

Trends, Challenges and Opportunities in P/C Insurance Focus on New Jersey Markets

Agency Network Exchange Iselin, NJ
April 28, 2015

Robert P. Hartwig, Ph.D., CPCU, President & Economist Insurance Information Institute ◆ 110 William Street ◆ New York, NY 10038

Tel: 212.346.5520 ♦ Cell: 917.453.1885 ♦ bobh@iii.org ♦ www.iii.org

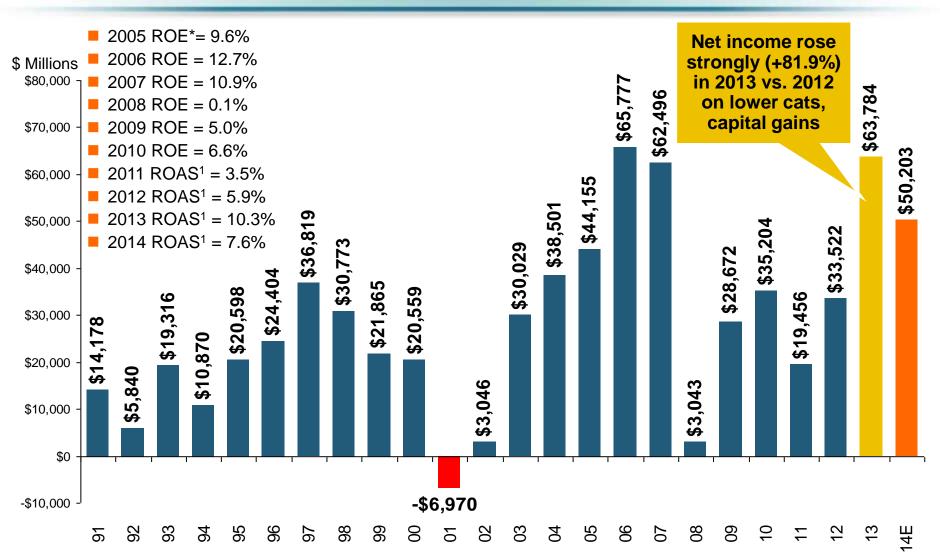


Insurance Industry: Financial Update & Outlook

2014 Was a Reasonably Good Year 2015: A Repeat of 2014?

P/C Industry Net Income After Taxes 1991–2014E





•ROE figures are GAAP; ¹Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 7.7% ROAS through 2014:Q2, 9.8% ROAS in 2013, 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:Q3*





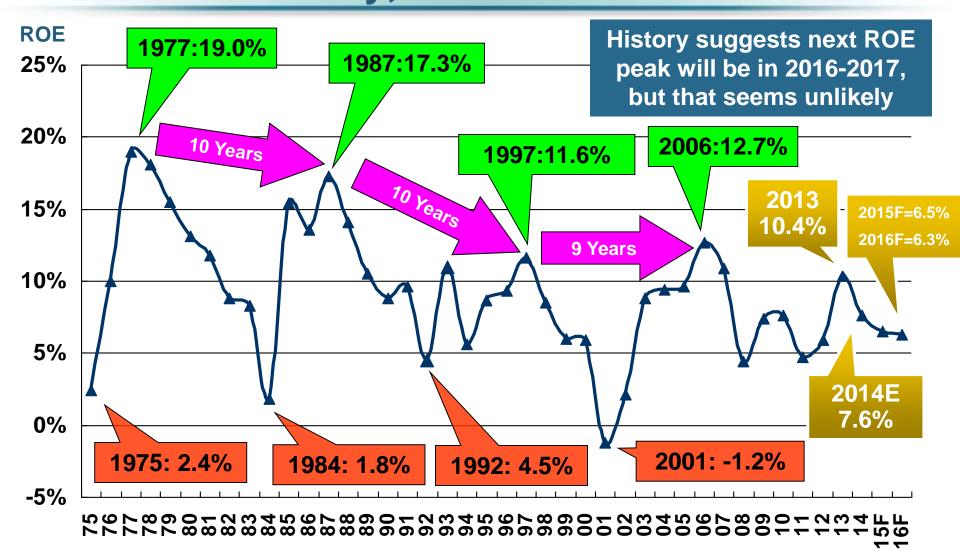
*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude

mortgage and financial guaranty insurers.

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

Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2016F



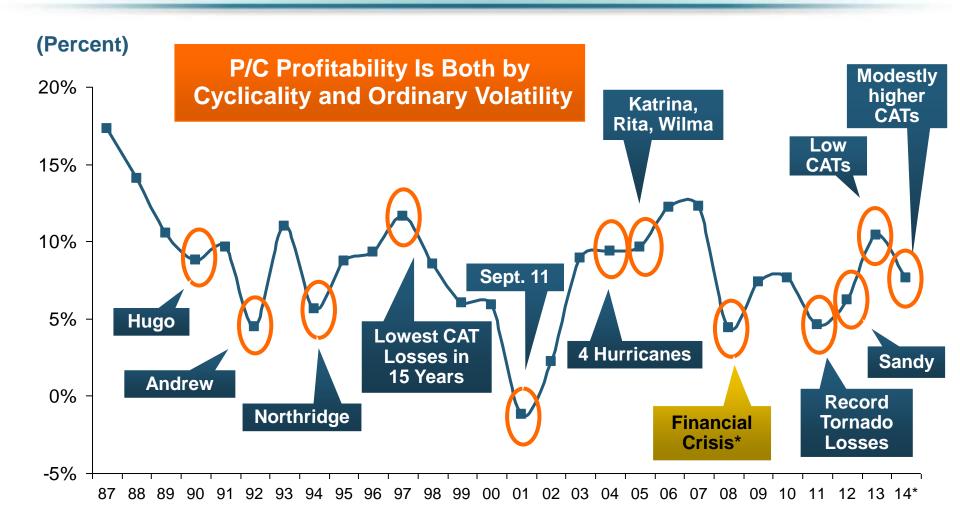


^{*}Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.

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

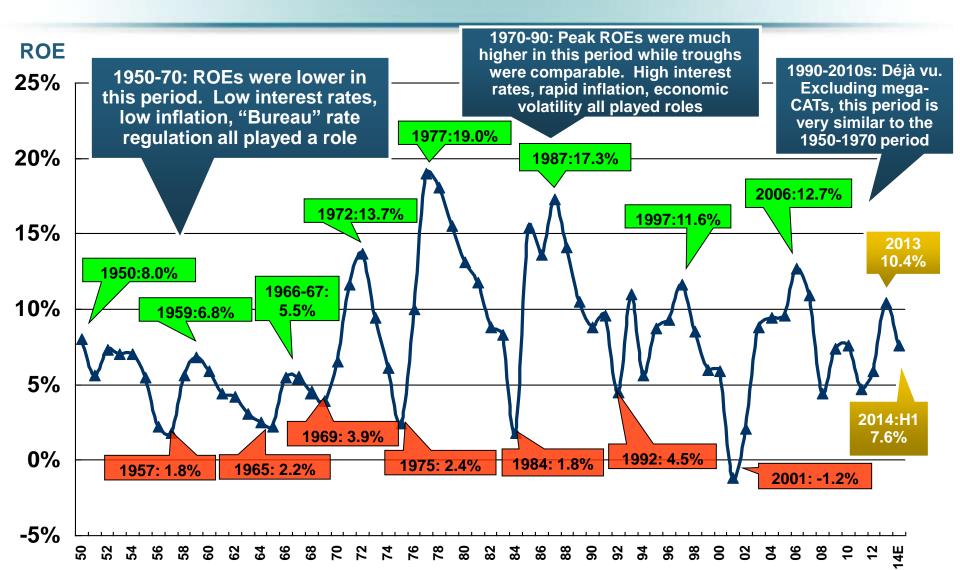
ROE: Property/Casualty Insurance by Major Event, 1987–2014E





^{*} Excludes Mortgage & Financial Guarantee in 2008 – 2014. 2014 figure is through Q3:2014. Sources: ISO, *Fortune*; Insurance Information Institute.

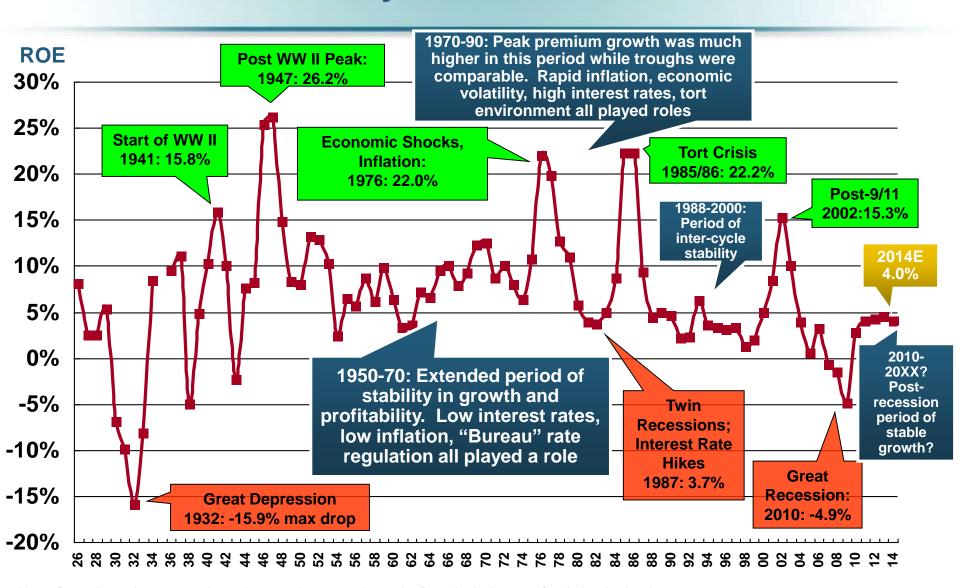
Back to the Future: Profitability Peaks & Troughs in the P/C Insurance Industry, 1950 – 2014*



^{*}Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers. 2014 figure is through Q3. Source: Insurance Information Institute; NAIC, ISO, A.M. Best.

NPW Premium Growth: Peaks & Troughs in the P/C Insurance Industry, 1926 – 2014E

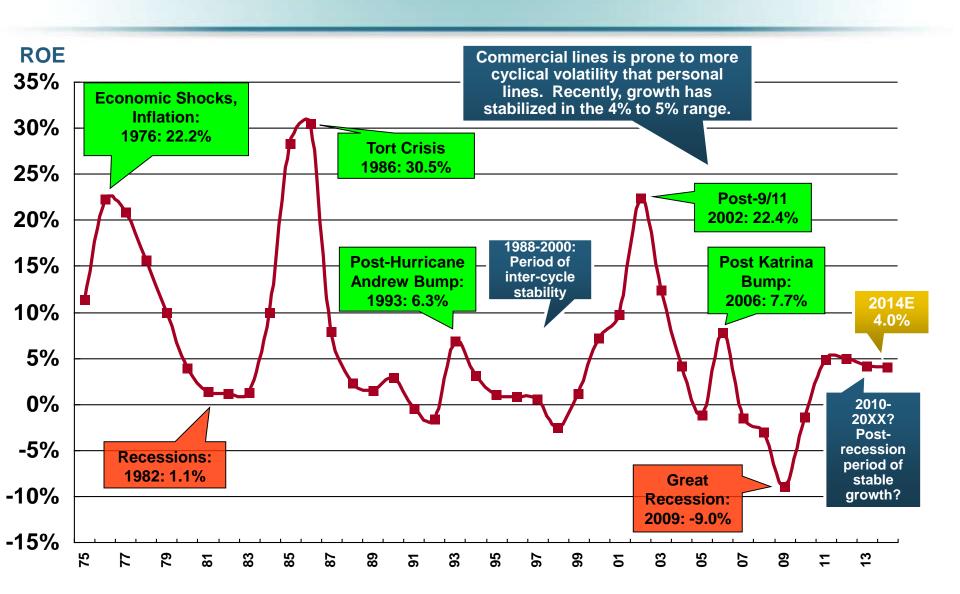




Note: Data through 1934 are based on stock companies only. Data include state funds beginning in 1998. Source: A.M. Best: Insurance Information Institute.

Commercial Lines NPW Premium Growth: 1975 – 2014E

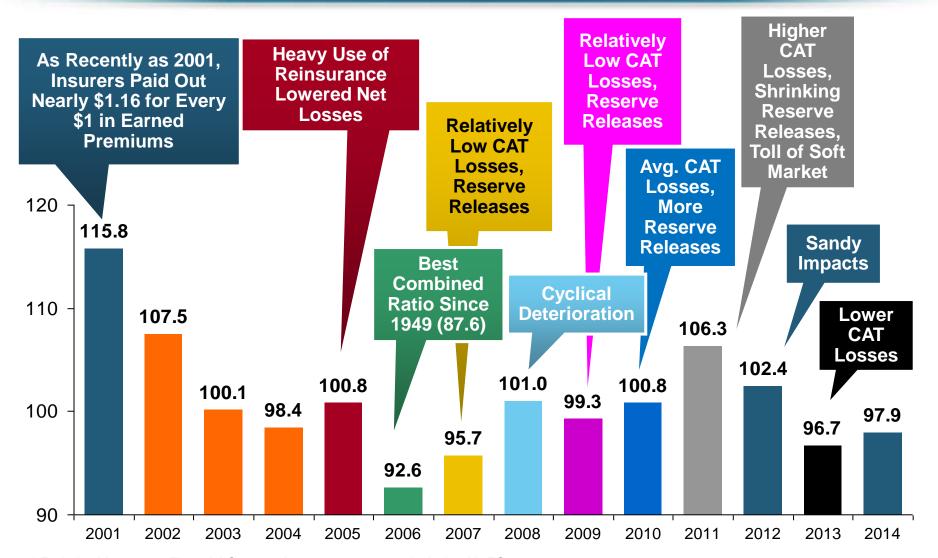




Note: Data include state funds beginning in 1998. Source: A.M. Best: Insurance Information Institute.

P/C Insurance Industry Combined Ratio, 2001–2014:Q3*



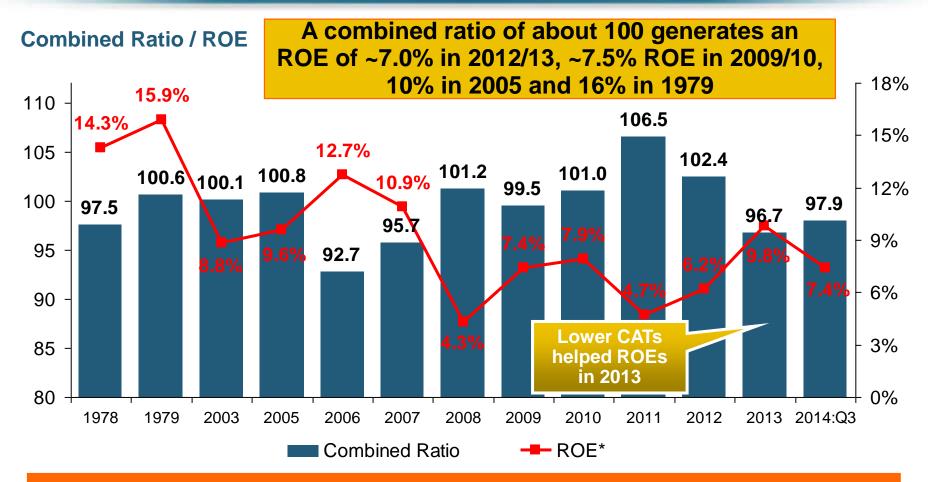


^{*} Excludes Mortgage & Financial Guaranty insurers 2008--2014. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014:9M = 97.7.

Sources: A.M. Best, ISO.

A 100 Combined Ratio Isn't What It Once Was: Investment Impact on ROEs



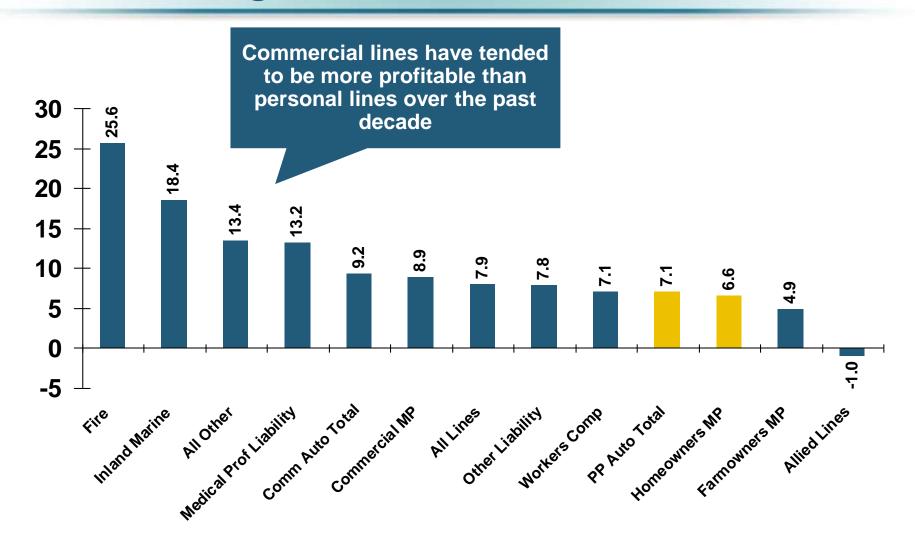


Combined Ratios Must Be Lower in Today's Depressed Investment Environment to Generate Risk Appropriate ROEs

^{* 2008 -2014} figures are return on average surplus and exclude mortgage and financial guaranty insurers. 2014:9M combined ratio including M&FG insurers is 97.7; 2013 = 96.1; 2012 =103.2, 2011 = 108.1, ROAS = 3.5%. Source: Insurance Information Institute from A.M. Best and ISO Verisk Analytics data.

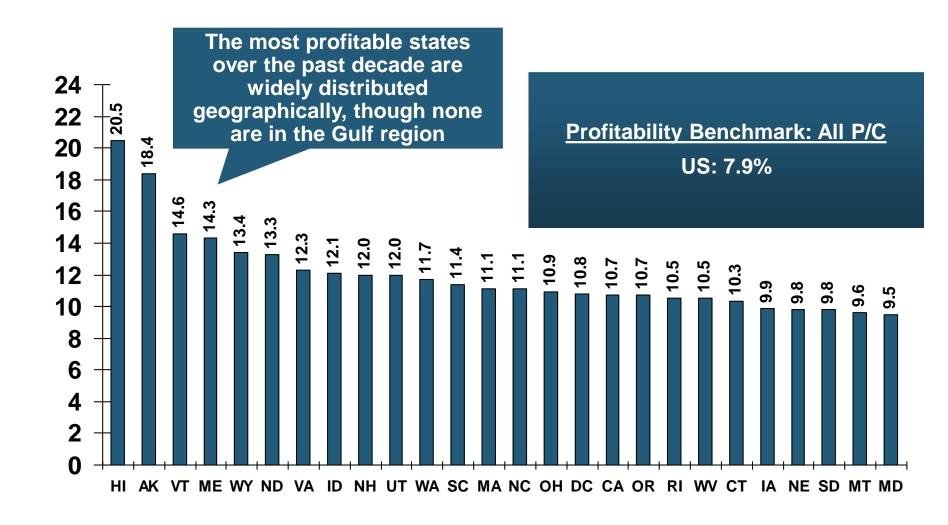
Return on Net Worth (RNW) All Lines: 2004-2013 Average





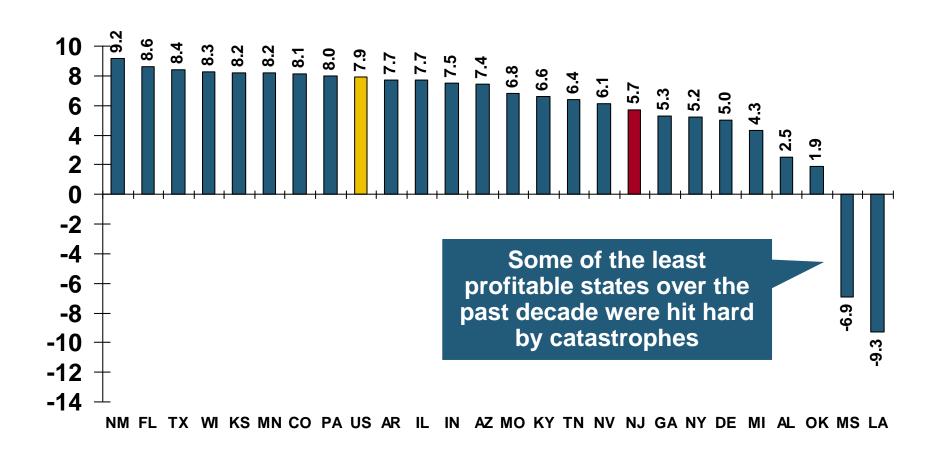
RNW All Lines by State, 2004-2013 Average: Highest 25 States





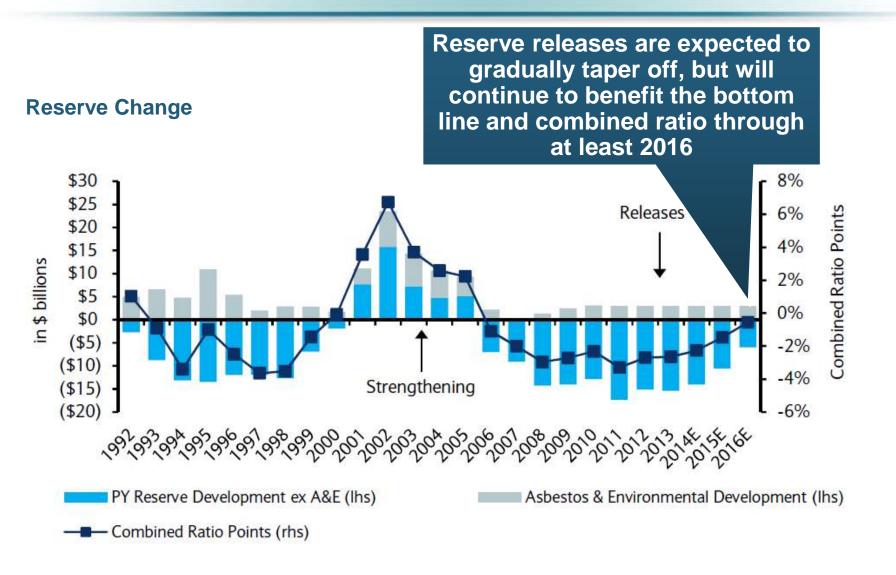
RNW All Lines by State, 2004-2013 Average: Lowest 25 States





P/C Insurance Loss Reserve Development, 1992 – 2016E*





Source: A.M. Best; Barclays research for estimates.

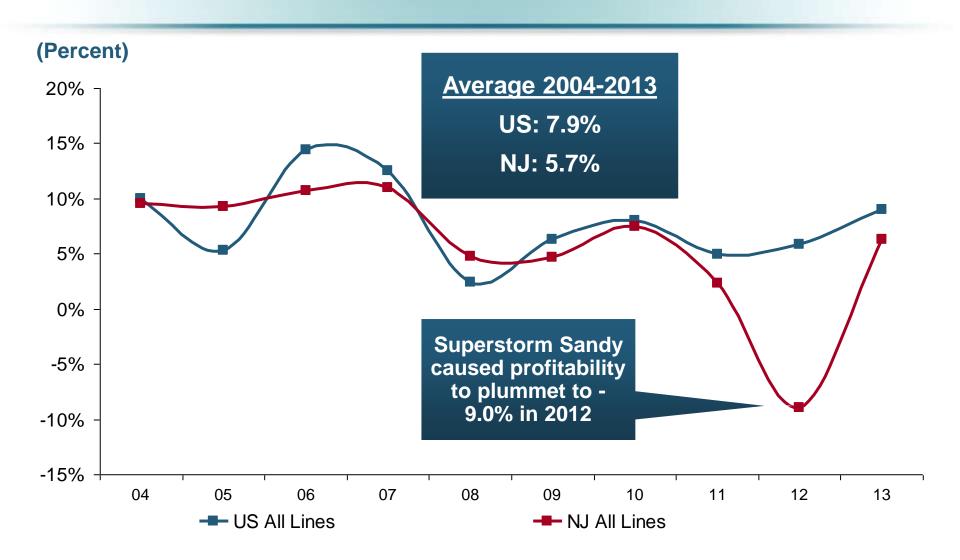


Profitability and Growth in New Jersey P/C Insurance Markets

Analysis by Line and Nearby State Comparisons

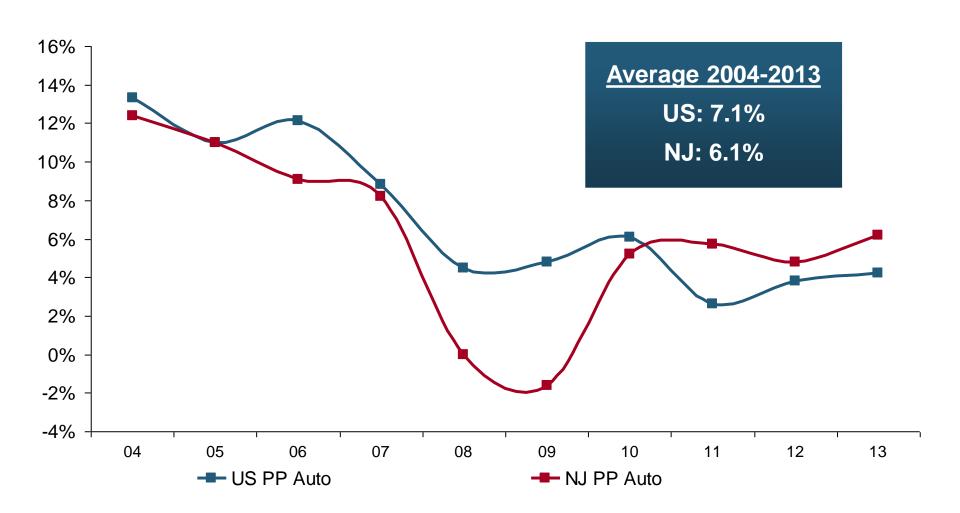
RNW All Lines: NJ vs. U.S., 2004-2013





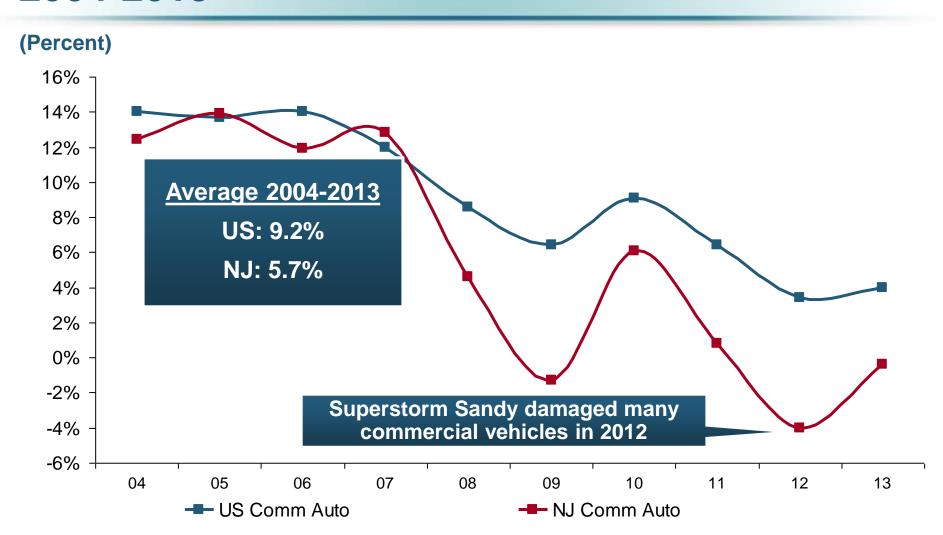
RNW PP Auto: NJ vs. U.S., 2004-2013





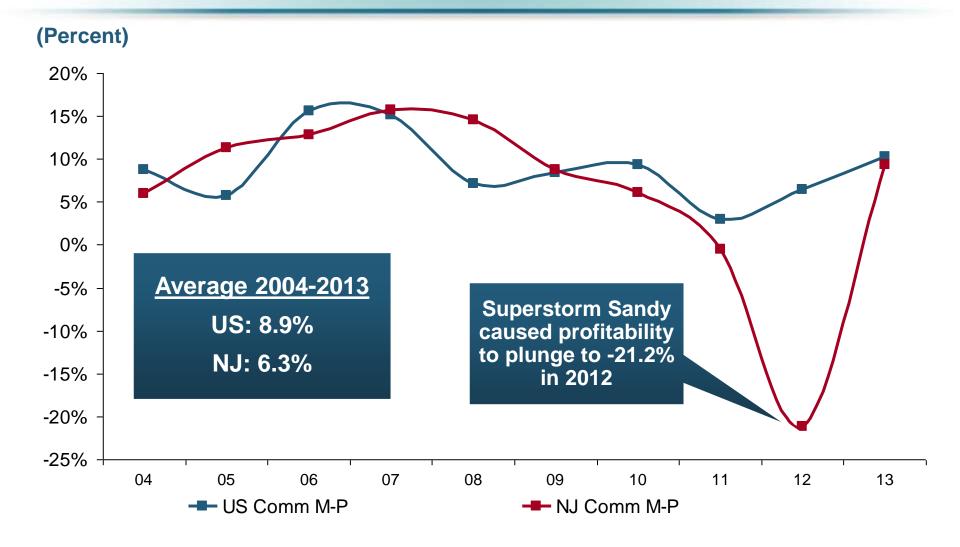
RNW Comm. Auto: NJ vs. U.S., 2004-2013





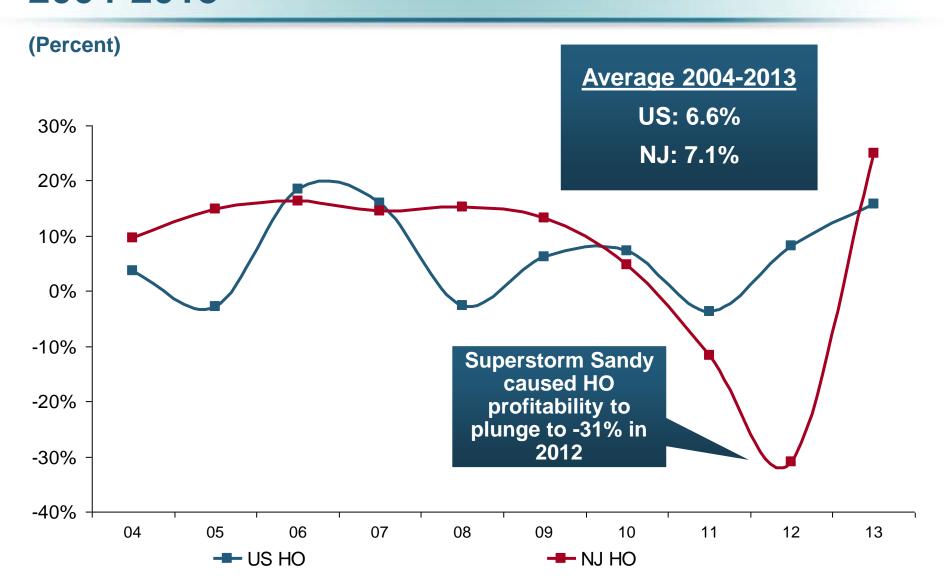
RNW Comm. Multi-Peril: NJ vs. U.S., 2004-2013





RNW Homeowners: NJ vs. U.S., 2004-2013

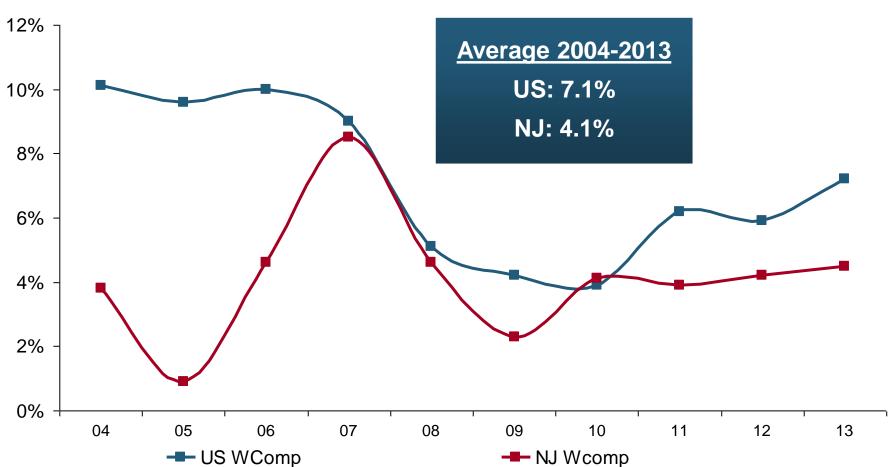




RNW Workers Comp: NJ vs. U.S., 2004-2013

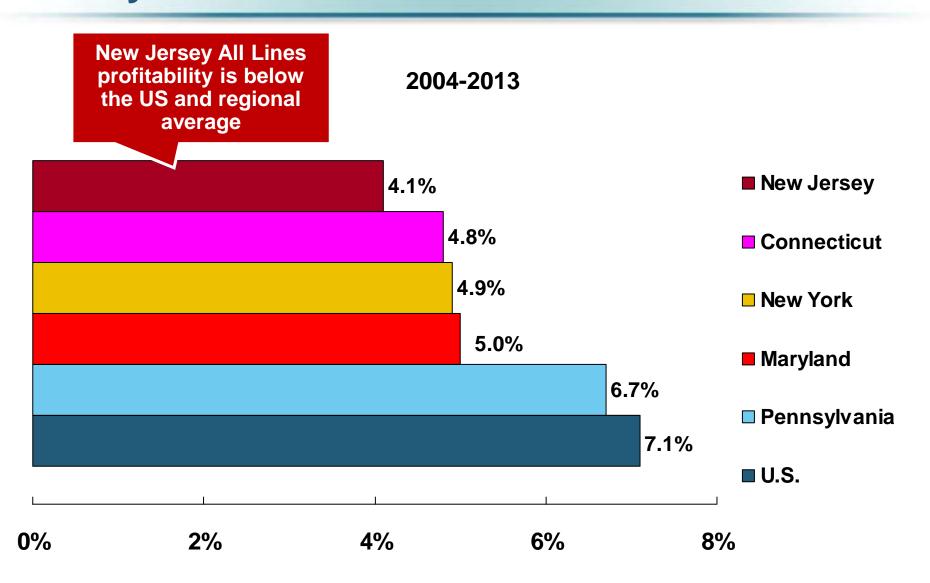






All Lines: 10-Year Average RNW NJ & Nearby States

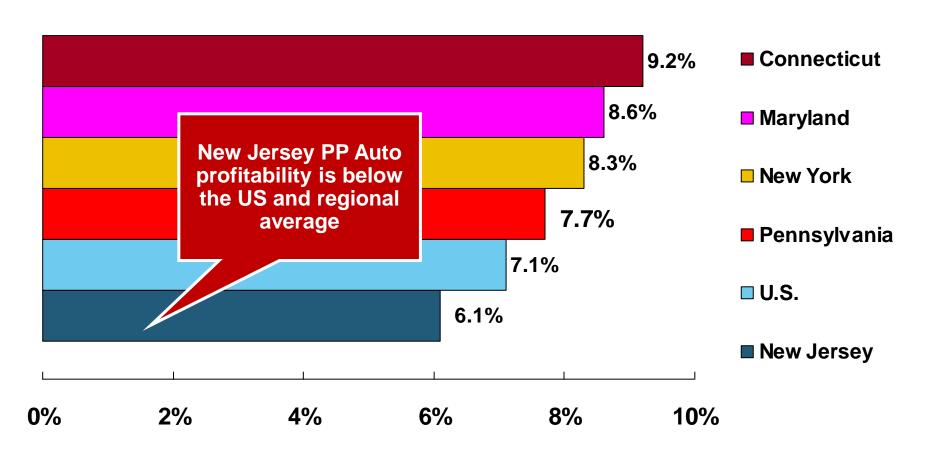




PP Auto: 10-Year Average RNW NJ & Nearby States



2004-2013



Top Ten Most Expensive And Least Expensive States For Automobile Insurance, 2012 (1)



Rank	Most expensive states	Average expenditure	Rank	Least expensive states	Average expenditure
1	New Jersey	\$1,219.93	1	Idaho	\$534.56
2	D.C.	1,154.91	2	South Dakota	556.51
3	New York	1,152.45	3	lowa	561.26
4	Florida	1,127.93	4	North Dakota	576.08
5	Louisiana	1,112.53	5	Maine	582.43
6	Delaware	1,065.37	6	Wisconsin	598.84
7	Michigan	1,048.87	7	North Carolina	611.48
8	Rhode Island	1,034.50	8	Nebraska	616.78
9	Connecticut	986.73	9	Wyoming	618.81
10	Massachusetts	976.65	10	Kansas	632.07

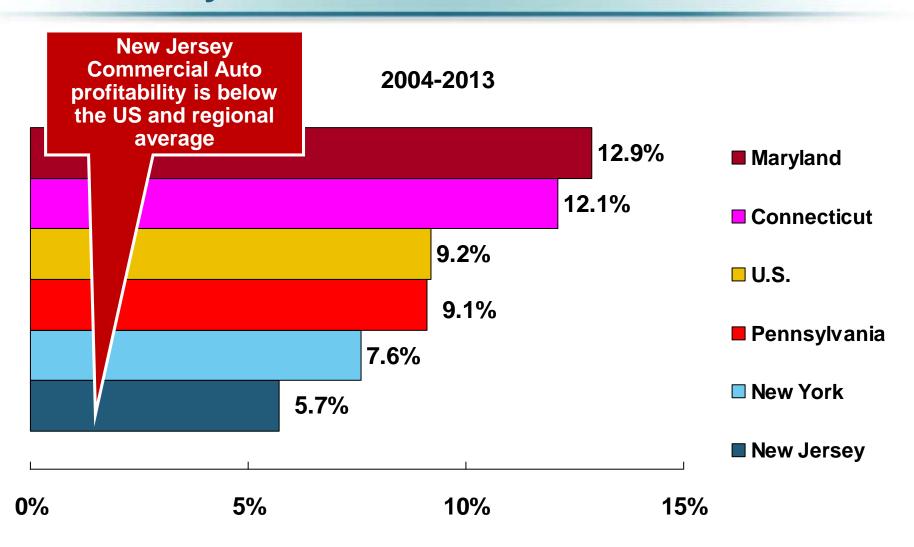
New Jersey ranked 1st as the most expensive state in 2012, with an average expenditure for auto insurance of \$1,219.

(1) Based on average automobile insurance expenditures.

Source: © 2014 National Association of Insurance Commissioners.

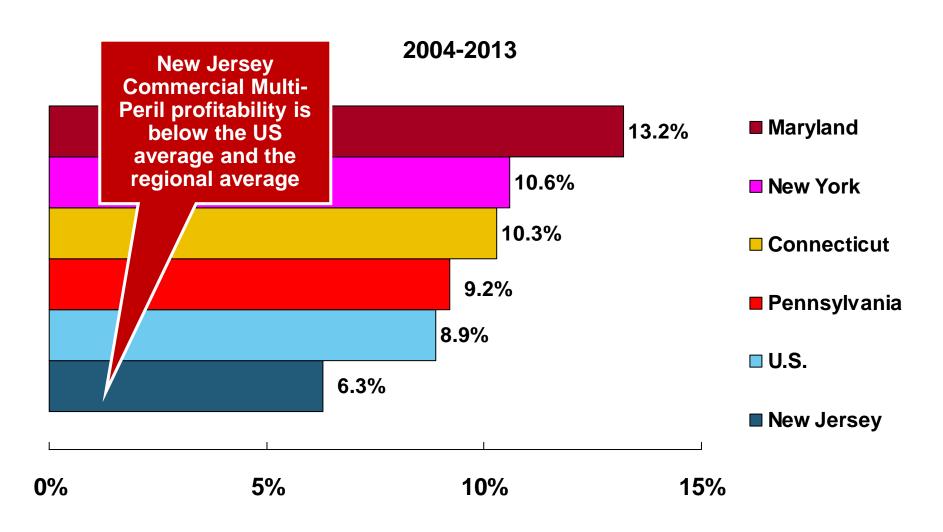
Comm. Auto: 10-Year Average RNW NJ & Nearby States





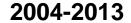
Comm. M-P: 10-Year Average RNW NJ & Nearby States

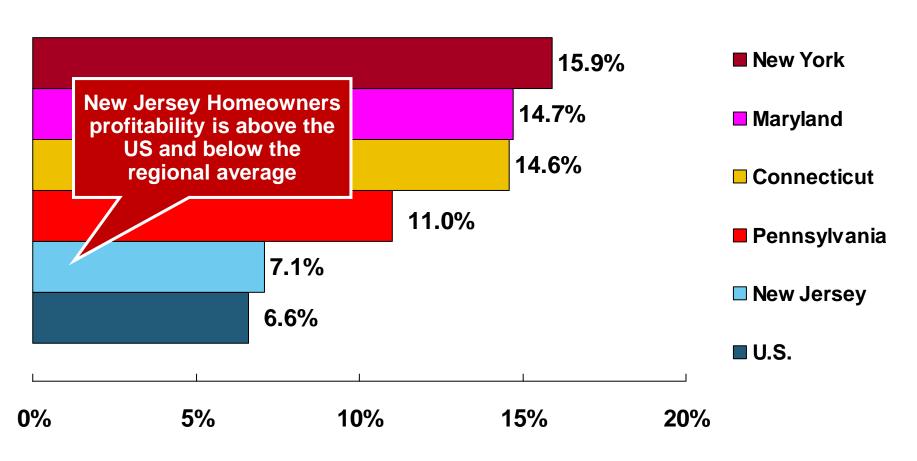




Homeowners: 10-Year Average RNW NJ & Nearby States







Top Ten Most Expensive And Least Expensive States For Homeowners Insurance, 2012 (1)



New Jersey ranked as the 21st most expensive state for homeowners insurance in 2012, with an average expenditure of \$981.

Rank	Most expensive states	HO average premium	Rank	Least expensive states	HO average premium
1	Florida	\$2,084	1	Idaho	\$538
2	Louisiana	1,742	2	Oregon	567
3	Texas	1,661	3	Utah	580
4	Oklahoma	1,501	4	Wisconsin	631
5	Mississippi	1,314	5	Washington	648
6	Alabama	1,248	6	Nevada	674
7	Rhode Island	1,233	7	Delaware	678
8	Kansas	1,213	8	Arizona	691
9	Connecticut	1,160	9	Ohio	721
10	New York	1,158	10	Maine	741

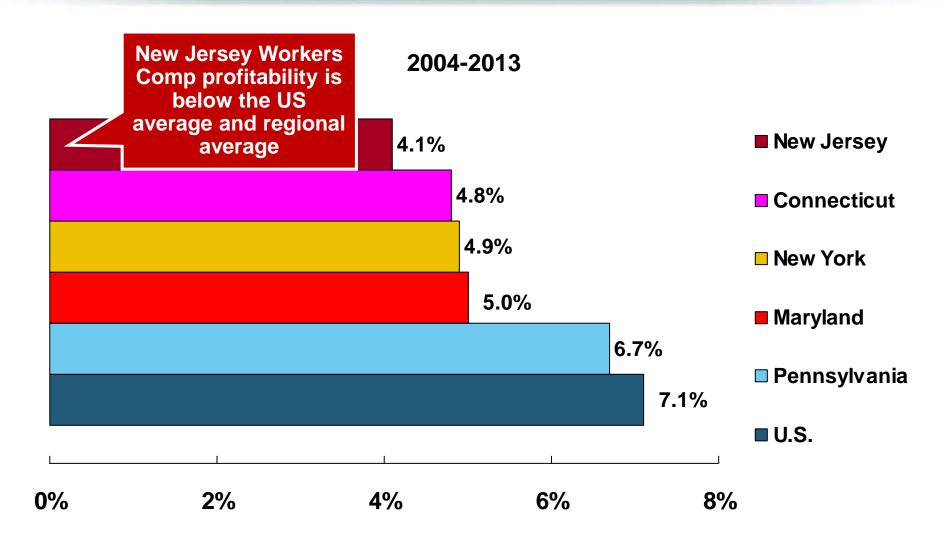
- (1) Includes policies written by Citizens Property Insurance Corp. (Florida) and Citizens Property Insurance Corp. (Louisiana), Alabama Insurance Underwriting Association, Mississippi Windstorm Underwriting Association, North Carolina Joint Underwriting Association and South Carolina Wind and Hail Underwriting Association. Other southeastern states have wind pools in operation and their data may not be included in this chart. Based on the HO-3 homeowner package policy for owner-occupied dwellings, 1 to 4 family units. Provides "all risks" coverage (except those specifically excluded in the policy) on buildings and broad named-peril coverage on personal property, and is the most common package written.
- (2) The Texas Department of Insurance developed home insurance policy forms that are similar but not identical to the standard forms. In addition, due to the Texas Windstorm Association (which writes wind-only policies) classifying HO-1, 2 and 5 premiums as HO-3, the average premium for homeowners insurance is artificially high.

Note: Average premium=Premiums/exposure per house years. A house year is equal to 365 days of insured coverage for a single dwelling. The NAIC does not rank state average expenditures and does not endorse any conclusions drawn from this data.

Source: ©2014 National Association of Insurance Commissioners (NAIC). Reprinted with permission. Further reprint or distribution strictly prohibited without written permission of NAIC.

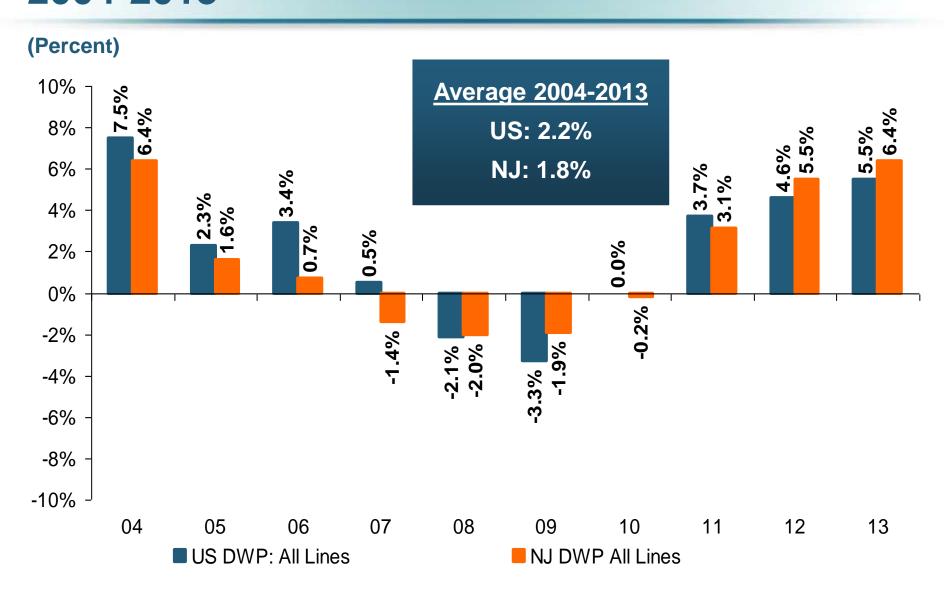
Workers Comp: 10-Year Average RNW NJ & Nearby States





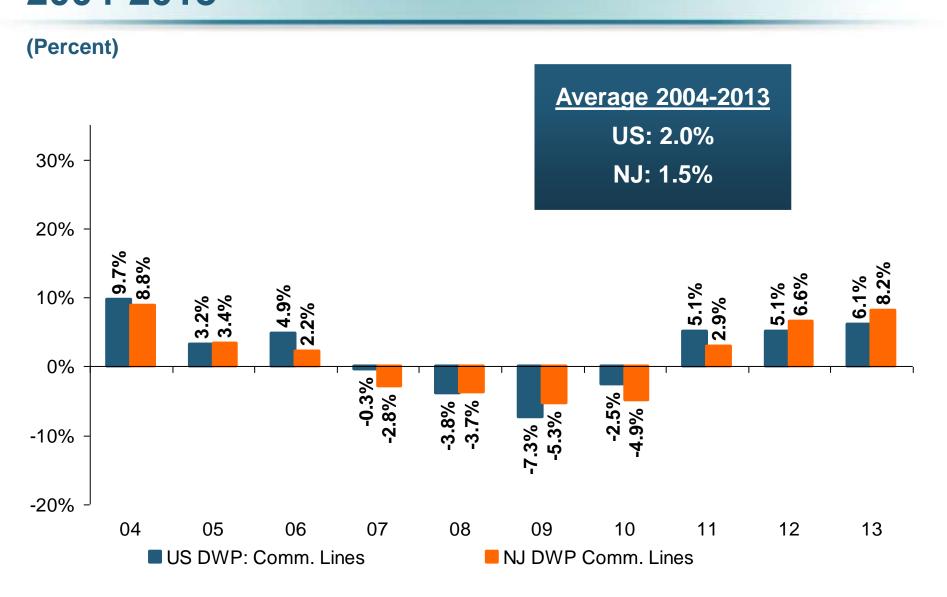
All Lines DWP Growth: NJ vs. U.S., 2004-2013





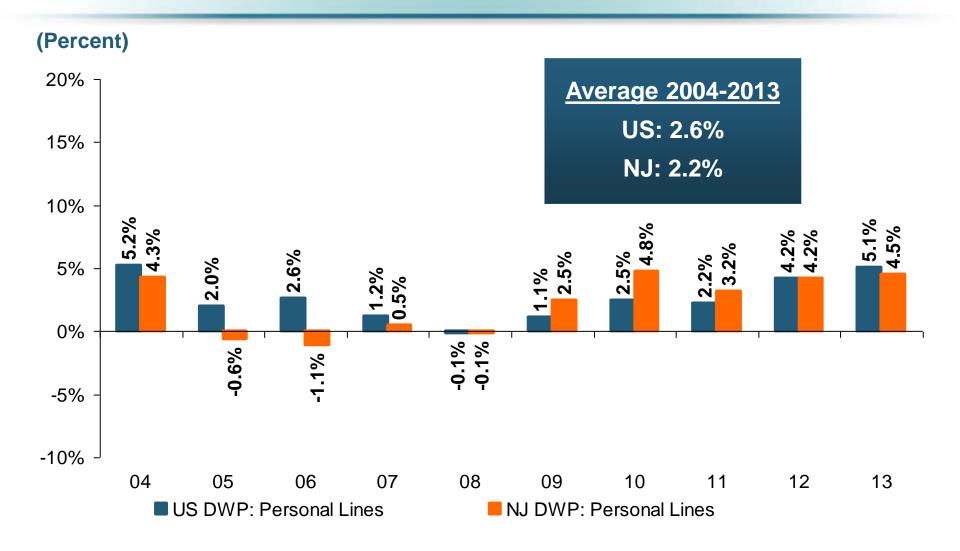
Comm. Lines DWP Growth: NJ vs. U.S., 2004-2013





Personal Lines DWP Growth: NJ vs. U.S., 2004-2013





Source: SNL Financial.

Private Passenger Auto DWP Growth: NJ vs. U.S., 2004-2013

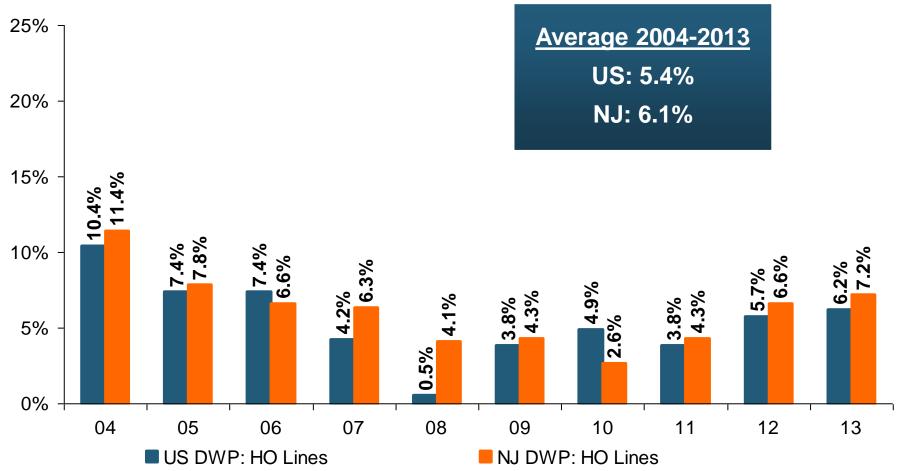




Homeowner's MP DWP Growth: NJ vs. U.S., 2004-2013







Source: SNL Financial.



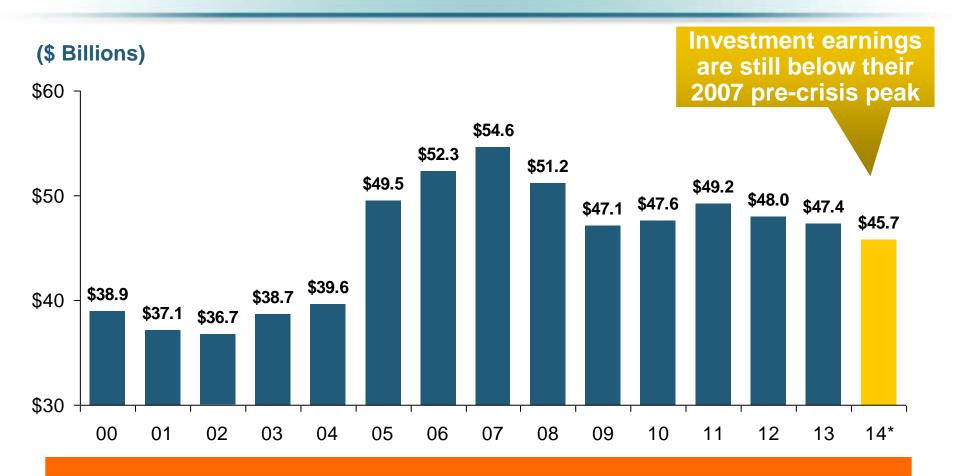
INVESTMENTS: THE NEW REALITY

Investment Performance is a Key Driver of Profitability

Depressed Yields Will Necessarily Influence Underwriting & Pricing

Property/Casualty Insurance Industry Investment Income: 2000–2014¹





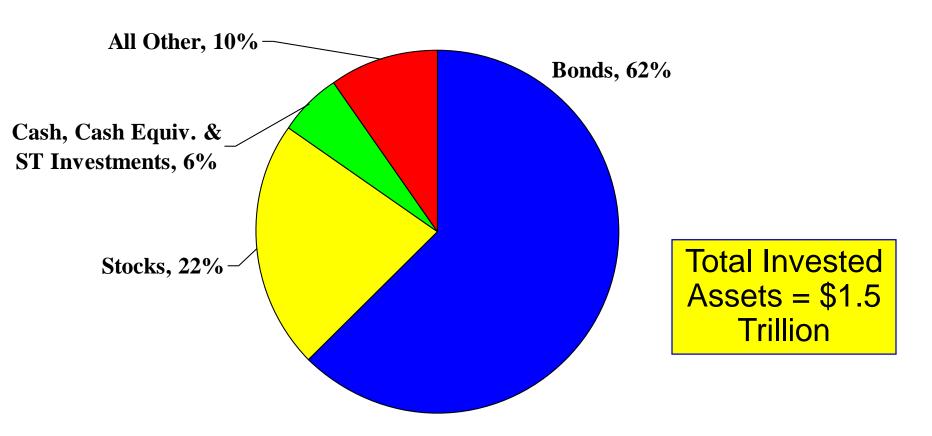
Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014.

¹ Investment gains consist primarily of interest and stock dividends. Sources: ISO; Insurance Information Institute.

Distribution of Invested Assets: P/C Insurance Industry, 2013



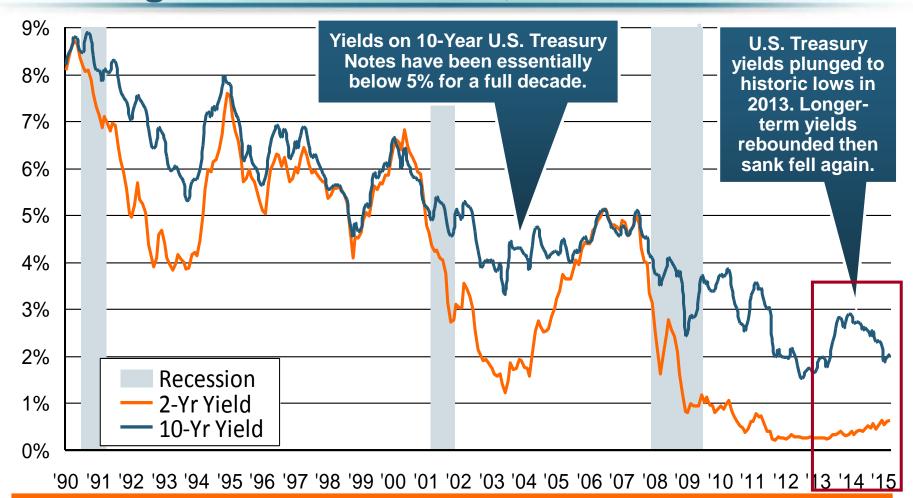
\$ Billions



Source: Insurance Information Institute Fact Book 2015, A.M. Best.

U.S. Treasury Security Yields: A Long Downward Trend, 1990–2015*





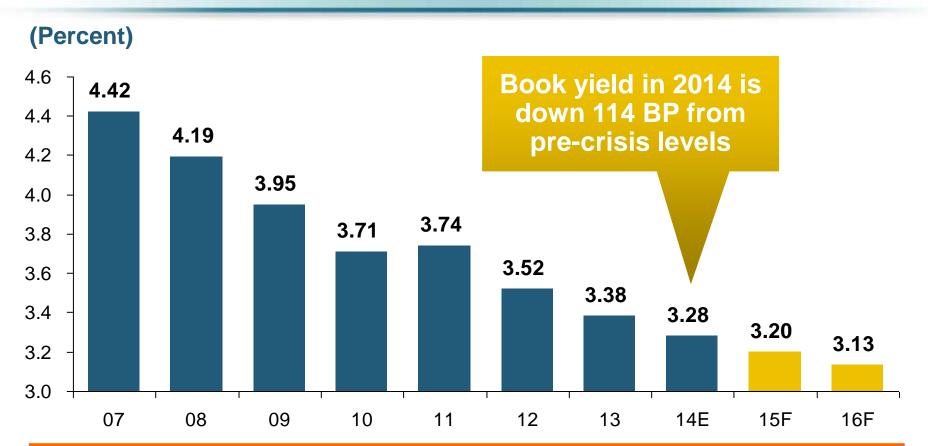
Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

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

^{*}Monthly, constant maturity, nominal rates, through Mar. 2015.

Book Yield on Property/Casualty Insurance Invested Assets, 2007–2016F



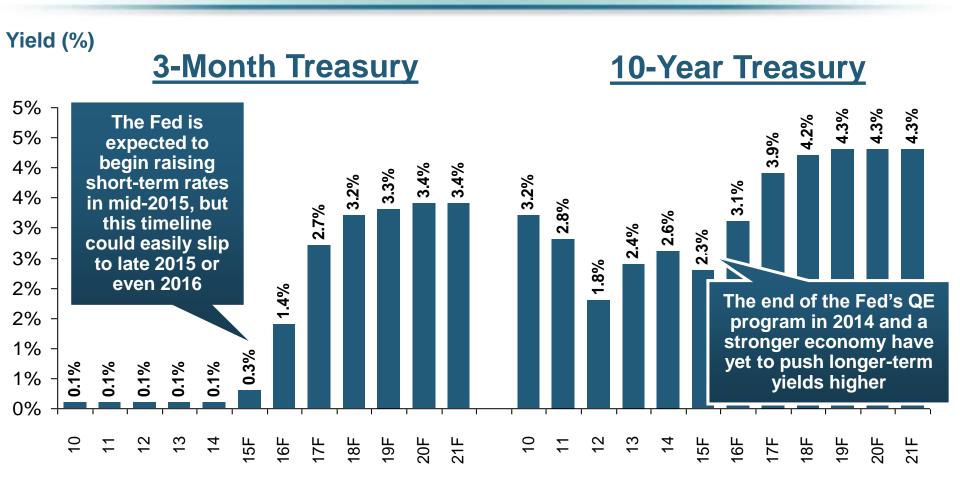


The yield on invested assets continues to decline as returns on maturing bonds generally still exceed new money yields. The end of the Fed's QE program in Oct. 2014 should allow some increase in longer maturities while short term interest rate increases are unlikely until mid-to-late 2015

Sources: Conning.

Interest Rate Forecasts: 2015 - 2021

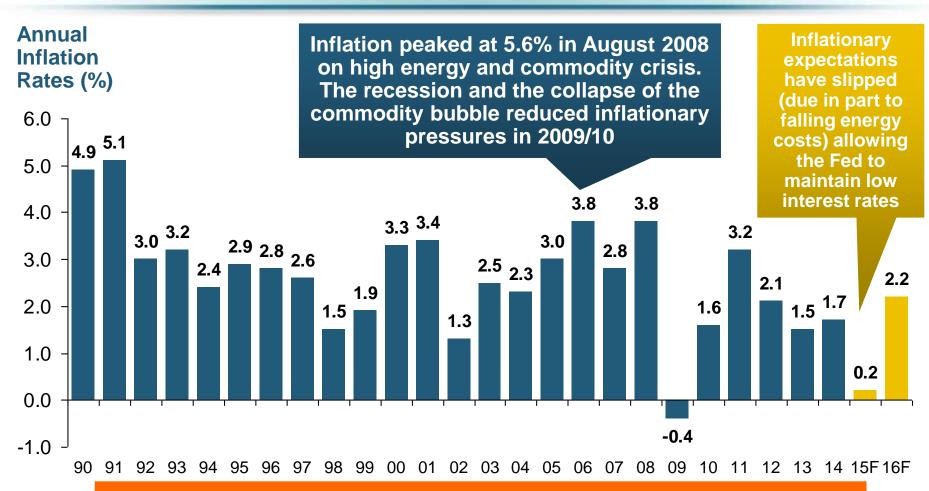




A Full Normalization of Interest Rates Is Unlikely Until 2018 or Later, More than a Decade After the Onset of the Financial Crisis

Annual Inflation Rates, (CPI-U, %), 1990–2016F



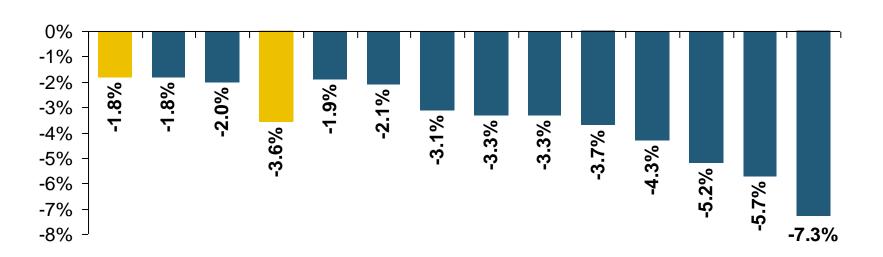


Slack in the U.S. economy and falling energy prices suggests that inflationary pressures should remain subdued for an extended period of times

Reduction in Combined Ratio Necessary to Offset 1% Decline in Investment Yield to Maintain Constant ROE, by Line*







Lower Investment Earnings Place a Greater Burden on Underwriting and Pricing Discipline

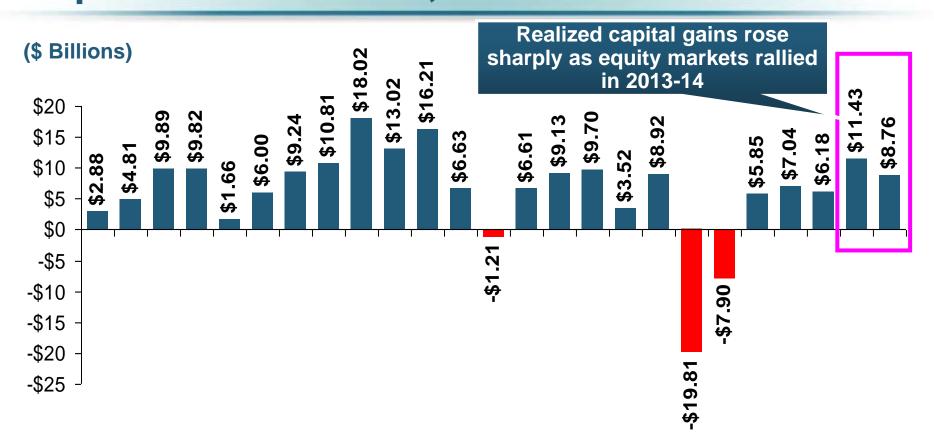
Source: A.M. Best; Insurance Information Institute.

^{*}Based on 2008 Invested Assets and Earned Premiums

^{**}US domestic reinsurance only

P/C Insurer Net Realized Capital Gains/Losses, 1990-2014:Q3





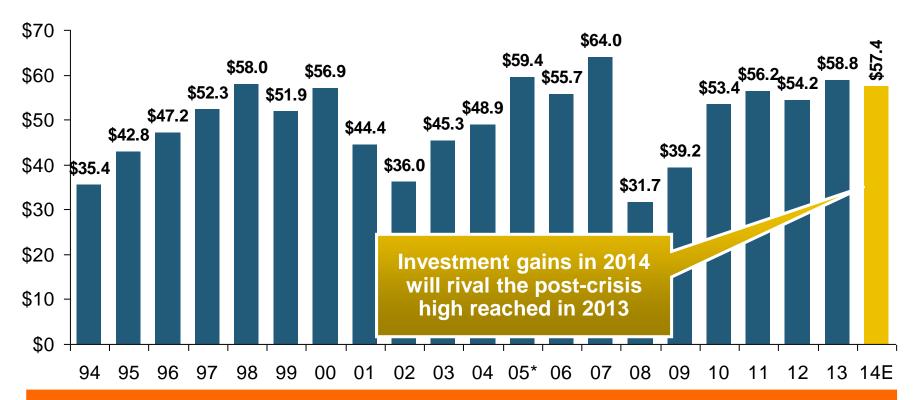
90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 1314:Q3

Insurers Posted Net Realized Capital Gains in 2010 - 2014 Following Two Years of Realized Losses During the Financial Crisis. Realized Capital Losses Were a Primary Cause of 2008/2009's Large Drop in Profits and ROE

Property/Casualty Insurance Industry Investment Gain: 1994–2014E¹



(\$ Billions)



Total Investment Gains Were Flat in 2014 as Low Interest Rates Pressured Investment Income but Realized Capital Gains Remained Robust

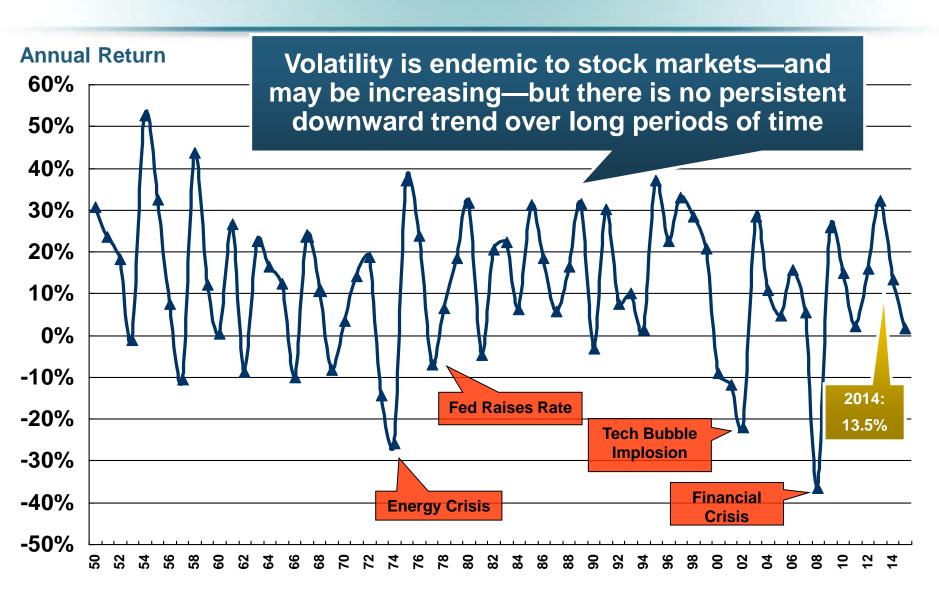
Sources: ISO; Insurance Information Institute.

¹ Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.

^{* 2005} figure includes special one-time dividend of \$3.2B;

S&P 500 Index Returns, 1950 – 2015*



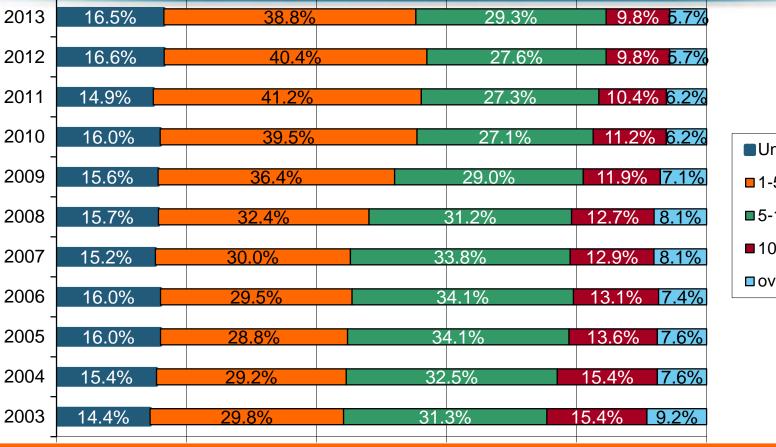


^{*}Through April 9, 2015.

Source: NYU Stern School of Business: http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html Ins. Info. Inst.

Distribution of Bond Maturities, P/C Insurance Industry, 2003-2013





Under 1 year1-5 years5-10 years10-20 yearsover 20 years

The main shift over these years has been from bonds with longer maturities to bonds with shorter maturities. The industry first trimmed its holdings of over-10-year bonds (from 24.6% in 2003 to 15.5% in 2012) and then trimmed bonds in the 5-10-year category (from 31.3% in 2003 to 27.6% in 2012). Falling average maturity of the P/C industry's bond portfolio is contributing to a drop in investment income along with lower yields.

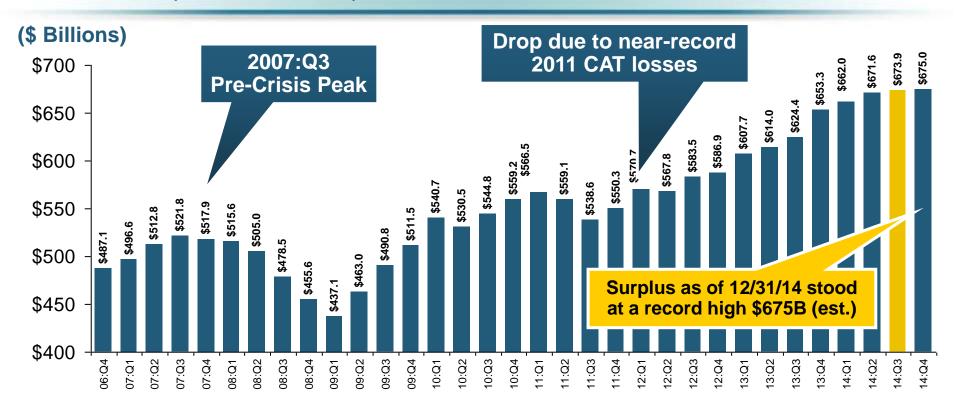


CAPITAL/CAPACITY

Capital Accumulation Has Multiple Impacts

Policyholder Surplus, 2006:Q4–2014:Q4E





The industry now has \$1 of surplus for every \$0.73 of NPW, close to 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.

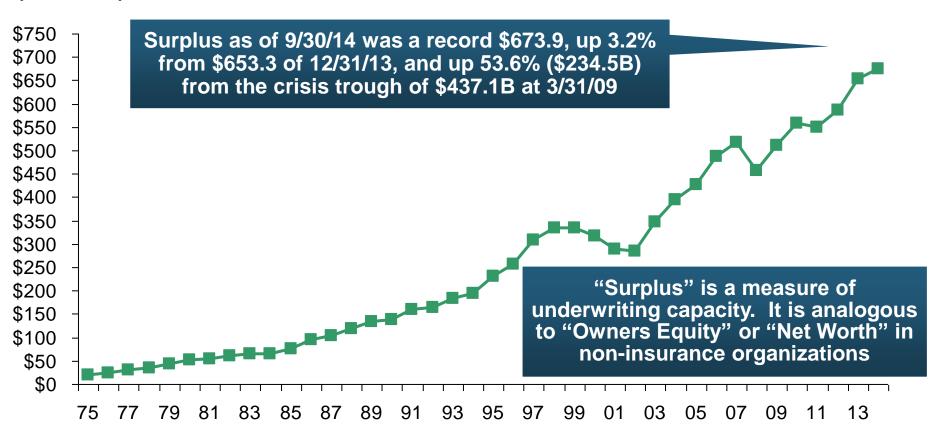
The P/C insurance industry entered 2015 in very strong financial condition.

Sources: ISO, A.M .Best.

US Policyholder Surplus: 1975–2014*







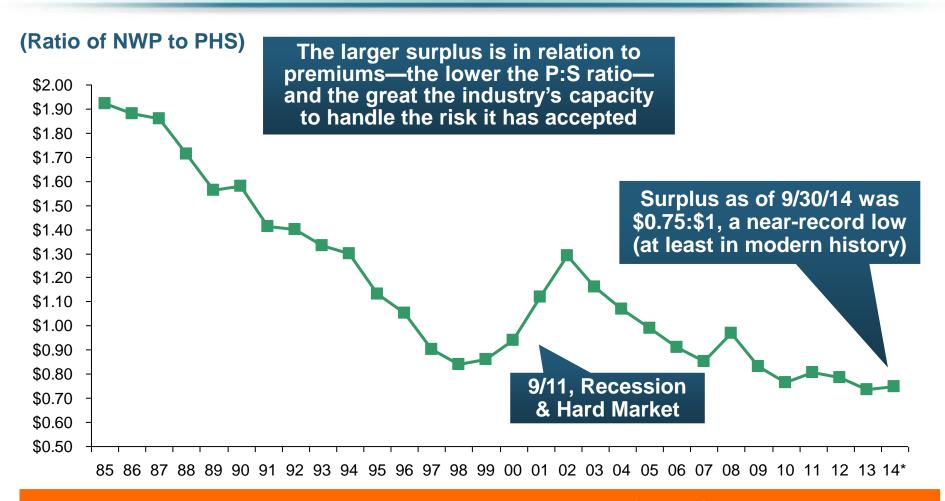
The Premium-to-Surplus Ratio Stood at \$0.73:\$1 as of 9/30/14, a Near Record Low (at Least in Recent History)

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

^{*} As of 9/30/14.

Premium-to-Surplus Ratio: 1985–2014*





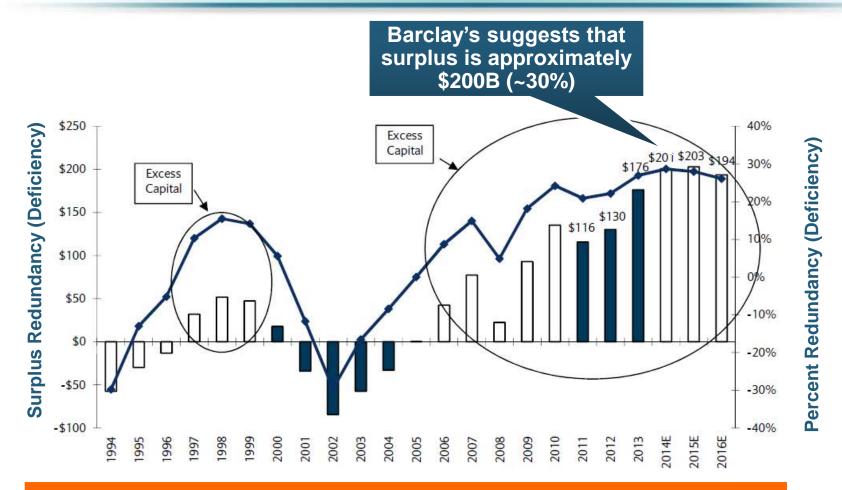
The Premium-to-Surplus Ratio Stood at \$0.75:\$1 as of 9/30/14, a Record Low (at Least in Recent History)

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

^{*} As of 9/30/14.

US P/C Insurance Industry Excess Capital Position: 1994–2016E



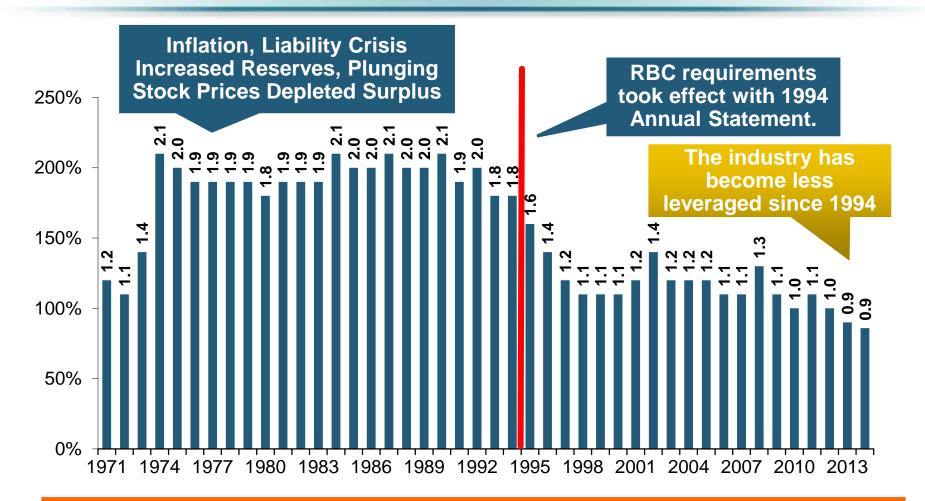


The Industry's Strong Capital Position Suggests Insurers Are in a Good Position to Increase Risk Appetite, Repurchase Shares and Pursue Acquisitions

Source: Barclays Research estimates.

P/C Industry: Loss Reserve-to-Surplus Ratio, 1971-2014:Q3





The Property/Casualty Industry Adjusted Its Risk Portfolio in Response to Risk-Based Capital Requirements Implemented in 1994.



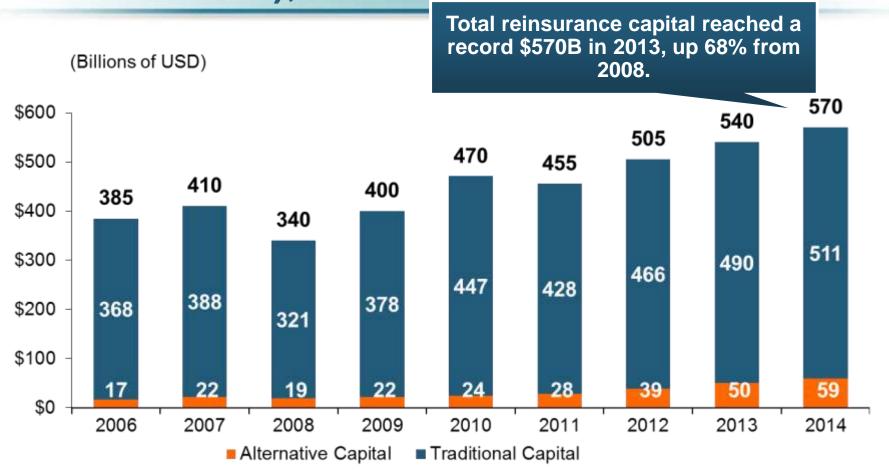
Alternative Capital

New Investors Continue to Change the Reinsurance Landscape

First I.I.I. White Paper on Issue Was Released in March 2015

Global Reinsurance Capital (Traditional and Alternative), 2006 - 2014





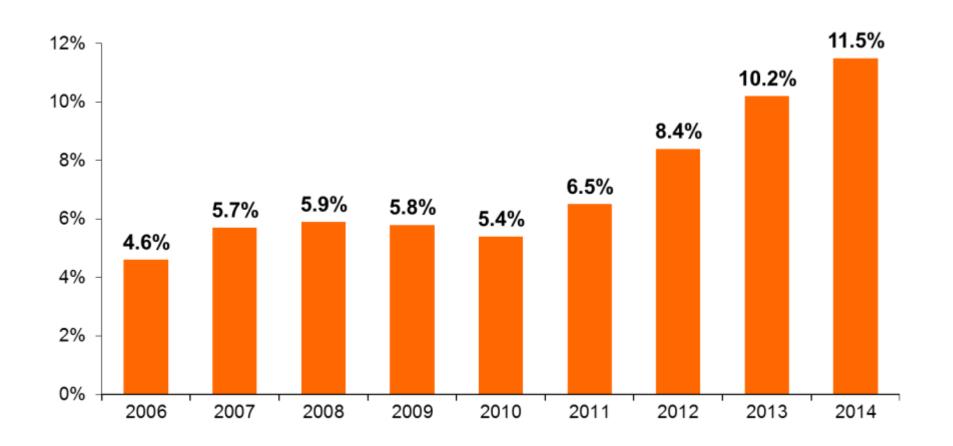
But alternative capacity has grown 210% since 2008, to \$50B. It has more than doubled in the past three years.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics: Insurance Information Institute.

Alternative Capital as a Percentage of Traditional Global Reinsurance Capital





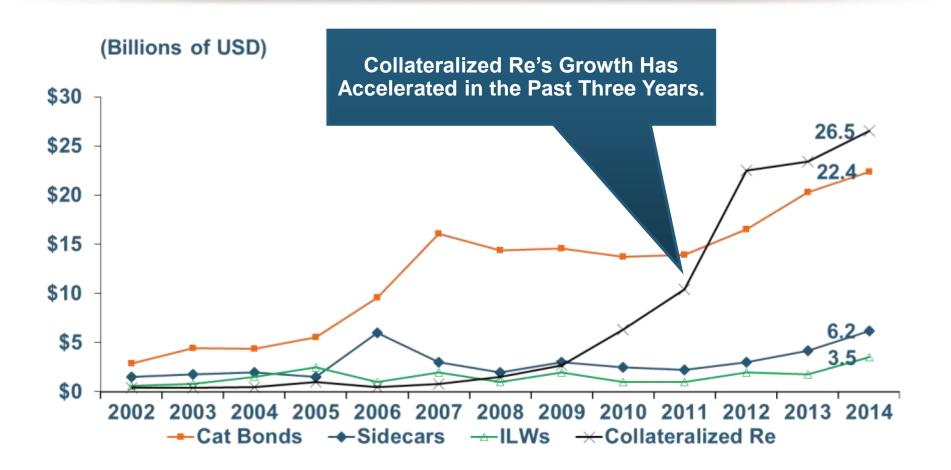
Alternative Capital's Share of Global Reinsurance Capital Has More Than Doubled Since 2010.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

Growth of Alternative Capital Structures, 2002 - 2014





Collateralized Reinsurance and Catastrophe Bonds Currently Dominate the Alternative Capital Market.

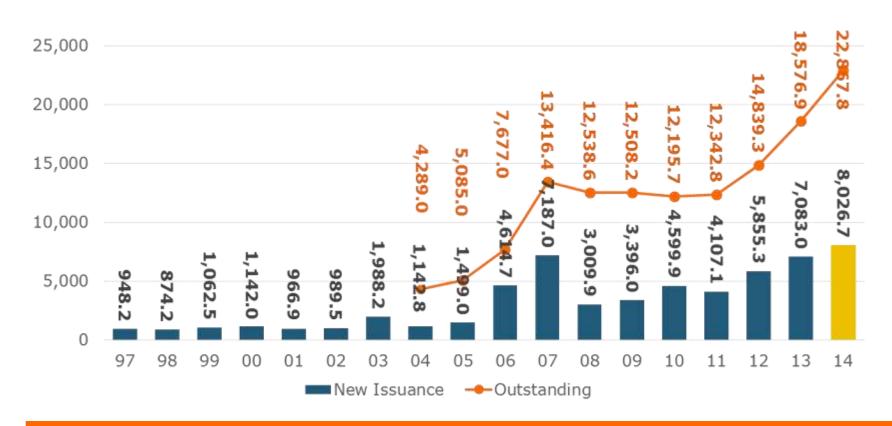
2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

Catastrophe Bond Issuance and Outstanding: 1997-2014



Risk Capital Amount (\$ Millions)



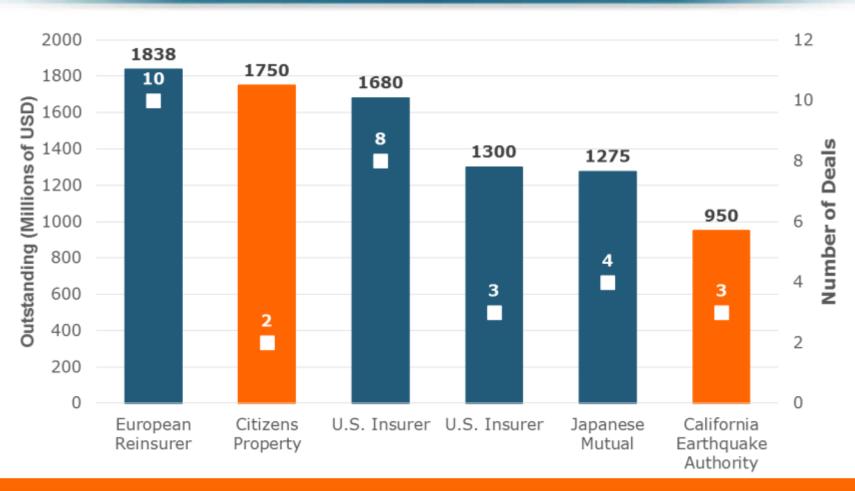
2014 Has Seen the Largest Cat Bond Ever - \$1.5 Billion (Florida Citizens).

Bond Issuance Set a Record.

Source: Guy Carpenter.

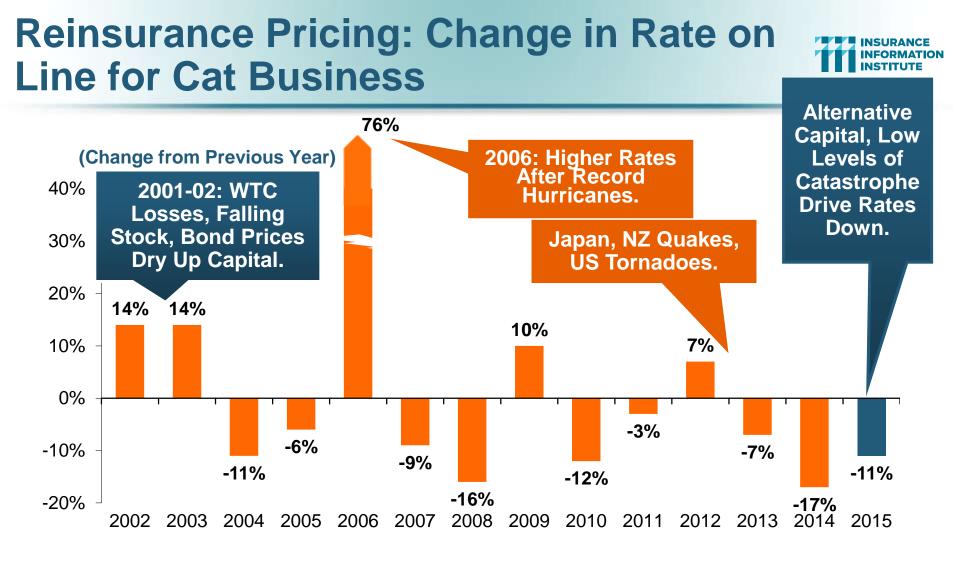
Largest Sponsors of ILS, Year-End 2014





Two of the Largest ILS Issuers Are Government-Sponsored Insurers. Nine Government-Related Insurers Have \$4.6 Billion in Outstanding Securities.

Source: Artemis.bm; Insurance Information Institute.

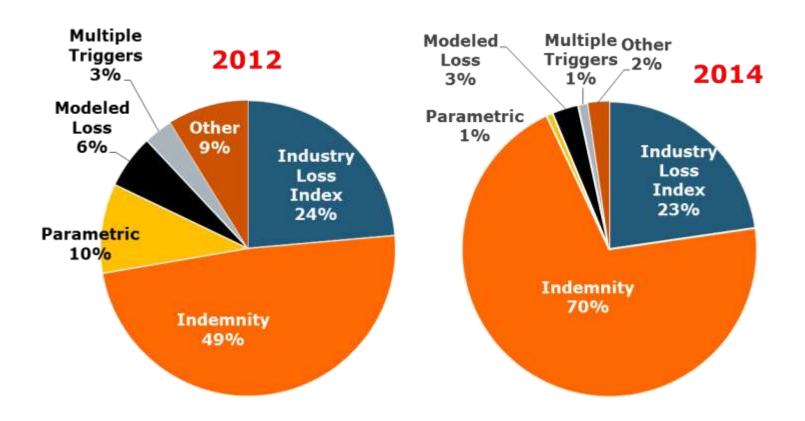


Catastrophe Prices Fell 11 Percent on January 1 Renewals, Driven by Emergence of New Capital, Mild Catastrophe Losses.

2014 reflects change through June 30 from prior year end. 2015 is for January 1 renewals.. Source: Guy Carpenter; Insurance Information Institute.

ILS Issuance by Trigger





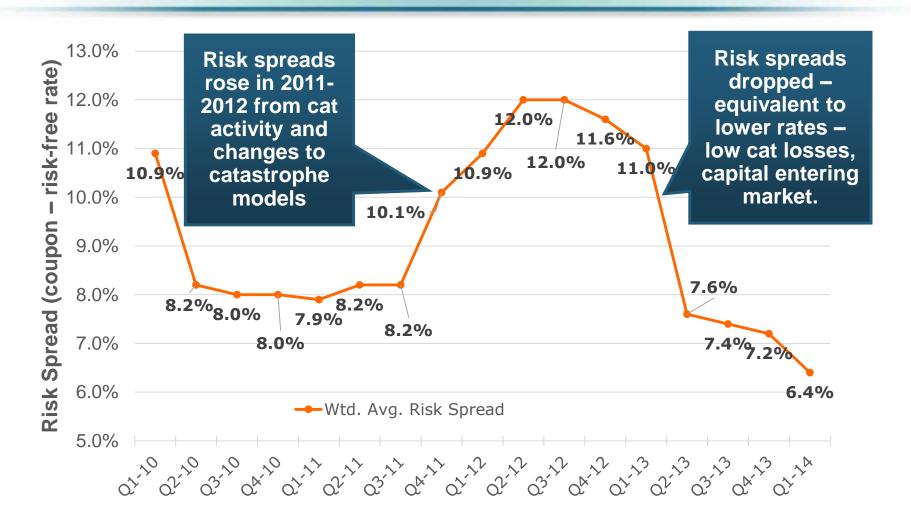
Terms Are Shifting Away From 'Objective' Triggers (Favored by Investors)

Toward Indemnity Trigger (Favored by Insurers).

Source: Artemis.bm; Insurance Information Institute.

U.S. Wind-Exposed Risk Premium* 2010:Q1 to 2014: Q1





^{*} Trailing 12-month average

SOURCE: Willis Capital Markets, Insurance Information Institute.

Questions Arising from Influence of Alternative Capital



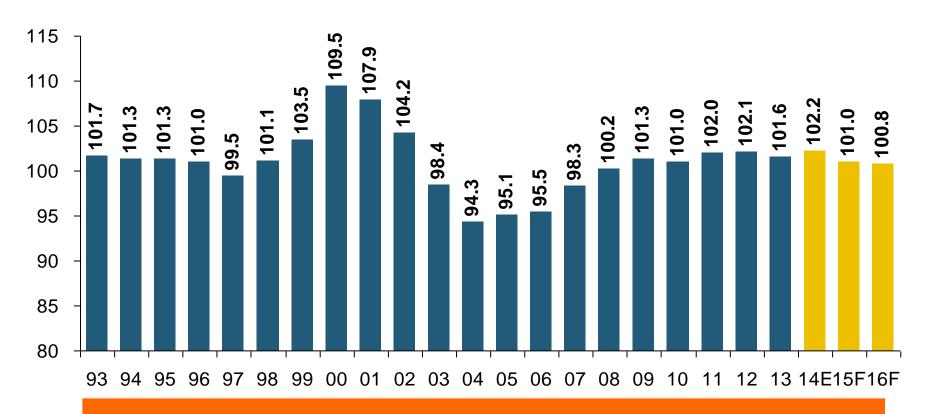
- What Will Happen When Investors Face Large-Scale Losses?
- What Happens When Interest Rates Rise?
- Does ILS Have a Higher Propensity to Litigate?
- How Much Lower Will Risk Premiums Shrink/ROLs Fall?
- Will There Be Spillover Into Casualty Reinsurance?
- **Will Alternative Capital Drive Consolidation?**



Performance by Segment

Private Passenger Auto Combined Ratio: 1993–2016F

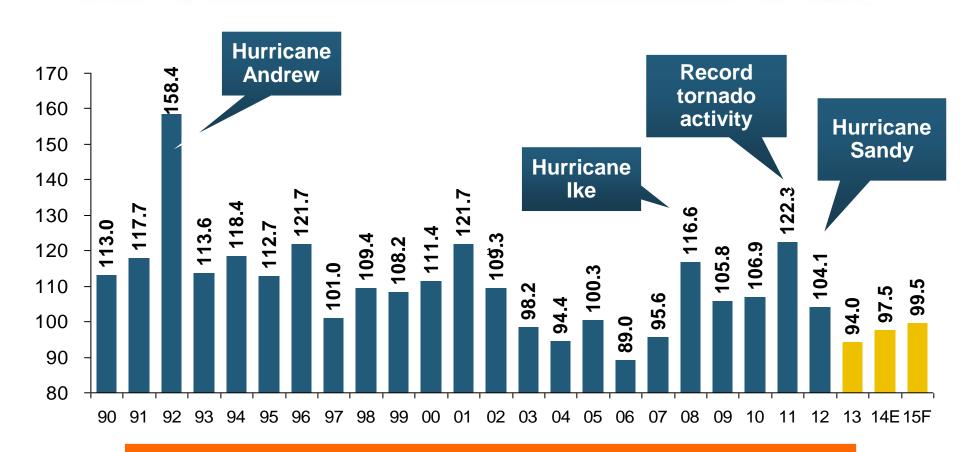




Private Passenger Auto Accounts for 37% of Industry Premiums and Remains the Profit Juggernaut of the P/C Insurance Industry

Homeowners Insurance Combined Ratio: 1990–2015F

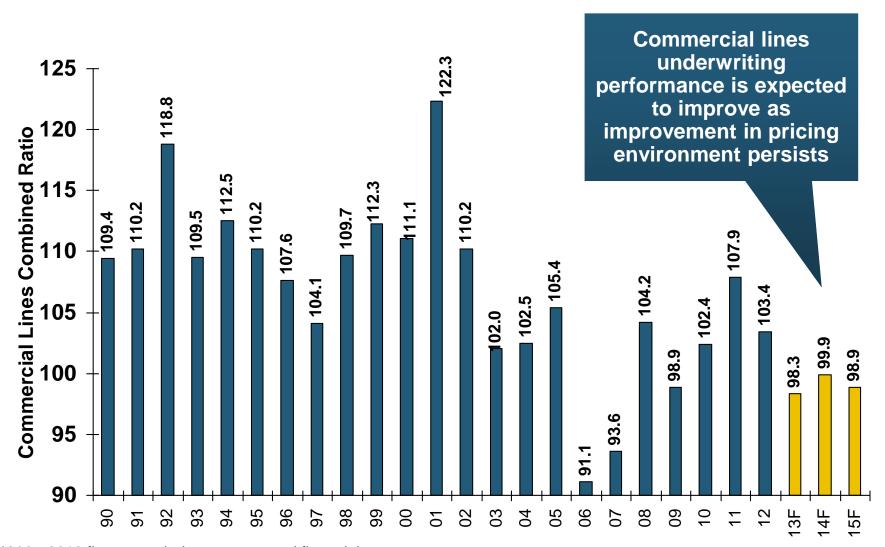




Homeowners Performance in 2011/12 Impacted by Large Cat Losses. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity

Commercial Lines Combined Ratio, 1990-2015F*

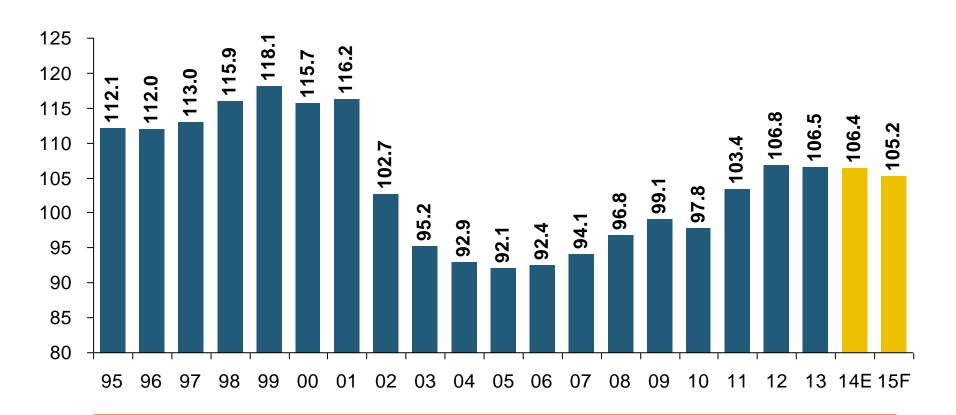




*2007-2012 figures exclude mortgage and financial guaranty segments. Source: A.M. Best (1990-2014F); Conning (2015F) Insurance Information Institute.

Commercial Auto Combined Ratio: 1993–2015F

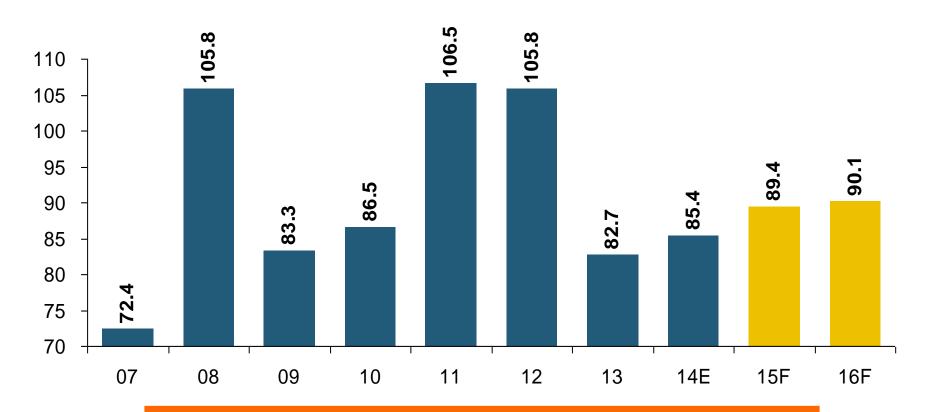




Commercial Auto is Expected to Improve Only Slowly as Rate Gains Barely Offset Adverse Frequency and Severity Trends

Commercial Property Combined Ratio: 2007–2016F

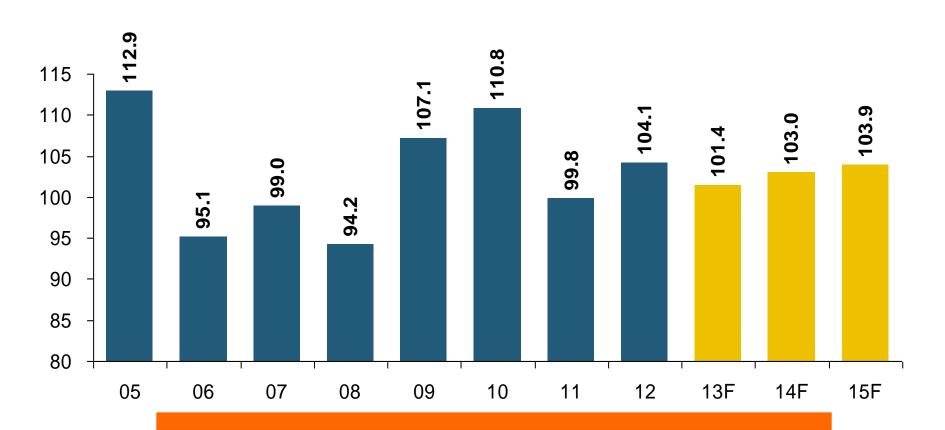




Commercial Property Underwriting Performance
Has Been Volatile in Recent Years, Largely Due to
Fluctuations in CAT Activity

General Liability Combined Ratio: 2005–2015F

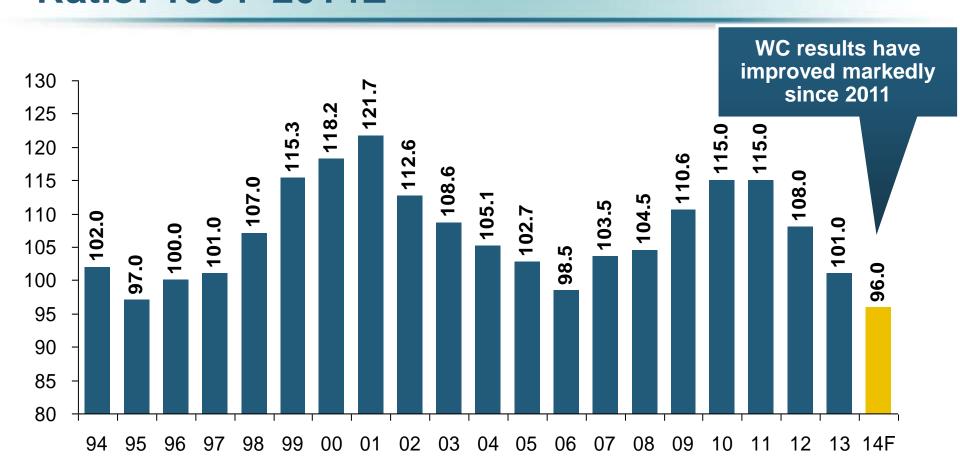




Commercial General Liability Underwriting Performance Has Been Volatile in Recent Years

Workers Compensation Combined Ratio: 1994–2014E

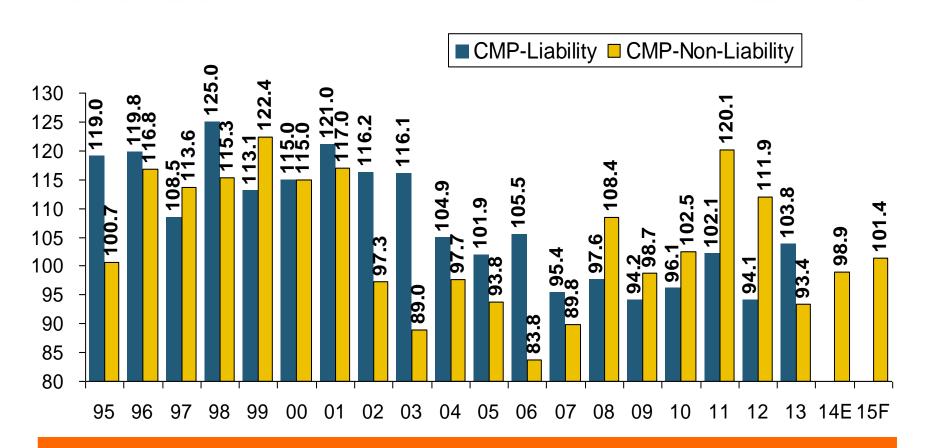




Workers Comp Results Began to Improve in 2012. Underwriting Results Deteriorated Markedly from 2007-2010/11 and Were the Worst They Had Been in a Decade.

Commercial Multi-Peril Combined Ratio: 1995–2015F



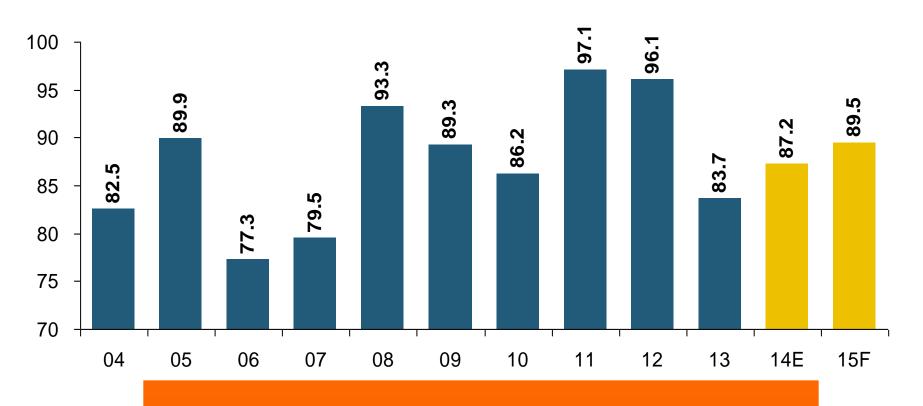


Commercial Multi-Peril Underwriting Performance is Expected to Improve in 2013 Assuming Normal Catastrophe Loss Activity

^{*2014}E-2015F figures are Conning figures for the combined liability and non-liability components.. Sources: A.M. Best; Conning; Insurance Information Institute.

Inland Marine Combined Ratio: 2004–2015F





Inland Marine Underwriting Performance Has Been Consistently Strong for Many Years



Growth Analysis by State and Business Segment

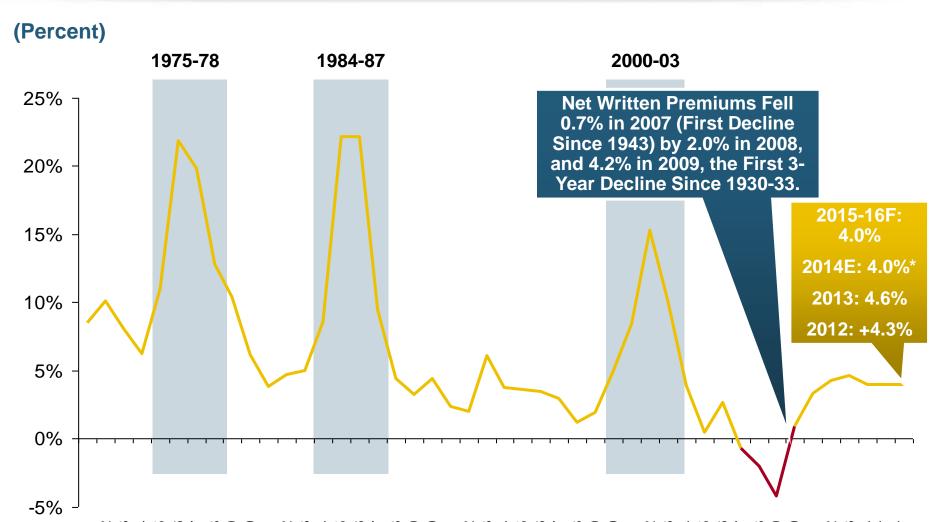
Post-Crisis Paradox?

Premium Growth Rates Vary

Tremendously by State

Net Premium Growth: Annual Change, 1971—2016F





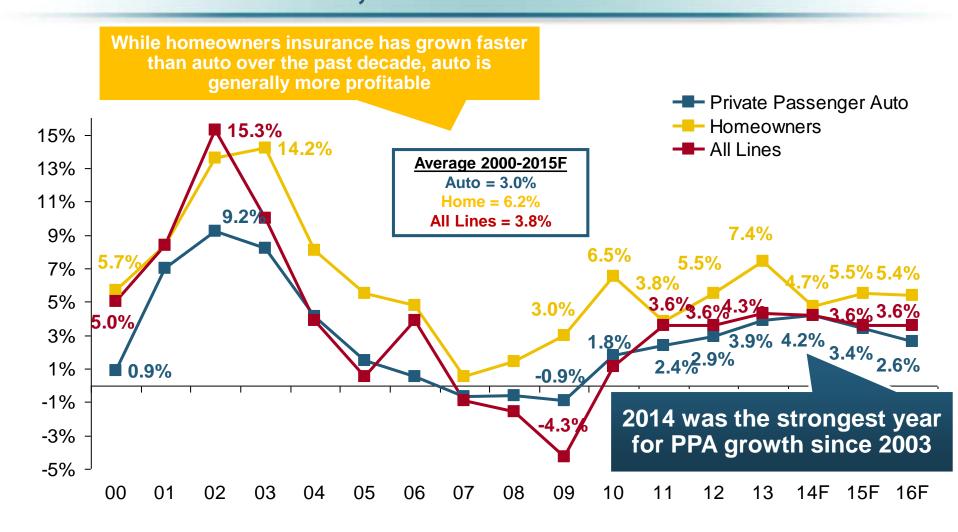
Shaded areas denote "hard market" periods

Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute.

^{*}Actual figure based on data through Q3 2014.

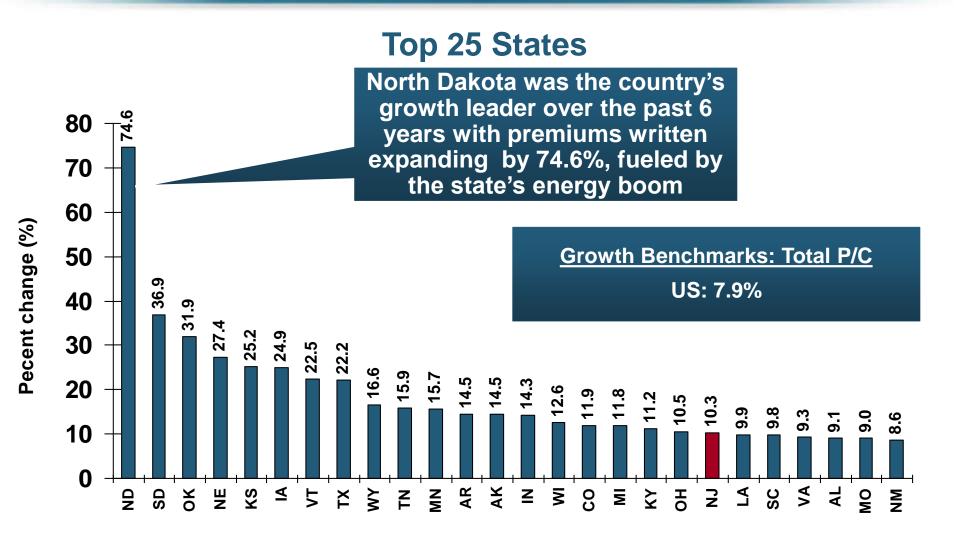
Auto & Home vs. All Lines, Net Written Premium Growth, 2000–2016F





Direct Premiums Written: Total P/C Percent Change by State, 2007-2013

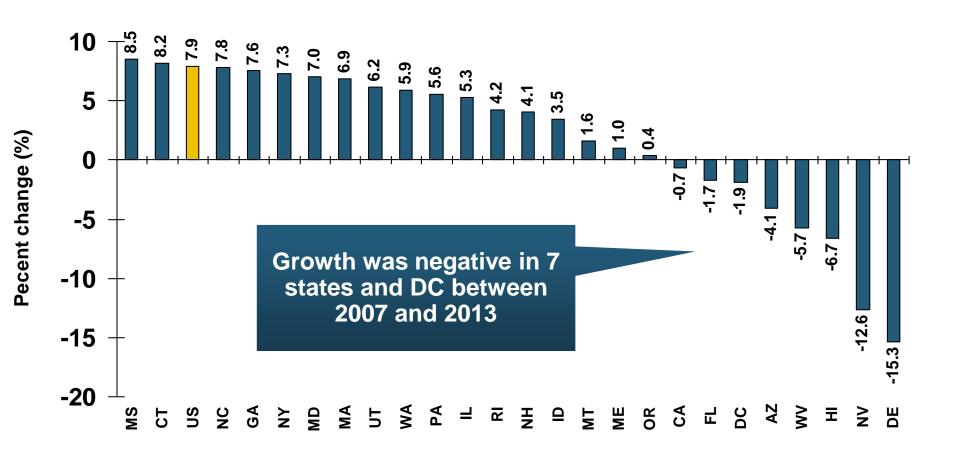




Direct Premiums Written: Total P/C Percent Change by State, 2007-2013

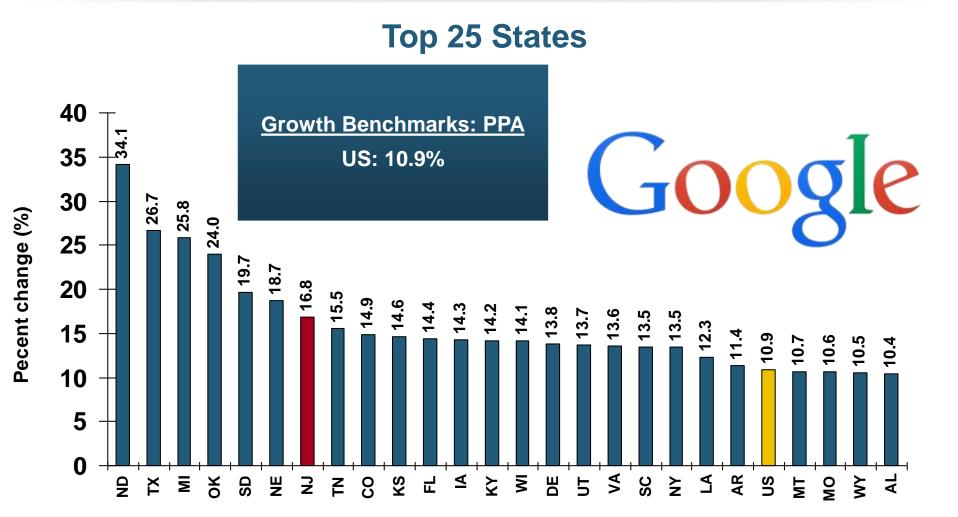


Bottom 25 States



Direct Premiums Written: PP Auto Percent Change by State, 2007-2013

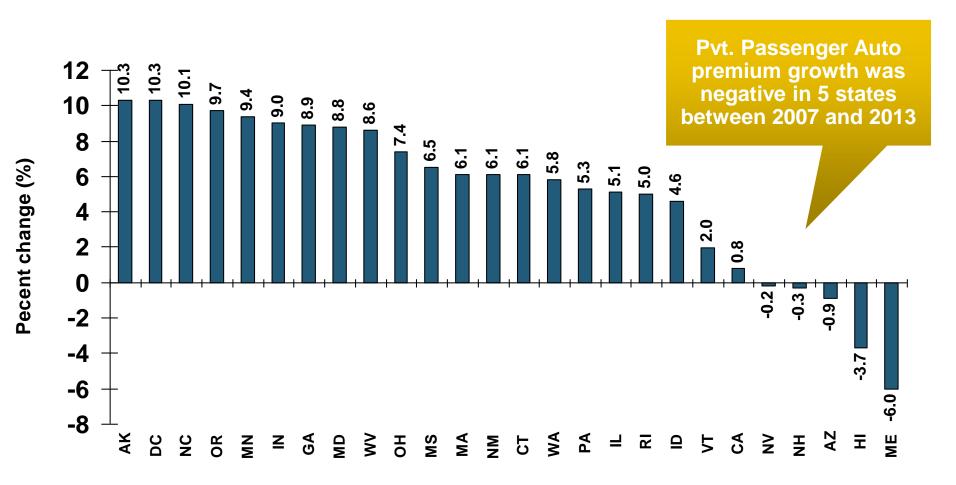




Direct Premiums Written: PP Auto Percent Change by State, 2007-2013

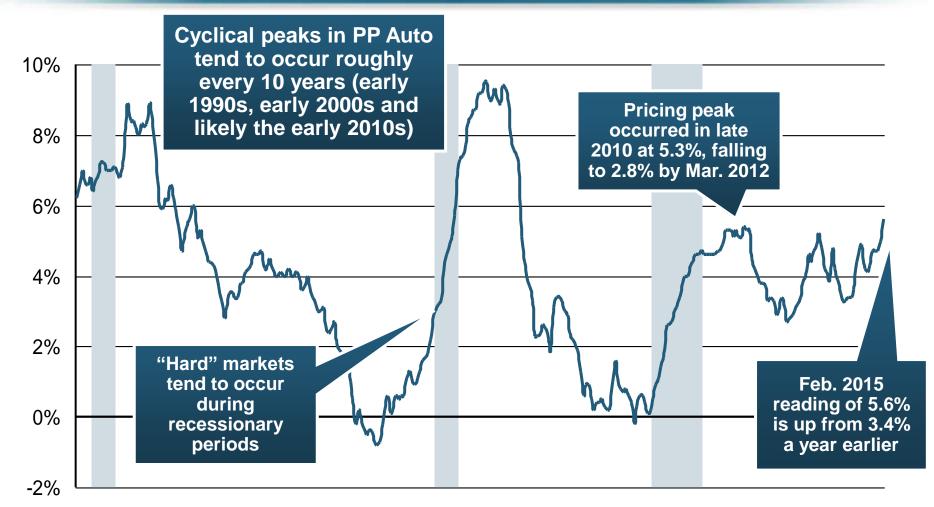


Bottom 25 States



Monthly Change in Auto Insurance Prices, 1991–2015*





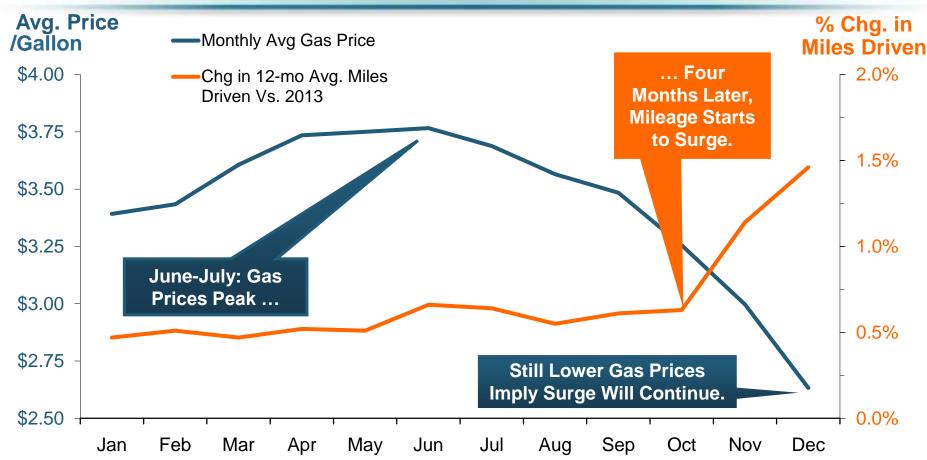
'90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.

^{*}Percentage change from same month in prior year; through February 2015; seasonally adjusted Note: Recessions indicated by gray shaded columns.

Do Changes in Gas Prices Affect Miles Driven? A Look at 2014



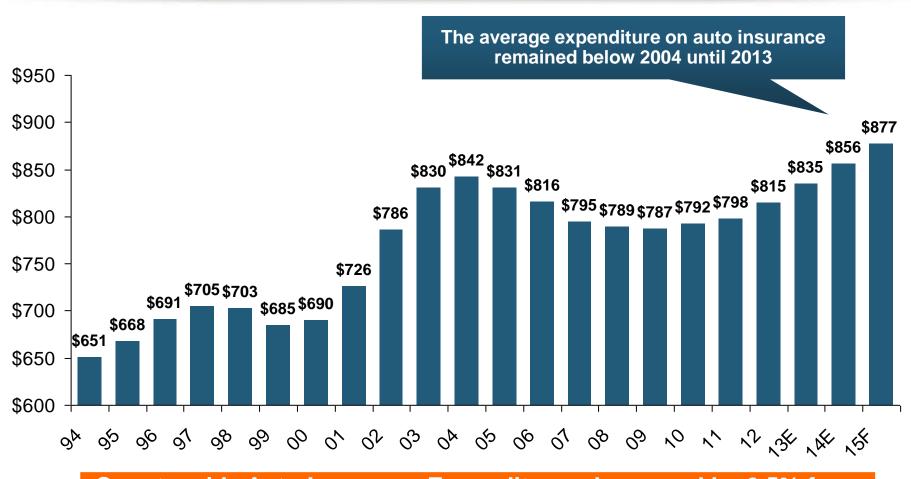


Prior research on the relationship between gas prices and miles driven says that, in the short run, an increase in gas prices produces little change in miles driven. No recent research on the effect of price drops.

Sources: Federal Energy Administration (http://www.eia.gov/petroleum/gasdiesel/); *gas prices and miles driven through December Federal Highway Administration (http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm); I.I.I.

Average Expenditures on Auto Insurance



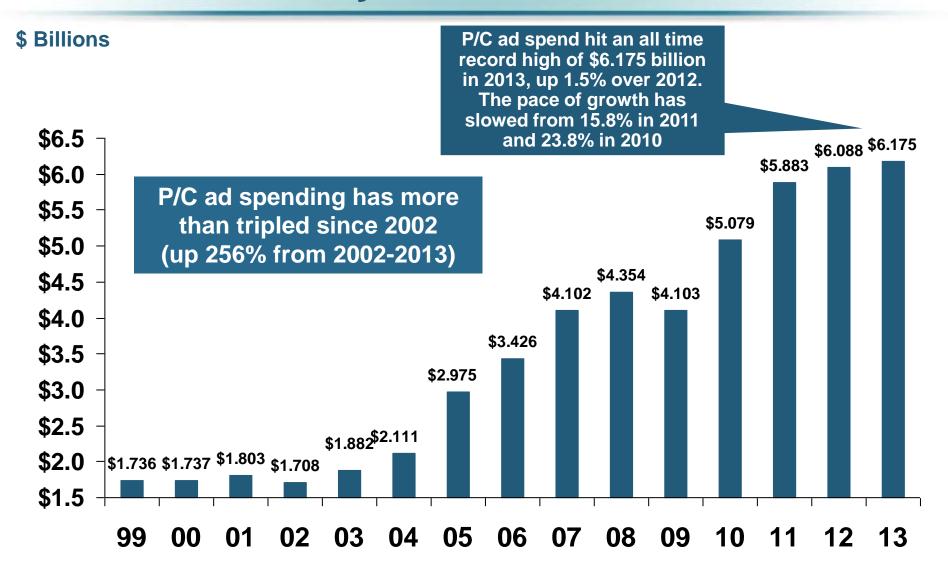


Countrywide Auto Insurance Expenditures decreased by 6.5% from 2004 through 2009, rising gradually since the with annual increases in the 2.0% to 2.5% range

^{*} Insurance Information Institute Estimates/Forecasts
Source: NAIC, Insurance Information Institute estimate for 2013-2015 based on CPI and other data.

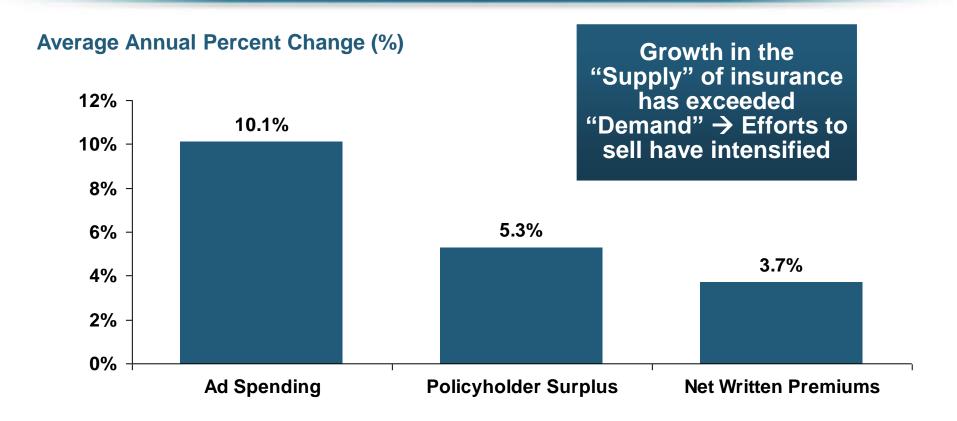
Advertising Expenditures by P/C Insurance Industry, 1999-2013





Growth in Premiums, Capacity vs. Growth in Advertising Expenditures, 2000 – 2013



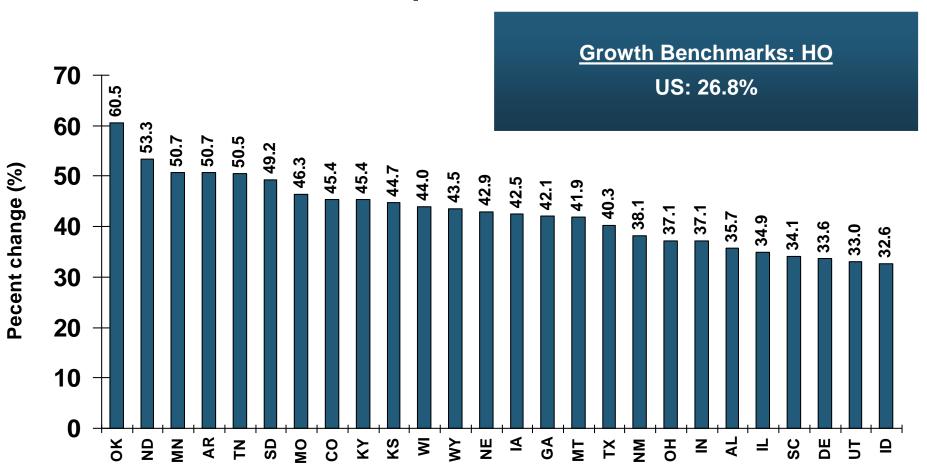


Overall Growth in Ad Spending has greatly exceeded growth in capacity (policyholder surplus) or premium growth. This suggests that there are diminishing returns to advertising.

Direct Premiums Written: Homeowners Percent Change by State, 2007-2013

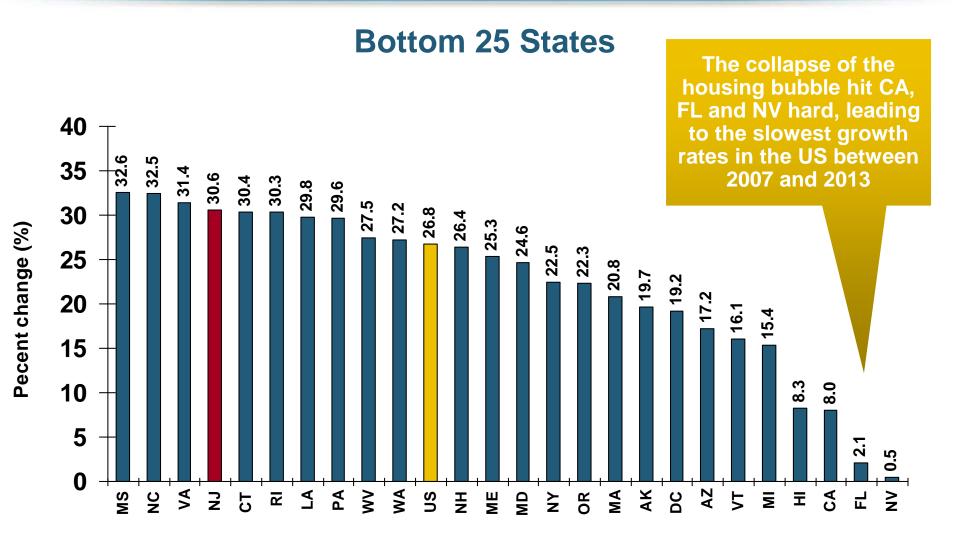


Top 25 States



Direct Premiums Written: Homeowners Percent Change by State, 2007-2013



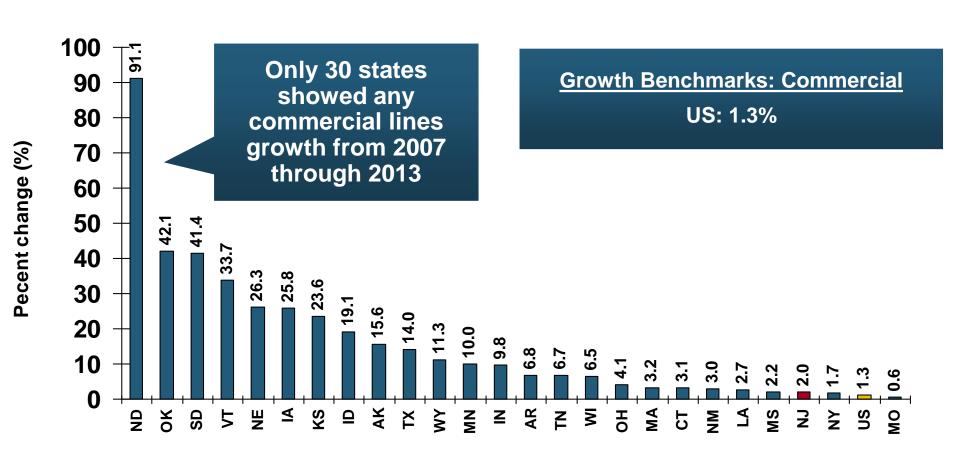


Sources: SNL Financial LLC.; Insurance Information Institute.

Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2013



Top 25 States

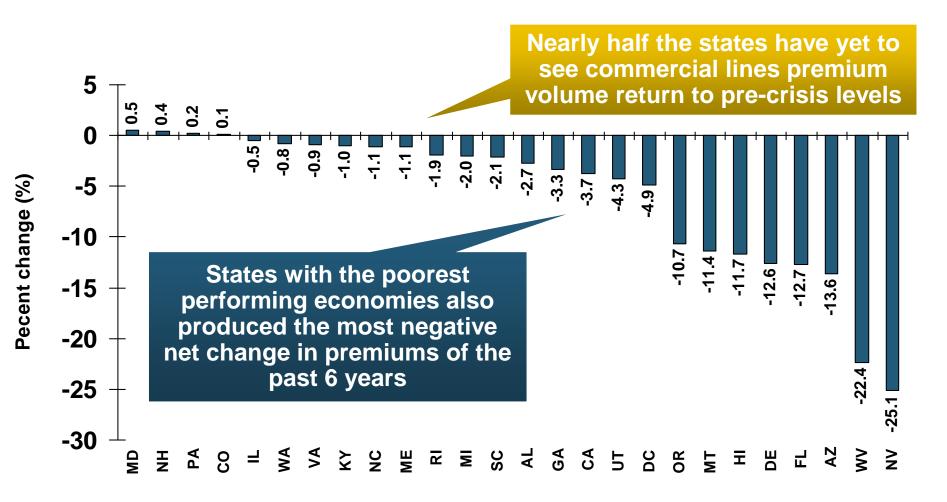


Sources: SNL Financial LLC.; Insurance Information Institute.

Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2013



Bottom 25 States

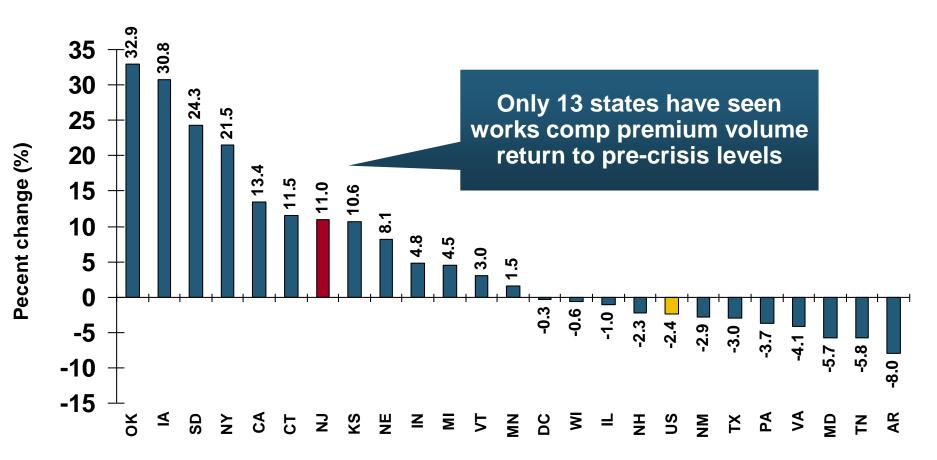


Sources: SNL Financial LLC.; Insurance Information Institute.

Direct Premiums Written: Workers' Comp Percent Change by State, 2007-2013*





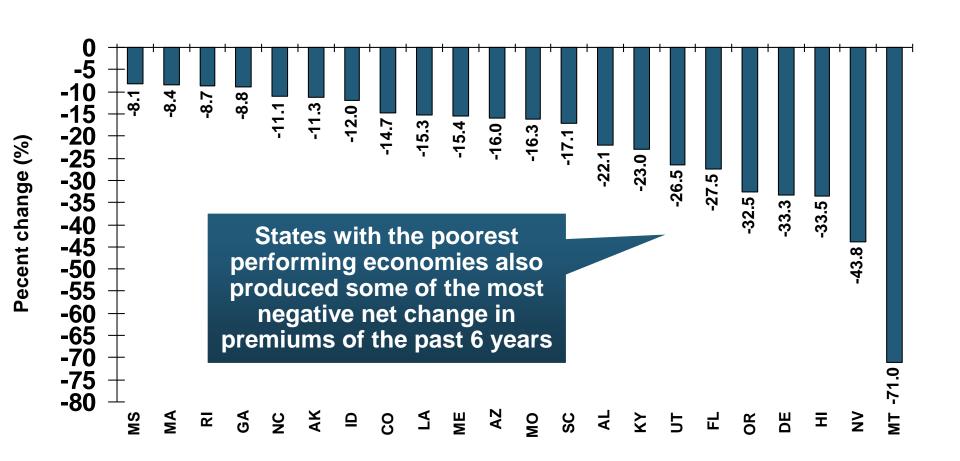


^{*}Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period. Sources: SNL Financial LC.; Insurance Information Institute.

Direct Premiums Written: Worker's Comp Percent Change by State, 2007-2013*



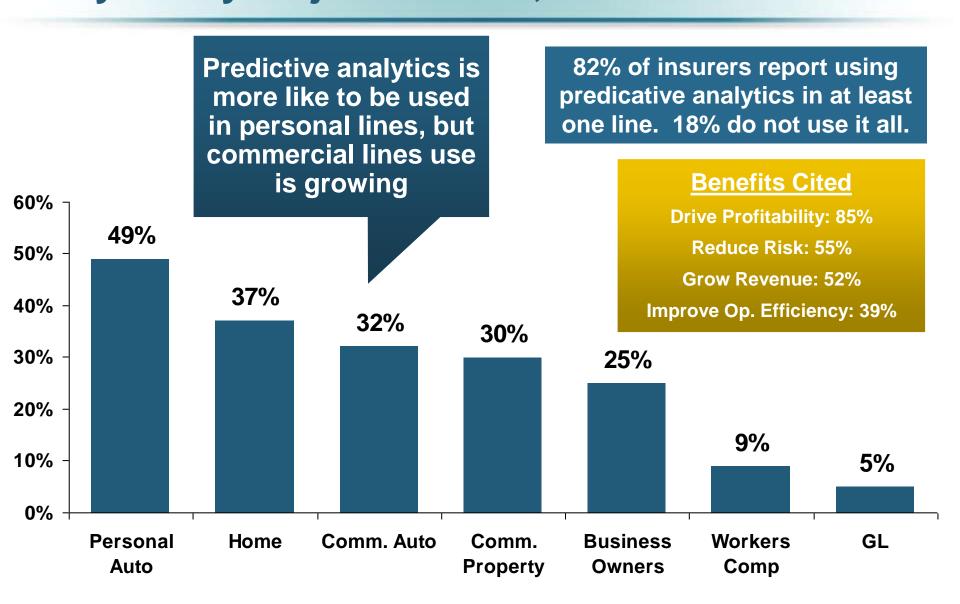
Bottom 25 States



^{*}Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period. Sources: SNL Financial LC.; Insurance Information Institute.

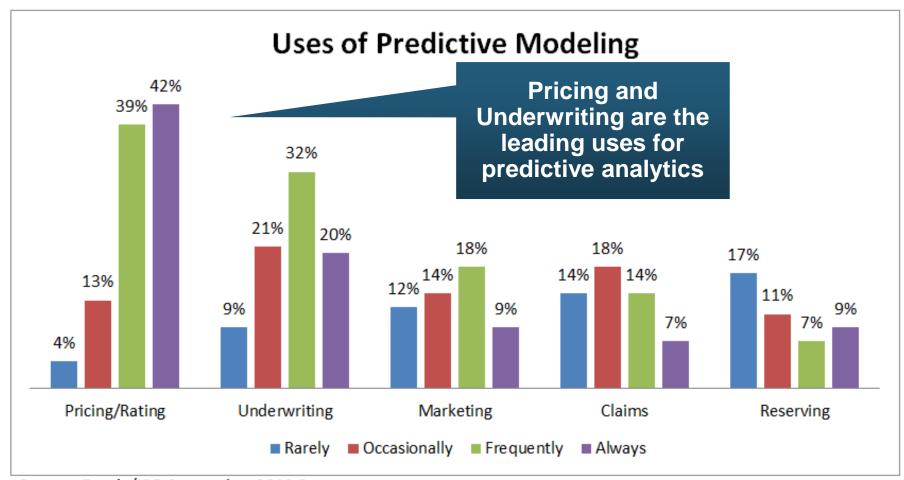
Percentage of Carriers Using Predictive Analytics by Major P/C Line, 2013





Uses of Predictive Analytics by Function Institute





Source: Earnix/ISO September 2013 Survey



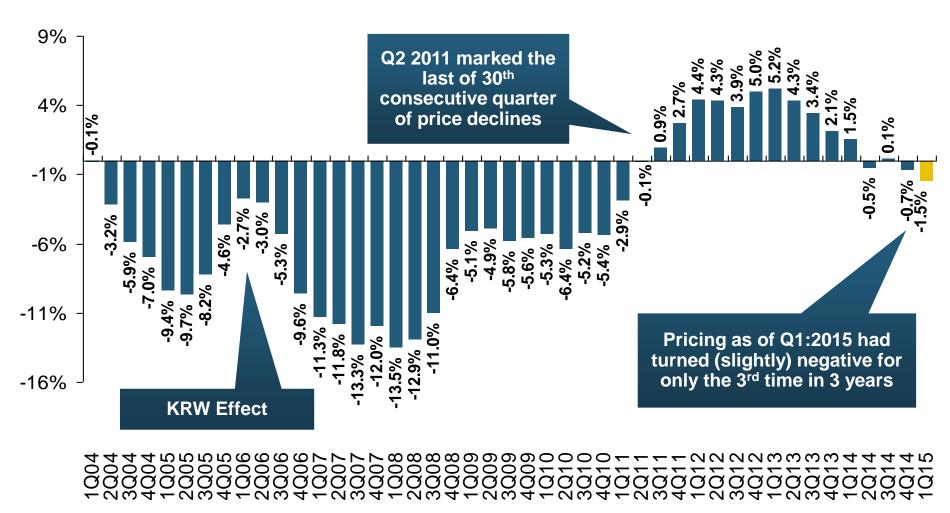
Commercial Lines Pricing Trends

Survey Results Suggest Commercial Pricing Has Flattened Out

Average Commercial Rate Change, All Lines, (1Q:2004–1Q:2015)





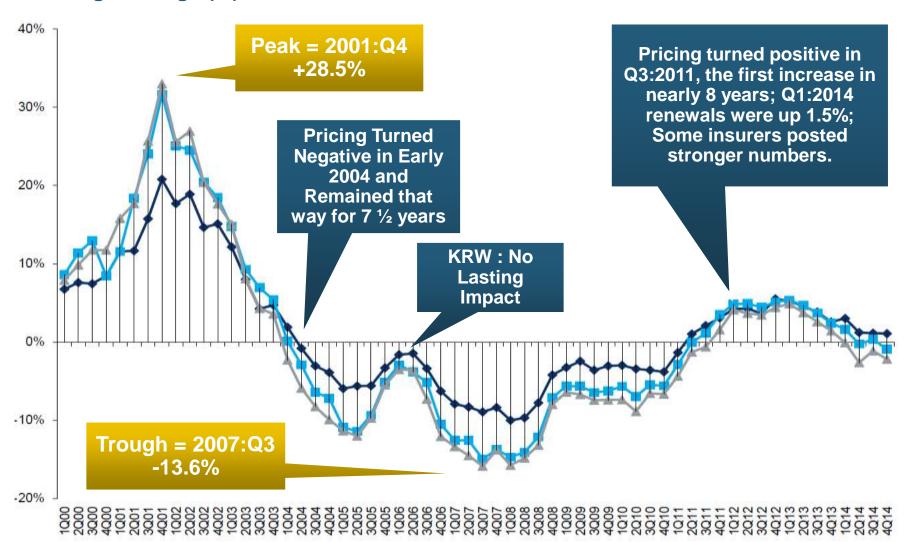


Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially. Source: Council of Insurance Agents & Brokers; Insurance Information Institute

Change in Commercial Rate Renewals, by Account Size: 1999:Q4 to 2014:Q4



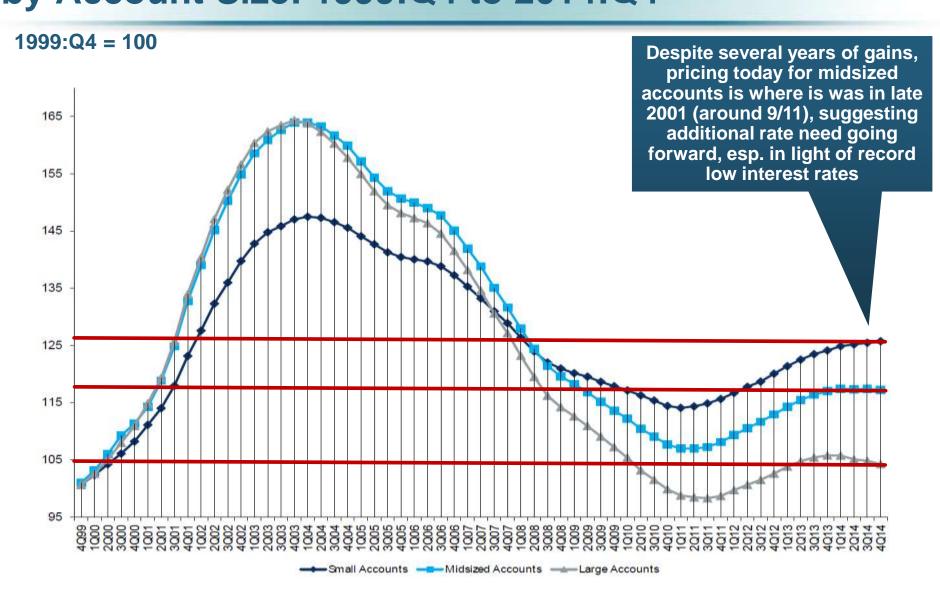
Percentage Change (%)



Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially. Source: Council of Insurance Agents and Brokers; Barclay's Capital; Insurance Information Institute.

Cumulative Qtrly. Commercial Rate Changes, triby Account Size: 1999:Q4 to 2014:Q4

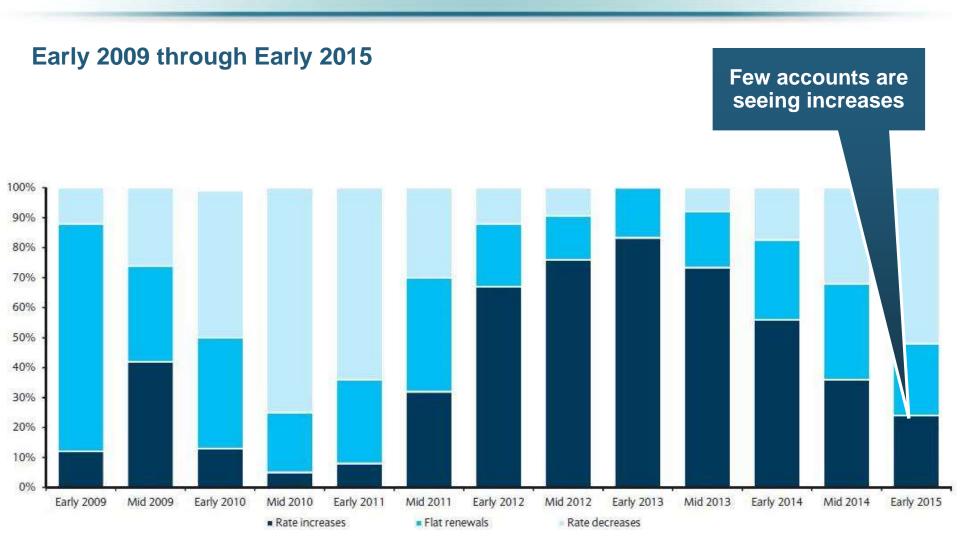




Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially. Source: Council of Insurance Agents and Brokers; Barclay's Capital; Insurance Information Institute.

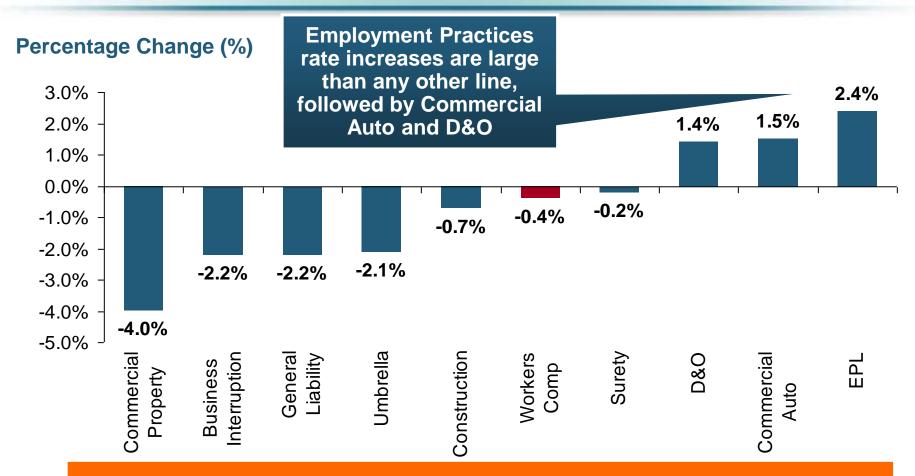
Directional Pricing Trend in Large Account P/C Renewals





Change in Commercial Rate Renewals, by Line: 2015:Q1





Major Commercial Lines Renewals Were Mixed to Flat in Q1:2015; EPL and Commercial Auto Led the Way



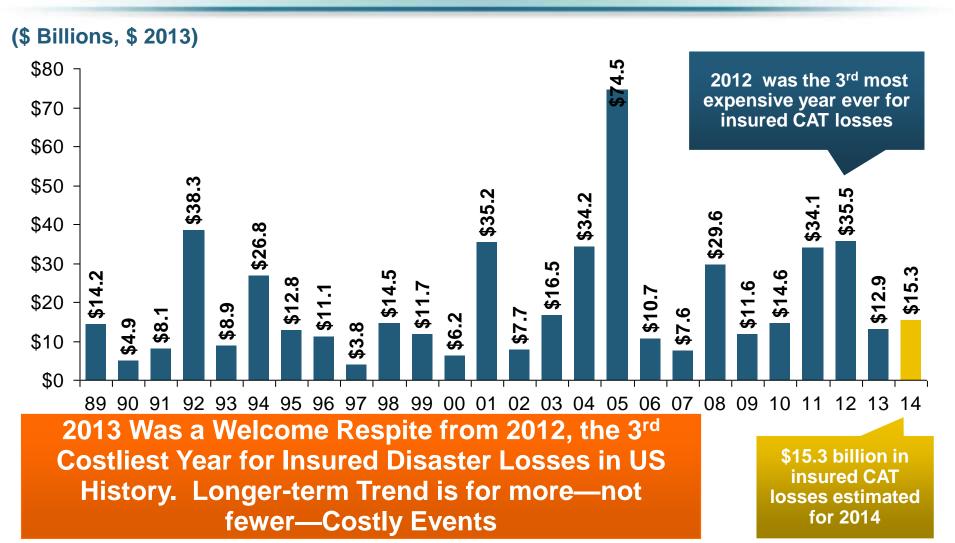
U.S. Insured Catastrophe Loss Update

2013/14 Experienced Below Average CAT Activity After Very High CAT Losses in 2011/12

Winter Storm Losses Far Above Average in 2014 and 2015

U.S. Insured Catastrophe Losses





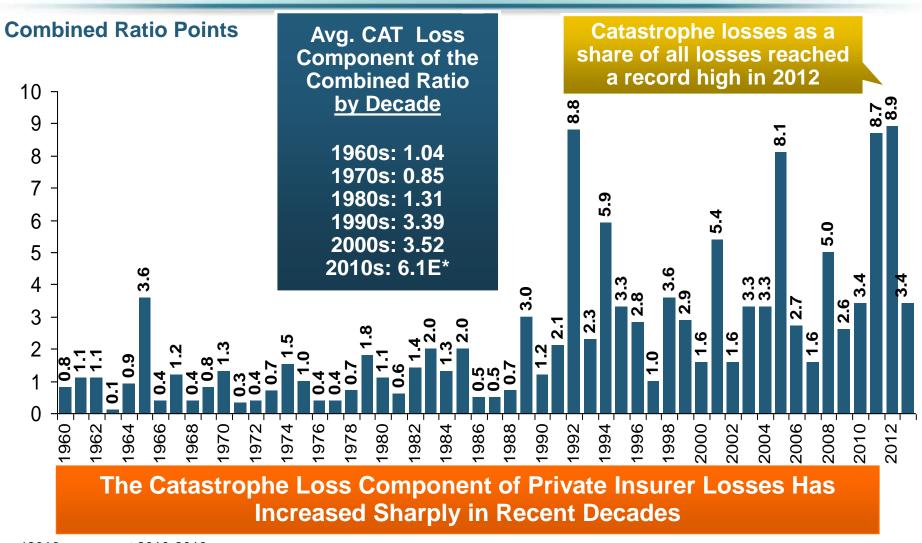
^{*}Through 12/31/14.

Note: 2001 figure includes \$20.3B for 9/11 losses reported through 12/31/01 (\$25.9B 2011 dollars). Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = \$12.2B (\$15.6B in 2011 dollars.)

Sources: Property Claims Service/ISO; Insurance Information Institute.

Combined Ratio Points Associated with Catastrophe Losses: 1960 – 2013*





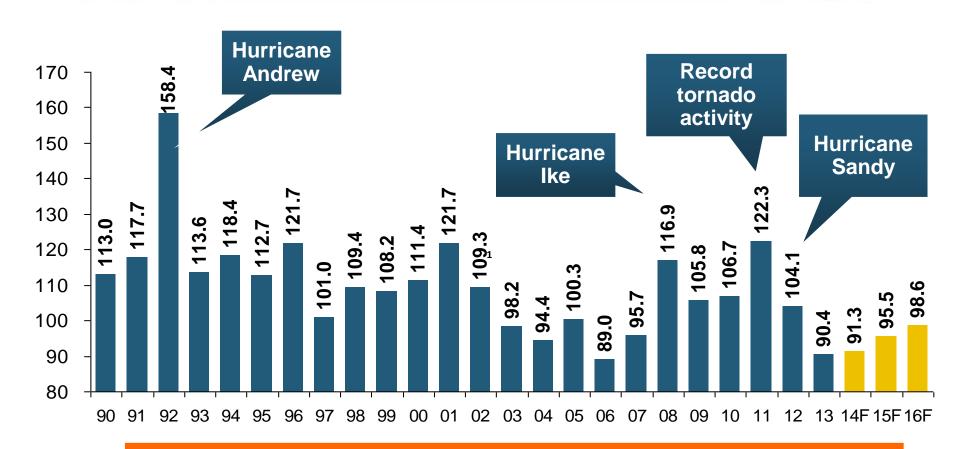
^{*2010}s represent 2010-2013.

Notes: Private carrier losses only. Excludes loss adjustment expenses and reinsurance reinstatement premiums. Figures are adjusted for losses ultimately paid by foreign insurers and reinsurers.

Source: ISO (1960-2011); A.M. Best (2012E) Insurance Information Institute.

Homeowners Insurance Combined Ratio: 1990–2016F

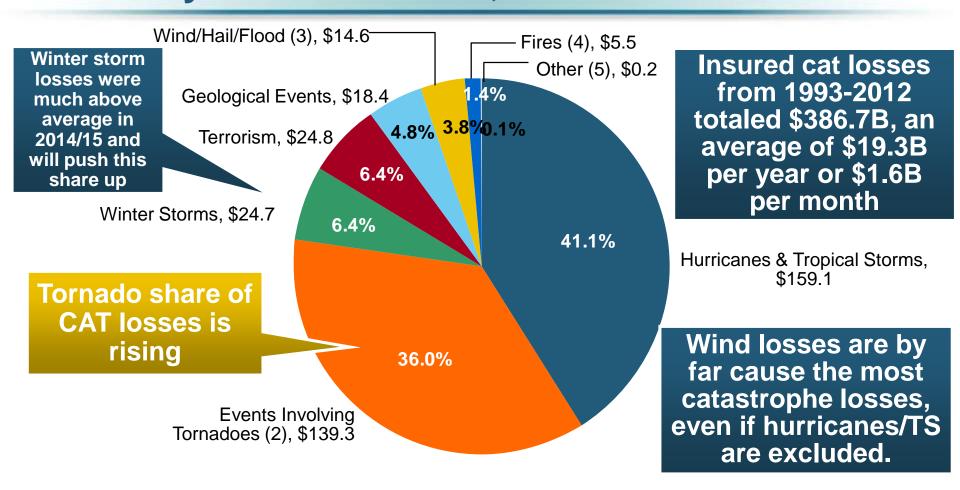




Homeowners Performance in 2011/12 Impacted by Large Cat Losses but Lower CATs Helped 2013/14. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity

Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1994–2013¹





- 1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2013 dollars.
- 2. Excludes snow.
- 3. Does not include NFIP flood losses
- Includes wildland fires
- 5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those covered by workers compensation. Source: ISO's Property Claim Services Unit.

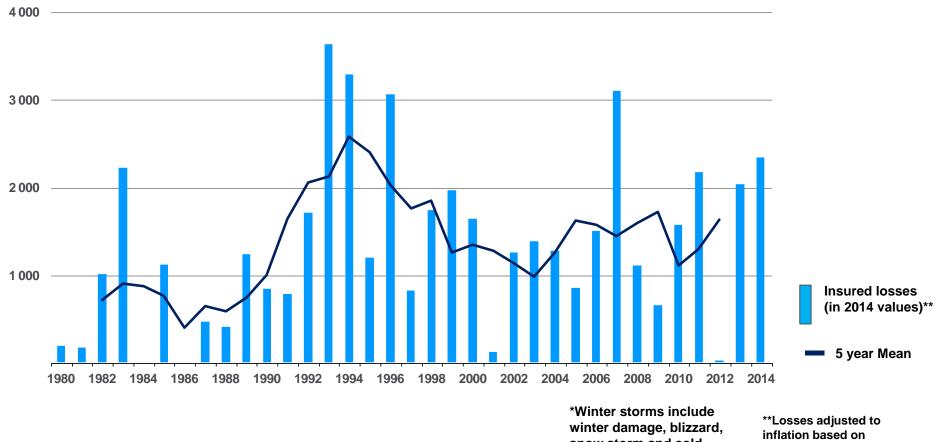
104

Loss events in the US, 1980 – 2014 Insured losses due to winter storms*



Overall losses in 2014 totaled \$3.7B; Insured losses totaled \$ 2.4B

\$ Billions



Source: Property Claim Services, MR NatCatSERVICE.

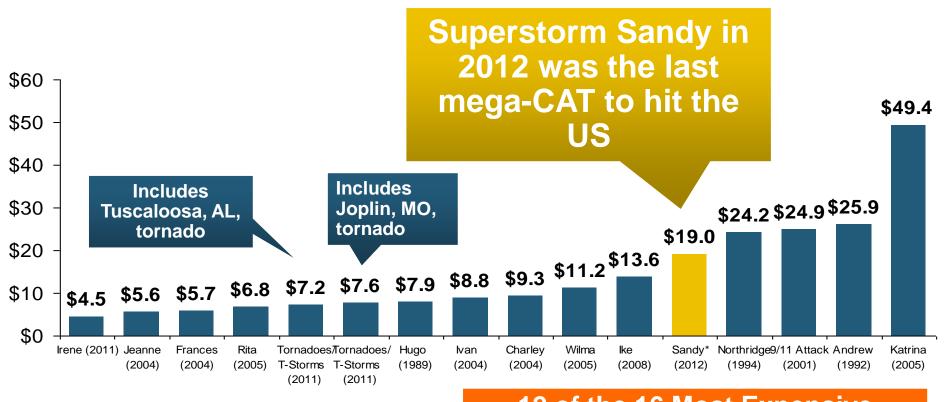
snow storm and cold wave

country CPI

Top 16 Most Costly Disasters in U.S. History



(Insured Losses, 2013 Dollars, \$ Billions)



12 of the 16 Most Expensive Events in US History Have Occurred Over the Past Decade

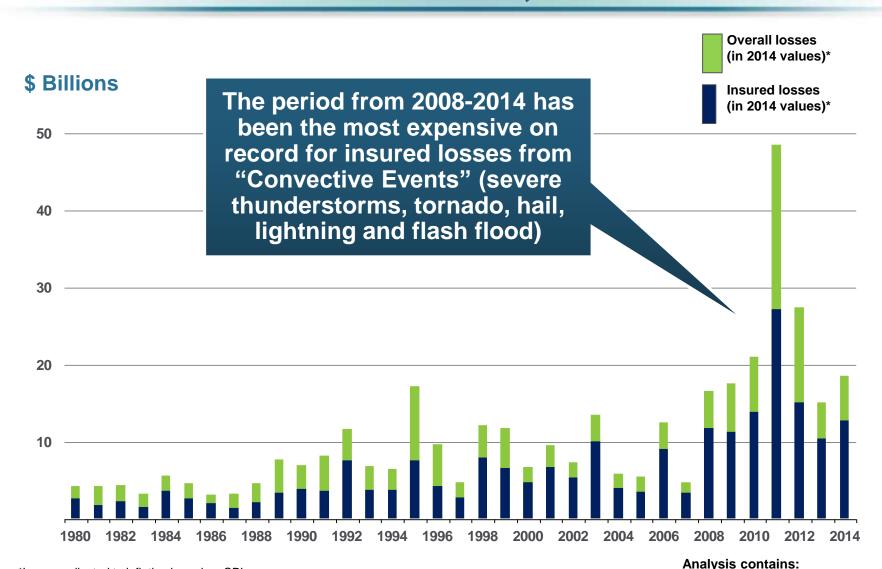
Natural Disaster Losses in the US, 2014 Based on perils



As of January, 2015	Number of Events	Fatalities	Estimated Overall Losses (US \$m)	Estimated Insured Losses (US \$m)
Severe Thunderstorm	62	98	17,000	12,300
Winter Storm, winter damage, cold wave, snow storm	13	115	3,700	2,300
Flood, flash flood, storm surge	20	5	1,800	500
Earthquake & Geophysical, landslides	11	45	750	150
Tropical Cyclone	2	1	95	Minor market losses
Wildfire, Heat, & Drought	11	2	1,700	Minor market losses
Totals	119	266	25,000	15,300

Convective Loss Events in the US Overall and insured losses, 1980 – 2014





*Losses adjusted to inflation based on CPI

Source: Geo Risks Research, NatCatSERVICE

severe storm, tornado, hail, flash flood and lightning

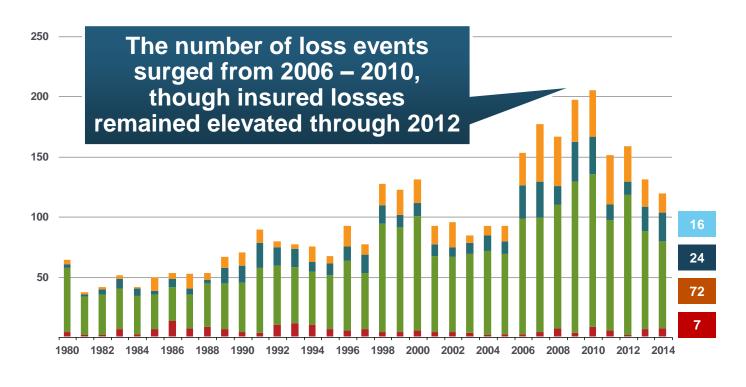
Loss events in the US, 1980 – 2014

Number of events



Number of Events

2014 Total: 119 Events



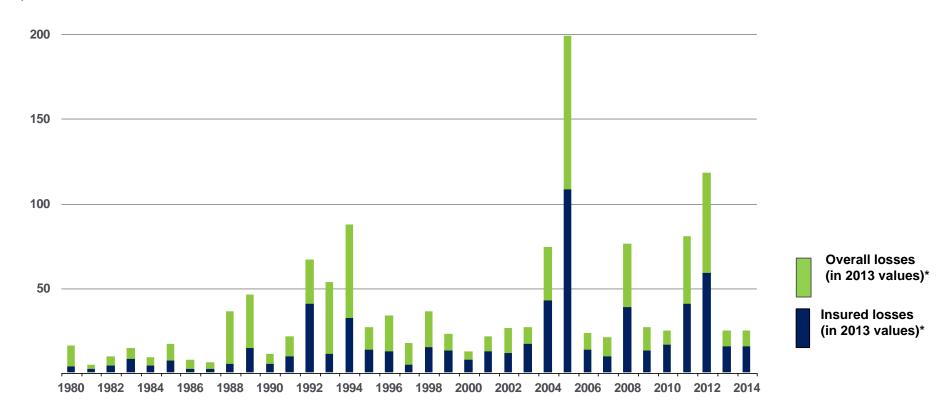
- Geophysical events (Earthquake, tsunami, volcanic activity)
- Meteorological events
 (Tropical storm,
 extratropical storm,
 convective storm,
 local storm)
- Hydrological events (Flood, mass movement)
- Climatological events (Extreme temperature, drought, forest fire)

Loss Events in the US, 1980 – 2014 Overall and insured losses



Overall losses totaled US\$ 25bn; Insured losses totaled US\$ 15.3bn

\$ Billions



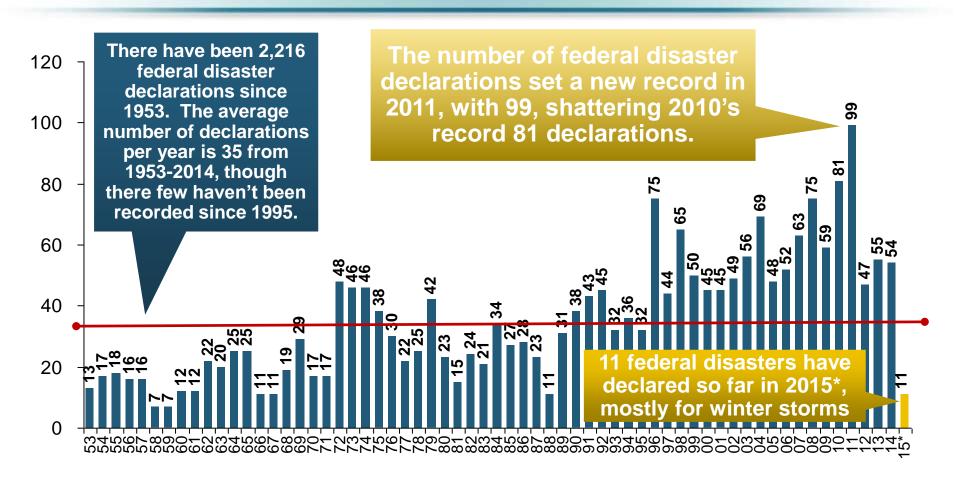


Federal Disaster Declarations Patterns: 1953-2015

Disaster Declarations Set New Records in Recent Years

Number of Federal Major Disaster Declarations, 1953-2015*



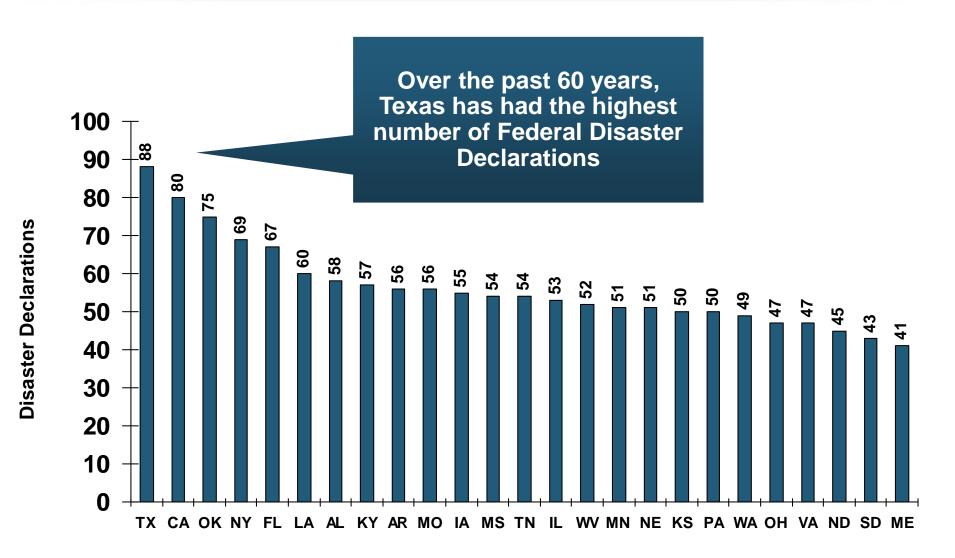


The Number of Federal Disaster Declarations Is Rising and Set New Records in 2010 *and* 2011 Before Dropping in 2012-2014

^{*}Through April 21, 2015.

Federal Disasters Declarations by State, 1953 – 2015: Highest 25 States*



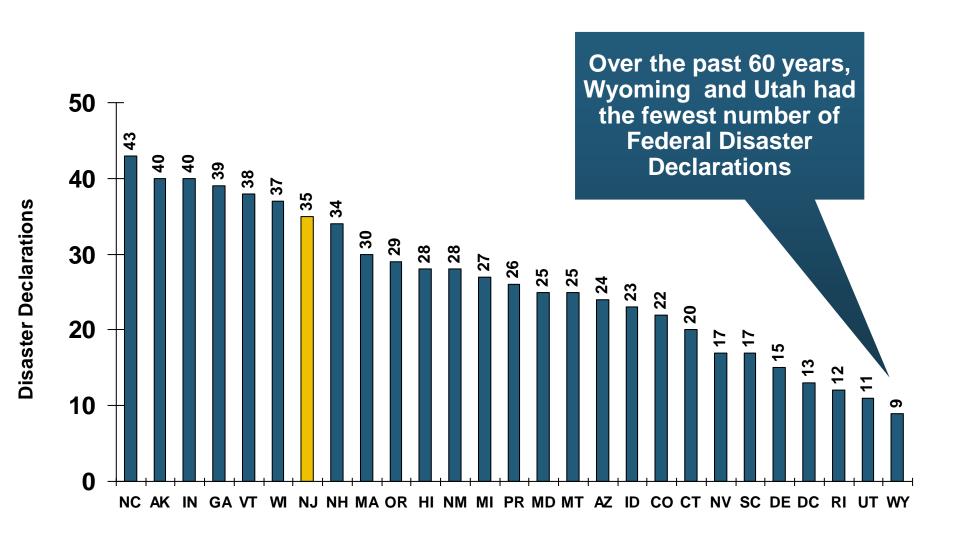


^{*}Through April 10, 2015. Includes Puerto Rico and the District of Columbia.

Source: FEMA: http://www.fema.gov/news/disaster_totals_annual.fema; Insurance Information Institute.

Federal Disasters Declarations by State, 1953 – 2015: Lowest 25 States*





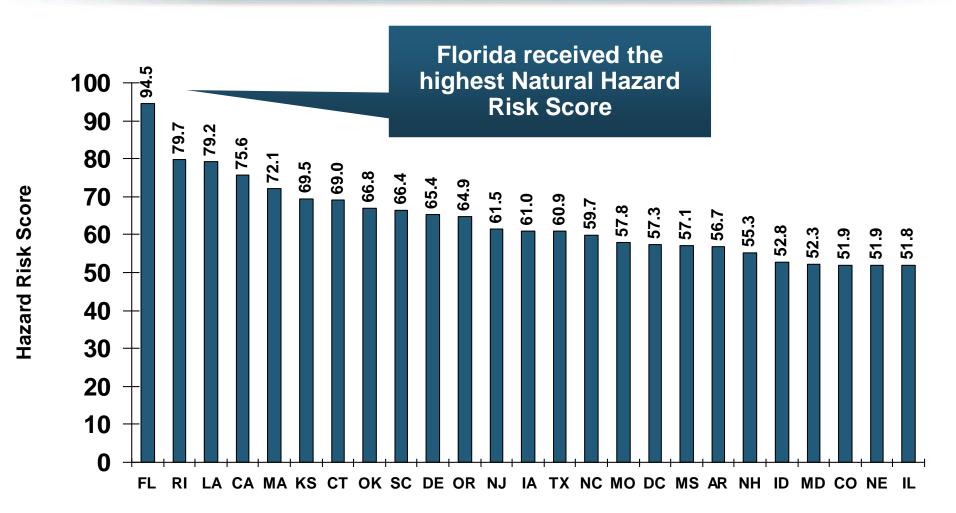
^{*}Through April 21, 2015. Includes Puerto Rico and the District of Columbia.

Source: FEMA: http://www.fema.gov/news/disaster_totals_annual.fema; Insurance Information Institute.

Natural Hazard Risk Scores, 2014 Highest 25 States*



115



Note: Score is based on data on 9 natural hazards: flood, wildfire, tornado, storm surge, earthquake, straight-line wind, hurricane, wind, hail and sinkhole.

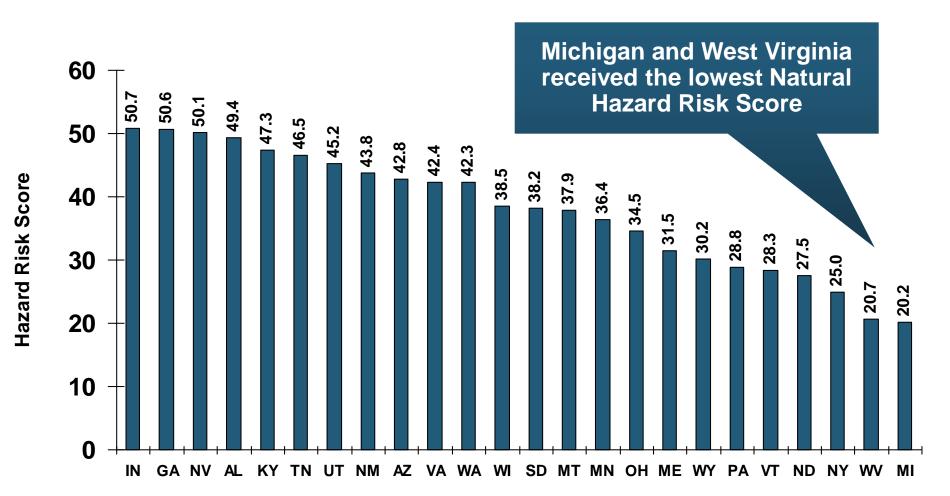
Sources: CoreLogic release "CoreLogic Identifies US States at Highest Risk of Property Damage Loss from Natural Hazards," Sept. 10, 2014; Insurance Information Institute.

^{*}Analysis Includes DC. Excludes Alaska and Hawaii due to limited natural hazard risk data.

Natural Hazard Risk Scores, 2014 Bottom 24 States*



116



Note: Score is based on data on 9 natural hazards: flood, wildfire, tornado, storm surge, earthquake, straight-line wind, hurricane, wind, hail and sinkhole.

Sources: CoreLogic release "CoreLogic Identifies US States at Highest Risk of Property Damage Loss from Natural Hazards," Sept. 10, 2014; Insurance Information Institute.

^{*}Analysis Includes DC. Excludes Alaska and Hawaii due to limited natural hazard risk data.



Top Insurance Issues: What's Hot, What's Not

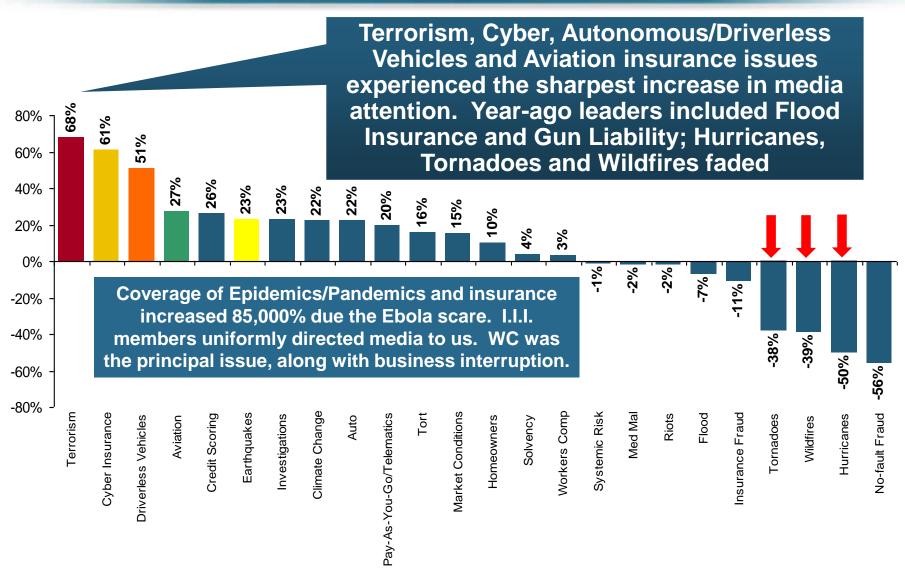
No Dominant Even in 2014, but Some Key Commercial Lines Issues Spiked

Terrorism, TRIA & Cyber

I.I.I. Media Index, P/C, 2014 vs 2013

Percent increase/decrease from previous year





Source: Insurance Information Institute based on a search of Lexis/Nexis.

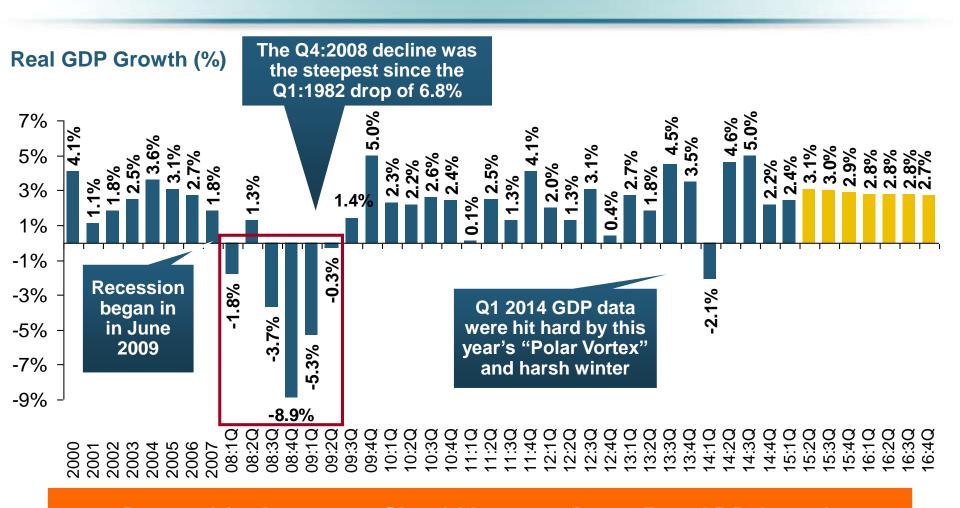


The Strength of the Economy Will Influence P/C Insurer Growth Opportunities

Growth Will Expand Insurer Exposure Base Across Most Lines

US Real GDP Growth*





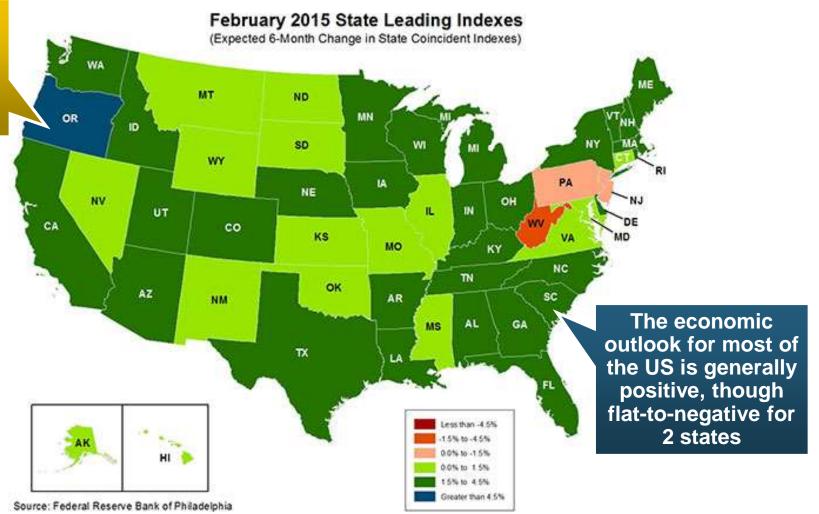
Demand for Insurance Should Increase in 2015 as GDP Growth Accelerates Modestly and Gradually Benefits the Economy Broadly

^{*} Estimates/Forecasts from Blue Chip Economic Indicators.

State-by-State Leading Indicators through August 2015

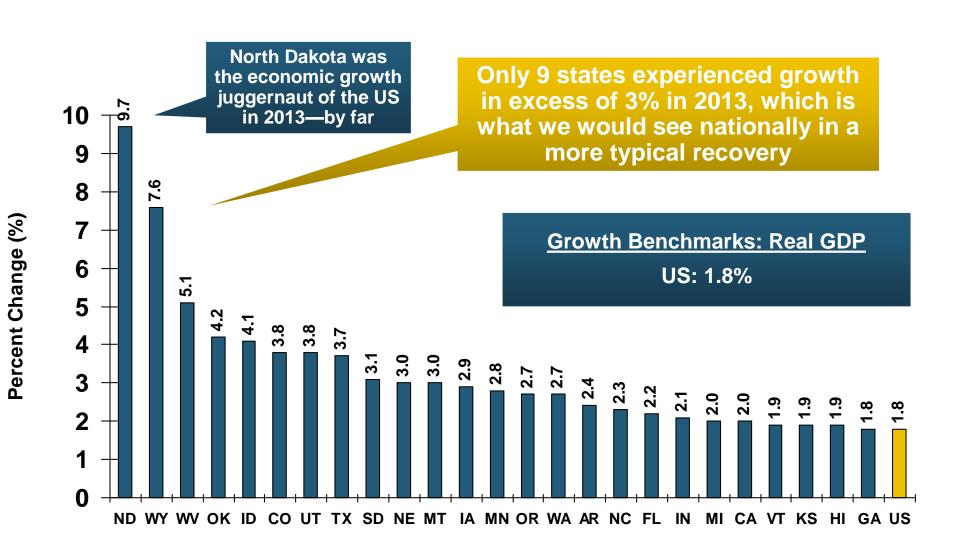


Growth in the West is finally beginning to pick up



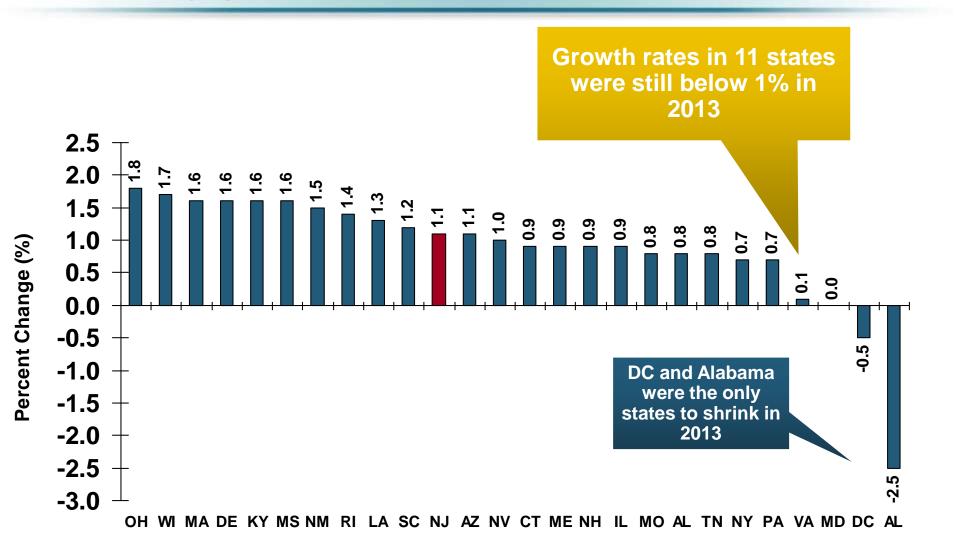
Real GDP by State Percent Change, 2013: Highest 25 States





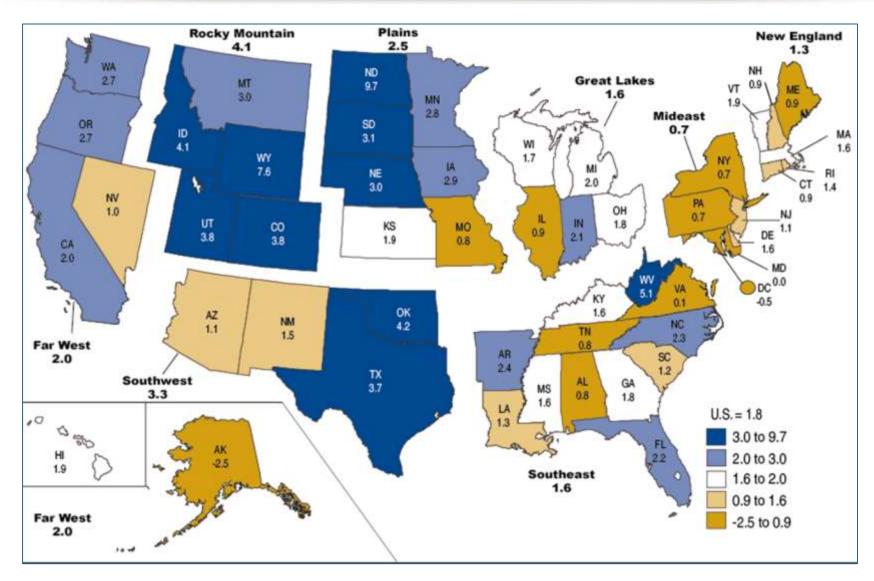
Real GDP by State Percent Change, 2013: Lowest 25 States





Percent Change in Real GDP by State, 2013 INSURANCE INFORMATION INSTITUTE

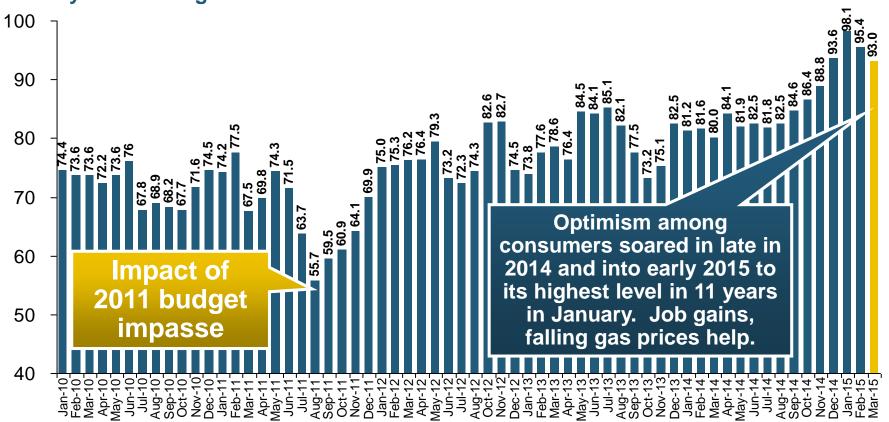




Consumer Sentiment Survey (1966 = 100)



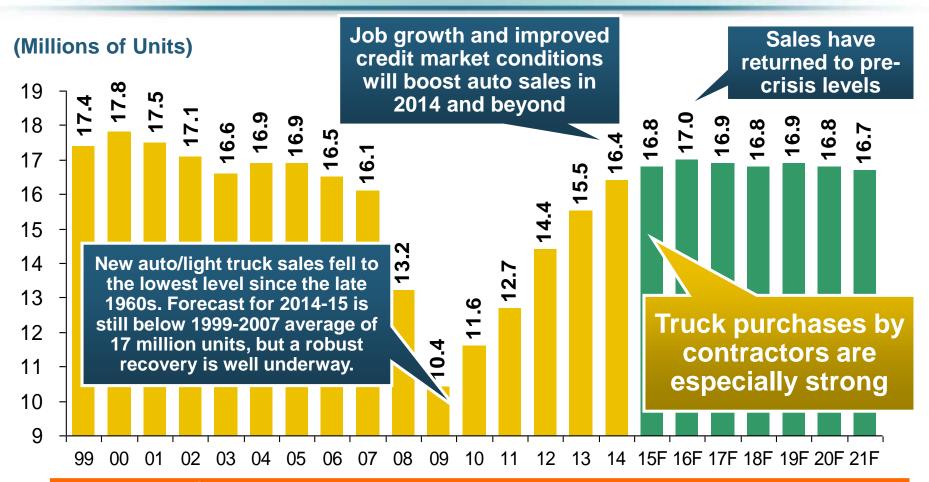




Consumer confidence had been low for years amid high unemployment, falling home prices and other factors adversely impact consumers, but improved substantially over the past 2+ years, as job growth and falling energy prices aid consumers

Auto/Light Truck Sales, 1999-2021F

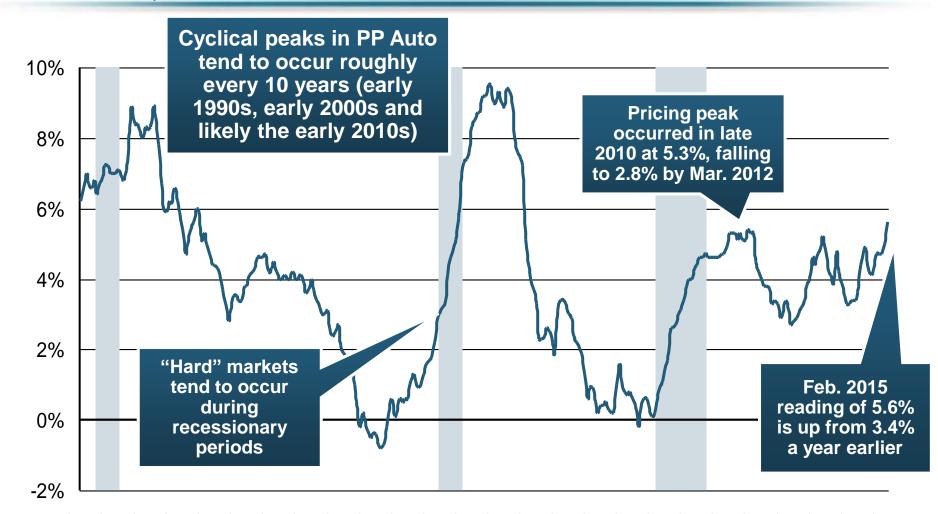




Yearly car/light truck sales will likely continue at current levels, in part replacing cars that were held onto in 2008-12. New vehicles will generate more physical damage insurance coverage but will be more expensive to repair. PP Auto premium might grow by 5% - 6%.

Monthly Change in Auto Insurance Prices, 1991–2015*





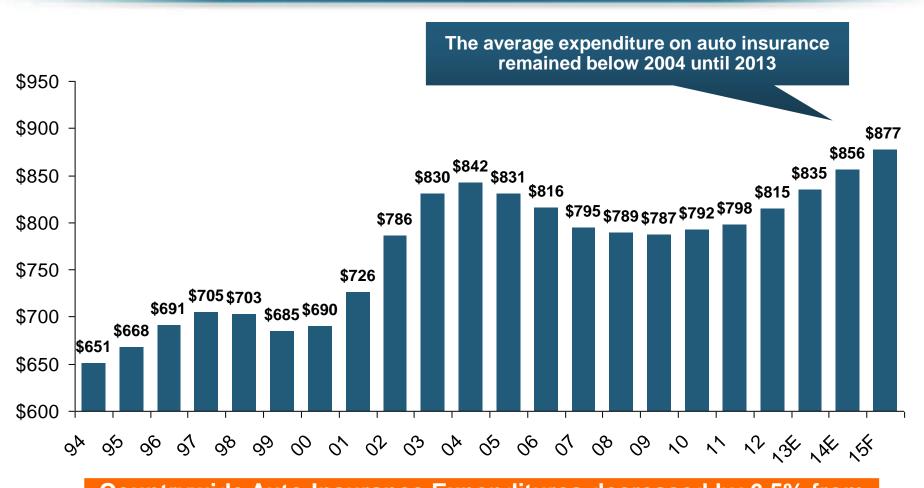
'90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.

^{*}Percentage change from same month in prior year; through February 2015; seasonally adjusted Note: Recessions indicated by gray shaded columns.

Average Expenditures on Auto Insurance



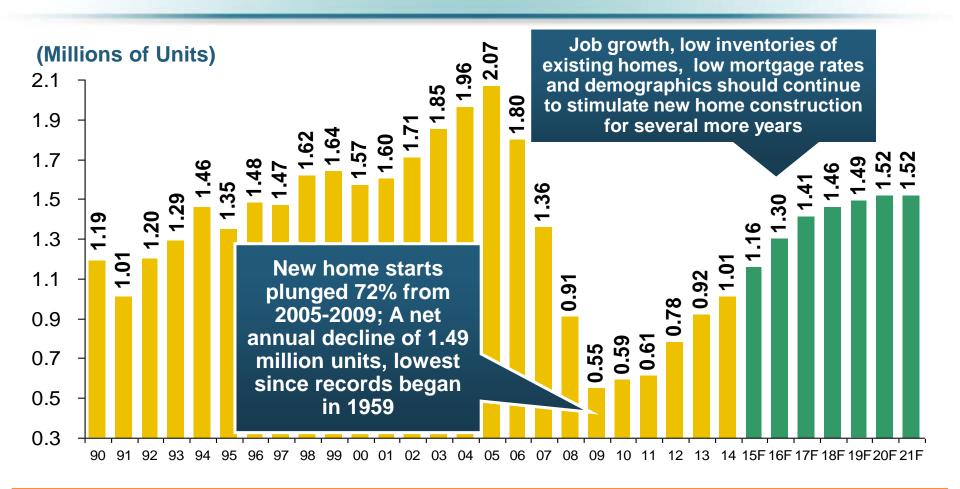


Countrywide Auto Insurance Expenditures decreased by 6.5% from 2004 through 2009, rising gradually since the with annual increases in the 2.0% to 2.5% range

^{*} Insurance Information Institute Estimates/Forecasts
Source: NAIC, Insurance Information Institute estimate for 2013-2015 based on CPI and other data.

New Private Housing Starts, 1990-2021F





Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the "Great Recession" Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Interest Rate on Convention 30-Year Mortgages: Up a Bit, 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

Mortgage interest rates remain low by historical standards, aiding the housing recovery. Changes in Fed policy could push rates up modestly later in 2015.

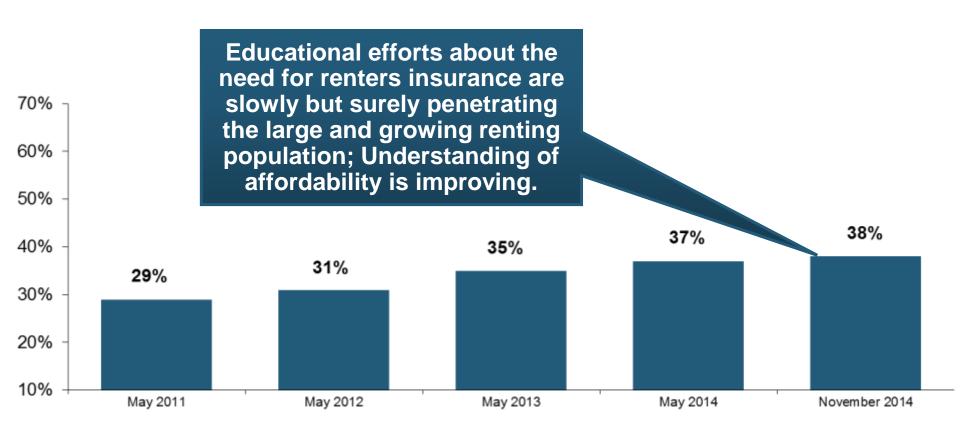
^{*}Monthly, through Dec. 2014.

Note: Recessions indicated by gray shaded columns.

I.I.I. Poll: Renters Insurance



Percentage of Renters Who Have Renters Insurance, 2011-2014

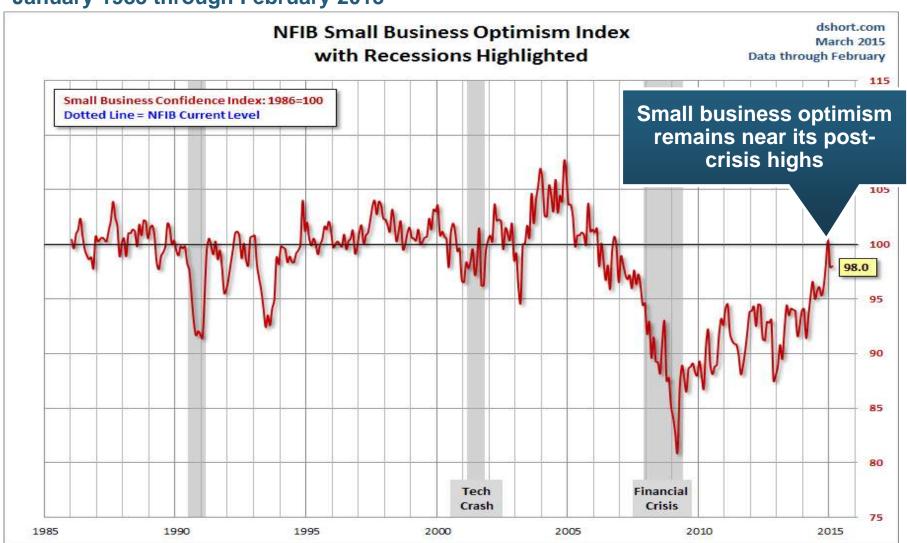


Percentage Of Renters With Renters Insurance Is Increasing.

NFIB Small Business Optimism Index



January 1985 through February 2015

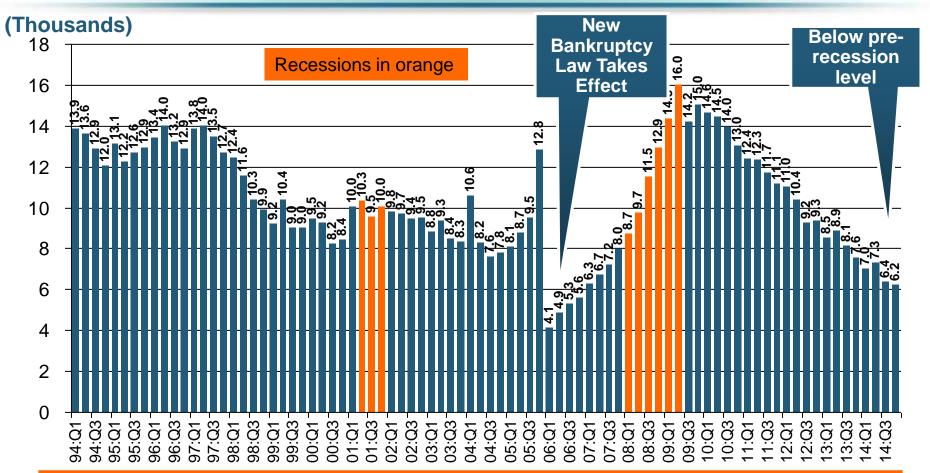


Source: National Federation of Independent Business at http://www.advisorperspectives.com/dshort/charts/indicators/Sentiment.html?NFIB-optimism-index.gif; Insurance Information Institute.

Business Bankruptcy Filings: Still Falling



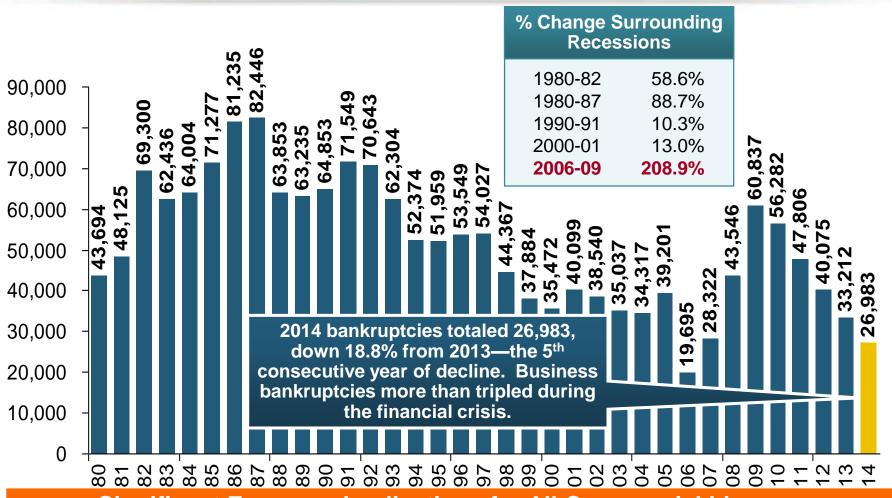
(1994:Q1 - 2014:Q4)



Business bankruptcies in 2014 were below both the Great Recession levels and the 2003:Q3-2005:Q1 period (the best five-quarter stretch in the last 20 years). Bankruptcies restrict exposure growth in all commercial lines.

Business Bankruptcy Filings, 1980-2014



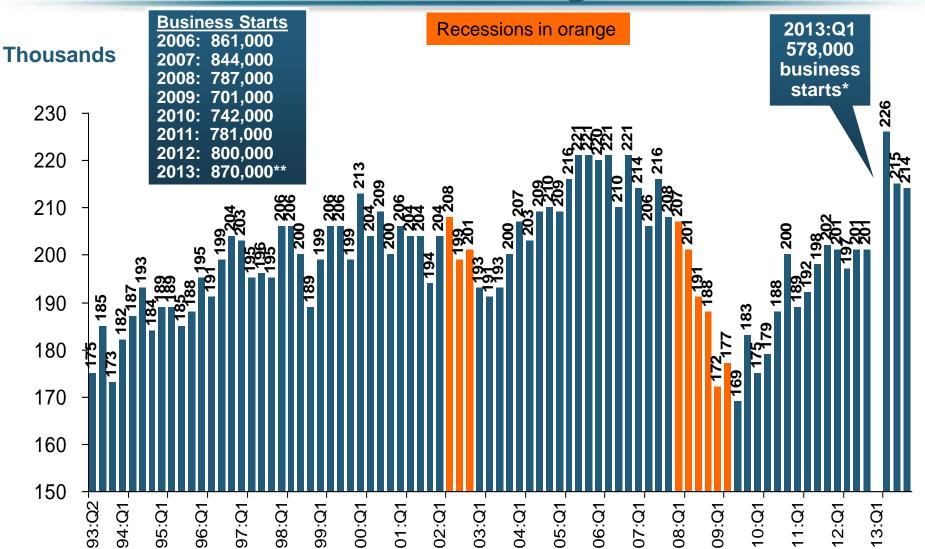


Significant Exposure Implications for All Commercial Lines as Business Bankruptcies Begin to Decline

Sources: American Bankruptcy Institute (1980-2012) at http://www.abiworld.org/AM/AMTemplate.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=61633; 2013-14 data from United States Courts at http://news.uscourts.gov; Insurance Information Institute.

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





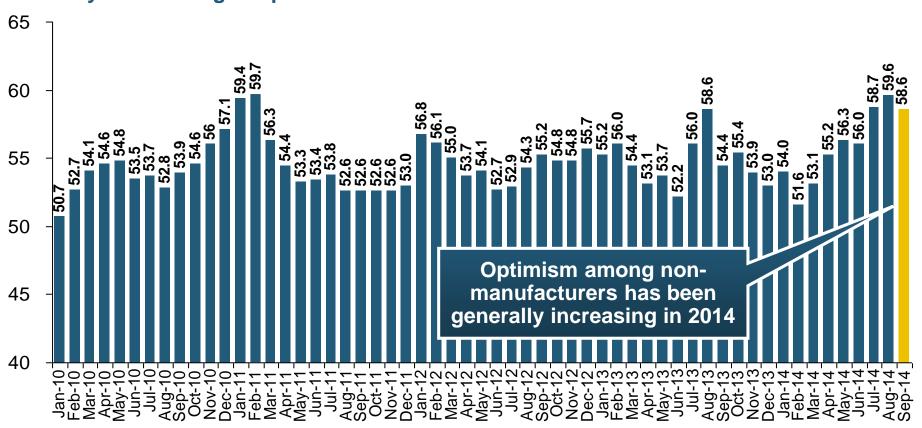
*Data posted Apr 29, 2014, the latest available; a classification change in 2013:Q1 resulted in a report of 578,000 businesses started in that quarter. Seasonally adjusted. **2014 number assumes 1st quarter equaled average of other three quarters

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

ISM Non-Manufacturing Index (Values > 50 Indicate Expansion)



January 2010 through September 2014



Non-manufacturing industries have been expanding and adding jobs. This trend is likely to continue through 2014.

12 Industries for the Next 10 Years: Insurance Solutions Needed



Health Care

Health Sciences

Energy (Traditional)

Alternative Energy

Petrochemical

Agriculture

Natural Resources

Technology (incl. Biotechnology)

Light Manufacturing

Insourced Manufacturing

Export-Oriented Industries

Shipping (Rail, Marine, Trucking, Pipelines)

Many
industries are
poised for
growth,
though
insurers'
ability to
capitalize on
these
industries
varies widely

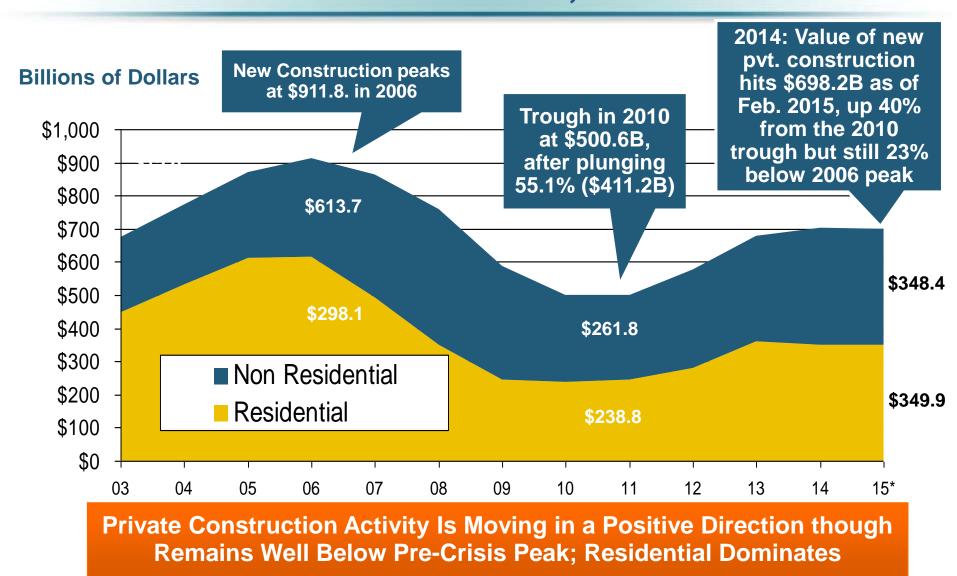


CONSTRUCTION INDUSTRY OVERVIEW & OUTLOOK

The Construction Sector Is Critical to the Economy and the P/C Insurance Industry

Value of New Private Construction: Residential & Nonresidential, 2003-2015*

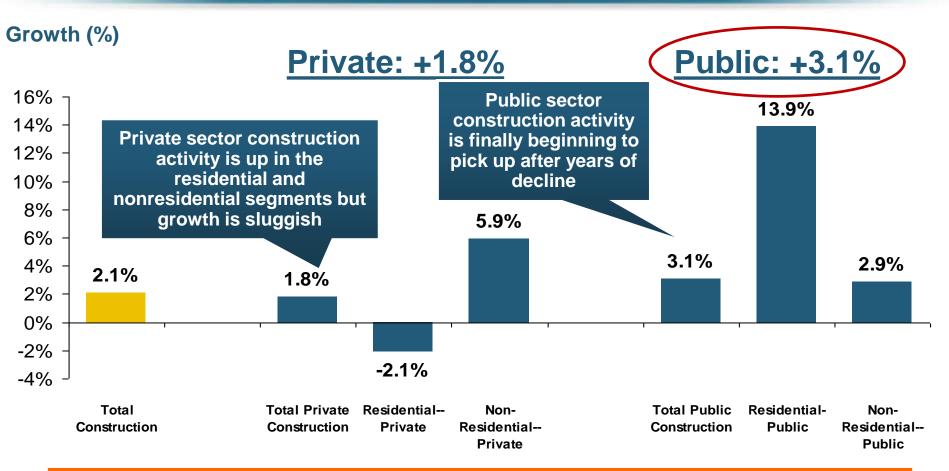




^{*2015} figure is a seasonally adjusted annual rate as of February.

Value of Construction Put in Place, Feb. 2015 vs. Feb. 2014*



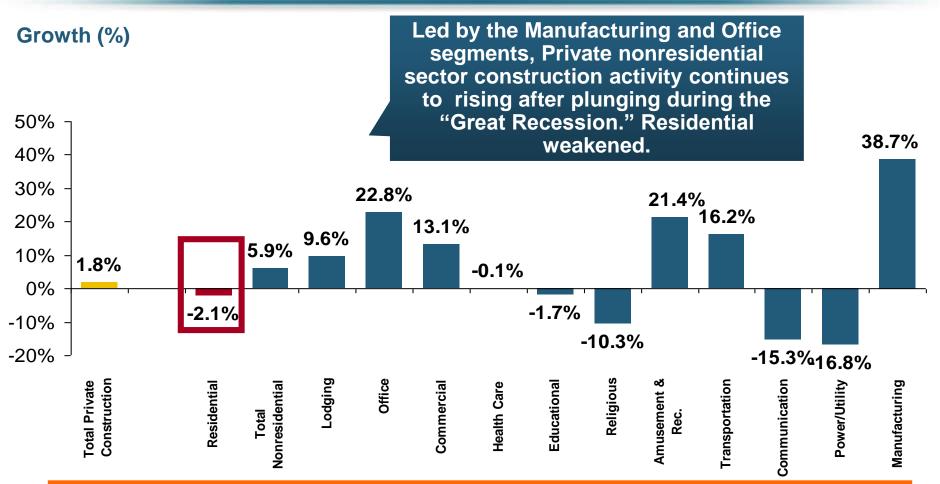


Overall Construction Activity is Up, But Growth In the Private Sector Slowed in Late 2014 While Picking in the State/Local Sector Government Sector as Budget Woes Ease in Some Jurisdictions

^{*}seasonally adjusted

Value of Private Construction Put in Place, by Segment, Feb. 2015 vs. Feb. 2014*



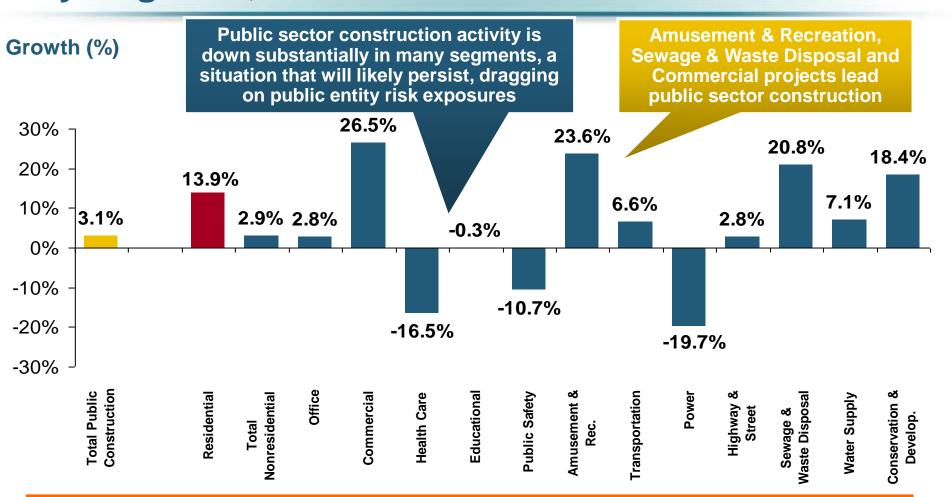


Private Construction Activity is Up in Many Segments, though the Key Residential Construction Sector Weakened in Late 2014/Early 2015; Mixed Outlook for 2015, though Expansion Should Continue

^{*}seasonally adjusted

Value of Public Construction Put in Place, by Segment, Feb. 2015 vs. Feb. 2014*



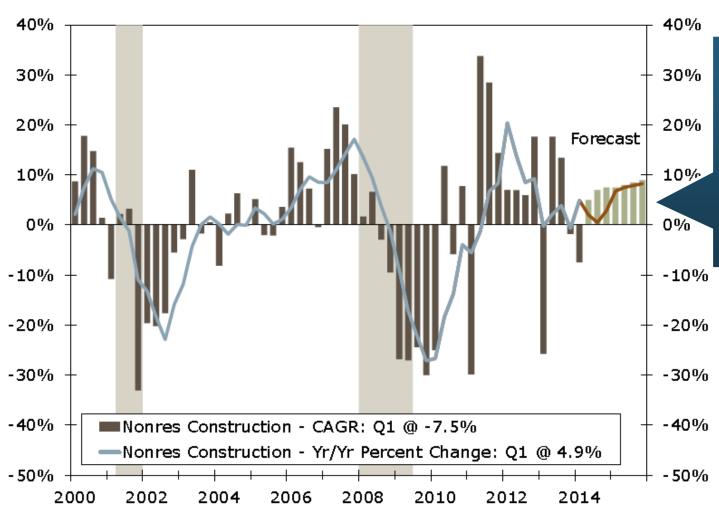


Public Construction Activity is Beginning to Recover from its Long Contraction which Will Drive Demand in Many Commercial Insurance Lines

Real (Inflation-Adjusted) Nonresidential Construction, 2000-2014*



(Bar = CAGR; Line = Y/Y Growth Rate)

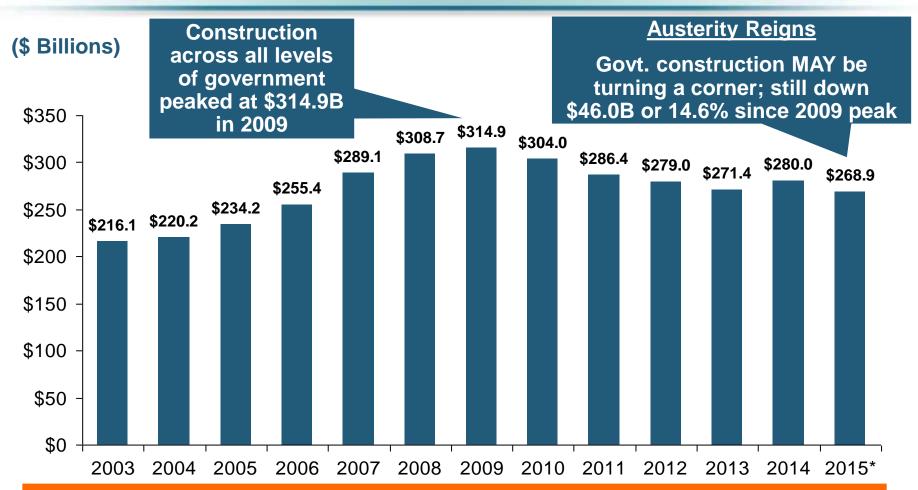


Construction activity
has generally been
positive since late
2010 but has
occasionally be
erratic. Forecast is
for slowing
improving growth

^{*}Through Q1 2014.

Value of New Federal, State and Local Government Construction: 2003-2015*



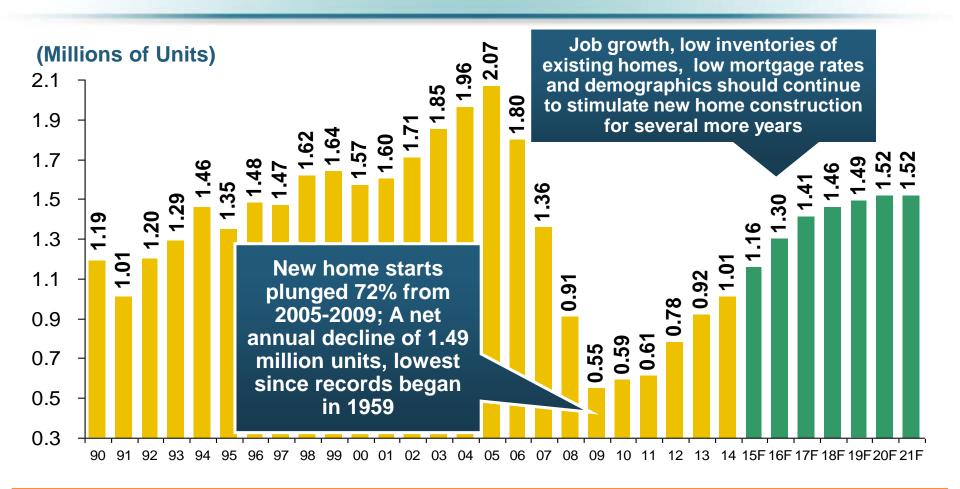


Government Construction Spending Peaked in 2009, Helped by Stimulus Spending, but Contracted As State/Local Governments Grappled with Deficits and Federal Sequestration

^{*2014} figure is a seasonally adjusted annual rate as of December; http://www.census.gov/construction/c30/historical_data.html Sources: US Department of Commerce; Insurance Information Institute.

New Private Housing Starts, 1990-2021F





Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the "Great Recession" Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Construction Employment, Jan. 2010—December 2014*



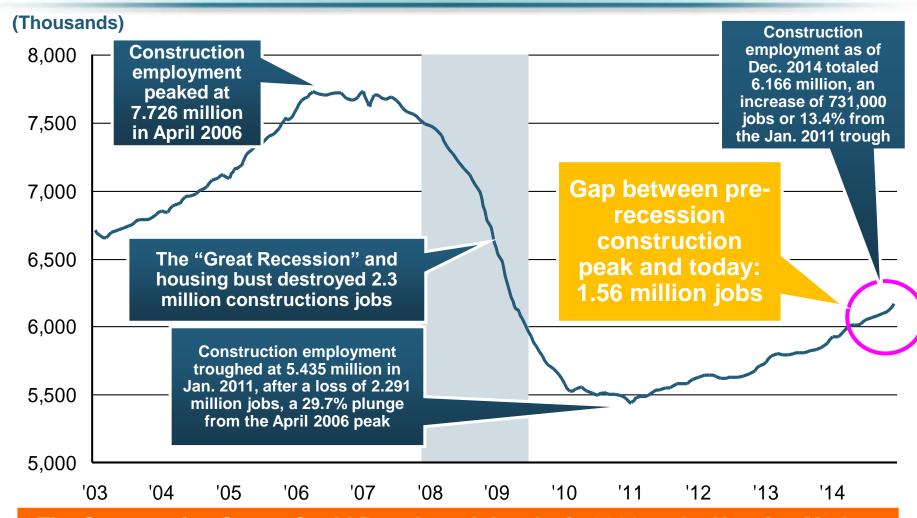


Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

^{*}Seasonally adjusted.

Construction Employment, Jan. 2003–December 2014





The Construction Sector Could Be a Growth Leader in 2014 as the Housing Market, Private Investment and Govt. Spending Recover. WC Insurers Will Benefit.

Note: Recession indicated by gray shaded column.

Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute.



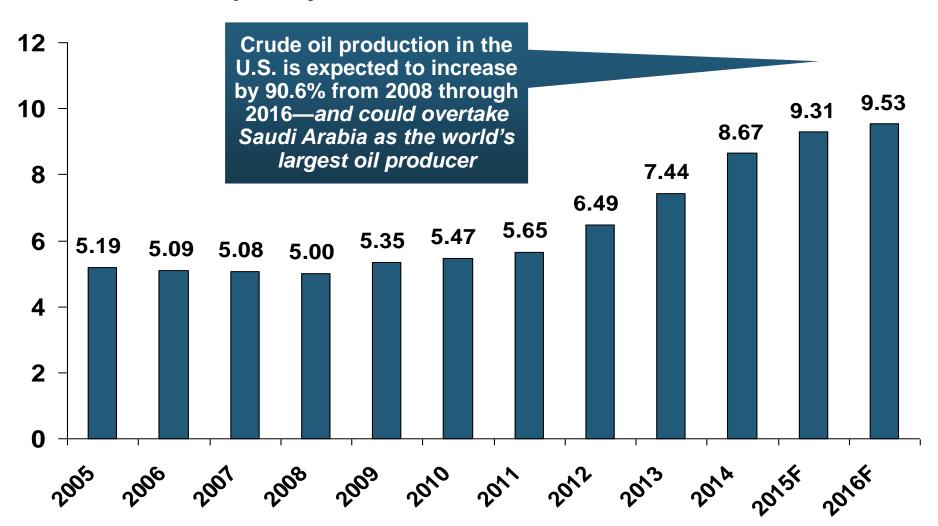
ENERGY SECTOR: OIL & GAS INDUSTRY FUTURE IS BRIGHT BUT VOLATILE

US Is Becoming an Energy Powerhouse but Fall in Prices Will Have Negative Impact

U.S. Crude Oil Production, 2005-2016P



Millions of Barrels per Day

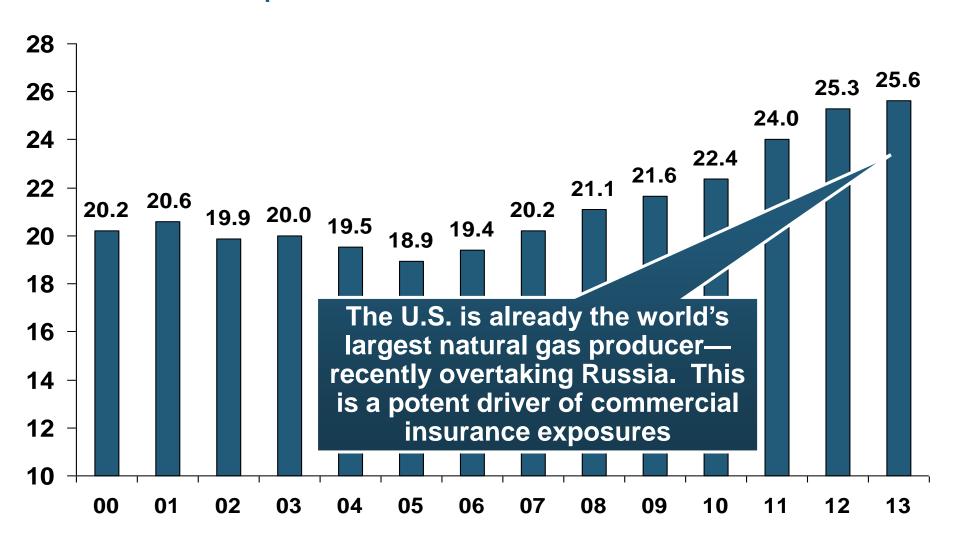


Source: Energy Information Administration, Short-Term Energy Outlook (January 15, 2015), Insurance Information Institute.

U.S. Natural Gas Production, 2000-2013



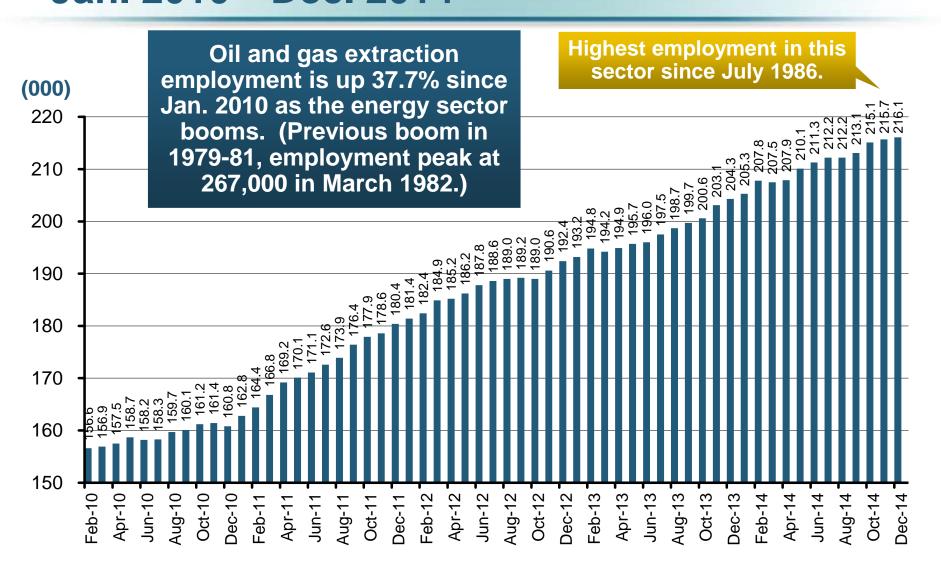
Trillions of Cubic Ft. per Year



Source: Energy Information Administration, Short-Term Energy Outlook (April 8, 2014), Insurance Information Institute.

Employment in Oil & Gas Extraction, Jan. 2010—Dec. 2014*





^{*}Seasonally adjusted

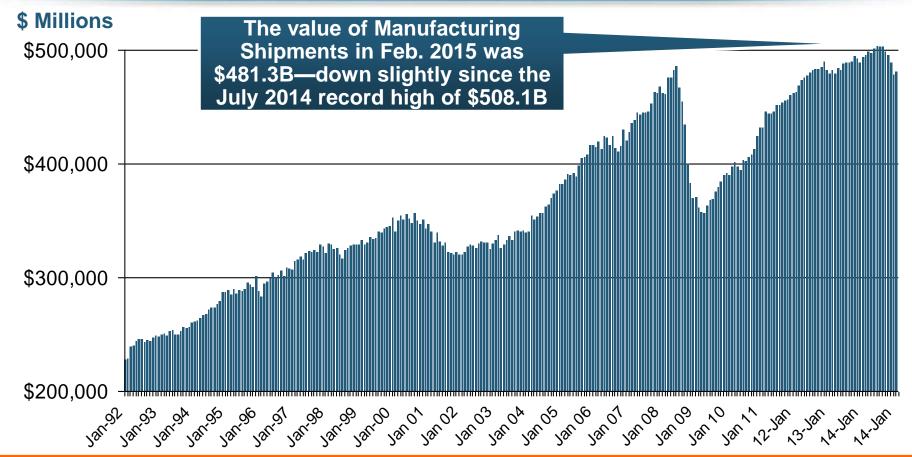


MANUFACTURING SECTOR OVERVIEW & OUTLOOK

The U.S. Is Experiencing a Mini Manufacturing Renaissance but Headwinds from Weak Export Markets and Strong Dollar

Dollar Value* of Manufacturers' Shipments Monthly, Jan. 1992—February 2015



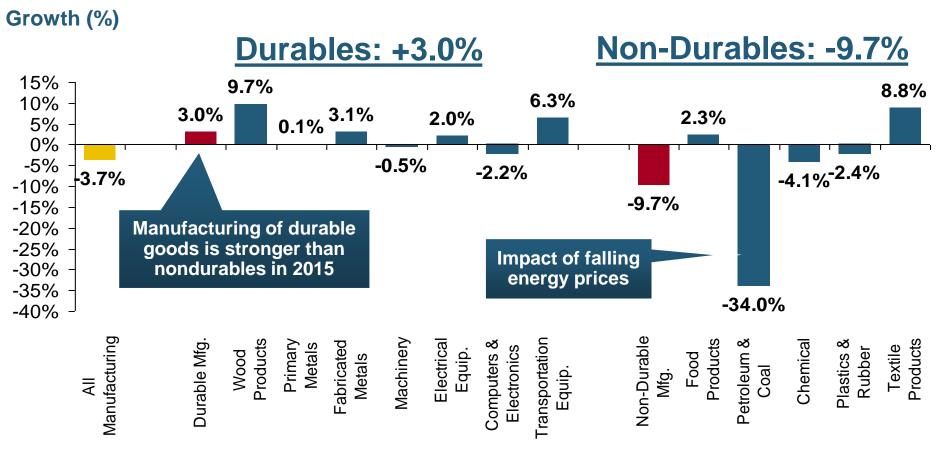


Monthly shipments in Feb. 2015 are similar to pre-crisis (July 2008) peak but has declined in recent months. Manufacturing is energy-intensive and growth leads to gains in many commercial exposures: WC, Commercial Auto, Marine, Property, and various Liability Coverages.

^{*} Seasonally adjusted; Data published Apr. 2, 2015. Source: U.S. Census Bureau, Full Report on Manufacturers' Shipments, Inventories, and Orders, http://www.census.gov/manufacturing/m3/153

Manufacturing Growth for Selected Sectors, 2015 vs. 2014*



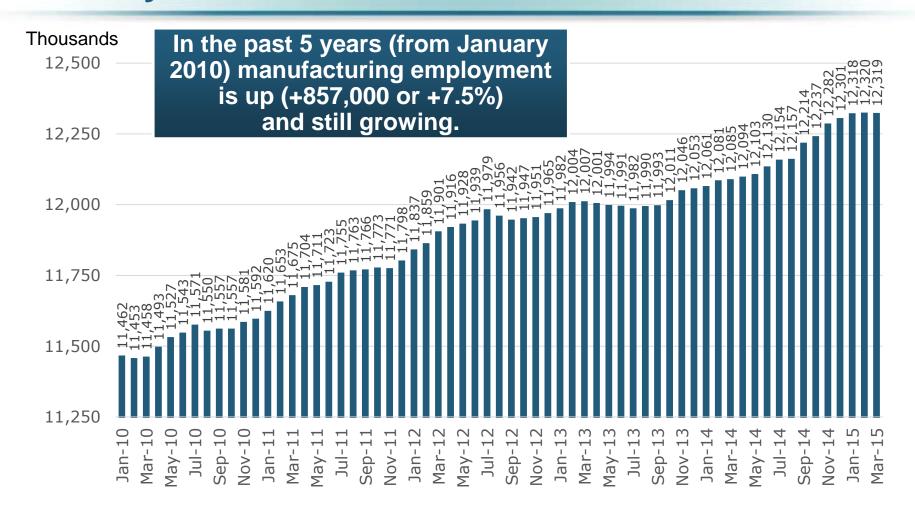


Manufacturing Is Expanding in Many Sectors But Declining Energy Prices Are Dragging Down Industry Figures. Continued Gortwh Across a Number of Sectors that Will Contribute to Growth in Insurable Exposures Including: WC, Commercial Property, Commercial Auto and Many Liability Coverages

*Seasonally adjusted; Date are YTD comparing data through February 2015 to the same period in 2014. Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders,* http://www.census.gov/manufacturing/m3/ 154

Manufacturing Employment, January 2010—March 2015*





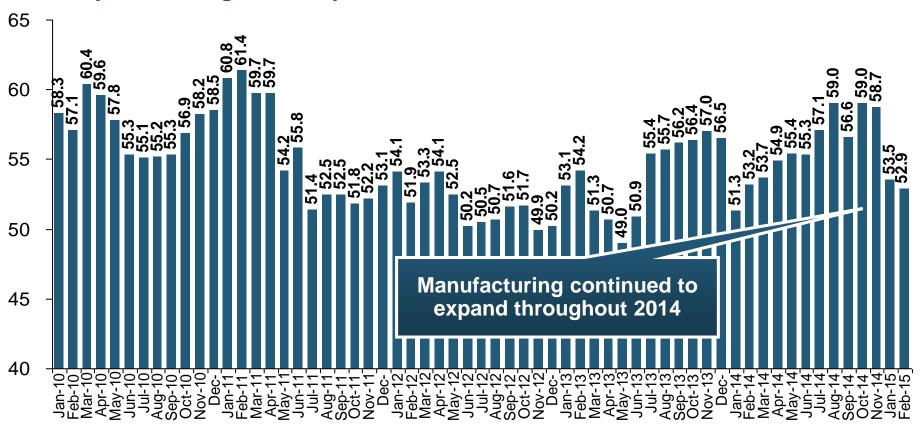
Manufacturing employment is a surprising source of strength in the economy. Employment in the sector is at a multi-year high.

^{*}Seasonally adjusted; Feb. and Mar. 2015 are preliminary
Sources: US Bureau of Labor Statistics at http://data.bls.gov; Insurance Information Institute.

ISM Manufacturing Index (Values > 50 Indicate Expansion)



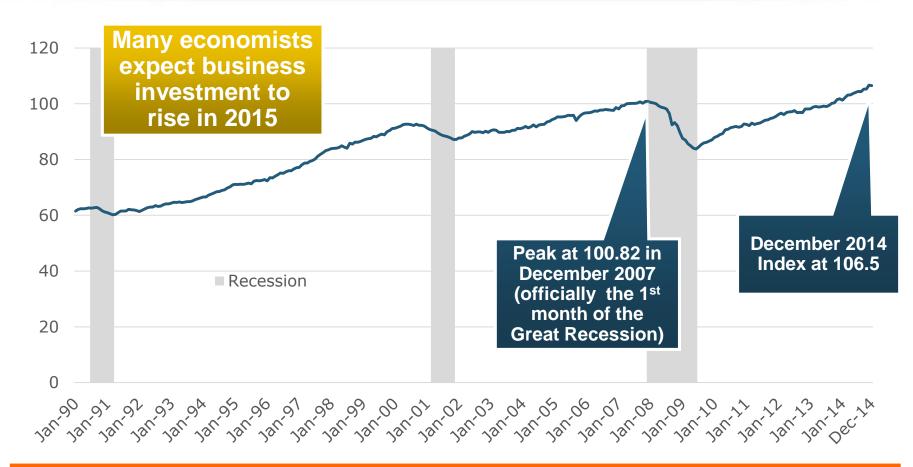
January 2010 through February 2015



The manufacturing sector expanded for 60 of the 62 months from Jan. 2010 through Feb. 2015. Pace of recovery has been uneven due to economic turbulence in the U.S., Europe and China.

Index of Total Industrial Production:* A Near Peak as of December 2014



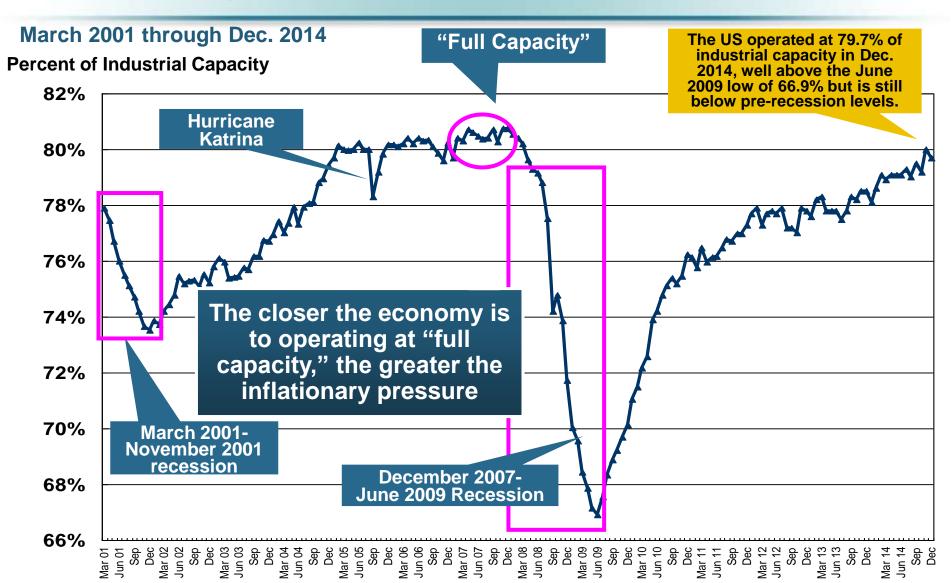


Insurance exposures for industrial production will continue growing in 2015, and commercial insurance premium volume with them. Y-o-Y growth to December 2014 was 4.6%. Both production and premium volume growth for 2015 should exceed this.

^{*}Monthly, seasonally adjusted, through December 2014 (which is preliminary). Index based on year 2007 = 100 Sources: Federal Reserve Board at http://www.federalreserve.gov/releases/g17/ipdisk/ip_sa.txt. National Bureau of Economic Research (recession dates); Insurance Information Institute.

Recovery in Capacity Utilization is a Positive Sign for Commercial Exposures

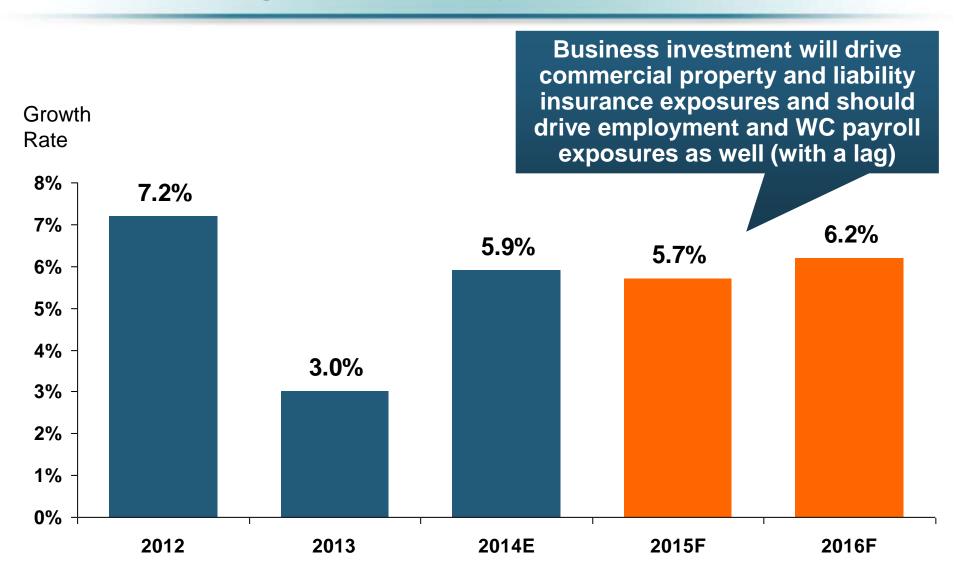




Source: Federal Reserve Board statistical releases at http://www.federalreserve.gov/releases/g17/Current/default.htm.

Business Fixed Investment is Forecast to Grow Steadily in 2015-16, Fueling Commercial Exposure Growth





Sources: Wells Fargo Economic Group; Insurance Information Institute.

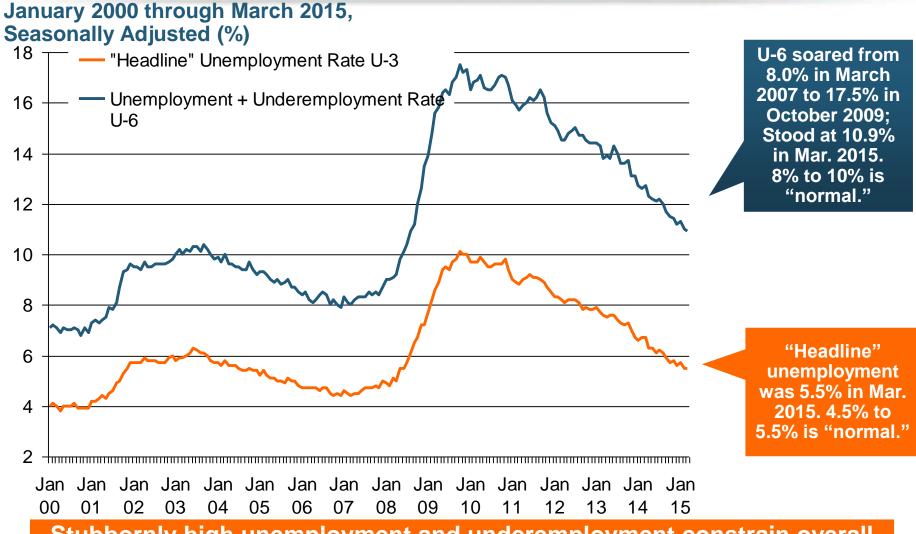


Labor Market Trends

Massive Job Losses Sapped the Economy and Commercial/Personal Lines Exposure, But Trend Has Greatly Improved

Unemployment and Underemployment Rates: Still Too High, But Falling

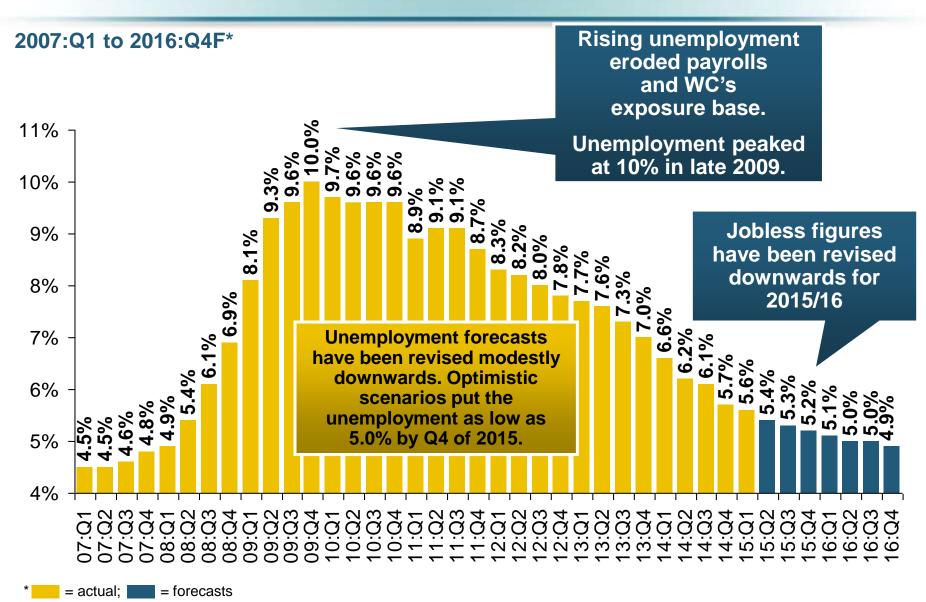




Stubbornly high unemployment and underemployment constrain overall economic growth, but the job market is now clearly improving.

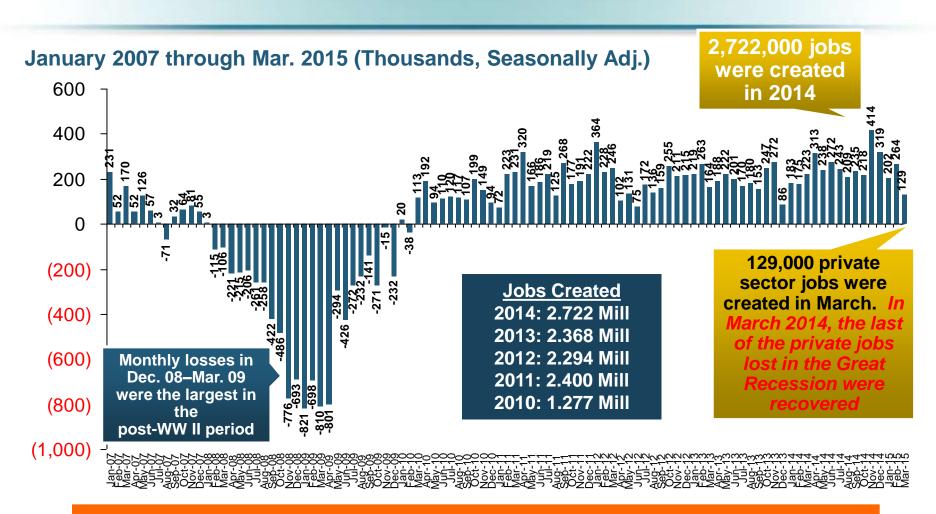
US Unemployment Rate Forecast





Monthly Change in Private Employment

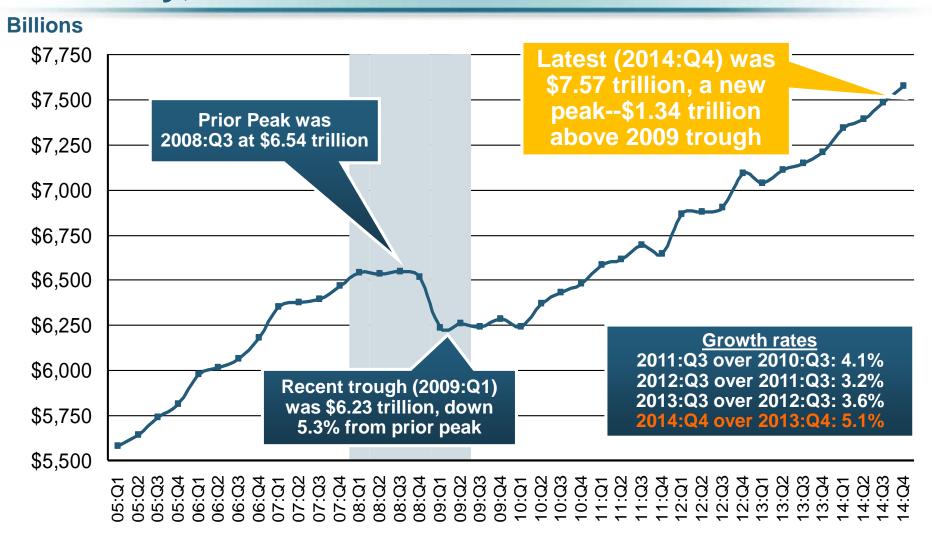




Private Employers Added 11.20 million Jobs Since Jan. 2010 After Having Shed 5.01 Million Jobs in 2009 and 3.76 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)

Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2014:Q4



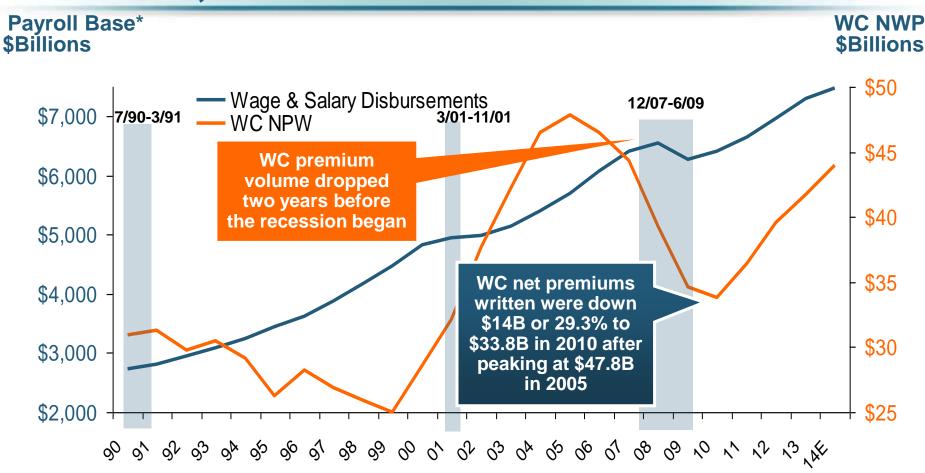


Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

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

Payroll vs. Workers Comp Net Written Premiums, 1990-2014P





Continued Payroll Growth and Rate Gains Suggest WC NWP Will Grow Again in 2015

^{*}Private employment; Shaded areas indicate recessions. WC premiums for 2014 are I.I.I. estimates.. Sources: NBER (recessions); Federal Reserve Bank of St. Louis at http://research.stlouisfed.org/fred2/series/WASCUR; NCCI; I.I.I.

Construction Employment, Jan. 2010—March 2015*



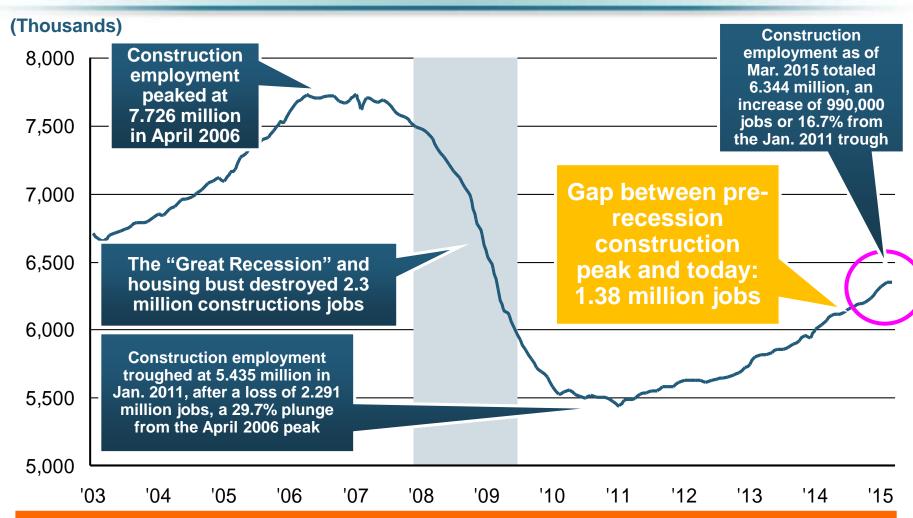


Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

^{*}Seasonally adjusted.

Construction Employment, Jan. 2003–March 2015





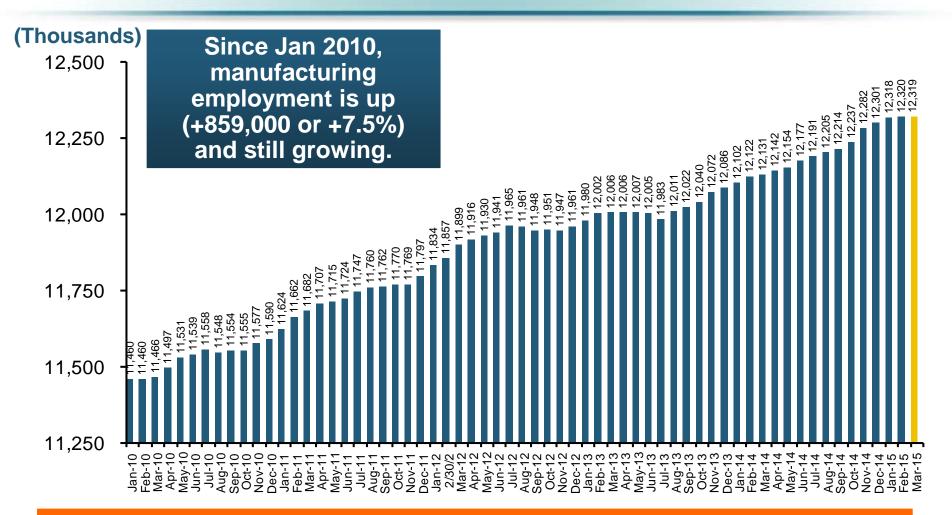
The Construction Sector Was a Growth Leader in 2014 as the Housing Market, Private Investment and Govt. Spending Recover. WC Insurers Will Benefit.

Note: Recession indicated by gray shaded column.

Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute.

Manufacturing Employment, Jan. 2010—March 2015*



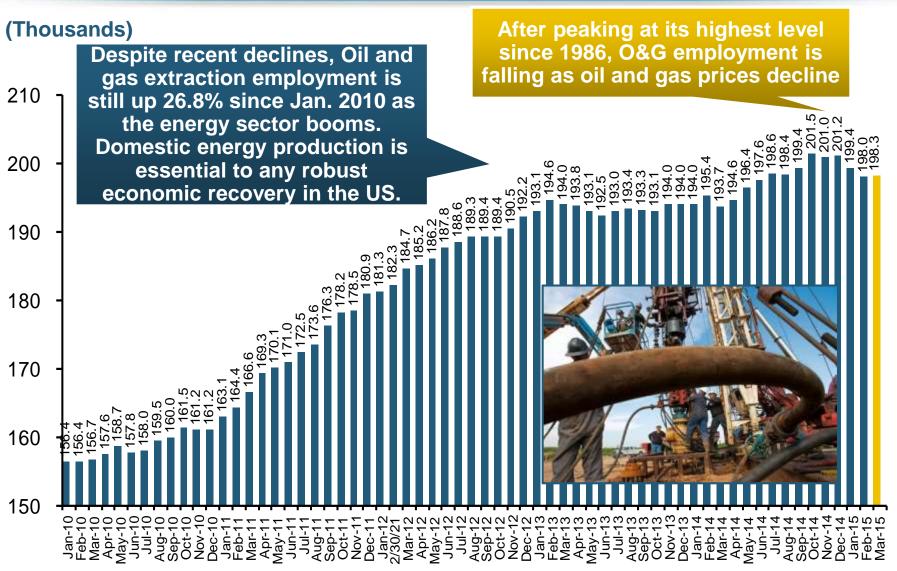


Manufacturing employment is a surprising source of strength in the economy. Employment in the sector is at a multi-year high.

^{*}Seasonally adjusted.

Oil & Gas Extraction Employment, Jan. 2010—March 2015*





^{*}Seasonally adjusted

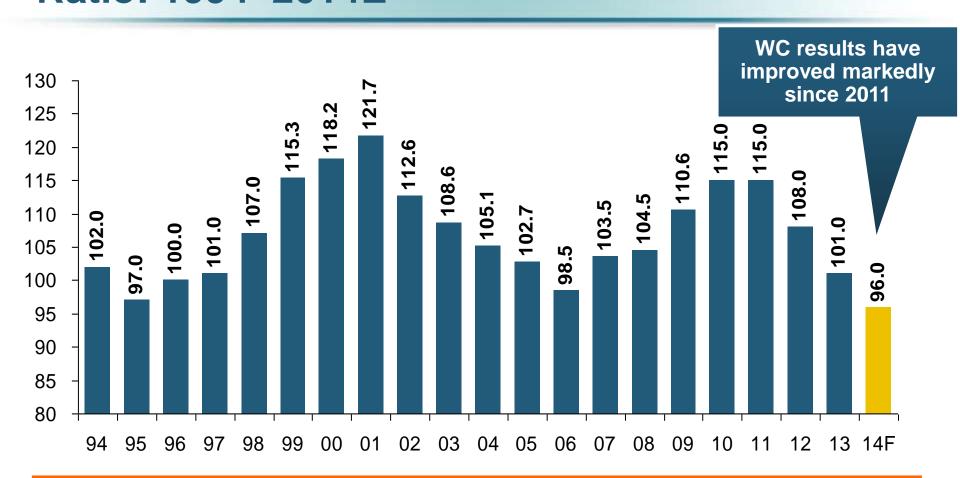


Workers Compensation Operating Environment

Workers Comp Results Have Improved Substantially in Recent Years

Workers Compensation Combined Ratio: 1994–2014E



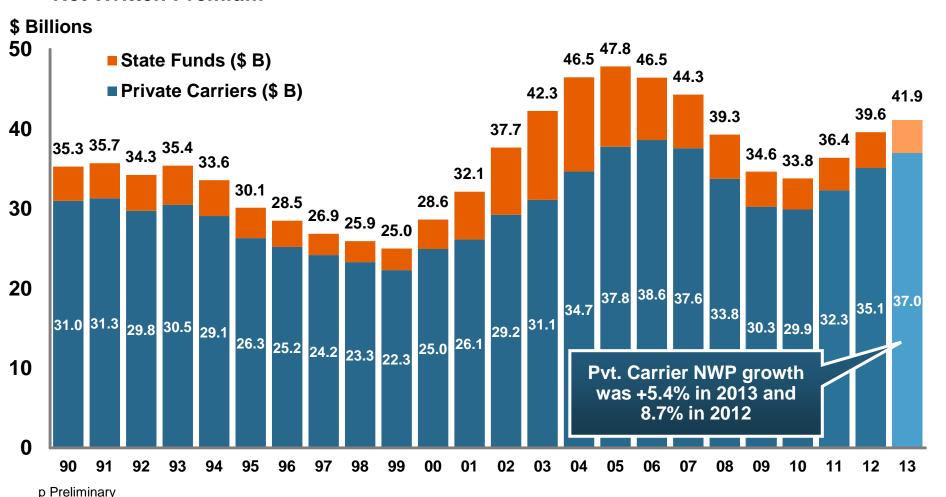


Workers Comp Results Began to Improve in 2012. Underwriting Results Deteriorated Markedly from 2007-2010/11 and Were the Worst They Had Been in a Decade.

Workers Compensation Premium: Third Consecutive Year of Increase



Net Written Premium



Source: 1990–2013p Private Carriers, Annual Statement Data, NCCI.

1996–2013p State Funds: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, UT Annual Statements

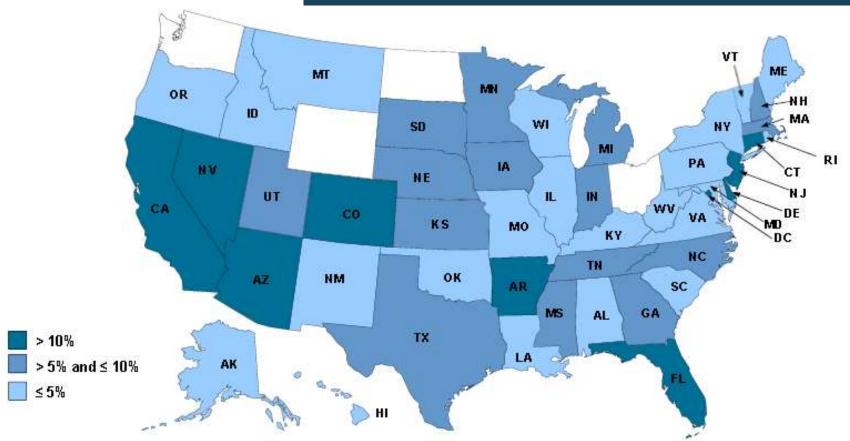
State Funds available for 1996 and subsequent

2013 Workers Compensation Direct Written Premium Growth, by State*



PRIVATE CARRIERS: Overall 2013 Growth = +5.4%



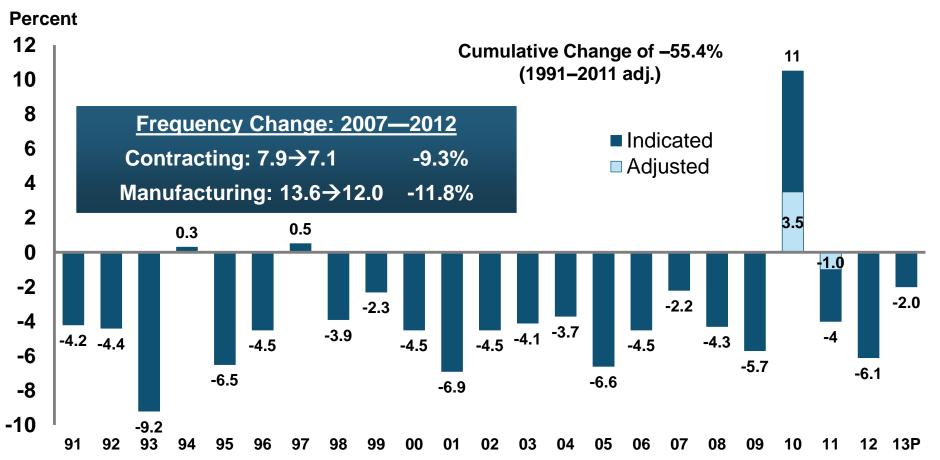


^{*}Excludes monopolistic fund states (in white): OH, ND, WA and WY. Source: NCCI.

Workers Compensation Lost-Time Claim Frequency Declined in 2013







^{*}Adjustments primarily due to significant audit activity.

2013p: Preliminary based on data valued as of 12/31/2013

1991–2012: Based on data through 12/31/2012, developed to ultimate

Based on the states where NCCI provides ratemaking services, including state funds; excludes high deductible policies Frequency is the number of lost-time claims per \$1M pure premium at current wage and voluntary loss cost level

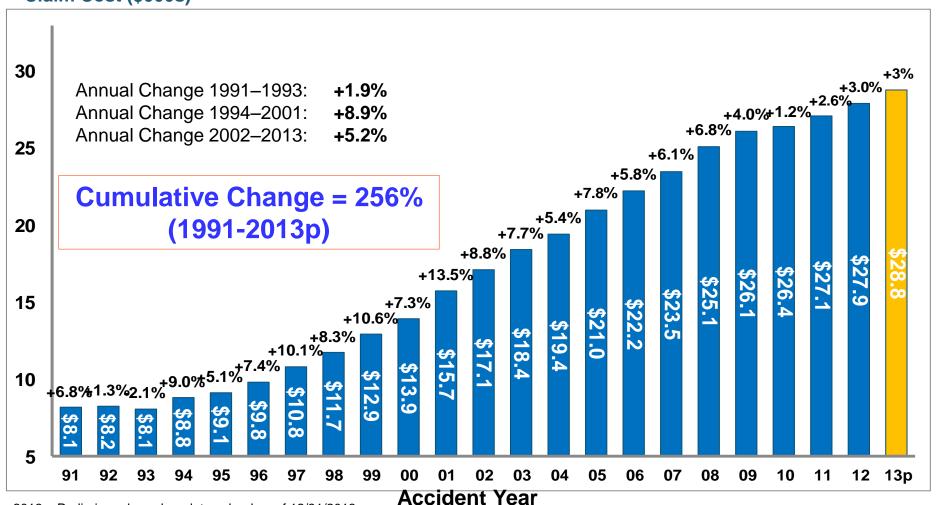
Source: NCCI.

Workers Compensation Medical Severity Moderate Increase in 2013



Medical
Claim Cost (\$000s)

Average Medical Cost per Lost-Time Claim



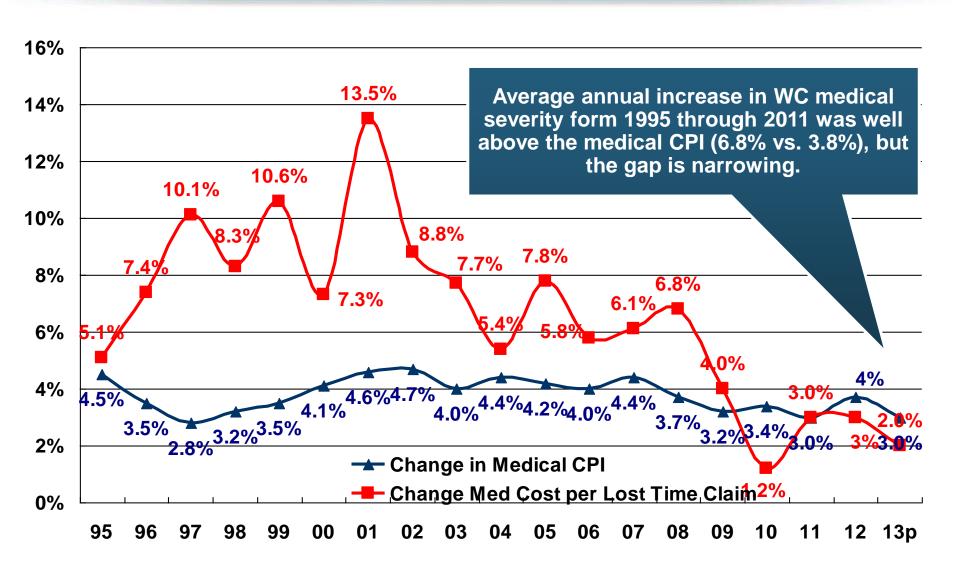
2013p: Preliminary based on data valued as of 12/31/2013.

1991-2012: Based on data through 12/31/2012, developed to ultimate

Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.

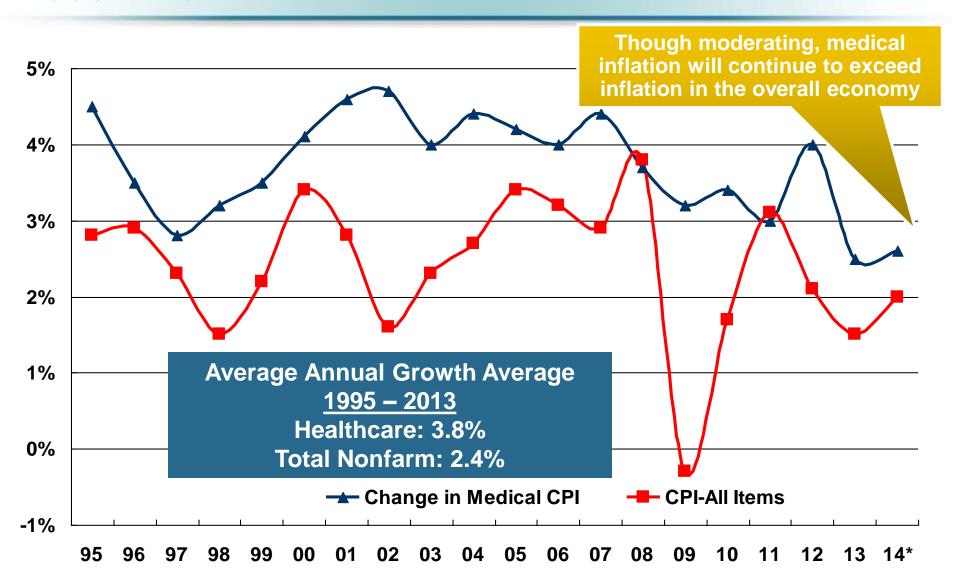
WC Medical Severity Generally Outpaces the Medical CPI Rate





Medical Cost Inflation vs. Overall CPI, 1995 – 2014*



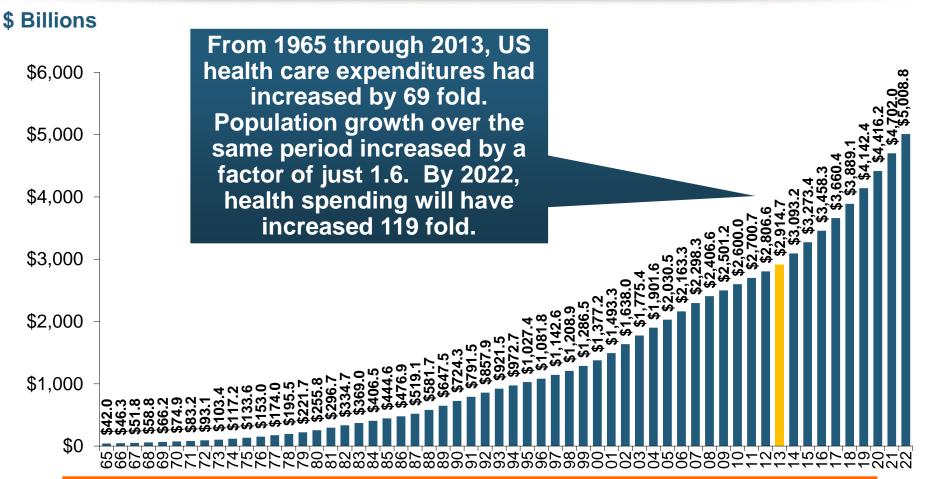


^{*}July 2014 compared to July 2013.

Sources: Med CPI from US Bureau of Labor Statistics, WC med severity from NCCI based on NCCI states.

U.S. Health Care Expenditures, 1965–2022F

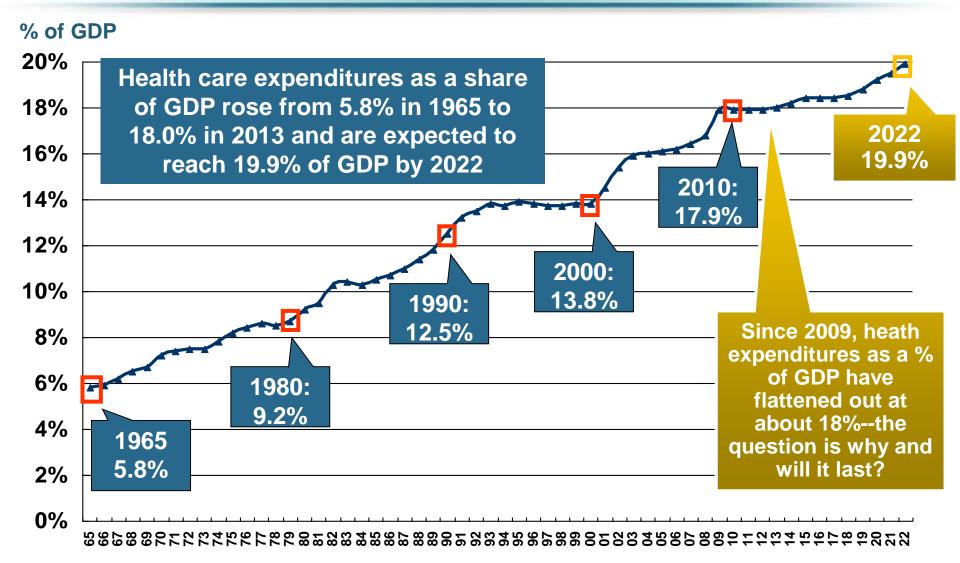




U.S. health care expenditures have been on a relentless climb for most of the past half century, far outstripping population growth, inflation of GDP growth

National Health Care Expenditures as a Share of GDP, 1965 – 2022F*





Sources: Centers for Medicare & Medicaid Services, Office of the Actuary at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html accessed 3/14/14; Insurance Information Institute.

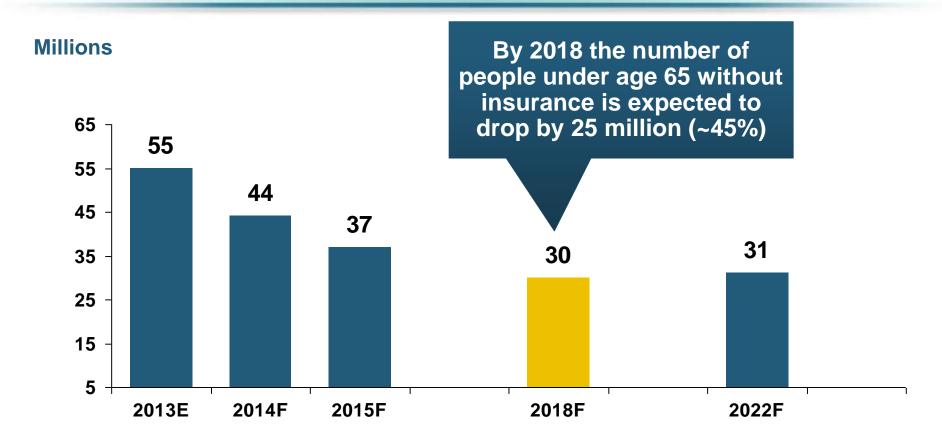


The Affordable Care Act & Implications for P/C Insurance

The ACA Is Now Being Fully Implemented; Consequences for P/C Insurance Are Yet to Be Determined

Projected Number of People with No Health Insurance, 2013—2022*





The projected decline in the uninsured population is very sensitive to the enrollment rate under the Affordable Care Act

^{*}Under age 65.

A Few Potential Impacts of the ACA on Workers Compensation



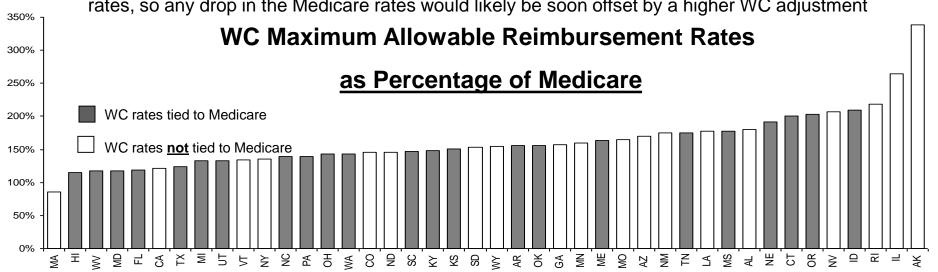
Issue	Concern	Contravening Argument
Surge in People Covered by Health Insurance	 System is overwhelmed MD shortage Patient care adversely impacted 	 Over time, people will have access to preventative care, improving the general health of the population Greater use of PA's, etc.
Electronic Health Records	• Cost	Computerization of patient data could help flag issues and improve risk management and improve patient outcomes
Claim Shifting	 Provider/patient may prefer claim handled via WC system 	Reduction in uninsured population reduces shifting
Reimbursement Rates	Cuts in MC reimbursement rates could makes docs less willing to take WC claims	Impact would be short-lived. All MC-linked states already boost WC reimbursements

ACA Impact on WC May Occur via Changes in Rates Set by State Regulators



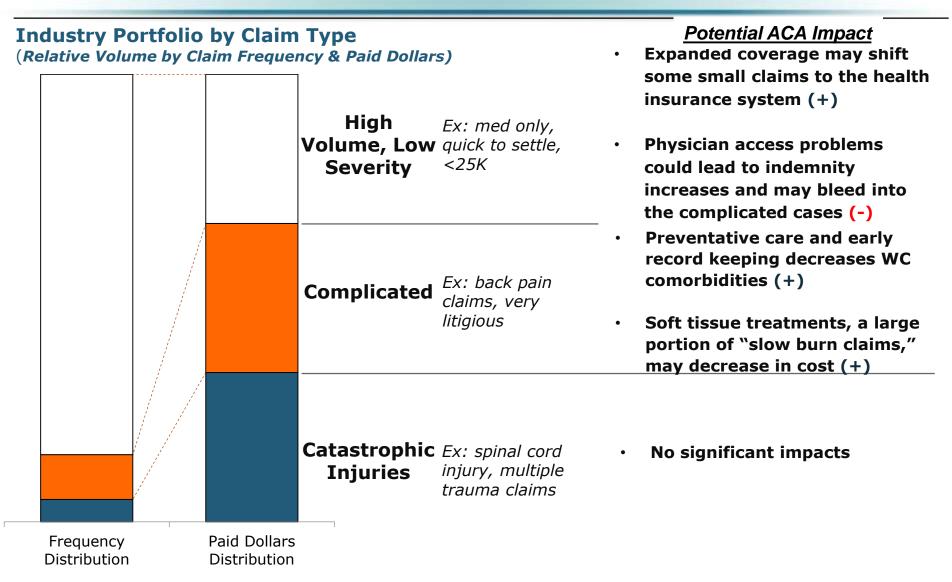
- WC rates often tied to Medicare but can change for reasons independent of this link
- There could be both positive and negative effects of a cut in Medicare rates on WC performance in states which tie reimbursement to Medicare
 - WC reimbursement rates would go down
 - Doctors may be unwilling to see WC patients:
 - ➤ 64% of Dr.'s surveyed said they would stop accepting new Medicare patients if planned rate cuts go through; some of these same doctors may also refuse WC patients if WC rates also decrease
- These effects would likely be short lived

 All states which tie their fee schedules to Medicare already increase the Medicare rates to set WC rates, so any drop in the Medicare rates would likely be soon offset by a higher WC adjustment



PPACA May Have Distinct Impacts on WC Depending on Claim Frequency/Severity





SOURCE: Christopher Cunniff, FCAS, Impacts of Healthcare Reform on Workers Compensation.

Possible Effects on Workers Comp



1. Could slow the growth in WC medical care costs

 IPAB recommendations and PCORI reports, plus Medicare changes, could have beneficial effects on cost and treatment effectiveness

2. Could ACA be first step in federal regulation of insurance products and markets?

- Will regulation like that requiring products to be priced to meet Medical Loss Ratios be applied to WC?
- Will cost-control mechanisms such as the Independent Payment Advisory Board be developed for WC?
- Will WC insurers lose their limited exemption from anti-trust laws that they have had under McCarran-Ferguson since 1945?

Potential Impacts of the ACA on Medical Professional Liability



Issue	Concern	Contravening Argument		
Surge in People Covered by Health Insurance	 System is overwhelmed Doctors spend less time on patients Patient care adversely impacted 	 Over time, people will have access to preventative care, improving the general health of the population People are receiving care already via suboptimal channels Less use of ERs 		
Electronic Health Records	Digitization could create a treasure trove of data for plaintiff attorneys	Computerization of patient data could help flag issues and improve risk management and improve patient outcomes		
MPL Claim Severity	More large verdicts will	ACA will help contain system costs		



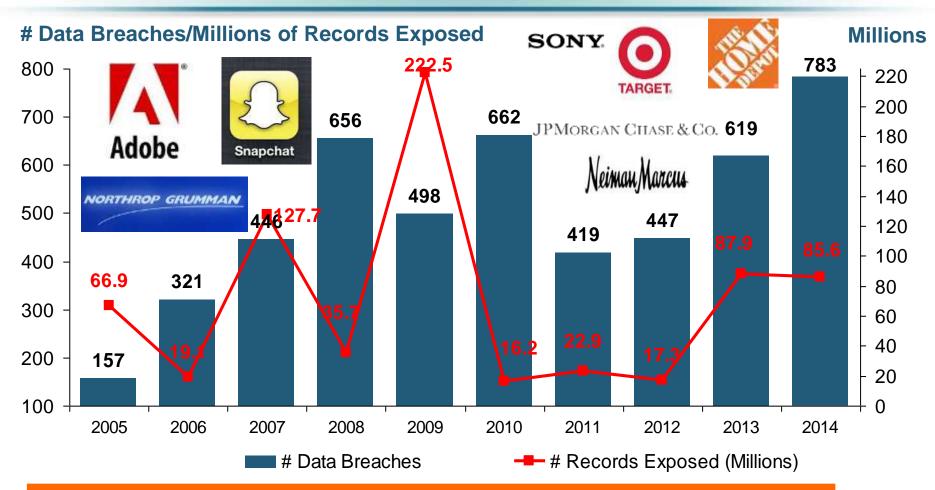
CYBER RISK & CYBER INSURANCE

Cyber Risk is a Rapidly Emerging Exposure for Businesses Large and Small in Every Industry

Rapidly Increasing Interest from Businesses, Media & Public Policymakers

Data Breaches 2005-2014, by Number of Breaches and Records Exposed



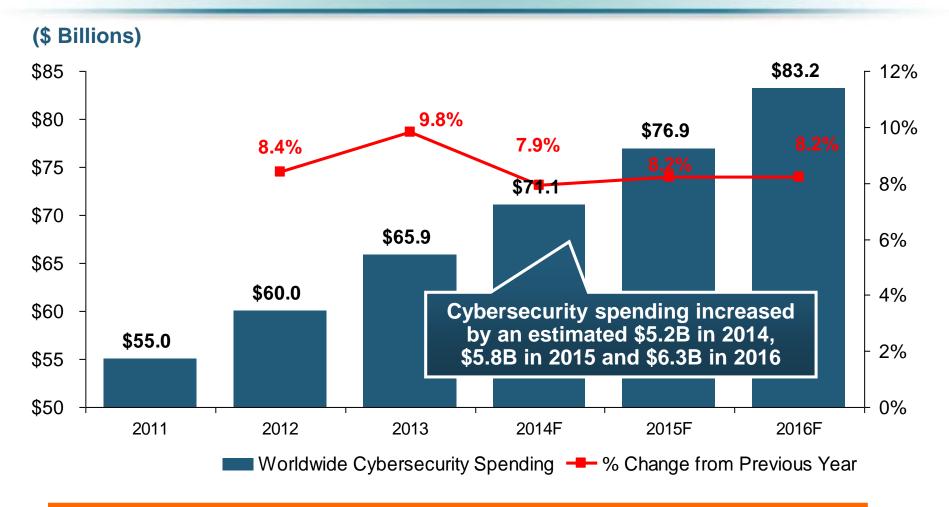


The Total Number of Data Breaches Rose 28% While the Number of Records Exposed Was Relatively Flat (-2.6%)

^{* 2014} figures as of Jan. 12, 2014 from the ITRC. Source: Identity Theft Resource Center.

Worldwide Cybersecurity Spending, 2011- 2016F

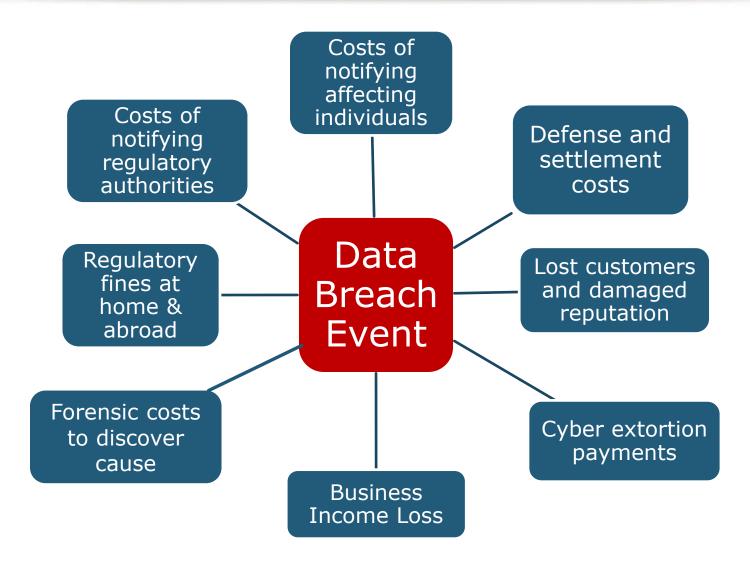




Cybersecurity Spending Is Rising Sharply, Up by About 8%+ Annually through 2016—a Projected Increase of \$12.1 Billion from 2014 to 2016

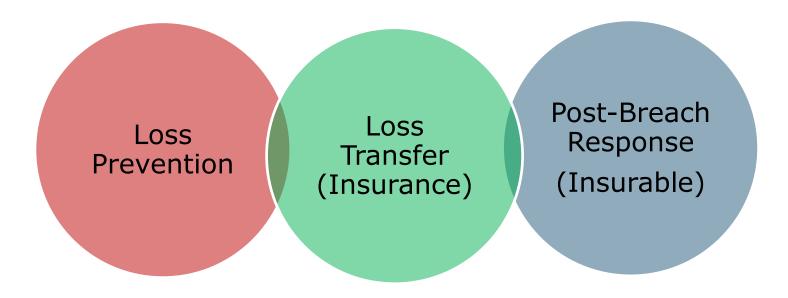
Data/Privacy Breach: Many Potential Costs Can Be Insured





The Three Basic Elements of Cyber Coverage: Prevention, Transfer, Response





Cyber risk management today involves three essential components, each designed to reduce, mitigate or avoid loss. An increasing number of cyber risk products offered by insurers today provide all three.

I.I.I. Released its Second Cyber Report in 2014: Cyber Risk: The Growing Threat





CYBER RISKS: THE GROWING THREAT

JUNE 2814

Robert P. Hartwig, Ph. D. CPCU Presidents, Economist (212)346-5520 bobingNill.org

Conjultant (5.17) 455-6457 claire w@ll.org

- I.I.I.'s 2nd report on cyber risk released June 2014
- Provides information on cyber threats and insurance market solutions
- Global cyber risk overview
 - Quantification of threats by type and industry
- Cyber security and cost of attacks
- Cyber terrorism
- Cyber liability
- Insurance market for cyber risk
- 3rd Report in Q2 2015



INDUSTRY DISRUPTORS

Technology, Society and the Economy Are All Changing at a Rapid Pace Thoughts on the Future

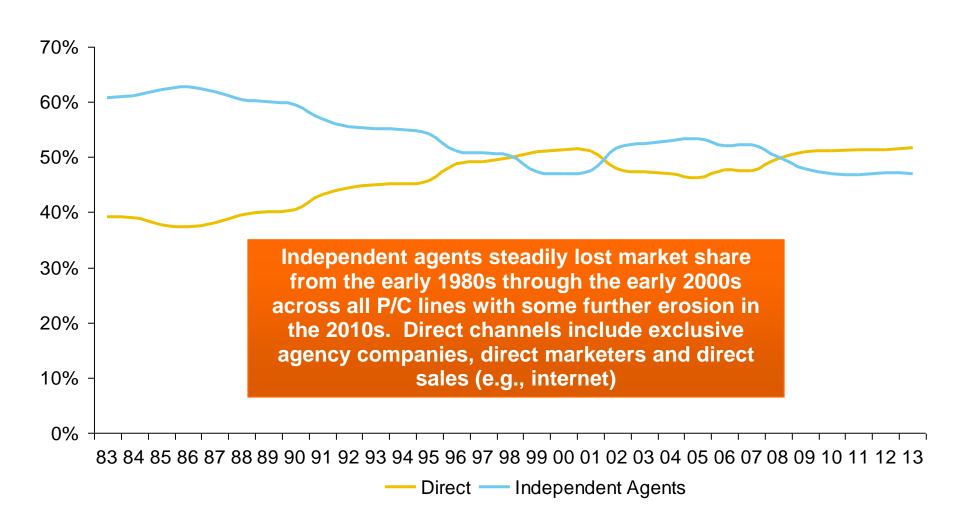


DISTRIBUTION TRENDS

Distribution by Channel Type Continues to Evolve Rapidly

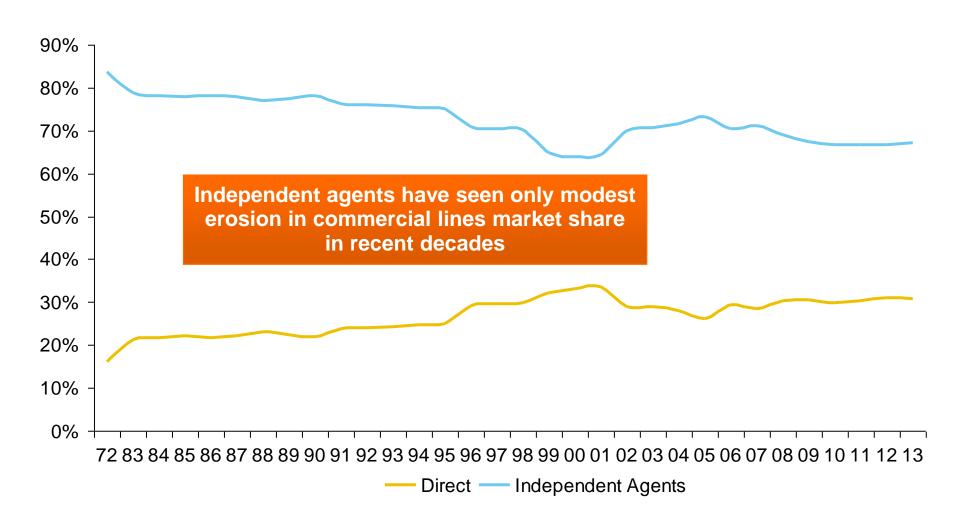
All P/C Lines Distribution Channels, Direct vs. Independent Agents





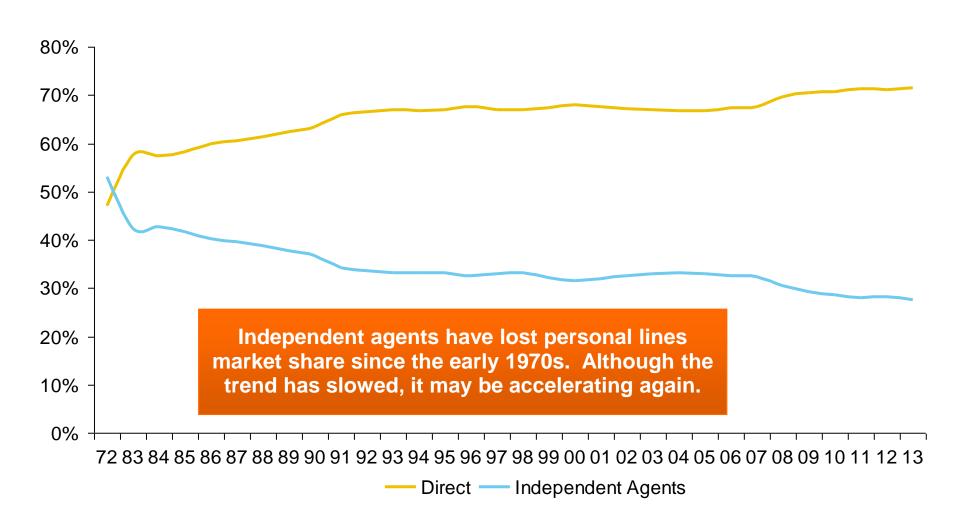
Commercial P/C Distribution Channels, Direct vs. Independent Agents





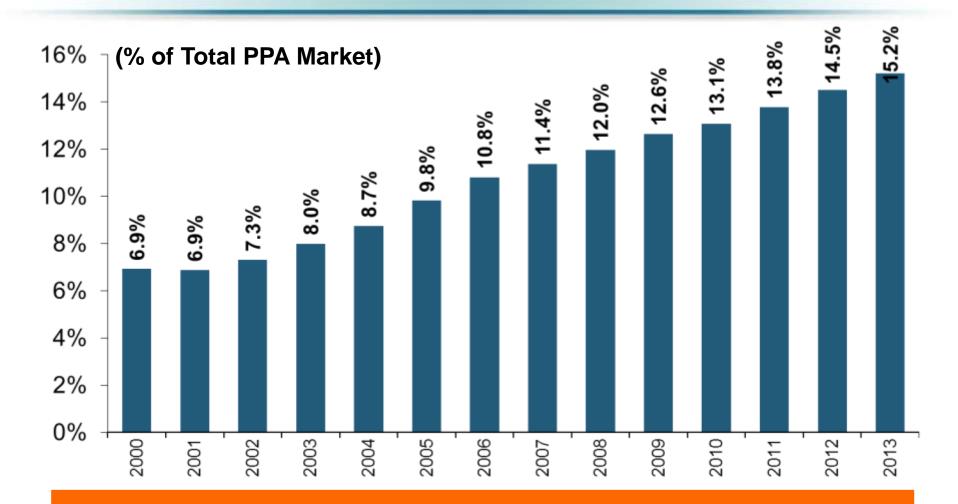
Personal Lines Distribution Channels, Direct vs. Independent Agents





Growth in Select Major Pvt. Passenger Auto Direct Writers' Market Share*





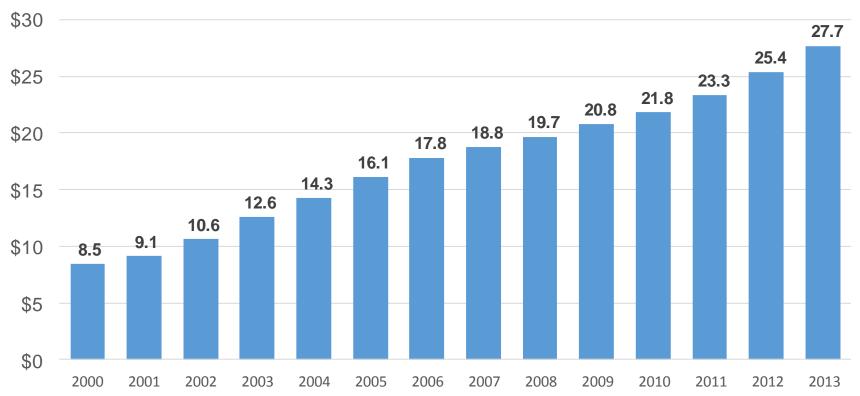
Direct Writers' Market Share Has More Than Doubled Since 2000.

^{*}Includes GEICO, Progressive Direct, Esurance and 21st Century. Sources: SNL Financial; Insurance Information Institute.

Direct Premiums Written for Select Major Pvt. Passenger Auto Direct Writers'





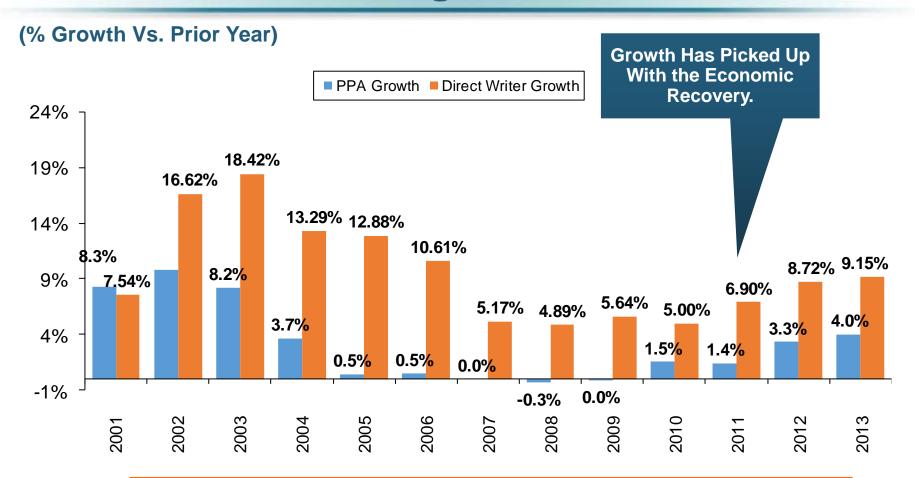


Direct Writers Have More Than Tripled Their Premiums Written Since 2000.

^{*}Includes GEICO, Progressive Direct, Esurance and 21st Century. Sources: SNL Financial; Insurance Information Institute.

Growth Rates: Major PPA Direct Writers vs. All Private Passenger Auto Writers





Direct Writers Have Grown Faster Than The Private Passenger Market Since 2002

^{*}Includes GEICO, Progressive Direct, Esurance and 21st Century. Sources: SNL Financial; Insurance Information Institute.

Top 10 and Direct PP Auto Writers Gained Market Share from 2009 to 2013



		Market Share (%)				Market Share Change				
2013 Rank		2009	2010	2011	2012	2013	2010	2011	2012	2013
1	State Farm Mutl Automobile Ins	18.09%	18.11%	18.07%	17.87%	17.97%	0.03%	-0.04%	-0.21%	0.10%
2	Berkshire Hathaway Inc.	8.35%	8.64%	9.22%	9.72%	10.35%	0.29%	0.58%	0.50%	0.63%
3	Allstate Corp.	11.13%	10.85%	10.48%	10.15%	10.03%	-0.29%	-0.36%	-0.34%	-0.11%
4	Progressive Corp.	7.58%	7.83%	8.06%	8.37%	8.54%	0.24%	0.23%	0.32%	0.16%
5	Farmers Insurance Group of Cos	6.46%	6.06%	5.99%	5.97%	5.49%	-0.40%	-0.07%	-0.02%	-0.48%
6	USAA Insurance Group	4.13%	4.39%	4.63%	4.87%	5.06%	0.26%	0.24%	0.23%	0.19%
7	Liberty Mutual	4.43%	4.57%	4.62%	4.80%	5.02%	0.14%	0.04%	0.18%	0.22%
8	Nationwide Mutual Group	4.64%	4.37%	4.20%	4.14%	4.04%	-0.27%	-0.17%	-0.06%	-0.10%
9	American Family Mutual	2.18%	2.13%	2.00%	1.92%	1.91%	-0.05%	-0.14%	-0.08%	0.00%
10	Travelers Companies Inc.	2.08%	2.14%	2.12%	1.97%	1.77%	0.06%	-0.02%	-0.15%	-0.20%
	Top 10 Market Share	69.1%	69.1%	69.4%	69.8%	70.2%	0.01%	0.30%	0.39%	0.41%
11	Hartford Financial Services	1.64%	1.53%	1.41%	1.34%	1.31%	-0.11%	-0.12%	-0.07%	-0.03%
12	Auto Club Exchange Group	1.27%	1.28%	1.30%	1.30%	1.30%	0.01%	0.02%	0.00%	-0.01%
13	Erie Insurance Group	1.15%	1.19%	1.20%	1.21%	1.23%	0.04%	0.01%	0.01%	0.02%
14	M etLife Inc.	1.24%	1.24%	1.23%	1.22%	1.23%	-0.01%	-0.01%	-0.01%	0.01%
15	Mercury General Corp.	1.30%	1.26%	1.24%	1.22%	1.19%	-0.04%	-0.02%	-0.02%	-0.04%
16	CSAA Insurance Exchange	1.19%	1.18%	1.17%	1.14%	1.11%	-0.01%	-0.01%	-0.03%	-0.02%
17	Auto-Owners Insurance Co.	0.84%	0.91%	0.98%	0.99%	0.99%	0.07%	0.07%	0.01%	0.00%
18	Auto Club Insurance Assoc Grp	0.85%	0.89%	0.91%	0.91%	0.90%	0.04%	0.02%	0.00%	-0.01%
19	MAPFRE	0.82%	0.86%	0.89%	0.83%	0.82%	0.04%	0.02%	-0.06%	-0.01%
20	Infinity P&C Corp.	0.49%	0.55%	0.61%	0.68%	0.70%	0.06%	0.07%	0.07%	0.01%
	#11-#20 Total Market Share	10.8%	10.9%	10.9%	10.8%	10.8%	0.09%	0.05%	-0.11%	-0.07%
	Top 20 Market Share	79.9%	80.0%	80.3%	80.6%	80.9%	0.10%	0.35%	0.28%	0.34%
	Rest of Industry Market Share	20.1%	20.0%	19.7%	19.4%	19.1%	-0.10%	-0.35%	-0.28%	-0.34%
	TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%				

Top Line Growth of Major Independent Agency PP Auto Writers, 2009 – 2014H1

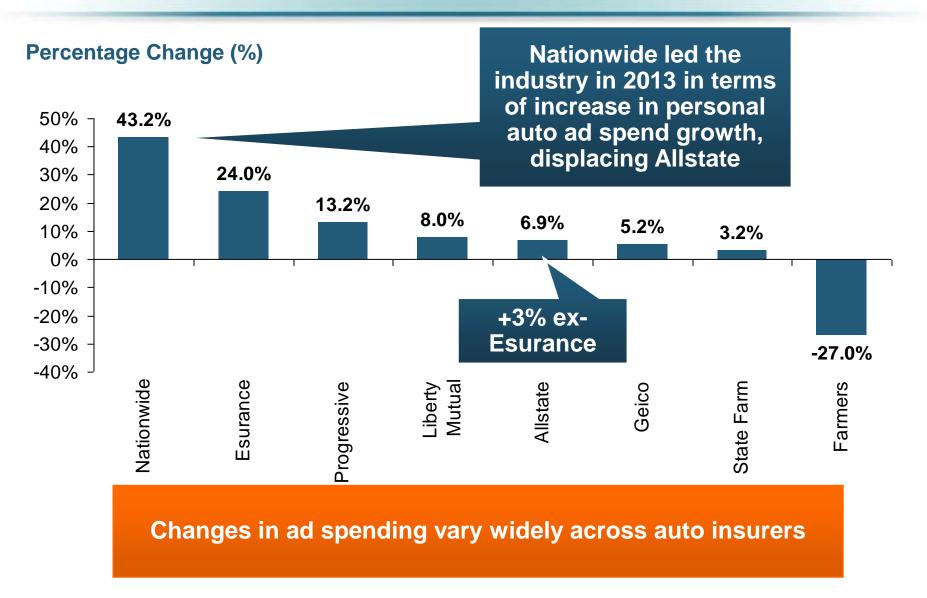


	2009	2010	2011	2012	2013	1H14
Progressive Agency Pool	0.9%	0.9%	2.5%	6.7%	5.2%	3.7%
Travelers	-0.7%	4.4%	0.4%	-3.8%	-6.3%	-2.3%
Nationw ide Mutual	-2.5%	-4.5%	-2.4%	2.7%	2.0%	1.3%
Safeco	-12.0%	4.3%	-1.4%	12.6%	26.3%	11.7%
Mercury	-8.4%	-1.9%	0.0%	1.9%	1.3%	3.5%
Erie	2.2%	4.7%	2.4%	4.4%	6.4%	6.5%
Auto-Owners	8.2%	10.3%	8.7%	4.6%	4.4%	4.7%
Zurich/Farmers	-7.4%	-4.7%	0.0%	3.2%	-3.8%	-3.5%
Hartford	0.0%	-5.1%	-6.7%	-1.8%	2.0%	3.5%
Mapfre	-4.8%	6.2%	3.6%	-3.3%	3.4%	1.3%
Infinity	-5.7%	13.8%	13.7%	15.7%	6.5%	0.5%

Independent Agency carriers have turned in a mixed growth performance in the PP Auto line in 2014

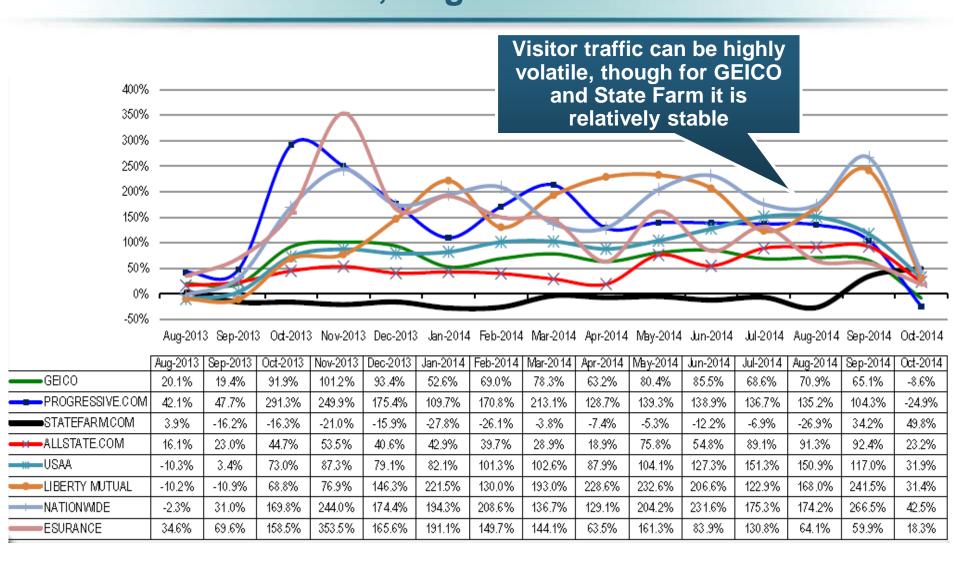
Advertising Spend Change by Select Personal Auto Writers: 2013 vs. 2012





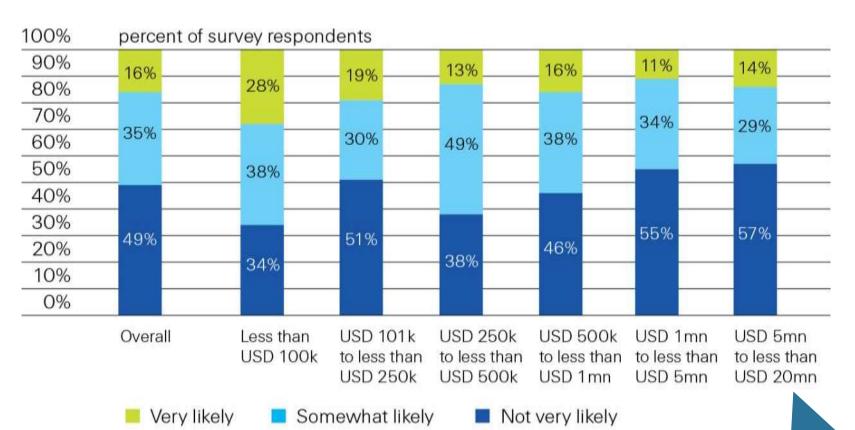
Y/Y Change in Unique Website Visitors of Select INSURANCE Personal Auto Writers, Aug. 2013 - Oct. 2014





Proportion of Businesses Interested in Buying Insurance Online





Likelihood of small US businesses buying insurance online directly from the insurer, overall and by annual company revenue, in 2013

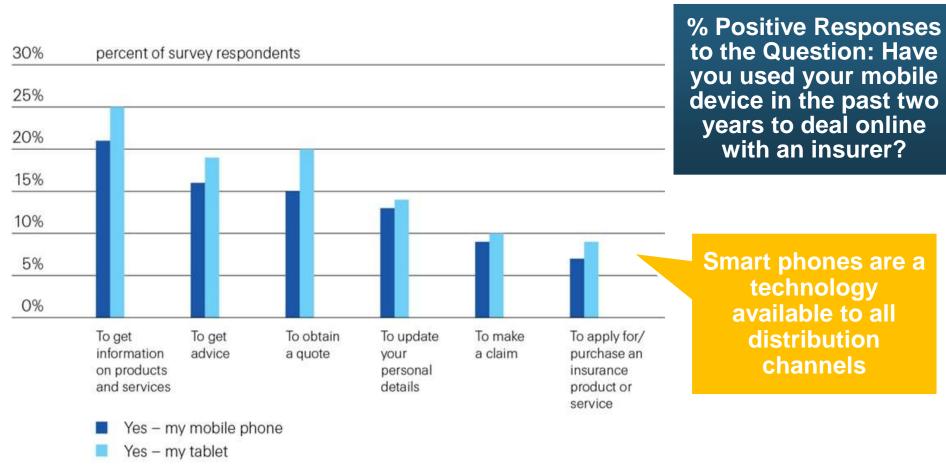
Source: Swiss Re from "Voice of the Small Commercial Insurance Consumer Survey." Deloitte, March (2013)

Interest diminishes with account size

The Rise of the Smart Phone: Technology Insurance is Available for All Distribution Channels



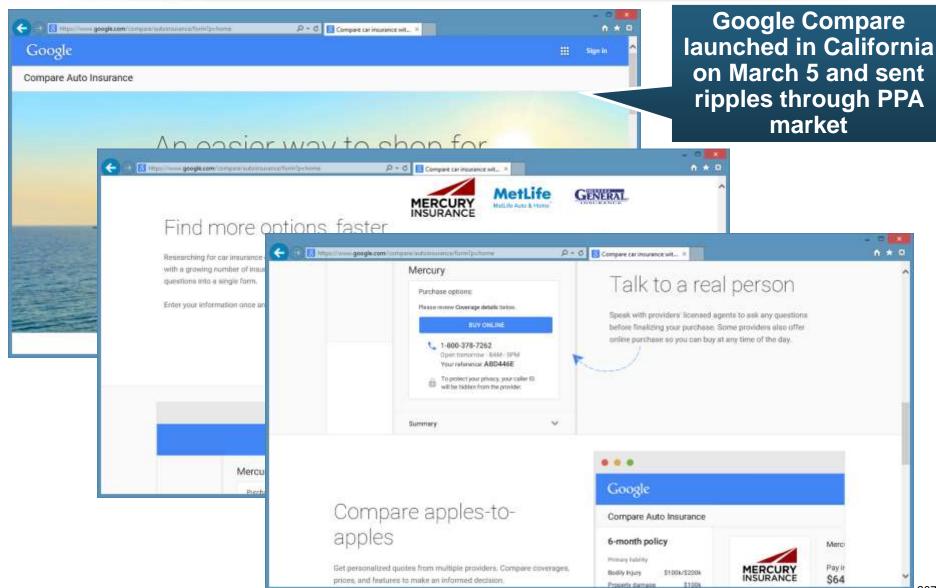




Note: Share of positive responses to the question: "Have you used your mobile device in the past two years to deal online with an insurer?"

Source: Swiss Re from "2013 Consumer-Driven Innovation Survey." Accenture (2013)

Google: Should Insurers Be Concerned? Insurance information institute



Distribution via 'basic' mobile



- New uses for mobile increase potential for accessing the previously uninsured
 - Insurance premiums can be collected via mobile (through mobile money platforms or through airtime deductions)
 - Collection methods typically depend on regulation

Innovative Examples

- MicroEnsure using algorithms to track down potential claims
- Bima using mobile to monitor agent performance and verify that consumers get the right information
- Kilimo Salama using just 2 mobile data points (GPS location and date of text), combined with satellite technology, to underwrite crop insurance
- IFFCO-Tokio mobile biometric identification for livestock insurance



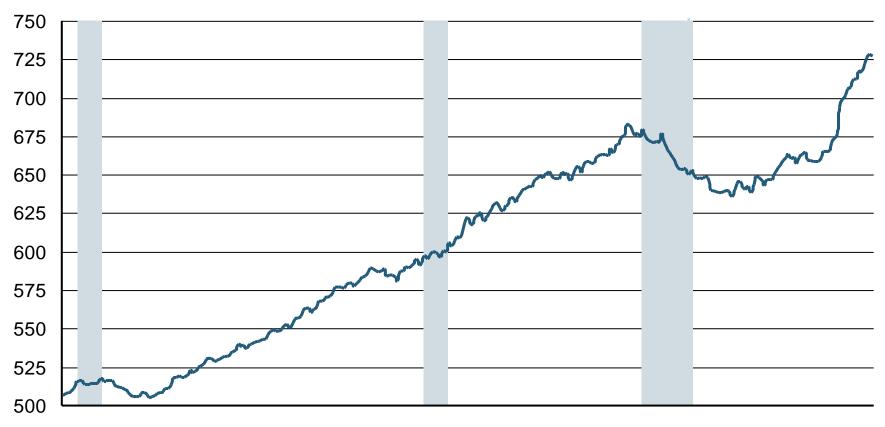
DISTRIBUTION DEMOGRAPHICS

Employment Among Agents and Brokers Has Recovered but Consolidation Trends Will Persist

U.S. Employment in Insurance Agencies & Brokerages: 1990–2015*



Thousands



'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 '15

Note: Recessions indicated by gray shaded columns.

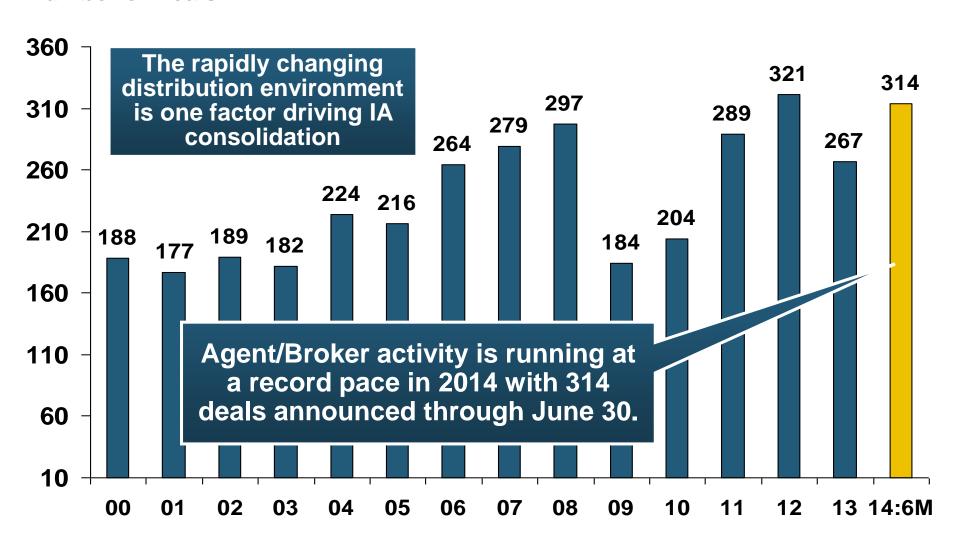
Sources: U.S. Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institute.

^{*}As of January 2015; not seasonally adjusted. Includes all types of insurance.

Agent/Broker M&A Deals, 2000-2014:6M



Number of Deals



Source: Optis Partners, "Agent-Broker Merger & Acquisition Statistics: The New Normal?", August 2014; Insurance Information Institute.

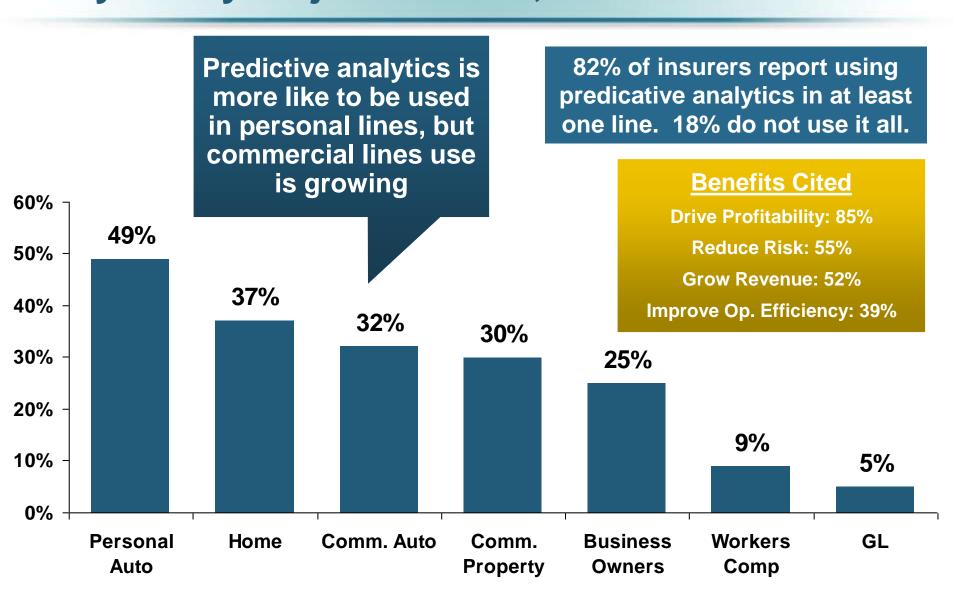


"BIG DATA"

More and Better Data Combined with Consumer Interactivity Are Transforming Many Industries—
Including Insurance

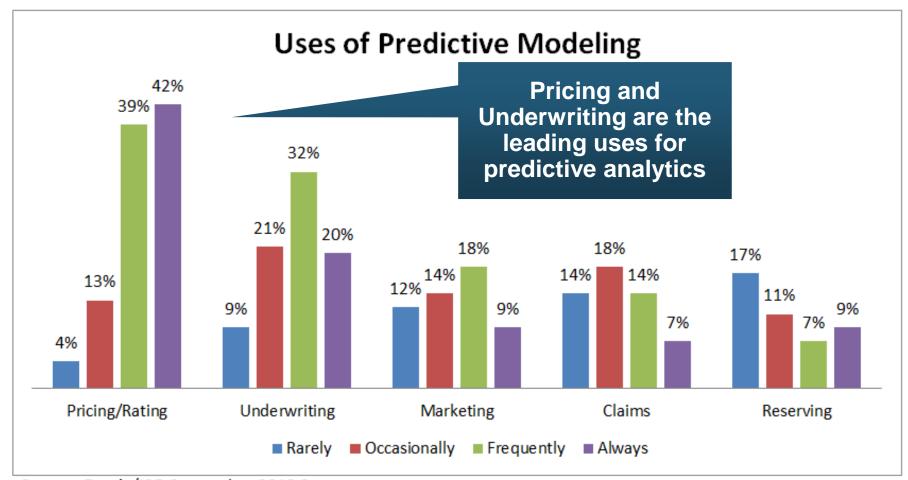
Percentage of Carriers Using Predictive Analytics by Major P/C Line, 2013





Uses of Predictive Analytics by Function Institute





Source: Earnix/ISO September 2013 Survey



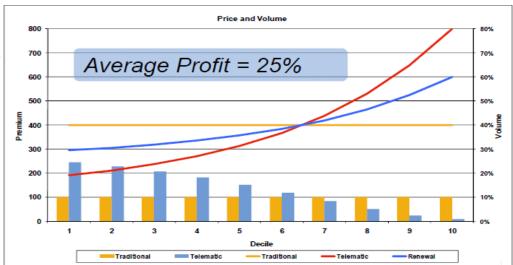
Usage-Based Insurance (UBI): Telematics

UBI Is Catching On Among Insurers and Consumers, But Is It a Transient Technology?

Driving Behavior Data Is Very Predictive



- Provides significant lift above current rating plan
 - Early programs had discounts of up to 61% and surcharges of 9%, but most companies are not giving such significant rate variation
 - Difference between indication and selection can help fund technology while still providing marketing effect
 - Must be matched with policy and claims data to develop predictive models and define lift



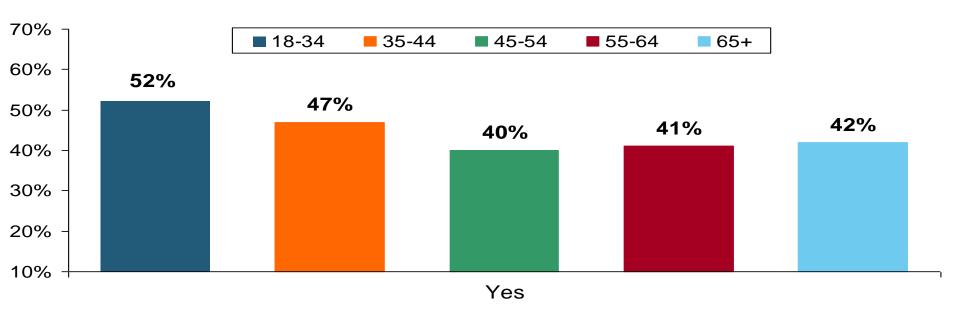
Smart implementation helps justify the technology cost

Source: Towers Perrin.

I.I.I. Poll: Telematics



Q. Would you be more likely to install a recording device on your car that allows your insurance company to monitor how many miles you drive, the time of day you drive and how often you make sudden stops if you could get an immediate discount on your auto insurance?¹



Support for telematics device is highest among youngest age group and declines among older people.

Source: Insurance Information Institute Annual *Pulse* Survey.

¹Asked of those who have auto insurance.





Autonomous/Driverless Vehicles

Rapid Technological Innovations in Motor Vehicle Engineering Are Likely to Transform Auto Insurance and Product Liability Markets

Likely Impacts of Successful, Incremental Autonomous Vehicle Technologies



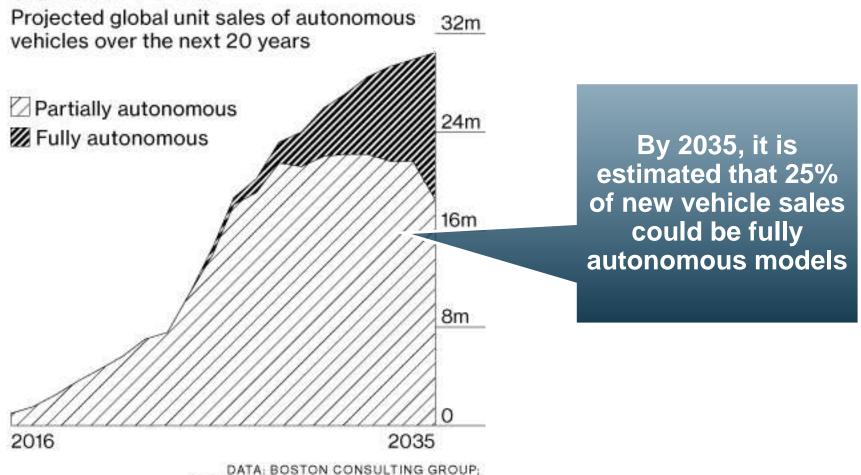
- Proven Collision Avoidance Technologies Will Likely Become Standard as Major Manufacturers, Google Set 2020-2025 Timeframes for Fully Autonomous
- Auto Accident Frequency Will Fall, Possibly Substantially as Share of Cars with New Technology Grows (~20-yrs.)
 - Collision, BI, PIP claims should fall
 - Less litigation (due to fewer claims and "black box" technologies)
- Historical Analogies to Aviation and Marine Insurance
 - Both saw technology radically reduce claim frequency
- Potential "Leapfrog" Technology Over Usage-Based Insurance (UBI) Technologies Currently Available
- Insurance Price Will Be a Major Factor in Adoption Rate
 - 90% would consider an autonomous car if premium is 80% lower*

Projected Sales of Partially and Fully Autonomous Vehicles through 2035

GRAPHIC BY BLOOMBERG BUSINESSWEEK



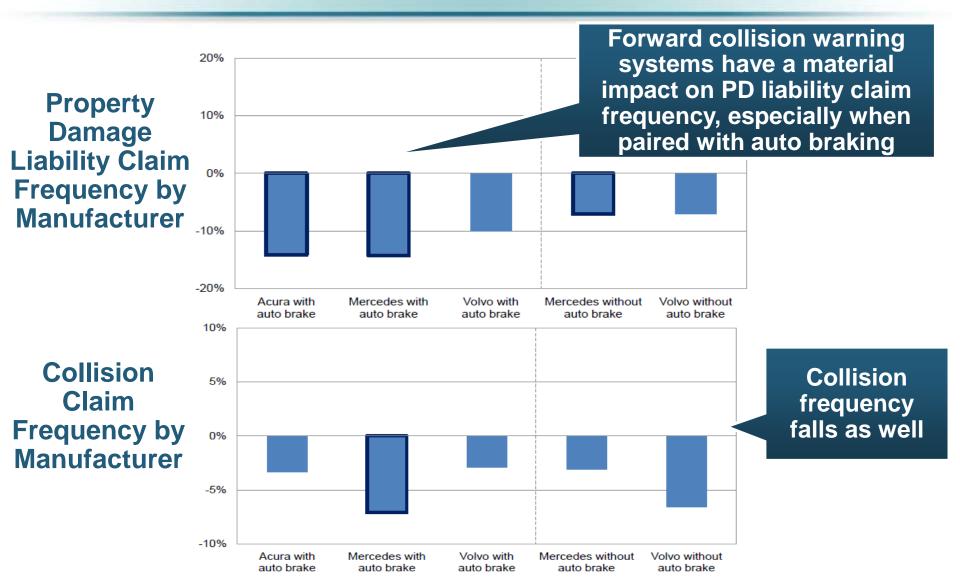




Source: Boston Consulting Group.

Impact of Forward Collision Warning With and Without Auto Brake



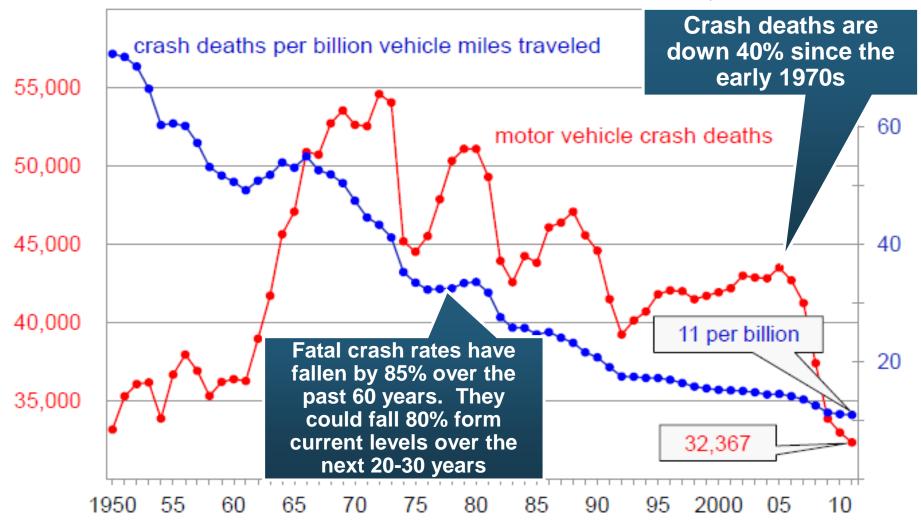


Source: Highway Loss Data Institute and Insurance Institute for Highway Safety presentation by Matthew Moore, *Measuring Crash Avoidance System Effectiveness with Insurance Data,"* January 30, 2013; Insurance Information Institute.

Enhanced Vehicle and Road Safety Have Made Driving Much Safer



Motor Vehicle Crash Deaths and Crash Death Rate, 1950-2012



Source: National Highway Transportation Safety Administration as cited in Insurance Institute for Highway Safety presentation by Adrian Lund, Ph.D., *Drivers and Driver Assistance Systems: How Well Do They Match?*, June 18, 2013; Insurance Information Institute.

Additional Disruptors



- "Peak Auto"
 - Peak vehicle ownership per person/household likely already reached
 - Less interest in auto ownership among youth
 - Preference of youth to live in urban areas, use public transit
- The "Sharing Economy": Vehicles & Homes On Demand
 - Vehicles on Demand: Fewer vehicles likely need in the future as the technologies of driverless vehicles and ride sharing (e.g., Uber, Lyft)
 - Dwellings on Demand: Airbnb

Additional Disruptors (continued)



Disintermediation

- For commodity products, the power resides with whoever has contact with the customer
- Fear that tech firms such as Google or Apple or a major retailer such as Walmart or Amazon could disintermediate agency forces (or insurers themselves if regulatory environment were to permit)

Big Data

- Ushering a new era of advanced/predictive analytics which will presumably improve underwriting a pricing
- Could drive down pricing but also open up new risks to underwrite

Additional Disruptors (continued)



The Digital Economy

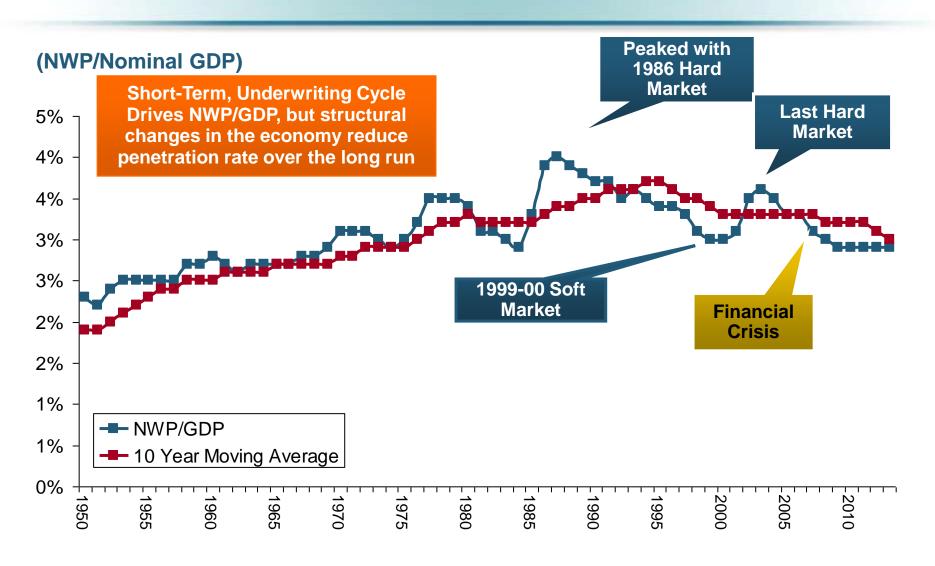
- Increasing share of GDP is intangible
- Insuring of "bits and bytes" and associated liability risks is in its infancy compared to "brinks and mortar" products

Reduced Relevancy of Insurance

- Many consumers, given the option, will forego the purchase of insurance (p/c and life/retirement)
- Mispreception of risk, cost, product complexity, moral hazard due to government subsidies, etc., are all factors
- Consumer perceptions need to adjusted

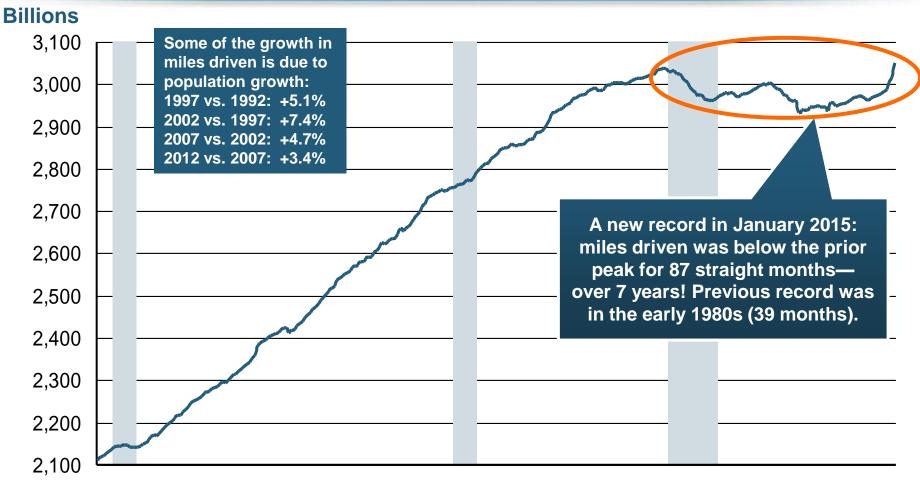
Net Written Premium/GDP





Something Unusual is Happening: Miles Driven*, 1990–2015





'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 '15

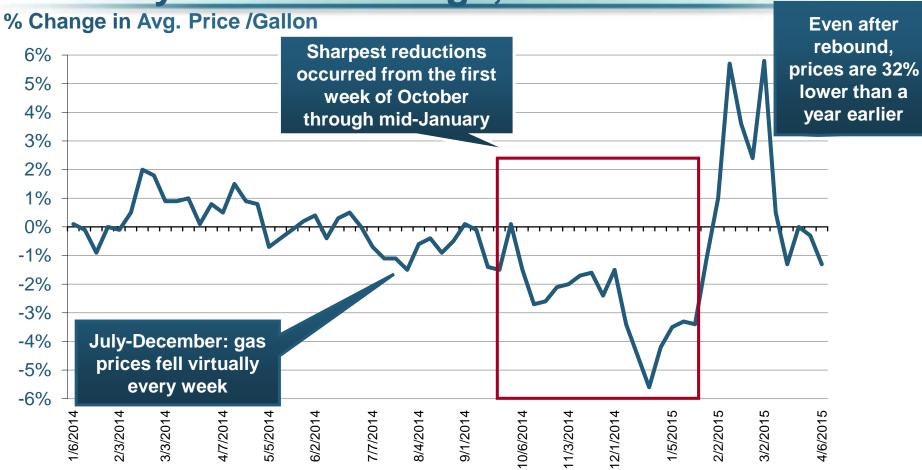
Note: Recessions indicated by gray shaded columns.

Sources: Federal Highway Administration (http://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm); National Bureau of Economic Research (recession dates); Insurance Information Institute.

^{*}Moving 12-month total. The 2015 figure is through January 2015, the latest available.

The Price of Gas, Weekly Percent Change, 2014-15



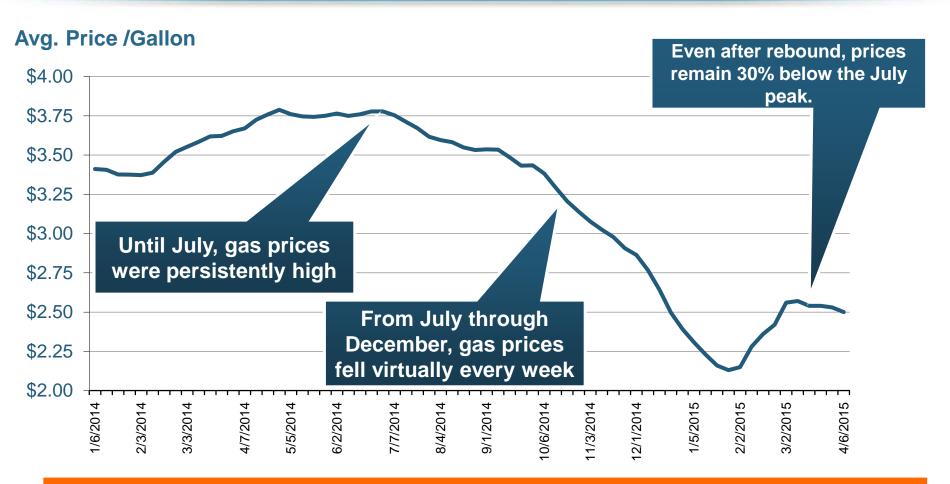


Over the Course of the Second Half of the 2014 Calendar Year, Gas Prices Fell 34%.

Price is Weekly U.S. All Grades All Formulations Retail Gasoline Prices Sources: Federal Energy Administration (http://www.eia.gov/petroleum/gasdiesel/); I.I.I.

The Price of Gas, 2014-2015



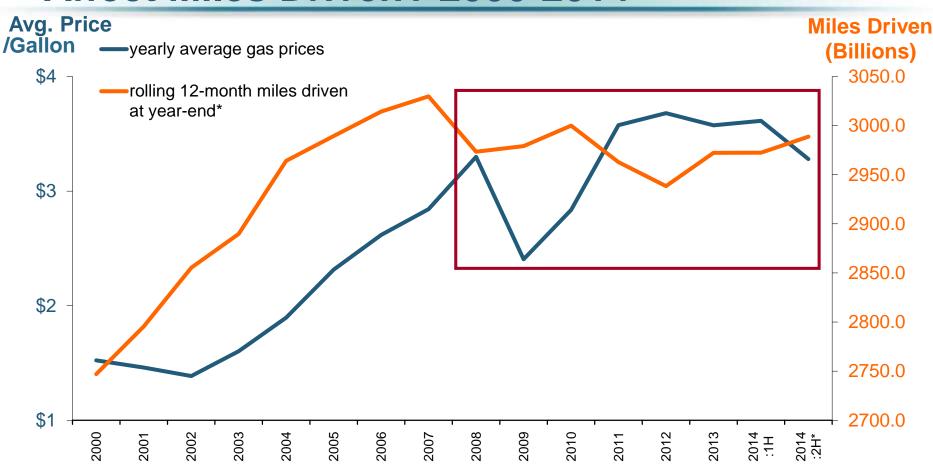


Over the Course of the Second Half of the 2014 Calendar Year, Gas Prices Fell 34%.

Price is Weekly U.S. All Grades All Formulations Retail Gasoline Prices
Sources: Federal Energy Administration (http://www.eia.gov/petroleum/gasdiesel/); I.I.I.

Do Changes in Gas Prices Affect Miles Driven? 2000-2014



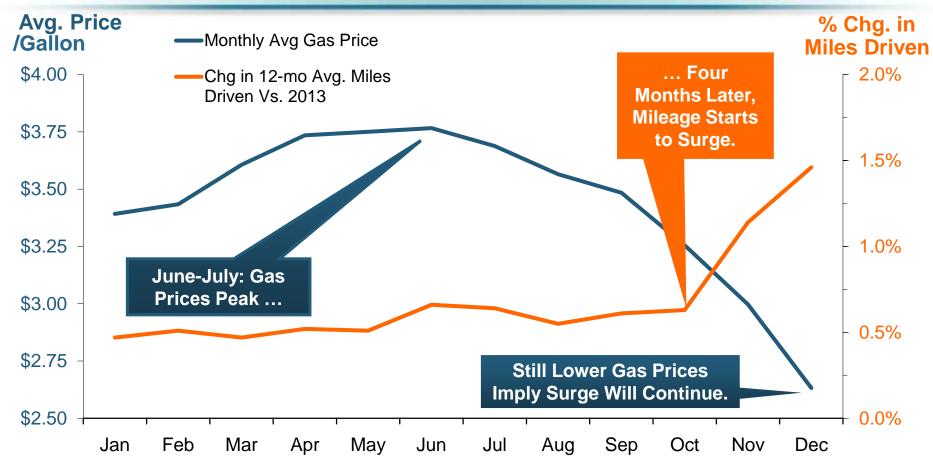


Miles driven rose from 2000 to 2007 despite a fairly steady rise in gas prices. Miles driven fell, then recovered (2008-2011) from the Great Recession and tracked flat gas prices in 2011-2014.

Sources: Federal Energy Administration (http://www.eia.gov/petroleum/gasdiesel/); *gas prices and miles driven through December Federal Highway Administration (http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm); I.I.I.

Do Changes in Gas Prices Affect Miles Driven? A Look at 2014





Prior research on the relationship between gas prices and miles driven says that, in the short run, an increase in gas prices produces little change in miles driven. No recent research on the effect of price drops.

Sources: Federal Energy Administration (http://www.eia.gov/petroleum/gasdiesel/); *gas prices and miles driven through December Federal Highway Administration (http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm); I.I.I.

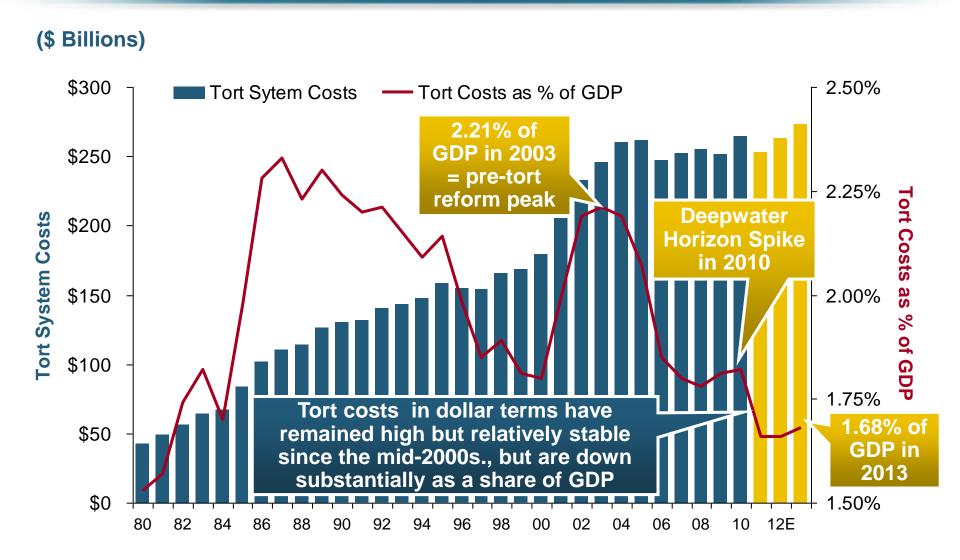


Shifting Legal Liability & Tort Environment

Will the Tort Pendulum Swing Against Insurers?

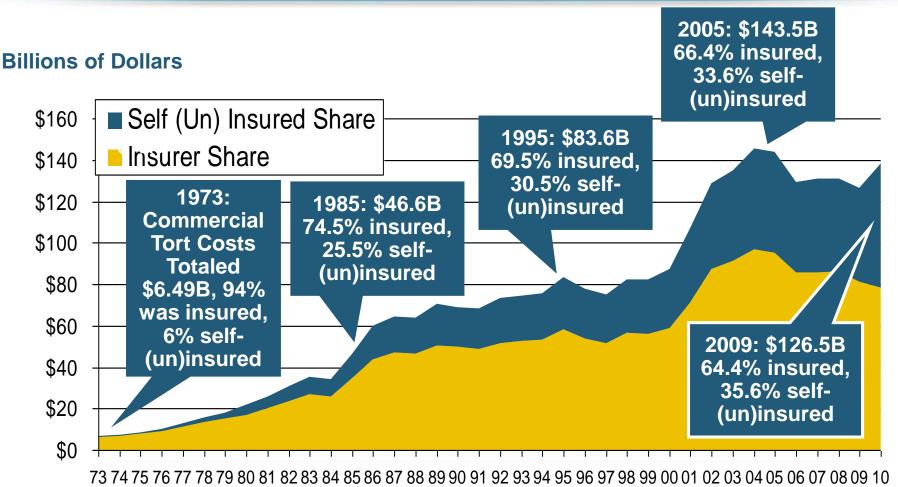
Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical, 1980-2013E





Commercial Lines Tort Costs: Insured vs. Self-(Un)Insured Shares, 1973-2010



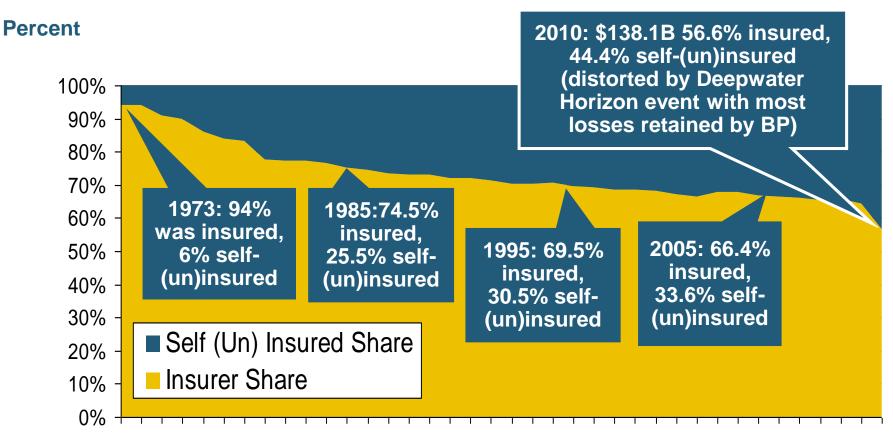


Tort Costs and the Share Retained by Risks Both Grew Rapidly from

the mid-1970s to mid-2000s, When Tort Costs Began to Fall But Self-Insurance Shares Continued to Rise

Commercial Lines Tort Costs: Insured vs. Self-(Un)Insured Shares, 1973-2010





73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10

The Share of Tort Costs Retained by Risks Has Been Steadily Increasing for Nearly 40 Years. This Trend Contributes Has Left Insurers With Less Control Over Pricing.

Business Leaders Ranking of Liability Systems in 2012



Best States

- Delaware
- Nebraska
- 3. Wyoming
- 4. Minnesota
- 5. Kansas
- 6. Idaho
- 7. Virginia
- 8. North Dakota

9. Utah

10. Iowa

New in 2012

- Wyoming
- Minnesota
- Kansas
- Idaho

Drop-offs

- Indiana
- Colorado
- Massachusetts
- South Dakota

Worst States

- 41. Florida
- 42. Oklahoma
- 43. Alabama
- 44. New Mexico
- 45. Montana
- 46. Illinois
- 47. California
- 48. Mississippi
- 49. Louisiana
- 50. West Virginia

Newly Notorious

Oklahoma

Rising Above

Arkansas

The Nation's Judicial Hellholes: 2012/2013







Insurance Information Institute Online:

www.iii.org

Thank you for your time and your attention!

Twitter: twitter.com/bob_hartwig

Download at www.iii.org/presentations