Session Number: Parallel Session 7B
Time: Friday, August 27, AM

Paper Prepared for the 31st General Conference of
The International Association for Research in Income and Wealth

St. Gallen, Switzerland, August 22-28, 2010

Economic Uncertainty in the United States: Measurement and Trends

Brian Bucks

For additional information please contact:

Name: Brian Bucks
Affiliation: Federal Reserve Board

Email Address: brian.k.bucks@frb.gov

This paper is posted on the following website: http://www.iariw.org

Economic Uncertainty in the United States: Measurement and Trends*

Brian Bucks†
Federal Reserve Board

Preliminary draft.
Please do not cite or distribute. Comments welcome.

July 2010

Abstract

This paper uses data from the 1989–2007 U.S. Surveys of Consumer Finances to examine how different concepts and measures of economic vulnerability affect estimates of the prevalence of economic insecurity and the characteristics of households classified as "economically insecure." The household-level measures include indicators of: i) vulnerability to health, employment, or income shocks; ii) adequacy of household savings and income to offset adverse economic shocks; and iii) high current debt-payment burdens and other potential borrowing constraints. The measures offer little evidence of changes in households' economic security since 1989. Economic security appears to increase with family income and the age of the household head; the relationship between education and economic security, however, may depend on the measure of economic security. Estimates of the share of families that are economically insecure vary widely and depend in large part on the number of criteria considered.

* This paper represents the views of the author and does not necessarily represent the views of the Federal Reserve Board, its members, or its staff

† Contact: brian.k.bucks@frb.gov

1. Introduction

Nearly two-thirds of respondents to a 2007 survey in the U.S. reported they felt economic security in America had declined relative to ten years earlier, and only 19 percent of respondents believed that economic security had improved (Hacker et al., 2010).[1] Regardless of whether these perceptions are correct (by whatever metric of economic security the respondents had in mind), these survey responses presumably provide an accurate gauge of individuals' subjective assessment of their economic situation, and they are consistent with much of the popular discussion of the risks that households face. Moreover, economic events in recent years have likely further reduced individuals' sense of economic security (Hacker et al., 2010).

In contrast to this survey evidence, which suggests economic security is a common concern, the academic literature on the topic is comparatively limited, as noted by Osberg (1998) and Bossert and D'Ambrosio (2009). One reason for this discrepancy may be data constraints. Osberg and Sharpe (2002, 2009) suggest that the ideal dataset would include information on "the anxiety produced… by an inability to obtain protection against subjectively significant potential economic losses." As they point out, data on anxiety and, for example, the adequacy of accumulated savings that a household could draw on when faced with an adverse economic shock, are not widely available.[2]

In the case of the United States, the Survey of Consumer Finances (SCF) includes not only information on families' finances but also a variety of other data that may capture at least some dimensions of economic insecurity. Although the survey surely does not provide data on all relevant risks and household perceptions, the SCF collects information on, for example, self-

[1] These results are likely not unique to recent years or to the United States. These shares are higher than but broadly consistent with the percentage (42–52 percent) of Canadians surveyed in the mid-1990s that reported they felt that they had lost control of their economic future (Osberg, 1998).

[2] The data requirements are even greater for comparisons over time or across countries like those of Osberg and Sharpe (2002), who examine trends across OECD countries in a composite well-being index that incorporates a measure of economic security.

reported measures of families' desired level of precautionary savings, adequacy of retirement savings, and income volatility along with potential indicators of health and employment risks. This paper draws on data from the 1989 through 2007 SCF surveys to construct several household-level measures of economic insecurity. By utilizing multiple measures, I am able to examine how different concepts and definitions of economic insecurity affect estimates of the prevalence of economic insecurity and the characteristics of households that are classified as economically insecure.

The results presented are the first step in considering how household-level survey data might contribute to our understanding of economic insecurity and its correlates. These initial results are descriptive, but they suggest several preliminary conclusions. First, the SCF-based measures do not reveal a clear and sustained trend in households' economic security. Second, the share of families that might be considered economically insecure tends to decline with the age of the household head and with family income. Households headed by a person with a college degree also appear to be more economically secure than other families, but the relationship between educational attainment and economic security for other families may depend on the measure of economic security considered.

2. Context from Prior Literature

To my knowledge, no prior study has examined a comparably broad array of potential criteria for gauging household financial security at a similarly disaggregated level. To be certain, many of the individual measures that I construct, or analogous concepts, have been analyzed in depth in previous work, but these studies have generally been more narrowly focused. To take one example, my analysis includes a potential indicator of income volatility. Numerous studies have examined trends in earnings volatility in the United States, but these studies generally do not

examine the other measures that I analyze in the current paper.[3] The closest analogs to this paper are the literature on economic insecurity and studies of asset-based poverty measures.

The conception of economic insecurity that guides the analysis is similar to the framework developed by Osberg and Sharpe and implemented as a part of the authors' Index of Economic Well-being (see, e.g., Osberg, 1998; Osberg and Sharpe, 2002, 2009). In particular, this paper shares their focus on gauging economic security by measuring families' ability to mitigate or avoid a range of economic losses. The set of risks that I consider—unemployment, health, and old age—are similar to those examined by Osberg and Sharpe (2002, 2005), although these authors also consider the likelihood and economic consequences of single motherhood.

In contrast to the aggregated indexes that Osberg and Sharpe construct, however, the SCF lends itself to household-level estimates. These estimates, in turn, provide a means for understanding how economic insecurity may differ across groups. This study also differs in its use of subjective as well as objective measures of financial vulnerability. Osberg and Sharpe necessarily rely on objective measures of risks and assume that changes in subjective anxiety are proportional to changes in objective measures.

The use of subjective measures also distinguishes this paper from closely related studies that augment conventional income-based poverty measures with measures of the sufficiency of families' assets. Haveman and Wolff (2004), for example, use the SCF to examine how conclusions regarding trends in poverty over time and differences in poverty rates across groups depend on whether poverty is measured by the adequacy of income, assets, or both. Similarly, Brandolini et al. (2010) analyze cross-country differences in poverty rates when assets and wealth are taken into account in classifying families as impoverished. Both of these studies define asset-poverty thresholds that are a constant fraction of the applicable income-poverty threshold. To

[3] Dynan et al. (2007) provide a concise overview of the literature examining trends in the volatility of earnings and household income.

gauge the adequacy of families' asset holdings, this study instead takes advantage of the SCF question that seeks to measure directly families desired level of precautionary savings. Importantly, variation in the value of this buffer savings amount across households may in part reflect unobserved differences in the risks that households face.[4] Furthermore, in addition to measuring families' current income and asset holdings, I expand the scope of potential financial resources available to a household facing a negative economic event by also examining potential indicators of households' access to credit.

3. Data and Measures

Design and overview of the SCF

The SCF provides the most comprehensive and highest quality data available on U.S. household wealth and has been conducted by the Federal Reserve Board every three years since 1983. The survey collects detailed household-level data on not only assets and liabilities but also on demographic characteristics, income, expectations and attitudes, credit market experiences, employment, pensions, and health insurance coverage. The data are reported as of the time of the interview, with the exception of information on income, which refers to the prior calendar year.

The SCF utilizes a dual-frame design, comprising a standard geographically based, multistage area-probability sample and a "list sample."[5] The area-probability component provides robust measurement of assets and debts that are widely held. The list sample draws on statistical records derived from tax returns to oversample households that are likely to be relatively wealthy and accounts for about one-third of households in the final sample. Oversampling of wealthier households should yield more precise estimates of the prevalence and value of assets and debts that

[4] As suggested by the discussion in Osberg (1998), households with similar objective risks may have different desired buffer savings levels if they differ in the way that they subjectively assess these risks or in the way they respond to risk.

[5] See Bucks et al. (2009) for a general overview of the SCF and Kennickell (1998, 2001, 2005) for details of the list sample design.

tend to be held by wealthier families.[6] The analysis in this paper utilizes the SCF sample weights to generate estimates that are representative of the U.S. household population. The weights account for differences across households in the probability of selection due to the sample design and differences in response rates that are correlated with observable characteristics.

Defining economic insecurity in the SCF

I define eleven measures of economic security. The starting point for these measures is the view that a family's financial security depends on both the extent of economic risk that the household faces and the financial resources available, including credit, when faced with an adverse economic shock. For example, a family confronting an unexpected expense might spend down savings, borrow, or draw on current income. However, families that have low levels of savings, have limited ability to borrow, or already devote a large share of income to debt repayment may have difficulty meeting this expense and may, in turn, forgo consumption or default on debt. In line with this framework, I construct four types of measures: i) indicators of the economic risks that a household faces; ii) measures of the sufficiency of income; iii) subjective measures of the adequacy of savings, and; iv) indicators and correlates of households' ability to borrow (Table 1).

Economic risks. The SCF collects information on the health insurance status for each person in the household, and I classify families as susceptible to medical/health risk if any person in the household is not covered by health insurance. My measure of unemployment risk is an ex post indicator that identifies families in which the household head or their spouse/partner was unemployed at the time of the interview or which had income from unemployment or worker's compensation in the prior calendar year. The first of the two income-volatility measures applies to families that reported a drop in income last year and, more specifically, that characterized their

[6] Kennickell (2007), for example, finds that the standard error of the estimated share of wealth held by the top 1 percent of households in the SCF (with its combined area-probability and list samples) would be more than four times larger without the list sample.

income in the previous year as "unusually low" relative to a "normal" year. The second indicator of income volatility is derived from questions about income expectations and, in particular, captures households that reported that they do not usually have a good idea of what the next year's income will be.

Income adequacy. I construct two measures of income sufficiency. The first is based on a self-reported characterization of spending relative to income in the previous year. Specifically, a family is treated as having low income if they reported that their spending in the prior year (net of purchases of durables or investments) exceeded income. The second criterion is a measure of relative income poverty and identifies households whose equivalized income falls below the one-half of median equivalized income calculated over all households in a given wave of the SCF.[7]

Assets/savings adequacy. The SCF asks respondents to rate the adequacy of their actual or expected retirement income from Social Security and job pensions. Although this question asks about income, I assume that a key determinant of retirement income other than Social Security is returns on or spending out of assets.[8] Accordingly, I classify families that regard their retirement income as "totally inadequate" to maintain their living standards as having low retirement savings.

I derive a second measure of the adequacy of a household's savings by comparing an estimate of the amount of assets available to a household with the amount of savings that the family considers sufficient to cover unanticipated expenses. I determine this level of precautionary savings for each family based on the SCF question that asks the amount of savings needed for emergencies and similar contingencies. This question was introduced in the 1995 survey. Differences in households' responses to this question appear to reflect, in part, differences in the

[7] Household income is equivalized based on a square-root equivalence scale and includes income from wages and salary; interest and dividends; business, farm, and self-employment income; capital gains; Social Security and other retirement income; and government transfers.

[8] This savings could be in a defined-contribution or similar retirement plan and, thus, included in "job pensions" referred to in the SCF question or it may be savings outside of such a retirement account.

extent of risk that families face, as well as differences in risk preferences and access to credit (Kennickell and Lusardi, 2005).

Gauging the adequacy of a household's savings in this way requires defining the set of resources that a family could draw upon when faced with an adverse economic shock, and there are several measures that could be used. Haveman and Wolff (2004), for instance, consider both net worth (total marketable assets less total liabilities) and "liquid assets," a narrower measure that comprises cash and financial assets that can be readily liquidated. I take an approach similar to Kennickell and Lusardi (2005) in defining a measure of available assets or savings. This definition attempts to account for the fact that families may be unable or unwilling to liquidate some financial assets, such as IRAs and retirement accounts, and that they may be able to draw on a portion of non-financial assets through, for instance, a home equity line of credit. Specifically, my measure of savings includes all liquid financial assets outside of retirement plans and one-third of equity in the families' home or other real estate, CDs, IRAs, and defined-contribution or similar retirement accounts. I then subtract three months of debt payments, rent, property taxes, or other housing-related fees from this asset measure.

Credit market experiences and debt burdens. The final three measures of economic security are intended to provide a gauge of households' ability to borrow. The first criterion applies to families that reported that at some time in the past five years they had either: i) applied for credit but were turned down or received less credit than they had originally applied for, or; ii) considered applying for a loan but chose not to because they thought they would be turned down. Prior studies have concluded that these SCF questions about credit application decisions and outcomes provide an indicator that a household is potentially credit constrained (Jappelli, 1990, and Gropp, Scholz, and White, 1997). Second, I identify households that may have recently faced difficulty in meeting debt payments. This group includes families with outstanding debt who reported having fallen

behind on any loan payment by two months or more in the previous year. Finally, I use the detailed information on debt and expenses in the SCF to classify families as potentially having limited ability to borrow due to a comparatively high payment-to-income ratio (PIR); specifically, the measure applies to families with current monthly debt payments, rent, property taxes, and housing-related fees that total more than 50 percent of monthly income.[9]

4. Economic Insecurity among U.S. Households

Collectively these eleven criteria constitute a broad definition of economic insecurity, as 71 percent of households in the pooled 1989–2007 surveys are categorized as economically vulnerable by at least one measure (Table 2). To ease comparison across years, the second row of the table shows the corresponding percentages based only on the 6 measures that are available in each of the SCF waves. Just over half of families satisfy at least one of these six criteria, and the estimates of this share have remained fairly steady across SCF survey years. Thus, at least this inclusive barometer of economic insecurity does not appear to support the popular perception that economic insecurity has increased in the last decade.

There is also little evidence of a trend in economic insecurity over the 1989–2007 period if higher thresholds are used to classify families as economically insecure. For example, across all years, 26 percent of households meet at least two of the six criteria, and the shares in each wave of the survey range from 24 percent in 1989 to 27 percent in 2004. Similarly, the fraction of families that meet three or more criteria for each year never differs by more than one percentage point from the 1989–2007 average of about 11 percent. There is likewise no apparent sustained trend in any

[9] This payment-to-income ratio differs from that used to classify households as having high debt payments in Bucks et al. (2009). Bucks et al. (2009) use a threshold of 40 percent of income but do not consider rent, property taxes, and housing-related fees.

of the individual measures. As might be expected, changes in my measure of unemployment risk across surveys are generally track changes in the unemployment rate.[10]

Three of the indicators—income volatility, low retirement savings, and low precautionary savings—each capture roughly 30 percent of households. Thus, they may classify economically insecure households less precisely than other proposed measures. In fact, nearly half of all families have low savings as measured either by the subjective assessment of the adequacy of retirement income or by the constructed measure of insufficient savings buffer alone (not shown).[11] Together with the income volatility measure, these three criteria account for 13 percentage points of the 20 percentage-point gap in the shares of families that are classified as economically insecure when the set of criteria is narrowed from all eleven to just the six that are available in that 1989 and later surveys.

Differences by Household Characteristics

Nearly all of the indicators imply that families become more economically secure as they age. Over 80 percent of families headed by a person who is younger than 35 meet at least one of the eleven criteria, but this falls to 65 percent for families whose head is between ages 50 and 64, and to 61 percent for households with a head of traditional retirement age (Table 3). The differences are even more dramatic for the smaller set of measures available in all seven SCFs. Just over one-fifth of households in the youngest age group meet at least half of the criteria, but the proportion drops to 12 percent for families with a head between the ages of 35 and 49.

By these measures, families with a head who is less than 35 years old differ in particular with respect to the amount of economic risk that they face and their potentially more limited access to credit. Conversely, these measures point to greater economic security among retirement-age

[10] In particular, the share of families classified as susceptible to unemployment risk is generally around 3–4 percentage points higher than the unemployment rate in September of each survey year except 2001, when the SCF percentage was only 2.1 percentage points higher.

[11] Appendix Table 1 illustrates the positive correlation between the measures of economic security.

households (those with a head aged 65 or older). Both sets of measures, but especially the economic risk indicators, generally show relatively large declines across the younger two age groups and the older two groups, while the rates for families with a head aged 35–49 and 50–64 tend to be more similar. The probability that a family reported that their income last year was unusually low, for example, is about 25 percent higher for families in the youngest age category relative to families headed by a person between the ages of 35 and 49, and the rate for families headed by a person between 50 and 64 years of age is nearly twice the rate for the oldest families.

Perhaps not surprisingly, the youngest and oldest households are more likely than other families to have relatively low income. For families in the less-than-35 age category, this lower income may contribute to the relatively large share with high payment-to-income ratios. In contrast, the fraction of the youngest households that reported their spending exceeded their income aligns more closely with the shares for families in each of the older age groups, and this fraction is in fact lower than the percentage for households headed by a person aged 35–49.

Without exception, each of the measures indicates that economic insecurity declines as income increases.[12] This is perhaps most clearly evident for both of the measures of savings adequacy. The estimated shares of families with (equivalized) income of less than one-half the median that are classified as having insufficient retirement savings or precautionary savings are notably higher than the corresponding shares for families with income that is closer to but still below the median. Moreover, these indicators are higher than for any group shown in the table—including any of the groups defined by age and education.

Although these results suggest a close relationship between poverty and economic security, the correlation is not perfect. Nearly three-quarters of families with income between 50 percent and 100 percent of the median meet at least one of the criteria, and, by this admittedly broad

[12] Of course, in the case of the "low relative income" indicator this is by definition.

measure, half of families that have income more than 50 greater than the median might be considered economically insecure. The rates for all income groups are substantially lower when attention is restricted to families that are captured by more than one of the six measures available in each SCF wave. Nevertheless, more than one out of every ten families in the third-highest income group are classified as economically insecure by at least two of these two measures, and about 3 percent meet three or more criteria.

On the whole, economic security appears to increase with education, at least by these measures. The share of families that might be considered economically insecure by at least two of the metrics available over the full time period, for instance, declines from 42 percent for families headed by a person that did not graduate high school to about 13 percent for families in which the head of household has a college degree. Similarly, the indicators of income volatility, incomplete health insurance coverage, low income relative to the median, and inadequate precautionary savings each decline incrementally across the education categories.

Other measures of families' economic security, however, do not decline monotonically. In fact, the shares of families that experienced a drop in income in the preceding year is highest for families headed by a person who attended college but who did not obtain a degree. Families in the some-college group also may not be able to borrow as readily as other families: they are the most likely to have missed a debt payment by sixty days or more in the past year and to have been turned down for credit or to have not applied because they expected to be turned down. By all measures, however, families in the college-degree category enjoy greater economic security than do other families.

5. Summary and Extensions

The indicators of potential economic insecurity that I construct based on the 1989–2007 SCF data do not appear to support, at least at this preliminary stage, a conclusion of rising economic

insecurity in the United States in the last two decades. In most years of the SCF, more than two-thirds of families might be considered economically insecure under an expansive definition, namely meeting any of the 11 criteria examined in this paper. The share falls to just over ten percent under a narrower definition that considers only six of these criteria and classifies a family as economically insecure if it satisfies at least three of these. Finally, economic security appears to increase with the age of the household head, family income and, in many cases, educational attainment, particularly for those with a college degree.

The wide range of measures considered in this study reflect a view that economic insecurity is multi-faceted and may depend on an array of risks and a variety of types of resources that a family might draw upon in the event of an adverse shock. The indicators that I construct may serve as a useful illustration of the objective and subjective information that can be collected. Although many of the indicators yield similar conclusions regarding which households are likely to be economically insecure, interpreting a large number of distinct measures is challenging. Combining these measures would likely ease interpretation and analysis. The literature on multi-dimensional poverty measures suggests several approaches to meaningfully aggregating these measures. One particularly attractive method may be a fuzzy set approach, as described by, e.g., Deutsch and Silber (2005). Investigating the feasibility and benefits of applying this methodology to multi-dimensional data on economic security is a natural next step. The fuzzy set approach of Vero (2006), in particular, has several advantages in this context, including more fully utilizing information from continuous variables, readily accounting for correlation between indicators, and adjusting for differences in the prevalence of various indicators in the overall population.

References

Bossert, Walter and Conchita D'Ambrosio (2009). "Measuring Economic Insecurity." ECINEQ WP 2009–11.

Brandolini, Andrea, Silvia Magri, Timothy M. Smeeding (2010). "Asset-Based Measurement of Poverty." *Journal of Policy Analysis and Management*, 29(2): pp. 267–284.

Bucks, Brian K., Arthur B. Kennickell, Traci L. Mach, and Kevin B. Moore (2009). "Changes in U.S. Family Finances from 2004 to 2007: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin*: pp. A1–A55.

Deutsch, Joseph and Jacques Silber (2005). "Measuring Multidimensional Poverty: An Empirical Comparison of Various Approaches." *Review of Income and Wealth*, 51(1): pp. 145–174.

Dynan, Karen E., Douglas W. Elmendorf, and Daniel E. Sichel. "The Evolution of Household Income Volatility." Finance and Economics Discussion Series 2007–61. Washington: Board of Governors of the Federal Reserve System.

Gropp, Reint, John Karl Scholz, and Michelle White (1997). "Personal Bankruptcy and Credit Supply and Demand." *Quarterly Journal of Economics*, 112: pp. 217–252.

Hacker, Jacob S. (2007). "The New Economic Insecurity—And What Can Be Done About It." *Harvard Law and Policy Review*, 1(1): pp. 111–126.

Haveman, Robert and Edward N. Wolff (2004). "The Concept and Measurement of Asset Poverty: Levels, Trends, and Composition for the U.S., 1983–2001." *Journal of Economic Inequality*, 2: pp. 145–169.

Jappelli, Tulio (1990). "Who is Credit-Constrained in the U.S. Economy?" *Quarterly Journal of Economics*, 105(420): pp. 219–234.

Kennickell, Arthur (1998). "List Sample Design for the 1998 Survey of Consumer Finances." mimeo, Federal Reserve Board.

——— (2001). "Modeling Wealth with Multiple Observations of Income: Redesign of the Sample for the 2001 Survey of Consumer Finances." mimeo, Federal Reserve Board.

———(2005). "Darkness Made Visible: Field Management and Nonresponse in the 2004 SCF." mimeo, Federal Reserve Board.

——— (2007). "The Role of Oversampling of the Wealthy in the Survey of Consumer Finances." mimeo, Federal Reserve Board.

Kennickell, Arthur and Annamaria Lusardi (2005). "Disentangling the Importance of the Precautionary Savings Motive." CFS working paper No. 2006/15.

Osberg, Lars (1998) "Economic Insecurity." Social Policy Research Centre, Discussion Paper No. 88.

Osberg, Lars and Andrew Sharpe (2002). "An Index of Economic Well-Being for Selected OECD Countries." *Review of Income and Wealth*, 48(3): pp. 291–316.

Osberg, Lars and Andrew Sharpe (2009). "Measuring Economic Security in Insecure Times: New Perspectives, New Events, and the Index of Economic Well-being." working paper presented at 2009 Canadian Economics Association Annual Conference.

Vero, Josiane (2006). "A Comparison of Poverty According to Primary Goods, Capabilities and Outcomes: Evidence from French School Leavers' Surveys." in Jacques Silber, ed. *Fuzzy Set Approach to Multidimensional Poverty Measurement*. New York: Springer.

Table 1. Definitions of SCF-Based Measures of Economic Insecurity

Category Measure	Availability	Definition (all variables are dichotomous)
Economic risks		
Medical risk	1989–2007	1=Any households member not covered by health insurance
Unemployment risk	1989–2007	1=Head or spouse/partner unemployed at time of interview or unemployment/worker's compensation income received last year
Income drop	1992–2007	1=Income last year unusually low
Income volatility	1995–2007	1=Does not usually have a good idea of next year's income
Income adequacy		
Spending > Income	1992–2007	1=Spending (net of investments and purchase of durables) exceeded income last year
Low relative income	1989–2007	1=Equivalized income below median over all households in a given SCF survey
Assets/savings adequacy		
Low retirement savings*	1992–2007	1=Actual or expected retirement income "totally inadequate" to maintain standards of living
Low precautionary savings	1995–2007	1=[(Liquid financial assets, excl. retirement plans) + 1/3*(home equity + other real estate equity + CDs + IRAs + defined-contribution and similar accounts)] – (3 mos. debt payments + rent and other housing expenses) < reported desired precautionary savings
Credit market experiences and debt burden		
Credit constrained	1989–2007	1=Applied for credit in past 5 years and turned down or received less credit or considered applying for credit but did not because thought would be turned down
Late payments	1989–2007	1=Missed any debt payment by two months or more in the past year (asked of families with any debt at the time of the interview)
High payment-to-income ratio (PIR)	1989–2007	1=Monthly debt payments + rent, property taxes and housing-related fees > 1/2 * monthly income

* Question was asked in 1989 SCF but is not comparable due to different rating scale

Table 2. Shares of Households Classified as Economically Insecure, 1989–2007

Percent

Economic Insecurity Criterion	All Years	SCF Survey Year						
		1989	1992	1995	1998	2001	2004	2007
Any criterion	71.0	50.7	70.9	76.9	75.7	74.4	72.7	73.6
Any of 89–07 criteria	51.3	50.7	51.4	51.8	51.9	49.4	52.2	51.4
Meet 2 or more 89–07 criteria	25.6	24.1	25.3	26.4	26.6	24.7	27.1	25.0
Meet 3 or more 89–07 criteria	11.2	11.2	11.1	11.7	11.6	10.2	11.9	11.1
Medical risk	19.2	19.4	19.9	18.0	19.1	17.2	20.6	20.0
Unemployment risk	8.8	9.6	10.6	9.4	8.3	7.1	9.2	7.6
Income drop	17.5	n.a.	22.8	17.6	16.1	14.7	19.8	14.5
Income volatility	29.0	n.a.	n.a.	31.2	28.2	29.1	29.6	27.2
Spending > Income	15.0	n.a.	14.8	15.7	14.2	14.5	15.4	15.2
Low relative income	23.4	23.9	22.4	24.3	23.3	23.0	23.5	23.5
Low retirement savings*	32.1	n.a.	36.5	36.0	33.5	30.4	27.3	29.8
Low precautionary savings	28.4	n.a.	n.a.	31.3	30.1	29.1	26.0	26.0
Credit constrained	21.9	20.3	22.0	23.2	22.3	21.7	22.4	21.2
Late payments	5.6	5.3	4.4	5.3	6.0	5.3	6.9	5.5
High payment-to-income ratio	13.7	11.9	13.1	14.3	15.7	13.4	13.2	14.0

Source: 1989–2007 Surveys of Consumer Finances

n.a. Not available

* Question was asked in 1989 SCF but is not comparable due to different rating scale

Table 3. Household-Level Measures of Economic Insecurity, Selected Demographic Groups

Percent

	Age of head (years)				*Percent of median equivalized income*				*Education of head*			
Measure	Less than 35	35–49	50–64	65 or older	< 50	50–99.9	100–149.9	≥150	No HS Degree	HS Degree	Some College	College Degree
Any criterion	83.7	72.6	65.1	60.9	100.0	74.5	63.6	50.7	84.0	74.8	73.8	59.0
Meet 2+ 89–07 criteria	41.1	27.2	19.9	12.0	69.5	21.6	11.6	4.4	41.8	28.8	27.9	12.8
Meet 3+ 89–07 criteria	21.0	12.1	8.3	2.2	37.9	5.8	3.1	0.8	19.3	13.3	11.7	4.8
Medical risk	28.8	21.0	18.0	7.0	35.7	23.8	12.9	6.6	31.7	22.4	18.9	9.7
Unemployment risk	13.2	10.9	8.2	1.2	12.8	9.3	7.9	5.7	10.6	10.9	8.9	5.6
Income drop†	23.4	18.9	17.1	9.2	30.4	19.2	13.1	8.8	18.4	18.0	20.0	15.0
Income volatility‡	38.8	29.4	26.5	20.8	46.3	30.9	22.1	18.5	42.0	31.8	29.5	20.2
Spending > Income†	15.4	16.8	14.3	12.5	23.3	17.9	11.7	8.2	18.4	15.4	16.3	12.2
Low relative income	30.0	17.3	17.6	31.4	100.0	0.0	0.0	0.0	52.4	25.8	19.9	7.9
Low retirement savings*	38.3	35.6	29.9	22.1	41.8	34.1	28.4	25.2	36.3	33.6	34.3	27.3
Low precautionary savings‡	49.3	27.3	18.7	18.1	55.1	33.3	20.5	8.5	45.5	32.1	30.2	16.1
Credit constrained	37.0	26.6	15.1	5.1	31.3	26.9	20.1	11.5	24.1	24.5	27.9	14.9
Late payments	8.7	6.6	4.8	1.3	8.4	7.6	4.9	2.1	5.9	6.1	7.1	4.0
High payment-to-income ratio	21.0	13.0	11.1	9.4	36.4	12.7	5.8	2.1	17.2	14.2	15.4	10.4
Memo												
Percent of families	23.9	31.9	22.8	21.4	23.4	26.5	19.3	30.8	17.4	31.6	18.0	32.0

Source: 1989–2007 Surveys of Consumer Finances

* Question was asked in 1989 SCF but is not comparable due to different rating scale

† Not asked in 1989 SCF; ‡ Not asked in 1989 or 1992 SCF surveys

Appendix Table 1. Shares of Households Classified as Economically Insecure By Criterion and Share Meeting Multiple Criteria

Percent

Measure	Percent of Families in Row Meeting Column Criterion										
	Medical risk	Unemploy-ment risk	Income drop	Income volatility	Spending > Income	Low relative income	Low retirement savings*	Low precautionary savings	Credit constrained	Late payments	High PIR
All Households	19.2	8.8	17.5	29.0	15.0	23.4	32.1	28.4	21.9	5.6	13.7
Medical risk	-	17.3	28.0	47.3	20.9	43.6	45.2	51.6	37.4	11.1	24.7
Unemployment risk	38.0	-	38.9	45.6	24.8	34.3	41.9	42.5	36.8	12.0	19.7
Income drop†	30.7	19.3	-	47.8	24.4	40.8	43.9	40.0	33.9	10.8	30.6
Income volatility‡	31.0	13.0	27.2	-	20.4	37.5	40.2	41.8	31.1	8.5	21.7
Spending > Income†	26.7	14.3	28.5	39.4	-	36.4	47.9	42.0	39.0	14.0	25.0
Low relative income	35.7	12.8	30.4	46.3	23.3	-	41.8	55.1	31.3	8.4	36.4
Low retirement savings*	27.0	11.3	23.9	37.4	22.4	30.4	-	38.0	30.2	8.5	18.6
Low precautionary savings‡	34.6	12.4	23.2	42.7	22.2	45.7	41.8	-	40.5	10.7	25.5
Credit constrained	32.7	14.7	26.7	40.8	26.4	33.5	43.7	51.8	-	16.0	21.4
Late payments	38.2	18.9	33.5	42.3	37.5	35.2	48.4	52.1	63.1	-	26.7
High payment-to-income ratio (PIR)	34.6	12.6	38.2	44.6	26.9	62.4	42.7	51.3	34.2	10.8	-

* Question was asked in 1989 SCF but is not comparable due to different rating scale

† Not asked in 1989 SCF; ‡ Not asked in 1989 or 1992 SCF surveys

- 100 percent by construction