WELLS FARGO SECURITIES

NCSL Budget and Revenue Committee

State Debt Situation: An Update and Discussion

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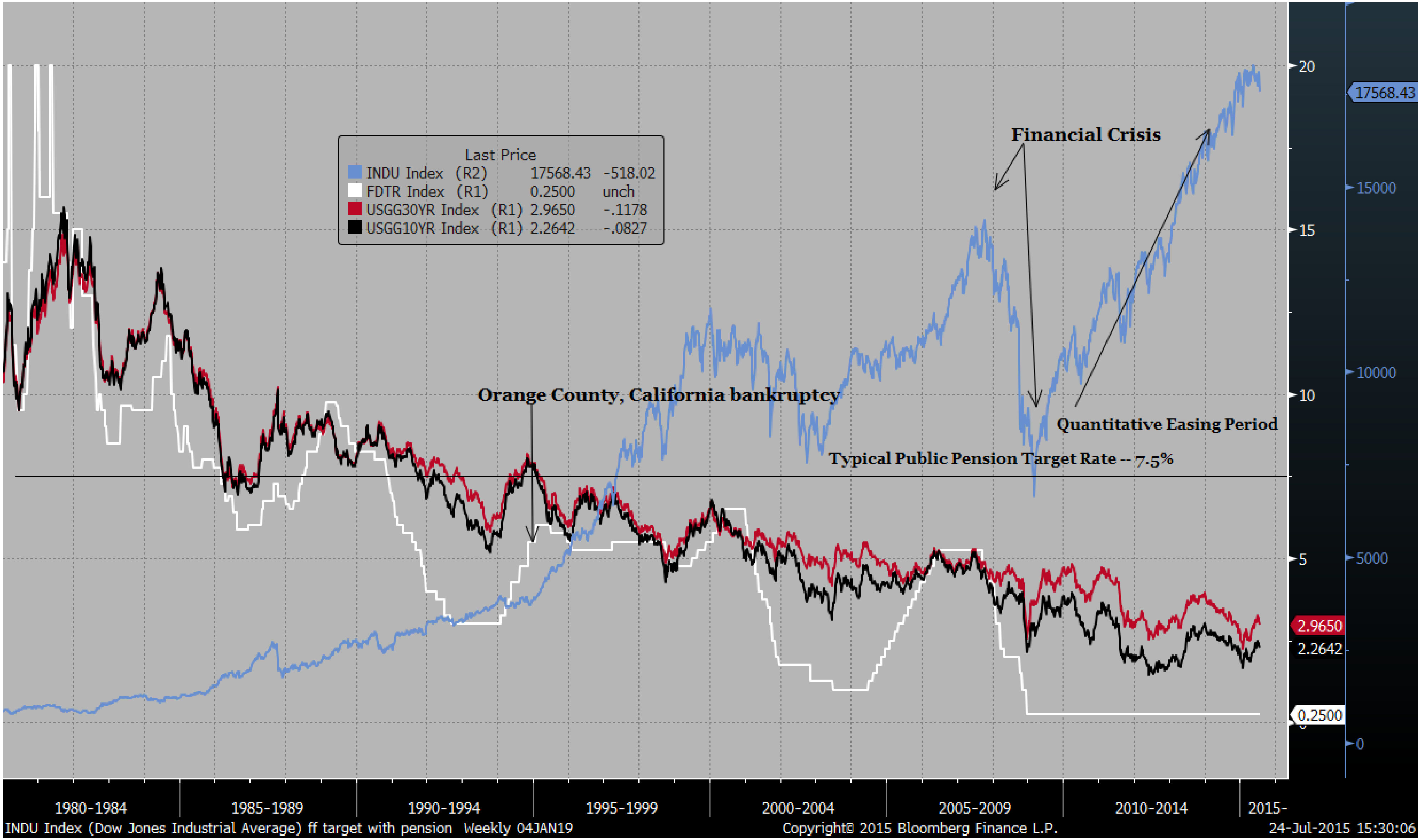
Please see the disclosure appendix of this publication for certification and disclosure information. Also note that all estimates and forecasts are current as of July 27, 2015 unless otherwise stated.

Together we'll go far

A 35-year view of treasury rates, the stock market and the fed funds target rate
(as of July 24, 2015)



A Closer Look: Market Response to the Financial Meltdown and to Federal Reserve Interventions 2008-2014 (as of July 13, 2015)

- Interventions bolstered markets; discussions of tapering QE that began in May 2013 led to 130bp movement in yields. Bond markets rallied back to some extent, but rates are still elevated from 2011-2013 lows.
- Also note 2014 (unexpected) fixed-income rally – particularly slope of 30-year

INDU Index (Dow Jones Industrial Average) dow and treasuries Daily 02JAN2007-13 Copyright© 2015 Bloomberg Finance L.P. 13-Jul-2015 11:18:44

A Few Notes on the Preceding Charts

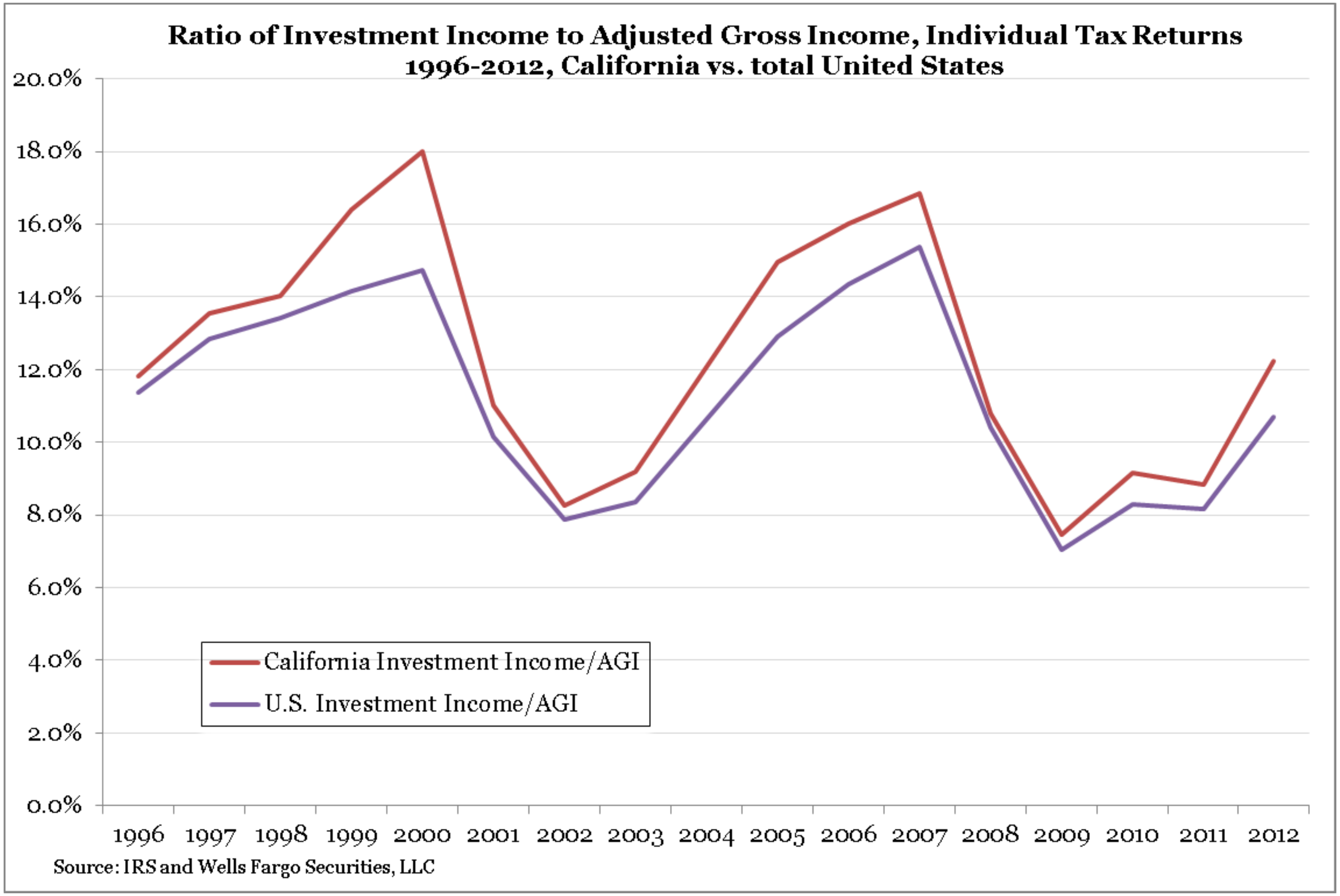
- ***Financial markets***, rather than wage and salary growth have been key drivers of state revenues – and pension earnings as well, since the recession.

- Until the mid-1990's, public pensions could achieve their target returns using "risk free" Treasuries. During the "dot-com" bubble in the late 1990's many states liberalized their investment policies to expand equity investments. This subjected public pensions to greater earnings volatility.

- States with capital gains and progressive income tax schemes have done well during market growth; less well during downturns (California and New Jersey, e.g.).

- Have financial markets "uncoupled" from the underlying economy?
  - A number of studies have shown that real personal income tax revenue fell between 2001-2003 while real personal income increased slightly. Between 2004-2007, growth in personal income tax revenue exceeded growth in personal income.

Volatility of Investment Income, Particularly Since 2000

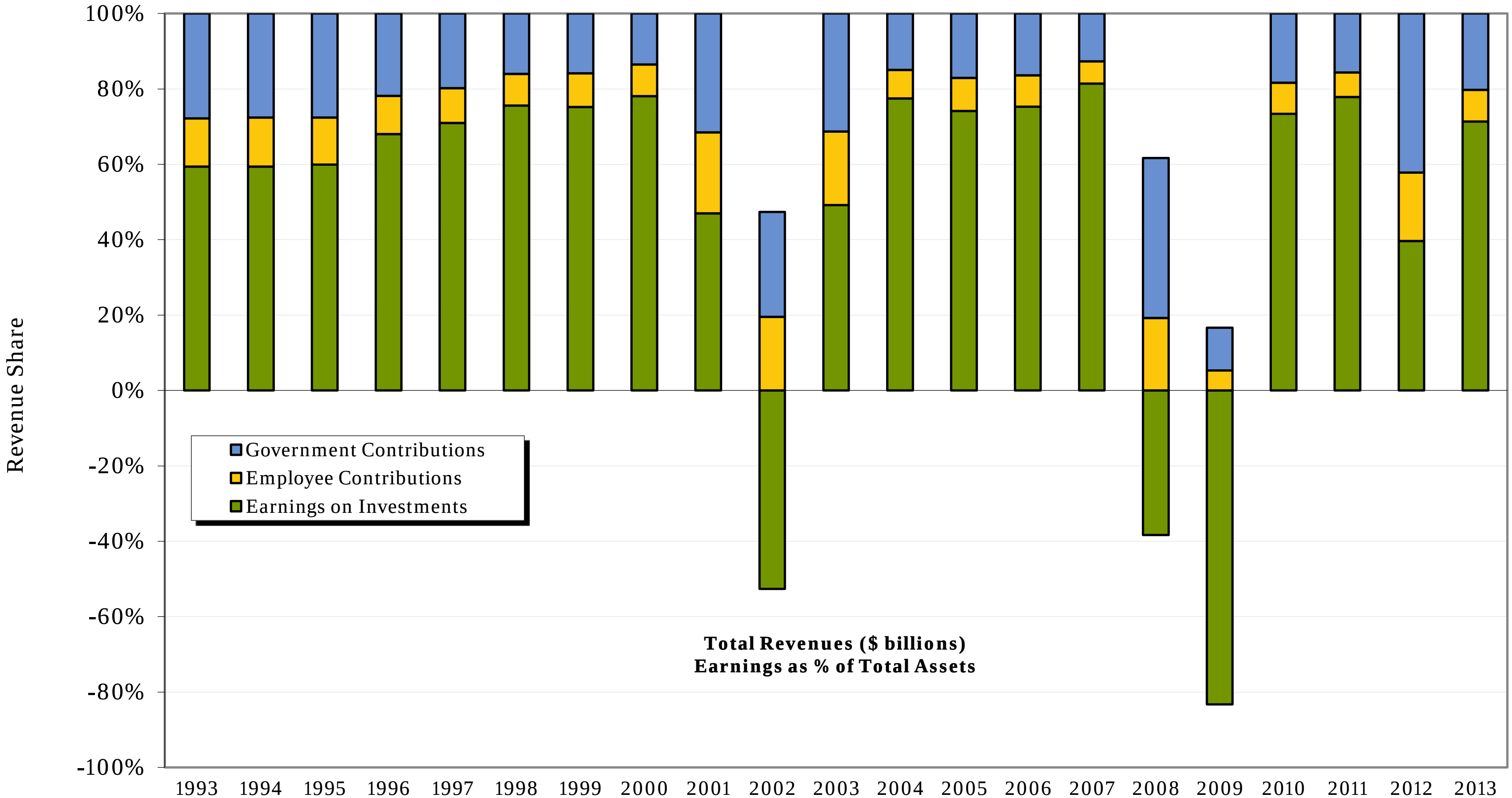


Another Consequence of Market Volatility: Pensions

Returns were healthy throughout the 1990's, but weak in 2001, 2003 and 2012 and negative in 2002, 2008, 2009

$100 in 2000 would become $272 by 2013 at a steady 8% compound rate, but $174 at the actual earnings rates below

Revenues of Total Government Employee Retirement Systems, 1993-2013



	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Revenues ($ billions)	$125.9	$133.3	$148.8	$190.5	$227	$261.3	$263.2	$297	$123.2	($7.5)	147.7	$407.3	$354.3	$392.8	$578.8	$44.9	($490.7)	$471.6	$616.1	$239.5	$537
Earnings as % of Total Assets	8.9%	7.9%	8.0%	10.2%	10.9%	11.5%	10.4%	10.7%	2.7%	(3.5%)	3.3%	12.6%	9.8%	10.2%	14.3%	(2.4%)	(25.7%)	12.9%	15.8%	3.1%	11.7%

Source: US Census and Wells Fargo Securities, LLC

The Employment Picture Shows How Government Lags the Private Sector, but has Tightened its Belt Since the Recession

US Non-farm and Government Employees, in thousands May 2007 - May 2015, seasonally adjusted						
	May Employment					
Period	**Total Nonfarm**	**Private Total**	**Govt Total**	**Federal**	**State**	**Local**
2007	137,947	115,754	22,193	2,733	5,121	14,339
2008	137,803	115,320	22,483	2,757	5,162	14,564
2009	131,411	108,794	22,617	2,860	5,187	14,570
2010	130,575	107,579	22,996	3,416	5,135	14,445
2011	131,623	109,495	22,128	2,873	5,082	14,173
2012	133,874	111,961	21,913	2,827	5,050	14,036
2013	136,128	114,271	21,857	2,776	5,049	14,032
2014	138,621	116,780	21,841	2,726	5,054	14,061
2015*	141,679	119,738	21,941	2,738	5,083	14,120
Δ2007-2009	-4.74%	-6.01%	1.91%	4.65%	1.29%	1.61%
Δ2009-2015	7.81%	10.06%	-2.99%	-4.27%	-2.01%	-3.09%
Δ2012-2015	5.83%	6.95%	0.13%	-3.15%	0.65%	0.60%

* preliminary

Source: US Department of Labor, Bureau of Labor Statistics and Wells Fargo Securities, LLC

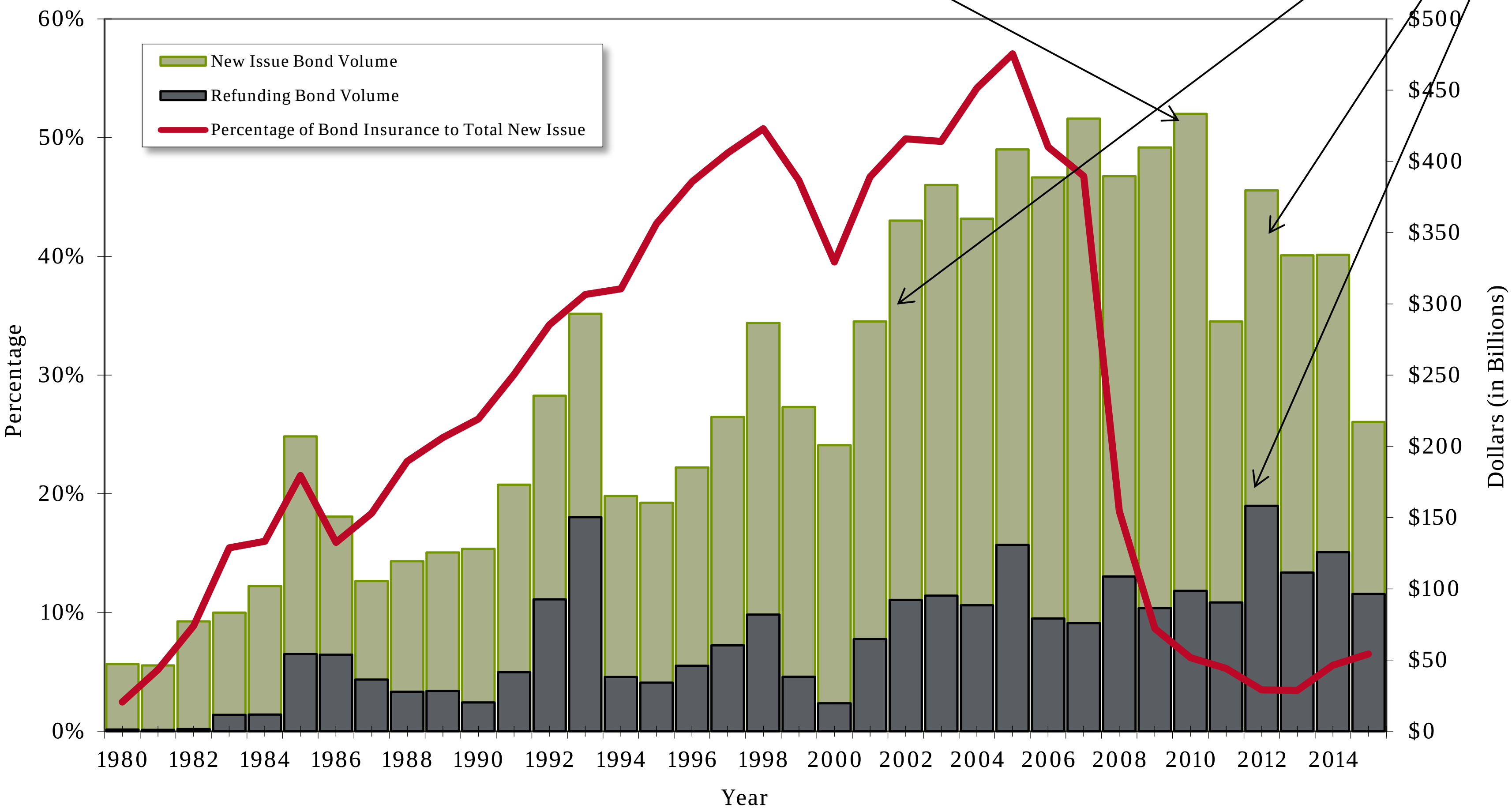
The employment picture is improving but taking place in lower wage service jobs

Employment in Selected Industries, 2007 and 2015				
(Establishment Data, seasonally adjusted, in thousands, March 2015 is preliminary)				
Industry	**Mar-15**	**Dec-07**	**%**	**#**
Total nonfarm	141,183	138,350	2.05%	2,833
Total private	119,285	115,974	2.85%	3,311
Goods-producing	19,547	21,976	-11.05%	-2,429
Service providing	99,738	93,998	6.11%	5,740
Total Government	21,898	22,376	-2.14%	-478
Total education and health services, selected sectors below	**21,855**	**18,861**	**15.87%**	**2,994**
Total Health care(1)	14,952	13,103	14.11%	1,849
Leisure and hospitality	**15,055**	**13,550**	**11.11%**	**1,505**
Food services and drinking places	11,017	9,673	13.90%	1,344
Total Professional and business services	**19,541**	**18,051**	**8.25%**	**1,490**
Source: Bureau of Labor Statistics, Establishment Data, seasonally adjusted and Wells Fargo Securities, LLC				
(1) Includes ambulatory health care services, hospitals, and nursing and residential care facilities.				

The Shape of Municipal Bond Volume 2001-2008 Resembles the Housing Boom and was Propelled by Low Rates

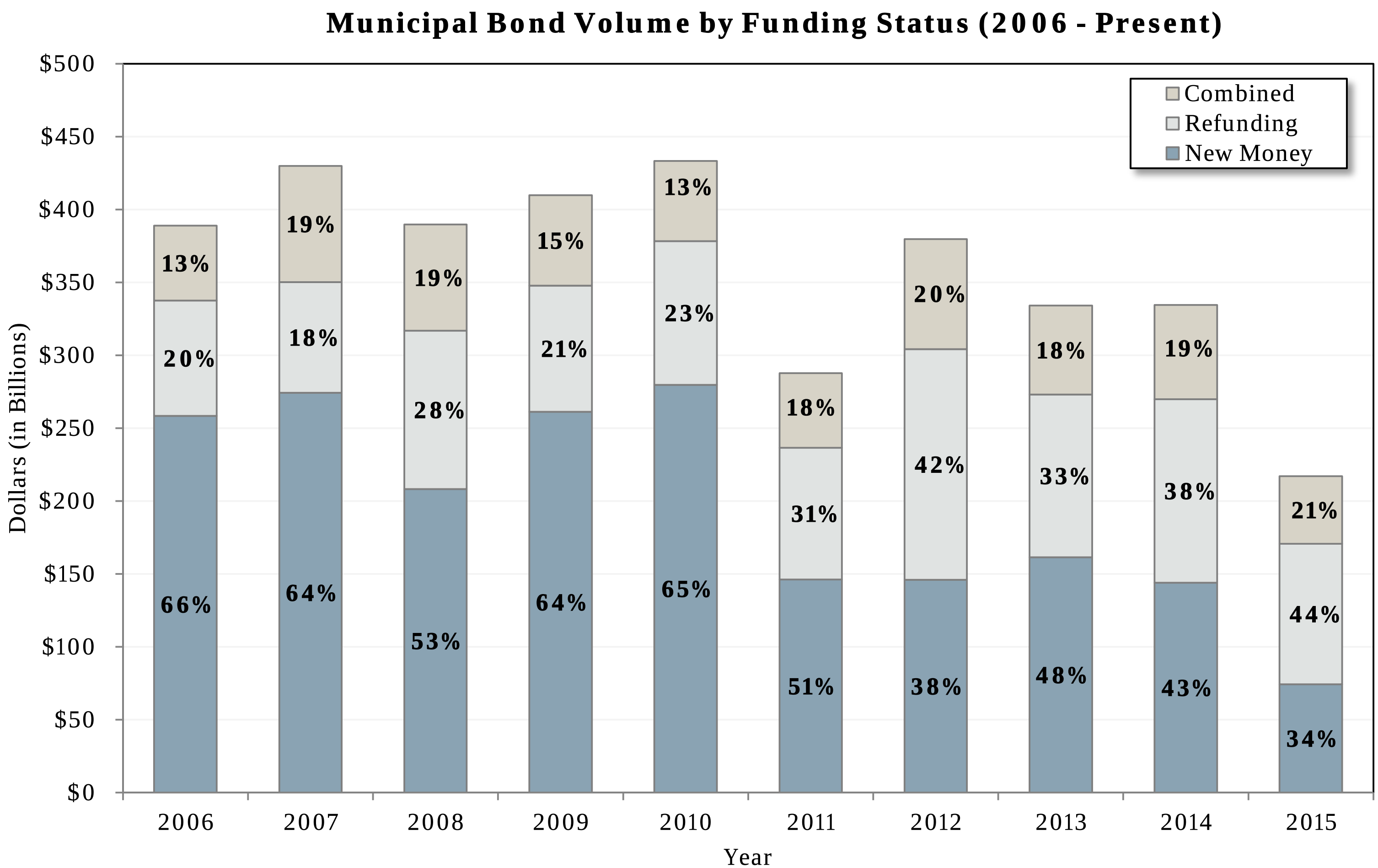
- Volume jump in 2012 was largely due to an increase in refundings and mirrors 10-years ago (10-year call); this pattern is likely to continue in 2015 looking at 2005 volume unless rates spike above what's economical
- Eventually volume is more likely to return to pre-2001 levels
- Volume would have been lower in 2009-2010 if not for the $181 billion Build America Bond program
- Note uptick in bond insurance

New Issue Volume (1980-2015) and the Percentage of Bond Insurance



As of June 30, 2015
Source: Bond Buyer, Assured Guaranty, Thomson Reuters and Wells Fargo Securities, LLC

The Municipal Market in this Context:
Refunding has increased and infrastructure funding decreased as a percent of annual volume since 2011 – following the end of fiscal stimulus (ARRA/BABs)



As of June 30, 2015
Source: Bond Buyer and Wells Fargo Securities, LLC

Debt Market Themes H2 2015

- **Greater Volatility**
  - **Federal Reserve rate hike speculation**
  - **Geo-political factors affecting global investor sentiment**
  - **Debt default by Puerto Rico *could* cause temporary volatility in the municipal market**
  - **Other fiscal crises such as in Illinois or Chicago and pension underfunding/rating downgrades could also create investor jitters.**

- **Market differentiation among states will continue to grow**
  - **Poorly funded pensions pressure the budgets in New Jersey, Pennsylvania and Illinois, Connecticut, Kansas, Kentucky; rating agencies and markets react.**
  - **Strength in California and Texas (each for different reasons) allows them to bypass short-term borrowing this year.**

- **Partisan politics affect fiscal policy as we lead up to the presidential election**
  - **Thirty states currently have single party "trifecta" across gubernatorial and legislative bodies (7 Democrat, 23 Republican) Divided government in remaining 20. Two states with a partisan divide, Illinois and Pennsylvania, still have not adopted FY2016 budgets.**
  - **Sequestration returns in October 2015 following a brief hiatus.**
  - **Perhaps after presidential election headlines calm down, state budgeting will too.**

- **High redemptions during June, July and August, both in the tax exempt market and internationally, influence supply and demand**

- **Why isn't more infrastructure being financed? (low interest rates, needs are there, buyers are there)**
  - **No tax hike pledges**
  - **High unfunded pension and OPEB costs weigh on budgets**
  - **Increased Medicaid costs and lingering costs of recessionary social services**

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