-	-	-	-	-	-	-	-
Unemployment compensation -----	515	1.3	232	157	90	35	1	-	-	-	-	-	-
Under 100 employees -----	42	1.8	13	12	9	8	-	-	-	-	-	-	-
100 - 499 employees -----	148	1.5	50	49	35	13	1	-	-	-	-	-	-
500 - 999 employees -----	77	1.5	29	24	18	6	-	-	-	-	-	-	-
1,000 - 4,999 employees -----	190	1.2	98	60	25	7	-	-	-	-	-	-	-
5,000 and over -----	58	.9	42	12	3	1	-	-	-	-	-	-	-
Workmen's compensation -----	517	.9	363	107	23	14	8	1	1	-	-	-	-
Under 100 employees -----	40	1.4	20	11	4	3	1	-	1	-	-	-	-
100 - 499 employees -----	147	1.2	81	44	10	6	5	1	-	-	-	-	-
500 - 999 employees -----	79	.9	53	19	3	4	-	-	-	-	-	-	-
1,000 - 4,999 employees -----	191	.7	155	28	6	-	2	-	-	-	-	-	-
5,000 and over -----	60	.5	54	5	-	1	-	-	-	-	-	-	-
State temporary disability insurance -----	38	.4	35	2	1	-	-	-	-	-	-	-	-
Under 100 employees -----	7	(1)	7	-	-	-	-	-	-	-	-	-	-
100 - 499 employees -----	11	(1)	9	1	1	-	-	-	-	-	-	-	-
500 - 999 employees -----	4	(1)	4	-	-	-	-	-	-	-	-	-	-
1,000 - 4,999 employees -----	12	(1)	11	1	-	-	-	-	-	-	-	-	-
5,000 and over -----	4	(1)	4	-	-	-	-	-	-	-	-	-	-
	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures of—										
			Under 6 percent	6 and under 8 percent	8 and under 10 percent	10 and under 12 percent	12 and under 14 percent	14 and under 16 percent	16 and under 18 percent	18 and under 20 percent	20 and under 25 percent	25 and under 30 percent	30 percent and over
All selected items -----	419	16.5	5	10	19	37	58	57	78	65	70	16	4
Under 100 employees -----	32	14.3	2	1	4	6	5	3	4	2	3	2	-
100 - 499 employees -----	127	15.7	2	4	6	19	17	21	21	16	14	4	3
500 - 999 employees -----	64	16.4	-	2	6	5	7	8	14	10	9	3	-
1,000 - 4,999 employees -----	144	17.4	-	3	3	6	22	20	25	28	31	5	1
5,000 and over -----	52	17.6	1	-	-	1	7	5	14	9	13	2	-
All selected items excluding premium pay -----	478	11.9	17	54	82	103	87	78	33	13	8	2	1
Under 100 employees -----	36	9.7	4	10	8	7	1	4	1	-	1	-	-
100 - 499 employees -----	139	11.2	4	23	28	29	28	15	6	4	1	1	-
500 - 999 employees -----	76	11.9	3	9	11	19	13	13	4	1	3	-	-
1,000 - 4,999 employees -----	173	12.6	4	10	29	35	37	35	15	4	2	1	1
5,000 and over -----	54	13.0	2	2	6	13	8	11	7	4	1	-	-

<sup>1</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

per hour, with the exception of Old Age and Survivors Insurance payments<sup>26</sup> for which a slightly higher average was reported by the larger establishments.

These data illustrate the importance of a proper sampling balance of establishments of different size in expenditure surveys. The significance of appropriate representation of the various establishment sizes in a sample is underscored by the differentials among size classes for "all selected items" and "all selected items excluding premium pay." For these totals, and for such voluntary expenditure items as vacations, holidays, sick leave, shift premiums, pensions, and insurance, it is, moreover, important to emphasize that if relative prevalence of practices were taken into account (by computing average expenditures covering all establishments, including those with no expenditures) the differentials between small and large establishments would be substantially wider than these data show.<sup>27</sup>

Variations by Industry Group<sup>28</sup>.—The classification of manufacturing industries into three groups, conveniently if arbitrarily identified as "low wage" (group I), "medium wage" (group II), and "high wage" (group III), permitted a cursory examination of broad industry differences bearing upon sampling problems. Admittedly, this was a substitute for more precise data on specific industries which a larger sample and a better rate of response would have yielded.

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<sup>26</sup> In 1953, employers were required to pay 1.5 percent of employee earnings up to \$3,600 a year for Old Age and Survivors Insurance. If a substantial number of workers earned more than \$3,600, an establishment's annual contributions would amount to less than 1.5 percent of total payroll. Why the ratio exceeded 1.5 percent in a number of establishments was not ascertained in this study. Some of the possible reasons are: Payment of penalties for late filing; payment of interest on unpaid tax; the reporting of payments for four quarters which did not correspond to the calendar year 1953, and reporting errors. It is also possible that a small number of establishments reporting expenditures in excess of 2 percent of payroll were assuming part or all of the workers' liability; such payments, strictly speaking, should not be classified as legally required payments.

<sup>27</sup> The underrepresentation in this response of establishments employing fewer than 100 workers, as described in a previous section of this report, would have its most profound effect on an average covering all establishments. As far as the averages for reporting establishments only were concerned, the effect can be illustrated simply: It would require a weighting of five applied to the average expenditure of 4 cents an hour for paid vacations shown for the smallest size group to reduce the overall average of 5.8 cents by as much as 0.5 cent.

<sup>28</sup> See footnote 6, p. 17.

The average expenditures per adjusted payroll hour (table 19), the average expenditures as a percent of payroll (table 20), and the distributions and averages of establishment expenditures per employee per year (table 21) largely reflect the same industry-group relationships. With certain exceptions, establishments in the low-wage group, on the average, expended less on these items of supplementary remuneration than the medium- and high-wage groups. However, there appeared to be no consistent or significant differential, for the most part, between the latter groups.

Perhaps the most noteworthy exceptions to the generalizations that expenditure ratios were lowest in group I were found in legally required payments. By all three measures, group I paid a higher amount for unemployment compensation than groups II and III. Old Age and Survivors Insurance and total legally required payments cost more, percentagewise, to the "low-wage" group but less in cents-per-hour and dollars-per-year terms. Workmen's compensation averaged the same percent of payroll in the three industry groups.

In all likelihood, the differences between the low-wage group and the higher-wage groups in expenditures for the voluntary or negotiated items studied would be greater if the prevalence of these selected practices were taken into account. The somewhat poorer response from the low-wage group, as indicated in table 1, had a negligible effect on the average expenditures for all reporting establishments in this survey. However, the underrepresentation of establishments in this group would carry greater weight in averages covering all establishments, including those with no expenditures.

Variations by Collective Bargaining Status.—The comparison between average ratios for union and nonunion establishments, in terms of cents-per-payroll hour (table 22) and percent of payroll (table 23), presented a mixed picture. Earnings levels appeared to be higher in the union establishments covered, as is evidenced by the relationship of percent-of-payroll ratios to cents-per-hour ratios for items such as Old Age and Survivors Insurance. Both measures were higher in union establishments, as a group, for paid vacations, paid holidays, paid sick leave, shift premium pay, insurance and health programs,<sup>29</sup> and the combined "all selected items." The contrary held for pension expenditures. The differences between union and nonunion establishments for other items showed no discernible pattern.

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<sup>29</sup> Actual figures, taken separately, showed a somewhat larger difference in percent of payroll than was shown in table 23.

TABLE 19.—Average expenditures per adjusted payroll hour<sup>1</sup> for reporting establishments only\*  
by item and industry group,<sup>2</sup> 1953

Item	All industries		Group I		Group II		Group III	
	Number of establishments reporting expenditures	Average per adjusted payroll hour (cents)	Number of establishments reporting expenditures	Average per adjusted payroll hour (cents)	Number of establishments reporting expenditures	Average per adjusted payroll hour (cents)	Number of establishments reporting expenditures	Average per adjusted payroll hour (cents)
Vacations, holidays, and sick leave -----	528	9.8	169	7.5	163	10.1	196	11.5
Paid vacations -----	524	6.1	169	4.7	165	6.1	190	7.3
Paid holidays -----	471	3.7	138	3.0	153	3.8	180	4.0
Paid sick leave -----	87	1.9	23	1.2	32	2.1	32	2.1
Premium pay -----	454	9.5	149	6.4	142	10.8	163	11.3
Premium pay for overtime -----	406	7.6	137	5.8	119	8.5	150	8.5
Premium pay for work on holidays -----	103	.6	33	.4	35	.7	35	.6
Shift premium pay -----	361	2.6	88	1.5	120	2.6	153	3.2
Pensions (total) -----	271	7.4	54	6.6	98	7.4	119	7.8
Insurance, health, and welfare (total) -----	482	3.3	148	2.9	154	3.7	180	3.4
Legally required payments -----	524	6.8	175	6.6	160	6.8	189	7.0
Old Age and Survivors Insurance -----	516	2.6	171	2.4	157	2.7	188	2.9
Unemployment compensation -----	515	2.4	170	2.8	158	2.4	187	2.1
Workmen's compensation -----	517	1.7	172	1.5	158	1.7	187	2.0
State temporary disability insurance -----	38	.8	13	( <sup>3</sup> )	15	( <sup>3</sup> )	10	( <sup>3</sup> )
All selected items -----	419	32.5	143	24.0	126	35.9	150	37.8
All selected items excluding premium pay -----	478	23.5	161	18.5	143	25.4	174	26.6

<sup>1</sup> Adjusted payroll hours = total payroll hours less vacation, holiday, and sick leave hours paid for and taken.

<sup>2</sup> For industry groupings, see footnote 6, p. 17. See table 1 for industry identification.

<sup>3</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 20.—Average expenditures as percent of payroll for reporting establishments only\*  
by item and industry group,<sup>1</sup> 1953

Item	All industries		Group I		Group II		Group III	
	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures	Average percent of payroll
Vacations, holidays, and sick leave -----	528	4.9	169	4.4	163	5.1	196	5.1
Paid vacations -----	524	3.1	169	2.8	165	3.0	190	3.3
Paid holidays -----	471	1.8	138	1.7	153	1.9	180	1.8
Paid sick leave -----	87	.9	23	.6	32	1.0	32	.9
Premium pay -----	454	4.8	149	3.9	142	5.5	163	5.1
Premium pay for overtime -----	406	3.9	137	3.5	119	4.3	150	3.8
Premium pay for work on holidays -----	103	.3	33	.2	35	.3	35	.3
Shift premium pay -----	361	1.2	88	.8	120	1.3	153	1.4
Pensions (total) -----	271	3.5	54	3.5	98	3.6	119	3.4
Insurance, health, and welfare (total) -----	482	1.7	148	1.7	154	1.9	180	1.5
Legally required payments -----	524	3.6	175	4.2	160	3.6	189	3.2
Old Age and Survivors Insurance -----	516	1.4	171	1.5	157	1.4	188	1.3
Unemployment compensation -----	515	1.3	170	1.8	158	1.3	187	1.0
Workman's compensation -----	517	.9	172	.9	158	.9	187	.9
State temporary disability insurance -----	38	.4	13	( <sup>2</sup> )	15	( <sup>2</sup> )	10	( <sup>2</sup> )
All selected items -----	419	16.5	143	14.6	126	18.1	150	17.0
All selected items excluding premium pay -----	478	11.9	161	11.0	143	12.9	174	12.0

<sup>1</sup> For industry groupings, see footnote 6, p. 17. See table 1 for industry identification.

<sup>2</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 21.—Expenditures per year per employee for reporting establishments only\*  
by item and industry group,<sup>1</sup> 1953

Item and industry group	Number of establishments reporting expenditures	Average expenditure per employee per year	Number of establishments reporting expenditures of—										
			Under \$50	\$50 and under 100	\$100 and under 150	\$150 and under 200	\$200 and under 250	\$250 and under 300	\$300 and under 350	\$350 and under 400	\$400 and under 450	\$450 and under 500	\$500 and over
Vacations, holidays, and sick leave	528	\$192	28	52	82	109	131	79	33	5	6	1	2
Group I	169	146	20	36	33	37	30	7	4	1	1	-	-
Group II	163	200	4	13	25	38	45	23	10	1	3	-	1
Group III	196	226	4	3	24	34	56	49	19	3	2	1	1
Paid vacations	524	120	48	142	197	102	28	4	3	-	-	-	-
Group I	169	91	34	64	56	11	3	1	-	-	-	-	-
Group II	165	120	8	48	68	34	6	-	1	-	-	-	-
Group III	190	145	6	30	73	57	19	3	2	-	-	-	-
Paid holidays	471	72	94	322	52	2	1	-	-	-	-	-	-
Group I	138	58	50	81	6	1	-	-	-	-	-	-	-
Group II	153	75	25	107	20	1	-	-	-	-	-	-	-
Group III	180	79	19	134	26	-	1	-	-	-	-	-	-
Paid sick leave	87	37	60	23	3	-	1	-	-	-	-	-	-
Group I	23	23	20	3	-	-	-	-	-	-	-	-	-
Group II	32	42	20	11	-	-	1	-	-	-	-	-	-
Group III	32	42	20	9	3	-	-	-	-	-	-	-	-
Premium pay	454	196	68	69	70	67	49	35	29	24	16	8	19
Group I	149	132	46	32	23	19	9	2	9	2	2	2	3
Group II	142	219	14	21	15	19	18	17	10	13	9	3	3
Group III	163	233	8	16	32	29	22	16	10	9	5	3	13
Overtime premium pay	406	158	81	91	69	49	32	32	16	11	8	7	10
Group I	137	118	43	36	22	11	11	5	1	1	3	1	3
Group II	119	177	18	23	19	17	7	15	9	4	2	4	1
Group III	150	178	20	32	28	21	14	12	6	6	3	2	6
Premium pay for holiday work	103	12	95	8	-	-	-	-	-	-	-	-	-
Group I	33	8	32	1	-	-	-	-	-	-	-	-	-
Group II	35	14	31	4	-	-	-	-	-	-	-	-	-
Group III	35	13	32	3	-	-	-	-	-	-	-	-	-
Shift premium pay	361	51	209	112	31	9	-	-	-	-	-	-	-
Group I	88	28	75	9	3	1	-	-	-	-	-	-	-
Group II	120	51	67	42	8	3	-	-	-	-	-	-	-
Group III	153	64	67	61	20	5	-	-	-	-	-	-	-
Pensions (total)	271	149	52	44	72	35	32	11	7	9	1	4	4
Group I	54	133	11	12	14	3	10	2	-	1	-	-	1
Group II	98	145	16	14	29	14	11	7	2	4	1	-	-
Group III	119	159	25	18	29	18	11	2	5	4	-	4	3
Insurance (total)	482	65	183	215	68	15	1	-	-	-	-	-	-
Group I	148	56	76	50	18	4	-	-	-	-	-	-	-
Group II	154	72	49	72	27	6	-	-	-	-	-	-	-
Group III	180	67	58	93	23	5	1	-	-	-	-	-	-
Legally required payments	524	135	1	142	226	104	29	9	10	1	2	-	-
Group I	175	129	1	58	68	34	8	2	3	1	-	-	-
Group II	160	136	-	30	83	33	10	1	2	-	1	-	-
Group III	189	139	-	54	75	37	11	6	5	-	1	-	-
Old Age and Survivors Insurance	516	52	172	341	3	-	-	-	-	-	-	-	-
Group I	171	46	106	65	-	-	-	-	-	-	-	-	-
Group II	157	54	42	114	1	-	-	-	-	-	-	-	-
Group III	188	57	24	162	2	-	-	-	-	-	-	-	-
Unemployment compensation	515	47	322	168	23	2	-	-	-	-	-	-	-
Group I	170	53	87	74	8	1	-	-	-	-	-	-	-
Group II	158	47	98	56	3	1	-	-	-	-	-	-	-
Group III	187	43	137	38	12	-	-	-	-	-	-	-	-
Workmen's compensation	517	34	419	70	18	5	4	1	-	-	-	-	-
Group I	172	30	139	26	4	1	2	-	-	-	-	-	-
Group II	158	33	137	15	3	2	-	1	-	-	-	-	-
Group III	187	39	143	29	11	2	2	-	-	-	-	-	-

See footnotes at end of table.

TABLE 21.—Expenditures per year per employee for reporting establishments only\*  
by item and industry group,<sup>1</sup> 1953 - Continued

Item and industry group	Number of establishments reporting expenditures	Average expenditure per employee per year	Number of establishments reporting expenditures of—											
			Under \$50	\$50 and under 100	\$100 and under 150	\$150 and under 200	\$200 and under 250	\$250 and under 300	\$300 and under 350	\$350 and under 400	\$400 and under 450	\$450 and under 500	\$500 and over	
Legally required payments: - Continued														
State temporary disability insurance .....	38	\$15	36	1	1	-	-	-	-	-	-	-	-	-
Group I .....	13	( <sup>2</sup> )	11	1	1	-	-	-	-	-	-	-	-	-
Group II .....	15	( <sup>2</sup> )	15	-	-	-	-	-	-	-	-	-	-	-
Group III .....	10	( <sup>2</sup> )	10	-	-	-	-	-	-	-	-	-	-	-
	Number of establishments reporting expenditures	Average expenditure per employee per year	Number of establishments reporting expenditures of—											
			Under \$100	\$100 and under 200	\$200 and under 300	\$300 and under 400	\$400 and under 500	\$500 and under 600	\$600 and under 700	\$700 and under 800	\$800 and under 900	\$900 and under 1,000	\$1,000 and over	
All selected items .....	419	\$649	1	22	30	32	50	46	62	59	43	30	44	
Group I .....	143	473	-	21	26	17	24	16	15	6	7	4	7	
Group II .....	126	714	-	1	3	6	19	14	16	19	19	14	15	
Group III .....	150	762	1	-	1	9	7	16	31	34	17	12	22	
All selected items excluding premium pay .....	478	464	3	47	51	78	100	92	61	22	11	7	6	
Group I .....	161	358	2	42	27	28	29	17	7	4	2	2	1	
Group II .....	143	501	-	2	14	27	26	36	22	9	3	4	-	
Group III .....	174	531	1	3	10	23	45	39	32	9	6	1	5	

<sup>1</sup> For industry groupings, see footnote 6, p. 17. See table 1 for industry identification.

<sup>2</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 22.—Expenditures per payroll hour for reporting establishments only\*  
by item and union status, 1953

Item and union status <sup>1</sup>	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures of—										
			Under 2 cents	2 and under 4 cents	4 and under 6 cents	6 and under 8 cents	8 and under 10 cents	10 and under 12 cents	12 and under 14 cents	14 and under 16 cents	16 and under 18 cents	18 and under 20 cents	20 cents and over
Vacations, holidays, and sick leave	528	9.2	22	35	49	78	122	103	60	33	13	10	3
Union establishments	404	10.1	5	11	34	53	101	90	58	28	11	10	3
Nonunion establishments	120	6.4	17	23	14	24	20	13	2	5	2	-	-
Paid vacations	524	5.8	34	98	158	140	63	22	7	2	-	-	-
Union establishments	400	6.3	10	57	125	120	60	19	7	2	-	-	-
Nonunion establishments	120	4.1	23	40	32	19	3	3	-	-	-	-	-
Paid holidays	471	3.4	61	245	147	17	-	1	-	-	-	-	-
Union establishments	378	3.6	31	197	132	17	-	1	-	-	-	-	-
Nonunion establishments	90	2.6	28	47	15	-	-	-	-	-	-	-	-
Paid sick leave	87	1.7	56	23	7	-	-	1	-	-	-	-	-
Union establishments	63	1.9	37	19	6	-	-	1	-	-	-	-	-
Nonunion establishments	24	1.2	19	4	1	-	-	-	-	-	-	-	-
Premium pay	454	9.1	49	64	52	60	56	47	36	22	26	16	26
Union establishments	344	9.3	30	46	37	49	43	39	32	18	17	13	20
Nonunion establishments	106	8.2	19	17	15	9	13	7	4	4	9	3	6
Overtime premium pay	406	7.2	68	77	64	49	41	30	26	20	14	3	14
Union establishments	300	7.2	48	52	50	41	33	22	18	16	8	1	11
Nonunion establishments	104	7.2	20	25	14	7	8	7	8	4	6	2	3
Premium pay for holiday work	103	.5	94	8	1	-	-	-	-	-	-	-	-
Union establishments	88	.5	80	8	-	-	-	-	-	-	-	-	-
Nonunion establishments	15	.5	14	-	1	-	-	-	-	-	-	-	-
Shift premium pay	361	2.4	170	138	27	21	5	-	-	-	-	-	-
Union establishments	300	2.6	127	124	25	19	5	-	-	-	-	-	-
Nonunion establishments	58	1.6	40	14	2	2	-	-	-	-	-	-	-
Pensions (total)	271	7.0	43	40	43	52	35	24	10	8	2	7	7
Union establishments	215	6.4	36	31	33	47	32	18	6	3	1	5	3
Nonunion establishments	55	9.2	7	9	9	5	3	6	4	5	1	2	4
Insurance (total)	482	3.1	131	202	108	34	5	2	-	-	-	-	-
Union establishments	379	3.3	87	162	94	31	4	1	-	-	-	-	-
Nonunion establishments	98	2.5	41	40	12	3	1	1	-	-	-	-	-
Legally required payments	524	6.5	-	62	213	126	74	28	10	7	3	1	-
Union establishments	398	6.6	-	40	160	101	58	22	7	7	2	1	-
Nonunion establishments	121	6.0	-	22	53	24	14	4	3	-	1	-	-
Old Age and Survivors Insurance	516	2.5	63	445	8	-	-	-	-	-	-	-	-
Union establishments	392	2.6	25	359	8	-	-	-	-	-	-	-	-
Nonunion establishments	119	2.2	38	81	-	-	-	-	-	-	-	-	-
Unemployment compensation	515	2.3	254	182	75	4	-	-	-	-	-	-	-
Union establishments	390	2.3	200	130	57	3	-	-	-	-	-	-	-
Nonunion establishments	120	2.3	54	51	14	1	-	-	-	-	-	-	-
Workmen's compensation	517	1.6	388	89	22	9	6	2	1	-	-	-	-
Union establishments	389	1.7	292	72	12	6	5	1	1	-	-	-	-
Nonunion establishments	123	1.5	95	15	8	3	1	1	-	-	-	-	-
State temporary disability insurance	38	.7	35	2	1	-	-	-	-	-	-	-	-
Union establishments	26	.8	23	2	1	-	-	-	-	-	-	-	-
Nonunion establishments	11	( <sup>2</sup> )	11	-	-	-	-	-	-	-	-	-	-
	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures of—										
			Under 10 cents	10 and under 15 cents	15 and under 20 cents	20 and under 25 cents	25 and under 30 cents	30 and under 35 cents	35 and under 40 cents	40 and under 50 cents	50 cents and over		
All selected items	419	30.8	18	34	33	50	54	72	65	67	26		
Union establishments	316	32.5	4	19	19	36	45	62	54	59	18		
Nonunion establishments	99	25.6	14	15	14	11	9	10	10	8	8		
All selected items excluding premium pay	478	22.2	51	53	90	116	89	38	26	10	5		
Union establishments	367	23.3	20	32	74	100	74	36	19	9	3		
Nonunion establishments	107	18.5	31	20	14	15	15	2	7	1	2		

<sup>1</sup> Union status not available for 4 establishments.

<sup>2</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 23.—Expenditures as percent of payroll for reporting establishments only\*  
by item and union status, 1953

Item and union status <sup>1</sup>	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures of—										
			Under 1 percent	1 and under 2 percent	2 and under 3 percent	3 and under 4 percent	4 and under 5 percent	5 and under 6 percent	6 and under 7 percent	7 and under 8 percent	8 and under 9 percent	9 and under 10 percent	10 percent and over
Vacations, holidays, and sick leave	528	4.9	8	19	36	76	125	124	99	27	11	3	-
Union establishments	404	5.2	2	4	17	53	96	108	88	24	9	3	-
Nonunion establishments	120	3.9	6	15	17	23	28	15	11	3	2	-	-
Paid vacations	524	3.1	8	67	156	199	79	14	1	-	-	-	-
Union establishments	400	3.2	2	29	121	165	72	11	-	-	-	-	-
Nonunion establishments	120	2.5	6	37	33	34	6	3	1	-	-	-	-
Paid holidays	471	1.8	37	233	186	15	-	-	-	-	-	-	-
Union establishments	378	1.9	18	182	164	14	-	-	-	-	-	-	-
Nonunion establishments	90	1.5	18	49	22	1	-	-	-	-	-	-	-
Paid sick leave	87	.9	51	30	5	-	1	-	-	-	-	-	-
Union establishments	63	.9	34	25	3	-	1	-	-	-	-	-	-
Nonunion establishments	24	.6	17	5	2	-	-	-	-	-	-	-	-
Premium pay	454	4.8	32	60	44	61	67	50	37	30	27	20	26
Union establishments	344	4.8	20	48	31	48	51	42	29	23	23	14	15
Nonunion establishments	106	5.0	12	11	13	13	14	8	7	7	4	6	11
Overtime premium pay	406	3.9	57	58	73	55	44	30	30	22	13	10	14
Union establishments	300	3.7	42	46	55	42	35	24	20	15	8	6	7
Nonunion establishments	104	4.6	15	12	18	13	8	5	10	7	5	4	7
Premium pay for holiday work	103	.3	92	11	-	-	-	-	-	-	-	-	-
Union establishments	88	.3	78	10	-	-	-	-	-	-	-	-	-
Nonunion establishments	15	.2	14	1	-	-	-	-	-	-	-	-	-
Shift premium pay	361	1.2	147	158	38	16	1	1	-	-	-	-	-
Union establishments	300	1.3	112	136	35	15	1	1	-	-	-	-	-
Nonunion establishments	58	.9	33	21	3	1	-	-	-	-	-	-	-
Pensions (total)	271	3.5	41	36	45	54	35	23	10	11	6	2	8
Union establishments	215	3.1	34	31	36	46	31	18	8	5	3	-	3
Nonunion establishments	55	5.1	7	5	8	8	4	5	2	6	3	2	5
Insurance (total)	482	1.7	112	206	111	40	5	7	1	-	-	-	-
Union establishments	379	1.7	82	160	94	34	4	5	-	-	-	-	-
Nonunion establishments	98	1.6	27	46	16	5	1	2	1	-	-	-	-
Legally required payments	524	3.6	-	30	182	126	100	51	19	10	4	2	-
Union establishments	398	3.5	-	24	152	98	68	34	13	7	2	-	-
Nonunion establishments	121	4.0	-	6	30	27	32	15	5	2	2	2	-
Old Age and Survivors Insurance	516	1.4	8	495	12	1	-	-	-	-	-	-	-
Union establishments	392	1.4	5	379	7	1	-	-	-	-	-	-	-
Nonunion establishments	119	1.4	3	111	5	-	-	-	-	-	-	-	-
Unemployment compensation	515	1.3	232	157	90	35	1	-	-	-	-	-	-
Union establishments	390	1.3	193	119	54	24	-	-	-	-	-	-	-
Nonunion establishments	120	1.6	39	37	32	11	1	-	-	-	-	-	-
Workmen's compensation	517	.9	363	107	23	14	8	1	1	-	-	-	-
Union establishments	389	.9	272	89	17	6	4	1	-	-	-	-	-
Nonunion establishments	123	1.0	90	16	5	7	4	-	1	-	-	-	-
State temporary disability insurance	38	.4	35	2	1	-	-	-	-	-	-	-	-
Union establishments	26	.4	23	2	1	-	-	-	-	-	-	-	-
Nonunion establishments	11	( <sup>2</sup> )	11	-	-	-	-	-	-	-	-	-	-
All selected items	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures of—										
			Under 6 percent	6 and under 8 percent	8 and under 10 percent	10 and under 12 percent	12 and under 14 percent	14 and under 16 percent	16 and under 18 percent	18 and under 20 percent	20 and under 25 percent	25 and under 30 percent	30 percent and over
All selected items	419	16.5	5	10	19	37	58	57	78	65	70	16	4
Union establishments	316	16.8	2	3	11	22	45	46	66	56	56	7	2
Nonunion establishments	99	15.8	3	7	8	15	11	10	12	9	13	9	2
All selected items excluding premium pay	478	11.9	17	54	82	103	87	78	33	13	8	2	1
Union establishments	367	12.1	9	28	59	90	75	64	27	9	6	-	-
Nonunion establishments	107	11.4	8	26	22	12	11	13	6	4	2	2	1

<sup>1</sup> Collective bargaining status not available for 4 establishments.<sup>2</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

The absence of any noticeable concentration of expenditure ratios for individual items among establishments under collective bargaining agreements emphasizes the interrelationship among such factors as size of establishment, industry, and collective bargaining status. It indicates that expenditure surveys limited to manufacturing establishments under collective bargaining agreements would face the same types of sampling problems as surveys covering all manufacturing establishments.

Variations by Type of Practice and Earnings Levels.—One of the chief advantages of obtaining separate expenditure figures for the items studied and some information on the practices causing the expenditures is illustrated in tables 24 through 28. In these tabulations, one or more of the factors accounting for the variation among establishments in expenditure ratios for the same item is isolated. As pointed out previously, the amount of information on practices that was requested was not sufficient to explain all of the variation.

Establishment expenditures for paid holidays were obviously influenced by the number of paid holidays provided and the establishment's earnings level (table 24). Establishments providing 4 paid holidays reported average expenditures per payroll hour amounting to 2.4 cents; for 8 paid holidays, the average was approximately twice as large (4.9 cents). The average for 6 paid holidays was 3.6 cents. Within the group of establishments providing 6 paid holidays, the average expenditure increased from 3.2 cents for establishments with gross average hourly earnings between \$1.40 and \$1.60 to 3.8 cents for establishments paying between \$2.20 and \$2.40 an hour on the average.

Only a small part of the dispersion of expenditure ratios shown in table 24 was "explained" by the number of paid holidays provided and the establishment's earnings level. For example, expenditures for 6 paid holidays ranged from less than 1 cent an hour to between 5 and 6 cents an hour in the group of establishments with gross average hourly earning levels of \$2 to \$2.20. Assuming that all employees received 6 paid holidays and that each employee worked 2,080 hours during the year, holiday expenditures at the rate of \$2 an hour would amount to 4.6 cents as against 5.1 cents at the rate of \$2.20 an hour. However, at least three-fifths of the establishments in this category reported expenditures of less than 4.6 cents an hour. Some of the factors possibly accounting for this "unexplained" dispersion were listed earlier in this section; the possibility of errors in estimation can be disposed of readily, since only 4 of the 52 establishments in this group provided estimated figures.

With respect to paid vacations (table 25), a variable not accounted for in the paid holiday tabulation was taken into consideration by computing the average length of the vacation period for each

TABLE 24.—Expenditures per payroll hour for paid holidays for reporting establishments only\* by establishment earnings level and number of holidays provided, 1953

Gross average hourly earnings and number of paid holidays <sup>1</sup>	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures of—							
			Under 1 cent	1 and under 2 cents	2 and under 3 cents	3 and under 4 cents	4 and under 5 cents	5 and under 6 cents	6 and under 7 cents	7 cents and over
All establishments -----	471	3.4	23	38	91	154	117	30	14	4
Establishments with gross average hourly earnings of:										
\$1.20 and under \$1.40 -----	34	2.2	7	7	11	6	3	-	-	-
\$1.40 and under \$1.60 -----	53	2.9	1	11	13	23	5	-	-	-
\$1.60 and under \$1.80 -----	74	3.3	-	5	20	31	16	2	-	-
\$1.80 and under \$2.00 -----	118	3.6	3	4	14	52	35	7	3	-
\$2.00 and under \$2.20 -----	85	3.7	2	4	15	27	24	10	3	-
\$2.20 and under \$2.40 -----	48	3.8	2	2	10	10	16	5	2	1
\$2.40 and under \$2.60 -----	26	4.2	1	-	2	4	14	3	2	-
Establishments providing:										
4 paid holidays -----	49	2.4	2	11	28	7	1	-	-	-
5 paid holidays -----	34	2.7	2	3	15	14	-	-	-	-
6 paid holidays -----	271	3.6	3	12	42	118	80	14	2	-
\$1.40 and under \$1.60 -----	33	3.2	-	2	8	19	4	-	-	-
\$1.60 and under \$1.80 -----	42	3.3	-	1	11	24	6	-	-	-
\$1.80 and under \$2.00 -----	65	3.7	-	1	4	37	23	-	-	-
\$2.00 and under \$2.20 -----	52	3.6	2	2	4	22	19	3	-	-
\$2.20 and under \$2.40 -----	37	3.8	1	2	6	8	15	5	-	-
7 paid holidays -----	52	4.1	1	2	4	11	26	5	3	-
8 paid holidays -----	31	4.9	2	1	-	2	9	8	7	2

<sup>1</sup> Selected intervals and provisions.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 25.—Expenditures per payroll hour for paid vacations for reporting establishments only\* by establishment earnings level and average length of vacation, 1953

Gross average hourly earnings and average length of vacation <sup>1</sup>	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures of—										
			Under 1 cent	1 and under 2 cents	2 and under 3 cents	3 and under 4 cents	4 and under 5 cents	5 and under 6 cents	6 and under 7 cents	7 and under 8 cents	8 and under 9 cents	9 and under 10 cents	10 cents and over
All establishments -----	524	5.8	8	26	36	62	62	96	84	56	40	23	31
Establishments with gross average earnings of:													
\$1.00 and under \$1.20 -----	29	2.1	2	11	10	6	-	-	-	-	-	-	-
\$1.20 and under \$1.40 -----	46	3.4	-	6	10	15	11	2	1	1	-	-	-
\$1.40 and under \$1.60 -----	56	4.5	1	-	3	12	18	18	4	-	-	-	-
\$1.60 and under \$1.80 -----	81	5.1	1	3	8	10	9	23	17	9	1	-	-
\$1.80 and under \$2.00 -----	120	6.0	-	1	2	11	13	34	28	18	8	4	1
\$2.00 and under \$2.20 -----	90	6.8	1	-	1	6	6	11	24	14	15	6	6
\$2.20 and under \$2.40 -----	50	7.5	1	-	-	2	4	5	5	11	9	9	4
\$2.40 and under \$2.60 -----	26	8.9	-	-	-	-	-	2	4	3	5	3	9
Establishments providing average vacations of:													
Less than 1 week -----	52	2.2	3	23	18	6	1	1	-	-	-	-	-
1 and under 1.5 weeks -----	138	4.3	1	3	17	39	32	29	13	1	1	-	2
1.5 and under 2 weeks -----	191	6.1	-	-	1	15	23	55	45	31	12	7	2
\$1.40 and under \$1.60 -----	27	5.0	-	-	-	2	10	13	2	-	-	-	-
\$1.60 and under \$1.80 -----	31	5.7	-	-	-	3	1	16	8	3	-	-	-
\$1.80 and under \$2.00 -----	51	6.3	-	-	-	1	4	16	17	10	3	-	-
\$2.00 and under \$2.20 -----	36	6.8	-	-	-	1	2	5	14	9	3	2	-
\$2.20 and under \$2.40 -----	20	7.5	-	-	-	-	-	3	3	8	3	3	-
2 and under 2.5 weeks -----	114	8.1	-	-	-	2	5	7	22	22	21	14	21

<sup>1</sup> Selected intervals and provisions.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

establishment.<sup>30</sup> As expected, average expenditures for paid vacations, in cents-per-payroll hour, increased consistently with establishment earnings levels and with the size of the average vacation period. Among establishments providing an average of between 1½ and 2 weeks of vacations, with gross average hourly earnings between \$2 and \$2.20, expenditures per hour ranged from less than 4 cents to more than 9 cents. Assuming 60 and 80 hours to be the equivalent of 1½ and 2 weeks, and that each employee worked 2,080 hours during the year, the "explained" variation ranged between 5.8 cents (60 hours at \$2 an hour) and 8.5 cents (80 hours at \$2.20 an hour).<sup>31</sup> Thus, the "unexplained" variation in this case was relatively small. Only 6 of the 36 establishments provided estimated figures; one amounted to more than 9 cents an hour, one to between 5 and 6 cents.

The influence of the amount of shift work on shift premium expenditures is demonstrated in table 26. The dispersion of establishment expenditures within the categories determined by the ratio of shift premium hours to total payroll hours signifies the operation of factors other than the amount of shift work. Included among these factors, of course, are the size of the shift differential and the prevalence of third-shift work which typically carries a higher premium rate than work on the second shift.

A distribution of expenditures on paid sick leave by the type of plan in effect (table 27) revealed that expenditures on informal or discretionary leave plans were substantially lower, on the average, than expenditures connected with formal plans. This undoubtedly was due largely to differences between discretionary and formal plans in the proportions of employees sharing this benefit.

Little could be done with the amount of information requested in isolating some of the factors accountable for variations in pension expenditures. However, a separation between contributory and non-contributory plans disclosed slightly higher average expenditures for the contributory plans in cents per hour<sup>32</sup> (table 28) and percent of payroll (3.7 percent as against 3.5 percent—table not shown). This finding is significant chiefly because it appears to run counter to a popular conception that, in general, noncontributory plans require greater employer expenditures than contributory plans. On the basis

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<sup>30</sup> For each establishment, the number of employee-vacation weeks were aggregated and divided by the average number of production and related workers (including employees who did not receive a paid vacation) to arrive at the average vacation period per employee. For all establishments with vacation practices, the average thus computed was 1.7 weeks. The average vacation per vacationer amounted to 1.8 weeks.

<sup>31</sup> The vacation and earnings intervals could be made narrower with a larger number of establishments reporting.

<sup>32</sup> The actual figures reported showed a difference of 0.5 cent.

TABLE 26.—Expenditures per payroll hour for shift premiums for reporting establishments only\* by volume of shift work, 1953

Volume of shift work	Number of establishments reporting expenditures	Average per payroll hour (cents)	Number of establishments reporting expenditures of—							
			Under 1 cent	1 and under 2 cents	2 and under 3 cents	3 and under 4 cents	4 and under 5 cents	5 and under 6 cents	6 and under 7 cents	7 cents and over
All establishments .....	<sup>1</sup> 361	2.4	75	95	71	67	16	11	16	10
Ratio of shift premium hours to total payroll hours:										
Less than 5 percent .....	33	1.3	22	2	5	2	-	-	1	1
5 and under 10 percent .....	33	.8	24	6	3	-	-	-	-	-
10 and under 15 percent .....	35	1.4	12	15	6	1	1	-	-	-
15 and under 20 percent .....	27	1.7	2	16	7	2	-	-	-	-
20 and under 25 percent .....	34	2.4	-	19	7	2	5	-	1	-
25 and under 30 percent .....	50	2.7	-	21	14	8	1	1	3	2
30 and under 35 percent .....	31	3.5	1	5	6	10	2	3	3	1
35 and under 40 percent .....	31	3.0	2	4	12	7	2	2	2	-
40 and under 45 percent .....	21	3.3	-	3	6	7	2	2	-	1
45 and under 50 percent .....	24	3.8	2	1	-	15	2	-	3	1
50 percent and more .....	23	4.5	-	-	4	11	1	1	2	4

<sup>1</sup> Number of shift hours not available for 19 establishments.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 27.—Expenditures per payroll hour for sick leave for reporting establishments only\* by type of plan, 1953

Expenditures per payroll hour (in cents)	All sick leave plans	Formal plans	Informal or discretionary plans
Establishments reporting expenditures .....	<sup>1</sup> 87	60	23
Average expenditure in cents per payroll hour .....	1.7	2.2	0.6
Establishments reporting expenditures of:			
Under 1 cent .....	37	17	17
1 and under 2 cents .....	19	13	5
2 and under 3 cents .....	14	13	1
3 and under 4 cents .....	9	9	-
4 and under 5 cents .....	4	4	-
5 cents and over .....	4	4	-

<sup>1</sup> Type of plan not reported in 4 cases.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 28.—Expenditures per payroll hour for pension plans for reporting establishments only\* by type of plan, 1953

Expenditures per payroll hour (in cents)	All pension plans	Contributory plans	Non-contributory plans
Establishments reporting expenditures .....	<sup>1</sup> 271	73	191
Average expenditures in cents per payroll hour .....	7.0	7.2	7.0
Establishments reporting expenditures of:			
Under 2 cents .....	43	8	33
2 and under 4 cents .....	40	13	26
4 and under 6 cents .....	43	10	32
6 and under 8 cents .....	52	12	37
8 and under 10 cents .....	35	15	20
10 and under 12 cents .....	24	4	20
12 and under 14 cents .....	10	5	5
14 and under 16 cents .....	8	3	5
16 and under 18 cents .....	2	-	2
18 cents and over .....	14	3	11

<sup>1</sup> Seven establishments did not identify type of plan.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

of these data, this was not the case among the establishments covered by this study in 1953.

The inability to account for variations among establishments in expenditure ratios, which differs in degree among the selected items studied, would seem to be more of a limitation on the types of uses of expenditure data than on the scope and techniques of expenditure surveys. However, intensive studies directed toward this problem could substantially narrow the area of unexplained variation and, over time, facilitate those uses of expenditure data which depend more on specific establishment comparisons than on aggregate data.

Variations in Legally Required Payments Among Regions.— With the exception of Old Age and Survivors Insurance, rates and practices regarding legally required payments vary by states. Thus geographic balance in expenditure survey samples assumes specific importance. In unemployment compensation taxes, for example, about 98 percent of all rated employers in Colorado were assigned a zero rate in 1953; Massachusetts and Rhode Island, on the other hand, collected 2.7 percent of taxable wages from all employers.<sup>33</sup> Regional differences in the levels of legally required payments, in terms of cents-per-adjusted-payroll hour (table 29) and percent of payroll (table 30), were caused in part by variations in state requirements among the establishments covered in this survey.

Average expenditures for Federal and State unemployment compensation taxes in cents-per-adjusted-payroll hour ranged from 1.2 in West North Central States to 3.7 in New England. The corresponding range in percent of payroll was 0.7 to 2.1. Workmen's compensation premiums, or the equivalent in self-insured costs, ranged from 0.9 cent an hour (or 0.6 percent of payroll) in the South Atlantic region to 2.5 cents (1.3 percent of payroll) in the Pacific Coast States. Total legally required payments were highest, in cents per hour, in the Pacific (8.7 cents), New England (8.2 cents) and Middle Atlantic regions (8.0 cents). Percentagewise, the highest expenditures were reported by establishments in the New England (4.6 percent) and Pacific regions (4.3 percent).

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<sup>33</sup> Review of Experience Rating, 1953 in Labor Market and Employment Security, U. S. Department of Labor, Bureau of Employment Security, September 1954, p. 23.

TABLE 29.—Expenditures per adjusted payroll hour<sup>1</sup> for legally required payments for reporting establishments only\* by region and type of payment, 1953

Item and region	Number of establishments reporting expenditures	Average per adjusted payroll hour <sup>1</sup> (cents)	Number of establishments reporting expenditures of—						
			Under 4 cents	4 and under 6 cents	6 and under 8 cents	8 and under 10 cents	10 and under 12 cents	12 and under 14 cents	14 cents and over
<b>All legally required payments:</b>									
All regions .....	524	6.8	46	196	142	79	33	14	14
New England .....	53	8.2	3	7	19	12	5	6	1
Middle Atlantic .....	130	8.0	4	37	33	31	13	3	9
East North Central .....	163	6.2	10	75	56	14	6	2	-
West North Central .....	39	5.8	7	21	5	3	2	-	1
South Atlantic .....	46	4.9	11	29	3	3	-	-	-
East South Central .....	22	5.5	4	9	6	3	-	-	-
West South Central .....	16	6.5	2	5	6	1	1	-	1
Mountain .....	3	( <sup>2</sup> )	2	-	1	-	-	-	-
Pacific .....	32	8.7	-	6	7	9	6	2	2
Interregional .....	20	6.5	3	7	6	3	-	1	-
<b>Old Age and Survivors Insurance:</b>									
All regions .....	516	2.6	505	11	-	-	-	-	-
New England .....	53	2.5	53	-	-	-	-	-	-
Middle Atlantic .....	128	2.7	124	4	-	-	-	-	-
East North Central .....	157	2.8	152	5	-	-	-	-	-
West North Central .....	39	2.7	38	1	-	-	-	-	-
South Atlantic .....	47	2.0	47	-	-	-	-	-	-
East South Central .....	22	2.4	22	-	-	-	-	-	-
West South Central .....	16	2.3	16	-	-	-	-	-	-
Mountain .....	3	( <sup>2</sup> )	3	-	-	-	-	-	-
Pacific .....	32	2.8	31	1	-	-	-	-	-
Interregional .....	19	2.9	19	-	-	-	-	-	-
<b>Unemployment compensation (Federal and State):</b>									
All regions .....	515	2.4	423	85	7	-	-	-	-
New England .....	53	3.7	26	24	3	-	-	-	-
Middle Atlantic .....	128	3.0	96	31	1	-	-	-	-
East North Central .....	158	2.0	144	11	3	-	-	-	-
West North Central .....	39	1.2	38	1	-	-	-	-	-
South Atlantic .....	46	2.0	45	1	-	-	-	-	-
East South Central .....	22	2.2	19	3	-	-	-	-	-
West South Central .....	16	1.6	16	-	-	-	-	-	-
Mountain .....	3	( <sup>2</sup> )	3	-	-	-	-	-	-
Pacific .....	31	3.5	17	14	-	-	-	-	-
Interregional .....	19	1.9	19	-	-	-	-	-	-
<b>Workmen's compensation:</b>									
All regions .....	517	1.7	472	27	8	6	3	1	-
New England .....	54	1.9	49	3	1	-	1	-	-
Middle Atlantic .....	129	2.2	111	8	3	5	1	1	-
East North Central .....	161	1.4	157	3	1	-	-	-	-
West North Central .....	38	1.9	33	4	1	-	-	-	-
South Atlantic .....	46	.9	44	2	-	-	-	-	-
East South Central .....	21	1.0	21	-	-	-	-	-	-
West South Central .....	14	( <sup>2</sup> )	10	2	1	-	1	-	-
Mountain .....	3	( <sup>2</sup> )	3	-	-	-	-	-	-
Pacific .....	31	2.5	25	5	-	1	-	-	-
Interregional .....	20	1.7	19	-	1	-	-	-	-
<b>State temporary disability insurance:</b>									
All regions .....	38	.8	37	1	-	-	-	-	-
Middle Atlantic .....	32	.6	32	-	-	-	-	-	-

<sup>1</sup> Adjusted payroll hours = total payroll hours less vacation, holiday, and sick leave hours paid for and taken.

<sup>2</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

TABLE 30.—Expenditures for legally required payments as percent of payroll for reporting establishments only\* by region and type of payment, 1953

Item and region	Number of establishments reporting expenditures	Average percent of payroll	Number of establishments reporting expenditures of—							
			Under 1 percent	1 and under 2 percent	2 and under 3 percent	3 and under 4 percent	4 and under 5 percent	5 and under 6 percent	6 and under 7 percent	7 percent and over
<b>All legally required payments:</b>										
All regions	524	3.6	-	30	182	126	100	51	19	16
New England	53	4.6	-	2	5	12	15	11	5	3
Middle Atlantic	130	4.1	-	4	32	26	37	19	7	5
East North Central	163	3.0	-	14	82	42	18	4	2	1
West North Central	39	3.1	-	4	19	7	5	4	-	-
South Atlantic	46	3.6	-	-	15	12	15	3	-	1
East South Central	22	3.5	-	1	6	10	3	1	1	-
West South Central	16	4.1	-	3	1	6	1	1	1	3
Mountain	3	( <sup>1</sup> )	-	1	1	1	-	-	-	-
Pacific	32	4.3	-	-	8	7	4	7	3	3
Interregional	20	3.0	-	1	13	3	2	1	-	-
<b>Old Age and Survivors Insurance:</b>										
All regions	516	1.4	8	495	12	1	-	-	-	-
New England	53	1.4	2	50	1	-	-	-	-	-
Middle Atlantic	128	1.4	4	119	4	1	-	-	-	-
East North Central	157	1.4	2	151	4	-	-	-	-	-
West North Central	39	1.4	-	39	-	-	-	-	-	-
South Atlantic	47	1.5	-	46	1	-	-	-	-	-
East South Central	22	1.5	-	22	-	-	-	-	-	-
West South Central	16	1.4	-	16	-	-	-	-	-	-
Mountain	3	( <sup>1</sup> )	-	3	-	-	-	-	-	-
Pacific	32	1.4	-	30	2	-	-	-	-	-
Interregional	19	1.3	-	19	-	-	-	-	-	-
<b>Unemployment compensation (Federal and State):</b>										
All regions	515	1.3	232	157	90	35	1	-	-	-
New England	53	2.1	7	17	19	10	-	-	-	-
Middle Atlantic	128	1.6	38	51	28	11	-	-	-	-
East North Central	158	1.0	100	43	10	4	1	-	-	-
West North Central	39	.7	33	5	1	-	-	-	-	-
South Atlantic	46	1.6	15	13	13	5	-	-	-	-
East South Central	22	1.4	9	8	4	1	-	-	-	-
West South Central	16	1.2	9	4	1	2	-	-	-	-
Mountain	3	( <sup>1</sup> )	2	1	-	-	-	-	-	-
Pacific	31	1.8	8	7	14	2	-	-	-	-
Interregional	19	.9	11	8	-	-	-	-	-	-
<b>Workmen's compensation:</b>										
All regions	517	.9	363	107	23	14	8	1	1	-
New England	54	1.1	35	15	1	1	1	-	1	-
Middle Atlantic	129	1.0	82	30	8	5	3	1	-	-
East North Central	161	.7	128	29	2	2	-	-	-	-
West North Central	38	1.0	22	11	3	2	-	-	-	-
South Atlantic	46	.6	40	3	1	1	1	-	-	-
East South Central	21	.6	18	1	2	-	-	-	-	-
West South Central	14	( <sup>1</sup> )	6	3	2	1	2	-	-	-
Mountain	3	( <sup>1</sup> )	2	1	-	-	-	-	-	-
Pacific	31	1.3	15	10	4	1	1	-	-	-
Interregional	20	.8	15	4	-	1	-	-	-	-
<b>State temporary disability insurance:</b>										
All regions	38	.4	35	2	1	-	-	-	-	-
Middle Atlantic	32	.3	30	2	-	-	-	-	-	-

<sup>1</sup> Number of establishments too small to justify computation of an average.

\* The averages in this table are not applicable to manufacturing as a whole. Establishments incurring no expenditures for the particular items studied were excluded in the computation of these averages, as were establishments unable to provide expenditure data.

**U. S. DEPARTMENT OF LABOR**  
**BUREAU OF LABOR STATISTICS**  
**WASHINGTON 25, D. C.**

*Questionnaire*

**CONFIDENTIAL**

The Measurement of Expenditures on Selected Items  
 of Supplementary Employee Remuneration, 1953

This survey is designed primarily to provide information on how expenditures on selected items of supplementary remuneration for production and related workers can be measured or estimated. If you cannot supply some of the information requested below, please indicate why. Reasons for your inability to furnish such data are important parts of this survey.

The period to be covered is the calendar year 1953. If a reply to any question must be computed on another basis, please write in the period covered next to your answer.

In the case of multiplant companies, a report covering the plant identified on the accompanying letter would be preferred. However, multiplant companies may report for all plants if records are maintained on that basis. Whichever alternative is selected, it is essential that all of the information supplied relate to the same unit.

**I. ESTABLISHMENT(S) COVERED**

Name of company \_\_\_\_\_

Plant(s) covered by report \_\_\_\_\_ City and state \_\_\_\_\_

Authorizing official \_\_\_\_\_ Title \_\_\_\_\_

Mailing address \_\_\_\_\_

Does a collective bargaining agreement cover a majority of production and related workers?    Yes     No

**II. PAYROLL AND EMPLOYMENT INFORMATION** (Please see instructions II-A, II-B and II-C.) This basic information will be needed to relate the expenditures reported in Section IV to annual payrolls, hours, and employment.

A. Gross payroll for production and related workers - 1953: \$ \_\_\_\_\_

B. Total man-hours for production and related workers (hours paid for - 1953): \_\_\_\_\_

C. Average number of employees during 1953:

Total \_\_\_\_\_ Production and related workers \_\_\_\_\_

### III. PLANT PRACTICES FOR PRODUCTION AND RELATED WORKERS.

These questions are designed to obtain information on the extent and nature of company practices with respect to the items listed. The answers are needed to understand the expenditure figures reported in Section IV.

#### A. Paid vacations in 1953 (see instruction III-A-1, and A-2.)

1. Approximate number of production and related workers receiving paid vacations
 

	Number of weeks' pay (or equivalent)
_____ workers	_____ week
_____ workers	_____ weeks
_____ workers	_____ weeks
_____ workers	_____ weeks
2. Total vacation man-hours paid for and taken: \_\_\_\_\_ hours

#### B. Paid holidays (see instruction III-B-1, and B-2.)

1. Number of holidays paid for during 1953: \_\_\_\_\_ days
2. Total holiday man-hours paid for but not worked: \_\_\_\_\_ hours

#### C. Paid sick leave (Report insured sickness and accident benefits under F.)

1. Please indicate whether you have (1) a formal and definite plan for granting paid sick leave to a majority of employees , (2) an informal or discretionary plan , or (3) no plan .
2. Total sick leave hours paid for in 1953: \_\_\_\_\_ hours. (See instruction III-C-2.)

#### D. Shift differentials

1.
 

Shift	Amount of shift differentials				
	Cents per hour	or	Percent of earnings	or	Other (specify)
Evening (2d) -----					
Night (3d) -----					
Other (e. g. 4th, relief, etc.)					
Specify -----					
2. Indicate the approximate total number of man-hours paid for in 1953 for work on all shifts for which a differential was paid: \_\_\_\_\_ hours

III. PLANT PRACTICES FOR PRODUCTION AND RELATED WORKERS  
- Continued

E. Pension or retirement plan

1. Does the establishment have a pension or retirement plan covering a majority of employees? Yes  No
2. If so, do employees contribute to it? Yes  No
3. If pensions are provided, indicate method of funding:
 

<input type="checkbox"/> On pay-as-you-go basis.	<input type="checkbox"/> Through profit-sharing fund.
<input type="checkbox"/> Through insurance company.	<input type="checkbox"/> Through self-insured trust fund.
<input type="checkbox"/> Other (specify) _____	
4. Was a part of past-service liability funded during 1953? \_\_\_\_\_  
Yes or No

F. Insurance, health, and welfare plan

1. Does the establishment have such a plan covering a majority of employees? Yes  No   
If so, do employees contribute to it? Yes  No
2. Method of company financing: Please indicate how the plan was financed in 1953:
 

<input type="checkbox"/> Company made a fixed contribution for each worker covered. The company contribution was (indicate amount):
_____ dollars per month per employee, or
_____ cents per hour, or
_____ percent of payroll, or
_____ other (specify) _____
_____

<input type="checkbox"/> Company did not make a fixed contribution but provided benefits or coverage.
All or most of the benefits were provided through:
<input type="checkbox"/> Purchase of insurance to cover benefits
<input type="checkbox"/> Self-insured plan
<input type="checkbox"/> Combination of above methods (specify) _____
_____
_____
3. Benefits provided for employees by plan

Life insurance (death benefits) .....	<input type="checkbox"/>
Accidental death and dismemberment .....	<input type="checkbox"/>
Weekly sickness and accident (nonoccupational).....	<input type="checkbox"/>
Hospitalization .....	<input type="checkbox"/>
Surgical .....	<input type="checkbox"/>
Medical (other than surgical) .....	<input type="checkbox"/>
Other (specify) .....	<input type="checkbox"/>
_____	
_____	

**IV. COMPANY EXPENDITURES ON SELECTED ITEMS OF SUPPLEMENTARY REMUNERATION FOR PRODUCTION AND RELATED WORKERS**

The important types of information to be obtained from this section are:

1. Do you keep separate time and expenditure records for the items listed? (Cols. 1 and 2)
2. If you keep such records, how often do you summarize the entries? (Cols. 3 and 4)
3. What were the actual expenditures for each item in 1953? (Col. 5)
4. If you do not keep records for each item, or if separate records are not maintained for the unit covered by this report, what would be your best approximation of expenditures? (Col. 6)
5. If you provided an approximation of expenditures rather than actual figures, briefly how did you derive the estimate (e.g. "total expenditures prorated on the basis of payrolls"; "number of days or man-hours involved multiplied by average earnings," etc.)? (Col. 7)

Each of these objectives, together or separately, is important for this study.

**BEFORE FILLING OUT THE FOLLOWING SECTION, PLEASE READ THE INSTRUCTIONS**

Item	Records for production and related workers				Expenditures for production and related workers in 1953		
	Are time records kept? Yes or No	Are expenditure records kept? Yes or No	Frequency with which records are summarized <sup>1</sup>		Actual or	Approximate amount	If approximated, indicate briefly for each item the method or basis of your calculation (use separate sheet if necessary)
			Time	Expenditures			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>A. Vacations, holidays, and sick leave</b>							
Paid vacations -----					\$	\$	
Paid holidays -----							
Paid sick leave (exclude insured plans) -----							
Total -----							

<sup>1</sup> Throughout Section IV use "P" for payroll period, "M" for monthly, "Q" for quarterly, "SA" for semiannually, "A" for annually, and "None" if records are not summarized.

**IV. COMPANY EXPENDITURES ON SELECTED ITEMS OF SUPPLEMENTARY REMUNERATION FOR PRODUCTION AND RELATED WORKERS - Continued**

Item	Records for production and related workers				Expenditures for production and related workers in 1953		
	Are time records kept? Yes or No	Are expenditure records kept? Yes or No	Frequency with which records are summarized <sup>1</sup>		Actual or	Approximate amount	If approximated, indicate briefly for each item the method or basis of your calculation (use separate sheet if necessary) (7)
			Time	Expenditures			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>B. Overtime and premium pay (include extra or premium payment only)</b>							
Premium pay for overtime --daily, weekly, or for work on specific days as such					\$	\$	
Premium pay for work on holidays (see instruction IV-A) -----							
Shift premium pay-							
Total-----							

<sup>1</sup> Throughout Section IV use "P" for payroll period, "M" for monthly, "Q" for quarterly, "SA" for semiannually, "A" for annually, and "None" if records are not summarized.

IV. COMPANY EXPENDITURES ON SELECTED ITEMS OF SUPPLEMENTARY REMUNERATION FOR PRODUCTION AND RELATED WORKERS - Continued

Item	Records for production and related workers		Expenditures for production and related workers in 1953		
	Are expenditure records kept? Yes or No (2)	Frequency with which records are summarized <sup>1</sup> (4)	Actual	or approximate amount (6)	If approximated, indicate briefly for each item the method or basis of your calculation (use separate sheet if necessary) (7)

C. Pension or retirement plans (Exclude administrative costs)

			\$	\$	
Past service credits -----					
Current service credits --					
Total funding expenditures -----					

D. Insurance, health, and welfare plans -- net expenditures (Exclude administrative costs)

1. Fixed contributions to union or jointly administered welfare fund -----					
2. Expenditures on individual benefits. (Bracket or combine items if separate figures are not available.)					
Life insurance (death benefits) -----					
Accidental death and dismemberment -----					
Weekly accident and sickness benefits (insured) -----					

<sup>1</sup> Throughout Section IV use "P" for payroll period, "M" for monthly, "Q" for quarterly, "SA" for semiannually, "A" for annually, and "None" if records are not summarized.

IV. COMPANY EXPENDITURES ON SELECTED ITEMS OF SUPPLEMENTARY REMUNERATION FOR PRODUCTION AND RELATED WORKERS - Continued

Item	Records for production and related workers		Expenditures for production and related workers in 1953		
	Are expenditure records kept? Yes or No (2)	Frequency with which records are summarized <sup>1</sup> (4)	Actual	or	Approximate amount (6)

D. Insurance, health, and welfare plans -- net expenditures - Continued

			\$	\$	
Hospitalization-----					
Surgical-----					
Medical (other than surgical)-----					
Other (specify)-----					
Total-----					

E. Legally required payments -- employer's share only

Old Age and Survivors Insurance-----					
Unemployment compensation:					
Federal-----					
State (net)-----					

<sup>1</sup> Throughout Section IV use "P" for payroll period, "M" for monthly, "Q" for quarterly, "SA" for semiannually, "A" for annually, and "None" if records are not summarized.

**IV. COMPANY EXPENDITURES ON SELECTED ITEMS OF SUPPLEMENTARY REMUNERATION FOR PRODUCTION AND RELATED WORKERS - Continued**

Item	Records for production and related workers		Expenditures for production and related workers in 1953		
	Are expenditure records kept? Yes or No (2)	Frequency with which records are summarized <sup>1</sup> (4)	Actual	or Approximate amount (6)	If approximated, indicate briefly for each item the method or basis of your calculation (use separate sheet if necessary) (7)

**E. Legally required payments -- employer's share only - Continued**

			\$	\$	
Workmen's compensation-----					
State temporary disability insurance-----					
Other (specify) _____					
<b>Total legally required payments -----</b>					

<sup>1</sup> Throughout Section IV use "P" for payroll period, "M" for monthly, "Q" for quarterly, "SA" for semiannually, "A" for annually, and "None" if records are not summarized.

**V. ARE THERE MAJOR ITEMS OF SUPPLEMENTARY EMPLOYEE REMUNERATION IN EFFECT IN ESTABLISHMENTS WHICH ARE NOT LISTED ABOVE?**

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**GENERAL REMARKS:** \_\_\_\_\_

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## Instructions for Questionnaire

ITEM I. SELF EXPLANATORYITEM II. PAYROLL AND EMPLOYMENT INFORMATION

A. Gross Payroll.—Report the total earnings of production and related workers on the payroll of establishment(s) covered by this report for 1953 including dismissal pay, all bonuses, vacation and sick-leave pay (including sickness and accident benefits, unless insured) and compensation in kind, and prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. Exclude legally required payments made by employers such as Old Age and Survivors Insurance, unemployment compensation, workmen's compensation, etc., and premiums or other payments made in connection with health, insurance, and pension plans. Exclude payments to members of Armed Forces and pensioners carried on your active payroll. (You may follow the definition of wages and salaries that is used for calculating the withholding tax.)

B. Total Man-hours.—In addition to man-hours actually worked (not scheduled hours) by the production and related workers reported in II-C, also include hours paid for for standby or reporting time, sick leave (including absences covered by sickness and accident benefits, unless insured), holidays, and vacations taken during the year. If employees elected to work during vacation period, report only actual hours worked by such employees. Do not convert overtime hours to straight-time equivalent hours.

C. Average Number of Employees for Year.—Add the total number of employees attached to the manufacturing establishment(s) covered by this report who worked or received pay for any part of the pay period (preferably 1 week) ended nearest the 15th of each of 12 months covered by this report, and divide by 12 to get the average number of employees for the year. Include all persons on paid sick leave, paid holidays, and paid vacation during these pay periods; exclude members of Armed Forces and pensioners carried on your active rolls. If a yearly average cannot be readily computed, please provide best estimate and identify as an estimate.

Production and Related Workers.—Includes working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial, watchman services, products development, auxiliary production for plant's own use (e.g., powerplant), and recordkeeping and other services closely associated with the above production operations. Excludes members of the Armed Forces; force account construction workers hired temporarily for plant construction, repairs or alterations; and pensioners.

NOTE: This is the same definition used by the Bureau of Labor Statistics for its regular monthly and annual production-worker employment series and by other government agencies.

ITEM III. PLANT PRACTICES FOR PRODUCTION AND RELATED WORKERS

A. Paid Vacations

1. Report the number of production and related workers who, during 1953, received a paid vacation of 1 week, the number who received 2 weeks, etc. If the vacation plan provided for a specific number of days (rather than weeks) or if vacation benefits were determined as a percentage of the employees' annual earnings, please convert to equivalent weeks, or fractions of weeks, and report the number of workers receiving the respective "equivalent weeks" benefits in 1953. For example, 2 percent or slightly more (e.g.,  $2\frac{1}{4}$  percent) is to be considered equivalent to 1 week's vacation; 4 percent or slightly more (e.g.,  $4\frac{1}{4}$  percent) to 2 weeks' vacation, etc. If the vacation plan provides 1 day's vacation per month of service, consider 5 or 6 days as equivalent to 1 week's vacation.

2. The figure to be reported here is the number of vacation man-hours paid for and taken by employees. If an employee elected to work during his vacation period, and was given his vacation pay without actually taking any time off, no hours should be included for him. If all employees received a uniform vacation of 1 week, but received varying amounts of vacation pay (some 1 week's pay, others 2 or 3 weeks' pay, depending on length of service), report only the number of hours paid for and taken, i.e., only the 1 week in this example.

B. Paid Holidays

1. Please report here the number of paid holidays which the majority of employees received in 1953. Do not include any unworked holidays which fell on Saturday and for which employees were not paid.

2. Holidays falling within employees' vacation period, which were paid for in addition to vacation pay, should be counted as holiday hours paid for but not worked.

C. Paid Sick Leave

1. Self explanatory.

2. In computing total sick leave hours paid for, include actual number of hours paid for irrespective of the rate of pay. Where nonoccupational sickness and accident benefits are paid directly by the company (not insured), include corresponding hours paid for.

D, E, and F. Self explanatory.

ITEM IV. COMPANY EXPENDITURES ON SELECTED ITEMS OF SUPPLEMENTARY REMUNERATION FOR PRODUCTION AND RELATED WORKERS

General.—Please provide data for each item separately, if possible. If necessary, however, items within a group can be bracketed and a combined figure given. If a particular item listed does not apply to your plant workers, please draw a line through the item. If no expenditures were involved in connection with a particular item in effect, insert zero (0) in appropriate column.

Records for Production and Related Workers.—These questions relate to the availability of plant or office records which could be utilized to provide accurate data. Time records refer to clock cards or other records showing the number of hours or days spent by individual workers or groups of workers in connection with the item listed. Expenditure records refer to payrolls or other records showing the wages or other remuneration paid to workers in connection with the item listed. Frequency with which records are summarized or totalled refers to the company's practice of aggregating or totalling the individual time or expenditure records over a given period of time to obtain figures for the plant as a whole or for its departments.

Use the following symbols in columns 3 and 4 to indicate the period or periods typically used to summarize time and expenditure records:

Payroll period	- P
Monthly	- M
Quarterly	- Q
Semiannually	- SA
Annually	- A
No summarization	- None

A. Vacations, Holidays, and Sick Leave

Paid Vacations.—All vacation pay, whether pay for vacations actually taken or extra pay in lieu of a vacation, should be reported here. This item should be limited to outlays actually made during the year and should exclude the amount due employees for leave carried over into later years. It should include payments for unused vacation leave to employees who leave the company.

Paid Holidays and Premium Pay for Work on Holidays.—For purposes of this study, it is necessary to separate expenditures incurred through the recognition of paid holidays and those resulting from work on paid or unpaid holidays. The following instruction was designed solely for this purpose.

Paid Holidays.—Include under Item IV-A expenditures for pay for the number of holidays (or holiday hours) reported in III-B above, even if work was performed on one or more of these holidays. That is, if the company observed the practice of granting 6 paid holidays, the expenditures to be reported here should reflect the expenditures connected with this practice. The additional pay going to employees who worked on paid holidays should be excluded.

Premium Pay for Work on Holidays.—Total expenditures (wages plus) for holidays which were worked should be refined for the purpose of reporting premium pay expenditures as follows:

- a. Exclude regular straight-time pay for work performed.
- b. Exclude the equivalent of the holiday pay the worker would have received if he did not work.
- c. The balance should be reported under Item IV-B as premium pay for work on holidays.

Example: Employee was paid a total of double-time for work on what would have been a paid holiday. In this case, no premium expenditure would be reported.

Example: Employee was paid double-time and one-half for work on what would have been a paid holiday. In this case, the expenditures on the one-half time should be reported.

Example: Employee was paid triple-time for work on what would have been a paid holiday. In this case, one-third (his normal pay) should be reported as holiday pay under IV-A; one-third should be regarded as straight-time pay for the time actually worked; and the remaining one-third should be reported as premium pay under Item IV-B.

Example: Employee was paid time and one-half for work on an unpaid holiday (that is, he would have received no pay if he had not worked). In this case, the expenditures on the one-half time should be reported.

Paid Sick Leave.—Include all payments made by the company directly (not insured) to employees for time lost because of illness or nonoccupational accidents, whether it was at the worker's

regular rate or at a different rate. Exclude payments for medical care, for benefits provided under a State temporary disability law (covered in IV-E), and payments by the company for accident and sickness insurance (covered in IV-D). This item should be limited to outlays actually made during the year and should not include the amount due employees for leave carried over into later years. It should include cash payments for unused leave.

#### B. Overtime and Premium Pay

Daily and Weekly Overtime: Premium Pay for Work on Saturday and Sunday.—Include only pay above regular hourly rates. Pay at the regular rate for hours worked should be excluded. Thus, if an employee receives \$1.50 an hour for straight-time, and \$0.75 additional as a premium for each overtime hour worked, the overtime expenditures reported here must include only the \$0.75 overtime premium. Include premium pay for Saturday and Sunday as such or for 6th and 7th days.

Premium Pay for Work on Holidays.—(See instruction IV-A.)

Shift Premium Pay.—Include only shift premium pay above regular hourly rates. This should include not only differentials paid in the form of a higher hourly rate but special payments to late shift workers for meal periods and for any other hours not worked by them but paid for (e.g., 8 hours' pay for 7½ hours' work by the night shift, compared with 8 hours' work for the day shift).

#### C. Pension or Retirement Plans

Pensions.—Where the company pays into an outside insurance fund, the total premiums paid by the company, less any dividends, should be reported. Where the company pays into an irrevocable trust, its payments into this fund should be reported. (This refers, in either case, to payments for past service credits as well as payments for current service credits.) If a pension plan is financed through a profit-sharing plan and past and current service credits are not accounted for, provide total contributions. Otherwise actual company payments to pensioners should be reported. In the latter case, if the employees contribute to pensions, all employee contributions during the year should be deducted from the amount paid out.

Pension expenditures reported here should be restricted to those for production and related (plant) workers in the establishment(s) covered by this report. If the pension plan applies to more than one plant of a multiplant company whereas this report covers only one establishment, or if the plan applies to all employees, including office, supervisory, technical, etc., and no separate records

are kept for the production and related workers in this one establishment, make best available estimate and indicate basis.

Exclude administrative costs.

#### D. Insurance, Health, and Welfare Plans

Insurance, Health, and Welfare Plans.—The object of this section is to determine the net company expenditure for each benefit listed insofar as possible. If the company makes a fixed contribution to a union or jointly administered welfare fund and is unable to allocate the cost to individual benefits, the total contribution to the fund should be reported under Item IV-D-1. If, however, the company is able to make such an allocation, make no entry under IV-D-1, but include the expenditures under appropriate headings in IV-D-2.

Payments to employees for time lost under self-insured (nonoccupational) sickness and accident plans will be reported under "Paid Sick Leave" in Section IV-A. If the company made direct payments (not covered by insurance) for hospitalization, medical or surgical bills, etc., please report such expenditures in the appropriate columns of Section IV-D, with full explanation in column 7.

Expenditures for insurance premiums should be reported after deductions for dividends unless they go to purchase additional insurance. Where only information on gross premiums is available the gross figures should be reported but should be clearly indicated as gross; in such cases a note should indicate the percentage that dividends were of total premiums during the preceding year.

If the insurance, health and welfare plan applies to more than one plant of a multiplant company whereas this report covers only one establishment, or if the plan applies to all employees, including office, supervisory, technical, etc., and no separate records are kept for the production and related workers in this one establishment, made the best available estimate and indicate basis.

Exclude administrative costs.

#### E. Legally Required Payments.

Legally Required Payments.—In the case of employers who make reduced payments because of merit rating, only the net amounts actually paid should be reported.

Workmen's Compensation.—If self-insured, please indicate in column 7 (1) what items are included in your expenditure figure and (2) how you handled the problem of segregating workmen's

compensation cost from costs of medical and first-aid services normally supplied by the establishment.

State Temporary Disability Insurance.—This item applies only to establishments in California, New Jersey, New York, and Rhode Island. If a company provides this benefit through a private (self-insured) plan, no entry should be made under IV-E, but the expenditure should be reported under "Paid Sick Leave" in IV-A; if it is procured as part of a "package" through an insurance company, no entry should be made under Item IV-E but the expenditure should be reported under IV-D, "Weekly Sickness and Accident Benefits."

ITEM V. SELF EXPLANATORY.