

The Finances of American Households in the Past Three Recessions: Evidence from the Survey of Consumer Finances

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Our views do not necessarily reflect those of the Federal Reserve Board or most of its staff.

Outline of Presentation

- Macroeconomic Backdrop: A Selective Comparison of the Past 3 U.S. Recessions
 - Focus exclusively on the household/personal sector of the U.S. economy

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- Time permitting, I'll conclude by:
 - Briefly describing a re-interview of 2007 SCF respondents that is currently underway
 - Placing our paper's (limited) results in the context of the current macroeconomic outlook

The Timing and Duration of the Past 3 U.S. Recessions

Business Cycle Reference Dates		Duration, in months
<i>Quarterly dates in parentheses</i>		<i>Peak to trough</i>
December 2007 (IV)	through July 2009	19+
March 2001 (I)	November 2001 (IV)	8
July 1990 (III)	March 1991 (I)	8

The Timing and Duration of the Past 3 U.S. Recessions

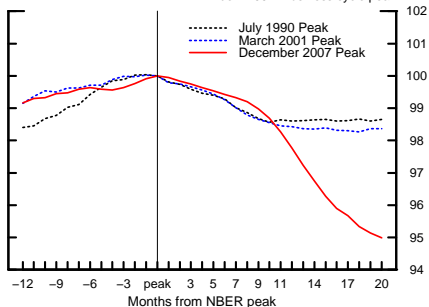
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- Cumulative declines in real GDP:
 - 2008-09 recession: 3-3/4%
 - 2001 recession: *real GDP did not fall (cumulatively, at least)*
 - 1990-91 recession: 1-1/2%

Macroeconomic Activity around NBER-dated Peaks

Total Payroll Employment

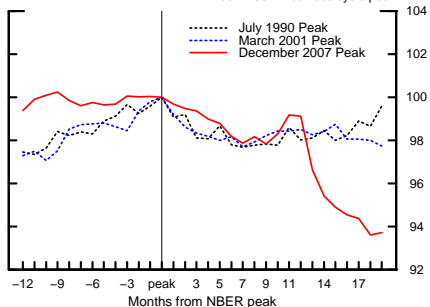
Index: 100 = Business cycle peak



Source. Bureau of Labor Statistics.

Real Income from Wages and Salary

Index: 100 = Business cycle peak

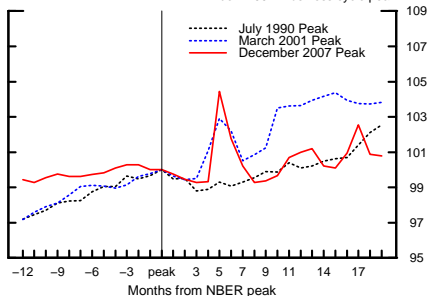


Source. Bureau of Economic Analysis.

Macroeconomic Activity around NBER-dated Peaks

Real Disposable Personal Income

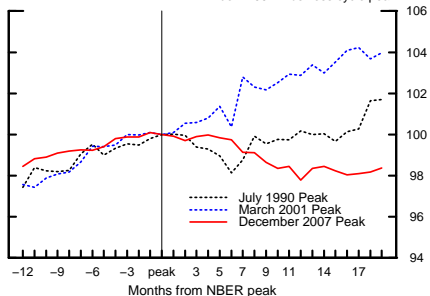
Index: 100 = Business cycle peak



Source: Bureau of Economic Analysis.

Real Personal Consumption Expenditures

Index: 100 = Business cycle peak

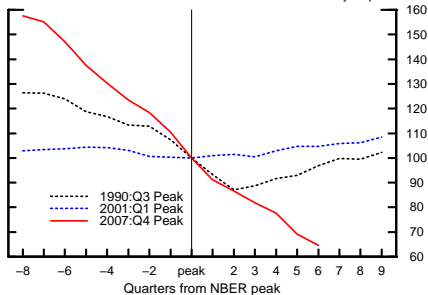


Source: Bureau of Economic Analysis.

Macroeconomic Activity around NBER-dated Peaks

Real Residential Investment

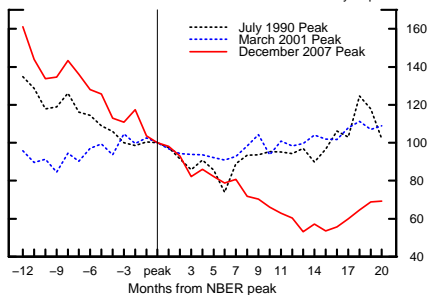
Index: 100 = Business cycle peak



Source: Census Bureau.

Sales of New Homes

Index: 100 = Business cycle peak

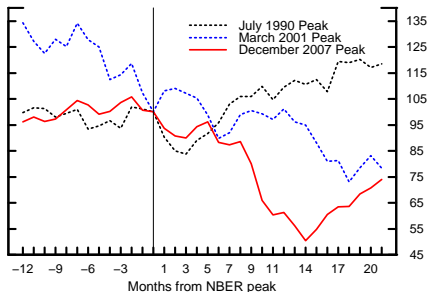


Source: Census Bureau.

Macroeconomic Activity around NBER-dated Peaks

Stock Prices

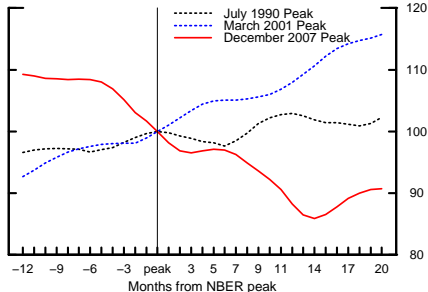
Index: 100 = Business cycle peak



Source. Dow Jones.

House Prices

Index: 100 = Business cycle peak

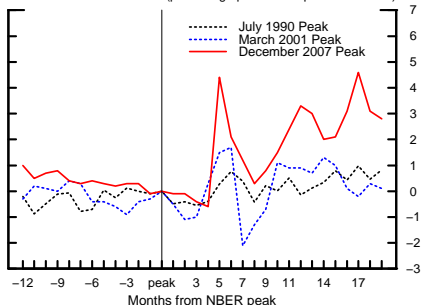


Source. First American CoreLogic.

Macroeconomic Activity around NBER-dated Peaks

Personal Saving Rate

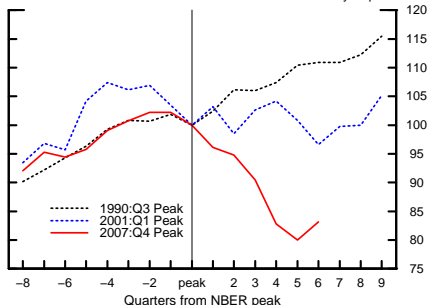
Difference relative to business cycle peak
(percentage points of disposable income)



Source: Bureau of Economic Analysis.

Household Net Worth

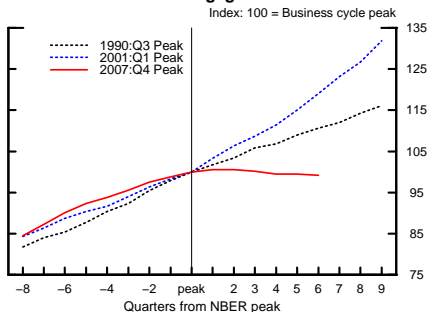
Index: 100 = Business cycle peak



Source: Federal Reserve Board, Flow of Funds.

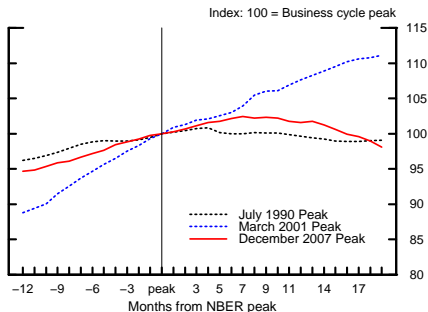
Macroeconomic Activity around NBER-dated Peaks

Home Mortgage Debt



Source. Federal Reserve Board, Flow of Funds.

Consumer Credit

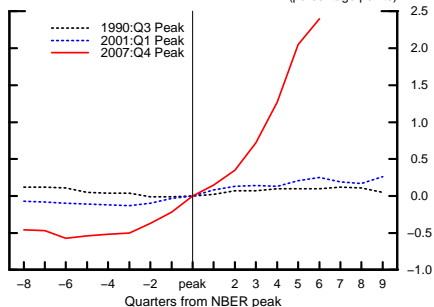


Source. Federal Reserve Board.

Macroeconomic Activity around NBER-dated Peaks

Mortgage Delinquency Rate

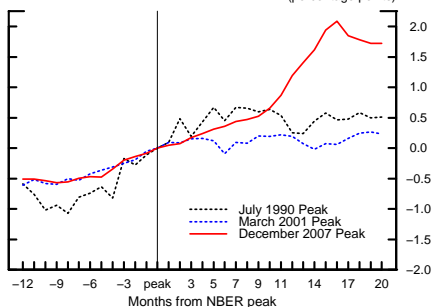
Difference relative to business cycle peak
(percentage points)



Source. Mortgage Bankers Association.

Credit Card Delinquency Rate

Difference relative to business cycle peak
(percentage points)



Source. Moody's Investors Service.

- Surveys of Consumer Finances are *near*, but not aligned with, U.S. macro downturns
 - So, we “translate” (project) household-level data from the nearest SCF using changes in stock price and home price indexes
 - We assume no changes in other asset values or in debt during the business cycles

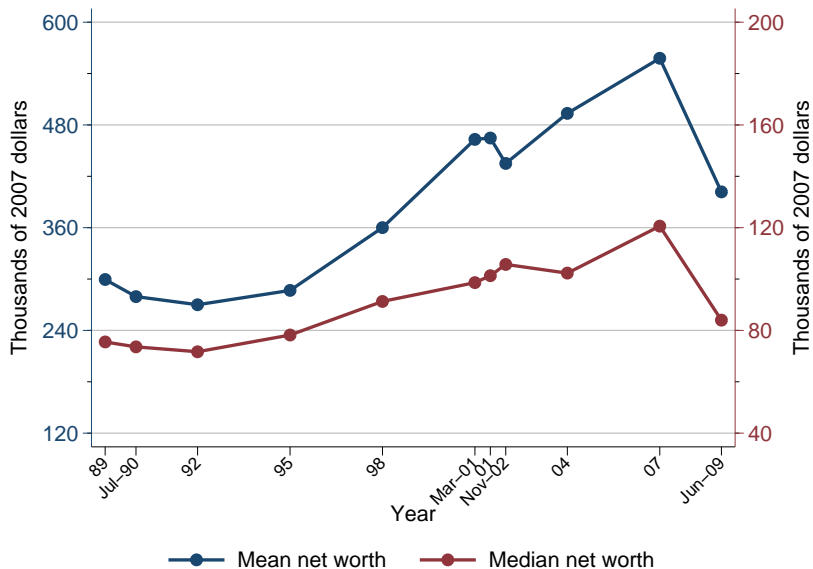
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 - So, we “translate” (project) household-level data from the nearest SCF using changes in stock price and home price indexes
 - We assume no changes in other asset values or in debt during the business cycles
- We compare shifts in the distribution of household net worth in the current and two prior U.S. recessions

Translating the SCF Data

Our Translation of Nearest SCF Data to NBER-Dated Cyclical Peaks and Troughs

	NBER-dated peak	SCF wave closest to NBER peak	How we generate data corresponding to the cyclical: peak trough	
1.	July 1990	1989,1992	project to July 1990	use the 1992 SCF
2.	March 2001	2001	project to March 2001	project to November 2002
3.	December 2007	2007	use the 2007 SCF	project to June 2009

Household Net Worth in the SCF, 1989 to 2009

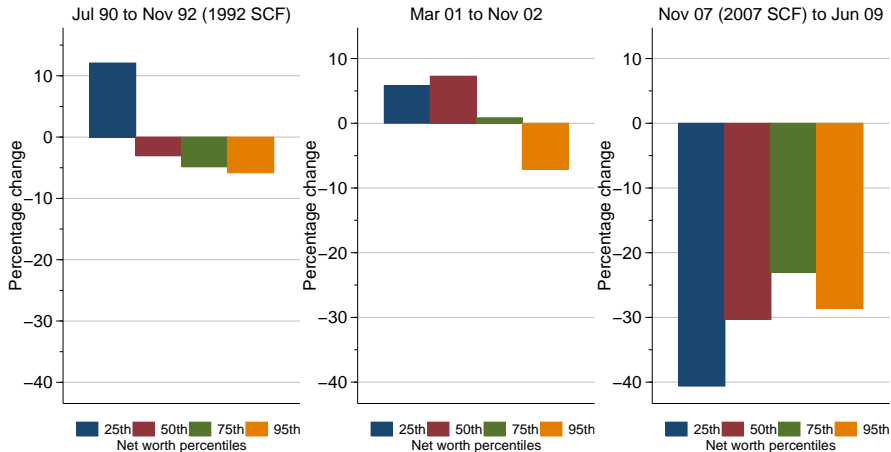


Changes in Median and Mean Net Worth—Past 3 U.S. Recessions

- Drops in median and mean household net worth have been much larger in the current recession

Cyclical downturn:	Jul-90	<i>(1992 SCF)</i>		<i>(2007 SCF)</i>		Jul-90 to Nov-92	Mar-01 to Nov-02	Nov-07 to Jun-09	
		Nov-92	Mar-01	Nov-02	Nov-07				Jun-09
<i>(thousands of 2007 dollars)</i>						<i>(percent change)</i>			
All households									
Median net worth	74	72	99	106	121	84	-3	7	-30
Mean net worth	285	270	463	435	558	402	-5	-6	-28

Changes in Net Worth across the Wealth Distribution



Factor #1: This time, *both* Corporate Equity and Housing Valuations Plunged

Comparison of Corporate Equity and Housing Revaluations in SCF

Change in:	1990-91	Recession:	
		2001	2008-09
1. Household net worth	-5%	-6%	-28%
2. Corporate equity values	+10%	-21%	-37%
3. Home values	-6%	+14%	-22%

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- Of the 23 percentage point sharper decrease in average net worth in the current recession (compared with 1990-91 episode):
 - About 10 percentage points is the influence of sharper decreases in corporate equity values this time (-37% vs. +10%)
 - About 10 percentage points is the influence of sharper decreases in home values this time (-22% vs. -6%)
 - The remaining 3 percentage points reflects other balance sheet factors that are different this time

Incidence of Large Changes in Net Worth among Households in the SCF

Cyclical downturn:	Jul-90 to 92 SCF	Mar-01 to Nov-02	07 SCF to Jun-09
	<i>(percent of households)</i>		
All households			
Net worth down \geq 10%	6	15	67
Net worth down \geq 20%	4	4	47
Net worth up \geq 10%	18	25	2
Income percentile			
<i>0-40</i>			
Net worth down \geq 10%	10	13	45
Net worth down \geq 20%	9	8	28
Net worth up \geq 10%	16	25	5
<i>40-80</i>			
Net worth down \geq 10%	4	12	77
Net worth down \geq 20%	1	2	54
Net worth up \geq 10%	17	27	0
<i>80-100</i>			
Net worth down \geq 10%	4	23	94
Net worth down \geq 20%	1	1	71
Net worth up \geq 10%	23	23	0

Other factor #1: Greater impact from corporate equity and housing revaluations

	SCF Wave			Change from:	
	1989	2001 (percent)	2007	1989 to 2001	1989 to 2007 (percentage points)
All households					
Corporate equity (directly or indirectly held)					
Share of households with balance > 0	32	52	51	21	19
Share of total assets	9	24	18	15	10
Primary residence					
Share of households with balance > 0	64	68	69	4	5
Share of total assets	32	27	32	-5	0
Income percentile					
<i>0-40</i>					
Corporate equity (directly or indirectly held)					
Share of households with balance > 0	9	24	24	14	15
Share of total assets	3	11	9	8	6
Primary residence					
Share of households with balance > 0	44	49	48	5	4
Share of total assets	47	48	50	0	3
<i>40-80</i>					
Corporate equity (directly or indirectly held)					
Share of households with balance > 0	36	64	60	28	24
Share of total assets	5	21	15	15	9
Primary residence					
Share of households with balance > 0	71	74	77	3	6
Share of total assets	43	38	46	-5	4

Other factor #2: Greater Leverage on Household Balance Sheets

	SCF Wave			Change from:	
	1989	2001	2007	1989 to 2001	1989 to 2007
	<i>(percent or ratio)</i>			<i>(percentage points or change in ratio)</i>	
All households					
Debt balance > \$0	72	75	77	3	5
Mortgage debt	40	45	49	5	9
Consumer debt	63	63	66	0	3
Median ratio of debt to income	0.5	0.8	1.1	0.3	0.6
Mortgage debt/income	0.8	1.1	1.5	0.3	0.7
Consumer debt/income	0.3	0.2	0.2	-0.1	-0.1
Income percentile					
<i>0-40</i>					
Debt balance > \$0	53	60	61	7	8
Mortgage debt	16	20	22	5	7
Consumer debt	48	53	52	5	5
Median ratio of debt to income	0.3	0.5	0.7	0.2	0.3
Mortgage debt/income	1.0	1.8	2.1	0.8	1.1
Consumer debt/income	0.2	0.2	0.3	0.1	0.1
<i>40-80</i>					
Debt balance > \$0	82	84	87	2	5
Mortgage debt	47	53	60	6	13
Consumer debt	74	72	77	-1	4
Median ratio of debt to income	0.6	0.9	1.4	0.3	0.8
Mortgage debt/income	0.9	1.2	1.6	0.4	0.8
Consumer debt/income	0.2	0.2	0.2	0.0	0.1

Quantifying the Importance of Revaluations and Exposures to Them

Cyclical downturn:	SCF-based Estimates:			Counterfactuals based on asset price changes since 2007 and:	
	Jul-90 to 92 SCF	Mar-01 to Nov-02	07 SCF to Jun-09	1989 SCF	2001 SCF
<i>(percent of households)</i>					
All households					
Net worth down \geq 10%	6	15	67	59	66
Net worth down \geq 20%	4	4	47	37	48
Net worth up \geq 10%	18	25	2	4	3
Income percentile					
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Net worth down \geq 10%	10	13	45	41	47
Net worth down \geq 20%	9	8	28	25	30
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80-100					
Net worth down \geq 10%	4	23	94	85	92
Net worth down \geq 20%	1	1	71	56	75
Net worth up \geq 10%	23	23	0	0	0

Trends in Credit and Payment Problems at the Onset of the Past 3 U.S. Recessions

SCF wave:	1989	1992	2001	2004	2007	Change, 1989 to 2007 (percentage pts)
<i>(percent of households who have any debt)</i>						
All households						
Turned down for credit recently	14	18	14	15	13	-1
Debt payments > 40% of income	10	11	12	12	15	5
60 days late on any payment	7	6	7	9	7	0
Any of the above problems	26	29	27	29	28	2
Income percentile						
<i>0-40</i>						
Turned down for credit recently	20	23	20	20	18	-1
Debt payments > 40% of income	19	21	22	22	23	4
60 days late on any payment	15	10	12	15	13	-2
Any of the above problems	43	43	43	44	43	-1
<i>40-80</i>						
Turned down for credit recently	15	18	14	16	13	-2
Debt payments > 40% of income	8	9	9	10	14	5
60 days late on any payment	5	6	6	9	6	1
Any of the above problems	24	28	24	28	27	3
<i>80-100</i>						
Turned down for credit recently	5	10	7	5	4	-1
Debt payments > 40% of income	3	3	3	2	6	3
60 days late on any payment	2	1	2	1	1	-1
Any of the above problems	9	13	10	7	11	2

Indications of Substantial Financial Stress

Percent of households whose net worth dropped 20% or more and had reported debt payments exceeding 40% of income or existing credit or payment problems

Cyclical downturn:	SCF-based estimates			Counterfactuals based on asset price changes since 2007 and:	
	1989 SCF and Jul-90 to 02 SCF	2001 SCF and 01 SCF to Nov-02	2007 SCF and 07 SCF to Jun-09	1989 SCF	2001 SCF
All Households	1	1	13	8	11
Income percentile					
0-40	1	1	12	7	11
40-80	0.8	1	16	11	13
80-100	1	0.2	8	6	7
Age of Head					
< 45 years	1	2	15	11	14
45 years to 64 years	0.7	0.3	14	8	11
> 64 years	0.2	0.0	5	2	4

- Earlier this year, the Federal Reserve Board authorized—that is, *funded*—follow-up interviews with households in the 2007 SCF sample.
 - These interviews promise to provide information on the distributions of changes in economic conditions—employment and income, balance sheet positions, measures of financial stress
 - And indications of how households responded to them—including changes in saving and expenditures

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 - These interviews promise to provide information on the distributions of changes in economic conditions—employment and income, balance sheet positions, measures of financial stress
 - And indications of how households responded to them—including changes in saving and expenditures
- The follow-up interviews are currently being conducted; preliminary data are arriving this fall

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 - Home sales, prices, and construction activity have all turned up
 - The rates of contraction in business investment, industrial production, and employment have slowed
 - Broad financial conditions have improved considerably

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 - In particular, there seems to be quite a range of opinions regarding the outlook for consumer spending
 - You hear lots of analysts and forecasters talking about the likely pace of household deleveraging and “balance sheet repair”
 - Essentially, they are making educated guesses about where the personal saving rate will end up and whether a rapid adjustment to a “permanently” higher saving is in train

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- This is particularly true with a strained federal budget limiting the scope for further fiscal stimulus, and with the stance of monetary policy limited by the effective zero lower bound on short-term interest rates

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 - The data should allow us to see what actions households have already taken in reaction to sharp asset revaluations

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 - The data should allow us to see what actions households have already taken in reaction to sharp asset revaluations
 - In particular, we should be able to trace, to some extent at least, cuts in consumer spending that were related to:
 - Job losses and wage reductions
 - Corporate equity and housing revaluations
 - Problems servicing existing debt and accessing new credit