

## *Appendix – Description of SCF, ACS and Polk Data Variables*

### CONTROL VARIABLES

#### **2005-2009 ACS Census Tract, County and State-level Variables –**

*Median Income:* Median household income in the past 12 months aggregated at the census tract, county, and state levels. The 2005-2009 ACS data use Census Tract definitions from the 2000 Census, which is the same Census Tract definition found in the 2010, 2007 and 2004 internal SCF data.

*Median House Value:* Median value of owner occupied housing in census tract. Data from 2005-2009 ACS.

#### **Polk Data Variables –**

*Fraction of High Status Cars in County:* Fraction of near-luxury or luxury brand cars, as defined by Kelley Blue Book, sold in each US county over years 2002-2010. These brands include: Acura, Aston Martin, Audi, Bentley, BMW, Cadillac, Infiniti Lamborghini, Land Rover Lexus, Lincoln, Lotus, Maserati, Maybach, Mercedes-Benz, Porsche, Rolls Royce, Tesla and Volvo.

#### **Household-Level Variables (SCF)<sup>111</sup> –**

*Normal Income:* Normal income considers total income abstracting one-off shocks such as temporary unemployment spells, bonuses, or capital gains or losses. “The concept of ‘normal’ income in the SCF is conceptually and empirically close to the concept of “permanent” income that economists generally consider when they describe consumer behavior. The label “normal” stems from a question posed to SCF respondents; after they report their actual income, they are asked whether they consider the current year a ‘normal’ year. If respondents state it is not a normal year, they are asked to report a value for ‘normal’ income. Actual and normal income are the same for most respondents. However, Ackerman and Sabelhaus (2012) show that the deviations from normal for the subset who report such deviations provide a relationship between actual and permanent income consistent with estimates of transitory shocks using panel income data” (Krimmel, Moore, Sabelhaus, and Smith, 2013).

*Assets:* Sum of real value of a household’s total financial and nonfinancial asset, including: liquidity, CDs, directly pooled investments funds, savings bonds, directly held stock, directly held bonds, cash value of whole life insurance, other managed assets, quasi-liquid retirement accounts, real value of vehicle stock (calculated according to National Auto Dealers Association estimates), self-reported value of residential properties, net equity in non-residential real estate, self-reported value of businesses, and other miscellaneous financial and nonfinancial assets.

*Debts:* Sum of debt secured by residential properties, including mortgages and home equity lines of credit; other lines of credit; credit card balances after last payment; installment loans, including education debt, vehicle loans, and other installment loans; and other miscellaneous debt.

*Net Worth:* Total household assets minus total household debts. Net worth enters into regressions as a categorical variable. (Less than 25<sup>th</sup> percentile of net worth distribution, 25<sup>th</sup>-49<sup>th</sup> percentile, 50<sup>th</sup>-74<sup>th</sup> percentile, 75<sup>th</sup>-89<sup>th</sup> percentile, and 90<sup>th</sup> percentile and above). See the table below for net worth group cutoff points, presented in 2010 dollars.

<i>Percentile of Net Worth</i>	<i>Survey Year</i>		
	2004	2007	2010
25	15,300	14,800	8,300
50	107,200	126,400	77,300
75	378,800	390,600	301,700
90	959,600	953,800	952,500

*Age:* Age of the head of household. Age variable enters into regressions as a categorical variable (Less than 35, 35-44, 45-54, 55-64, 65-74, 75+).

*Race:* Self-identified race of the head of household, either White non-Hispanic, Black, Hispanic, Asian, or Other.

*Marital Status:* Marital status of the household head; an indicator variable for which 1 equals married or living with partner.

*Renter:* An indicator variable for which homeowner equals 0 and a non-homeowner equals 1.

*Urban:* An indicator variable that equals 1 for households living in a Metropolitan Statistical Area (MSA) and 0 for those not residing in an MSA.

*Unemployment Spell:* An indicator variable that equals 1 if either the head of household or his/her spouse were unemployed and looking for work at any time during the past twelve months prior to the survey interview.

*Denied Credit:* An indicator variable that equals 1 if the head of household or spouse reports any of the following in the past five years: being denied credit, not receiving as much credit as applied for, or failing to apply for credit for fear of being turned down.

*High Payment Income Ratio (PIR):* An indicator variable that equals 1 for households whose total monthly debt payments exceed 40 percent of monthly income. Total debt payments include payments on mortgages, vehicle loans, education loans, other installment loans, credit cards, and other lines of credit.

*Spending Habits:* Survey respondents are asked to describe their spending habits over the past year. Leaving aside the purchase of a home, durable goods, or investment spending, respondents indicate whether (1) their family's spending exceeded their income, (2) spending equaled income, or (3) spending was less than income.

*Past Income Realizations:* A categorical variable in response to the following survey question: over the past five years, did your total (family) income go up more than inflation, less than inflation, or about the same as inflation?

*Income Expectations:* A categorical variable in response to the following survey question: over the next year, do you expect your total (family) income to go up more than inflation, less than inflation, or about the same as inflation?

*Economy-wide Expectations:* A categorical variable in response to the following survey question: over the next five years, do you expect the US economy as a whole to perform better, worse, or about the same as it has over the past five years?

*Neighborhood Tenure:* Amount of time, in years, the survey respondent has lived at his/her current residence.

#### INDEPENDENT VARIABLES (Using merged SCF and ACS data)

*Income Rank:* For every household in the sample, we determine the household's income rank inside its census tract using the household's reported "permanent income" and the ACS tract income distribution data. Income rank is a household's income percentile (on a continuous 0 to 1 scale) relative to the income distribution inside its census tract. We merge the SCF with the ACS to help determine the income rank of each household in our sample. The 2005-2009 ACS provides census tract level data on the number of households within 16 income buckets: less than \$10,000; \$10,000-\$14,999; \$15,000-\$19,999; \$20,000-\$24,999; \$25,000-\$29,999; \$30,000-\$34,999; \$35,000-\$39,999; \$40,000-\$44,999; \$45,000-\$49,999; \$50,000-\$59,999; \$60,000-\$74,999; \$75,000-\$99,999; \$100,000-\$124,999; \$125,000-\$149,999; \$150,000-\$199,999; and \$200,000 or more (in 2009 dollars). For each household in the SCF sample, we use this tract level income distribution data to compute the fraction of households within the tract that earns less than the sampled household—this is a household's income rank.

We also compute nearest tract income rank, an estimate of what a family's income rank would be if it lived in the nearest adjacent census tract. We identify the nearest tract using the longitude and latitude of ACS census tract centroids, and then repeat the process described above to place the observed family along the neighboring tract's income distribution. We use the difference between own tract income rank and nearest tract income rank to provide a conservative estimate of the importance of status.

*Income Relative to Median:* As a robustness exercise, we also calculate relative income at various levels of geography. We compute tract, county, and state relative income as household permanent income divided by census tract, county, and state median income, respectively.

#### DEPENDENT VARIABLES (SCF data)

*Highest Valued Car (logged):* re-sale value at time of survey (in logged 2010 dollars) of the household's most valuable car. In the SCF, respondents report detailed characteristics of up to five automobiles (make, model, and year). The value of each car is determined by matching

these characteristics to the re-sale value in the National Auto Dealers Association (NADA) databook.

*High Status Car*: indicator variable that equals 1 if household owns a Kelley Blue Book luxury or near-luxury brand vehicle, including Acura, Aston Martin, Audi, Bentley, BMW, Cadillac, Infiniti Lamborghini, Land Rover Lexus, Lincoln, Lotus, Maserati, Maybach, Mercedes-Benz, Porsche, Rolls Royce, Tesla and Volvo.

*Avg. Value of Car (logged)*: total value of household's owned vehicles divided by number of owned vehicles.

*Age of Youngest Car*: Age, in years, of household's newest car, as measured by the model year.

*Credit Card Balance (logged)*: Total balance still owed on all credit cards after the last payments were made.

*Total Debt Payments (logged)*: Total debt payments include payments on mortgages, vehicle loans, education loans, other installment loans, credit cards, and other lines of credit.

*Filed for Bankruptcy*: An indicator variable that equals 1 if the head of household and/or spouse has ever filed for bankruptcy.

*Total Debts (logged)*: Sum of debt secured by residential properties, including mortgages and home equity lines of credit; other lines of credit; credit card balances after last payment; installment loans, including education debt, vehicle loans, and other installment loans; and other miscellaneous debt.

*Non-Housing Debts (logged)*: Total debts less amount owed on mortgages, other residential properties, and home equity lines of credit.

*Entrepreneurship*: Indicator variable that equals 1 if anyone in the household actively manages a business, is self-employed, is a member of a partnership, or is a consultant/contractor.

*Fraction of Equity in Total Assets*: Financial assets invested in stock (the sum of: directly held stock, stock mutual funds, IRAs/Keoghs invested in stocks, other managed assets invested in stocks, retirement accounts invested in stocks, savings accounts invested in stocks, and closely held equity in S and C Corporations, partnerships, and sole-proprietorships) divided by household's total financial assets.