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WILLIAM A. BERRIDGE, Metropolitan Life Insurance Company

Although my participation in the field of unemployment and employment statistics in any active way ended a quarter-century back, I had spent more than a decade before that doing some modest pioneering in the development and use of such data for business cycle measurement. Inasmuch as my first main efforts in this field go almost as far back as the end of World War I, I hope that some of my references to the genetics of employment and unemployment measurement may prove to be of some interest and value to the many younger people who now delve in this field.

For example, when you bemoan present-day uncertainty as to the exact number unemployed—however unemployment be defined—you forget how lucky you are to have a direct measure of it available to you at all. Those of us who made unemployment estimates long ago had to content ourselves with far less, as the following reminiscences will make plain.

The 1921 President's Conference on Unemployment was organized by Herbert Hoover while he was Secretary of Commerce, and it gave the National Bureau of Economic Research its first important claim to fame. The Conference had a small subcommittee charged with developing an estimate of the number then unemployed, which consisted of the late revered Wesley Mitchell, founder of the Bureau, another intellectual giant, Allyn A. Young of Harvard, and two young technicians, Ernest S. Bradford and myself (with occasional visits by Walter W. Willcox of Cornell, as I recall). As a result of earlier studies. this committee decided to use the downswing of factory employment and of a few other employments as the prime basis for its unemployment estimation—along with a posited unemployment estimate for the peak of the previous boom. That estimate had to be arrived at "by guess and by God." Now it seems corroborated, as a by-product, by Stanley Lebergott's study which uses the much better test data now available—not only on subsequent depressions and recessions, but even on that of 1921 itself.1 As a surviving and active member of that

¹ Few present workers in this field seem to appreciate fully how inferior to the present were our current data-not only on unemployment but also on employment—at the time of that incident in 1921. Not until two years later did I succeed in persuading anyone (Dr. Walter W. Stewart of the Federal Reserve Board) to finance me in constructing the first employment index that eliminated biases and yielded truly dependable amplitudes from peak to trough in the net number of workers displaced (Federal Reserve Bulletin, December 1923, pp. 1272-1279).

That index, first done for factory workers, was later extended and otherwise

ancient body, I, on its behalf, express appreciation for this support after a third of a century.²

Indeed, the progress in measuring unemployment has been so vast that present students make exaggerated charges about discrepancies between agencies, and within different samplings by the same agency, that are really unwarranted when these are seen in historical perspective. Now the problem of discrepancy will doubtless always be with us. But you do not know what discrepancy really is if you are not familiar (by actual participation or by delving into the detailed reports and commentaries) with the much wider dispersions of a relatively few years ago. At a time when unemployment is low, does a discrepancy between 3.1 and 2.4 million warrant a wringing of hands? Not that I favor accepting the old standards. It is good that such discrepancies are being studied and that the very competent Stephan-Frankel-Teper Committee was set up (and so promptly) by Census Director Burgess to look into their origins and remedies. All that I have heard and seen of its report makes it seem a sound appraisal.3 Why not view our greatly improved data situation with a reasonable patience?4 Above all, let us not permit anyone to misinterpret or misuse the present minor controversies or to make them an entering wedge for discrediting sampling as such.

Not only am I a friend of small samplings but was one many years ago when small samplings had very few friends indeed. Though recog-

improved by Woodlief Thomas, then by Aryness Joy. Finally the Bureau of Labor Statistics (under new management) was prevailed upon to adopt the improved methods, whose results we all take for granted now.

² Report of the President's Conference on Unemployment, published in 1921. The specific section above referred to is on pages 52-57, but the same topic is adverted to variously in the general division concerned (Part II, "Unemployment Statistics," pp. 37-58, passim).

Also germane is Ernest S. Bradford's nearly contemporary note on "Methods Used in Measuring Unemployment" (Journal of the American Statistical Associa-

tion, December 1921, pp. 983-994).

When that Conference and the National Bureau of Economic Research jointly issued, in 1923, the book resulting from their report and recommendations, Business Cycles and Unemployment, it bore three ground-breaking chapters of special interest to members of our present Conference: Chapter VI on volume of employment by Willford I. King, Chapter V on underemployment by Paul Brissenden, and Chapter XVIII on unemployment insurance by Leo Wolman. I, too, had a paper in the volume, Chapter IV, "What the Present Statistics of Unemployment Show."

8 That very favorable opinion is confirmed by study of the report and ap-

pendixes, available in full since our Conference.

⁴ In respect to the part of the problem that concerns disagreements between the Bureau of Employment Security data and either of the Census Bureau's figures, we all seem impressed by the mutual tolerance and understanding repeatedly expressed here by representatives of the two agencies.

nizing that some of these unemployment studies and many elsewhere have been based on small-size samples, I think more could well be, not only on unemployment but on such intimately related variables as employment itself. This conviction arose many years ago, during a study of employment returns. I even tried to wager Ethelbert Stewart, then Commissioner of Labor Statistics, that he could develop virtually as good a general index from a sample of, say, 10 or 5 per cent (i.e. the first quarter or eighth of his returns) as from his full standard sample (which, he always felt, should be 40 per cent).

The conviction became even stronger in the late 1920's when I was watching the returns gathered in the pilot project on labor turnover (transferred to Bureau of Labor Statistics in 1929). When a simple control was set up to guard against the explosive effect of large-employer returns, I saw samples of 5 per cent, 1 per cent, or even smaller, yield astonishingly reliable results, days and weeks ahead of the final result.⁵

A recommendation of experimental small samplings was included by the American Statistical Association's Labor Statistics Committee in its handbook nearly thirty years ago. Little practical action resulted then. But now in the 1950's—with higher costs, with better knowledge and experience on sampling techniques, and with more demand for expediting results—experiments looking toward smaller samples in routine reporting, as in special studies, seem even more appropriate than ever before.

Several papers and discussions in this volume have dealt with parttime employment (or unemployment) and hidden or "disguised" unemployment both within the labor force and outside it in the socalled "secondary labor force." Opinions on this complex are difficult or impossible to synthesize, but it does seem that the case for counting

⁵ For a recent handy summary of the result, see my "Technical Note" in *Monthly Labor Review*, August 1954, pp. 887-890.

If wider turnover reporting is undertaken than at present, it would seem warranted only on grounds other than the validity of the sample size as such, within the industries covered. It is surprising to note a seemingly contrary view in the testimony by Arthur F. Burns, Chairman of the President's Council of Economic Advisers, before the Joint Committee on the Economic Report's Subcommittee on Economic Statistics (July 12, 1954, p. 166).

⁶ "Reliable statistics could probably be compiled on the basis of samples smaller

⁶ "Reliable statistics could probably be compiled on the basis of samples smaller than 40 per cent. [In fact some members of the committee hold that a properly selected sample of 15 per cent or even less would be adequate for some industries.]

... Probably one-third is a feasible proportion at which to aim. Forty per cent of the workers in any industry would appear to be in general an upper limit of the quota needed; and frequently a much smaller proportion may be found ample." Employment Statistics for the United States, Committee on Governmental Labor Statistics, Ralph G. Hurlin and William A. Berridge, editors, Russell Sage Foundation, 1926, p. 65.

persons in all of these states as unemployed should be declared "not proven" if not "disproved." Surely 2 million people on half-time work do not form the same problem—economically, socially, or politically—as 1 million wholly without work. Any such mathematical equating can only pad the rolls of the unemployed in a deceptive and meaningless way. So would the counting of, say, farmers' or others' inaction within employment; such measuring seems mere stop-watch engineering or accounting, hardly economics.

To count as constructively unemployed those school pupils, housewives, and others who might be at work if various circumstances were different seems altogether too subjective. Hypothetical questions are not good standard practice for unemployment or labor force inquiries. After all, one need not call all inaction unemployment. Surely it is not the only problem in the world. Nor is a gainful job necessarily the summum bonum for every person, time, place, and circumstance. "Full employment" can become, if it is not already, a monomania. In both long and short run, it may be better for many to be at school or housework than at jobs; indeed, many on jobs right now might far better be at school, or managing home or children. Perhaps some of us have so intensively cultivated the field of unemployment that we have passed well out into the zone of diminishing returns and should transfer some part of our technical talent to the measurement and behavior of other problems—such as "unschoolment."

"Disemployment," as defined and used by Philip Hauser, seems a good and useful term, and I hope it will gain wide currency. Unemployment, in whatever scope of meaning, has come to be far less an economic than a "political" word, as Robert Nathan so aptly said at the Conference. The concept lends itself only too well to rabble rousing, it may fairly be said to embody poor semantics, and it concentrates attention unduly on "the hole rather than the doughnut." The much larger and economically more significant "positive" mass of employment deserves greater emphasis.

However, unemployment statistics are as accurate as employment statistics and as reliable as business-cycle gauges. True, the statistics of unemployment may have very inaccurately measured the actual volume of unemployment (by whatever definition, broad or narrow). But that is not a conclusive test. When not their absolute size but their relative fluctuations are examined, unemployment statistics have proved highly reliable.

This was true even for the supposedly poor statistics gathered by trade union secretaries in two states as long as a half century or so ago. Such data were among the few working materials available on the his-

torical course of employment variations for my doctoral thesis in 1922. For a test period covering approximately 1900 to 1915, the unemployment variations were highly correlated with long-accepted business indexes. Indeed, a measure based more on unemployment than on the meager employment statistics then available showed a higher correlation with one widely accepted economic composite than did the latter's several components.7 Those results surprised me as much as they did Wesley Mitchell and Warren Persons; even those thorough workmen had ignored the few unemployment and employment statistics available. With so much latent cyclical accuracy in the data then, how much better should be the vastly improved data on present unemployment. That bit of history shows that, however inferior unemployment may be to employment, semantically or otherwise, it was measured by data that could and did measure economic cycles as reliably as data on employment or even as other economic gauges more widely accepted at that time.

It is pleasant to have the term "labor float" used here again, partly because I apparently was first to use it and partly because the first person who took it over applied it incorrectly to all unemployment, not as I have occasionally used it, to mean substantially the same thing as the perhaps clumsier or less descriptive "frictional unemployment" (i.e. labor in suspense while en route from one employment to another, analogous to "bank float" or "money float").

I close by paying tribute to the members of the Dominion Bureau of Statistics for their unique contribution to this Conference in their treatment of the terms "unemployment" and "labor force." They have been formulating a clear and clever definition of labor force which does not once say either "unemployment" or "unemployed." It has been good to know, from their other contributions as well, that Canada is fully on the alert to problems of unemployment measurement and behavior.

I hope that my attempt at a retrospective view, synthesizing briefly some pertinent developments in the history of employment- and unemployment-measurement since the early 1920's, will have helped you do what methodologists in any field could well profit by doing more—namely, to study methodology from a genetic point of view.

⁷ A less abridged summary of these correlations, etc., may if desired be found in *Review of Economic Statistics*, January 1922, especially pp. 34-35. So far as I can recall, this demonstration has not been "spelled out" more fully anywhere else, except in the thesis itself, "Employment and the Business Cycle," unpublished, Harvard University Library, pp. 196-211, *passim*.

ABRAHAM L. GITLOW, New York University

The questions of underemployment raised by Louis L. Ducoff and Margaret J. Hagood, however interesting and valuable, really involve questions of the economy's structure and resource allocation among alternative uses rather than the measurement of unemployment and its behavior. We should concentrate on the latter; the former involves matters that would only divert us. Not quite so strong, but similar in nature, is my reaction to Richard C. Wilcock's paper on the secondary labor force.

One of the real, current measurement problems-clearly revealed in Gertrude Bancroft's paper—is that involving "fringe" persons in the labor force. If we expand the current measurement by the Census Bureau (in the Monthly Report on the Labor Force) to include the secondary labor force, we shall compound these difficulties and produce something that invites public confusion. Miss Bancroft's suggestion that a new category of partially unemployed ("economic" or "involuntary" part-time workers) be introduced into the MRLF would strike a responsive chord in my mind if it indicated how persons partially employed ("voluntary" part-time workers) would be identified. Otherwise, it seems more a response to some rather vocal, organized criticisms than a substantive matter. These people are counted now. What do we really change by altering the name? If, however, she intends to distinguish the partially unemployed from the partially employed my response becomes more favorable. She also suggests the monthly collection of data on the reasons for part-time work. I favor this.

I cannot be certain, but I get the impression that Miss Bancroft is distressed by definitions of unemployment which embrace attitudes, inclining more strictly toward an activity definition (see page 78 and point 1 on page 97). If we accept Louis Levine's definitions of activity (seeking work) and attitude (desiring a job under certain conditions), I would not go so far as she does in eliminating the latter from the MRLF. Her suggestion that the MRLF drop those not actively seeking work because of their belief that no job is available in their regular line of work seems all right. Instead of completely dropping those unemployed because of illness, however, it would seem more accurate to set some time limit (e.g. one month) during which they would be counted as unemployed rather than as being in the nonlabor force. In a more basic sense, I wonder if it is really desirable or possible to divorce activity from attitude. What is "full-time" activity? Does it not reflect certain attitudes of a society? If people are voluntarily employed

part time, are they also partially unemployed? In such a case, I am inclined to give their attitudes great weight.

ELIZABETH J. SLOTKIN, Illinois Department of Labor

One of the elementary principles of scientific method is that the results of any research program depend primarily upon the original question which the research was designed to answer. Unfortunately, in proceeding from the stage where the question is posed to the definition of the problem and the concepts to be used, and from there to the collection of data, the original question is often lost sight of.

In reviewing the labor force concepts, I tried to work my way back to that original research question. After I had studied the concepts, I became more and more convinced that it had been: "How many jobs do we need to provide to employ our labor force more fully?" Consequently, I was very much interested to find some confirmation in Gertrude Bancroft's paper. On page 65, she points to the interest in determining "the number for whom jobs should be provided," as being one of the motivating forces behind the census concepts. Although she described the solution of the problem as being "middle of the road," I believe that the "current activity test" for unemployment comes closer to being a device for answering the question stated above than for answering any other single question.

I think much of the current controversy derives from the fact that we are today asking a different question and looking to census data to answer it. We are asking that our employment statistics give us a measure of the state of health of our economy. Increased employment brings with it increased purchasing power. Increased unemployment diminishes purchasing power, and whether one is a Keynesian economist or not, one cannot deny that purchasing power is required to make effective the demand for goods and services.

It is still true, of course, that we want to know how the people in our economy are being affected by the changes that are taking place in that economy. We should recognize at least two questions in need of data for their answers and should try to make our statistics conform to this double-headed problem. I believe this would result if an operational definition were adopted for employment as well as for unemployment. In other words, I think the acid test for employment is payment, and the group of workers with a job but not at work who are counted as employed should be limited to those who were paid by their employer for the week in question. Those who think they have a job to return to or to report to at some future date within the next thirty days should be counted separately. Whether they are put in a separate

category or whether they are counted among the unemployed does not particularly matter. My own inclination would be to count them among the unemployed, but possibly that is because I have known too many people whose statement that they had a job to report to proved to be a fantasy on their part, and I have also known too many plants to lay off workers for a two-week period that stretched out for many more weeks.

If my suggestion were adopted, I think a series of data that would react more sensitively to economic change would result. The research question would be: "Of those participating in our economy, how many were receiving or were due to receive payment for their activity during the census week and how many were not so rewarded for their efforts?"

It has been suggested at these meetings that we need not be concerned with unemployment except as it affects primary breadwinners. Those of us who have worked directly with labor market problems know that there is no orderly procession in and out of employment, with secondary workers hired last and laid off first. Consequently, to advocate that we concern ourselves only with the unemployment of primary breadwinners takes the question of the measurement of unemployment out of the realm of economics and at the same time calls for the imposition of labor market controls to assure a minimum of unemployed primary breadwinners. Labor surpluses would have to be reduced by forcing early retirement of excess male workers and by driving women out of the labor force by such slogans as "Küche, Kirche, Kinder." Adequate supplies of labor would have to be assured at other times by reversing these procedures. I think it is important to bear in mind that a definition of the term "unemployment," even though presumably designed for statistical measurement only, may have inherent in it a program of action which is inconsistent with our traditional labor market practices.

CONRAD TAEUBER, Bureau of the Census

There has been a good deal of emphasis in these papers on the desirability of having more detailed information about the unemployed as well as about the persons who move into and out of the labor force. The desire for additional information is one which we of the Bureau of the Census are striving to meet and it is our plan to make available more information about the characteristics of the unemployed than has been recently available.

However, some of the new groupings (or regroupings), that have been discussed seem to have policy implications that call for careful consideration before the new groupings are generally used. For exam-

ple, there are difficulties in classifying individuals as "primary" and "secondary" workers. Even if those difficulties of classification are satisfactorily disposed of, a series on the unemployment of primary workers would provide only a part of the needed information.

Great stress has recently been laid on the production and distribution of durable consumer goods and on the importance of maintaining a broad base of purchasing power to permit the movement of such goods. Insofar as the maintenance of a high level of business activity depends on decisions to buy or not to buy, it may well be that an increase in the unemployment of secondary workers might have a disproportionate effect on the economy. To illustrate, the statistics on family income show that approximately two-thirds of the families with incomes of \$6,000 to \$10,000 have more than one earner, and it may well be that the ability of these families to maintain a high level of consumption is dependent on the continued earning of the secondary worker.

It is our intention to provide statistics on the unemployment of family heads. The users of such statistics should recognize their limitations in an economy whose level of activity is dependent less on the provision of the minimum essentials for the maintenance of life and more on the provision of goods and services which people can forego without immediate danger to the maintenance of life.

Morris H. Hansen, Bureau of the Census

The demand for more data on unemployment has been not so much for data that could be used immediately to make decisions on economic policy as for data that could be used in analytic studies of the unemployed and of unemployment. An economical way to obtain some of the data required from the monthly labor force surveys of the Bureau of the Census would be to cumulate information from successive surveys. Estimates that are too unreliable to publish from a single month's enumeration might become publishable on a quarterly, semi-annual, or annual basis.

A word of caution is needed in connection with what has come to be known as "gross change analysis" as used in the papers by David L. Kaplan and Philip M. Hauser. The problem in interpreting these tabulations was recognized in these papers but deserves some additional emphasis. Gross change analyses are the tabulations of the month-to-month changes in labor force status of identical individuals (i.e. of persons who are included in the survey during the months under study). Our investigations of the accuracy and reliability of enumerative surveys suggest the hypothesis that substantial proportions of the gross changes from month to month may be simply response errors or

"response differences." The evidence we have gathered to date suggests that 5 to 30 per cent of the individual responses to specific labor force inquiries may vary (without any change in the characteristic under inquiry) from interview to interview. Some characteristics can be measured with considerably greater stability than others. The available evidence also suggests that such gross response variability usually has little effect on the summary statistics themselves—the totals and proportions. There seems to be considerable cancellation of errors. Gross change analysis, however, can not take as much advantage of the phenomenon of cancellation.

The collection of economic data is itself an activity of an economic character. The costs of producing statistics and the value of the statistics to those who use them should somehow be commensurate. This point of view has important implications for the design and conduct of data-collection activities. Not the least of these implications is that the "specifications" for a set of statistics should not only indicate the kinds of data that are required but also should consider the costs involved in various levels of inaccuracy that these data may possess. Where substantial amounts of public funds are involved, it is not enough to specify that the data should be "useful for micrometric analysis" or should be "reasonably accurate" or should be "consistent indicators of changes in the cycle." Nor is it adequate to specify that statistics should be "as accurate as possible."

Economists and other users of data must begin to examine critically how they use the data that are provided for them so that the requirements for the investment of public funds in statistics can become somewhat more rationally determined than is now feasible.

Paul S. Taylor, University of California

We suffer at times from a tendency to define our task by the tools we use. We focus on arriving at one perfect statistical series. (In deference to the Bureaus of the Census and of Employment Security ought I to say two perfect series?) But our problems are not so confined and uniform in nature that they will all yield to dissection by the same tool. The people who leave Illinois industry to "go to the hills" are "out" for the Illinois Department of Labor's statistical purposes, but they are "in" for the United States Department of Agriculture. We do not ask a single question and get a single answer. At what point along the curve of unemployment do we "get worried"? Have we enough reserve manpower for our periods of greatest exertion, for example, war?

¹ Our results are generally consistent with those reported by Gladys L. Palmer in "Factors in the Variability of Response in Enumerative Studies," *Journal of the American Statistical Association*, June 1943, pp. 143-152.

Even this question is not simple, as we step up to bridle it with a single statistical measure. In preparing estimates of the adequacy of the agricultural labor supply during the defense period just prior to World War II, I came across the reports of Thorstein Veblen on the adequacy of the agricultural labor supply during World War I. In his view, the definition of available labor reserve was greatly affected by the sharp eye he cast upon the nature of economic institutions in agricultural areas, and he saw far greater labor reserves than most. Who is to say that under sufficient emergency pressure, more observers might not look twice at the corners of the economy to which he pointed?

In considering what is adequate as a statistical measure, we do not entirely escape the binding force of our institutional arrangements. Our mores are involved at times as well as our economics. The solution of our problem of measurement, it seems to me, lies in diversity of statistical series; in special studies as well as in continuous series. When unemployment and underemployment become conspicuous in, say, the anthracite industry or in agriculture, we need special studies there. When special aspects of unemployment become prominent, as for example, long duration creating a "hard-core of unemployed," we need special statistical studies that will give the dimensions of this disturbing human problem. Our problems do not lack for diversity, and our measurements ought not to be sought in the singular, but rather in the plural.

A. Ross Eckler, Bureau of the Census

There are two types of research that I think will be helpful in contributing to the eventual solution of some of the problems discussed in this volume. First, the Bureau of the Census is undertaking a considerably expanded program of research on its Current Population Survey, primarily as a result of suggestions in the report of the Stephan Committee on employment statistics. This research will take a number of forms and should bear directly on many of the subjects discussed. It will involve some exploration of conceptual problems to see whether improvements can be made in the present labor force categories. It will involve studies of questionnaire design and interview procedures to determine whether more consistent measures can be obtained. Important emphasis will be placed on quality control procedures to insure that the performance of all units of the organization is being maintained at the levels required. Greater knowledge of the dynamics of the labor force is to be expected as a result of extension of month-tomonth gross change analyses and the development of gross change

analysis on a year-to-year basis. We expect that the papers presented here, together with the comments, will be fully taken into account as we carry out some of this research work.

Second, I should like to suggest the desirability of steps to determine more accurately the relationship between the Bureau of the Census and the Bureau of Employment Security unemployment data. We agree, I take it, that the two sets of data serve important purposes and complement each other in a significant way. I should like to urge that efforts be made to carry out matching studies in order to learn more about the composition of each series in relation to the other. The difficulties are admittedly great, and each agency must operate carefully because of the provisions on confidential material contained in the laws and regulations governing each agency. However, the need for better understanding of the differences is so great that I hope real progress can be made by the two agencies in carrying out the matching studies necessary for a better understanding of basic statistics on unemployment.

JAMES TOBIN, Yale University

I shall discuss briefly three topics which have dominated much of this conference: the problem of ascertaining the labor force attachment of individuals of working age, the problem of ascertaining the employment status of members of the labor force, and the relation of measures of unemployment to economic policy.

LABOR FORCE STATUS

When is an individual in the labor force? The line between being unemployed and being outside the labor force is a hard one to draw, and objections can be raised to almost any criteria. There are three kinds of criteria either in current use or under discussion.

Past Job-Holding or Job-Seeking Activity. Some job-seeking activity in the most recent week is normally a requirement for being counted as unemployed rather than as outside the labor force in the Census Bureau's monthly survey. But what of individuals who did not seek jobs in the past week because they knew none were available in the locality? These the Census Bureau now counts as unemployed, but, according to Gertrude Bancroft, the monthly survey counts them quite imperfectly. On the other hand, what of individuals—married women, say—who have never been employed but have recently carried on a casual and desultory search for a job with ideal specifications? These questions suggest that activity during the most recent week is not by itself an adequate criterion. One way to supplement it is to obtain a

longer history: Has the individual regularly held or sought jobs during his adult life? Richard C. Wilcock suggests an affirmative answer to such an inquiry as one way of qualifying for his "primary labor force." Regularity in the past may, however, be a poor guide to the labor force status of the young, the old, and many in between whose circumstances and attitudes change.

Both current job-seeking activity, at least in the sense of willingness to accept employment, and job-holding in the past are necessary to be counted as unemployed in connection with unemployment insurance plans. But not all persons who meet these conditions are counted. Herbert S. Parnes has expounded the omissions very thoroughly. Insurance data are nevertheless extremely valuable as a source of local estimates of unemployment.

Attitudes and Intentions. Skepticism is justified concerning the validity of hypothetical questions, "Would you take a job if . . . ?" But this does not mean that there is no way of getting a more subjective indicator of labor force status than the answers to historical questions. The Census Bureau's sample design is admirably suited to experimentation with questions about future plans and intentions because each respondent is reinterviewed a number of times. A question about what the respondent intends to do during the coming year (or quarter or month)-seek a job, stay home, go to school, or what-is not subject to the defects of hypothetical questions. People will not, of course, faithfully carry out their expressed intentions. But experience in the Federal Reserve's Surveys of Consumer Finances shows that intentions data in the aggregate can nevertheless be indicative of changes if not of levels. Analysis at the Survey Research Center shows that reinterviews can shed a great deal of light on the characteristics of those who fulfill their plans and of those who do not.

Another experimental possibility is to have the individual who does not have a job classify himself as "unemployed" or as "not in the labor force." The distinction by now probably has meaning for the vast majority of people. It is true that the meaning will not be the same from one person to another. But for many policy purposes, and for many political purposes, the important thing may be the number of persons who consider themselves unemployed, rather than the number who by some uniform objective criterion are so classified.

Demographic Characteristics. The usefulness of an individual's statements about his past and his future will be enhanced by combining them with demographic information. For example, there is a strong presumption that able-bodied males between eighteen and sixty-five are in the labor force whatever they may have been doing last week.

The same is true of males and females who are heads of spending units. Married women, especially those with children, may be expected to be less stable in their labor force attachment; and it is no cause for surprise if their answers to questions about their past or future give variable results.

Paying attention to the demographic characteristics of persons who classify themselves in or out of the labor force does not imply that unemployment of one kind of person is a less serious social problem than unemployment of another kind of person. Gladys L. Palmer and Elizabeth J. Slotkin are right to warn of the dangers of a policy that worries only about the employment status of male breadwinners. But these fears should not prevent the use of demographic data to assist in understanding and measuring unemployment and labor force participation. This was Wilcock's objective, although the terms "primary" and "secondary" may have connotations for policy that he did not intend.

EMPLOYMENT STATUS

The other line-drawing problem involved in measuring unemployment is determining the employment status of a member of the labor force. A number of difficulties have been discussed in these papers.

Partial Unemployment. One difficulty is connected with the practice of counting employment and unemployment in units of men instead of in man-hours. A man may work fewer hours than he would like or than he customarily has worked and still be counted as employed. A part-time worker who loses his job gets counted as a full unit of unemployment. Albert Rees' ingenious calculations indicate that the second kind of error outweighs the first, so that present methods of counting exaggerate the amplitude of fluctuations in unemployment. His findings are confirmed by some calculations of Gertrude Bancroft. In any event there is doubtless unanimous concurrence in Miss Bancroft's recommendations for monthly collection of data on partial unemployment.

Self-Employment and Disguised Unemployment. Self-employed individuals, including farm operators, fit poorly a conceptual scheme designed mainly for hired workers. Likewise secondary members of households headed by farmers or other business proprietors may be hard to classify. Lack of job opportunities may result not in idleness and job seeking but in unproductive self-employment or participation in the family enterprise. It is natural to seek, as Louis J. Ducoff and Margaret J. Hagood do, a way of counting these results as the equivalent of the more obvious symptom of the same disease, unemployment. Unfortunately, the phenomenon does not seem to be one for which the

either/or categories of labor force and unemployment statistics are appropriate. If people are at unproductive work, whether as hired wage earners, family farm hands, or self-employed, the best statistical symptom of this social malady is low per capita income, not unemployment.

Duration of Unemployment. Unemployment is, usually, a "snapshot" concept. We speak of the amount of unemployment existing at a moment of time, rather than, say, the number of man-days lost during a certain period of time. But it would be absurd to let the employment status of an individual at a certain time depend literally only on his condition at that moment; it must depend also on his recent history. How long a history should be considered in classifying him? Does a single day without work make a man "unemployed," as in many of the European statistics reported by Walter Galenson and Arnold Zellner? Or does it take a week, as in our Census Bureau definition? How far is the single-day concept responsible for the strikingly high levels Galenson and Zellner show for European unemployment ratios over a long period of time before World War II?

Rees has argued very convincingly that long-duration unemployment is the real social malady. One-day or one-week unemployment we can easily afford, and a certain amount is inevitable in a dynamic economy. The Census Bureau is besieged with suggestions of interesting dimensions to be added to its measure of unemployment, and one hesitates to lengthen the list. But high priority should be given to the distribution of unemployment by duration. This might be done semiannually, as it is probably neither practical nor necessary to do it monthly.

MEASURES OF UNEMPLOYMENT IN RELATION TO ECONOMIC POLICY

Employment and labor force statistics are not the only kind of information an economic policy maker needs, and he needs more than one dimension even of that information. The economics profession has been all too susceptible to the belief that there is one single index of economic health that can be used as a guide to policy. Sometimes it has been a price index, sometimes gross national product, sometimes the unemployment ratio. The economy is too complex to be described or controlled by a single number. Unemployment is not the only social malady, and unemployment itself is better described by a set of numbers than by a single total.

Is it obvious that the cyclically most sensitive measure of unemployment is the most relevant for policy? Such appears to be the assumption of Rees and other of the writers. Yet it is conceivable that the com-

ponents that fluctuate most violently are those of least public concern. We should decide what measures of unemployment we want and need and then see how they compare with other economic series in cyclical amplitude and timing. To do the reverse, to choose deliberately series that agree with others in cyclical pattern, is to reduce the information available for the policy maker rather than to increase it.

Should "full employment" be defined so that it is an acceptable single goal of policy? Rees seeks such a definition, and consequently he has to allow within it for desiderata other than low unemployment, principally price level stability. Would it not be better to define "full employment" unambiguously in terms of labor market data alone and to recognize that it is not an absolute goal? Wilcock's concept of "maximum desired employment," for example, would probably entail price level consequences that few policy makers would wish to accept. My difference here with Rees is largely terminological. His paper contributes mightily to answering the important questions: What dimensions of employment and unemployment are useful policy guides? How compatible are goals of low unemployment with other objectives of economic policy?

Finally, I would like to add a postscript regarding Eli Ginzberg's complaint that human behavior is not among the kinds of "behavior" this Conference considered. It is true that economists have traditionally attributed "behavior" to statistics of prices, interest rates, employment, etc., while other social scientists have maintained that only human beings, or at most only animals, behave. Aside from this terminological difference, Ginzberg's remarks are a reminder that hypotheses about human behavior are at least implicit in the concepts and methods used to measure unemployment and in the uses to which the measures are put. The "additional workers" controversy and the question of the wage elasticity of the supply of labor are only the most prominent of many indications of the need to understand more about the labor force participation decisions of households. The Census Bureau surveys, as well as other surveys of households made for different purposes, offer great opportunities for research on this aspect of human behavior.