

SOCIAL INDICATORS AND SAMPLE SURVEYS

BY RAYMOND A. BAUER

In this, his Presidential address to the American Association for Public Opinion Research on May 7, 1966, Professor Bauer makes a strong plea for greater use of sample surveys to collect a greater variety of basic social statistics. He believes that this will enable us to plot trends, the better to measure progress toward the attainment of social goals and values. He points up emphatically the pioneering role that unofficial research can and should play, especially in the area of controversial innovation.

Dr. Bauer is Professor of Business Administration at the Harvard Graduate School of Business Administration.

THE PRACTICAL IMPORTANCE of social statistics has been recognized for as long as we have had censuses. The first censuses were taken for purposes of taxation or to determine potential military strength, but over the course of the centuries scholars have proposed ever more elaborate data series in order to evaluate and guide the society in which they lived. (Indeed, the very word "statistics" has its origin in the Latin term *ratio status*, roughly "state of the nation.") Our ability to plan ahead and to evaluate what we have done is dependent on our ability to assess how we are relative to how we were.

My task here is to discuss a new and promising opportunity for a more adequate system of social statistics, or "social indicators," which will make it possible for us to regulate our own lives better in the future. And, having indicated why I think this opportunity exists, I shall then proceed to discuss the potential role of sample surveys in the exploitation of this opportunity and, specifically, point to the part that nongovernmental research organizations can play in this effort.

DISSATISFACTION WITH THE CURRENT STATE OF SOCIAL STATISTICS

Since 1946 we have had a system of economic indicators to evaluate our economic performance and to help guide our economy. However, increasingly the argument is heard that economic indicators are not enough and that more comprehensive data series are needed. Perhaps the key such recommendation came from the President's Science Advisory Committee's April 1962 report on the behavioral sciences,

which called for the "systematic collection of basic behavioral data for the United States."¹ It called for "data that are comparable, systematic and periodically gathered."

What are the elements of dissatisfaction that many informed persons have with the current state of social statistics? First, as useful as existing social statistics are, many have such drastic built-in biases that they may be crucially misleading for some purposes. For example, an increase in hospital beds for mental patients, or in mental patients receiving treatment, is sometimes used as an index of things going from bad to worse. But these increases may equally well reflect an increased ability and disposition to take care of the mentally ill, improved prognosis for the patients, and the prospect of reducing the incidence of mental illness.

This difficulty occurs most often when we use some readily observable phenomenon on which records are kept for administrative reasons as a substitute for the phenomenon we are really interested in. An example that is taken surprisingly for granted is the use of years of education as an estimate of the level of skill and ability of individuals, groups, or the entire population of a country, when what is called for is a more direct measurement of what a person knows and can do and of how appropriate these skills and knowledge are to the tasks to be done.

The second source of dissatisfaction involves phenomena about which we are apparently so concerned that we constantly refer to them in evaluating our own and other societies but about which there are no systematically collected historical series, biased or otherwise. Probably the best example is the lack of data on the values and aspirations of our people. Up to now we have suffered with jerry-built attempts to get at this problem. The most notable of these, I suppose, are the doctoral theses and other attempts at content analysis of mass media to trace, for example, the types of heroes in fiction in popular magazines at various time periods. Their major contribution to knowledge may be to document the absence of any systematic data on topics about which we apparently care a great deal.

Finally, there are aspects of society which social scientists regard as important but which do not seem to be of much relevance to non-social scientists. A clear-cut case is the collection of "personality" data to make assessments of ability. In many quarters, "personality questions" are regarded as a useless and malicious invasion of individual rights. But the psychologists contend that it is not enough to know what

¹ Life Sciences Panel, *Strengthening the Behavioral Sciences: Statement by the Behavioral Sciences Subpanel*, Washington, D. C., President's Science Advisory Committee, April 20, 1962.

abilities a person may have in the abstract if we cannot make an estimate of how much the individual can or will use those abilities in an appropriate social context.

These broad sources of concern with the inadequacy of our existing series of social statistics have stimulated many suggestions for their improvement.

PROPOSALS FOR BETTER SOCIAL STATISTICS

When the report of the President's Science Advisory Committee was issued, I was directing a program of research for the American Academy of Arts and Sciences on the social impact of space exploration. It became obvious to me that if many of the changes in American society about which there was so much speculation actually took place we would not know it, because no trend data existed. How would we know, for example, whether the space program had stimulated the interest of secondary school students in technical careers or had discouraged them from seeking further schooling because the required training seemed hopelessly beyond their grasp? There are no adequate series on career aspirations.

As a consequence, we commissioned a series of papers on the existing state of social statistics, a proposal for an over-all system of social accounting, a proposal for a system of stand-by research facilities to gather data that would not fall in regular data series, and the problems of feeding information back into an organization. The result was a volume by the MIT Press entitled *Social Indicators: A First Approximation*.² Hence, one of the traceable social consequences of the space program is a book on the difficulty of tracing social consequences.

This same PSAC report stimulated proposals for work on such data series by both the University of Michigan Survey Research Center and NORC. The response of the National Science Foundation, both verbal and monetary, was scarcely overwhelming. Yet the modest grants have kept interest in the problem alive. As a result, both SRC and NORC have found other opportunities to work on social indicators and contribute to the gathering interest in the topic.

In this period, Wilbert Moore and Eleanor Sheldon at the Russell Sage Foundation have started work on new methods of "monitoring social change." More recently, Bertram Gross of the Maxwell School of Citizenship and Public Affairs of Syracuse University, in cooperation with the Newhouse Communications Center, has begun work on a

² Raymond A. Bauer, Albert Biderman, Bertram Gross, Robert Rosenthal, and Robert Weiss, *Social Indicators: A First Approximation*, Cambridge, Massachusetts Institute of Technology Press, 1966.

volume of the *Annals of Political and Social Science* to be called "Social Goals and Indicators for a Great Society."

The National Commission on Technology, Automation and Economic Progress has pointed out that our ability to measure social change has lagged seriously behind our ability to measure strictly economic change and called for some system of social accounts to broaden our concept of costs and benefits in terms beyond ordinary economic concerns. Emphasis is on four areas: (1) measurement of social costs and net returns from innovations; (2) better measurement of such social ills as crime, family disruption, and so on; (3) establishment of a "performance budget" in areas of defined social needs such as housing, education, and so on; and (4) development of indicators of economic opportunity and social mobility.³

There have been proponents of better social statistics in many branches of the government. The theme of better data series has even gotten into a recent presidential message on domestic health and education:

To improve our ability to chart our progress, I have asked the Secretary [of Health, Education, and Welfare] to establish within his office the resources to develop the necessary social statistics and indicators to supplement those prepared by the Bureau of Labor Statistics and the Council of Economic Advisors. With these yardsticks, we can better measure the distance we have come and plan for the way ahead.⁴

In response, the Secretary of Health, Education, and Welfare established a mid-1966 task force to make proposals for improved methods of measuring social change.

Finally, the concern is not limited to our own country. The United Nations has been concerned with data for the cross-national comparisons for some time. This was reaffirmed in the past year in a UN report on *Methods of Determining Social Allocations*. A key passage calls for "the development of a comprehensive set of criteria that will take account of both economic and social considerations, not by forcing the one kind into the mould of the other, but by integrating them at a higher level of abstraction."⁵

SOME SUPPORTING FACTORS

Several factors probably have stimulated this change in atmosphere. First, there is the model of the system of economic indicators. On the

³ *Report of National Commission on Technology, Automation, and Economic Progress*, Washington, D. C., January, 1966.

⁴ President Lyndon B. Johnson, Message to the Congress on domestic health and education, May 1, 1966.

⁵ Report of the Secretary-General to the Sixteenth Session of the Social Commission, Economic and Social Council, *Methods of Determining Social Allocations*, Mar. 31, 1965, p. 10.

one hand, they are an example of the usefulness of related continuing data series. On the other hand, they have provoked close examination of their limitations and thus served as a stimulus to search for additional measures.

Similarly, I expect the McNamara-sponsored cost-effectiveness analysis to have a dual impact. It will serve as a model for analysis in general and thus popularize the idea of having some sort of criterion against which to evaluate programs more explicitly. But as the evaluators are forced to use either simple dollar values or the inadequate social measures of benefits that are likely to be available, there will, I suspect, be pressure for better noneconomic data.

The very multiplication of Great Society programs in itself generates pressure for more and better data, not merely to evaluate programs, but to provide the justification for grants under such various programs.

Finally, and here I am at my most speculative, I think that we as a people are on the verge of becoming much more self-conscious about the social consequences of our social actions. This is one of the reasons we are also getting more concerned with being able to detect these effects. I take as my prototype the concern over the social consequences of the space program. The size of this program and the fact that it is a discretionary activity not forced on us by imminent need has prompted an unusual scrutiny of the implications of undertaking the exploration of space.

This self-consciousness is part of a larger concern of an affluent society over managing the consequences of our actions. In urban renewal, for example, we are no longer indifferent to the fate of the people being displaced. We can afford to care.

TREND DATA AND SAMPLE SURVEYS

I have contended that in the past several years there has been a ripening support for more adequate social indicators, to some extent in the social science community but more pertinently in the higher echelons of the Executive Branch of the government. It may be that the full cumulative and reinforcing impact has just recently been felt. If this is true, then there are special opportunities and problems for survey research in the gathering of social-trend statistics.

The gathering of trend data by both governmental and nongovernmental survey researchers is not unprecedented. In general, however, survey research has tended to focus on the more transitory states of "public opinion," i.e. those which are "news," or on one- or two-shot research for program evaluation. In contrast, the Survey Research Center in 1963 proposed to study ". . . those variables which [do not] fluctuate dramatically in a population in the very short terms. . . .

Rather the focus would be upon relatively stable parameters, yet ones in which significant change might be discerned in a somewhat longer period if they are indeed functionally dependent upon other known or discoverable social trends."

In content, therefore, trend data on social indicators involve a shift of emphasis from the more transient issues in which public opinion research has typically specialized to a consideration of the type of variable that has been of concern to the more traditional social statistician, e.g. from consideration of which candidate is preferred in a given presidential race to decade-by-decade trends in extent of involvement in national politics. This shift places requirements on institutional stability and stability of financing, as well as an inhibition on "improving" our instruments in such a way as to make successive measures noncomparable.

What are the advantages and limitations of the sample survey in collecting trend data? In answering this question, two important characteristics of the sample survey must be kept in mind. First, it uses samples rather than observing all elements of the population. Second, it tends to gather information from people rather than from records or from the artifacts of people's behavior.

Advantages of sampling. The most obvious argument for gathering social statistics on a sample basis rather than by total enumeration of the population is cost. Less appreciated is the *accuracy* of sample surveys as compared to total enumeration. In the Congressional hearings on the proposed mid-decade census, there was repeated testimony by witnesses both inside and outside the government to the effect that data gathering by sampling can be, and generally is, more accurate. It is possible to invest more time, effort, and money in each unit in a sample survey. This permits more effort on callbacks and thus increases the possibility of including the stray souls who may slip through the net of total enumeration. Furthermore, it is possible to use more capable and highly trained personnel, and thereby improve the quality of information gathered from each person.

There is also the element of the speed with which a sample study can be executed, providing of course that the sample design is developed in advance. For example, with Medicare in effect, it is necessary for HEW to know as rapidly as possible what costs will be involved. There will be a delay in the processing of the bills as people forget to file them or deliberately let them accumulate before making their claims. To offset this delay, it was planned to do a sample survey to get patterns of use and level of costs in advance of information from administrative sources.

These advantages of sampling—cost, accuracy, and speed—make it

possible to do properly tasks that can otherwise be done only very poorly or not at all. For example, a person who has exhausted his unemployment benefits will disappear from the recorded ranks of the unemployed as measured by the number of persons applying for benefits. However, the new monthly sample survey of households permits not only an accurate measure of the employed and unemployed but gives background data, rapidly enough to be a guide to economic policy.⁶

Despite these advantages of sample surveys, what will probably be the most important consideration in the future is that the use of samples of the population will make possible an enormously more ambitious set of social statistics. It is easy to exhaust a respondent. Even an hour's interview is long. But many of the types of data we will want to gather in the future, such as reasonably thorough tests of ability, will require several hours of a person's time. It is possible to contemplate such data series *only* if we assume that the same people will not be asked to supply information for more than one or two of such series.

In summary, without sampling, no broad system of social indicators would be possible because of the cost, the problem of maintaining quality, the time lag, and the burden of information giving that would be involved.

Advantages of getting data from people. Certain types of information can better be gathered from people than from administrative records or other impersonal sources. For example, it is interesting to find that money spent on equipment for "active" recreation—tennis rackets, camping equipment, fishing and hunting gear, and so on—increased more rapidly than money spent on spectator sports. But it is quite another thing to find out whether the equipment was ever used, how often, when, where, with what intent, and to what effect.

Most of our social statistics, aside from census data, have come from records of economic transactions or behavior, or from expert evaluations such as medical diagnoses. The desire for new statistical series stems almosts by definition from dissatisfaction with the old, and in the future there will be a relatively much stronger demand for the type of data that can be obtained other than from records.

WHAT KIND OF INFORMATION?

Decisions as to what sort of societal trend data we want are dependent on several factors, including our goals and ways of evaluating past and prospective public expenditures and the practical problems of information gathering.

⁶ Cf. *Measuring Employment and Unemployment*, Washington, D. C., President's Committee to Appraise Employment and Unemployment Statistics, 1962.

Goals and evaluations. The data we want are obviously dependent on the goals we have set for ourselves. A society primarily bent on achieving military power would be interested in measuring different things than would a society bent on maximizing religiosity, aesthetic experience, or material comfort. Therefore, we need to know the values of the members of our society, the programs or "national goals" that *ought* to represent organized attempts to serve those values, and the interrelationship of the programs and values.

I do not want to gloss over the difficulties of measuring values and other forms of satisfaction or of choosing which ones to measure. But the availability of direct measures of values and satisfactions can change our approach to one of the very difficult problems of welfare economics.

The conventional way of putting a value on goods sold in the market is on the basis of the amount that people will pay for them. But it is characteristic of many public investments that their products (for instance, weather forecasting) can be shared by an untold number of people. The "value" of such goods and services is a function of the number of people who will benefit by them. But in the absence of a direct measure of value in terms of the utility of public goods and services to those who may use them, the current practice is to evaluate a public investment in terms of its cost. Modern economists agree that utility cannot be measured solely in monetary terms (a dollar is worth less to some people than to others), so it must be measured from the statements or behavior of people other than in terms of what they would pay in the market.

For a long time, many responsible persons have known that there is a crucial defect in our way of looking at public expenditures. Money spent on education, for example, is regarded as a *cost*. Increases in such expenditures tend to increase the budget deficit. Yet a business firm that builds a plant regards this as a capital investment that has created an asset in terms of its future earning capacity; the increase in indebtedness is offset by the increase in assets. Corporate accounting draws reasonably sensible distinctions between money to be consumed in the form of current costs (e.g. wages, debt servicing) and money invested to yield some return in the future. It is my anticipation that as we begin to measure phenomena associated with the future capacity of the society to produce the things we value, we shall be able to make similar reasonably sensible distinctions between "investments" and "costs" in the public area. Thus, we should be able to say that of a given dollar spent on education we regard a certain proportion as an expenditure to give each citizen the benefits he deserves, and the remainder as an investment in the future productive capacity of the

society, always remembering that future productive capacity in this scheme would not be measured solely in gross national product.

Thus, by studying people's values and utility directly, we make possible and probable the evaluation of public programs in other than monetary terms. We can shift the emphasis in considering the value of a program from its cost to its utility to people. Further, in studying the capacity of the system to produce in the future by direct assessment of the productive capacity of individuals and institutions, we make it possible to estimate the investment value of certain expenditures that hitherto have been considered purely as "cost." It will be a long time before we can develop a measure for comparing the preferences of the citizenry among a variety of programs. But the mere fact that we cannot order all of a people's values to a common yardstick is no reason for not measuring them as well as we can and comparing them as best as we can.

Practical problems. Finally, there is the sticky matter of "making things operational," of translating some fine-sounding variables like "health," "ability," or "happiness" into a set of questions and observations.

There is, first of all, a conceptual problem. When we talk about ability we may be referring to aptitude (the potential capacity of the individual), or to achievement (the developed capacity), and we may be concerned with his motivation (his disposition to use his ability), or such aspects of his personality that affect whether or not he *can* mobilize his resources in relevant situations.

Of current statistical series, those developed by the National Center for Health Statistics of the Department of Health, Education, and Welfare must be regarded as among the most advanced.⁷ Using health as an example, let me demonstrate how changes in concept lead to changes in criteria, and how these in turn affect measurement.

Over the course of time, the conceptualization of "health" has changed markedly. Until the mid-fifties, our primary concern was with our ability to keep people alive at various ages; *mortality* was a relevant criterion. Since then, considerable attention has been devoted to *morbidity*, or departures from health of a nonfatal sort. But nonhealth is not as clear-cut a proposition as death. As Sullivan cogently says, "Health is often spoken of as if it were a directly observable characteristic existing within the individual, but measurement of health, in fact, requires selection from many potentially measurable characteristics of a person or a population." It may be thought of as the absence of detectable disease, "disease" being defined as that which a medical

⁷ See Daniel F. Sullivan, *Conceptual Problems in Developing an Index of Health*, Washington, D. C., National Center for Health Statistics, Series 2, No. 17, 1966.

doctor regards as malfunctioning of the organism. It may also be defined in terms of the individual's ability to continue to perform with some degree of effectiveness in his various roles. Indeed, some writers have suggested that medicine should reorient itself from correcting the subnormal toward improving the performance and well-being of individuals now regarded as "normal."

Several of the concepts of disability or nonhealth employed in HEW's Health Interview Survey in recent years bear on the individual's ability to carry on in his various roles. For persons with specified chronic diseases or impairments, the respondent is classified into one of four categories ranging from "unable to carry on [his] major activity" to "not limited in activity." Similarly, limitation of mobility ranging from "confined to house" to "not limited in mobility" is recorded. And, for short-term morbidity, every individual is asked to report on any day in a two-week recall period when he had cut down on his usual activities for an entire day.

Note, first, that information concerning curtailment of activity and mobility is information that the individual himself can best give us. While it might be possible to obtain records of days absent from work or school attributed to sickness, certain categories of absence from role activity would be missed completely. There are no records of housewives who were not on the job on a particular day. And potential workers who have withdrawn from the labor force because of long-term illness will show up on nobody's employment records. Furthermore, variations in degree of mobility show up in no records. Finally, background data on the individual and on the circumstances surrounding the curtailment of activity can be obtained from the interview.

These rather new criteria of the level of health of the population require information most appropriately gathered from people and hence via sample surveys. However, wide experience in gathering health statistics by many methods has sharpened awareness of when interview methods are and are not appropriate. For example, in a study comparing the incidence of various chronic conditions as reported by both respondents in an interview survey and physicians in a clinical evaluation of samples of persons from comparable populations,⁸ the physicians reported higher incidence of many disease—heart conditions, high blood pressure, diabetes, and peptic ulcer—that people usually learn about from physicians. However, survey respondents reported a higher incidence of certain other afflictions—asthma, hay fever, chronic bronchitis, and chronic sinusitis—that are transitory and need not be present at the time of a medical examination.

⁸ Barkev S. Sanders, "Have Morbidity Surveys been Oversold?" *American Journal of Public Health*, Vol. 52, No. 10, 1962, pp. 1648-1659.

It is one thing when the validity of survey data is checked against some supposedly valid other criterion, such as physicians' clinical judgment. But there are many phenomena to be measured for which there is no clear-cut criterion of validity. To return to Sullivan's concern for the problems of establishing an index of health:

The validity of disability measures based on interview reports is difficult to evaluate because there is often no criterion for comparison. If a housewife reports the omission of several chores she planned to carry out, there is no way to test the accuracy of her statement. If a worker reports that an upset stomach caused a day of work loss two weeks ago, there may be no way of knowing whether he was milingering.⁹

I would like to warn, however, against premature capitulation to the criticism that data gathered from people are somehow "softer" than other sorts of data. An adequately kept record of what a person *said* in response to a given question is just as "objective" as a record of how he spent his money. But in neither case are we interested in what is objective, i.e. what he said or did, but in what the observation of verbal or nonverbal behavior permits us to infer about such relatively abstract things as his health, abilities, happiness, aspirations, and so on.

Data validation lies in use and in learning the inferences that one may make for his purposes. As I have said above, in this sense, answers to questions (assuming they are properly asked and reported) can be just as "hard" as any other data.

ROLE OF PRIVATE RESEARCH ORGANIZATIONS

Social statistics tend to be gathered by governments. Furthermore, as we think of such statistics as a system of social indicators, the need for uniformity, control, and financing would suggest that government agencies will become more and more the instrument for gathering and processing them. Once a statistical series has been well developed, the technical problems generally ironed out, its acceptability established, and so on, it inevitably will gravitate to some governmental agency as the *responsible* agency for at least monitoring the series, establishing standards and controls, and so on.

What relevance, then, do my comments have for nongovernmental research organizations? Many nongovernmental research agencies have pioneered in developing and sustaining novel trend series, in producing new conceptualizations of established indicators, and in stimulating interest in measurement of variables that have not previously been measured in any serious fashion. The distinctive advantage of the nongovernmental organization lies where there is controversy and need

⁹ Sullivan, *op. cit.*

for innovation, or where the private investigator has a missionary sense of the need for new work.

Certainly, Katona's continuing studies of consumer buying intentions at the Survey Research Center ought to qualify as an example of trend series developed, collected, and interpreted by a private organization. This series has been successful probably in part because it has been controversial. At the present time, other organizations (including some governmental data-gathering units) are incorporating questions concerning buying intentions in their surveys. If measures of buying intentions in the next decade become increasingly important in governmental data series, the Survey Research Center may find its work on this "indicator" pre-empted. I think this should be regarded as a measure of SRC's success in introducing and developing the concept.

Profit-making research organizations often conduct continuing series of studies, but generally these have been limited to monitoring trends in public attitudes toward the particular industry involved. These data have limited general implications. Unexploited is the opportunity for developing broad trend studies—on basic rather than transitory issues—on a syndicated basis with corporate sponsorship. One major commercial research organization is considering launching a trend series on businessmen's perceptions of and attitudes toward, a range of policy issues. Such a series, it is hoped, will have a sufficiently fundamental orientation to enable us to trace over time the secular trends in the relationship of one key group in society to the major activities of society. It might stimulate the development of similar series focusing on other "special groups" of diagnostic importance.

In the long run, the most important series of indicators to study might be trends in social values. Such a series must inevitably be highly controversial because of ambivalence about the role the values of the populace should play in policy formation and because of arguments as to which values are important; the debates may well finally degenerate into a purportedly technical argument about how values can be measured and what the limitations of survey research are. There would be strong initial resistance if a *governmental* research organization ventured to study trends in American values. But if the same agency let out two or more contracts to nongovernmental organizations, its own vulnerability would be reduced sharply. This is a problem of such complexity that a multiplicity of approaches is virtually mandatory. Moreover, the development of better instruments and concepts would be a contribution to social science apart from the long-run relevance to the steering of our society.

In process now are attempts to reconceptualize traditional concepts.

The published NORC studies of "happiness" represent at least a demonstration piece. The aim was to throw light on the concept of mental health by studying the reactions of "normal" persons to varying situations.

More adventurous are the attempts by NORC and the Bureau of Social Science Research to take a new look at the measurement of experience with crime. Both have contracts with the Crime Commission to go directly to samples of people and ask them about their experience with various types of crime. Both organizations realize that there will be reporting problems with certain types of crime, such as those in which the alleged victim was an accomplice of the alleged criminal. But for crimes where this bias is not expected they propose to compare the incidence of such crimes reported to a survey organization with those reported to the police. They also will study the circumstances of and reaction to the crime.

There have been several prototypes for the measurement of abilities that I have suggested as a substitute for our use of years of education. The most notable of these was Project Talent, which measured the abilities and interests of very large samples of school children. The extension of instruments such as this poses no technical problems if the public and its representatives in Congress will concur in supporting such studies and permitting appropriate measures to be made.

While many innovations are in progress, future possibilities are even greater. Most challenging to me is to think of the potentially long-range role of nongovernmental research organizations, particularly contributions in new and controversial areas.

One distinctive contribution may lie in the area of uncommon phenomena. Using crime as an example, to get a reasonable estimate of how many people were robbed last month requires a large sample; to get enough people who were robbed last month to estimate what the experience was like requires a *very* large sample. But every month many survey organizations have many surveys in the field. The cumulative sample size is tremendous. The appropriate governmental agency could well contract with a number of organizations to generate an estimate of the incidence of such phenomena, and to do the first stage of a two-stage sampling process for locating respondents to be interviewed on the topic. While, to be sure, there are complications and problems, the opportunity justifies efforts to overcome them.

This sort of organizational arrangement could also be used as a device for monitoring and certifying the quality of sampling and interviewing done by cooperating research groups. The organizations would be paid sufficiently well to warrant the extra effort of meeting the prescribed standards.

While I have been able to point to a few specific instances in which nongovernmental research organizations have made and are making contributions to the development of social trend statistics, it must be admitted that this area of activity is largely undeveloped and I can speak more of the potential than the actuality. Particularly undeveloped is the participation of private foundations—Russell Sage excepted—and other private organizations. There have been hints of interest in recent years—one foundation commissioned an exploration of the availability of data to assess the progress of the American Negro, one of the national business organizations might finance a study of measurements to be made in assessing the state of our cities, and the like. There is no doubt that private funding organizations have been interested in the substance of major social problems. Work needs to be done to convince them of the value of improved means of measurement.

In conclusion, let us hope that the developments on the national scene that I described earlier in this paper will stimulate the nongovernmental researchers to explore the possibilities of expanding their own role along lines similar to the speculative ones discussed above.