The (insert word here) Recovery Continues…

Pinal Partnership
December 6th, 2013

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

You Choose…

The Anemic Recovery?

Feeble
Frail
Sickly
Listless
Weak
Insipid
Wishy-Washy
Vapid
Bland
Lackluster
Ineffective
Pathetic

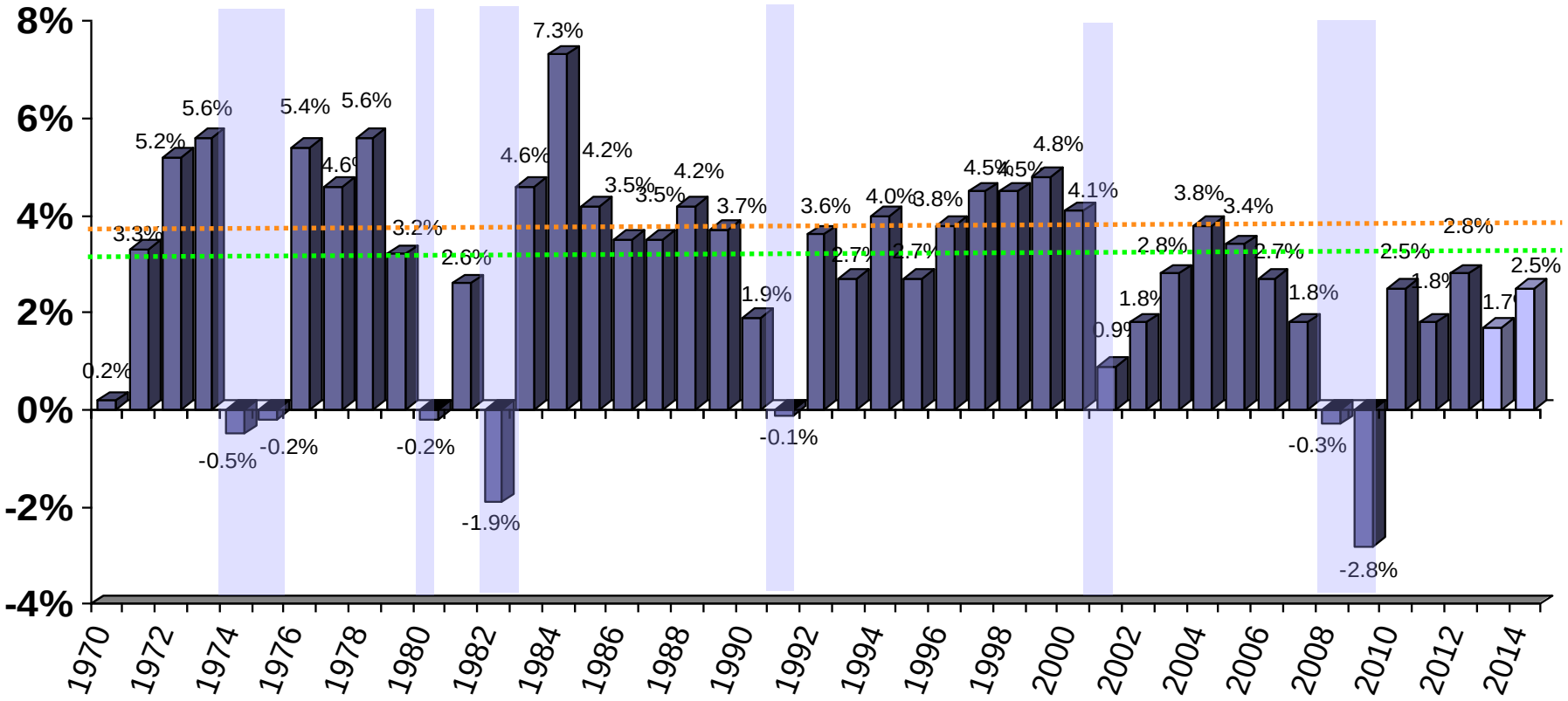
The Mediocre Recovery?

Uninspired
Indifferent
Unexceptional
Run-of-the-mill
Inferior
Of poor quality
Second rate
Bogus
Crappy
Lousy
Poor
Rinky Dink

United States Real Gross Domestic Product*

Annual Growth 1970 - 2014**

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



* Based on chained 2009 dollars.

** 2013 and 2014 are a forecast from the Blue Chip Economic Indicators, November 2013

3.8% = 40-year avg during expansion

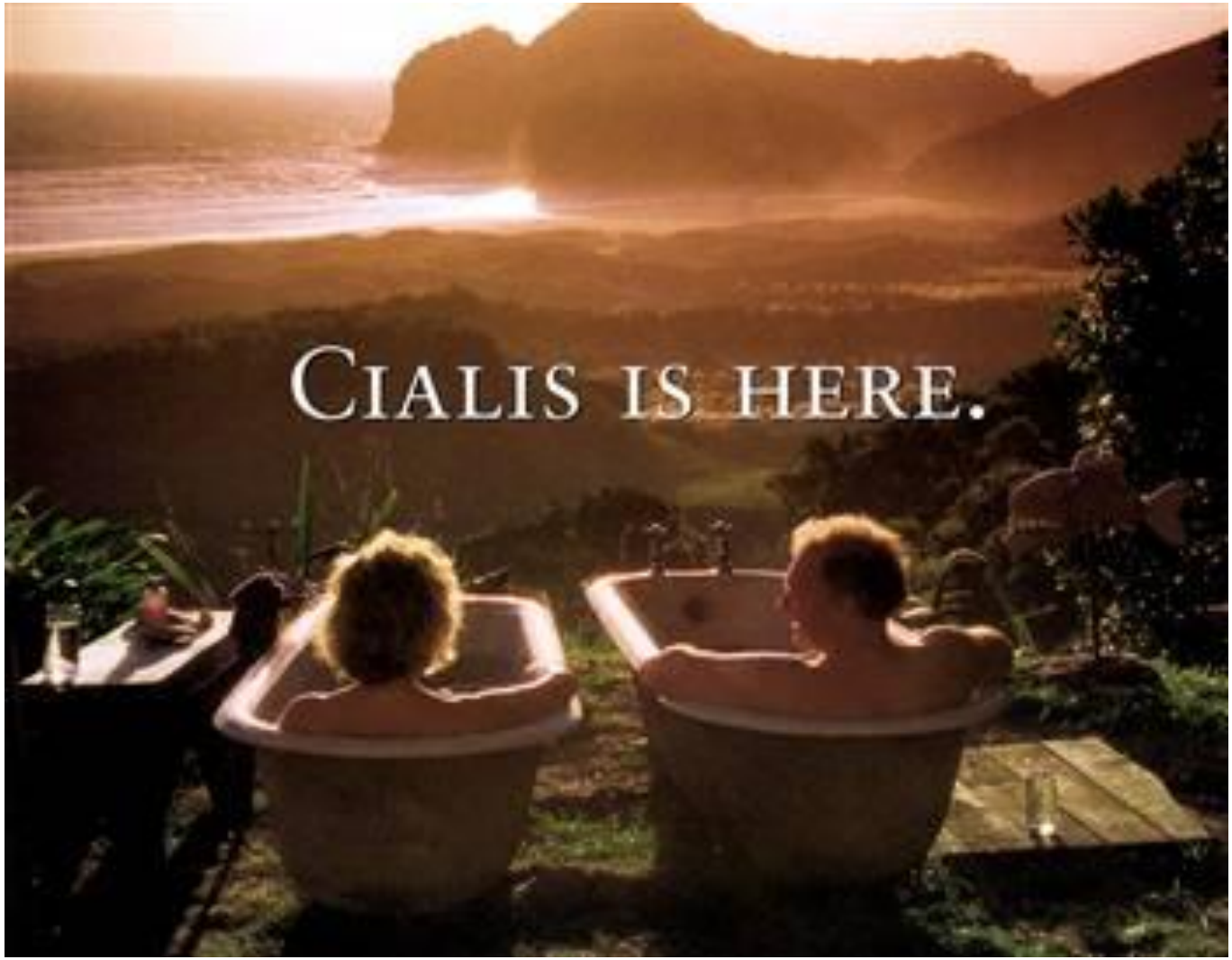
3.2% = 20-year avg during expansion

Recession Periods

Elliott D. Pollack & Company

It is only because conditions have been so poor for so long that we feel this (insert word here) recovery is OK.

When will the recovery firm up?



Good News –

The recovery should continue because there are no significant imbalances.

Overall

- No irrational exuberance

Consumers

- Debt burden low
- Net worth improved
- Real income growth
- Liquidity improving
- Inflation low

Business

- No excess inventory
- No capacity issues
- Dollar not overly strong

Government

- No longer a drag on economy
- Fed policy still expansive

Housing

- Prices up but only as a rebound

NATIONAL ECONOMY –

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

Uncertainty

No Acceleration to Income

- **70s, 80s, early 90s** – rapid increase in household formation.
- **90s** – huge increase in stock market.
- **96 – 2005** – rapid increase in housing prices and big jump in housing based credit.

- **NOW - ???????**

- Stock market up, but not much from 2007 highs.
- Housing prices still way off peak.
- Revolving credit still flat.
- Participation rates declining.
- 14.5% of homes still underwater.

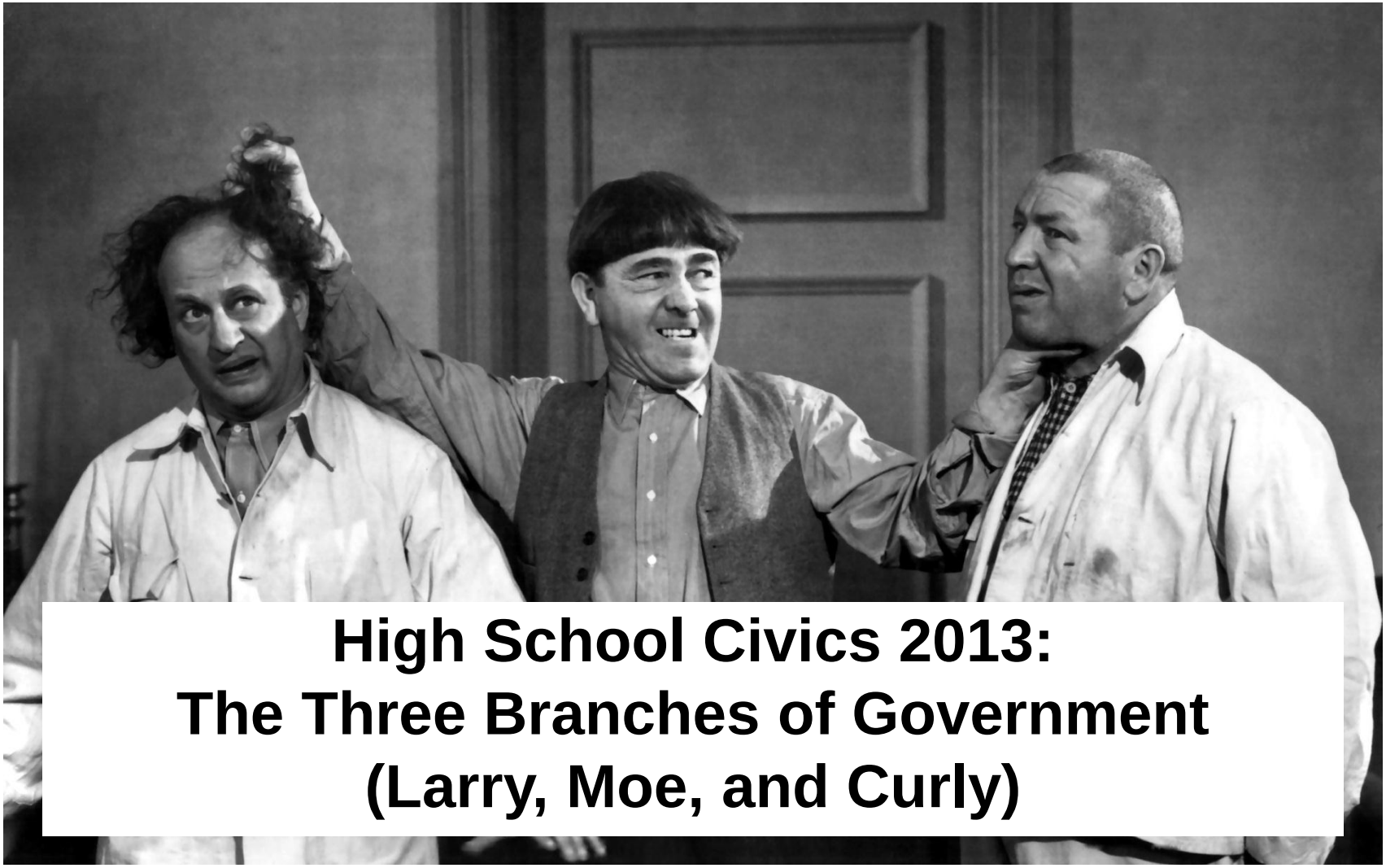
Bottom Line

Slower Long Term Growth

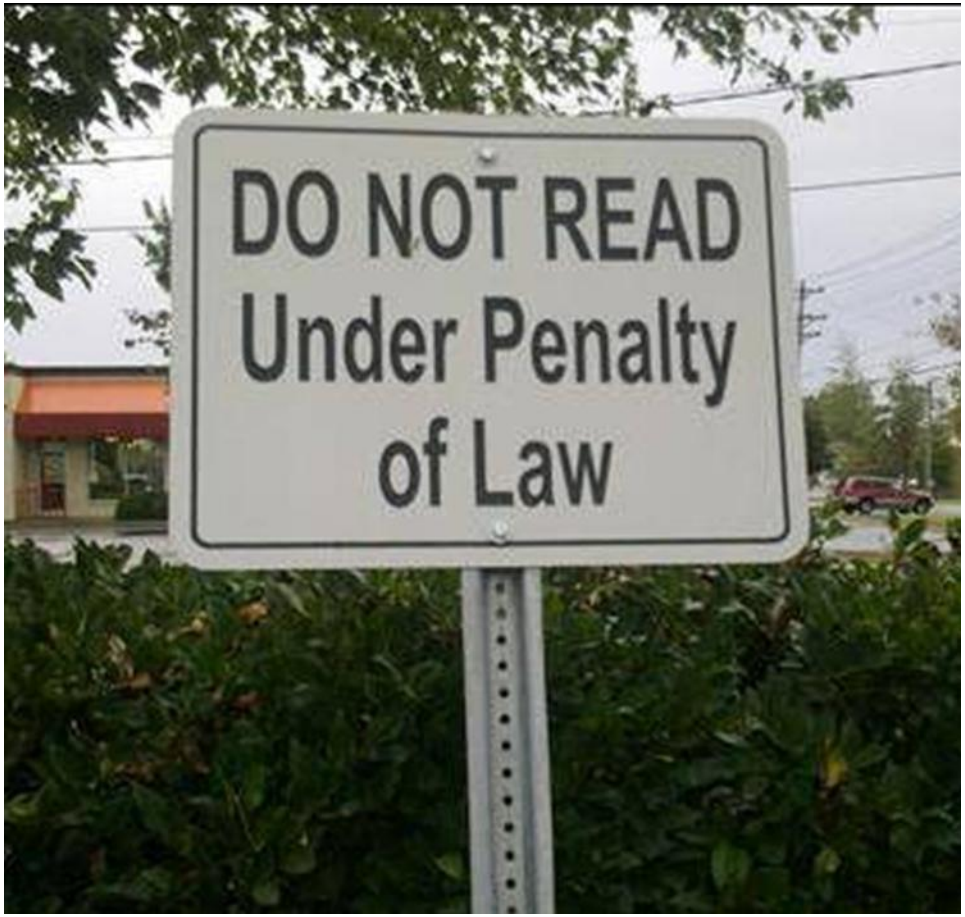
Skills Gap

CarWash
ALL EMPLOYEES
TRAINED BY
MR MIYAGI

Government Uncertainty



Affordable Care Act?



- Dodd-Frank
- Tough lending standards
- Tax policy
- Over regulation
- Poor fiscal policy

Inability of the economy to deal with shocks.

All this has led to:
Slow Employment Growth

Economic Crisis Du Jour

- **European Debt;**
- **U.S. Debt Ceiling;**
- ***Middle East;***
- **Rating Downgrade;**
- **ObamaCare;**
- ***Middle East;***
- **Fiscal Cliff;**
- **Sequestration;**
- ***Middle East…***

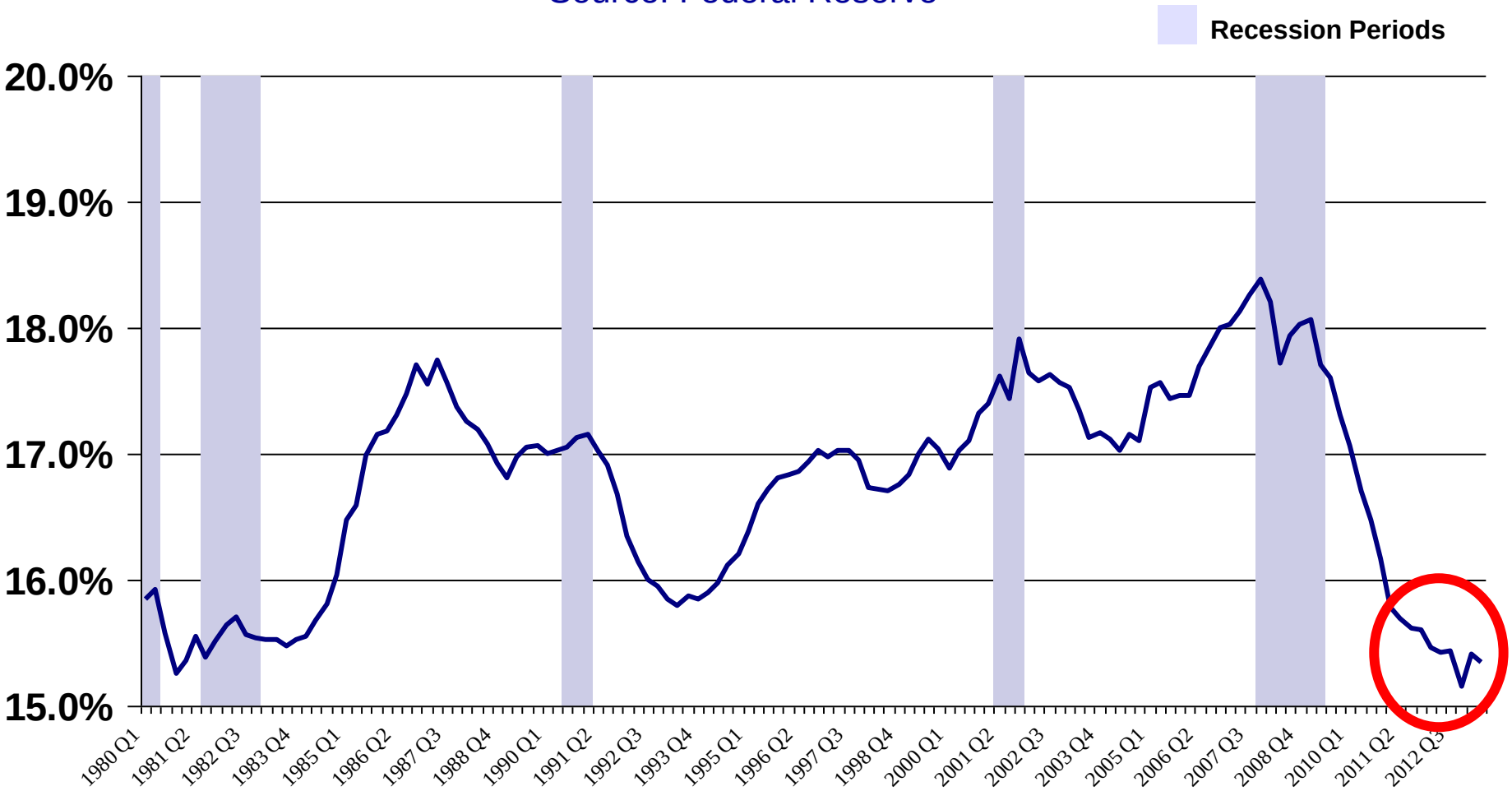
Consumers

GRAND OPENING
BETTER EVERYDAY
LOW PRICES!
WAL*MART
WAL*MART
HONORARY LESBIAN

Watch what you tweet,
Or you’ll lose your seat!

Financial Obligation Ratio**
1980 – 2013*

Source: Federal Reserve



*Data through second quarter 2013

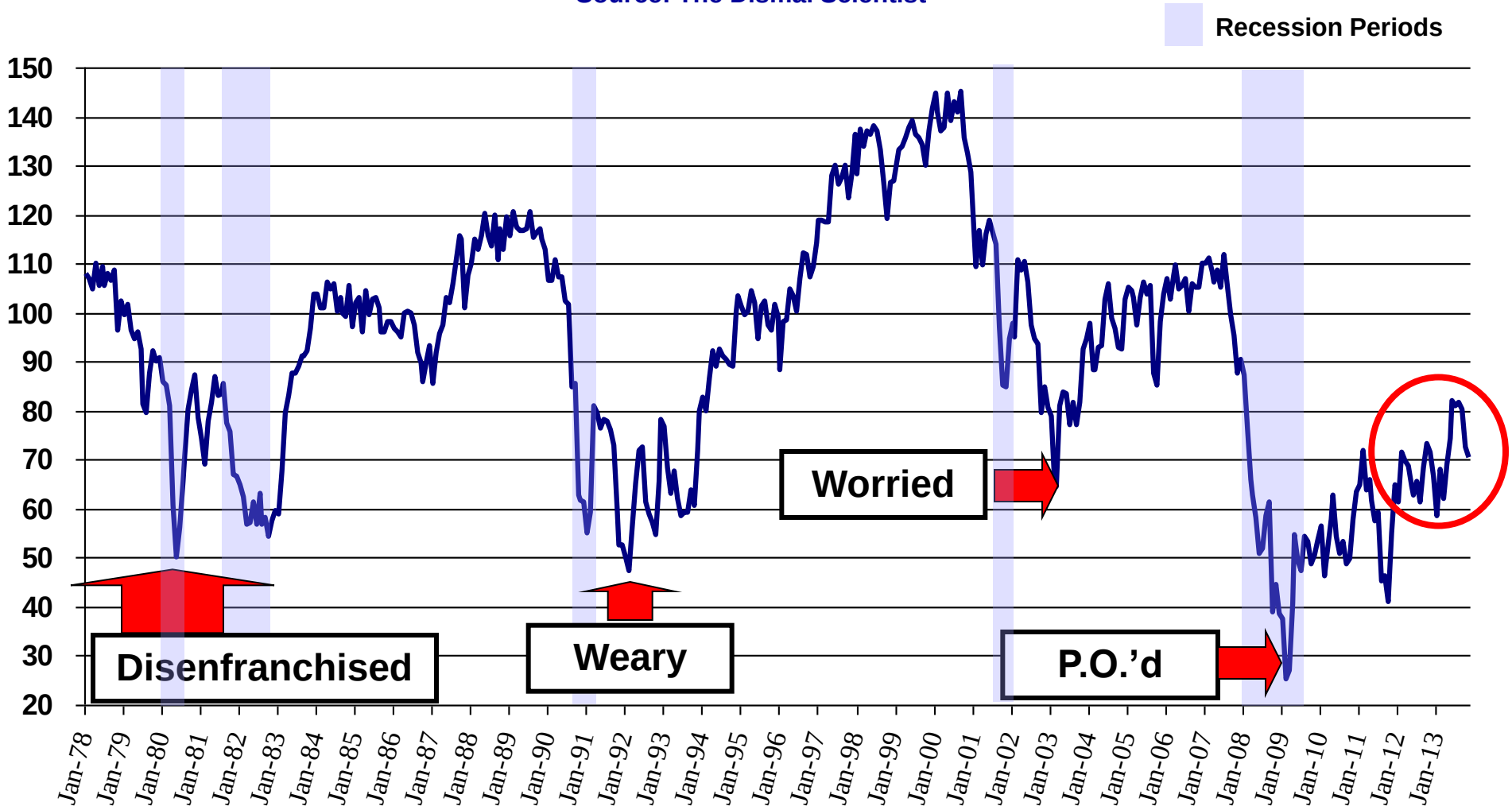
**Ratio of mortgage and consumer debt (including auto, rent and tax payments) to disposable income.

Elliott D. Pollack & Company

Consumer Confidence

1978 – 2013*

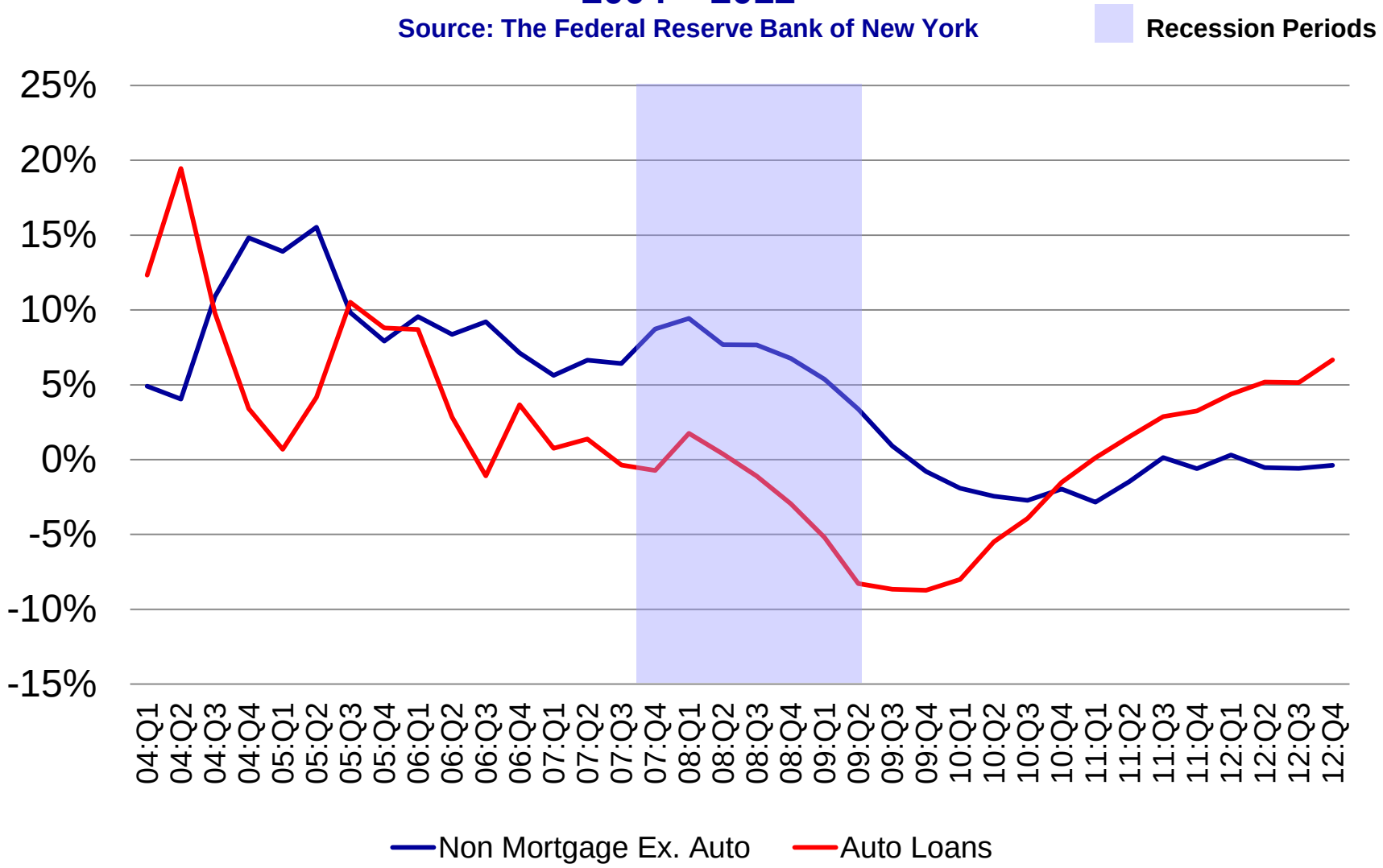
Source: The Dismal Scientist



*Data through November 2013.

Household Debt Composition
Percent Change Year Ago
2004 – 2012

Source: The Federal Reserve Bank of New York

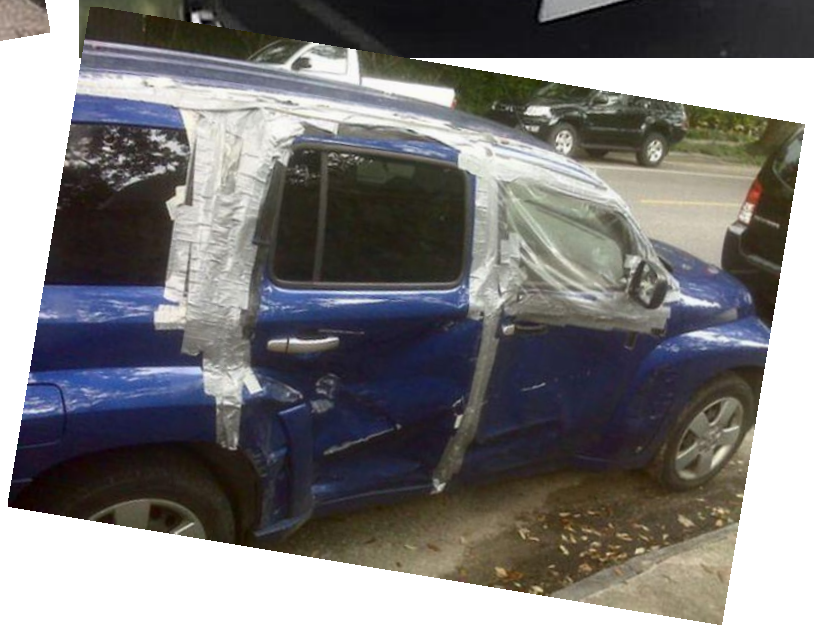


Average Age of Auto Fleet (all light vehicles)

- 2013 – 11.4 years
- 2010 – 10.6 years
- 2005 – 9.5 years
- 2000 – 8.9 years
- 1995 – 8.4 years

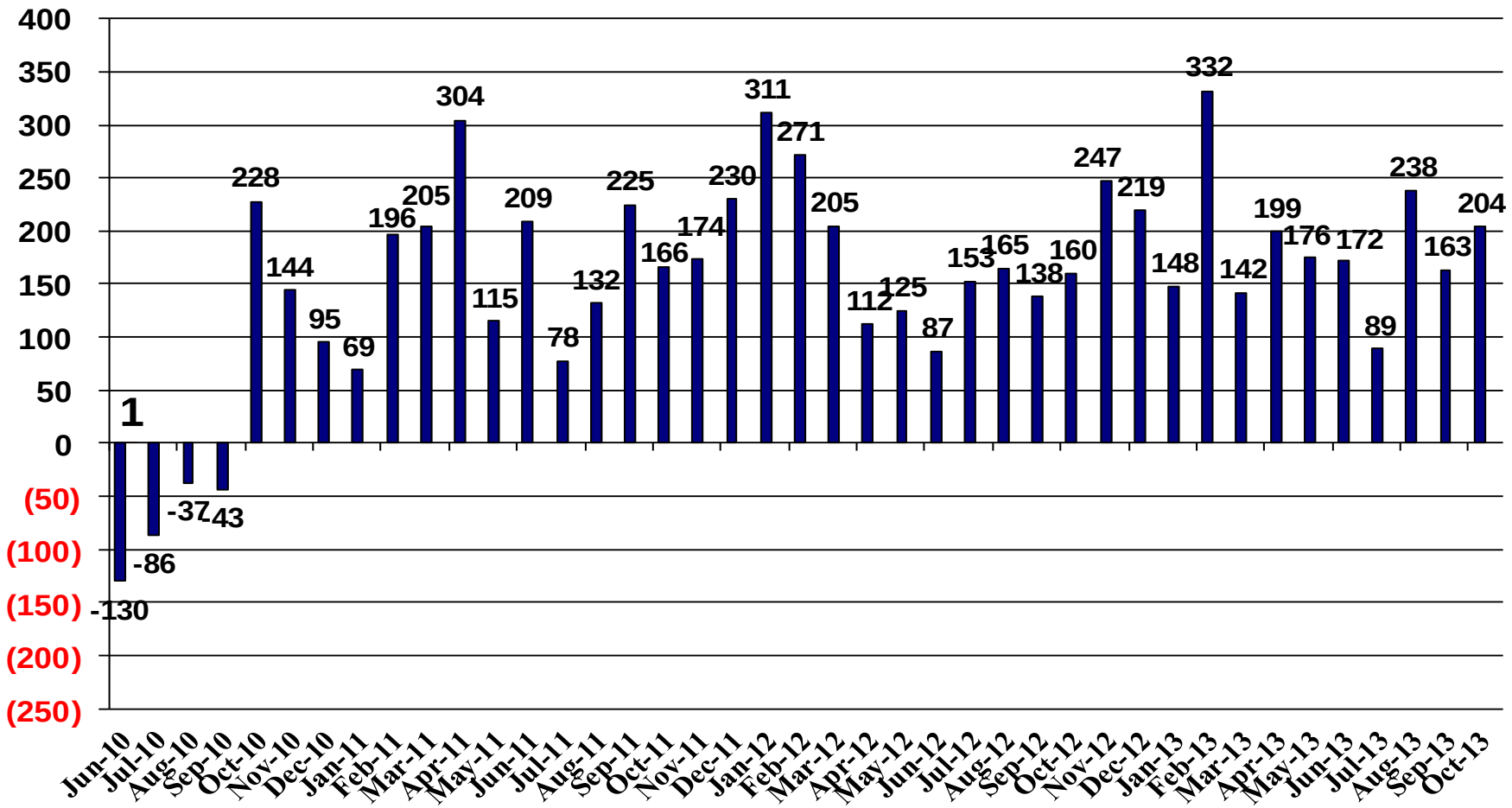
Source: R.L. Polk Company

Time to replace the autos…



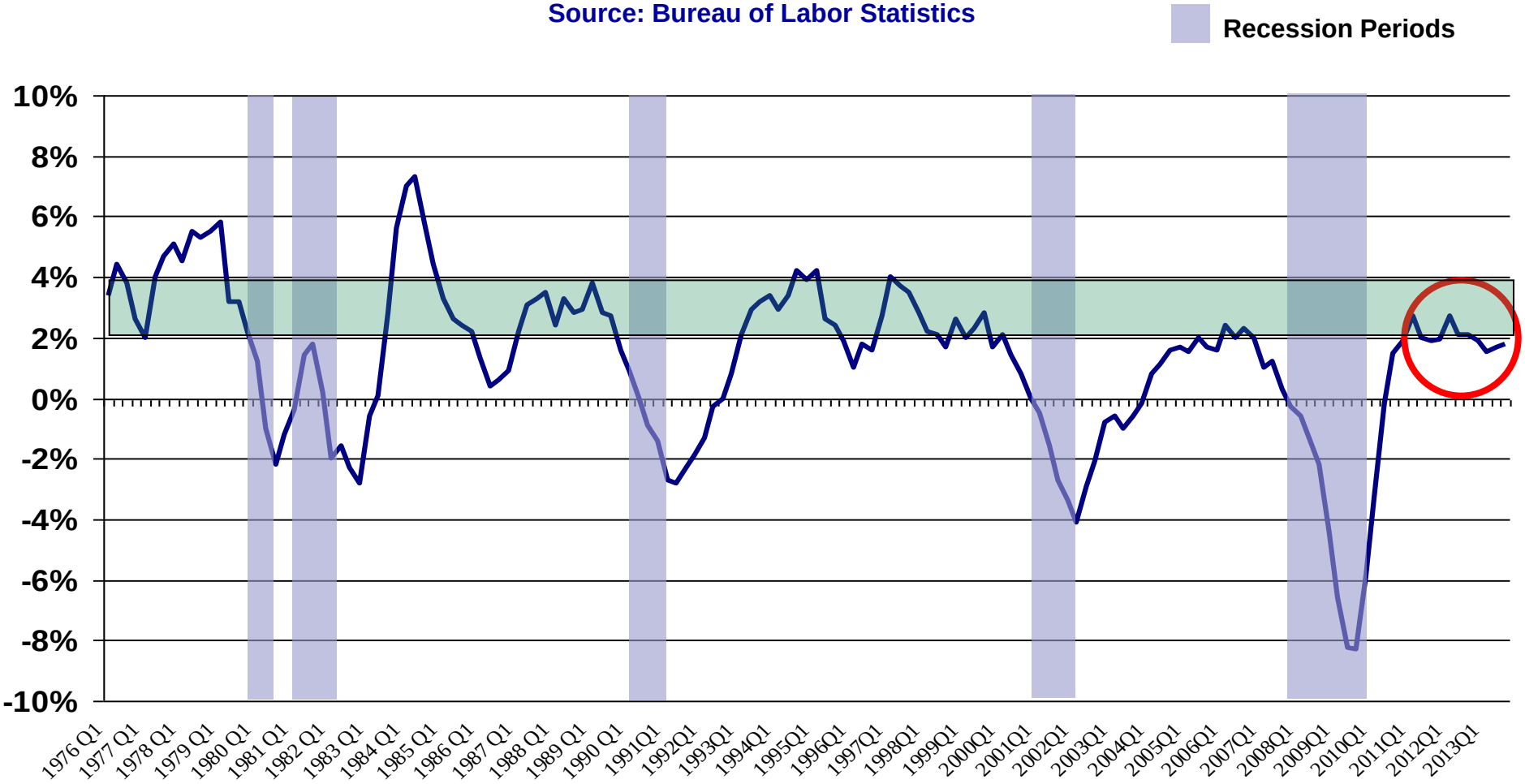
US Non-Farm Employment
Change from Prior Month (S/A)
June 2010 – October 2013

Source: Bureau Labor of Statistics



Hours Worked
Percent Change from Year Ago
1976 – 2013*

Source: Bureau of Labor Statistics



*Data through third quarter 2013

Elliott D. Pollack & Company

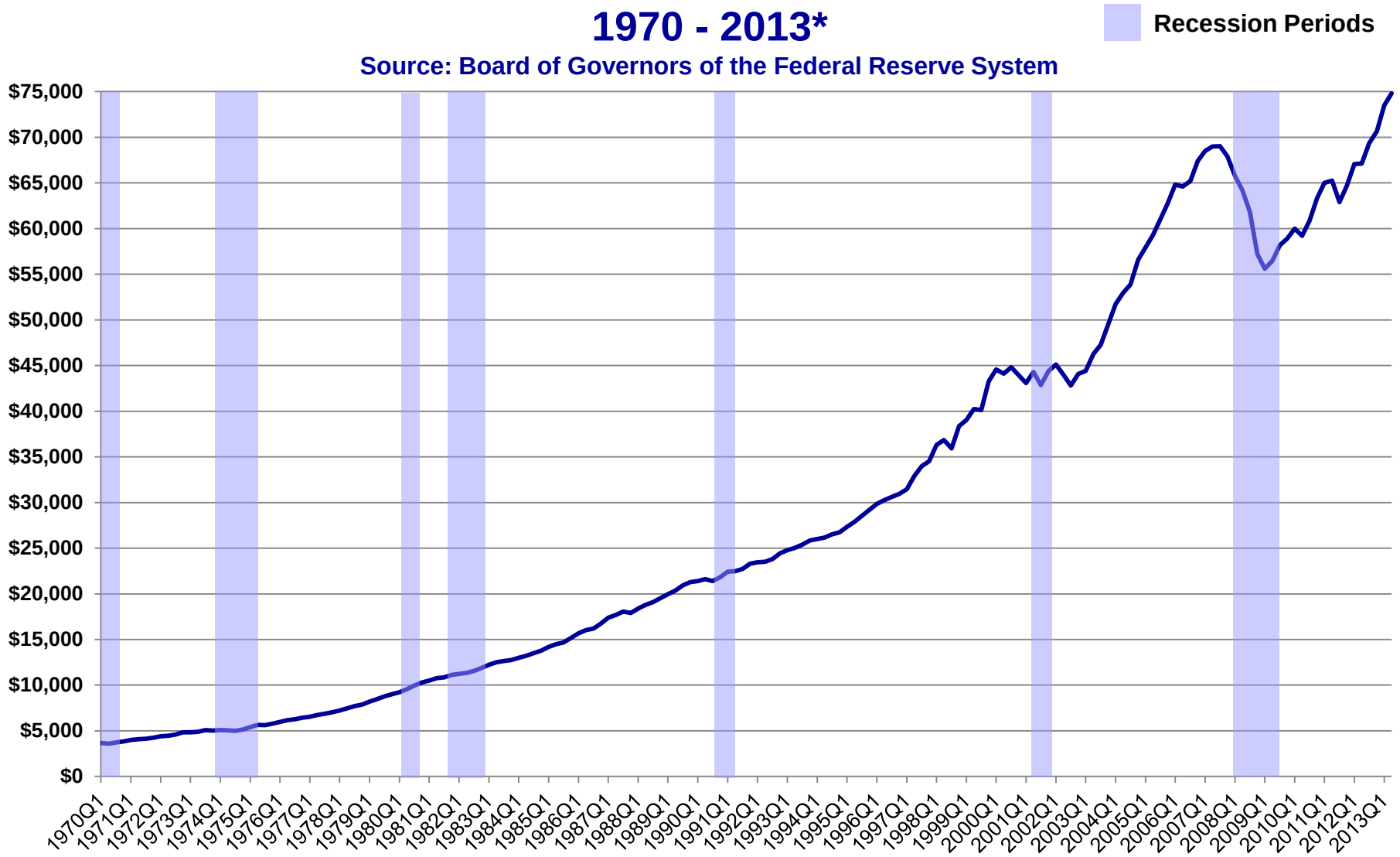
WEALTH EFFECT

Housing prices are up.

Stock market is up from a year ago.

U.S. Household Net Worth
(Billions of Dollars, NSA)
1970 - 2013*

Source: Board of Governors of the Federal Reserve System



*Data through second quarter 2013.

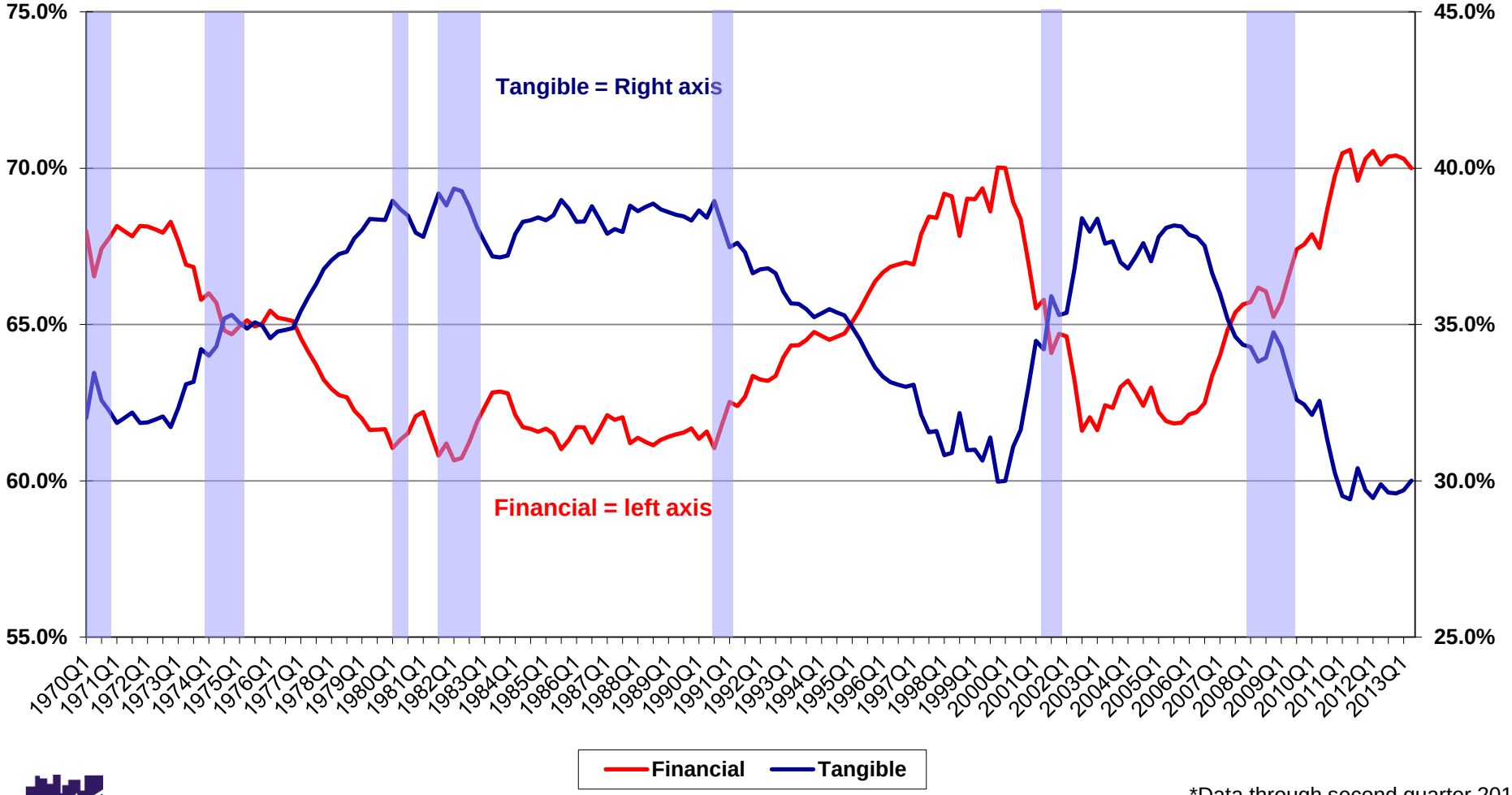
Elliott D. Pollack & Company

Wealth Effect…

U.S. Household Assets
Financial (left) v. Tangible (right)
as a Percent of Total Assets
1970 - 2013*

Recession Periods

Source: Board of Governors of the Federal Reserve System



*Data through second quarter 2013.

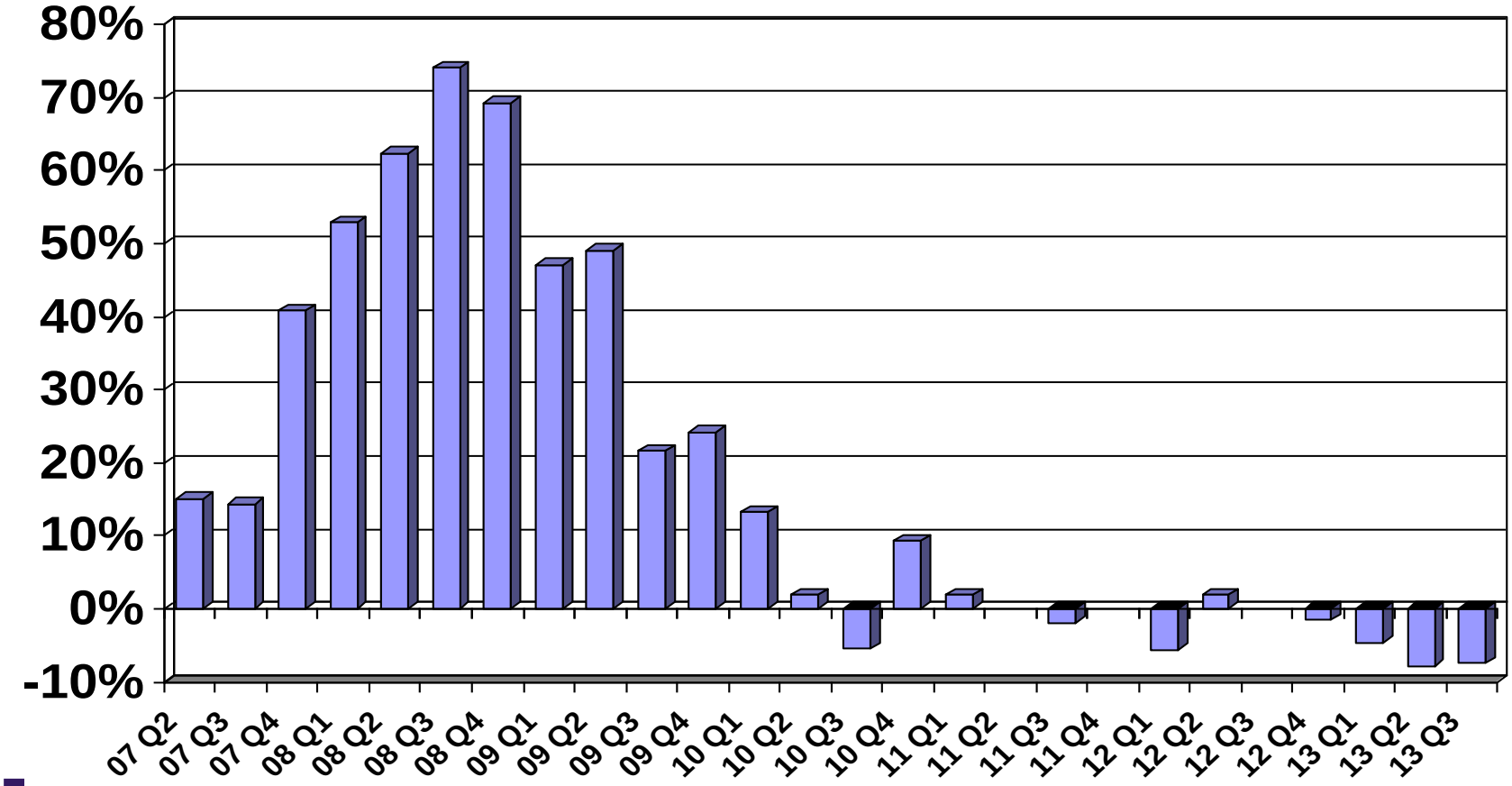
Elliott D. Pollack & Company

Are *you* talking to your banker?

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

2007Q2 – 2013Q3

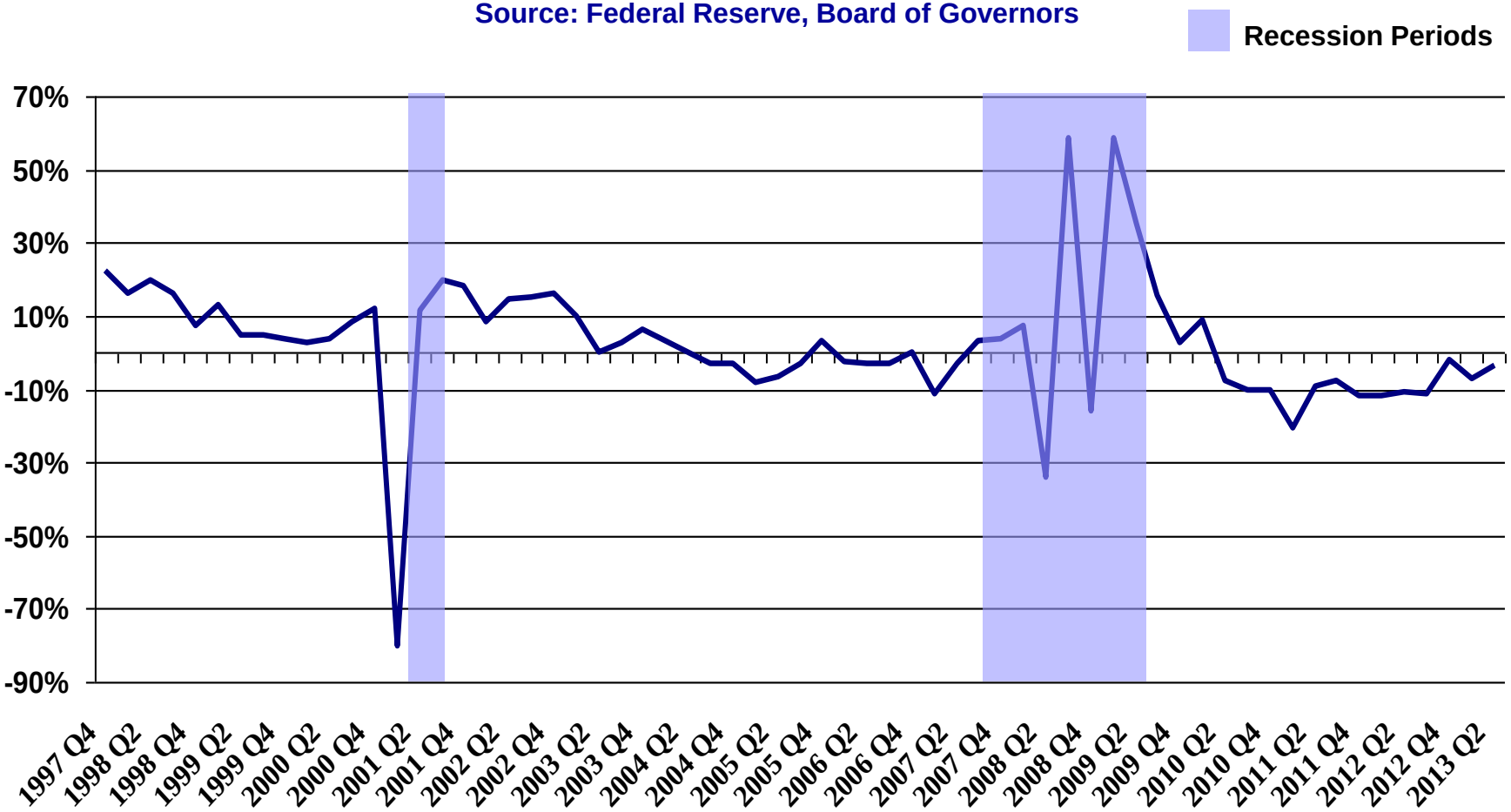
Source: Federal Reserve, Board of Governors



Net Percentage of Large U.S. Banks Reporting Tougher Standards versus Eased Standards on Consumer Loans

1997 – 2013*

Source: Federal Reserve, Board of Governors



* Data as of Q3, 2013 survey.

Consumer Summary:

- **Jobs are being created at a slow rate.**
- **Those that have jobs are spending a little more but will remain cautious.**
- **Unemployment to remain high, but should trend lower.**
- **Wealth levels are improving.**

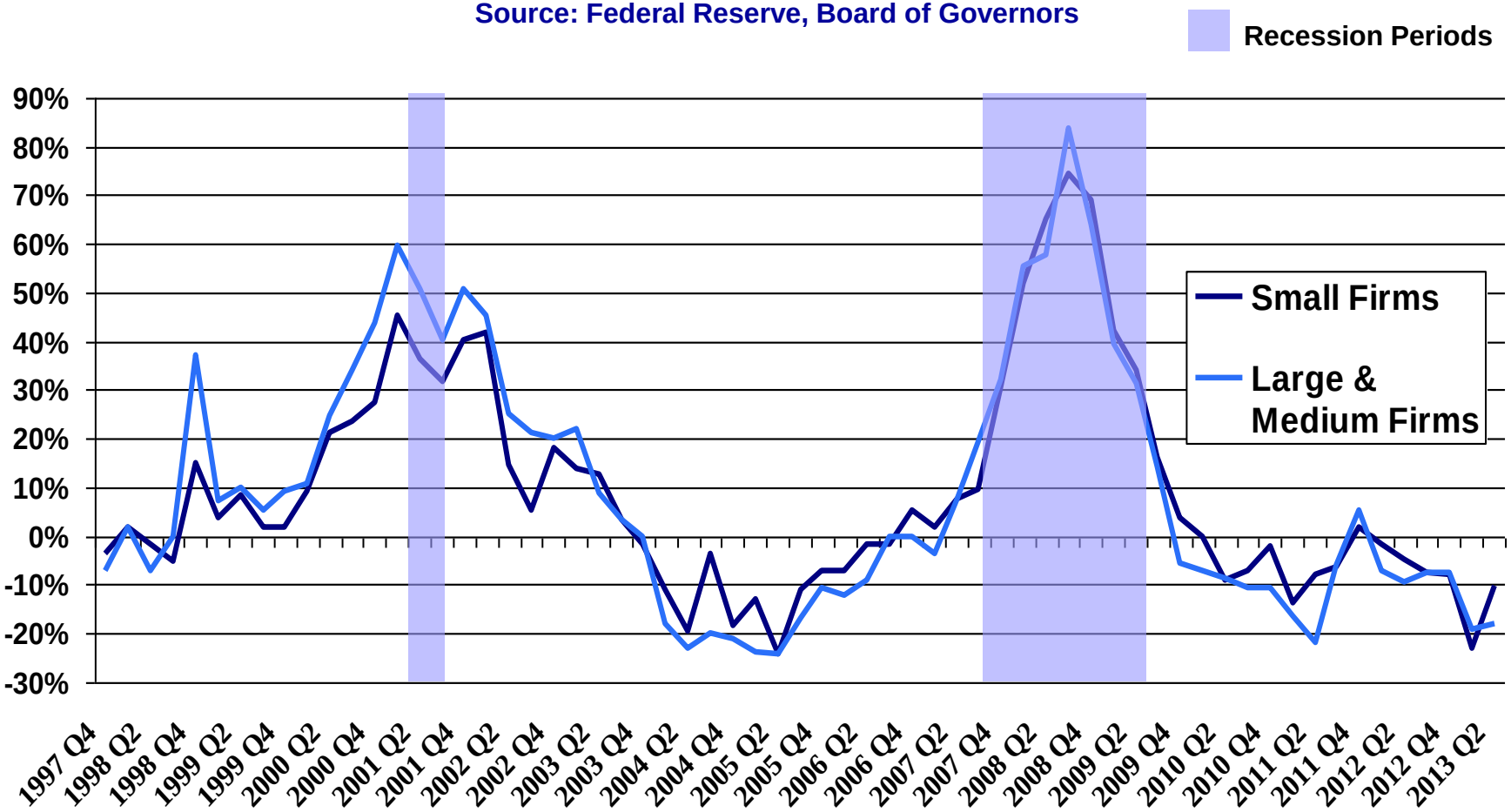
Business

TopGear
These T-Shirts were tested on animals. They didn't fit.
Top Gear™ & © BBC 2005
L

Net Percentage of Large U.S. Banks Reporting Tougher Standards versus Eased Standards on Business Loans

1997 – 2013*

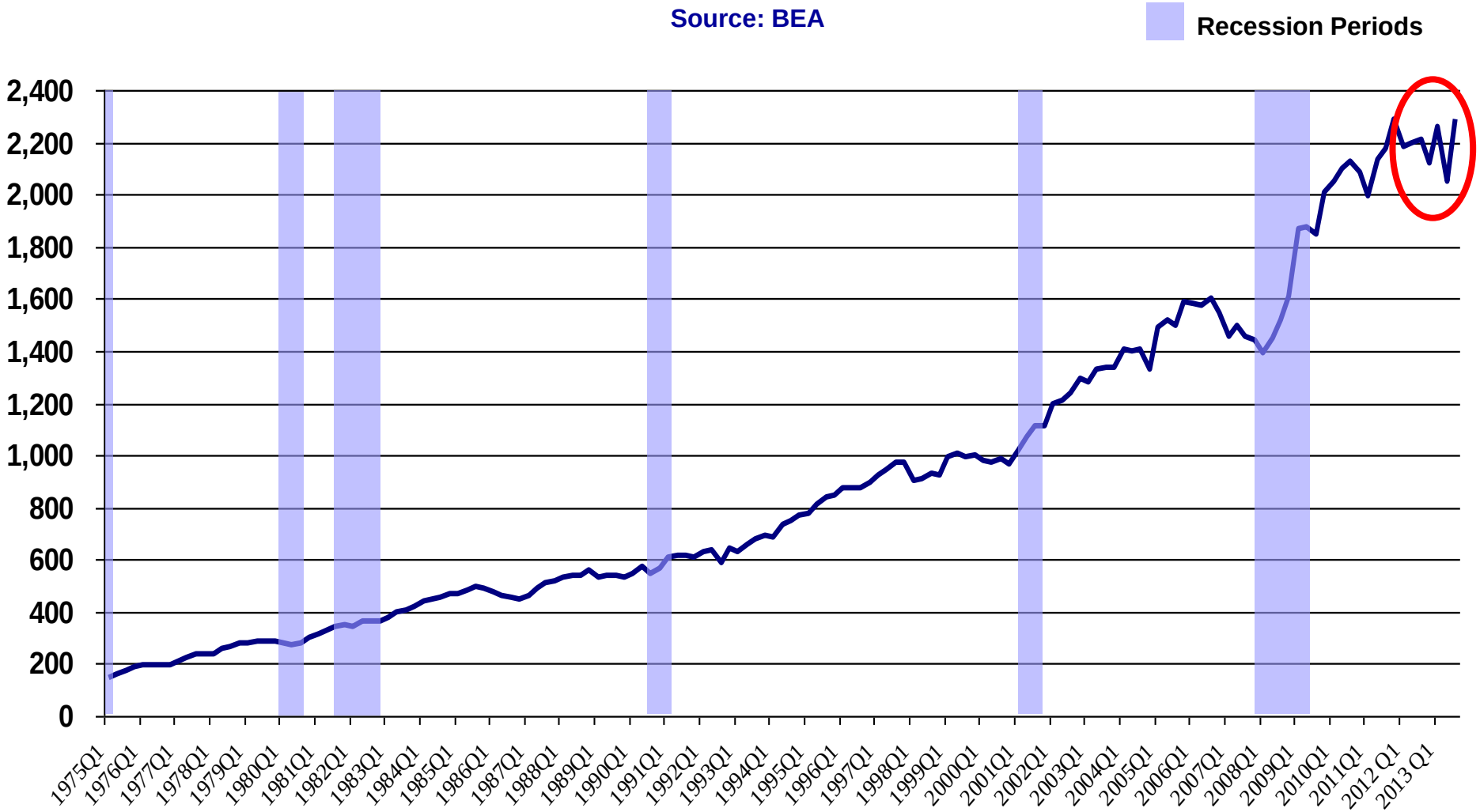
Source: Federal Reserve, Board of Governors



* Data as of Q3 2013 survey.

Corporate Net Cash Flow
(Billions of Dollars, SA)
1975-2013*

Source: BEA

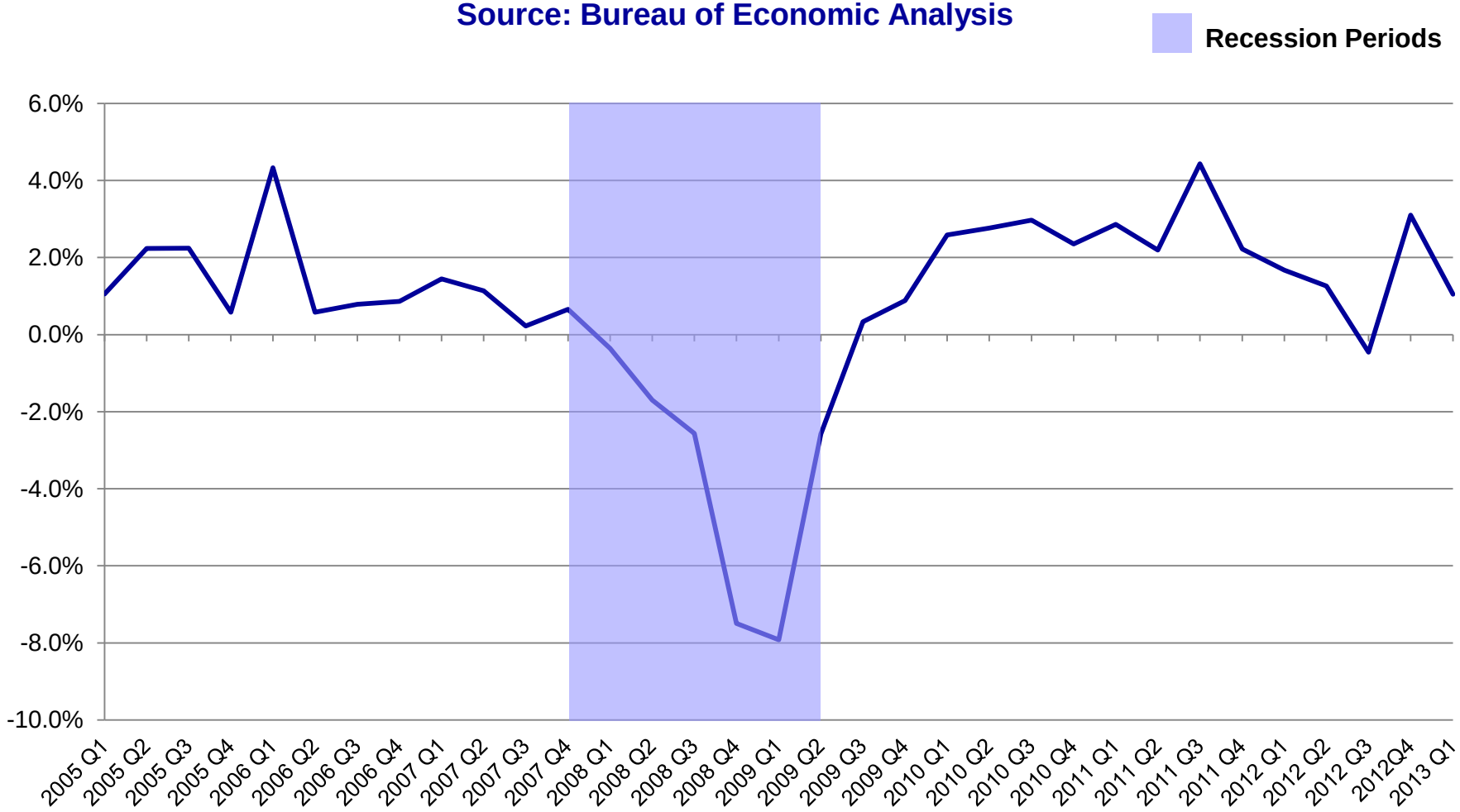


Elliott D. Pollack & Company

*Data through third quarter 2013.

Business Spending on Equipment
Percent Change from Prior Quarter
2005 – 2013*

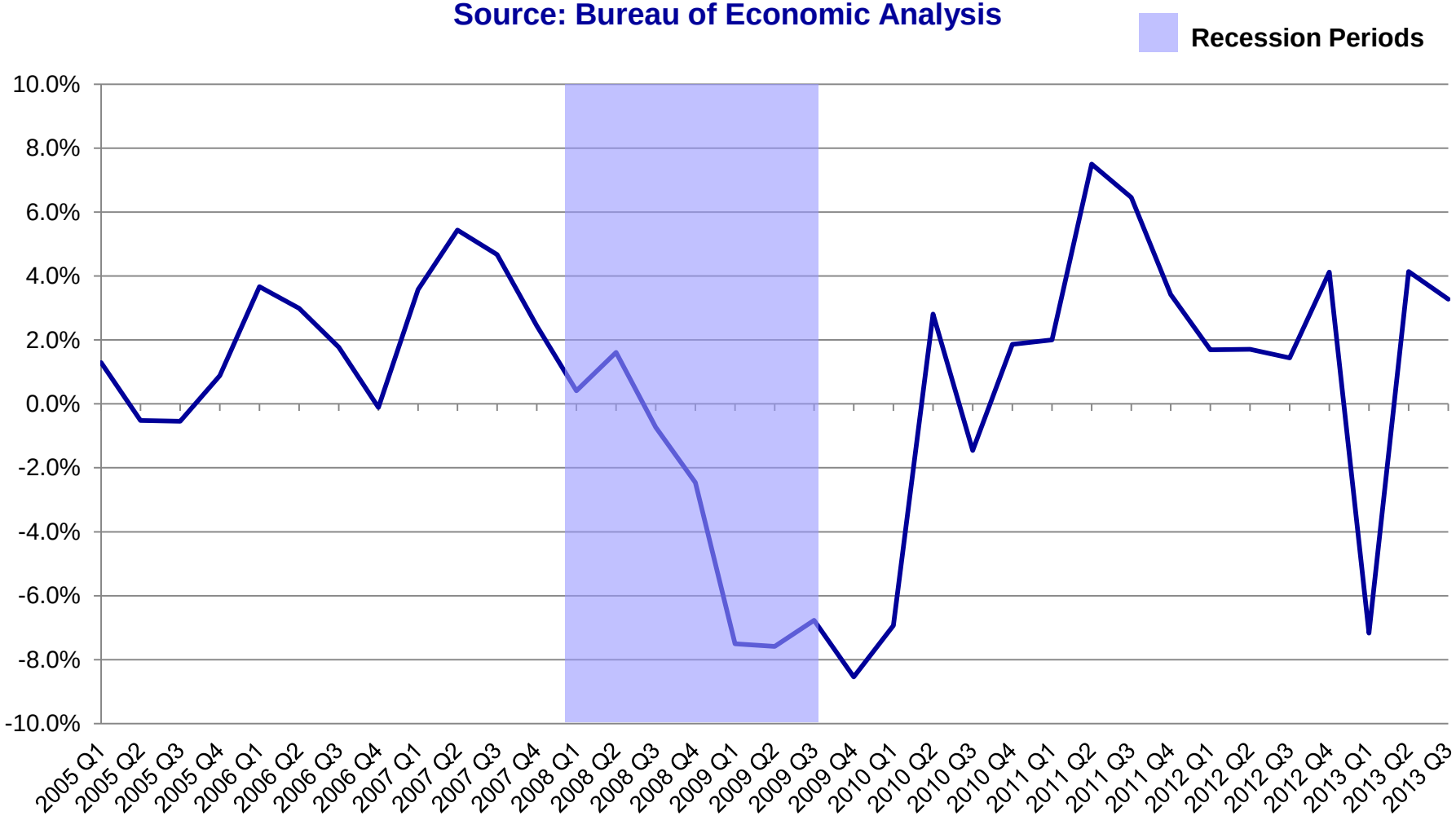
Source: Bureau of Economic Analysis



*Data through first quarter 2013

Business Spending on Plant
Percent Change from Prior Quarter
2005 – 2013*

Source: Bureau of Economic Analysis

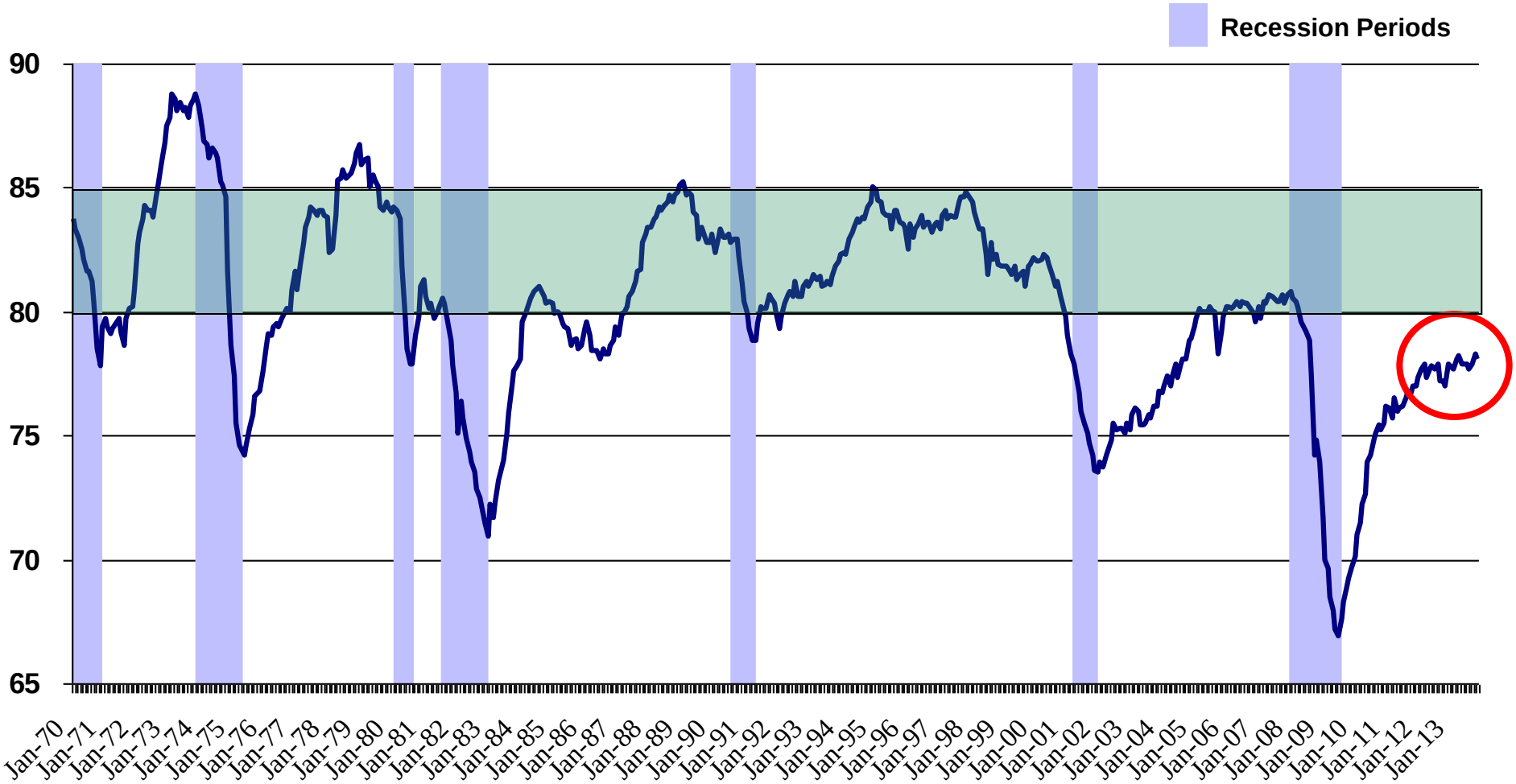


Elliott D. Pollack & Company

*Data through third quarter 2013
Note: Data smoothed in Q1 of 2011

Capacity Utilization Rate
1970 – 2013*

Source: The Federal Reserve Bank of St. Louis



*Data through October 2013

Elliott D. Pollack & Company

Business Summary:

- Businesses are in better shape.
- Spending on equipment to continue to grow.
- Spending on plant will lag until capacity utilization goes higher…getting close.
- Employment to continue to grow.

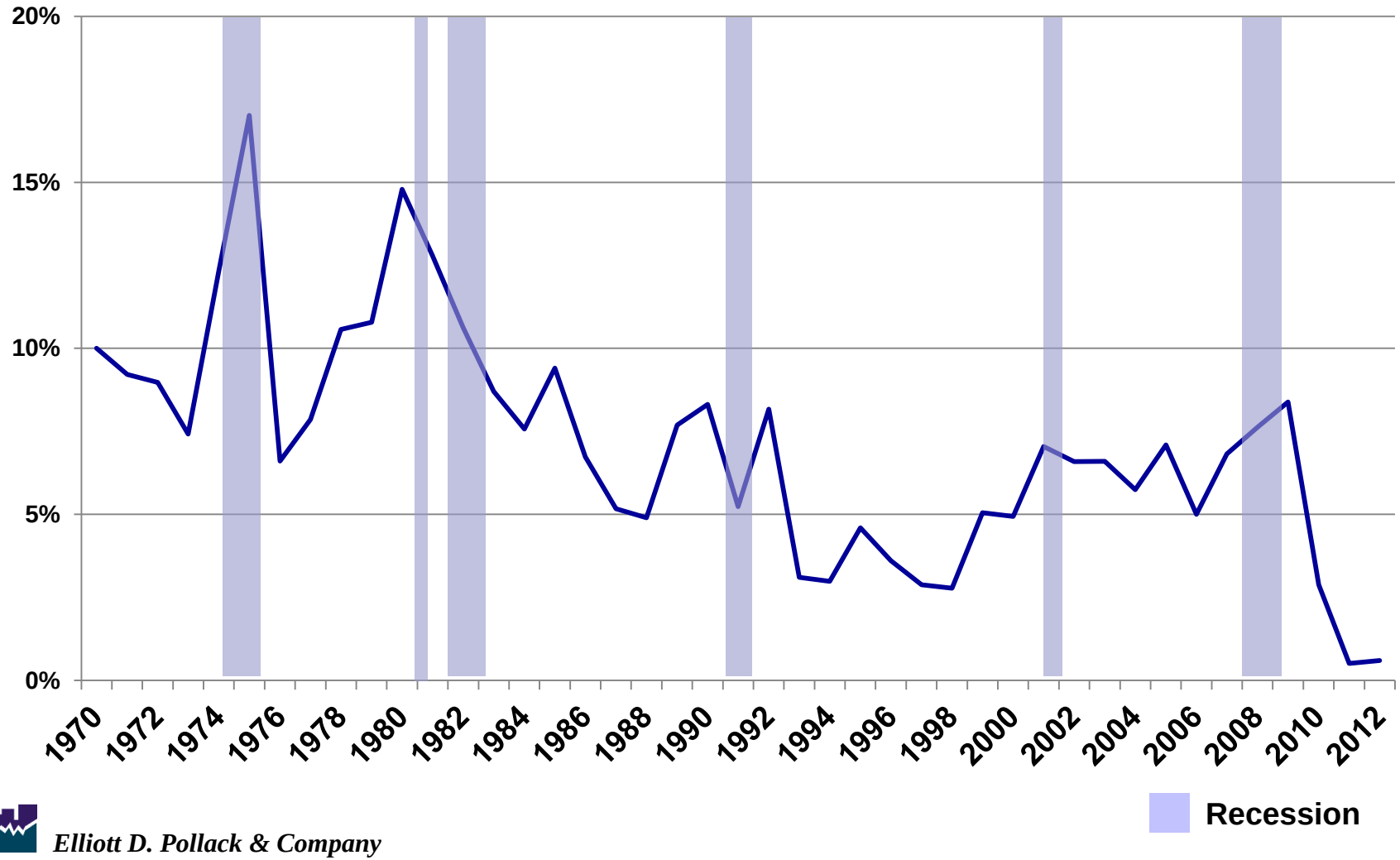
Government

CAUTION
GOVERNMENT
WASTE
AHEAD
PROJECT FUNDED BY THE
American Recovery
and Reinvestment Act

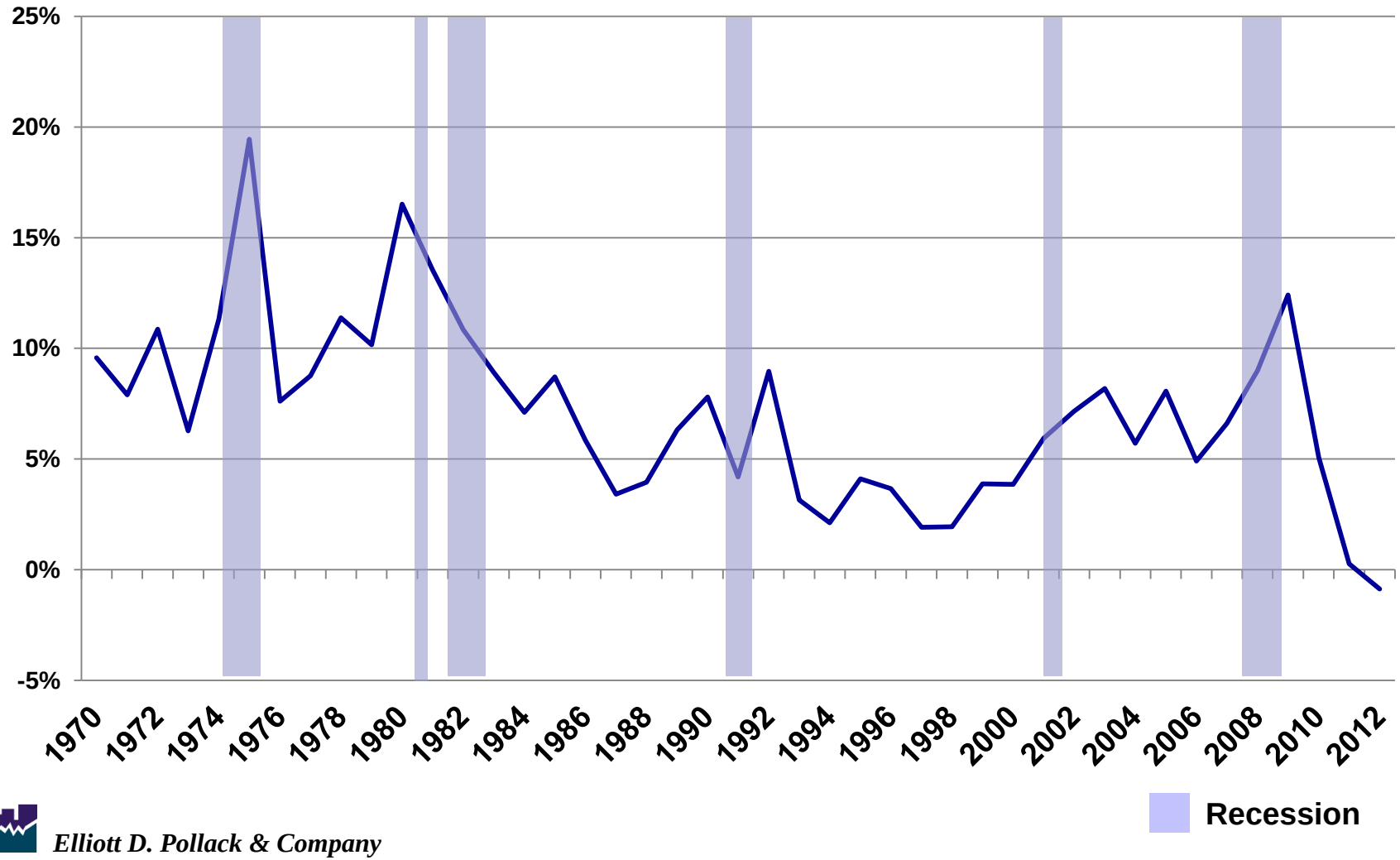
Government Infighting & Lack of Leadership

PITBULL FIGHT

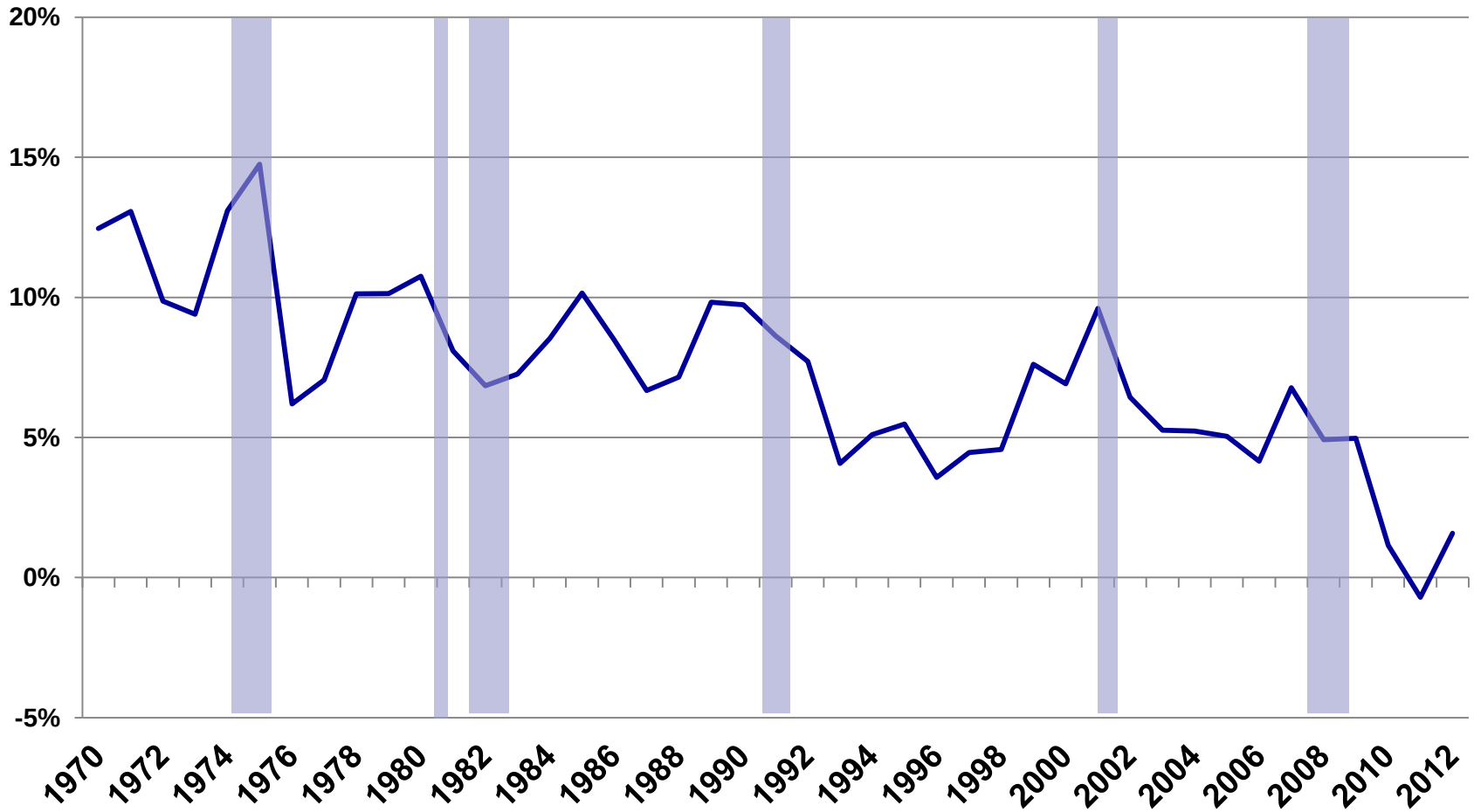
Total Government Expenditures
Percent Change Year Ago
1970-2012
Source: U.S. Bureau of Economic Analysis



Federal Government Expenditures
Percent Change Year Ago
1970-2012
Source: U.S. Bureau of Economic Analysis



State and Local Government Expenditures
Percent Change Year Ago
1970-2012
Source: U.S. Bureau of Economic Analysis



Recession

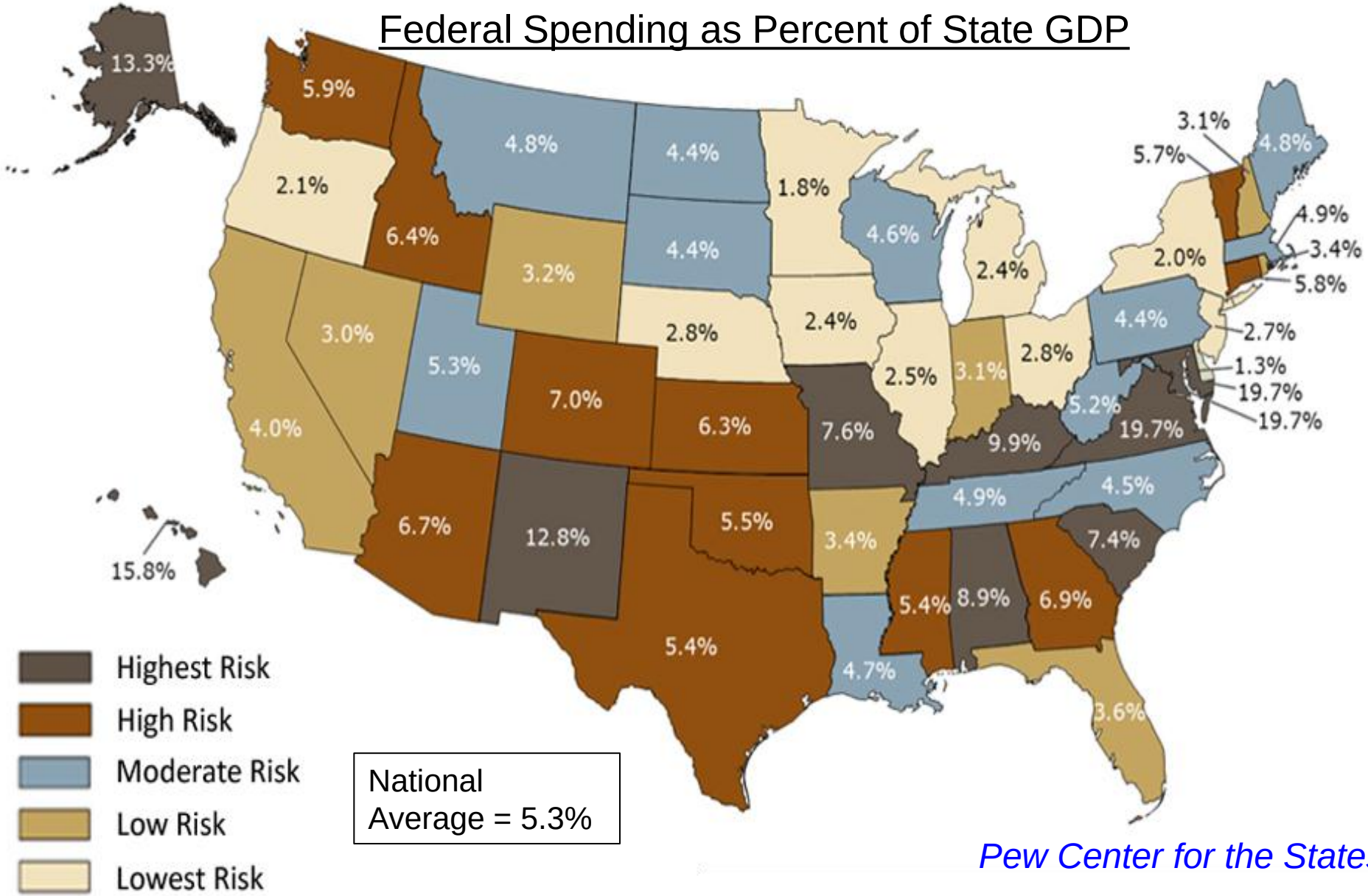
Government Summary:

- Government no longer a drag on economy in terms of GDP.
- Most major issues still ahead of us.

Sequestration

Arizona At Risk For Spending Cuts

Federal Spending as Percent of State GDP



National Average = 5.3%

Pew Center for the States

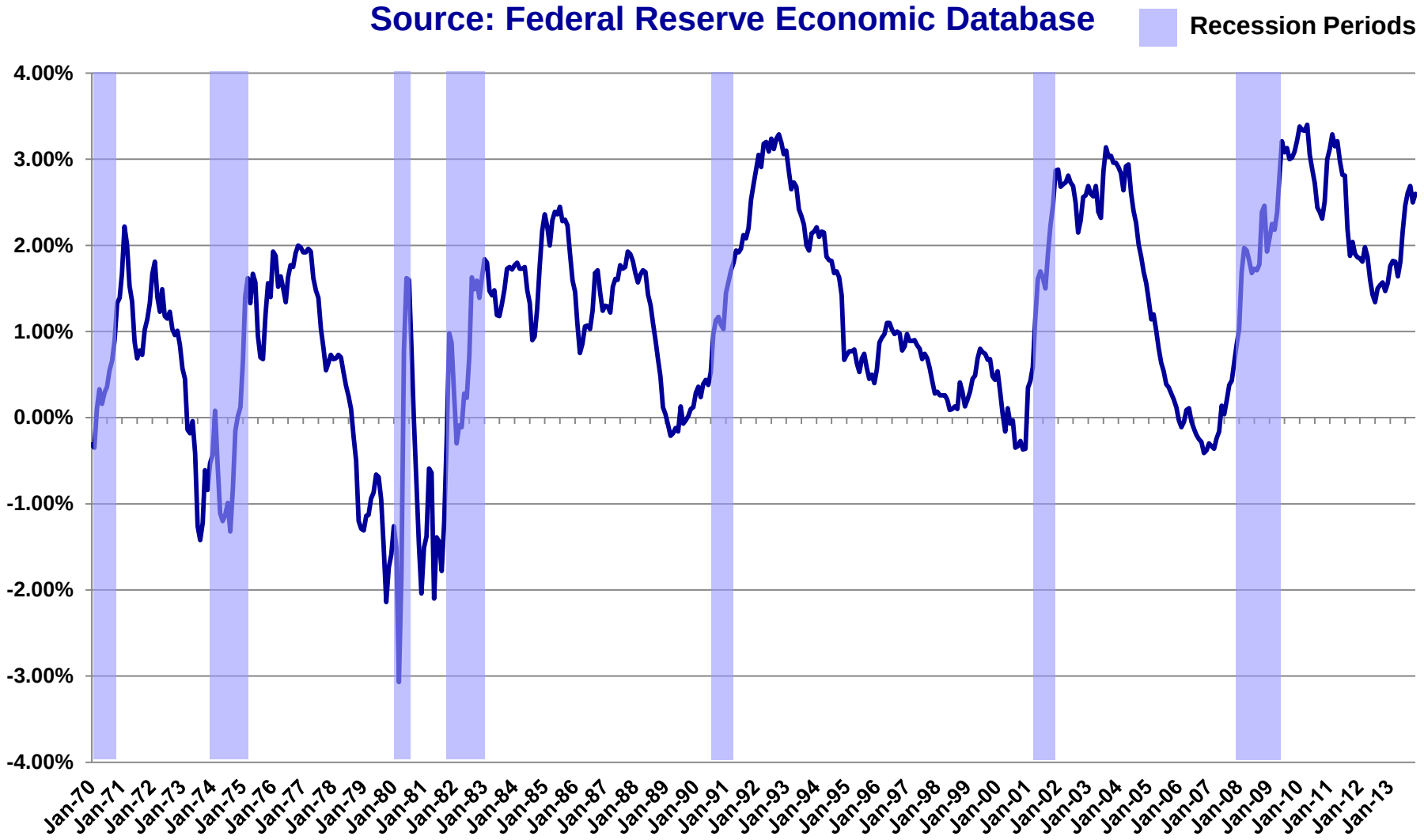
Other Selected Indicators of Potential Vulnerabilities to Spending Cuts

Selected Indicator of Vulnerability	National Avg.	Arizona
Federal grants subject to sequester (as a percent of State revenue)	6.6%	7.7%
Fed defense spending on procurement & wages (as a percent of State GDP)	3.5%	5.2%
Fed nondefense spending on procurement & wages (as a percent of State GDP)	1.8%	1.4%
Fed nondefense workforce (as a percent of employment in State)	1.0%	1.3%

Source: PEW Center for the States

10-Year Treasury Rate minus 1-Year Treasury Rate 1970 – 2013*

Source: Federal Reserve Economic Database



* Data through November 2013.

Elliott D. Pollack & Company

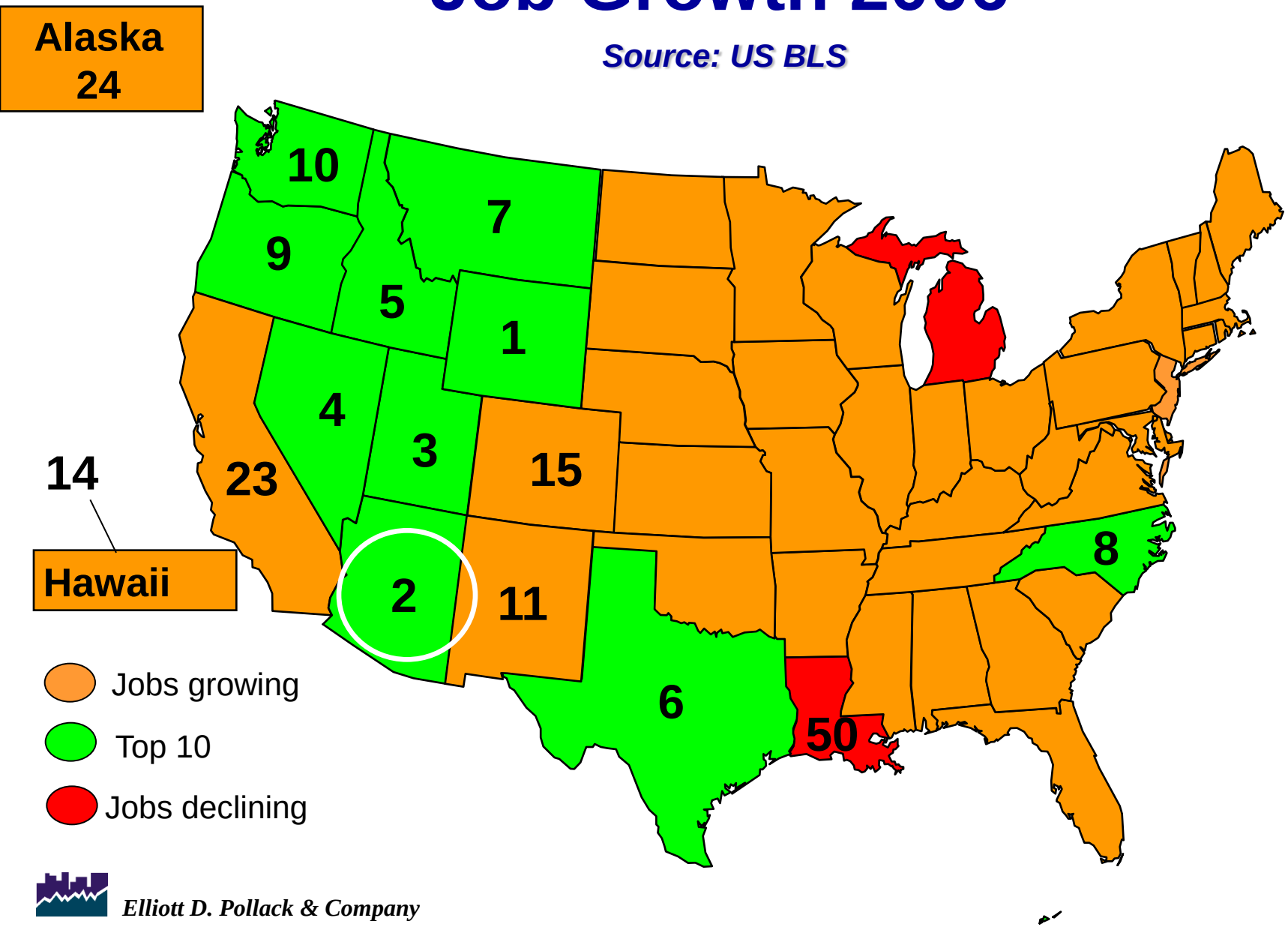
NATIONAL SUMMARY

- No major imbalances
- Consumer income growth to continue to be slow - but likely to continue
- Housing recovery likely to continue
- Business in good shape
- Federal government still creating uncertainties
- Government no longer a big drag on GDP

Arizona

Job Growth 2006

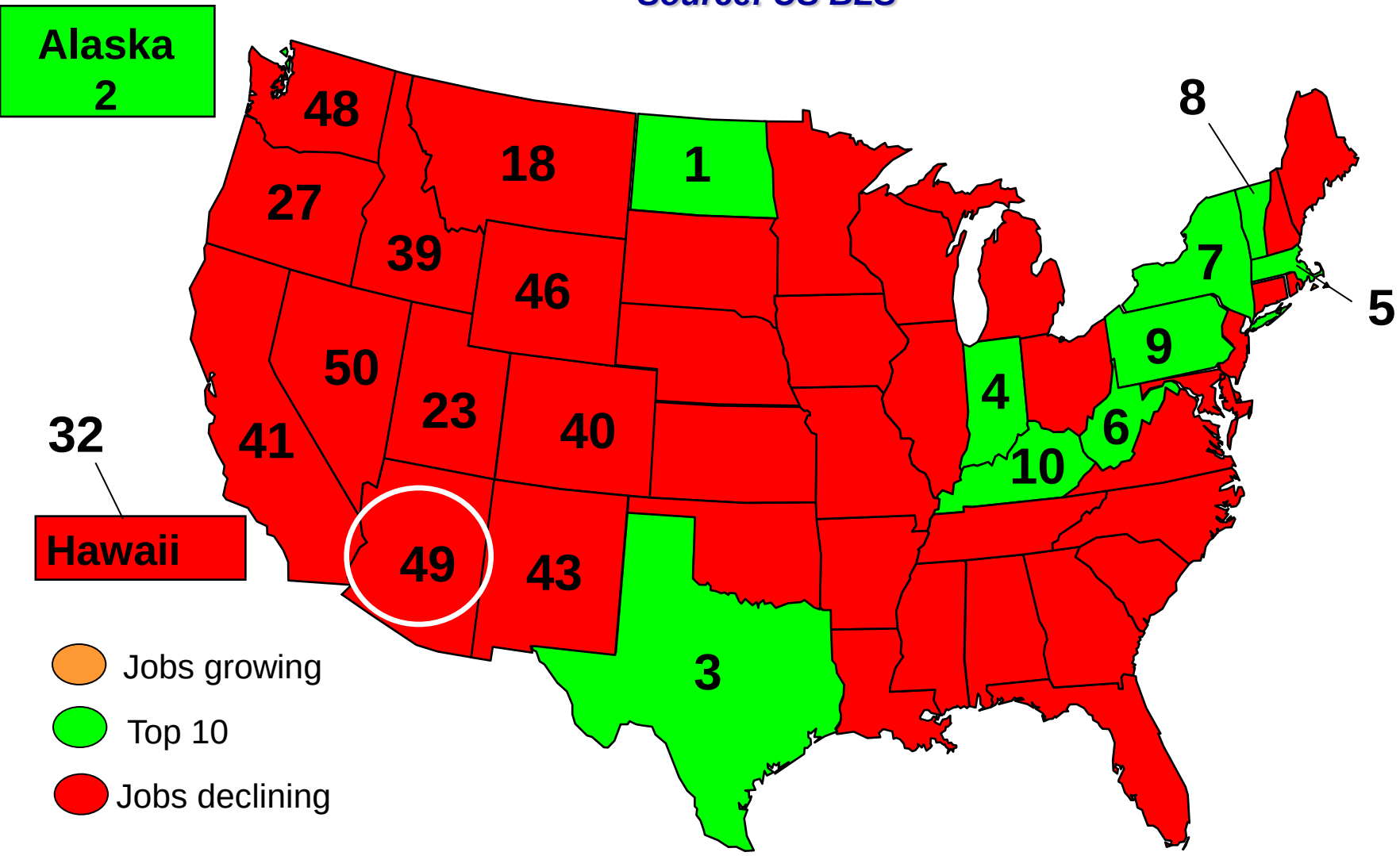
Source: US BLS



Elliott D. Pollack & Company

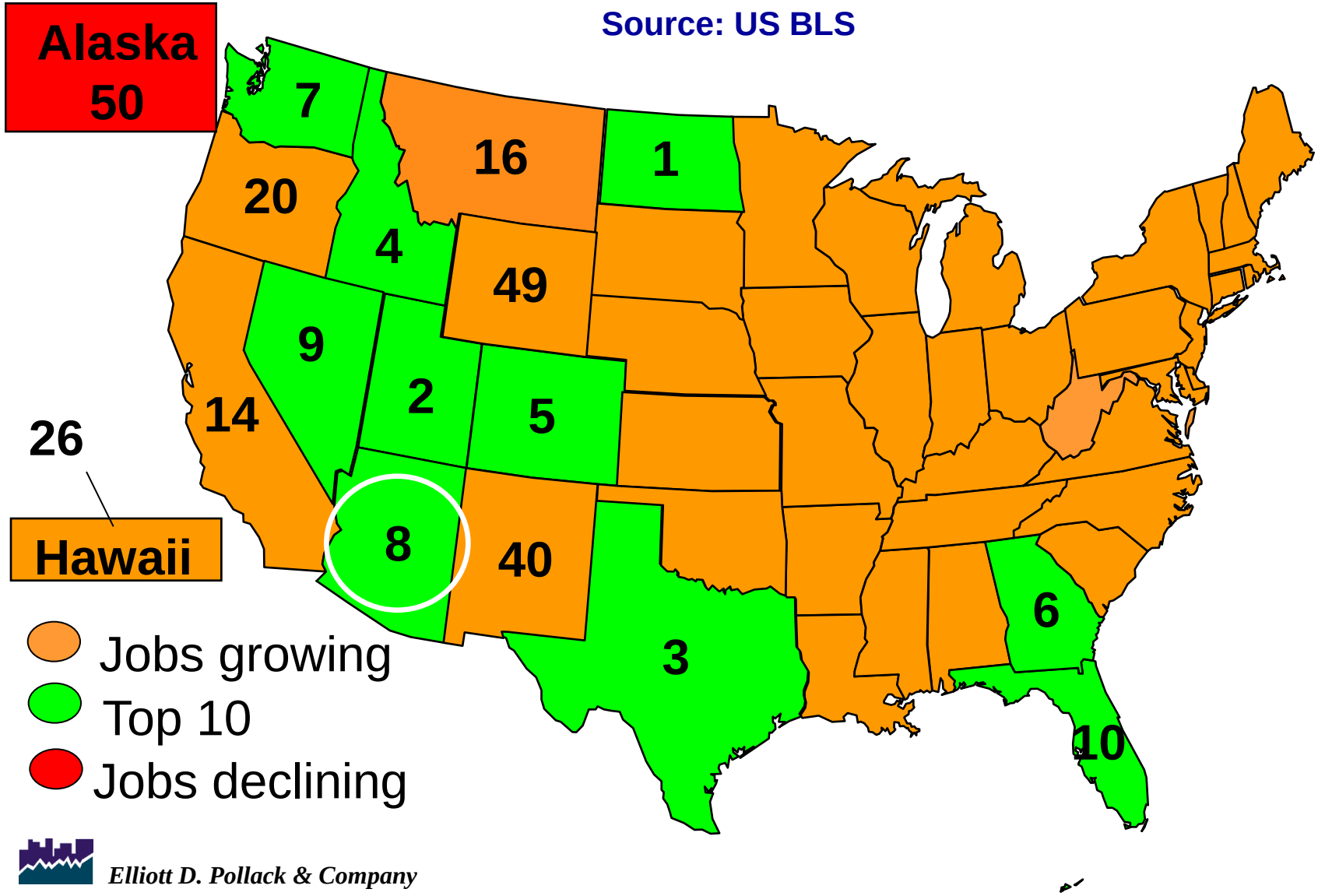
Job Growth 2010

Source: US BLS



Job Growth 2013

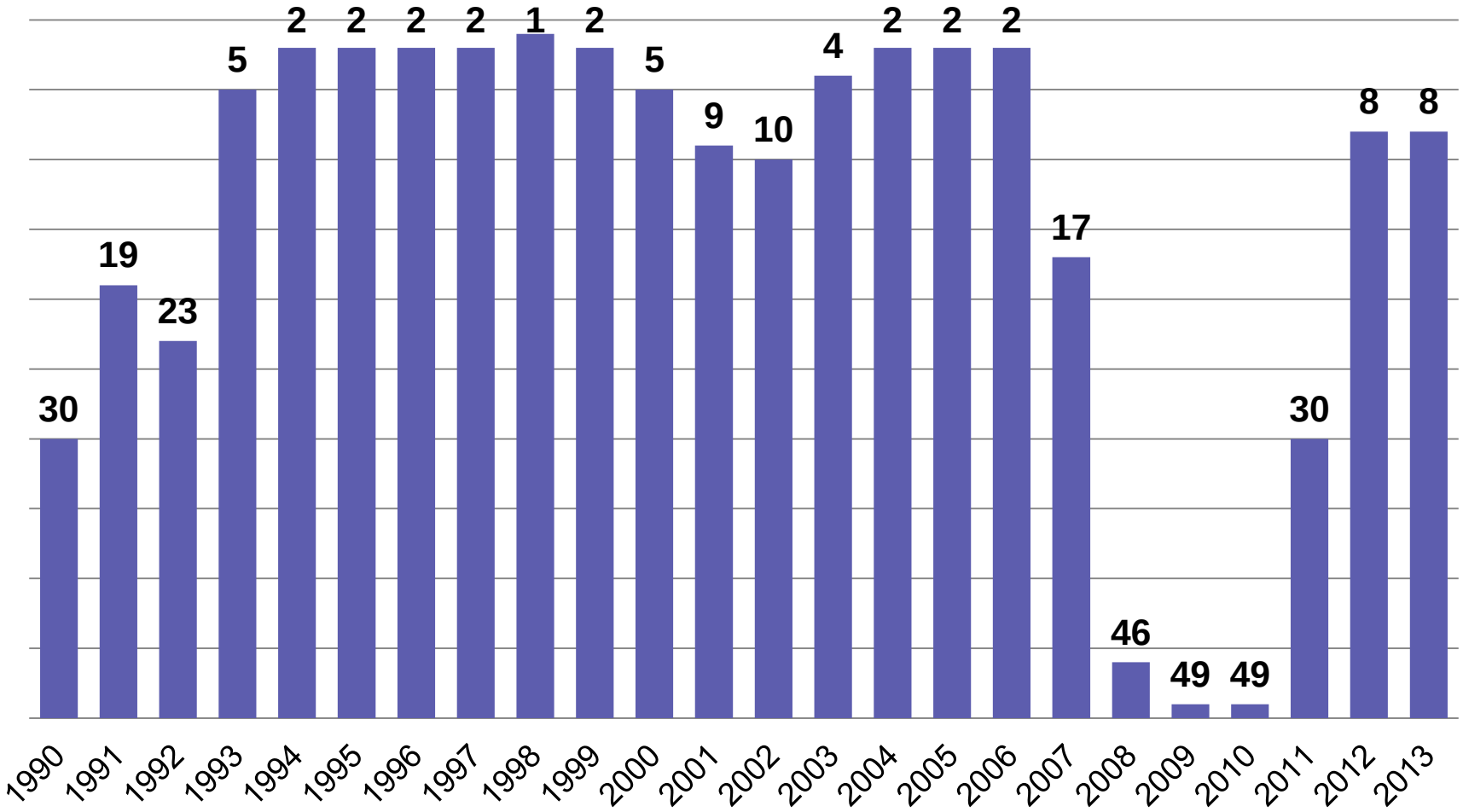
YTD October 2013 vs YTD October 2012
Source: US BLS



Elliott D. Pollack & Company

Arizona Rank
Employment Growth
1990-2013*

Source: Bureau of Labor Statistics



*Year-to-date through October.

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	24	25
2010	24	24
2011	14	25
2012	6	27
2013*	7	28

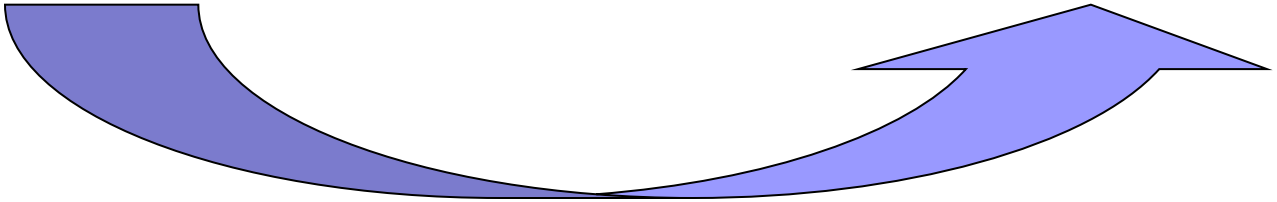
*Year-to-date, October 2013.

Greater Phoenix Employment*

Source: ADOA

Sectors in Decline	Net Change	% Change
Manufacturing	-2,300	-1.9%
Natural Resources And Mining	-200	-5.1%

Sectors Improving	Net Change	% Change
Education & Health Services	8,800	3.4%
Trade, Transp. & Utilities	8,500	2.4%
Professional & Bus. Services	6,900	2.4%
Financial Activities	6,400	4.3%
Leisure & Hospitality	5,500	3.0%
Construction	1,100	1.2%
Other Services	500	0.8%
Information	400	1.4%
Government	400	0.2%



*October 2013/ October 2012

Top Sources of New Jobs Greater Phoenix

Source: Bureau of Labor Statistics, ADOA

		Job Growth	Wage
	Total	36,600	$48,112
1	Health Care	7,600	$49,806
2	Professional Services	6,900	$51,720
3	Financial Activities	6,400	$62,026
4	Food Services	5,500	$17,076
5	Retail Trade	4,200	$31,605
6	Wholesale Trade	4,000	$72,507
7	State Government	1,600	$51,558

*Job growth October 2013/ October 2012

Top Sources of New Jobs U.S.

Source: Bureau of Labor Statistics

		Job Growth	Wage
	Total	2,229,000	$49,200
1	Administrative Services	391,900	$34,870
2	Retail Trade	367,000	$27,729
3	Food services	344,300	$16,242
4	Health Care	300,400	$45,407
5	Professional services	213,900	$83,357
6	Construction	176,000	$52,294
7	Financial activities	91,000	$80,097

*Job growth October 2013/ October 2012

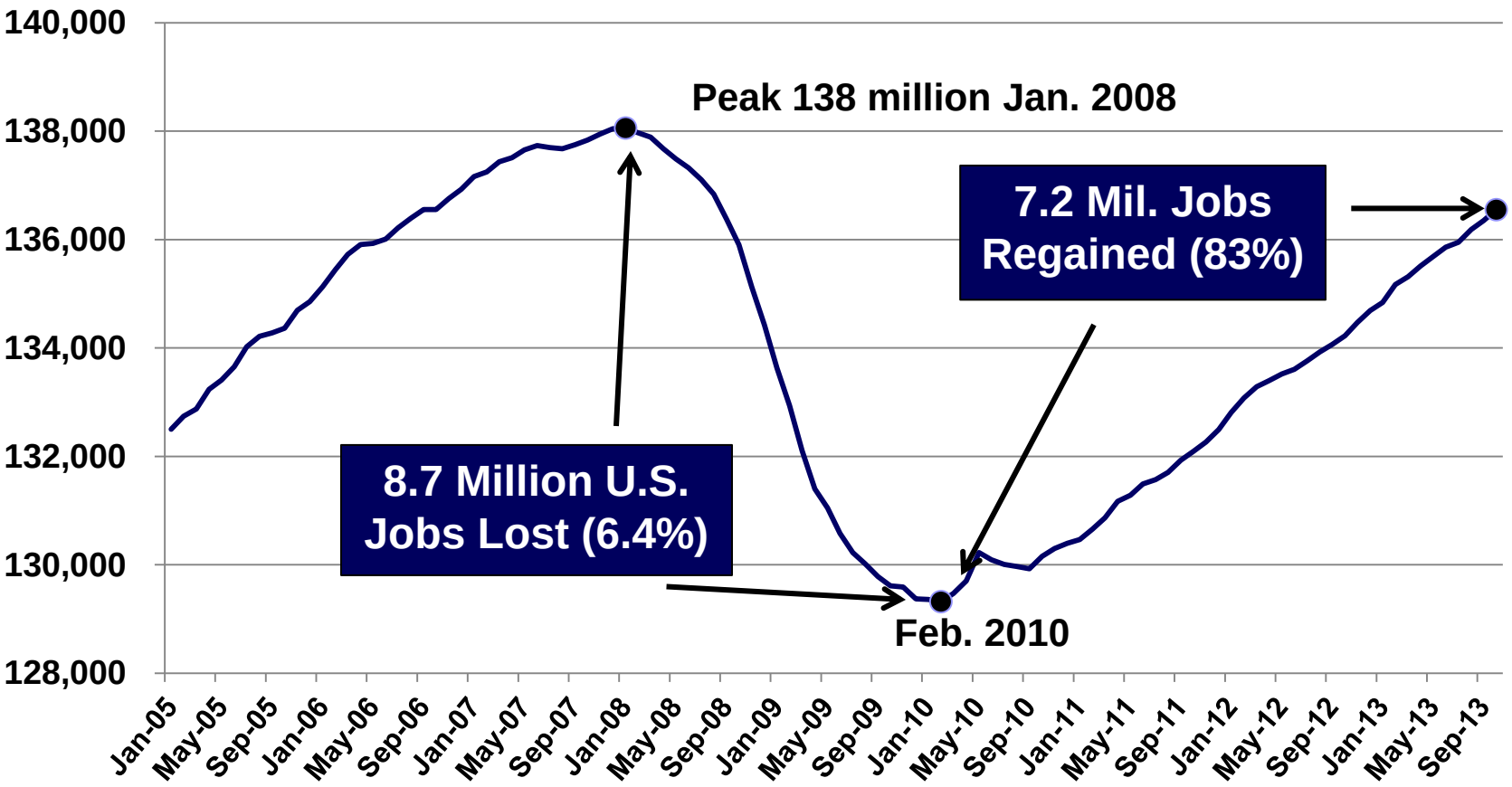
Greater Phoenix-
Jobs Finally in the Black

Over last 12 months:	**36,000**
12 months before that:	**43,900**
12 months before that:	**32,600**
12 months before that:	**1,500**
12 months before that:	**(149,700)**

* As of October 2013

U.S. Has Gained 83% of Lost Jobs

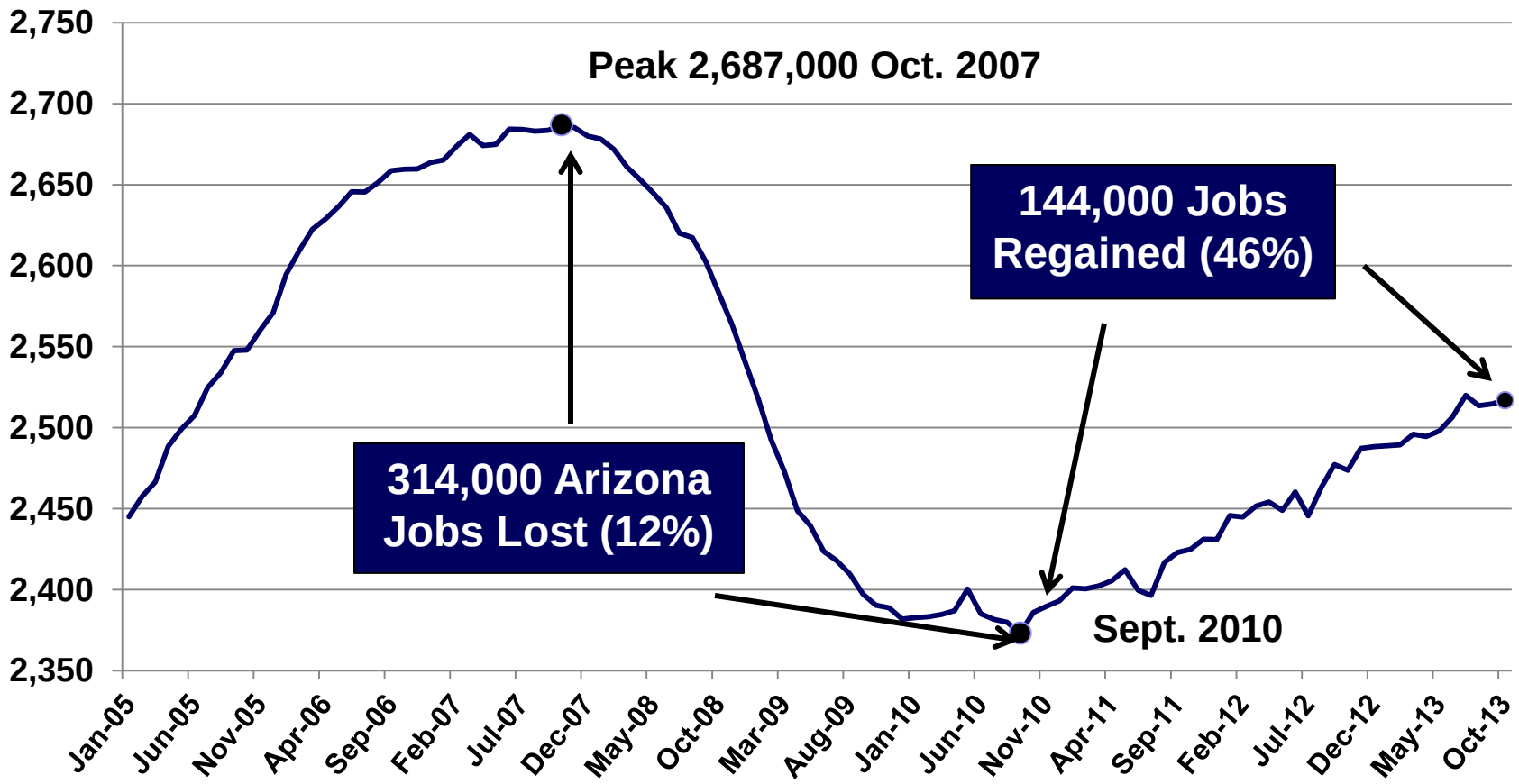
1.5 Million Jobs (17%) Still to Recover



Source: U.S. Bureau of Labor Statistics, Thousands of Jobs, Seasonally Adjusted
Slide stolen from Lee McPheters…

Arizona Has Gained 46% of Lost Jobs

170,000 Jobs (54%) Still to Recover

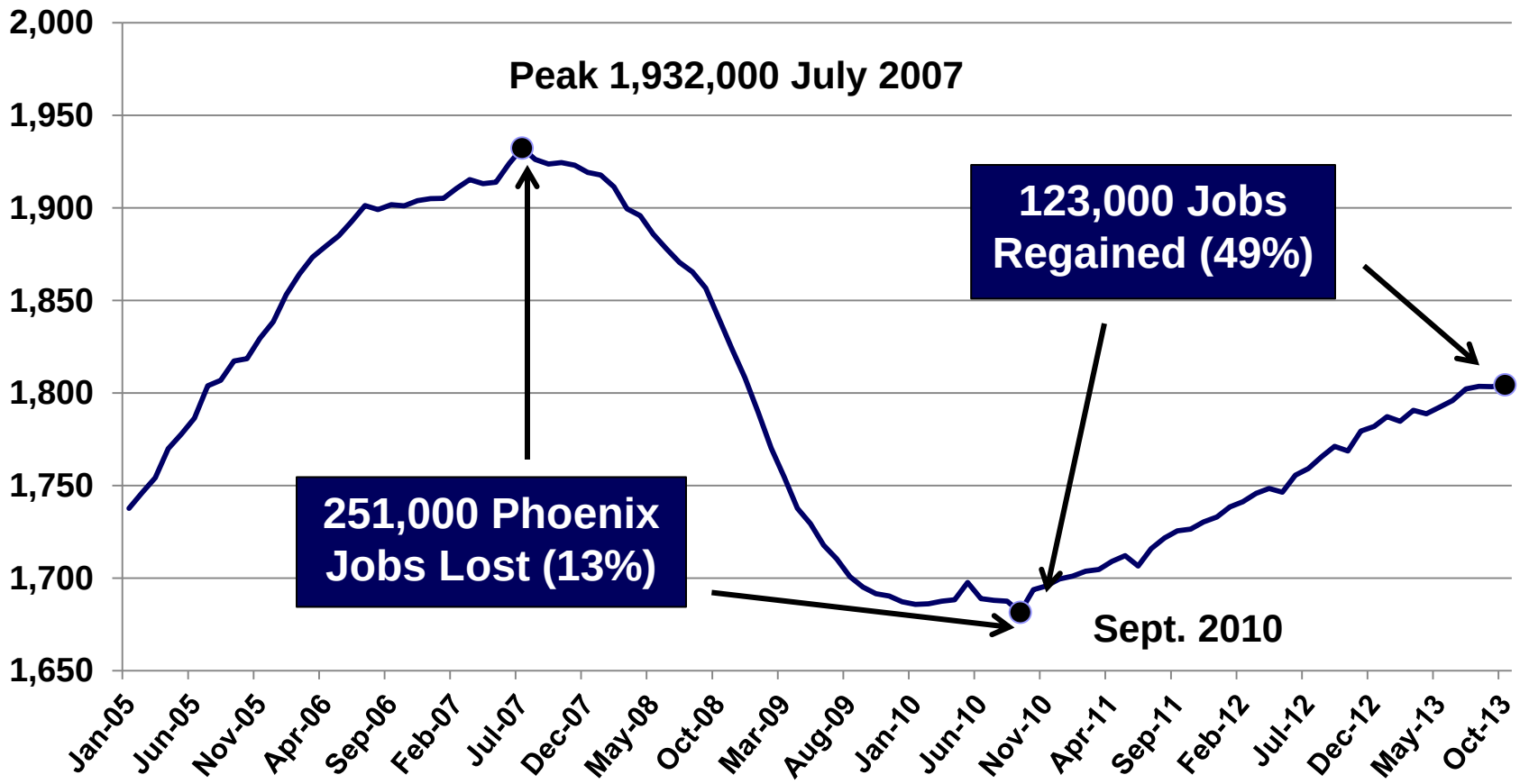


Source: U.S. Bureau of Labor Statistics, Thousands of Jobs, Seasonally Adjusted

Slide stolen from Lee McPheters…

Greater Phoenix Has Gained 49% of Lost Jobs

128,000 Jobs (51%) Still to Recover

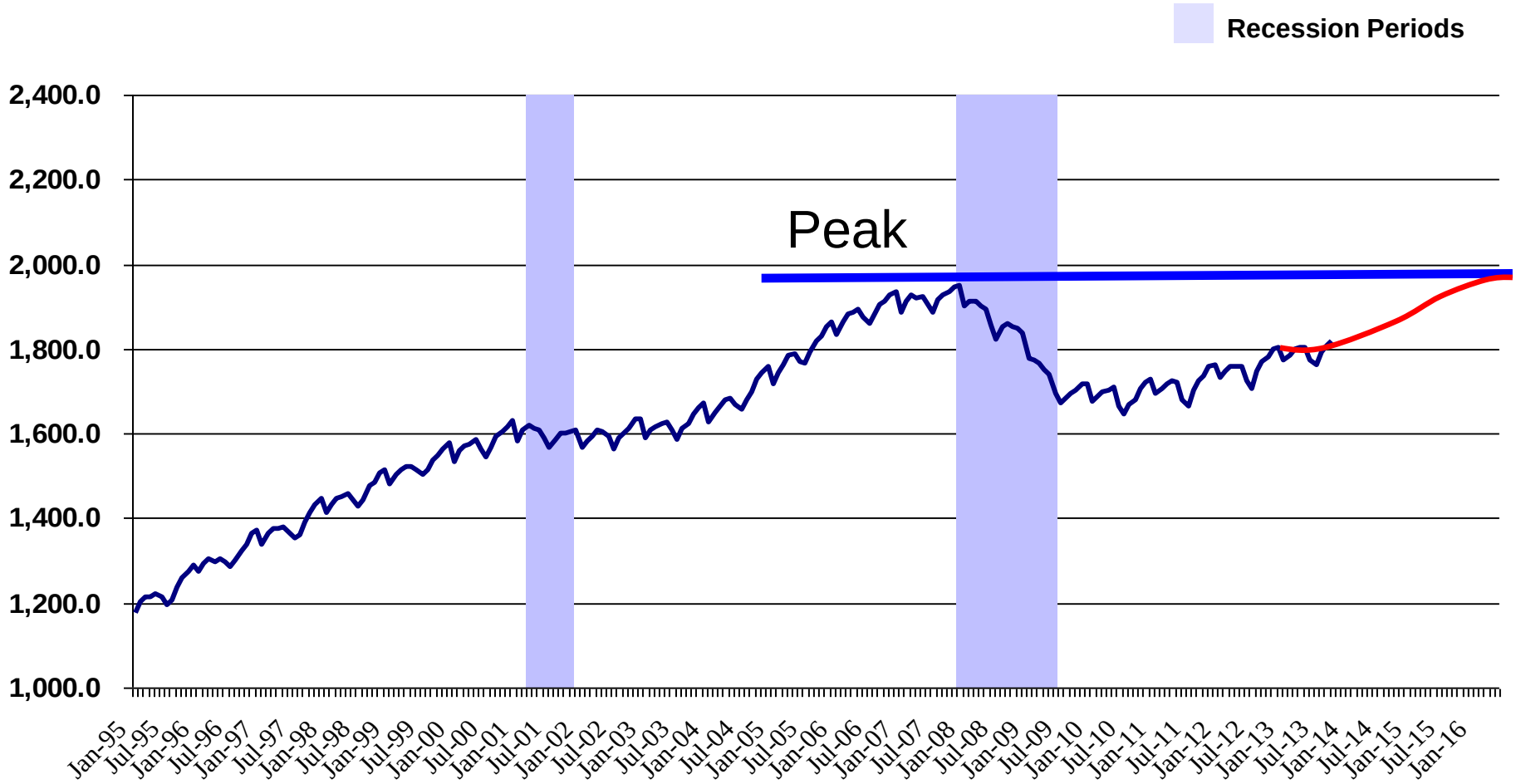


Source: U.S. Bureau of Labor Statistics, Thousands of Jobs, Seasonally Adjusted

Slide stolen from Lee McPheters…

Employment Levels:
Greater Phoenix back to Peak in 2016?

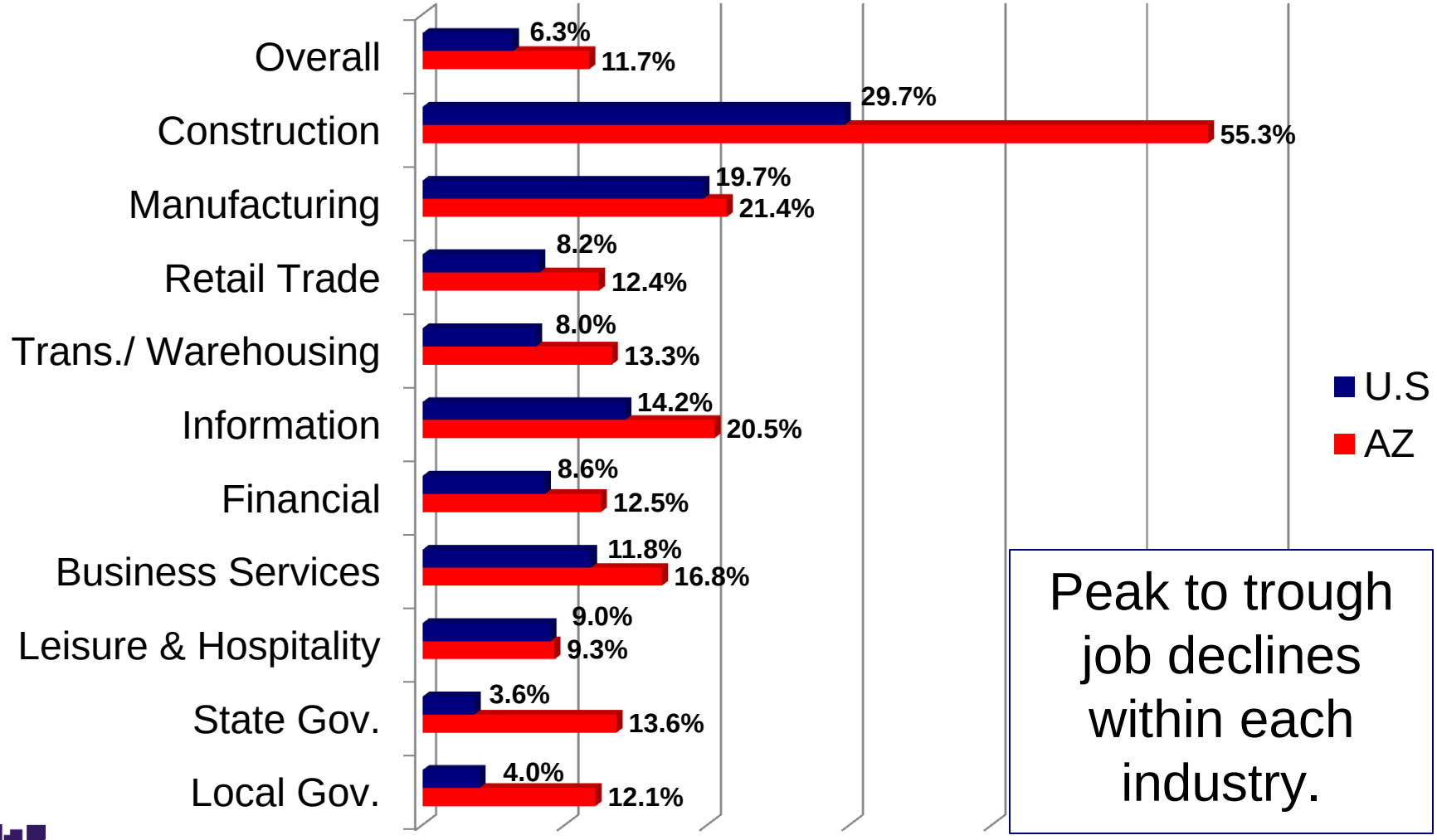
Source: ADOA



*Based on seasonally unadjusted monthly data

Arizona Job Losses Exceeded U.S.

Source: Bureau of Labor Statistics, Seasonally Adjusted Data



Peak to trough job declines within each industry.

Slide stolen from Lee McPheters…

WHY?

(1) Significant declines in population flows

(2) Steeper housing decline

(1). Population Flows

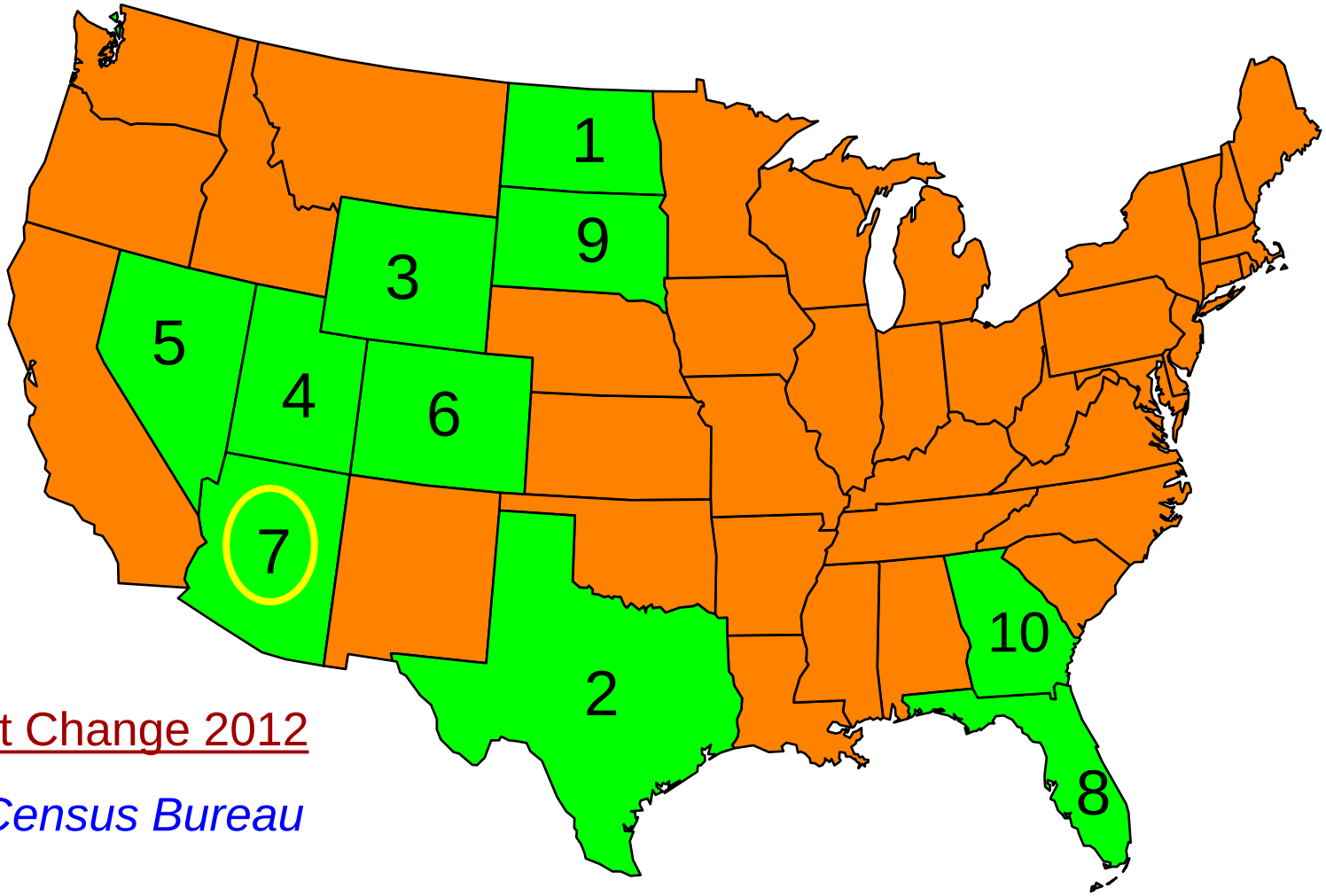
Since the Recovery Greater Phoenix has created 136,900 jobs.

By Comparison, for the first 36 months of the previous recoveries, Greater Phoenix created 206,500, 190,000 and 203,100 jobs, respectively.

Unemployment Rate is now 6.9%.

At the same point in the last three cycles, it was 5.3%, 3.2%, and 4.1%, respectively.

Arizona Population Growth Was Slow But Still Top 10 in 2012



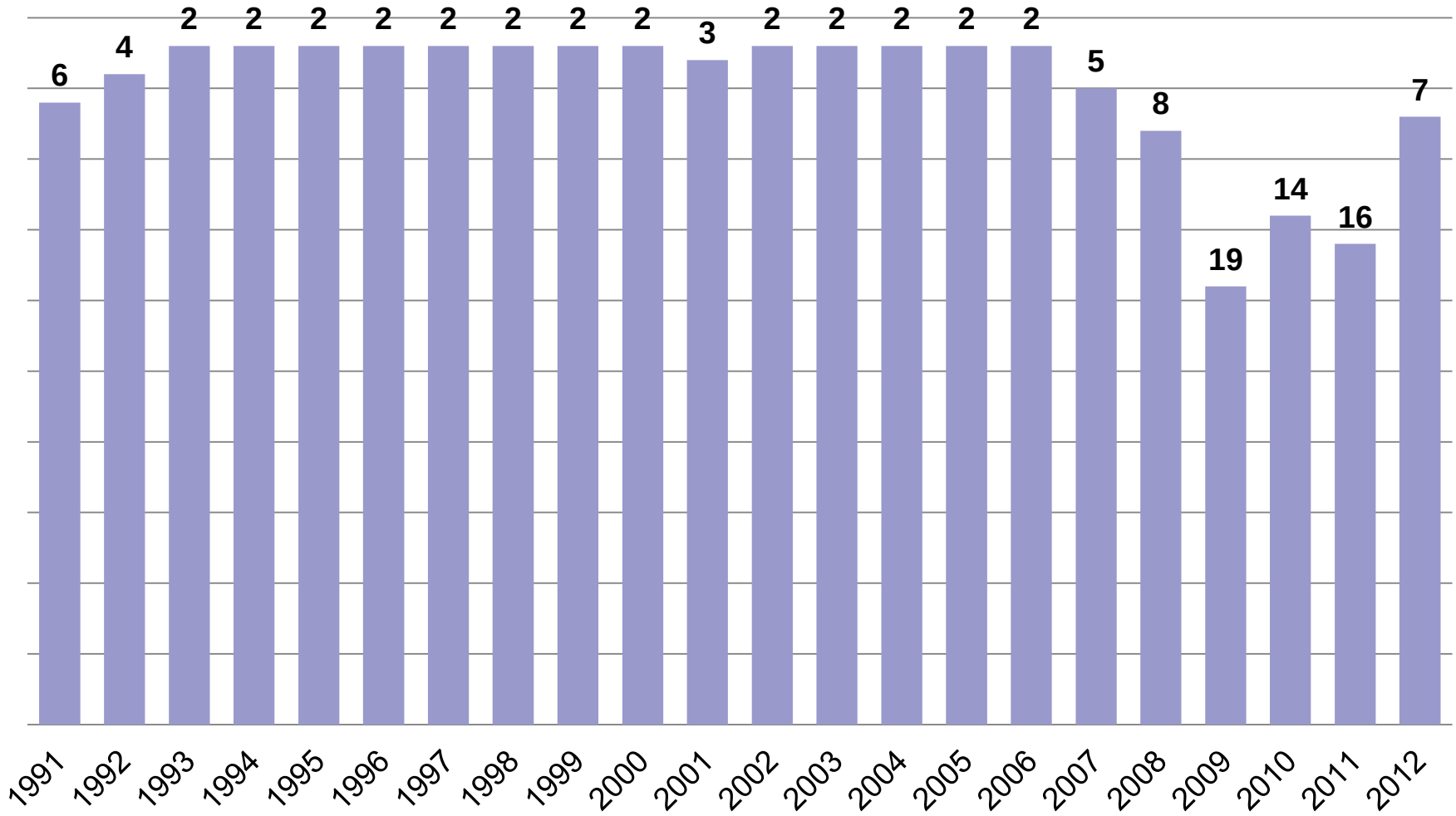
Percent Change 2012

U. S. Census Bureau

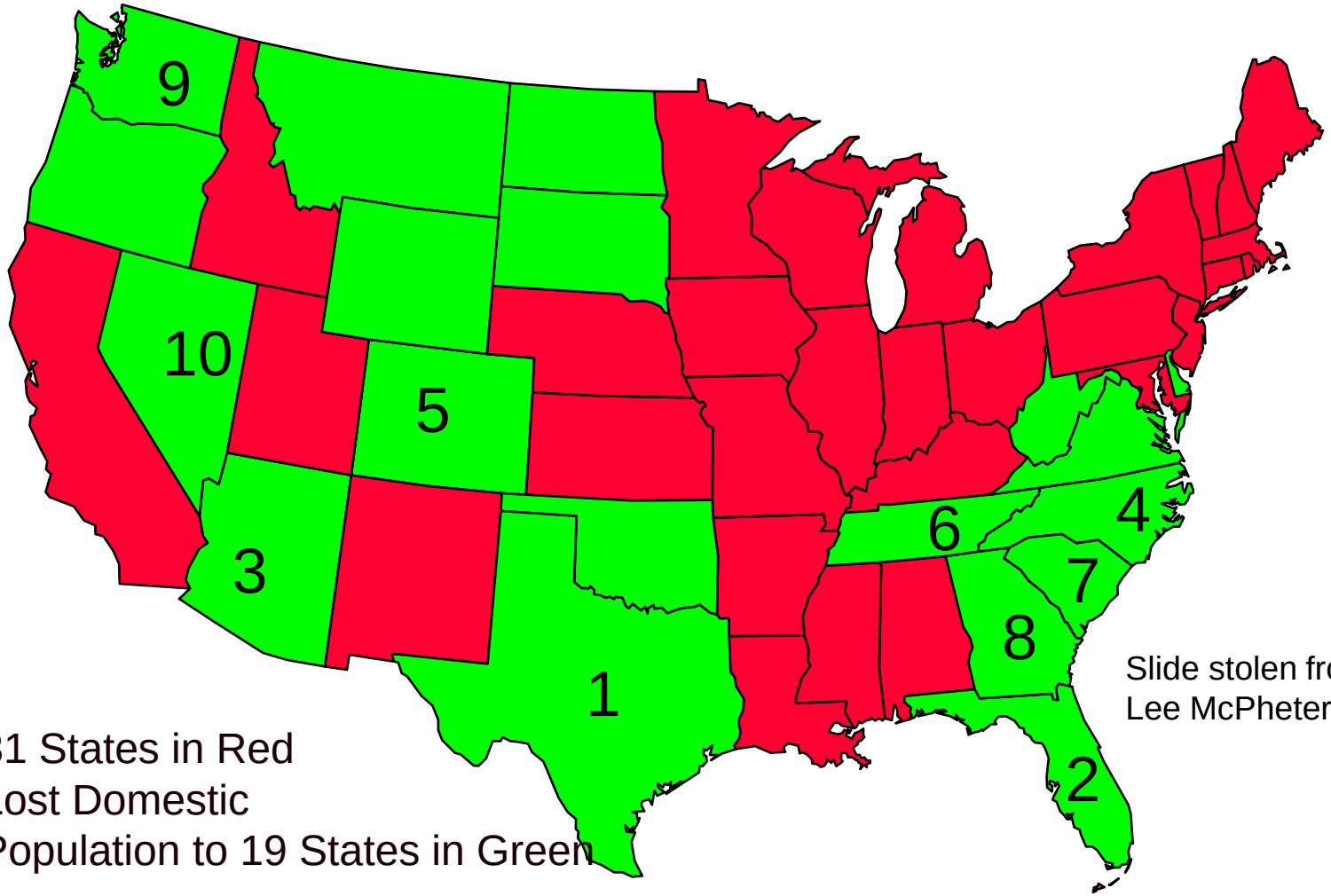
Elliott D. Pollack & Company

Arizona Rank
Population Growth
1991-2012

Source: Census Bureau



Texas, Florida, Arizona Attracted Most Domestic Migrants in 2012



Alaska
Hawaii

31 States in Red
Lost Domestic
Population to 19 States in Green

Slide stolen from
Lee McPheters…

U.S. Census Bureau

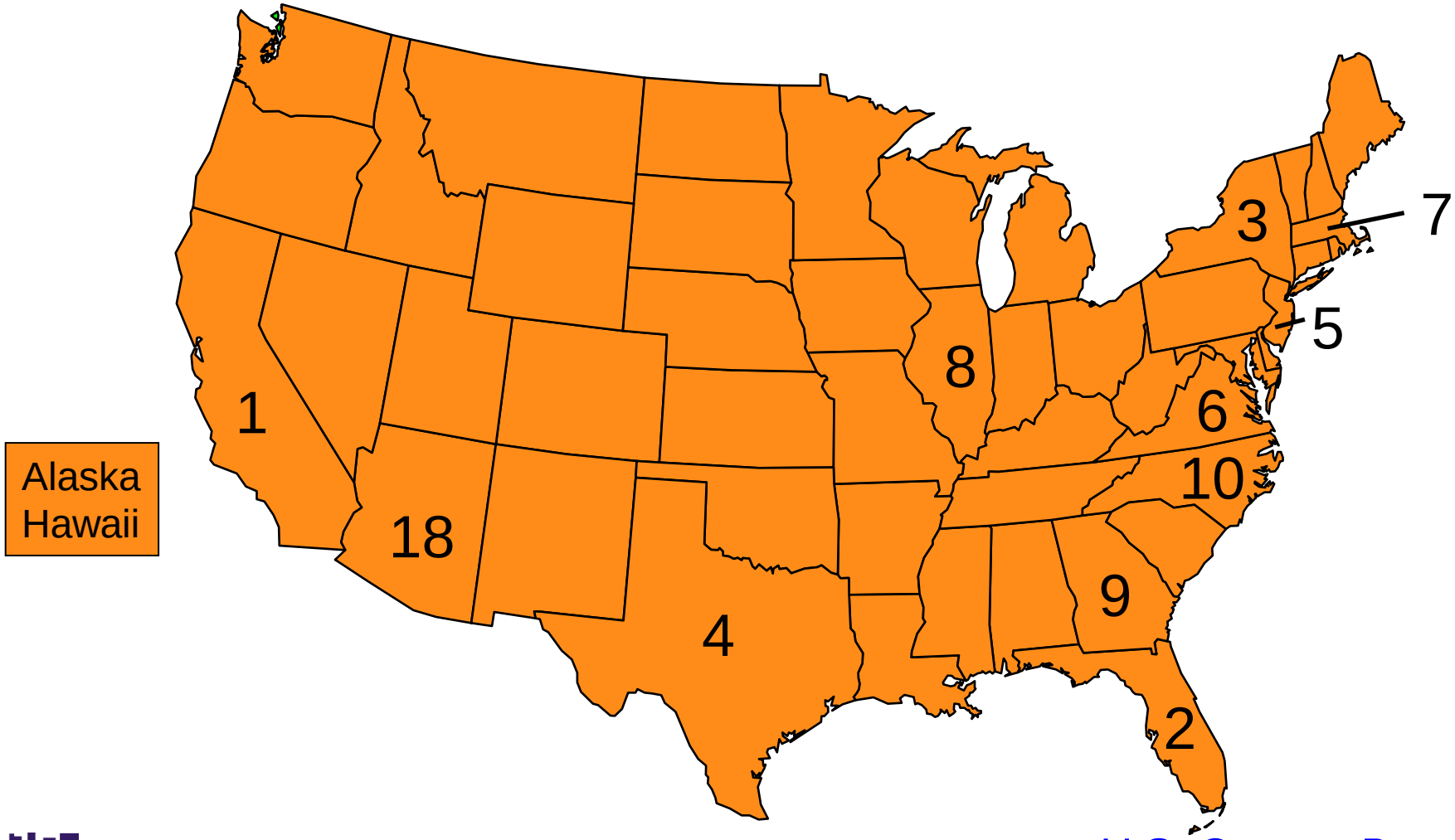
Arizona Domestic Migration Ranking

Source: U.S. Census Bureau

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

*No data available for 2010

California, Florida, New York Attracted Most International Migrants in 2012



U.S. Census Bureau

Nationally, immigration represented over 38% of the total population increase in 2012.

Source: U.S. Census Bureau

Arizona International Migration Ranking

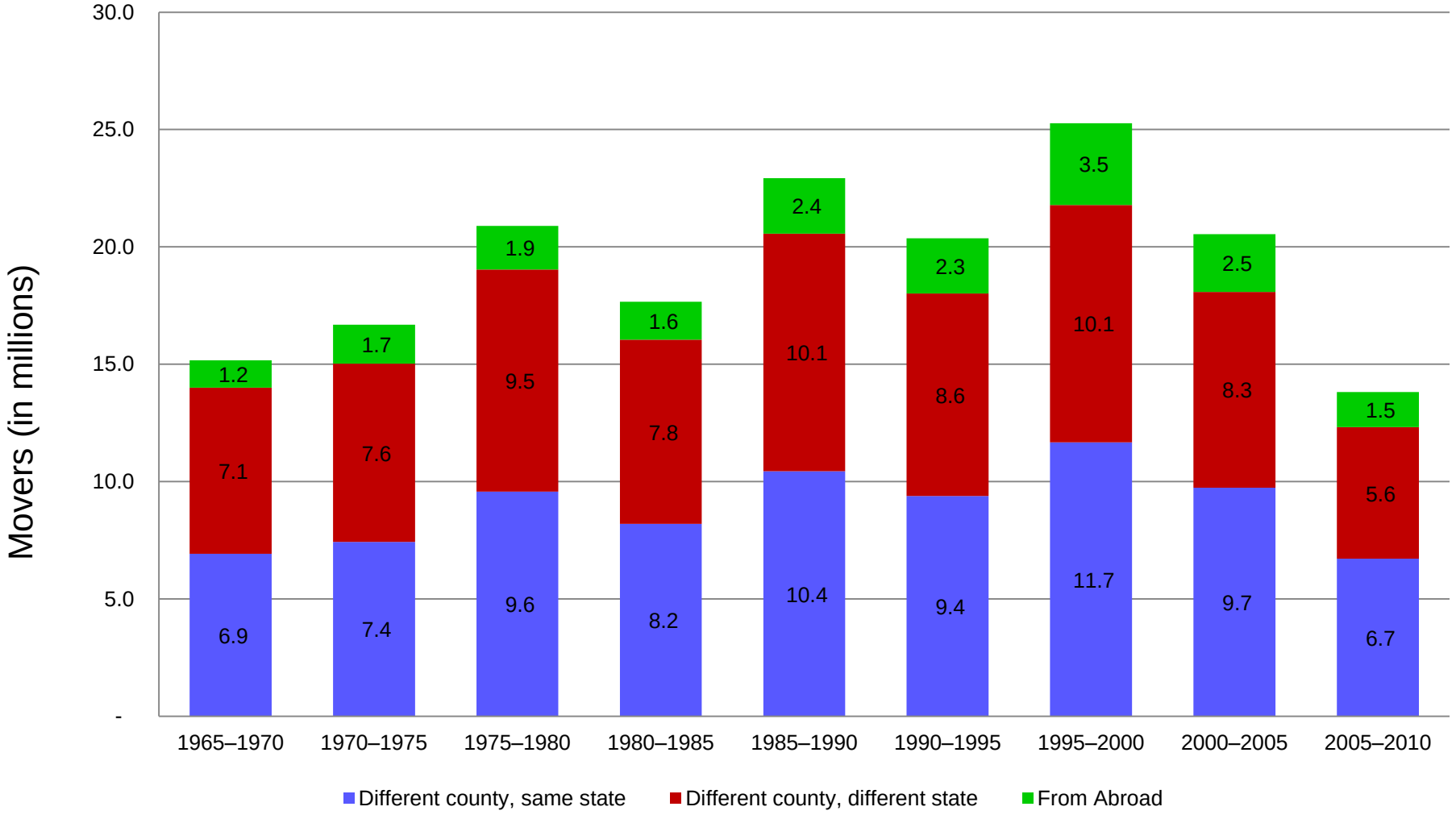
Source: U.S. Census Bureau

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

*No data available for 2010

Five Year Distribution of Movers in U.S. by Type*
1980-2010

Source: U.S. Census Bureau



*Excludes movers in the same county

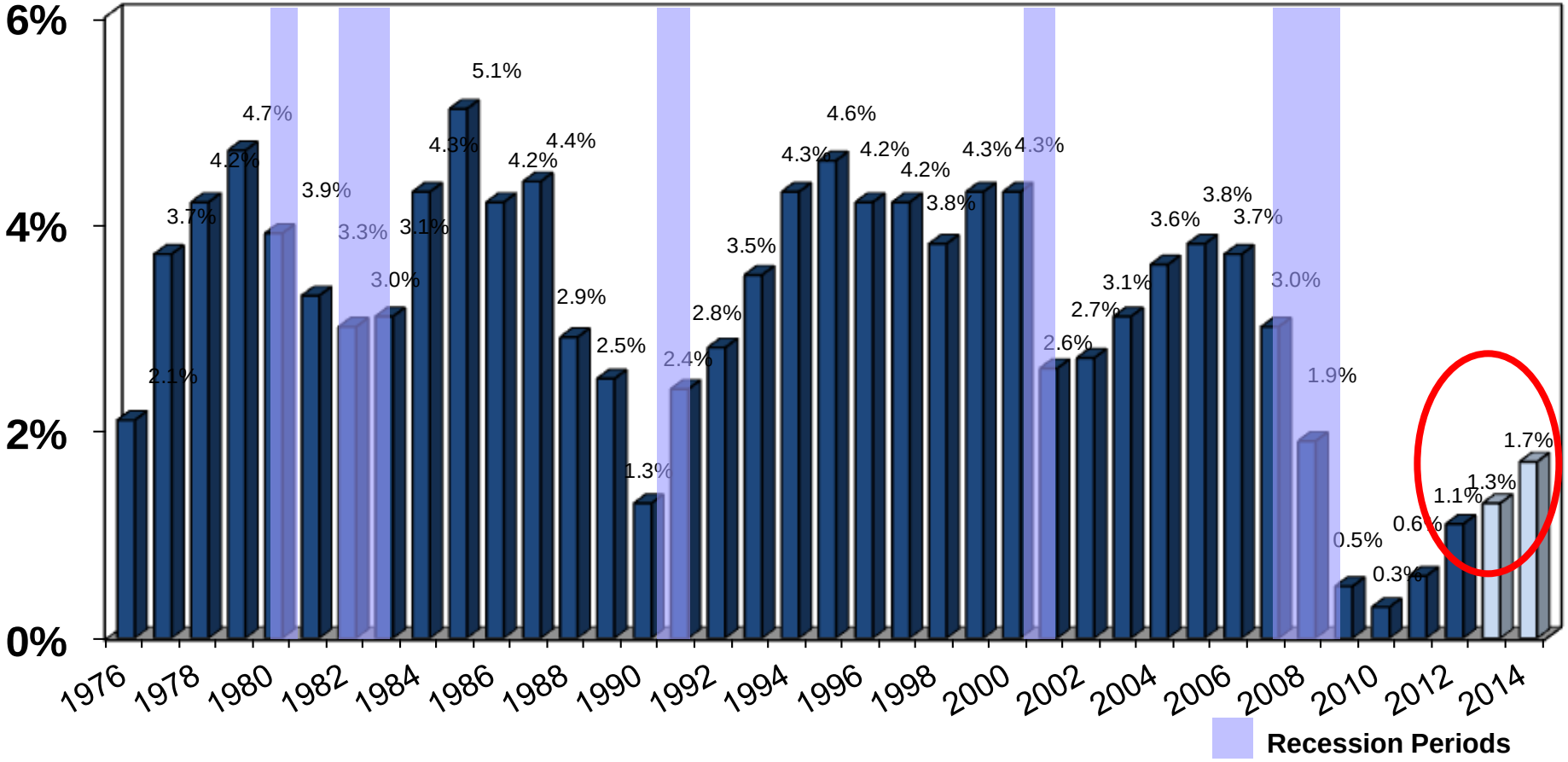
Elliott D. Pollack & Company

Why did population flows slow?

- Slow job growth
- High unemployment
- Delayed retirement
- Difficulty in selling home
- Difficulty in qualifying for a loan
- S.B. 1070

Greater Phoenix Population
Annual Percent Change 1976–2014*

Source: Arizona State University & Department of Commerce, Research Administration



Elliott D. Pollack & Company

* 2013 & 2014 forecast is from *Elliott D. Pollack & Co.*

How quickly are population flows going to recover?

No one knows, but not as rapidly as we would like.

(2). Housing

Fewer people mean fewer houses.

Greater Phoenix Population

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

YEAR	POPULATION	APR
1950	374,000	
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%
2020 (forecast)	5,011,767	1.8%

If you believe that population forecast, it implies an average of more than 22,500 single family units will be built each year from 2014 through 2020.

How homebuilders felt 2008 – 2011…

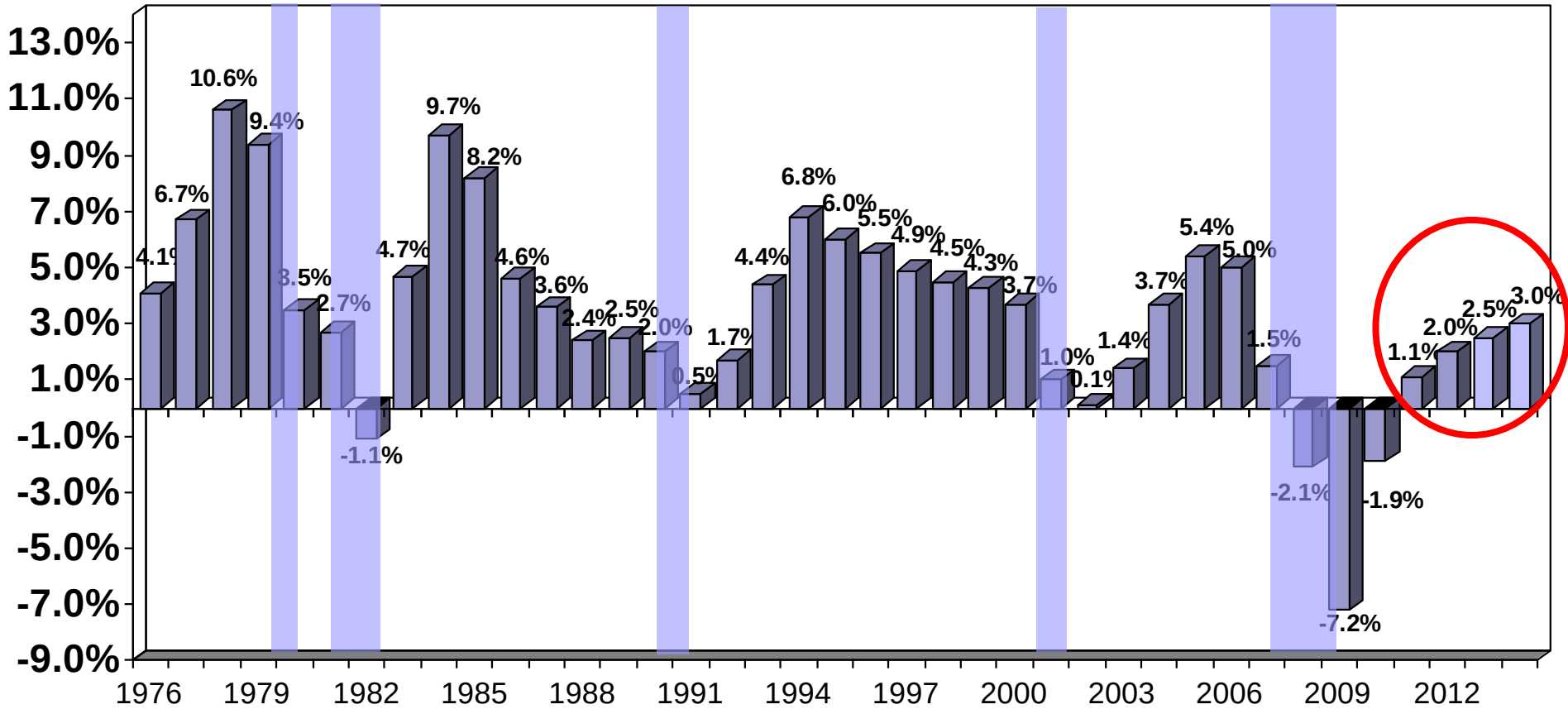
How homebuilders feel now…

Greater Phoenix permits declined 89.3% from peak to trough

compared to

75.4% nationally

Arizona Employment
Annual Percent Change 1976–2014*
Source: Arizona Department of Administration

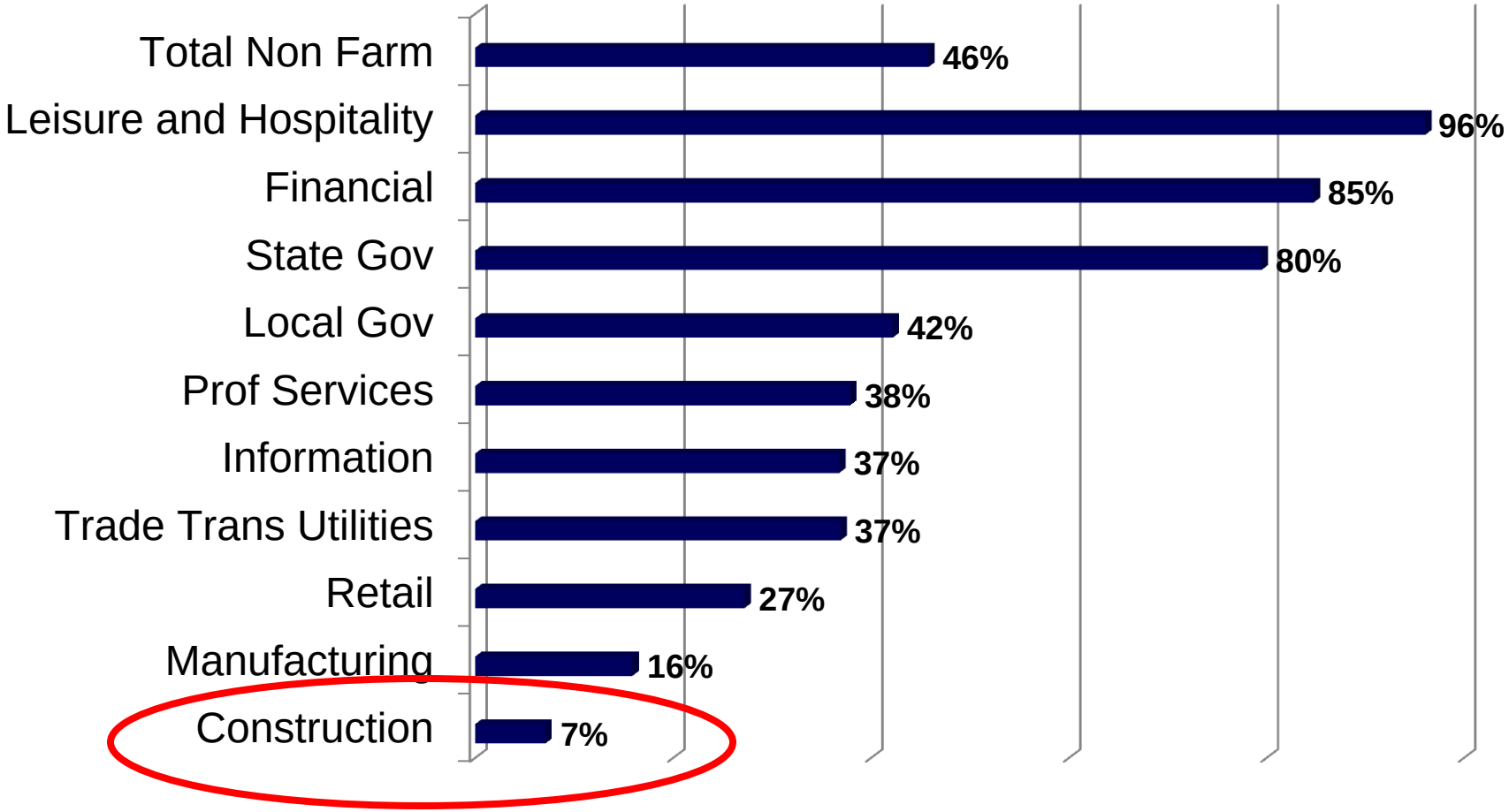


Recession Periods

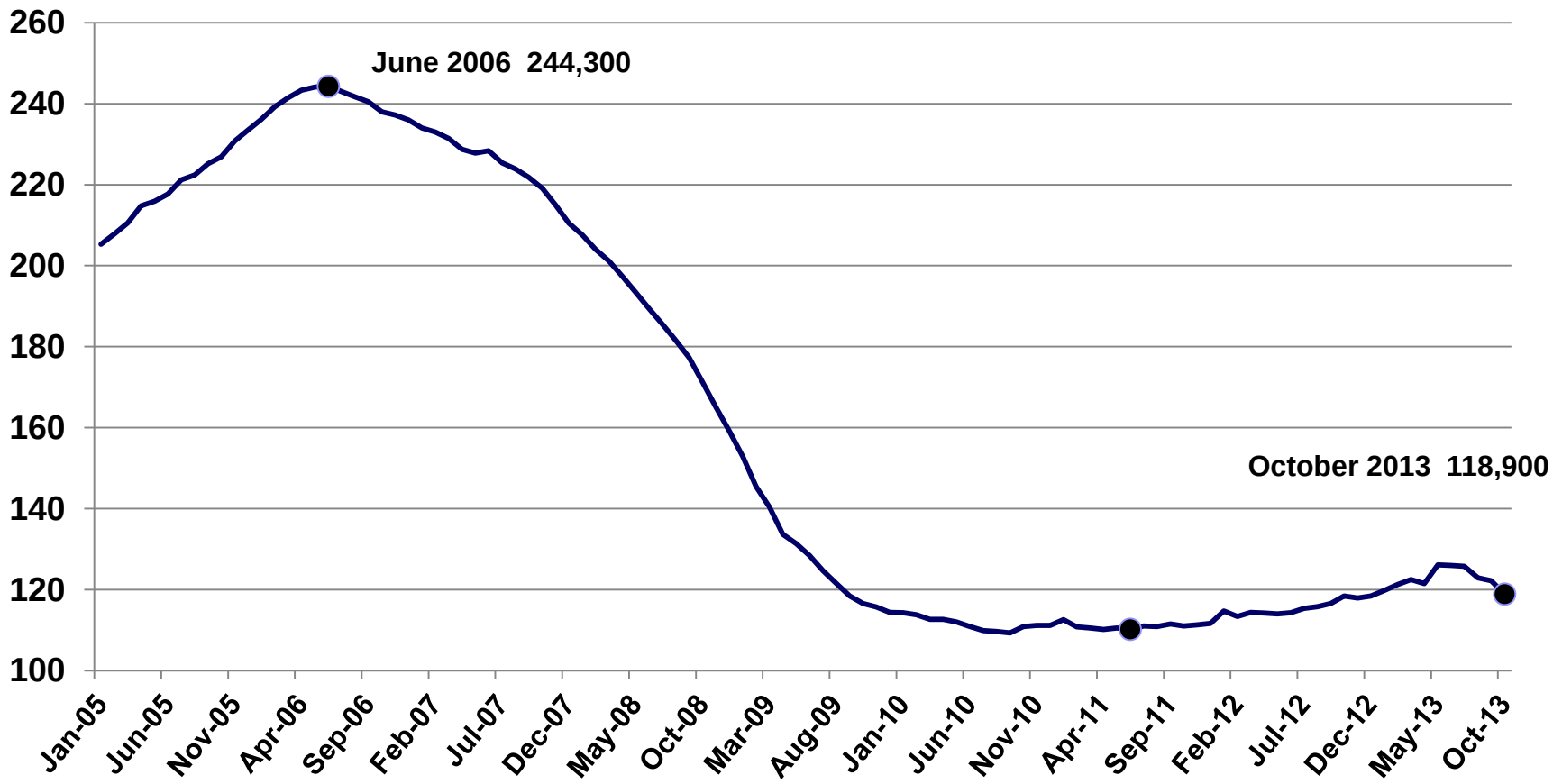
* 2013 & 2014 forecast is from *Elliott D. Pollack & Co.*

Elliott D. Pollack & Company

Arizona Jobs Regained Since Bottom of Cycle
Most Industries Yet To Regain Lost Jobs



Construction Employment is Still Down by 125,400 Jobs (49%) Since Peak

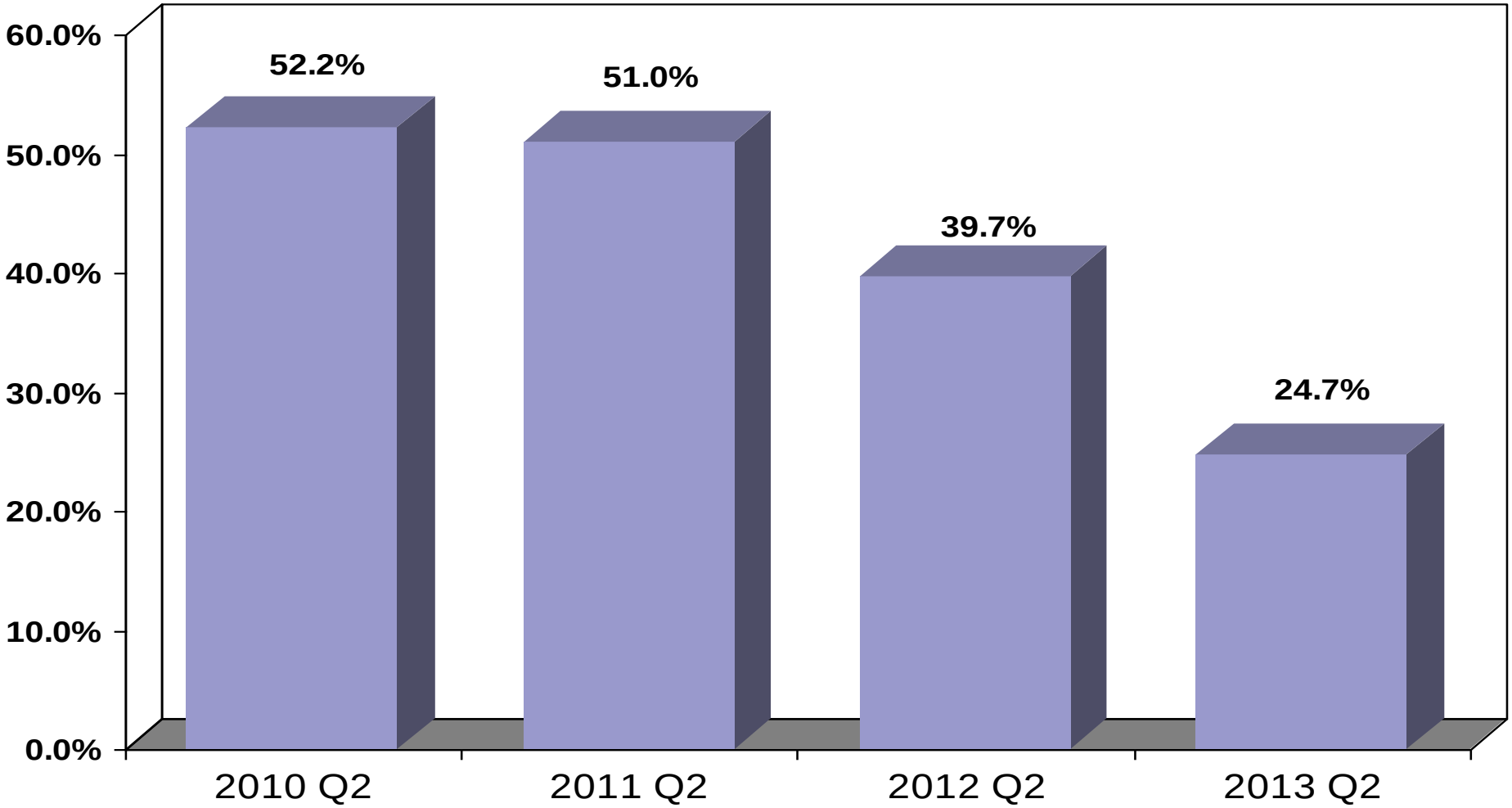


Source: U.S. Bureau of Labor Statistics, Thousands of Jobs, Seasonally Adjusted

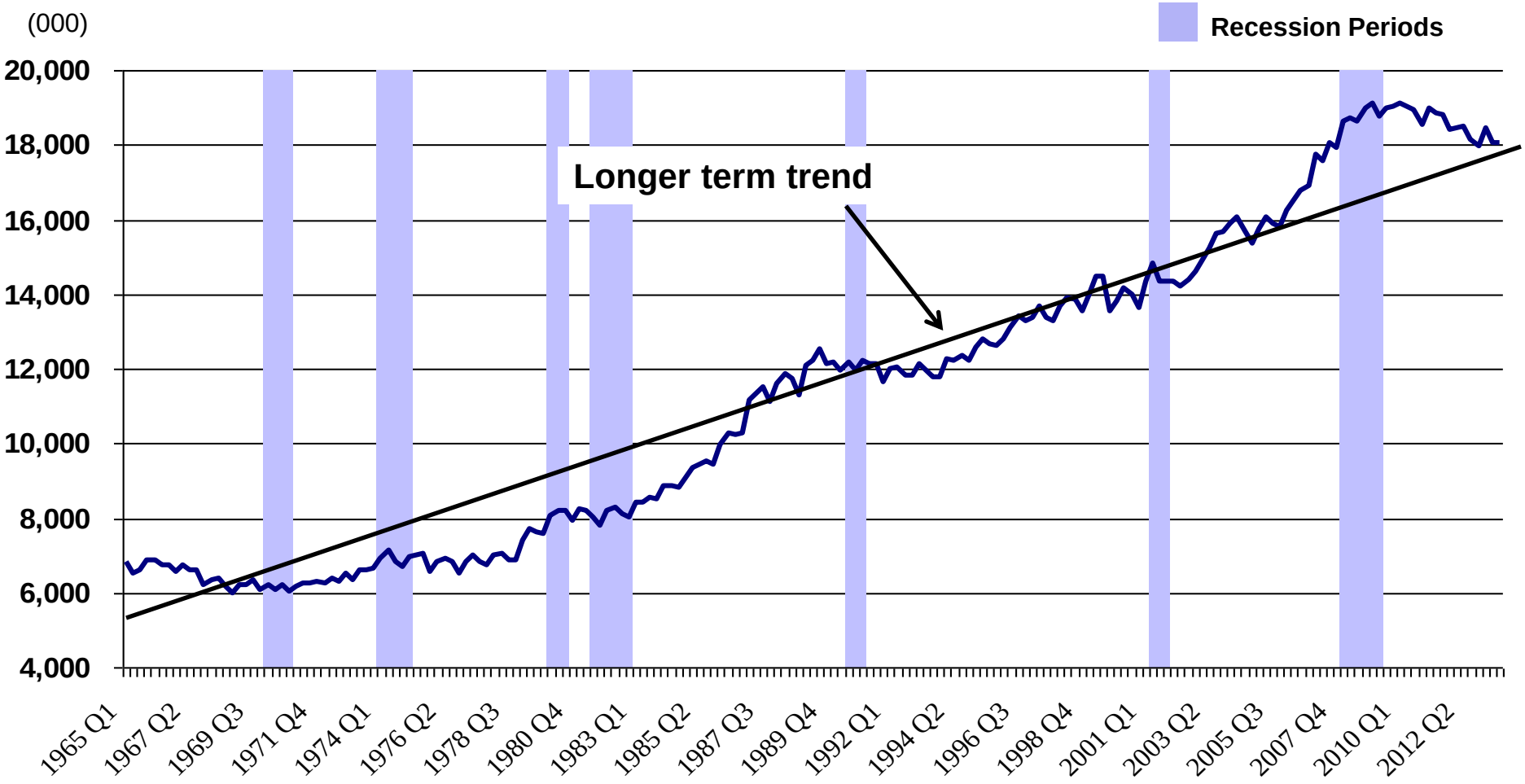
The outlook for housing is still excellent

Arizona Negative Equity Share
2010 Q2 – 2013 Q2

Source: CoreLogic



US Total Vacant Housing Units
1965-2013*
Source: US Census Bureau



*Data through 2013 Q3.

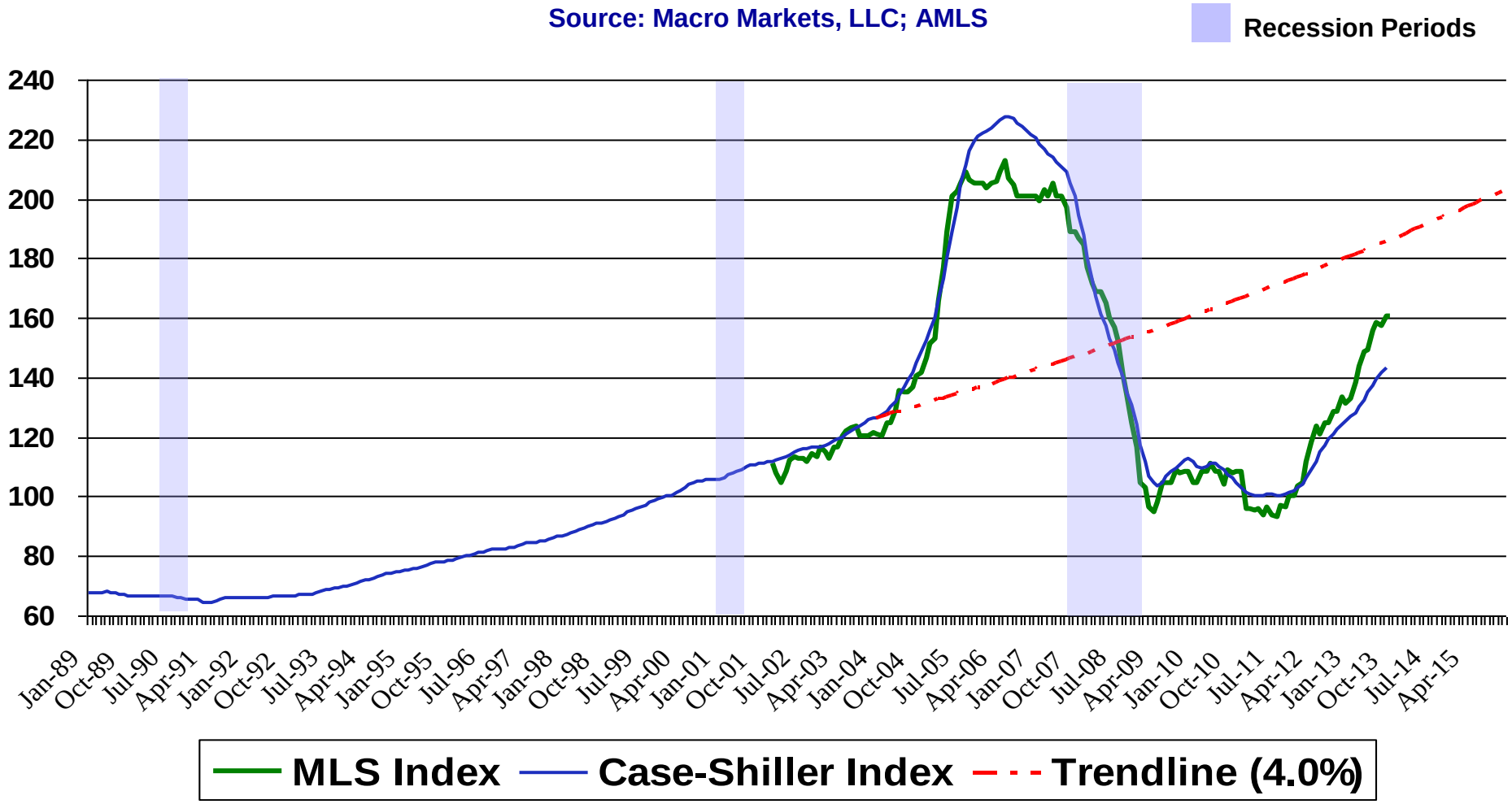
Elliott D. Pollack & Company

Home Prices Indices

Greater Phoenix

1989 – 2013*

Source: Macro Markets, LLC; AMLS

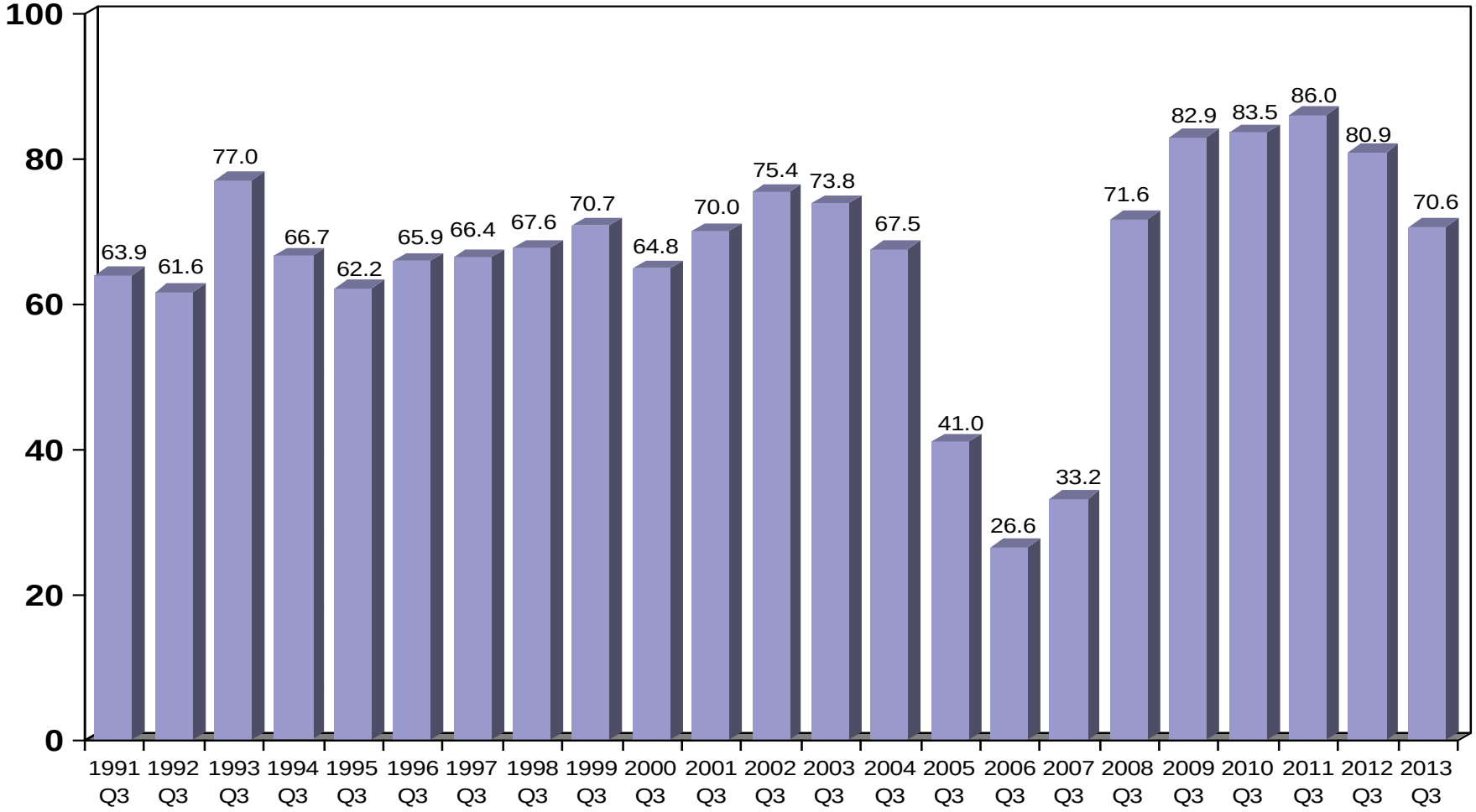


*Data through October 2013.

Elliott D. Pollack & Company

Greater Phoenix
Housing Opportunity Index
2004 – 2013*

Source: NAHB-Wells Fargo



Elliott D. Pollack & Company

As housing prices go up, more and more people will be able to sell their homes because they aren’t underwater.

Until credit markets become more normal
and housing prices continue to increase,
the rate of population growth will remain lower than normal….

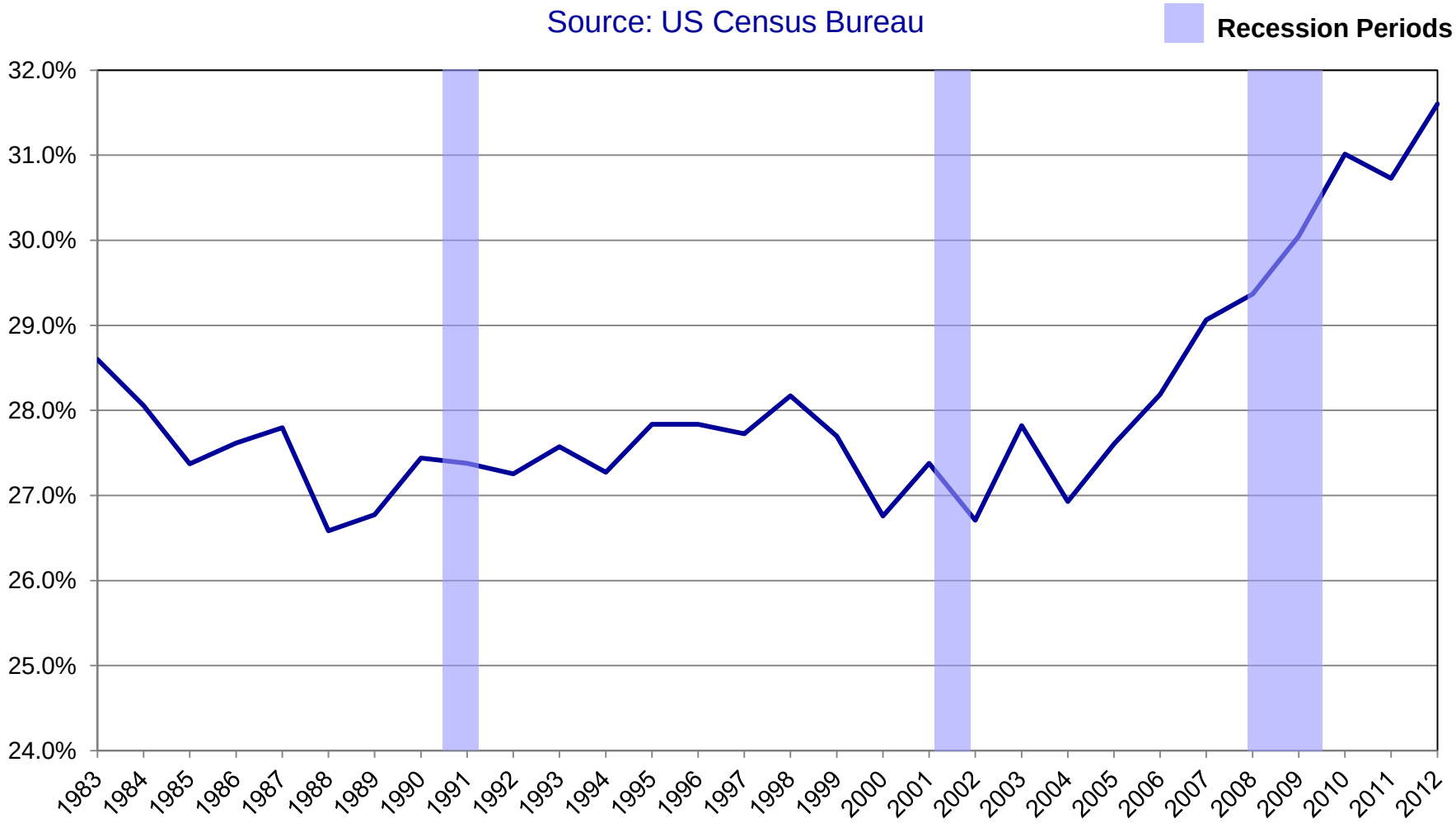
…This will limit the rate of growth in jobs.

Household Formations

Lower during recessions (doubling up, living at home with mom & dad, etc)

Percent of 18-34 Year Olds Living With Parents
U.S.: 1983 – 2012

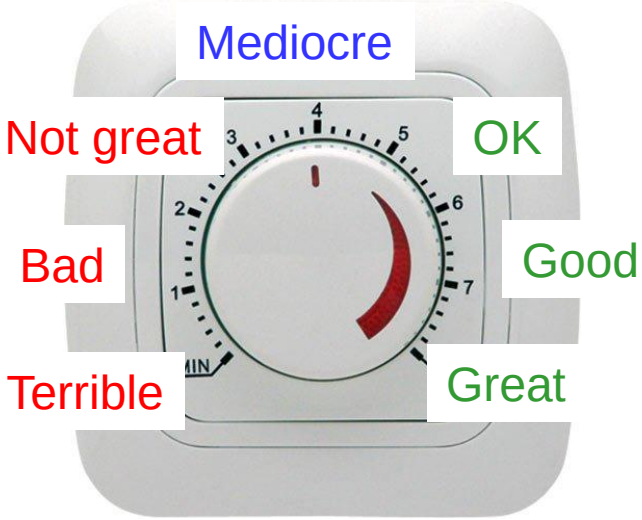
Source: US Census Bureau



Housing

Not a light switch…

A dimmer switch…



WHAT WE HAVE BEEN SAYING…

- Think of what the housing market is going through as the same as any manufacturer that finds themselves with excess inventory…

- As excess inventory is absorbed, prices increase.

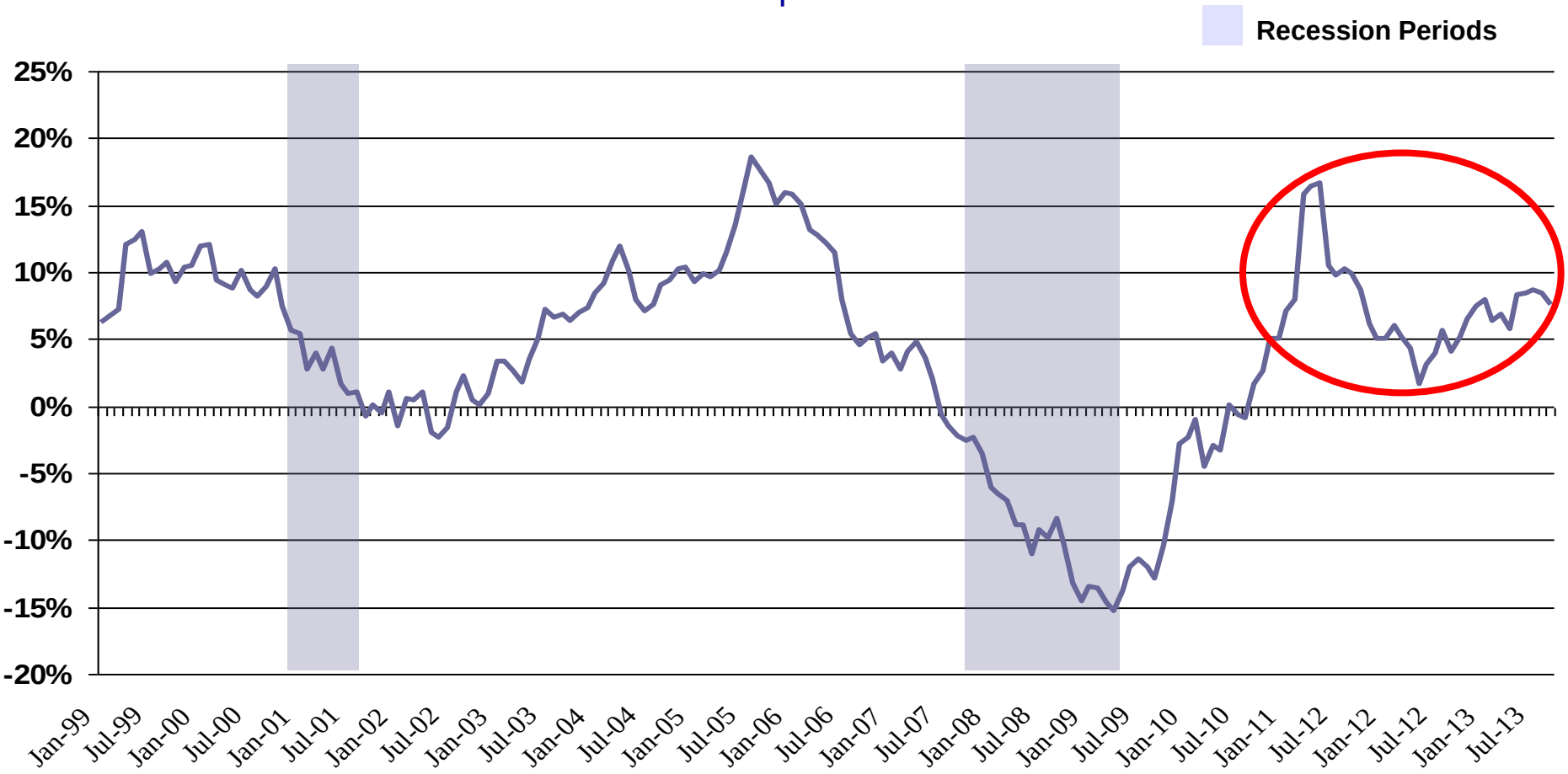
sale
ends
soon!
TUESDAY
2009 © designersalesigns.com

Under any reasonable employment growth scenario, we believe it will be at least 2016 before any significant office construction occurs

(although some sub-markets will be sooner).

Maricopa County Retail Sales
Percent Change Year Ago*
1999 – 2013**

Source: Arizona Department of Revenue



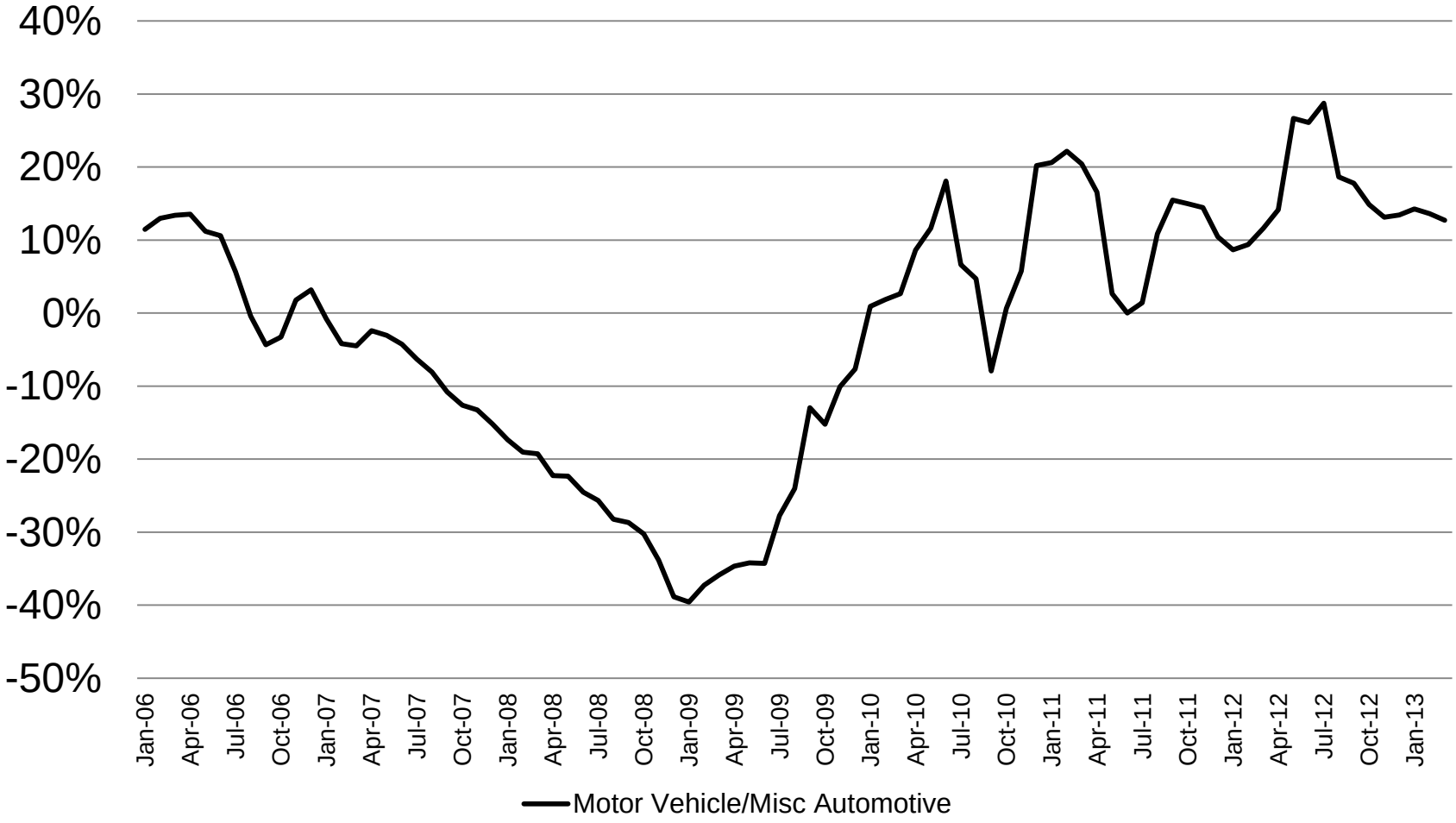
*Data through September 2013
**3-month moving average
Note: January 2010 and March 2010 retail sales are estimates.

Elliott D. Pollack & Company

clearance
75% off

Maricopa County Motor Vehicle Retail Sales
Percent Change Year Ago
2006 – 2013*

Source: Arizona Department of Revenue



*Data through March 2013
**3-month moving average
Note: January 2010 and March 2010 retail sales are estimates.

Elliott D. Pollack & Company

TRANSCARS.COM

CONCLUSIONS:
How will it all turn out?

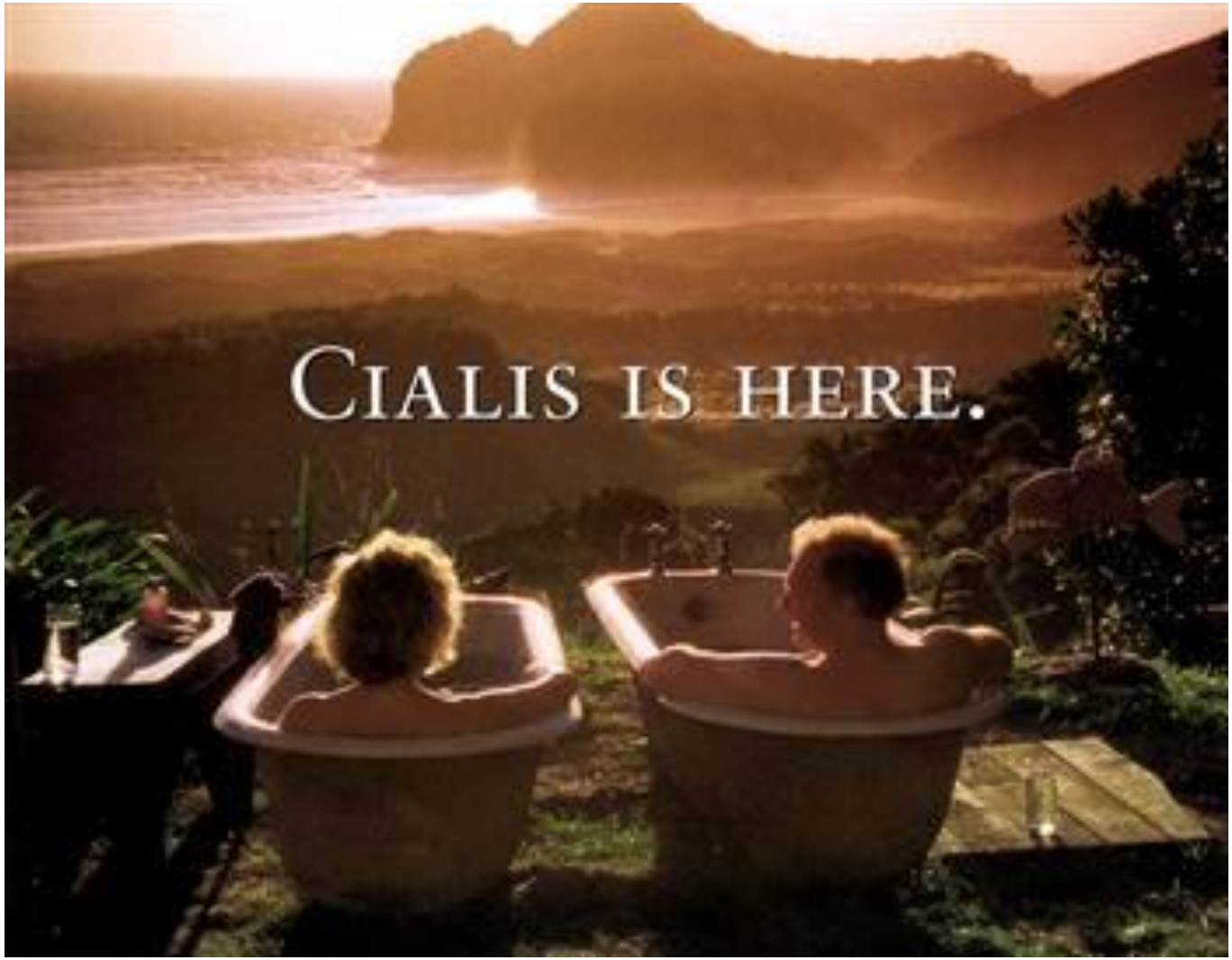
Exclusive To All Newspapers

DIANA WAS STILL ALIVE HOURS BEFORE SHE DIED

A SERIES of previously unseen CCTV images have revealed that Diana was alive and well before she was tragically killed in Paris, ten years ago.

INSIDE ● Do you think Diana is dead? Or have you seen her in Morocco? Call now: 0900 000 0000. If not, call: 0900 000 0000. Calls cost (cont. p 94)

Expect more growth…



What?
No recession!!??!

No recession on the horizon...

… It’s slow but it’s growing.

The economy is improving in both absolute and relative terms.

© London Media

ARIZONA–
Slow but mildly accelerating recovery.

2014 will be better than 2013.

2015 should be a good year.

For a quick analysis of important economic data released each week, subscribe to the *Monday Morning Quarterback*

www.arizonaeconomy.com

(Click on Subscribe to MMQ)

ELLIOTT D. POLLACK & Company

- **Economic and Fiscal Impact Analysis/Modeling**
- **Real Estate Market and Feasibility Studies**
- **Litigation Support**
- **Revenue Forecasting**
- **Keynote Speaking**
- **Public Finance and Policy Development**
- **Land Use Economics**
- **Economic Development**

7505 East Sixth Avenue, Suite 100 Scottsdale, Arizona 85251

480-423-9200 P / 480-423-5942 F / www.arizonaeconomy.com / info@edpco.com