

Challenge, Change & Opportunity: *Growth and the Future of the P/C Insurance Industry in 2018 and Beyond*

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The Case for Growth (and a Correction?) in the P/C Insurance Industry: 2018 and Beyond

- **Drivers of Growth: Personal and Commercial Lines**
 - ◆ Price
 - ◆ Exposure
- **Role of the Economy and Shifting Demographics**
- **Pressure from Record Catastrophe Activity**
- **Industry Financial Performance**
 - ◆ Pricing and capacity implications
- **Financial Market Pressure**
- **Regulatory and External Influences**
- **A Look Ahead: Technology, Disruptors and Insurance**

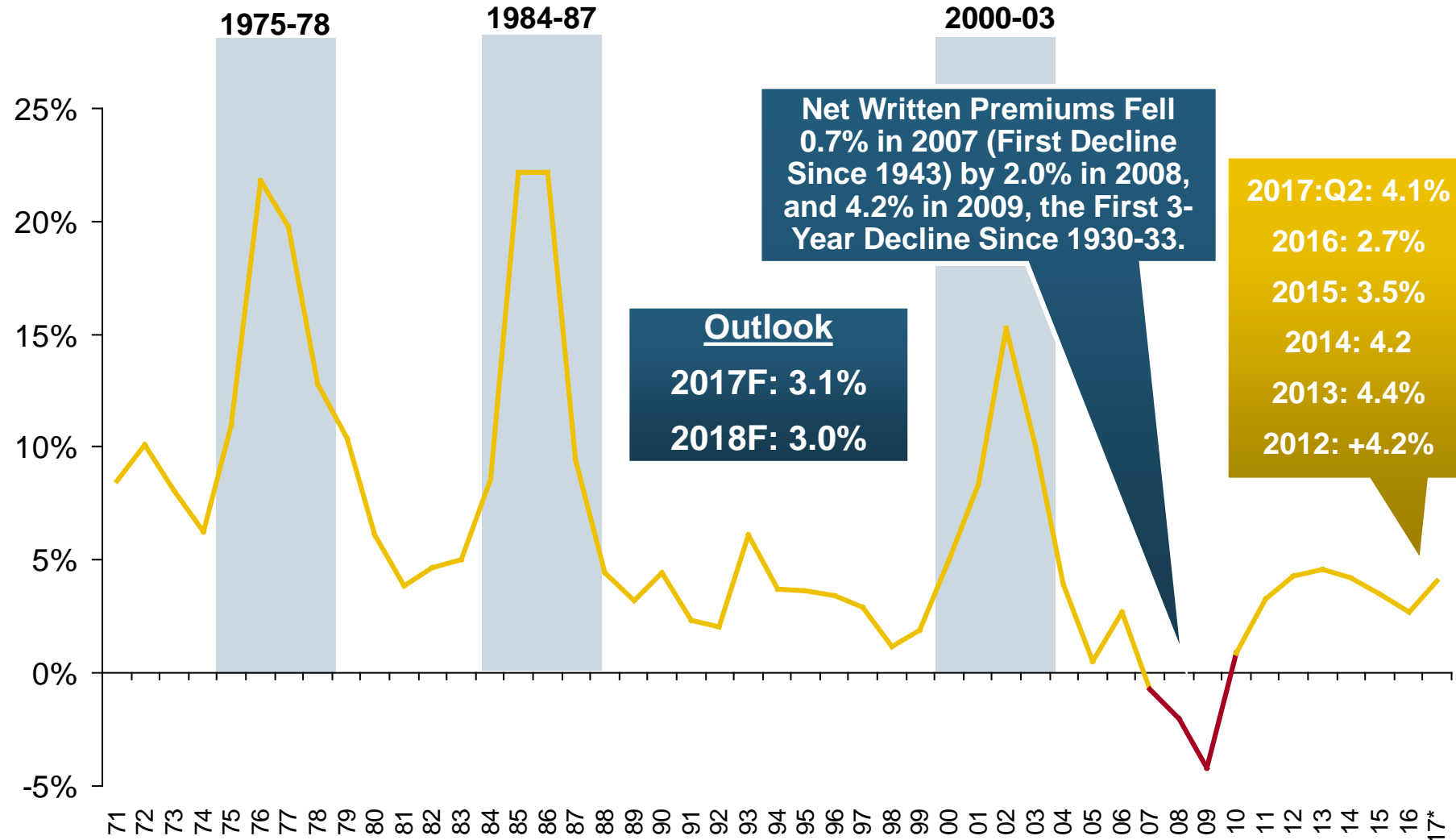
**P/C Insurance Growth
Overview and Outlook**
Drivers of Growth in 2018

**Economic Growth Fuels Exposure &
Record CAT Losses Are Pressuring Rates**

Price Competition Remains Rational

Net Premium Growth (All P/C Lines): Annual Change, 1971—2017E

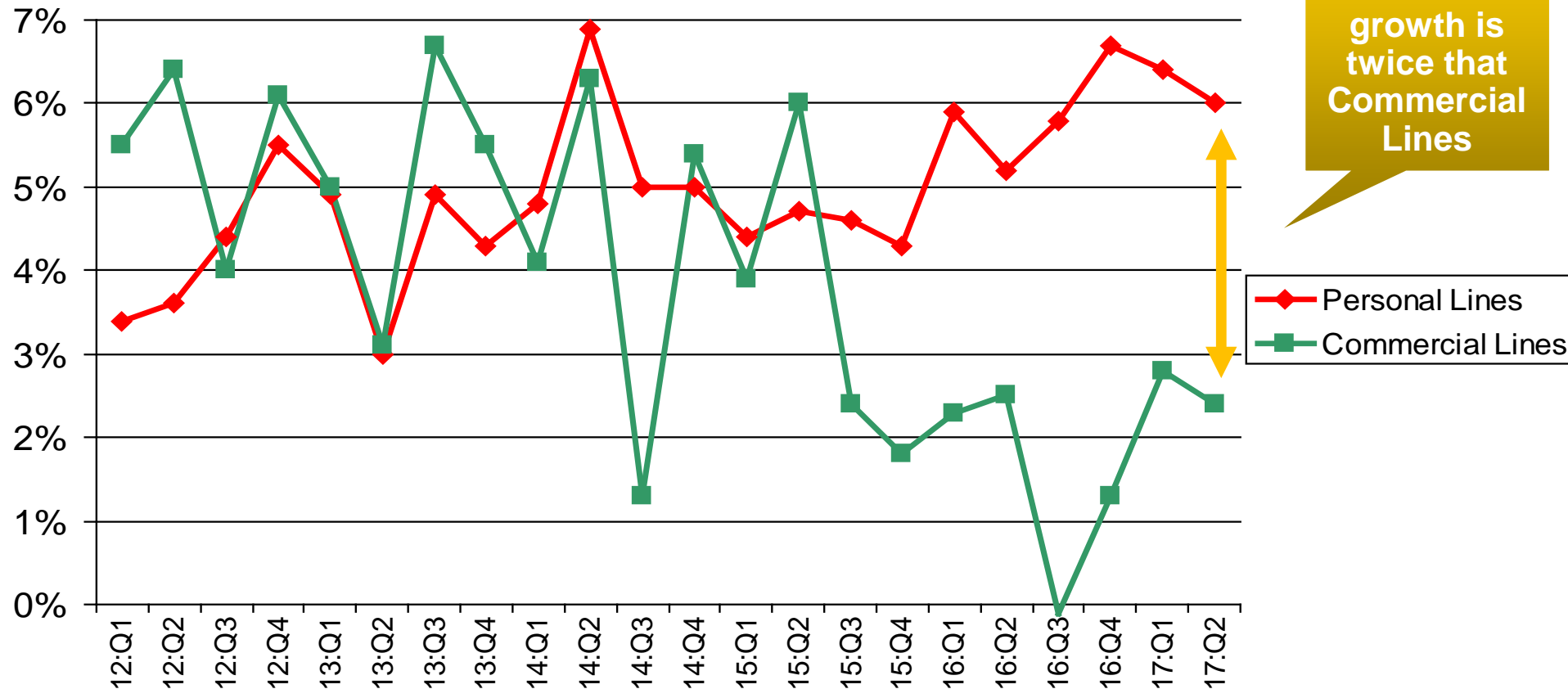
(Percent)



*Q2:2017 over Q2:2016. Shaded areas denote "hard market" periods
Sources: A.M. Best (1971-2013), ISO (2014-16).

Y-o-Y Growth Rates, Direct Premiums Written, Commercial vs. Personal Lines,

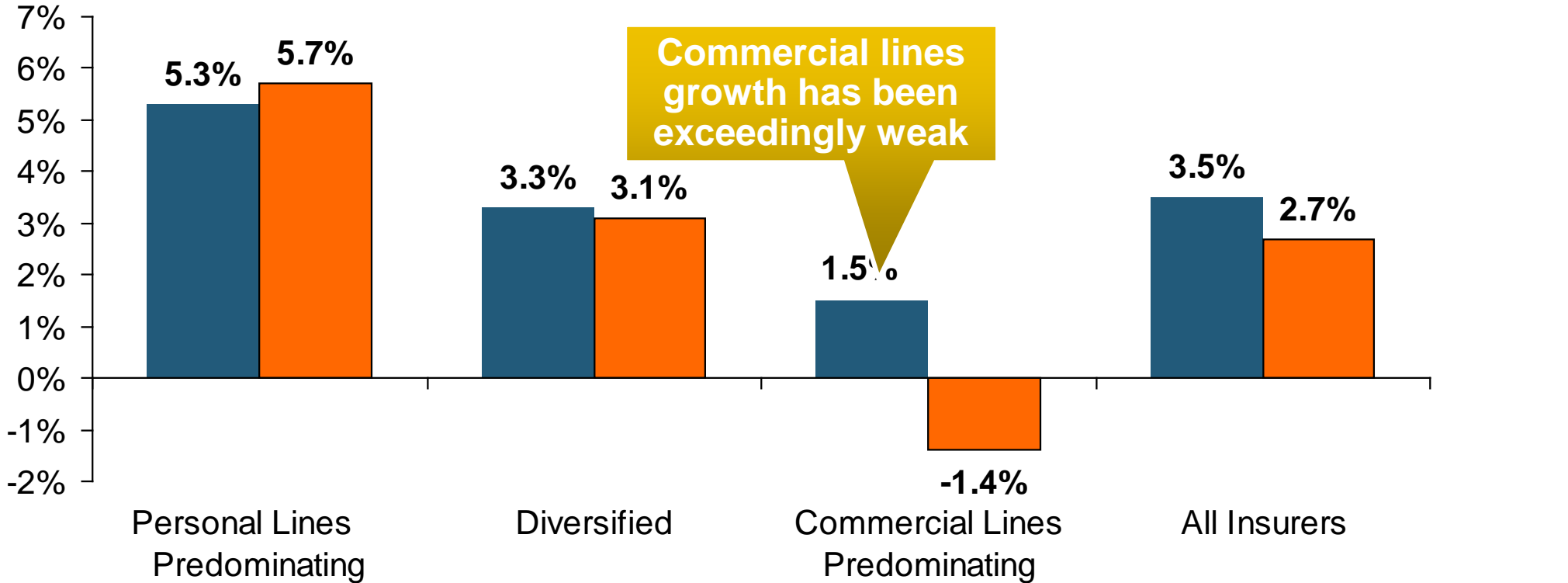
2012:Q4 - 2017:Q2



Since 2014, personal lines Direct Premiums Written have generally grown faster than commercial lines DPW, and that growth has been less volatile.

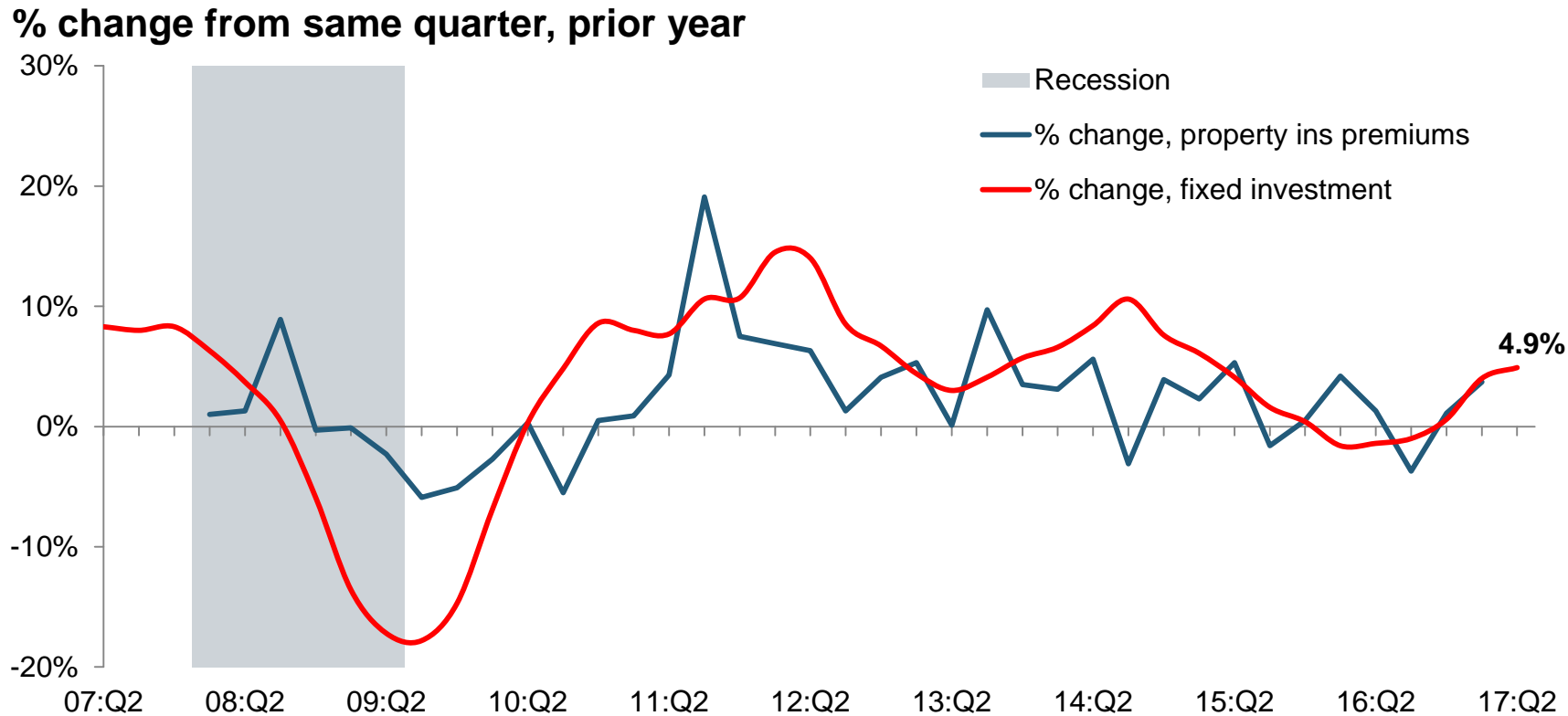
2016 Growth in Net Written Premium: Personal vs. Commercial

Annual Change in NWP



The divergence in growth between personal and commercial lines is large and has been expanding rapidly

Business Investment Is a Potent Driver of Property Insurance Premium Growth*



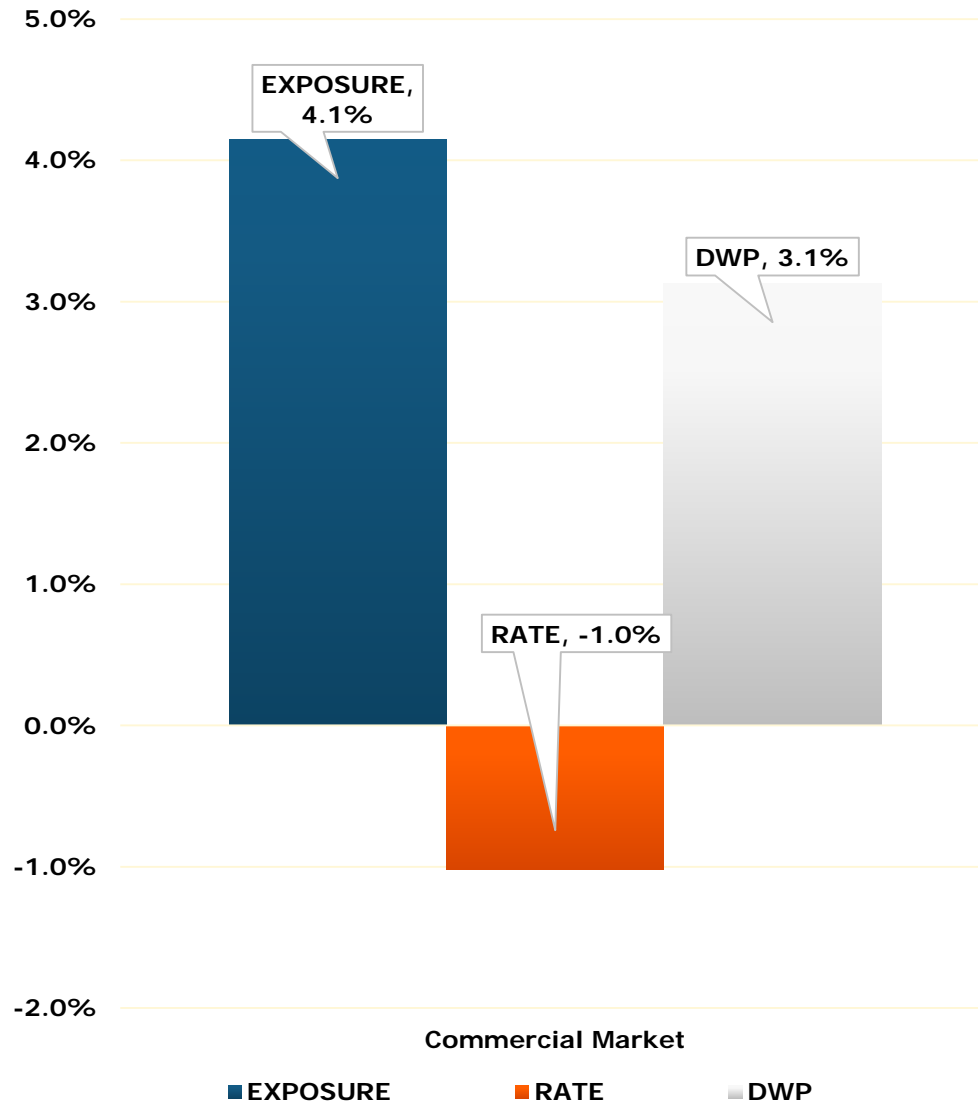
- Business fixed investment is forecast to grow at 5%–6% in 2017:2H and at 4.5%–5.5% in 2018.
- Investment in equipment and software is expected to grow but investment in structures is expected to shrink.

*Commercial property direct premiums written (fire, allied lines, CMP, inland marine, burglary and theft); business fixed investment (structures, equipment, and software).

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

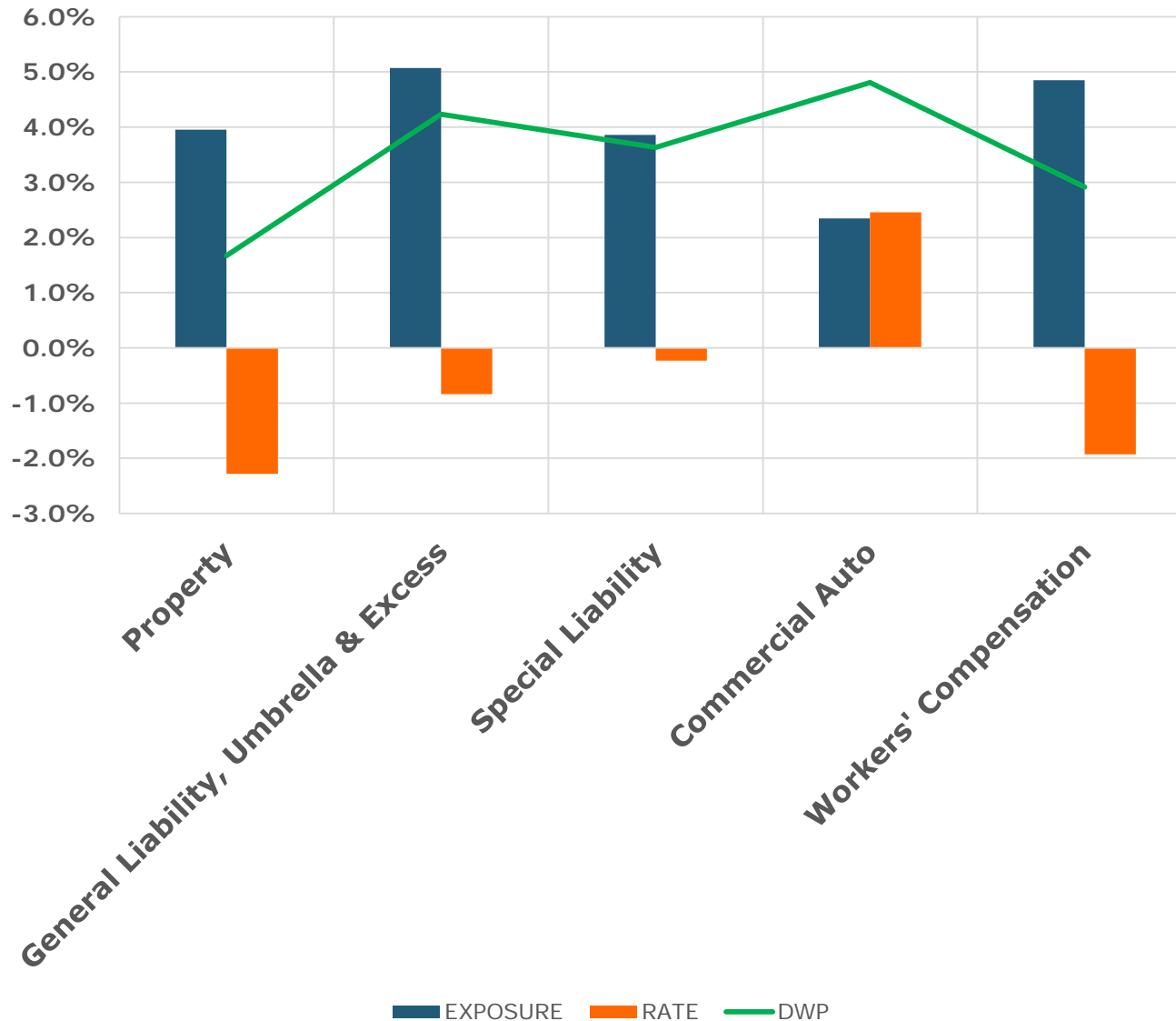
Sources: <https://fred.stlouisfed.org/series/PNFI#0>; National Bureau of Economic Research (recession dates); Insurance Information Institute.

2016: Components of Commercial DWP Growth



- Direct Written Premium (DWP) in US lines covered by ISO MarketStance grew 3.1 percent in 2016
- Soft market conditions counteracted moderate 4.1 percent exposure growth
- Anecdotal evidence: insureds spent rate reductions on new/broader coverages (CIAB, 2017).

2016 Commercial Market Growth by Coverage



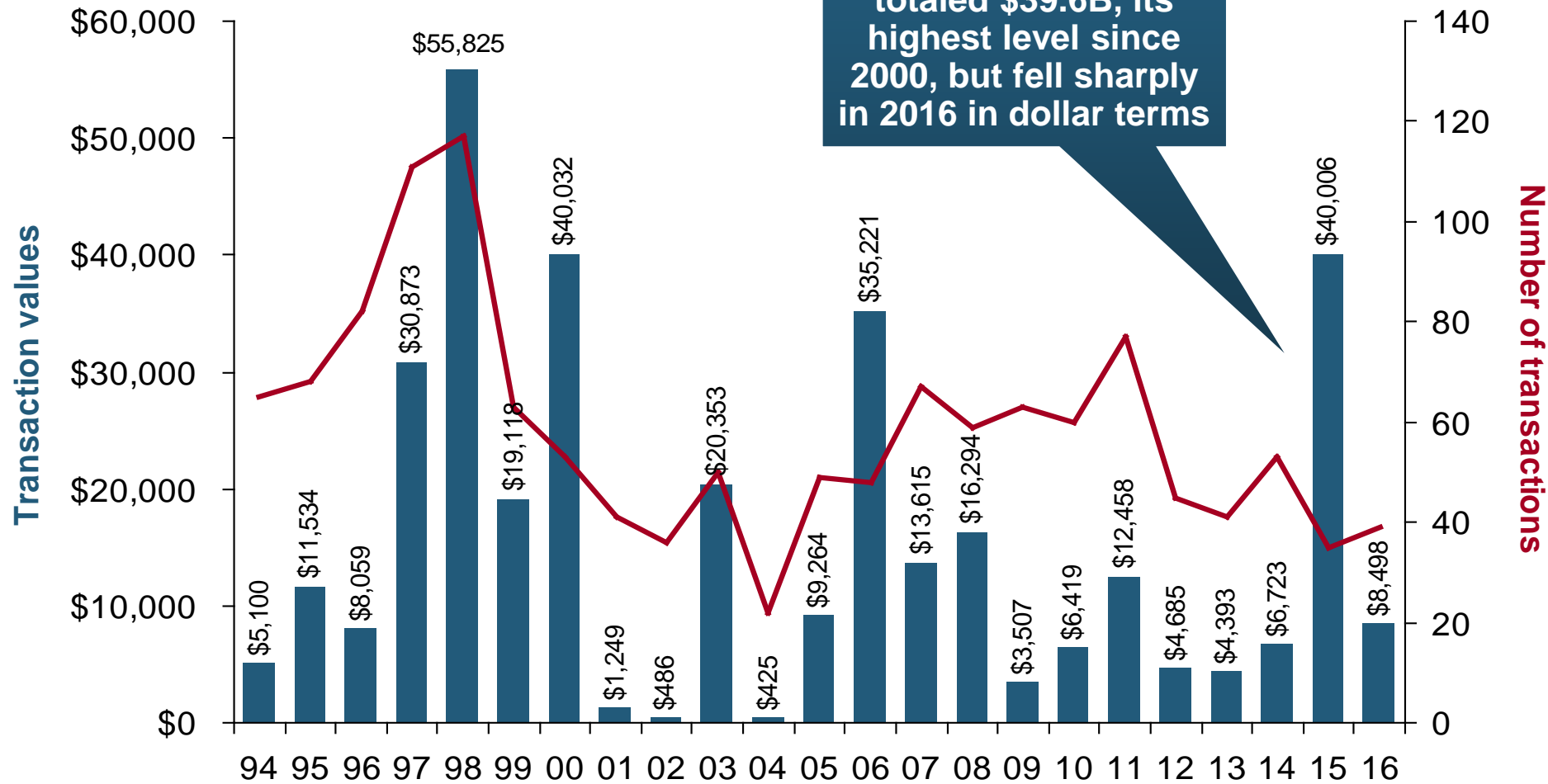
- Commercial auto rates increased as carriers reacted to ongoing challenges
- Property, Workers' Compensation under most severe rate pressures
- Umbrella, excess, specialty lines liability growth may have reflected trading price for quantity (i.e. demand elasticity)
- Stand-alone cyber DWP, policies in force reported to NAIC doubled in 2016, and DWP>earned premiums, all signals of market growth

M&A Trends

**Consolidation Among P&C
(Re)Insurers and Within
Distribution Channels Will Likely
Continue at a Modest Pace**

U.S. INSURANCE MERGERS AND ACQUISITIONS, P/C SECTOR, 1994-2016 (1)

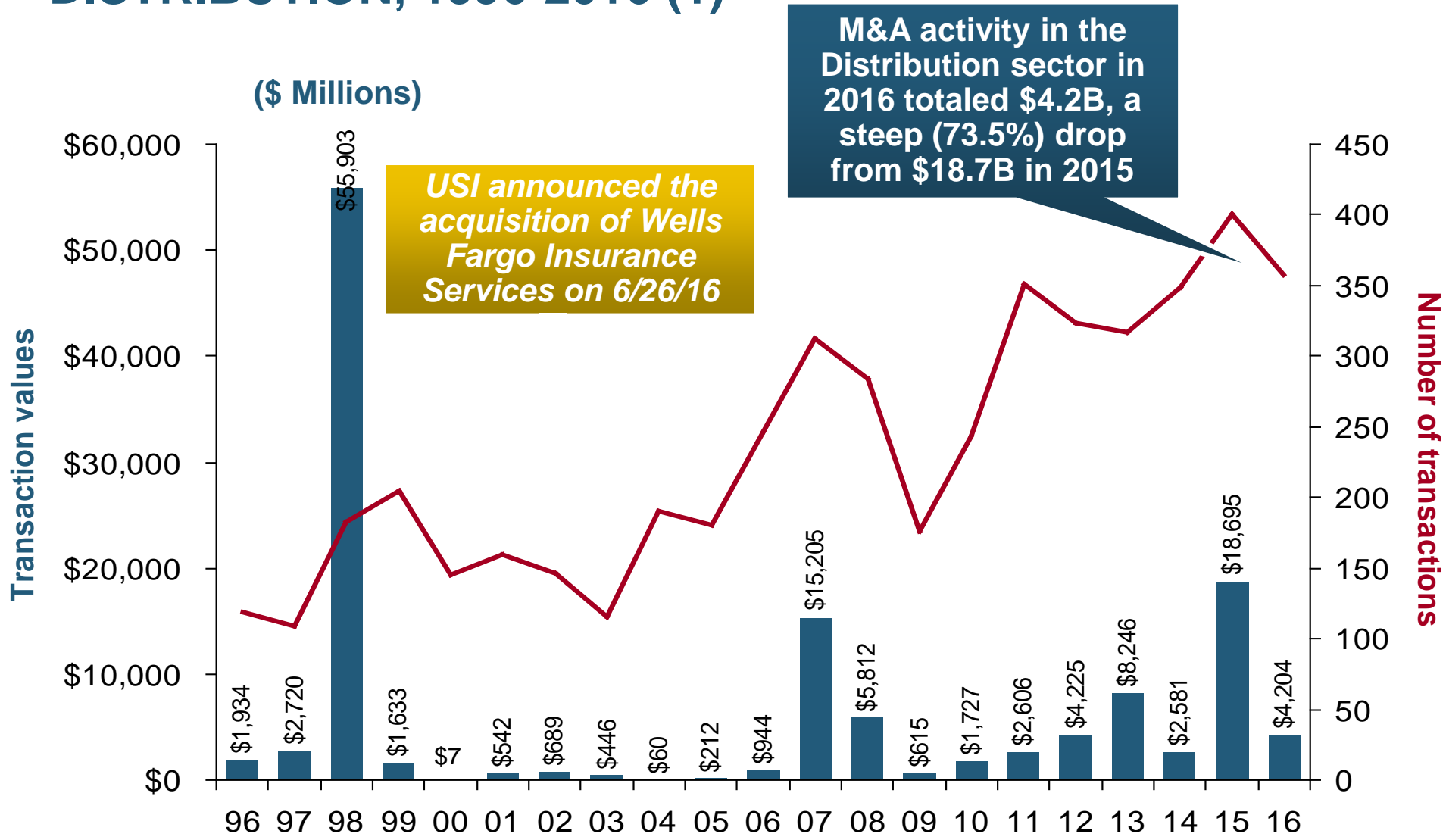
(\$ Millions)



(1) Includes transactions where a U.S. company was the acquirer and/or the target.

Source: Conning proprietary database.

U.S. INSURANCE MERGERS AND ACQUISITIONS, DISTRIBUTION, 1996-2016 (1)



(1) Includes transactions where a U.S. company was the acquirer and/or the target.

Drivers of M&A Activity: P/C Insurers & Distribution

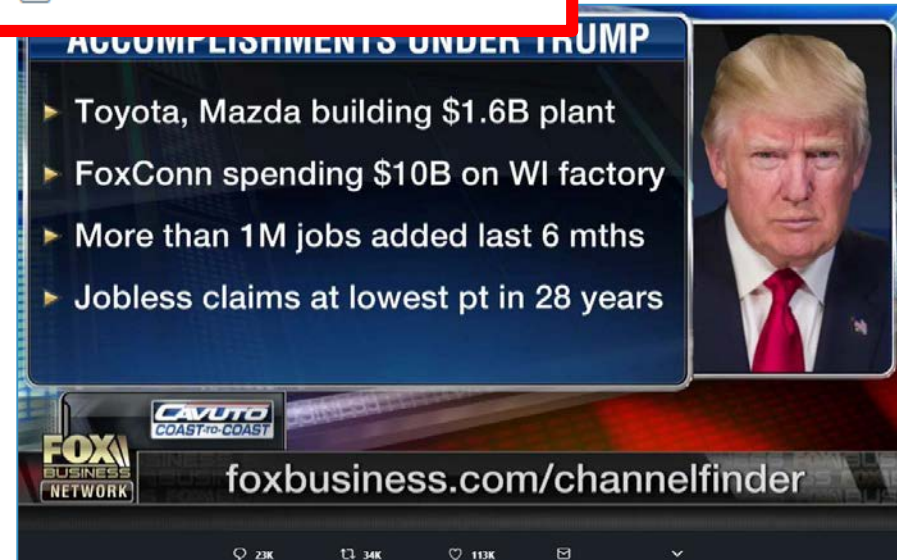
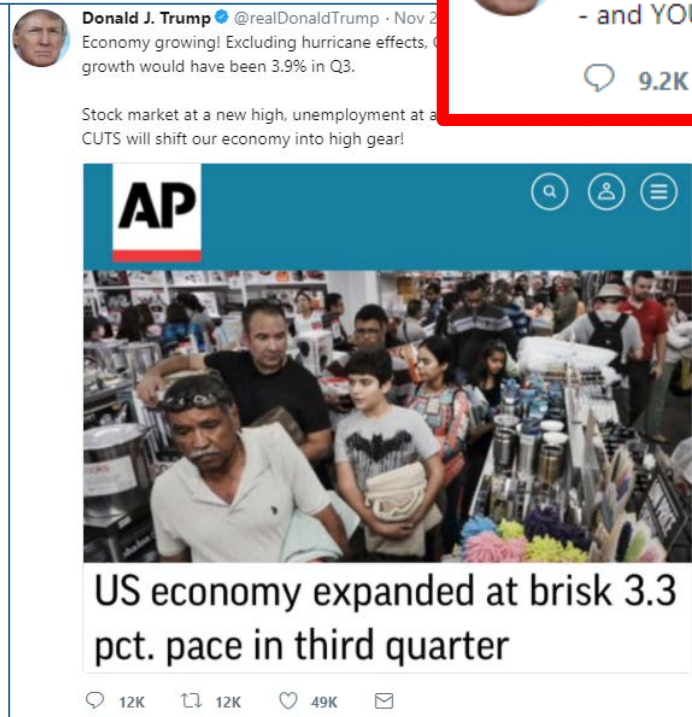
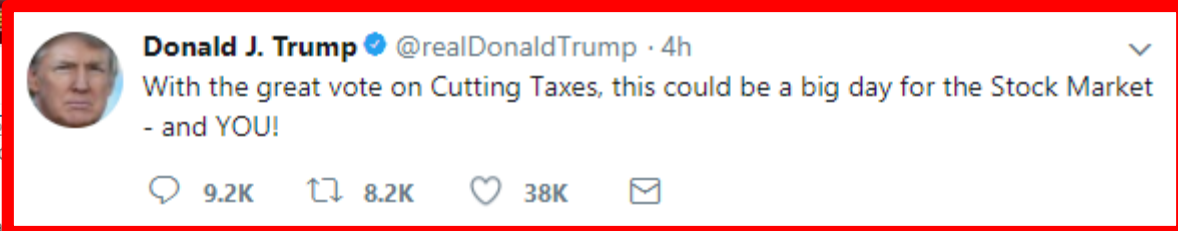
P/C Insurers	Distribution Segment
<p>Soft Market Conditions/Limited Organic Growth Opportunities: Mostly commercial lines and reinsurance</p>	<p>Slow Growth: Acquisition provides surest and fastest path to growth</p>
<p>Expense Ratios: Desire to lower ERs via realization of economies of scale</p>	<p>Diverse Universe of Buyers: Agencies, brokerages, MGAs/MGUs, insurers, private equity firms, banks</p>
<p>Interest Rates: Low yields continue to pressure longer-tailed lines but can encourage debt-financed M&A</p>	<p>Lack of Succession: Avg. age of an insurance agent is now 59 and rising. Difficulty attracting younger generation of talent.</p>
<p>Capital Management/Valuations: Prevalence of excess capital even after share repurchases; View that M&A may be more accretive to earns than share repurchases</p>	<p>Scale and Efficiency: Need/desire to improve efficiency; New InsurTech start-ups active in the distribution segment.</p>

THE ECONOMY

**The Strength of the Economy Will Greatly
Influence Growth in Insurers' Exposure
Base Across Most Lines**

***How Will “Trumponomics” Impact
the Industry?***

Animal Spirits: Unleashed from the Oval Office?



Source: <https://twitter.com/realDonaldTrump>

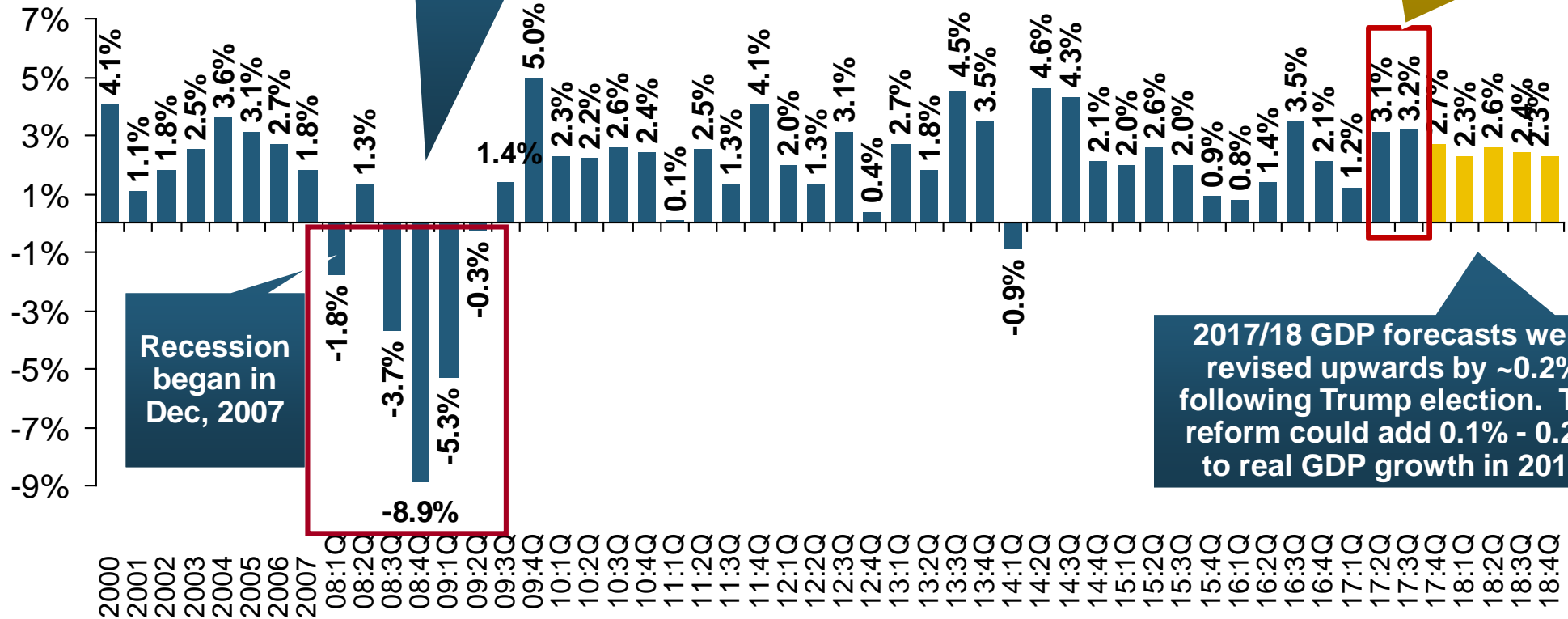
Awakening America's “Animal Spirits”

*Economic Policy and the
Insurance Industry*

**Consumer and Business
Confidence Are Key**

US Real GDP Growth*

Real GDP Growth (%)



Recession began in Dec, 2007

The Q4:2008 decline was the steepest since the Q1:1982 drop of 6.8%

First consecutive quarters of 3%+ GDP growth since 2014

2017/18 GDP forecasts were revised upwards by ~0.2% following Trump election. Tax reform could add 0.1% - 0.2% to real GDP growth in 2018

Demand for Insurance Should Increase in 2017-18 as GDP Growth Continues at a Steady and Perhaps Accelerating Pace and Gradually Benefits the Economy Broadly

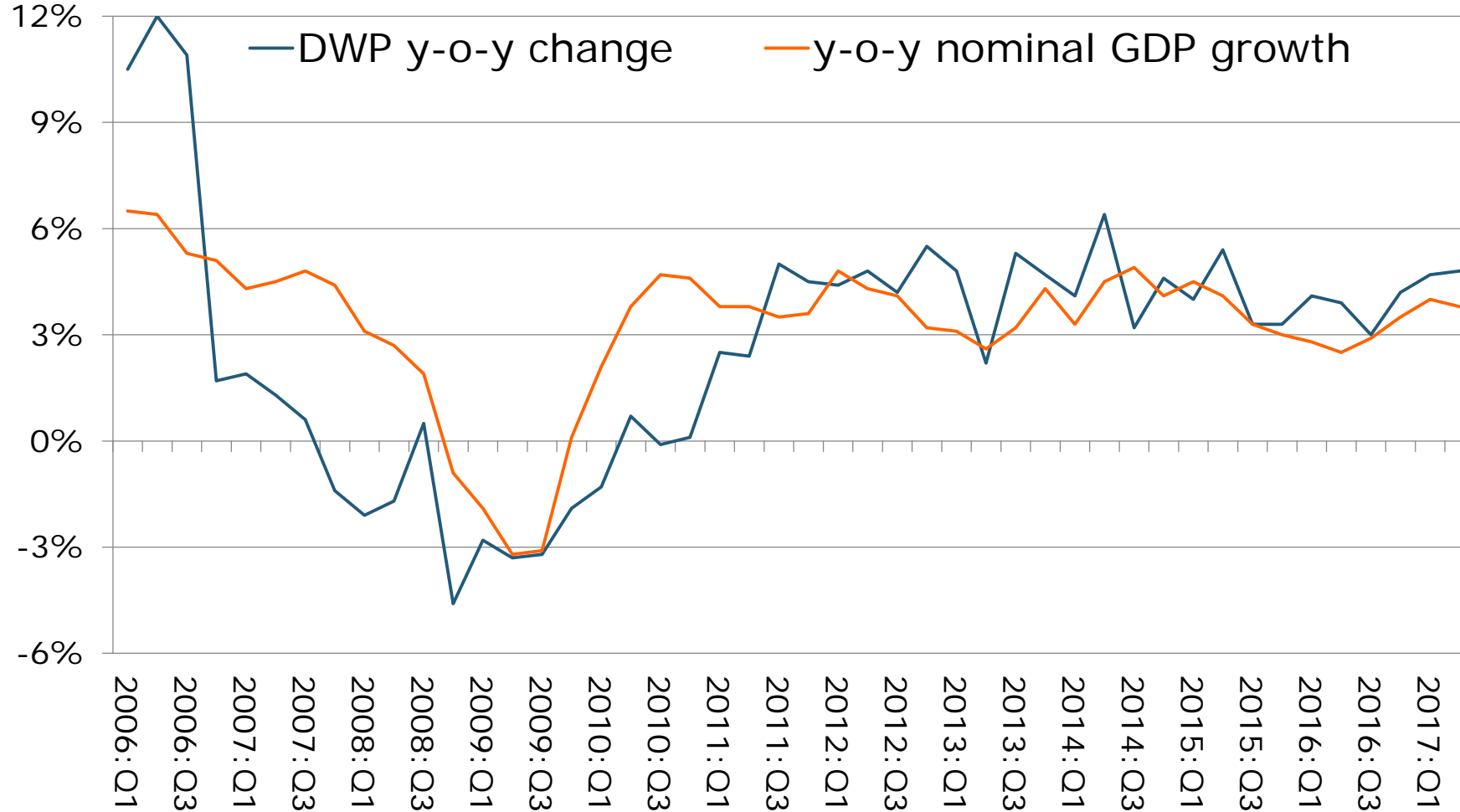
*Estimates/Forecasts from Blue Chip Economic Indicators.

Source: US Department of Commerce, Blue Economic Indicators 12/17; Insurance Information Institute.

The Economy Drives P/C Insurance

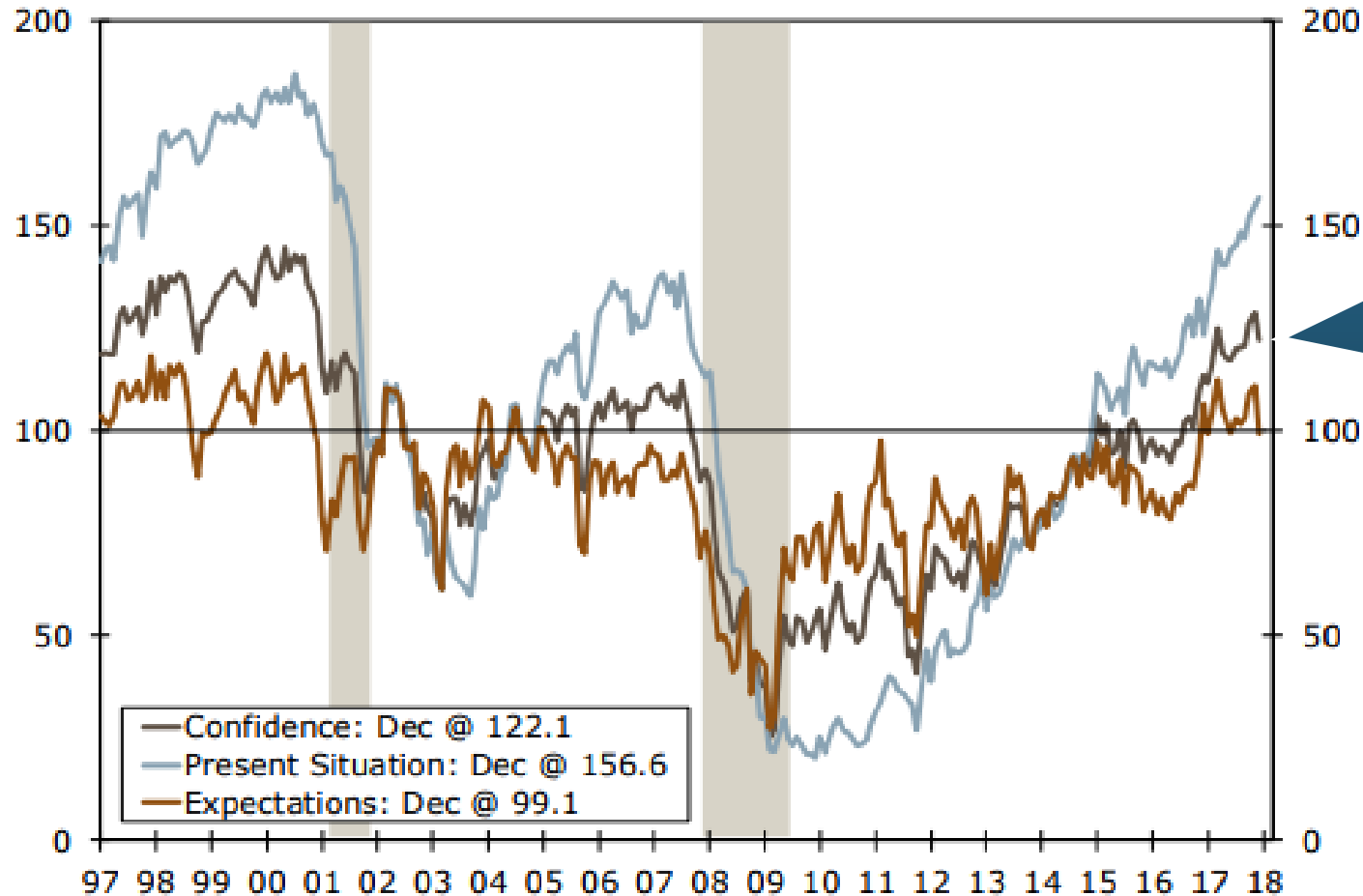
Industry Premiums: 2006:Q1 – 2017:Q2

Direct Premium Growth (All P/C Lines) vs. Nominal GDP: Quarterly Y-o-Y Pct. Change



Direct Written Premiums track Nominal GDP—not quarter by quarter but overall fairly well.

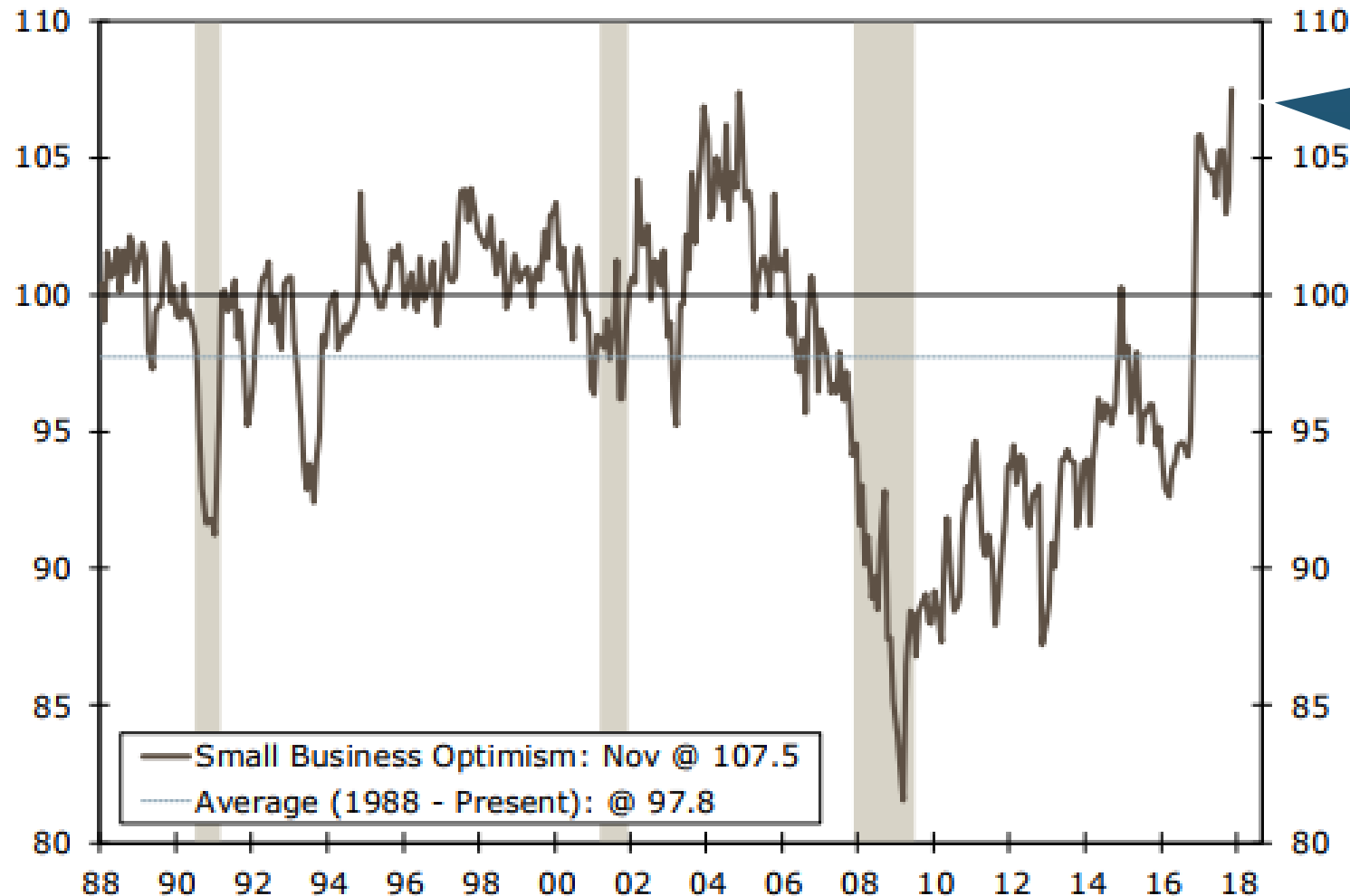
Consumer Confidence Index: Jan. 1987 – Dec. 2017



The Conference Board's Consumer Confidence Index stood at 122.1 in Dec., close to its post-recession high

Outlook: Consumers are optimistic about the future, which is consistent with expectations for stronger economic growth (consumers account for nearly 70% of all spending in the economy). Should positively influence business investment.

NFIB Small Business Optimism Index: Jan. 1988 – November 2017

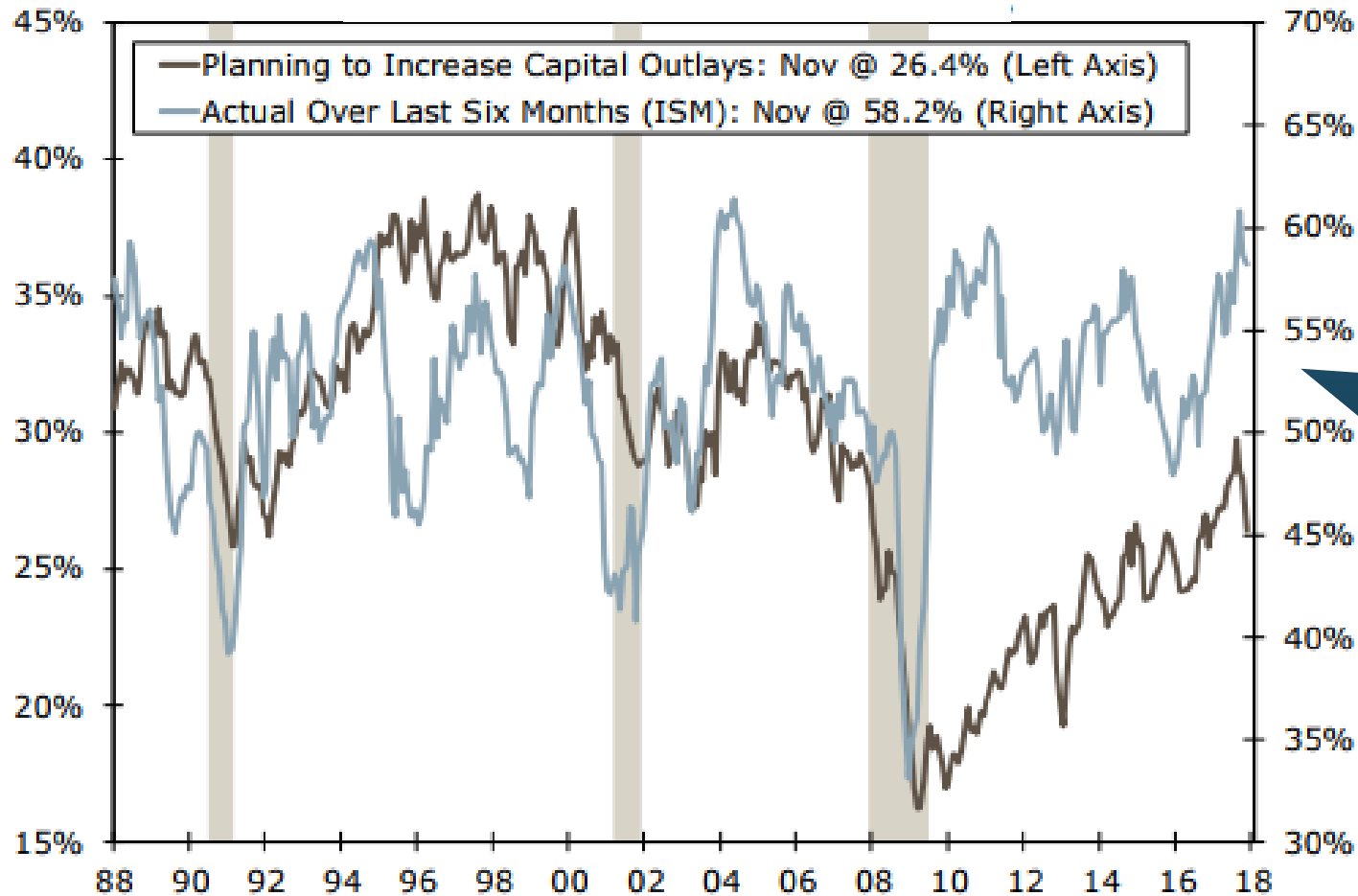


The NFIB's Index of Small Business Optimism is at recent highs. Tax reform, reduced regulations and strong sales will drive investment, hiring and exposures

Outlook: Small businesses are much more optimistic about the future

Source: National Federal of Independent Business; Wells Fargo Research.

Small Business Capital Spending, Jan. 1988 – November 2017

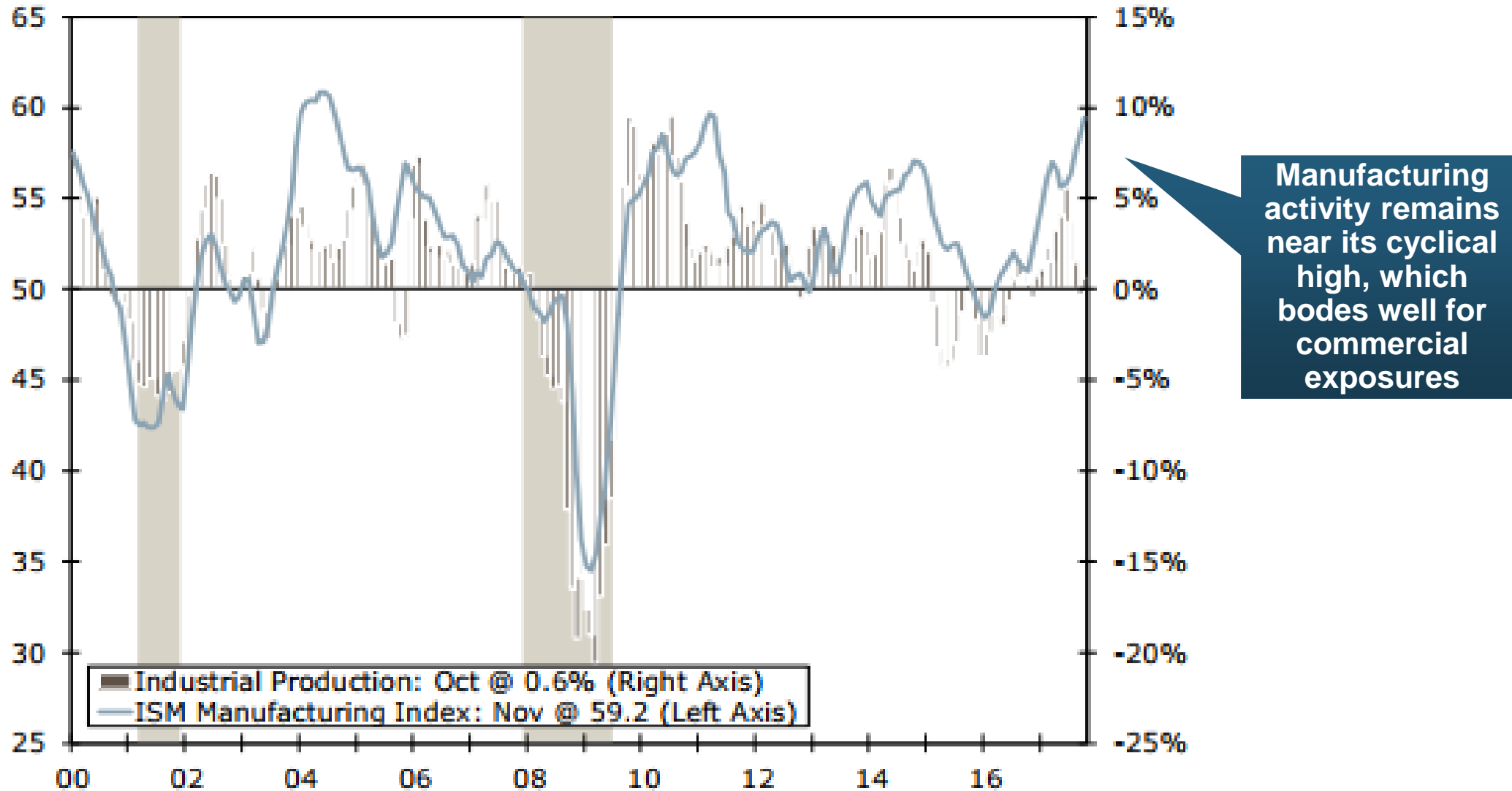


Small business capital spending is close to post-crisis highs;

Tax cuts and accelerated depreciation could push capital spending higher—and commercial insurance exposures—along with it

Small business optimism is translating into more capital spending which will increase insurable commercial exposures

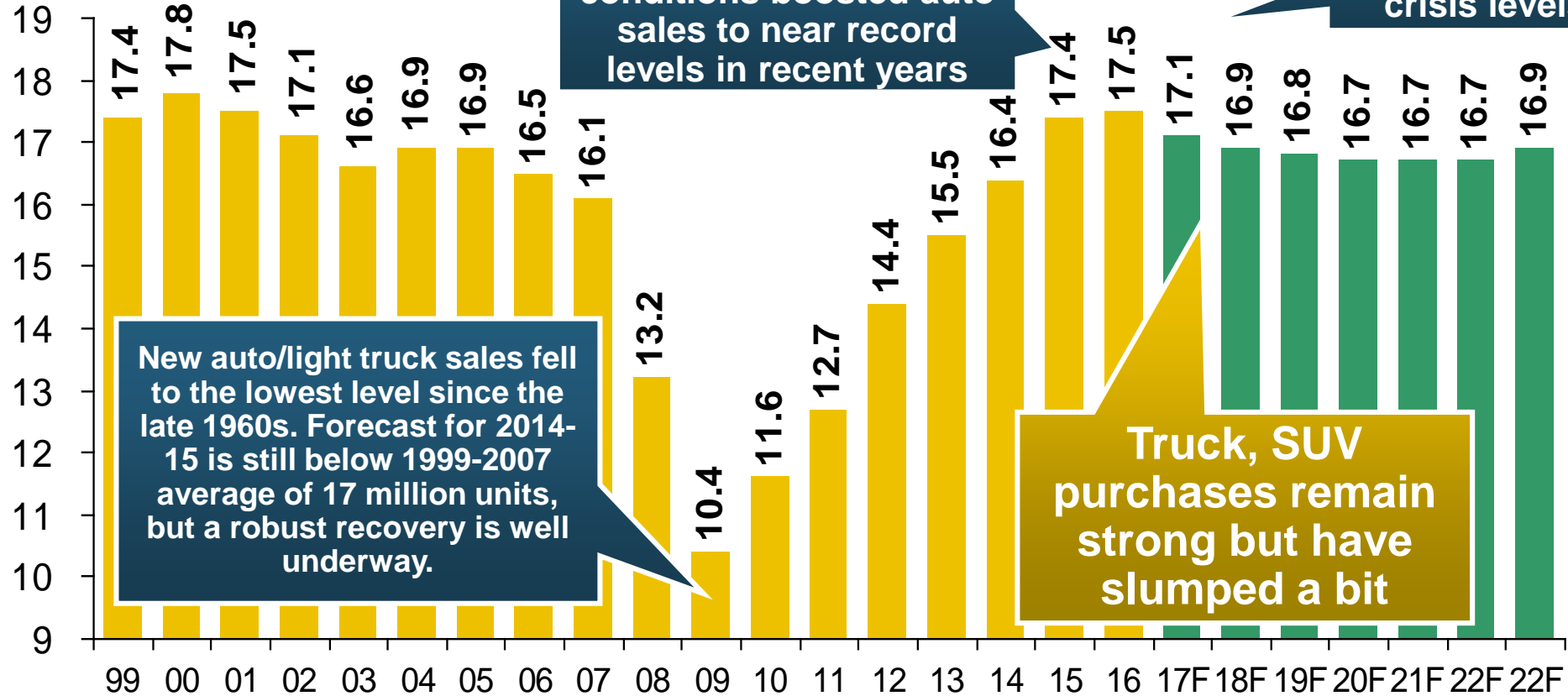
Manufacturing: ISM Manufacturing Composite & Industrial Production, Jan. 2000 – Nov. 2017 (>50 implies expansion)



Source: Institute for Supply Management (ISM); Wells Fargo Securities.

Auto/Light Truck Sales, 1999-2023F

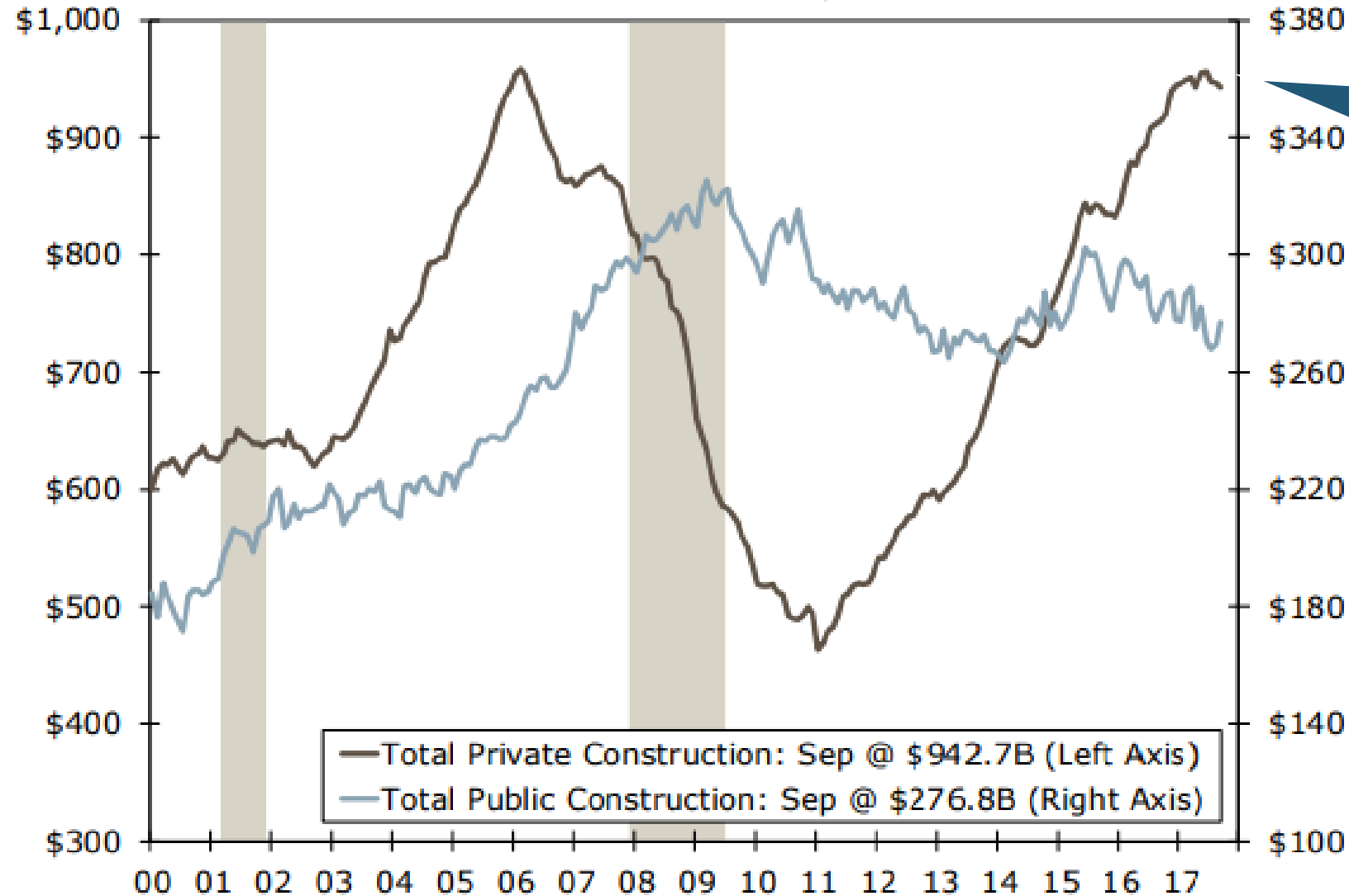
(Millions of Units)



Yearly car/light truck sales are slowing slightly, as demand tapers following the recovery from the recession. PP Auto premium might grow by 3.5% - 5%.

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (12/17 for 2017-18; 10/17 for 2018-23F; Insurance Information Institute.

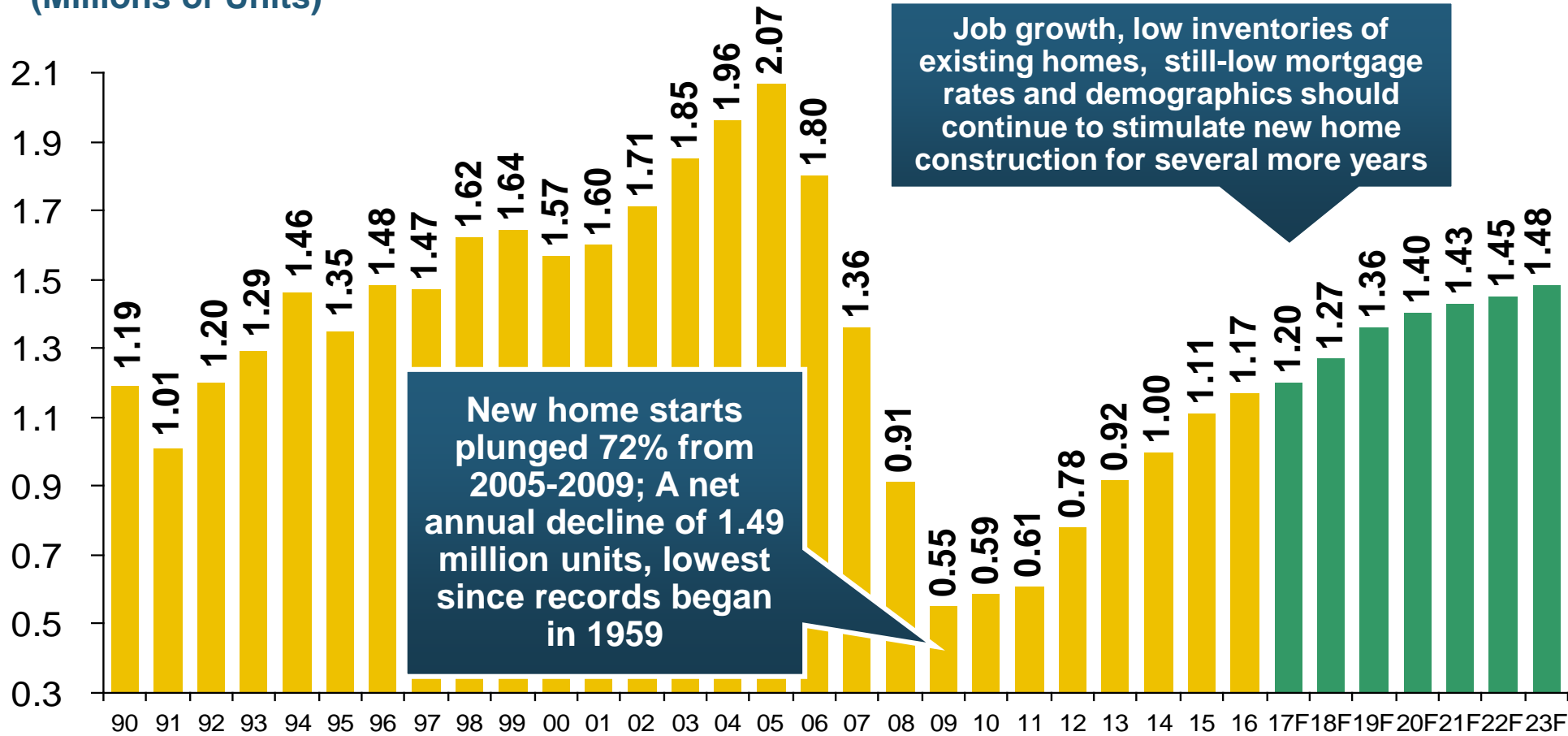
Construction Spending: Jan. 2000 – Oct. 2017 (\$ Bill)



Private (but not public) construction spending remains relatively strong. Public construction spending could benefit from a boost in infrastructure investment

New Private Housing Starts, 1990-2023F

(Millions of Units)



Job growth, low inventories of existing homes, still-low mortgage rates and demographics should continue to stimulate new home construction for several more years

New home starts plunged 72% from 2005-2009; A net annual decline of 1.49 million units, lowest since records began in 1959

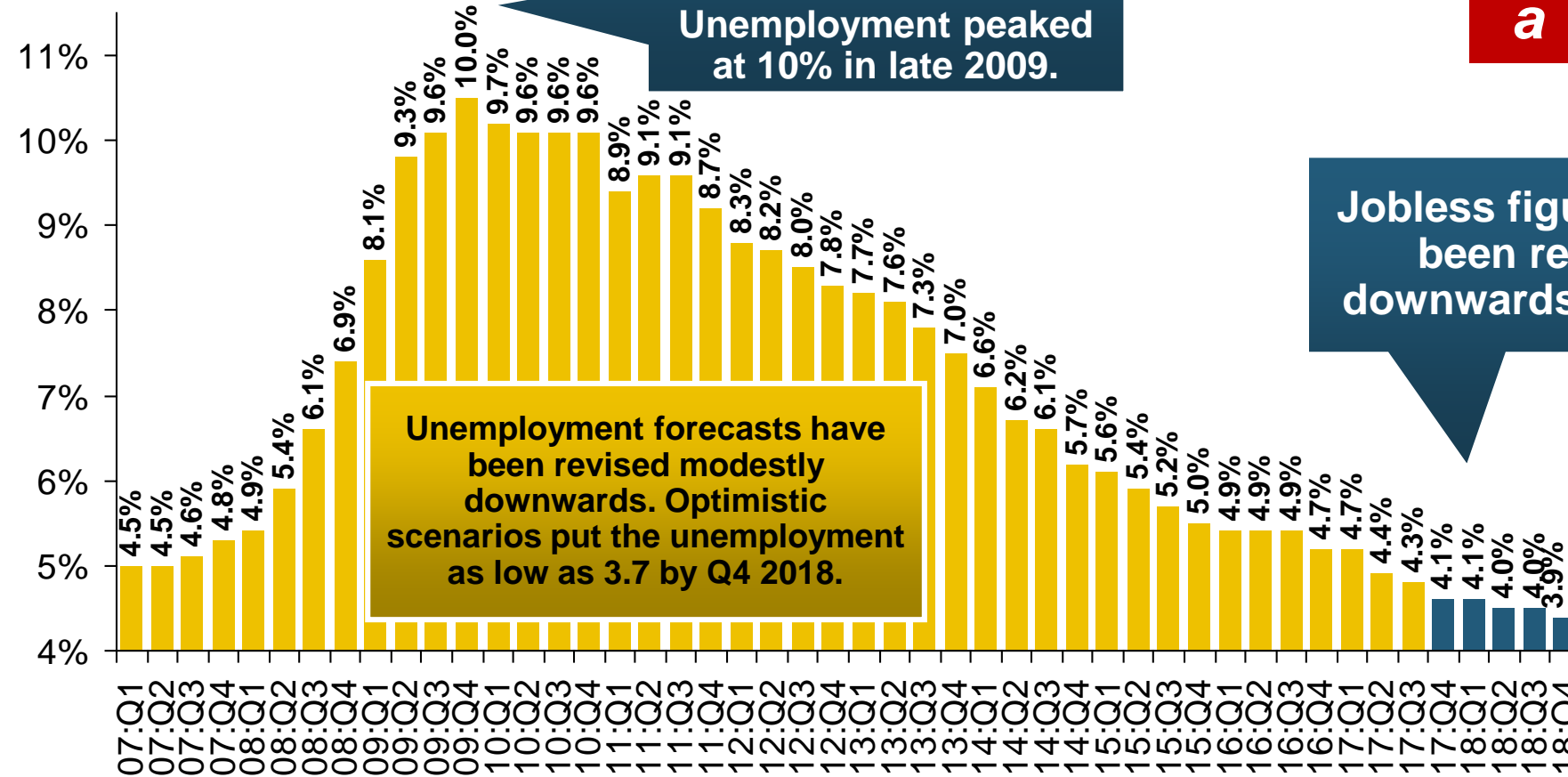
Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the “Great Recession” Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Economic Outlook: Labor Market Focus

**Labor Markets Are Healthy:
*Favorable Implications for Workers
Comp and Many Other Lines***

US Unemployment Rate Forecast

2007:Q1 to 2018:Q4F*



Rising unemployment eroded payrolls and WC's exposure base.
Unemployment peaked at 10% in late 2009.

The Nov. 2017 unemployment rate was 4.1%, a 17-year low

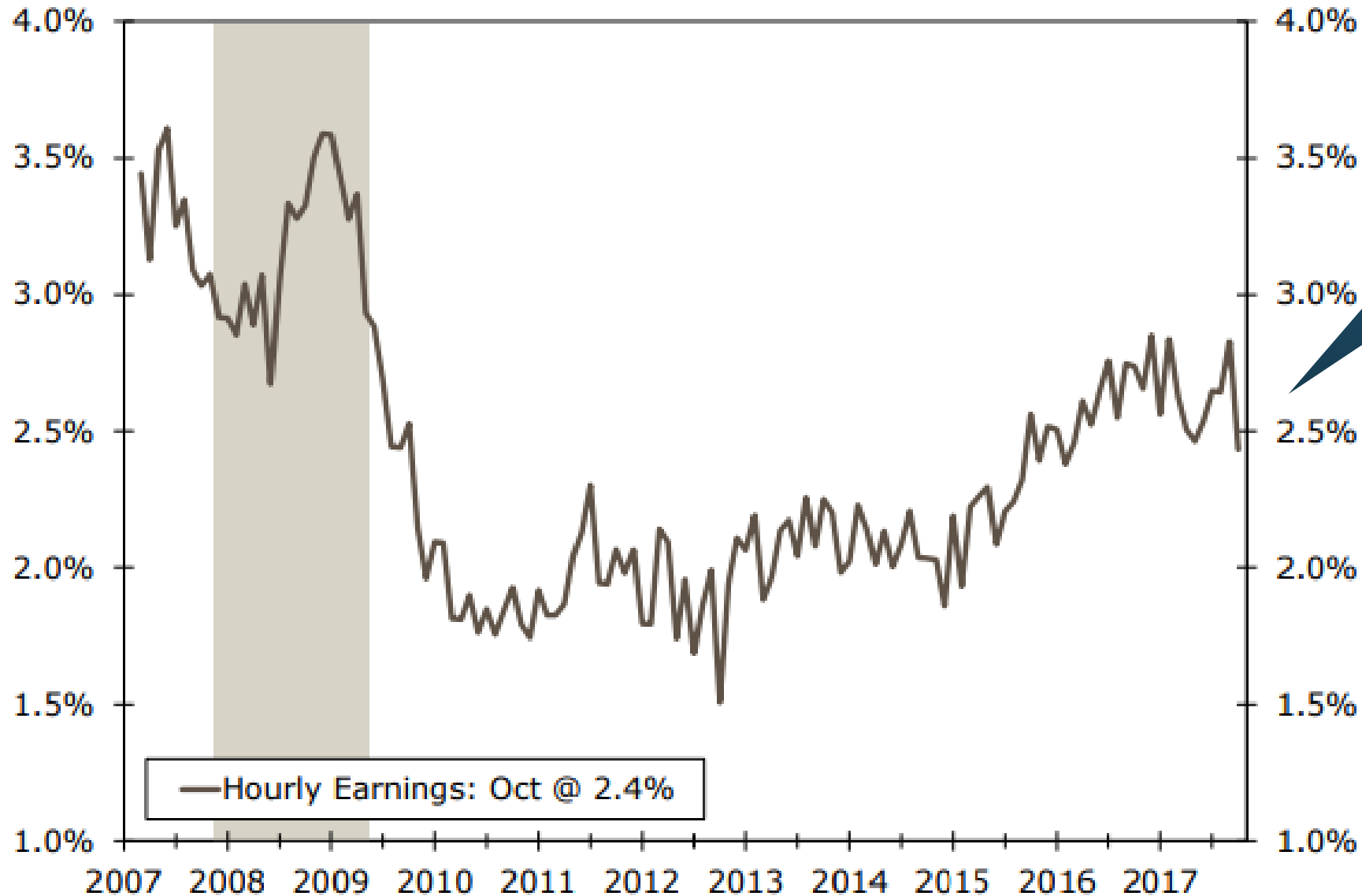
Jobless figures have been revised downwards for 2018

Unemployment forecasts have been revised modestly downwards. Optimistic scenarios put the unemployment as low as 3.7 by Q4 2018.

* Yellow = actual; Blue = forecasts

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (12/17 edition); Insurance Information Institute.

Average Hourly Earnings: Jan. 2007 – Oct. 2017 (\$ Bill)

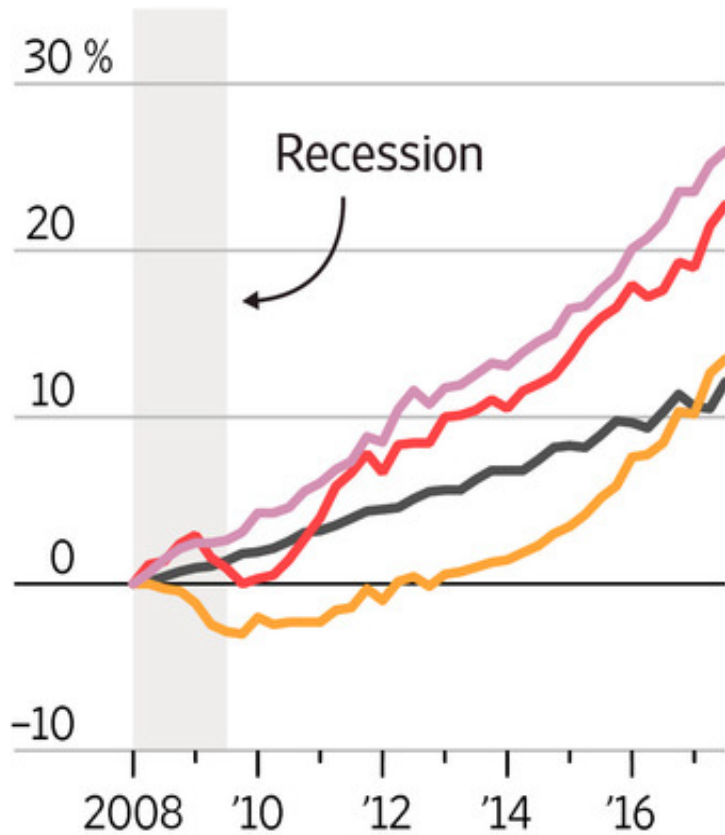


Source: US Bureau of Labor Statistics; Wells Fargo Research.

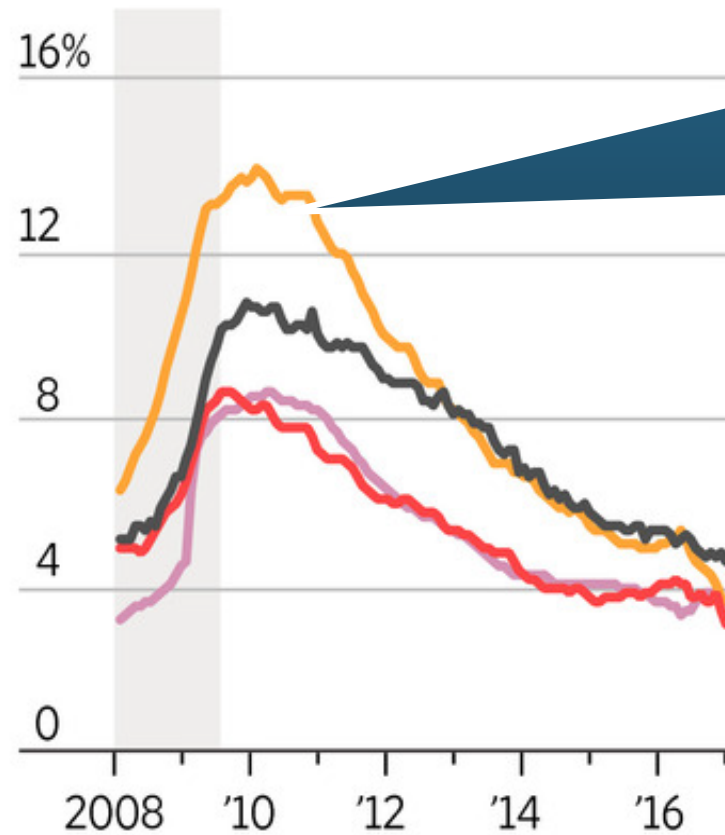
Wages Are Responding to Tight Labor Market Conditions in More Cities

Change in wages

■ U.S. ■ Minneapolis ■ Fort Myers, Fla. ■ Ogden, Utah



Unemployment rate



Workers in cities with unemployment rates below the national average are seeing accelerating wage gains—WC insurers will benefit as well

18 states and 20 cities increased their minimum wage as of Jan. 1, 2018—increasing payrolls by \$5 billion!

Source: US Bureau of Labor Statistics; Wall Street Journal.

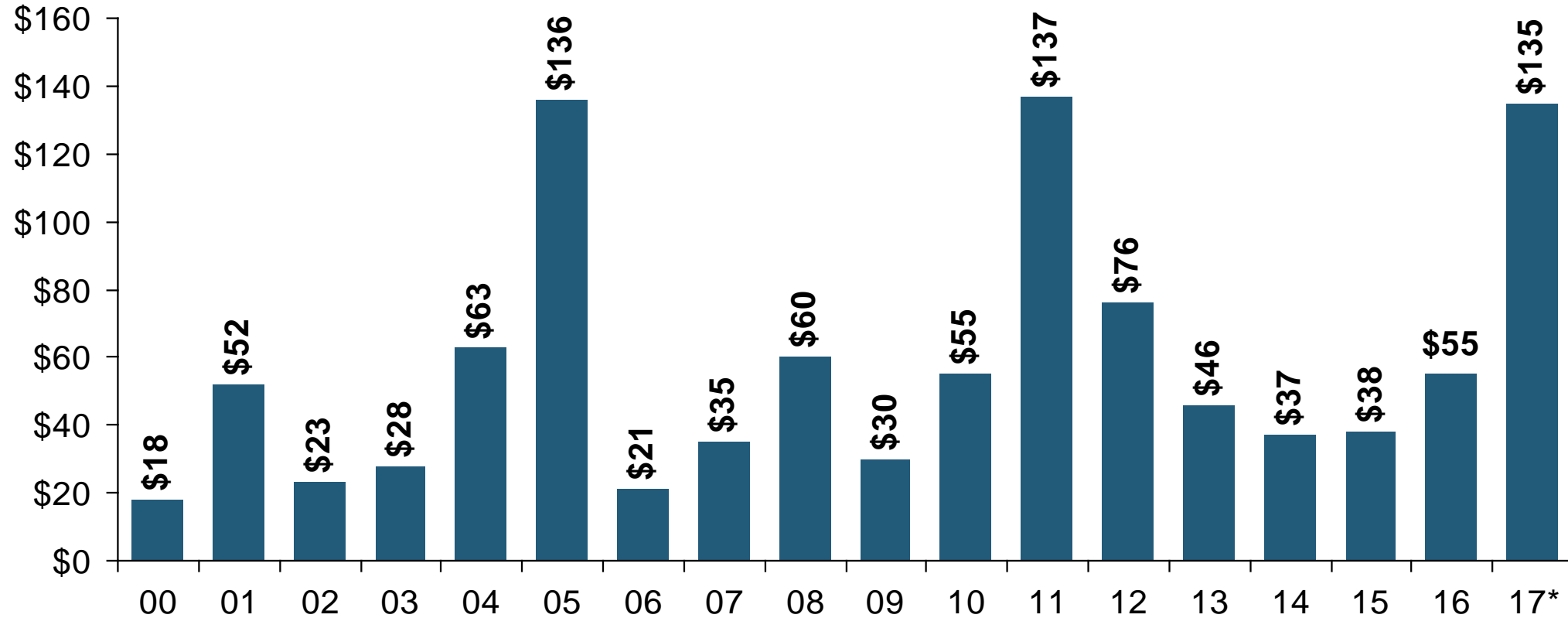
Catastrophe Loss Update: *Major Driver of Rate Pressure*

**2017 Was One of the Costliest Years Ever
for US Insurers**

***Hurricanes Harvey, Irma and Maria,
California Wildfires Exact a Huge Toll***

Global Insured Catastrophe Losses, 2000 – 2017E

(\$ Billions, \$ 2017)



2017 was one of the top 3 costliest years ever for insurers on a global scale

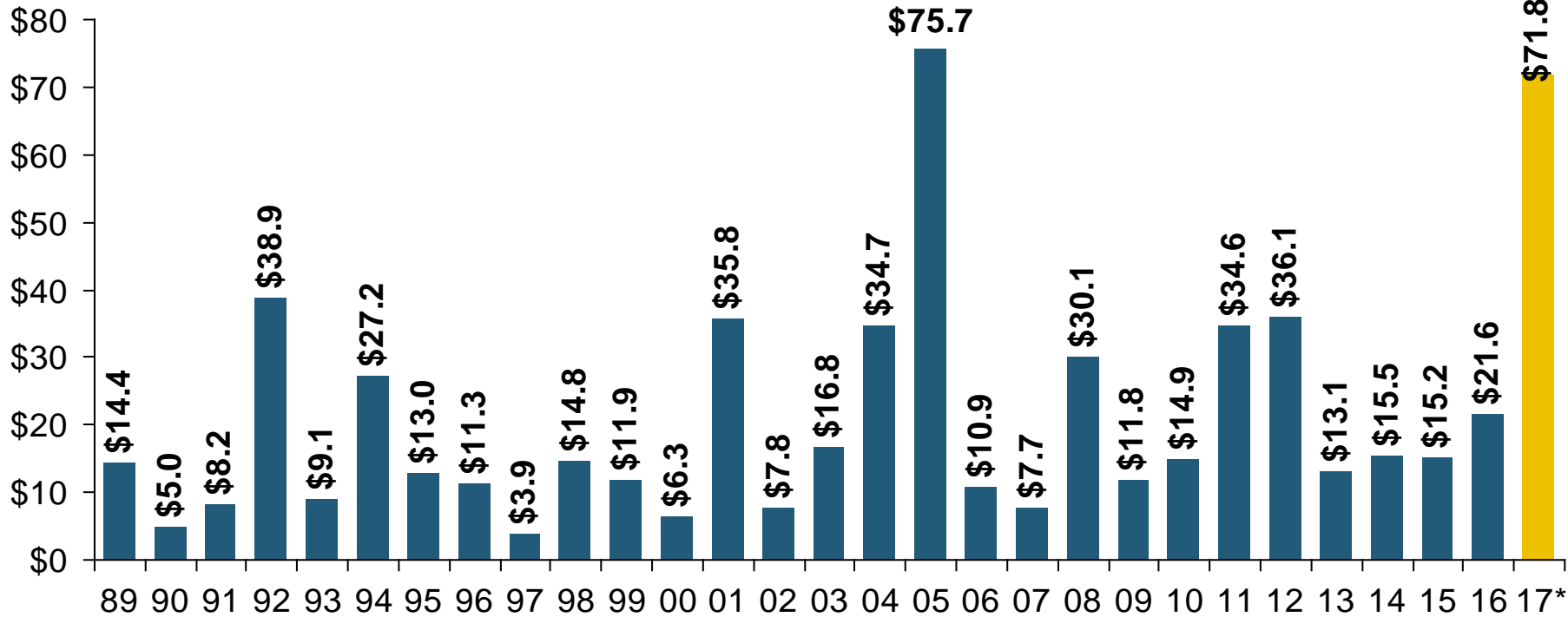
*Estimate

Sources: Swiss Re, RMS, Barclays Research.

U.S. Insured Catastrophe Losses, 1989 – 2017 YTD*

2017 is likely to become the second costliest year ever for insured CAT losses in the US

(\$ Billions, \$ 2015)



*As of Nov. 14, 2017. Stated in 2017 dollars. Excludes NFIP losses.

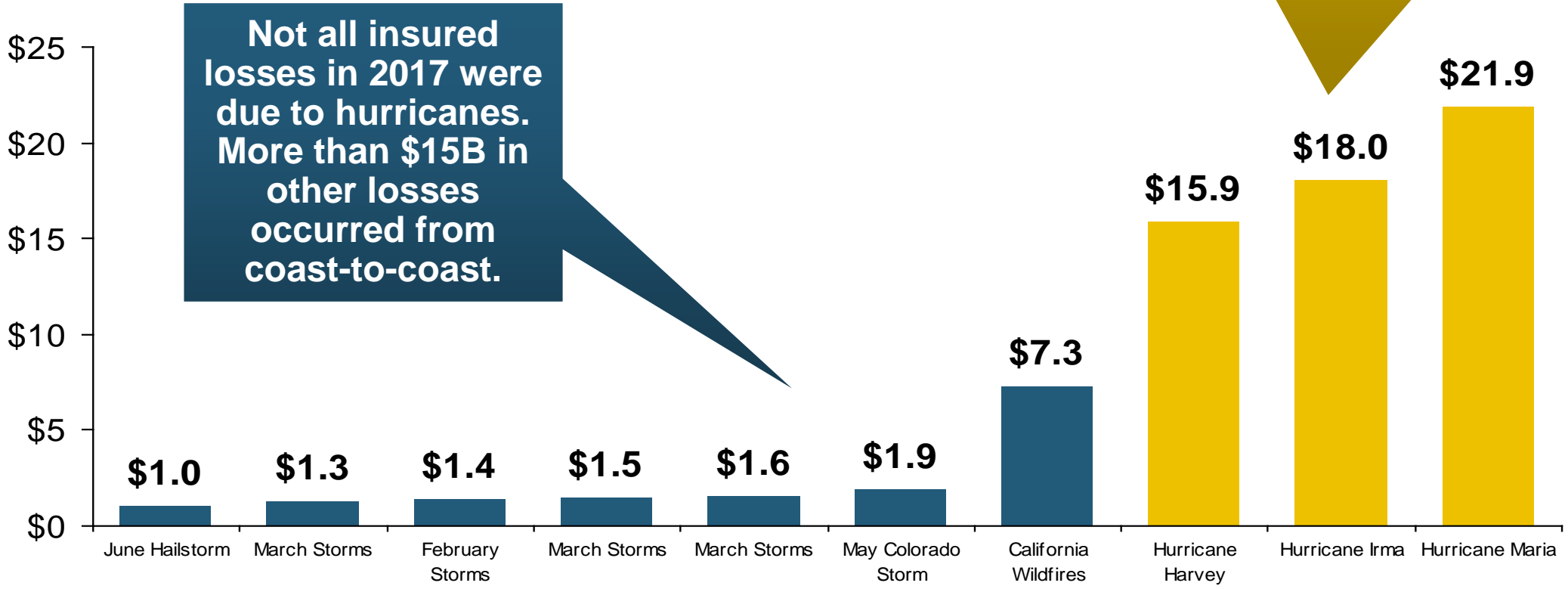
Note: 2001 figure includes \$20.3B for 9/11 losses reported through 12/31/01 (\$25.9B 2011 dollars). Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = \$12.2B (\$15.6B in 2011 dollars.)

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

Top 10 US Catastrophe Losses of 2017, by Insured Loss

YTD insured CAT losses in the US totaled \$72 billion by late 2017, the second costliest year on record, led by Hurricanes Maria, Irma and Harvey

(Insured Losses, 2017 Dollars, \$ Billions)*



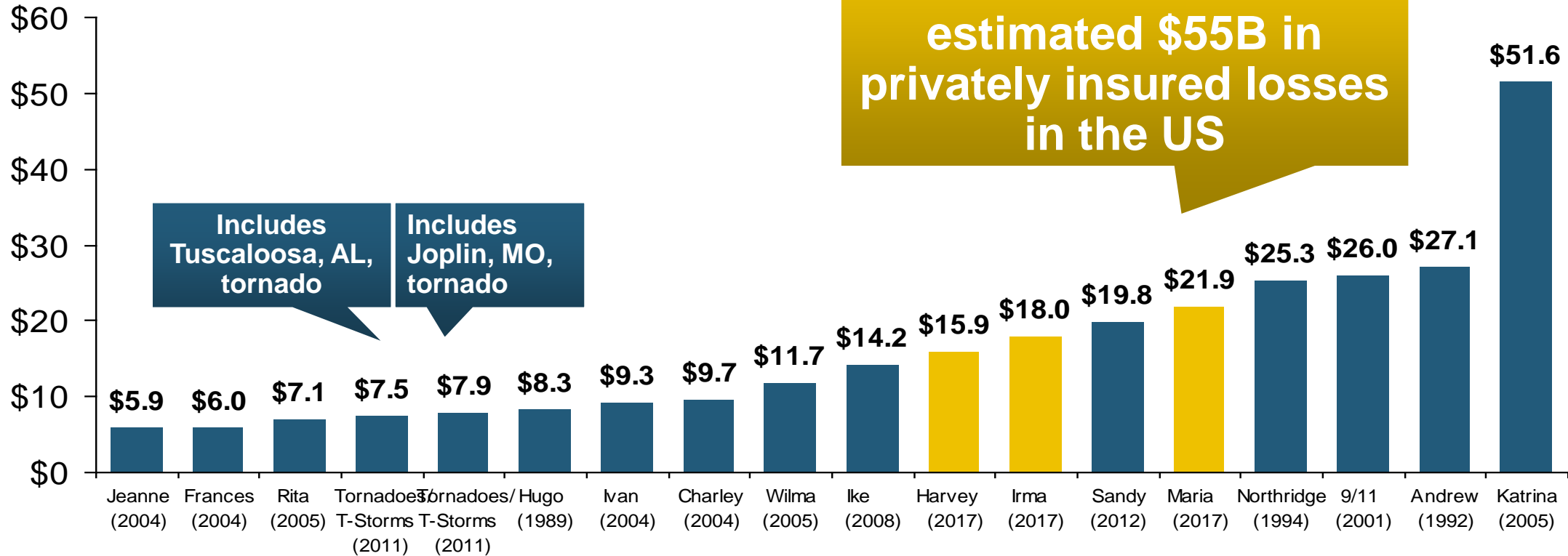
Not all insured losses in 2017 were due to hurricanes. More than \$15B in other losses occurred from coast-to-coast.

*As of Nov. 14, 2017.

Sources: PCS; Insurance Insider: <http://www.insuranceinsider.com/-1270818/9>.

Top 18 Most Costly Disasters in U.S. History—Katrina Still Ranks #1

(Insured Losses, 2017 Dollars, \$ Billions)*

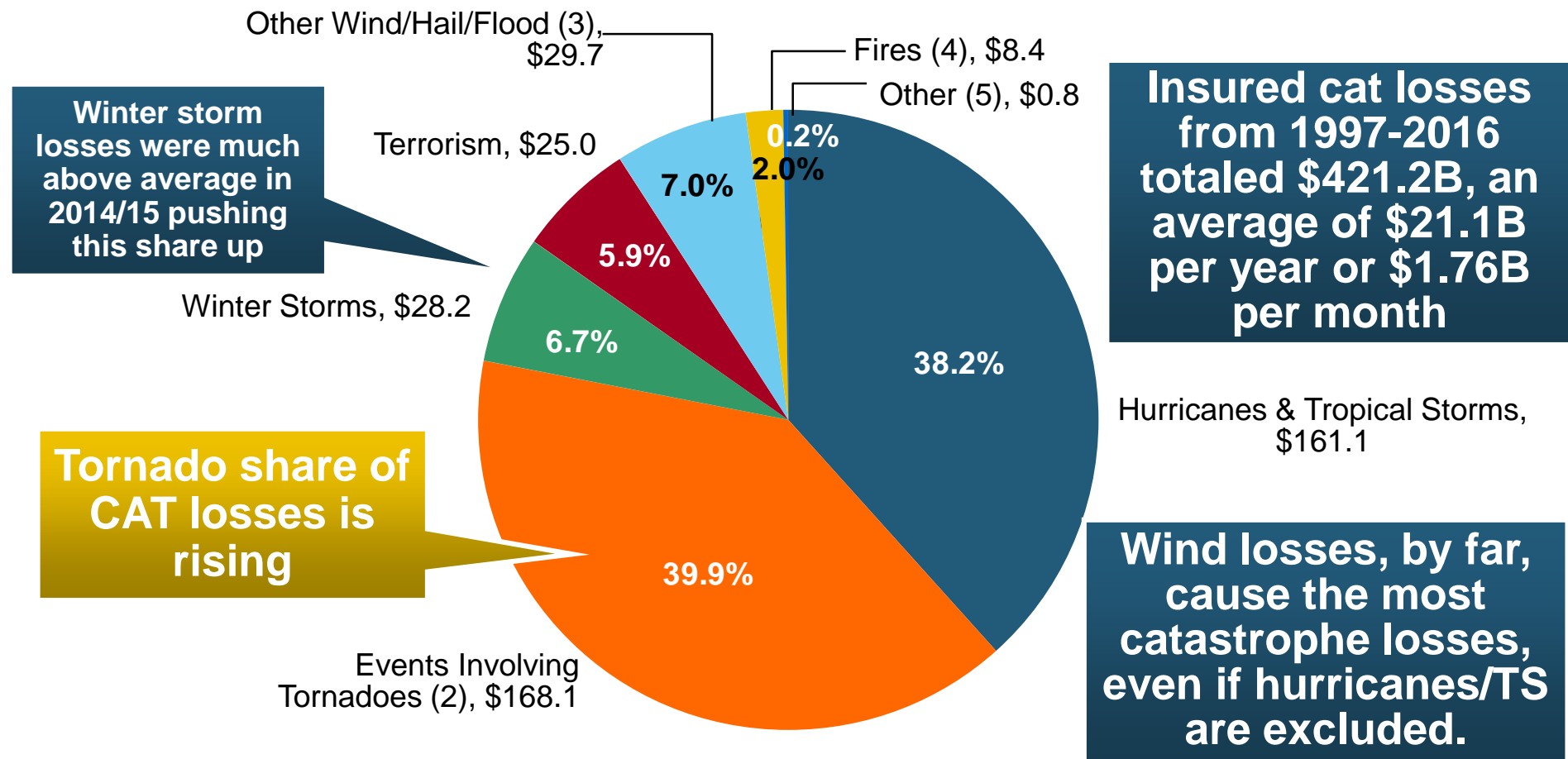


15 of the 18 Most Expensive Insurance Events in US History Have Occurred Since 2004—3 of those in 2017

*2017 values are as of Nov. 14, 2017.

Sources: PCS, RMS, Karen Clark & Co; USC Center for Risk and Uncertainty Management adjustments to 2017 dollars using the CPI.

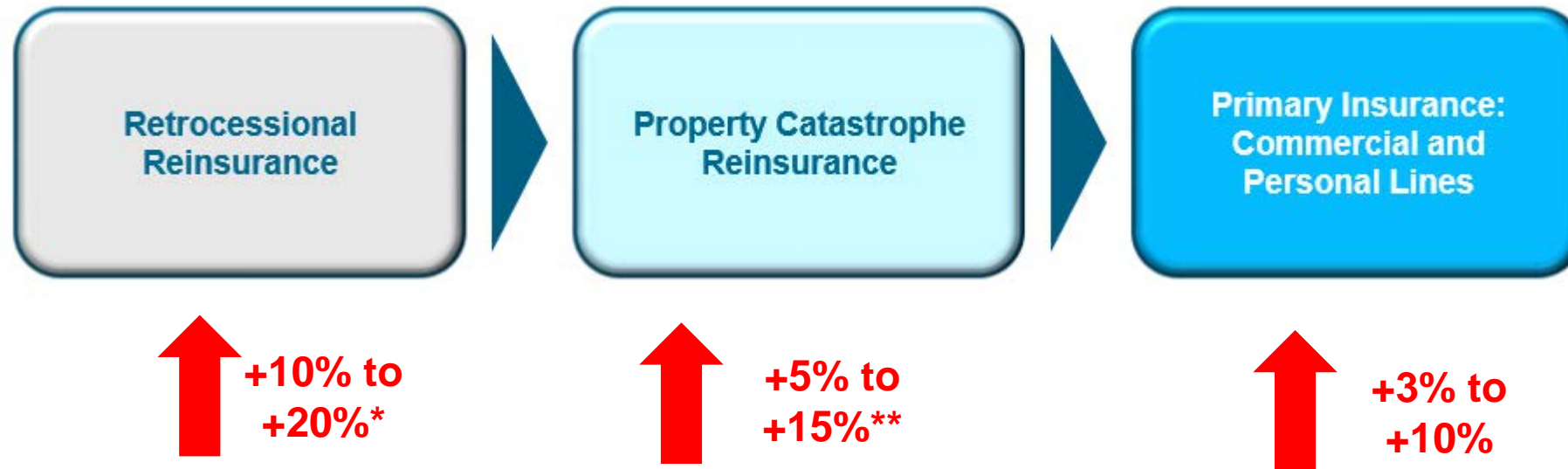
Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1997–2016¹



1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2016 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses
4. 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.

Origins of Pricing Pressure Arising from Near-Record CAT Activity



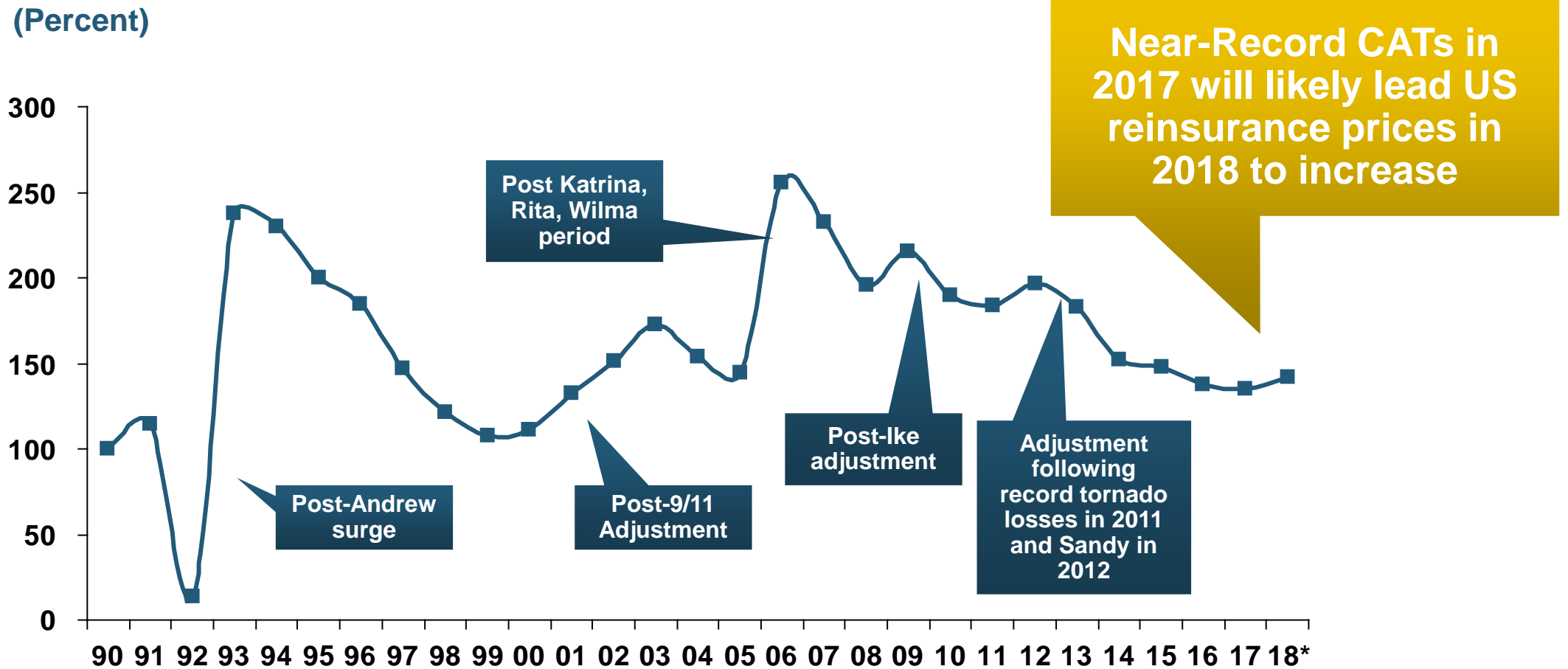
Retrocessional Reinsurance markets (reinsurance for reinsurance companies) is pushing pressure through the reinsurance markets and into both commercial and personal lines

*Some programs above and below this range.

**Higher end of range applies to loss-affected accounts.

Sources: Adapted from Barclay's Capital research.

US Property Catastrophe Rate-on-Line Index: 1990 – 2018*



US Reinsurance Pricing Is Sensitive to CAT Activity and Ultimately Impacts Primary Insurance Pricing, Terms and Conditions

*As of January 1 each year. 2018 is a full-year estimate (Center for Risk and Uncertainty Management, Univ. of South Carolina).

Source: Guy Carpenter; Artemis.bm accessed at: <http://www.artemis.bm/indices/regional-property-cat-rate-on-line-index.html>

Catastrophe Claims and Hard Markets

Year	CAT claims over \$35 billion (\$2016, billions)	Growth of (NWP-GDP) in following year	Hard Market?
1992	\$39.6	0.9%	No
2001	\$36.4	12.0%	Yes
2004	\$36.4	-6.2%	No
2005	\$77.1	-3.1%	No
2011	\$35.2	0.2%	No
2012	\$36.8	1.3%	No
2017	\$80+	?	?

Contrary to conventional wisdom, heavy CAT activity does not generally precipitate a hard market

Policyholder Surplus (Capacity) and Hard Markets

Year	Surplus decline	Growth of (NWP-GDP) in following year	Hard Market?
1984	-2.7%	14.6%	Yes
1999	-0.9%	-1.5%	No
2000	-4.7%	5.1%	Yes
2001	-8.0%	12.0%	Yes
2008	-12.5%	-2.2%	No
2011	-0.8%	0.2%	No
2017	>0%?	?	?

Declines in surplus (capacity) are a less reliable predictor of hard markets

P/C Insurance Industry ROE and Hard Markets

Year	P/C Industry ROE less than 4%	Growth of (NWP-GDP) in following year	Hard Market?
1975	2.4%	10.7%	Yes
1984	1.8%	14.6%	Yes
2001	-1.2%	12.0%	Yes
2002	2.1%	5.1%	Yes
2017	<4%	?	?

Depressed ROEs are a historically reliable predictor of hard markets

Hard Markets: Conclusion & Implications for 2018

- **Low ROE** is the best predictor of a hard market (likely well below 4% in 2017), but does this mean a hard market is a sure thing?
 - ◆ *No...but some “correction” is likely*
- **Surplus** in 2017 was flat or down slightly from a vastly overcapitalized peak.
 - ◆ *Capacity remains generally abundant and seems likely to grow—not drop—due to asset value growth, implying that a true hard market is unlikely to develop.*
- **CAT Losses:** 2017 was one of the worst years on record for cat losses—implying a hard market—but this predictor does not appear to be an accurate one, at least in isolation
 - ◆ *Greatest impacts are driven through property cat reinsurance and retro markets on loss impacted areas and accounts*

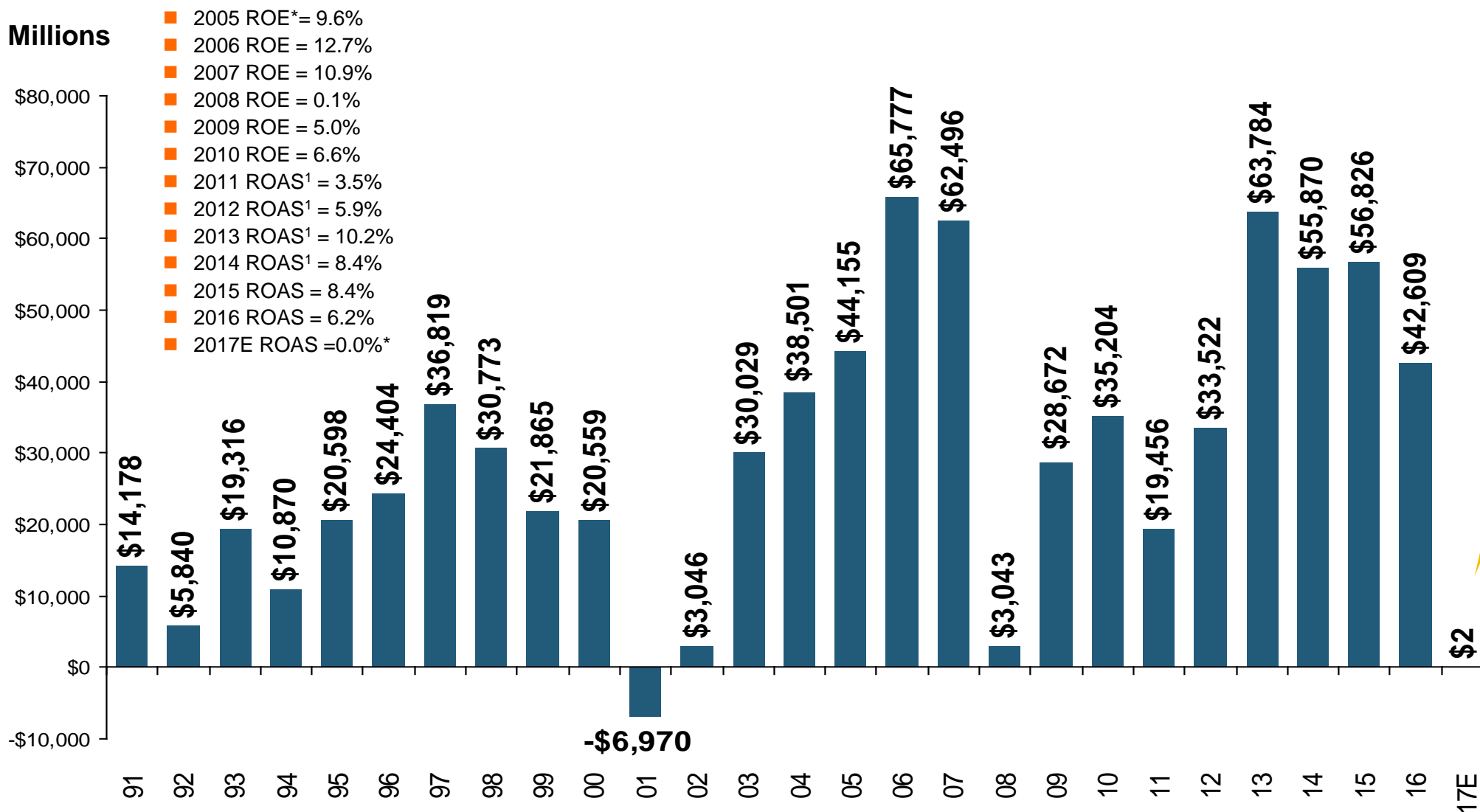
P/C Insurance Industry Financial Overview

**CATS, Non-CAT Underwriting Losses
Impacted Insurer Balance Sheets**

***Industry Remains Strong, But Only Risk-Appropriate
Premiums Can Ensure Long-Term Strength***

P/C Industry Net Income After Taxes, 1991–2017E

\$ Millions

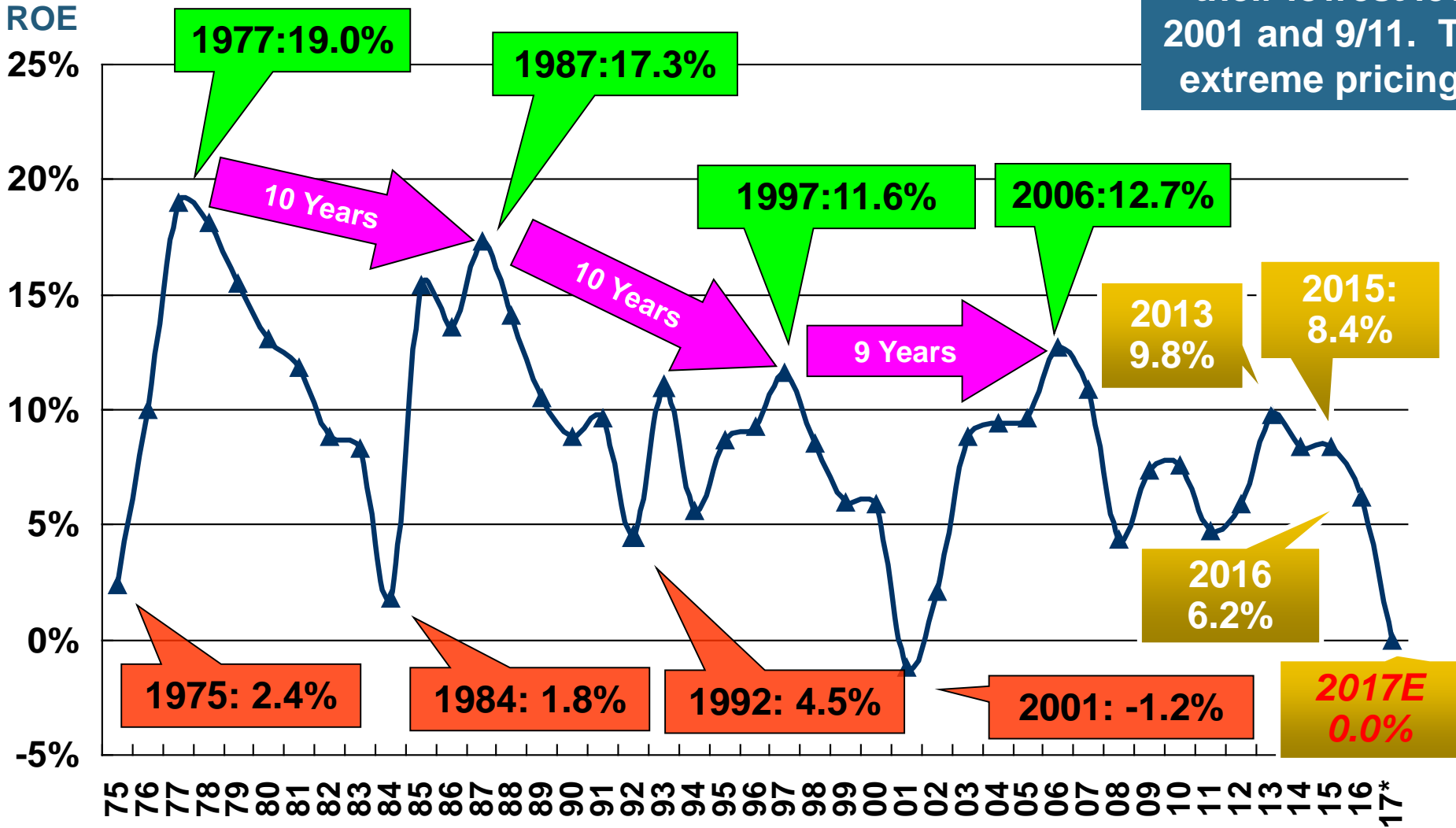


Net income will fall sharply in 2017 as high CAT losses took their toll

*ROE figures are GAAP; ¹Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 8.2% ROAS in 2014, 9.8% ROAS in 2013, 6.2% ROAS in 2012, 4.7% ROAS for 2011, 7.6% for 2010 and 7.4% for 2009; 2016E is annualized figure based actual figure through Q3 of \$31.8B.

Sources: A.M. Best, ISO; USC RUM Center estimate (2017 based on actual NIAT of \$15.5B though Q2 and ROAS of 4.4% adj. for Q3/4 activity).

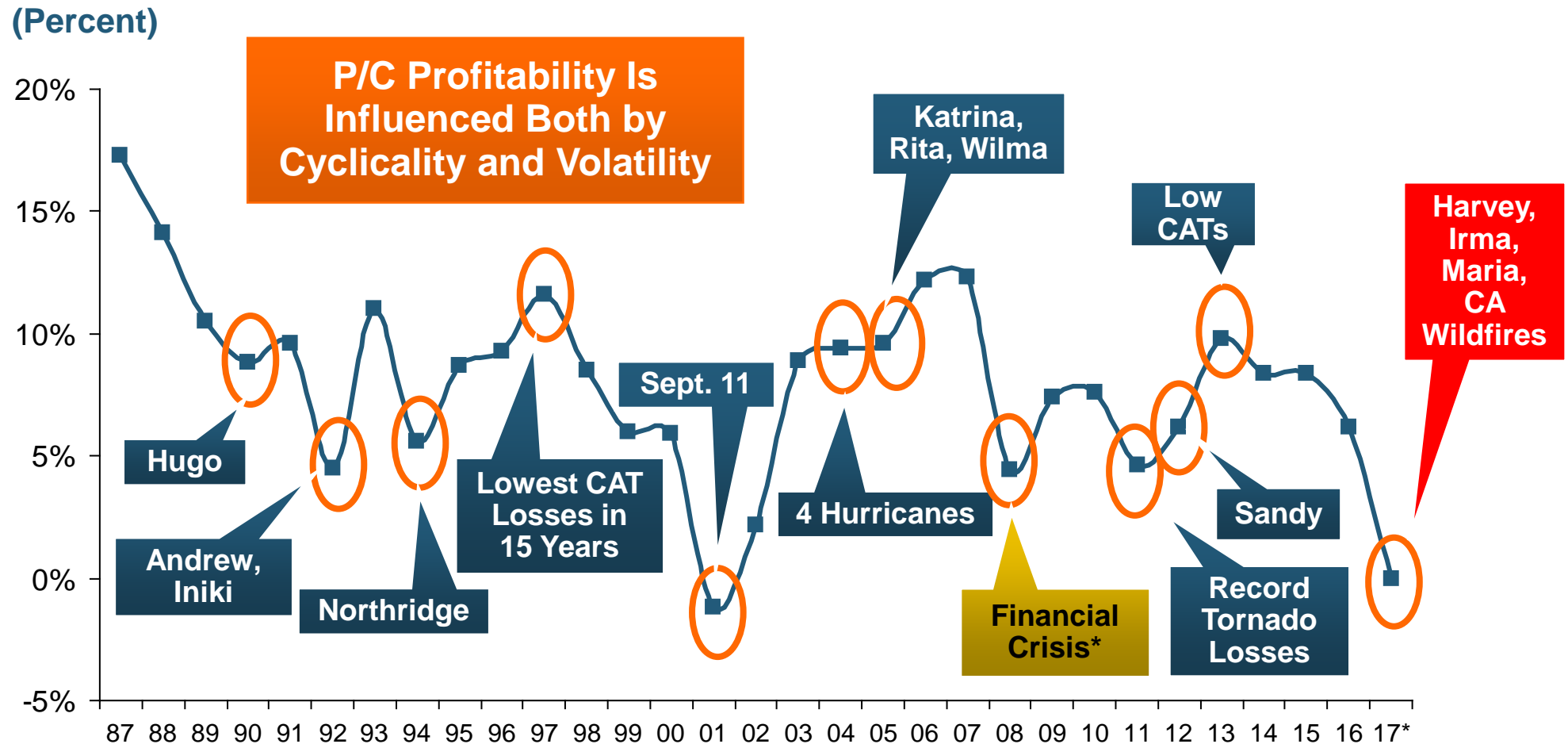
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2017E



ROEs in 2017 plunged to their lowest levels since 2001 and 9/11. This creates extreme pricing pressure.

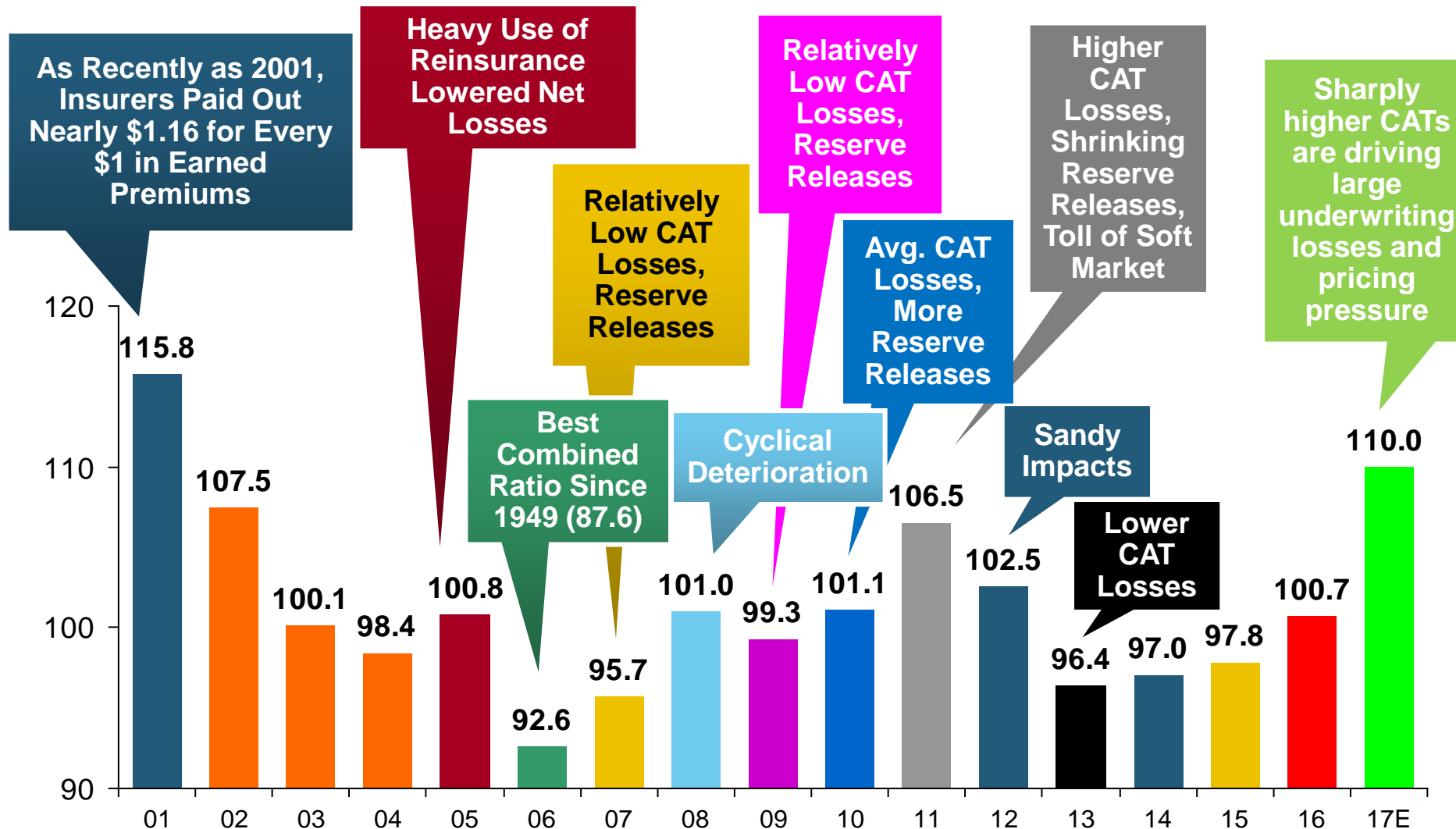
*Est. for 2017 based on actual ROAS of 4.45 through Q2; Profitability = P/C insurer ROEs. 2011-16 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers. Source: NAIC, ISO, A.M. Best, Conning, USC RUM Center estimates.

ROE: Property/Casualty Insurance by Major Event, 1987–2017E



*2017 Estimate based on actual ROAS through Q2 of 4.4% with USC Center for Risk and Uncertainty Management estimate for the full year. Excludes Mortgage & Financial Guarantee in 2008 – 2014. Sources: ISO, *Fortune*; USC RUM Center.

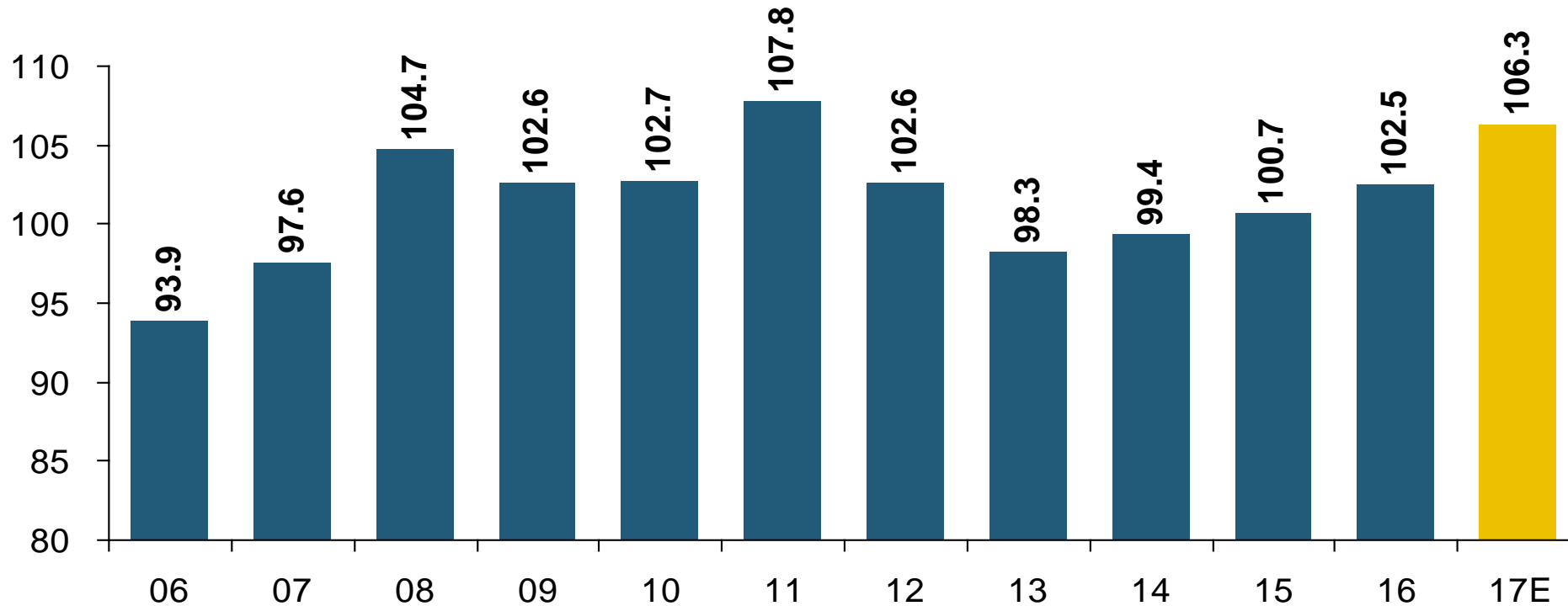
P/C Insurance Industry Combined Ratio, 2001–2017E*



* 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: = 97.0.; 2017 (est.) based on actual 100.7 through Q2.

Sources: A.M. Best, ISO (2014-2015); Figure for 2010-2013 is from A.M. Best P&C Review and Preview, Feb. 16, 2016.

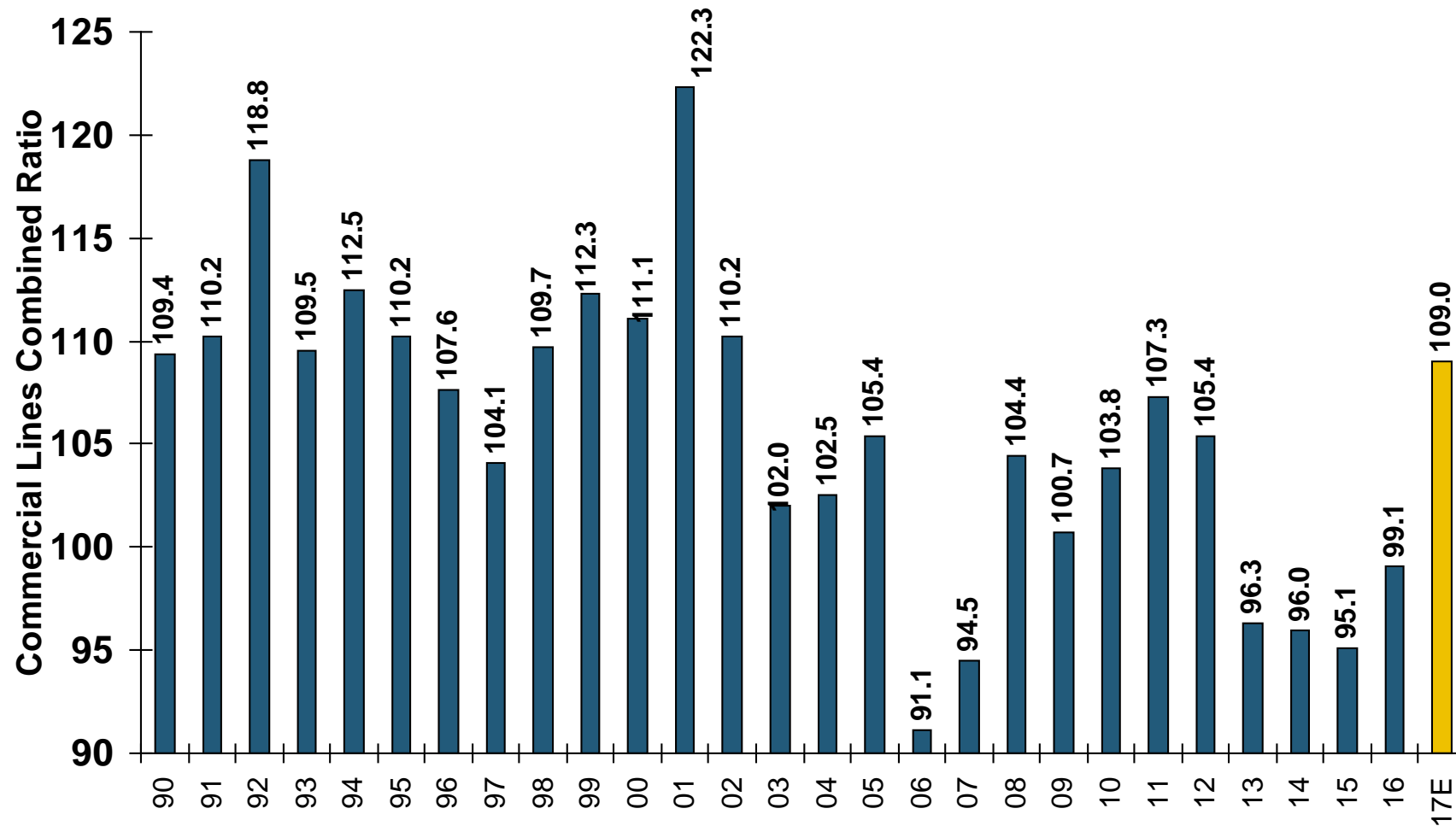
Personal Lines Combined Ratio: 2006–2017E



**Personal Lines Underwriting Losses Rose in 2017
Due to Record CATs and Adverse Auto Severity**

Source: A.M. Best (2006-2016); USC RUM (2017E).

Commercial Lines Combined Ratio, 1990-2017F*

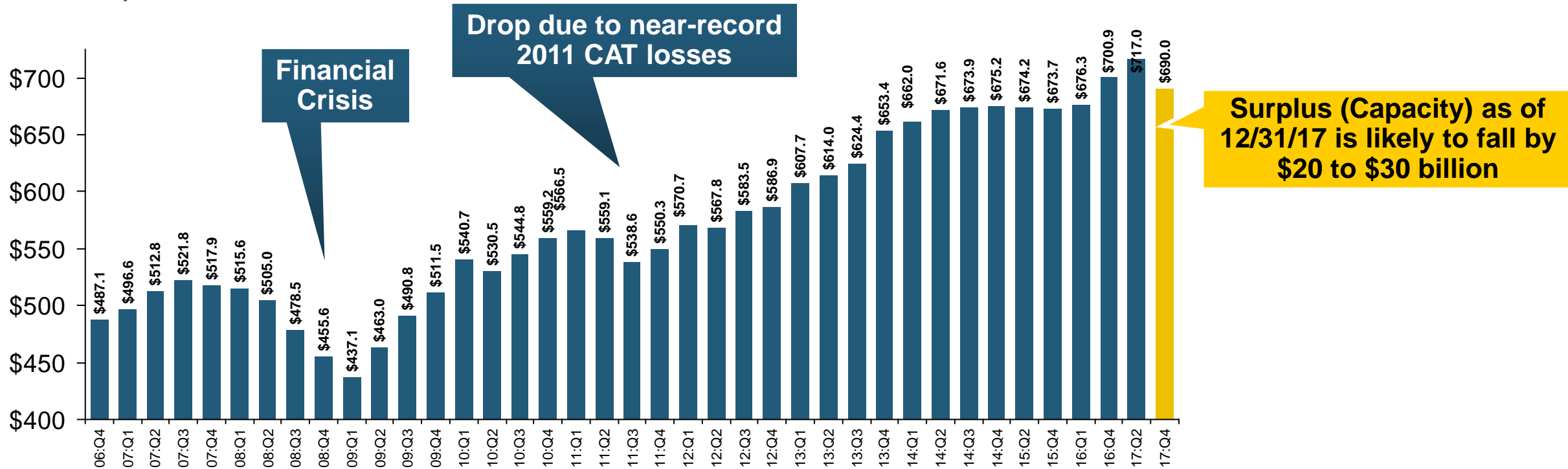


Commercial lines underwriting performance deteriorated materially in 2017 as record CATs, diminishing prior year reserves, rising loss cost trends and pricing pressure in some lines are pushing combined ratios higher

*2007-2012 figures exclude mortgage and financial guaranty segments.
Source: A.M. Best (1990-2016); USC RUM Center (2017E).

Policyholder Surplus, 2006:Q4–2017:Q4E

(\$ Billions)



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 .

Capacity/Capital “shocks” typically drive a firming of the pricing environment

Sources: ISO, A.M .Best; 2018 estimate from the Center for Risk and Uncertainty Management, University of South Carolina.

INVESTMENTS: THE NEW REALITY

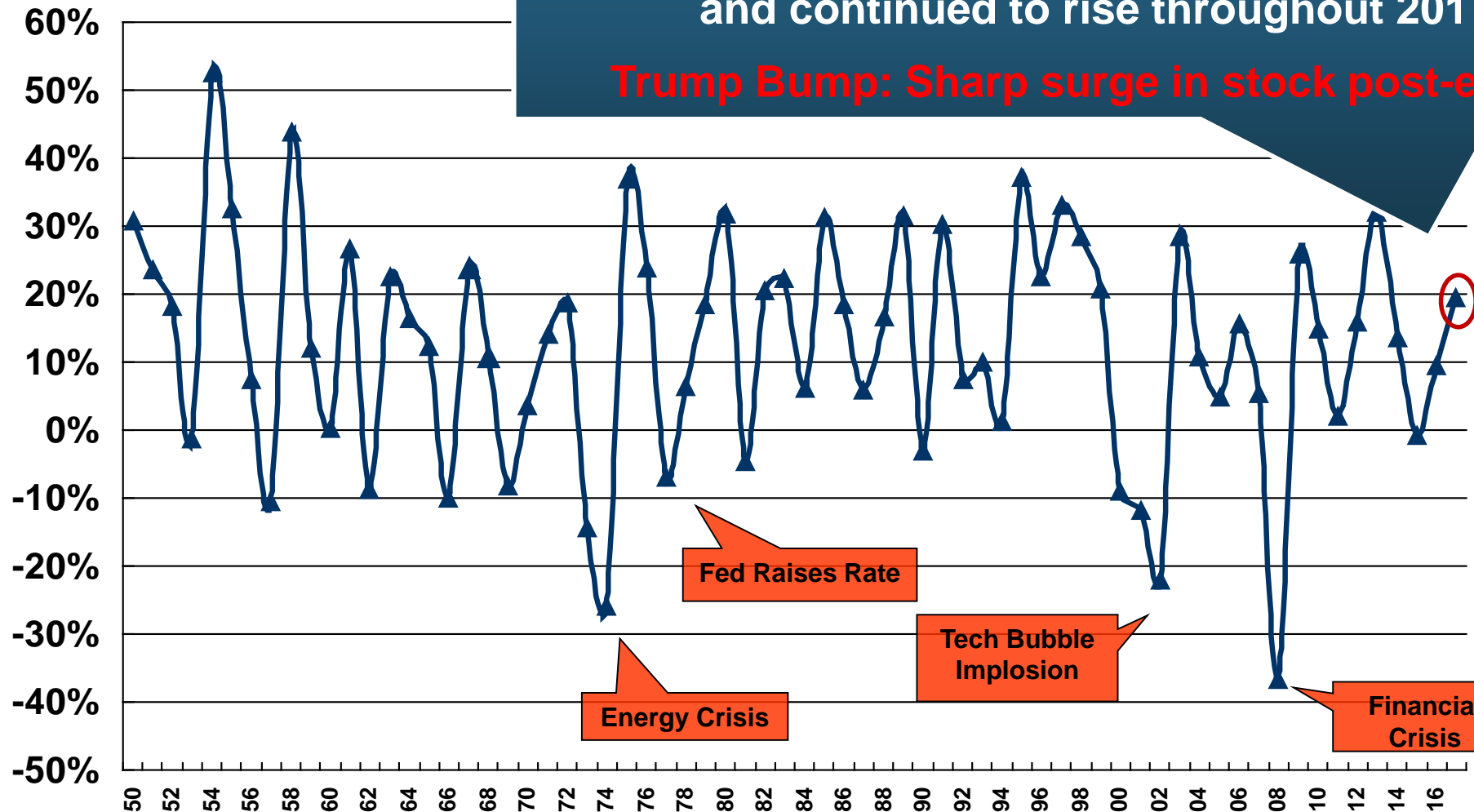
**Investment Performance is a Key
Driver of Insurer Profitability**

***The “Trump Bump” Has Lifted
Stock Markets and Interest Rates***

Will the Gains Help Insurers?

S&P 500 Index Returns, 1950 – 2017*

Annual Return



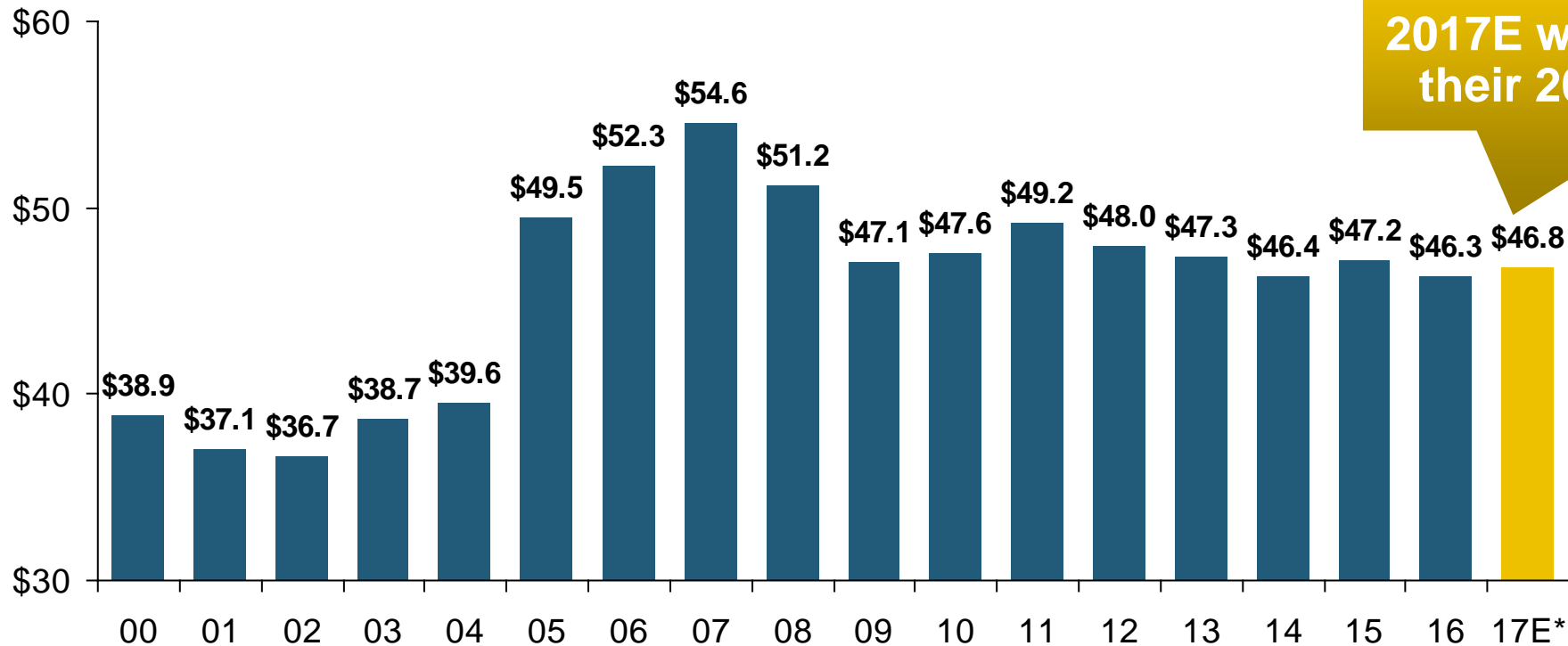
2016: +9.5%
2017: 19.4%

*Through Dec. 31, 2017.

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

Property/Casualty Insurance Industry Investment Income: 2000–2017E*

(\$ Billions)



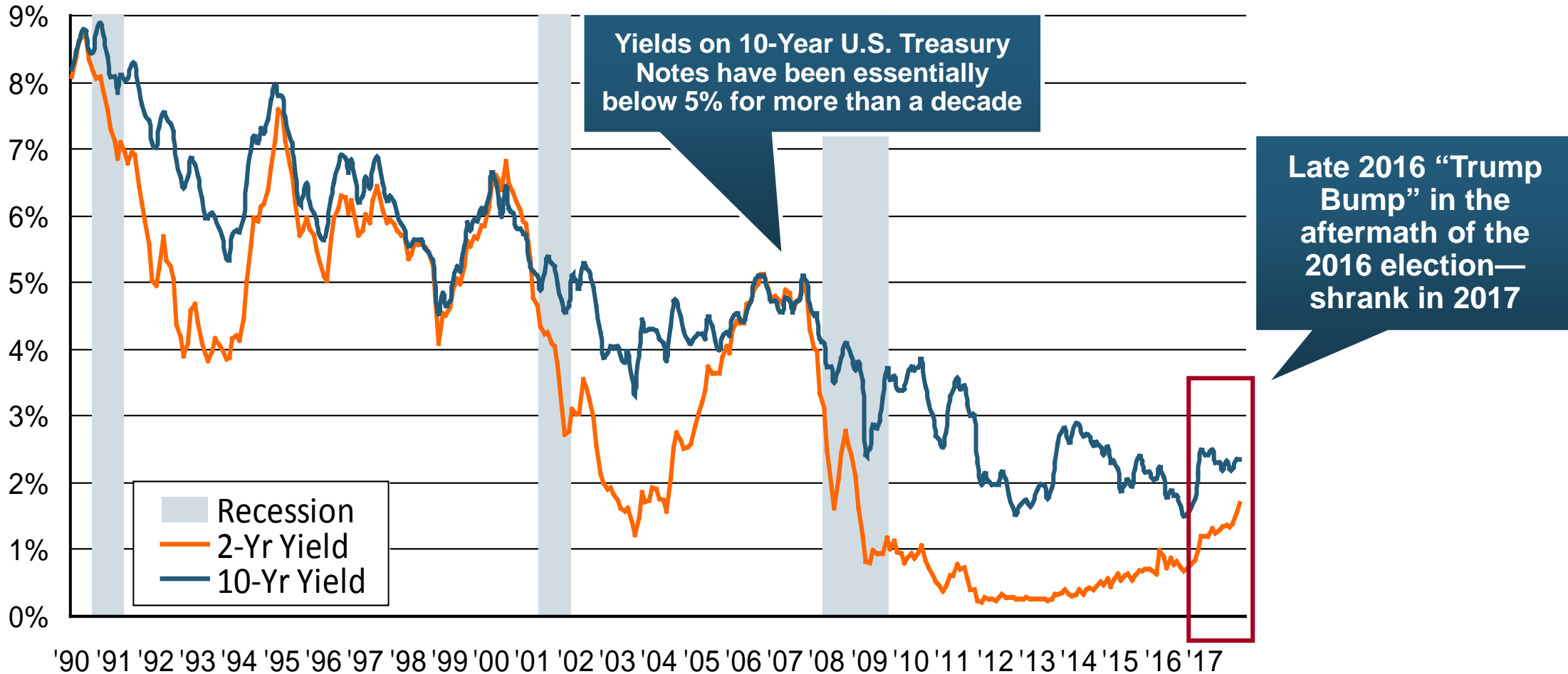
Investment earnings in 2017E were still ~14% below their 2007 pre-crisis peak

Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014 but showed a small (1.7%) increase in 2015—though 2016 experienced another decline. ~ Flat in 2017.

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

*2017 estimate based on annualized \$23.4B actual figure for 1st Half 2017.

U.S. Treasury Security Yields: A Long Downward Trend, 1990–2017*



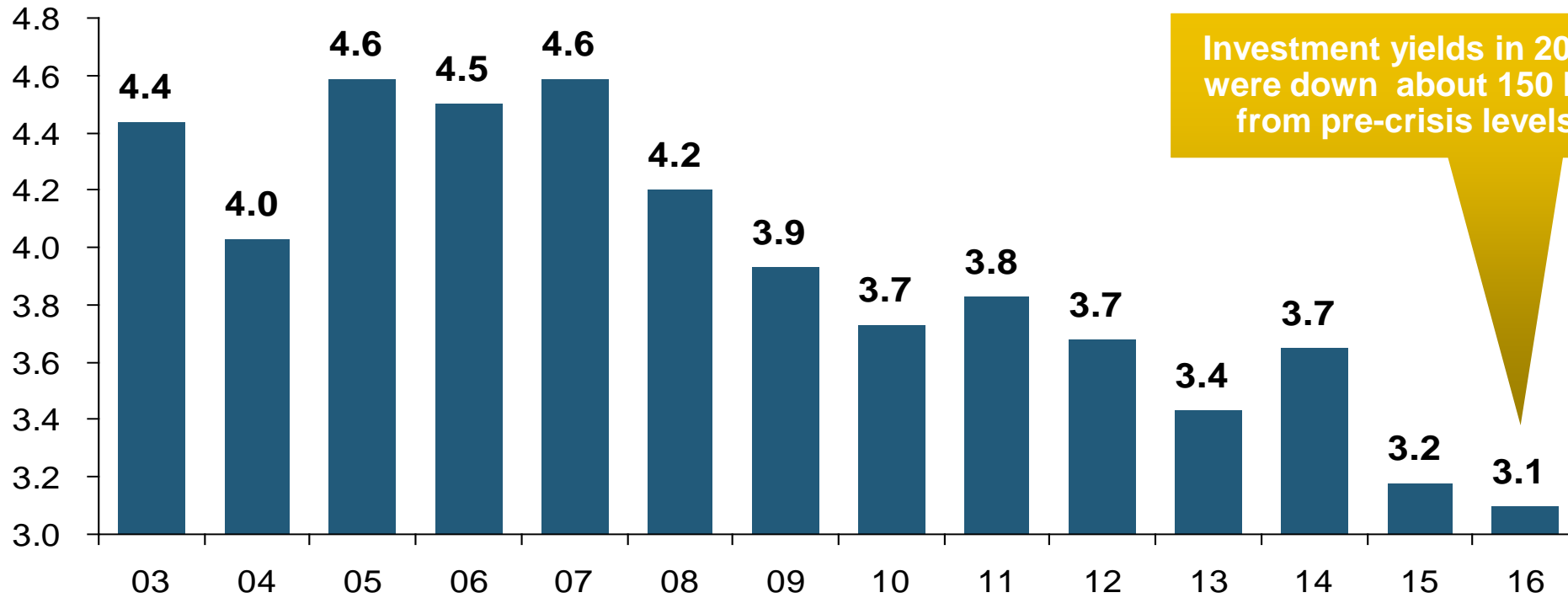
Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through Nov. 2017.

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

Net Investment Yield on Property/ Casualty Insurance Invested Assets, 2007–2016*

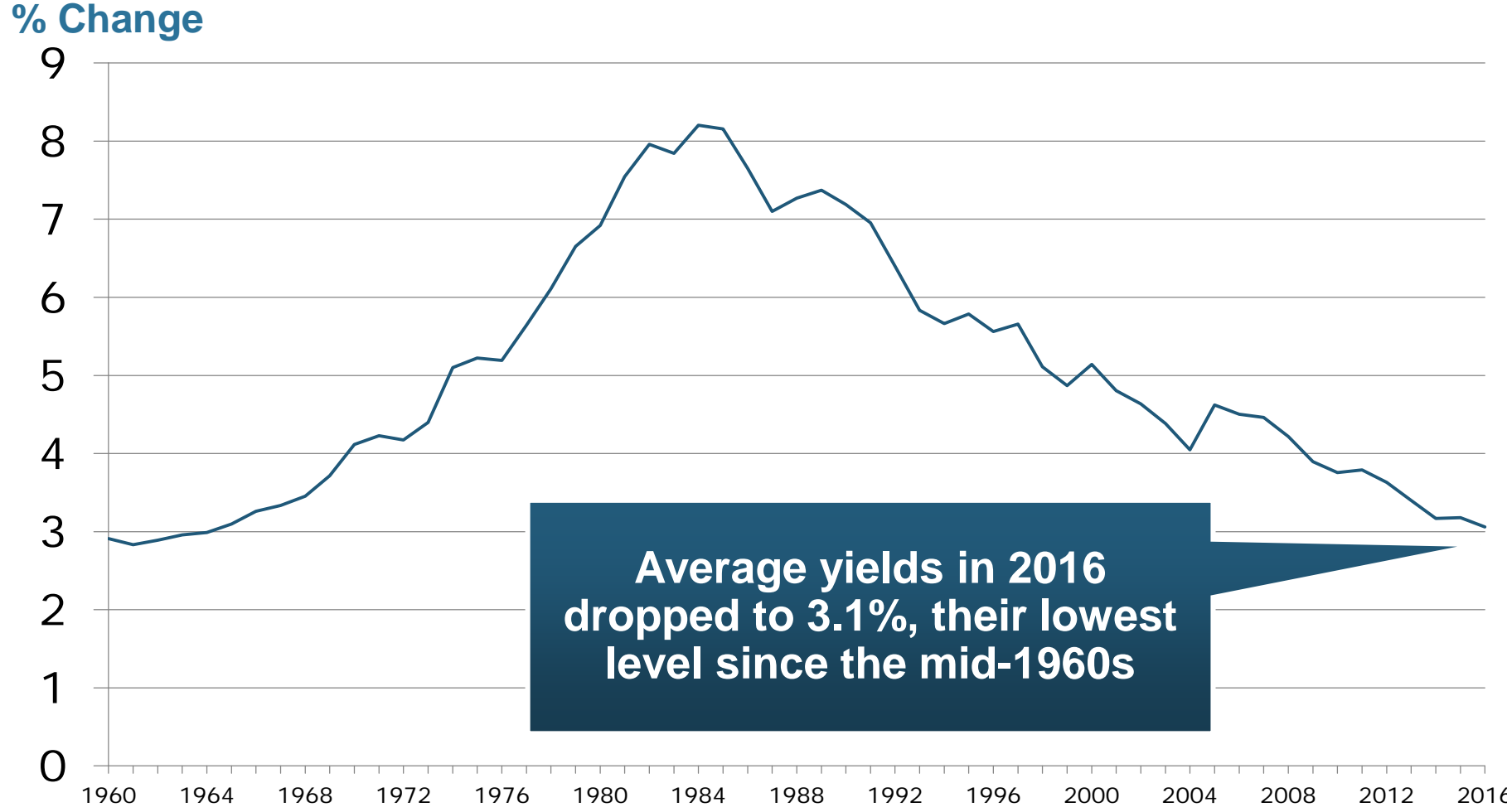
(Percent)



The yield on invested assets remains low relative to pre-crisis yields. Fed rate increases beginning in late 2015 have pushed up some yields, albeit quite modestly.

P/C Insurer Investment Yields: Lowest in Half a Century

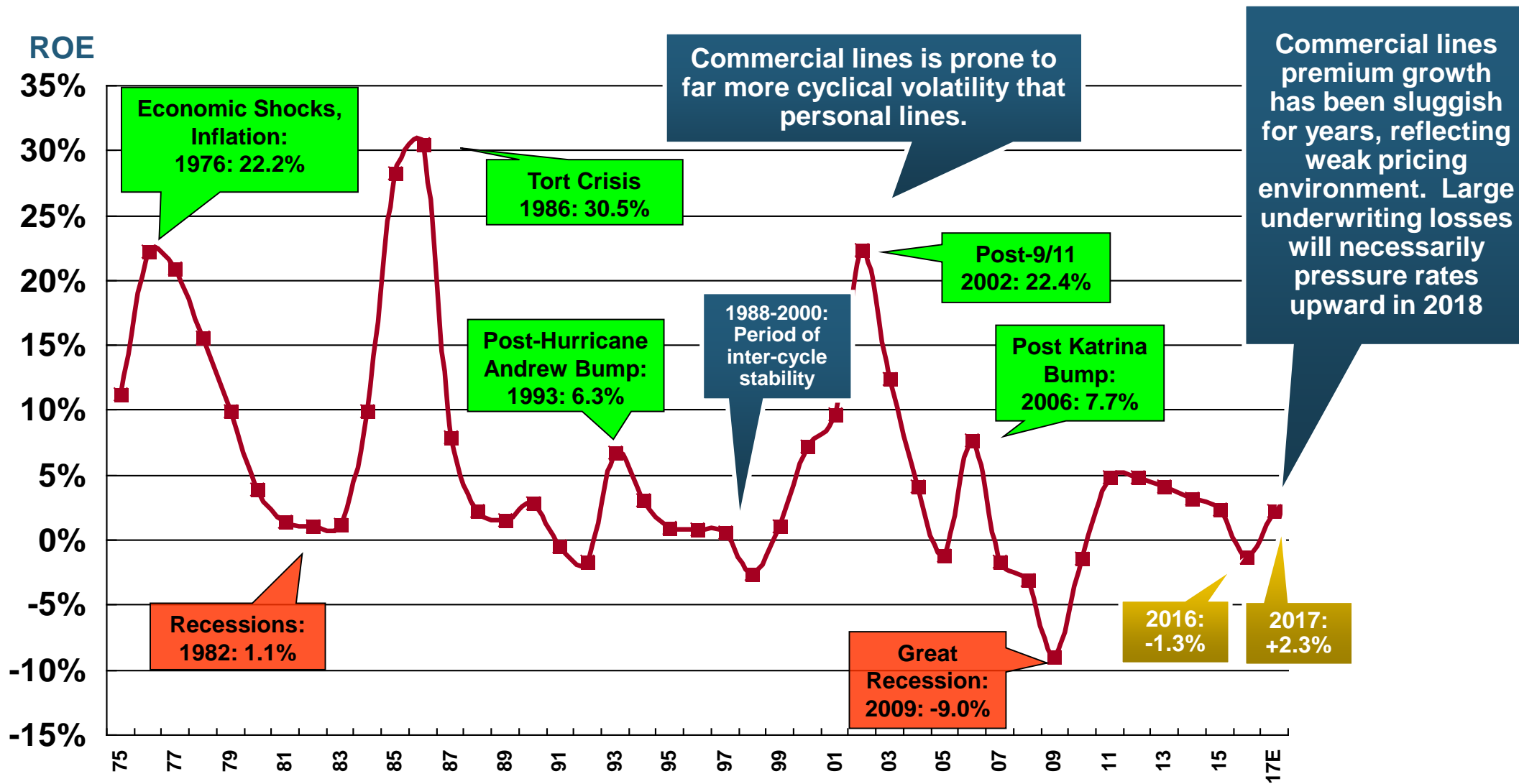
Yield on average cash and investment assets, %



Commercial Lines Growth, Underwriting Performance & Pricing Cyclicity

Cyclicity in Growth, Price Are the Norm
***Rising Rates Are a Normal Part of
Adjustment Process***

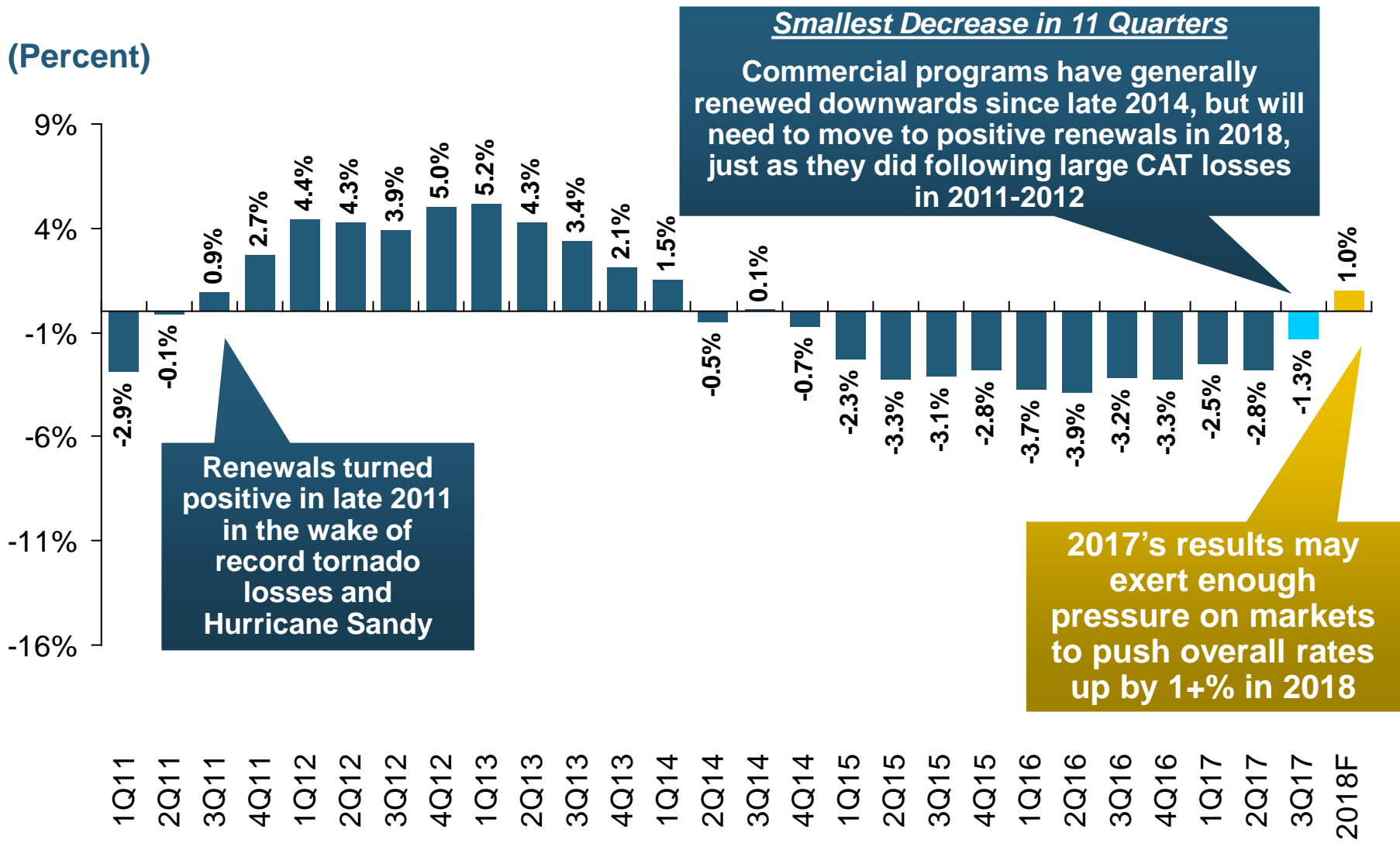
Commercial Lines NPW Premium Growth: 1975 – 2017E



Note: Data include state funds beginning in 1998.

Source: A.M. Best; Insurance Information Institute. 2017 estimate: Univ. of South Carolina Center for Risk and Uncertainty Management.

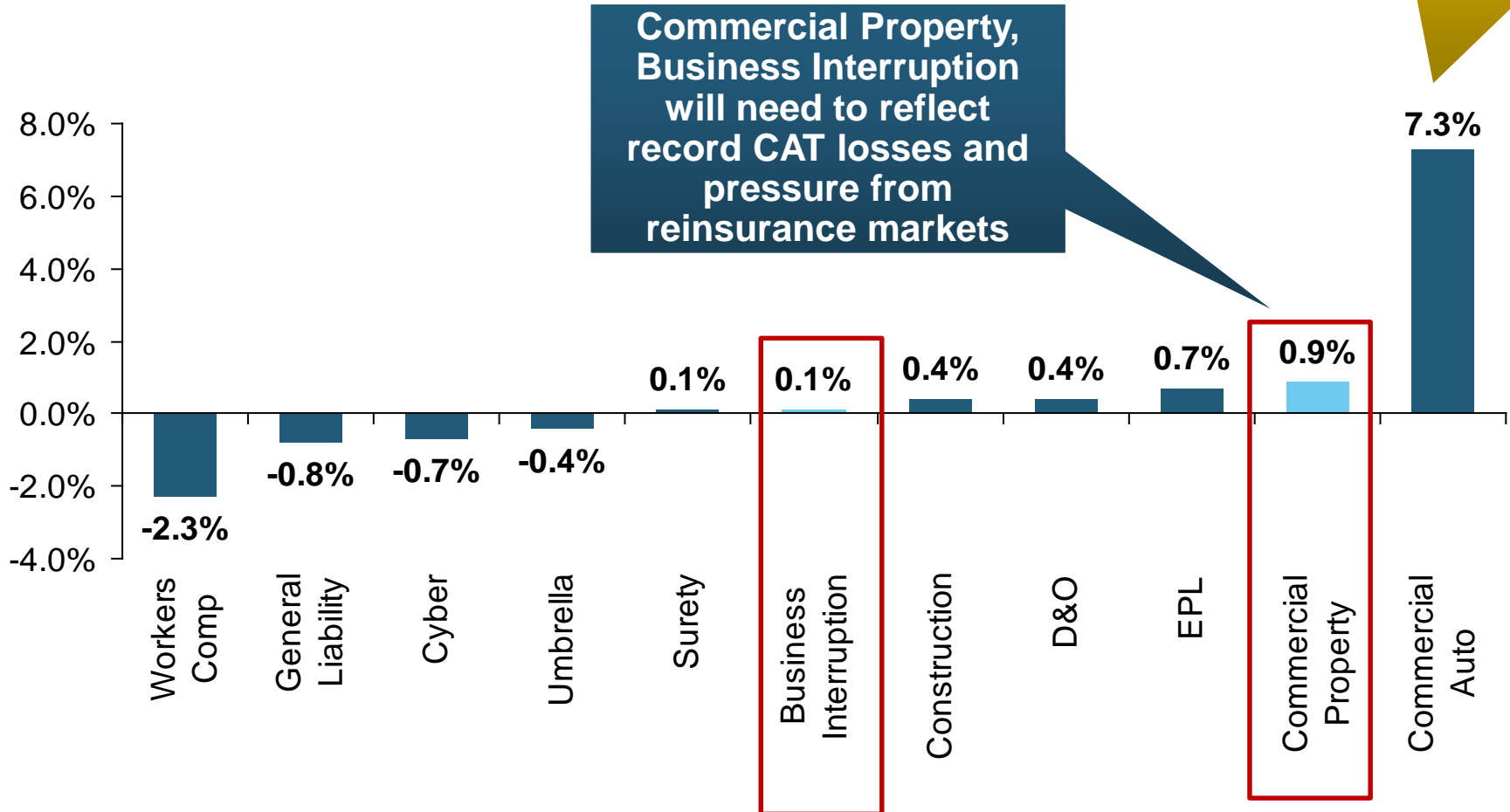
CIAB: Average Commercial Rate Change, All Lines, 2011:Q1–2017:Q3*, 2018F



*Latest available.
 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; Center for Risk and Uncertainty Management, Univ. of South Carolina.

Change in Commercial Rate Renewals, by Line: 2017:Q3

Percentage Change (%)

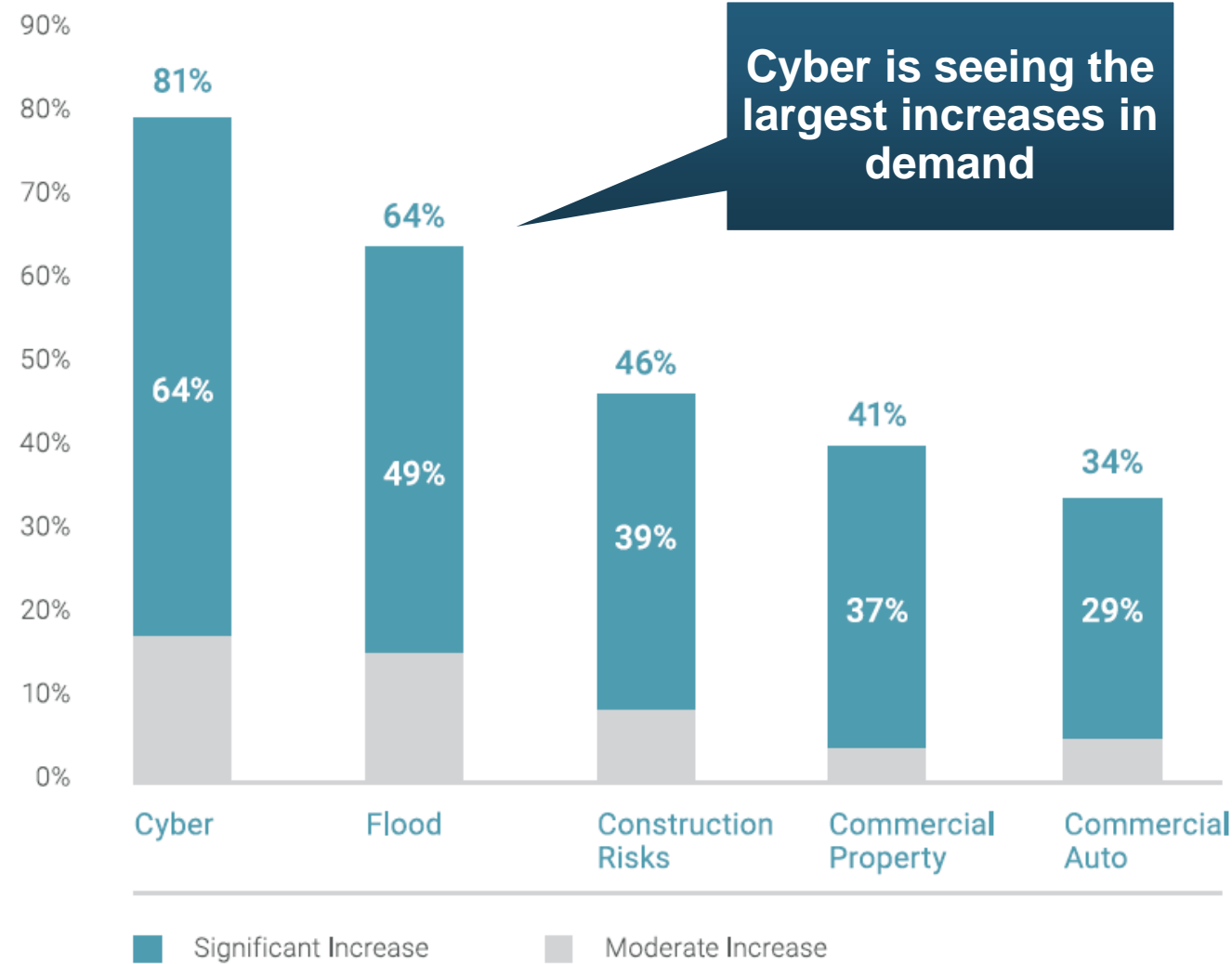


Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.

Source: Council of Insurance Agents and Brokers; USC Center for Risk and Uncertainty Management.

Commercial Lines with Largest Demand Increase, 2017:Q3

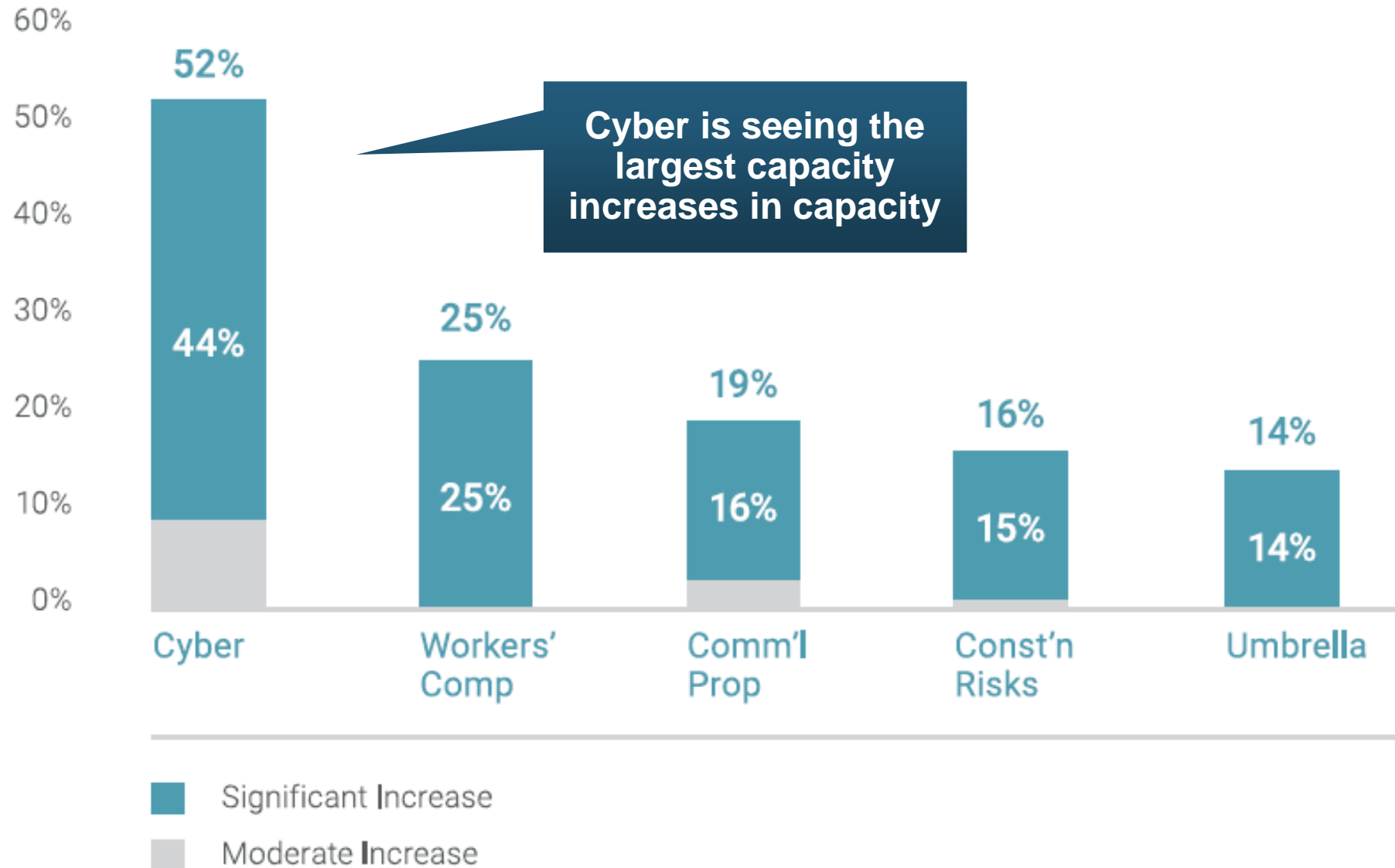
Percentage Indicating Increase



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; USC Center for Risk and Uncertainty Management.

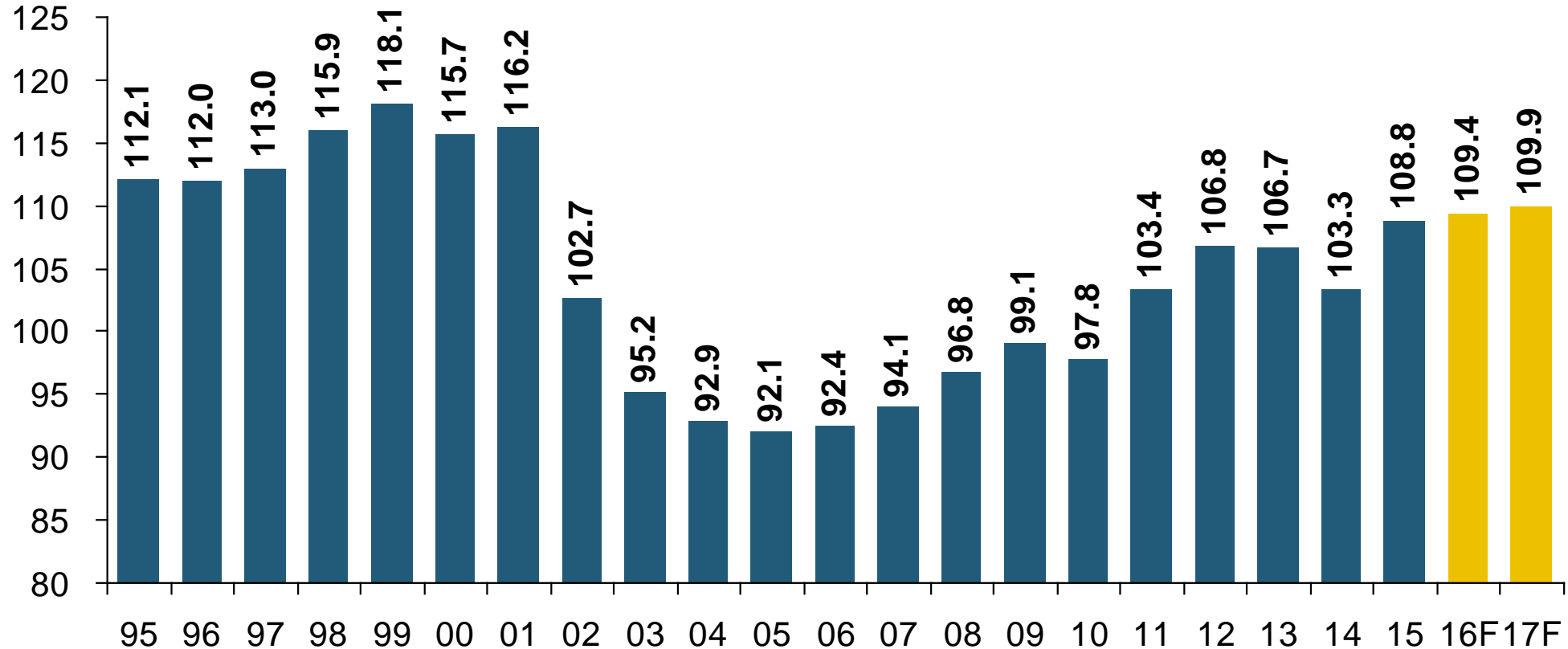
Commercial Lines with Largest Capacity Increase: 2017:Q3



Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.

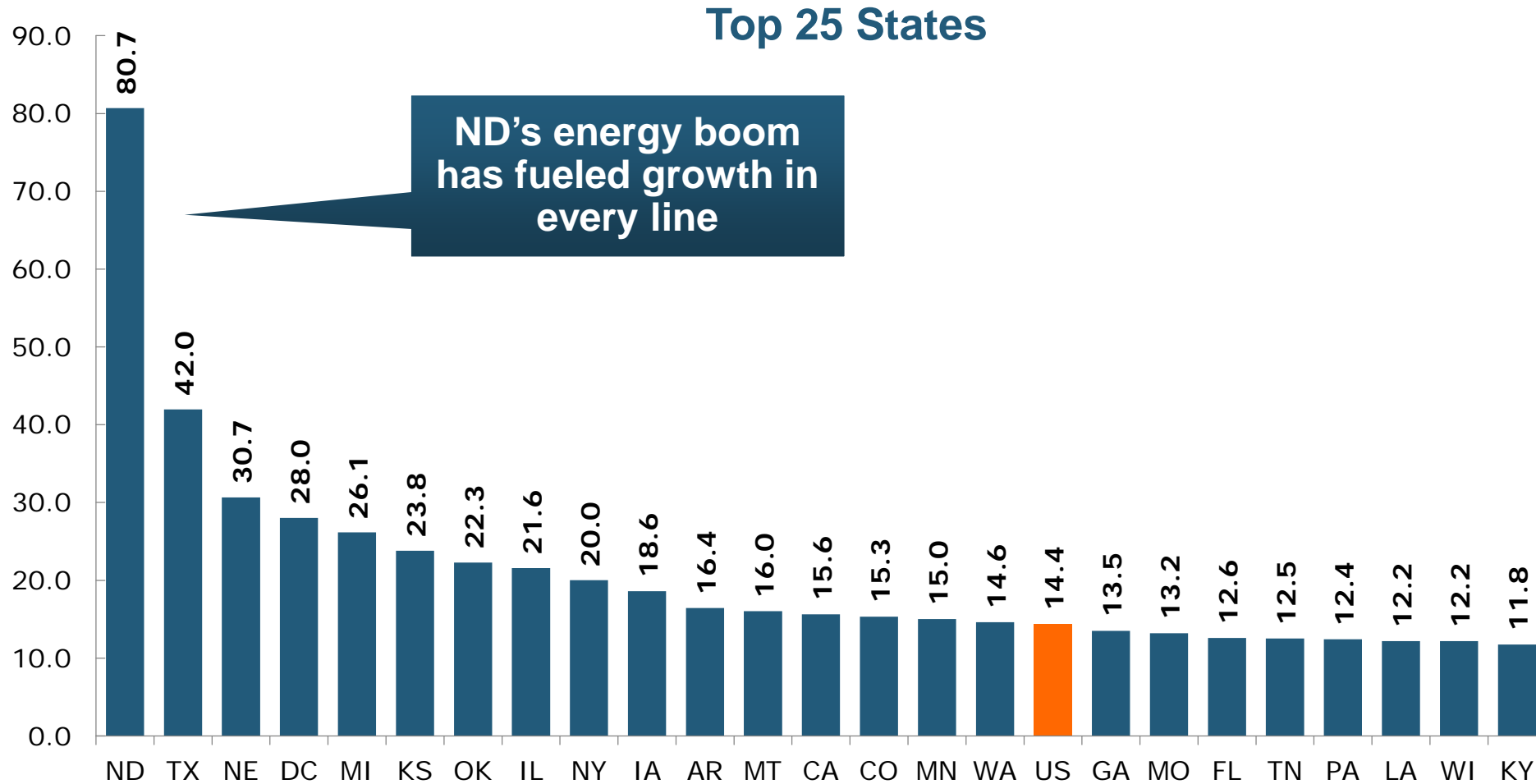
Source: Council of Insurance Agents and Brokers; USC Center for Risk and Uncertainty Management.

Commercial Auto Combined Ratio: 1993–2017F



Commercial Auto Results Are Challenged as Rate Gains Have Yet to Fully Offset Adverse Frequency and Severity Trends

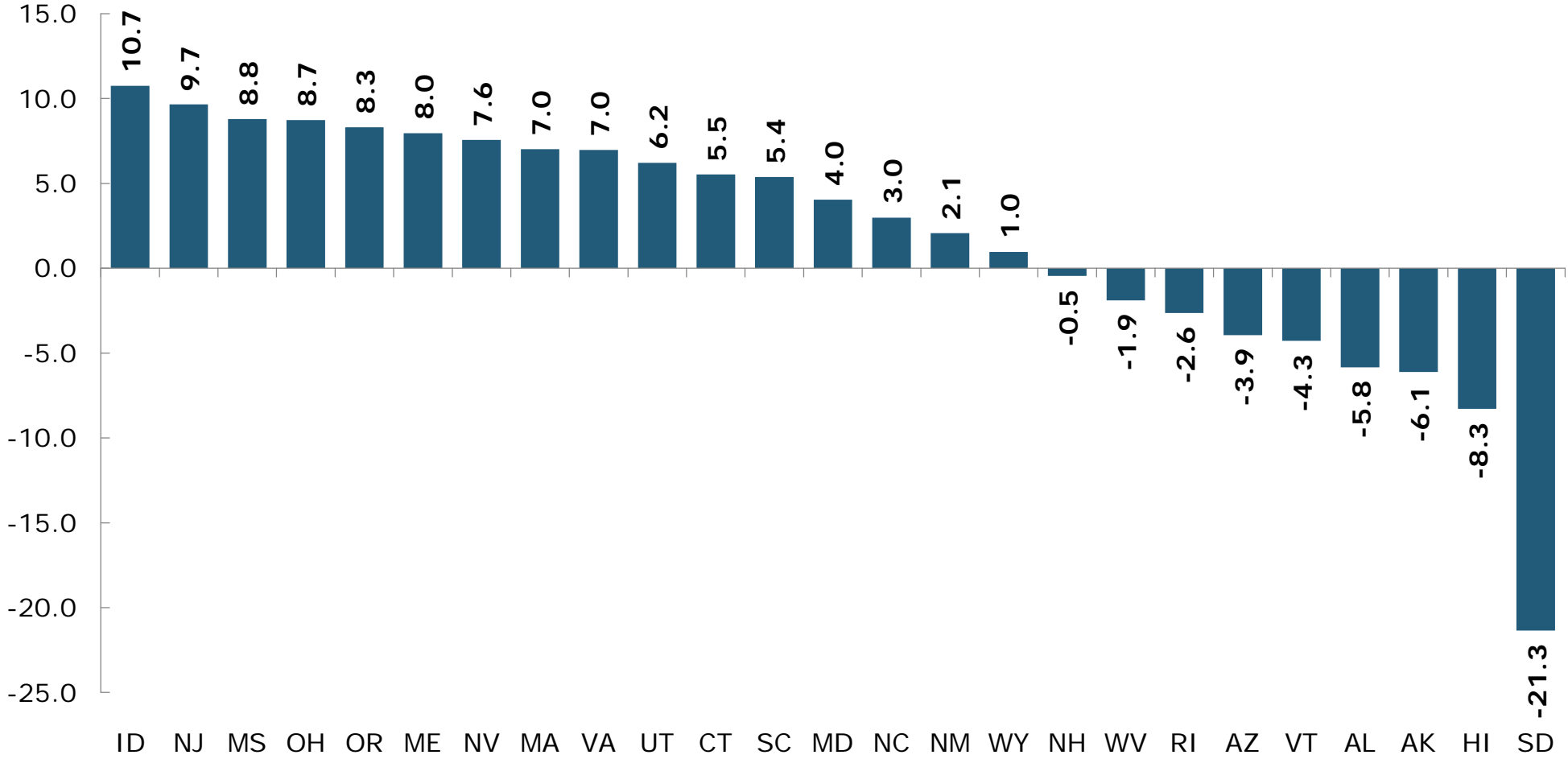
Direct Premiums Written: Commercial Auto, Percent Change by State, 2007-2016



Source: NAIC data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

Direct Premiums Written: Commercial Auto, Percent Change by State, 2007-2016

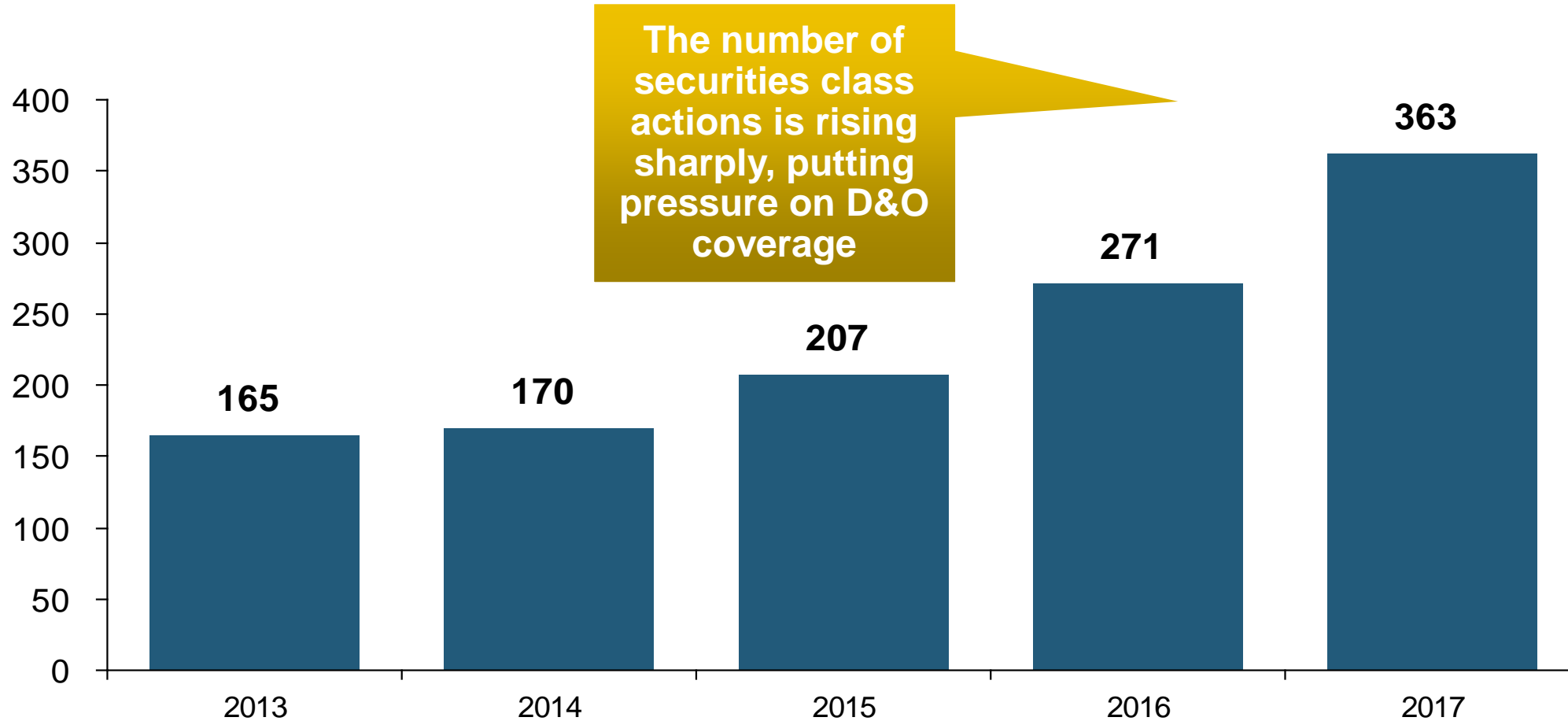
Bottom 25 States



Source: NAIC data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

D&O Pressure: Number of Federal Securities Class Actions, 2013 – 2017*

Number of Class Actions



*As of Nov. 16, 2017.

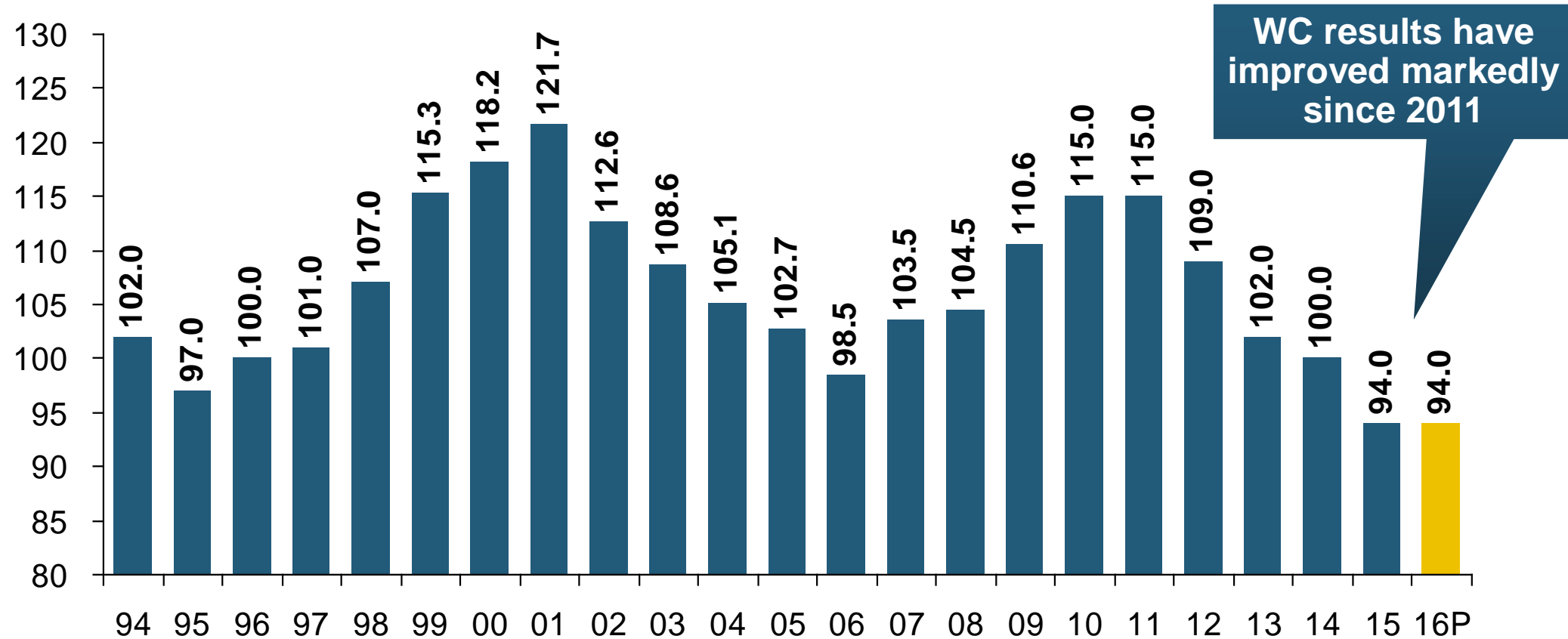
Source: Stanford University Law School: <http://securities.stanford.edu/>

Workers Comp Spotlight

**Underwriting Results Remain
Strong**

**Exposure Outlook Is Outstanding
as Job Growth Continues and
Wage Gains Accelerate**

Workers Compensation Combined Ratio: 1994–2016P

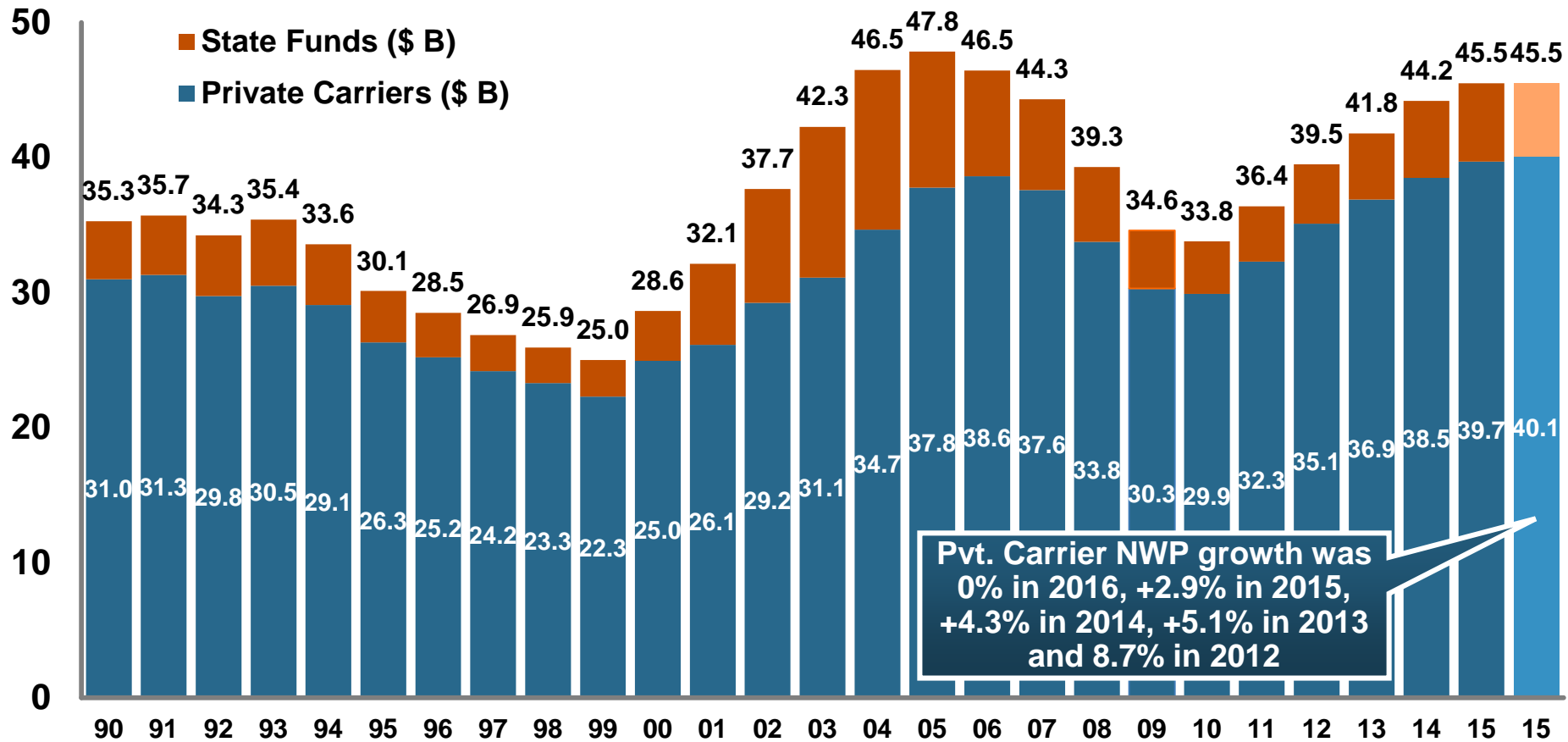


Workers Comp Is an Example of a Line that Was Recently Restored to Health Through the Return of Rate Adequacy

Workers Compensation Premium: Flat in 2016 After 5 Years of Increase

Net Written Premium

\$ Billions



p Preliminary

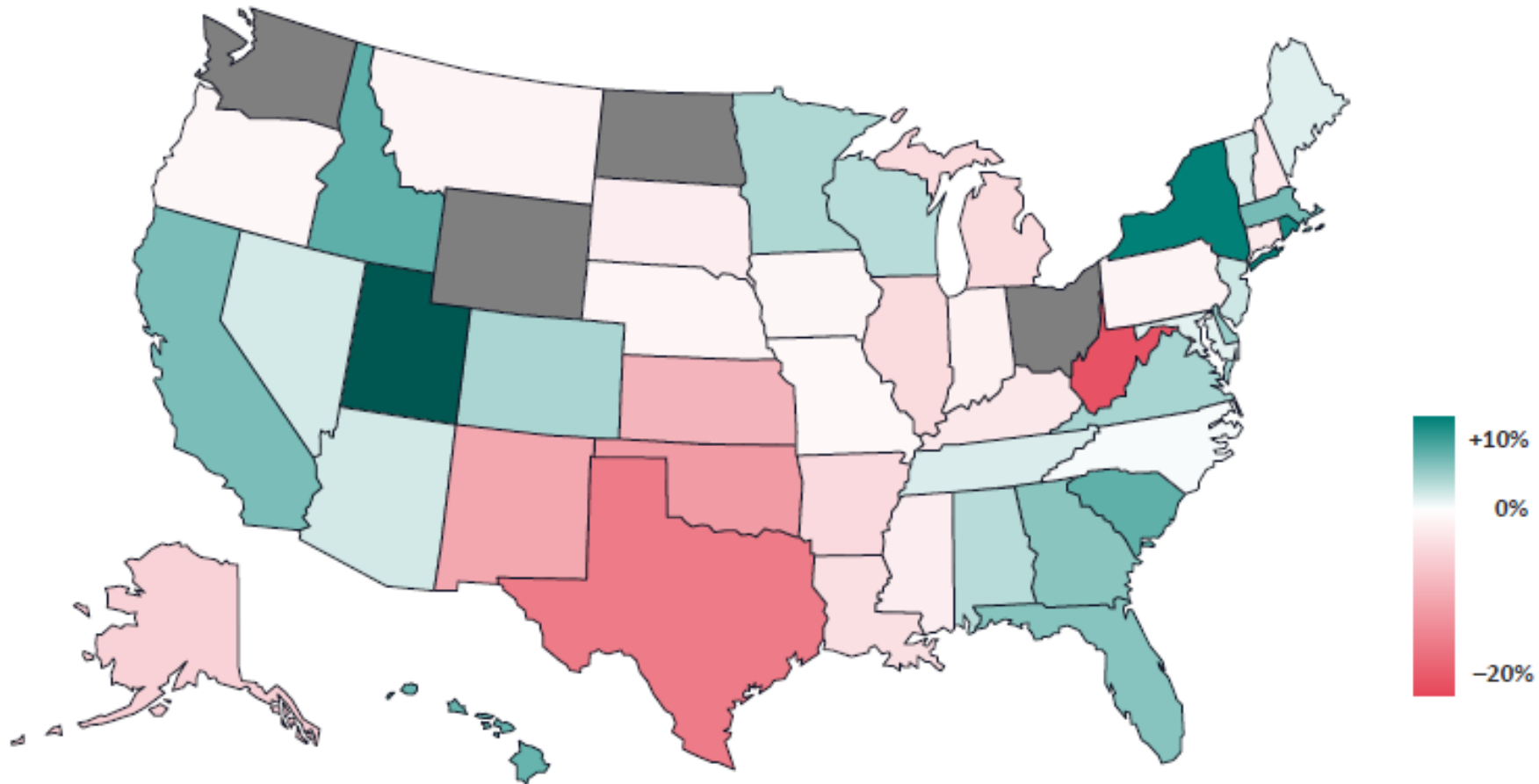
Source: NCCI from Annual Statement Data.

Includes state insurance fund data for the following states: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, UT.

Each calendar year total for State Funds includes all funds operating as a state fund that year.

2016 Workers Compensation Direct Written Premium Growth, by State*

PRIVATE CARRIERS: Overall 2016 Growth = +1.0%



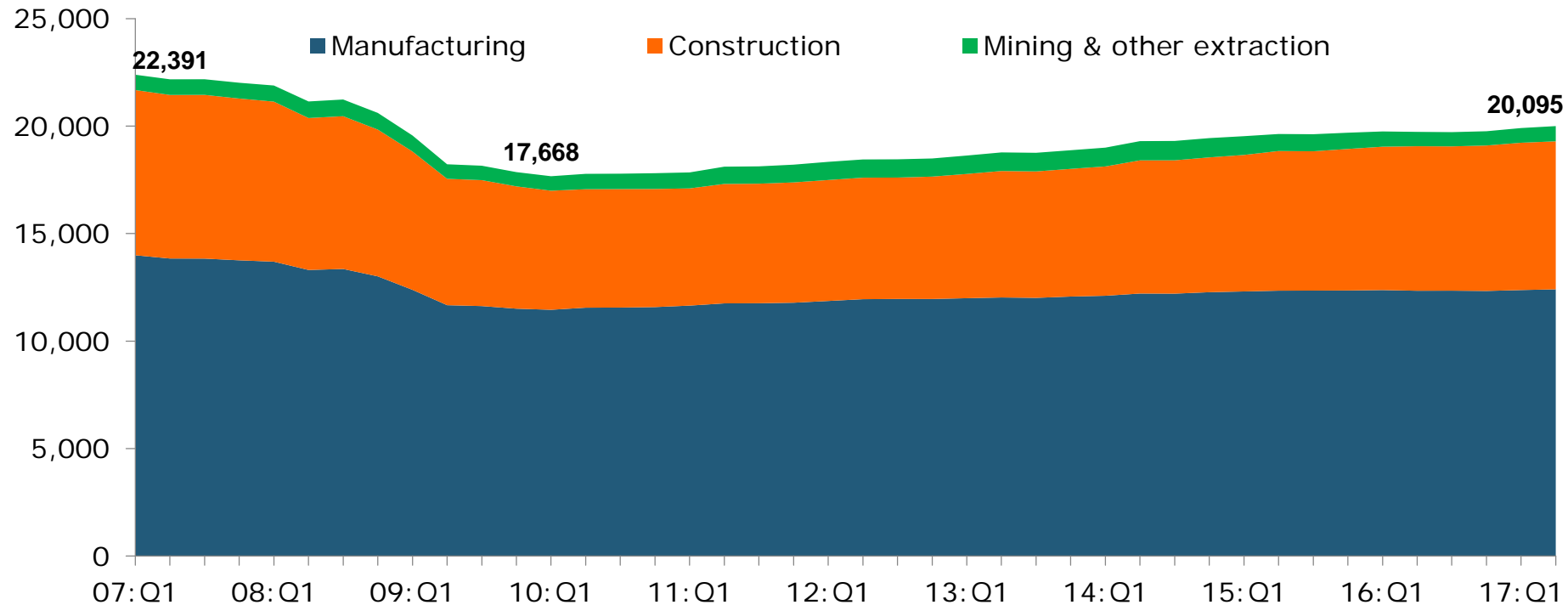
While growth rates varied widely, overall growth for private carriers was up very slightly in 2016

*Excludes monopolistic fund states (in gray): OH, ND, WA and WY.

Source: NCCI.

As Hiring Gains Continue, WC Exposures Follow

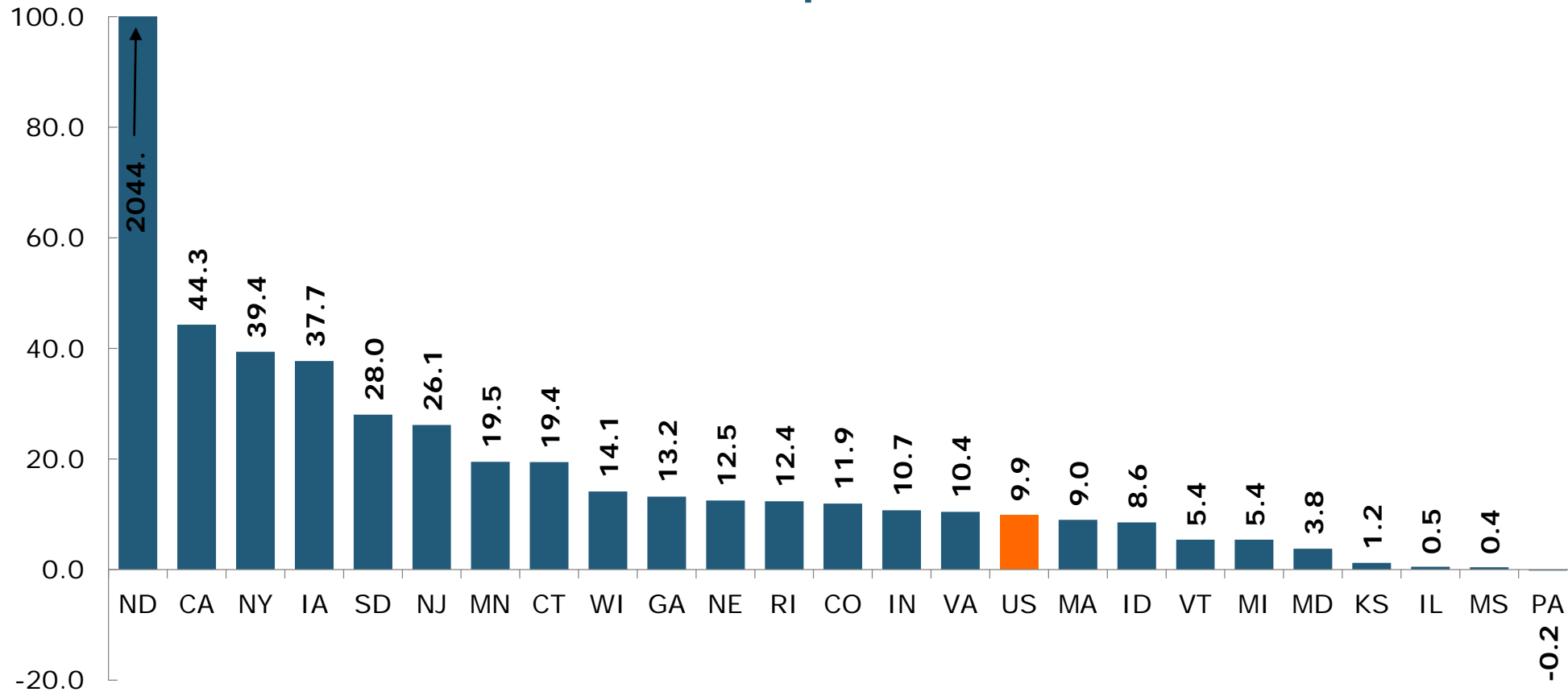
(000s at quarter-end)



- ▼ **Employment in the three industries that are the heart of workers composition exposure is not quite back yet to the level reached before the Great Recession.**

Direct Premiums Written Growth: Workers Comp Percent Change by State, 2007-2016

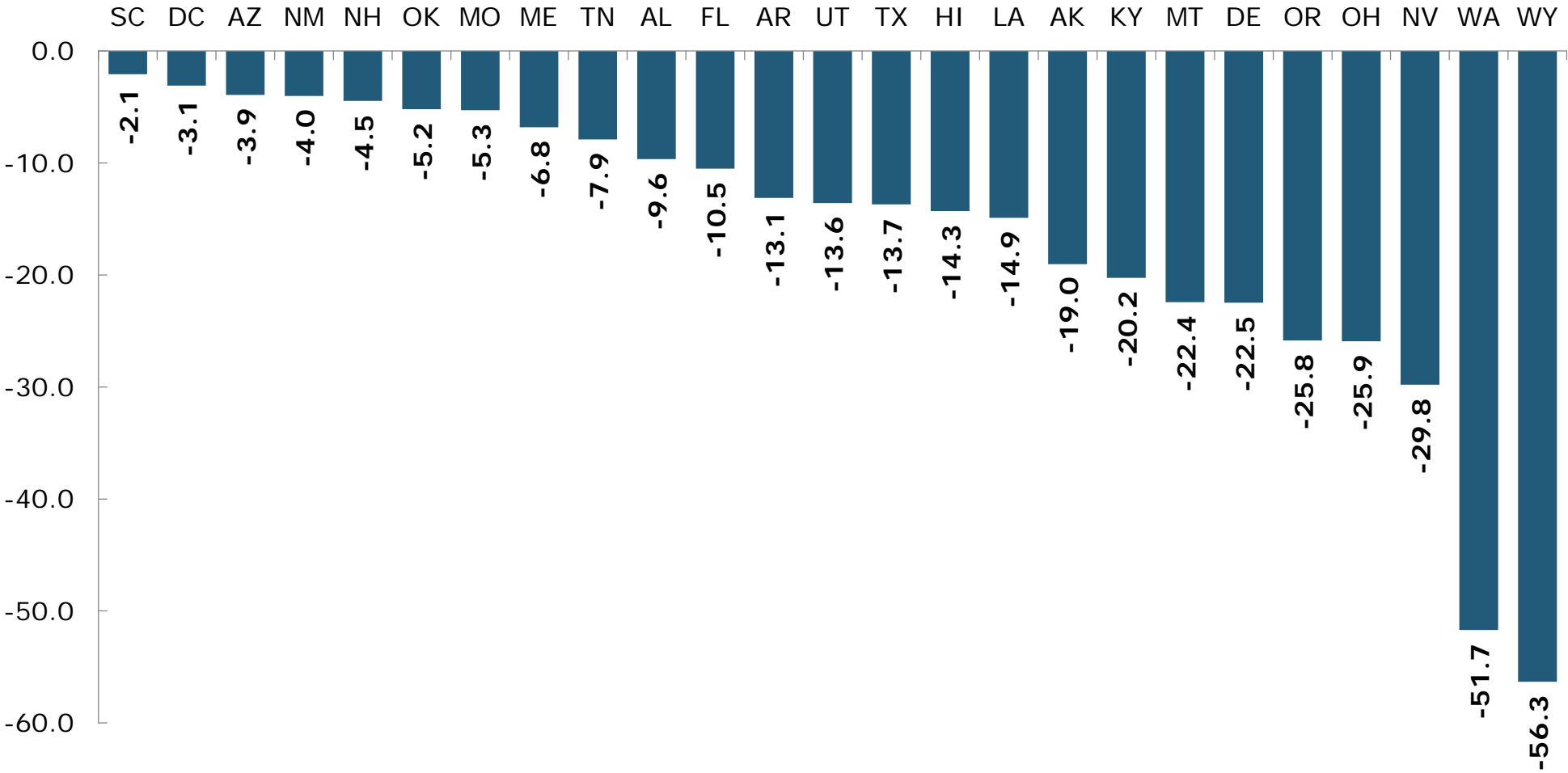
Top 25 States



Source: NAIC data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

Direct Premiums Written Growth: Workers Comp Percent Change by State, 2007-2016

Bottom 25 States



Source: NAIC data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

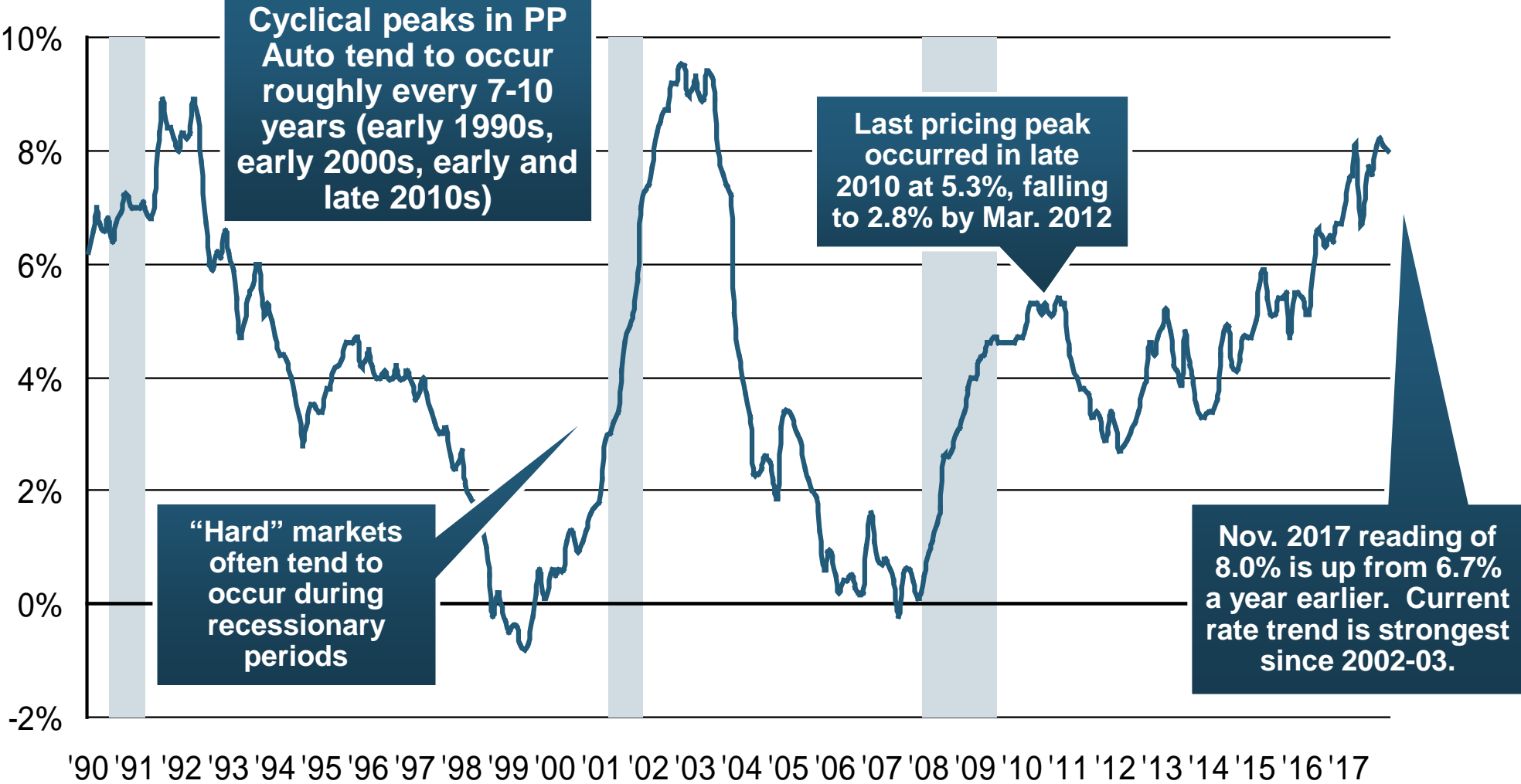
Personal Lines Growth Drivers

**Rate and Exposure are Both
Presently Important
Growth Drivers**

Top Growth Factors: Personal Lines

- **Rate:** Favorable rate trends in both auto and home
 - ◆ Record CAT losses in 2017 will further pressure property lines
 - ◆ Adverse severity trends are pressuring personal auto
- **Economic Strength:** Economic growth, supported by low unemployment and rising consumer confidence are supporting strength in new auto sales and new home construction
- **Household Formation:** Millennials are finally becoming home and car buyers in larger numbers, driving exposures upward
- **High Net Worth Consumers:** This segment has seen consistent (and profitable) growth as the “wealth effect” grows
- **Tax Cuts:** Will tax reform fuel additional growth?
- **Market Discipline:** Major personal lines insurers remain generally price disciplined

Monthly Change in Auto Insurance Prices, 1991–2017*

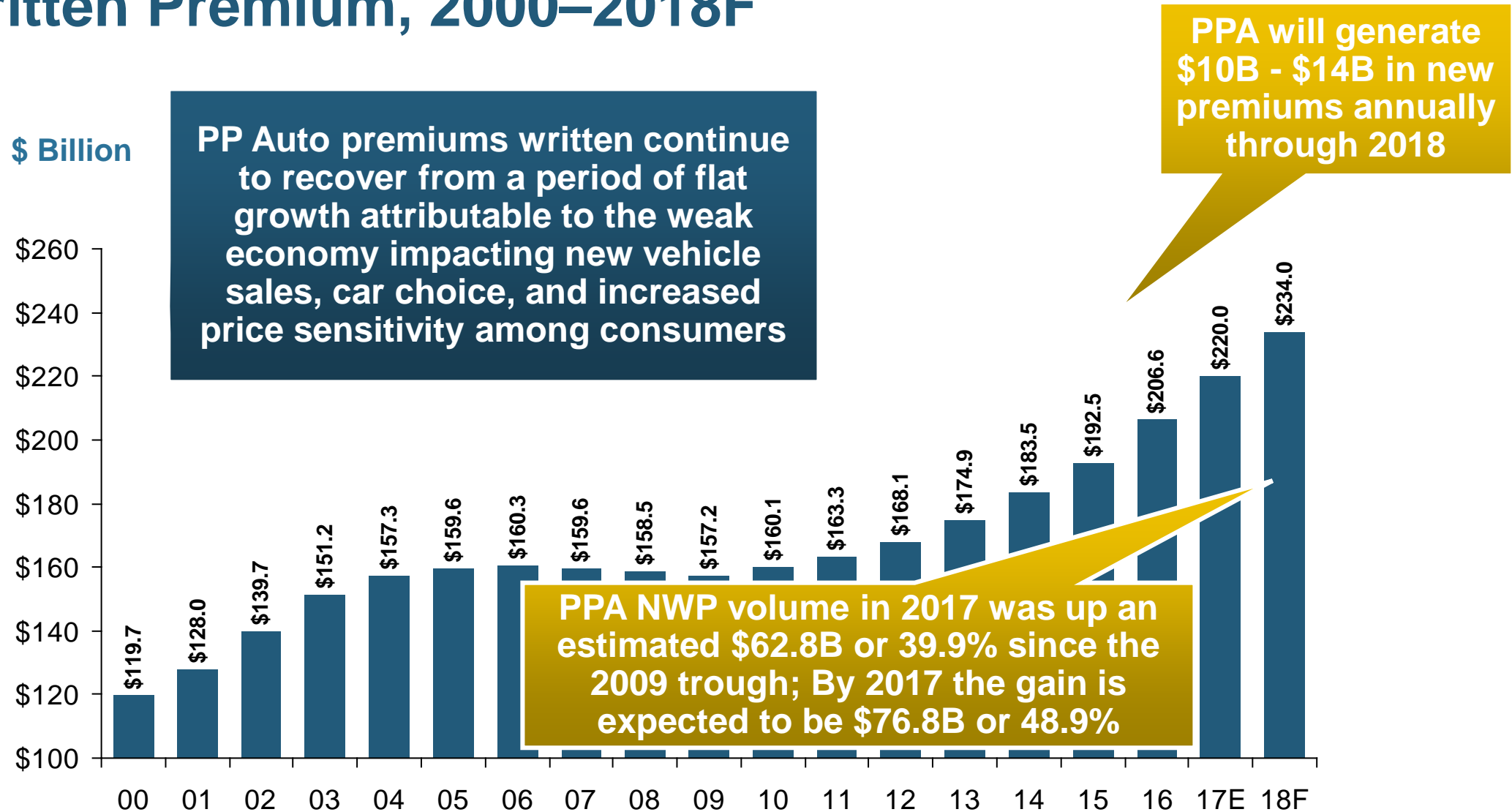


*Percentage change from same month in prior year; through Nov. 2017; seasonally adjusted

Note: Recessions indicated by gray shaded columns.

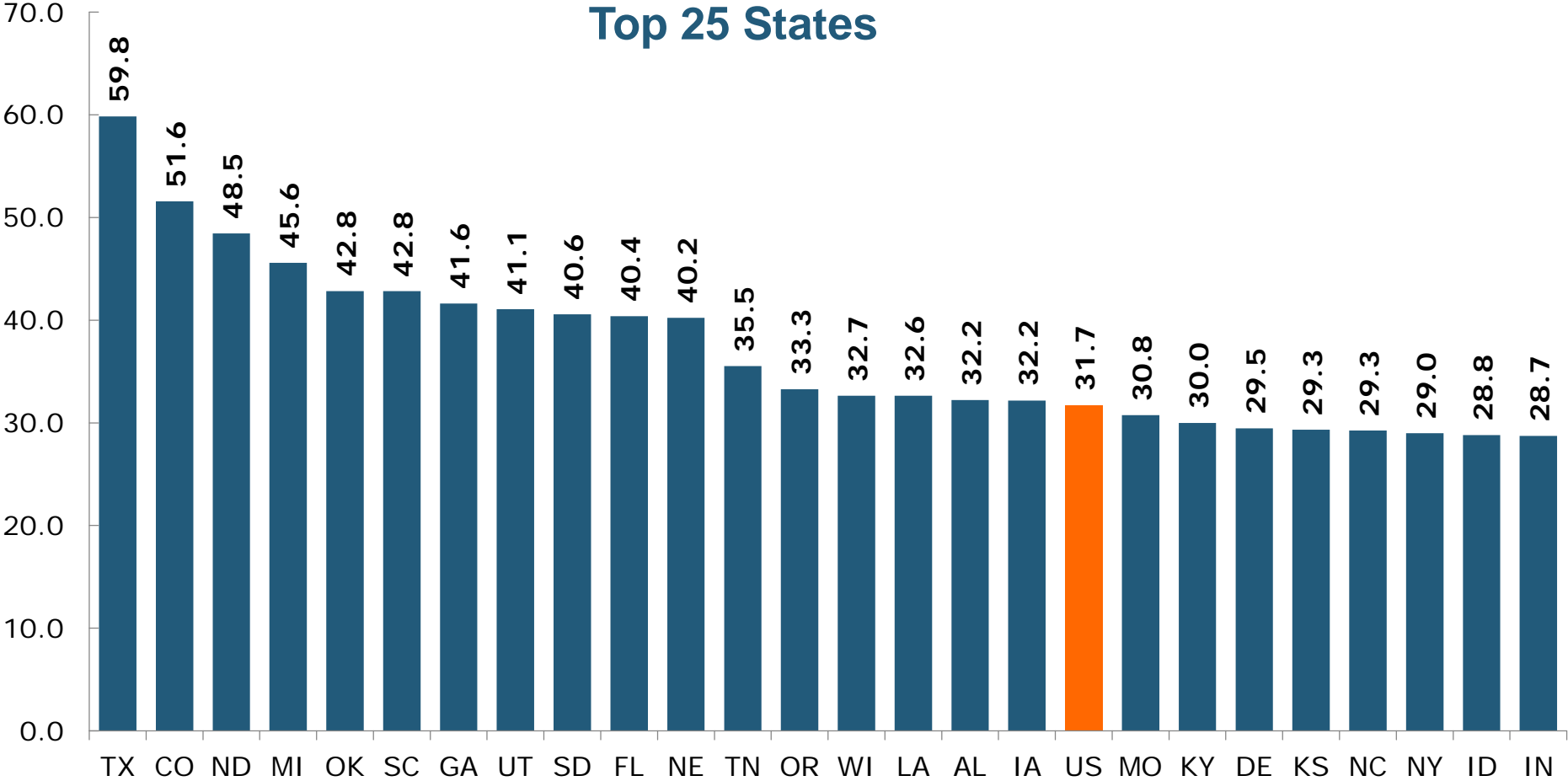
Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.

Private Passenger Auto Insurance Net Written Premium, 2000–2018F



Sources: A.M. Best (1990-2016); USC RUM (2017F-2018F).

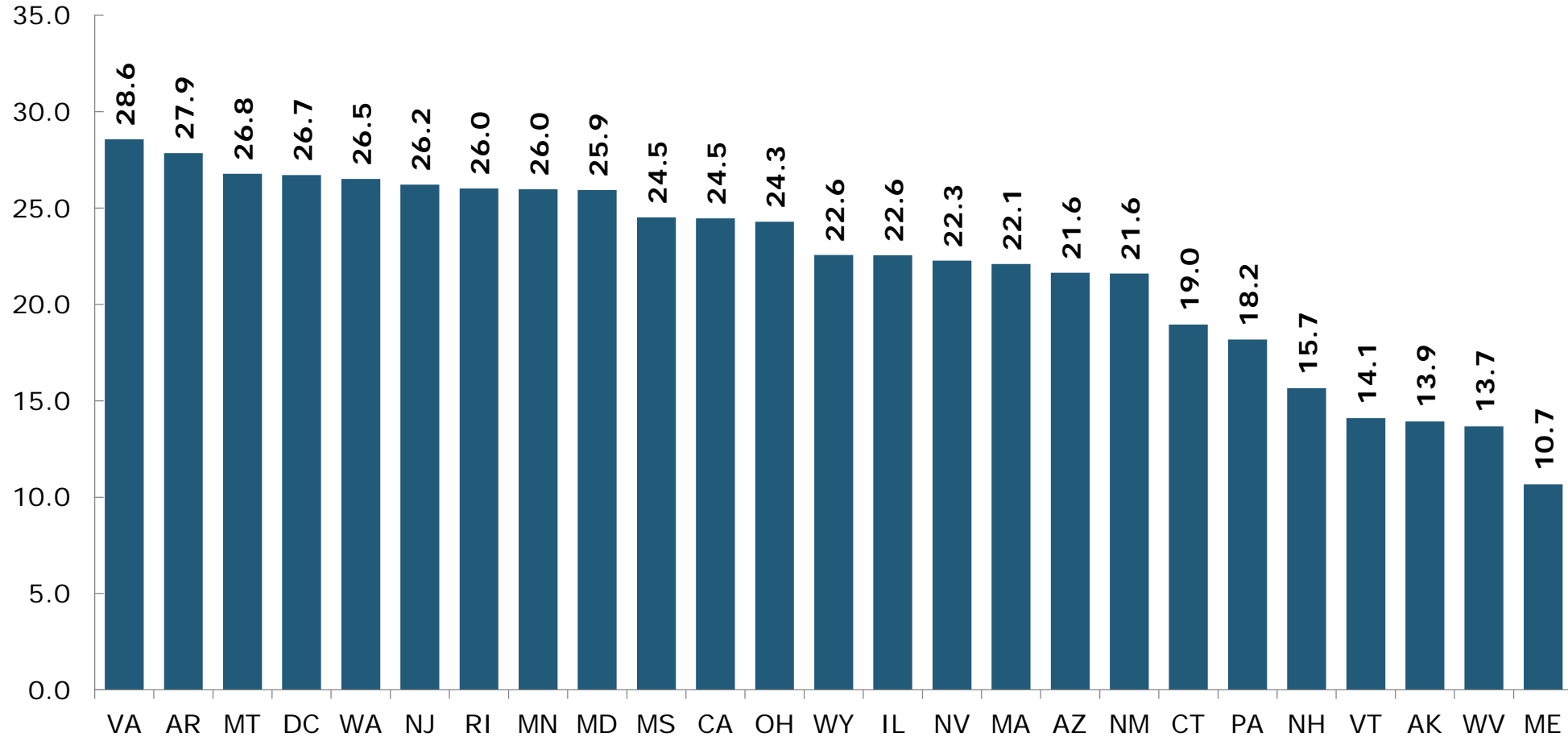
Direct Premiums Written: Pvt. Passenger Auto, Percent Change by State, 2007-2016



Source: NAIC data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

Direct Premiums Written: Pvt. Passenger Auto Percent Change by State, 2007-2016

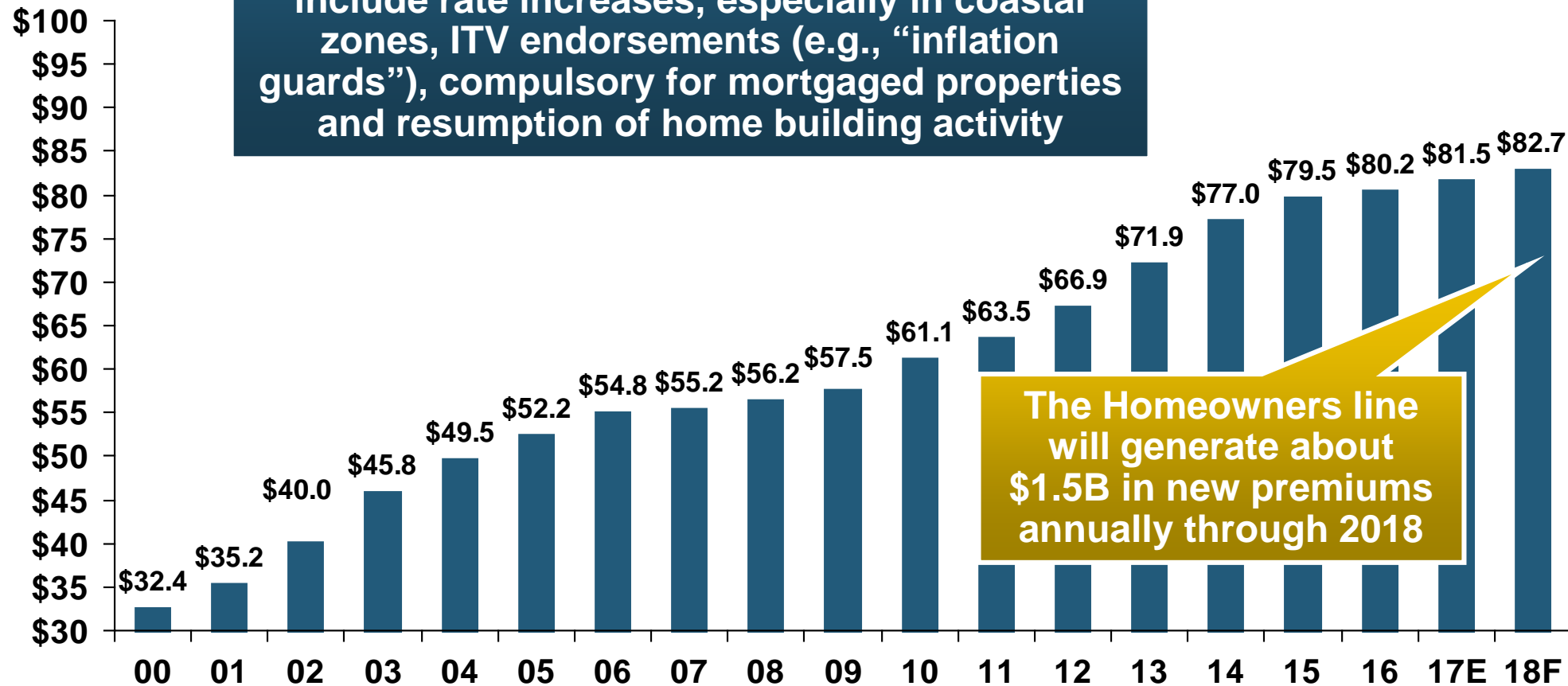
Bottom 25 States



Source: NAIC data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

Homeowners Insurance Net Written Premium, 2000–2018F

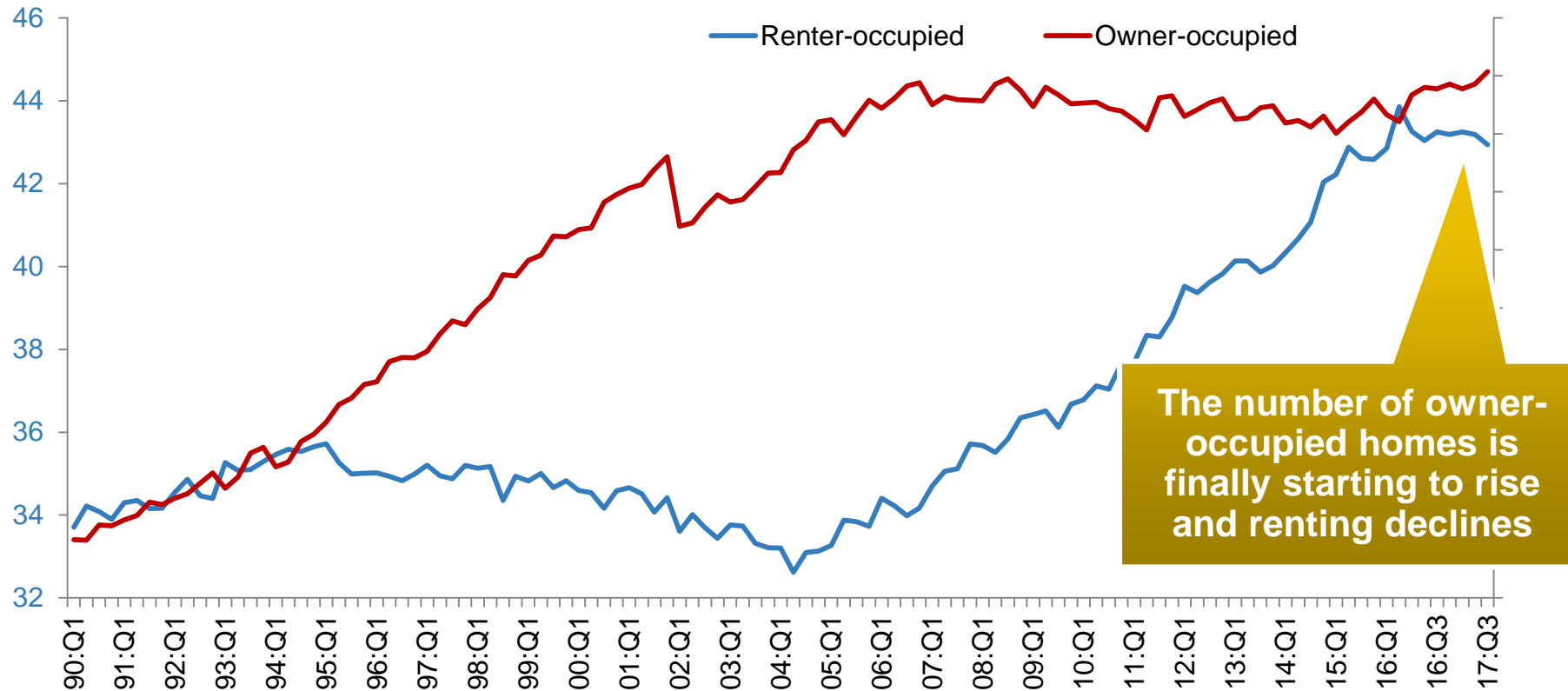
\$ Billions



Sources: A.M. Best; USC RUM Center.

To Rent or to Buy?

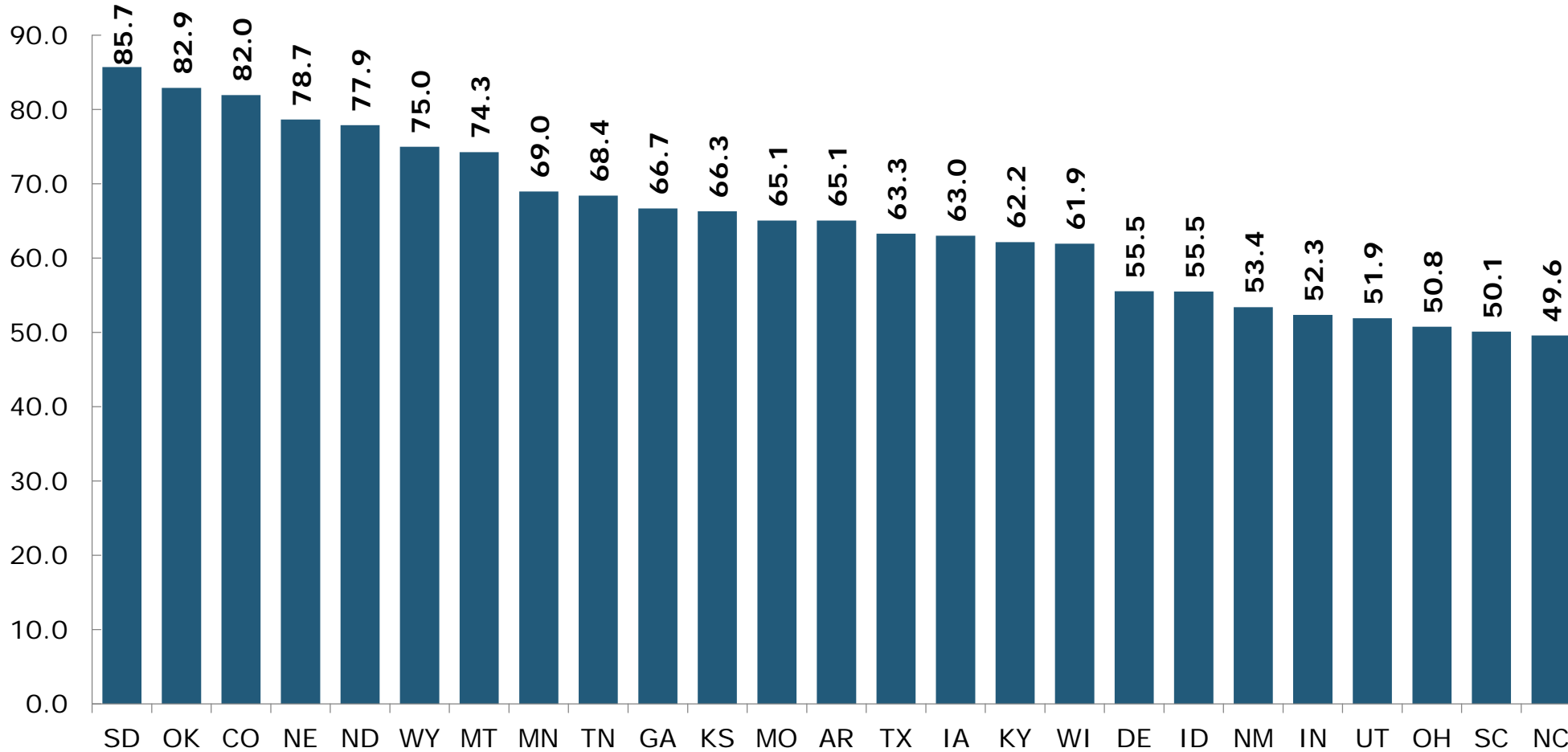
Millions of renter-occupied housing units



▼ Since 2004 the number of renter-occupied housing units has grown by about 10.5 million units (+34%), but there has been no growth in the number of owner-occupied housing units in 12 years. Did this streak end in 2017?

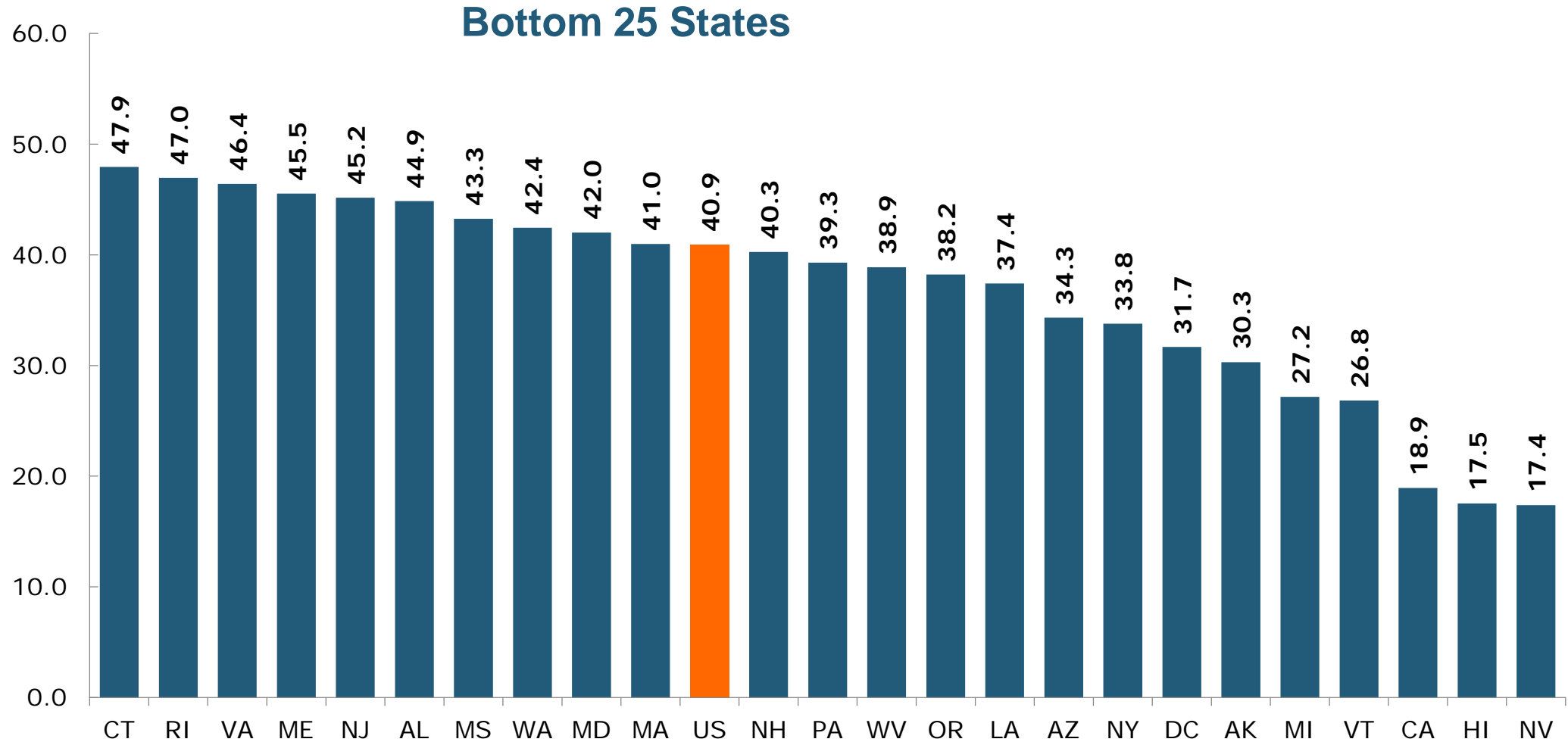
Direct Premiums Written: Homeowners MP Percent Change by State, 2007-2016

Top 25 States



Source: NAIC data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

Direct Premiums Written: Homeowners MP Percent Change by State, 2007-2016



Source: NAIC data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

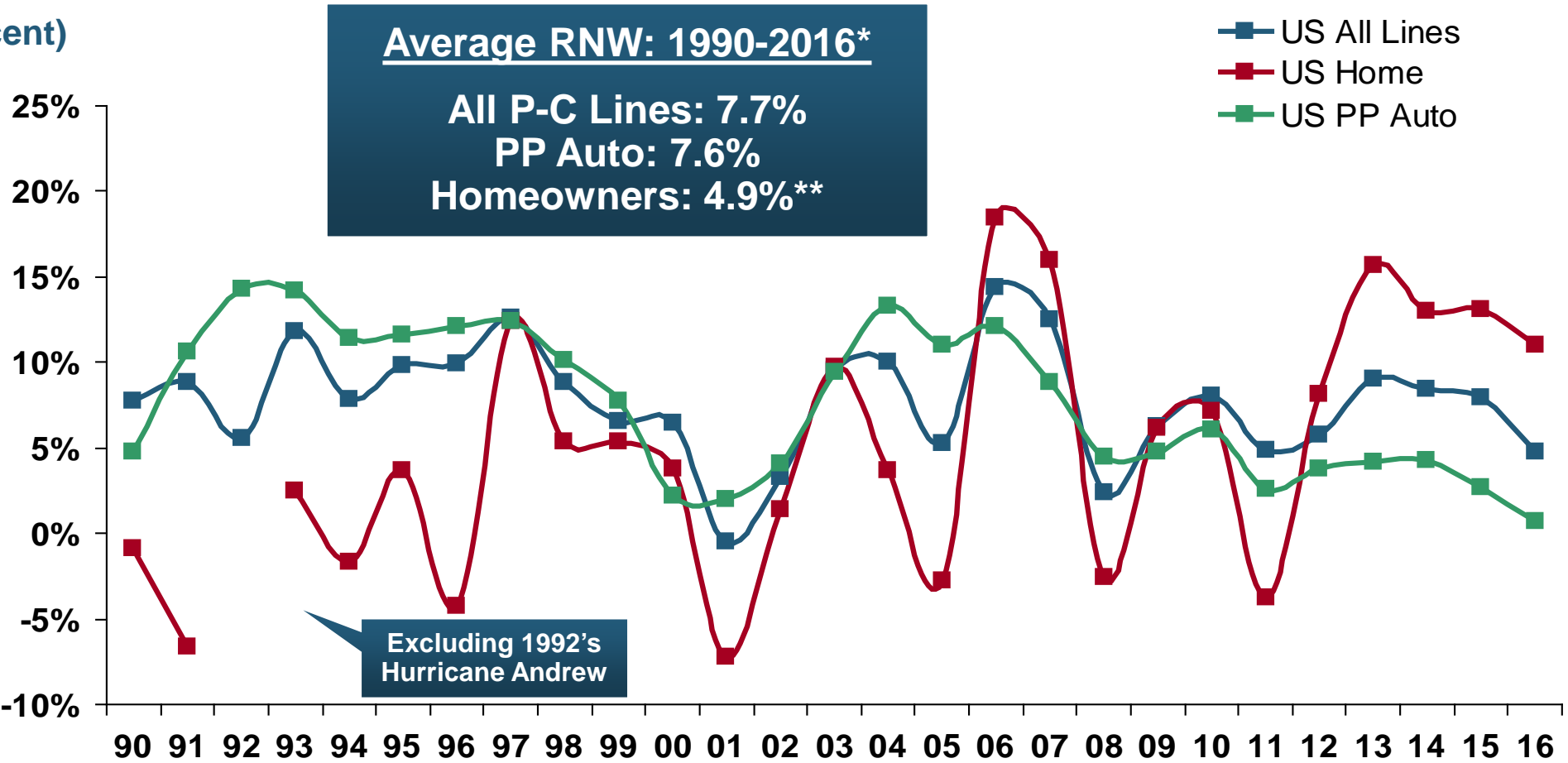
State of the Personal Lines Market

Auto Frequency and Severity Are an Immediate Challenge

Homeowners Majorly Impacted by CATs in 2017

Return on Net Worth: All P-C Lines vs. Homeowners & Pvt. Pass. Auto, 1990-2016*

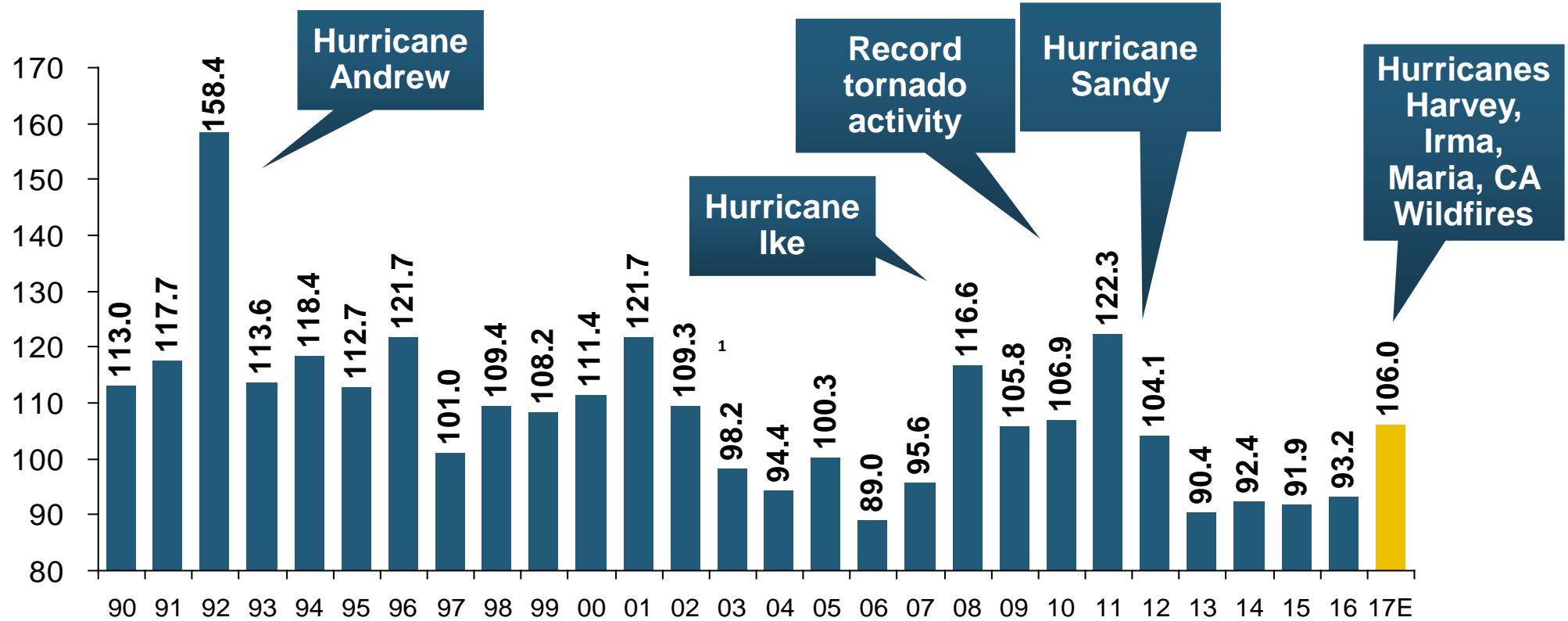
(Percent)



Homeowners is Now Outperforming Pvt.Pass. Auto and P-C Industry as a Whole. HO Volatility is Associated Primarily With Coastal Exposure Issues

*Latest available.
 **Excludes 1992, the year of Hurricane Andrew. If 1992 is included the resulting homeowners RNW is 2.2%
 Sources: NAIC; Insurance Information Institute.

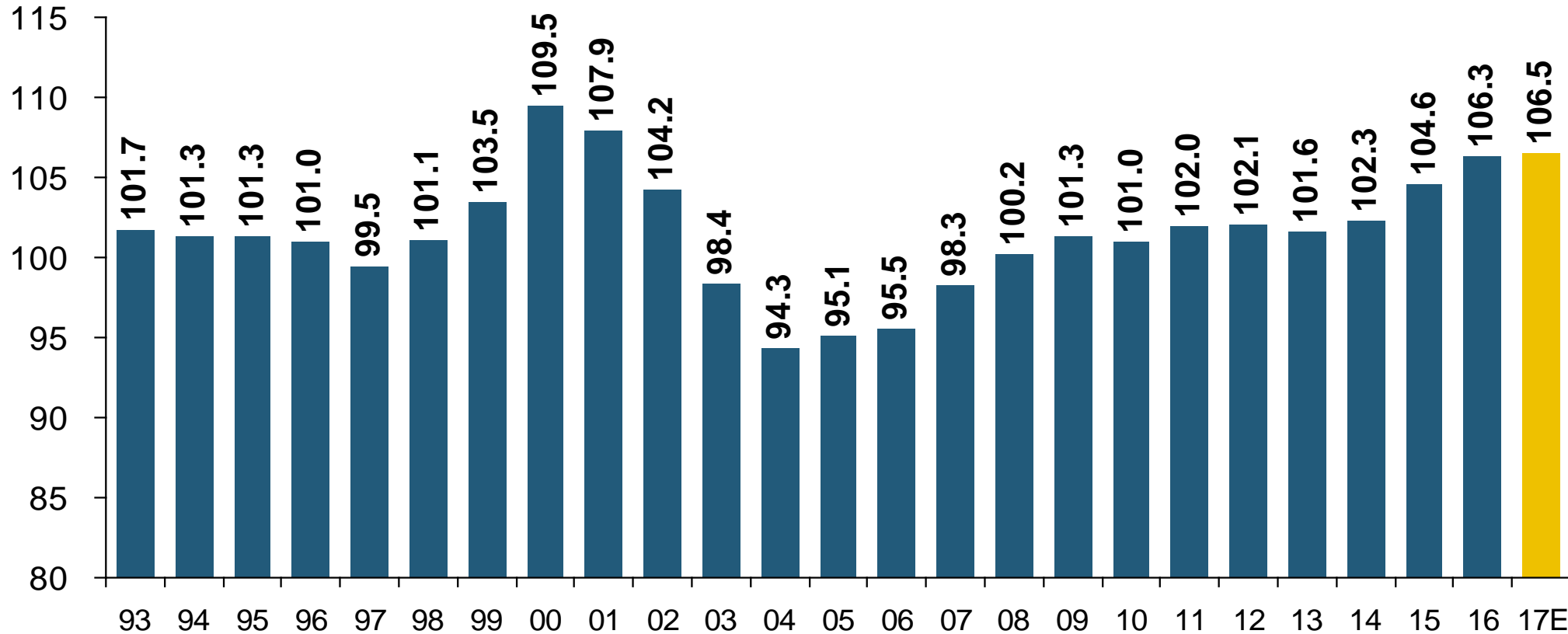
Homeowners Insurance Combined Ratio: 1990–2017E



Homeowners Performance Had Improved Markedly Since 2011/12's Large Cat Losses...until 2017's Record Catastrophe Loss Activity.

Sources: A.M. Best (1990-2016); USC RUM Center (2017E).

Private Passenger Auto Combined Ratio: 1993–2017E



Private Passenger Auto Underwriting Performance Is Showing the Strains of Rising Frequency (and Severity) Trends in Many States

Claim Trends in Private Passenger Auto Insurance

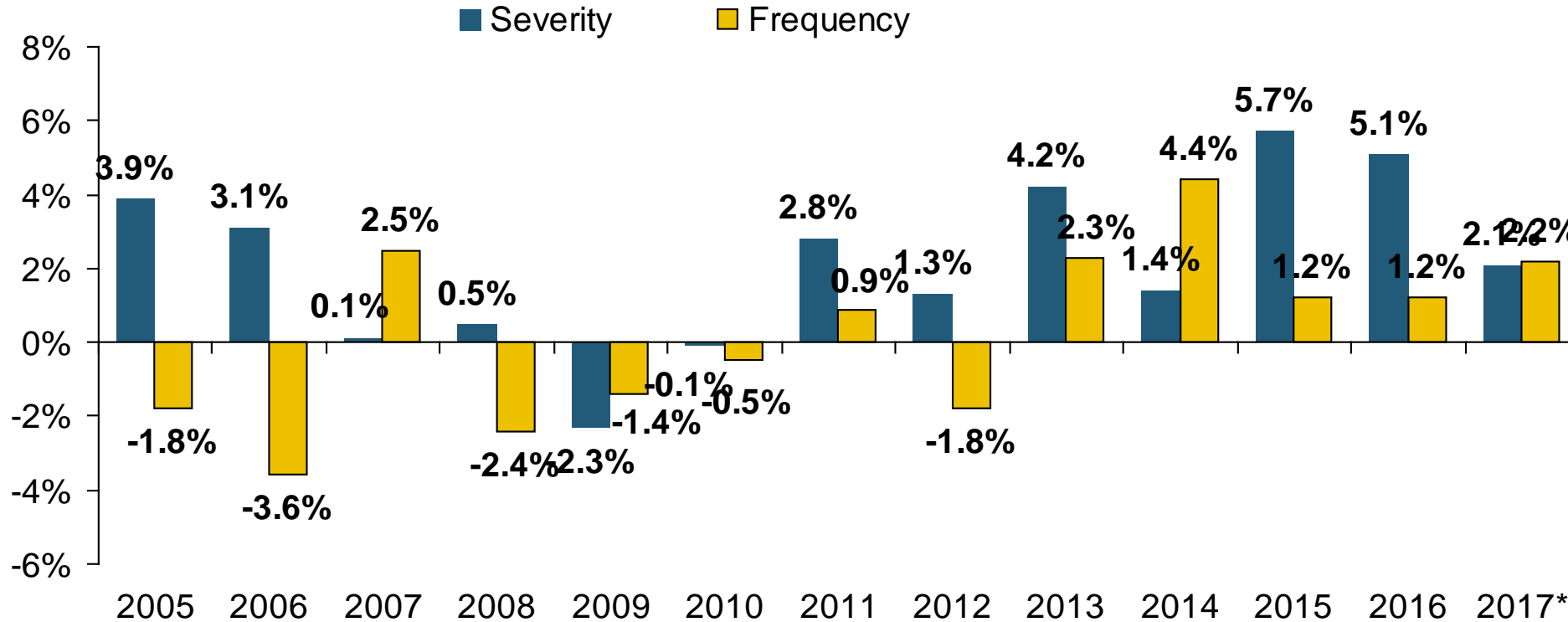
**Rising Frequencies and Severities
in Many Coverages**

Will that Pattern Be Sustained?

Collision Coverage: Severity & Frequency

Trends Are Both Higher in 2017*

Annual Change, 2005 through 2017*



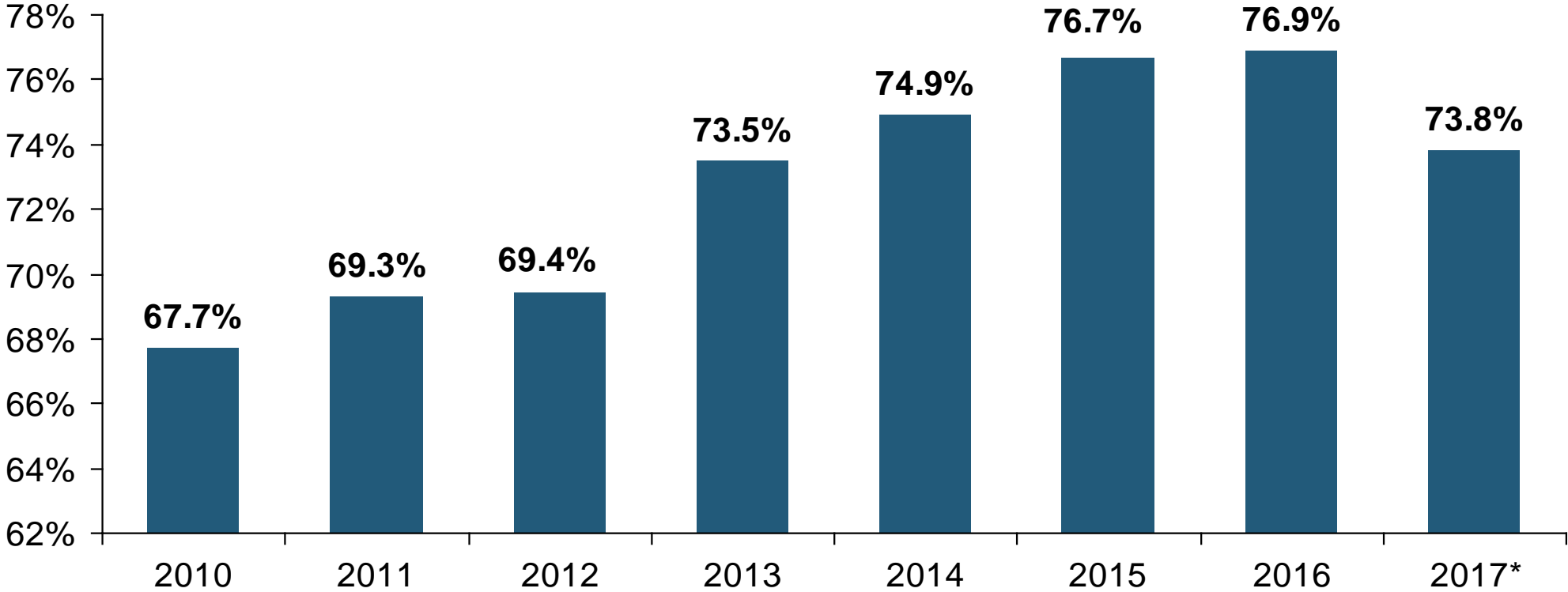
The Recession, High Fuel Prices Helped Temper Frequency and Severity, But this Trend Has Clearly Reversed, Consistent with Experience from Past Recoveries

*Four quarters ending with 2017 Q2.

Source: ISO/PCI *Fast Track* data; Insurance Information Institute

Collision Loss Ratio Trending Upward: Private Passenger Auto, 2010 – 2017*

Loss Ratio

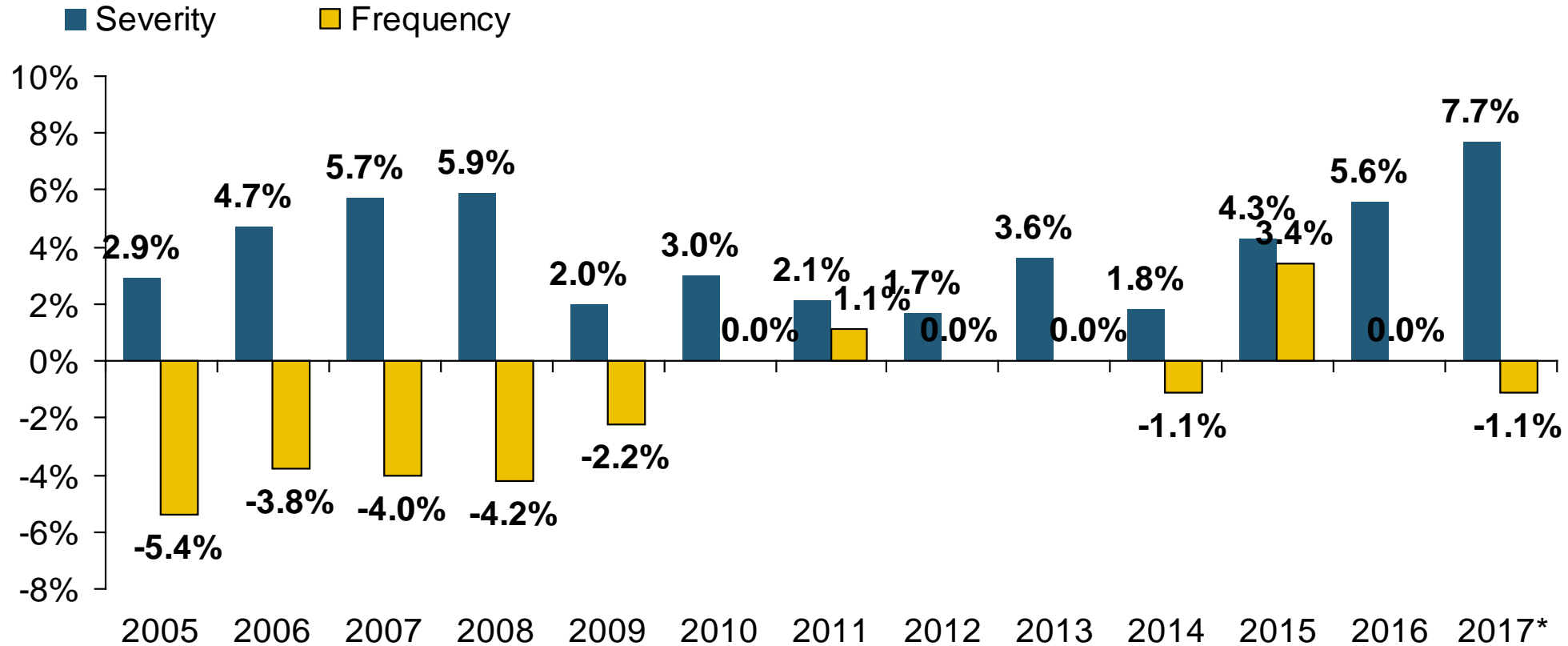


Collision Loss Ratios Were Trending Steadily Upward Until Early 2017

*2017 figure is for the 4 quarters ending in 2017:Q2
Source: ISO/PCI *Fast Track* data; Insurance Information Institute

Bodily Injury: Severity Trend Is Up, Frequency Decline Has Ended—For Now...

Annual Change, 2005 through 2017*



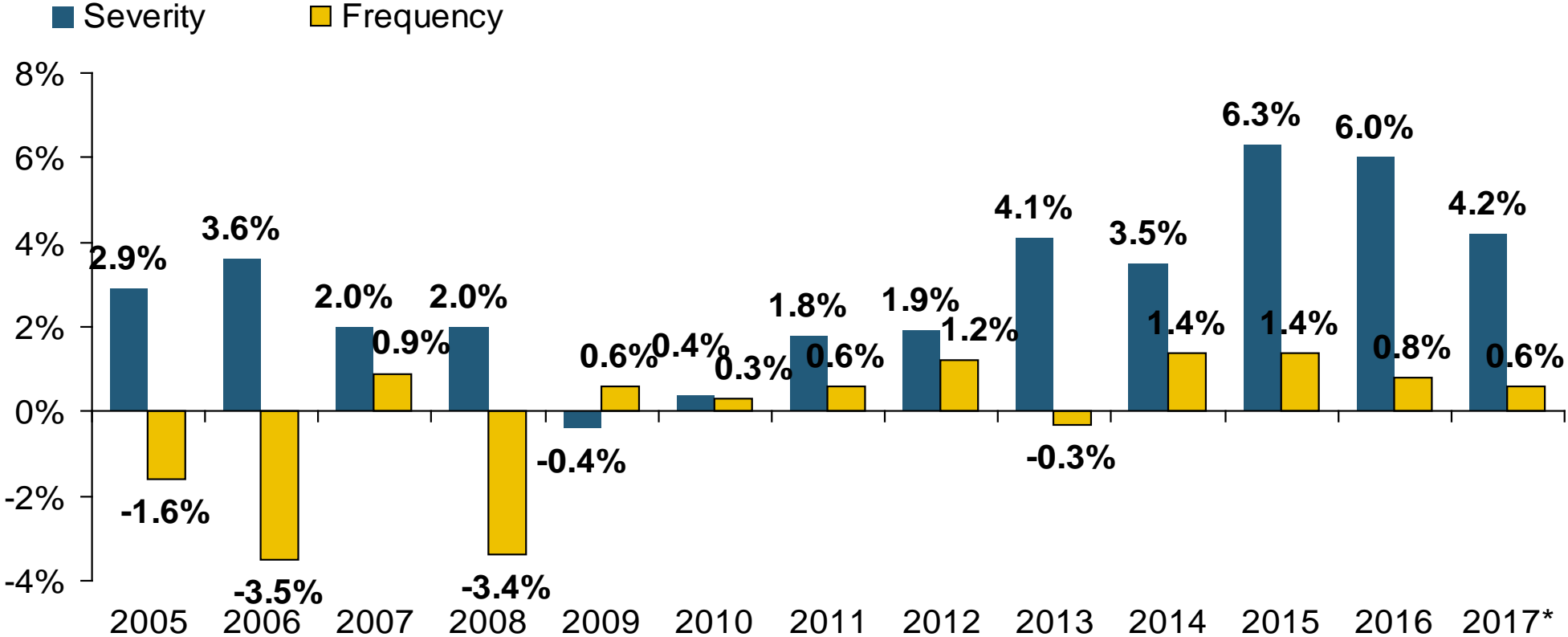
BI Severity Trend is a Major Cost Driver

*2017 figure is for the 4 quarters ending 2017:Q2.

Source: ISO/PCI *Fast Track* data; Insurance Information Institute

Property Damage Liability: Severity and Frequency Are Up

Annual Change, 2005 through 2017*

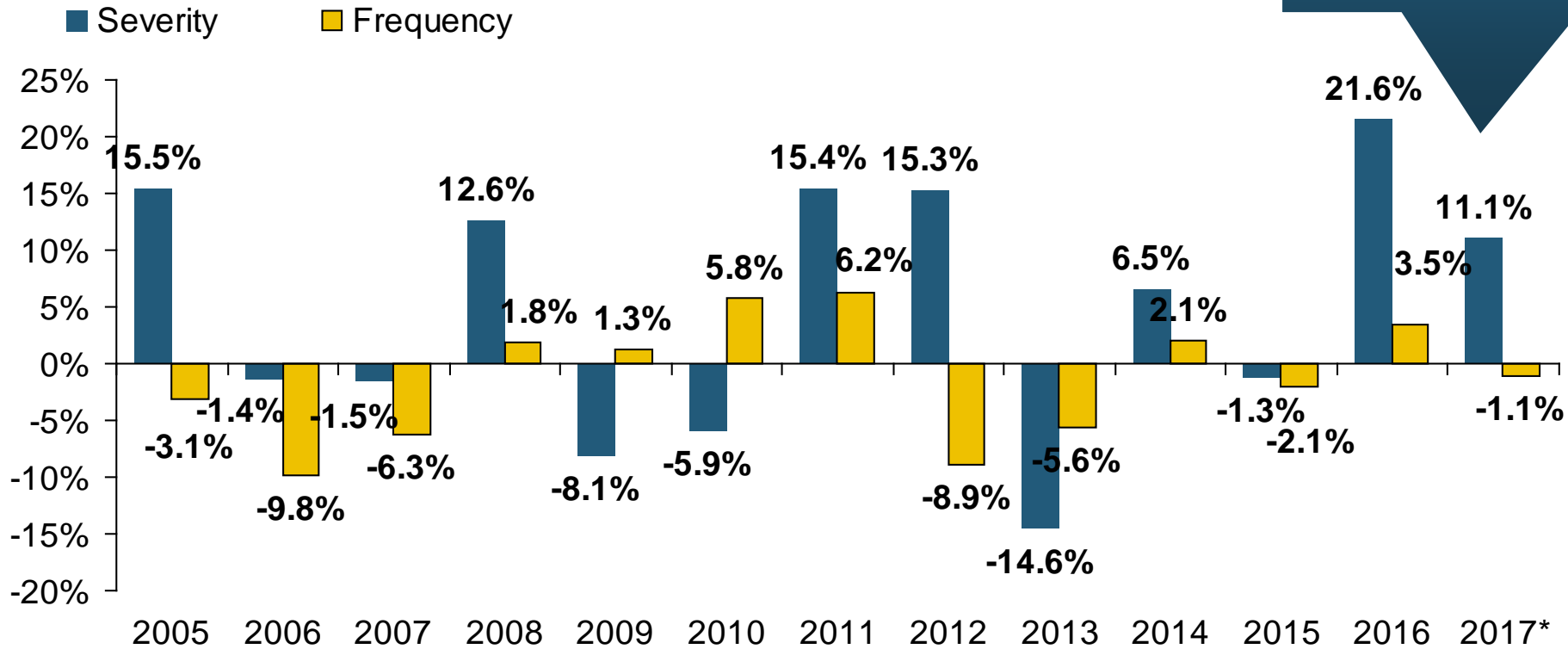


Severity/Frequency Trends Have Been Volatile, But Rising Severity since 2011 Is a Concern

*2017 figure is for the 4 quarters ending 2017:Q2.
 Source: ISO/PCI *Fast Track* data; Insurance Information Institute

Comprehensive Coverage: Frequency and Severity Trends Are Volatile

Annual Change, 2005 through 2017*



Severe weather is a principal cause of the spikes in both frequency and severity

Weather Creates Volatility for Comprehensive Coverage. Enormous Comprehensive Losses Are Expected in Q3:2017 Due to Hurricanes Harvey and Irma

*2017 figure is for the 4 quarters ending with 2017:Q2.

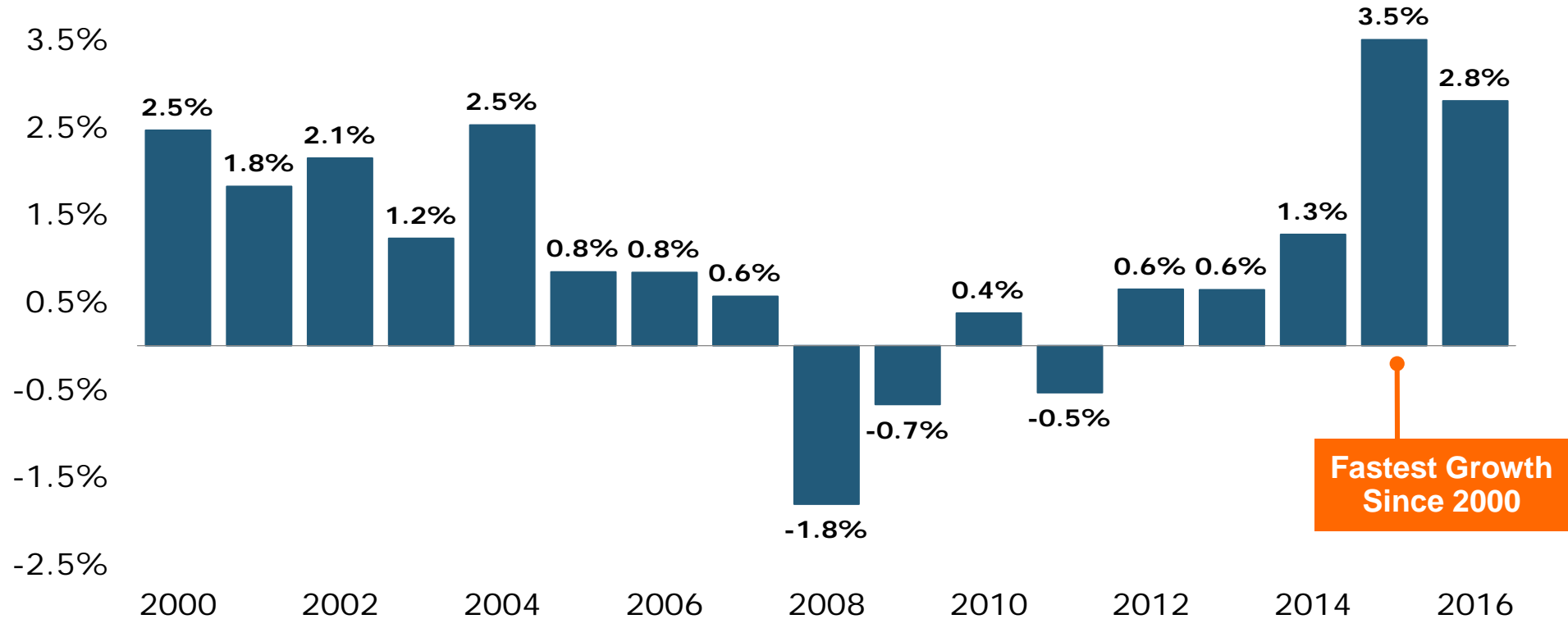
Source: ISO/PCI *Fast Track* data; Insurance Information Institute

A Few Factors Driving Adverse Private Passenger Auto Loss Trends

More Jobs, Better Economy, More People Driving, Lower Gas Prices, More Expensive Cars, Higher Speed Limits...

America is Driving More Again: 2000-2016

Percent Change, Miles Driven*

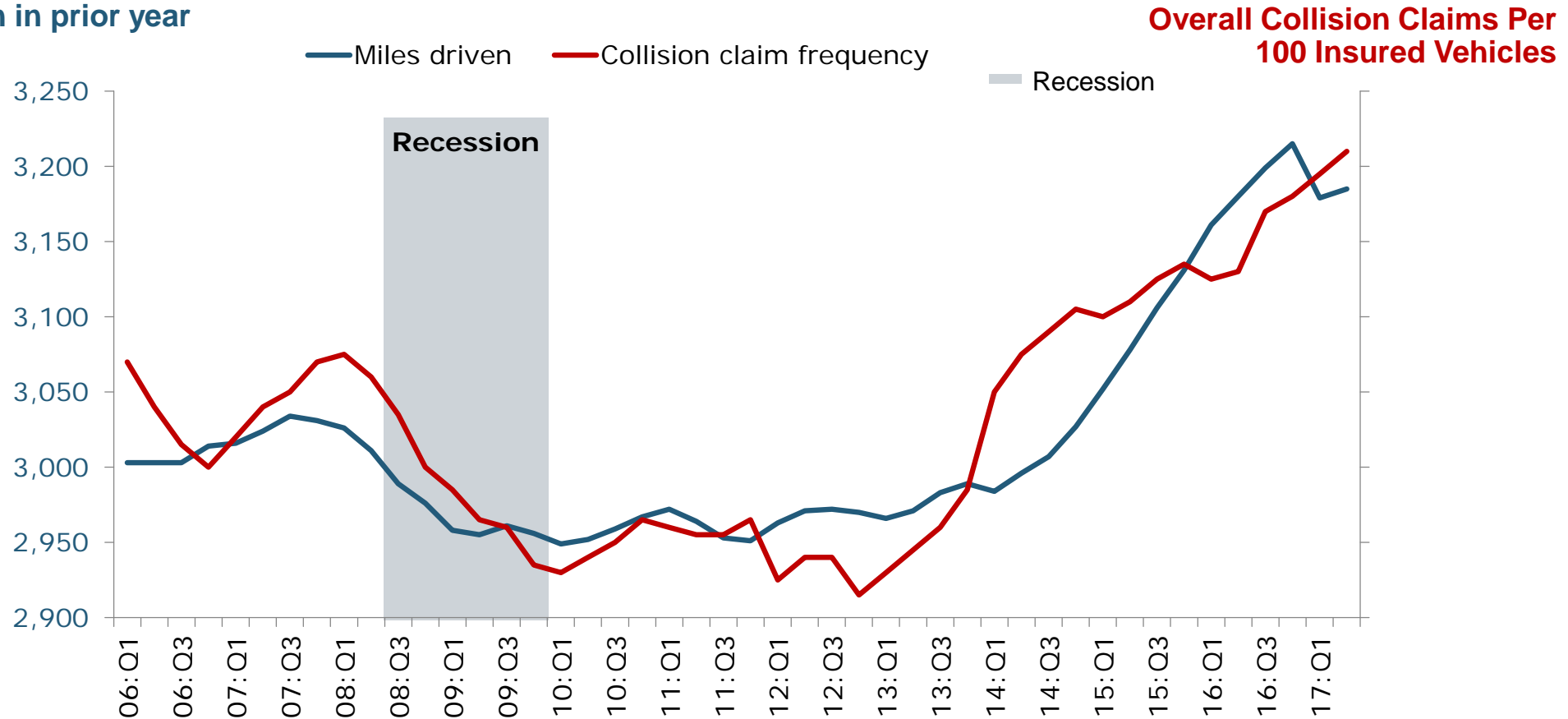


Tremendous Growth In Miles Driven. The More People Drive, The More Frequently They Get Into Accidents.

*2000-2015: Moving 12-month total vs. prior year. 2016 data through Dec. 2016, the latest available, vs. Dec. 2015.
Sources: [Federal Highway Administration](#); National Bureau of Economic Research (recession dates); Insurance Information Institute.

More Miles Driven → More Collisions, 2006-2017:Q3

Billions of miles
driven in prior year

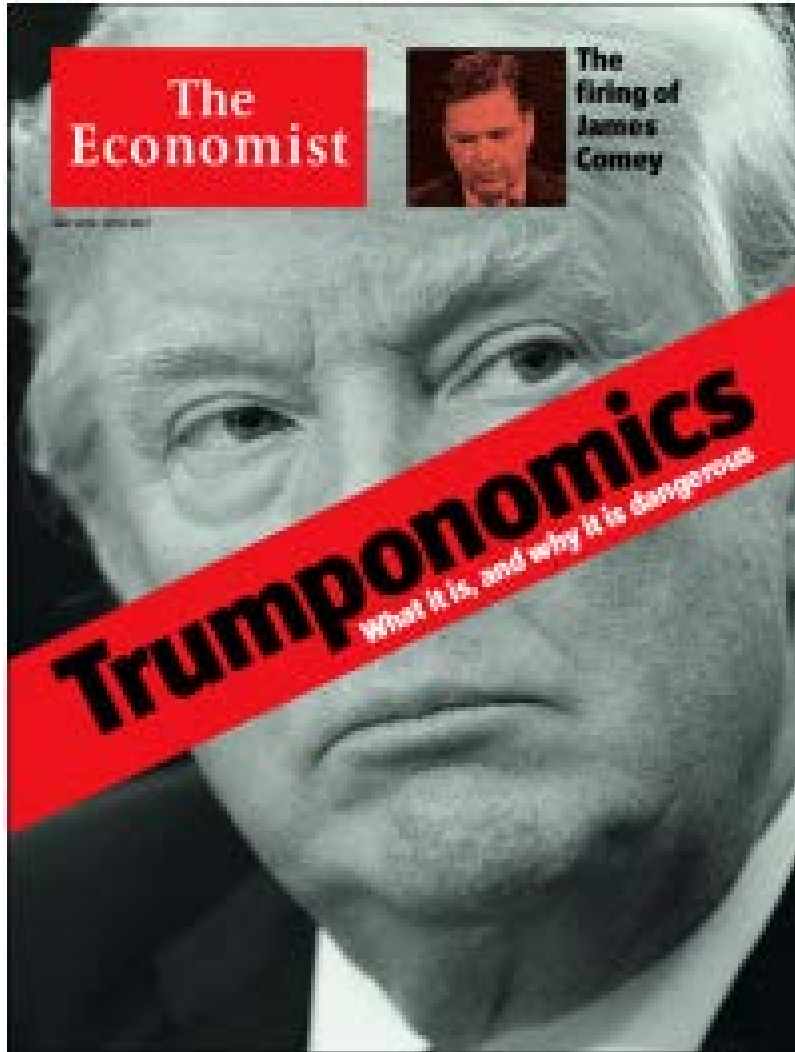


▼ The correlation between miles driven and collision claim frequency is very tight. Will technology weaken this correlation in the years ahead?

Trumponomics, Insurance and Politics

***How Might the Trump Presidency
Impact the Insurance Industry?***

Trumponomics: The Essential Elements



■ 5 Elements

- ◆ Tax Reform
- ◆ Deregulation
- ◆ Infrastructure Investment
- ◆ Healthcare
- ◆ Fair Trade
- ◆ Immigration Reform/Enforcement

■ **Most of these have direct impacts for insurers**

Tax Reform...and More

***Tax Reform Could Have Could
Favorably Impact the
Insurance Industry***

Tax Reform Implications for P/C Insurers and Reinsurers

■ Reduction of Corporate Tax Rate from 35% to 21%...

■ All Insurers Benefit...But Not Equally

- ◆ Companies generating most of their profits from underwriting income now taxed at 35% benefit the most
- ◆ Companies generating proportionately more or the Net Investment Income from (taxable) Corporate Bonds benefit more than companies with heavier muni bond holdings
 - In P/C industry, insurers with underwriting losses tend to hold proportionately more in corporates
- ◆ Leveling the Playing Field: Domestic (re)insurers taxed at 35% will benefit relative to (re)insurers domiciled in Bermuda, etc.
 - Diminished advantage for foreign-owned insurers that cede premium offshore

Tax Reform Implications for Select Industries

■ All Industries

- ◆ Reduction in corporate income tax rate from 35% to 21% is an unambiguous boost to virtually US corporations, including insurers

■ Financial Services

- ◆ Tax bill is generally favorable
- ◆ Amplifies lightening of regulatory burden with scaling back of Dodd-Frank, FSOC SIFI designations, CFPB, Fiduciary Rule

■ Manufacturing

- ◆ Immediate expensing of capital investments for next 5 years

■ Energy:

- ◆ House bill repeals some energy tax credits, including on renewables; Senate preserves most energy credits

Tax Reform Implications for Select Industries

■ Healthcare

- ◆ **Hospitals and others upset about repeal of the ACA's individual mandate requirement**
- ◆ **CBO estimates that 15 million fewer people will be insured over time**
- ◆ **Providers argue they'll be stuck with the tab for uncompensated care for people who drop coverage but still seek care**
- ◆ **House bill would reduce the ability of many hospitals to float in tax-advantaged debt (Advanced Refunding Bonds)**

Trump Administration: Likely Issues Impacting Insurers

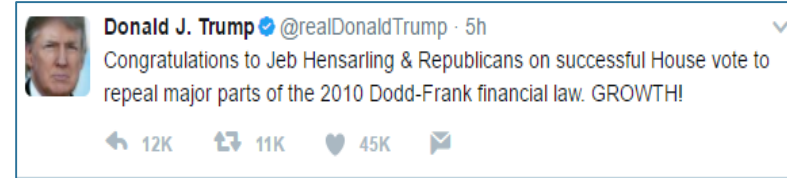
■ Dodd-Frank

◆ TRUMP DODD-FRANK QUOTES

- Dodd-Frank is a “*disaster*”
- Vowed to “*do a big number*” on the Act

◆ *NEW*: Financial CHOICE Act (June 2017 in House)

- Ends authority of the FSOC to designate non-bank SIFIs
 - MetLife, Prudential and even AIG SIFI designations rescinded
- Repeal Volker Rule
- Some loosening of liquidity requirements for well-capitalized financial institutions; Less frequent stress tests
- Weaken Consumer Financial Protection Bureau



Trump Administration: Likely Issues Impacting Insurers

■ Infrastructure Spending

- ◆ Insurance industry could benefit from stepped-up infrastructure spending as promised by Trump
- ◆ Competition for federal dollars will be fierce
- ◆ Privatization of government infrastructure could provide growth opportunity for commercial insurers
- ◆ If infrastructure spending materializes, will benefit all major commercial lines:
 - WC
 - Commercial Property
 - Commercial Liability
 - Surety
 - Commercial Auto

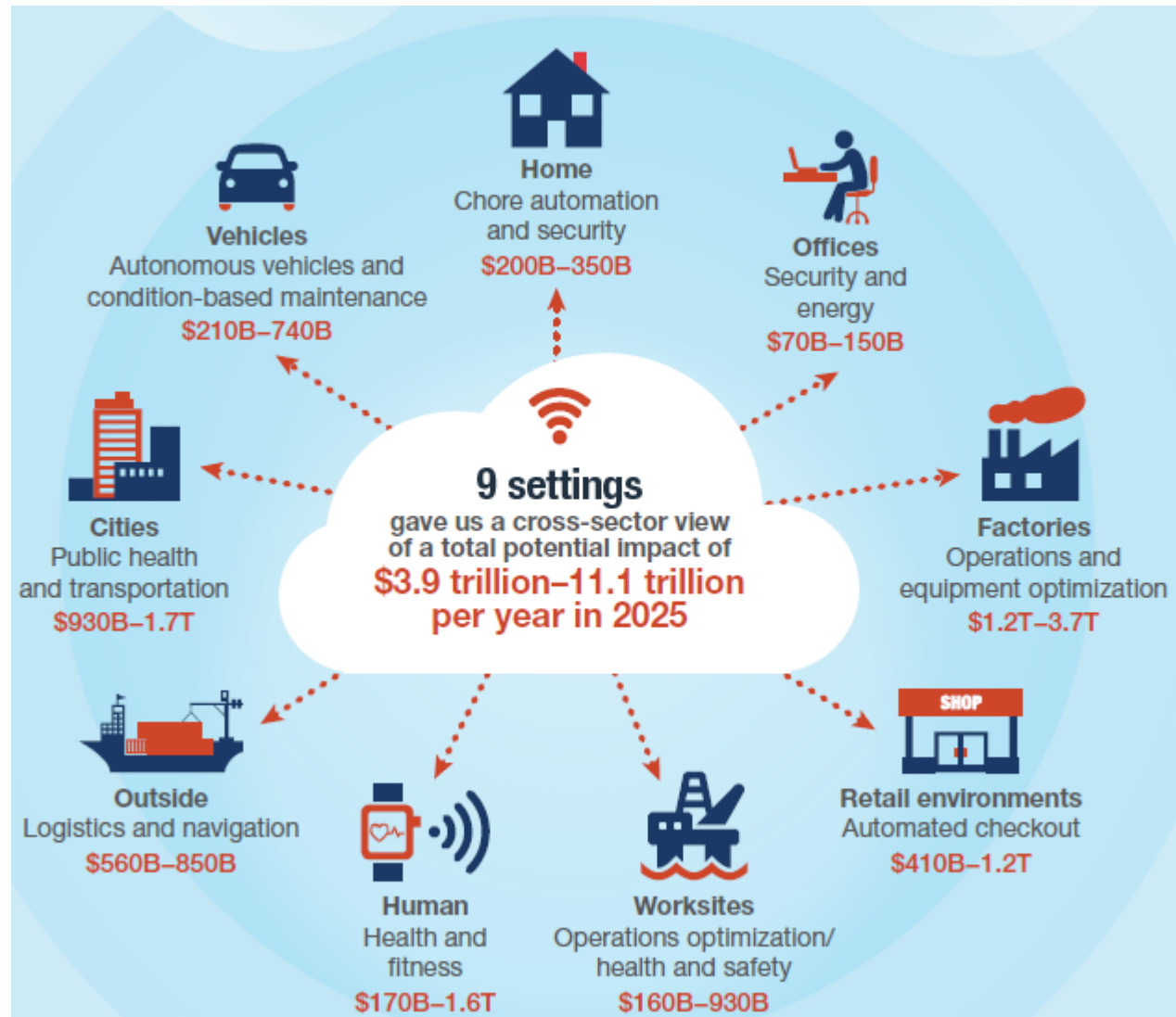


INDUSTRY DISRUPTORS

**Technology, Society and
the Economy Are All
Changing at a Rapid Pace**

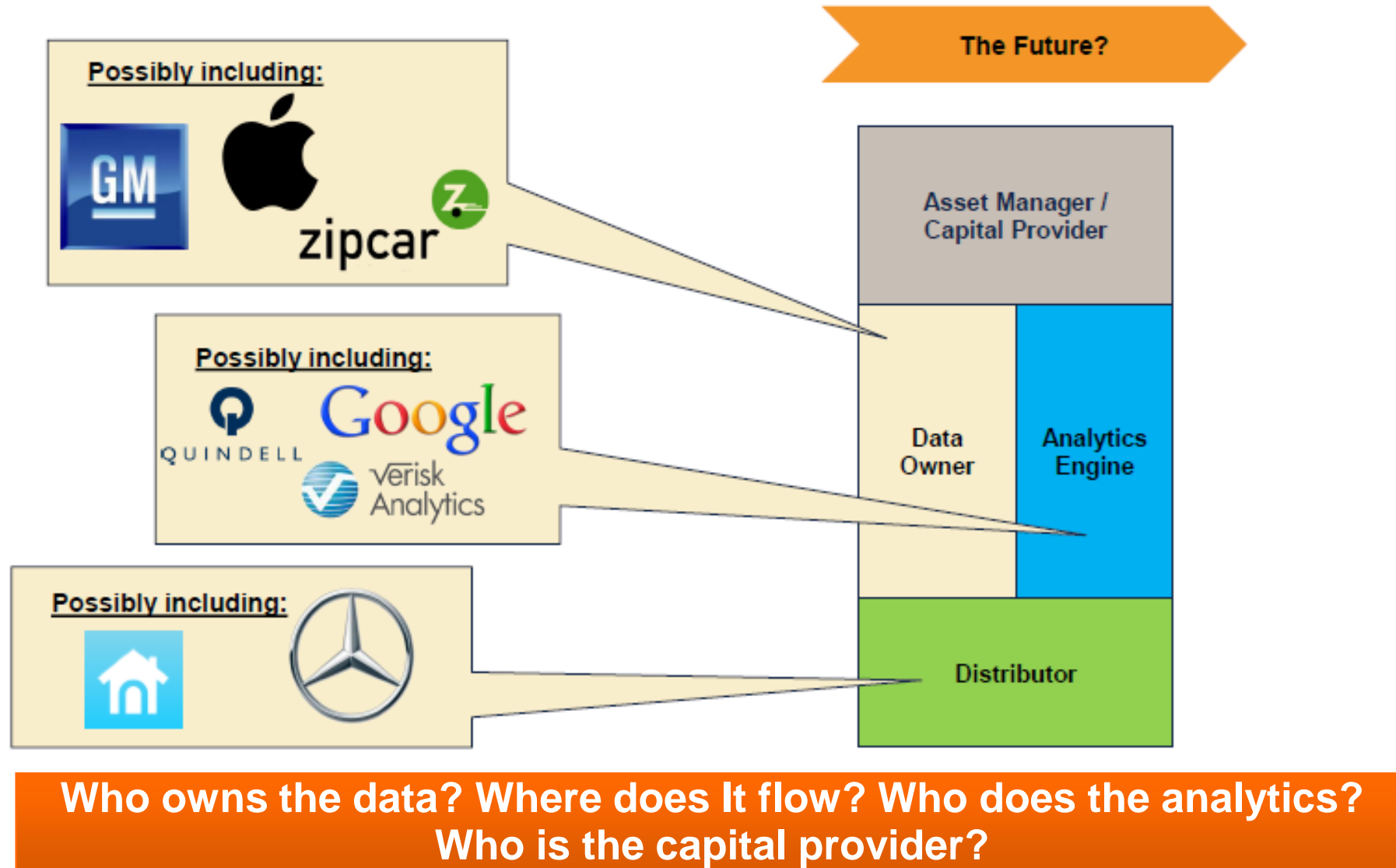
***Reality vs. Drinking the
Silicon Valley Kool Aid***

The Internet of Things and the Insurance Industry



- The “Internet of Things” will create trillions in economic value throughout the global economy by 2025
- What opportunities, challenges will this create for insurers?
- What are the impact on the insurance industry “value chain”?

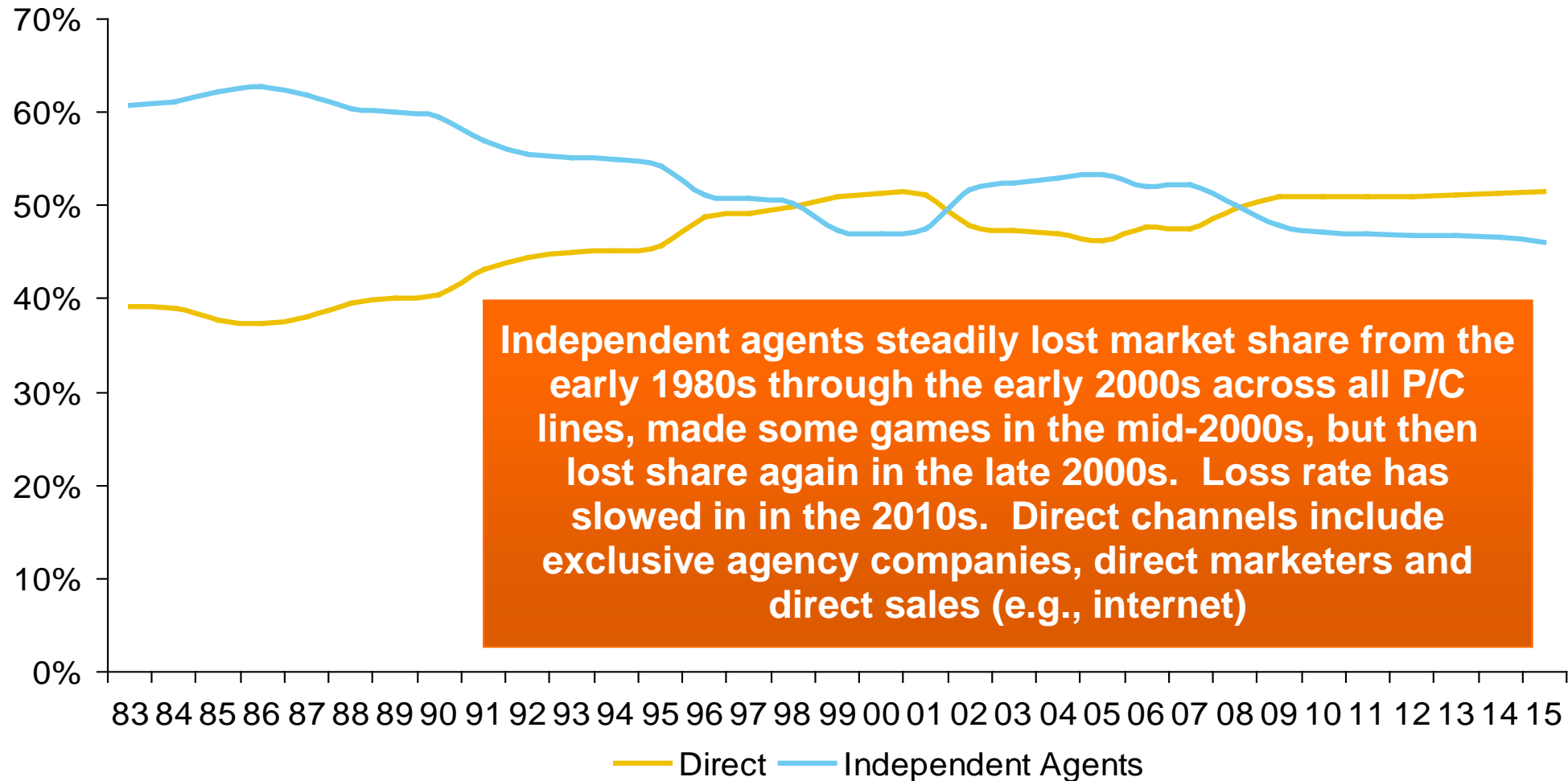
The Internet of Things and the Insurance Industry Value Chain



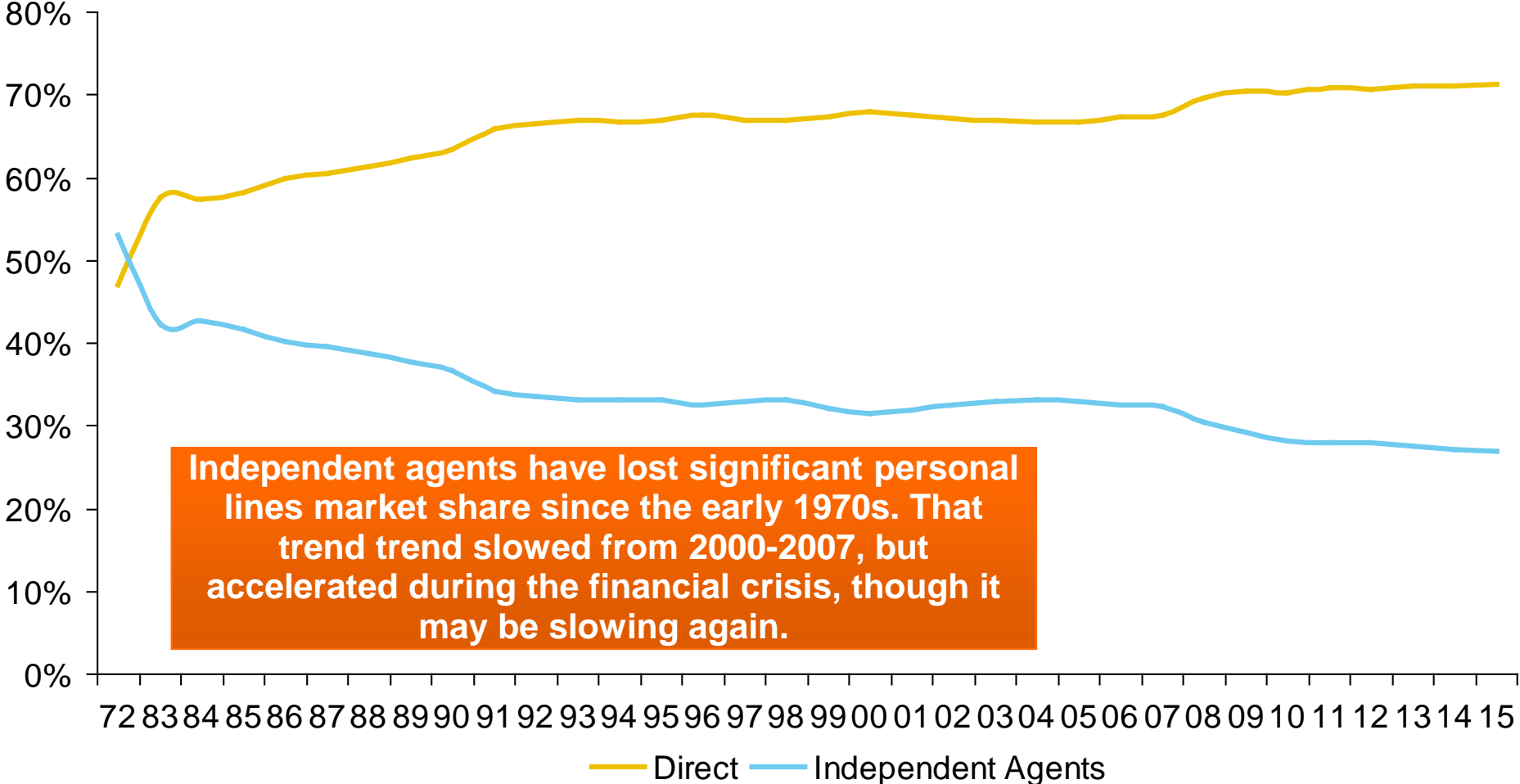
Distribution Trends

**Distribution by Channel Type
Continues to Evolve Around
the World**

All P/C Lines Distribution Channels, Direct vs. Independent Agents, 1983-2015

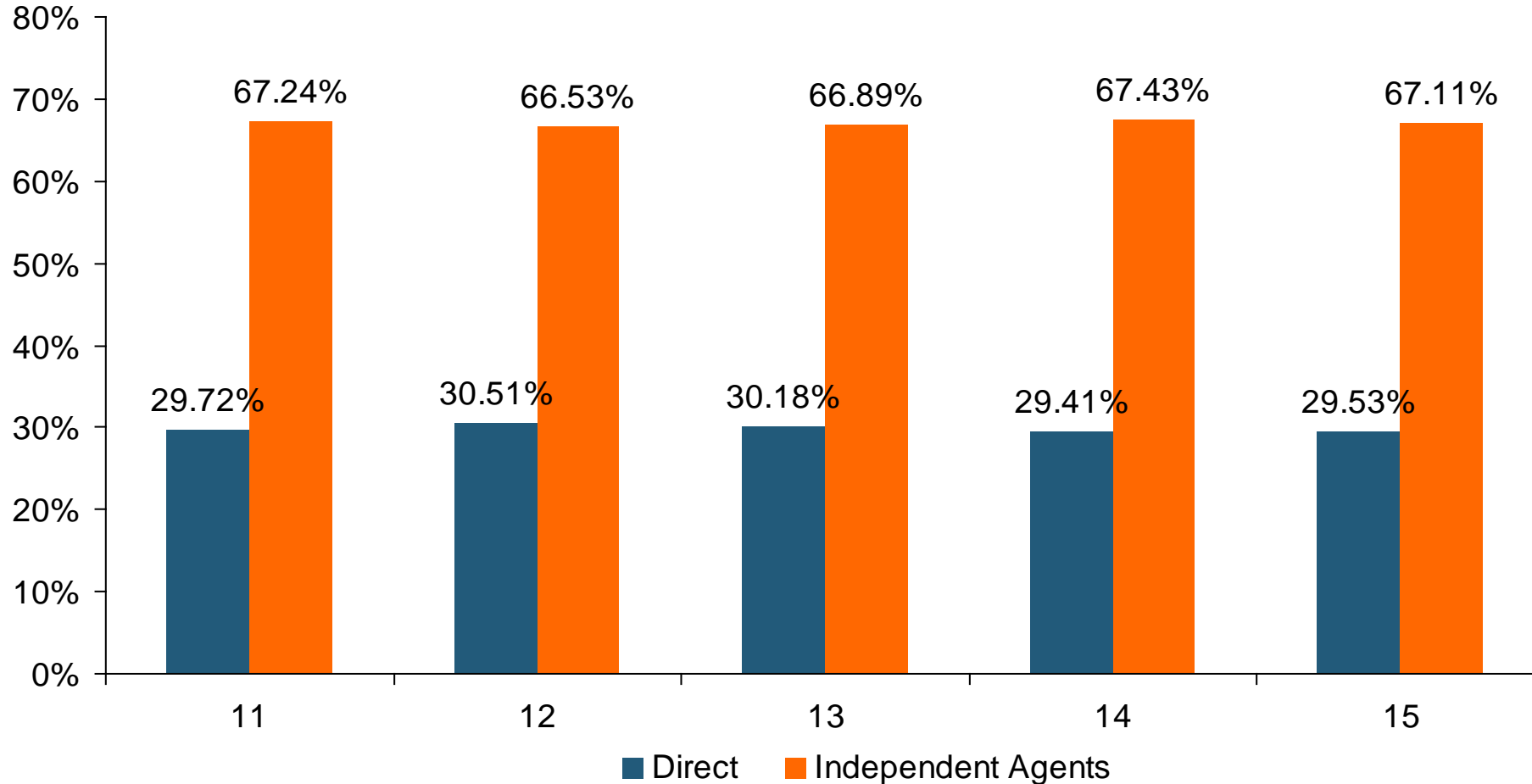


Personal Lines Distribution Channels, Direct vs. Independent Agents, 1972-2015



Source: Insurance Information Institute; based on data from Conning and A.M. Best.

Commercial Lines Distribution Channels, Direct vs. Independent Agents, 2011-2015



Independent agent market share in commercial lines has held steady in recent years

INSURANCE TECHNOLOGY: *FIN TECH ZEROES IN*

Number and Value of Deals Is Increasing

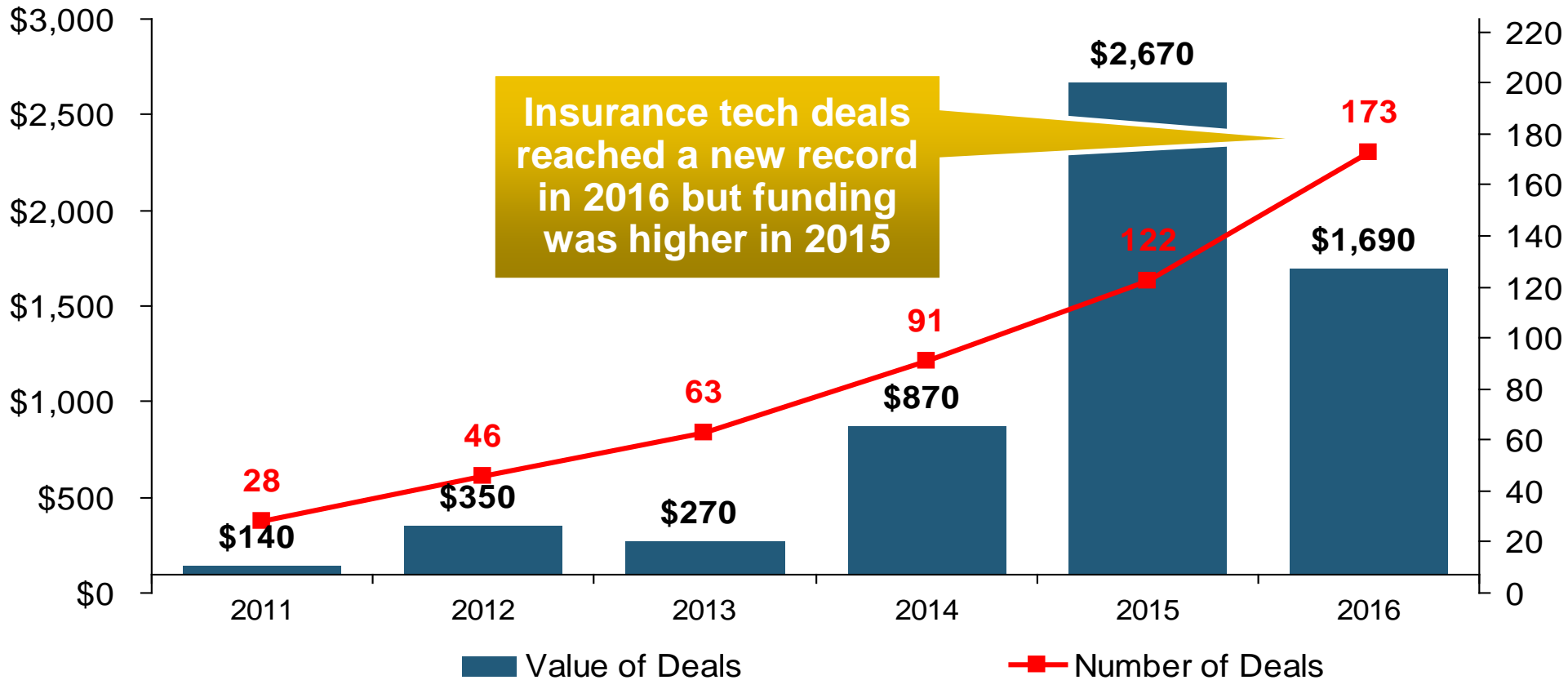
***An Industry that Has Always Been Accepting
of Change and Innovation***

InsurTech Annual Financing, 2011 – 2016

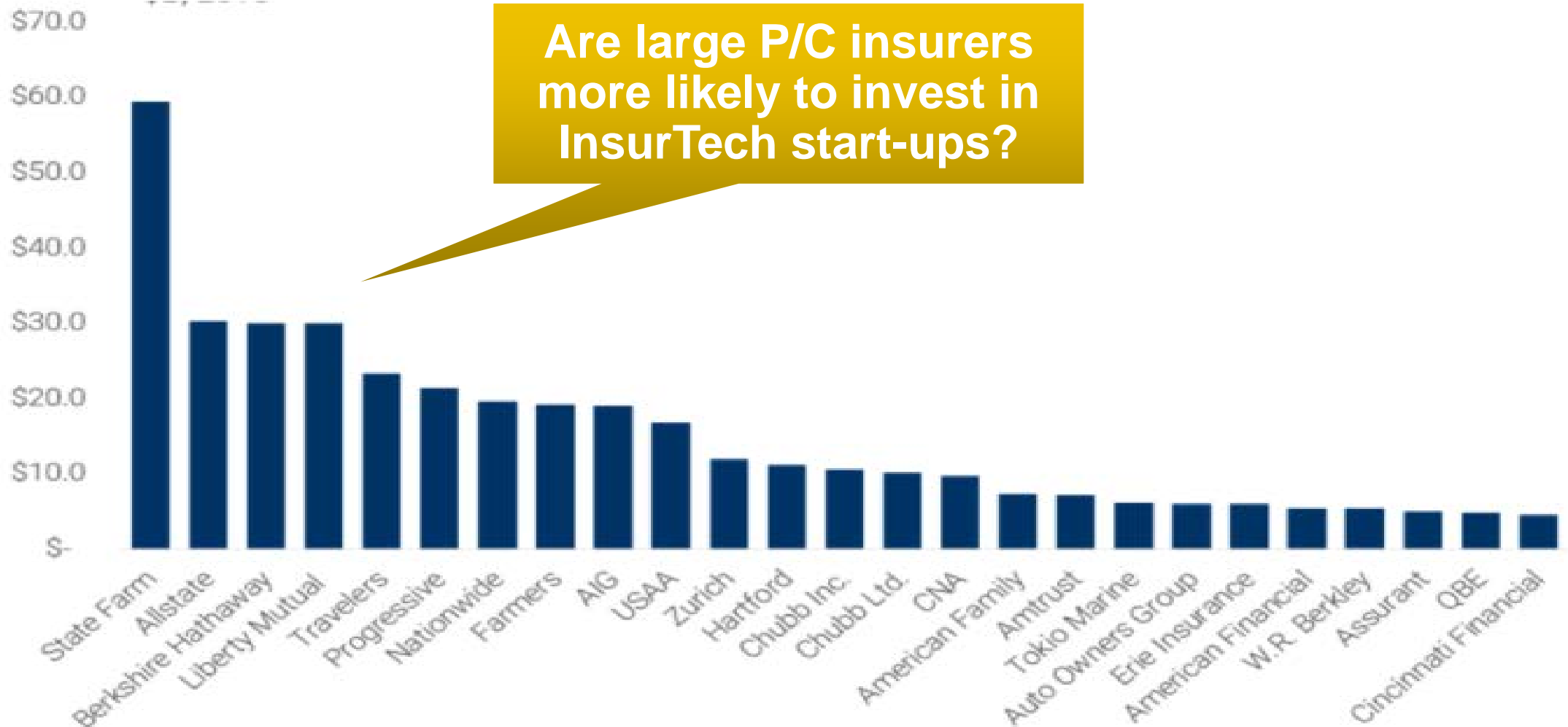
2 out of every 3 InsurTech deals in 2016 was at the early stage!

Value of Deals (\$ Millions)

No. of Deals



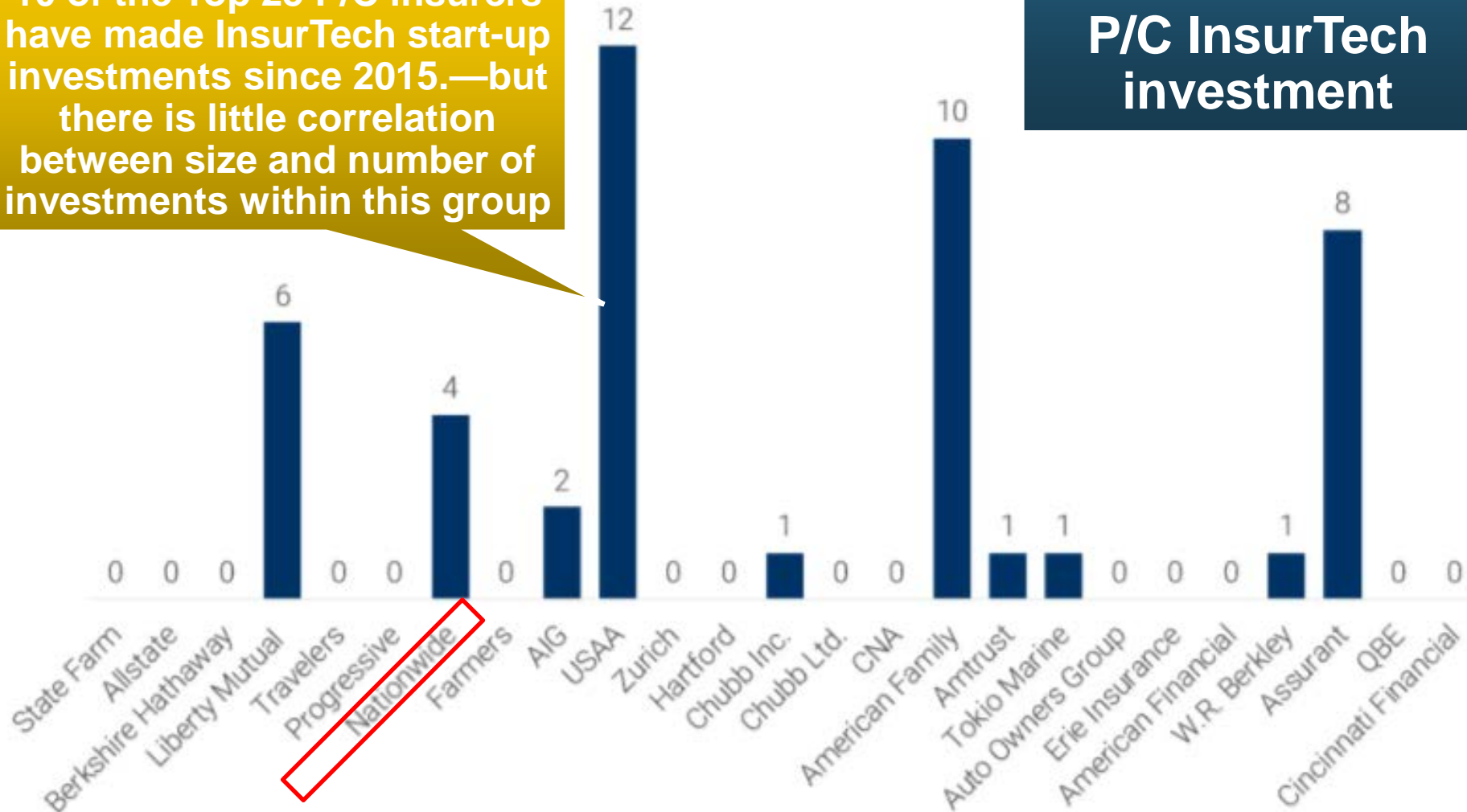
Top 25 P/C Insurers by Direct Written Premium, 2015



Start-Up InsurTech Investments by Top 25 P/C Insurers, 2015 - 2017*

10 of the Top 25 P/C insurers have made InsurTech start-up investments since 2015.—but there is little correlation between size and number of investments within this group

USAA and AmFam lead in P/C InsurTech investment



*As of June 23, 2017.

Sources: NAIC from CB Insights at <https://www.cbinsights.com/blog/largest-pc-insurers-rank-startup-investments/>



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*Thank you for your time
and your attention!*

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