

## Appendix 1

### Sources and Methods

#### A. PSID Wealth Supplements

##### Assets and Liabilities

1. Main home – house value minus remaining mortgage principal.
2. Other real estate – net value of second home, land, rental real estate, money owed in land contract.
3. Net equity in farm or business.
4. Stock – stock in publicly-held corporations, mutual funds, investment trusts, including stocks in IRAs.
5. Checking and saving - checking or saving accounts, money market funds, certificates of deposit, government saving bonds, or Treasury bills, including IRA's.
6. Net value of vehicles.
7. Other savings -- bonds, rights in a trust or estate, cash value in a life insurance policy, or a valuable collection for investment purposes.
8. Other debts – credit card, student loans, loans from relatives, medical or legal bills.

##### Items Asked About in Active Saving Questions (over past five years)

1. Amount of money put aside in private annuities.
2. Value of pensions or annuities cashed in.
3. Amount of money invested in real estate other than main home.
4. Value of additions or improvements worth \$10,000 or more to main home or other real estate.

5. Amount of money invested in farm or business.
6. Amount of money realized from sale of farm or business assets.
7. Net value of any stocks in publicly-held corporations, mutual funds or investment trusts bought or sold.
8. Net value of debt and assets removed from family holdings by someone with more than \$5,000 of either leaving the family.
9. Net value of debt and assets added to family holdings by someone with more than \$5,000 of either joining the family.
10. Value of any gifts or inheritances of money or property worth \$10,000 or more.

#### B. Calculations

##### Division of Change in Asset Value into Capital Gains and Gross Saving

1. Main home – Division is done by calculating capital gains and saving in each year and then summing them. If family did not move, the capital gains in each year equals the rise in the value of the home and saving equals the reduction in mortgage principal. In years in which the family moves, the change in the net value of the house is considered saving. In addition, the value of additions or improvements, which is assumed to apply to main home, is added to saving as well.
2. Other real estate – Saving is the amount of money invested in real estate other than main home. Capital gains is the change in the net value of the asset minus saving in this asset.
3. Net equity in farm or business – Saving is the difference between the amount of money invested in farm or business and the amount realized from the sale of such assets. Capital gains is the change in the net value of the asset minus active saving in this asset.

4. Stock – Saving is the net value of stock bought or sold. Capital gains is the change in the net value of the asset minus saving in this asset.
5. Checking and savings – A 0 percent annual real rate of return is assumed, so saving equals the change in the net value of the asset.
6. Net value of vehicles – Change in the net value is attributed to saving.
7. Other savings – Capital gains are calculated by assuming a 1 percent annual real rate of return. Saving is the change in the net value of the asset minus the capital gains for this asset.
8. Other debts - Capital gains are calculated by assuming an annual real rate of return equal to the inflation rate (CPI-U). Saving is the change in the net value of the asset minus the capital gains for this asset.

#### Saving Derived from Family Income

The calculations just described divide changes in wealth during a period into capital gains and gross saving during the period. Information from the series of questions on active saving is used to calculate the: 1) total amount of inheritance and transfers, 2) the net change in assets as a result of changes in household composition, and the 3) net change in annuities. Summing these three components and then subtracting them from gross saving yields a measure of saving derived from family income.

#### Rates of Return on Assets

Two different types of rate return were calculated, asset-specific and overall. For the asset-specific rates, the amount of capital gain over the period was summed up over all families, separately by asset type, and then divided by the sum over all families of the value of that asset at the beginning of the period. For the overall rate, the same calculation was done except the sums were taken over all assets together. As the calculations of asset-specific rates require more

assumptions about the flows into each asset, they are presumably less reliable than the overall rate. As a result, in any case where the overall rates could be used, they were (though it turns out that the results are not very sensitive to this choice). In the counterfactual experiments associated with portfolio composition, however, it is necessary to use asset-specific rates.

The questions about active saving are phrased in terms of flows over the past five years, so there is no information given as to when over the past five years these flows occurred. Rates of return were calculated under two assumptions, that the flow occurred at the end of the period (at the time of the survey) and that the flow occurred at the beginning of the period. As the results were not sensitive to these assumptions, it was assumed throughout that the flow occurred at the end of the period. Assuming that the flows occurred at the beginning of the period would have the effect of raising slightly the amount of capital gains and lowering slightly the amount of saving.

#### Rate of Saving

The saving rate was calculated by summing the estimate of saving out of income (described above) over all families and divided by the sum across families of total family income over the period. As family income was not available for 1993, it was assumed that income in that period equaled the average of income over the preceding four years.

#### C. Sample Selection and Use of Weights

1. Cross-sectional samples: There are no sample selection criteria for inclusion in these samples. However, Juster, Smith and Stafford (1998) say: “The PSID other savings number in 1984 is unusually high. This is due to a few large outlier values that appear to be miscodes.” (p. 17, footnote 12). There are 7 cases where the other savings value is giving as \$9 million, which is an extreme outlier. These observations are excluded from the 1984 cross-sectional sample. All calculations with these samples use the cross-sectional PSID family weights.

2. Longitudinal samples: Three separate longitudinal samples were formed, for the 1984-89, 1989-94 and 1984-94 periods. To be included in these samples, following the approach of Hurst, Luoh and Stafford (1998) and Juster, Smith and Stafford (1998), we require that the household head does not change over the period. The main rationale for this restriction is to avoid drawing erroneous conclusions about the changes in the level of wealth and their composition. For an individual living with his/her parents in the year of one wealth supplement and then as a head of household in the next, it would not be sensible to calculate wealth accumulation on the basis of a comparison of the wealth of the parents at the beginning of the period to that of the child at the end. In addition, in calculations of means and in all multivariate analysis other than the median regressions, we require that the household did not undergo extreme changes in wealth in order to avoid the undue influence of outliers. Thus, the samples are trimmed to exclude those families in the top or bottom percentile of the wealth appreciation distribution over the relevant five-year period(s). Calculations with these samples use the PSID family weights from the cross-section at the beginning of the period.

After excluding those families where the household head has changed, one is left with samples where about 90 percent of the sample either underwent no change in family composition or a change that involved a member other than the head or wife, with the remaining cases ones where a wife either left or died, or where the head has a new wife. These cases can only be ones where a wife moves in or moves out, because of the PSID's rule of treating a male as the head of household if one is present. It is possible that this asymmetric treatment of the sexes does introduce some peculiarities into the data, however. If a male respondent marries, divorces, or is widowed, the wealth of his family is tracked both before and after the change in marital status. The wealth of women facing similar changes in circumstances would not, however, be tracked.

While there is a large literature on the divergent economic fortunes of men and women after a divorce (for example, Burkhauser and Duncan 1989) these results are based on incomes, not on wealth. The possibility exists that changes in wealth are more symmetric than those in income with respect, particularly for the PSID concept of wealth, since assets associated with earnings, such as pension and social security wealth, are not included.

Appendix Table 1  
Wealth Statistics By Race and Sample

|                                | 1984              |        |       | 1989              |        |       | 1994              |        |       |
|--------------------------------|-------------------|--------|-------|-------------------|--------|-------|-------------------|--------|-------|
|                                | African Americans | Whites | Ratio | African Americans | Whites | Ratio | African Americans | Whites | Ratio |
| <b>Cross-sectional samples</b> |                   |        |       |                   |        |       |                   |        |       |
| Mean net worth                 | 29.1              | 149.2  | 0.19  | 39.2              | 190.1  | 0.21  | 38.0              | 192.9  | 0.20  |
| Median net worth               | 3.8               | 60.4   | 0.06  | 6.6               | 61.7   | 0.11  | 8.2               | 67.7   | 0.12  |
| Sample size                    | 2,575             | 4,336  |       | 2,609             | 4,505  |       | 2,611             | 4,804  |       |
| <b>Longitudinal samples</b>    |                   |        |       |                   |        |       |                   |        |       |
| <i>1984-89</i>                 |                   |        |       |                   |        |       |                   |        |       |
| Mean net worth (untrimmed)     | 31.2              | 162.7  | 0.19  | 49.1              | 223.5  | 0.22  |                   |        |       |
| Mean net worth (trimmed)       | 30.1              | 133.5  | 0.23  | 39.8              | 176.2  | 0.23  |                   |        |       |
| Median net worth               | 4.4               | 70.6   | 0.06  | 9.2               | 90.7   | 0.10  |                   |        |       |
| Sample size (untrimmed)        | 1,844             | 3,329  |       | 1,844             | 3,329  |       |                   |        |       |
| Sample size (trimmed)          | 1,838             | 3,261  |       | 1,838             | 3,261  |       |                   |        |       |
| <i>1989-94</i>                 |                   |        |       |                   |        |       |                   |        |       |
| Mean net worth (untrimmed)     |                   |        |       | 43.7              | 206.8  | 0.21  | 47.5              | 226.4  | 0.21  |
| Mean net worth (trimmed)       |                   |        |       | 34.8              | 155.5  | 0.22  | 47.4              | 177.0  | 0.27  |
| Median net worth               |                   |        |       | 7.9               | 74.9   | 0.11  | 11.2              | 91.2   | 0.12  |
| Sample size (untrimmed)        |                   |        |       | 1,792             | 3,465  |       | 1,792             | 3,465  |       |

|                               |       |       |       |       |
|-------------------------------|-------|-------|-------|-------|
| Sample size (trimmed) 1984-94 | 1,788 | 3,391 | 1,788 | 3,391 |
| Mean net worth (untrimmed)    | 53.0  | 240.5 | 53.9  | 255.4 |
| Mean net worth (trimmed)      | 40.6  | 171.6 | 53.6  | 191.1 |
| Median net worth              | 10.5  | 98.6  | 13.2  | 111.0 |
| Sample size (untrimmed)       | 1,334 | 2,685 | 1,334 | 2,685 |
| Sample size (trimmed)         | 1,329 | 2,598 | 1,329 | 2,598 |

## Notes:

Ratios refer to wealth for African Americans divided by wealth of whites. Net worth is measured in thousands of 1998 dollars. For trimmed samples, the top and bottom 1 percent of the distribution of changes in wealth in each five year period is excluded. For calculations of rate of return on capital, only those with positive wealth can be included. Calculations use PSID family weights.



Appendix Table 2  
Sample Means

|                           | 1984-89 | 1989-94 | 1984-94 |
|---------------------------|---------|---------|---------|
| Characteristics of head   |         |         |         |
| 1=African American        | 0.12    | 0.13    | 0.11    |
| 1=Female                  | 0.26    | 0.27    | 0.23    |
| Age                       | 45.9    | 47.2    | 45.0    |
| 1=High school graduate    | 0.35    | 0.31    | 0.31    |
| 1=Some college            | 0.18    | 0.21    | 0.18    |
| 1=College graduate        | 0.20    | 0.23    | 0.22    |
| Characteristics of family |         |         |         |
| 1=Married                 | 0.60    | 0.57    | 0.65    |
| Number of children        | 0.75    | 0.67    | 0.70    |
| Total income              | 261.1   | 264.7   | 563.5   |

Income is for the entire period and is measured in thousands of 1998 dollars. Other variables are measured at start of the period. Calculations use PSID family weights on the untrimmed longitudinal samples.