

## Property & Casualty Insurance in the Era of Mega-Catastrophes: Focus on Michigan Markets

### Greater Detroit Chapter, CPCU Detroit, MI October 7, 2014

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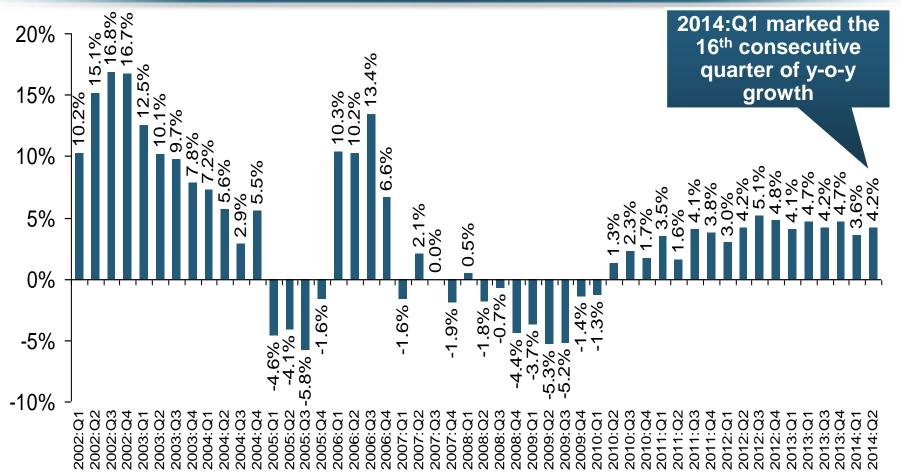


## 2013: Best Year (So Far) in the Post-Crisis Era

## **Performance Improved with Lower CATs, Firming Markets**

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## P/C Net Premiums Written: % Change, Quarter vs. Year-Prior Quarter

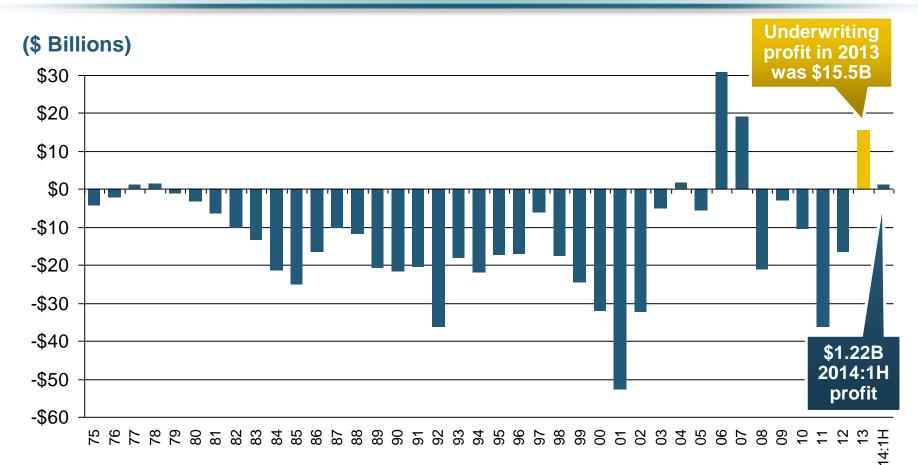


Sustained growth in written premiums (vs. the same quarter, prior year) should continue through 2014.

Sources: ISO, Insurance Information Institute.

## Underwriting Gain (Loss) All Lines Combined, 1975–2014\*





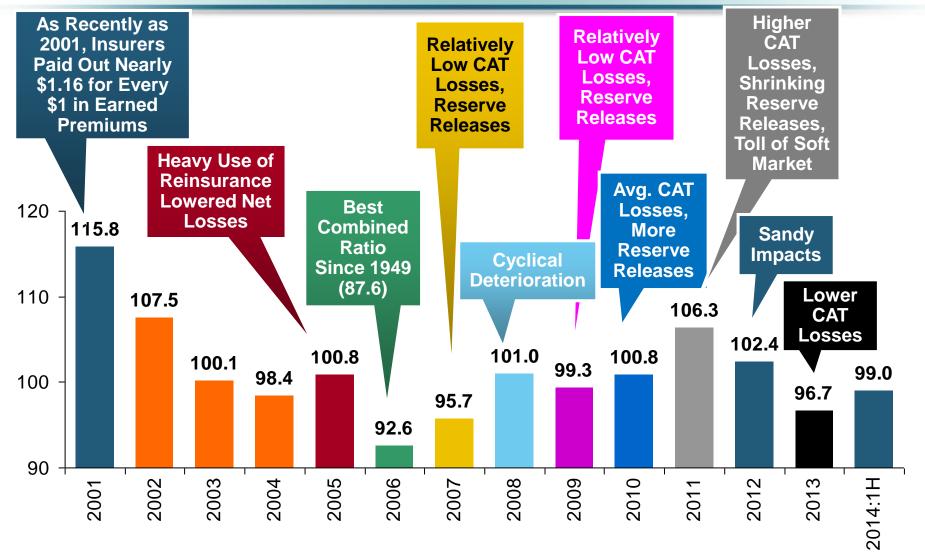
#### High CAT losses in 2011 led to the highest underwriting loss since 2001. Lower CAT losses in 2013 led to the highest underwriting profit since 2007.

\* Includes mortgage and financial guaranty insurers in all years. 2014:1H is estimated.

Sources: A.M. Best, ISO, Insurance Information Institute.

## P/C Insurance Industry Combined Ratio, 2001–2014:1H

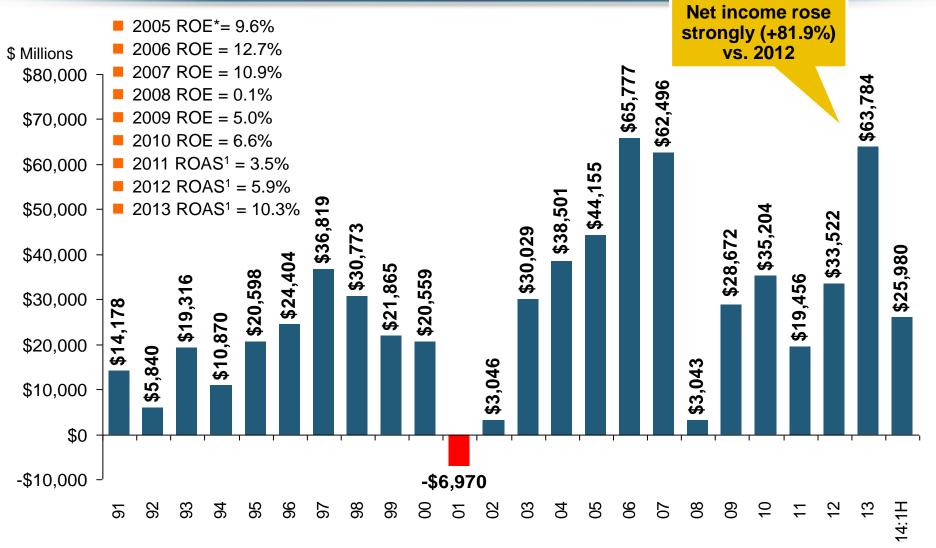




\* Excludes Mortgage & Financial Guaranty insurers 2008--2012. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014.1H: 98.9

Sources: A.M. Best, ISO.

## P/C Industry Net Income After Taxes 1991–2014:1H



•ROE figures are GAAP; <sup>1</sup>Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 8.9% ROAS through 2013:Q3, 6.2% ROAS in 2012, 4.7% ROAS for 2011, 7.6% for 2010 and 7.4% for 2009.

Sources: A.M. Best, ISO; Insurance Information Institute

## Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2014:1H\*

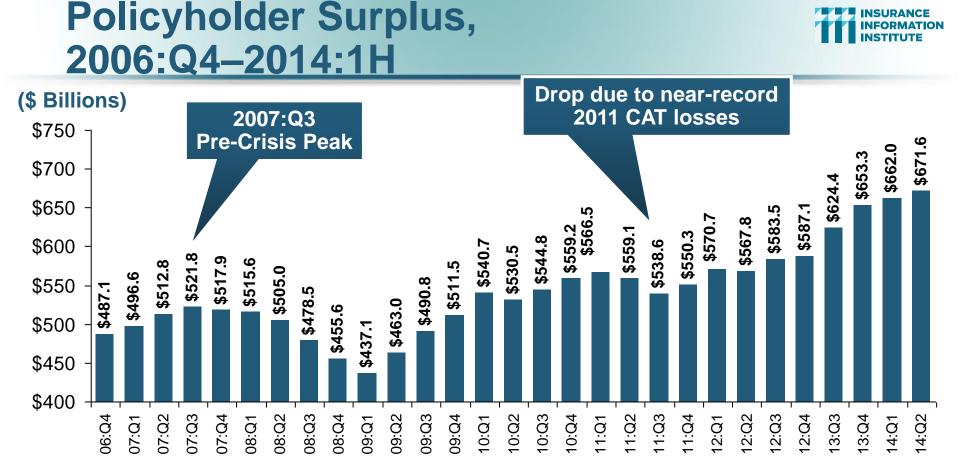
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\*Profitability = P/C insurer ROEs. 2011-13 figures are estimates based on ROAS data. Note: Data for 2008-2013 exclude mortgage and financial guaranty insurers.

Source: Insurance Information Institute; NAIC, ISO, A.M. Best.



#### The industry now has \$1 of surplus for every \$0.73 of NPW, the strongest claims-paying status in its history.

2010:Q1 data includes \$22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business.

The P/C insurance industry entered the second half of 2014 in very strong financial shape.

Sources: ISO, A.M .Best.

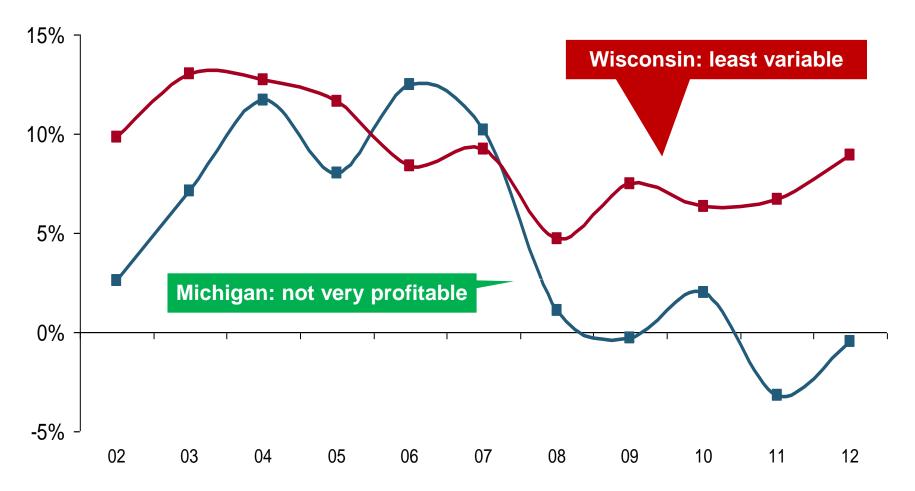


## Profitability and Growth in the Midwest P/C Insurance Markets

**Analysis by Line and State** 

# Return on Net Worth, All Lines: 2002-2012





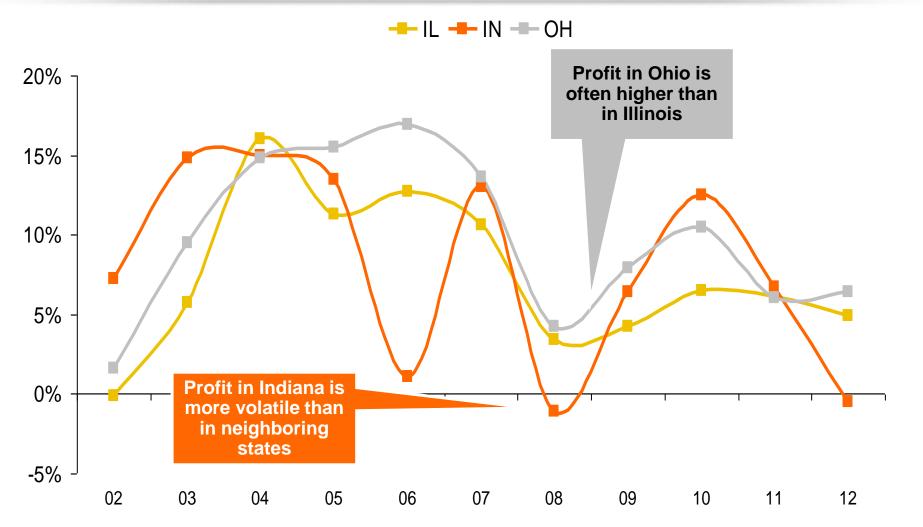
Source: NAIC.

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# Return on Net Worth, All Lines: 2002-2012





Sources: NAIC.

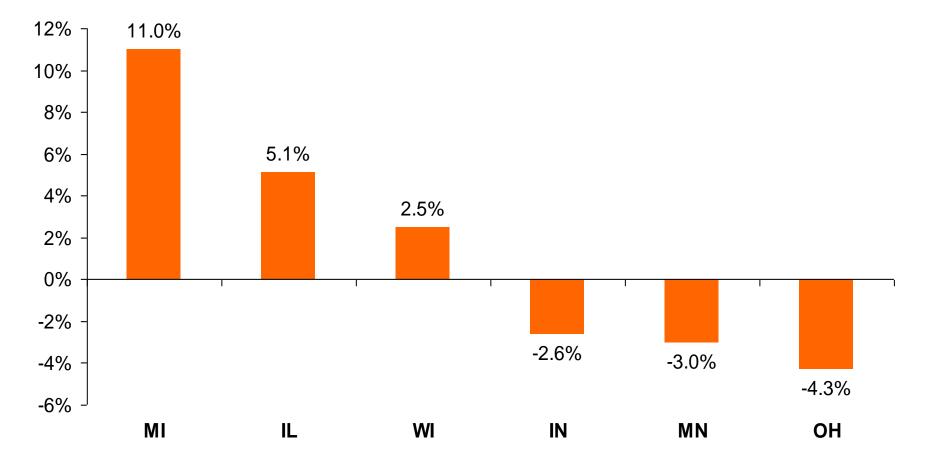
# RNW PP Auto: MAF States, 2003-2012, 10-year average



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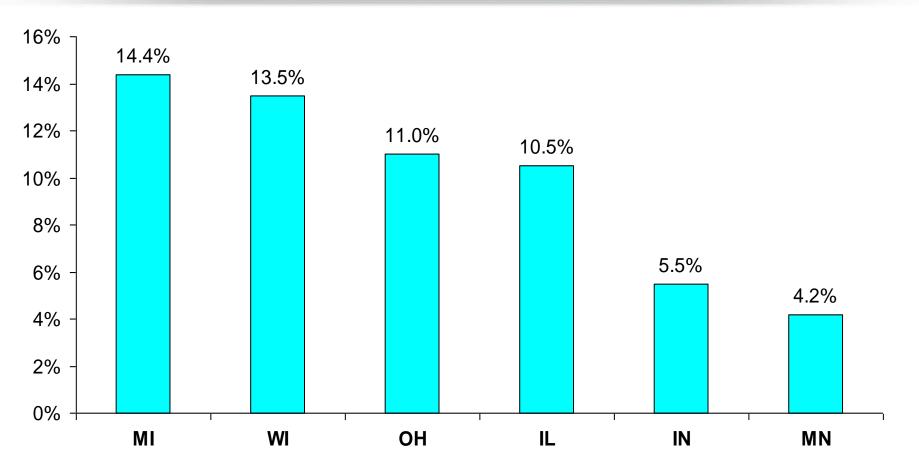
## RNW HO: MAF States, 2003-2012, 10-year average





Sources: NAIC.

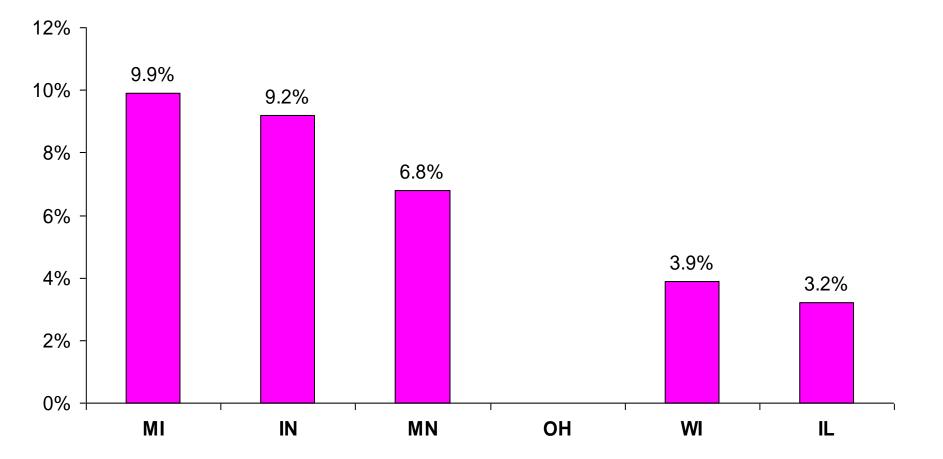
# RNW CMP: MAF States, 2003-2012, 10-year average



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# RNW WC: MAF States, 2002-2011, 10-year average



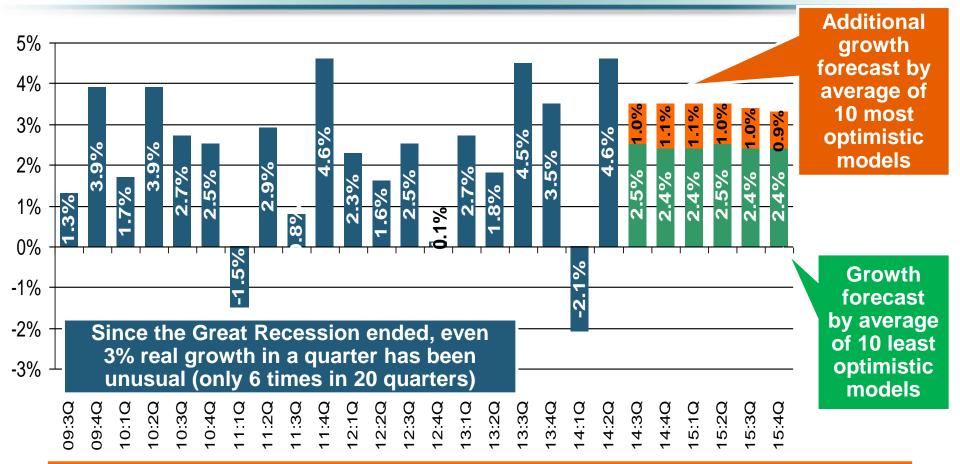




## The Strength of the Economy Will Influence P/C Insurer Growth Opportunities

Growth Will Expand Insurer Exposure Base Across Most Lines

## Real Quarterly GDP Growth Since the "Great Recession, and Forecast



## Demand for insurance continues to be affected by sluggish economic conditions, but the benefits of even slow growth will compound and gradually benefit the economy broadly.

Forecasts from Blue Chip Economic Indicators; data are quarterly changes at annualized rate.

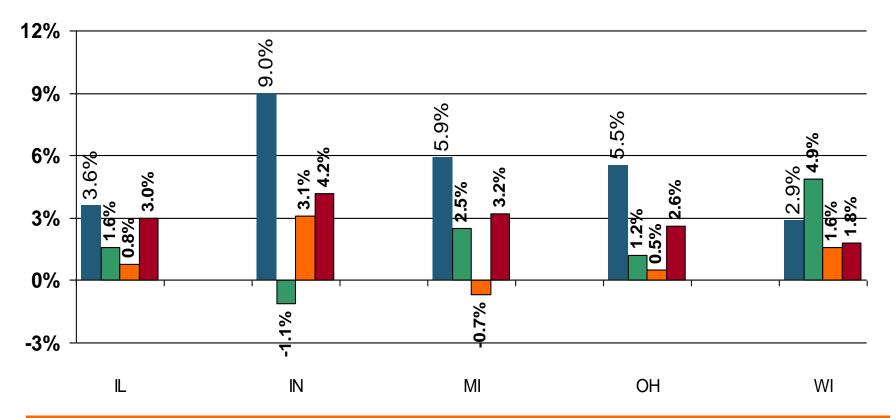
Sources: (history) US Department of Commerce, at <u>http://www.bea.gov/national/index.htm#gdp</u>; (forecasts) Blue Chip Economic Indicators 9/14; Insurance Information Institute.

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# Real Quarterly GDP Growth by State, 2013



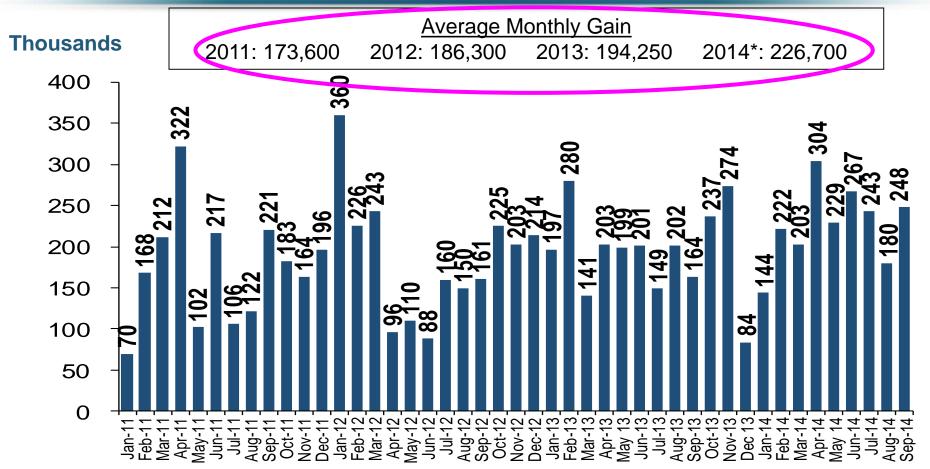
■ Q1 ■ Q2 ■ Q3 ■ Q4



Economic growth varied widely among the Great Lakes states in 2013. Not only were the rates of growth different from state to state, but even the direction of growth differed.

Data are seasonally-adjusted quarterly changes at annualized rates Source: US Department of Commerce, at <u>http://www.bea.gov/newsreleases/regional/gdp\_state/2014/pdf/qgsp0814.pdf</u>

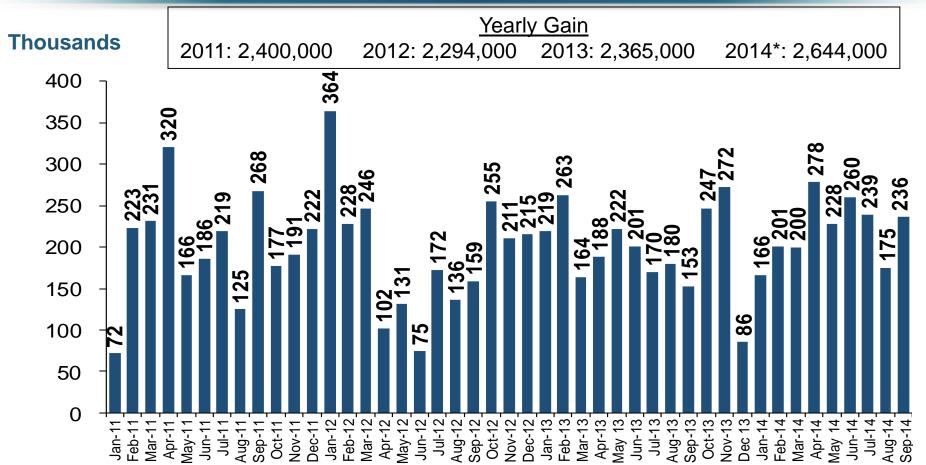
### Monthly Change in Nonfarm Employment, **11 INSURANCE** 2011 - 2014



#### The pace of job growth varies considerably from month to month.

\*Seasonally adjusted. Aug 2014 and Sept 2014 are preliminary data. Monthly gain for 2014 is average for January-August Sources: US Bureau of Labor Statistics; Insurance Information Institute

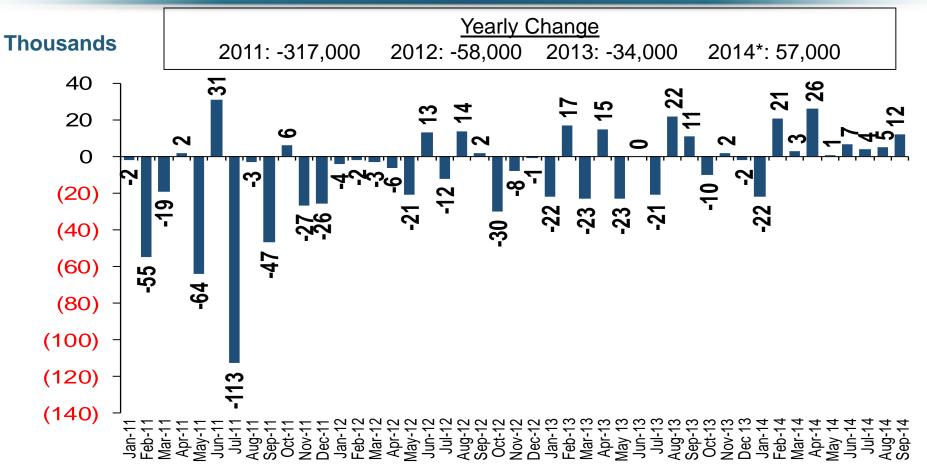
## Monthly Change in Private Employment, 2011 - 2014



#### The pace of job growth varies considerably from month to month.

\*Seasonally adjusted. Aug 2014 and Sept 2014 are preliminary data. Yearly gain for 2014 is based on for January-September Sources: US Bureau of Labor Statistics; Insurance Information Institute

### Monthly Change in Government Employment, 2011 - 2014



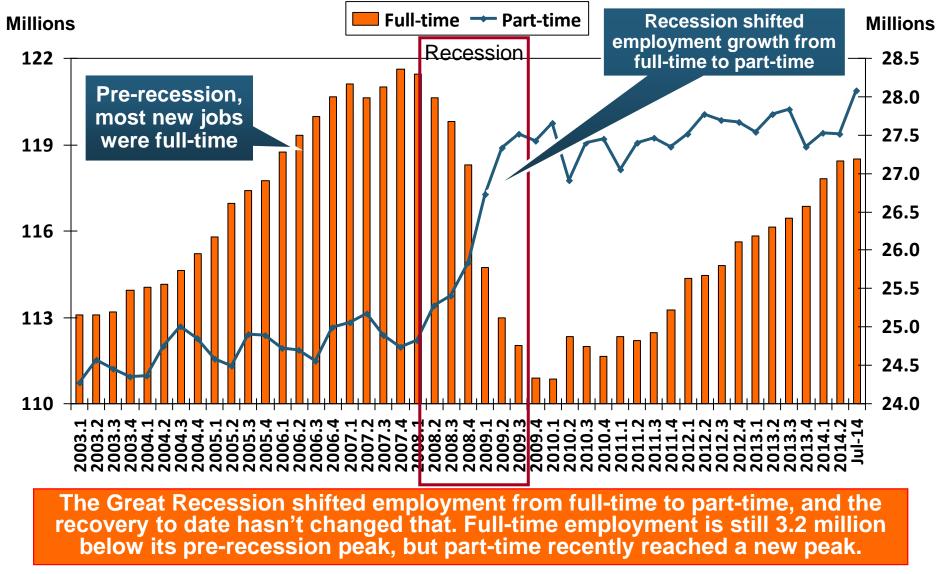
#### The pace of job growth varies considerably from month to month.

\*Seasonally adjusted. Aug 2014 and Sept 2014 are preliminary data. Yearly gain for 2014 is January-August Sources: US Bureau of Labor Statistics; Insurance Information Institute

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### Full-time vs. Part-time Employment, Quarterly, 2003-2014: WC Implications

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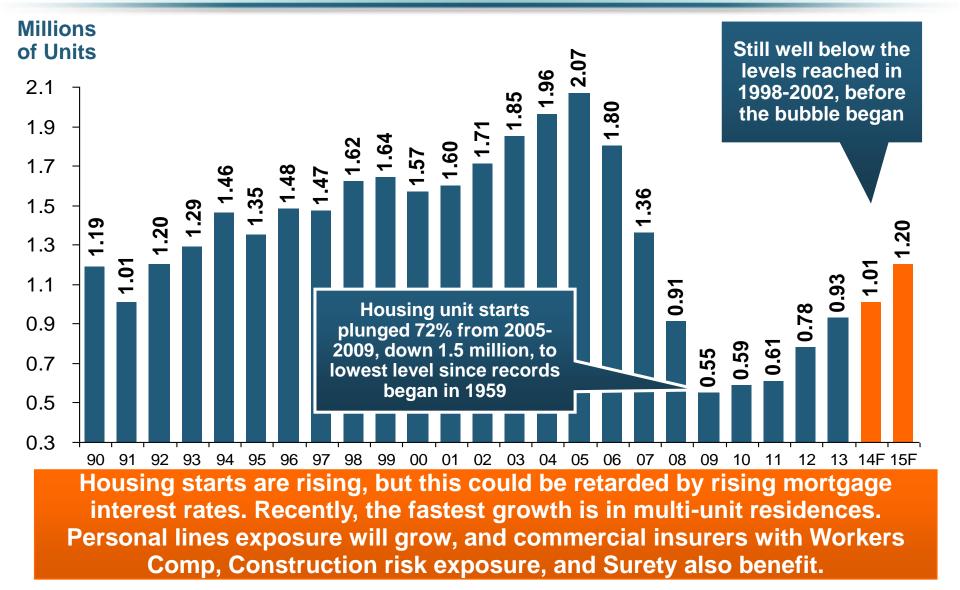


Data are seasonally-adjusted. Sources: US Bureau of Labor Statistics, US Department of Labor; Insurance Information Institute.



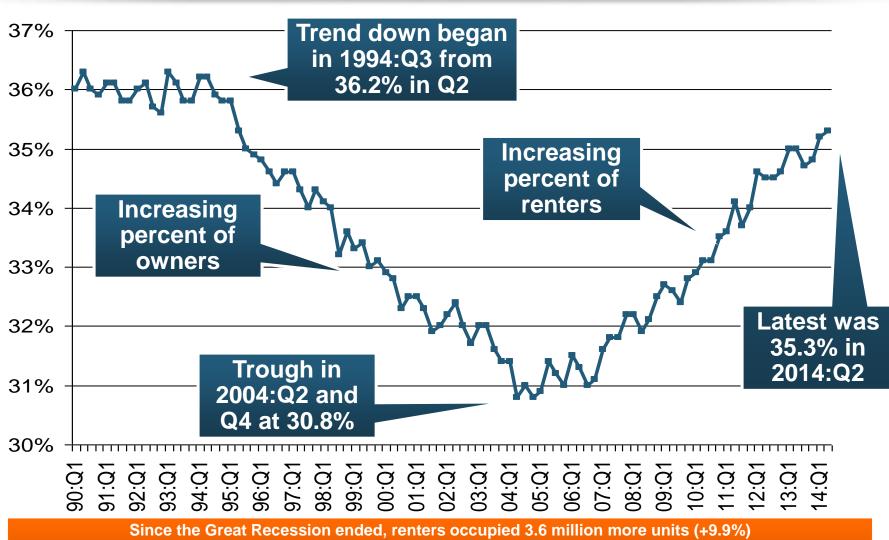
## **Forces Affecting Personal Lines**

## Private Housing Unit Starts, 1990-2015F



Sources: U.S. Department of Commerce; Blue Chip Economic Indicators (8/14); Insurance Information Institute.

### Rental-Occupied Housing Units as % of Total Occupied Units, Quarterly, 1990-2014

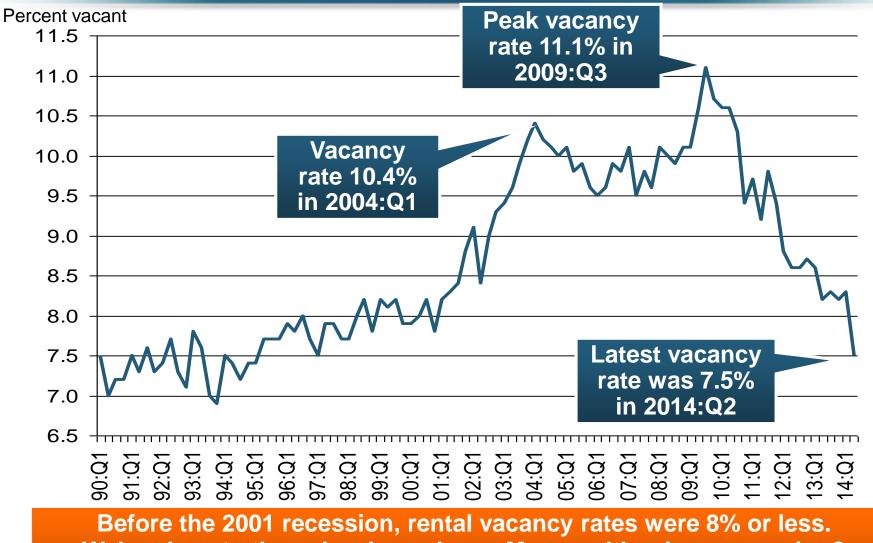


-outstripping population growth (+2.9%)

Sources: US Census Bureau, Residential Vacancies & Home Ownership in the Second Quarter of 2014 (released July 29, 2014) and earlier issues; Insurance Information Institute. Next Census Bureau report to be released on October 28, 2014.

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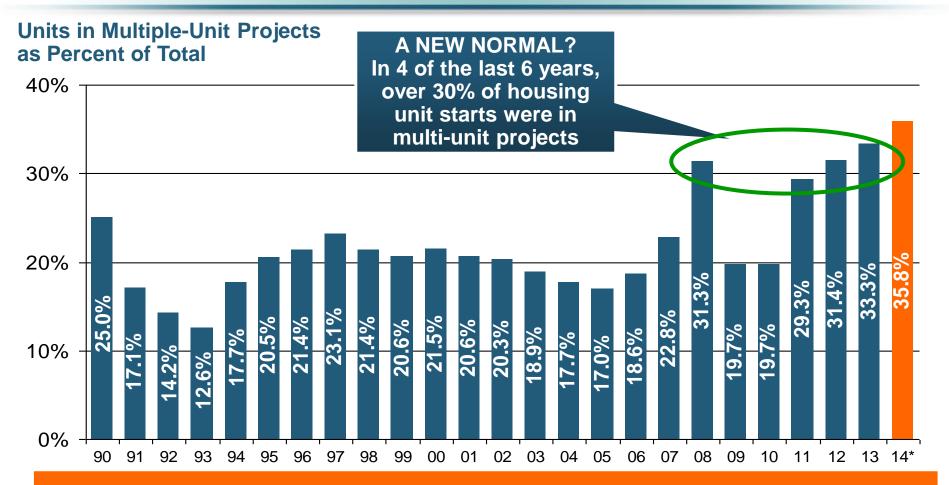
## Rental Vacancy Rates, Quarterly, 1990-2014



#### We're close to those levels again. => More multi-unit construction?

Sources: US Census Bureau, *Residential Vacancies & Home Ownership in the Second Quarter of 2014* (released July 29, 2014) and earlier issues; Insurance Information Institute. **Next Census Bureau report to be released on October 28, 2014**.

## US: Pct. Of Private Housing Unit Starts In Multi-Unit Projects, 1990-2014\*

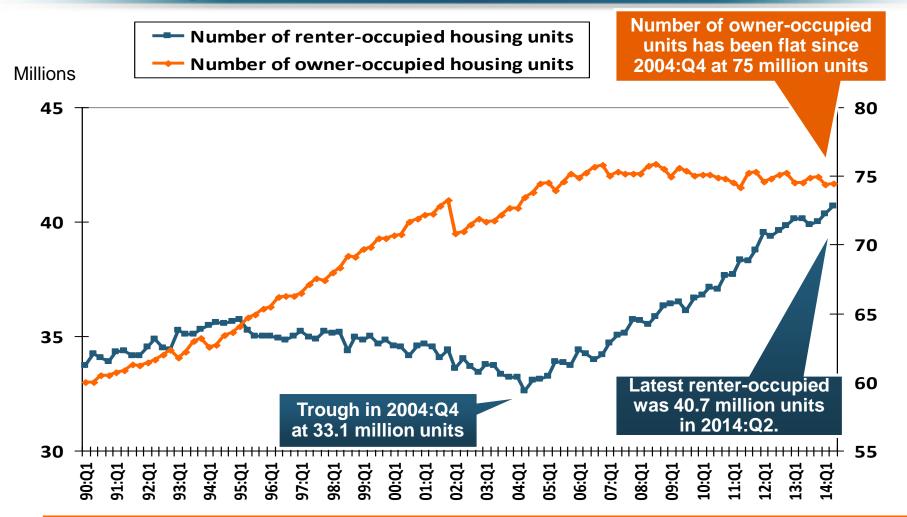


For the U.S. as a whole, the trend toward multi-unit housing projects (vs. single-unit homes) is recent. Commercial insurers with Workers Comp, Construction risk exposure, and Surety benefit.

\*through July 2014

Sources: U.S. Census Bureau; Insurance Information Institute.

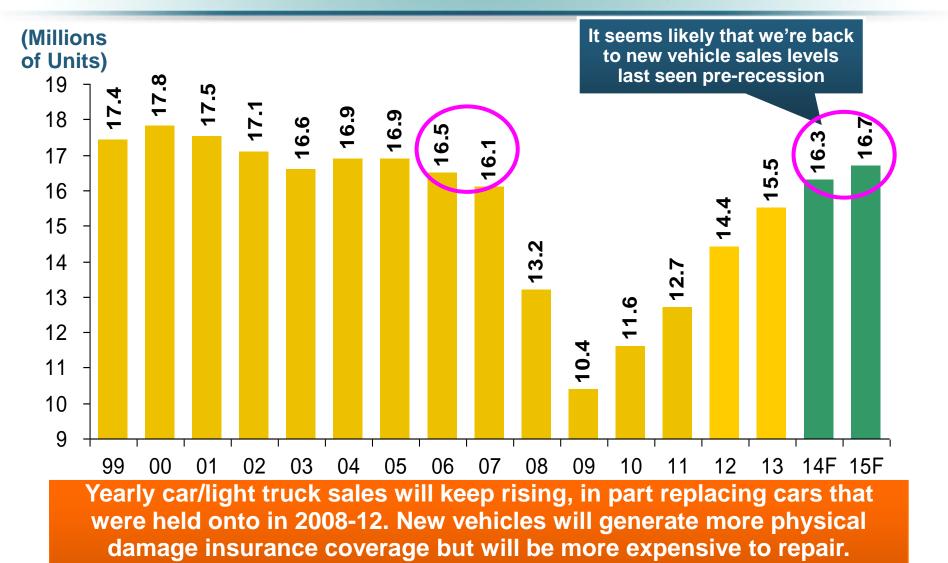
### Number of Rental- and Owner-Occupied Housing Units, Quarterly, 1990-2014



#### There has been no growth in the number of owner-occupied housing units in nearly 10 years. All the growth since then has been in renter-occupied housing. When will this end?

Sources: US Census Bureau at http://www.census.gov/housing/hvs/data/histtabs.html; Insurance Information Institute.

## Auto/Light Truck Sales, 1999-2015F

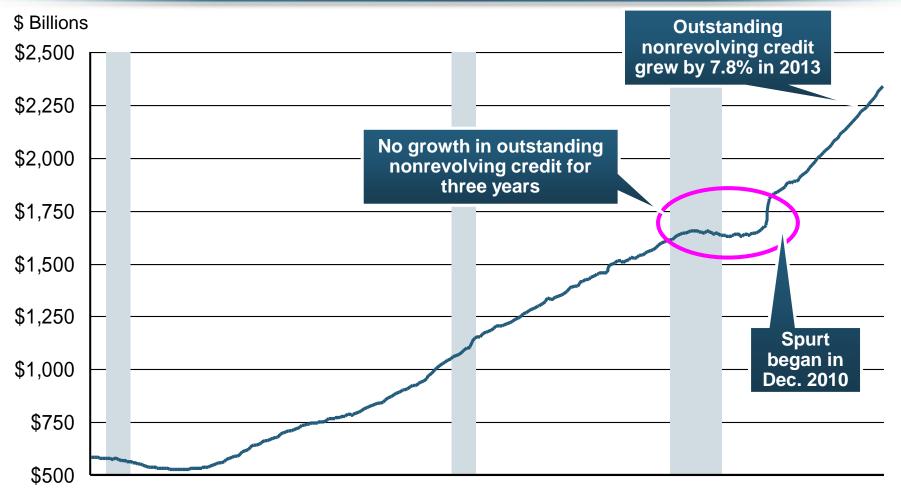


PP Auto premium might grow by 6%.

Sources: U.S. Department of Commerce; Blue Chip Economic Indicators, 8/14 issue (forecasts); Insurance Information Institute.

## Auto Loans and other Nonrevolving Credit Outstanding, 1990–2014\*





#### '90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14

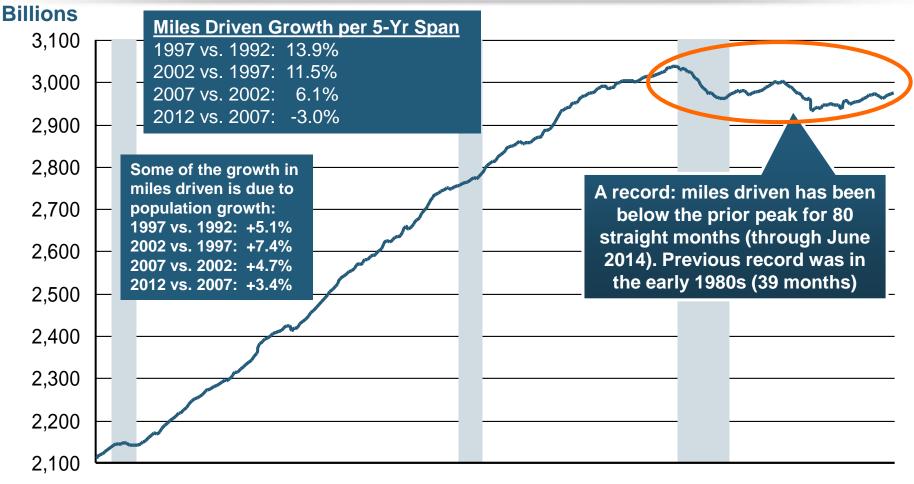
Note: Recessions indicated by gray shaded columns. \*Seasonally adjusted; Latest data is for June 2014, preliminary

Sources: Federal Reserve at

http://www.federalreserve.gov/datadownload/Download.aspx?rel=G19&series=8ee7aa36107a130bcc862d44824a3b86&lastObs=&fro m=&to=&filetype=csv&label=include&layout=seriescolumn&type=package

National Bureau of Economic Research (recession dates); Insurance Information Institutes.

## Something Unusual is Happening: Miles Driven\*, 1990–2014

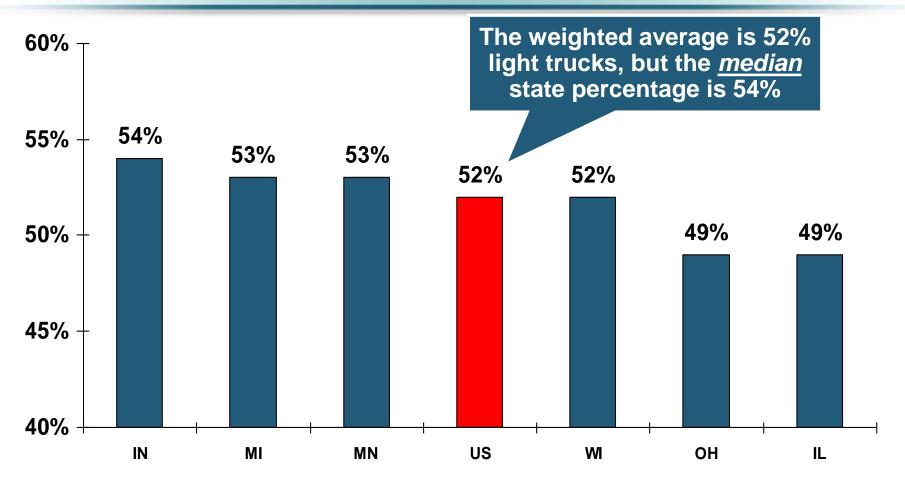


'90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14

\*Moving 12-month total. The latest data is for July 2014. Note: Recessions indicated by gray shaded columns.. Sources: Federal Highway Administration (<u>http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm</u>); National Bureau of Economic Research (recession dates); Insurance Information Institute.

## Light Trucks as Pct. Of Light Vehicles in Use: MAF States





## PP Auto premiums will vary by state based on the mix of light trucks (SUVs, minivans, and pickup trucks) vs. passenger cars.

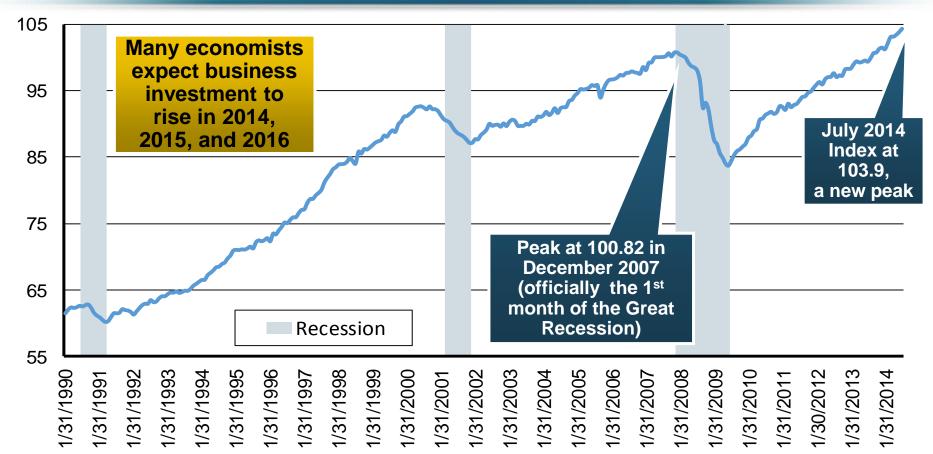
Sources: NADA, State of the Industry Report 2013, p. 17, at www.nada.org/nadadata citing R. L. Polk; Insurance Information Institute



## **Forces Affecting Commercial Lines**

## Index of Total Industrial Production:\* A New Peak in July 2014



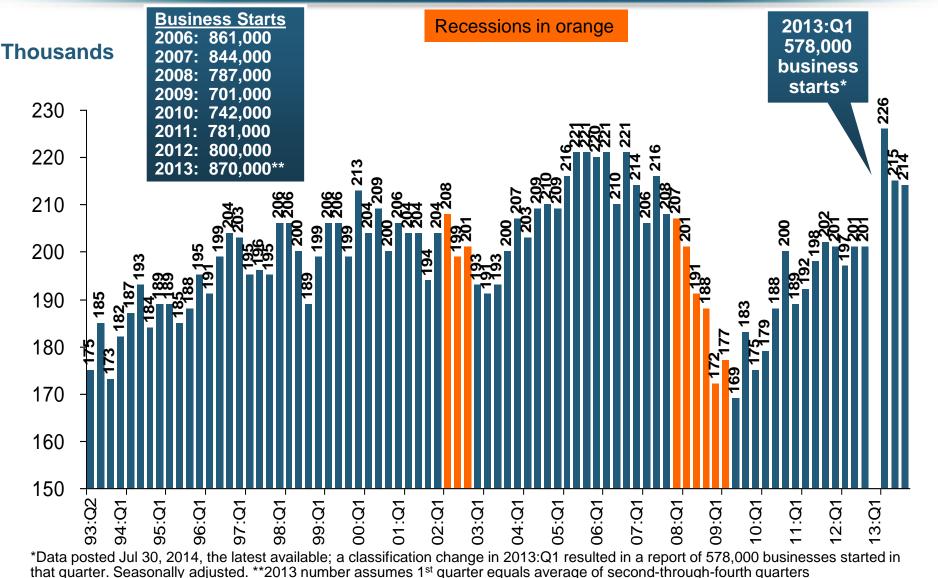


#### Insurance exposures for industrial production will continue growing in 2014, and commercial insurance premium volume with them.

\*Monthly, seasonally adjusted, through July 2014 (which is preliminary). Index based on year 2007 = 100 Sources: Federal Reserve Board at <u>http://www.federalreserve.gov/releases/g17/ipdisk/ip\_sa.txt</u>. National Bureau of Economic Research (recession dates); Insurance Information Institute.

### Private Sector Business Starts: 1993:Q2 – 2013:Q4\* As Strong as Ever?

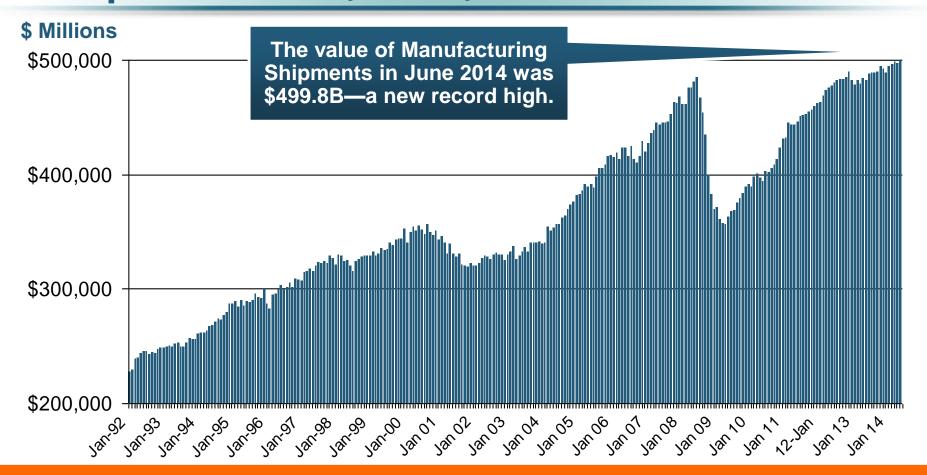
Sources: Bureau of Labor Statistics, http://www.bls.gov/news.release/cewbd.t08.htm. NBER (recession dates)



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## Dollar Value\* of Manufacturers' Shipments Monthly, January 1992—June 2014

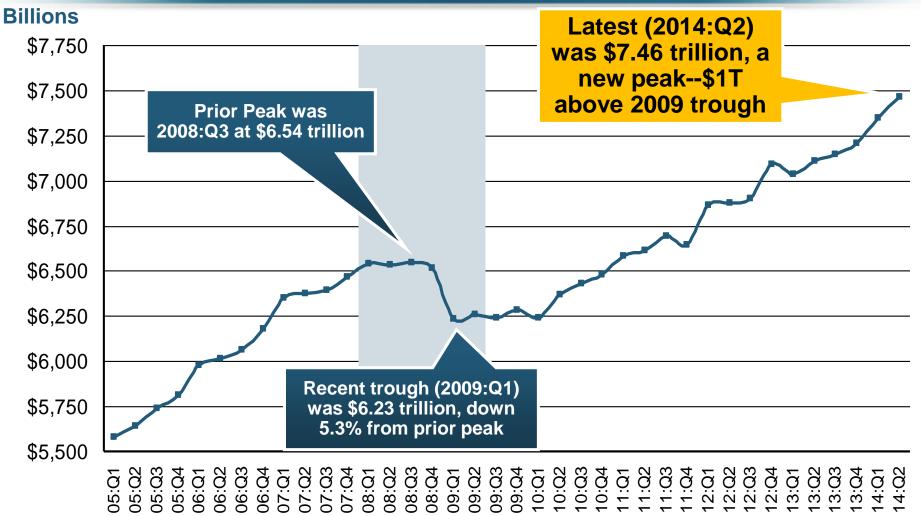




Monthly shipments in November 2013 exceeded the pre-crisis (July 2008) peak; December 2013, January 2014, and February 2014 slipped a bit. March 2014, then April, then May, then June 2014 (prelim.) set new record highs.

\*seasonally adjusted; June 2014 is preliminary; data published July 25, 2014. Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders, http://www.census.gov/manufacturing/m3/* 37

### Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2014:Q2

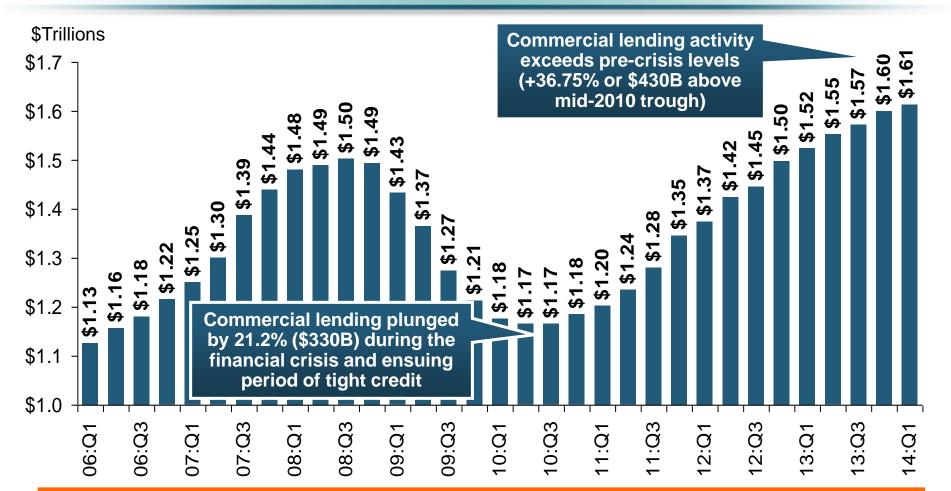


Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

Sources: <u>http://research.stlouisfed.org/fred2/series/WASCUR;</u> National Bureau of Economic Research (recession dates); Insurance Information Institute.

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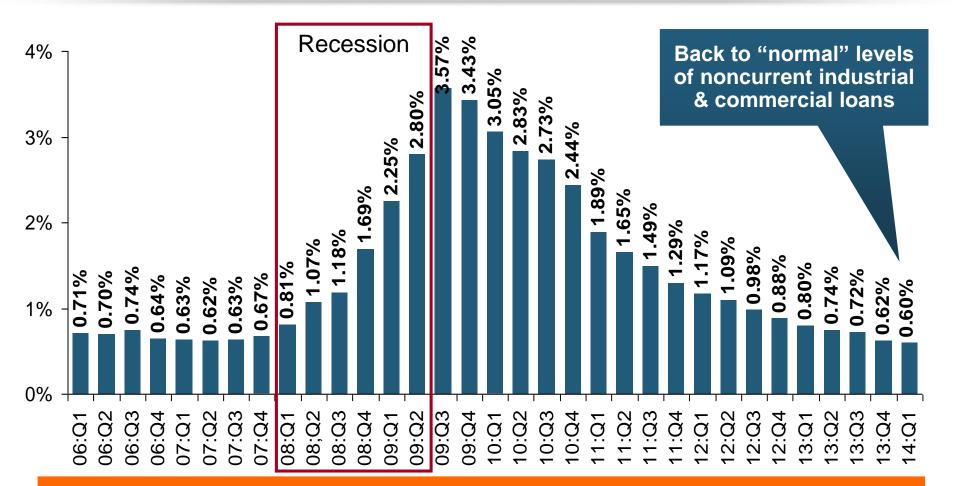
### Commercial & Industrial Loans Outstanding at FDIC-Insured Banks, Quarterly, 2006-2014:Q1



Outstanding Commercial Loan Volume Has Been Growing for Over Two Years and Is Now Nearly Back to Early Recession Levels. Bodes Very Well for the Creation of Current and Future Commercial Insurance Exposures

Source: FDIC at <a href="http://www2.fdic.gov/qbp/">http://www2.fdic.gov/qbp/</a> (Loan Performance spreadsheet); Insurance Information Institute.

#### Percent of Non-current Commercial & Industrial Loans Outstanding at FDIC-Insured Banks, Quarterly, 2006-2014:Q1



Non-current loans (those past due 90 days or more or in nonaccrual status) are below even pre-recession levels, fueling bank willingness to lend.

Source: FDIC at <u>http://www2.fdic.gov/qbp/</u> (Loan Performance spreadsheet); Insurance Information Institute.



## Winter Storms and Other Natural Catastrophes

Have You Noticed It's Been Cold and Snowy Lately?

#### Significant Natural Catastrophes in 2013 (\$1 billion economic loss and/or 50 fatalities)

Date	Event	Estimated Economic Losses (US \$m)	Estimated Insured Losses (US \$m)
February 24 – 25	Winter Storm	1,300	690
March 18 – 19	Thunderstorms	2,200	1,600
April 7 – 11	Winter Storm	1,600	1,200
April 16 – 18	Thunderstorms	1,100	560
May 18 – 20	Thunderstorms	3,100	1,800
May 28 – 31	Thunderstorms	2,800	1,400
August 6 – 7	Thunderstorms	1,300	740
September 9 – 16	Flooding	1,500	160
November 17 - 18	Thunderstorms	1,300	931

### Natural Disaster Losses in the United States, 2013



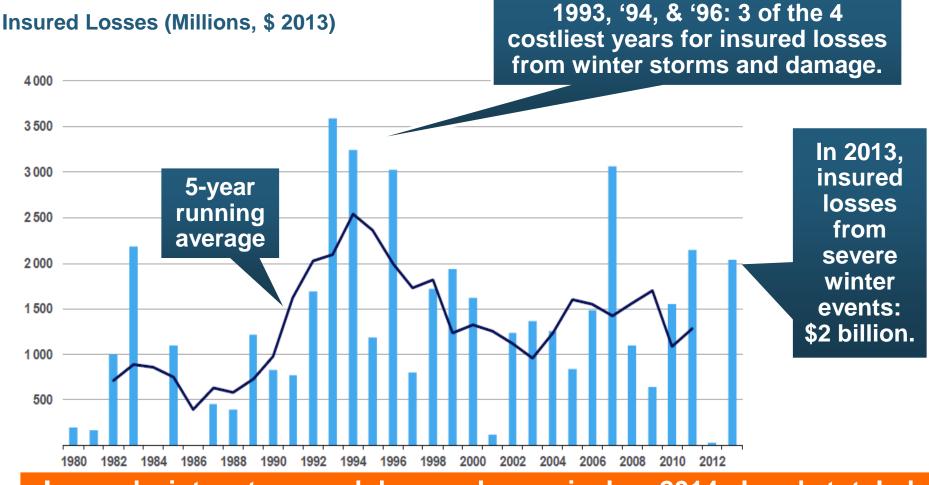
As of December 31, 2013	Number of Events	Fatalities	Estimated Overall Losses (US \$m)	Estimated Insured Losses (US \$m)
Severe Thunderstorm	69	110	16,341	10,274
Winter Storm	11	43	2,935	1,895
Flood	19	23	1,929	240
Earthquake & Geophysical	6	1	Minor	Minor
Tropical Cyclone	1	1	Minor	Minor
Wildfire, Heat, & Drought	22	29	620	385
Totals	128	207	21,825	12,794

### Largest Insured Claims, Individual Winter Storms, US & Canada, 1980-2013

Storm Dates	Economic Loss (\$2013, mil)	Insured Loss (\$2013, mil)	Deaths
Mar. 11-14, 1983	\$8,061	\$3,224	270
Dec. 17-30, 1983	\$2,339	\$2,058	500
Apr. 13-17, 2007	\$2,247	\$1,775	23
Dec. 10-13, 1992	\$4,981	\$1,660	19
Jan. 5-12, 1998	\$4,146	\$1,644	45
Feb. 10-12, 1994	\$4,716	\$1,258	9
Jan. 17-20, 1994	\$1,572	\$1,258	70
Apr. 7-11, 2013	\$1,600	\$1,200	N/A
Jan. 1-4, 1999	\$1,398	\$1,084	25
Jan 31-Feb 2, 2011	\$1,346	\$1,010	36

Sources: Munich Re NatCatSERVICE, Insurance Information Institute

# Winter Storm and Winter Damage Events in the US and Canada, 1980-2013 (2013 US\$)



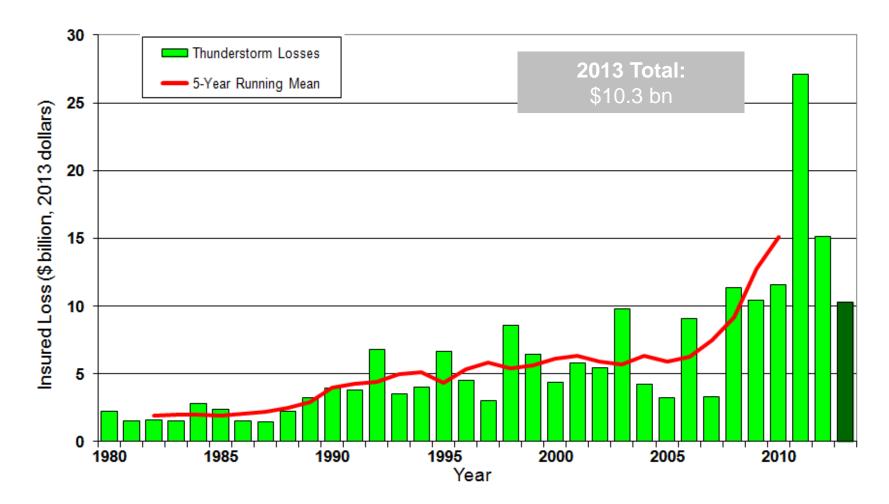
Insured winter storm and damage losses in Jan. 2014 already totaled \$1.5 billion. Continued severe weather since then makes it likely that 2014 will become one of the top 5 costliest winters since 1980.

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#### US Thunderstorm Loss Trends Insured Annual Totals 1980 – 2013



#### Average insured thunderstorm losses have increased sevenfold since 1980.

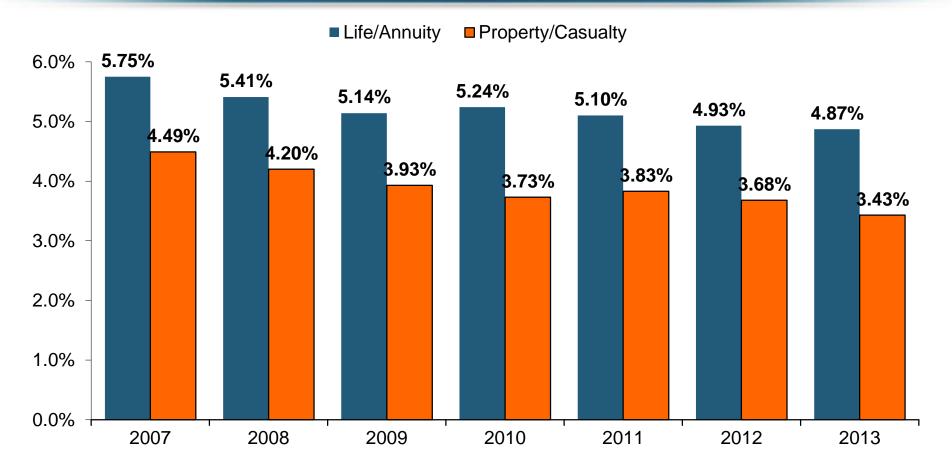




## Investment Performance: a Key Driver of Profitability

## Depressed Yields Influence Underwriting & Pricing

# Net Yield on Insurer Invested Assets, 2007-2014:1H



## P/C Insurer net yields to date dropped by 106 basis points since year-end 2007.

Sources: NAIC, via SNL Financial; I.I.I.

### Property/Casualty Insurance Industry Investment Gain: 1994–2014:Q1<sup>1</sup>



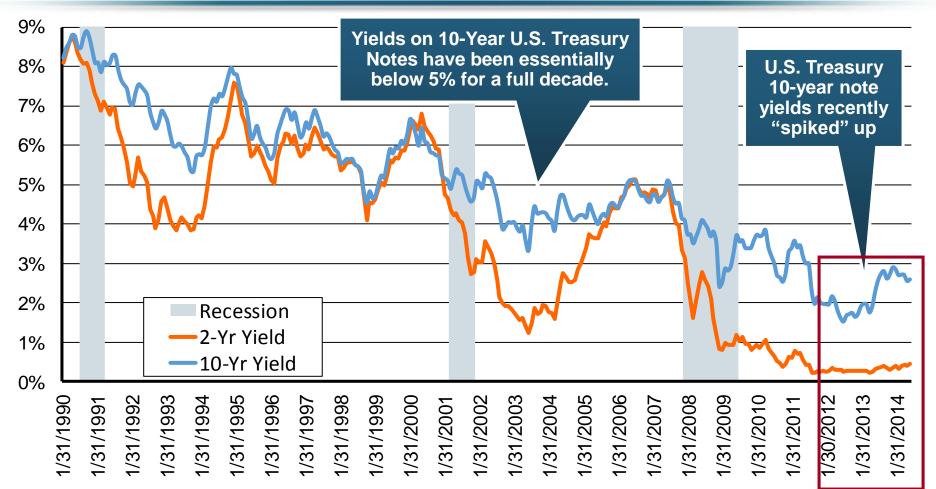
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Low interest rates in 2013 caused investment income to keep falling but realized investment gains were up sharply. The financial crisis caused investment gains to fall by 50% in 2008.

 <sup>1</sup> Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.
\* 2005 figure includes special one-time dividend of \$3.2B; Sources: ISO; Insurance Information Institute.

### U.S. Treasury 2- and 10-Year Note Yields\*: 1990–2014





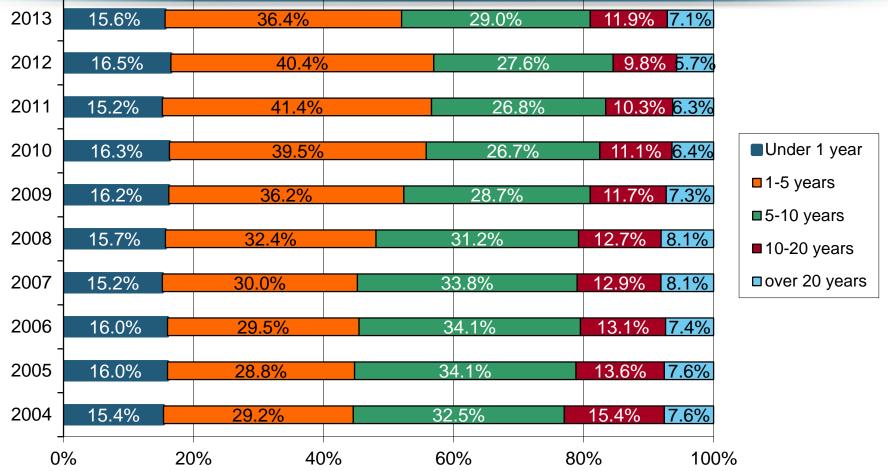
### Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

\*Monthly, constant maturity, nominal rates, through July 2014.

Sources: Federal Reserve Bank at <u>http://www.federalreserve.gov/releases/h15/data.htm</u>. National Bureau of Economic Research (recession dates); Insurance Information Institutes.

### Distribution of Bond Maturities, P/C Insurance Industry, 2004-2013

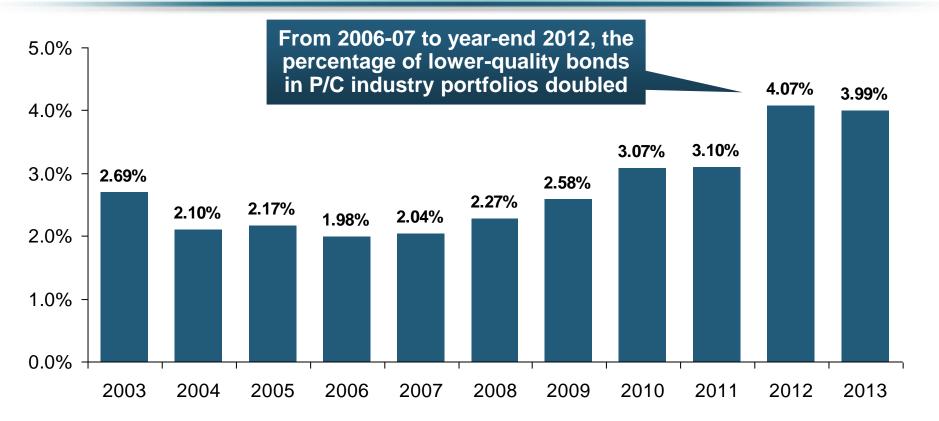




The main shift over these years has been from bonds with longer maturities to bonds with shorter maturities. The industry trimmed its holdings of over-10-year bonds (from 23.0% in 2004 to 15.5% in 2012) and trimmed bonds in the 5-10-year category (from 32.5% in 2004 to 27.6% in 2012). A shift back began in 2013.

Sources: SNL Financial; Insurance Information Institute.

### Bonds Rated NAIC Quality Category 3-6 as a Percent of Total Bonds, 2003–2013



There are many ways to capture higher yields on bond portfolios. One is to accept greater risk, as measured by NAIC bond ratings. The ratings range from 1 to 6, with the highest quality rated 1. Even in 2012-13, over 95% of the industry's bonds were rated 1 or 2.

Sources: SNL Financial; Insurance Information Institute.



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# Thank you for your time and your attention!