

Economic Outlook

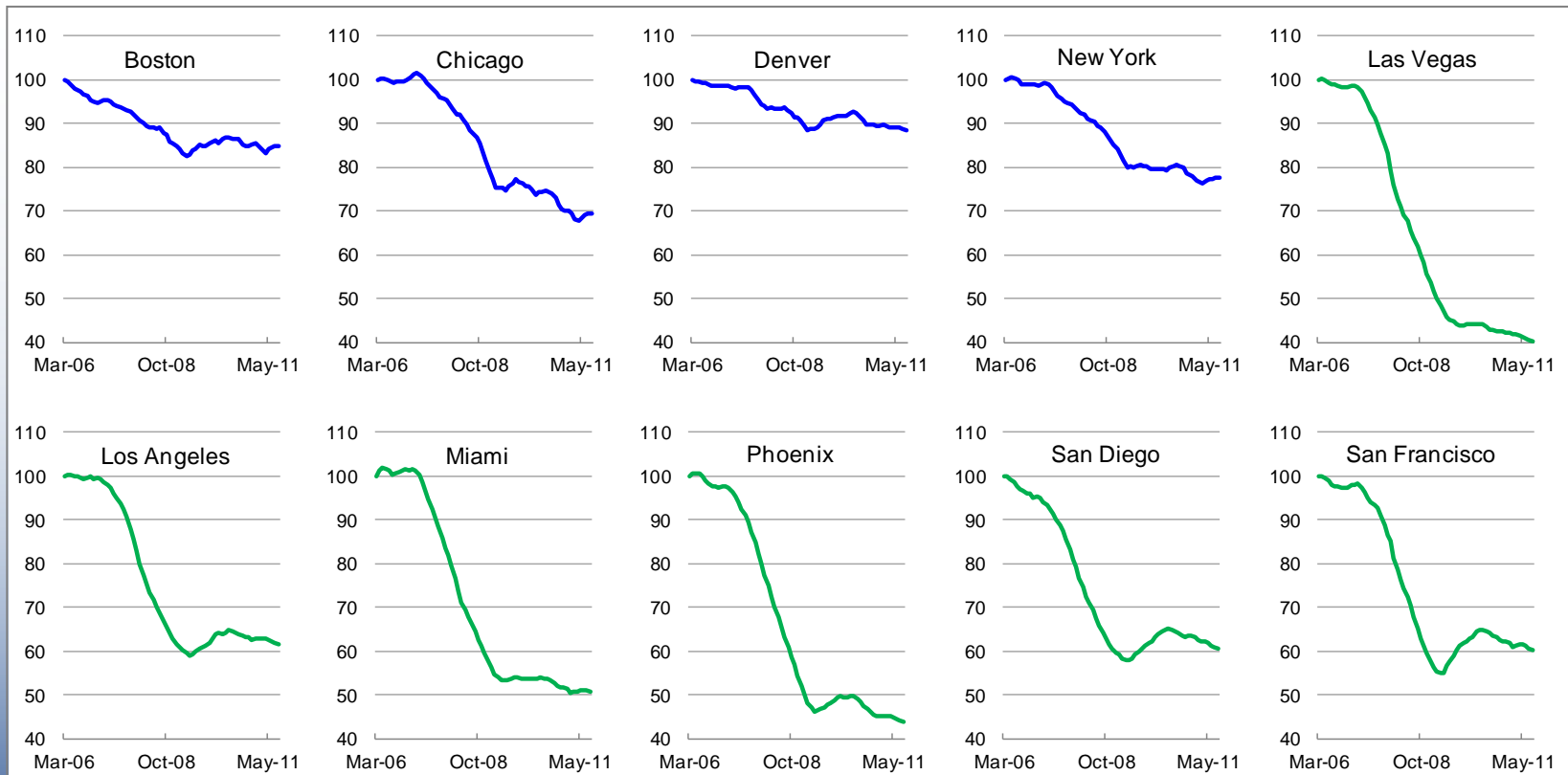
Eric S. Rosengren
President & CEO
Federal Reserve Bank of Boston
10th Annual Regional & Community
Bankers' Conference
November 8, 2011

Figure 1

U.S. Regional Home Price Declines: S&P/Case-Shiller Metro Area Indexes

March 2006 - August 2011

Index Level March 2006 = 100

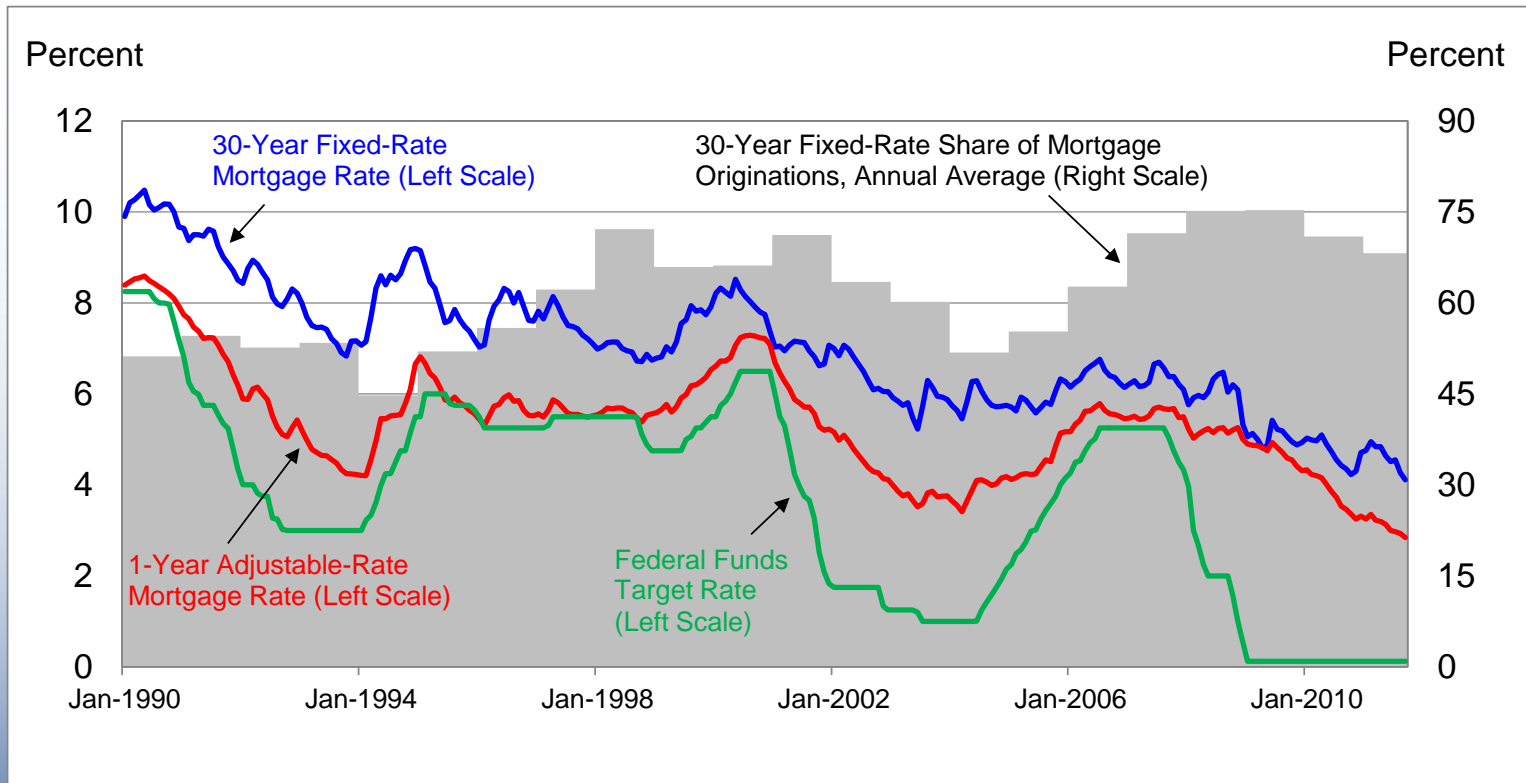


Source: S&P/Case-Shiller / Haver Analytics

Figure 2

30-Year Fixed-Rate Share of Mortgage Originations and Selected Interest Rates

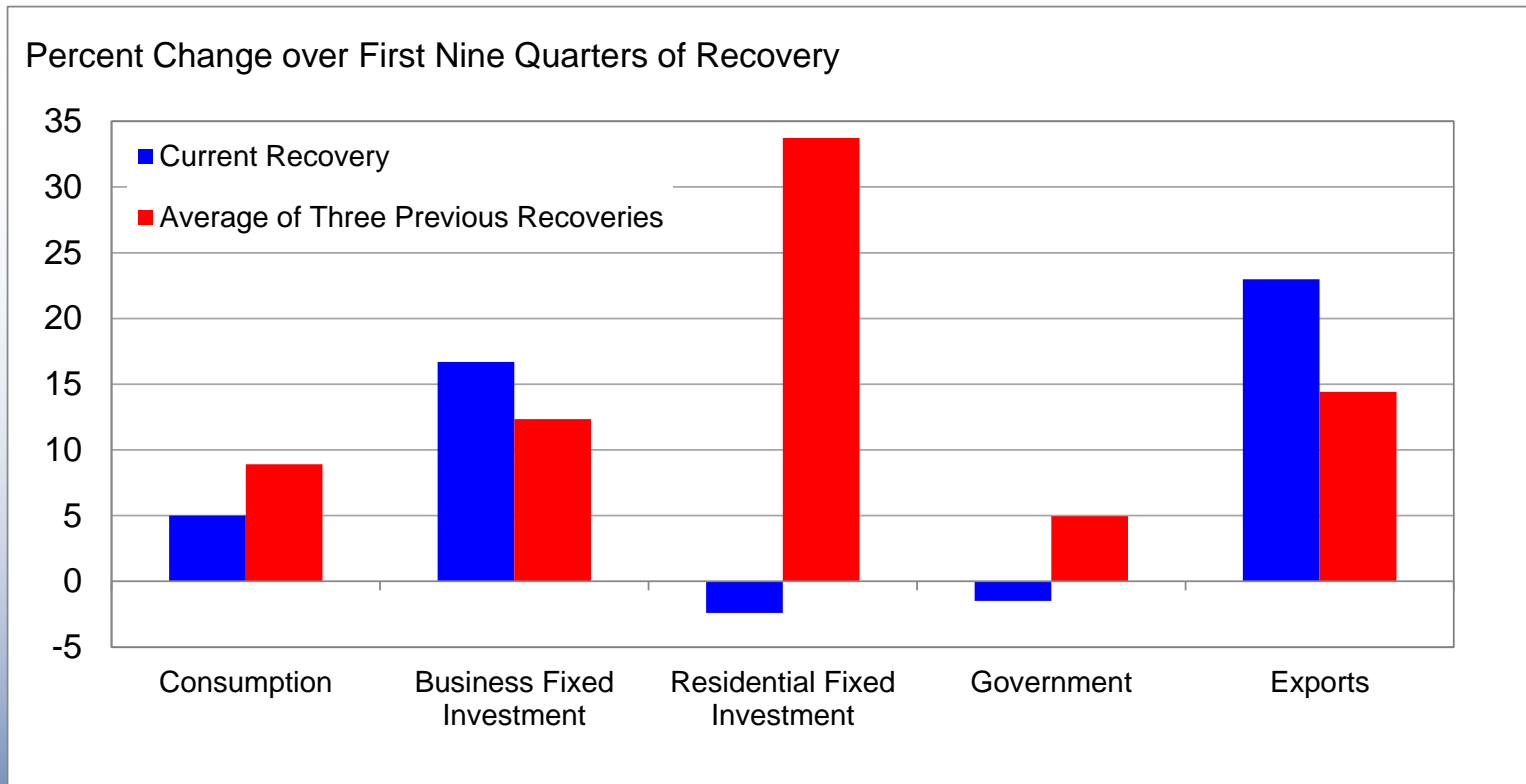
January 1990 - September 2011



Source: FHLMC, FHFA, Federal Reserve Board / Haver Analytics

Figure 3

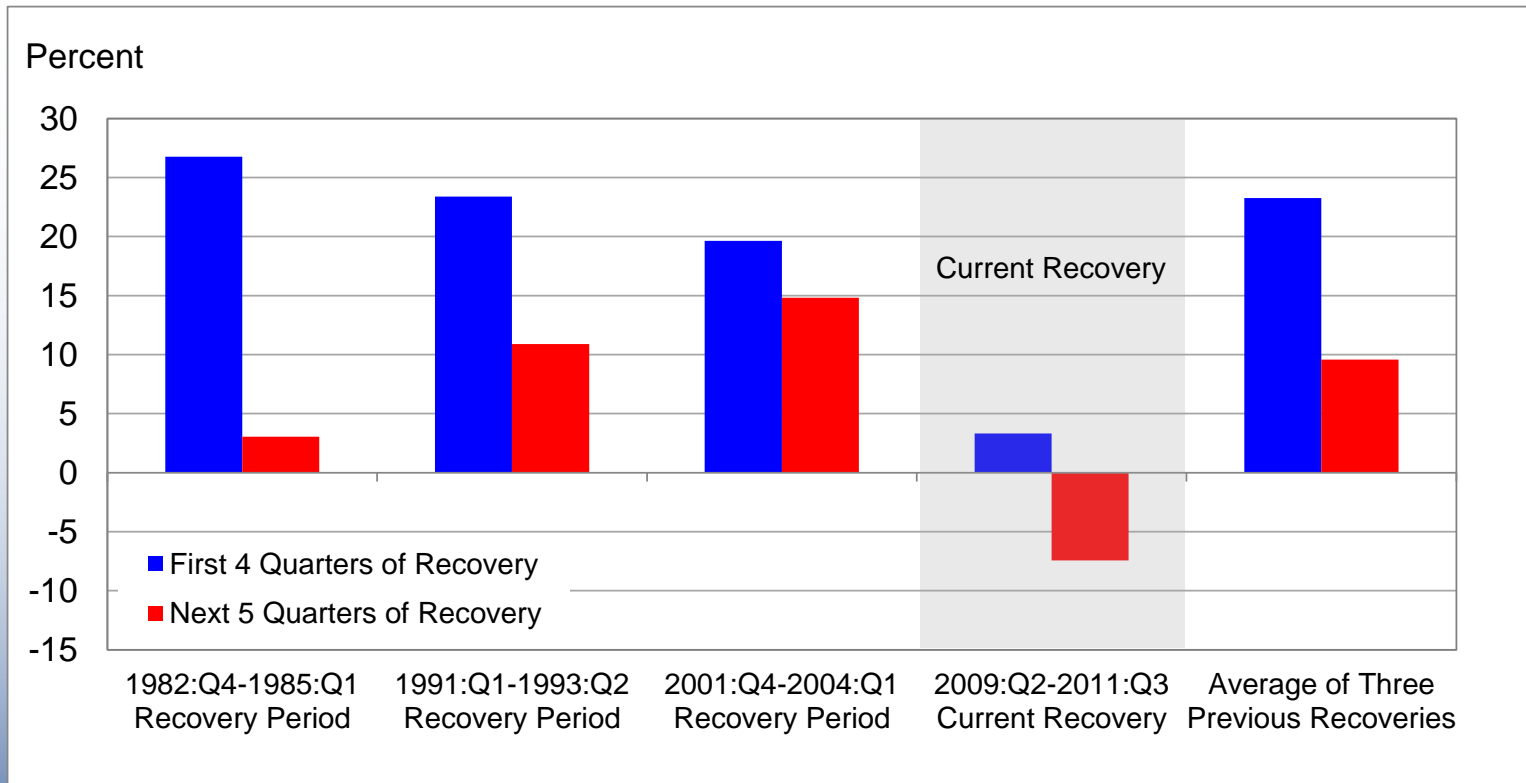
Growth in Real GDP Components: Current and Three Previous Recoveries



Source: BEA, NBER / Haver Analytics

Figure 4

Residential Investment Share of GDP Growth: Current and Three Previous Recoveries

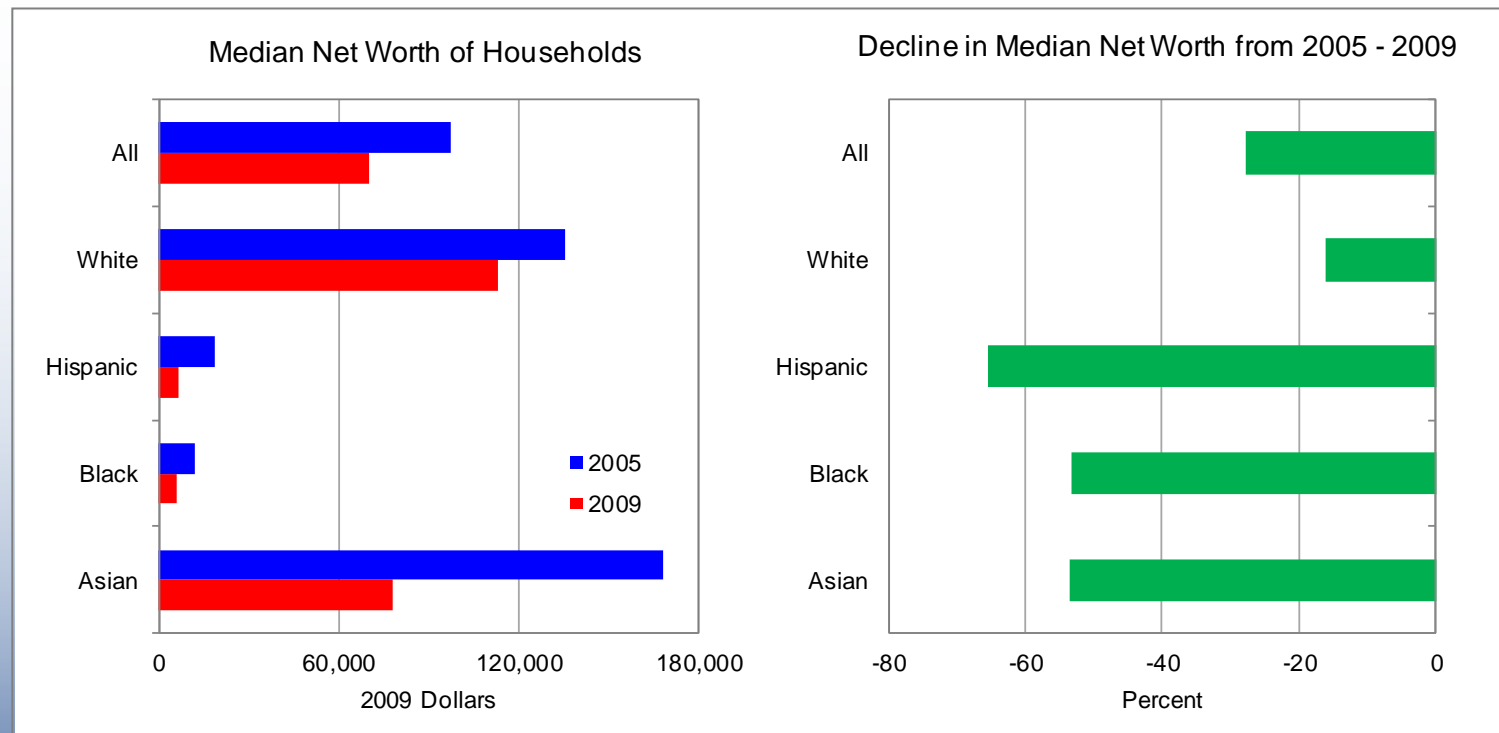


Source: BEA, NBER / Haver Analytics

Figure 5

Median Net Worth of Households by Race and Ethnicity

2005 - 2009

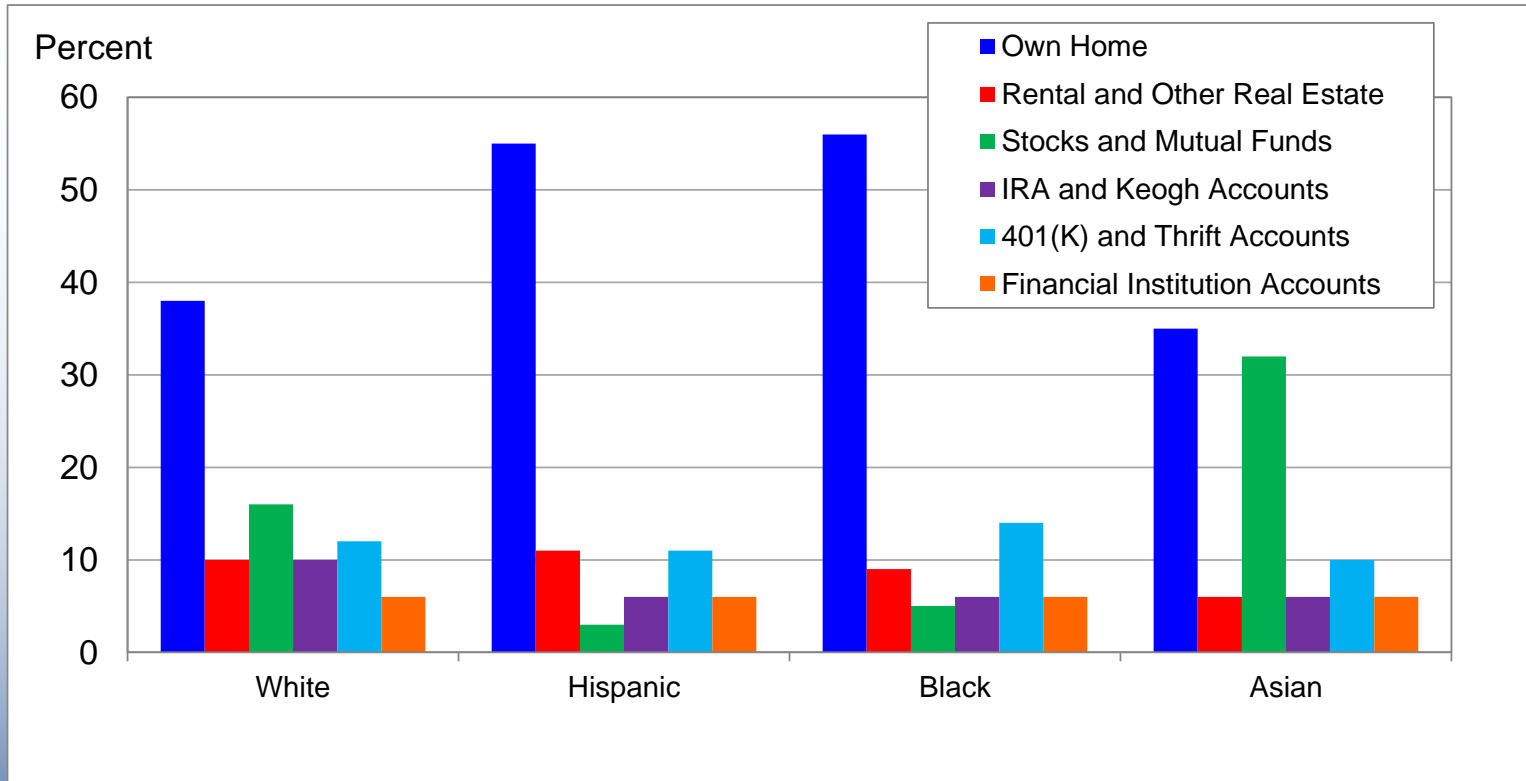


Source: Pew Research Center Tabulations of the Census Bureau's Survey of Income and Program Participation Data

Figure 6

Composition of Household Net Worth: Selected Components

2009

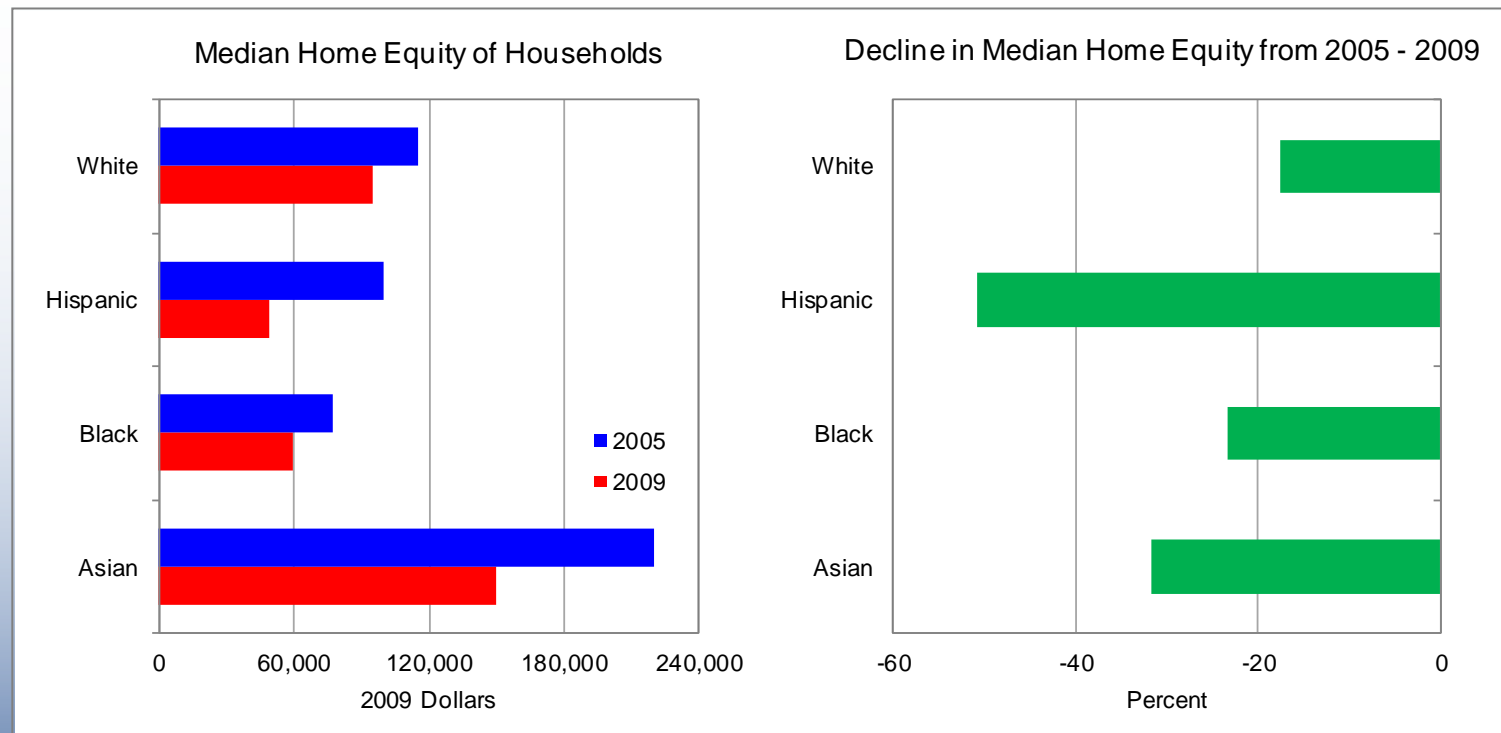


Source: Pew Research Center Tabulations of the Census Bureau's Survey of Income and Program Participation Data

Figure 7

Erosion of Home Equity of Households by Race and Ethnicity

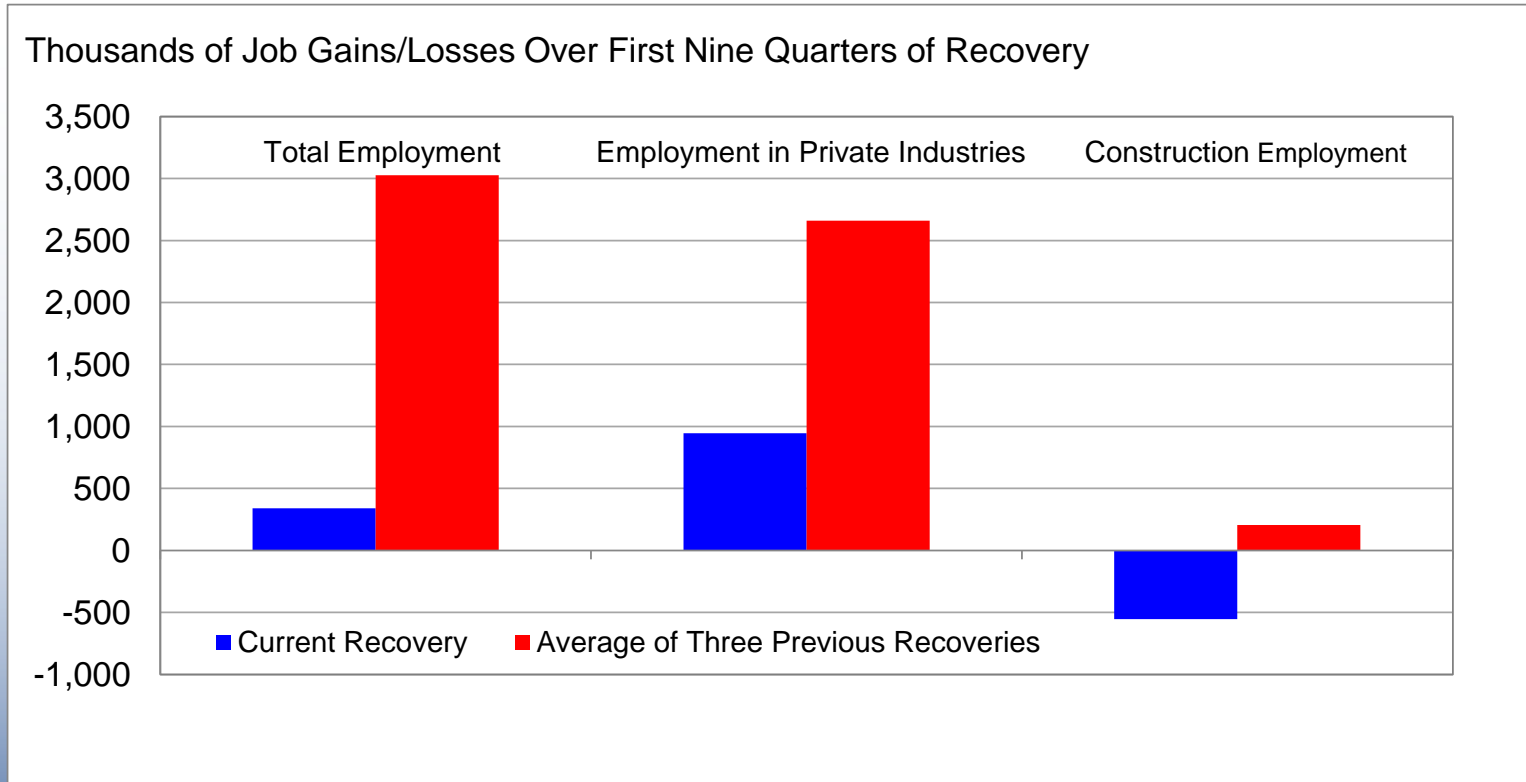
2005 - 2009



Source: Pew Research Center Tabulations of the Census Bureau's Survey of Income and Program Participation Data

Figure 8

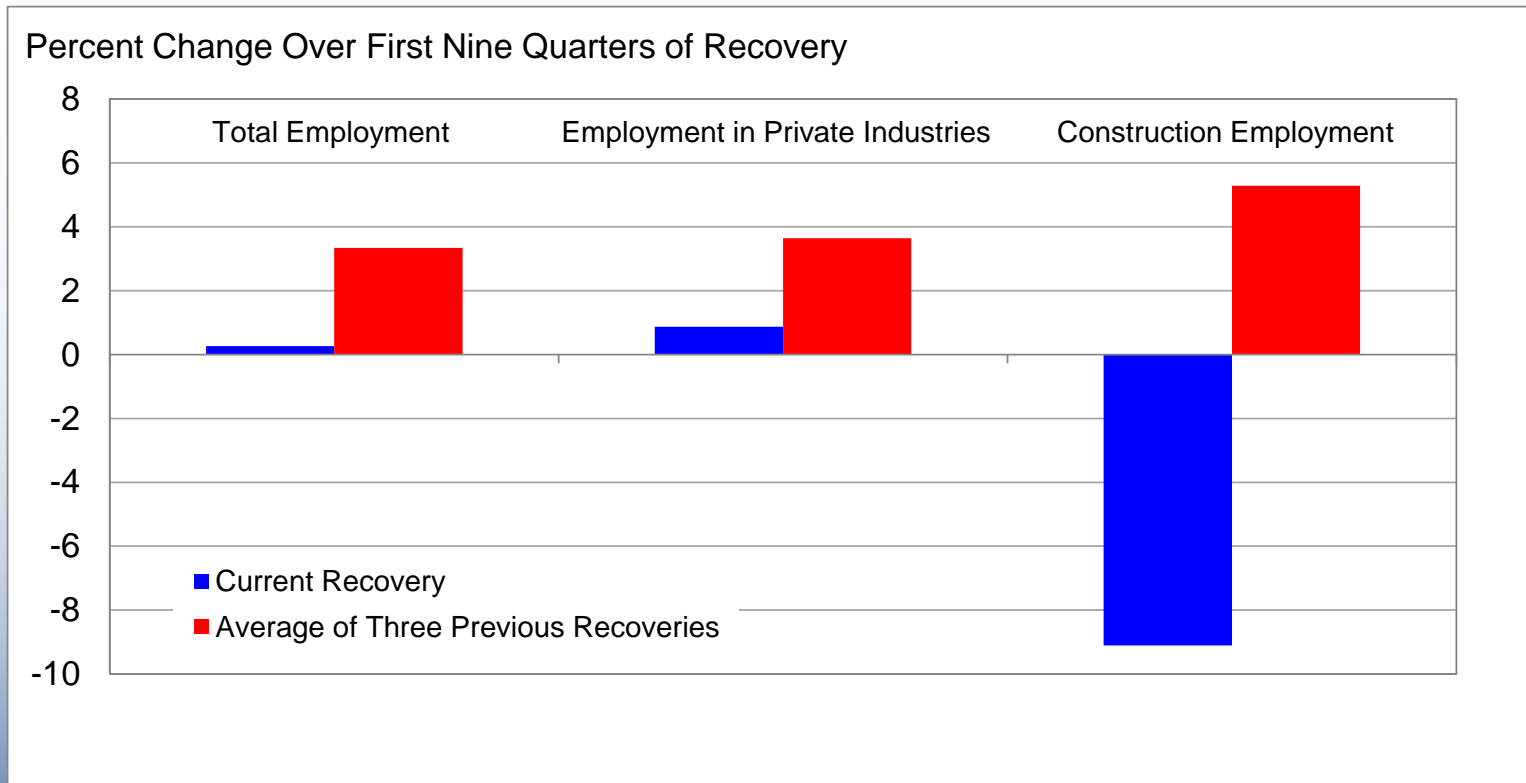
Job Growth: Current and Three Previous Recoveries



Source: BLS, NBER / Haver Analytics

Figure 9

Employment Growth: Current and Three Previous Recoveries

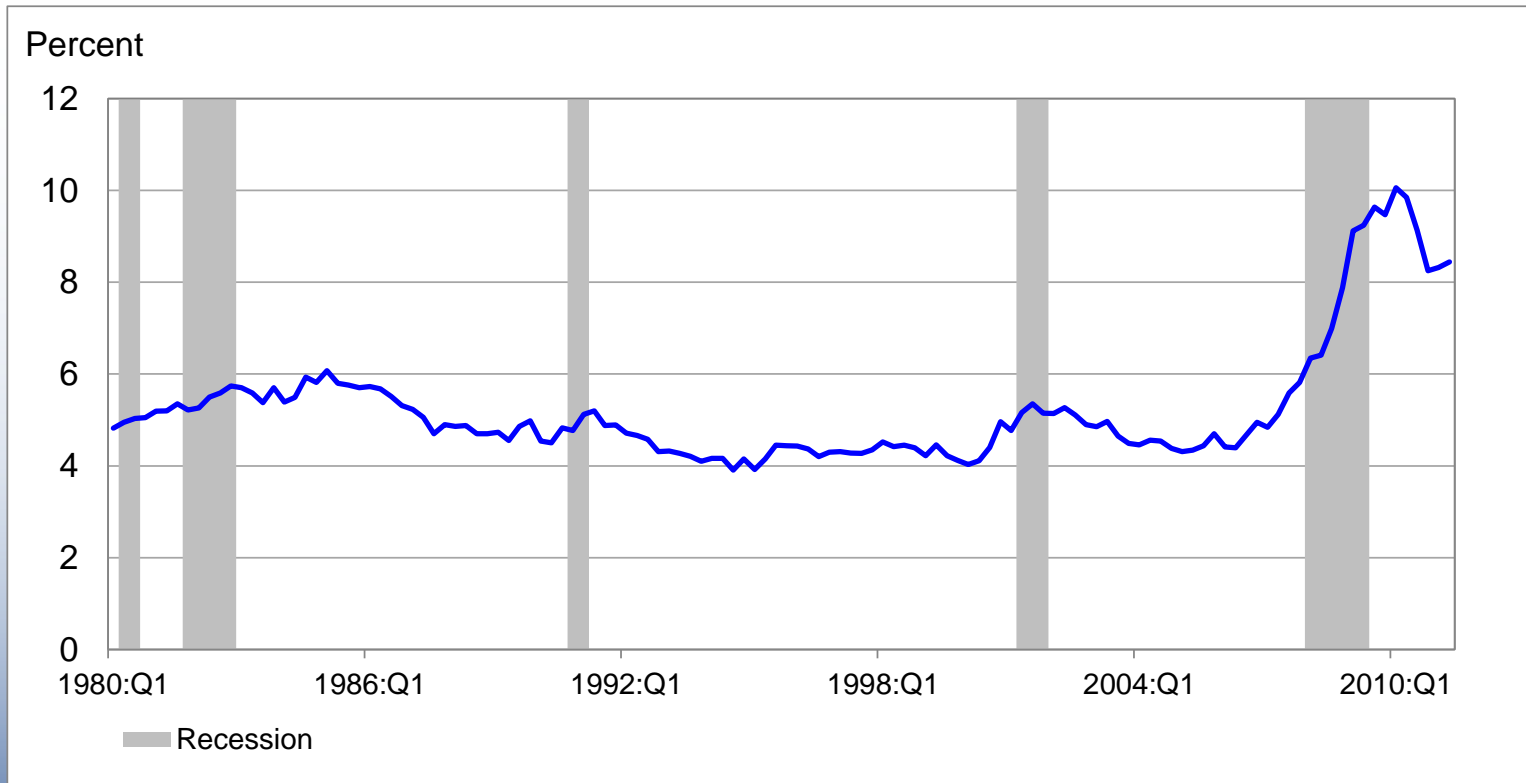


Source: BLS, NBER / Haver Analytics

Figure 10

Delinquency Rate: 1-4 Family Mortgage Loans 30 or More Days Past Due

1980:Q1 - 2011:Q2

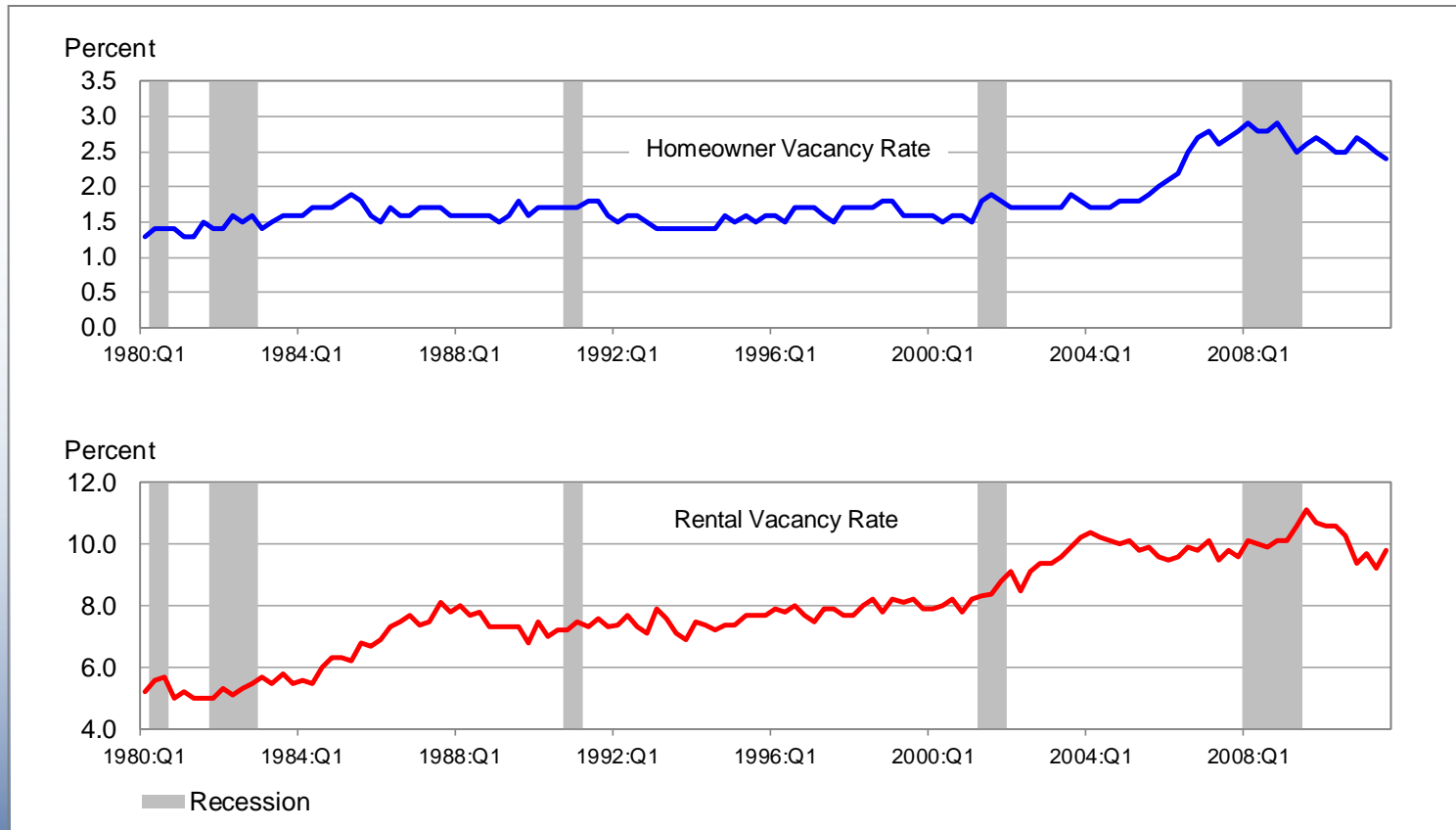


Source: Mortgage Bankers Association, NBER / Haver Analytics

Figure 11

Homeowner and Rental Vacancy Rates

1980:Q1 - 2011:Q3



Source: Census Bureau, NBER / Haver Analytics

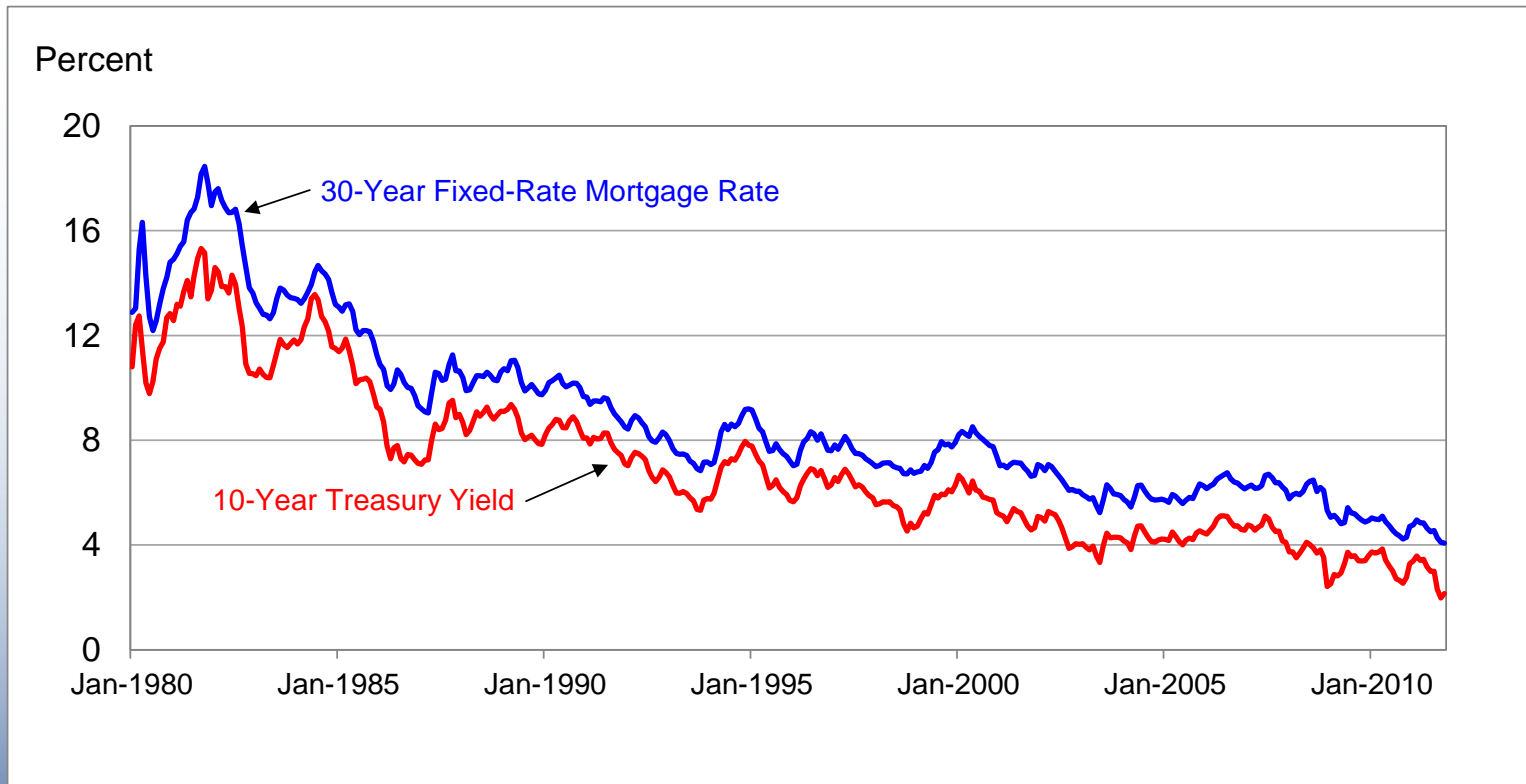
Housing has been a Major Impediment to Stronger Growth

- Problems in housing have greatly complicated the U.S. recovery
- Residential investment has been unusually weak relative to previous recoveries
- Consumption, business formation, and employment have also been affected by problems in the housing sector

Figure 12

30-Year Fixed-Rate Mortgage Rate and 10-Year Treasury Yield

January 1980 - October 2011

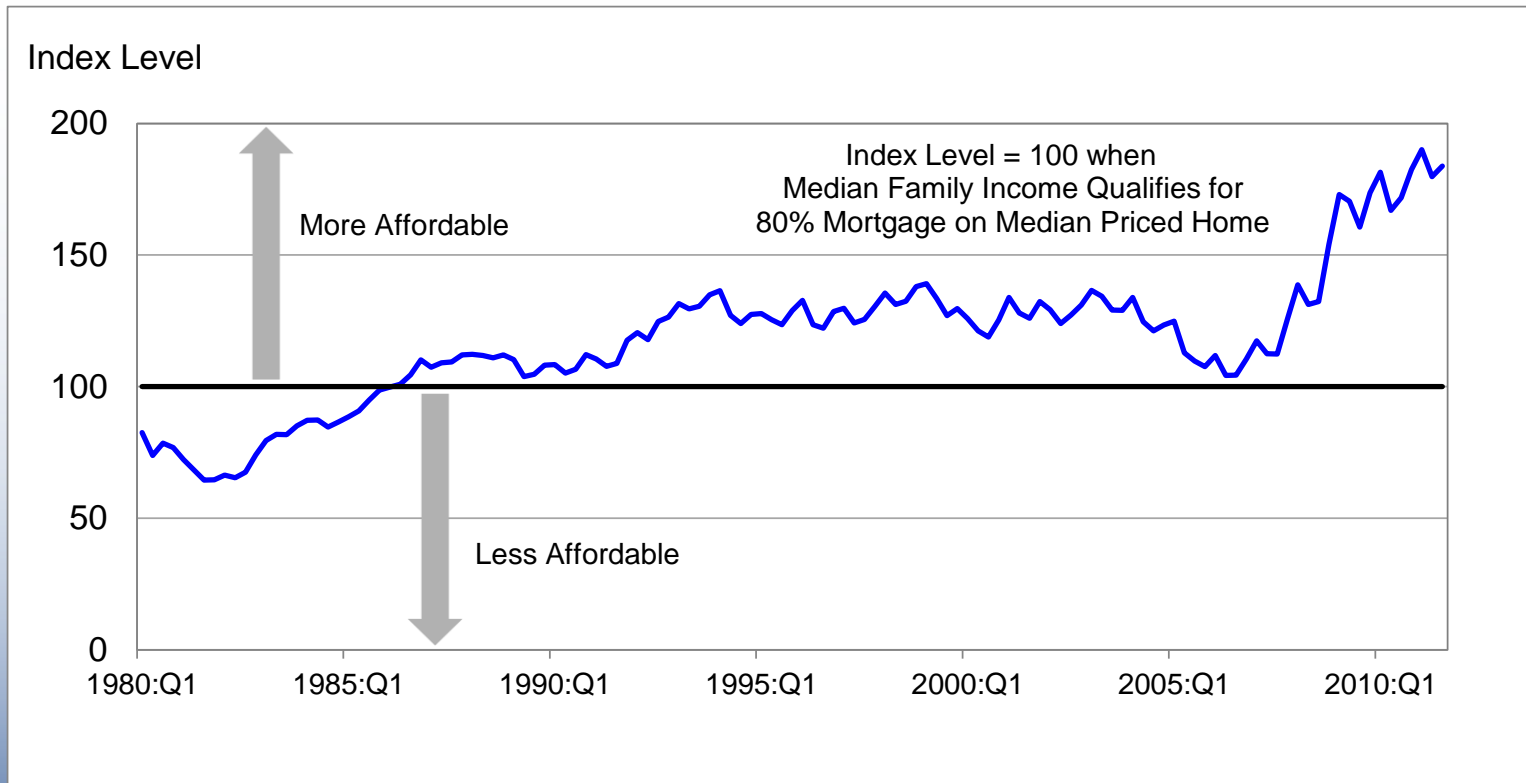


Source: FHLMC, Federal Reserve Board / Haver Analytics

Figure 13

Housing Affordability: Median Income Relative to Income Needed to Purchase Median Priced Home

1980:Q1 - 2011:Q3

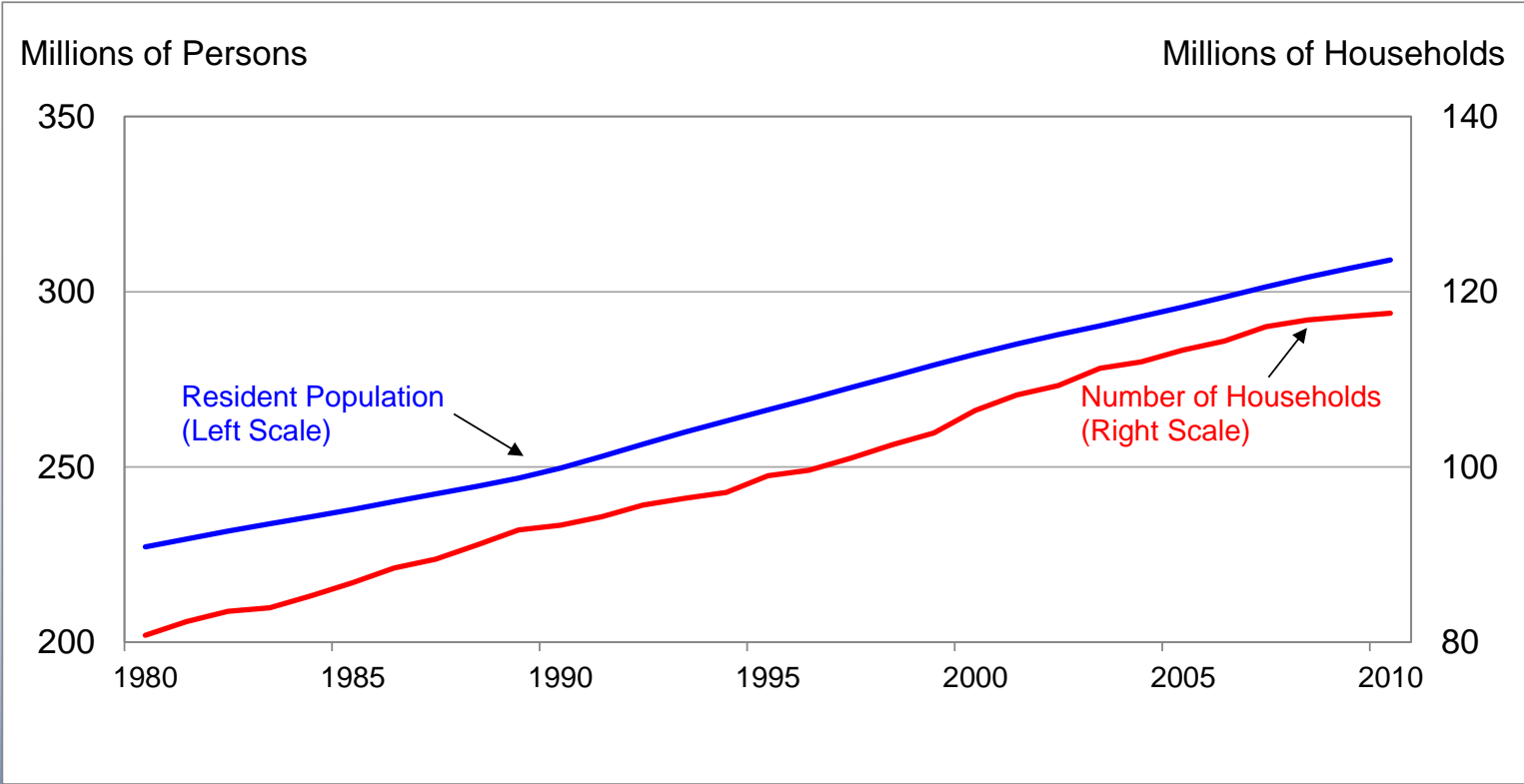


Source: National Association of Realtors / Haver Analytics

Figure 14

Population and Households

1980 - 2010



Source: Census Bureau / Haver Analytics

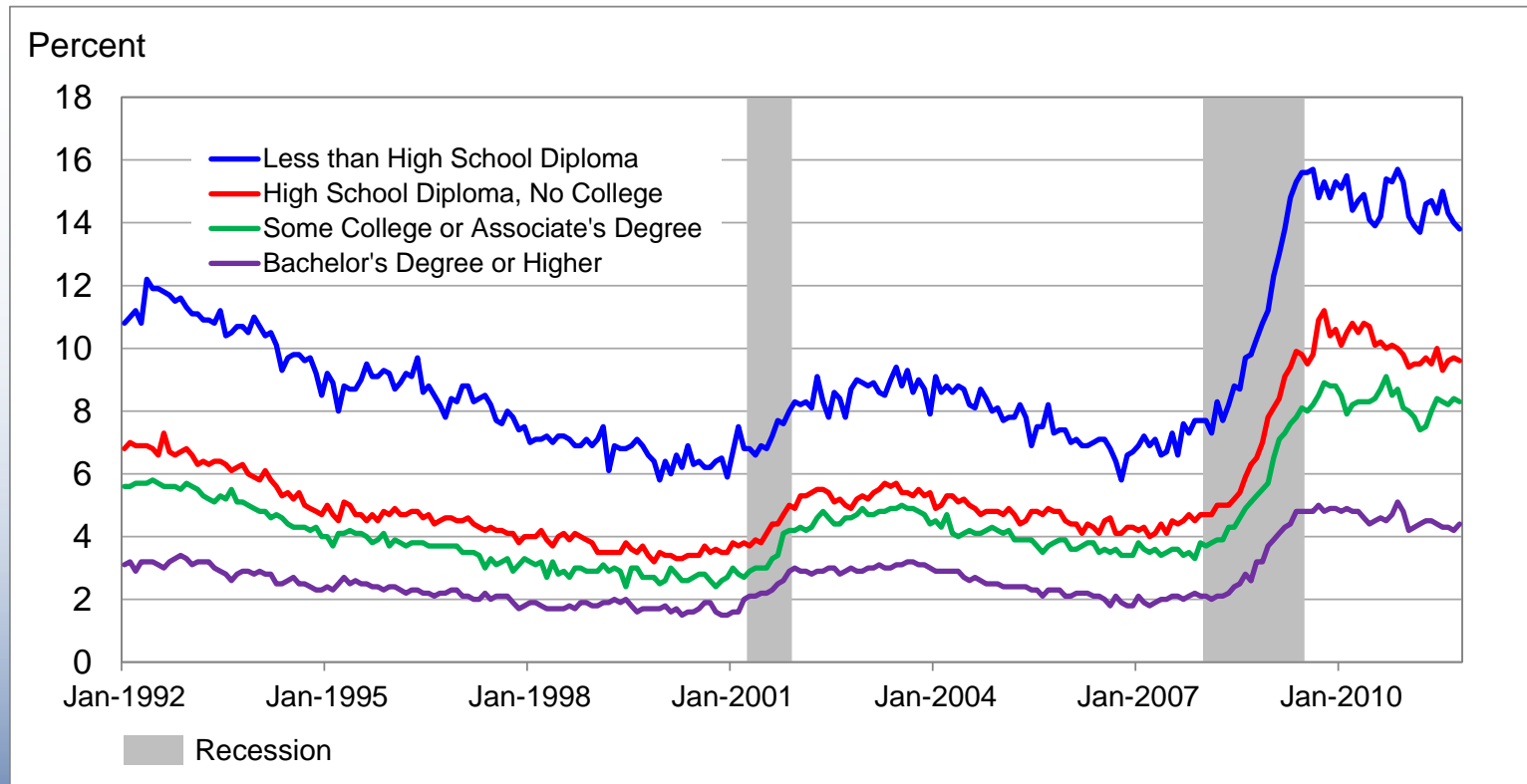
Housing Prices and Monetary Policy

- Falling prices discourage home purchases and many borrowers are unable to refinance
- This has impacted the ability of monetary policy to have its usual effect on an important interest-sensitive sector
- Monetary policy accommodation would have a greater impact if households were able to respond to the lower rates

Figure 15

U.S. Unemployment Rate for Population Age 25 and Older by Educational Attainment

January 1992 - October 2011



Source: BLS, Census Bureau, NBER / Haver Analytics

Figure 16

Changes in Unemployment Rate by Educational Attainment

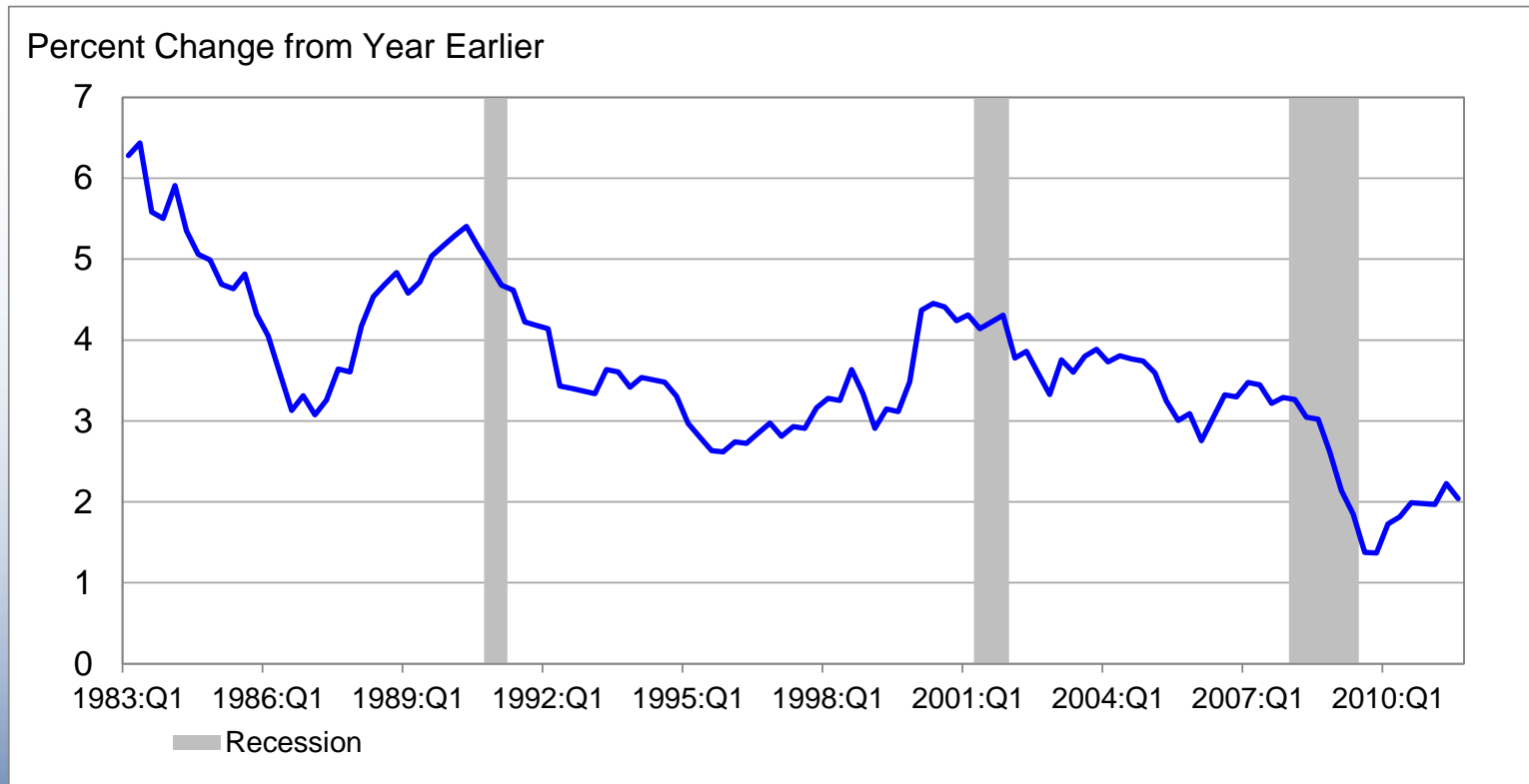
Educational Attainment	Unemployment Rate		
	Business Cycle Peak December 2007	Current October 2011	Peak-to-Current Percent Change
Less than High School Diploma	7.7%	13.8%	+ 79%
High School Diploma, No College	4.7%	9.6%	+104%
Some College or Associate's Degree	3.8%	8.3%	+118%
Bachelor's Degree or Higher	2.1%	4.4%	+110%

Note: Figures are for population age 25 and older
Source: Census Bureau, BLS / Haver Analytics

Figure 17

Employment Cost Index for Civilian Workers

1983:Q1 - 2011:Q3

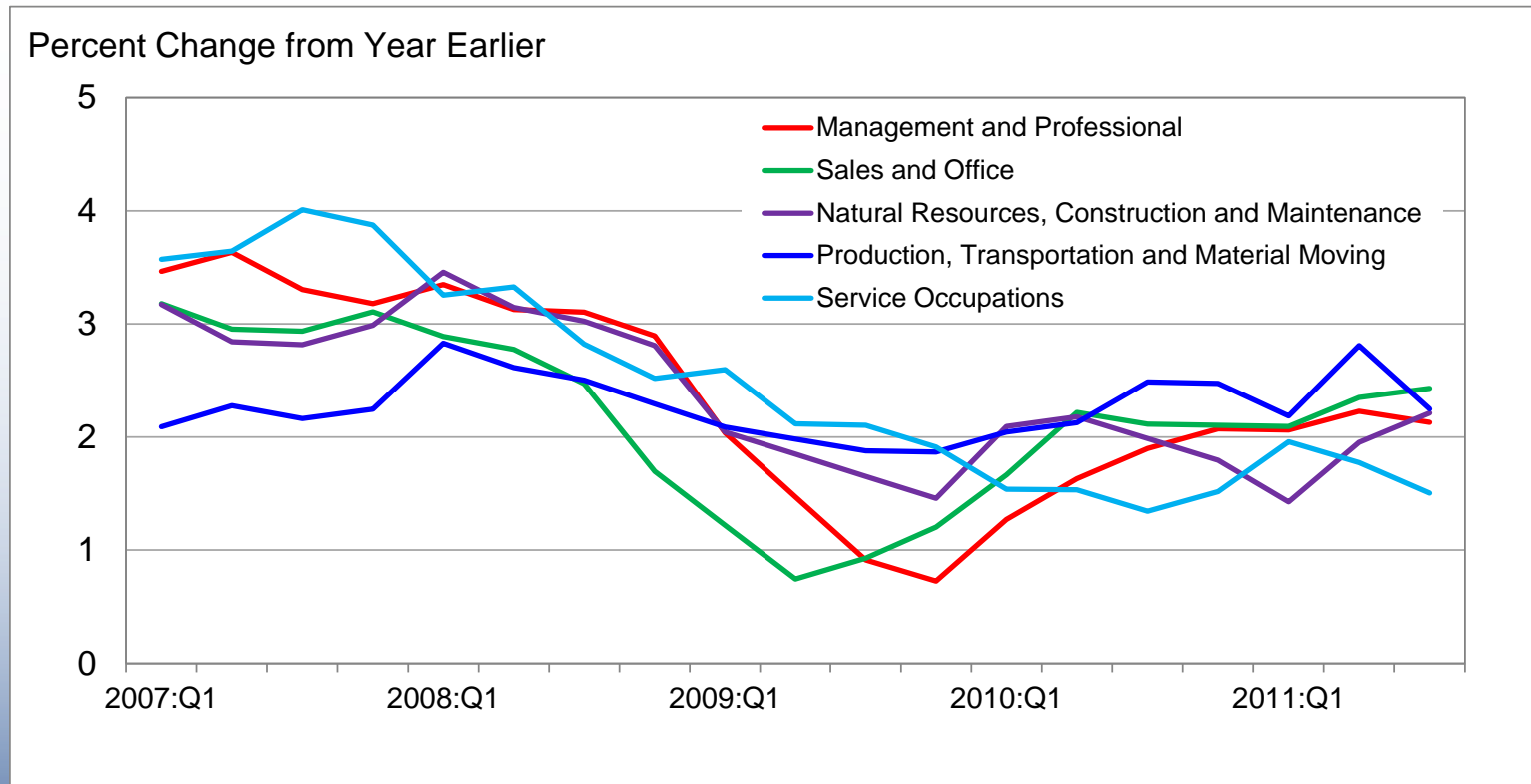


Source: BLS, NBER / Haver Analytics

Figure 18

Employment Cost Index for Civilian Workers by Occupational Group

2007:Q1 - 2011:Q3

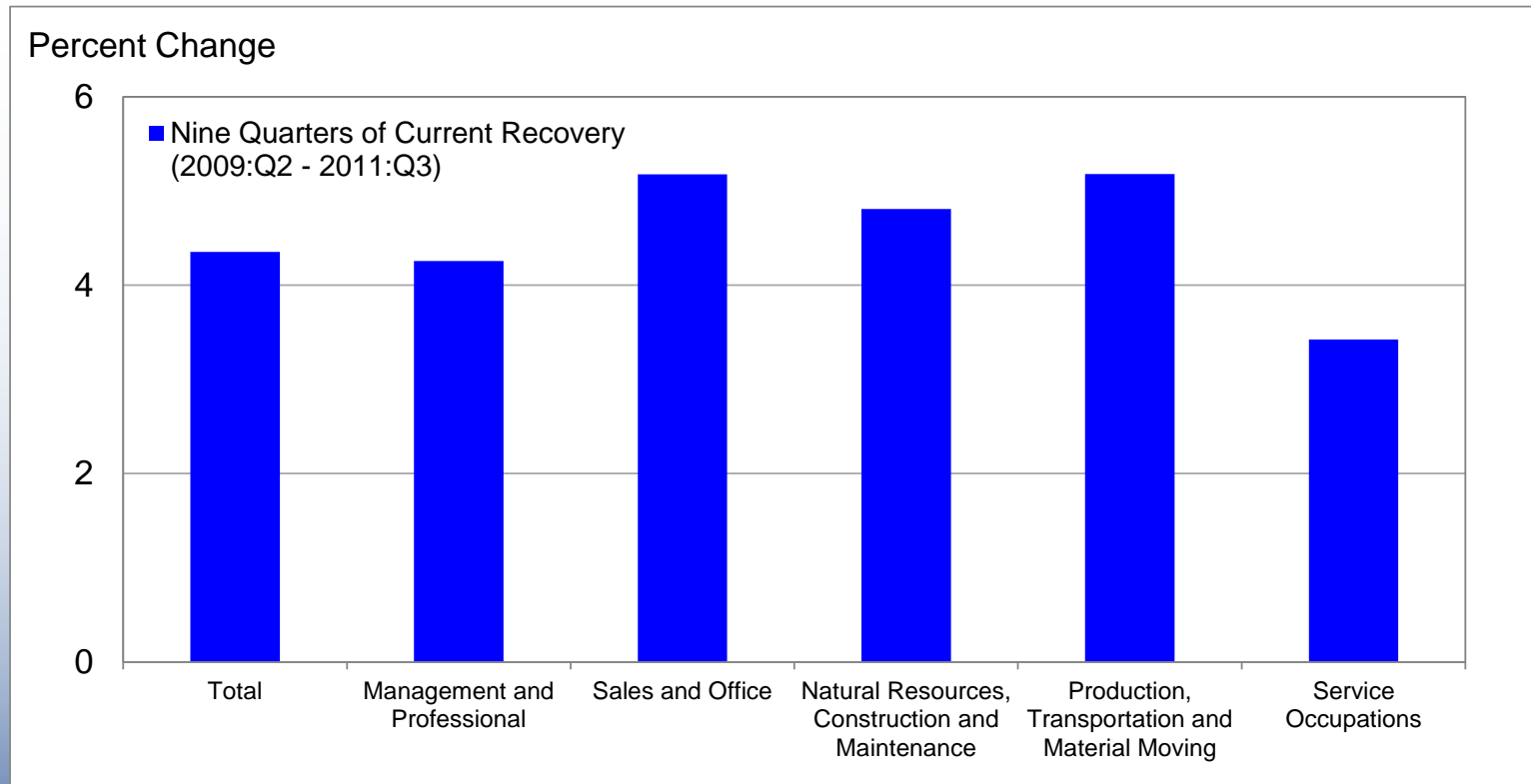


Source: BLS / Haver Analytics

Figure 19

Employment Cost Index for Civilian Workers by Occupational Group

2009:Q2 - 2011:Q3

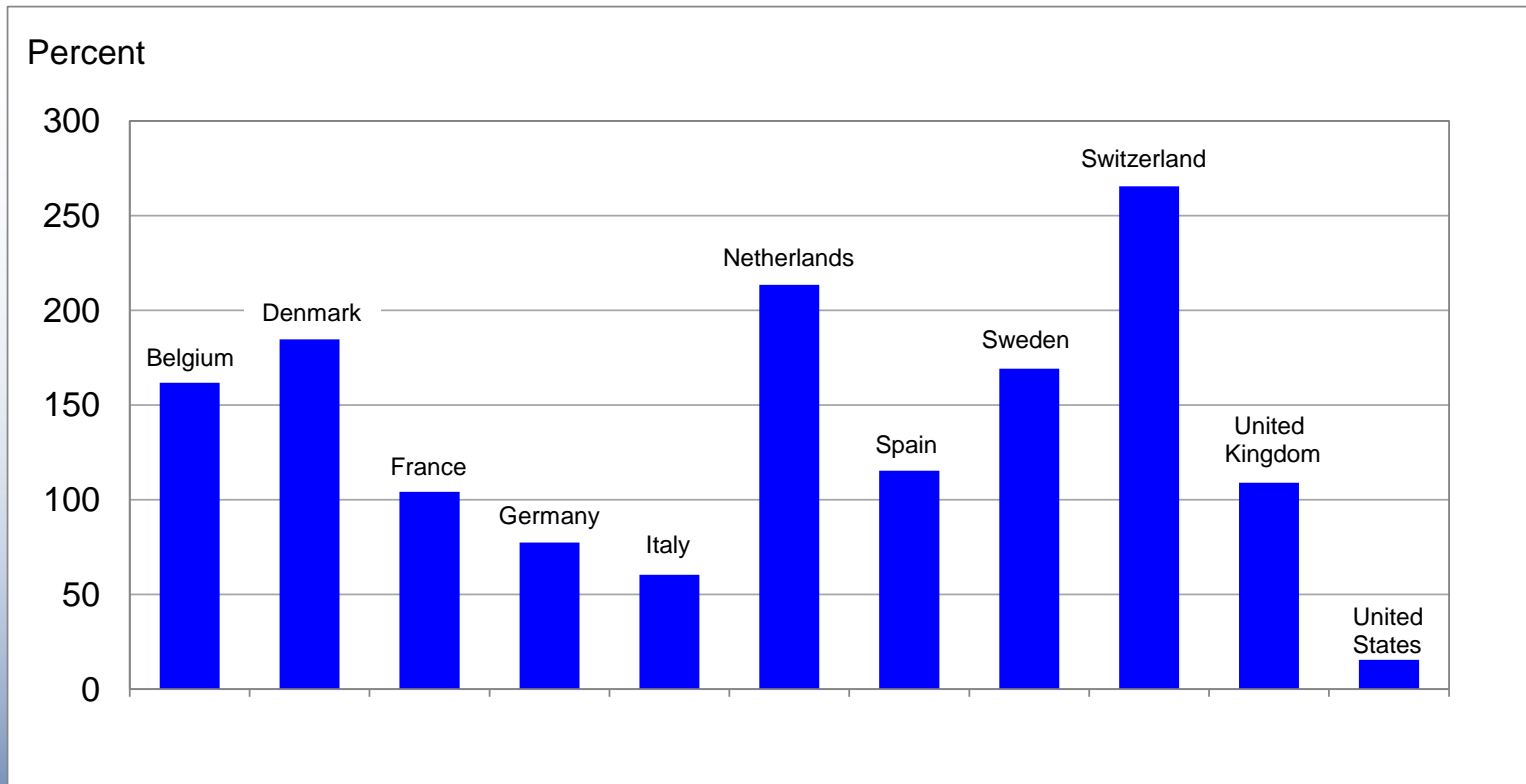


Source: BLS / Haver Analytics

Figure 20

Bank Size Relative to Country Size: Assets of Largest Bank as a Share of GDP

as of Year End 2010



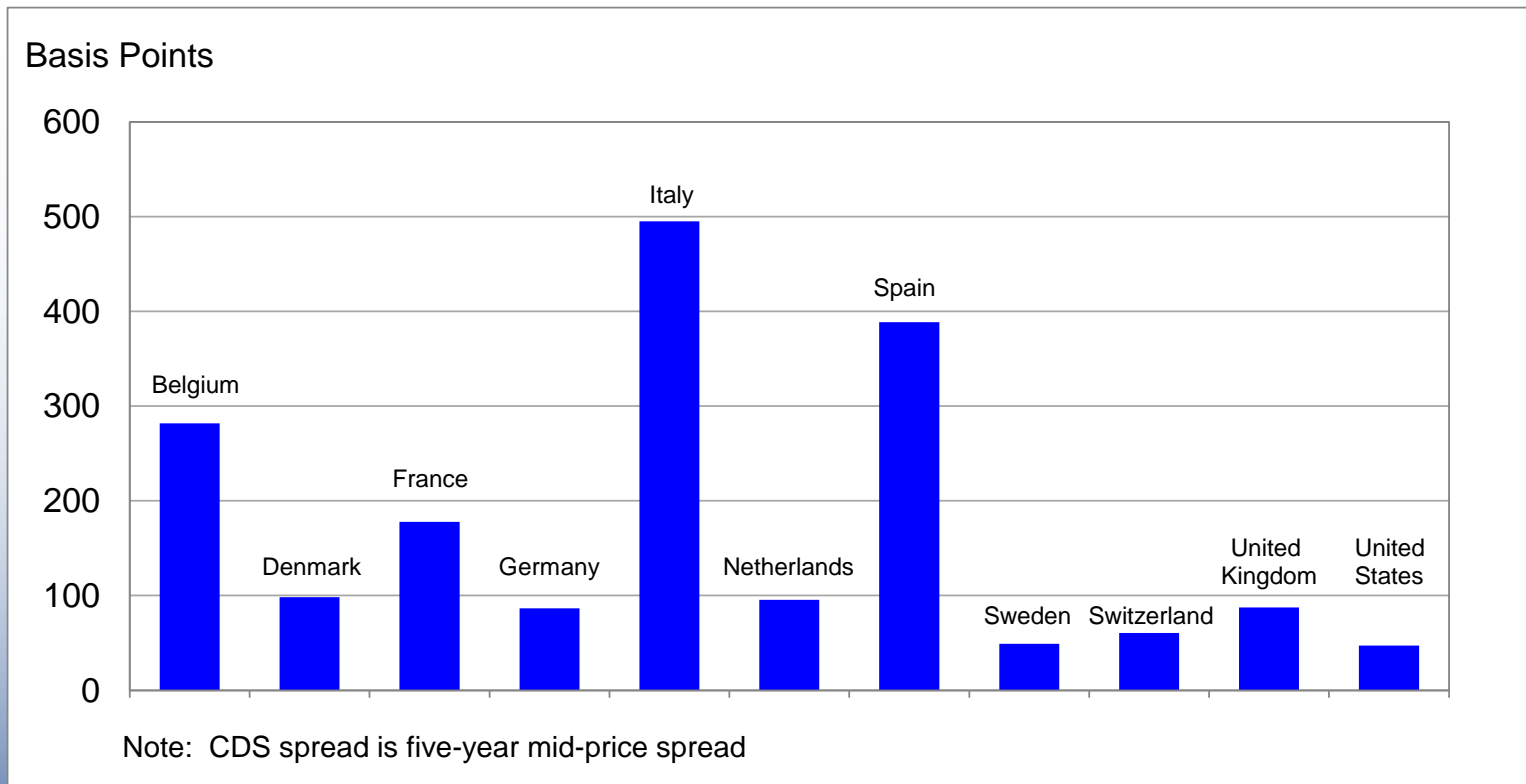
Note: Includes the U.S. and all European countries with a bank ranked in the top 50 worldwide as of year end 2010

Source: Global Finance, IMF

Figure 21

Sovereign Credit Default Swap Spreads

as of November 4, 2011



Note: Includes the U.S. and all European countries with a bank ranked in the top 50 worldwide as of year end 2010
Source: Bloomberg

Figure 22

Credit Default Swap Spreads of Largest Banks in Europe and the United States

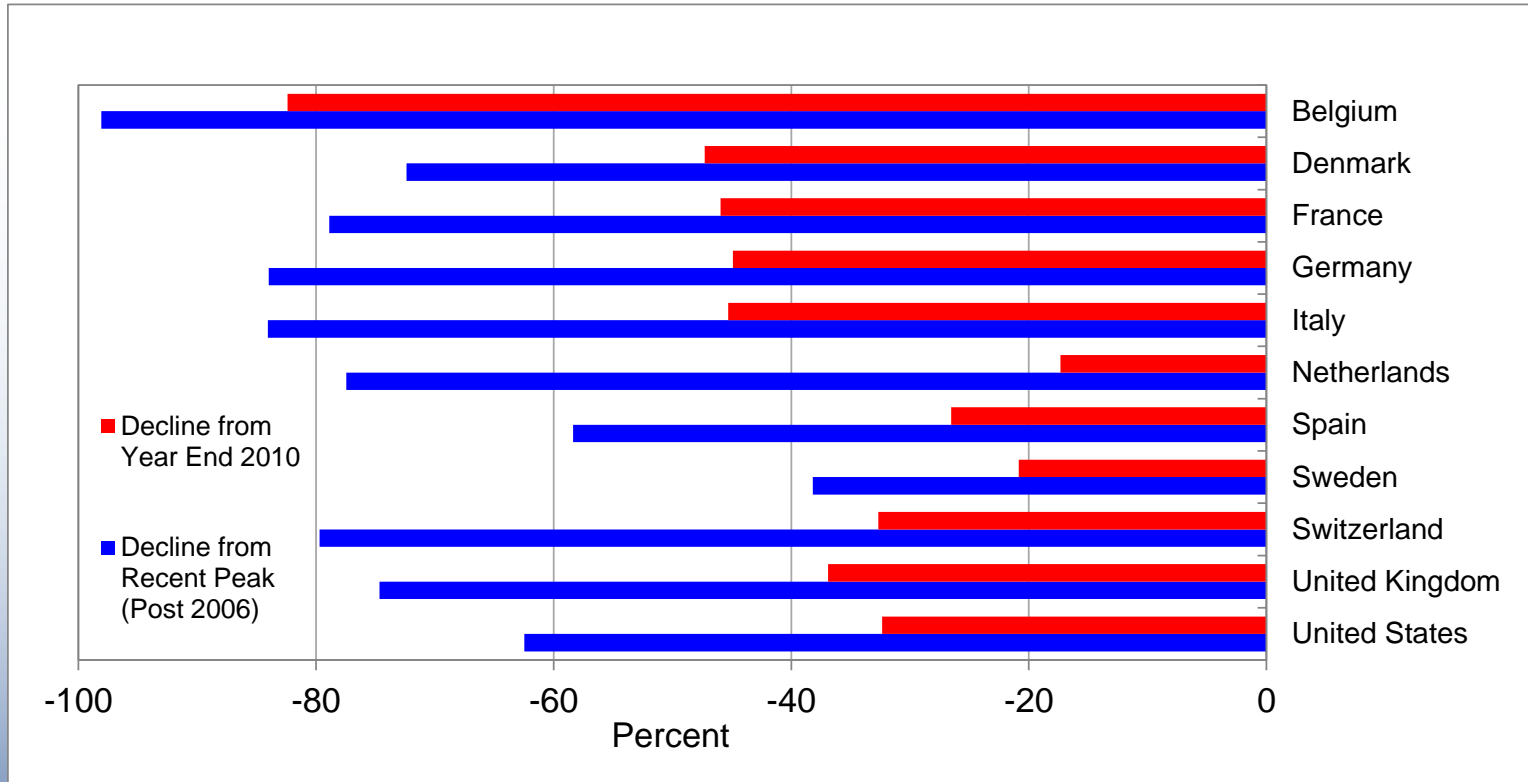
Largest Banks in Groups of Five	Average Bank Assets Billion Dollars	Average Five-Year Mid-Price CDS Spreads in Basis Points			
	Dec 31, 2010	Dec 29, 2006	Dec 31, 2008	Nov 4, 2011	Peak
Five Largest Banks	2,456	6	121	219	276
Next Five Largest Banks	2,019	9	128	233	381
Next Five Largest Banks	1,470	6	129	249	366
Next Five Largest Banks	1,028	12	158	291	420

Source: Global Finance, Bloomberg

Figure 23

Stock Price Declines at Largest Banks by Country

as of November 4, 2011



Note: Includes the U.S. and all European countries with a bank ranked in the top 50 worldwide as of year end 2010
 For countries with more than 1 bank in the top 20 in assets, declines are averaged

Source: Bloomberg

Figure 24

Stock Prices of Largest Banks in Europe and the United States

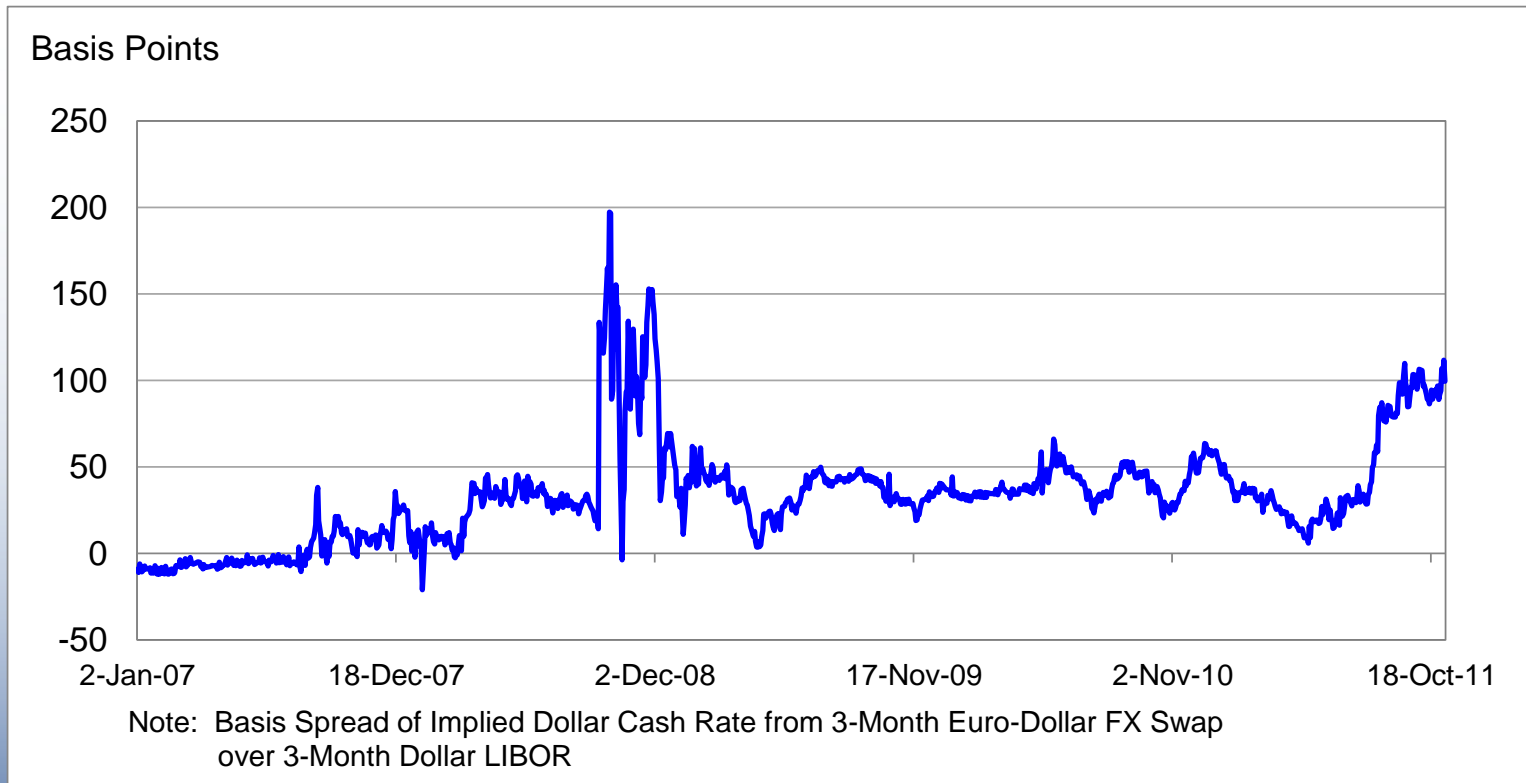
Largest Banks in Groups of Five	Average Bank Assets Billion Dollars Dec 31, 2010	Average Stock Prices: Index Level Dec 29, 2006 = 100			Average Percent Change	
		Dec 30, 2008	Nov 4, 2011	Peak (Post 2006)	Peak to Nov 4, 2011	Year End 2010 to Nov 4, 2011
Five Largest Banks	2,456	33	33	110	-70	-31
Next Five Largest Banks	2,019	30	26	104	-76	-34
Next Five Largest Banks	1,470	41	32	111	-71	-37
Next Five Largest Banks	1,028	34	25	118	-79	-45

Source: Global Finance, Bloomberg

Figure 25

Dollar Funding Pressures

January 2, 2007 - November 4, 2011



Source: British Bankers' Association, Deutsche Bundesbank, Financial Times / Haver Analytics

U.S. Monetary Policy Response to Weak Recovery

- Short-term interest rates at the zero bound
- Expanded Fed balance sheet, including mortgage securities
- Increased holdings of long-term securities
- Altered communications

Recent FOMC Actions

- Expect short-term rates low until mid-2013
- Downward pressure on longer-term interest rates
- Extending the average maturity of our holdings of securities
- To support conditions in mortgage markets, reinvest principal payments from holdings of agency debt and mortgage-backed securities in agency mortgage-backed securities

Monetary Policy Cannot Fully Offset Problems, but Can Mitigate Some Effects

- Reducing unemployment by half a percent means 750,000 jobs
- Unemployment at 9.0% and medium term inflation restrained
- Goal is to restore economy to full employment and 2% inflation
- The sooner the economy improves the more quickly we can normalize interest rates