A New Household Panel in the U.S.

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October 13, 2010

The NSF SBE has invited the research community to submit white papers outlining grand challenge questions that are both foundational and transformative. This white paper argues that a new long-term household panel would be foundational and transformative both to economics and related social sciences.

(1) The important questions are the major ones concerning economic and social dynamics in the U.S. What are the causes of economic and social disadvantage, and where in the life course do their origins lie? How have the dynamics of cohabitation, marriage, child-bearing, and divorce and remarriage changed over time, what are the reasons for these trends, and what are their implications for US society? How do US workers’ earnings and labor market success or lack of success evolve over their lifetimes, how has this changed, and what policies might the US society follow to address those challenges? What are the contributors to disadvantage during childhood, and how does childhood disadvantage affect later life outcomes? How important are schools, neighborhoods, and other social groupings to the evolution of economic and social well-being over the life course? Economics, sociology, psychology, and related disciplines have long studied these questions.

(2) Current understanding both of trends and of their causes and implications is poor, and one of the major reasons lies in limitations in the data infrastructure in the US for studying these issues. The major data set for studying long-term economic and social dynamics in the population as a whole is the Michigan Panel Study of Income Dynamics (PSID) which, while in some sense a national treasure because of its unique ability to study intragenerational and intergenerational dynamics over a 40-year period, has limitations which will increasingly prevent it from serving the necessary role in the future. A major investment in new data infrastructure is needed to provide the capability for new research and to inject new energy into social science research on economic and social dynamics. Such an investment would have enormous payoffs to the research community, including educators and students, as well as to policy-makers.

In the remainder of this paper, these points are elaborated.

The U.S. has long been a leader in the world in the development of household panel surveys. The NSF-supported Panel Study of Income Dynamics (PSID), begun in 1968, was the first of the modern panels to follow a representative sample of the population over time. It is by now well understand that the dynamics of population, family, labor market, education, health, residential mobility, and other key features of US society cannot be properly understood without data that follow the same individuals over time. The research accomplishments of the PSID are
virtually incalculable, having accumulated over 40 years of data on both the initial sample and the children of the sample. The research output from the PSID is enormous, and there are certain areas of research (the long-term dynamics of poverty, intergenerational dynamics) which are essentially defined by the PSID, for it is the only extant panel which can study those issues.

However, despite its accomplishments, the PSID is suffering from problems of its age. It has had major cumulative attrition over time, attrition which has affected the representativeness of second and third generation PSID respondents in ways that are difficult to ascertain. While a number of studies have shown that the PSID has roughly maintained its cross-sectional representativeness, there are serious questions about its representativeness of dynamic patterns, and there is evidence that it is increasingly composed of individuals with more stable life trajectories. The original sample of the PSID was also quite small, only 5000 families, and less than that if the low-income oversample (which has since been largely dropped) is omitted. Weights in the PSID do not necessarily restore its representativeness. It necessarily omits immigrants to the US since 1968 (an attempt to bring them in was unsuccessful). Also, it is to some extent locked into its history by using what are now regarded as outdated methods of data collection in its first few years (e.g., not attempting to recontact attritors from earlier rounds). While the NSF should continue its vital support for the PSID in the next and future renewal rounds, since it will continue to be the only data set in the country capable of examining medium-term and long-term economic and social dynamics, in the long run it should not be the only US national household long panel.

There is no other panel in the US to fulfill this function. The closest substitute is the Survey of Income and Program Participation, the representative Census Bureau survey. However, the SIPP is focused on short-term dynamics and no panel has lasted more than a few years, so the long-term dynamics that have been possible to study with the PSID cannot be examined with the SIPP. The SIPP has also always never been interested in some of the innovative survey additions like biomeasures, which would probably not be allowed by the Census Bureau. The Department of Labor has conducted two panels of youth, one started in 1979 and one started in 1997, but a third (originally, the idea was for a new one every ten years) has not been started. These surveys are focused on labor market issues and are only aimed at examining specific birth cohorts. There are several panels of the aged, most prominently the Health and Retirement Survey, but these necessarily are not useful for studying the non-aged population.

At the same time, other countries are starting new household panels that completely dominate the PSID or any other general-population survey in the U.S. The most prominent example is the UK panel USoc (Understanding Society), a new 20,000 household panel with an ethnic minority oversample, collection of biomeasures, capability for linkage to administrative data sets, and an additional 2,000 household panel for methodological experimentation (the “Innovation Panel”). All members of the household are interviewed, plus a self-completion instrument for 10-15 year olds. Fieldwork started in January, 2009, and interviewing is annual.

Germany is copying the USoc design with a similar new survey with similar sample sizes. Canada is in the advanced stages of planning a new, large household panel. Other countries in Europe are discussing adopting these new, large, innovative panels.
With these developments, the US is in danger of falling behind other countries in its ability to analyze important economic and social issues for the society as a whole. The piecemeal approach in the US, where individual agencies fund special-population panels, cannot provide the same level of research potential as those being developed in other countries. With the myriad socioeconomic problems facing the US at the current time, it is essential that we have the research basis to address those problems.

The primary obstacle to starting a new household panel of such a large size has always been cost. A 20,000 household survey would cost, by some estimates, somewhere in the neighborhood of $20 million to $30 million on an annual basis. If the panel were followed for a sufficient number of years (say, long enough to generate a longer panel than the SIPP), the cumulative cost would be high indeed. It may be that the US does not have the resources, or political will, to support this cost even though several other countries are able to do so.

Given this, other modes of data collection must be considered. One alternative widely discussed but never attempted on a very large scale are internet surveys. Such surveys have a difficulty being representative and tend to underrepresent lower income households, and the underrepresentation cannot be satisfactorily addressed simply by reweighting. Innovative alternatives, such as offering to hook up household TVs to allow households without computers to participate in the survey, are one means of reaching more households in the country. However, research on internet surveys is still in its infancy, and we know relatively little about whether participating households are representative or about what nonresponse rates would look like over a longer-term panel.

Another possibility is a mixed-mode survey which combines traditional in-person or telephone household surveys with internet surveys, with the mix designed to optimize the relative advantages of both and to generate a more representative sample. The different modes of collection might generate mode effects, but this has, again, not been studied.

The appropriate course of action at this point would be for NSF to sponsor a working group, a conference, or a series of working groups and conferences of experts to discuss the possibilities for a new household survey, alternative designs, and the costs of each. Experts at traditional surveys as well as experts in new modes of data collection should be involved, as well as economists and other social scientists who would be using the data for applications. Experts from survey firms who are capable of generating realistic cost estimates should also be brought into the discussion.

The NSF has invited the research community to submit ideas that would “unlock a new cycle of research.” Nothing would unlock a new cycle of research on the dynamics of economic and social behavior in the U.S. more than a fresh household panel which was adequate to investigate the key social issues. The number of new theories and ideas for exploring social dynamics have far outrun the available data, and no amount of new ideas for research are capable of advancing social knowledge if there are not the data to test them on. This is the reason for the critical importance of a new U.S. panel.