SIPP and SIPP ACCESS: Initial findings from a new data base

The Survey of Income and Program Participation (SIPP) is beginning to yield research results, facilitated by a storage and retrieval center, SIPP ACCESS, an innovation in the use and dissemination of complex survey data.

SIPP is the single new data collection effort conducted by the Census Bureau in the 1980s. It had its origins in the recognition during the 1970s of the need for more detailed information on individuals—income sources, eligibility for and use of social programs, demographic characteristics—as well as changes in individual experiences over time. In the SIPP pilot, the Income Survey and Development Program (ISDP), 8,000 families were interviewed in 1979–80 at three-month intervals over eighteen months. SIPP began in October 1983 with its first panel of about 20,000 nationally representative households, interviewed at four-month intervals for 32 months. Panels 2 and 3 began in February of 1985 and 1986, with interviews of about 12,000 households every four months, over a total of 32 months.

Panel 1, known as the 1984 SIPP, is now complete. It contains information on employment, income from various sources—including cash, employer-provided fringe benefits, and financial assets—and such demographic characteristics as family size, the education of various members, health, and fertility.

Without the existence of SIPP ACCESS, the complexity of these data and the intricacies of their computerization would pose obstacles and cause delays to analysts who wish to gain new insights into such classic research issues as the effects of taxation on work effort, the validity of the official poverty measure in gauging true hardship, and the factors underlying welfare dependency. The new studies now becoming available (see box) touch on these and other topics.

SIPP ACCESS: A research network and data center

Sponsored by the National Science Foundation, Division of Technology Information, and the Alfred P. Sloan Foundation and located at the Institute for Research on Poverty, SIPP ACCESS was established in 1985 for the purpose implicit in its name: to make data from the ISDP and SIPP easily and widely available to the social science community. It does so through a technology that enhances information retrieval and user interaction.

The technology has three components: a national dial-in system, optical archival data storage, and a relational data base management system. Dial-in permits interactive access to data and documentation, promoting a network among users, who can communicate with each other, exchanging information and discoveries. Optical archival storage is a compact and efficient means of storing very large data sets so that they are immediately accessible to the user. The relational data base management system is a powerful tool for reaching the data, creating new units of analysis, and studying the dynamics of change over time. This system avoids the need to restructure the data base as each wave (set of interviews) is entered.

The management strategy has extended the analysis and concept of SIPP ACCESS to microcomputers. Supplementary funding recently provided by the Sloan Foundation will be used to develop this concept to provide access to the data by means of personal computers.

The center also offers workshops at periodic intervals to train users and familiarize them with the data and the relational data base technology.

First results

The accompanying box lists four papers produced in 1987 from the ISDP and SIPP, demonstrating the variety of subjects that can be investigated. Among their highlights are the following.

Martin David, a founder and codirector (with Alice Robbin) of SIPP ACCESS, and his coauthor John Fitzgerald used information on different sources of income recorded in the 1984 SIPP panel to construct an alternative to the official measure of poverty. The official measure is calculated on an annual basis and excludes noncash income. The measure developed by David and Fitzgerald adds the estimated value of liquid assets, distinguishing between individuals whose income shortfalls can potentially be made up by selling assets and those who face true hardship—a crisis, in the authors' terminology—and must curtail consumption. The authors

Studies Using SIPP and ISDP Data

Martin H. David and John Fitzgerald, "Measuring Poverty and Crises: A Comparison of Annual and Subannual Accounting Periods Using the Survey of Income and Program Participation." IRP Discussion paper no. 843–87.

John Fitzgerald, "The Effects of the Marriage Market and AFDC Benefits on Recipient Duration on AFDC." Paper prepared under the IRP Small Grants program, April 1987.

Alberto Martini, "The Discouraged Worker Effect: A Reappraisal Using Spell Duration Data." Paper presented at the meeting of the Eastern Economic Association, Washington, D.C., March 5–7, 1987.

Robert K. Triest, "The Effect of Income Taxation on Labor Supply When Deductions Are Endogenous." Johns Hopkins University, Working Papers in Economics, no. 195, July 1987.

find that the official measure overstates both the incidence of poverty at any one time and transitions into and out of poverty, because it overlooks the ability to liquidate forms of wealth to meet immediate demands. Among the demographic groups that hold few assets, however, such as nonwhites and single parents, the measures do not differ by much.

David and Fitzgerald also experimented with accounting periods, shortening them from one year to four months and then to one month. The shorter the accounting period, the greater the number of persons classified as poor by the official measure: on a one-month basis, 14 percent of the population was officially poor, a figure 24 percent larger than the annual poverty rate, because yearly calculations exclude persons who experience hardship for only part of the year.

In a separate study Fitzgerald used the 1984 SIPP panel to pursue a line of research originated by Mary Jo Bane and David Ellwood with the Michigan Panel Study of Income Dynamics: the study of welfare "spells," or lengths of time that single mothers receive Aid to Families with Dependent Children (AFDC). Fitzgerald created monthly welfare spells, then analyzed the relationship between continued use of AFDC and the availability of marriage partners. He found some corroboration for the hypothesis that lack of marriageable men is a factor in the continued reliance of black women on welfare, reducing differences that might otherwise be ascribed to ethnicity or race.

Alberto Martini explored factors underlying the transition from becoming unemployed to dropping out of the labor force altogether—becoming, in the labor economist's term, a "discouraged worker." From SIPP one can obtain weekly information on employment status. Martini exploited that capability to construct continuous work histories of 35,000 people aged 16–64. Almost half were employed throughout the 32-month period of the 1984 panel, one-quarter were wholly out of the labor force, meaning that they were neither working nor looking for work, and the remainder changed work status at least once. From this last group, unemployment "spells" of varying durations were identified for 4,500 women and 4,000 men, and the probabilities that those who experienced unemployment would withdraw from the labor force were calculated. The results provided strong evidence that poor local labor market conditions have much to do with abandonment of the world of work by persons who would, under better market conditions, persist in job search. Other findings: blacks were about 25 percent more likely to leave the labor force than were nonblacks, other things being equal; the more education a woman achieved, the less likely she was to withdraw from work after unemployment; receipt of unemployment insurance reduced the probability of withdrawal by over 40 percent for men and 50 percent for women.

Robert Triest used information from the pilot study for SIPP, the 1979 ISDP, to examine the effects of income taxes on work effort. By looking in detail at taxation, especially the interrelationships of work, consumption, and itemization of deductions, he concluded that negative effects of marginal income taxation on work effort may be offset by the indirect effect of consumption subsidies gained through itemizing. This indicates that well-publicized work[1] on reduction of work effort in response to marginal taxation is not properly specified and may lead to erroneous estimates of tax disincentives to work effort.

These capsule accounts of research to date clearly indicate the value of SIPP and of SIPP ACCESS in permitting tests of the validity of previous studies as well as breaking ground for new ones. ■

[1]See Jerry Hausman, "Labor Supply," in Henry J. Aaron and Joseph A. Pechman, eds., *How Taxes Affect Economic Behavior* (Washington, D.C.: Brookings Institution, 1981).