

# This Time is Different, An Update



## Update on Carmen M. Reinhart & Kenneth S. Rogoff's Research

Original figures from “The Aftermath of Financial Crises” Dec 2008 draft paper, available here: [www.economics.harvard.edu/faculty/rogoff/files/Aftermath.pdf](http://www.economics.harvard.edu/faculty/rogoff/files/Aftermath.pdf)

# Research Findings

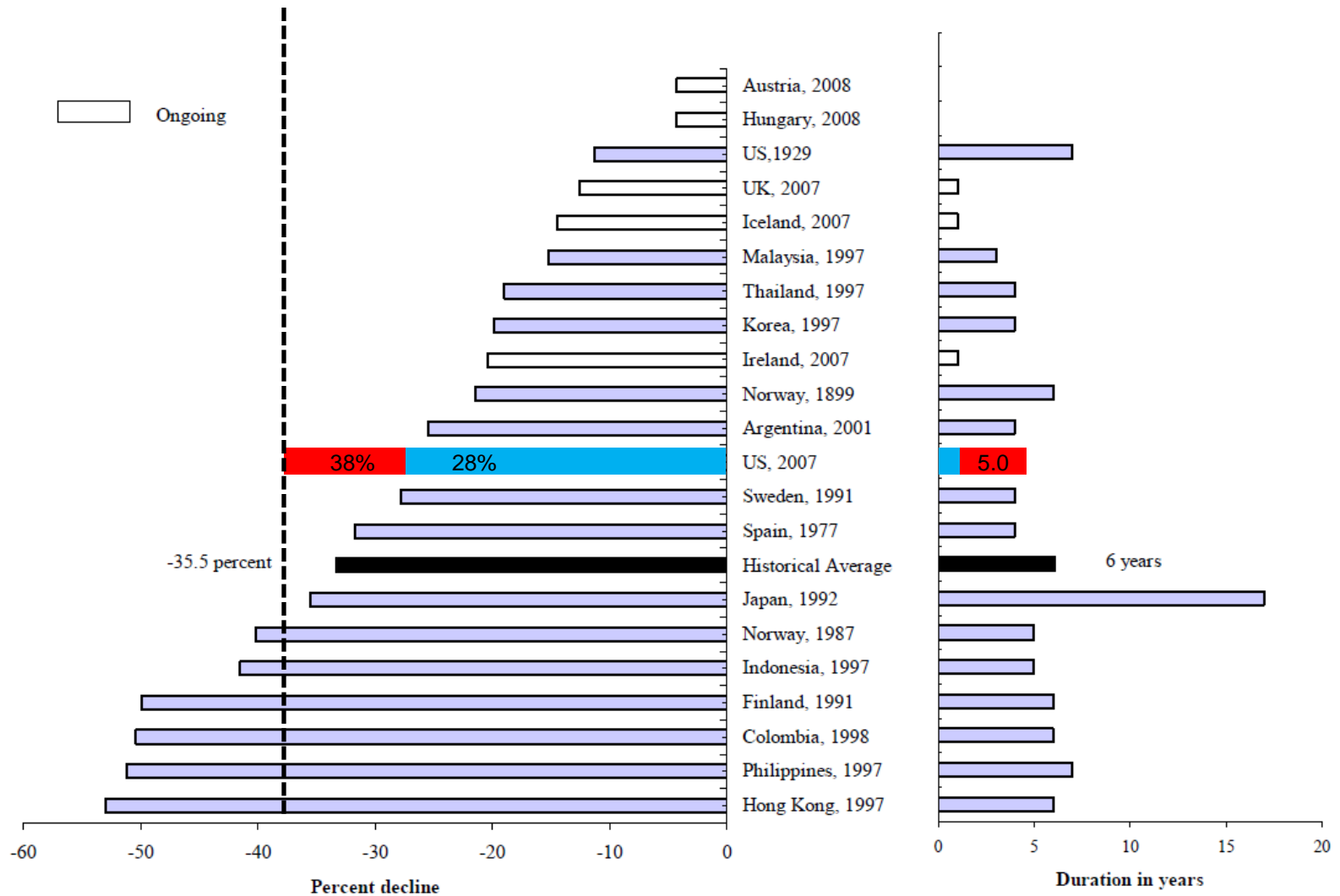
- Historical financial crisis facts:
  - Real Housing Prices decline 35% over 6 years
  - Real Equity Prices fall 56% over 3.4 years
  - Unemployment Rate rises 7 PPT over 4.8 years
  - Real GDP per Capita falls 9.3% over 1.9 years
  - Real Government Debt rises 86% over first 3 years
- How does the current U.S. cycle compare?

# Notes

- These slides use the original graphics from the draft paper, updated with current information regarding the U.S. economy.
  - To update the original graphics that contained data available at the time of publication for the current cycle, the following scheme is used to show how that data has changed over the past few years.
    -  Data Available at Time of Publication (Dec 2008)
    -  Data Available Today (Sep 2011)
- Reinhart and Rogoff's draft paper does not include information regarding employment levels. The last slide illustrates return to peak timelines for the Big 5 financial crisis plus the current U.S. economy.

## Past and Ongoing Real House Price Cycles and Banking Crises:

### Peak-to-trough Price Declines (left panel) and Years Duration of Downturn (right panel)

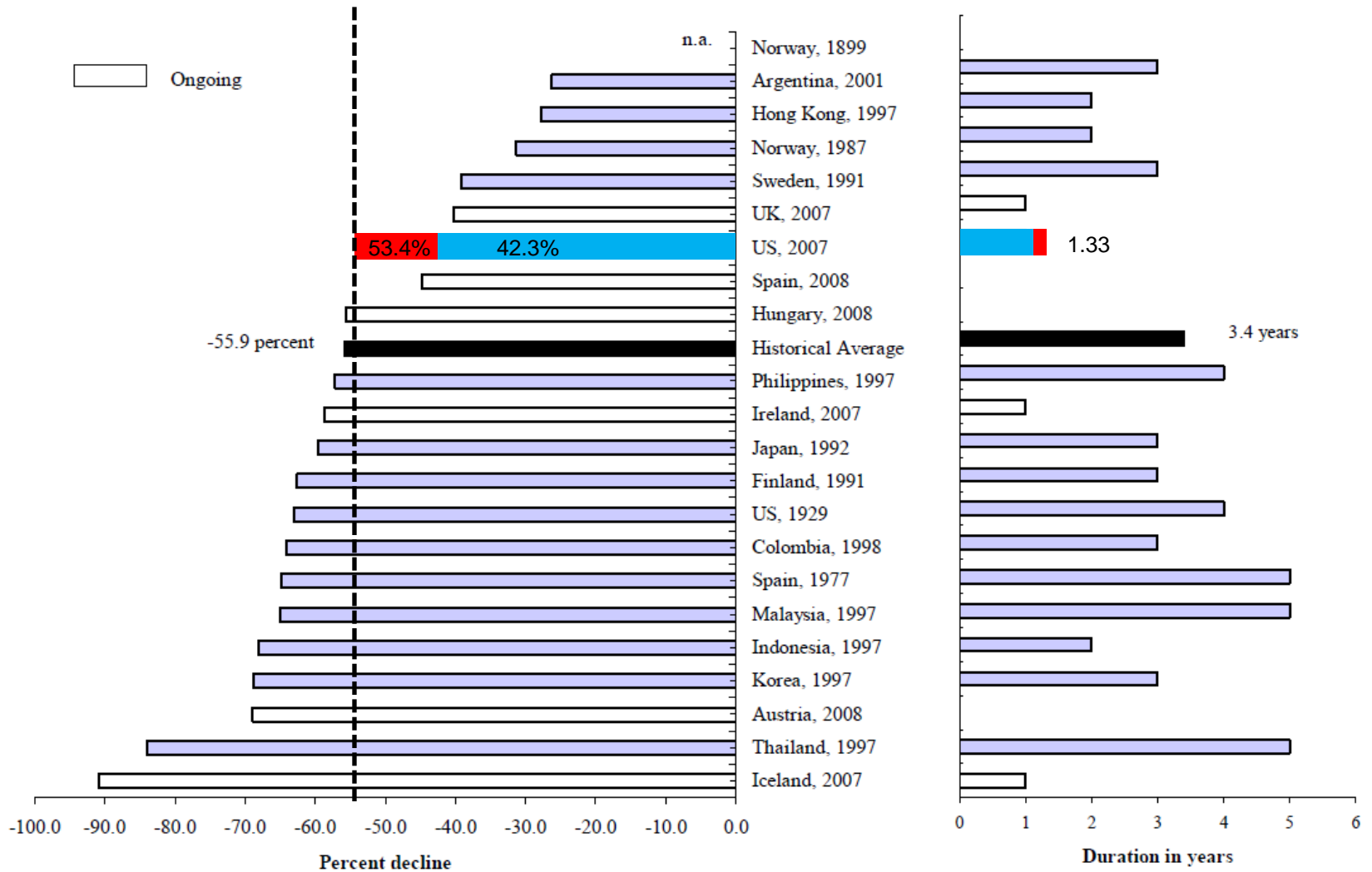


Note: While the financial crisis began in 2007, the S&P Case-Shiller peaked in mid-2006 (10 city composite in June, 20 city composite in July) and the calculation used here is based on these peaks. It does not matter which composite is used as the decline through June 2011 is equal to 38 percent.

Sources: S&P/Case-Shiller Home Price Indices, BLS

## Past and Ongoing Real Equity Price Cycles and Banking Crises:

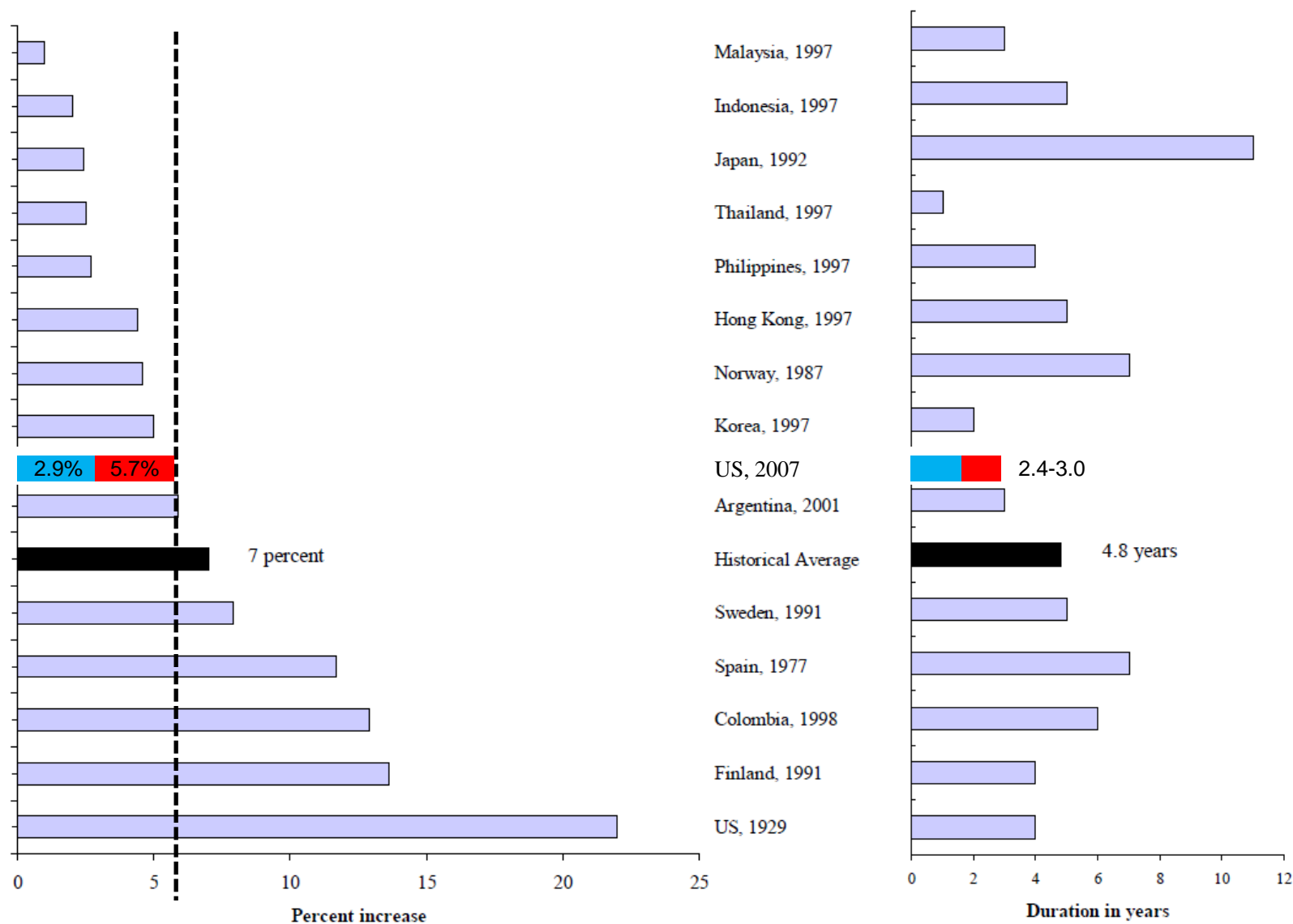
Peak-to-trough Price Declines (left panel) and Years Duration of Downturn (right panel)



US, 2007 Measure: S&P 500 – Peak Date: Oct 2007, Trough Date: Feb 2009

Sources: Yahoo Finance, BLS

## Past Unemployment Cycles and Banking Crises: Trough-to-peak Percent Increase in the Unemployment Rate (left panel) and Years Duration of Downturn (right panel)

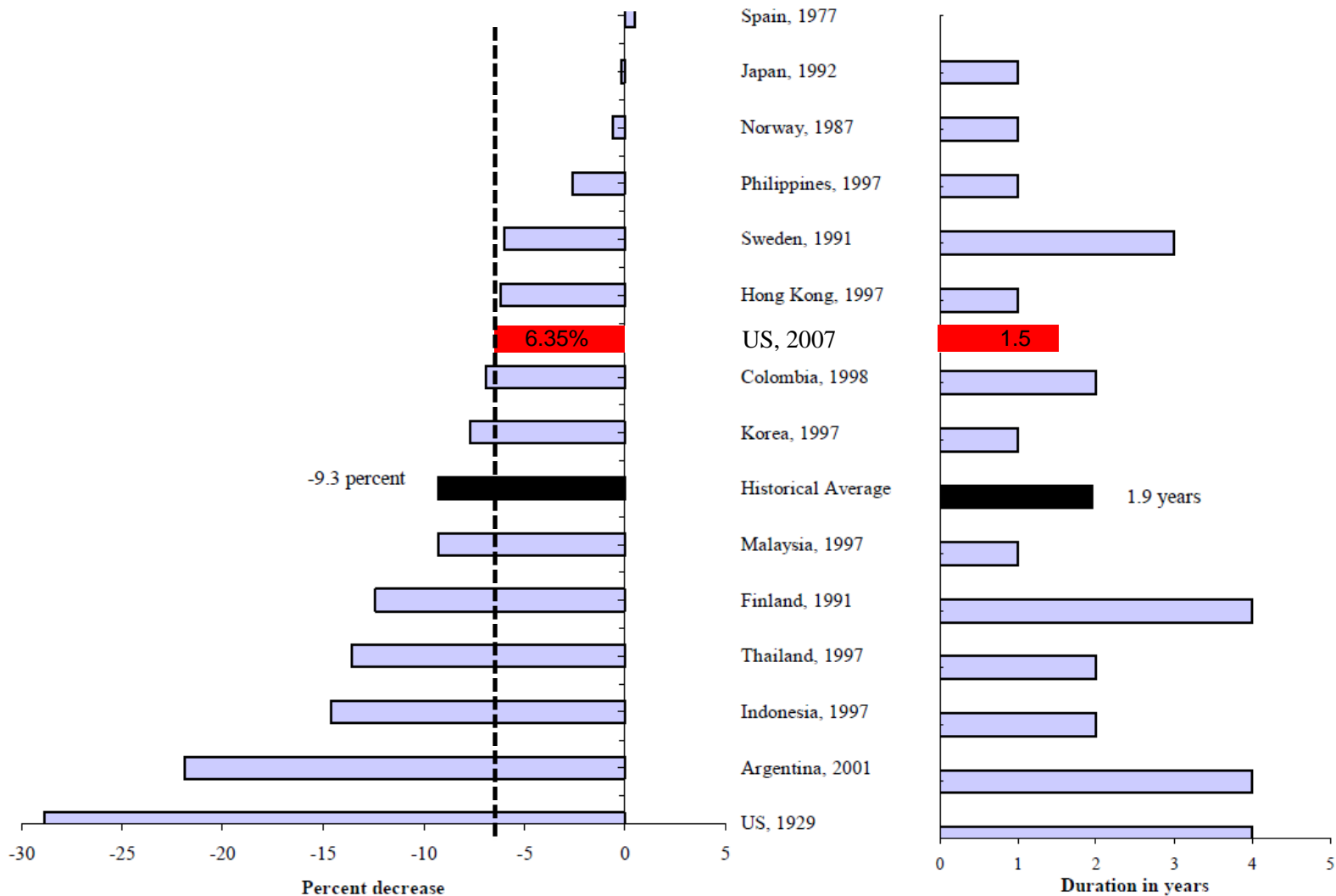


Note: The U.S. unemployment rate's business cycle trough was 4.4 percent, reached in Oct '06, Dec '06, Mar '07 and May '07. Depending upon which date one chooses, the duration of the rise is between 2.4 and 3.0 years. Unemployment rate peak reached Oct '09 at 10.1 percent.

Source: BLS

## Past Real Per Capita GDP Cycles and Banking Crises: Peak-to-trough

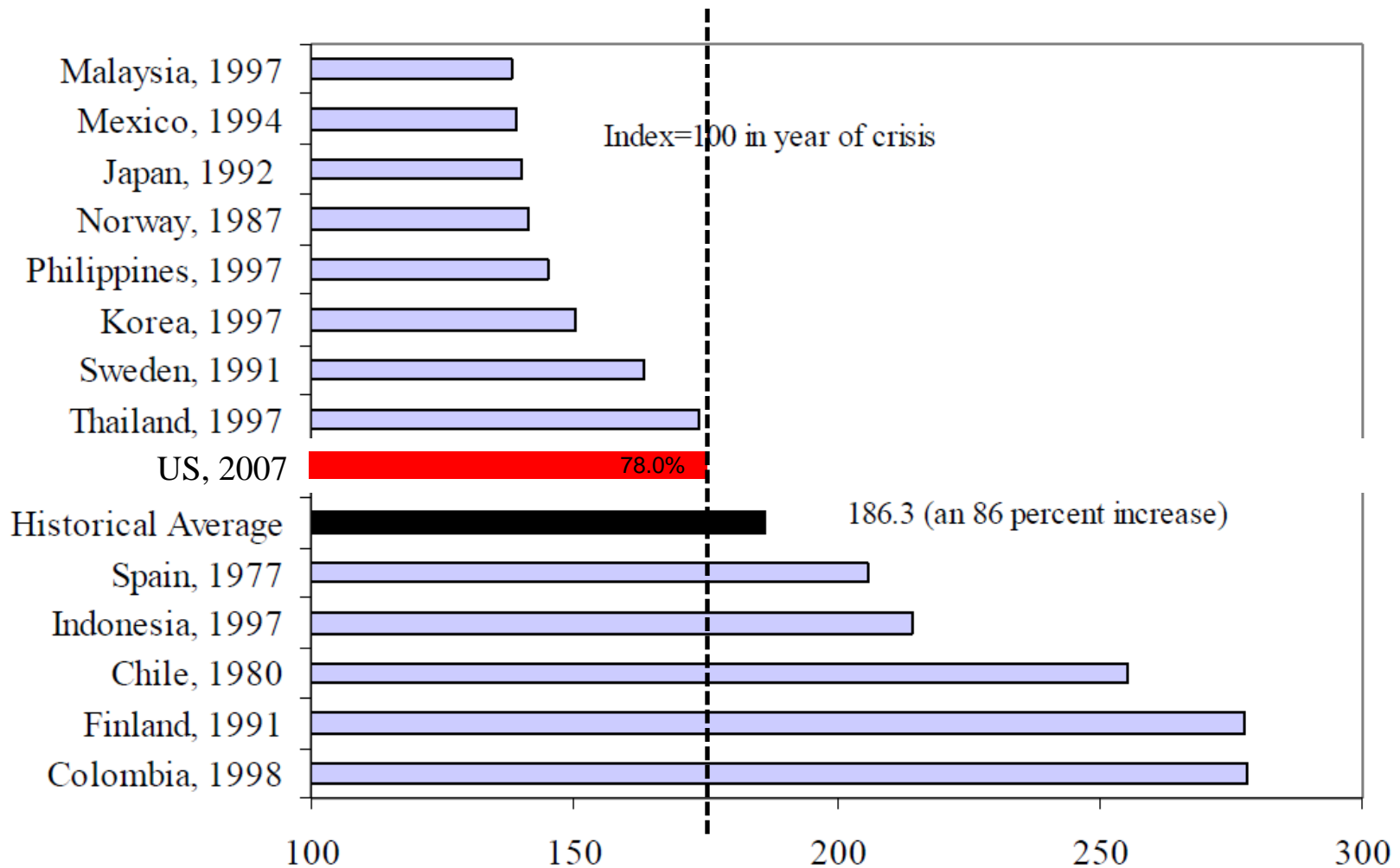
Percent Decline in Real GDP (left panel) and Years Duration of Downturn (right panel)



Note: Real GDP per capita peak reached 2007 Q4, trough reached 2009 Q2.

Source: BEA

## Cumulative increase in real public debt in the three years following the banking crisis



Note: To obtain inflation adjusted debt for a full three years the calculation dates chosen here are July 2008 – July 2011. Depending upon which dates one prefers, the percentage increase varies, e.g. Dec 2007 – Dec 2010 the increase is 73 percent.

Source: BLS, U.S. Treasury – Debt Held by the Public

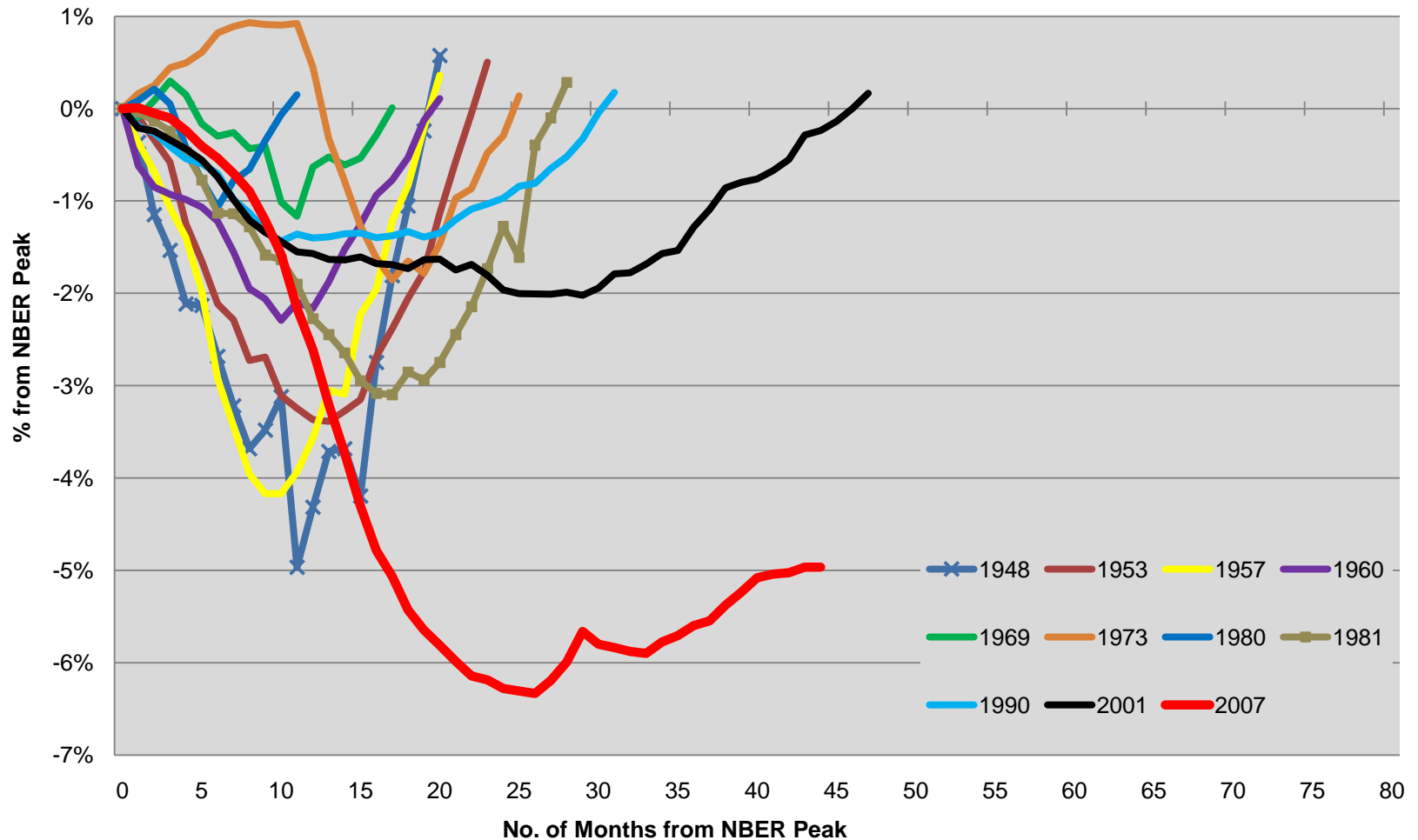


# Employment Losses

- Given the history of post WWII recessions in the US, the current level of job loss and slow recovery to date make the current cycle the clear outlier
- Juxtapose the current US cycle against the Big 5 financial crisis in the developed world, the picture looks a bit different
  - That doesn't necessarily mean the current outcome is acceptable

# U.S. Employment Return to Peak

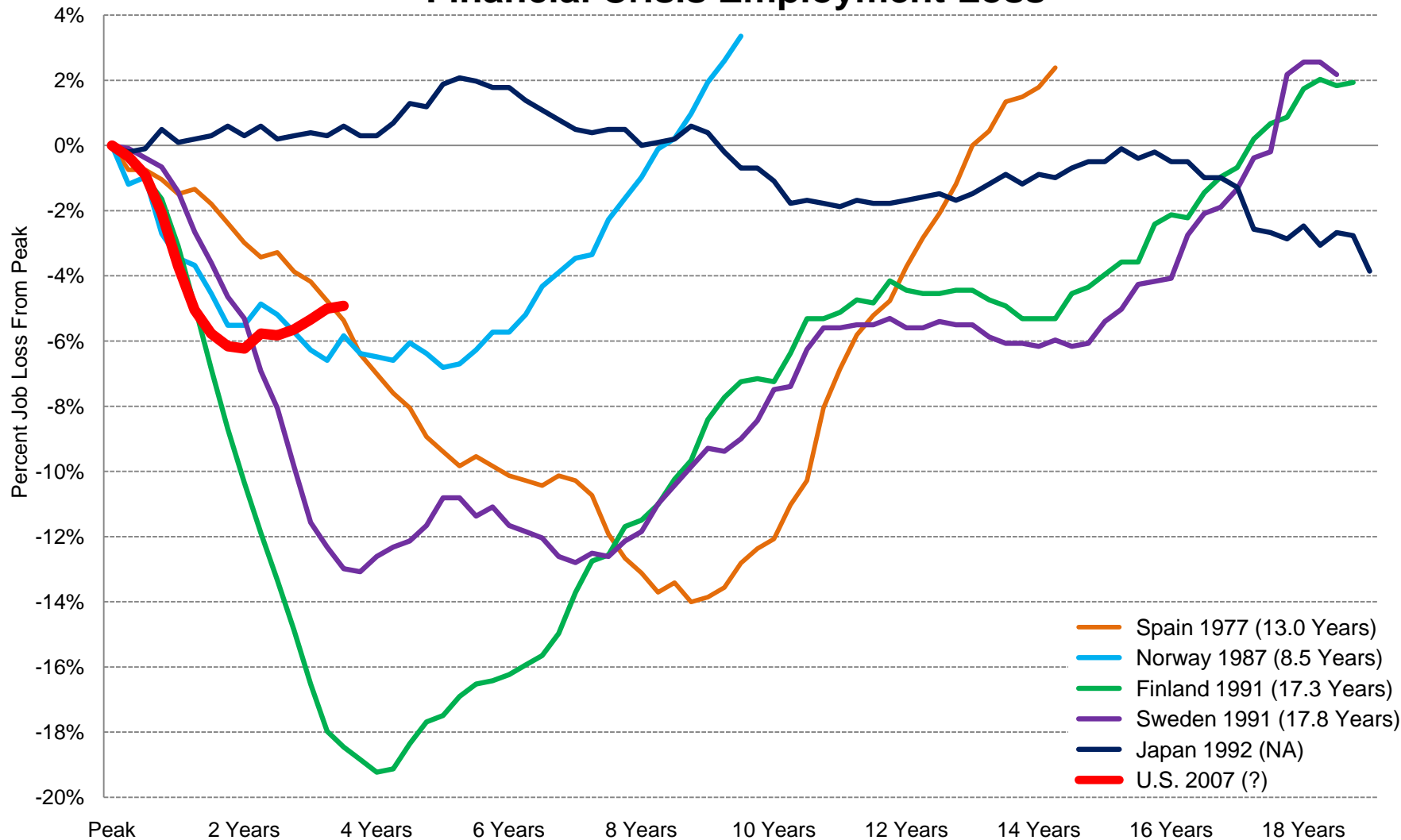
## U.S. Recession Employment Loss



Data through August, 2011

# Employment Return to Peak

## Financial Crisis Employment Loss



Note: Return to peak duration given in parenthesis. Japan's employment essentially reached a plateau in 1992, the start date used here is 1992 Q1.

Sources: OECD, BLS

# Conclusion

- The U.S.' current experience is your “garden-variety severe financial crisis”

Financial Crises Facts		
	Historical Average	Current U.S. Cycle
Real Housing Prices	-35.5%	-38.0%
Real Equity Prices	-55.9%	-53.4%
Unemployment Rate	7.0%	5.7%
Real GDP per Capita	-9.3%	-6.4%
Real Government Debt	86.0%	78.0%

- However labor markets are performing better than previous episodes