



The Anemia Continues (and other complaints)

Pinal Partnership

December 12th, 2014

**Presented By:
Elliott D. Pollack
CEO, Elliott D. Pollack & Company**



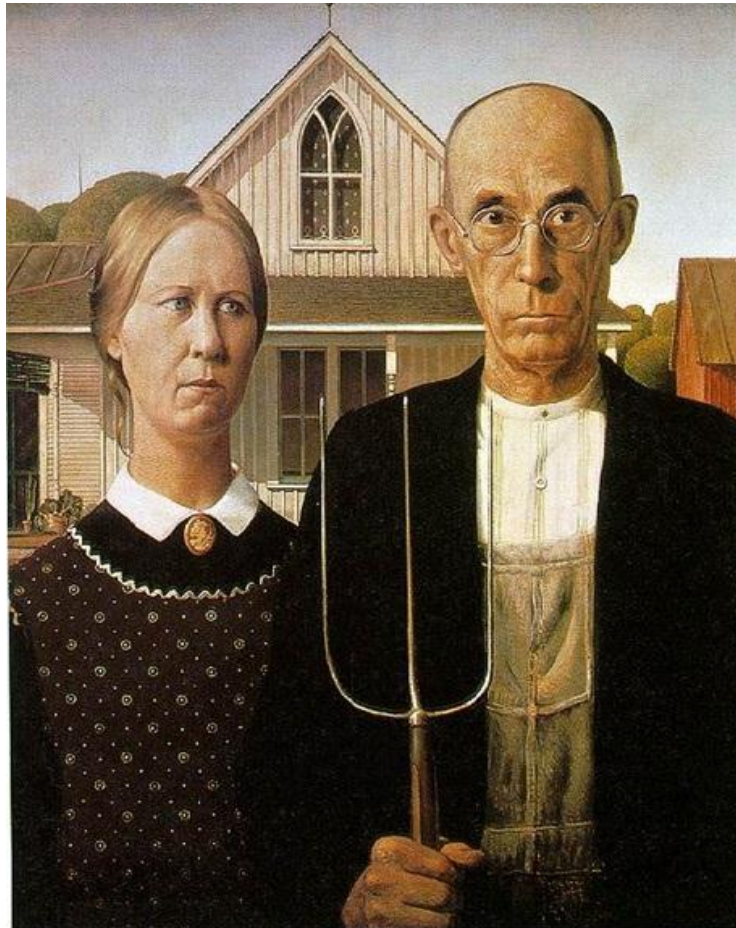
Good News –

The recovery should continue because there are no significant imbalances.



Overall

- No irrational exuberance



Consumers

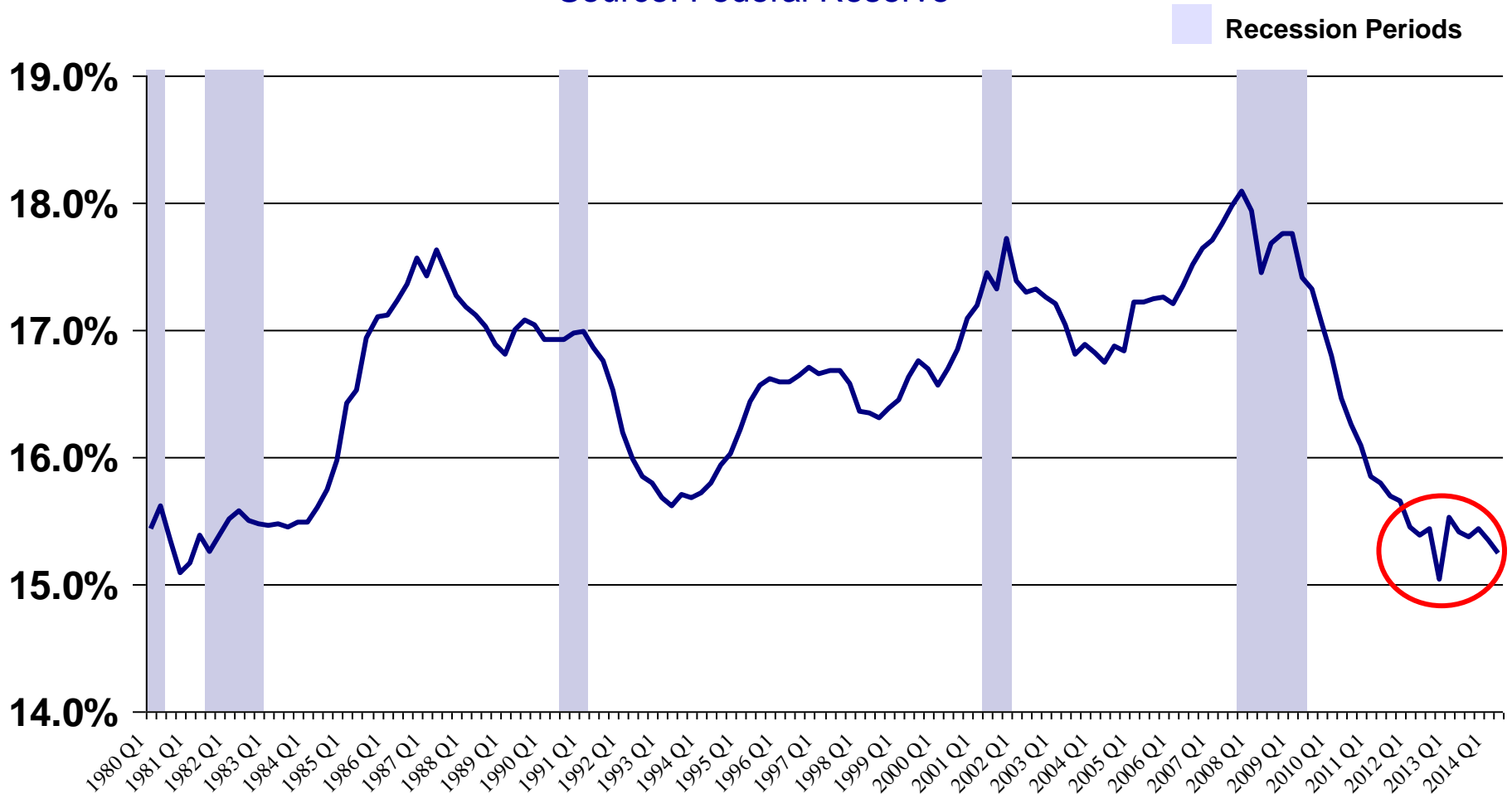
- Debt burden low



Financial Obligation Ratio**

1980 – 2014*

Source: Federal Reserve



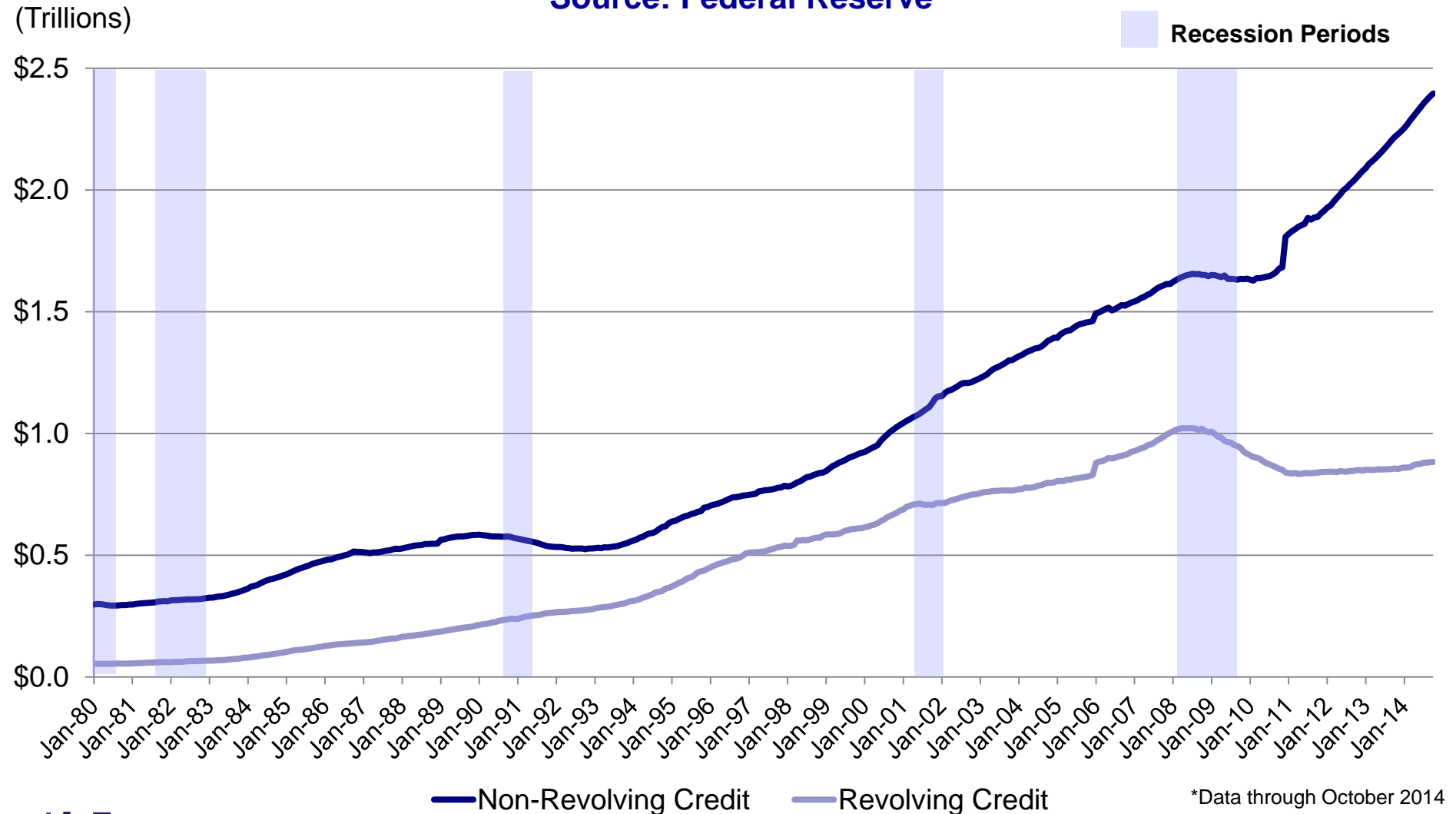
*Data through second quarter 2014

**Ratio of mortgage and consumer debt (including auto, rent and tax payments) to disposable income.



U.S. Consumer Credit 1980 - 2014*

Source: Federal Reserve



*Data through October 2014



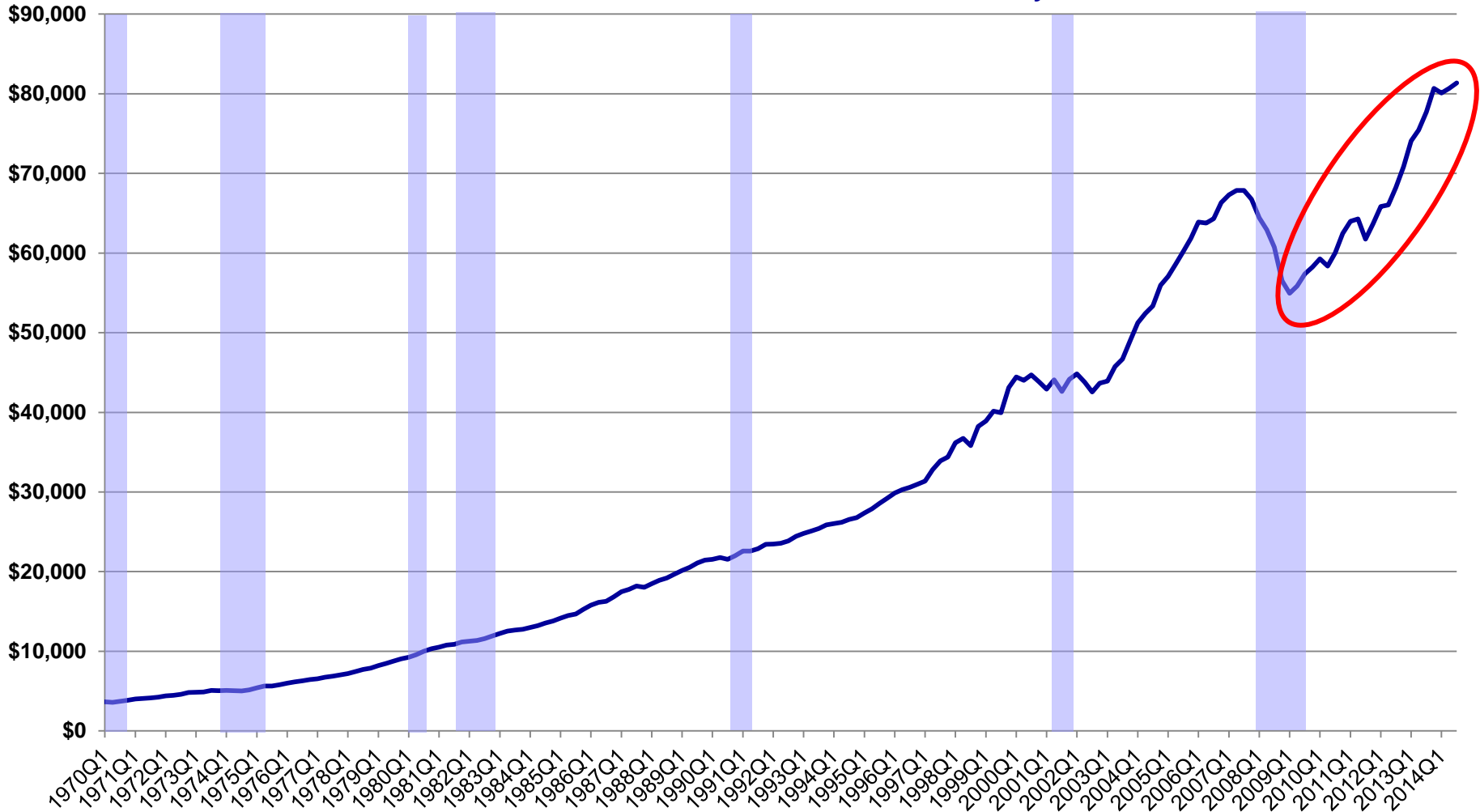
- Net worth improved



U.S. Household Net Worth (Billions of Dollars, NSA) 1970 - 2014*

Recession Periods

Source: Board of Governors of the Federal Reserve System



- Consumer Confidence High

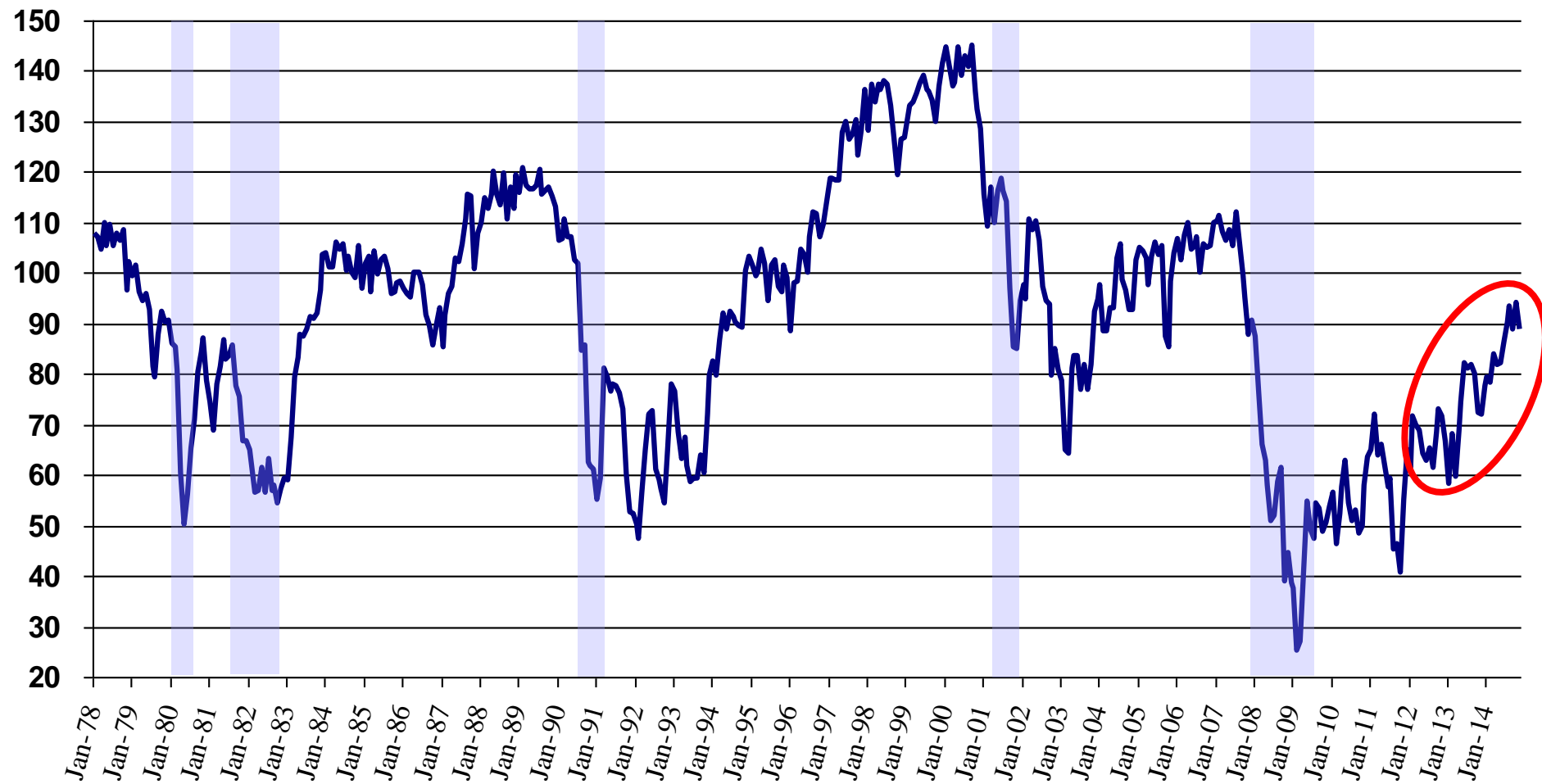


Consumer Confidence

1978 – 2014*

Source: The Conference Board

Recession Periods



*Data through November 2014.

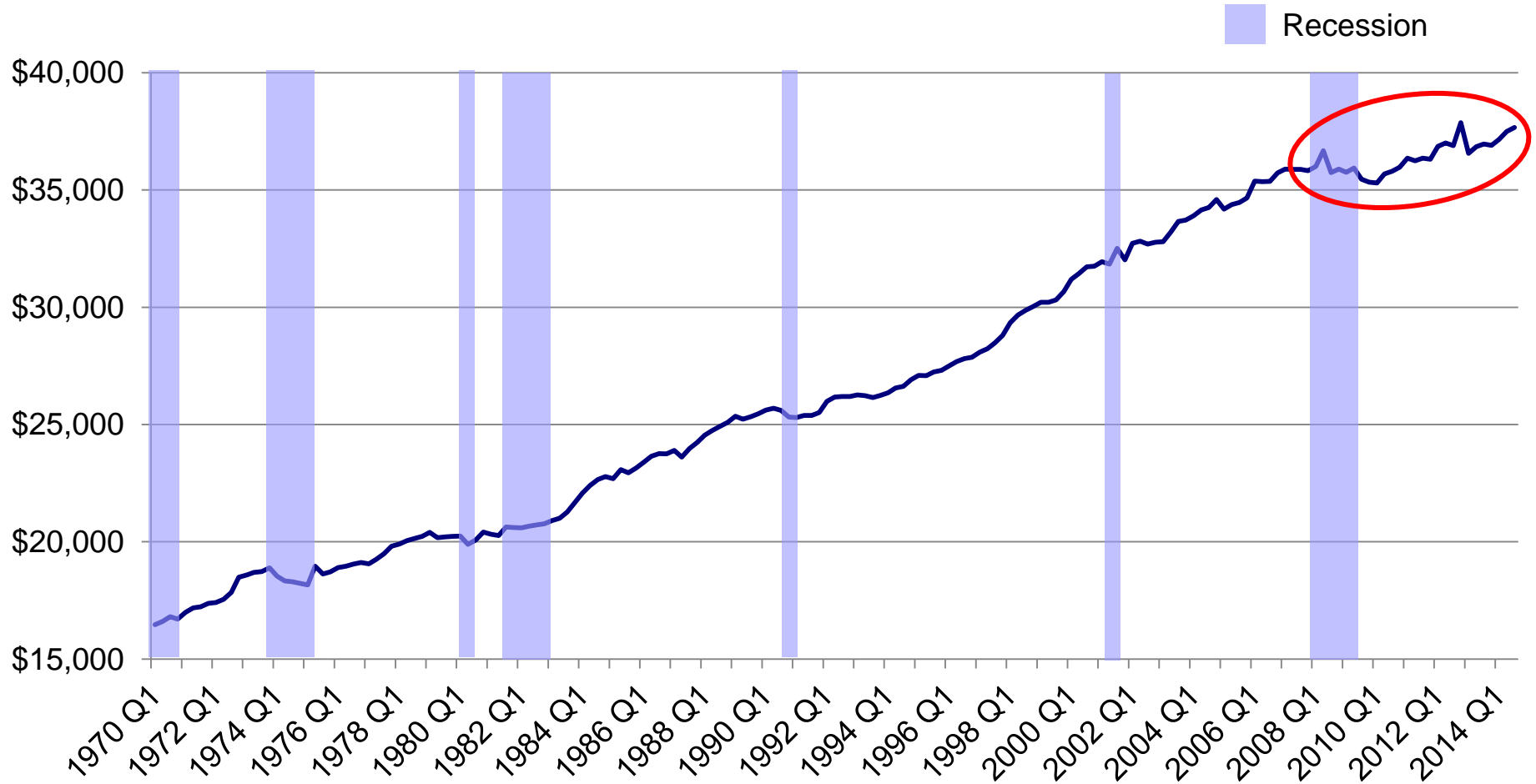


- Real income growth



Real Disposable Personal Income Per Capita 1970-2014*

Source: Bureau of Economic Analysis



* Data through third quarter 2014



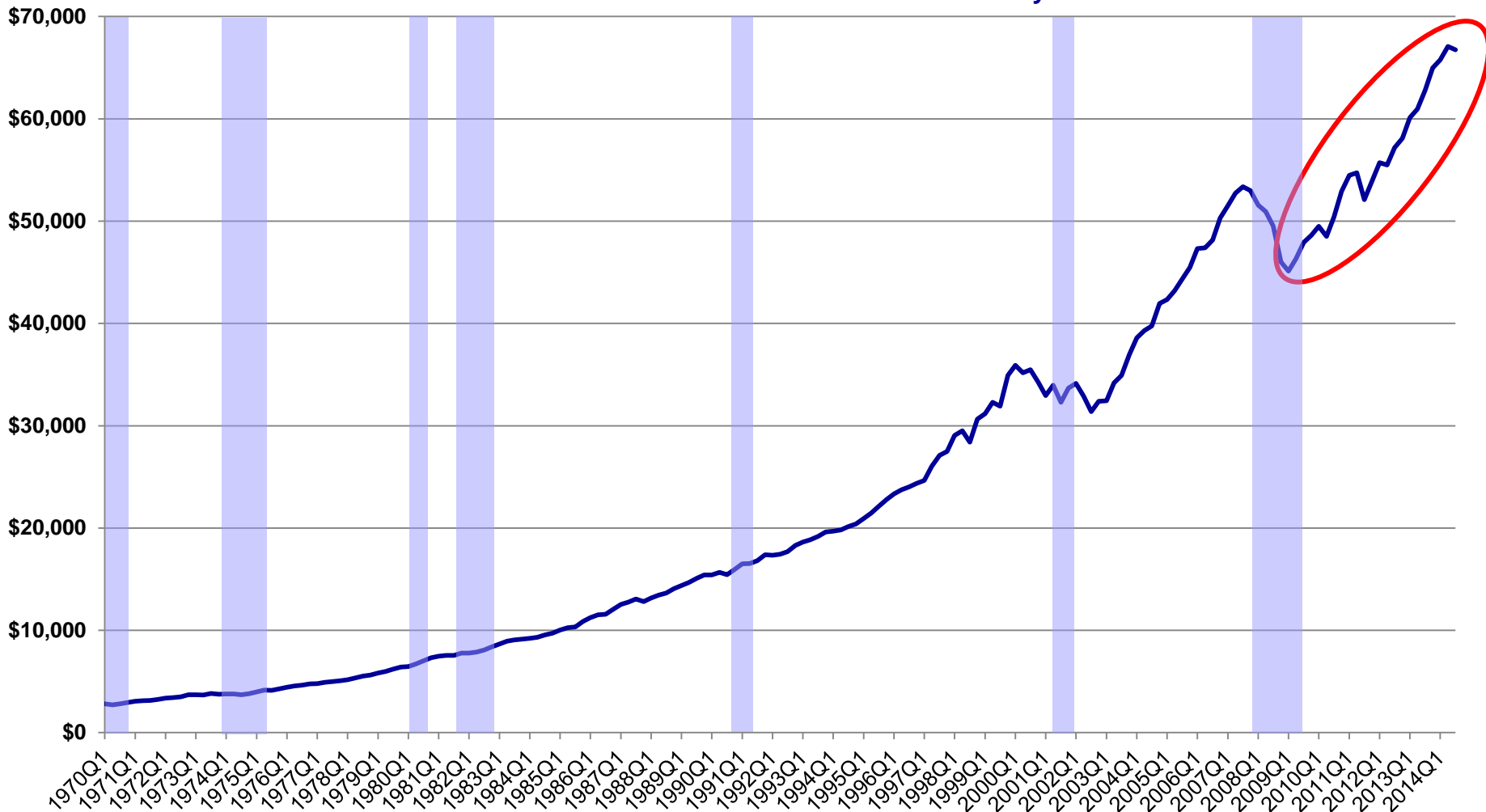
- Liquidity improving



U.S. Household Financial Assets (Billions of Dollars, NSA) 1970 - 2014*

Recession Periods

Source: Board of Governors of the Federal Reserve System



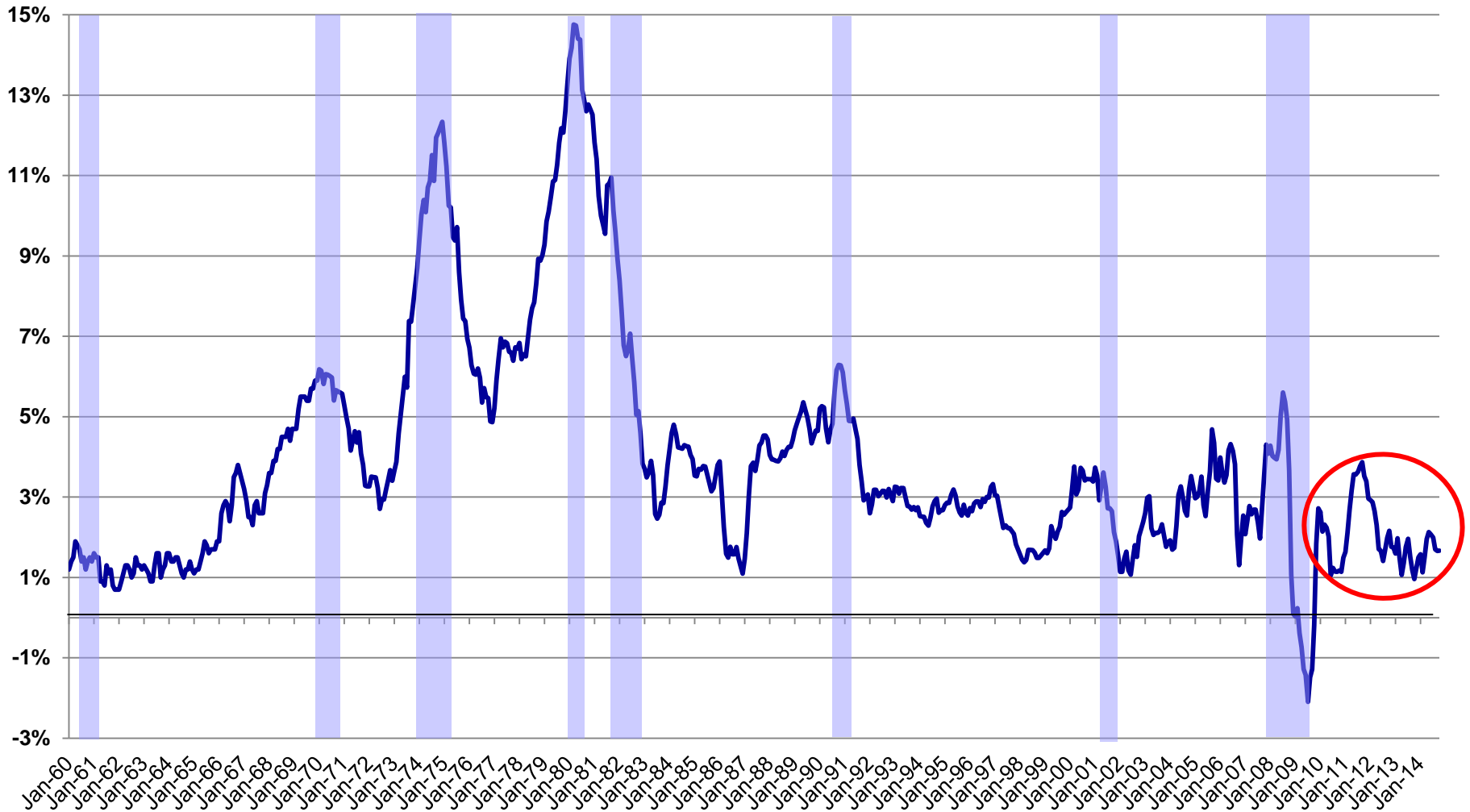
- Inflation low



U.S. Consumer Price Index Annual Percent Growth 1960 - 2014*

Source: Bureau of Labor Statistics

Recession Periods



Business

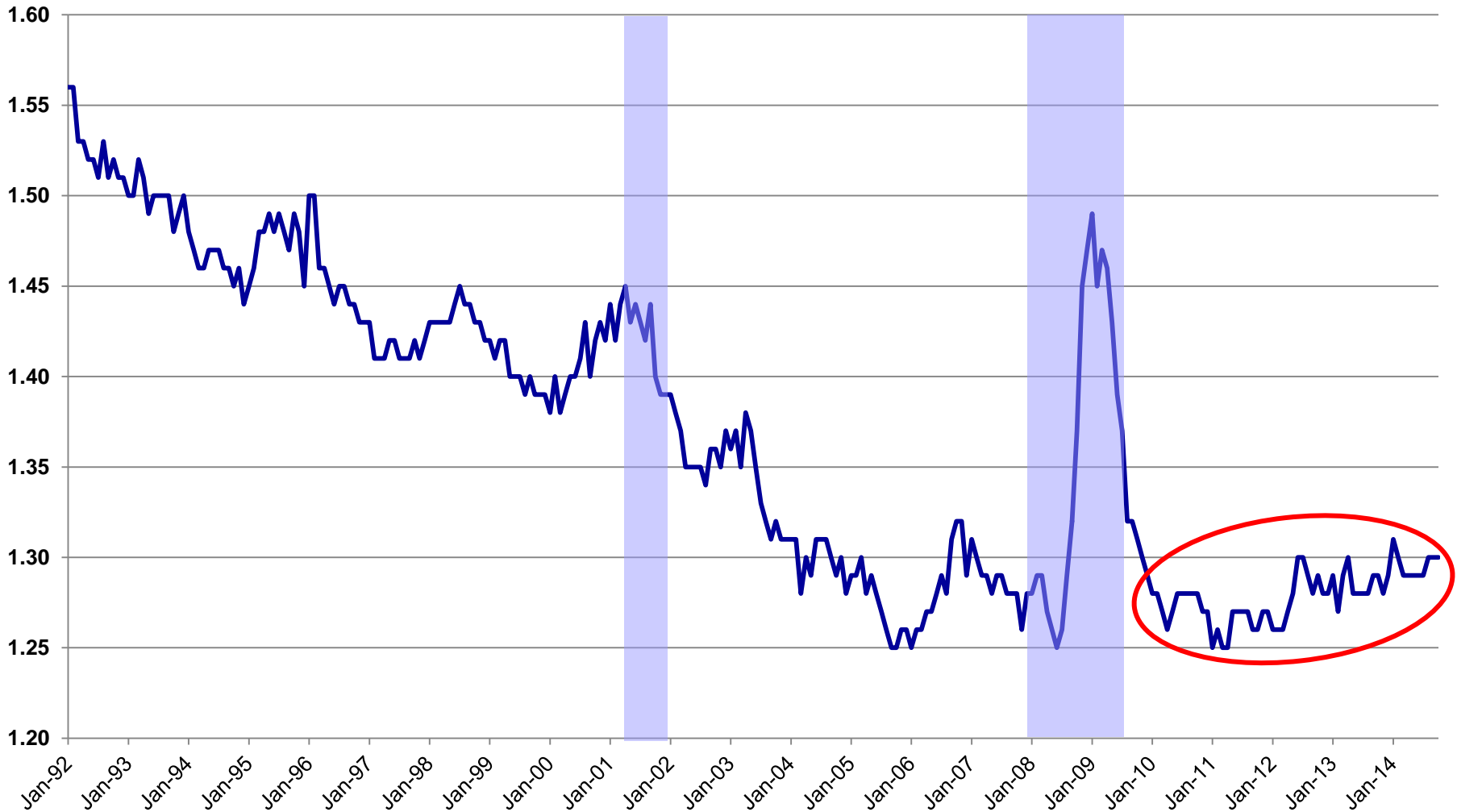
- No excess inventory



U.S. Inventory to Sales Ratio 1992 - 2014*

Source: Bureau of Labor Statistics

Recession Periods



*Data through October 2014

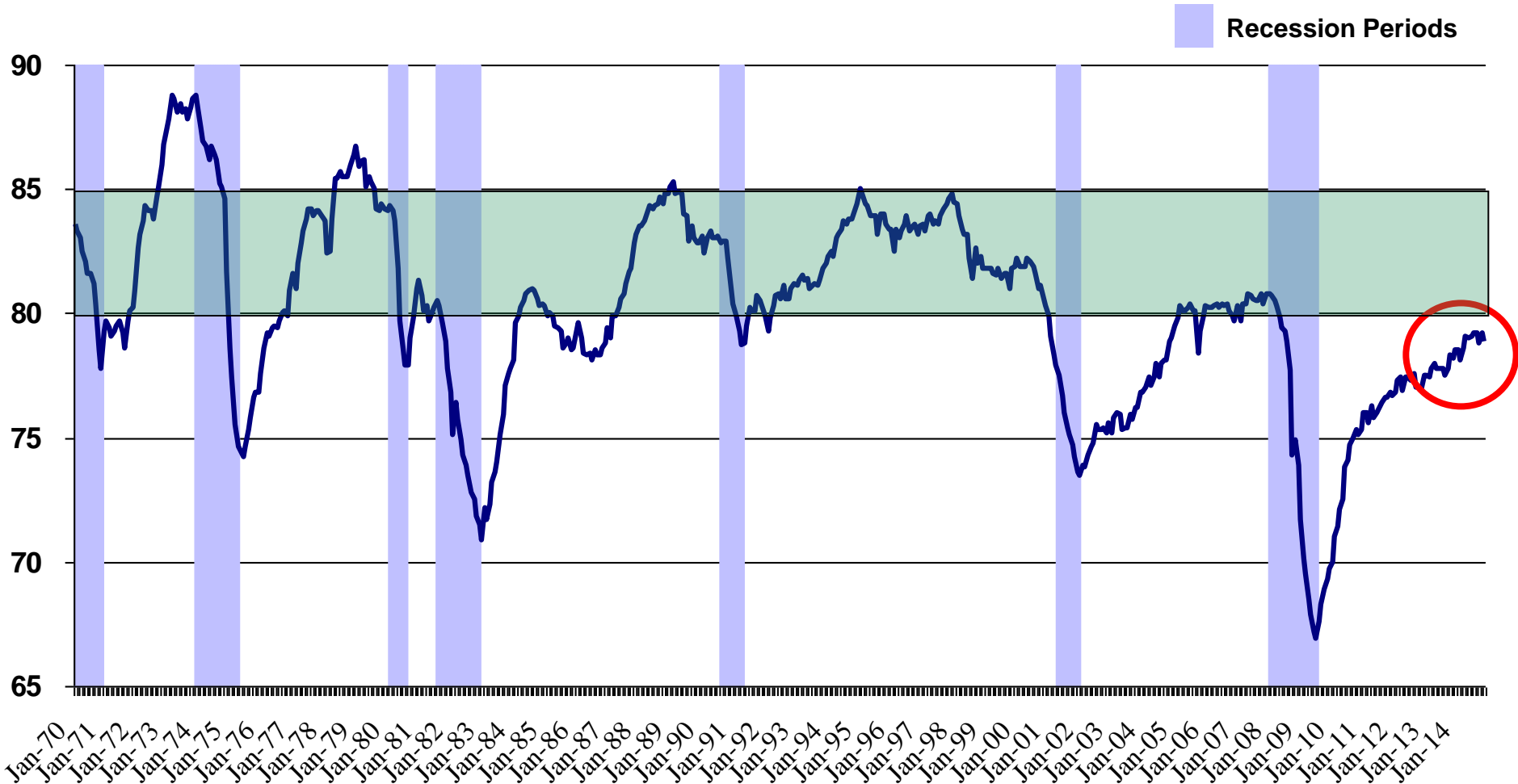


- No capacity issues



Capacity Utilization Rate 1970 – 2014*

Source: The Federal Reserve Bank of St. Louis



*Data through October 2014.

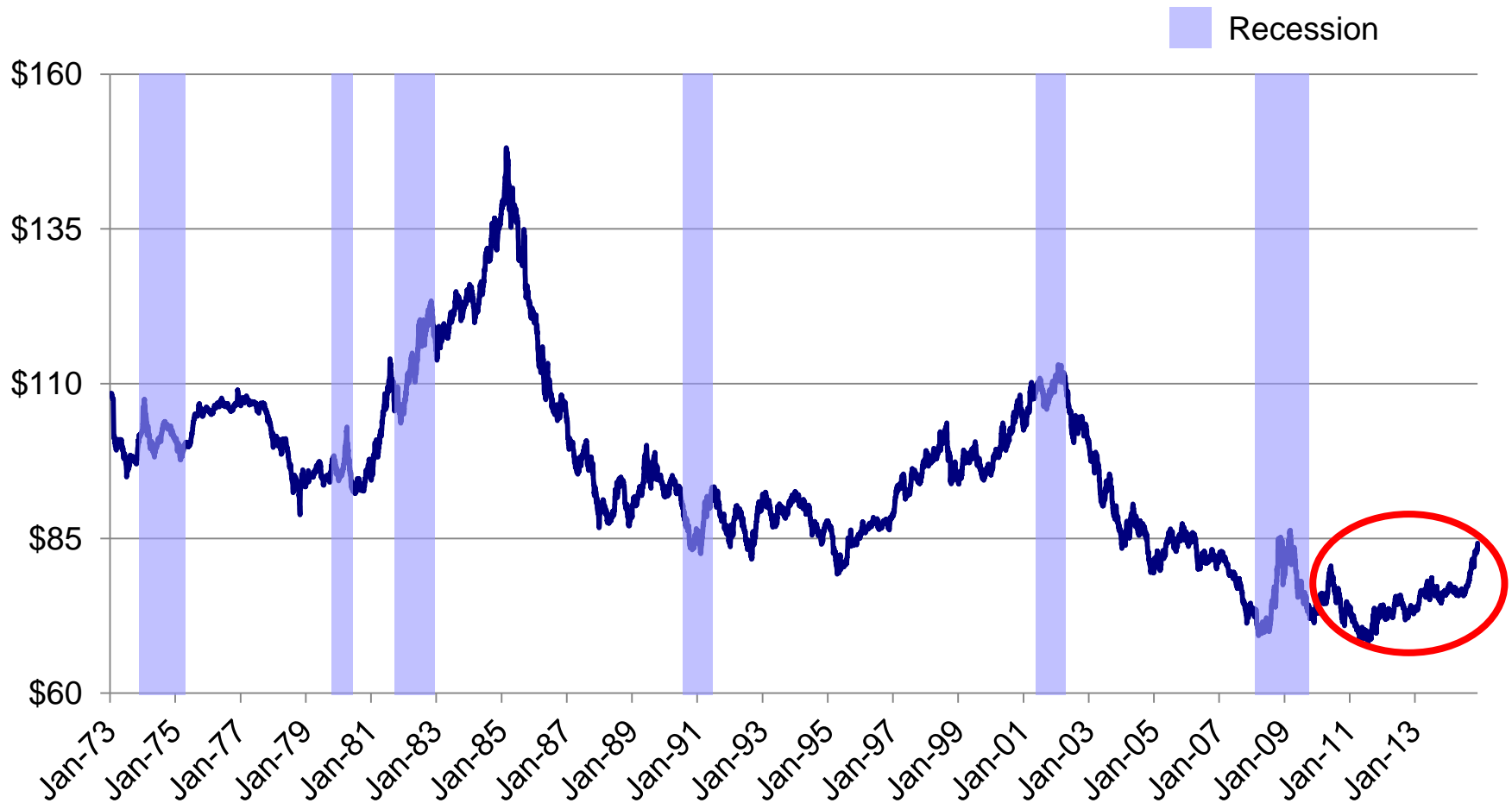


- Dollar not overly strong



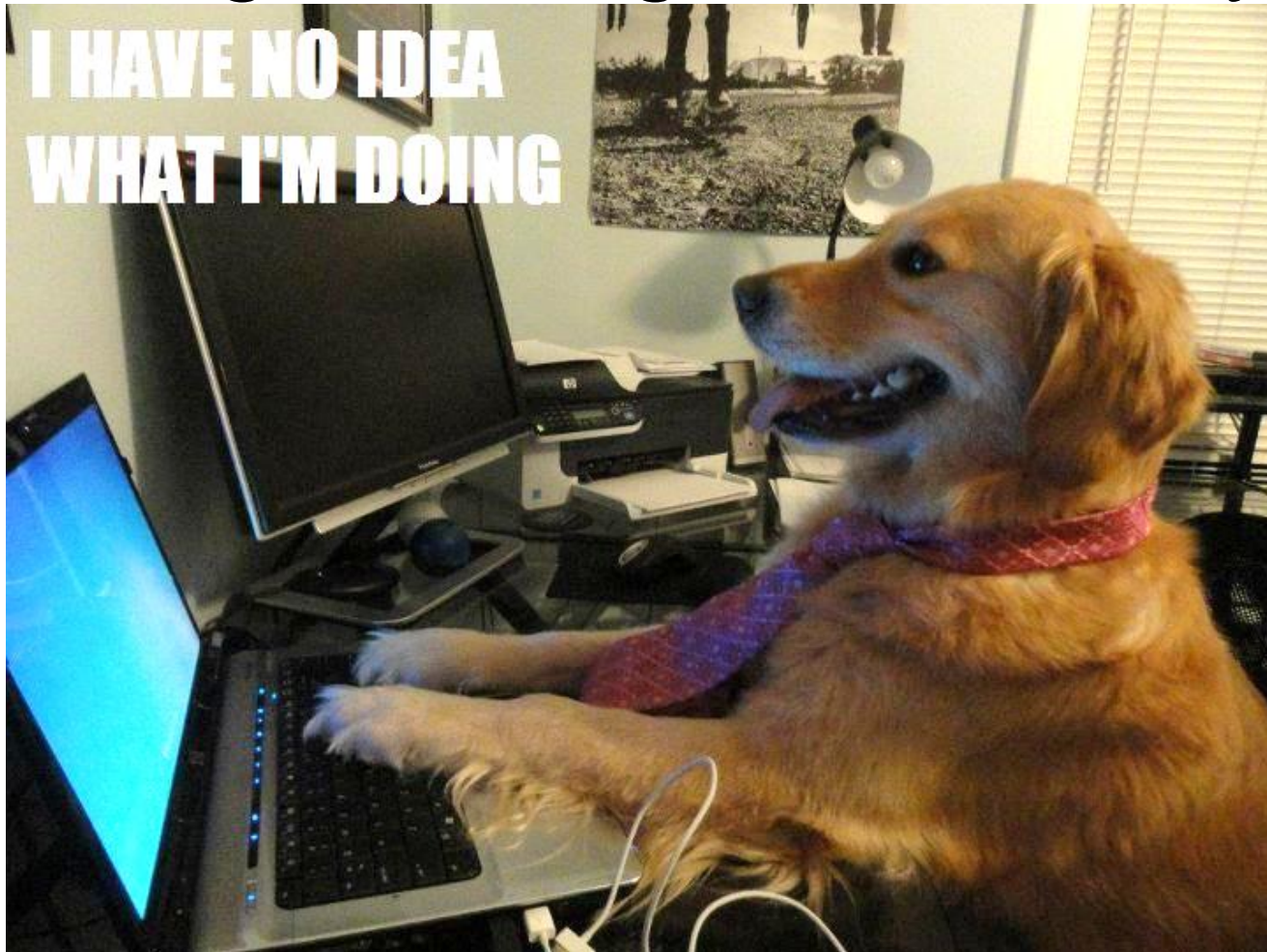
U.S. Dollar Trade Weighted Exchange v. Major Currencies 1973-2014*

Source: U.S. Federal Reserve



Government

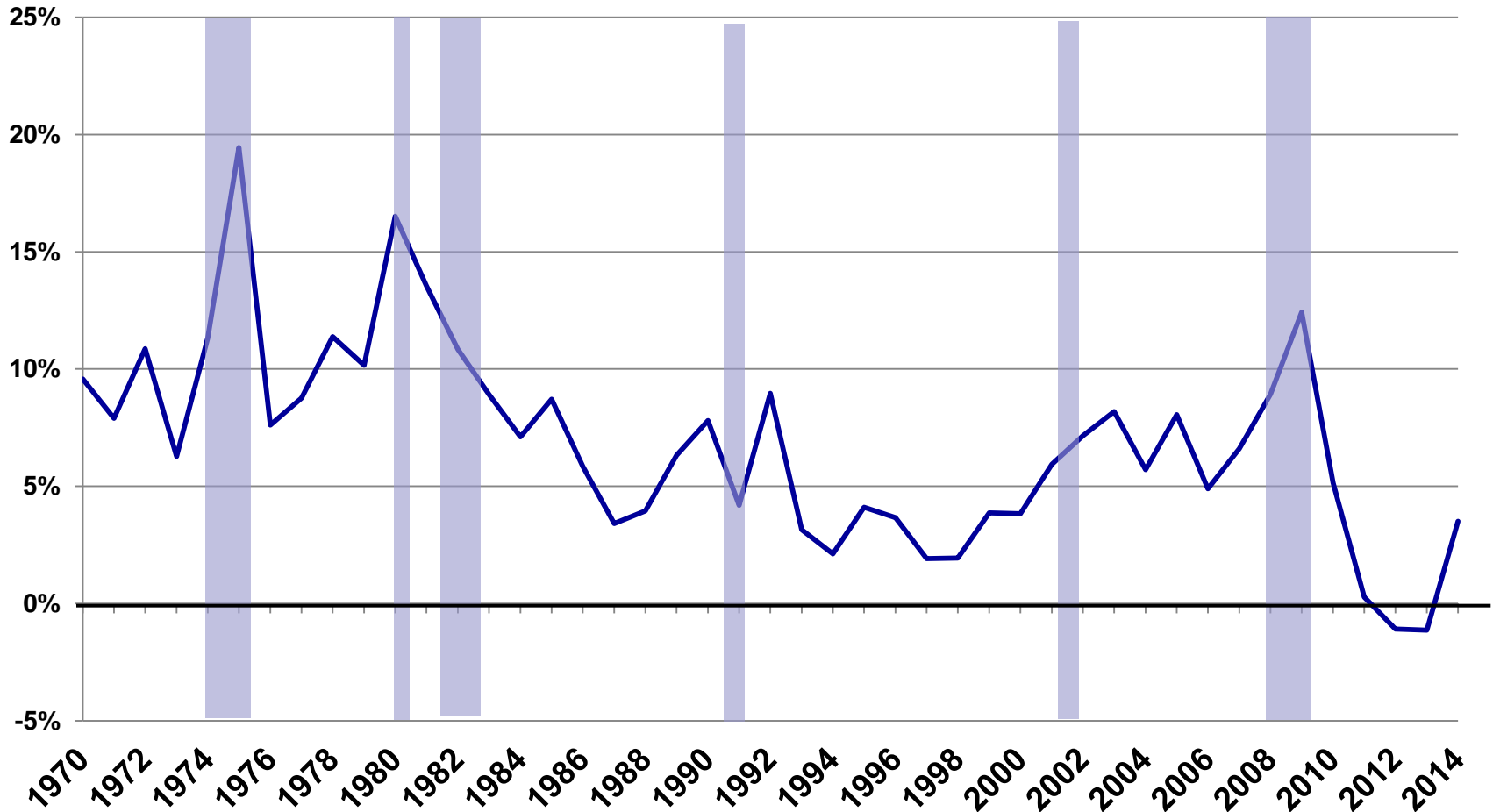
- No longer a drag on economy



Federal Government Expenditures Percent Change Year Ago 1970-2014*

Source: U.S. Bureau of Economic Analysis

Recession Periods



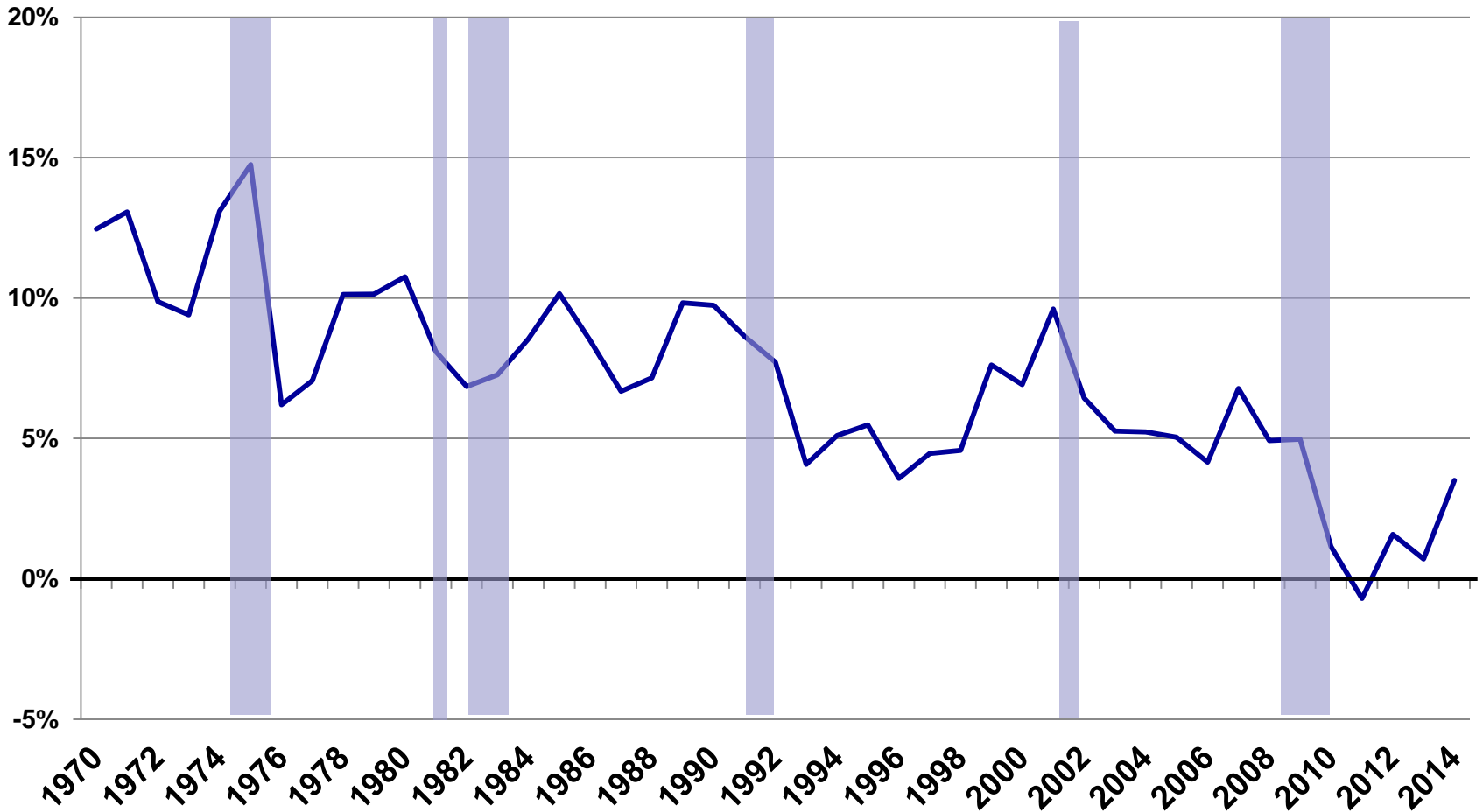
*Data through third quarter 2014.



State and Local Government Expenditures Percent Change Year Ago 1970-2014*

Source: U.S. Bureau of Economic Analysis

Recession Periods



- Fed policy still expansive

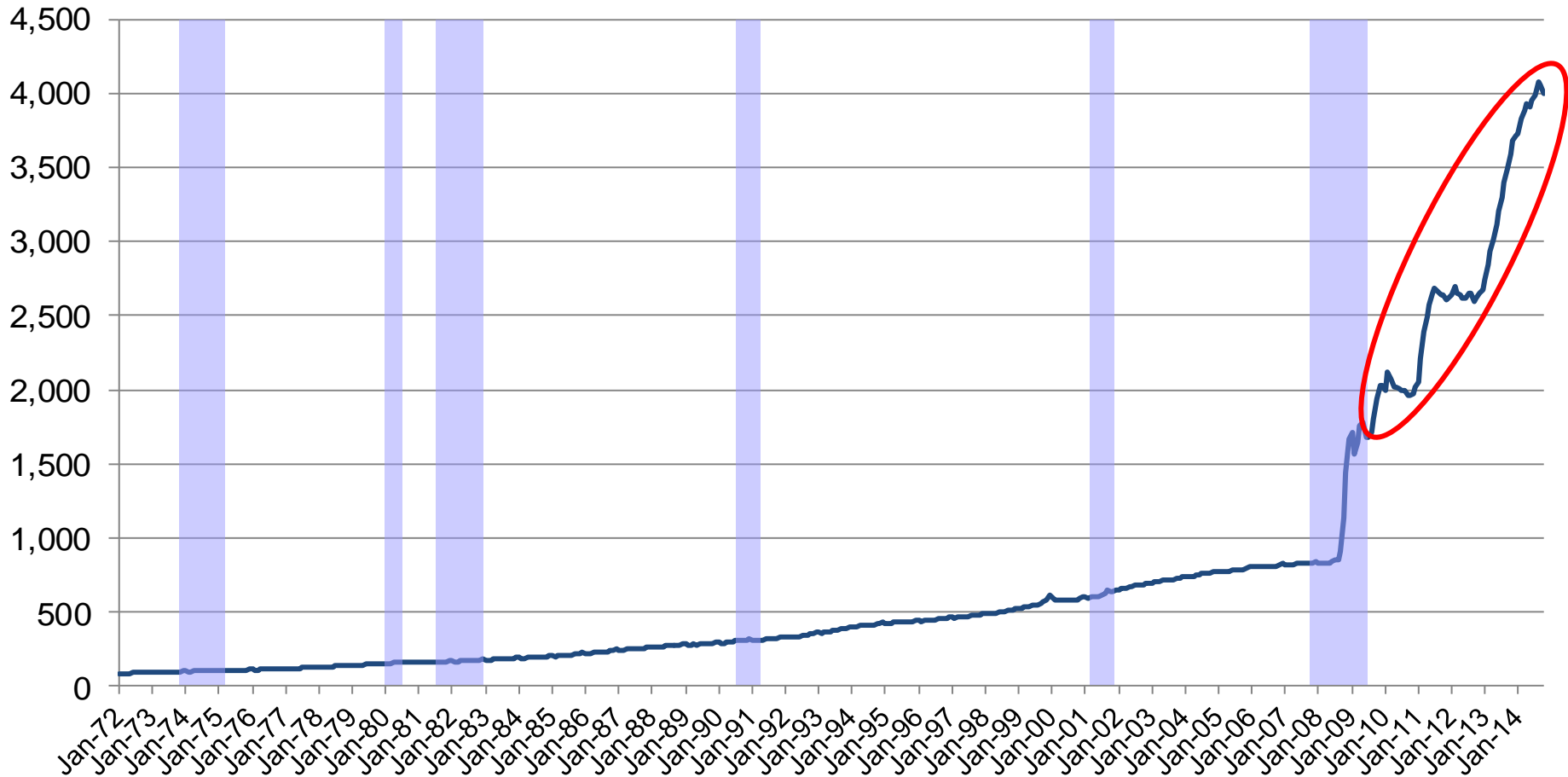


Monetary Base* 1970 – 2014**

Source: Federal Reserve

Recession Periods

(\$ mil NSA)



*The Monetary base is defined as the sum of currency in circulation and reserve balances (deposits held by banks and other depository institutions in their accounts at the Federal Reserve).

**Data through October 2014.



NATIONAL ECONOMY –

**Continued subpar growth.
But, recovery should continue
and growth should accelerate.**

**Major impact of sequestration
and tax increases should be
behind us.**



No Accelerator to Income

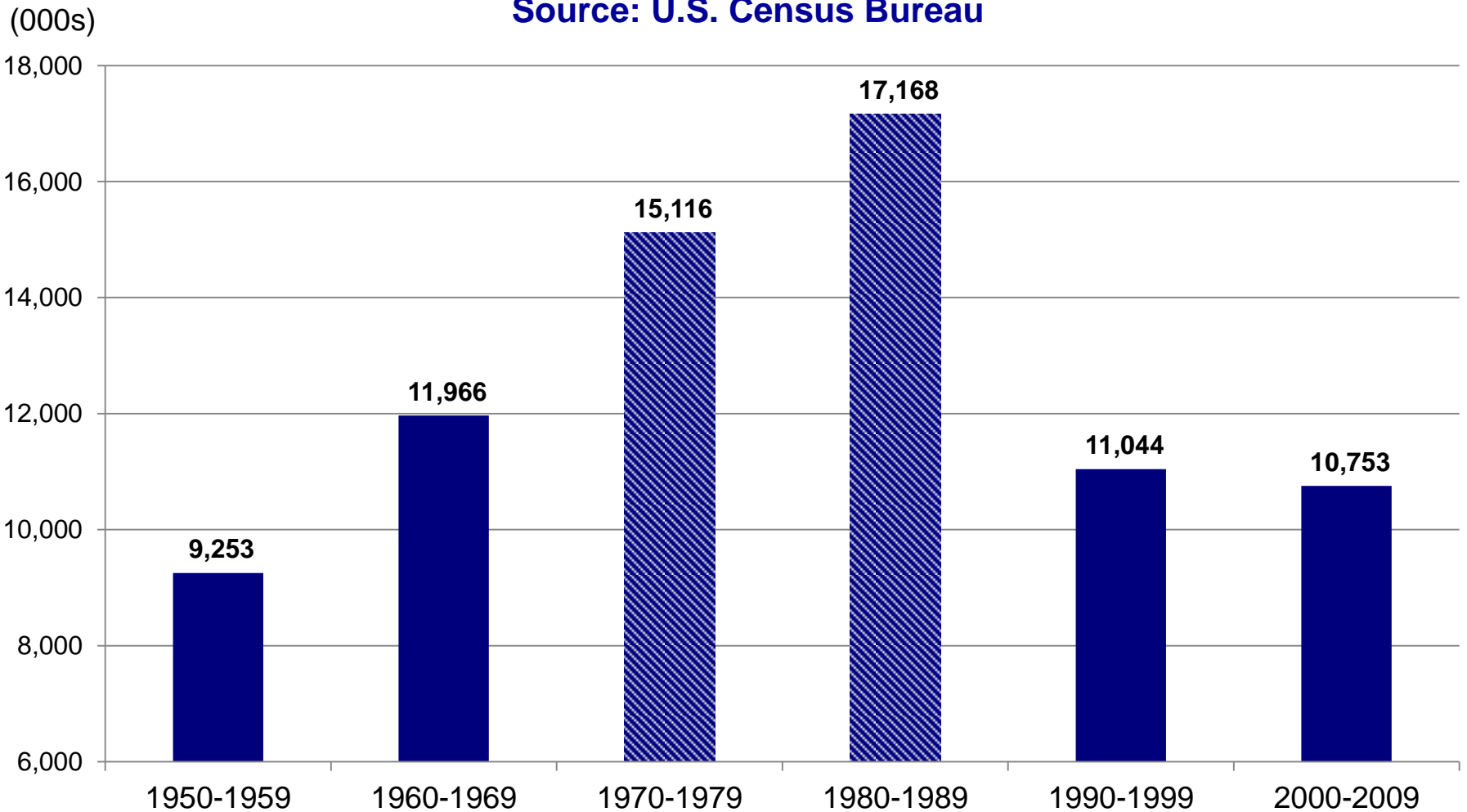


- **70s and 80s**– rapid increase in household formation.



U.S. Household Formations Net Change in Households 1950-2009

Source: U.S. Census Bureau

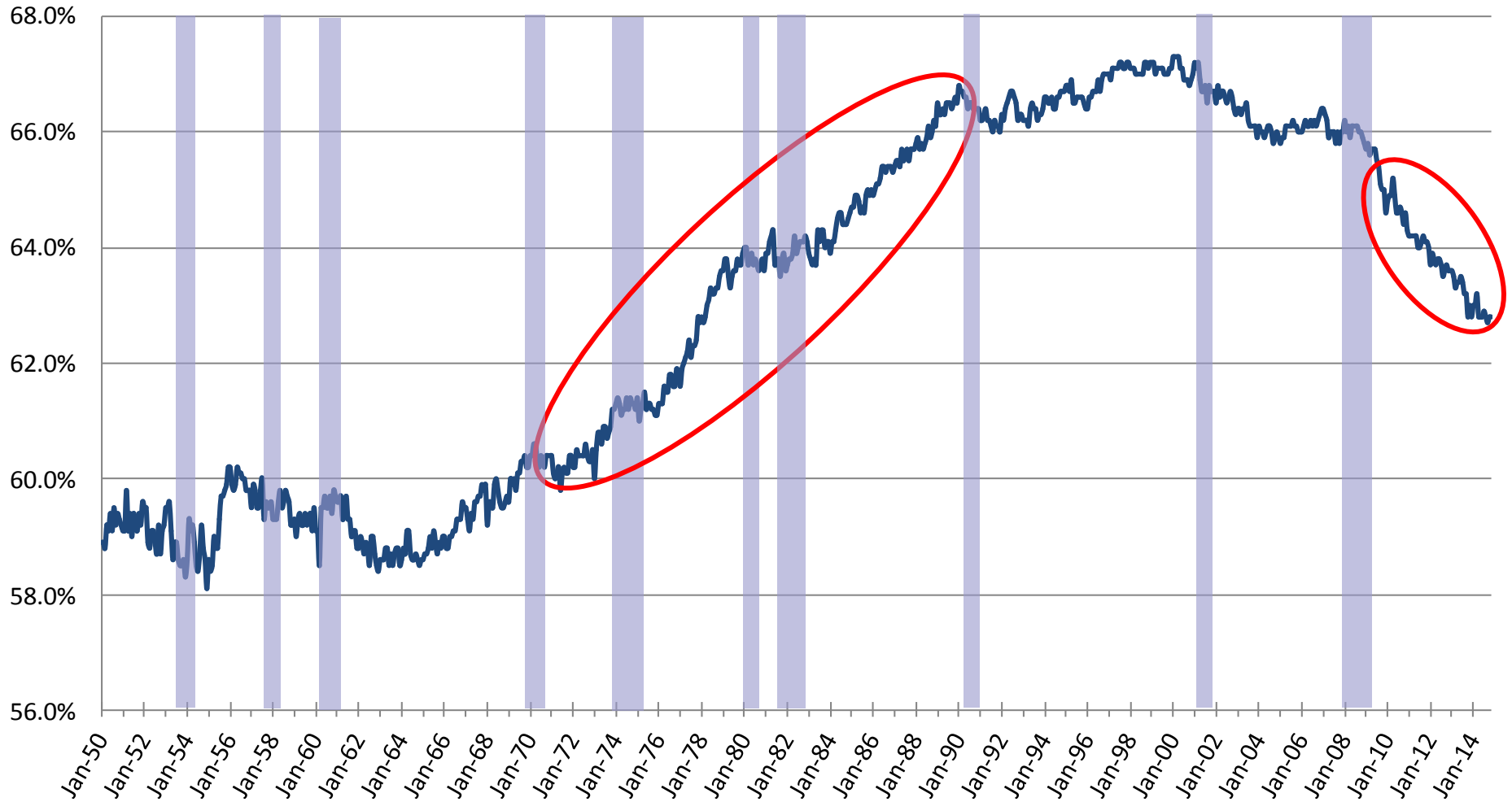


Labor Force Participation Rate (16 years and over)

1950 – 2014*

Source: Bureau of Labor Statistics

■ Recession Periods



*Seasonally adjusted data through November 2014



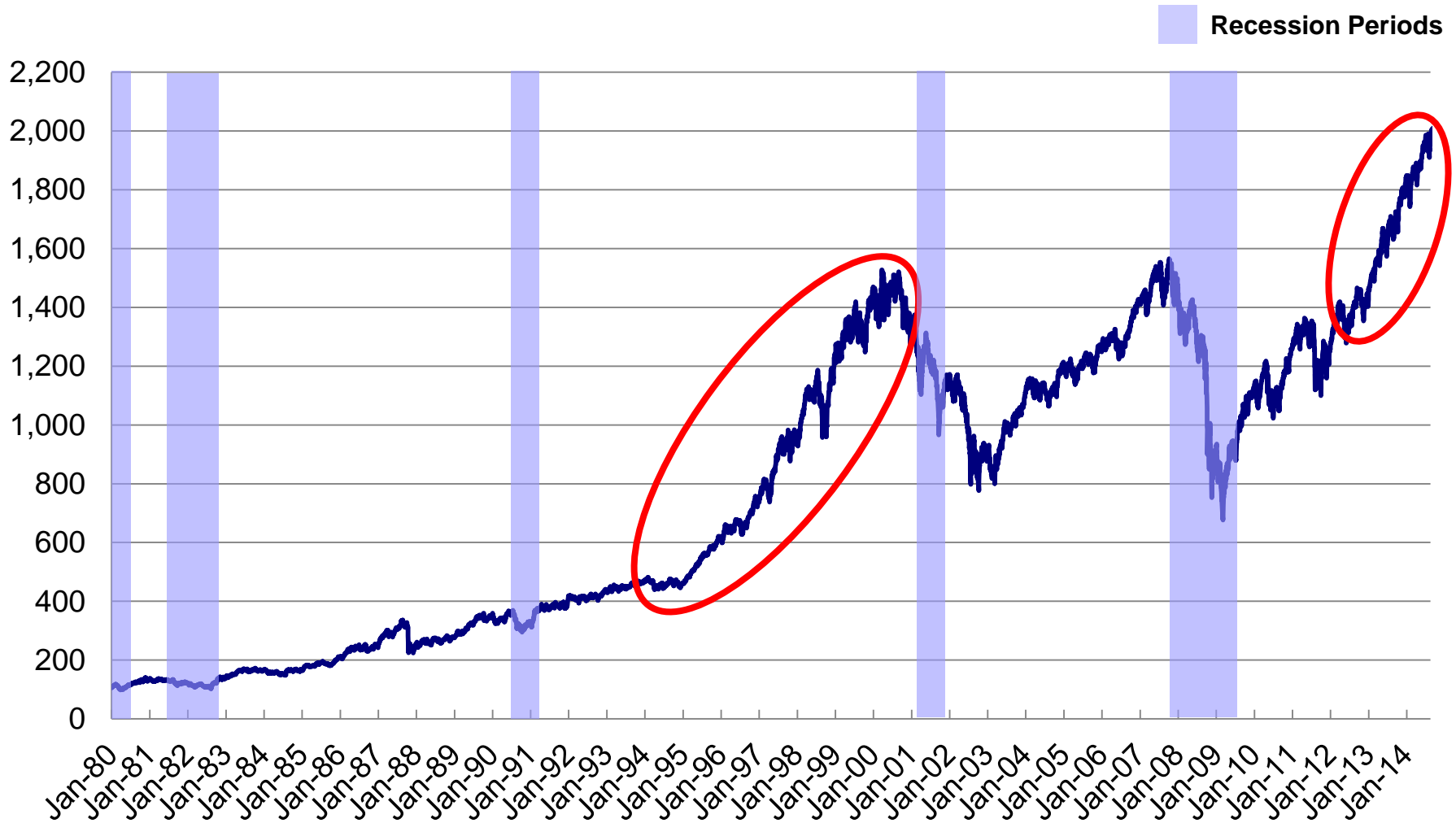
■ 90s – huge increase in stock market.



Elliott D. Pollack & Company

S&P 500 1980-2014*

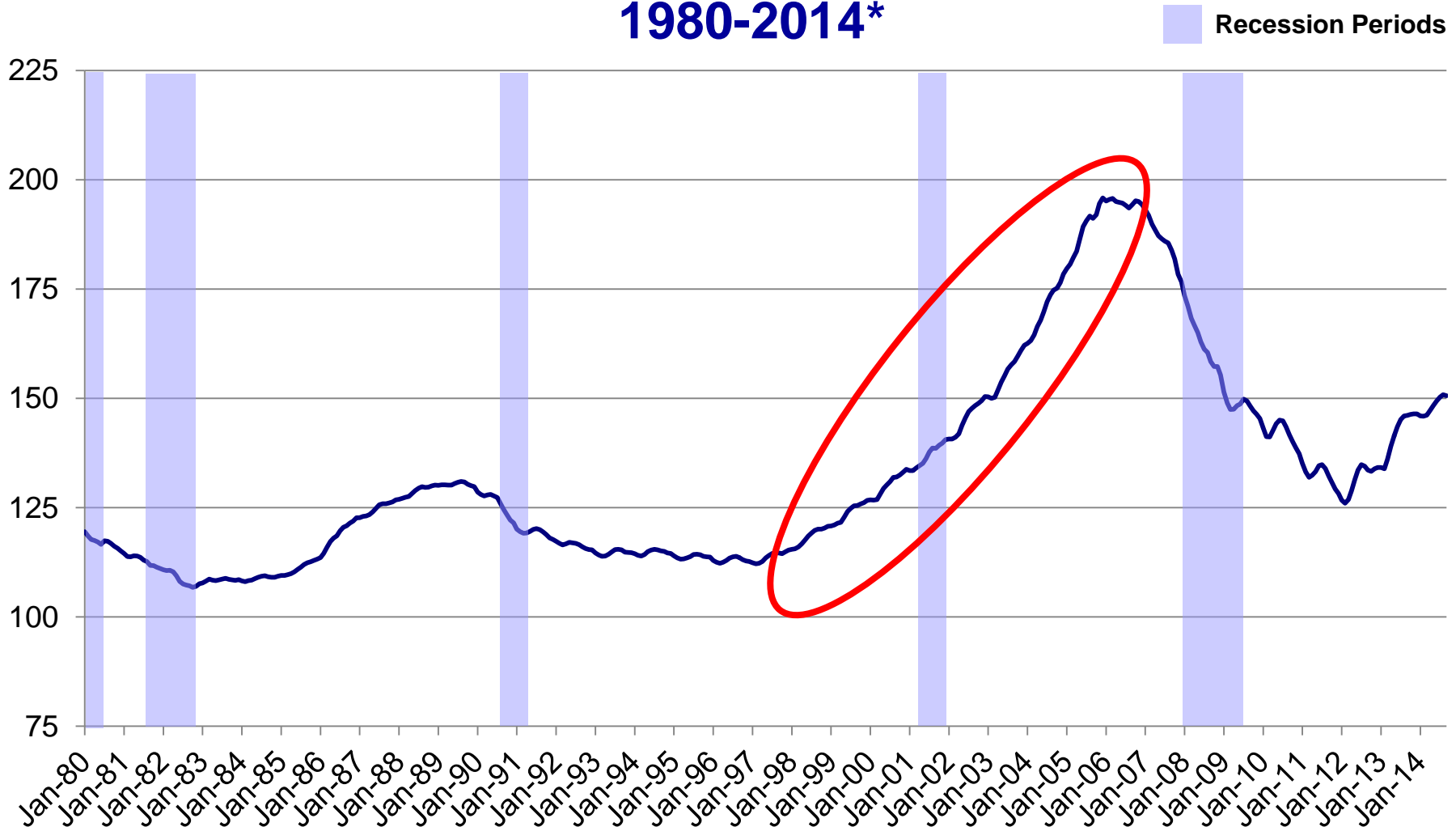
Source: Standard & Poor's (S&P); Moody's Analytics (ECCA) Converted



- **96 – 2005** – rapid increase in housing prices and big jump in housing based credit.



Long-Term Home Prices in the U.S. Adjusted for Inflation 1980-2014*



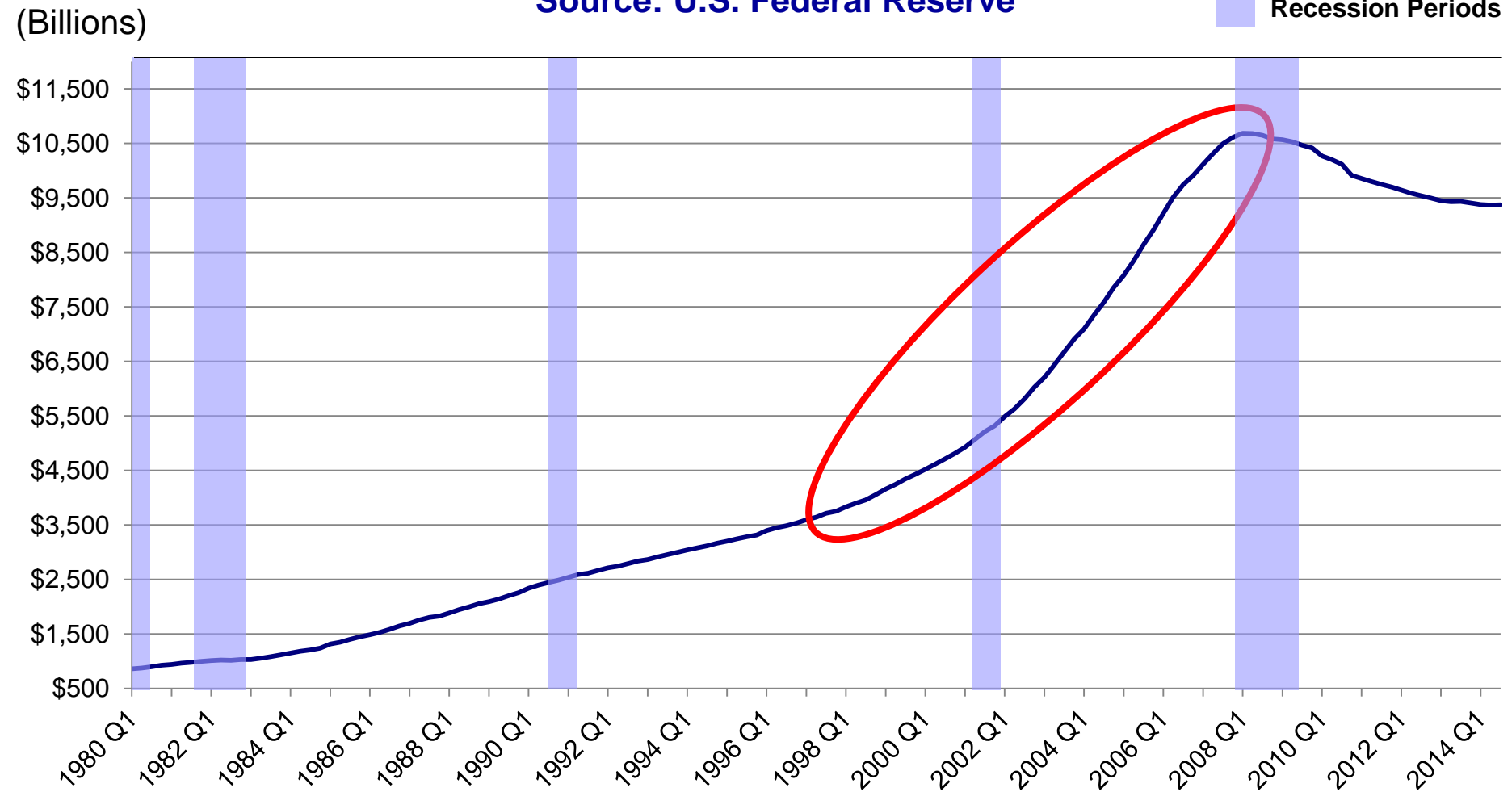
Data for Figure 2.1 in Robert J. Shiller, *Irrational Exuberance*, 2nd. Edition, Princeton University Press, 2005, 2009, Broadway Books 2006, also *Subprime Solution*, 2008, as updated by author.
*Data through September 2014.



Household Outstanding Home Mortgages 1980-2014*

Source: U.S. Federal Reserve

Recession Periods

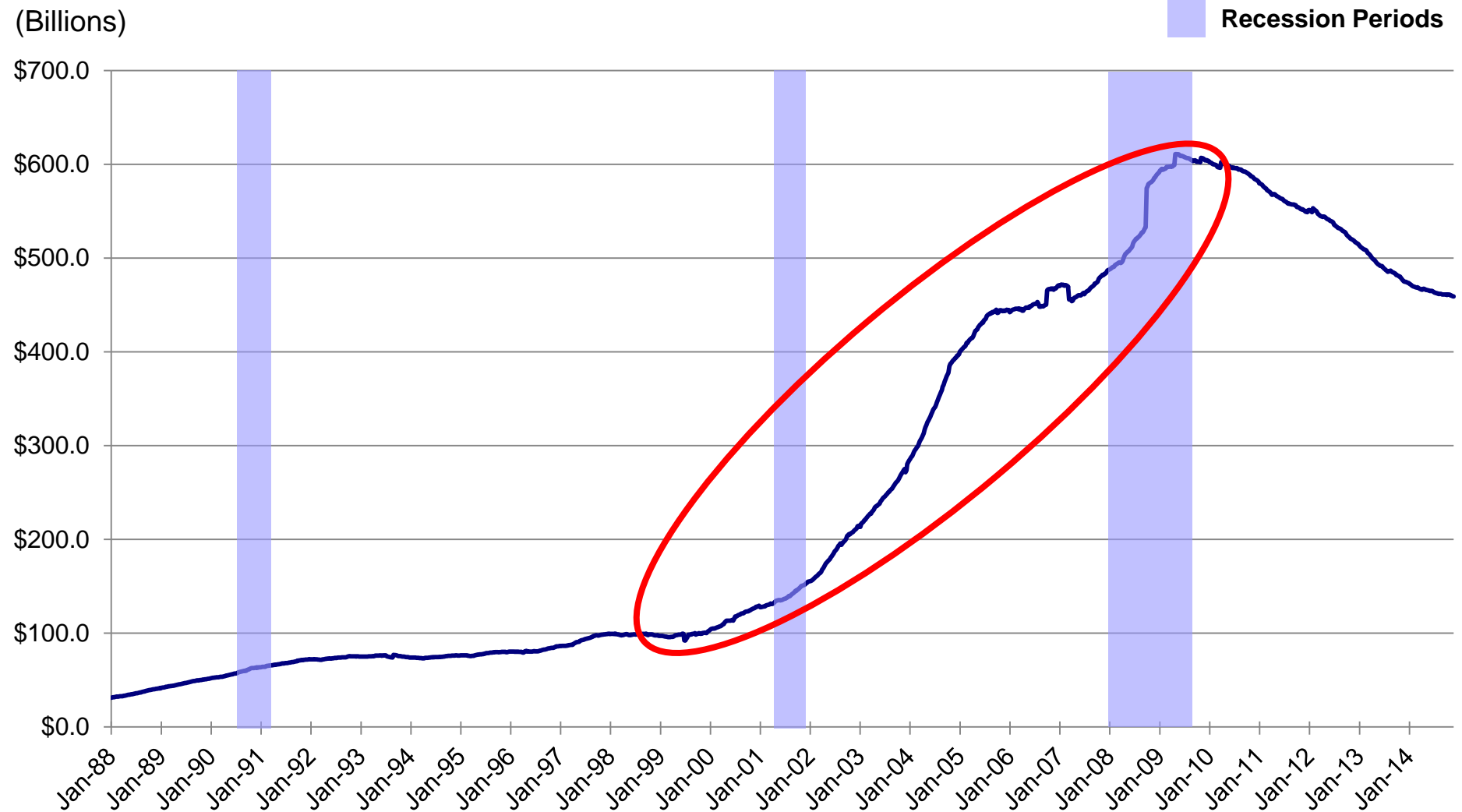


*Data through third quarter 2014



Revolving Home Equity Loans 1988-2014*

Source: U.S. Federal Reserve



- Stock market up, but not much as the 90's.
- Housing prices still way off peak.
- Revolving credit still flat.
- Labor force participation rates declining.
- 29.7% of homes still have less than 20% equity.

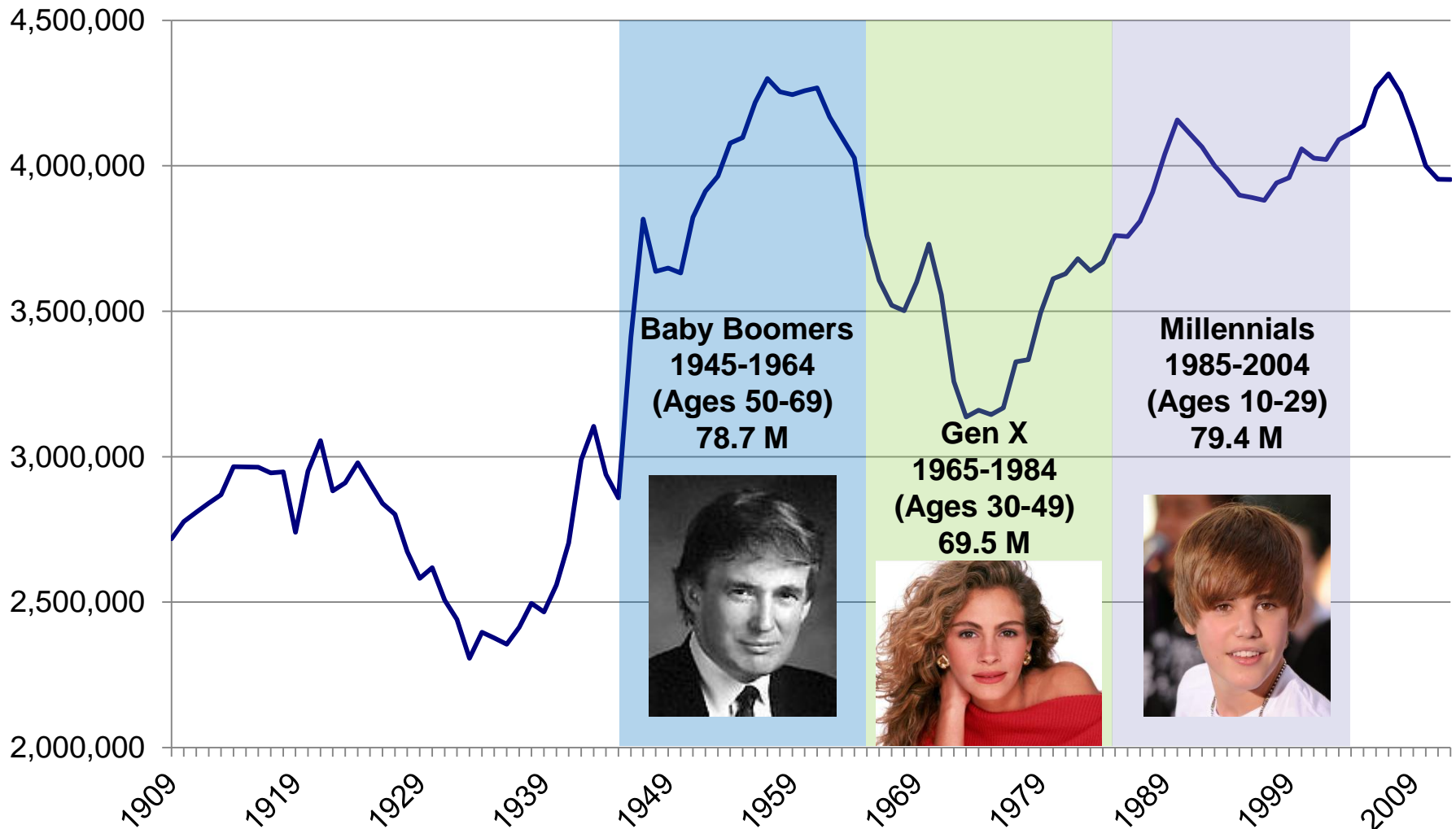


Demographics



U.S. Birth Index 1909-2012

Source: U.S. Census Bureau; Harvard Joint Center for Housing Studies



Average Annual Expenditures in U.S. by Age Groups

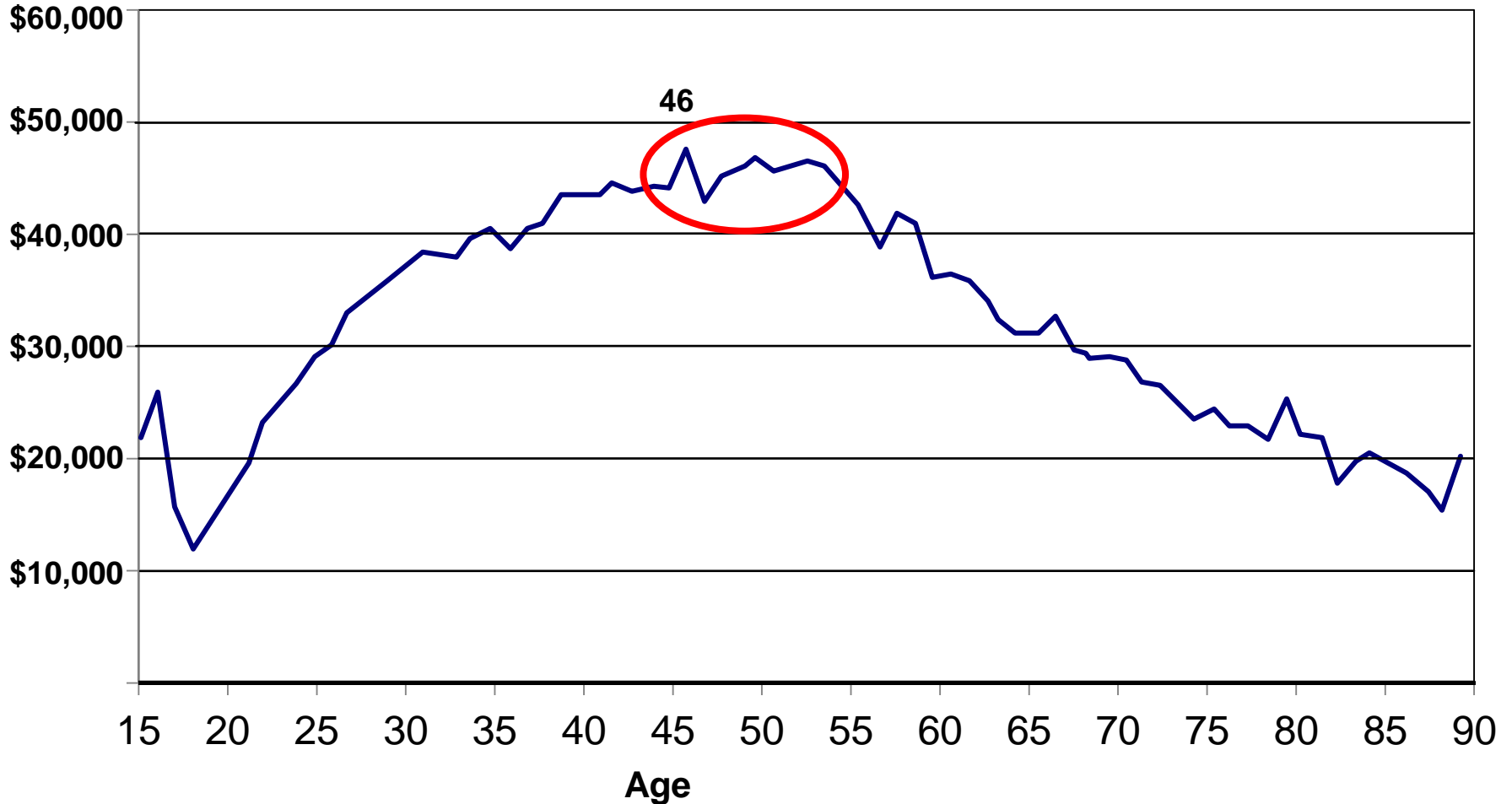
Source: 2013 Consumer Expenditure Survey; U.S. Bureau of Labor Statistics

<u>All Ages</u>	<u><25</u>	<u>25 to 34</u>	<u>35 to 44</u>	<u>45 to 54</u>	<u>55 to 64</u>	<u>65 to 74</u>	<u>75 +</u>
\$51,100	\$30,373	\$48,087	\$58,784	<u>\$60,524</u>	\$55,892	\$41,403	\$34,382



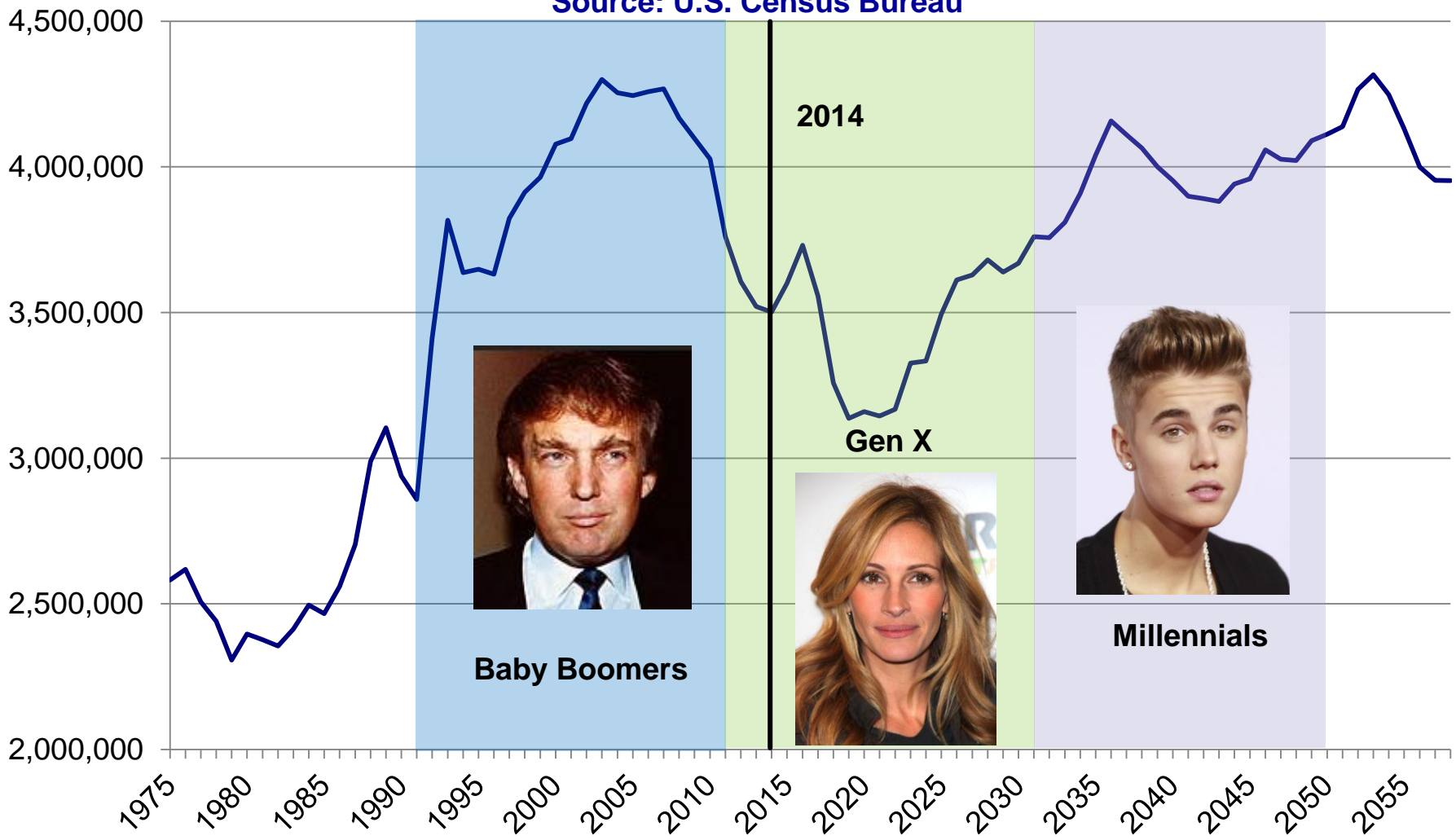
Total Consumer Expenditure by Age

Source: U.S. Census Bureau; Dent Research

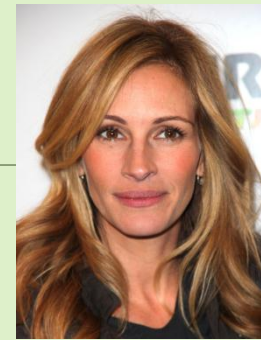


Peak Spending Cycle 46 year lag 1975-2058

Source: U.S. Census Bureau



Baby Boomers



Gen X



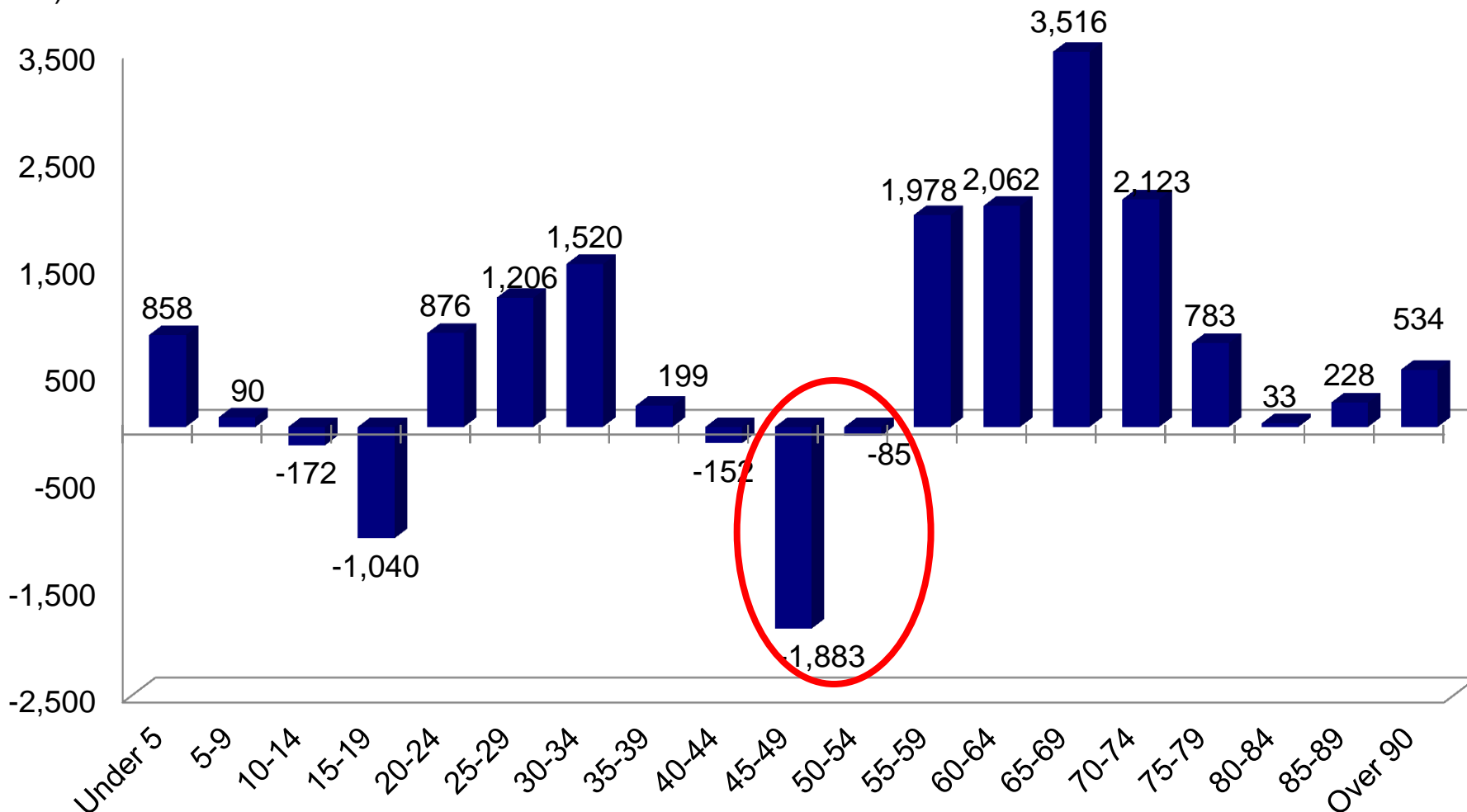
Millennials



U.S. Population by Age Net Change 2010 – 2015

Source: U.S. Census Bureau

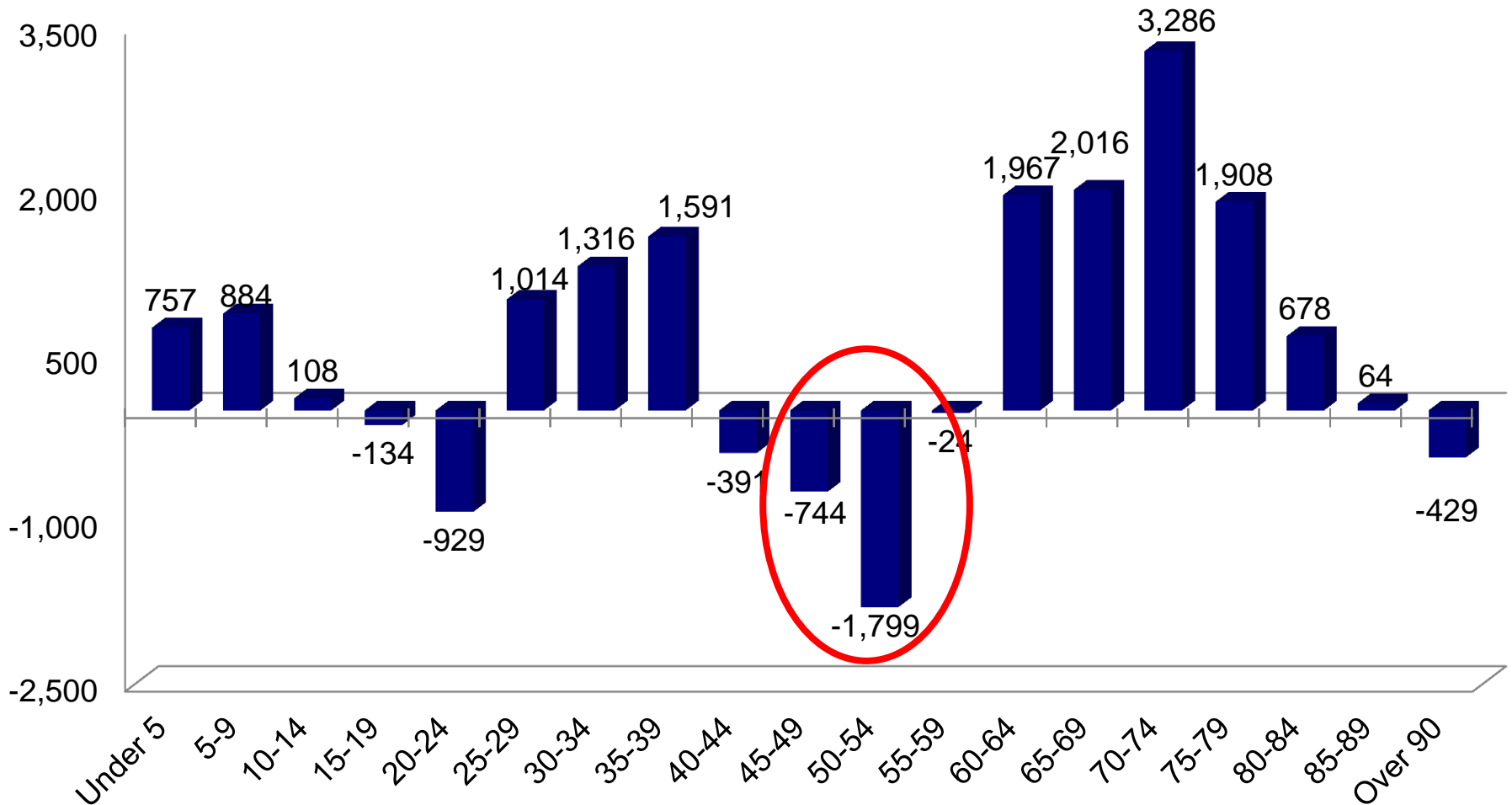
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U.S. Population by Age Net Change 2015 – 2020

Source: U.S. Census Bureau

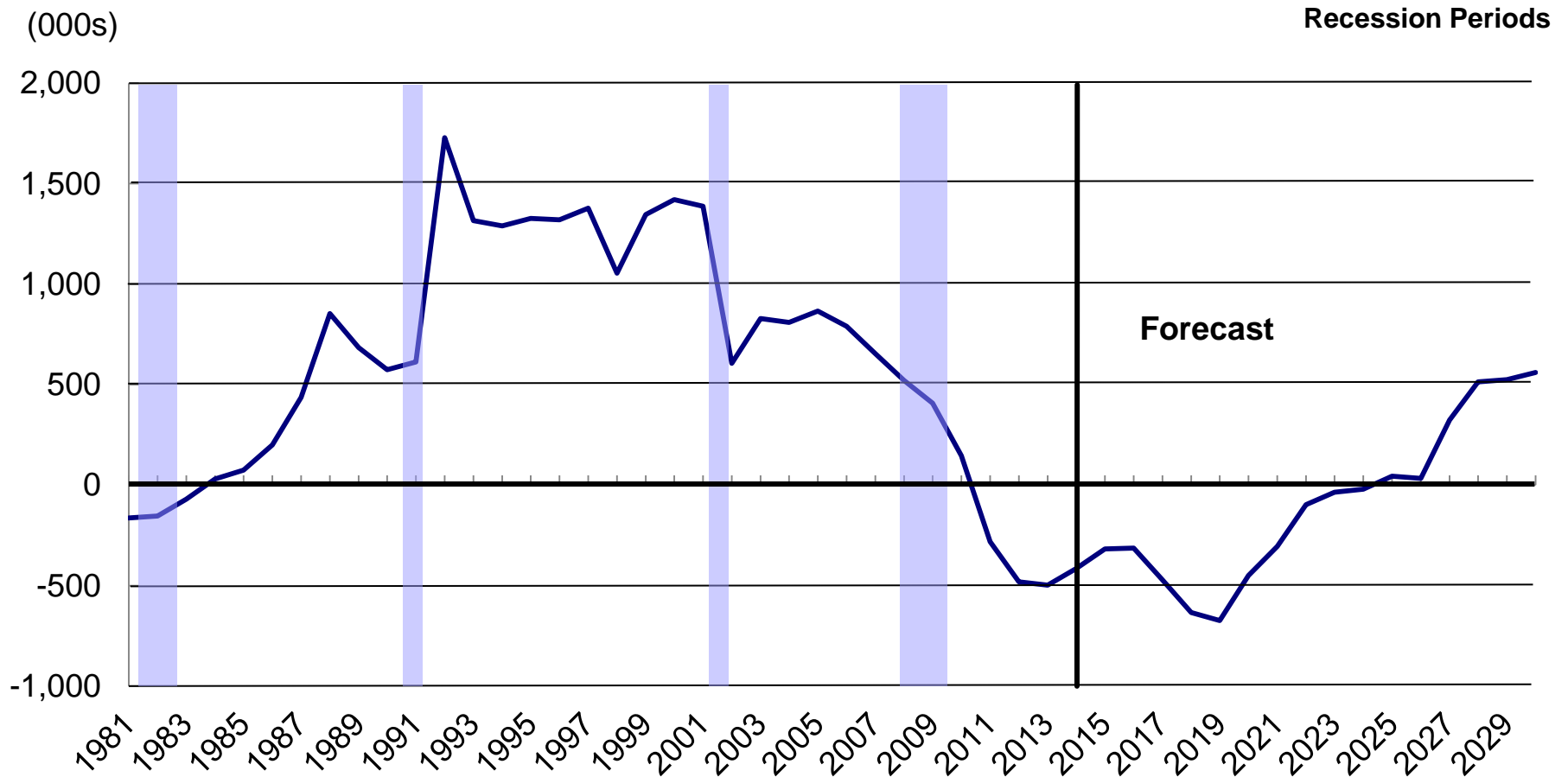
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Peak Spending Cycle

Net Change in U.S. Population Ages 45-54 1981-2030

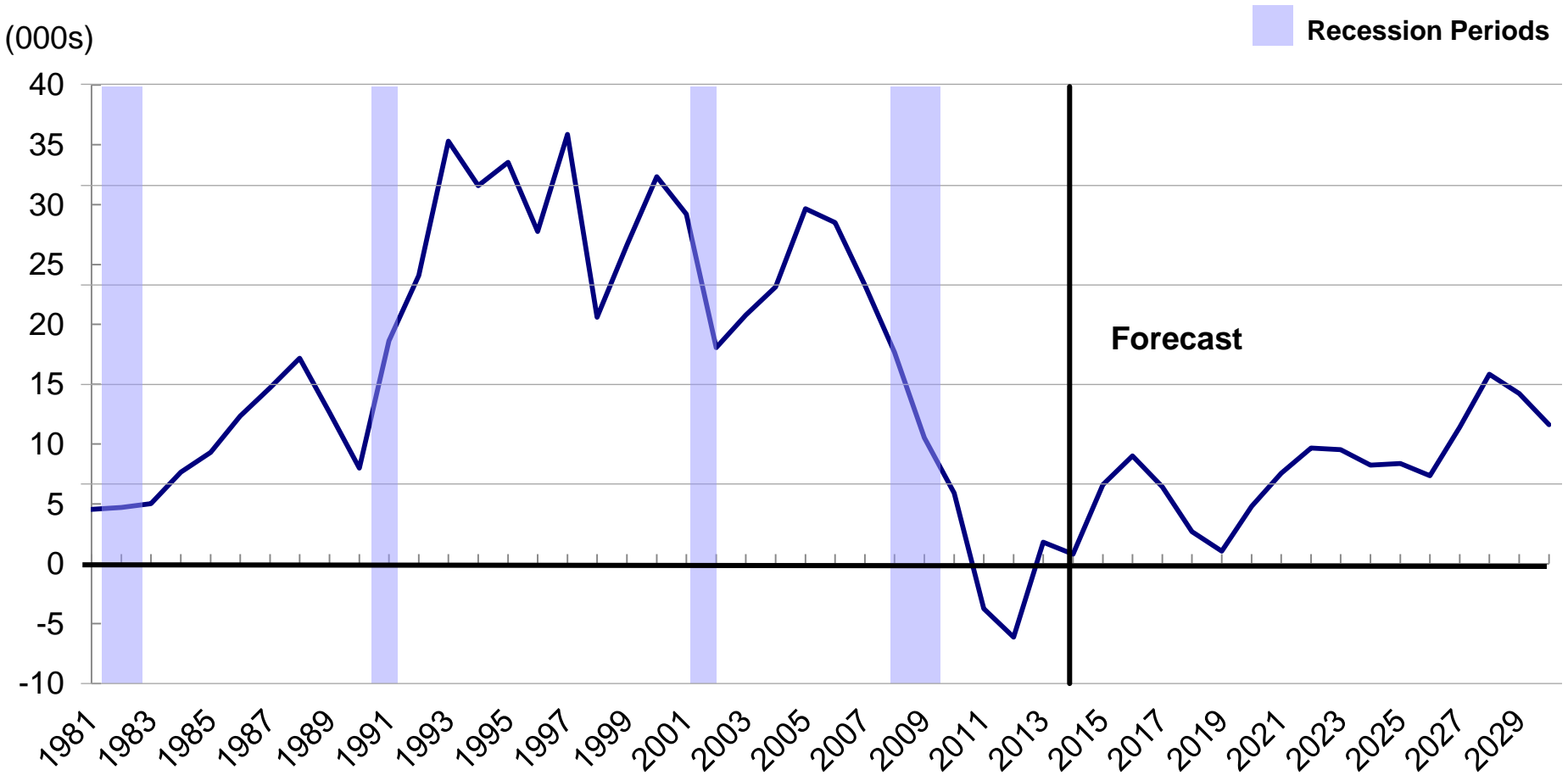
Source: 2013 Consumer Expenditure Survey; U.S. Bureau of Labor Statistics



Peak Spending Cycle

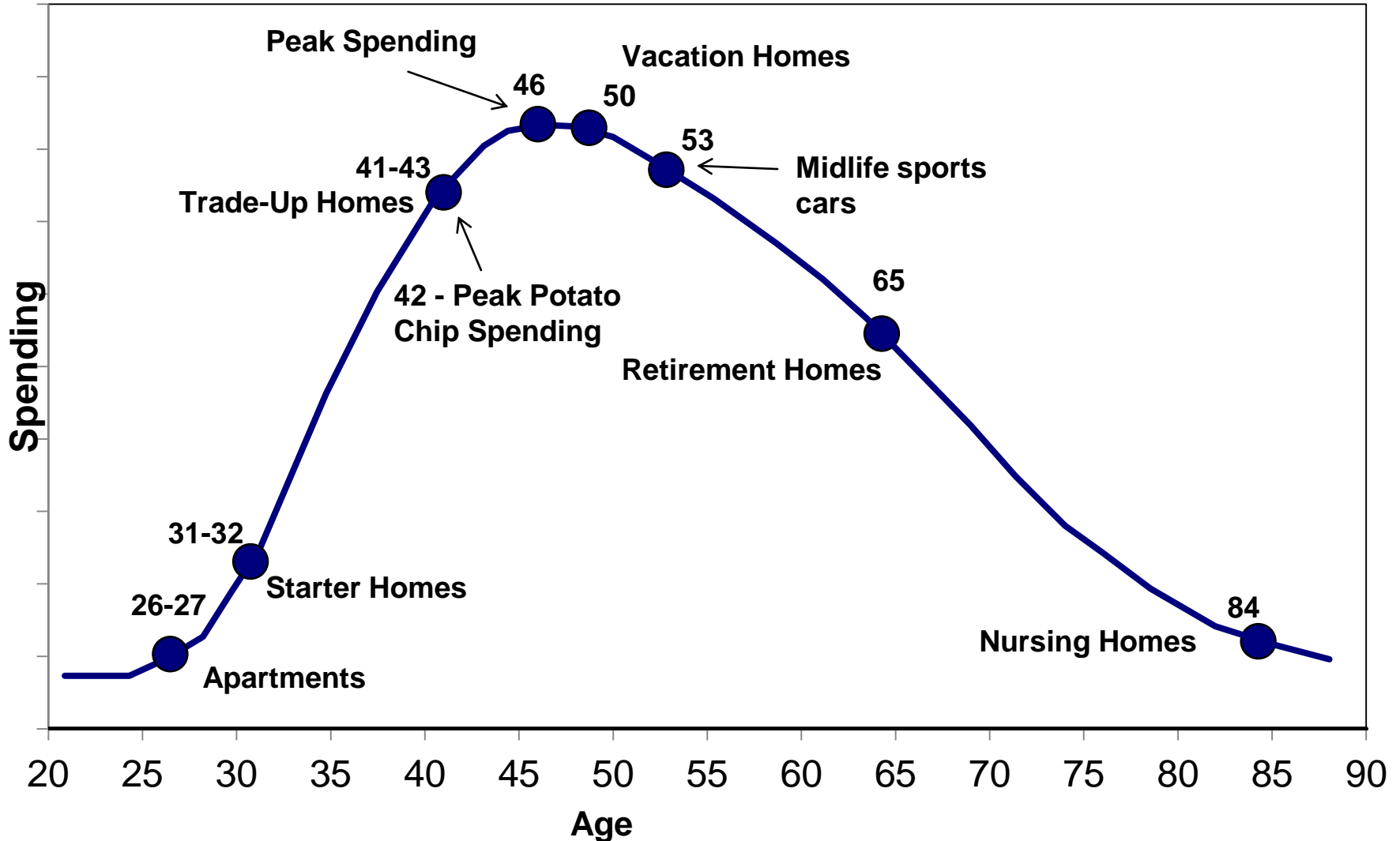
Net Change in Arizona Population Ages 45-54 1981-2030

Source: 2013 Consumer Expenditure Survey; U.S. BLS; AZ Dept. of Administration



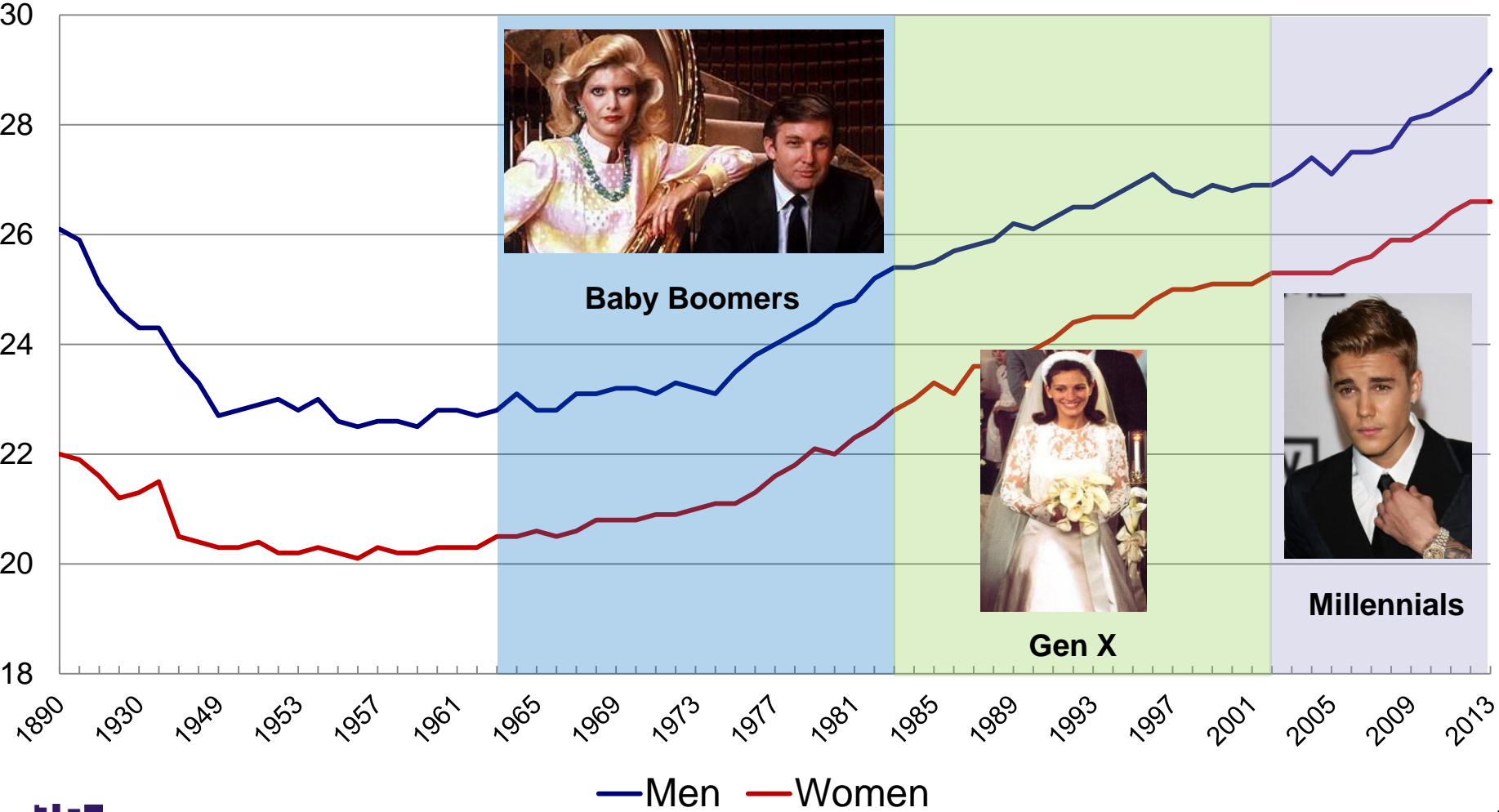
Consumer Life Cycle

Source: U.S. Census Bureau; Dent Research; EDPCo



U.S. Median Age at First Marriage 1890-2013

Source: U.S. Census Bureau



Baby Boomers



Gen X



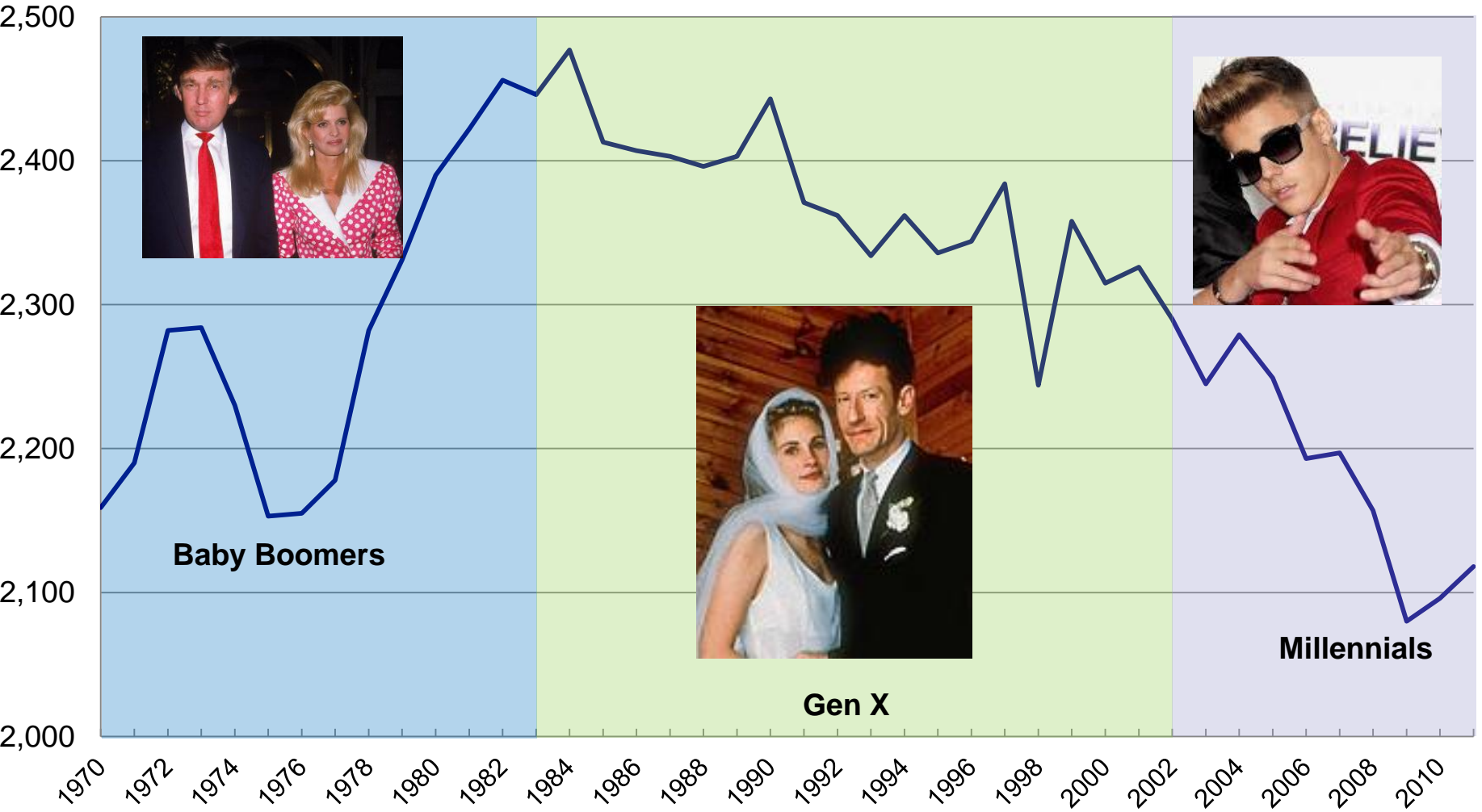
Millennials



U.S. Number of Marriages 1970-2011

Source: U.S. Census Bureau

(000s)



Baby Boomers



Gen X

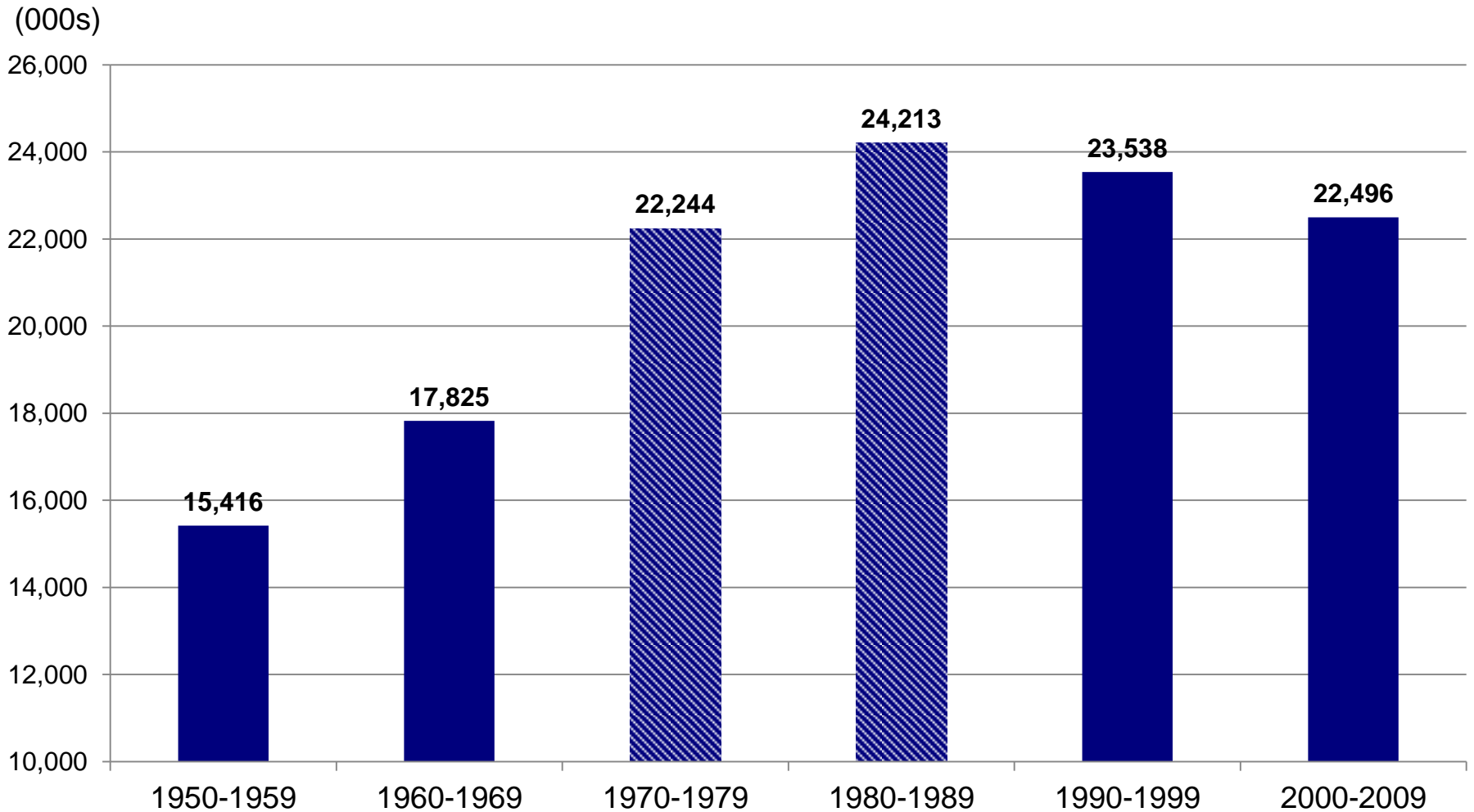


Millennials



U.S. Marriages 1950-2009

Source: U.S. Census Bureau





WEDDING DRESS
\$50
WORN ONCE
BY MISTAKE



Bottom Line

Slower Intermediate Term Growth



How should I feel about this?



A spoonful of vodka helps the valium go down..



Welcome to Arizona



Arizona Employment Growth

Arizona's Rank Out of 50 States

Source: Arizona State University, U.S. Bureau of Labor Statistics

Year	Rank
1991	19
1992	23
1993	5
1994	2
1995	2
1996	2
1997	2
1998	1
1999	2
2000	5
2001	9
2002	10

Year	Rank
2003	4
2004	2
2005	2
2006	2
2007	17
2008	46
2009	49
2010	49
2011	28
2012	9
2013	10
2014*	12



Phoenix-Mesa Employment Growth

(Ranking among all metro areas greater than 1,000,000)

Source: Arizona State University, U.S. Bureau of Labor Statistics

Year	Rank	# MSA's
1991	4	19
1992	4	19
1993	2	19
1994	1	19
1995	1	20
1996	1	21
1997	1	22
1998	1	23
1999	3	24
2000	9	25
2001	7	26
2002	5	25

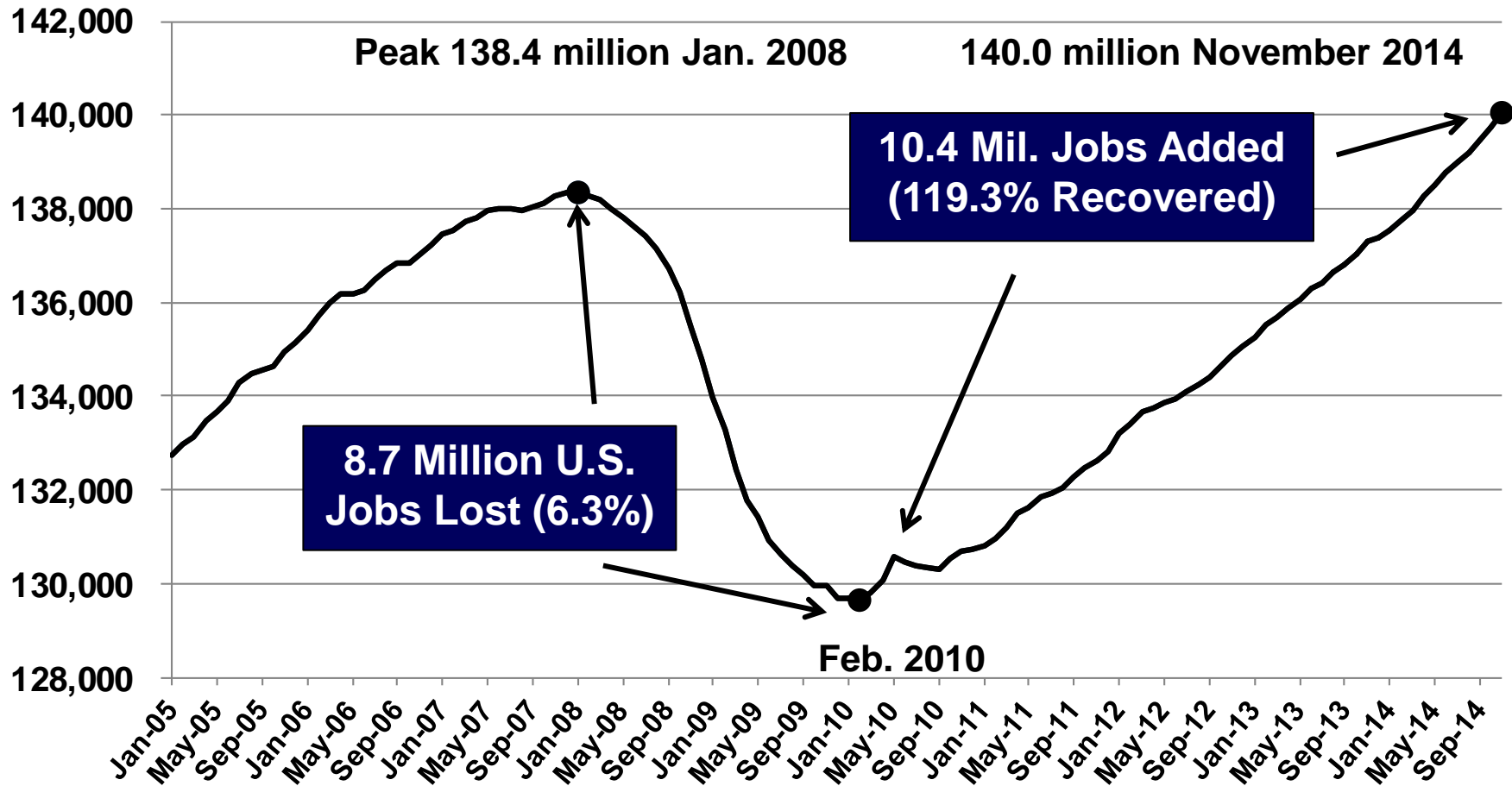
Year	Rank	# MSA's
2003	3	25
2004	3	25
2005	1	26
2006	1	27
2007	9	28
2008	24	28
2009	23	24
2010	23	23
2011	14	25
2012	9	27
2013	7	28
2014*	12	28



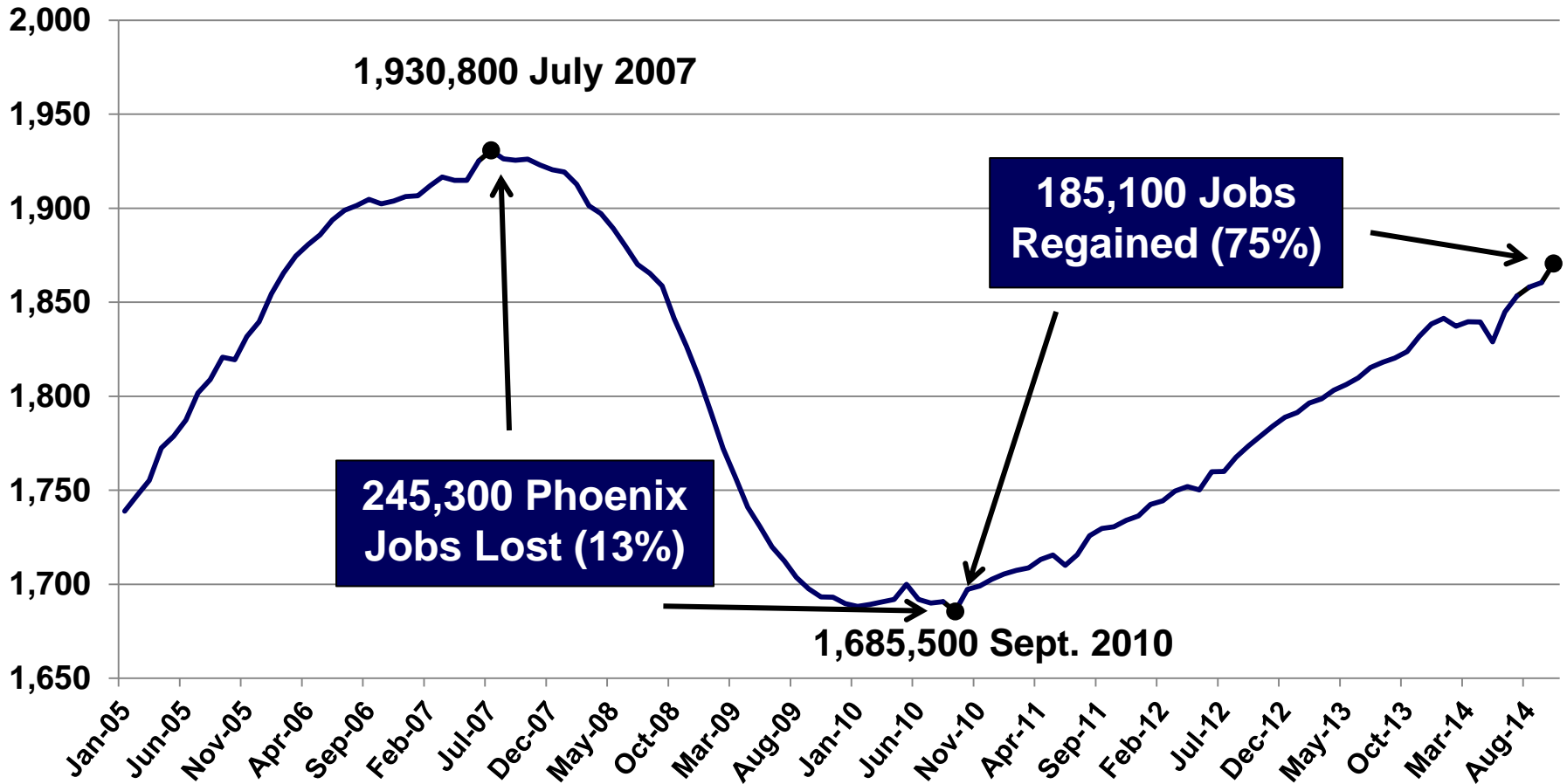
U.S. Seasonally Adjusted Non-Farm Employment 2005 – 2014*

Source: Bureau of Labor Statistics

(000's)



Greater Phoenix Has Gained 75% of Lost Jobs 60,200 Jobs (25%) Still to Recover

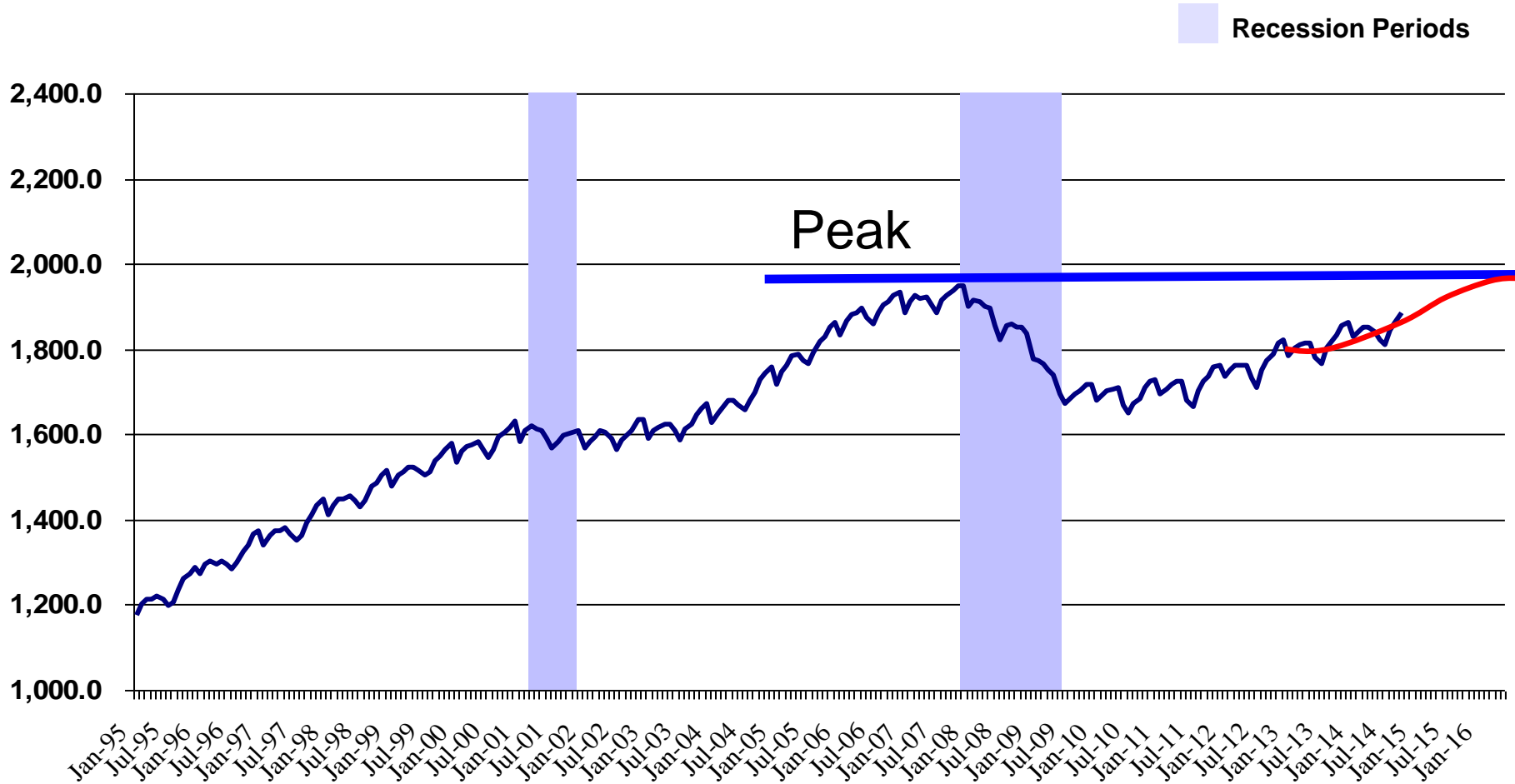


Source: U.S. Bureau of Labor Statistics, Thousands of Jobs, Seasonally Adjusted Data through October 2014.



Employment Levels: Greater Phoenix back to Peak in 2016 or 2017?

Source: ADOA



*Based on seasonally unadjusted monthly data



**Why has Greater
Phoenix growth in this
cycle been subpar
relative to its historical
norm?**





(1) Significant slowdown in
population flows

(2) Steeper housing decline and
modest recovery



**The Greater Phoenix
Unemployment Rate is now 5.8%.**

**At the same point in the last two
cycles, it was 4.0% and 3.8%,
respectively.**

Source: Bureau of Labor Statistics



**Since the Recovery
Greater Phoenix has created
174,000 jobs.**

**By Comparison, for the first 48
months of the previous two
recoveries, Greater Phoenix
created 256,900 and 225,300 jobs,
respectively.**

Source: Bureau of Labor Statistics



Since the Recovery the Greater Phoenix population has increased by 217,600 persons.

By Comparison, for the first 5 years of the previous two recoveries, Greater Phoenix population increased by 608,700 and 482,900 persons, respectively.



Good News!



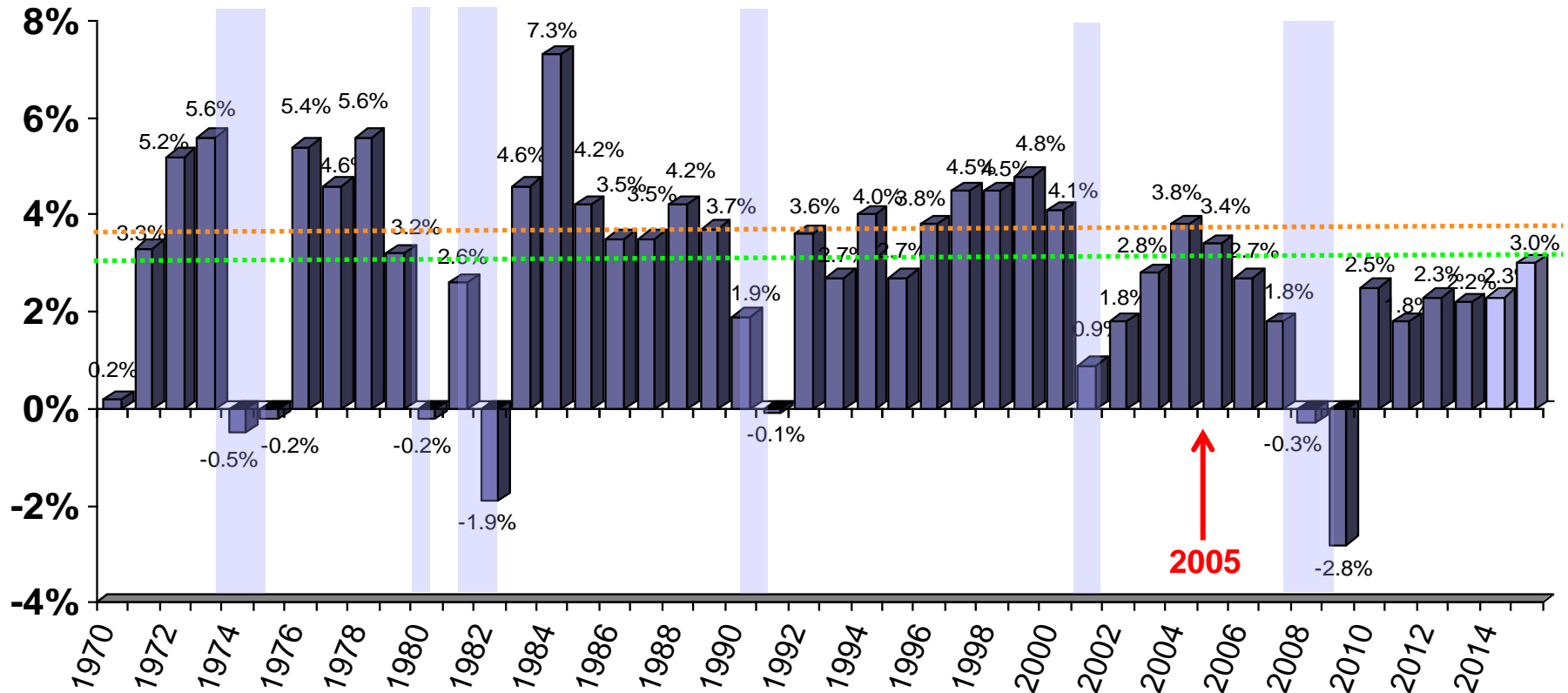
Good news - housing fundamentals are positive!

- (1) Economic growth is accelerating**
- (2) Mortgage rates are low & lending is loosening up a bit**
- (3) Affordability is still good and price gains are slowing**
- (4) Foreclosure & delinquency rates are low & distressed sales are less than 10% of the market**
- (5) Investors are leaving creating more opportunity for buyers needing financing**
- (6) International demand for housing still strong**
- (7) Construction is up - apartments and office buildings**



United States Real Gross Domestic Product* Annual Growth 1970 - 2015**

Source: U.S. Bureau of Economic Analysis & *Blue Chip Economic Indicators*



* Based on chained 2009 dollars.

** 2014 and 2015 are a forecast from the Blue Chip Economic Indicators, December 2014.

----- 3.7% = 40-year avg during expansion

----- 3.1% = 20-year avg during expansion

Recession Periods

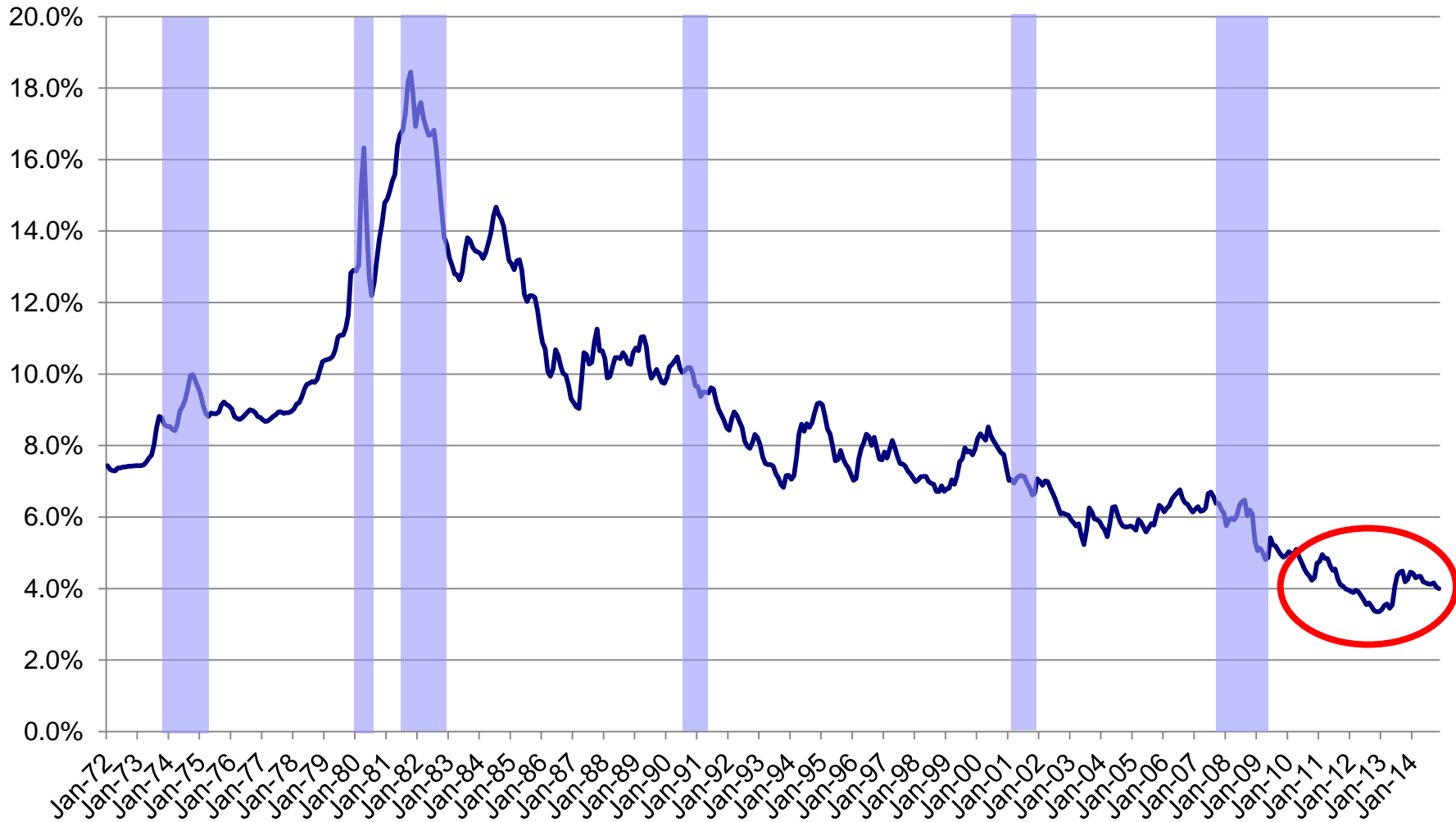


Mortgage Rates are Low and Lending is Loosening Up A Bit



30-Year Conventional Mortgage Rate 1972 – 2014*

Source: Federal Reserve

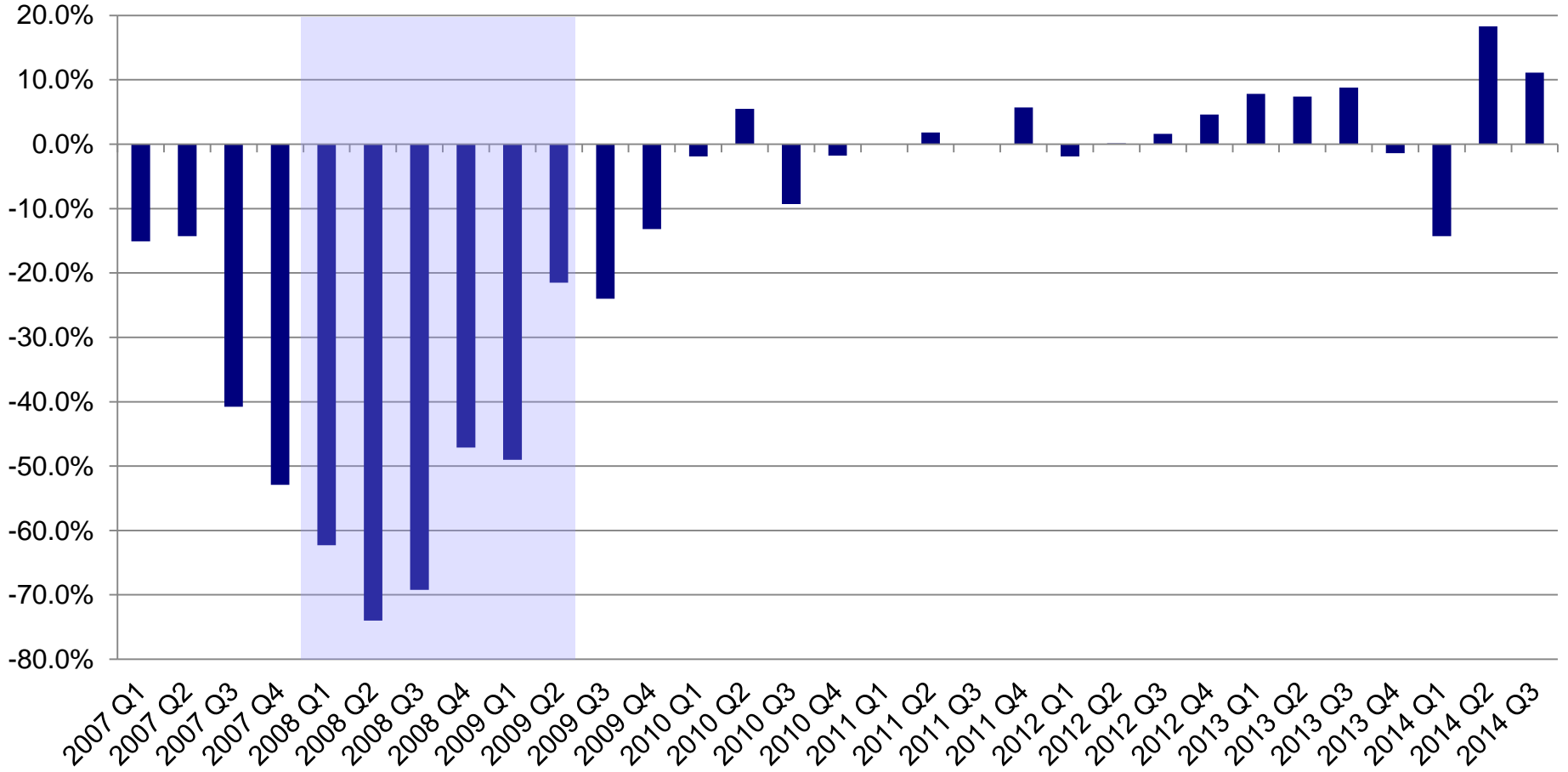


Net Percentage of Large U.S. Banks Reporting Eased Standards versus Tougher Standards on Residential Mortgage **Prime** Loans

2007 Q1 – 2014 Q3

Source: Federal Reserve

Recession Periods

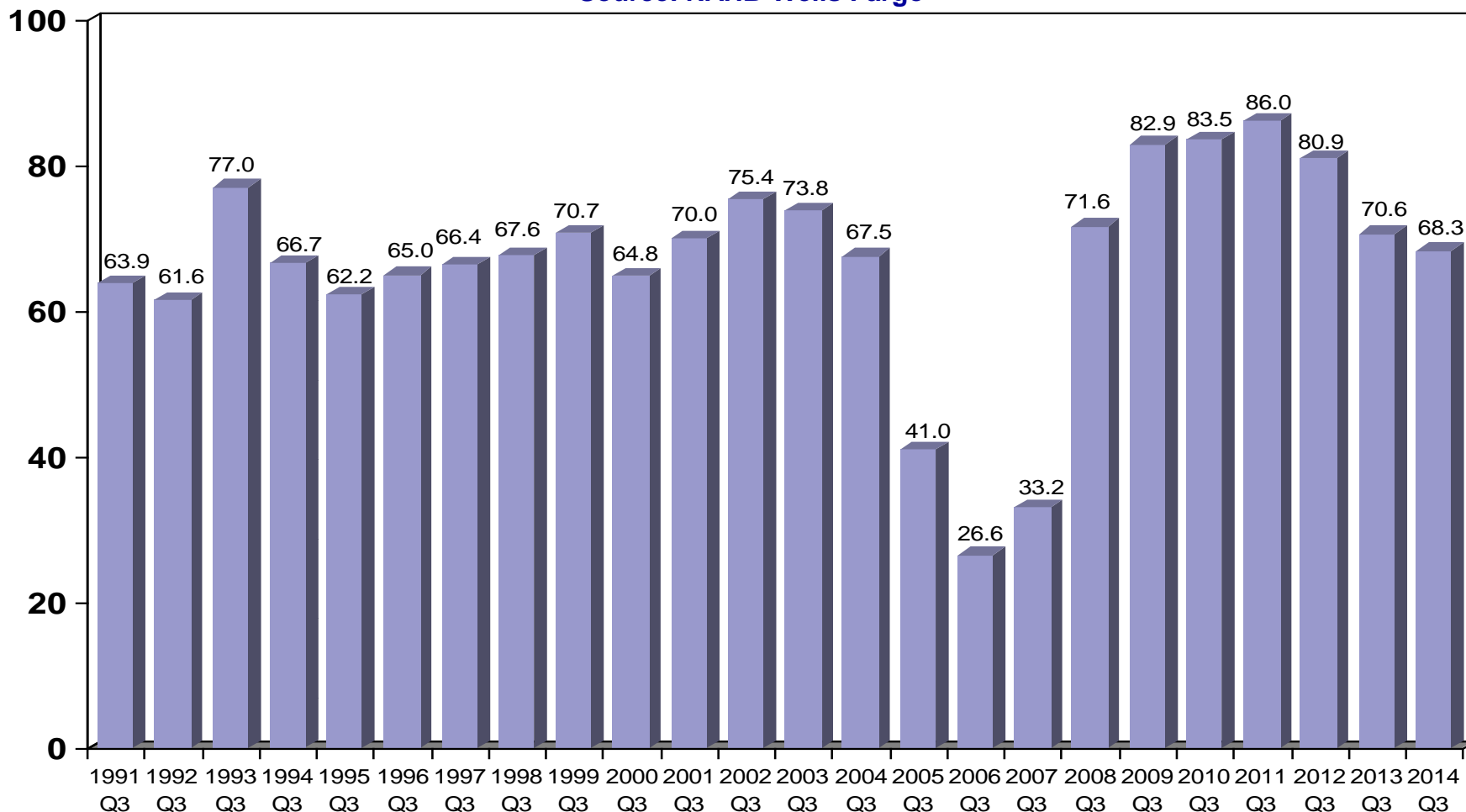


Affordability still good.



Greater Phoenix Housing Opportunity Index 1991 – 2014

Source: NAHB-Wells Fargo



Note: HOI is a measure of the percentage of homes sold in a given Area that are affordable to families earning the area's median income During a specific quarter. Data for 1996 Q3 is an estimate.



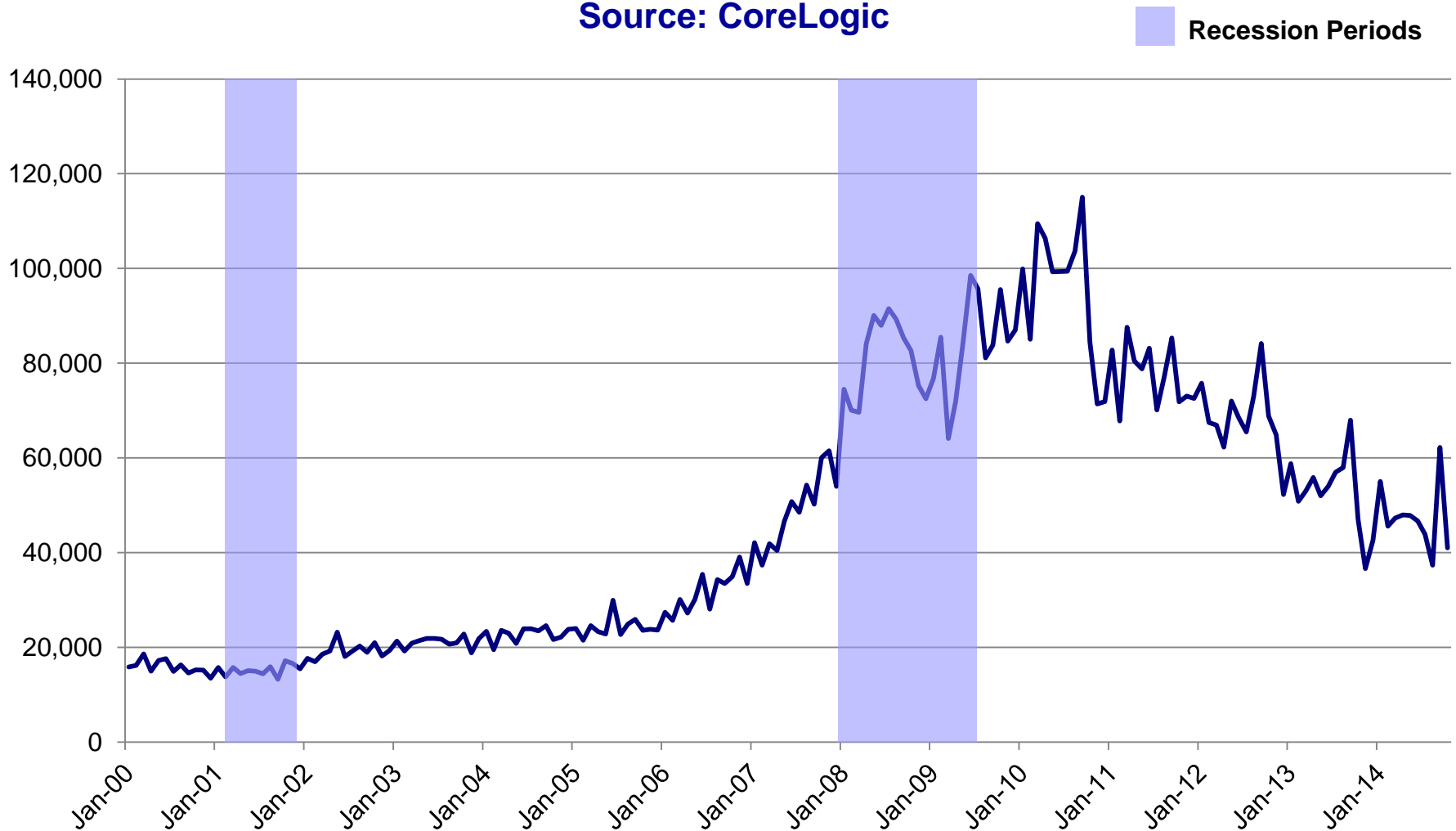
Foreclosures and Delinquency Rates Low



U.S. Completed Foreclosures

2000 – 2014*

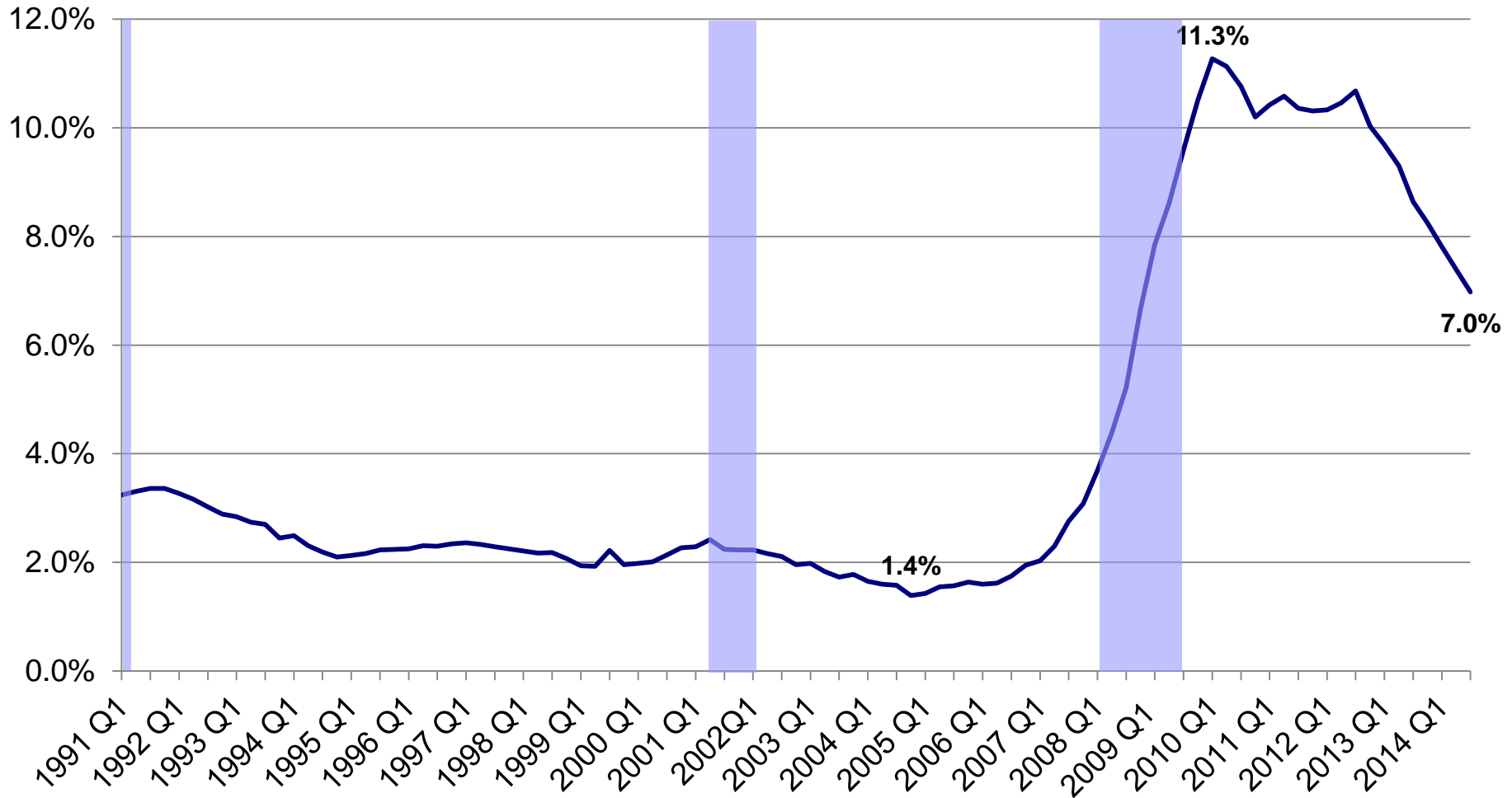
Source: CoreLogic



Delinquency Rate on Single Family Residential Mortgages 1991 – 2014*

Source: Federal Reserve

Recession Periods

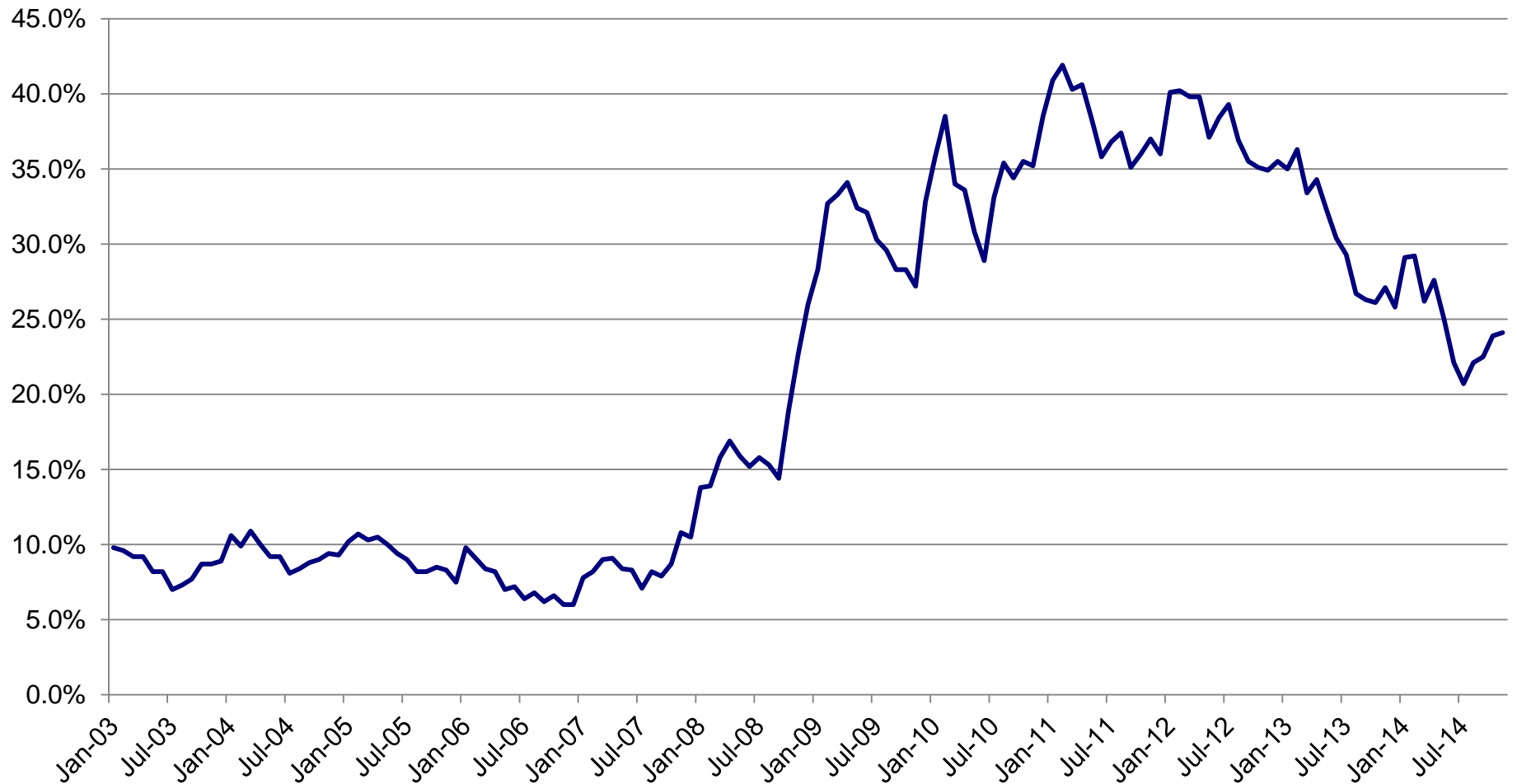


Investors no longer buying in mass.



Percentage of Homes Purchased with Cash Maricopa County – Single Family & Condo 2003 – 2014*

Source: Cromford Report



International Demand for Housing Strong.

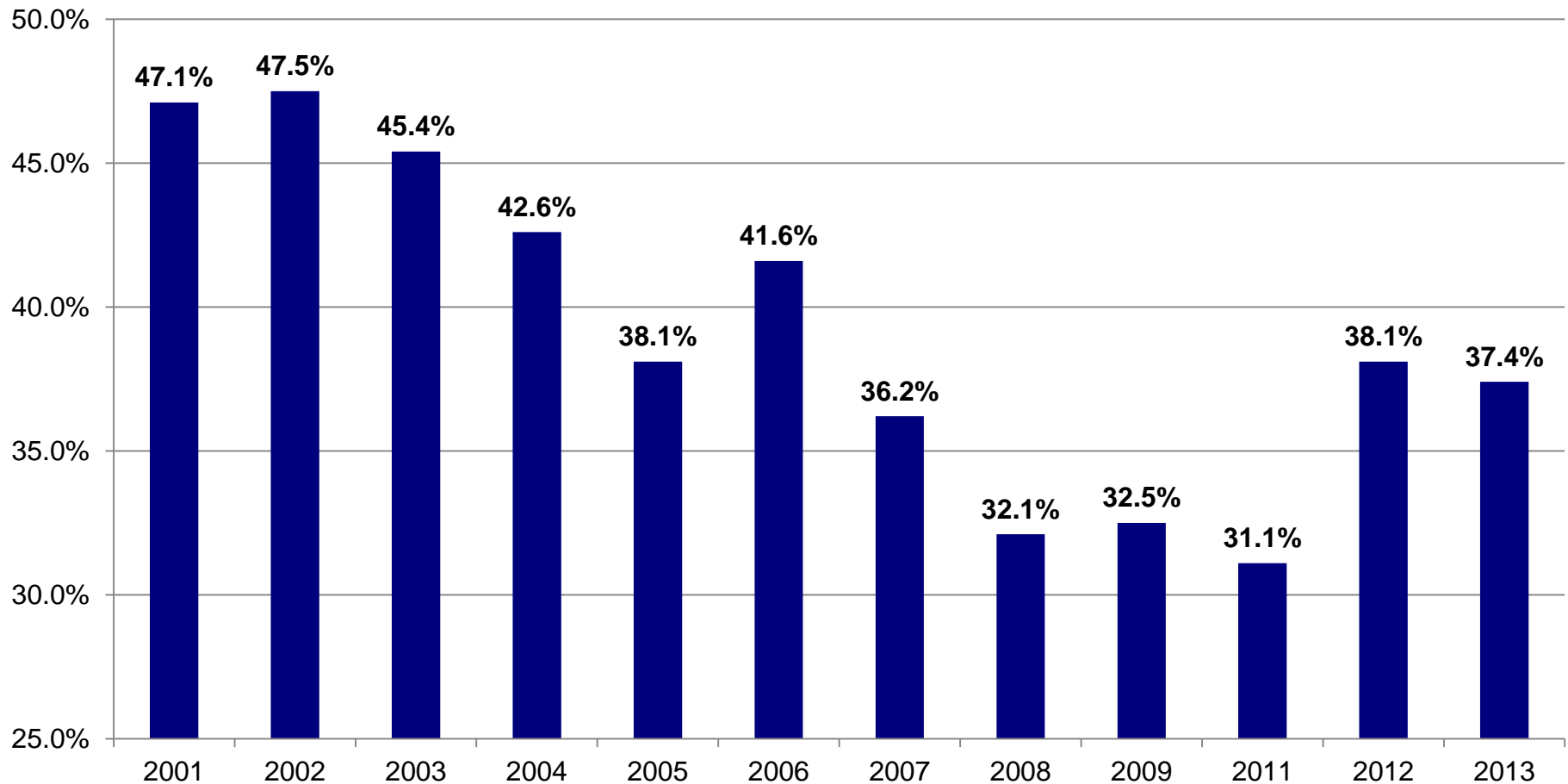


How to catch a Canadian.



International Immigration as a Percentage of Total Population Net Change 2001 – 2013

Source: U.S. Census Bureau



Data for 2010 not available

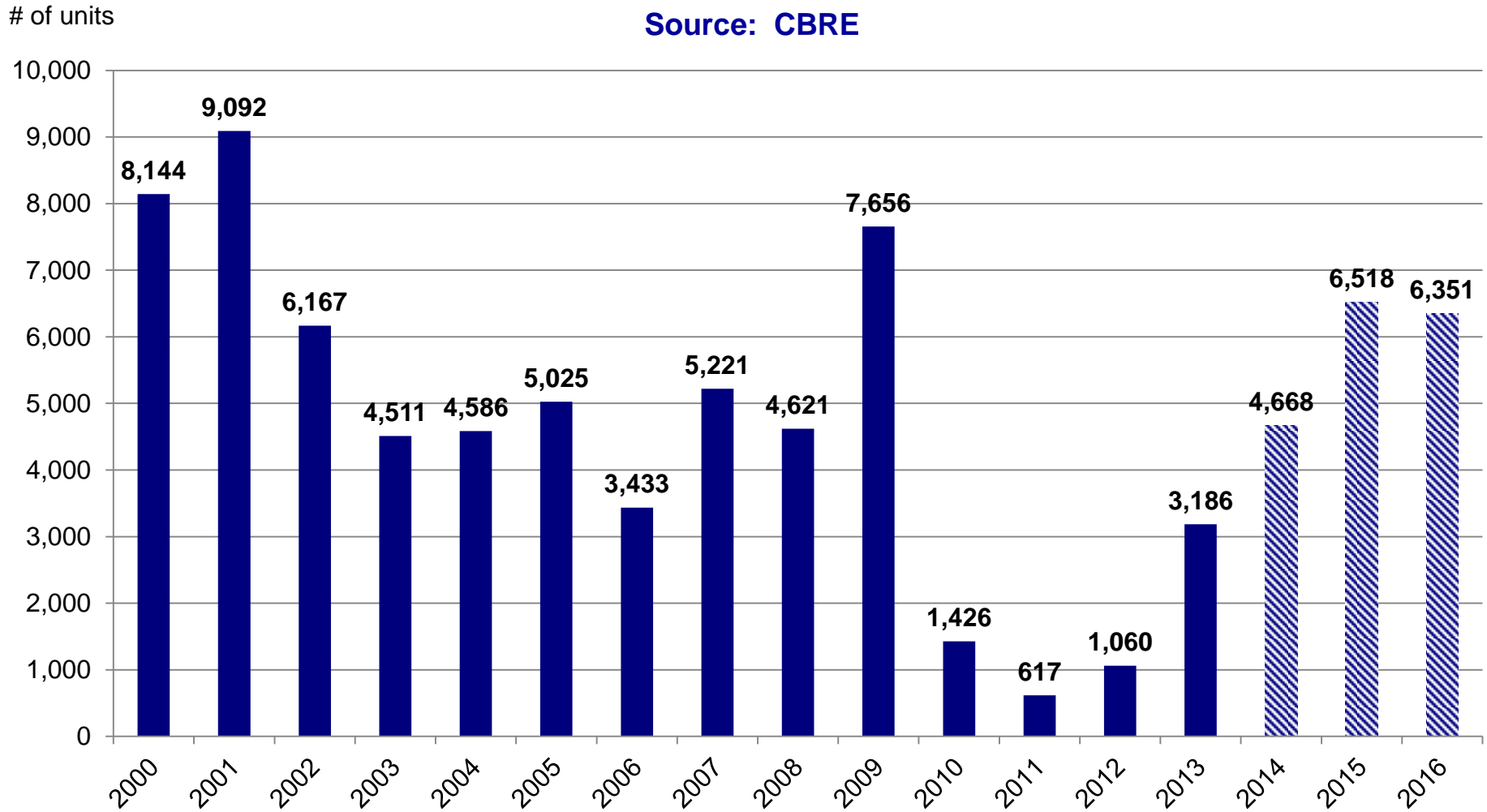


Construction up – Apartments and Office Buildings



Greater Phoenix Multi-Family Housing Deliveries 2000 – 2016*

Source: CBRE

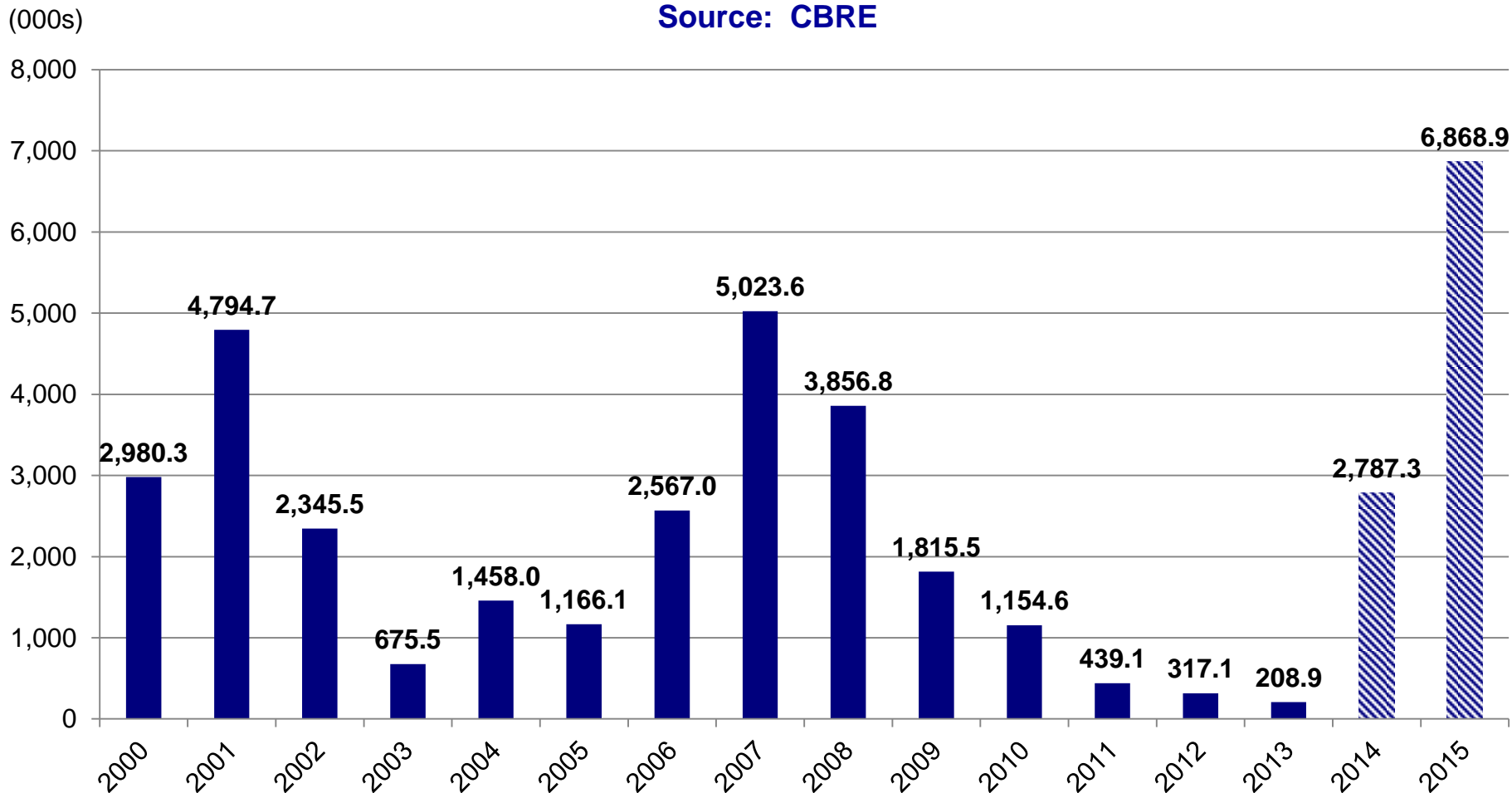


*2014 – 2016 forecast is from CBRE as of third quarter 2014.



Greater Phoenix Office Building Completions (square feet) 2000 – 2015*

Source: CBRE



*2014 currently under construction
2015 planned construction



Bad News.



Bad news- people aren't buying. Why?

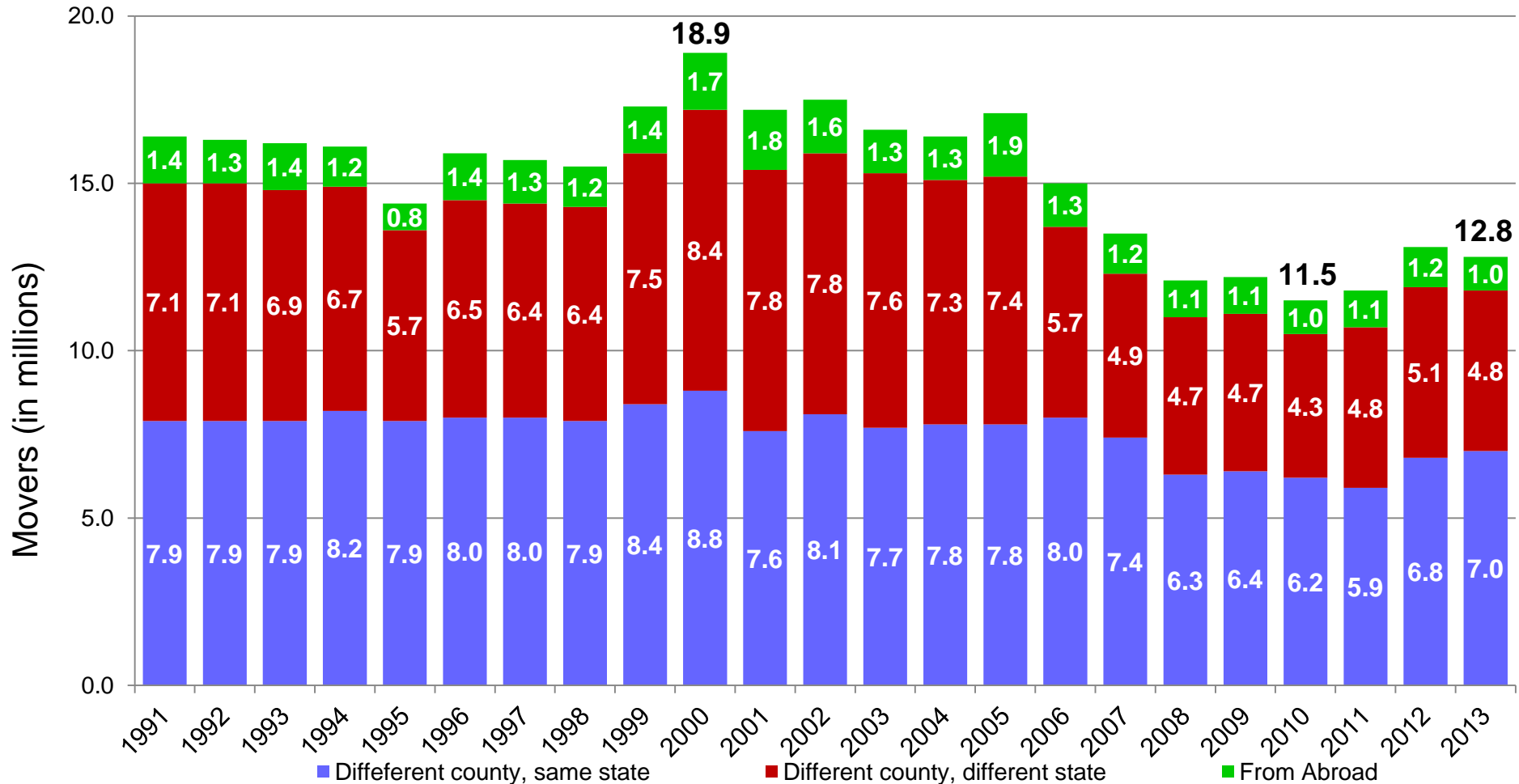
- (1) Fewer people moving
- (2) Fewer people moving to Arizona
- (3) Slower employment growth
- (4) Negative Equity
- (5) “Penalty Box”
- (6) Millennials
- (7) Student loan debt
- (8) SB 1070
- (9) **FINANCING !!!!**



Distribution of Movers in U.S. by Type*

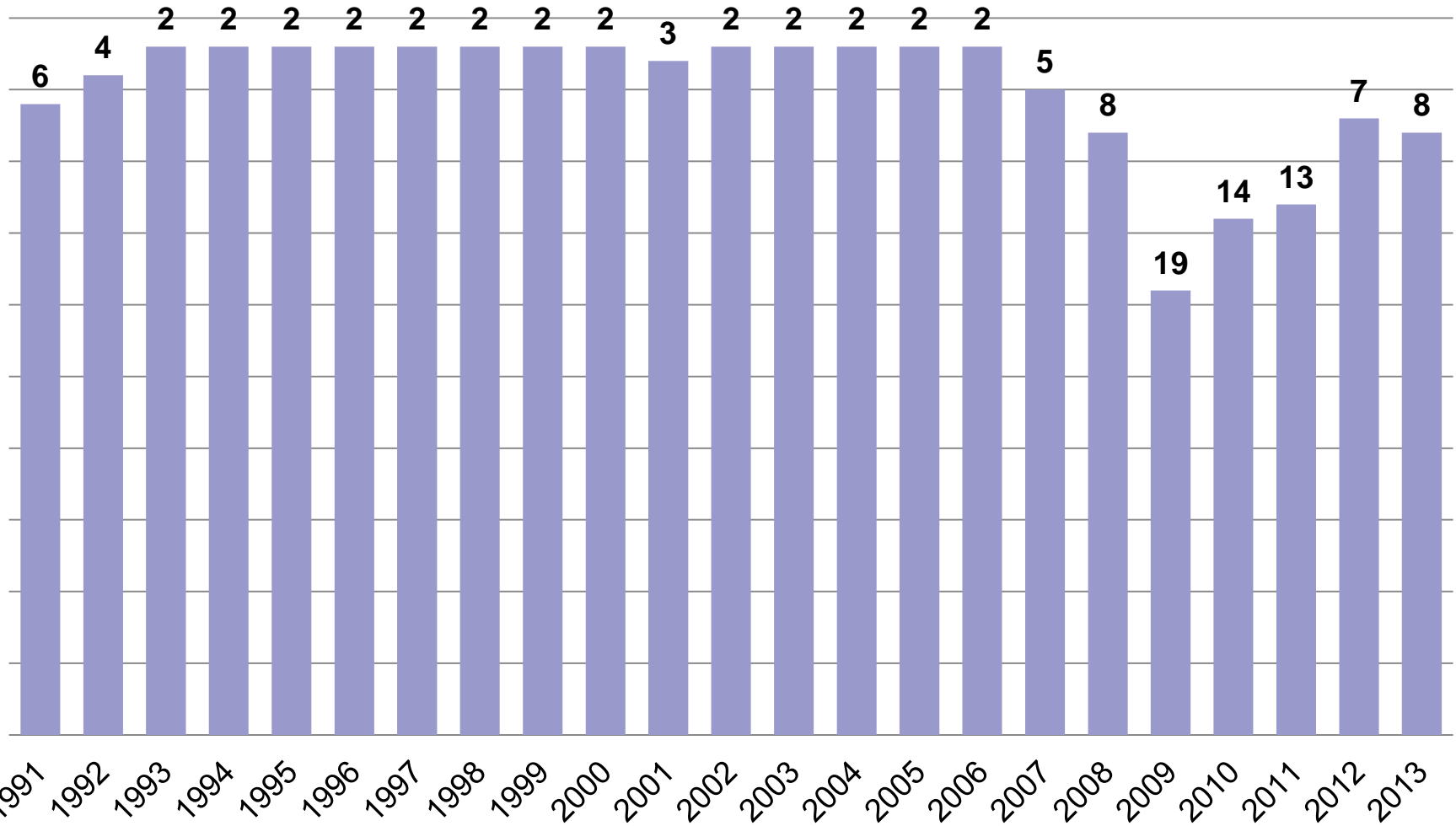
1990-2013

Source: U.S. Census Bureau



Arizona Rank Population Growth 1991-2013

Source: Census Bureau

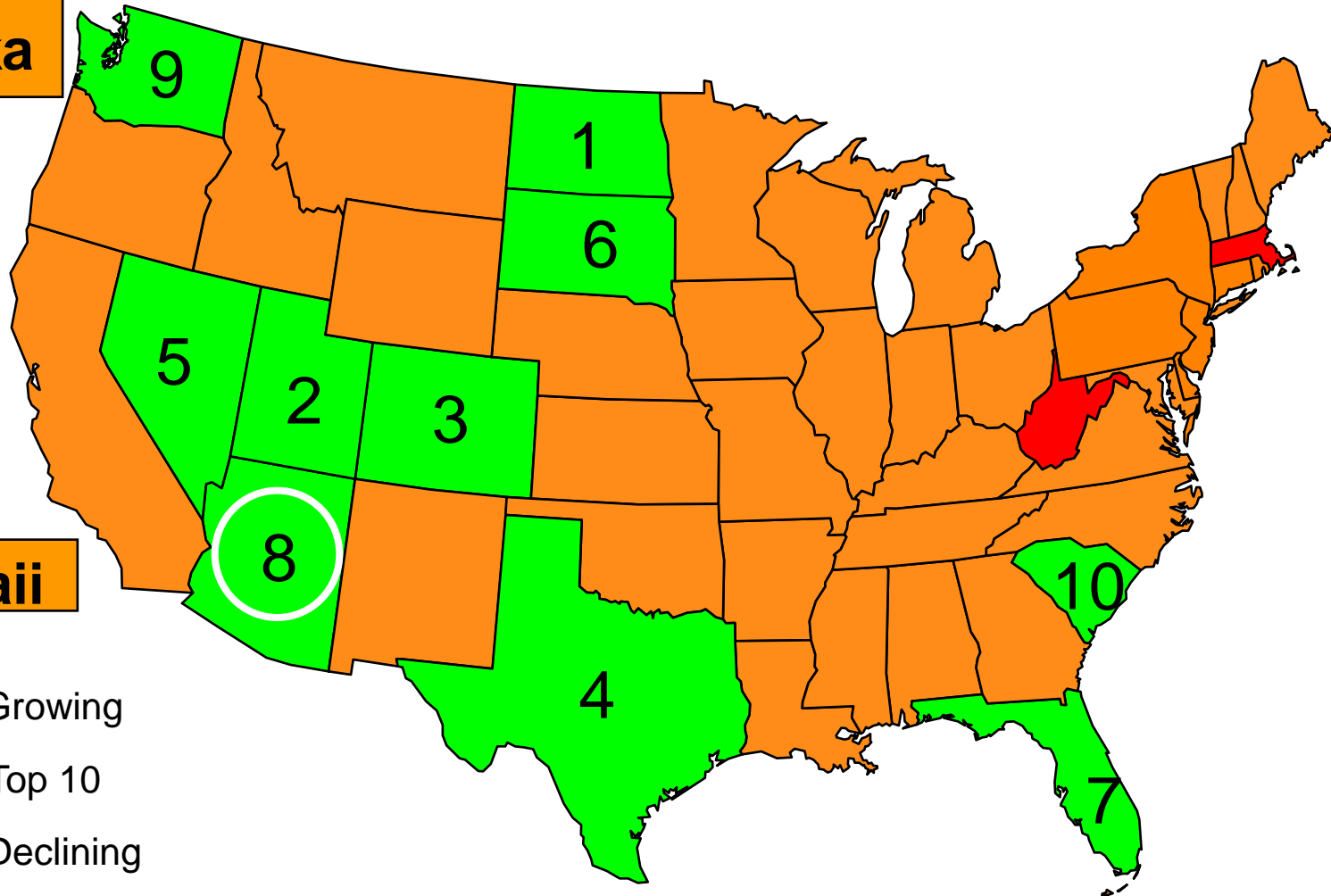


Arizona Population Growth Was Slow But Still Top 10 in 2013

Alaska

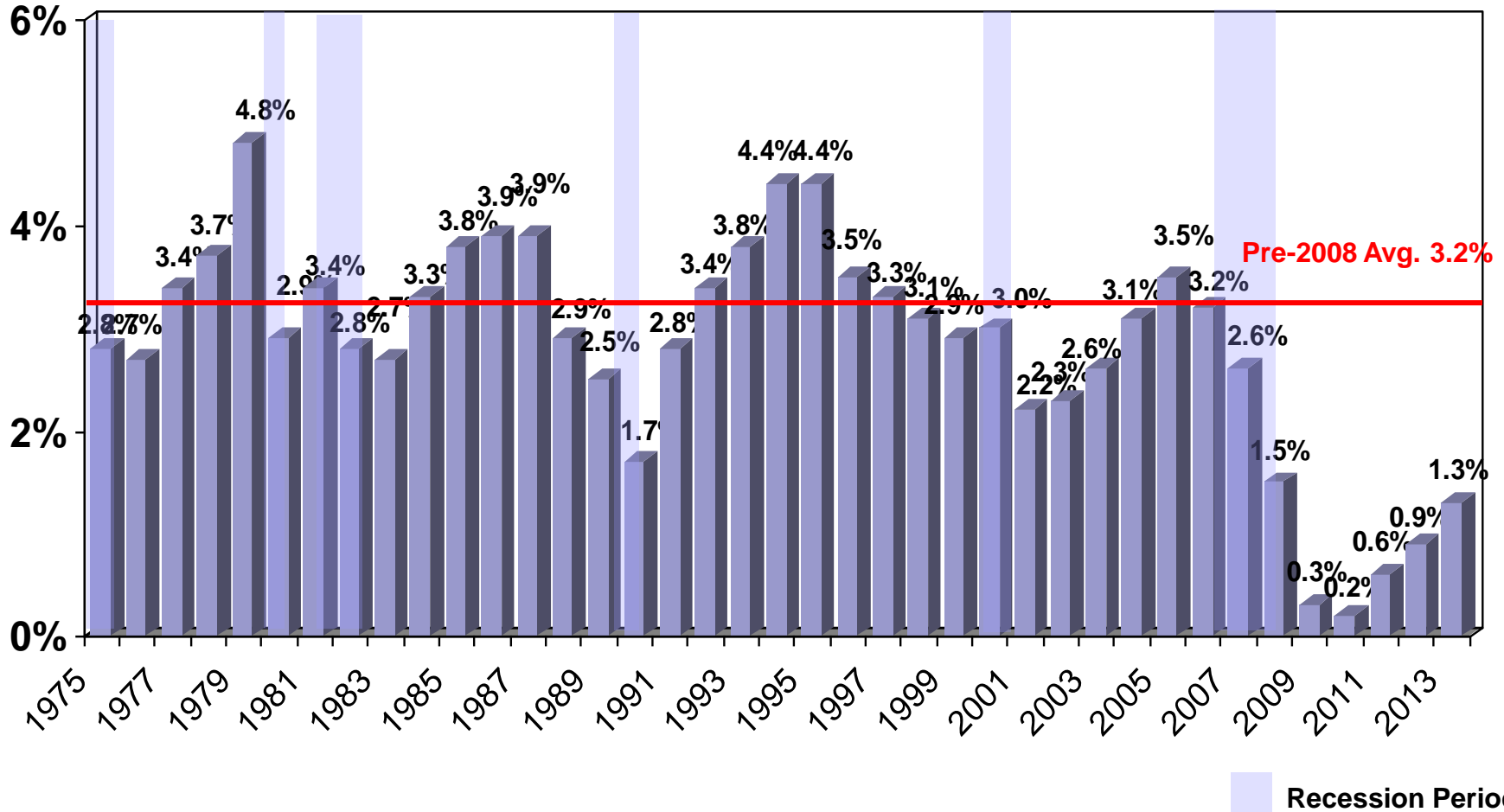
Hawaii

-  Growing
-  Top 10
-  Declining



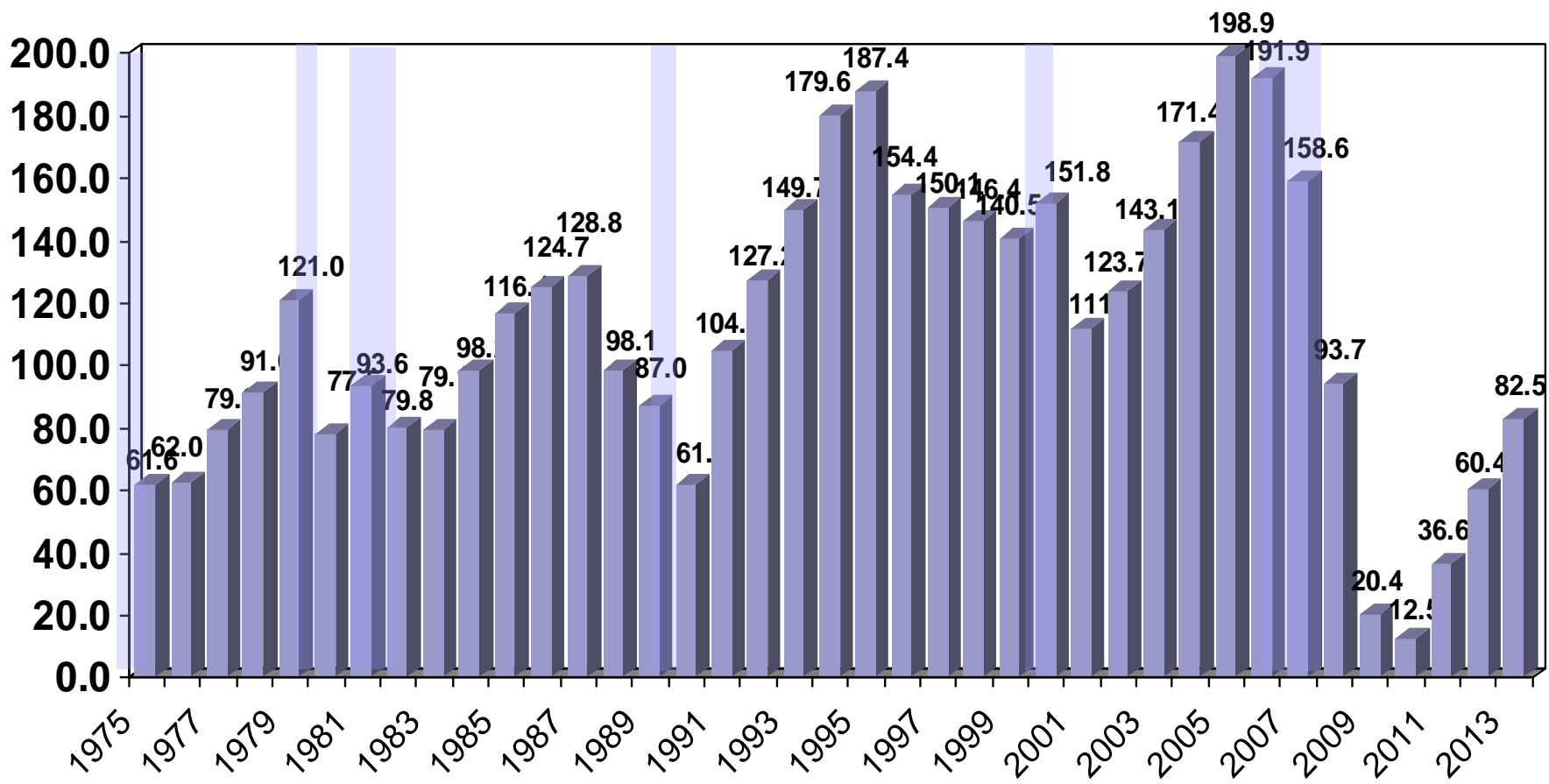
Arizona Population Annual Percent Change 1975–2013

Source: AZ Dept. of Administration



Arizona Population Annual Net Change 1975–2013

Source: AZ Dept. of Administration

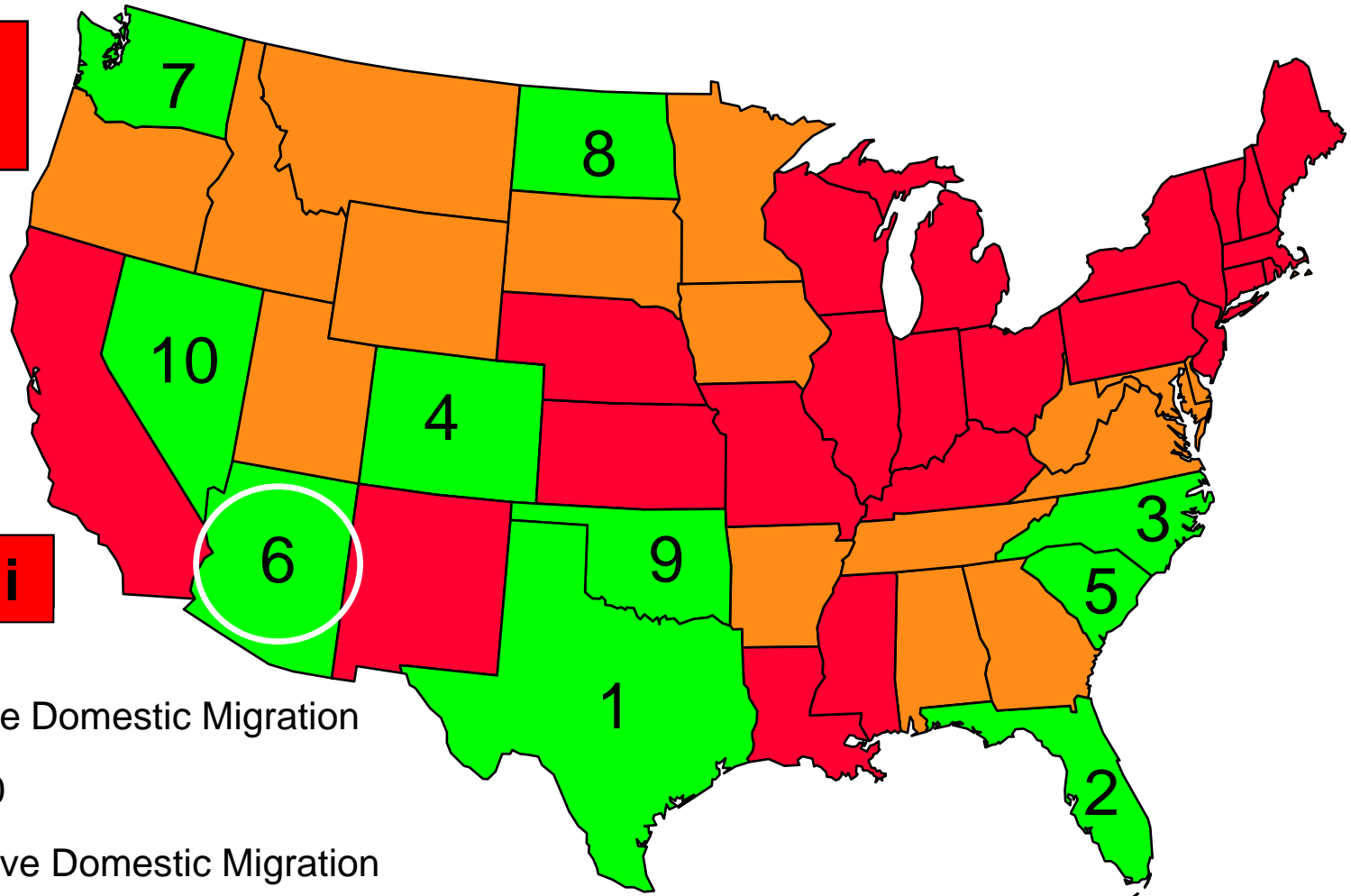


Recession Periods

Arizona Still Top 10 in Attracting Domestic Migrants as of 2013

Alaska

Hawaii



- Positive Domestic Migration
- Top 10
- Negative Domestic Migration

Arizona Domestic Migration Ranking

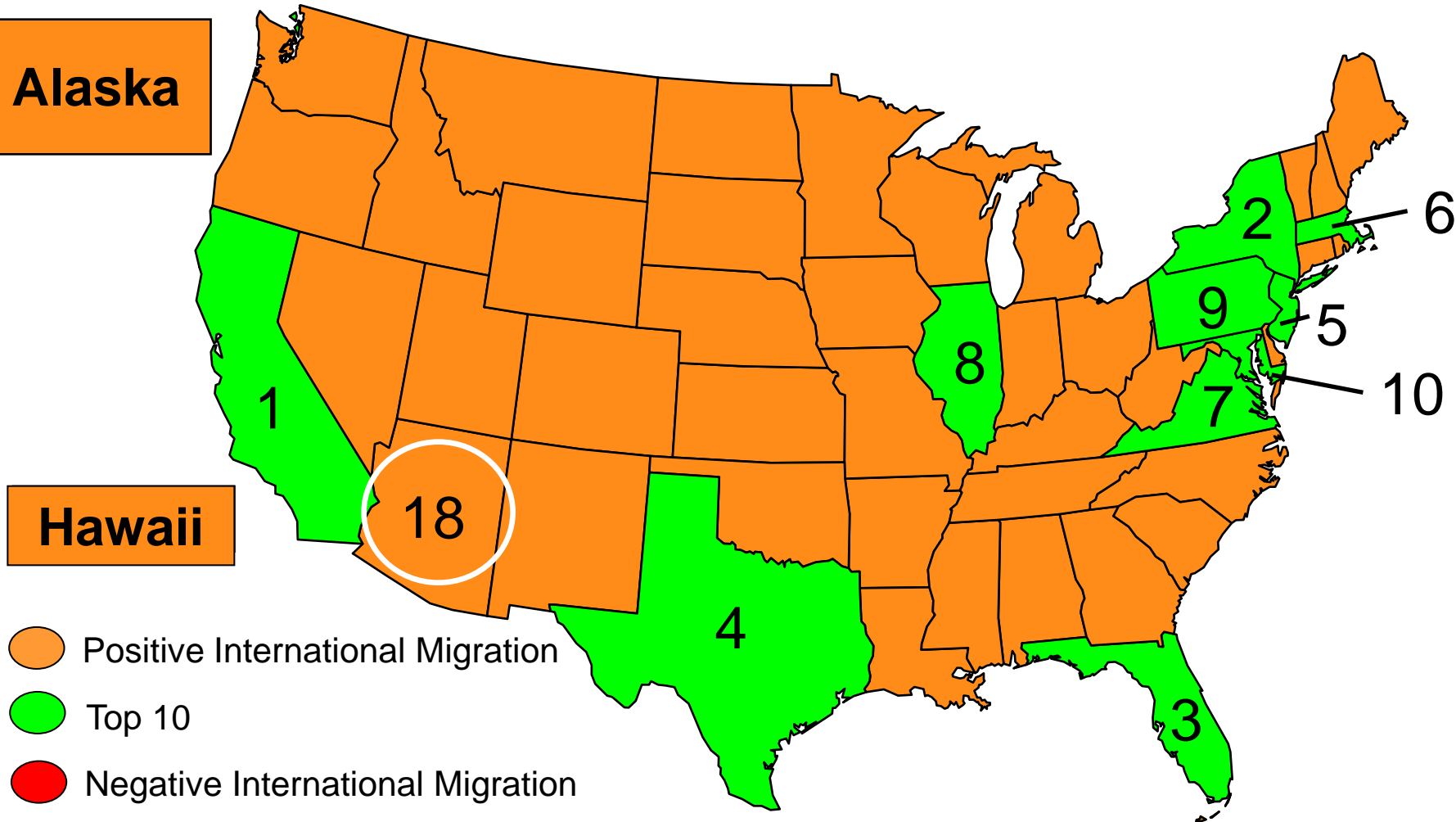
Source: U.S. Census Bureau

Year	Rank
2005	2
2006	3
2007	4
2008	3
2009	11
2011	12
2012	3
2013	6

*No data available for 2010



California, New York & Florida Attracted Most International Migrants in 2013



Arizona International Migration Ranking

Source: U.S. Census Bureau

Year	Rank
2005	8
2006	9
2007	8
2008	9
2009	8
2011	8
2012	18
2013	18

Immigration represented 14% of total population increase in 2013.
That compares to 37% nationally.

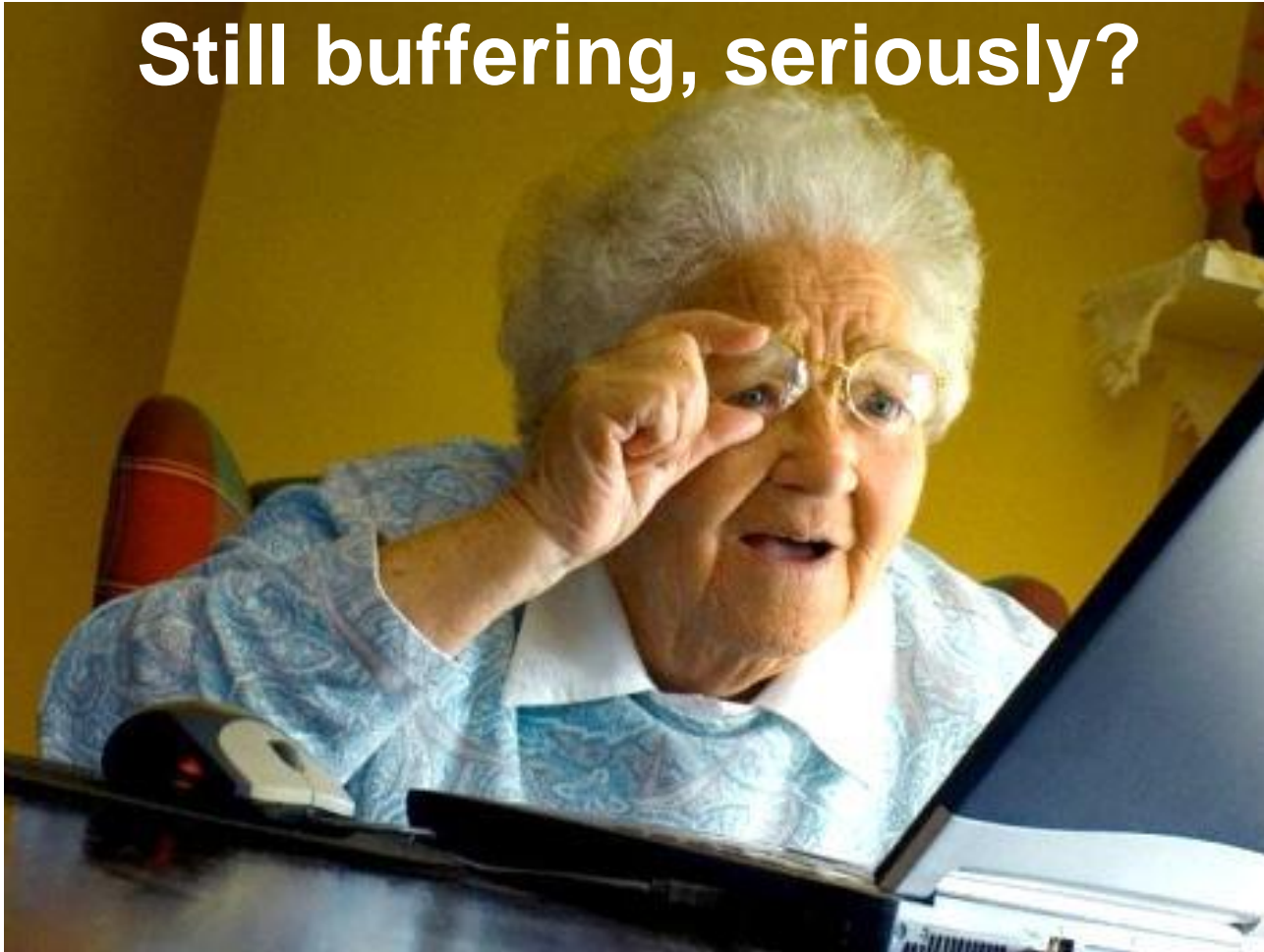


**How quickly are population
flows going to recover?**



SLOWLY!

Still buffering, seriously?



**Fewer people mean fewer
houses.**



Greater Phoenix Population

Source: AZ Dept. of Administration; University of Arizona Forecasting Project; EDPCo

Greater Phoenix Population Estimates and Projections			
Population	2014	2015	2016
EDPCO			
Forecast as of 2014 Q4	4,403,752	4,483,020	4,572,680
Net Change	65,080	79,268	89,660
% Change	1.5%	1.8%	2.0%
U of A Forecasting Project			
Forecast as of 2014 Q4	4,403,817	4,473,290	4,550,366
Net Change	65,145	69,473	77,076
% Change	1.5%	1.6%	1.7%
Arizona Dept. of Administration			
Forecast as of 2012 Q4	4,393,500	4,478,700	4,577,100
Net Change	64,200	85,200	98,400
% Change	1.5%	1.9%	2.2%



Greater Phoenix Population

Source: U.S. Bureau of Census; Arizona Department of Administration; University of Arizona Forecasting Project

YEAR	POPULATION	APR
1960	726,183	6.9%
1970	1,039,807	3.7%
1980	1,600,093	4.4%
1990	2,238,498	3.4%
2000	3,251,876	3.8%
2010	4,192,887	2.6%
2015*	4,481,056	1.3%
2020*	4,974,545	2.1%



If you believe that
population forecast,
it implies an average of
more than **21,100** single family units
will be built each year
from 2014 through 2020 (only if
homeownership comes back).

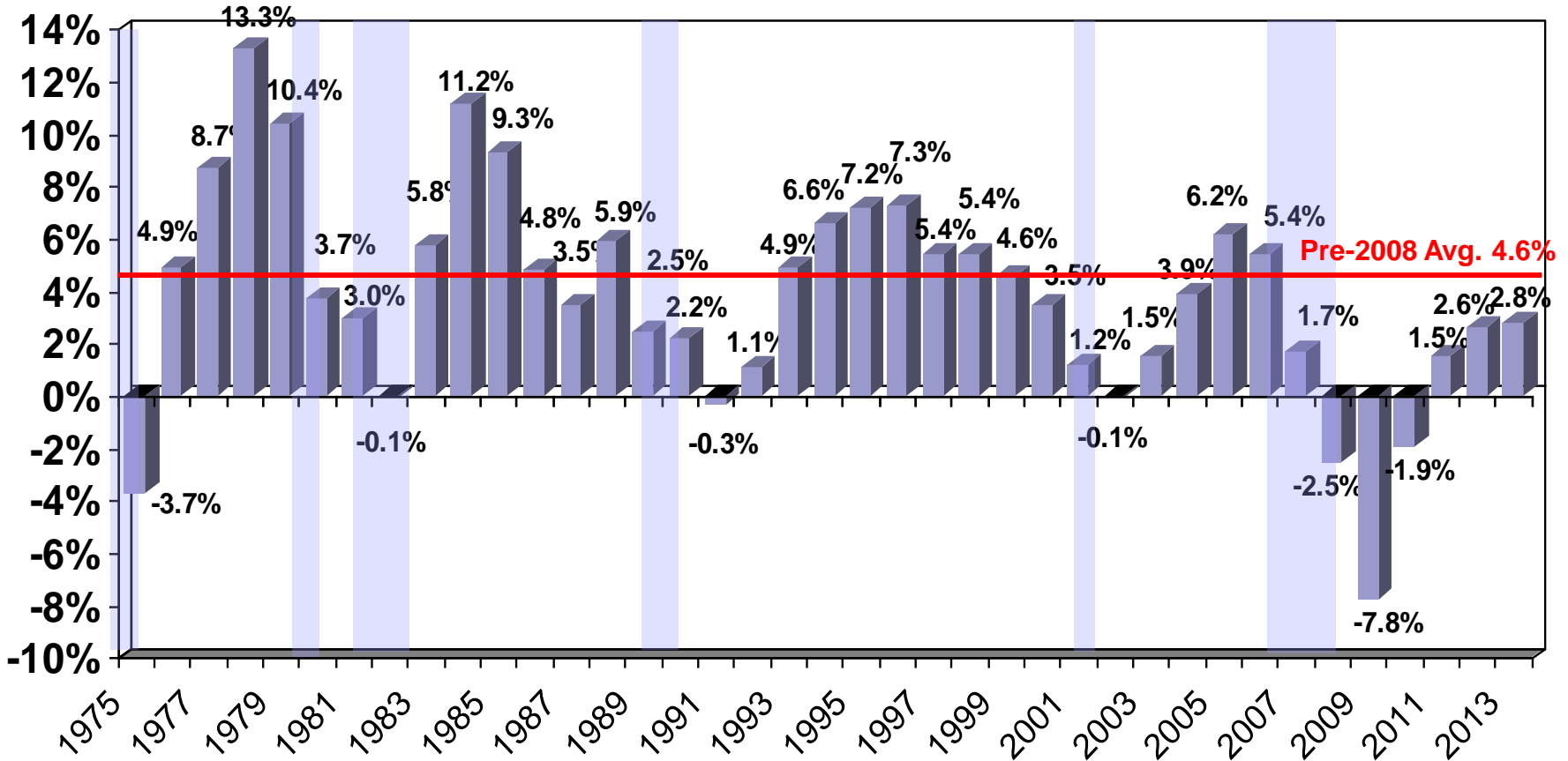


Employment



Greater Phoenix Employment* Annual Percent Change 1975–2013

Source: Arizona Department of Administration



*Non-agricultural wage & salary employment. Changed from SIC to NAICS reporting in 1990.

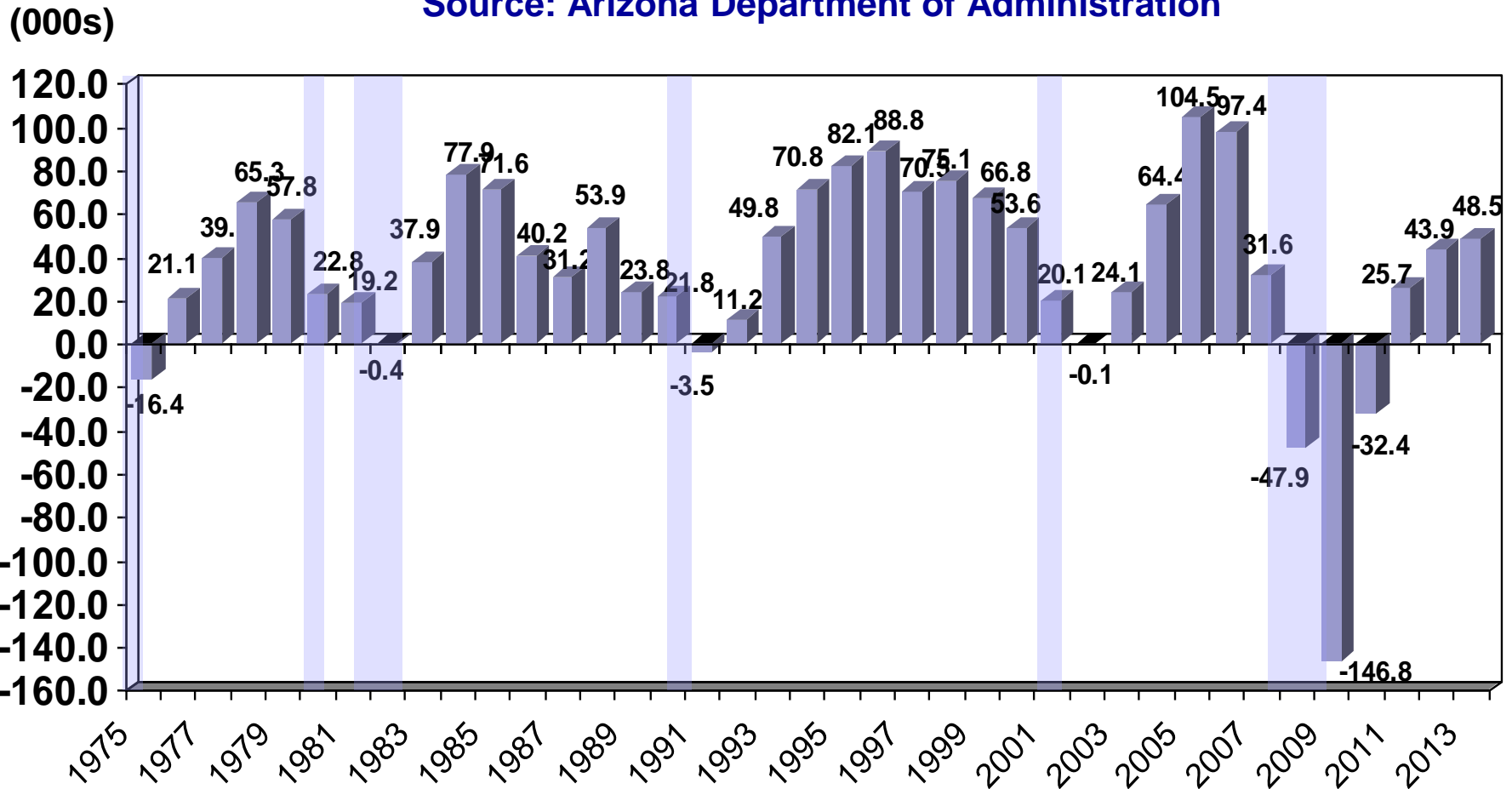
Not seasonally adjusted

Recession Periods



Greater Phoenix Employment* Annual Net Change 1975–2013

Source: Arizona Department of Administration



Recession Periods

*Non-agricultural wage & salary employment. Changed from SIC to NAICS reporting in 1990.

Not seasonally adjusted



100, 1011 5, 2010

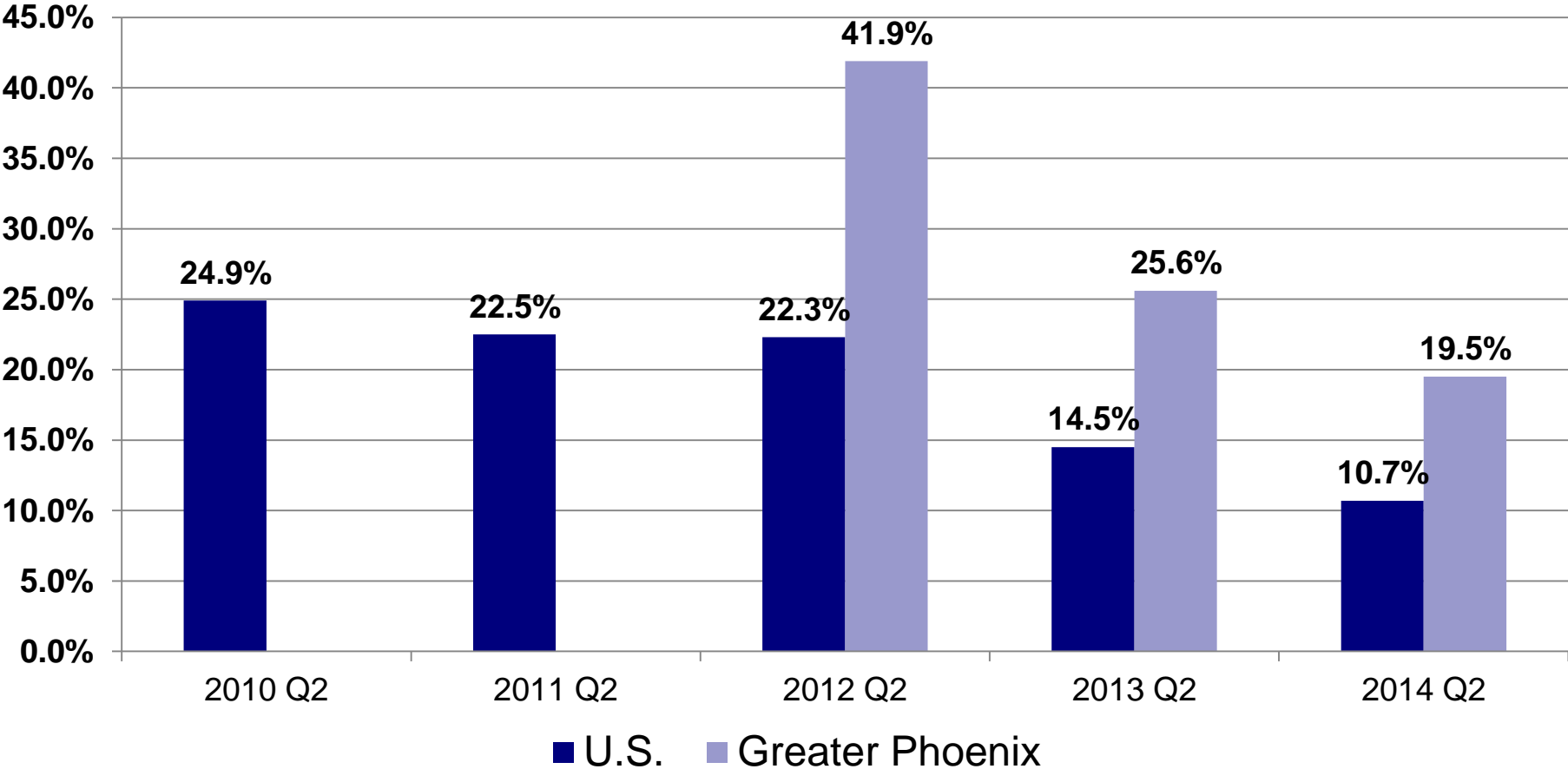
B3

How to Buy a \$450,000 Home for Only \$750,000



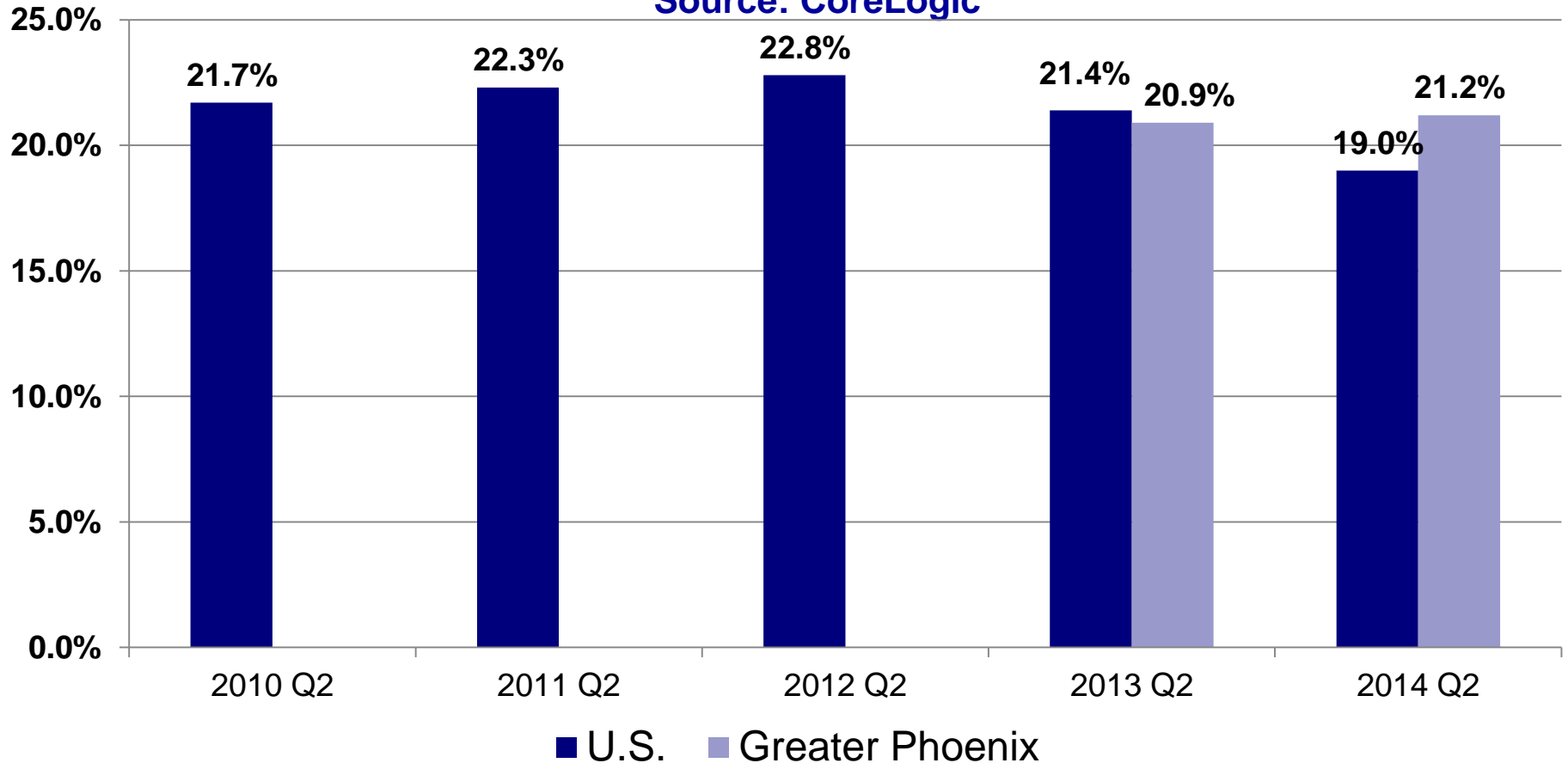
U.S. and Greater Phoenix Negative Equity Share 2010–2014

Source: CoreLogic



U.S. and Greater Phoenix Percent of Borrowers with Home Equity Between 0% and 20% 2010–2014

Source: CoreLogic





U.S. and Greater Phoenix Annual Foreclosures 2002–2013

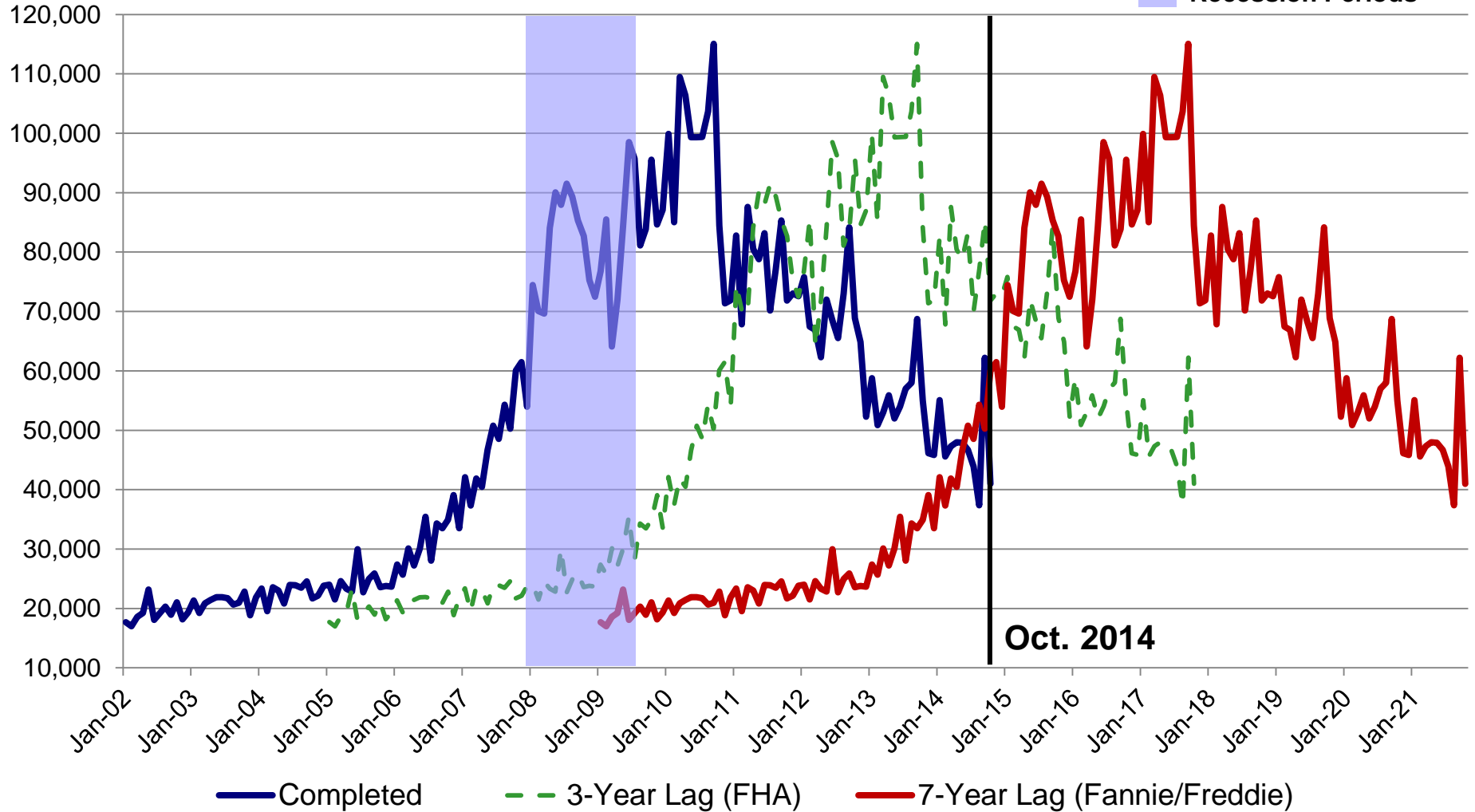
Source: CoreLogic; Information Market

Year	U.S. Foreclosures	% chg year ago	Greater Phoenix Foreclosures	% chg year ago
2002	230,750		4,288	
2003	253,584	9.9%	4,788	11.7%
2004	273,930	8.0%	3,881	-18.9%
2005	290,872	6.2%	1,108	-71.5%
2006	379,380	30.4%	935	-15.6%
2007	587,872	55.0%	9,550	921.4%
2008	972,933	65.5%	38,427	302.4%
2009	1,009,284	3.7%	47,054	22.5%
2010	1,145,292	13.5%	49,338	4.9%
2011	930,633	-18.7%	42,518	-13.8%
2012	821,689	-11.7%	22,629	-46.8%
2013	618,493	-24.7%	9,686	-57.2%



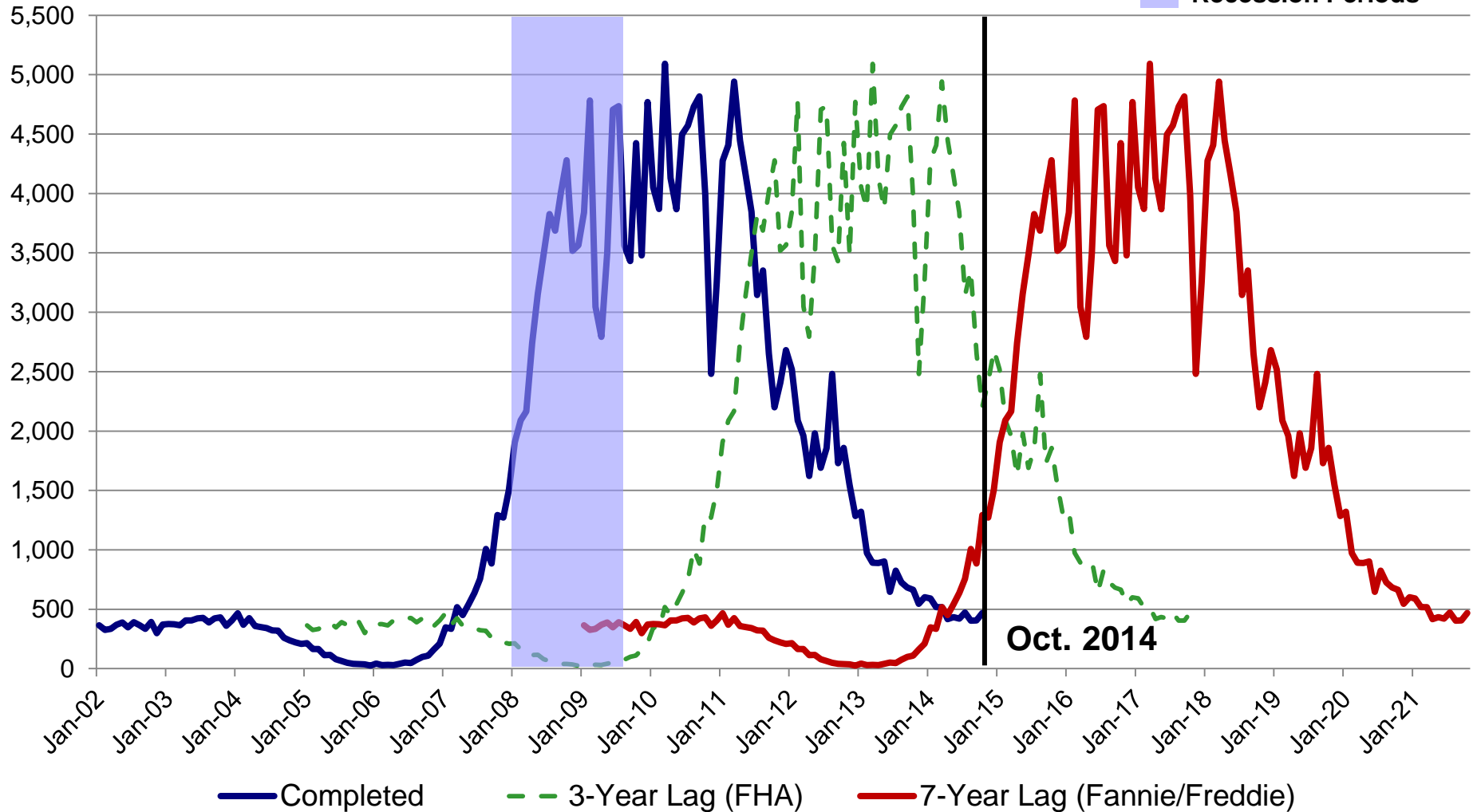
U.S. Foreclosure Lag 2002–2021

Source: CoreLogic



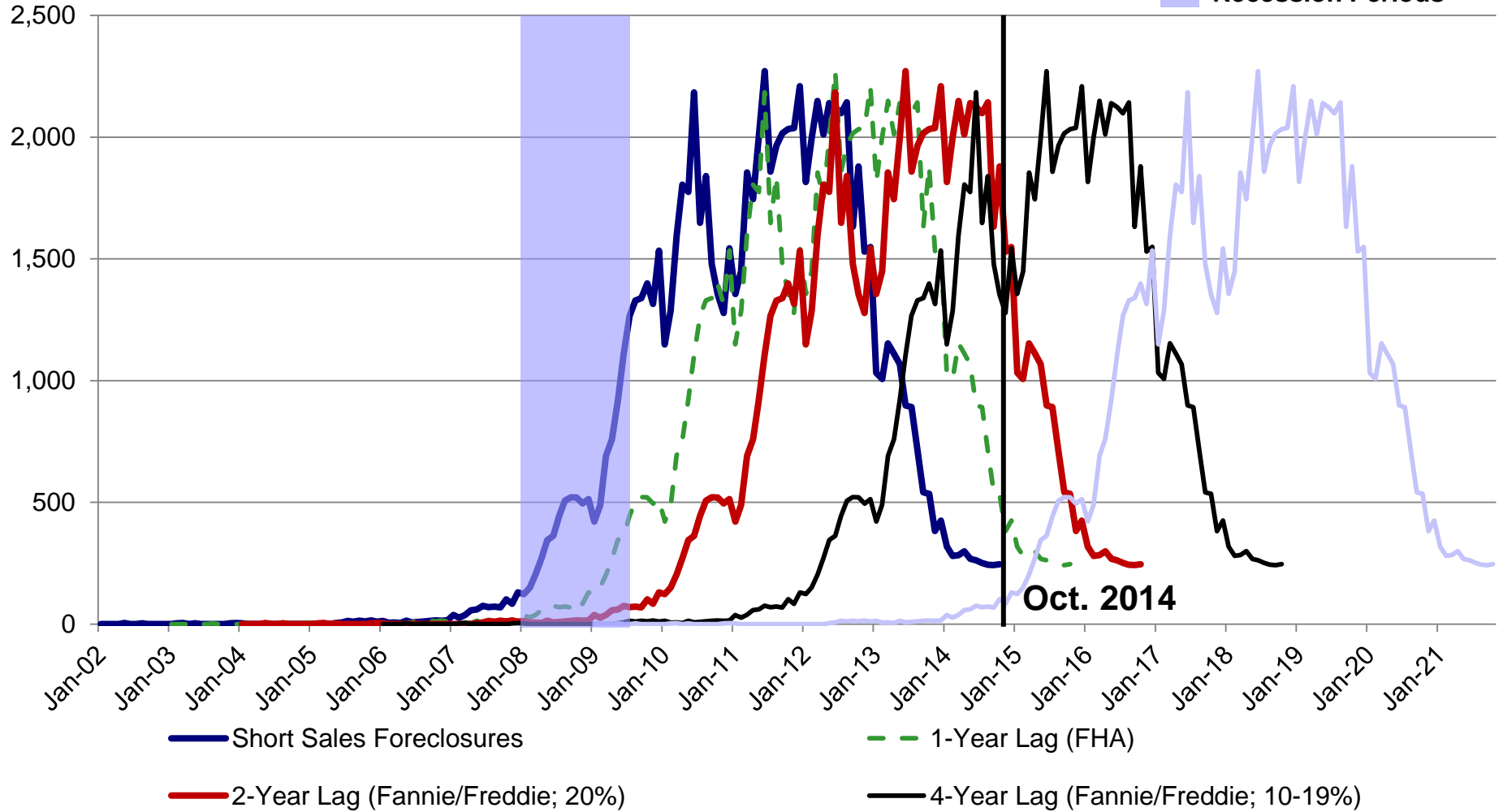
Greater Phoenix Foreclosure Lag 2002–2021

Source: Information Market



Greater Phoenix Short Sale Lag 2002–2021

Source: Cromford Report



Millennials



Priorities..

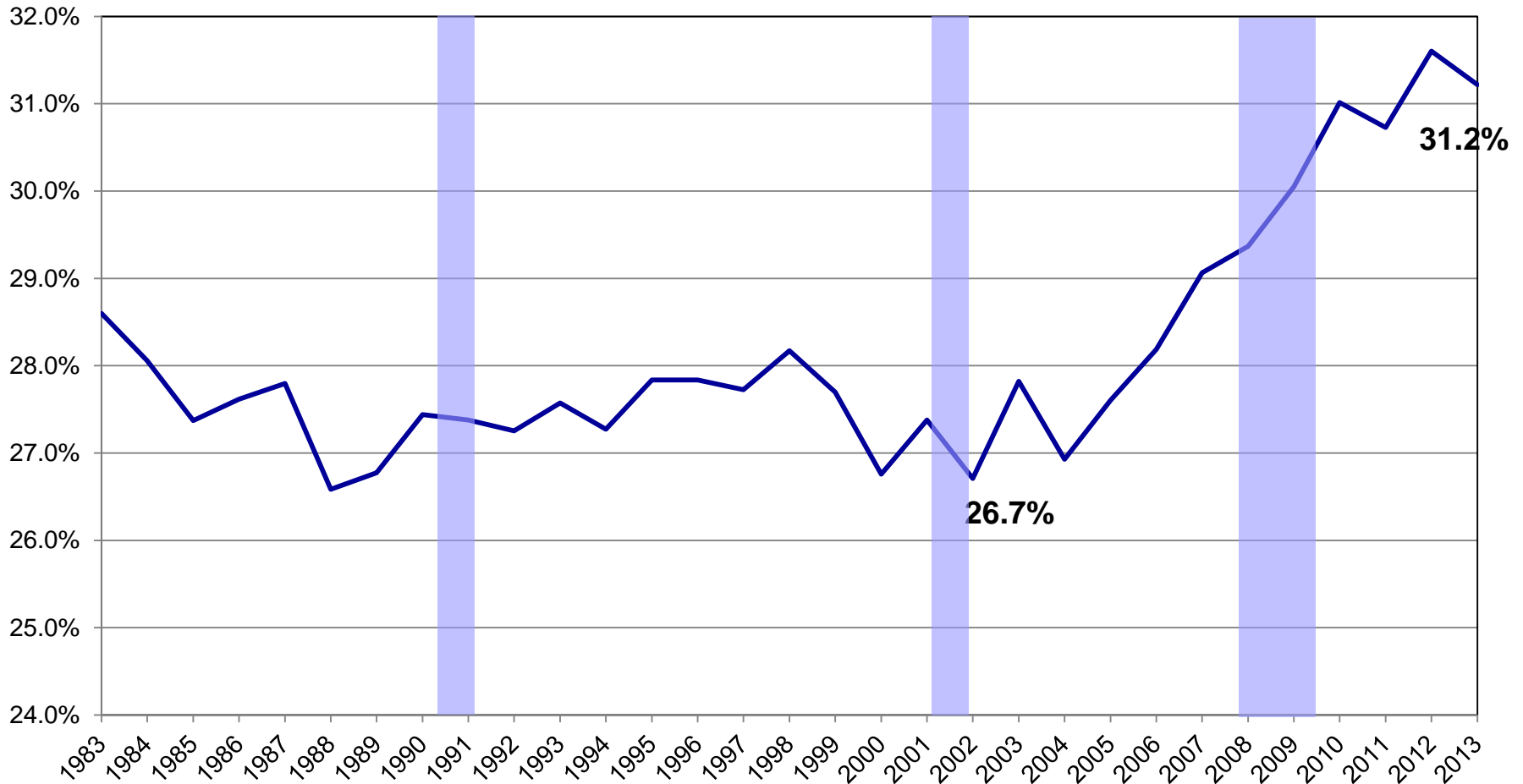


Percent of 18-34 Year Olds Living With Parents

U.S.: 1983 – 2013

Source: US Census Bureau

Recession Periods



18-34 year olds represent 23.5% of total population (74.3 million persons).

3.3 million more 18-34 year olds now living with parents.

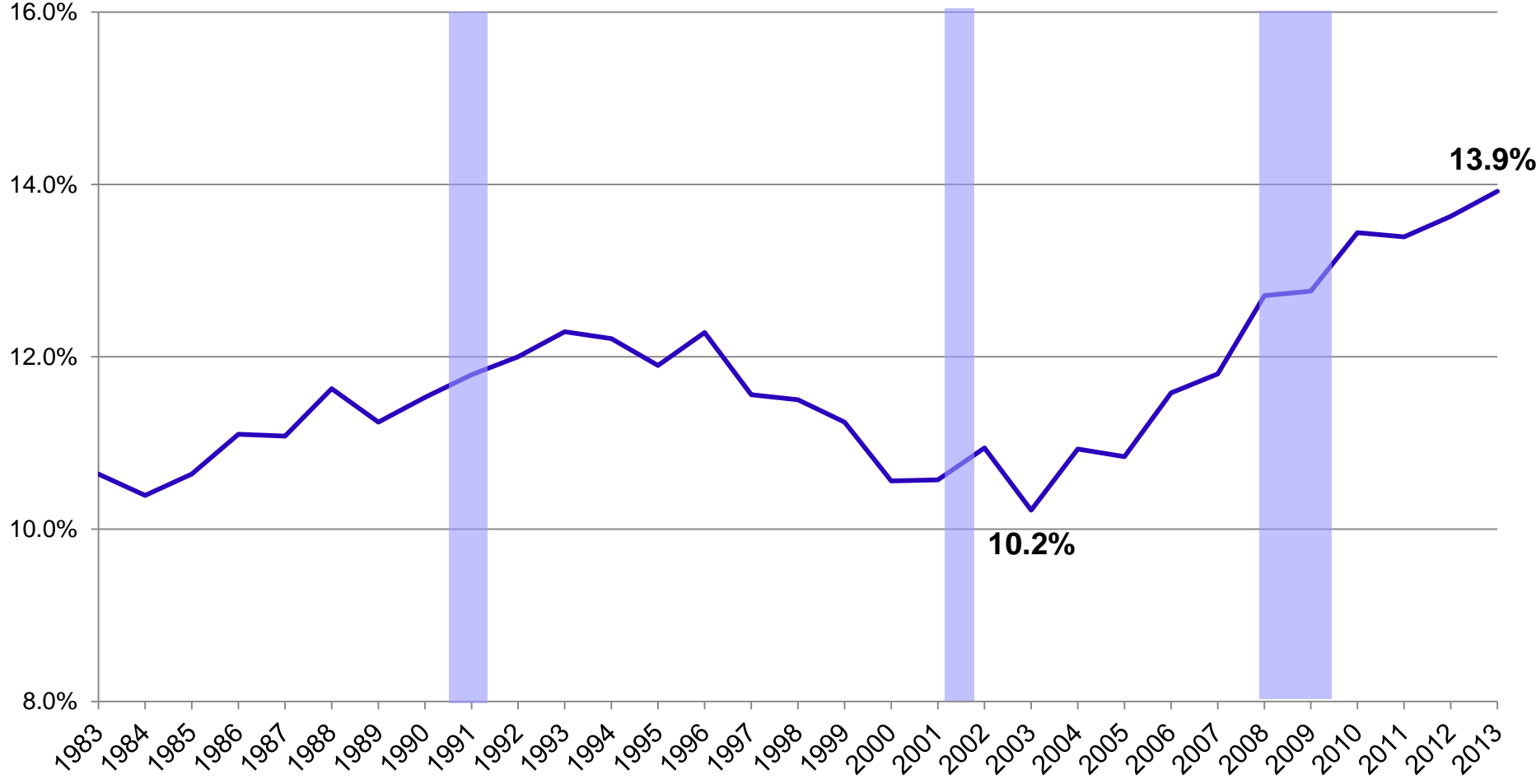


Percent of 25-34 Year Olds Living With Parents

U.S.: 1983 – 2013

Source: US Census Bureau

 Recession Periods



25-34 year olds represent 13.6% of total population (42.8 million persons).
 1.5 million more 25-34 year olds now living with parents.

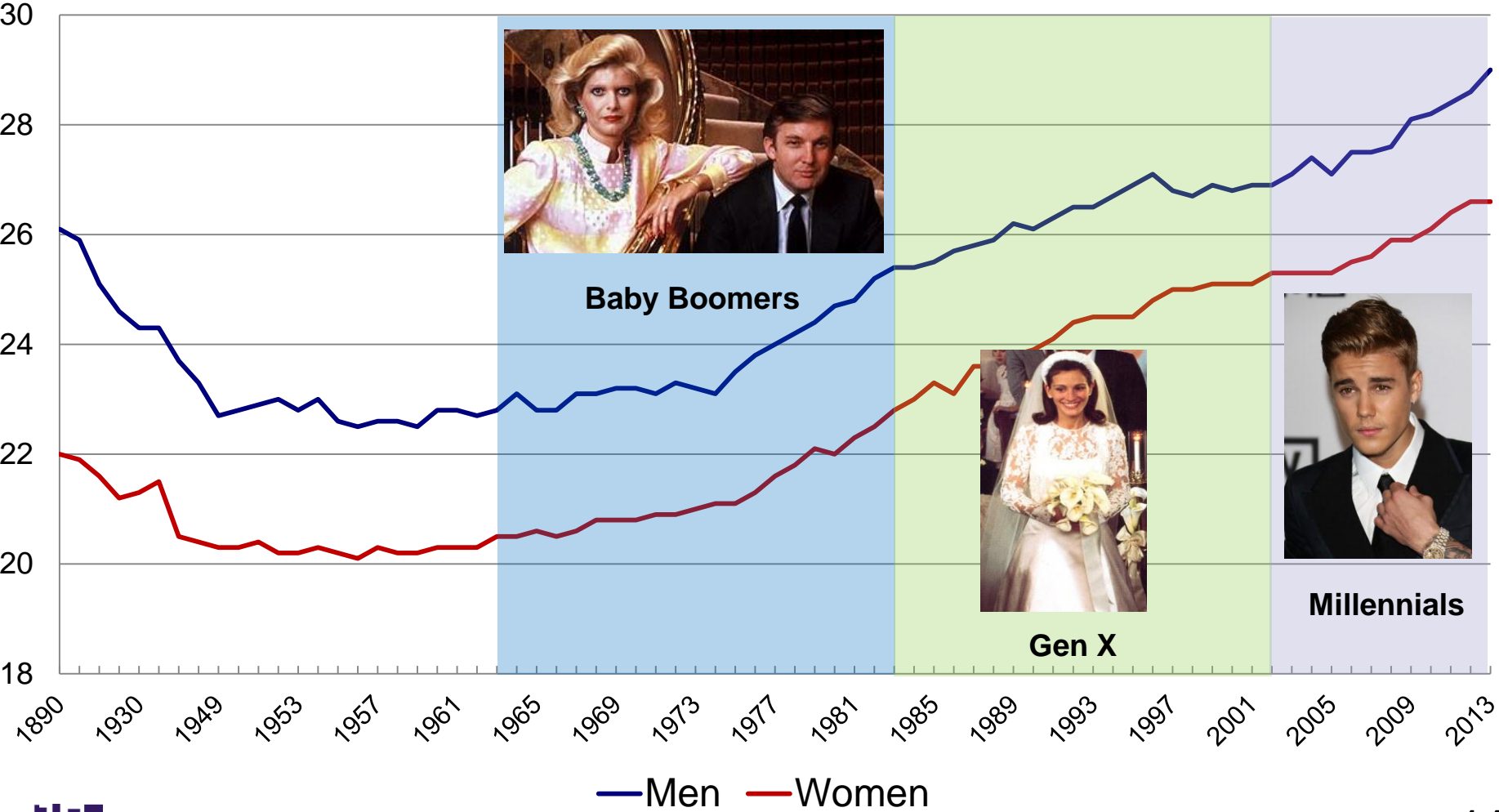
Millennials

- **30-34 year olds in 2012 had the lowest homeownership rate of any similarly aged group before them.**
- **Five years prior, this exact same group (at 25-29 years old) had the highest homeownership rate than any group before them.**



U.S. Median Age at First Marriage 1890-2013

Source: U.S. Census Bureau



Baby Boomers



Gen X



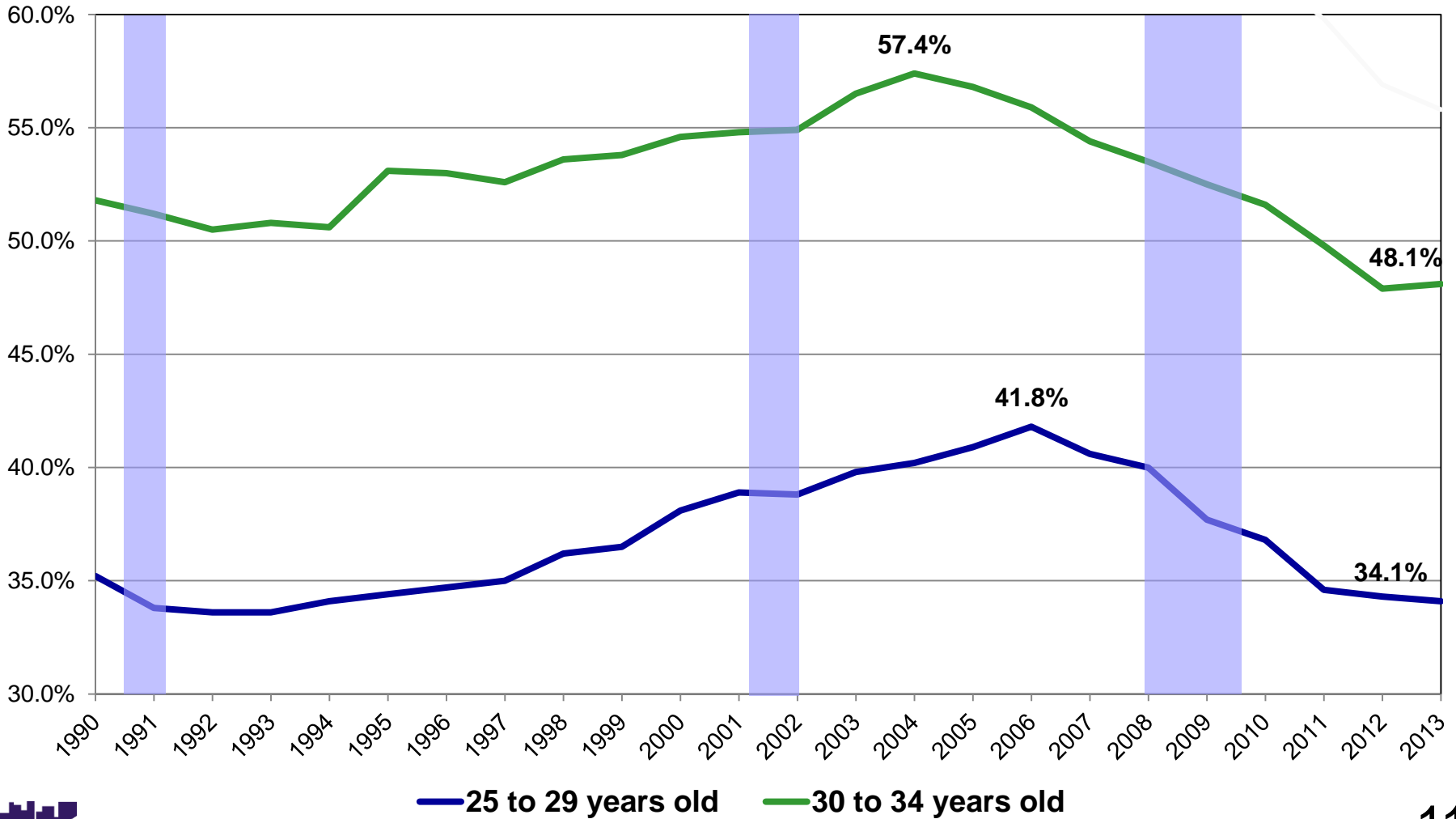
Millennials



U.S. Homeownership Rates By Age of Householder 1990 – 2013

Source: US Census Bureau

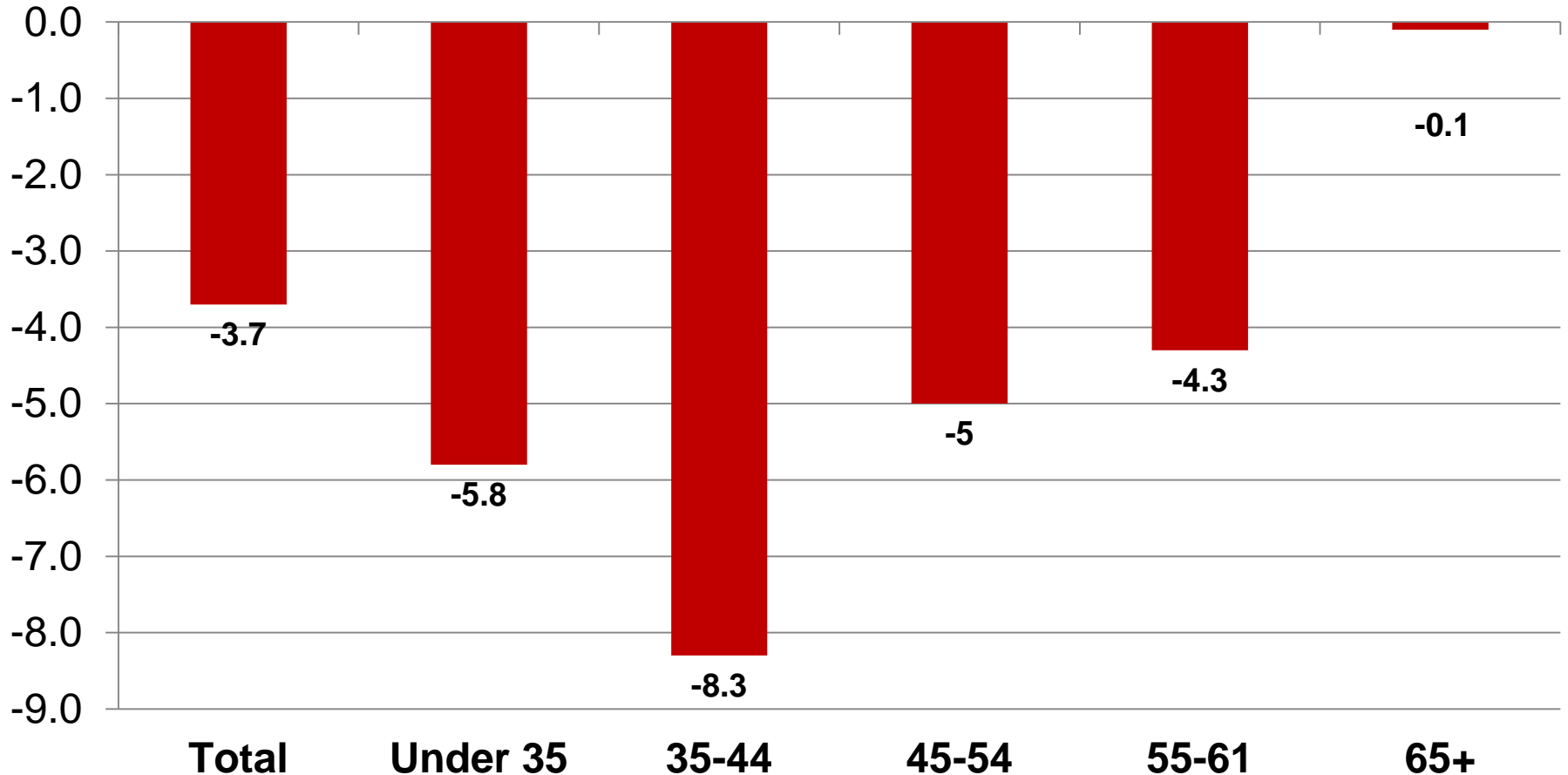
Recession Periods



U.S. Homeownership Rates by Age

%-Point Change from 2006-2013

Source: US Census Bureau

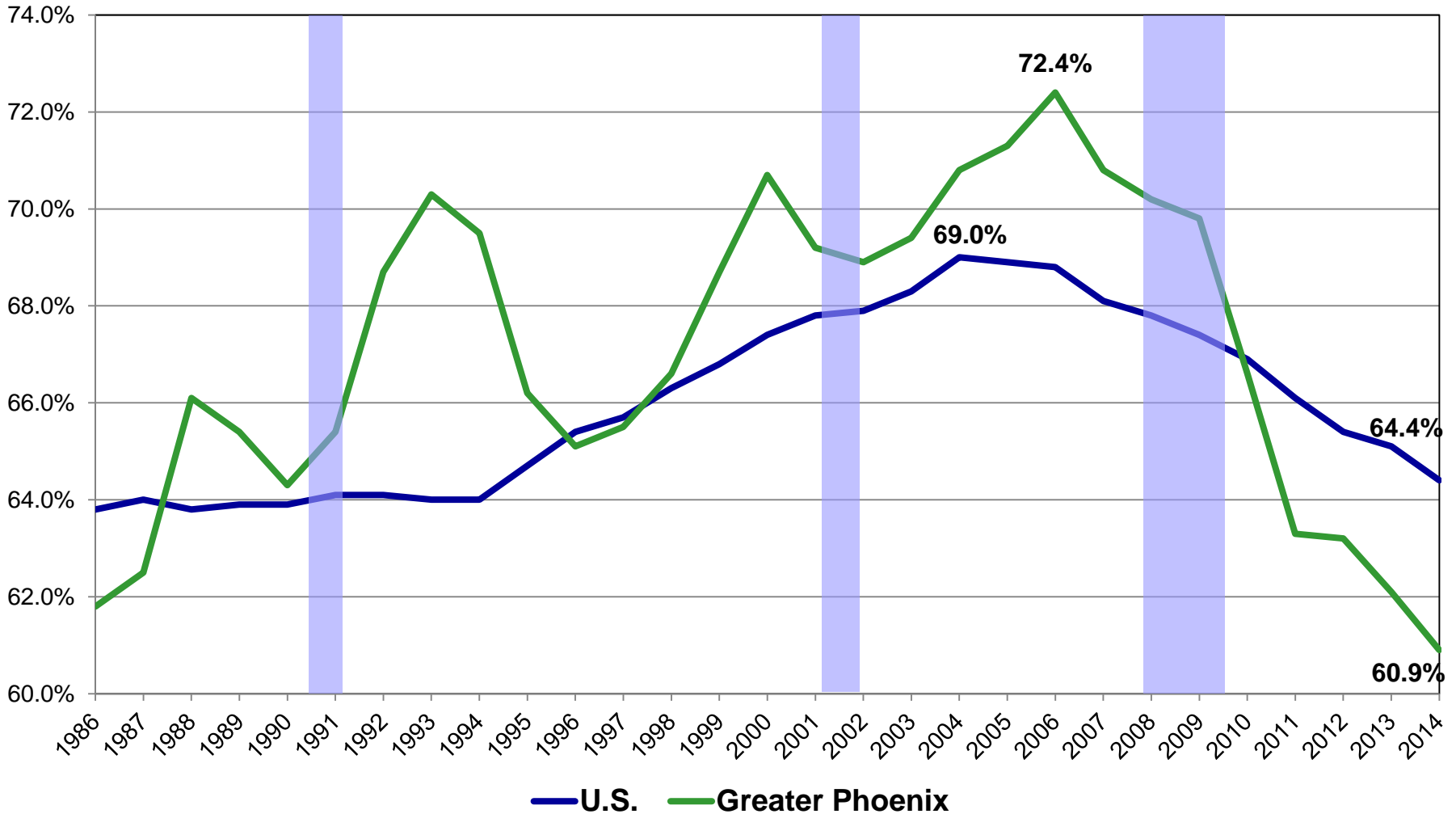


Homeownership Rates

1986 – 2014*

Source: US Census Bureau

Recession Periods



*Data through the third quarter of 2014.



Change in Greater Phoenix occupied housing units

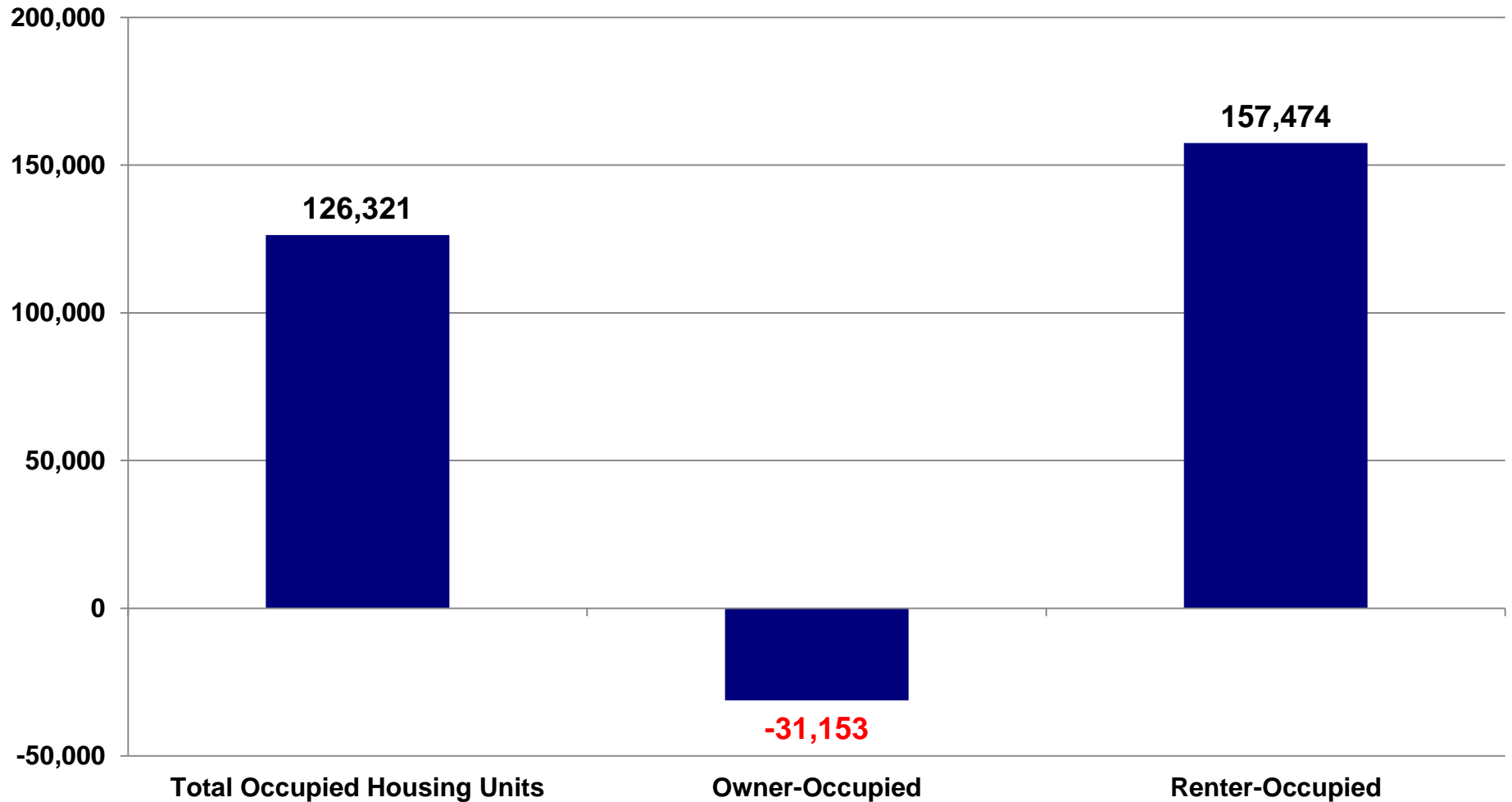
Source: American Community Survey

	2006	2013	2006-2013
Owner-occupied	68.6% of total occupied	61.0% of total occupied	-25% of total change
Renter-occupied	31.4% of total occupied	39.0% of total occupied	125% of total change



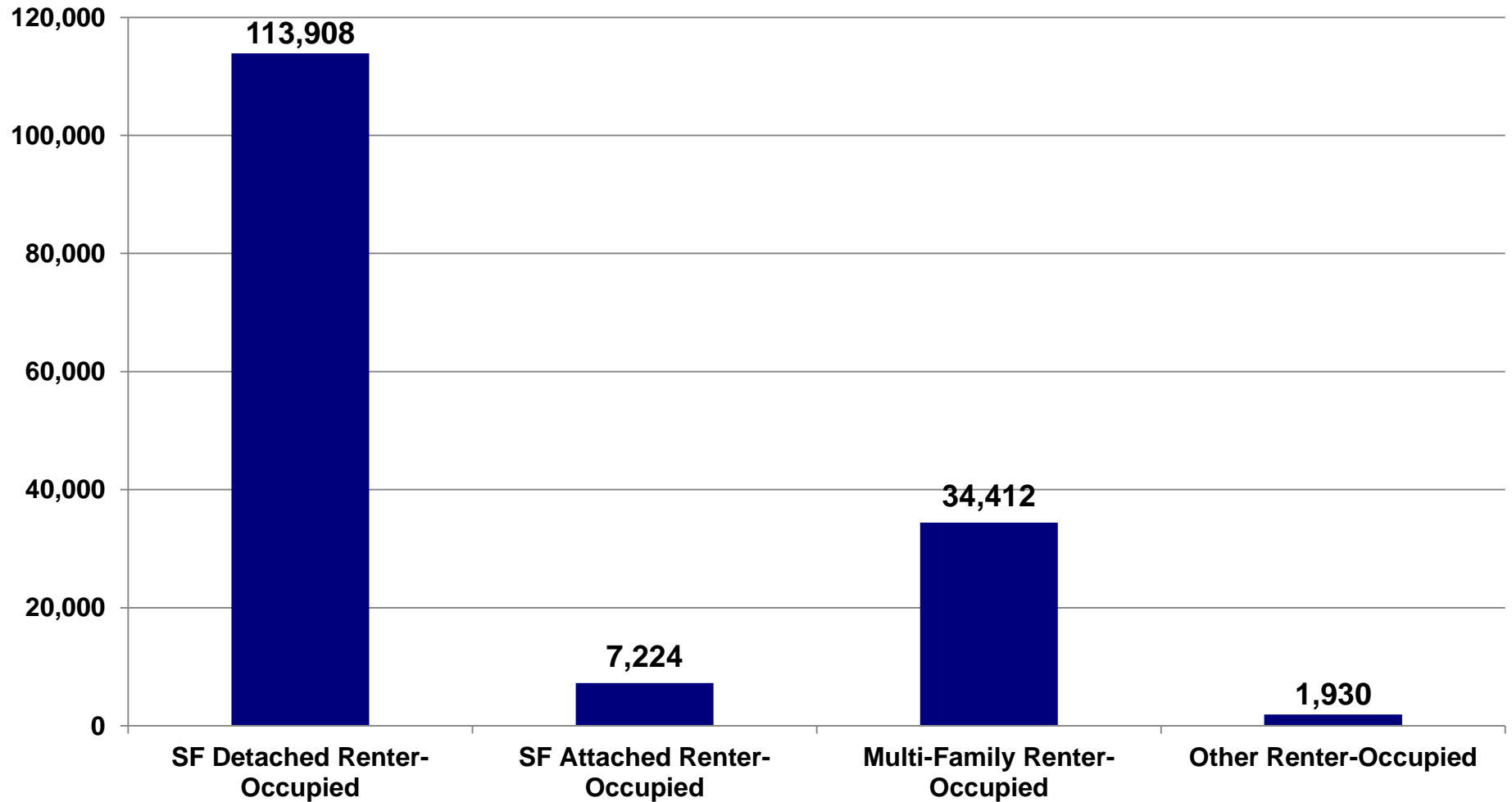
Greater Phoenix Occupied Housing Units Net Change 2006 – 2013

Source: American Community Survey



Greater Phoenix Renter-Occupied Housing Units Net Change 2006 – 2013

Source: American Community Survey



A total increase of **157,474** renter-occupied units between 2006-2013



Student Loan Impact on Home Buying



Student Loan Impact on Home Buying

- Purchasing power for a home is reduced by \$52,500 for every \$250 monthly student loan payment.
- As of 2013, 42.2 million people have some student debt.
- 29 million (or 34%) of the 86 million people under 40 have some student debt. These 29 million individuals translate into 16.8 million households.
- 5.9 million (or 35%) of the 16.8 million households pay more than \$250 per month in student loans. This is up from 2.2 million households (or 22%) in 2005.
- Most households paying \$750+ per month in student loans are priced out of the market (approximately 2.0 million people).

Source: Federal Reserve Bank of New York; John Burns Consulting; Elliott D. Pollack & Co.



SB 1070



Survey Regarding Arizona's Population

Are there too many illegal aliens in Arizona?

17% - Yes

22% - No

61% - No Comprende



What they Wanted to Say:

SB 1070:

“If you are an illegal immigrant
we don’t want you.”



What the World Heard:

SB 1070:

“If you are an immigrant we
don’t want you.”



ON TEENAGERS, ADULTS:

Statistics show that teen pregnancy drops off significantly after age 25.

*Mary Anne Tebode, Republican state senator from Colorado Springs
(contributed by Harry F. Ponce)*

MONDAY

DECEMBER 1999



Ability to Qualify



Tougher Qualifications

2002-2006 was not normal. 2009-present is not normal.

- (1) More paperwork
- (2) Automated underwriting standards make it difficult for self-employed, commissioned sales people and affluent retirees
- (3) Lower debt to income ratios
- (4) Longer lockout period after a foreclosure
- (5) Higher down payment requirements



Real Issues

- (1) FHA loan limit (\$271,050 vs. the previous \$346,250)
- (2) Freddie/Fannie “put-backs”
- (3) **FHA vs. Freddie/Fannie (Increased standards & Longer Lockout Periods)**
- (4) **Dodd-Frank created a cloud**



FHA Loan Limit Impact on Greater Phoenix New Home Sales

Source: U.S. Dept. of HUD/FHA; ASU Housing Reports

	<u>2013</u>	<u>2014</u>
FHA Loan Limit	\$346,250	\$271,050
% of Homes Under FHA Limit	70.9%	42.3%

Switching from FHA to Fannie/Freddie requires higher down payments, higher FICO scores, and other more stringent overall requirements.



FHA Loan Limit Impact on Greater Phoenix New Home Sales

Source: U.S. Dept. of HUD/FHA; ASU Housing Reports

IF...

	<u>2013</u>	<u>2014</u>
FHA Loan Limit	\$271,050	\$346,250
% of Homes Under FHA Limit	50.7%	65.9%

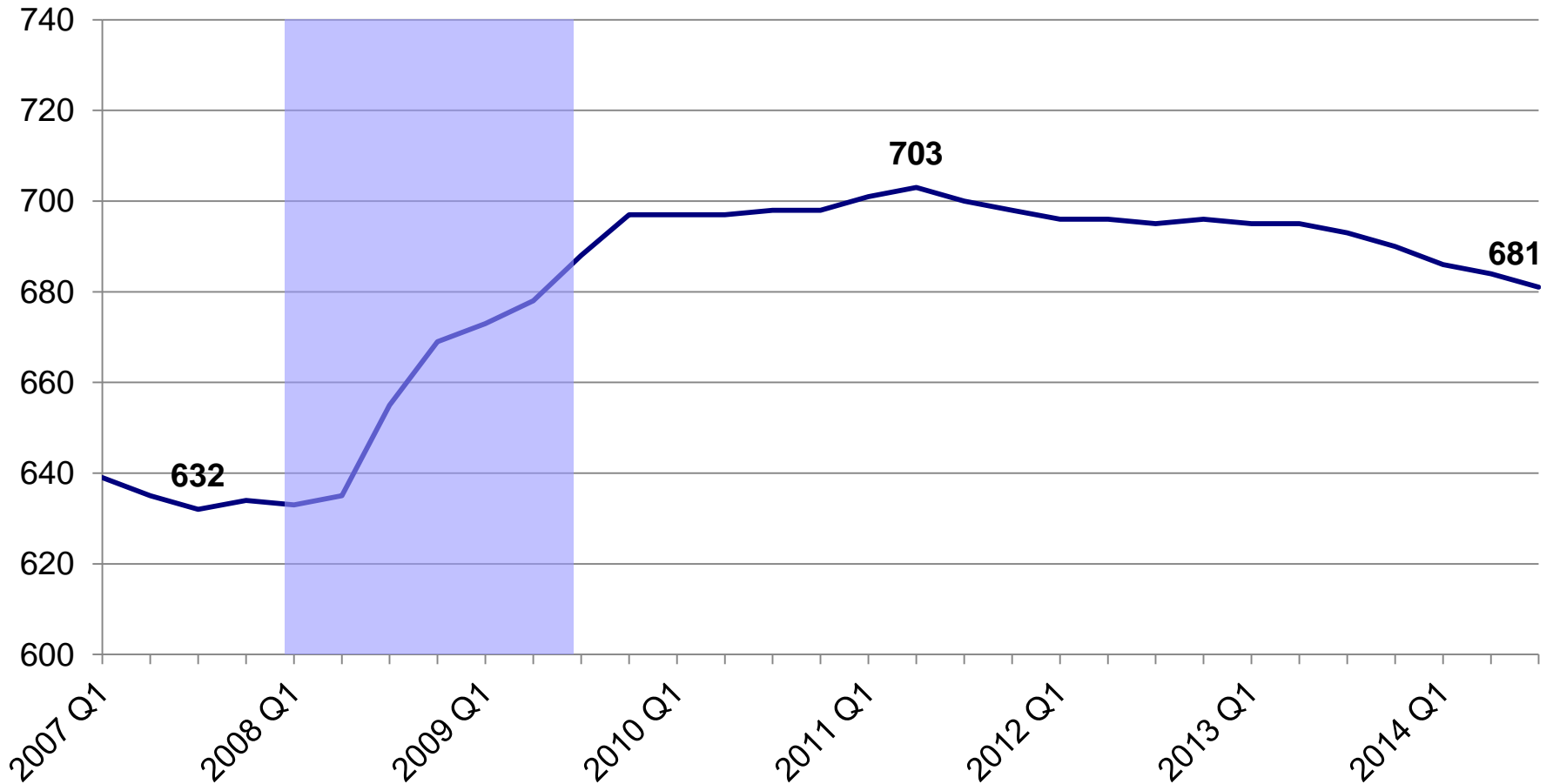


Average Borrowers Credit Scores on All New FHA Loans

2007– 2014*

Source: U.S. Dept. of HUD/FHA

 Recession Periods

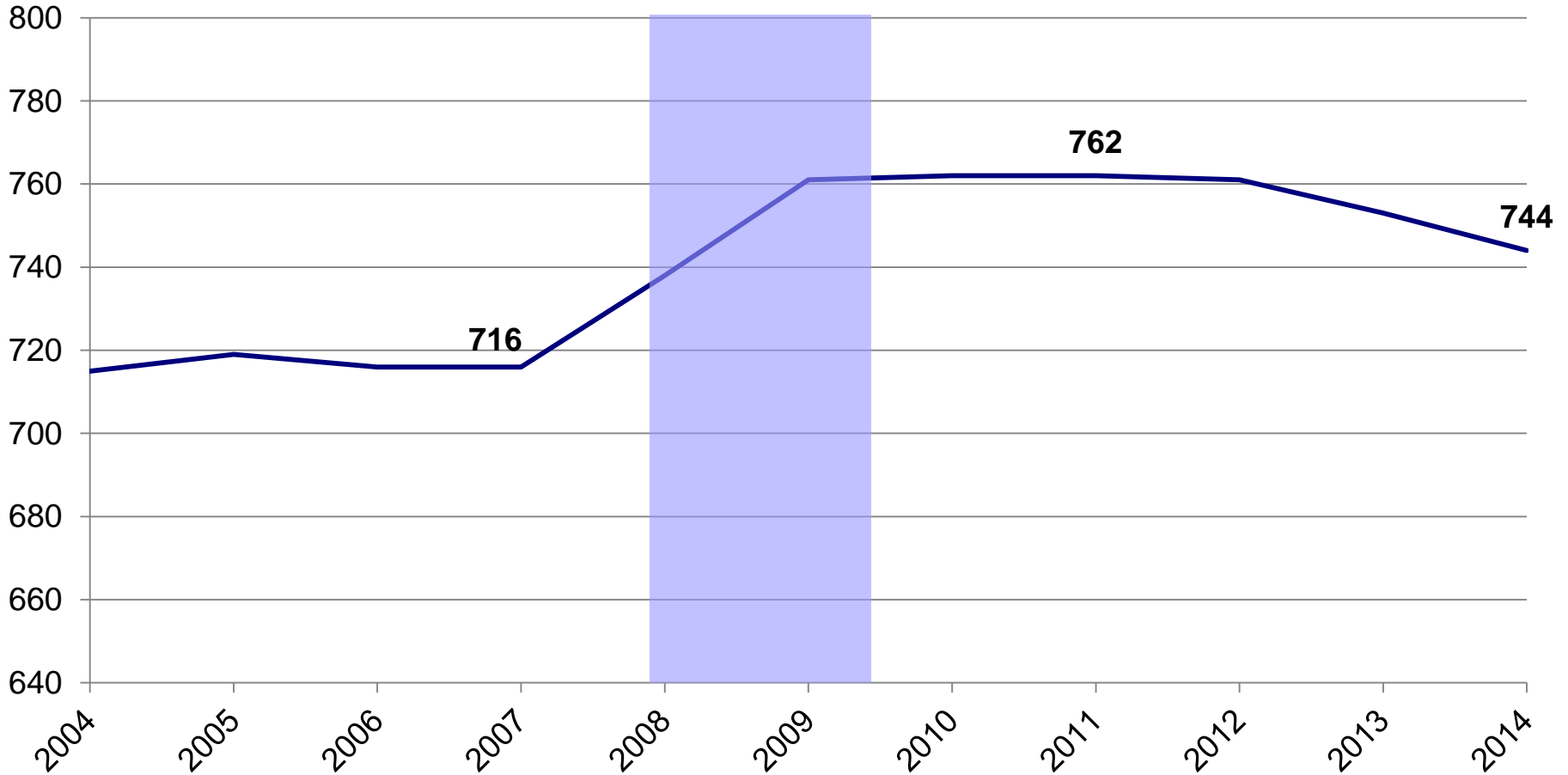


Average Borrowers Credit Scores on All New Fannie Mae Loans

2004 – 2014*

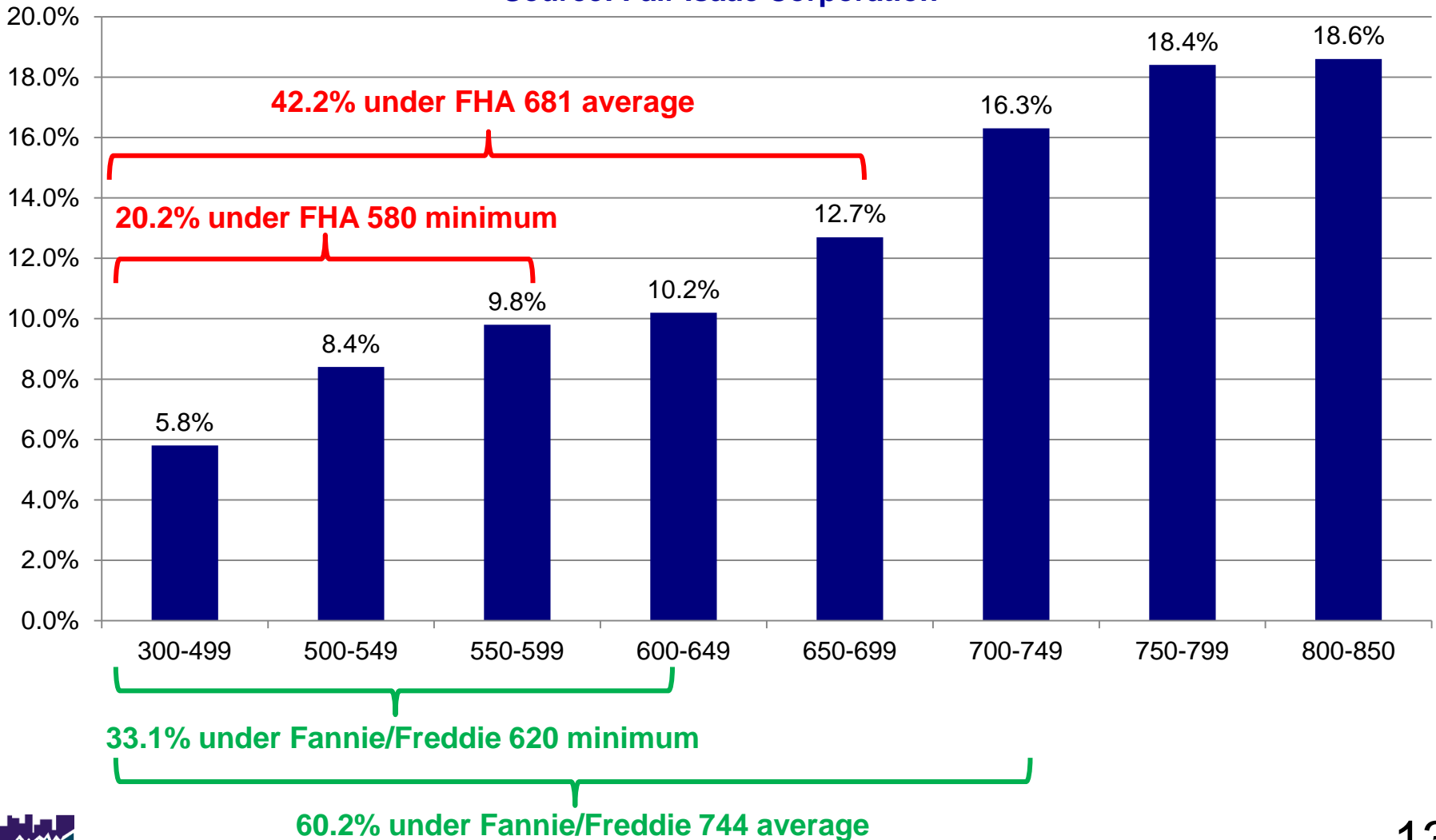
Source: Fannie Mae

Recession Periods



FICO Score Distribution Percent of Population October 2013

Source: Fair Isaac Corporation



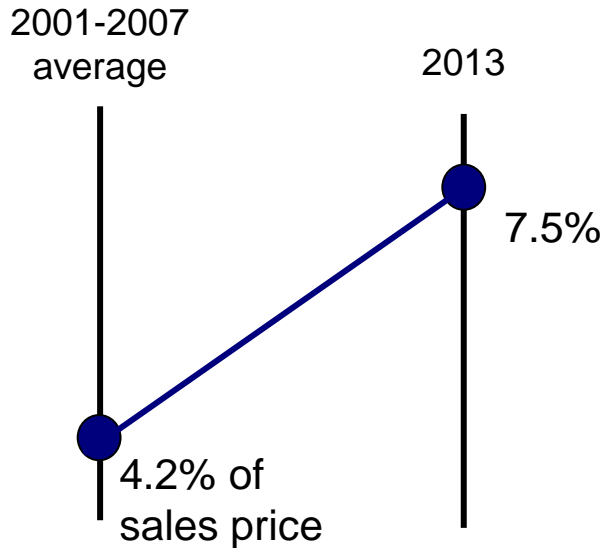
Approximately 1/4 of potential buyers shut out of the housing market due to their change in average FICO scores.



Size of Median Down Payment by Home Sales Price

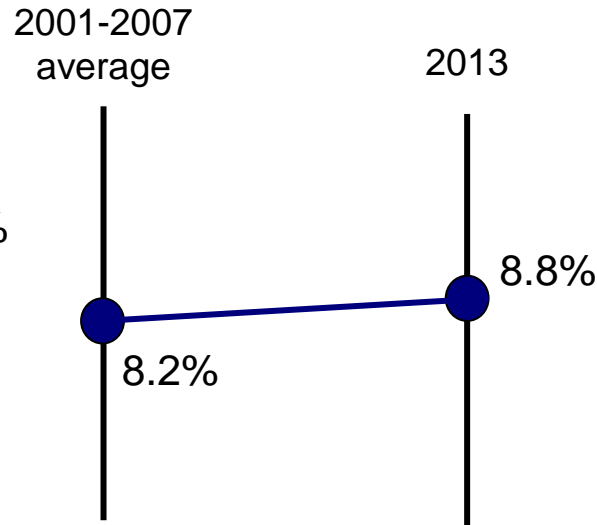
Source: Redfin; Bloomberg

Cheapest 25% of homes



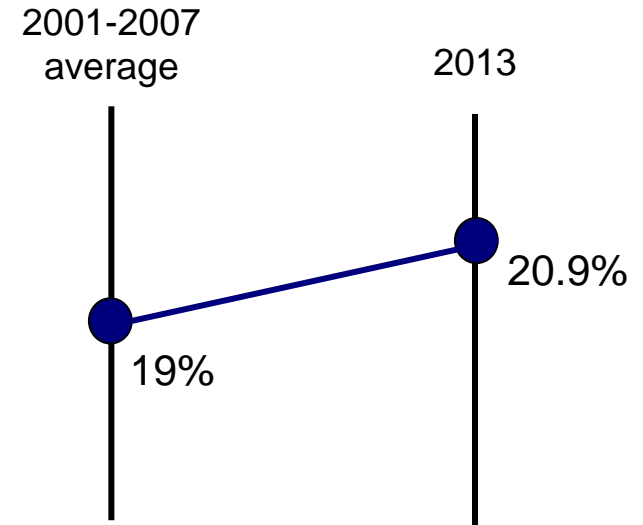
↑ 78.6%

Middle 50% of homes



↑ 7.3%

Highest 25% of homes



↑ 10.0%



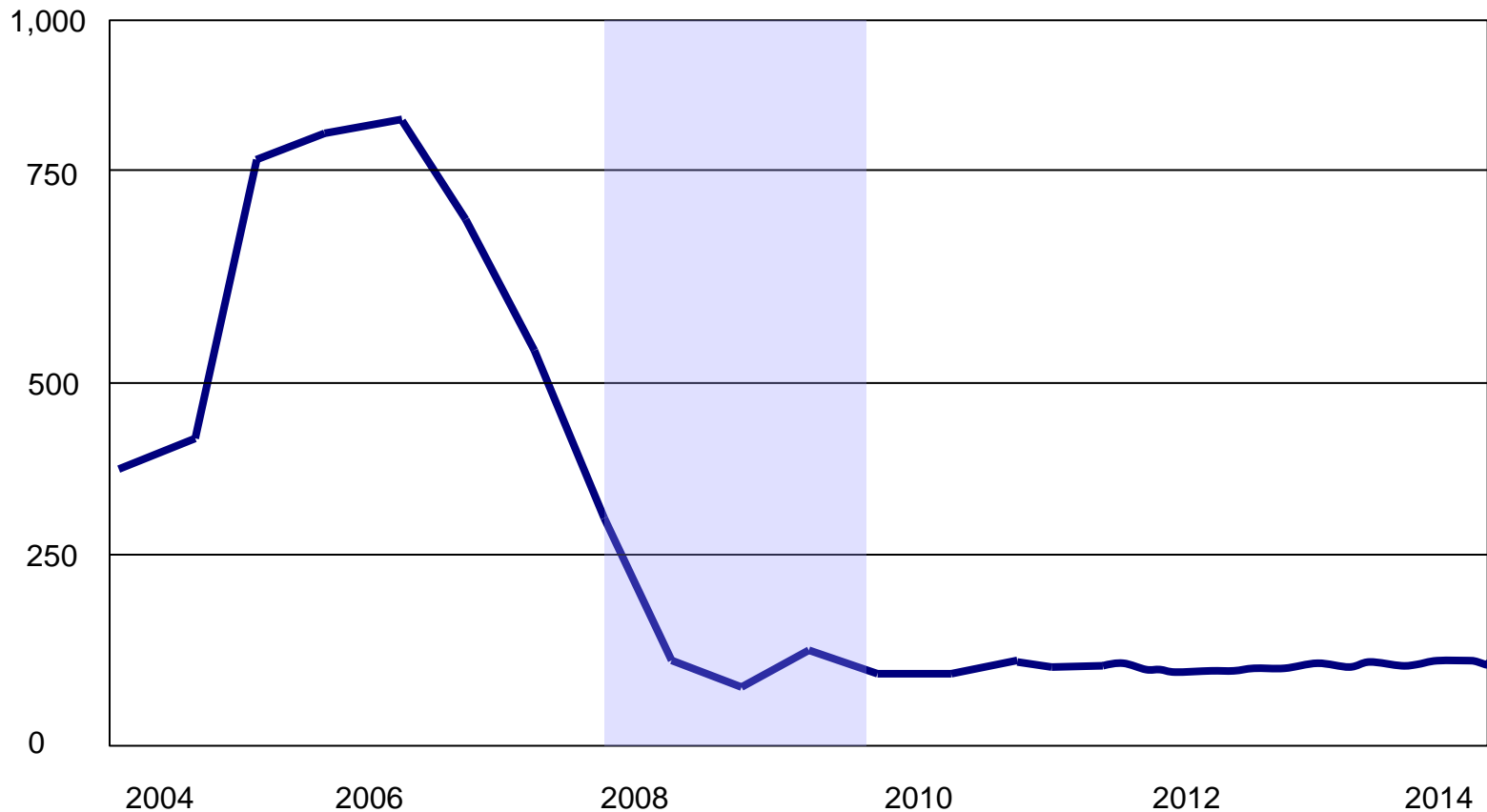
Mortgage Credit Availability Index

2004 – 2014*

March 2012 = 100

Source: Mortgage Bankers Association

Recession Periods



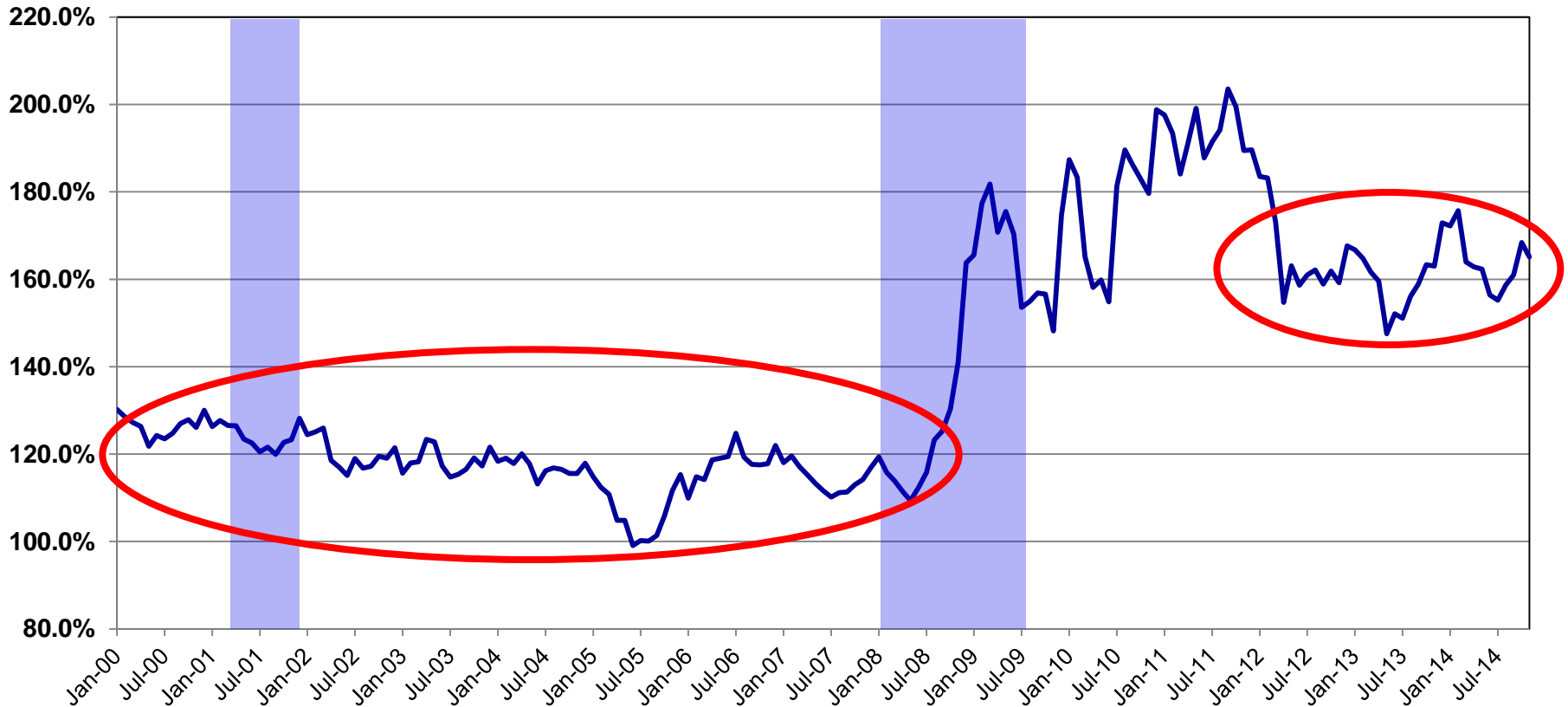
*A decline in the MCAI indicates that lending standards are tightening, while increases in the index are indicative of loosening of credit.



Median Price of New Homes as a Percent of the Median Price of Resale Homes Maricopa County 2000–2014*

Source: Information Market

Recession Periods

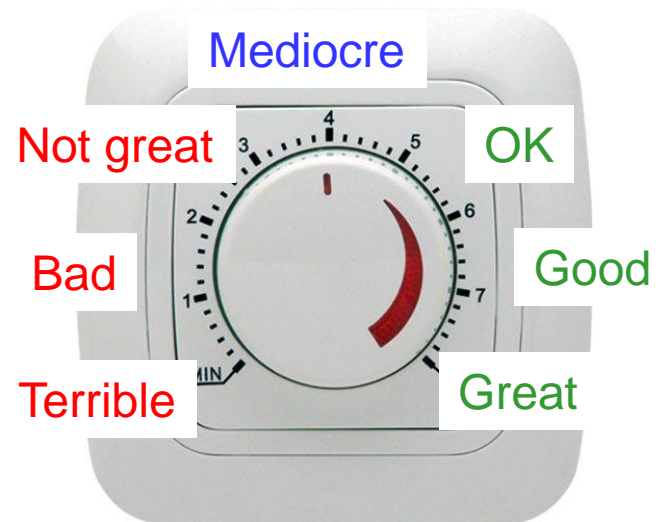


Housing

Not a light switch...



A dimmer switch...

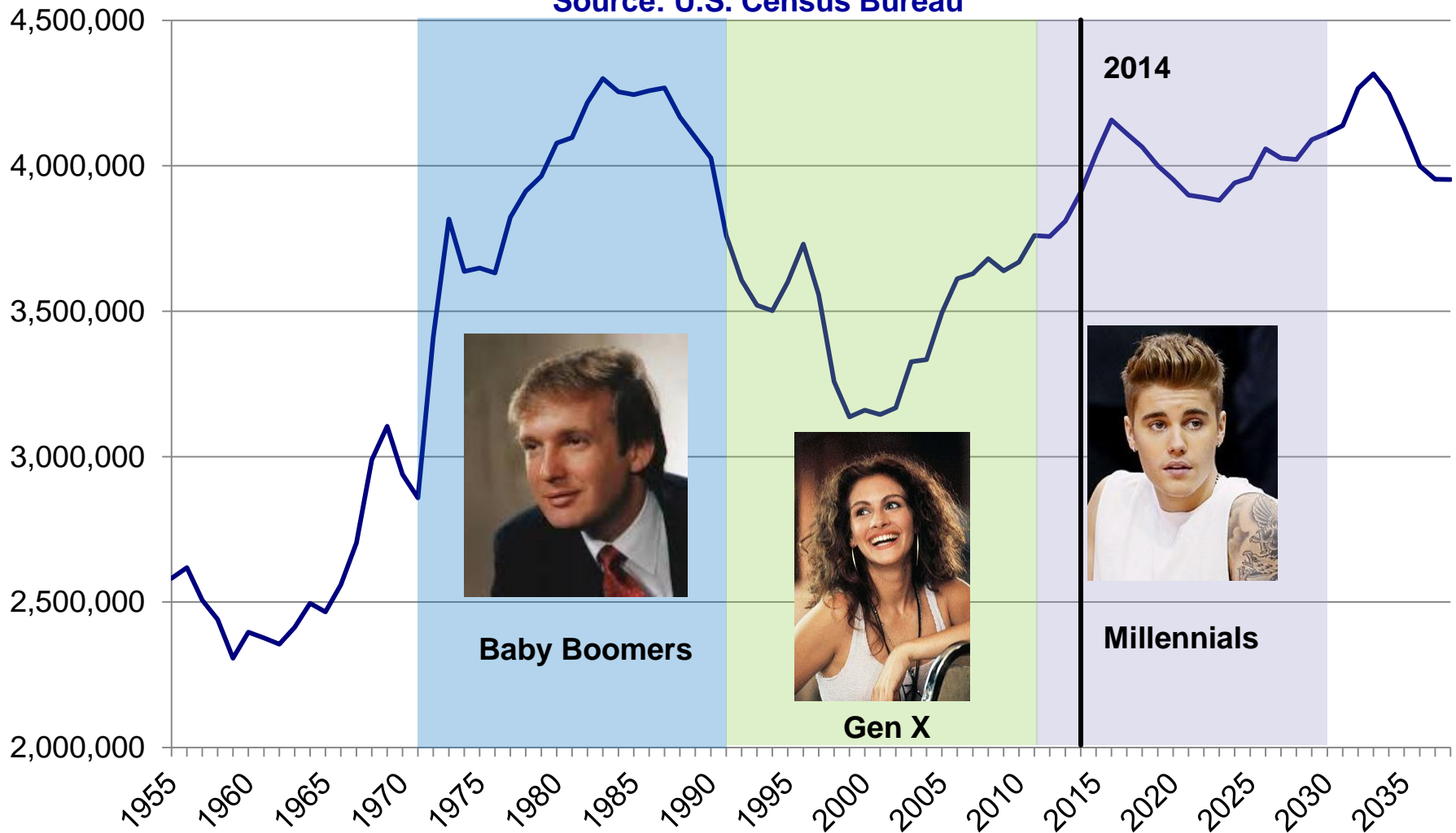


Multi-Family



Apartments 26-27 year lag 1955-2038

Source: U.S. Census Bureau



Baby Boomers



Gen X



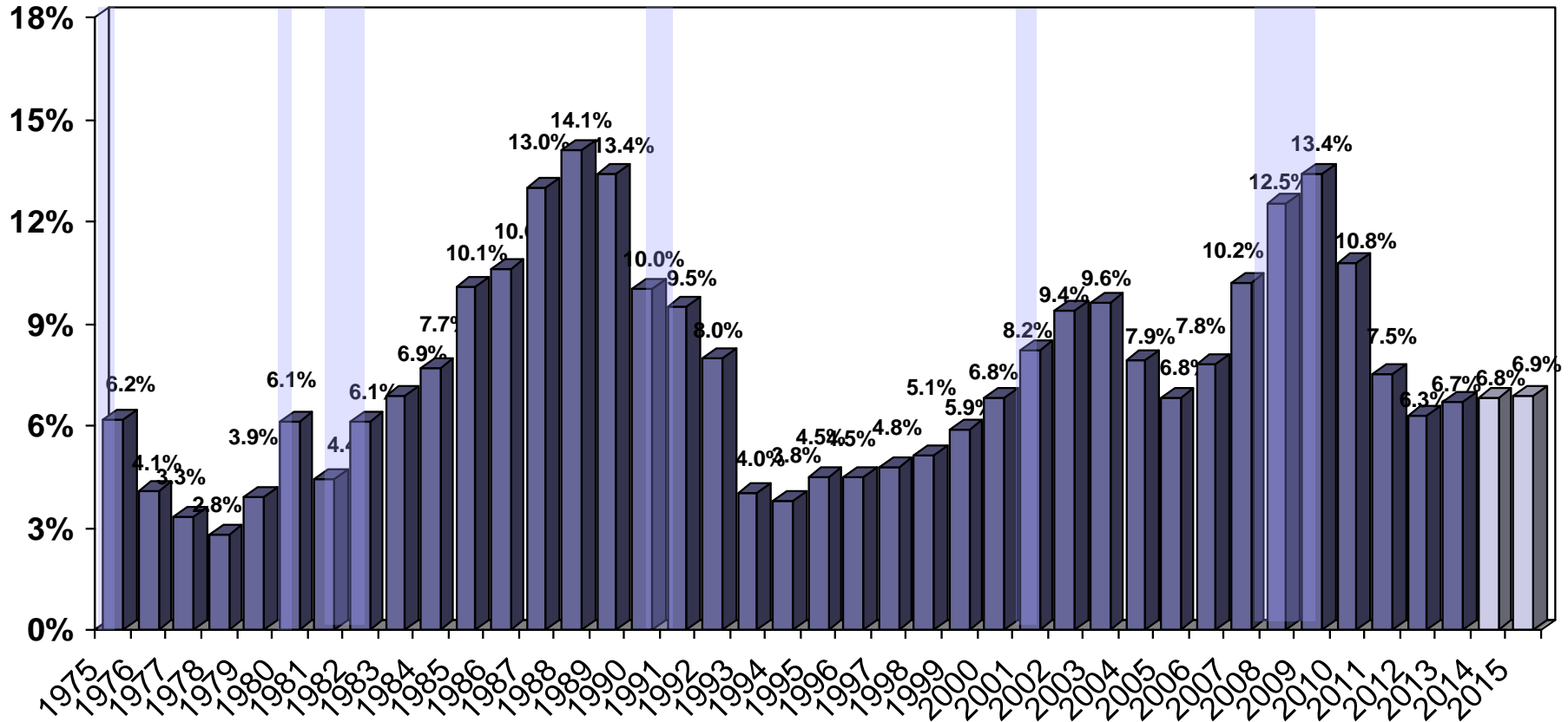
Millennials



Multi-Family Year-End Vacancy Rates Maricopa County 1975–2015*

Source: ASU Realty Studies / Hendricks Berkadia**

Recession Periods



*2014 -2015 are forecasts from *Elliott D. Pollack & Co.*

**Data prior to 2005 is from ASU



Multi-Family Housing Market

Source: PMHS and Hendricks Berkadia

	<u>Absorption</u>	<u>Completions</u>
2007	(3,121)	3,800
2008	(4,466)	5,900
2009	9,100	6,231
2010	11,619	200
2011	7,729	303
2012	2,950	910
2013	3,230	2,350
2014*	5,480	4,140



Multi-Family Housing Market

Source: CBRE as of Third Quarter 2014

	2014	2015	2016
Projected Completions*	4,668	6,518	6,351

*Complexes with 100+ units



Multi-Family Outlook

Higher population growth and continued weak homeownership suggests the outlook for apartments is excellent



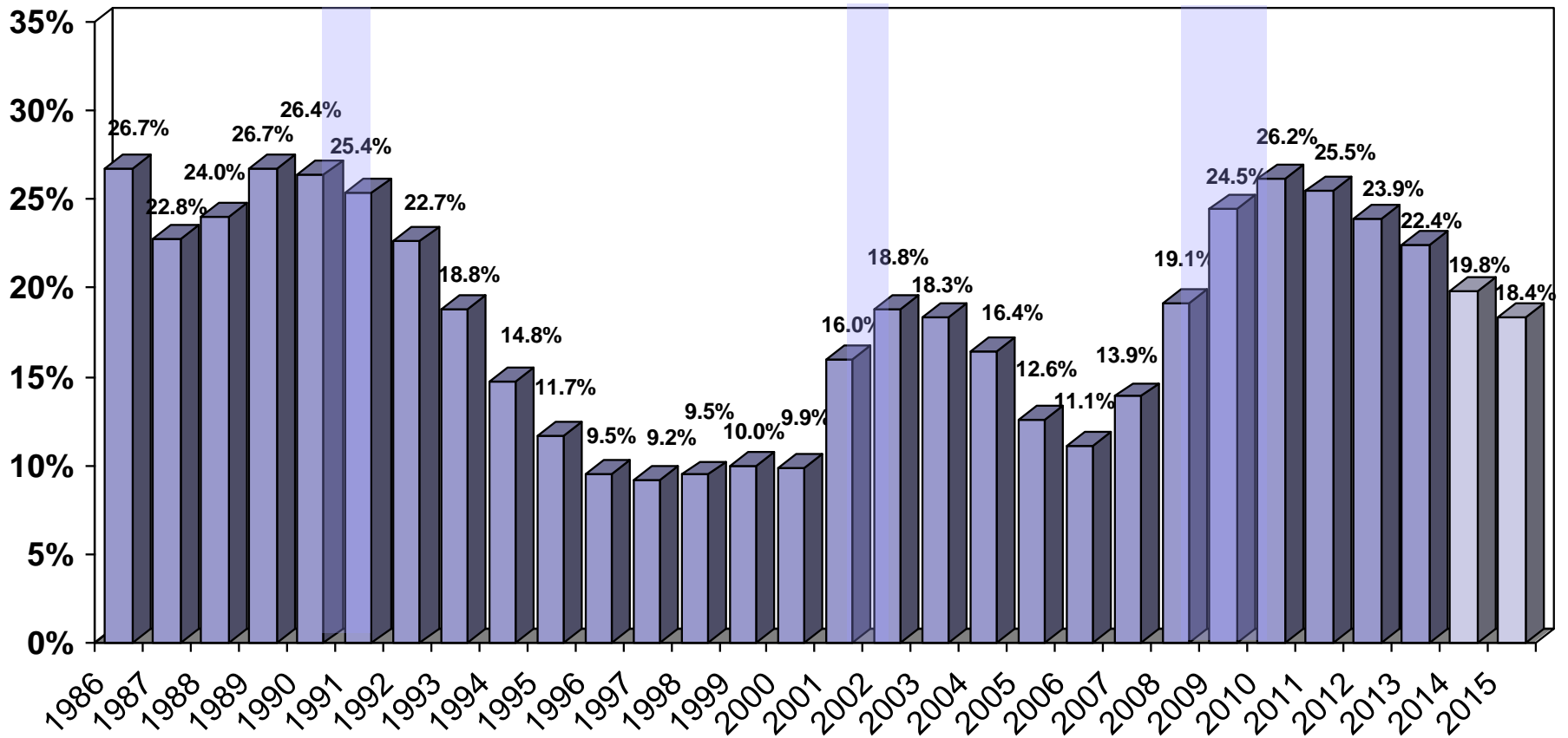
OFFICE



Office Space Year-End Vacancy Rates Maricopa County 1986–2015*

Source: CBRE

Recession Periods



*2014 -2015 are forecasts from the Greater Phoenix Blue Chip



Greater Phoenix Office Market*

Source: CBRE

Year	Absorption (sf)	Chg in Inventory (sf)
2005	3,119,293	7,987
2006	3,245,888	**2,320,302
2007	1,500,704	4,905,374
2008	(603,112)	3,402,646
2009	(667,329)	1,798,415
2010	233,670	2,011,404
2011	1,857,433	3,144,910
2012	2,020,529	973,282
2013	1,721,366	(35,566)
2014***	1,458,559	701,300

*Only includes multi-tenant space greater than 10,000 SF

** A number of buildings in downtown and mid-town are being converted to office condos.

***Data through third quarter 2014



**As of third quarter 2014,
there is 565,200 square feet
of speculative office space
under construction.**

Source: CBRE



Under any reasonable employment growth scenario, we believe it will be at least 2017-2018 before any significant office construction occurs (although some sub-markets like Tempe will be sooner).



INDUSTRIAL

Meanwhile



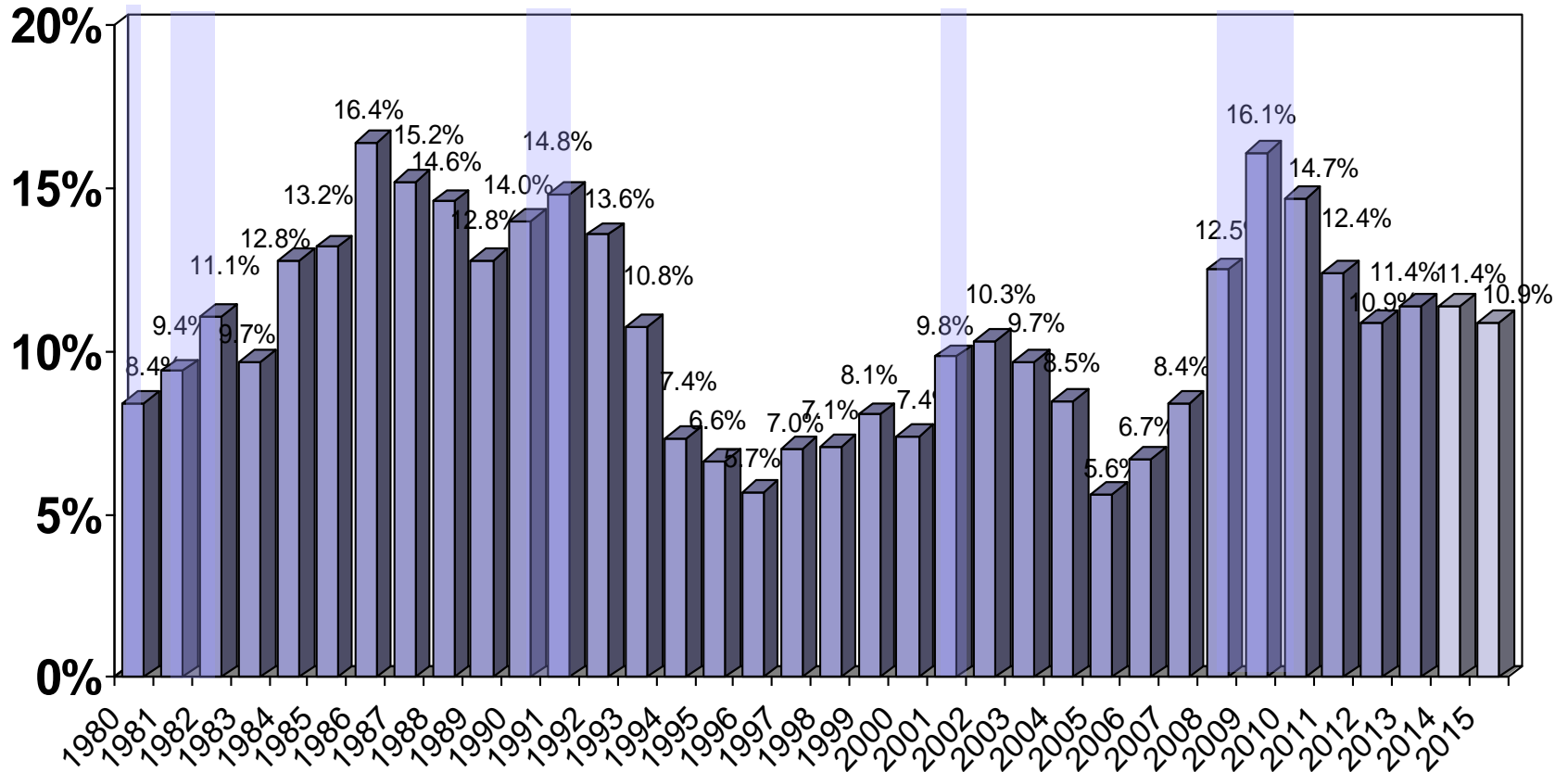
At the mattress factory



Industrial Space Vacancy Rates Maricopa County 1980 – 2015*

Source: CBRE

Recession Periods



* 2014 - 2015 are forecasts from the Greater Phoenix Blue Chip



Greater Phoenix Industrial Market

Source: CBRE

Year	Absorption (sf)	Chg in Inventory (sf)
2005	13,349,129	7,072,477
2006	6,032,175	7,829,959
2007	8,359,835	13,914,181
2008	629,838	13,467,215
2009	(4,649,352)	4,753,218
2010	4,455,097	2,451,202
2011	7,753,111	2,842,185
2012	7,405,168	3,358,724
2013	8,783,982	8,902,571
2014*	4,978,228	5,060,168

*Data through third quarter 2014





**As of third quarter 2014,
there is 2.3 million square feet
of speculative industrial space
under construction.**

Source: CBRE



Big box / small space



RETAIL

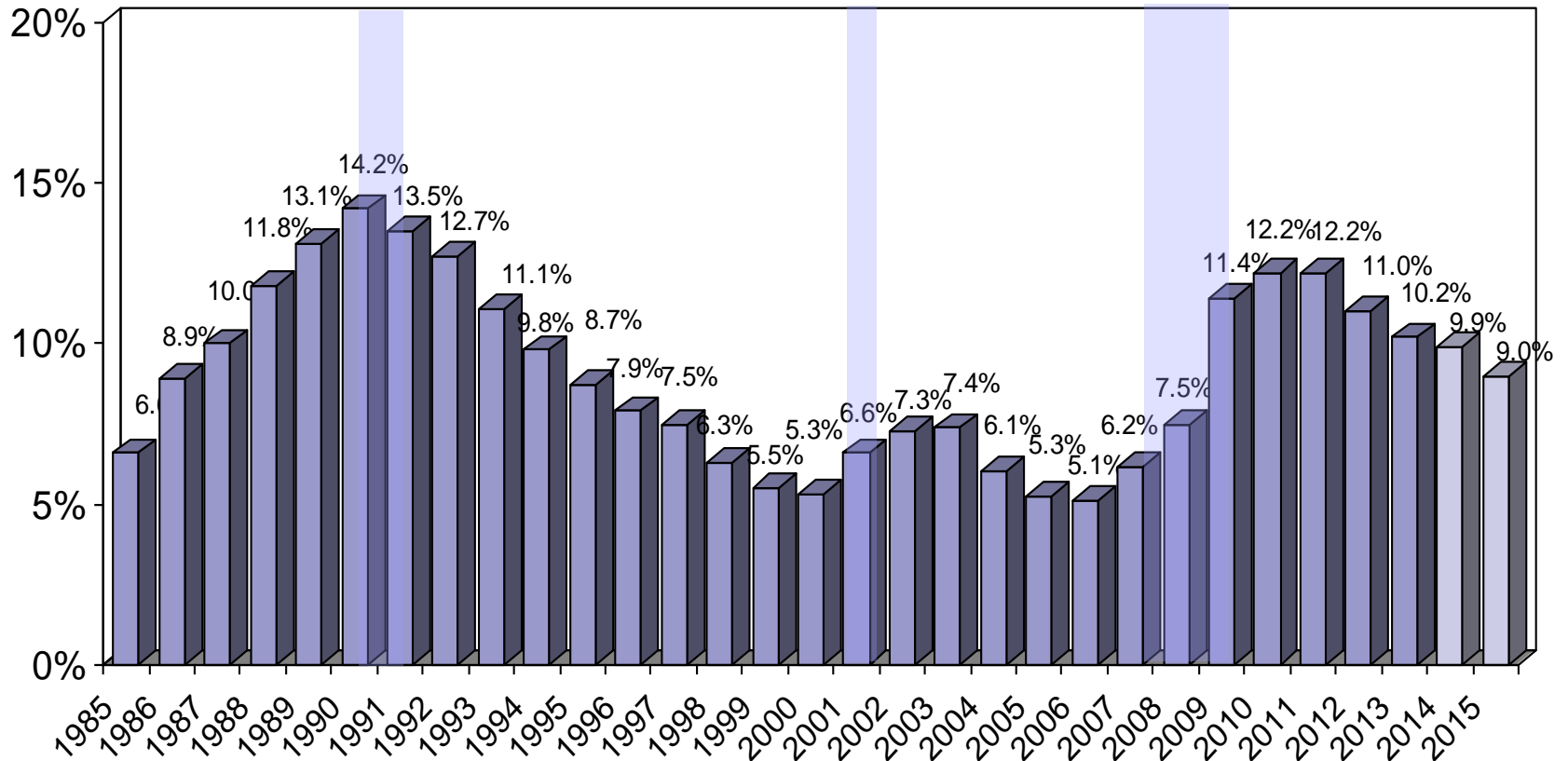




Retail Space Vacancy Rates Maricopa County 1985–2015*

Source: CBRE**

Recession Periods



* 2014-2015 are forecasts from GPBC
 ** Data prior to 1992 is from Grubb & Ellis



Greater Phoenix Retail Market

Source: CBRE

Year	Absorption (sf)	Chg in Inventory (sf)
2005	6,708,155	6,248,789
2006	5,244,597	4,582,618
2007	9,424,362	11,104,865
2008	3,395,986	6,229,205
2009	(1,117,100)	4,405,985
2010	(75,352)	902,380
2011	(152,647)	24,543
2012	1,879,005	184,932
2013	1,579,202	(325,959)
2014*	753,891	(146,171)

*Data through second quarter 2014



**As of third quarter 2014,
there is no square feet
of speculative retail space
under construction.**

Source: CBRE



CONCLUSIONS: How will it all turn out?





**No recession on the
horizon...**

**... It's slow but it's
growing.**



**The economy is improving
in both absolute and
relative terms.**





**Greater Phoenix–
Slow but mildly accelerating
recovery.**

2015 will be better than 2014.

Full recovery down the road.





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