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After the Fall: Rebuilding Household Balance Sheets, Rebuilding the Economy

Ray Boshara and William Emmons

Center for Household Financial Stability Federal Reserve Bank of St. Louis stlouisfed.org/hfs May 23, 2013

The views expressed here are those of the speakers and do not necessarily represent the views of the Federal Reserve Bank of St. Louis or of the Federal Reserve System.

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Overview of the Discussion

- The American Dream of homeownership and the fall of family balance sheets
- Why household balance sheets matter for the economy
- Why balance sheets matter for families
- Rebuilding families' balance sheets

Over the past decade, we had the...

- Highest rate of homeownership ever recorded—69% in 2004
 Latest data: 65.2% in first quarter of 2013
- Highest concentration of wealth in homeownership since at least 1952, when data began—33% in 2005

> Latest data: 25.0% in fourth quarter of 2012

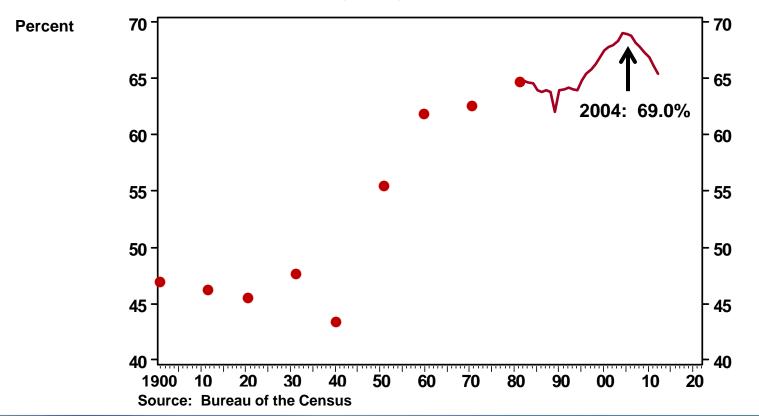
- Highest personal debt-to-income ratio since at least 1952, when data began—132% in 2007
 - > Latest data: 105.5% in fourth quarter of 2012
- Lowest personal saving rate since 1934—1.5% in 2005
 - Latest data: 2.6% in first quarter of 2013

Highest rate of homeownership ever recorded—69% in 2004

Latest data: 65.2% in first quarter of 2013

U.S. Homeownership Rate

Owner-occupiers as percent of households



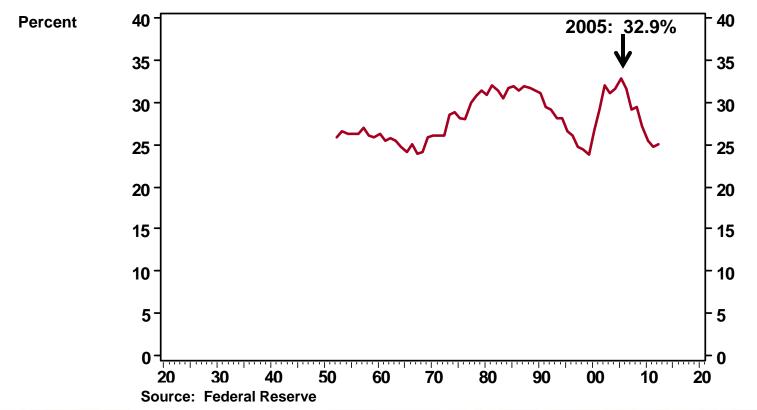
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Highest housing concentration ever recorded—33% in 2005

Latest data: 25.0% in fourth quarter of 2012 Real-Estate Share of Total Assets

Real-Estate Share of Total Assets

Real estate of households and non-profit organizations as percent of total assets



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Highest debt-to-income ratio ever recorded—132% in 2007

Household debt as percent of disposable personal income

Latest data: 105.5% in fourth quarter of 2012 Household Debt-to-Income Ratio

Percent - 120 - 100 2007: 131.5% 0 Source: Federal Reserve

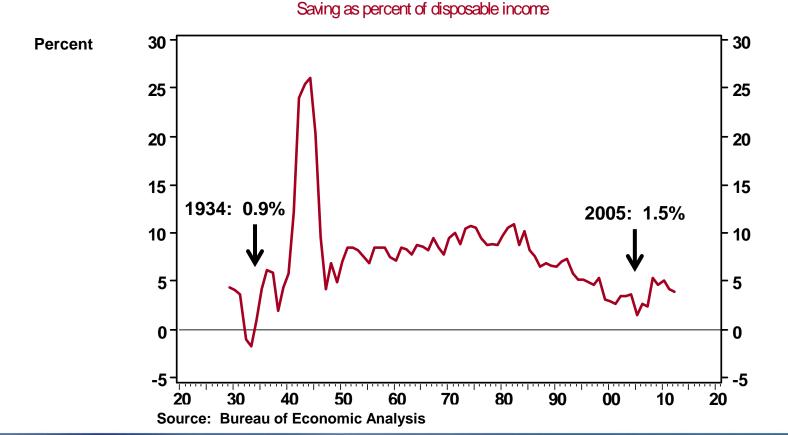
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Lowest personal saving rate since 1934—1.5% in 2005

Latest data: 2.6% in first quarter of 2013

Household Saving Rate



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These balance sheet "failures"...

...led to the worst economic downturn—a "balance sheet recession"—since the Great Depression and

...harmed the stability and upward mobility of millions of families and future generations.

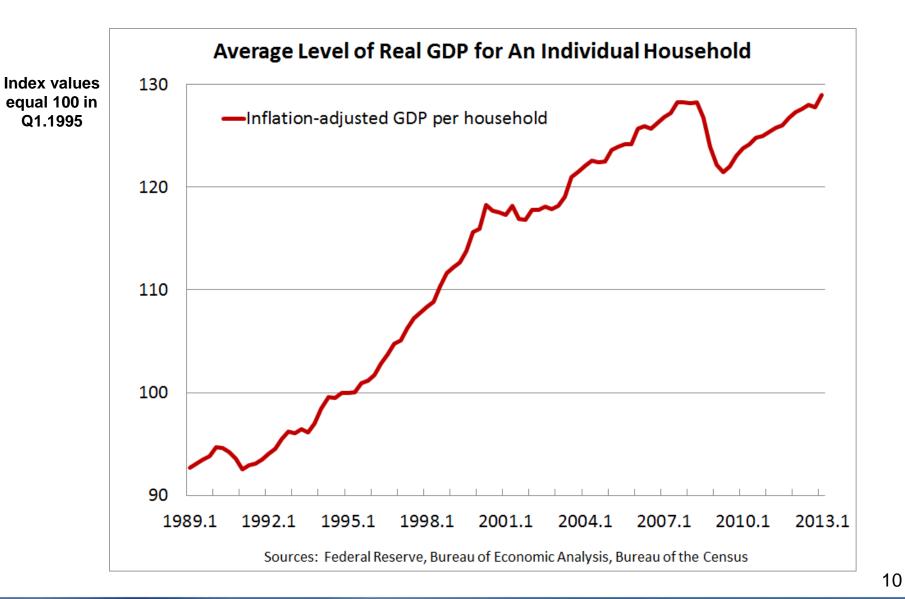
Which is why the Center is focusing on family balance sheets:

- 1. What is the state of American family balance sheets?
- 2. Why do balance sheets matter for families and the economy?
- 3. What can we do to improve them?

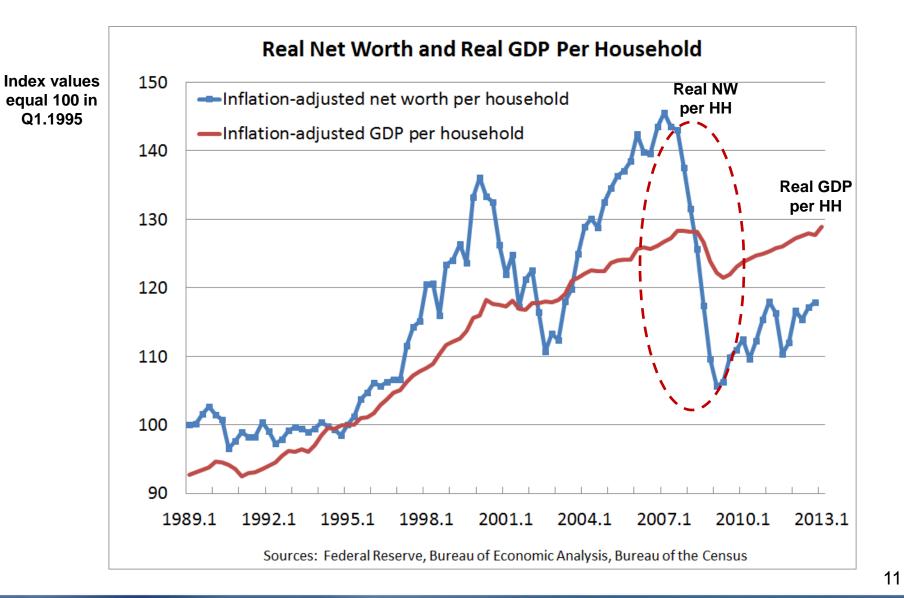
After the Fall

- Why household balance sheets matter for the economy
- The current state of American families' balance sheets

Why Was the Recession So Severe?



Household Balance Sheets Collapsed



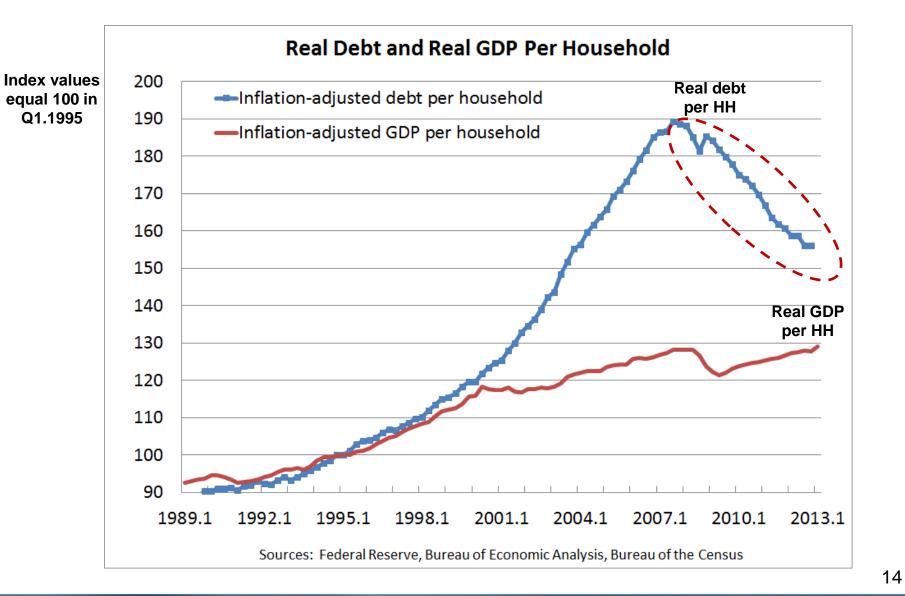
A Balance-Sheet Recession

- The financial crisis led to a "balance-sheet recession"
 - Large loss of household wealth depressed consumer spending and housing activity.
 - Businesses reduced employment and investment as a result.
 - Financial institutions suffered large loan losses, in some cases reducing their ability or willingness to lend.

Phase 2 of the Balance-Sheet Recession: Household Deleveraging

- With reduced wealth and income, many families found themselves with too much debt.
- How do families reduce their debt?
 - Voluntary deleveraging
 - Pay off principal balances faster than scheduled
 - Avoid or reduce new borrowing
 - Involuntary deleveraging
 - Cannot borrow as much as desired
 - Default on existing debt

Deleveraging Slows the Recovery



The Current State of American Families' Balance Sheets

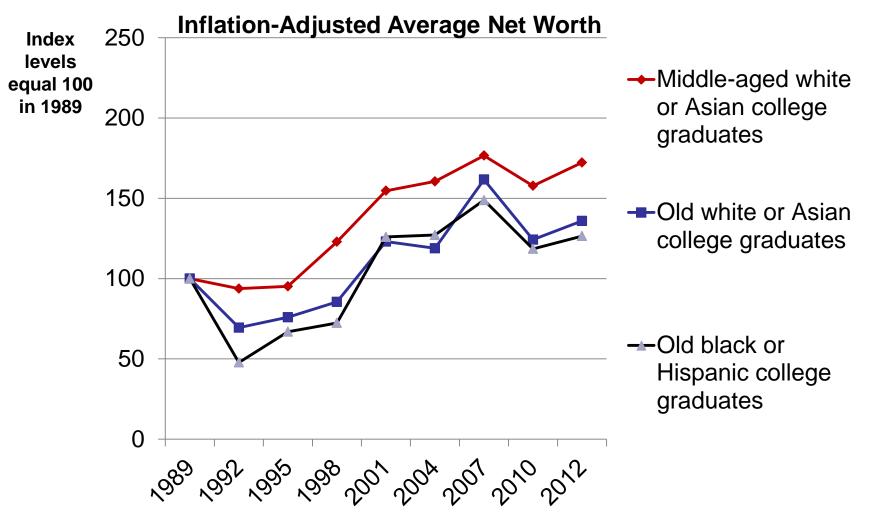
- What is a household balance sheet?
- The roles of age, educational attainment, and race or ethnicity in constructing household balance sheets

The Household Balance Sheet: Assets – Liabilities = Net Worth

Major balance-sheet categories

Assets	Values a	at date T	Liabilities and Net Worth
Durable goods	\$ X	\$ Q	Non-mortgage debt
Financial and business assets	\$ Y	\$ R	Mortgage debt
Residential real estate	\$ Z	\$ Q + R	Total liabilities
Total assets	\$ X + Y + Z	\$ (X + Y + Z) - (Q + R)	Net worth = T.A. – T.L.

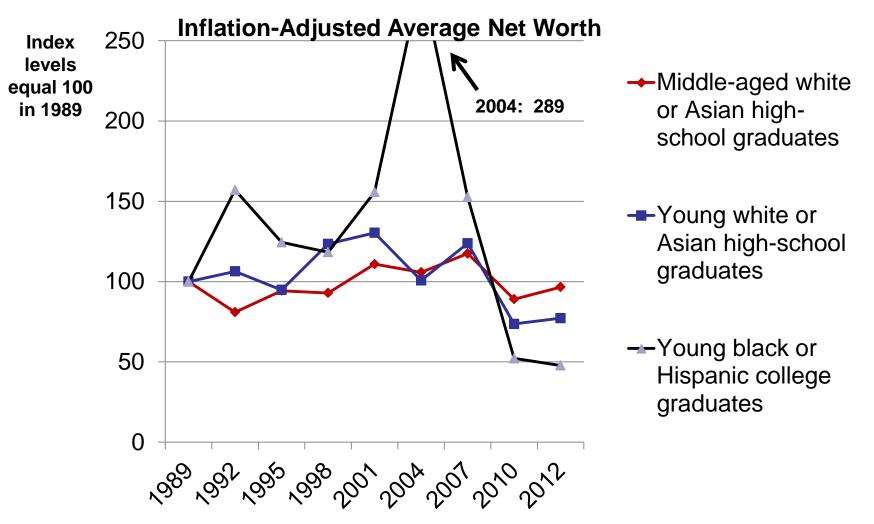
Some Groups of Families Have Fared Well Financially, Despite the Recession



*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

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Other Groups Were Hit Very Hard and Have Not Recovered



*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

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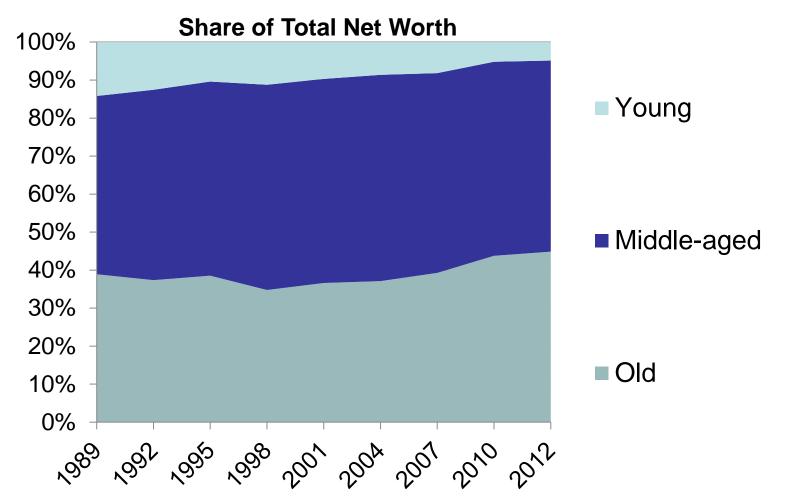
Demographics Drive Balance Sheets

- Three age categories
 - > Young: Family head under 40
 - Middle-aged: Family head between 40 and 61
 - > <u>Old</u>: Family head 62 or older
- Three educational-attainment categories
 - Family head <u>did not finish high school</u>
 - Family head has a <u>high-school degree</u> or GED certificate
 - Family head has a two- or four-year <u>college degree</u>
- Two race or ethnicity categories
 - Historically disadvantaged minorities: African-American or Hispanic of any race
 - > All <u>others</u>: White, Asian-American or other
- Result: Every family fits uniquely into one of 18 distinct groups of families at a given point in time

Diverse Balance-Sheet Experiences

- Hardest-hit groups included families that were:
 - > Young
 - Less-educated
 - Historically disadvantaged minorities—African-Americans and Hispanics of any race
- Key vulnerabilities of these groups
 - High rate of job loss
 - Low saving rates and few liquid assets
 - Frequent use of expensive financial services
 - High portfolio concentrations in housing
 - High debt ratios

Wealth is Concentrated Among Middle-Aged and Older Families...

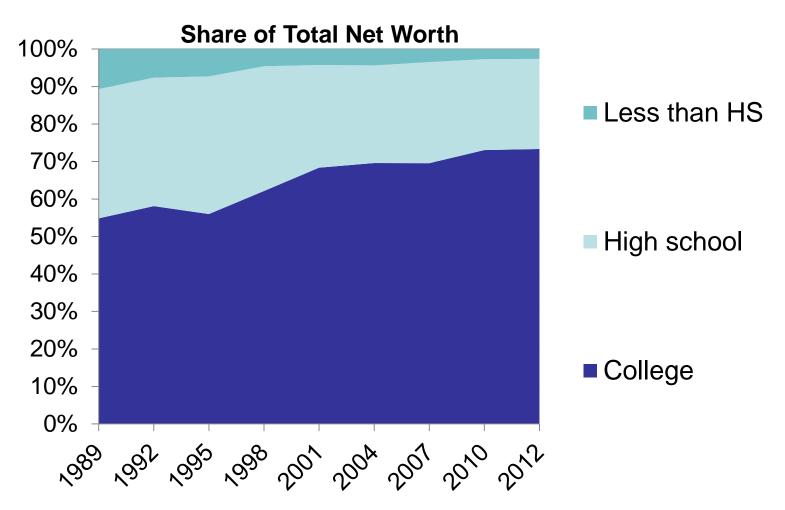


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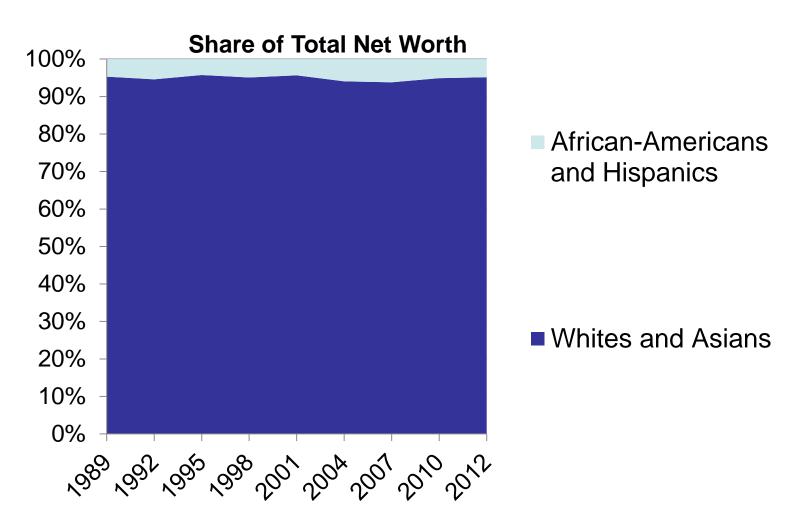
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... Among Better-Educated Families...



*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

... And in White and Asian Families



*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

Balance Sheet of Family A



Family head is 70 years old, white, 4-year college degree

Assets	Estimated v Dec. 31	Liabilities and Net Worth	
Durable goods	\$46,839	\$11,112	Non-mortgage debt
Financial and business assets	\$1,489,222	\$76,682	Mortgage debt
Residential real estate	\$504,787	\$87,793	Total liabilities
Total assets	\$2,040,848	\$1,953,054	Net worth = T.A. – T.L.

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Balance Sheet of Family A



Family head is 70 years old, white, 4-year college degree

Assets		Estimated values relative to total assets as of Dec. 31, 2012*		
Durable goods	2%	1%	Non-mortgage debt	
Financial and business assets	73%	4%	Mortgage debt	
Residential real estate	25%	5%	Total liabilities- to-assets ratio	
Total assets	100%	95%	Net worth-to- assets ratio	

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Balance Sheet of Family B



Family head is 50 years old, white, high-school graduate

Assets	Estimated values as of Dec. 31, 2012*		Liabilities and Net Worth
Durable goods	\$24,377	\$16,952	Non-mortgage debt
Financial and business assets	\$234,283	\$69,553	Mortgage debt
Residential real estate	\$157,830	\$86,505	Total liabilities
Total assets	\$416,491	\$329,985	Net worth = T.A. – T.L.

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Balance Sheet of Family B



Family head is 50 years old, white, high-school graduate

Assets		Estimated values relative to total assets as of Dec. 31, 2012*	
Durable goods	6%	4%	Non-mortgage debt
Financial and business assets	56%	21%	Mortgage debt
Residential real estate	38%	25%	Total liabilities- to-assets ratio
Total assets	100%	75%	Net worth-to- assets ratio

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Balance Sheet of Family C



Family head is 35 years old, African-American, 4-year college graduate

Assets	Estimated values as of Dec. 31, 2012*		Liabilities and Net Worth
Durable goods	\$14,445	\$35,023	Non-mortgage debt
Financial and business assets	\$33,776	\$66,515	Mortgage debt
Residential real estate	\$83,647	\$101,538	Total liabilities
Total assets	\$131,868	\$30,330	Net worth = T.A. – T.L.

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Balance Sheet of Family C



Family head is 35 years old, African-American, 4-year college graduate

Assets		Estimated values relative to total assets as of Dec. 31, 2012*		
Durable goods	11%	27%	Non-mortgage debt	
Financial and business assets	26%	50%	Mortgage debt	
Residential real estate	63%	77%	Total liabilities- to-assets ratio	
Total assets	100%	23%	Net worth-to- assets ratio	

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Balance Sheet of Family D



Family head is 35 years old, white, did not finish high school

Assets	Estimated values as of Dec. 31, 2012*		Liabilities and Net Worth
Durable goods	\$11,983	\$7,934	Non-mortgage debt
Financial and business assets	\$10,872	\$30,343	Mortgage debt
Residential real estate	\$33,194	\$38,277	Total liabilities
Total assets	\$56,048	\$17,771	Net worth = T.A. – T.L.

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Balance Sheet of Family D



Family head is 35 years old, white, did not finish high school

Assets	Estimated values as of Dec. 31, 2012*		Liabilities and Net Worth
Durable goods	21%	14%	Non-mortgage debt
Financial and business assets	19%	54%	Mortgage debt
Residential real estate	60%	68%	Total liabilities- to-assets ratio
Total assets	100%	32%	Net worth-to- assets ratio

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Comparing Families A, B, C, and D

Family	Net worth at end of 2012*		
A: 70 yrs. old, white, college grad	\$1,953,054		. West
B: 50 yrs. old, white, HS grad 110x	\$329,985 x		
C: 35 yrs. old, black, college grad	\$30,330		
D: 35 yrs. old, white, no HS degree	\$17,771		
All families: Mean (Dec. 31, 2012 estimate)	\$537,873		
All families: Median (2010 SCF)	\$77,000		

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Comparing Families A, B, C, and D

Family	Net worth at end of 2012*	RRE as share of assets*		
A: 70 yrs. old, white, college grad	\$1,953,054	25%		म
B: 50 yrs. old, white, HS grad 110	\$329,985	38%		
C: 35 yrs. old, black, college grad	\$30,330	63%		
D: 35 yrs. old, white, no HS degree	\$17,771	60%	530 (FA) 5 30 5	
	•			NA
All families: Mean (Dec. 31, 2012 estimate)	\$537,873	33%		-
All families: Median (2010 SCF)	\$77,000	45%		

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

All figures are in terms of 2010 purchasing power, adjusted by the CPI-U-RS.

Comparing Families A, B, C, and D

Family	Net worth at end of 2012*	RRE as share of assets*	Debt-to- assets ratio*	
A: 70 yrs. old, white, college grad	\$1,953,054	25%	5%	Y
B: 50 yrs. old, white, HS grad 110	\$329,985	38%	25%	
C: 35 yrs. old, black, college grad	\$30,330	63%	77%	
D: 35 yrs. old, white, no HS degree	\$17,771	60%	68%	
All families: Mean (Dec. 31, 2012 estimate)	\$537,873	33%	14%	
All families: Median (2010 SCF)	\$77,000	45%	22%	

*Sources: Federal Reserve Board's *Survey of Consumer Finances* and *Flow of Funds Accounts*; authors' estimates based on data from Bureau of Economic Analysis and Bureau of the Census

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The Crisis Reinforced Several Long-Term Balance-Sheet Trends

- Young families today are much weaker financially than they were in 2007—or even in 1989.
- On average, older families are nearly as strong today as they ever have been, despite the crisis.
- The strongest balance sheets are held by middle-aged or older college-educated whites and Asians.

Why Balance Sheets Matter for Families

Economic Mobility Outcomes

- Net worth drives opportunity from one generation to the next (Conley, 2009)
- Financial capital is one of the three strongest predictors of economic mobility in the U.S. (Butler, Beach, and Winfee, 2008)
- 55 percent of the lowest-income adults with high initial savings left the bottom quartile within 20 years, compared to 34 percent with low initial savings (Cooper and Luengo-Prado, 2009)
- Small amounts of wealth at the right moments can have a "transformative" effect on one's life course (Shapiro, 2004)

Post-Secondary Education Outcomes

- Liquid and non-liquid assets are positively associated with later college completion, while unsecured debt is negatively associated (Zhan and Sherraden, 2009)
- Households with a four-year college graduate and outstanding loans have \$185,996 less net worth than similar households with no outstanding student loans (Elliott, forthcoming)
- Americans who borrowed to pay for school are now less likely to have a mortgage at age 30 than those who never had student debt, a reversal of prior trends (Federal Reserve, 2013)

Youth Savings and College Graduation

(Elliott, Nam and Song, 2013)

	No Savings Account	Only Basic Savings	School Savings < \$1	School savings \$1 - \$499	School savings > \$500
% Who Graduate From College – All Children	14%	26%	30%	31%	49%
% Who Graduate From College – Lower-Income Children	5%	9%	13%	25%	33% ³⁹

Rebuilding Families' Balance Sheets

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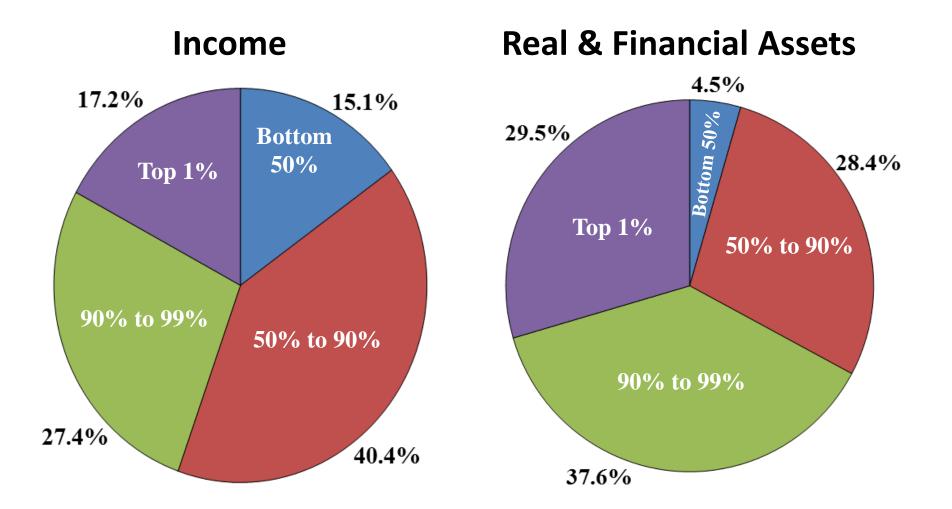
Two Policies: Maintenance and Mobility

(Economic Mobility Project, 2009)

Objective	Annual Budget	Wealth Incentives	Challenge	
Income maintenance – "getting by"	\$1.3 trillion (10% of GDP)	None, or negative	Reorient towards assets and mobility	
Economic mobility – "getting ahead"	\$746 billion (5.7% of GDP)	\$547 billion in tax incentives for homes, retirement, investments, education, etc.	Retarget towards lower- and middle- income families	

Distribution of Income and Wealth

(Survey of Consumer Finances, Federal Reserve, 2010)



Lessons – What Works?

Lesson	Research Findings
Opt-out policies work better than opt-in (Madrian and Shea, 2001)	 - 401(k) participation rates: • New hires: 48% increase • Women: 36% →86% • Hispanics: 19% →75% • Earnings < \$20,000: 13% →80%
Easy and automatic is best (Thaler, 2013)	 Savings rate tripled at one firm in the "Save More Tomorrow" program \$7 billion total new savings per year in the U.S. from "auto-escalation"
"Social norms" are effective (Thaler, 2012)	 15% increase in tax collections in Britain with "9 out of 10 people in Manchester pay their taxes" message, compared to standard warnings
"Anchoring" works (Grinstein-Weiss, 2013)	 Savings increased in the "Refund to Savings" experiment when the "anchor" or suggested amount was raised from 25%, 50% and 75% of the refund

Ideas to Rebuild Family Balance Sheets

Goal	Strategy
Build short-term and emergency savings	 "Split" refunds at tax time Escrow savings in mortgages, DMPs "Magic Mojo" impulse savings
Diversify assets beyond homeownership	 Expand low-cost investment options Support small business ownership Promote unrestricted savings
Build retirement savings	 Promote "AutoIRA" policy for workers without retirement plans Adopt auto-enrollment, auto- escalation, and auto-allocation plans for workers with retirement plans
Start saving early in life, especially for education	Adopt "Early Pells"Promote savings accounts at birth
Reduce negative equity and excessive mortgage debt	 Encourage mortgage modifications Reduce tax and policy bias toward homeownership and borrowing

For Further Information

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Researching Family Balance Sheets to Strengthen Families and the Economy