Technical Report
Construction and Evaluation of the 2017 Longitudinal Individual and Family Weights

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This document describes the construction of the 2017 Core/Immigrant individual and family longitudinal sample weights for the Panel Study of Income Dynamics (PSID). This technical report is organized in four sections. Section I provides an overview of the PSID sample, defines PSID sample and non-sample persons and explains the following rules. Section II outlines the methodology for computing the 2017 longitudinal individual and family weights. The report concludes in Section III with a descriptive analysis of the weights, including comparisons of distributions of U.S. socioeconomic characteristics using weighted estimates from the Current Population Survey (CPS), American Community Survey (ACS) and PSID. The weighting methodology and descriptive analysis of the weights for 2017 New Immigrant Supplement sample is not included in this document.

I. The PSID Sample and Following Strategy in 2017

The 2017 PSID panel is based on the dynamic, longitudinal follow-up of individuals and their families originally identified in a combination of four probability samples of U.S. households: the Survey Research Center 1960 National Sample (SRC), a subsample of families interviewed in 1967 by the Bureau of the Census for the Office of Economic Opportunity (SEO) (McGonagle and Schoeni, 2006), the 1997 PSID Immigrant Supplement (Heeringa and Connor, 1998), and the 2017 PSID New Immigrant Supplement. Sample persons and their descendents identified in the baseline SRC and SEO samples (termed the PSID "Core" in many publications) have been interviewed since 1968[1]. In 1997 and 1999 the baseline sample of the post-1968 immigrants was added and these immigrant sample persons have been followed continuously since the late 90s. More detailed information on the PSID 1968 and 1997/1999 Immigrant samples is available from the PSID website, (psid.org). In 2017 the baseline sample of the post-1997 immigrants was added to the PSID panel. More detailed information on the 2017 New Immigrant sample will be available from the PSID website and is not covered by this document.

Under the "dynamic" sample follow-up design, PSID interviewed 9,155 non-new-immigrant families in 2017. Included in these families are 24,821 individuals: 17,643 PSID "sample persons" (see Table 1) and 7,178 "non-sample" spouses and family members.

1 PSID has developed a measure of cumulative response rates for the original sample of persons interviewed in the initial 1968 wave. It estimates the proportion of the surviving members of the original 1968 census who were interviewed at each wave of data collection. The cumulative response rate report is available from the PSID website (see Heeringa et al., 2018).

PSID traditionally categorizes persons into one of two groups: sample persons and non-sample persons. The definition of these categories has changed slightly over the years. From 1968 to 1993, a sample person was defined as someone who was either an original sample person; i.e., resident of a PSID sample family in 1968, or an offspring born to or adopted by a sample individual who was actively participating in the study at the time. A newborn child had to appear in the study at the wave immediately following their birth to be considered a sample person. In 1994, the definition of a sample person was expanded to include children born to or adopted by a sample person when the sample person was not participating in the study; i.e., the child need not be residing with a responding panel family at birth or adoption. The same current PSID definition of sample persons (implemented in 1994) applies to the immigrant sample.

All of the 9,155 PSID non-new-immigrant families interviewed in 2017 are members of the Core or the 1997/1999 Immigrant samples. In 2017, the rules for following sample persons and interviewing their existing or newly formed families were the same as in the prior 2015 wave[2]. Specifically, sample persons who participated in the previous wave survey were followed. In addition to following sample persons who were respondents in 2015, the PSID attempted to obtain an interview with sample individuals who did not respond in the prior wave (2015 survey year), but responded in the 2013 survey year.

Each sample person successfully interviewed for 2017 received a positive value for their 2017 longitudinal individual weight. Nonsample persons received a 2017 PSID individual longitudinal weight equal to zero (0).

II. Methodological Approach to the 2017 PSID Longitudinal Weight Construction

The methodology for the calculation of PSID longitudinal weights follows a four year (two wave) cycle. At the beginning of each cycle, the calculation of weights incorporates an explicit adjustment for panel attrition due to nonresponse that has occurred over the past four years. The current cycle began in 2015 and a full nonresponse adjustment was incorporated in the 2015 longitudinal weights for individuals and families (see Gouskova, et al., 2008 for a description of the longitudinal weight nonresponse adjustment methodology). At the second wave of each four year weight development cycle, a simpler procedure is used to carry forward the individuals' weights from the previous wave and to update the weights for new births, sample panel members who "reappear" and are interviewed again after one or more waves of nonresponse. Family weights are also updated to reflect changes in family composition due to marriage, divorce, death, and other additions of new members.

[2] For more detail on the following rules in 1993-2007 survey years see Table 1 in Gouskova et al. (2008), (http://psidonline.isr.umich.edu/)

No explicit nonresponse adjustment is incorporated in the weight computations for the second wave of each of the 4-year weight updating cycles.

The 2017 weights are “carry-over” weights. The last attrition adjustment of the PSID longitudinal individual weights was done in 2015 and thus, the construction of the 2017 individual weights started with the 2015 longitudinal weight as the basis. For sample persons who were interviewed in both 2015 and 2017, the 2017 individual weights were assigned by carrying forward the 2015 longitudinal weight. For sample persons who were interviewed in 2017 but not in 2015, the most recent non-zero individual weight or "reference weight” for the case was carried forward as the 2017 individual weight. All “nonsample” individuals in the panel received a zero (0) value for their longitudinal weight. The PSID provides an optional cross-sectional weight that is designed for single wave analysis of all cases in the PSID individual data. The PSID cross-sectional weight is a positive weight for all sample and nonsample members of interviewed PSID families (see Chang, et al., 2019).

For sample newborns under 2 years of age in 2017, the 2017 individual longitudinal weight was calculated as the average of reference person and spouse’s individual weight in 2017. If a PSID non-newborn sample person moved into a PSID family during the period between 2015 and 2017 and they had no existing reference weight, that sample individual was assigned a new individual weight equal to the average of all positive 2017 individual weights in the family unit.

Once individual longitudinal weights had been constructed for each sample person interviewed in 2017, the 2017 longitudinal family weight was computed as the average of the positive individual weights for sample persons and the zero-value weights for the nonsample persons in the family. For example, consider a 2017 PSID family that consisted of a young married couple in which the female spouse was a PSID sample person and had an individual longitudinal weight of 60. Her new spouse was PSID “nonsample” and therefore is assigned a “0” value for his longitudinal individual weight. The 2017 family weight for this two-person family is (60+0)/2=30. Figure 1 is a simple schematic that illustrates the dynamic process of family level weighting for four waves of data collection. At the baseline wave, families “A” and “B” are chosen to the sample. Families “C” and “D” were eligible for probability sample selection at baseline but were not chosen. Over the next three waves, there are “split-offs” from sample families, marriage or new family formation by members of original sample and non-sample family members. At each wave’s change in family composition the family weights, $W_{t, FAM}$, are recomputed as the average of the current individual weights for the sample and nonsample persons that comprise the family unit. Note from the final column that the sum of all family weights constructed in this fashion remains consistent with the total number of all family units in the hypothetical

dynamic population.

Unlike the 2017 PSID individual weight which is available in both the longitudinal form (sample persons only) and cross-sectional analysis form (sample and nonsample persons have non-zero weights), there is only one version of the 2017 PSID family weight. The longitudinal family weight can be used for cross-sectional analysis of PSID family data.

III. 2017 PSID Individual Respondents: Transition from 2015 Status

As indicated above, the 2017 PSID completed interviews with 24,821 non-new-immigrant individuals. The columns of Table 1 show the 2017 status of each individual respondent by the sample/nonsample status and selected PSID special classifications for persons in these two major subpopulations. In this table, all non-new-immigrant respondents from 2017 are cross-classified against 2015 status using 6 sample status categories. The top row of the body of the table contains information about those that responded in 2017 but were classified as "non-sample persons, not part of the elderly group" in 2015. Of these, the key sample status categories are highlighted in dark shading and represent 2017 sample person members: original sample from 1968, born-in sample person consisting of newborns born in 2015, 2016, or 2017 and others born into a sample family, and those that moved into a sample family during this two year period.

The “born in” sample person group (705 people) consists mainly of 702 newborns. The “move in” sample person group (123 people) includes 22 newborns. Newborns in either the “born in” or “move in” sample person groups were assigned a 2017 weight equal to the average of the reference person and spouse’s weight. If neither reference person nor spouse in the family is a sample person in 2017, the newborn was assigned the average of all positive 2017 individual weights within the family unit, i.e. the average of sample family members’ individual weights. The non-newborn individuals in either the “born in” or “move in” sample person groups received the average of all positive 2017 individual weights within the family unit. All other sample persons (highlighted in light shading) were assigned the “carry forward” value of their most recent non-zero individual longitudinal weight.

Family longitudinal weights were constructed as the average of all non-zero individual weights from sample persons and zero-value individual weights from nonsample persons in the family unit during 2017. Note that the family units do change from year to year. See the PSID family level data set documentation and codebooks for more information. See also Duncan and Hill (1985) for a discussion of the issues involved in longitudinal analysis of family units.

IV. Descriptive Statistics for the 2017 PSID Longitudinal Weights

Tables 2 through 6 provide descriptive information on the 2017 PSID longitudinal weights. To enable comparison of the longitudinal weights across years, the same set of descriptors is reported for the longitudinal weights from the eight prior waves (2001-2015).

Tables 2 and 3 summarize the total number of cases with positive, zero, and missing values for individual and family weights and the total numbers of sample and non-sample individuals (families with and without sample members). For individual weights, the number of weights with a positive value is equal to the number of sample persons, and the number of the zero-valued individual weights is the same as the number of non-sample persons (Table 2). As with the 2015 survey, in 2017 all families had at least one sample member (Table 3). As a result, all PSID families in 2017 carry a non-zero, positive longitudinal family weight.

Tables 4 and 5 report summary statistics for the longitudinal individual and family weights. Based on the summary statistics, the distributions of the 2017 longitudinal weights are similar to those in the eight most recent survey waves. Across years, the measures of dispersion indicate that there is an increasing trend in variability of the distribution in the individual and family weights. This steady increase in the variability of the PSID longitudinal weights can be attributed to the periodic nonresponse adjustment (every four years) and to the reweighting that is required to reflect changes in family composition (e.g. new family formations).

Table 6 provides a key to the PSID variables names for longitudinal individual and family weight variables.

IV. Evaluation of the PSID Longitudinal Weights: Comparisons with the CPS or the ACS.

Tables 7 through 9 compare PSID, CPS and ACS weighted estimates for selected demographic statistics based on characteristics including age, gender and race of family reference person. Each table reports the unweighted PSID estimates, PSID estimates weighted (as applicable) by the PSID family or individual longitudinal weight, the CPS weighted estimates and the ACS weighted estimates. For age (Table 7) and race (Table 9), the first panel of the table compares weighted estimates for family reference person and the second panel of the table provides estimates of mean or percent values for individuals. The statistics in the right most columns of each table are simple ratios of the weighted PSID and CPS estimates and the ratios of the weighted PSID and ACS estimates. These tables are useful for examining three features of the PSID data: consistency of unweighted and weighted estimates across years, the effect of the longitudinal weights on the distributions of estimates of

family and individual population characteristics, and, finally, the consistency of the PSID weighted estimates with those obtained from the CPS data[3] and from the ACS data[4]. The comparison with ACS estimates are added to these tables in 2017. The persons who were foreign-born and entered the U.S. after 1997 were excluded from the ACS data for the ACS estimates reported in this document.

Comparison of the unweighted and weighted PSID distributions with the CPS or with ACS distributions reveals that in a majority of cases the weighted estimates are closer to CPS or ACS estimates than are the estimates obtained without weights. This is to be expected since due to the 1968 SEO oversample for which the baseline inclusion probabilities for African American and lower income PSID families and individuals were substantially greater than for other domains of the U.S. household population.

While there are some noticeable difference in the weighted distribution by race, the weighted PSID, CPS and ACS estimates align fairly closely for age and gender. However, caution is advised in placing too much emphasis on minor differences between the PSID and CPS or between the PSID and ACS weighted distribution. Analysts should keep in mind that for any given wave before 2017, the simple comparison of weighted demographic distributions does not explicitly take into account PSID non-coverage of immigrant populations after 1997. Immigrants arriving after 1997 when the immigrant sample was added to the PSID are not fully represented in the PSID. The comparison with ACS estimates, reported since 2017, provides a more comparable comparison by excluding the foreign-born persons entering U.S. after 1997 from the calculation of ACS estimates. Another limitation of this comparison is that the CPS does not cover the institutionalized population while PSID, due to the dynamic nature of the sample, may include institutionalized persons. There are differences in the definitions that PSID, CPS and ACS use to code household composition and disaggregate

[3] Some characteristics are not strictly comparable between the two surveys. For example, in the PSID, race is not asked of all individuals while in the CPS data all individuals are asked to provide detailed race information. To calculate proportions of black and non-black individuals in the PSID data, individual race was approximated using the race of the family reference person. Age is top-coded at 85 years old in CPS data while it is not top-coded in PSID data. CPS estimates are calculated based on CPS March supplement data collected in the same year of the PSID data collection.

[4] Some characteristics are not strictly comparable between the two surveys. For example, in the PSID, race is not asked of all individuals while in the ACS data all individuals are asked to provide detailed race information. To calculate proportions of black and non-black individuals in the PSID data, individual race was approximated using the race of the family reference person. Age is top-coded at 99 years old in ACS data while it is not top-coded in PSID data. ACS estimates are calculated based on ACS one-year PUMS data collected in the same year of the PSID data collection.

households into family and non-family units. Finally, the PSID longitudinal weights for families and individual do not include any recent adjustment to external population controls (e.g. 2000 Census or annual CPS or annual ACS population totals). The question of whether to introduce explicit post-stratification controls to the PSID weights is a topic of research for the PSID weight development program.

V. References

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Table 1. Table of 2017 Sample Status for 2017 PSID Individual Respondents, Excluding 2017 New Immigrant Supplement*

Sample status counts in 2015, among 2017 responders	Sample Status Counts in 2017						
	"Non-sample persons", not part of elderly group	Original "sample persons"	Born in "sample persons"	Move in "sample persons"	Followable "non-sample parents"	"Non-sample persons", part of elderly group	Total
"Non-sample persons", not part of elderly group	5513	0	705	123	0	0	6341
Original "sample persons"	0	4618	0	0	0	0	4618
Born in "sample persons"	1	0	10917	0	0	0	10918
Move in "sample persons"	0	0	0	1280	0	0	1280
Followable "non-sample parents"	0	0	0	0	1658	0	1658
"Non-sample persons", part of elderly group	0	0	0	0	0	6	6
Total	5514	4618	11622	1403	1658	6	24821

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

Table 2. PSID Longitudinal Individual Weights, 2001-2017, Excluding 2017 New Immigrant Supplement*

Year	Core sample (SRC, SEO) and Immigrant sample					
	Total number of individuals	Total number of "sample persons"	Total number of "non-sample persons"	Number of cases with positive individual weight	Number of cases with zero individual weight	Number of cases with missing individual weight
2001	21400	15646	5754	15646	5754	0
2003	22290	16012	6278	16012	6278	0
2005	22918	16620	6298	16620	6298	0
2007	23508	16906	6602	16906	6602	0
2009	24385	17471	6814	17471	6814	0
2011	24661	17643	7018	17643	7018	0
2013	24952	17785	7167	17785	7167	0
2015	24637	17505	7132	17505	7132	0
2017*	24821	17643	7178	17643	7178	0

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

Table 3. PSID Longitudinal Family Weights, 2001-2017, Excluding 2017 New Immigrant Supplement*

Year	Core sample (SRC, SEO) and Immigrant sample				
	Total number of families	Number of families with no "sample person"	Number of families with positive weight	Number of families with zero weight	Number of families with missing weight
2001	7406	211	7195	211	0
2003	7822	257	7565	257	0
2005	8002	0	8002	0	0
2007	8289	0	8289	0	0
2009	8690	0	8690	0	0
2011	8907	0	8907	0	0
2013	9063	0	9063	0	0
2015	9048	0	9048	0	0
2017*	9155	0	9155	0	0

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

Table 4. Summary Statistics of the PSID Longitudinal Individual Weights, 2001-2017, Excluding 2017 New Immigrant Supplement (Sample Persons Only)*

Year	N	Mean	Standard Deviation	Min	Max	Coefficient of Variation
2001	15646	25.07	18.97	0.25	167.68	0.76
2003	16012	25.62	19.54	0.25	173.56	0.76
2005	16620	24.81	19.33	0.23	173.56	0.78
2007	16906	25.38	20.09	0.20	181.45	0.79
2009	17471	24.57	19.90	0.23	181.45	0.81
2011	17643	25.65	21.47	0.25	196.44	0.84
2013	17785	24.75	21.11	0.25	196.44	0.85
2015	17505	26.96	23.91	0.28	225.82	0.89
2017*	17643	26.02	23.50	0.20	167.07	0.90

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

Table 5. Summary Statistics for the PSID Longitudinal Family Weights, 2001-2017, Excluding 2017 New Immigrant Supplement* (With 2001 and 2003 Based on Families with Positive Weights Only)

Year	N	Mean	Standard Deviation	Min	Max	Coefficient of Variation
2001	7195	22.03	16.74	0.06	167.68	0.76
2003	7565	22.06	17.06	0.12	132.64	0.77
2005	8002	21.04	16.82	0.12	136.03	0.80
2007	8289	21.32	17.40	0.10	139.34	0.82
2009	8690	20.66	17.28	0.10	139.34	0.84
2011	8907	21.71	18.75	0.12	150.89	0.87
2013	9063	20.85	18.44	0.08	150.89	0.89
2015	9048	22.80	21.06	0.10	156.12	0.92
2017*	9155	22.11	20.66	0.08	142.78	0.93

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

Table 6. Names of the PSID Longitudinal Weight Variables, 1993-2017

Year	Core Longitudinal Weight	
	Individual	**Family**
1993	ER30864	V23361
1994	ER33119	ER4160
1995	ER33275	ER7000
1996	ER33318	ER9251
	Core/Immigrant Longitudinal Weight	
	Individual	**Family**
1997	ER33430	ER12084
1999	ER33546	ER16518
2001	ER33637	ER20394
2003	ER33740	ER24179
2005	ER33848	ER28078
2007	ER33950	ER41069
2009	ER34045	ER47014
2011	ER34154	ER52436
2013	ER34268	ER58257
2015	ER34413	ER65492
2017	ER34650	ER71570

Table 7. Comparison of PSID and CPS Weighted Estimates of Mean and Median Age, 2001-2017, Excluding 2017 New Immigrant Supplement*

A. Family Level Data (age of reference person)

Year	PSID** unweighted		PSID** weighted***		CPS**** weighted		ACS***** weighted		PSID/CPS Ratio		PSID/ACS Ratio	
	Mean Years [1]	Median Years [2]	Mean Years [3]	Median Years [4]	Mean Years [5]	Median Years [6]	Mean Years [7]	Median Years [8]	Mean Years [3]/[5]	Median Years [4]/[6]	Mean Years [3]/[7]	Median Years [4]/[8]
2001	44.91	43	49.39	47	48.72	46			1.01	1.02		
2003	44.98	43	49.6	48	48.69	47			1.02	1.02		
2005	45.08	44	49.96	48	49.04	47			1.02	1.02		
2007	45.04	44	50.13	49	49.30	48			1.02	1.02		
2009	45.79	44	49.82	49	47.60	47			1.05	1.04		
2011	45.21	43	50.60	50	48.11	47			1.05	1.06		
2013	45.68	43	51.21	51	48.56	48			1.05	1.06		
2015	45.65	43	52.02	52	48.87	48			1.06	1.08		
2017*	46.20	43	53.14	54	49.37	49	52.96	53	1.08	1.10	1.00	1.02

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table.

** Missing value of age of reference person in PSID data was imputed.

*** PSID weighted estimates were weighted by PSID longitudinal family weight

**** Age in CPS data is top-coded at 85 years old.

***** Age in ACS data is top-coded at 99 years old. The families with reference person who was foreign-born and entered the U.S. after 1997 were excluded from the data used for calculating ACS estimates

B. Individual Level Data

Year	PSID** unweighted***		PSID** weighted****		CPS***** weighted		ACS****** weighted		PSID/CPS Ratio		PSID/ACS Ratio	
	Mean Years [1]	Median Years [2]	Mean Years [3]	Median Years [4]	Mean Years [5]	Median Years [6]	Mean Years [7]	Median Years [8]	Mean Years [3]/[5]	Median Years [4]/[6]	Mean Years [3]/[7]	Median Years [4]/[8]
2001	30.86	29	36.30	36	35.65	35			1.02	1.03		
2003	31.25	29	36.53	36	35.82	35			1.02	1.03		
2005	31.41	29	36.93	36	36.17	36			1.02	1.00		
2007	31.61	29	37.35	37	36.44	36			1.02	1.03		
2009	32.30	29	37.90	37	36.80	36			1.03	1.03		
2011	31.95	29	38.75	38	37.00	36			1.05	1.06		
2013	32.91	30	39.27	38	37.64	37			1.04	1.03		
2015	32.55	30	40.18	39	38.02	37			1.06	1.05		
2017*	32.93	31	40.75	39	38.38	37	38.88	38	1.06	1.05	1.05	1.03

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

** Missing value of age in PSID data was imputed

*** Unweighted individual level PSID estimates were calculated based on sample and non-sample individuals

**** PSID weighted estimates were weighted by PSID longitudinal individual weight

***** Age in CPS data is top-coded at 85 years old

****** Age in ACS data is top-coded at 99 years old. The individuals who were foreign-born and entered the U.S. after 1997 were excluded from the data used for calculating ACS estimates

Table 8. Comparison of PSID and CPS Weighted Estimates of % Population by Gender, 2001-2017, Excluding 2017 New Immigrant Supplement*

Year	PSID unweighted**		PSID weighted***		CPS weighted		ACS**** weighted		PSID/CPS Ratio		PSID/ACS Ratio	
	Male [1]	Female [2]	Male [3]	Female [4]	Male [5]	Female [6]	Male [7]	Female [8]	Male [3]/[5]	Female [4]/[6]	Male [3]/[7]	Female [4]/[8]
2001	47.93	52.07	48.08	51.92	48.86	51.14			0.98	1.02		
2003	47.98	52.02	48.17	51.83	48.92	51.08			0.98	1.01		
2005	47.88	52.12	48.23	51.77	49.03	50.97			0.98	1.02		
2007	47.88	52.12	48.58	51.42	49.08	50.92			0.99	1.01		
2009	47.48	52.52	48.40	51.60	49.10	50.90			0.99	1.01		
2011	47.87	52.13	48.74	51.26	49.21	50.79			0.99	1.01		
2013	47.69	52.31	48.83	51.17	48.96	51.04			1.00	1.00		
2015	47.53	52.47	48.70	51.30	48.97	51.03			0.99	1.01		
2017*	47.69	52.31	48.62	51.38	48.99	51.01	49.28	50.72	0.99	1.01	0.99	1.01

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

** Unweighted individual level PSID estimates were calculated based on sample and non-sample individuals

*** PSID weighted estimates were weighted by PSID longitudinal individual weight

**** The individuals who were foreign-born and entered the U.S. after 1997 were excluded from the data used for calculating ACS estimates

Table 9. Comparison of PSID and CPS Weighted Estimates of % Population by Race, 2001-2017, Excluding 2017 New Immigrant Supplement*

A. Family Level Data (age of reference person)

Year	PSID** unweighted		PSID** weighted***		CPS**** weighted		ACS***** weighted		PSID/CPS Ratio		PSID/ACS Ratio	
	Non-black [1]	Black [2]	Non-black [3]	Black [4]	Non-black [5]	Black [6]	Non-black [7]	Black [8]	Non-black [3]/[5]	Black [4]/[6]	Non-black [3]/[7]	Black [4]/[8]
2001	69.60	30.40	87.40	12.60	87.80	12.20			1	1.03		
2003	68.40	31.60	87.20	12.80	87.90	12.10			0.99	1.06		
2005	66.70	33.30	86.10	13.90	87.80	12.20			0.98	1.14		
2007	65.70	34.30	85.90	14.10	87.60	12.40			0.98	1.14		
2009	64.60	35.40	84.40	15.60	87.50	12.50			0.96	1.25		
2011	62.93	37.07	85.18	14.82	87.35	12.65			0.98	1.17		
2013	61.84	38.16	83.54	16.46	86.97	13.03			0.96	1.26		
2015	61.20	38.80	83.73	16.27	87.04	12.96			0.96	1.26		
2017*	60.62	39.38	83.64	16.36	87.12	12.88	86.85	13.15	0.96	1.27	0.96	1.24

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

** Black was defined based on the race first mention of reference person for PSID estimates. Missing value of race first mention of reference person in PSID data was imputed.

*** PSID weighted estimates were weighted by PSID longitudinal family weight

**** Black was defined by black alone or in combination with one or more other races for CPS

***** Black was defined by black alone or in combination with one or more other races for ACS estimates. The families with reference person who was foreign-born and entered the U.S. after 1997 were excluded from the data used for calculating ACS estimates

B. Individual Level Data

Year	PSID** unweighted***		PSID** weighted****		CPS***** weighted		ACS****** weighted		PSID/CPS Ratio		PSID/ACS Ratio	
	Non-black [1]	Black [2]	Non-black [3]	Black [4]	Non-black [5]	Black [6]	Non-black [7]	Black [8]	Non-black [3]/[5]	Black [4]/[6]	Non-black [3]/[7]	Black [4]/[8]
2001	67.00	33.00	86.90	13.10	87.30	12.70			1.00	1.03		
2003	66.10	33.90	86.60	13.40	87.50	12.50			0.99	1.07		
2005	64.60	35.40	86.00	14.00	87.40	12.60			0.98	1.11		
2007	64.20	35.80	85.90	14.10	87.40	12.60			0.98	1.12		
2009	63.70	36.30	85.20	14.80	86.70	13.30			0.98	1.11		
2011	63.35	36.65	84.19	15.81	86.43	13.57			0.97	1.17		
2013	61.88	38.12	84.79	15.21	85.95	14.05			0.99	1.08		
2015	61.51	38.49	84.85	15.15	85.87	14.13			0.99	1.07		
2017*	61.19	38.81	84.42	15.58	85.71	14.29	85.70	14.30	0.98	1.09	0.99	1.09

* PSID 2017 New Immigrants (post-1997 immigrants) were not included in this table

** Individual race in PSID data was approximated using the race of the family reference person. Black was defined based on the race first mention of reference person for PSID estimates. Missing value of race first mention in PSID data was imputed.

*** Unweighted individual level PSID estimates were calculated based on sample and non-sample individuals.

****PSID weighted estimates were weighted by PSID longitudinal individual weight

*****Black was defined by black alone or in combination with one or more other races for CPS

****** Black was defined by black alone or in combination with one or more other races for ACS estimates. The individuals who were foreign-born and entered the U.S. after 1997 were excluded from the data used for calculating ACS estimates

Figure 1: Illustration of Dynamic Weighting for PSID Families

Wave							Total
t_0	$A_1\ A_2\ A_3$	$B_1\ B_2$	$C_1\ C_2\ C_3$	$D_1\ D_2$			
$W_{0,\ IND}$	2, 2, 2	2, 2	0, 0, 0	0, 0			10
$W_{0,FAM}$	2	2	0	0			4
t_1	$A_1\ A_2$	B_1	B_2	$A_3\ C_3$	$C_1\ C_2$	D_1	D_2	
$W_{1,FAM}$	2	2	2	1	0	0	0	7
t_2	$A_1\ A_2$	B_1	$B_2\ D_2$	$A_3\ C_3$	$C_1\ C_2$	D_1		
$W_{2,FAM}$	2	2	1	1	0	0		6
t_3	$A_1\ A_2\ D_1$	$B_2\ D_2$	$A_3\ C_3$	$C_1\ C_2\ B_1$				
$W_{3,FAM}$	1.33	1	1	0.67				4