

The Panel Study of Income Dynamics,
*Inter-University Consortium for Political and Social
Research Bulletin, 1996, Vol 15, No.3.*

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The Panel Study of Income Dynamics (PSID), begun in 1968, is a longitudinal study of a representative sample of U.S. individuals (men, women, and children) and the family units in which they reside. It emphasizes the dynamic aspects of economic and demographic behavior, but its content is broad, including sociological and psychological measures. As a consequence of low attrition rates and the success of recontact efforts, the sample size has grown dramatically in recent years, from about 7,000 core households in 1990 to almost 8,700 in 1995. As of 1995, the PSID had collected information about more than 50,000 individuals spanning as much as 28 years of their lives. The study is conducted at the Survey Research Center, Institute for Social Research, University of Michigan.

The Sample

Starting with a national sample of 5,000 U.S. households in 1968, the PSID has reinterviewed individuals from those households every year since that time, whether or not they are living in the same dwelling or with the same people. Adults have been followed as they have grown older, and children have been observed as they advance through childhood and into adulthood, forming family units of their own. Information about the original 1968 sample individuals and their current co-residents (spouses, cohabitators, children, and anyone else living with them) is collected each year. In 1990, a representative national sample of 2,000 Latino households, differentially sampled to provide adequate numbers of Puerto Rican, Mexican-

American, and Cuban-Americans, was added to the PSID database.

Sponsorship

Funding has come from a number of government agencies and foundations. While the PSID's original funder was the Office of Economic Opportunity, today the National Science Foundation is the major funder, with additional funding coming from the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services; the Department of Labor; the National Institute on Aging; and the National Institute of Child Health and Human Development.

Data Collection and Content

Interviewing has been conducted on an annual basis, and the data files contain the full span of information collected over the course of the study. The PSID provides a wide variety of information about both families and their individual members, plus some information about the areas where they live. The central focus of the data is economic and demographic, with substantial detail on income sources and amounts, employment, family composition changes, and residential location. Content of a more sociological or psychological nature is also included in some waves of the study. Information gathered in the survey applies to the circumstances of the family unit as a whole (e.g., type of housing) or to particular persons in the family unit (e.g., age, earnings). While some information is collected about all individuals in the family unit, the greatest level of detail is ascertained for the primary adults heading the family unit.

Core Questions

Maintaining the comparability of the data throughout time is crucial for a panel study. Over the years, the general design and content of the study have remained largely unchanged. The central focus is on income sources and amounts, employment, family composition changes, and demographic events. See Table 1 for a list of the major core topics. Beginning in 1985, comprehensive retrospective fertility and marriage histories of individuals in the households have been assembled. Other important topics covered by the PSID include housing and food expenditures, housework time, and health status. (See Hill, 1992, for more detailed information about the data collected in the PSID.)

Supplements to the PSID

In the early years, respondents were asked about their housing and neighborhood characteristics, child care, achievement motivation, job training, and retirement plans. In more recent years, special topics include extensive supplements on education, military combat experience, health, kinship networks, and wealth (Table 2). A series of health supplements funded by the National Institute on Aging in the

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Table 1: Core Topics in the PSID

- Income sources and amounts
- Poverty status
- Public assistance in the form of food or housing
- Other financial matters (e.g., taxes, inter-household transfers)
- Family structure and demographic measures (e.g., marital events; birth and adoptions; children forming households)
- Labor market work (e.g., employment status, work/unemployment/vacation/sick time, occupation, industry, work experience)
- Housework time
- Housing (e.g., own/rent, house value/rent payment, size)
- Geographic mobility (e.g., when and why moved, where Head grew up; all states Head has lived in)
- Socio-economic background (e.g., education, ethnicity, religion, military service, parents' education, occupation, poverty status)
- Health (e.g., general health status, disability)

early 1990s contain a rich set of questions regarding the health of family members aged 55 and above: general health status, activities of daily living, nursing home stays, home-based care episodes, and major health expenditures. This set of questions, combined with the 1990 RAND Health supplement, provide extensive coverage over a six-year period of the health status of older PSID family unit members. In 1993–1994, the annual Health Care Burden Supplement focused on health care expenditures of the elderly and the extent to which family members spent either time or money taking care of their parents.

File Structure of the PSID Data

Before 1990, PSID main files for each interviewing wave consisted of a Cross-Year Family-Individual Response File, a Cross-Year Family-Individual Nonresponse File, and a Cross-Year Family File. Cross-Year Family-Individual Response and Nonresponse files had an identical file structure: one contained records for all individuals who are members of PSID family units interviewed in the most recent interviewing wave, while the other contained information for all individuals who were members of families interviewed in the past but

who had attrited in the most recent wave. The Cross-Year Family-Individual File stored both individual-level variables and family-level variables collected in the most current wave and in past waves. The Cross-Year Family File contained only family-level variables.

File Structure for the 1990 Wave and Beyond. Beginning with the 1990 data, the record format of the cross-year files exceeded the maximum allowed on most computing systems, and, consequently, a new file structure for the PSID data was developed. This new file format consists of separate, single-year files with family-level data collected in each wave (i.e., 23 family files for data collected from 1968 through 1990), and one cross-year individual file with individual-level data collected from 1968 to the most recent interviewing wave.

In this new scheme, each *family file* contains one record for each family interviewed in the specified year. The records in each file are identified by the Family ID for that year, are sorted by that variable, and contain the family-level variables collected in that year. The *cross-year individual file* contains one record for each person ever in a PSID family through the current year. The records in the cross-year individual file are identified by 1968 Family

ID and Person Number and are sorted by these variables. The file also contains the Family ID of the family with which the person was associated in each year. The cross-year individual file contains all individual-level variables for 1968 through the current year.

With the new file structure, a moderate amount of data management is required to merge the family files with the individual file to create a traditional PSID cross-year family-individual file. The advantage of this new file format is that the files require the minimum amount of storage space. Since each file is considerably smaller than the traditional cross-year family-individual file, the PSID data in this new file format are less demanding of computing resources. This new file structure also allows users to extract a subsample of individuals or families and the variables of interest to create a substantially smaller file to work with from the beginning of the data analysis process.

Special Supplemental Files

Several special files, each with detailed information about a particular topic collected over the years, are released separately, either because the size of the files makes them too cumbersome for storage on the study's main files or because of the unique nature of the data. Most of these files are public-release files, but some are restricted files that require analysts to sign a special contract with the University of Michigan to assure the confidentiality of the PSID respondents. See Table 3 for a listing of such files.

The **Work History Files** contain detailed information about employment and unemployment and the timing of those events. The **Relationship File** clarifies the crude relationships available on the main PSID file in early years as well as relating all pairs of individuals associated with a given family. Also included on this file are variables showing co-residence status for pairs of individuals for each year from 1968 through 1985. This file identifies the blood, marital, or cohabitational relationships between each pair of in-

dividuals who were members of family units that descended from a common, original 1968 family unit. The **Time and Money Transfers File** provides information regarding transfers, in the form of time and money, between a PSID family unit and other persons during the 1987 calendar year.

The **Demographic History Files**—Ego-Alter File, Childbirth and Adoption History File, and Marriage History File—provide details about the event and timing of each childbirth, adoption, and marriage for PSID family members. The Ego-Alter File also provides retrospective data collected in 1985 on substitute-parenting events and usage of public assistance programs. Data on these files are structured in a one-record-per-event format to facilitate event-history analysis, and the information is up-to-date as of the most recent interviewing wave.

A series of health supplements between 1990 and 1995 provides information on health status and health expenditures of the elderly and of their parents. The 1990 **Telephone Health Supplement** contains detailed data on health care costs and utilization for heads and wives aged 65 and over. It also has information about health services provided or available to the elderly, such as nursing care, transportation, and meals. The 1990 **Self-Administered Health Supplement** contains information about health status, health-care coverage, and long-term care coverage of heads and wives aged 50 and above. The 1991 **Parent Health Supplement** has extensive data about the health status and health care utilization experience of the parents and parents-in-law of the head of the family. Questions about parents' ability to care for themselves, as well as their housing, income, and assets, were included in this supplement.

The **Census Extract Files** contain a subset of the Census data, and the **Geocode Match Files** contain the identifiers necessary to link the main PSID data to the Census data. This linkage allows the addition of data on neighborhood characteristics for the

Table 2: Other Major Supplemental Topics

- Housing and neighborhood characteristics (1968–1972, 1975, 1977–1987)
- Achievement motivation (1972)
- Child care (1977)
- Job training and job acquisition (1978)
- Retirement plans (1981–1983)
- Health—health status, health expenditures, health care of the elderly and parent's health (1986, 1990, 1991, 1993–1995)
- Kinship—financial situation of parents, time and money help to and from parents (1980, 1988)
- Wealth—assets, savings, pension plans, fringe benefits (1984, 1989, 1994)
- Education—grade failure, private/public school, extracurricular activities, school detention, special education, Head Start Programs, criminal offense (1995)
- Military combat experience (1994)

geographic areas in which panel individuals and families reside to the already rich socioeconomic variables collected in the PSID. Because the Geocode Match data are highly sensitive (usually pinpointing the census tract in which families lived), this information is available only under special contractual conditions designed to protect the anonymity of respondents.

Death Index File. The PSID has gathered substantial amounts of new information about the **fact and date of death** of many former PSID respondents through 1993–1995 efforts to recontact former respondents and through use of the National Death Index of the U.S. Public Health Service. The resulting information on month and year of death will eventually be integrated into public-release individual cross-year files. A preliminary version, current through 1994 interviewing, is available as a separate file to researchers who request it.

As part of its 1990 interviewing wave, and in conjunction with an NIA-funded program project directed by Lee Lillard, the RAND Corporation, and Linda Waite (now at the University of Chicago), PSID staff asked individuals age 55 or older who were living in PSID households and who indicated they were Medicare beneficiaries to sign permission forms for access to Medicare claim records between 1984 and 1990. Those who agreed were asked to renew

that permission verbally in 1991 through 1995 for Medicare claims made in those years. When combined with questionnaire information on out-of-pocket medical expenditures and the long time-series of core PSID information, the resulting Medicare Record Data should be quite valuable for a number of studies of the health and well-being of the elderly. Given their sensitivity, these data will be released to outside analysts only under special contractual conditions.

Data Dissemination and Use

Comprehensive documentation is prepared and made available to the public along with the data files. Since the start of the study, the PSID data and documentation have been distributed by ICPSR on magnetic tape and will soon be available from ICPSR via FTP. Since 1987, the data have also been distributed on CD-ROM. PSID data files, documentation, bibliography, *Newsletters*, and SAS and SPSS examples for data extraction are also available to users, at no cost, via the Internet. The Uniform Resource Locator (URL) for the PSID homepage is:

<http://www.umich.edu/~psid/>

PSID staff members assist data users with issues concerning the data and questions about analysis through a User Help-Desk: PSID_staff@umich.edu.

The PSID data files have been disseminated widely throughout the United States and to numerous foreign countries. There are more than one thousand articles, papers, and other publications based upon the data.

The 1968–1992 PSID CD-ROM

Data for Waves 1–25 (1968–1992) of the PSID are now available from ICPSR on CD-ROM, with full documentation and SAS and SPSS data definition statements. Contents of the CD-ROM include:

- *PSID Bibliography*
- Single-year family files for each of 25 years
- Cross-year individual file for 25 years
- 1988 Time and Money Transfers File
- 1990 Health—Self-Administered Questionnaire
- 1990 Health—Telephone Health Questionnaire
- 1991 Parent Health Supplement
- 1985–1992 Childbirth and Adoption History File
- 1985–1992 Marriage History File

Interested users can obtain the CD-ROM (ICPSR 7439—CD0011) at the following prices: \$30 to users at ICPSR member institutions, \$55 to users at academic institutions that are not members of ICPSR, or \$105 to users at non-academic institutions.

Key Contributions of the PSID to the Knowledge Base

The PSID was founded to study poverty and the effect of the War on Poverty on family economic well-being. At that time it was widely believed that unemployment was the most important reason for poverty and economic distress. Probably the most important finding in the early years, and one that shaped later data collection, was the finding that family structure changes such as divorce were as important to family well-being as unemployment. In particular, it was discov-

ered that the income of women declined nearly 30 percent and their income relative to needs declined by 6.7 percent following divorce, while the income of men declined less and their income relative to needs increased 16.7 percent (Hoffman, 1977; Duncan and Hoffman, 1985).

The PSID expanded to its present focus on family structure and dynamics as well as income, wealth, and expenditures. Wealth and health are other important contributors to individual and family well-being that have been the focus of the PSID in recent years. Other findings include the following:

1. *Influences of Family History.* There are several key findings in the demographic literature that could not have been obtained without longitudinal data following parents and children over a long period of time. These include the finding that parental divorce is bad for kids (e.g., McLanahan and Sandefur, 1994) and teenage childbearing is bad for the young mother (e.g., Hoffman et al., 1993), and that neighborhoods have effects on children's development independent of family characteristics (Brooks-Gunn et al., 1993). Intergenerational transfers and mobility are key issues addressed by the PSID because of its longitudinal nature.

2. *Long-Term Social Impacts on Health.* In the health literature, researchers have found that the social environment of marriage decreases men's and women's risks of mortality, even taking positive selection into marriage into account (Lillard and Waite, 1995). Other work has examined the contribution of employment factors and personal health behaviors on mortality (e.g., Wolfe and Haveman, 1983; Haveman et al., 1994). Physical and environmental hazards lead to deterioration in men's and women's health status, net of other factors, and smoking has been found to be consistently harmful to health.

3. *Income and Balance Sheet Dynamics.* A recent important finding is that, compared with the older generation, the younger generation has experi-

enced a slowdown in the attainment of middle-class status and financial independence from their parents (Duncan, Boisjoly, and Smeeding, 1995). For example, 42 percent of young men who turned 30 in 1989–1992 had attained middle-class earnings, compared with 60 percent of those who turned 30 in 1977–1988. This decline in upward mobility has been uniform across all demographic groups. In addition, the PSID is now being used to address the puzzle of the low savings rate in the United States.

Major Activities in the Last Five Years

In the last five years (1990–1995), the PSID undertook five major key initiatives: (1) studies of data quality; (2) a recontact initiative; (3) coding of census tract, mortality, and relationships; (4) supplements on wealth and health; and (5) early file release through the Internet. These initiatives have increased the cumulative response rate of the PSID, shown its continuing value as representing the U.S. population; added enormously to the stock of knowledge about important areas such as health and wealth; added detailed information on the residential areas in which respondents live, on mortality, and on relationships among family members; and increased the accessibility of the data to users.

New Directions

While many of the uses for which the PSID has become known could not have been anticipated in 1968, today we see that, given the enormous value of the dataset and funding limitations for conducting new studies, the data will become even more widely used in the future.

Through supplements on intergenerational transfers, health and aging, wealth, and child development, and through its proposed immigrant supplement, in the next few years the PSID will have information of interest to an entire new generation of researchers that will inform policy and theory for the foreseeable future. □

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Table 3: Special PSID Supplemental Files

File Name	Public Release File	Available through ICPSR	Available via Internet
Ego-Alter File, 1985	Yes	Yes	No
Work-History File, 1984-1985; 1984-1986; 1984-1987	Yes	Yes	No
Relationship File, 1968-1985	Yes	Yes	No
Time and Money Transfers File, 1988	Yes	Yes	No
Childbirth and Adoption History File, 1985-1992	Yes	Yes	Yes
Marriage History File, 1985-1992	Yes	Yes	Yes
Telephone Health Supplement, 1990	Yes	Yes	Yes
Self-Administered Health Supplement, 1990	Yes	Yes	Yes
Parent Health Supplement, 1991	Yes	Yes	Yes
Census Extract File, 1970; 1980; 1990 (Summer 1995)	Yes	Yes	No
Geocode Match File*	No	No	No

*Contact PSID staff member Terry Adams (313-763-6868) for more information on this file.