The unemployment compensation statistical program of the Social Security Board, launched slightly more than a year ago, is based largely upon the reports made by the State agencies. These reports include summary data on financial status, coverage and contributions, and benefit payments. In line with other unemployment compensation operations, the statistical program has been characterized by an evolutionary growth. Gradually there is developing a body of labor-market data of a type lacking at the time the Committee on Economic Security was analyzing the need for social security legislation in this country.

The American Background

In its report the Committee observed that, because of "the dearth of data concerning all phases of employment and unemployment as well as of income," it was necessary to make use of "much indirect methodology in deriving the estimates presented."  

The Committee made use of Wisconsin's legislative experience with unemployment insurance and the work of the Ohio and Massachusetts commissions. European unemployment insurance experience helped to establish certain general principles, but statistical and actuarial information derived from foreign experience was vitiated by fundamental differences in political organization, geographic and population conditions, and the structure of the labor market.

Data on employment and pay rolls and volume of unemployment were essential for the establishment of an actuarial basis in determining the approximate relation of income to outgo of unemployment compensation funds. With respect to the proposed scope of coverage, contribution rate, and amount and duration of benefits, information was needed regarding labor turn-over rates, frequency and length of spells of unemployment, and individual earnings. Data of the latter character were even more scanty than those relating to volume of employment and unemployment.

The Committee recognized the limitations of the data upon which its recommendations for unemployment compensation legislation were founded. It pointed out that one of the values of a Nationwide system of unemployment compensation would be the collection of accurate and comprehensive unemployment statistics. Since the suggested unemployment compensation plan was "frankly experimental," emphasis was placed on the value of quantitative data gained from experience as a guide to future legislative modifications. At the present time, many State agencies are contemplating amendment of unemployment compensation laws based on a brief period of benefit-payment experience. In many instances the financial status of the fund after a single year of benefit payments is being used as the criterion either for liberalization of the benefit provisions through reduced waiting periods and increased amount and duration of benefits, or for restriction of benefit rights through more stringent qualifying provisions. At this time, therefore, the British experience in making changes based on inadequate statistical and actuarial data is especially pertinent.

British Experience

The contribution rates and the benefit schedule set forth in the British Unemployment Insurance Act of 1911 were based on fragmentary data derived from trade-unions, which were little better than the data used by the Committee on Economic Security. Unemployment rates were based on experience which did not include whole trades or the numerous unskilled and unorganized workers, and represented scarcely 13 percent of the workers to be covered. The calculations of incidence
and duration of unemployment were based on a sample of 21,600 workers, less than 1 percent of the workers to be insured, and reflected the experience of only 3 scattered years—1899, 1901, and 1904. Data relating to duration of spells of unemployment were derived from the records of some 1,800 iron founders. Such a paucity of data would have justified the collection and analysis of additional statistics which could be used as a check on the validity of the assumptions underlying the original calculations. During the World War period the large volume of employment resulted in the rapid accumulation of reserves, which by November 1920 amounted to $110 million. The false sense of security engendered by such a surplus led to the neglect of the development of an adequate research and statistical program.

The extension of coverage in the Act of 1920 to all persons covered by the health insurance program, except agricultural workers and domestic servants, was based on actuarial data scarcely better than those used in 1911. Less than a year after the passage of the act, the surplus had disappeared, and a deficit had begun to accumulate. Instead of a predicted average rate of unemployment of 5.32 percent, the average rate was 11.5 percent. The operating deficit for the period 1920-28 approximated $235 million, so that by March 1928 the cumulative debt to the Exchequer amounted to approximately $125 million. By 1933 it had mounted to more than $500 million. Although this deficit may be largely attributable to such changes as reduced waiting period, increased duration of benefits, and lowered contribution rates, as well as extension of coverage to workers for whom no data were available, the need for statistical guidance was poignantly felt. Thus, in 1927, the actuary reported that he was still hampered by the limited statistical basis for the determination of a rate of unemployment for the full period of a trade cycle, and that "at no time, from 1912 onwards, has the working of the current scheme of National Insurance against Unemployment provided any data with reference to which the general rate of unemployment for a long period, and with reference to a wide span of industries, can be estimated."

In 1931, with approximately 20 years of unemployment insurance experience, a Royal Commission on Unemployment Insurance was appointed to reexamine the principles of the system. The findings of this commission indicated that the insolvency of the fund arose chiefly from factors other than the insurability of the unemployment risk.

Considerations Underlying a Statistical Reporting Program for the United States

The unemployment compensation system in this country, because of its Federal-State character, renders the formulation of a statistical program somewhat more difficult than would be the case with a single national system and at the same time makes a sound program more imperative. Such a program must at least provide the bases for current appraisal of the compensation system and yield data which can be used for forecasting the rate of unemployment and classifying more accurately risks of unemployment. Because the unemployment compensation system in this country is based upon Federal-State cooperative administration, it is necessary that the statistical program give consideration to both Federal and State needs. Since contributions are levied as a percent of pay roll and benefits are related to earnings, the data should reflect both volume of employment and pay roll and individual earnings.

The broad outlines of the statistical program at the Federal level are indicated in part by the Social Security Board's statutory obligation to certify to the State amounts necessary for "proper administration" and to make "recommendations as to the most effective methods of providing economic security through social insurance." Information is needed which will indicate the degree to which administrative operations conform with established standards. In unemployment compensation, the administrative operations take place at the State and local office level, so that the Social Security Board is largely dependent on State agency reports for such information.

Another consideration in the development of the statistical program is that the reports shall be so designed as to be useful both to the Social Security Board and to the State agency. This objective is not always easily achieved, since most of the statistical reports are closely related to State administrative procedures which differ from jurisdiction to jurisdiction and which are subject to frequent revision in the early stages of operations. Constant care must be exercised if uniformity in the items reported and comparability of the data from a national standpoint are to be
The recently revised benefit claims and payment statistics illustrate the need for such adjustment.

In formulating the statistical program, care must be exercised that the collection of data shall not interfere with an orderly claims-taking process, efficient interviewing of unemployed claimants, placement of unemployed workers, and the prompt payment of benefits. Nor must the statistical program unnecessarily burden employers with regular reporting of information which is not essential to the operations of the unemployment compensation system. Unless, however, an unemployment compensation system provides an opportunity for stock taking and yields adequate quantitative data upon which to base future administrative and social policy, it may fail to achieve its ends.

The cost of a statistical program represents another important consideration. Perhaps in no type of social legislation is administrative cost subject to such close public scrutiny as is true in social insurance. Expenditures for administering unemployment compensation are sometimes viewed as a diversion of funds which might otherwise be used for the payment of benefits to unemployed workers. Moreover, it is argued that in addition to its other advantages unemployment compensation provides a more orderly and less costly means of aiding the unemployed than is the case with other systems of unemployment relief. Administrators, therefore, are properly concerned with the reduction of administrative costs; frequently statistical operations which seemingly do not enter into other day-to-day activities are made to bear the brunt of an economy drive. The costs of a statistical reporting program are necessarily affected by the existence of 51 State agencies with different legislative provisions and administrative procedures.

The effort to keep such statistical costs at a minimum has necessitated the restriction of the statistical program to reporting of only the minimum essential data. Reliance has been placed upon counts at control desks rather than on analysis of basic documents and upon selection of representative samples for certain types of reports which, either because of volume or detail, tend to make complete analysis costly.

The unemployment compensation statistical reporting program must also be considered from the standpoint of its relation to other unemployment relief plans. Unless the statistical program yields quantitative data which will provide a basis for a more adequate comprehension of the relationship between unemployment compensation, public works programs, work-relief programs, and direct relief, it will be difficult to make the necessary adjustments in the benefit formula which will define the unemployment risks to be covered by the compensation scheme. To a considerable extent, administrative policy in other unemployment relief programs must be guided by the developments in unemployment compensation. Thus far, scarcely any quantitative data have become available which serve to indicate the interrelationships between various unemployment relief programs; nor is it likely that accurate information of this character can be obtained from the regular unemployment compensation statistical reporting program in the near future. Some effort has already been made to institute a statistical reporting system which would yield current data indicating the extent to which relief cases were being closed because of the receipt of unemployment benefits. Such information is now available only for the State of Pennsylvania and a few scattered large cities.

The unemployment compensation statistical program is to be most effective in its guidance to administrators, it must provide for a closer integration of employment service and unemployment compensation statistics. This is especially important since employment service records are necessarily related to individual registrants. Such integration would make available data on personal characteristics of claimants which at the present time can be obtained from the unemployment compensation system only at added expense. The organization for effectuating such integration already exists. The research and statistical units in most State agencies are now responsible for tabulating both unemployment compensation and employment service statistics. The need for integration

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1 Jacobs, Arthur. "Studying the Effect of Unemployment Compensation on Relief," *Papers on Relief Statistics, No. 6*, published by the Joint Committee on Relief Statistics of the American Public Welfare Association and the American Statistical Association, December 1938. This article presents a number of questions which can be answered only by statistical data.

tion lies largely in the collection of the statistics, which in many instances necessitates merging of statistical reports at the local-office level.

Other considerations entering into the development of a statistical reporting system are the character and detail of the reports as well as the frequency with which they are to be submitted. In this connection it is necessary to distinguish between reports needed regularly and those needed for special purposes.

**The Present Statistical Program**

All the foregoing considerations have influenced the character of the existing statistical reporting program. The statistical data reported to the Social Security Board are deemed to provide the minimum information required by State agencies and the Board. The essential features of the statistical program outlined more than a year ago are still in use. Such modifications as have been introduced were motivated primarily by the need for greater uniformity in the items reported and increased administrative usefulness. In the development of this statistical program the statisticians of the Social Security Board have received assistance from the Committee on Research and Statistics of the Interstate Conference of Unemployment Compensation Agencies. In addition, State statisticians have frequently submitted detailed comments and suggestions for the revision of the program.

**Financial Transactions Statistics**

This monthly report provides information on an accounting basis as to additions, deductions, and end-of-month balances in each of three accounts which concern the State agencies—the clearing account, the unemployment trust fund account, and the benefit-payment account. This report provides the record of the current financial status of the unemployment compensation system.

Although the financial transactions report makes no provision for allocating contributions received to the pay-roll month for which payment was made and therefore includes a certain amount of delinquent contributions, it provides the most nearly current indication of the approximate fluctuations in taxable pay rolls. Since taxable pay rolls represent a considerable proportion of total pay rolls, information on this item has wide economic significance. When differentiation in State contribution rates (merit rating) becomes effective, however, this usefulness will be minimized.

**Coverage and Contribution Statistics**

The statistical report commonly referred to as the "coverage and contributions" report includes, in addition to items on number of covered workers (total number of workers engaged in covered employment for subject employers during the last pay-roll periods in the month) and amount of taxable wages, such other items as number of reporting units and amount of contributions (relating to wages payable in the reported pay-roll month). Although 33 State agencies have shifted to a quarterly basis for collection of contributions, the quarterly reports provide for a monthly break-down on the number of workers and the amount of taxable pay rolls. This information is fundamental to any analysis of solvency of State funds, seasonal unemployment, and merit rating.

The information submitted on this report was reported only on a State-wide basis through the pay-roll month of June 1938. Most State agencies, however, tabulated these data by major industry groups and by locality for at least part of an earlier period. This development has taken place because some unemployment compensation statistical units in States where data on employment and pay rolls have been lacking or inadequate have wished to establish indexes of employment and pay rolls by industry group. In these States the statistical method employed by the Bureau of Labor Statistics in constructing its indexes is used, although some consideration is being given to other methods.

Recently the Social Security Board provided for State reporting of covered employment and taxable pay rolls by major industry group 2 months after the report on a State-wide basis is made. The major difficulty with the coverage and contribution report has been that the reports of employers who were delinquent in reporting to the State agencies were not reflected in the data submitted to Washington. The industry report on

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5 The uniform closing date for the tabulation of the State-wide report has been eliminated so that the State agencies may have an opportunity to include a larger volume of delinquent reports.
covered employment and taxable pay roll, although
less useful for indicating current trends of employ­
ment and pay rolls, will be more nearly current
and more comprehensive than any other regularly
collected quantitative data of a similar character.
It can, therefore, very well serve as a bench mark
to which current indicators of employment and
pay rolls may be adjusted, and it permits more
frequent corrections of these indicators than have
been possible in the past.

Provision was made recently for current re­
porting of the administrative processing of wage
records in State agencies, and some work is being
done toward the development of an adequate
report on delinquency in payment of contributions.
Reports of this type are necessary for adminis­
tative purposes.

Benefit Claims and Payments Statistics

The present monthly reports on statistics of
benefit operations are limited primarily to ad­
ministrative data. For this reason, the statistical
reports must be revised from time to time so that
there will be a greater consistency between pro­
cedures in effect and the statistical items reported.
It is important that accurate data be reported if
the administrative load of State agencies is to be
appraised. These reports, however, do have a
limited socio-economic significance. Fluctuations
in the weekly claims load give added information
on trends in the labor market. The number and
amount of claims and payments classified by type
of unemployment (total, partial, or part-total)
provide some guidance in the analysis of the chang­
ing character of unemployment. Benefit pay­
ments according to major industry groups when
compared with contributions received are not
only useful in connection with analyses of the
solventy of the funds but also make possible a
better understanding of employment opportunities
in various industries.

All these data, however, must be used cau­
tiously. They are influenced by the administra­
tive procedures from which they are derived, and
they must be analyzed with these limitations in
mind: They relate only to workers in covered em­
ployments in establishments of a specified size,
and they provide information only for those weeks
when the claimant was within the scope of the
compensation system. Thus no information is
currently available on a claimant once he has ex­
hausted his benefit rights. Until recently, the
statistical reporting took no account of the dis­
tinction between waiting-period claims and com­
pensable-week claims. This present differentia­
tion not only permits a more satisfactory measure
of the work load but also provides a measure of
the completed man-weeks of unemployment which
were compensated.

Work-relief and public-works programs can
more easily, through their administrative pro­
cedures, provide information with respect to the
individuals served than is possible in unemploy­
ment compensation. It is important under the
unemployment compensation program to get a
count of individuals either on a monthly or on a
quarterly basis, but since the entire benefit­
payment procedure is based on the claims-taking
process, and since the same individual may file as
many as four or five claims within a month it
becomes exceedingly difficult and costly to avoid
a duplicated count. Moreover, the promptness
with which benefits are paid, the procedure in­
volved in closing an account, and the inclusion of
irregular payments—such as supplementary, ad­
justed, and multiple payments—to an individual
within a week affect the validity of the statistics
for individuals. Efforts to obtain this information
on a monthly basis have not proved successful.
More recently the statistical reports have been
revised to provide an unduplicated count of the
number of individuals receiving benefits in the
calendar week ending nearest the 15th of each
month.

In contrast to American experience, the British
unemployment insurance system easily yields
data with respect to the number of individuals
receiving benefits as well as a considerable amount
of sociological information. The ease with which
such information is obtained is largely attribut­
able to the benefit provisions and procedures as
well as to the use of the stamp-pass book which
each claimant must lodge with the local office of
the employment exchange. At the present time,
such information in most State unemployment
compensation agencies can be obtained only from
the internal administrative records. Since these
records are in current use, they are difficult to
obtain for special statistical analyses.

A somewhat similar situation exists in connec­
tion with unemployment compensation statistics
regarding the frequency and length of spells of

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unemployment (waiting-period and compensable) and the classification of benefit payments according to major industry groups.\footnote{For a brief description of the industrial classification system used in connection with unemployment compensation statistics, see: Bogge, Tillman M., "Industrial Classification in Relation to Unemployment Compensation," Social Security Bulletin, Vol. 1, Nos. 1-3 (March 1938), pp. 19-22.} For example, waiting-period claims in a great many States are now represented by signatures on a claim record card in the local office. The statistician in the central office is, therefore, dependent upon local-office counts somewhat removed from statistical control. This information eventually finds its way to central-office administrative records but rarely is available to the statistician because it is needed for current operations. Again, in obtaining benefit-payment data by industry, the statistician is frequently confronted with a benefit procedure which does not identify the industry of the last subject employer preceding the spell of unemployment. Consequently, benefit payments may have to be classified by industry of the last subject employer preceding the establishment of a benefit year or the last subject employer in the base period (usually available on the individual wage record). Fortunately, since various statistical analyses indicate that the average number of employers per claimant during a year is between 1.2 and 1.8, the industry classification is apt to be fairly reliable. This view is based on the assumption that the shift of workers between industries is even less than that between employers.

Provision was made only recently for the optional reporting by State agencies to the Social Security Board of the number and amount of benefit payments classified according to type of unemployment and major industrial groups. The Board has also made provision for an optional statistical report of the duration of benefit payments (number of full weeks of total unemployment compensated) according to weekly amount of benefit payment for claimants whose benefit years have been completed.

The widespread acceptance of the Interstate Benefit Payment Plan, which permits a worker who has left a State in which he has acquired benefit rights to file his claims for benefits in the State to which he has moved, has necessitated a new statistical report which will measure the administrative load arising from such multistate claims. This report also will provide a basis for some rough approximations of the geographical shifting of the covered-worker population.

For some time reports on the number of weeks elapsed between the end of the compensable week and the date of benefit payment have been made to the Board. These reports have now been revised to take account not only of first payments but also of second and subsequent payments in a benefit year.

The major emphasis of the revised benefit statistics reports has been to simplify reporting and to increase administrative usefulness. In making the necessary changes, however, the interests of other governmental agencies, students of social insurance, and the general public have been given consideration. In general, the revision of the statistical reporting program has been influenced by the view that it is neither desirable nor economically feasible to obtain certain types of quantitative data regularly. The statistical reports appear to be adequate for Federal purposes, but they do not provide for certain statistical data which are essential at the State level. Apart from the statistical reporting program established by the Social Security Board, there remains an important area within which statistical information can be supplied by the State agencies through the mechanism of special statistical analyses.

State Statistical Analyses

The ordinary administrative process for the determination of benefit rights yields a considerable body of important statistical data which can be obtained only by analysis of the internal records of the State agency. These records often contain sociological information regarding sex, age, and color. They are the sources from which data of individual earnings and shifts between employers and industries are available. Statistical data regarding the frequency and length of spells of compensable unemployment can often be derived from these internal administrative records. This storehouse of information has only recently been recognized, and the full significance of the data which may be yielded are just now beginning to be appreciated.\footnote{Examples of the use to which this type of data can be put are: Flood, William. "Seasonality in Ohio Canning Establishments in Relation to Unemployment Compensation," Social Security Bulletin, Vol. 1, No. 10 (October 1938), pp. 5-10; and Horn, McDonald K., Jr., "Seasonal Workers Under the Mississippi Unemployment Compensation Law," Social Security Bulletin, this issue, pp. 15-14.} Indeed much of this information has become available only within the past year and...
in most cases is too fragmentary for purposes of drawing valid conclusions.

The significant differences between States as to provisions of the unemployment compensation laws, structure of the labor market, diversification of industry, and patterns of employment make necessary individual State statistical and actuarial analyses. Moreover, many State laws specifically provide for the conduct of studies relating to partial unemployment, seasonal unemployment, merit rating, and stabilization of employment, and other laws imply that such studies should be made.

These needs have resulted in the establishment of research and statistical units in all State agencies. For the proper functioning of such units, it has been necessary to provide staff and equipment. The size of the statistical unit and the equipment used in a State agency are largely determined by the volume of administrative load and the type of administrative procedure. These units must ultimately provide the essential quantitative data and research which will supplement the regular statistical reporting program and which will provide the bases for future social, legislative, and administrative policy.

The evolution of unemployment compensation in this country indicates that research and statistics should perform an increasingly important function. Following the enactment of legislation, immediate interest was centered on problems of organization, determination of employer liability, and the collection of contributions. Subsequently emphasis was given to the development of benefit procedures and the making of prompt payments. All these problems, although continuing, become less pressing with the passage of time. The function which becomes increasingly significant is that of analysis and research—to develop standards and bases for legislative amendments and for increasingly effective administration.