DISCUSSION

J. Michael Brick, Westat, Inc.
1650 Research Blvd. Rockville, Md

These five papers on the Survey of Income and Program Participation (SIPP) continue the tradition of excellent research activities associated with the program. The quality and quantity of research on SIPP attest to the importance placed on these activities by the managers of the program at the Census Bureau. The recent publication of the Quality Profile is an excellent example of this orientation. Their efforts are resulting in much improved products from SIPP and are providing leadership to other data collection programs.

The papers presented today touch on a wide range of issues involving design, operations, and estimation topics. Some of the issues are related to critical components of longitudinal surveys with long-term implications, while others are topical problems of far less potential impact. Although this diversity may be a natural consequence of the interests of the staff, it does raise the more general question of how the research priorities are established for SIPP at the Bureau.

For example, a number of SIPP papers (including several of the papers today) have addressed the so-called 'seam' problem. The seam problem is a long-term problem that can and must be addressed by an organization interested in the quality of a longitudinal survey. It is logical to devote major resources into researching this area.

However, research into other important areas should also have an important place in the research agenda. Coverage is a major problem for SIPP especially because one of its primary goals is to estimate characteristics of persons who are participating in federal assistance programs. The sampling errors for estimates like transitions and change over time need to be computed and research conducted on methods of generalizing these sampling errors. I hope that the managers of the SIPP will propose a research agenda that includes a prominent place for these types of issues in the future.

A few comments on each of the five papers presented are given below.

"The SIPP Event History Calendar: Aiding Respondents in the Dating of Longitudinal Events" by Robert Kominski.

This paper examines the efforts used to reduce measurement errors associated with the seam problem by improving the data collection mechanism. It is a good example of implementing some of the keys to the Deming philosophy of quality improvement. First, collect the data correctly in the first place by providing the interviewers tools to do their job properly. Second, listen to the data collectors and use their ideas to improve the data collection process. Third, use the Deming cycle of examining a problem, experimenting with it, evaluating the experiment, and then iterate.

The author notes that the introduction of the calendar introduces a greater degree of dependency between interviews, and this may improve estimates of transitions but reduce the efficiency of estimates of level. These are important concerns that need to be studied; they have already been overlooked for too long in reinterview studies.

The use of dollar amounts in the calendar creates disclosure problems that are briefly mentioned in the paper. With nearly 30 percent of the interviews conducted by proxy respondents, I wonder how effective the dollar amounts on the calendar will be when the losses due to different respondents are considered.

"How does Smoothing Estimated Monthly Control Totals Affect SIPP Estimation?" by Lynn Weidman and Larry Bobbitt.

The goal of this research is to reduce month-to-month variation in SIPP estimates by smoothing the totals associated with household types that are used as controls in SIPP. The conclusion that some estimates are smoother across time is not very surprising, but in some sense I missed the motivation for this research. My assumption was that SIPP estimates were primarily used to estimate the percent or proportion of persons with certain characteristics and that totals (especially across months) were of somewhat lower importance. Under this assumption I had trouble understanding the need to reduce the month-to-month variation arising from the control totals. Some motivation for the research would have helped me.

Another issue that is not raised by the research is using estimates from CPS as control totals for SIPP. Since the CPS has a much larger sample size, it is reasonable to use these estimates to improve the estimates from SIPP. However, these CPS estimates are not control totals in the sense of being free of sampling error. In fact, the smoothing is designed specifically to reduce the impact of the sampling error for these estimates. Therefore, if CPS estimates are used (smoothed or not smoothed) as control totals in SIPP, then the sampling errors of the SIPP estimates should reflect the fact that they are estimates. This can

be accomplished with replicate estimation strategies in a relatively simple manner. Census should examine this possibility regardless of the need for smoothing the control totals.

"Implications of SIPP Record Check Results for Measurement Principles and Practice" by Kent Marquis, Jeffrey Moore, and Vicki Huggins.

This paper is an excellent review of previous research in the measurement error problems associated with the seam problem in SIPP, and it also suggests new avenues for fruitful research activities for the future. The authors' synthesis of the previous research in this area (much of the seminal work is their own) is very valuable and aids in understanding the nature of the problem and possible methods of approaching this very important issue in longitudinal data collection.

The paper makes it clear that the real payoff will only be accomplished by revising the survey interview process. Design changes have the potential of making vast improvements in the quality of the data collected and the consequent estimates. Other methods for correcting and adjusting the data, without modifying the process, are limited.

The conclusion that new methods of conducting the survey process need to be studied is consistent with a relatively new emphasis in survey work on the interpersonal aspects of interviewing. I wholeheartedly agree that new procedures need to be devised and tested. We should not be discouraged if we enter some dark alleys in this long-term research activity. We are only going to find better methods by accumulating knowledge from experiences that are not what we ordinarily call 'success stories.'

"Effect of Maximum Telephone Interviewing on SIPP Topical Module and Longitudinal Estimates" by Philip Gbur, Patrick Cantwell, and Rita Petroni.

An important aspect of this research is that the analysis is conducted by categorizing units by whether or not they were designated for telephone interviewing, not by the actual mode used. This is pointed out by the authors and should be kept in mind by those trying to apply these results to other conditions. The results are very specific to the SIPP operations. Nevertheless, the research is well done, and it is refreshing to see longitudinal estimates being used to evaluate the SIPP. My own reading of the results suggests that the differences by designated modes are not important and telephone interviewing could be employed if other factors, mainly costs, are favorable.

One word of warning is that it is easy to consider the differences between telephone and personal interviews as biases. However, the evidence from this study only suggests if differences are present. This may be a relatively fine distinction, but I think it is one that should be kept in mind in evaluating the differences.

"Investigations of the SIPP's Cross-Sectional Noninterview Adjustment Method and Variables" by Karen King, Patricia Chou, Maryann McCormick, and Rita Petroni.

This paper reports on two different studies associated with the method of adjusting SIPP estimates for nonresponse. The first study is an extension of work done earlier and presents a rather convincing case for using the proposed additional criteria for nonresponse adjustment. The results are displayed well and, in my opinion, should lead the Bureau to trying to operationalize these methods for SIPP.

With respect to the first study, I have three additional comments. First, it very nice to see statisticians evaluate the importance of the differences, rather than relying on statistical significance. I commend the authors for this effort. Second, the SIPP should be able to produce estimates of the correlation between the estimates and not fall back on assumptions. This fault is not the authors', since no such methods have been developed and used in SIPP. Third, the comparison of the 1984 and 1985 results reveals the potential value of poststratification. Too often poststratification is ignored when the totals are already relatively close to some existing benchmark figures. Poststratification has many benefits and should be employed whenever it is feasible.

The second study examines the use of adjusting for nonresponse based on mobility. I believe the idea for this study was generated when the seam problem was first identified and people were suggesting that the "weights" were the problem. Of course, the weighting was not the problem, but other ideas emerged from these studies.

I was not very convinced that the suggested adjustment would be very useful in this case. The results are also not as clearly evident from the tables as they were in the first study. If the format used in the first study were adopted here, then the results might be a little clearer. I also think that the researchers should consider the variance implications of these adjustments before proceeding much further. Some of the adjustment cells are probably small and could tend to introduce large adjustments that could increase the variance of the estimates. If the adjustments have to be trimmed to avoid this variance inflation, then the effectiveness of the procedure must also be questioned.