



**INSURANCE
INFORMATION**
INSTITUTE

What's Driving the P/C Industry?

CAS Webinar
October 11, 2018

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I.I.I. Mission Statement

Improving public understanding
of insurance...

...what it does and how it works

10 Key Ways Insurance Drives Economic Growth

Safety/ Security



1. Insurers are financial first responders



2. Insurers are risk mitigators

Economic/ Financial Stability



3. Insurers are capital protectors



4. Insurance is a partner in social policy



5. Insurance sustains the supply chain



6. Insurers are capital infusers

Development



7. Insurers are community builders



8. Insurance enables infrastructure improvements



9. Insurers are innovation catalysts



10. Insurers are credit facilitators

The State of Resilience

A Case Study: Flood Risk

1982 Union, Missouri, Flood

A Storm for the Ages



Bourbeuse River
Record Crest
33.8 feet
12/5/1982



2015 Union, Missouri, Flood

A Storm for the Ages



Bourbeuse River
Record Crest
34.3 feet
12/29/2019



2017: A Record Year Of Catastrophe Losses



Flooding events spurred 73% of federal disaster declarations



Thunderstorm related losses 2nd highest ever in U.S.



\$14 billion insured wildfire losses; California damage estimated ~\$11 billion



N.A. hurricane season record-breaking insured & economic losses; disasters affected >25 million Americans

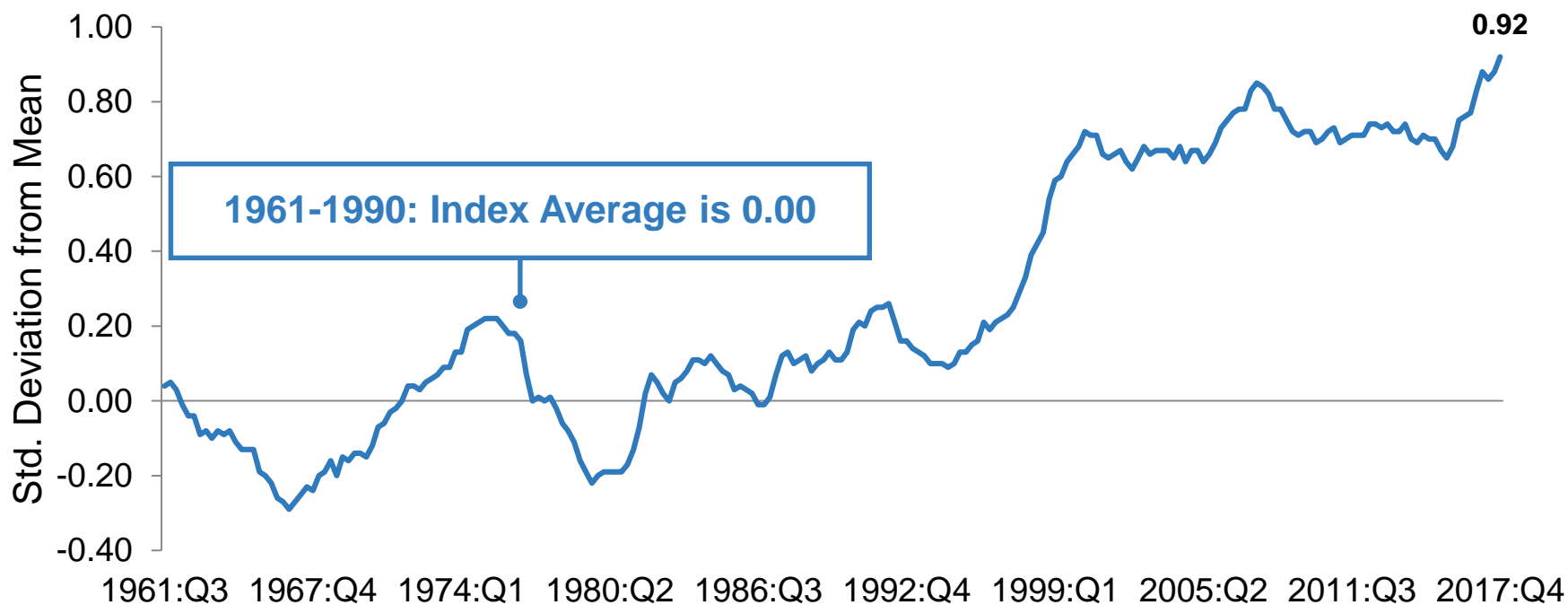


Cyber: Risk continuing to increase
Auto: Reaching epidemic proportions

Education & Analysis

Actuaries Climate Index – Measuring Weather Extremes

Seasonal Five-Year Moving Average, United States



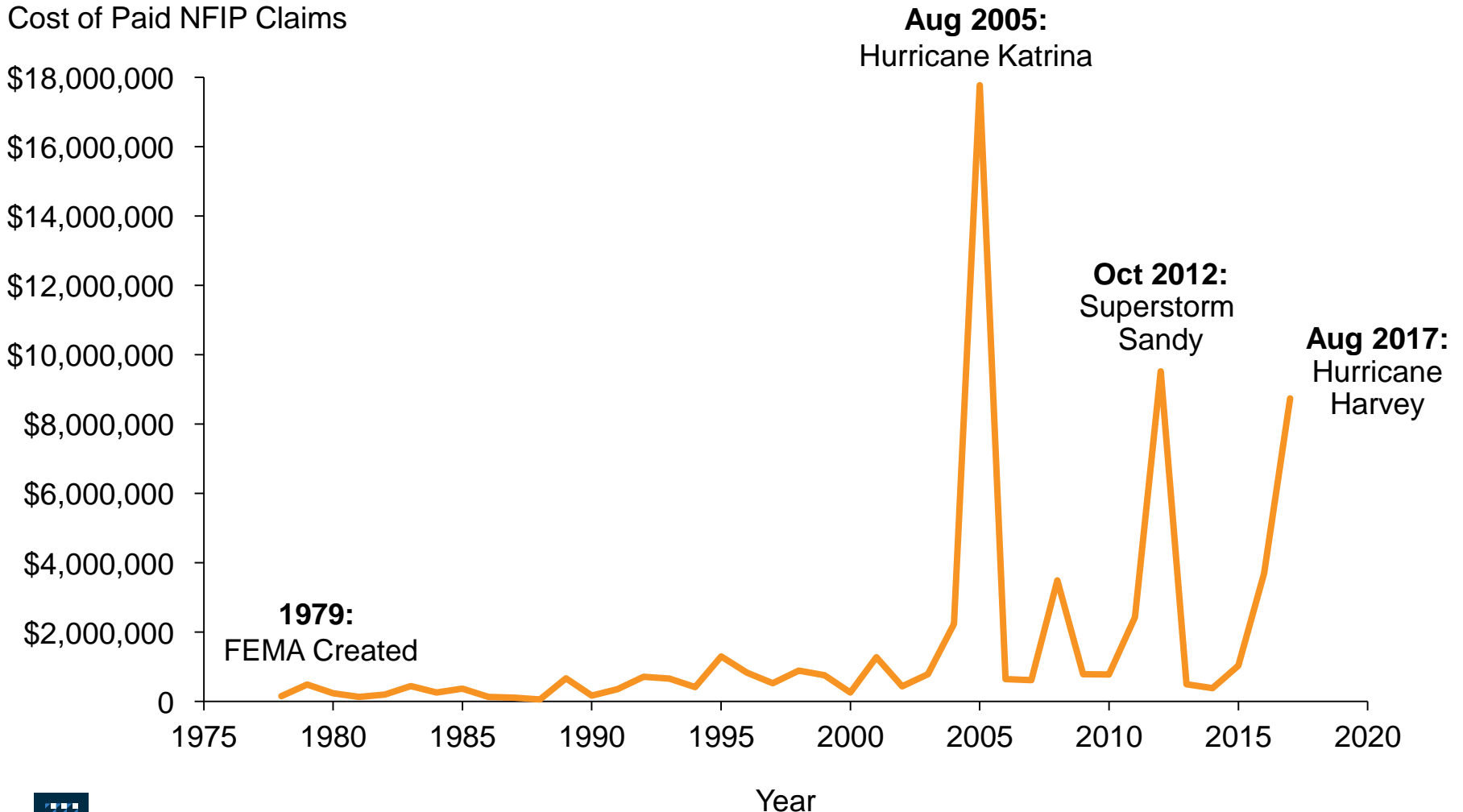
Index Measures Frequency of Extreme Events (Heat, Drought, Wind, Rain, Sea Level) Vs. 1961-1990 Average



NFIP Payouts To The Small Group Of Americans With Flood Insurance Have Skyrocketed

78% Of NFIP's Payouts Have Occurred In The Last 13 Years

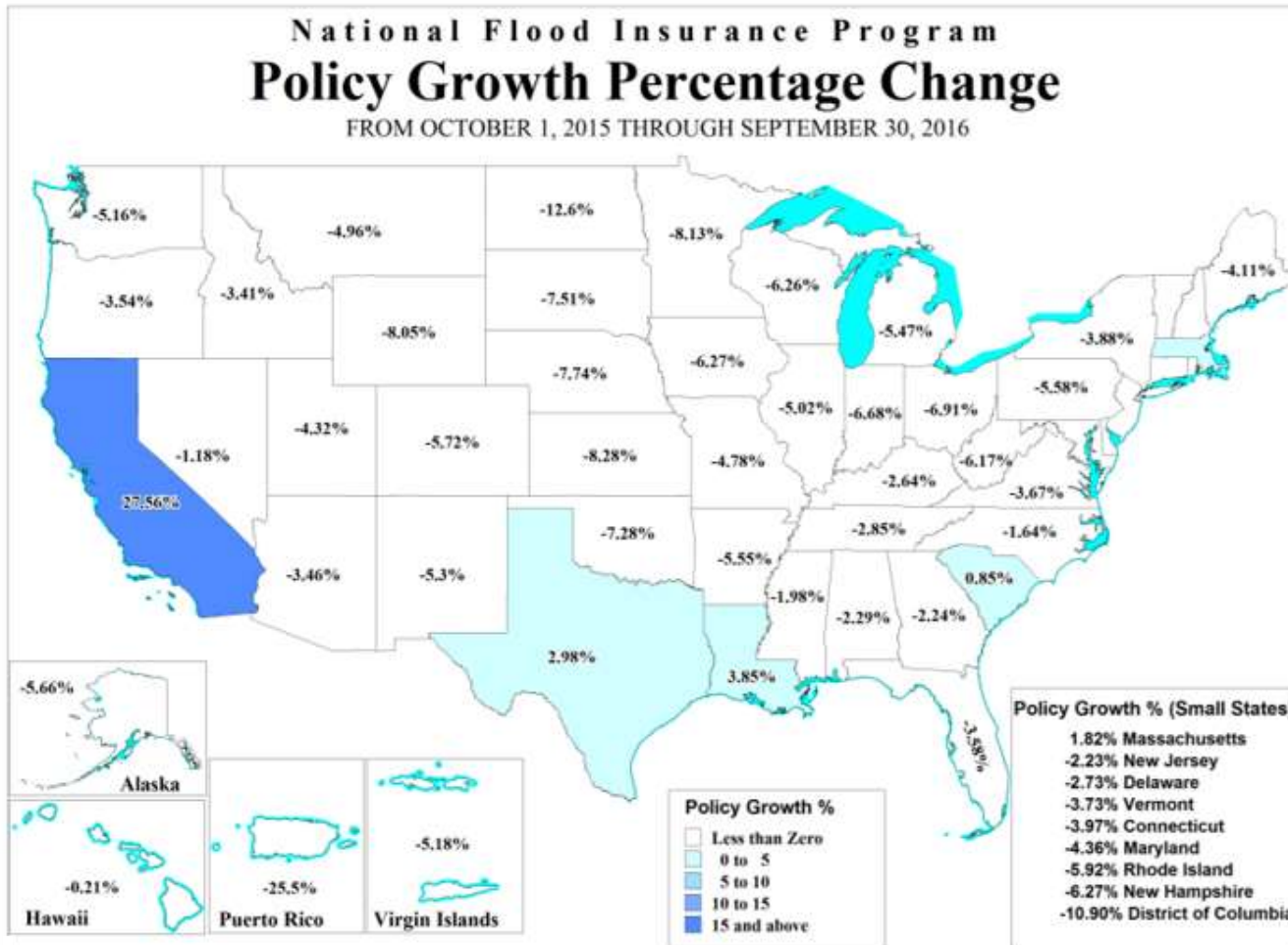
Cost of Paid NFIP Claims



Source: [FEMA NFIP](#)

Coverage Gaps Have Serious Consequences For American Families And Businesses

88% Of American Households Lack Flood Insurance



Major Populations Without Flood Insurance (%):

- ▲ Texas
 - 80%
- ▲ Florida
 - 60%
- ▲ Puerto Rico
 - 99%



The Insurance Coverage Gap Cost Consumers An Estimated \$1.3 Trillion From 2005-2015

- ▲ Over the last decade, more than 70 percent of all catastrophes losses worldwide were uninsured.
- ▲ Flooding is not covered by standard homeowners insurance or commercial insurance policies, making it one of the largest uninsured risks for consumers.

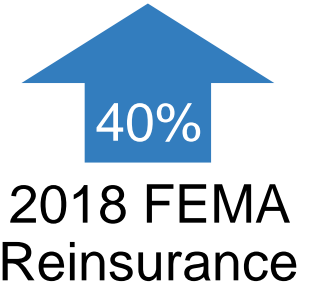


(Re)insurance Products

Private Industry

FEMA Reinsurance

- Through a \$150 million purchase of private reinsurance products, FEMA was able to recover approximately \$1 billion, or an eighth of its total 2017 loses.



NFIP NatCat Bonds

- By issuing new natural catastrophe bonds geared towards institutional investors, the NFIP can bring an estimated \$500 million of additional reinsurance coverage.



Private Market Flood Products

- During 2017, the private flood insurance market added 50 new carriers. Direct private flood insurance premiums written reached \$630 million, an increase of \$217 million over 2016.

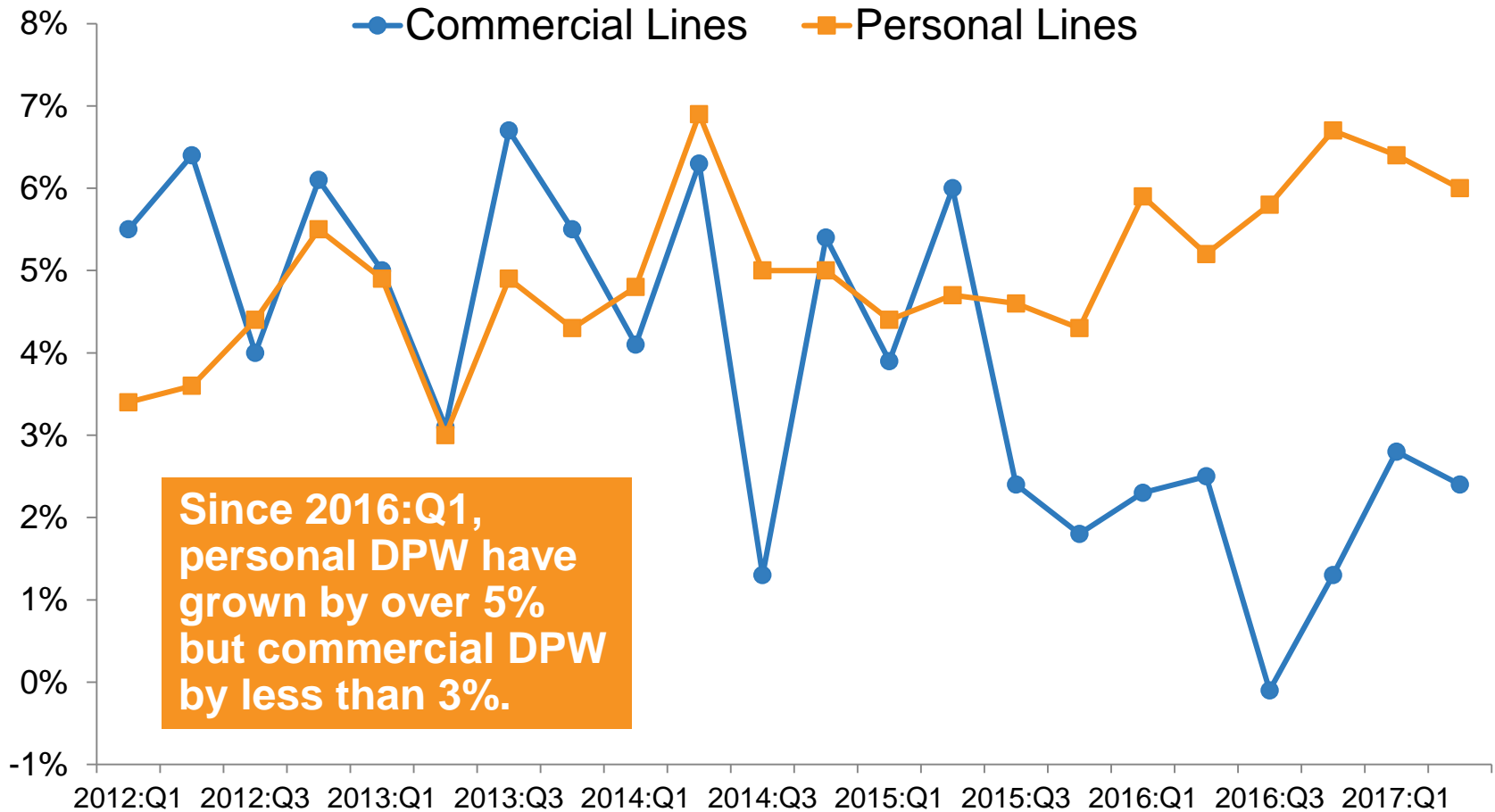


Financial Results

Light, Favorable Winds Buoy Results

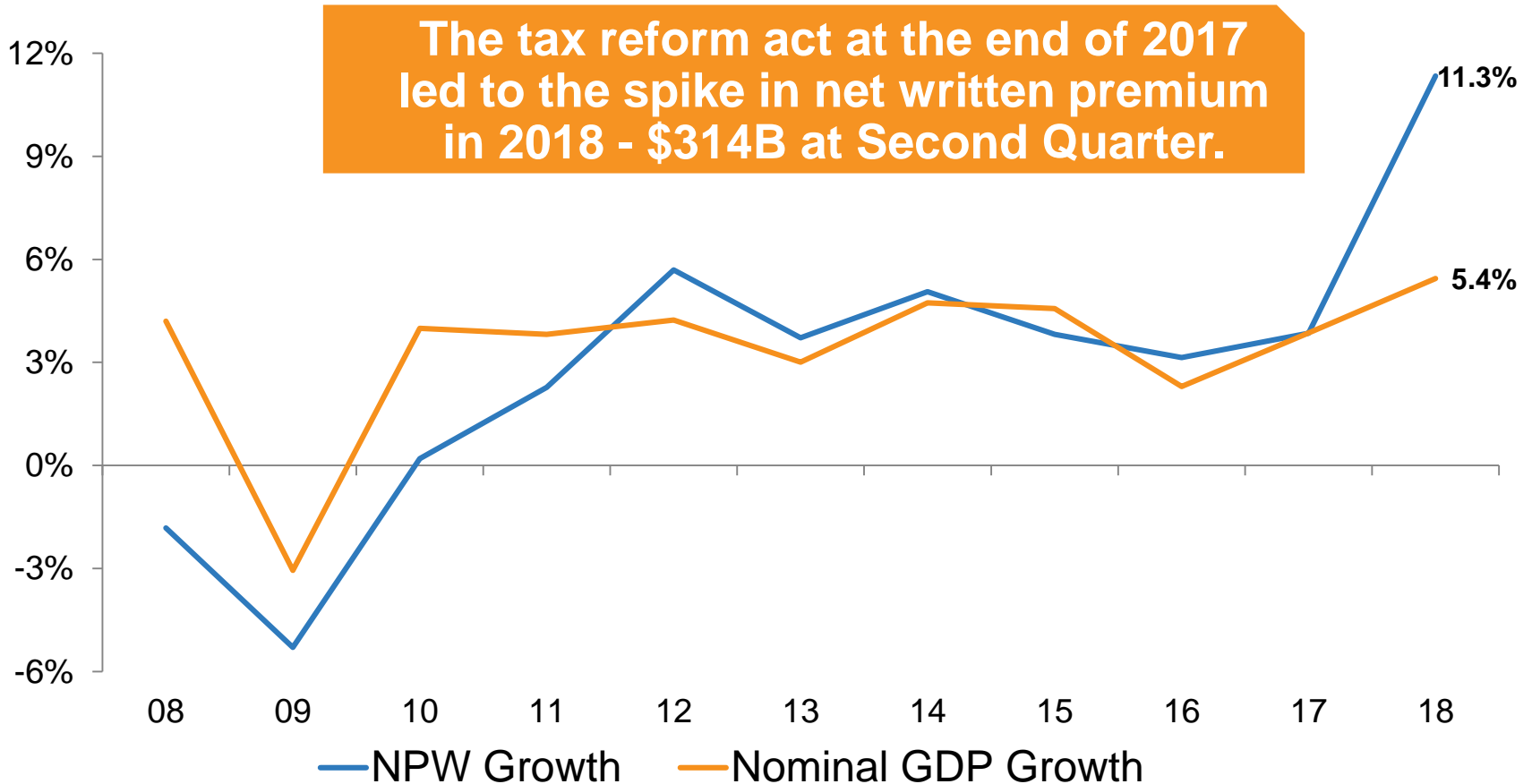
Commercial & Personal Lines Direct Premiums Written Growth, Quarterly Y-o-Y, 2012:Q1-2017:Q2

Percent Change from same quarter, prior year



Sources: NAIC via SNL Financial; Insurance Information Institute calculations.

Net Premium Growth, Annual Change



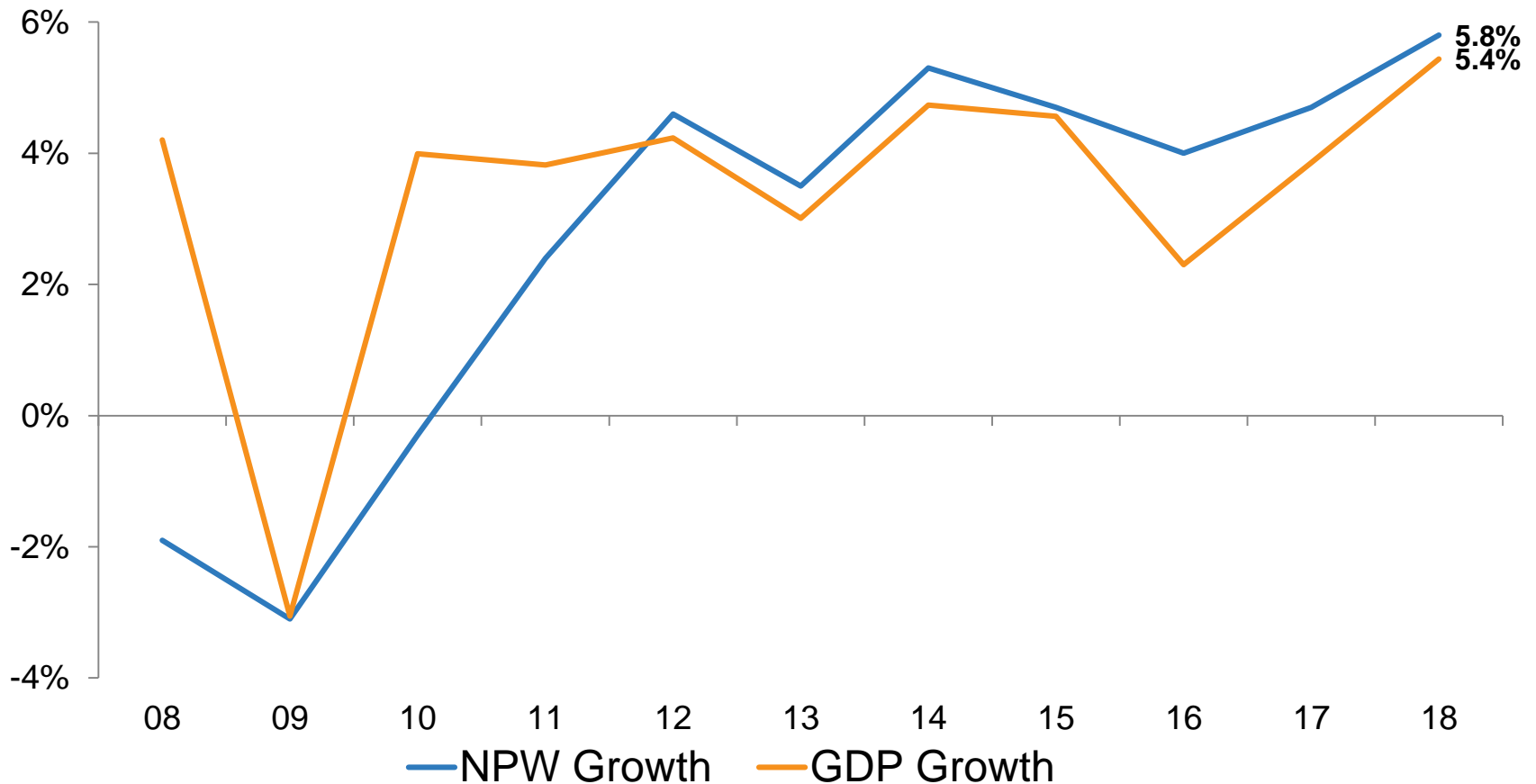
As a general rule, net written premium growth tracks nominal GDP growth.



All data through second quarter.

SOURCES: NAIC data sourced through S&P Global Intelligence, Bureau of Economic Affairs, Insurance Information Institute.

Direct Premium Growth, Annual Change



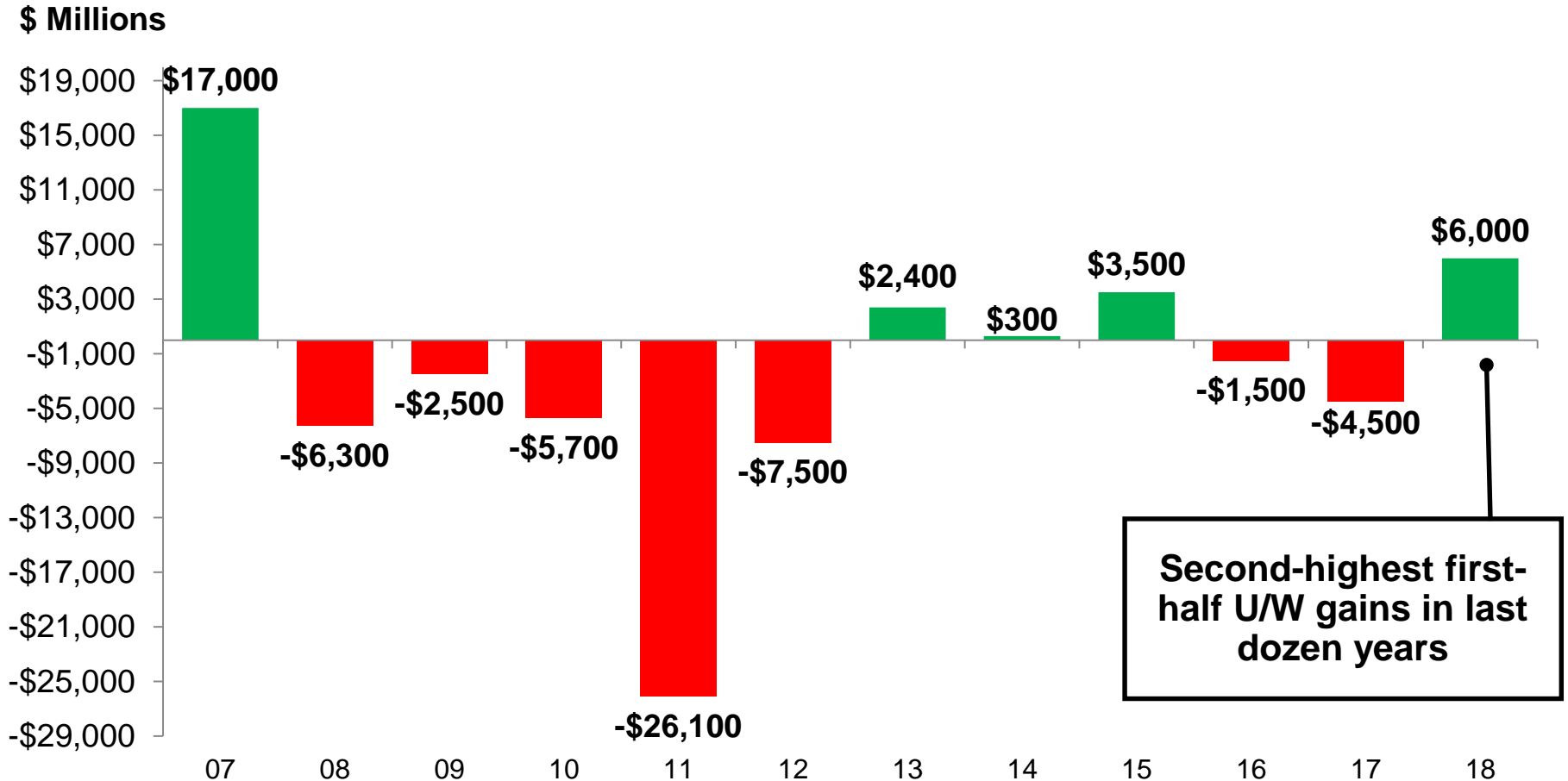
Rising Auto Rates Driving Premium Growth - \$337B at Second Quarter.



All data through second quarter.

SOURCES: NAIC data sourced through S&P Global Intelligence, Bureau of Economic Affairs, Insurance Information Institute.

Net Underwriting Gains & Losses, 1st Halves of Each Year, 2007-2018

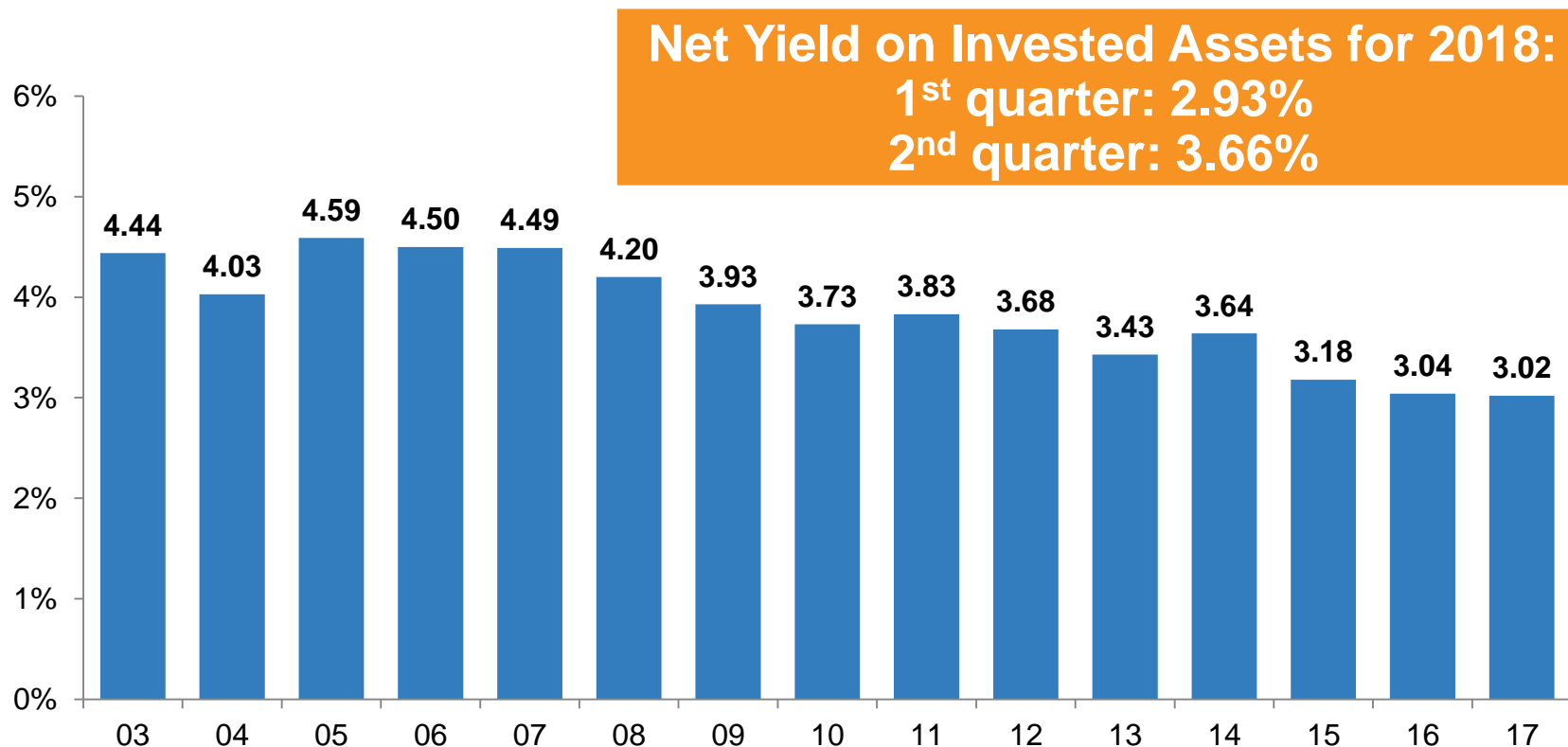


Net underwriting results in the first half of the year have been quite variable, but mostly losses.



Sources: ISO/PCI; Insurance Information Institute.

P/C Insurer Portfolio Yields, 2002-2017

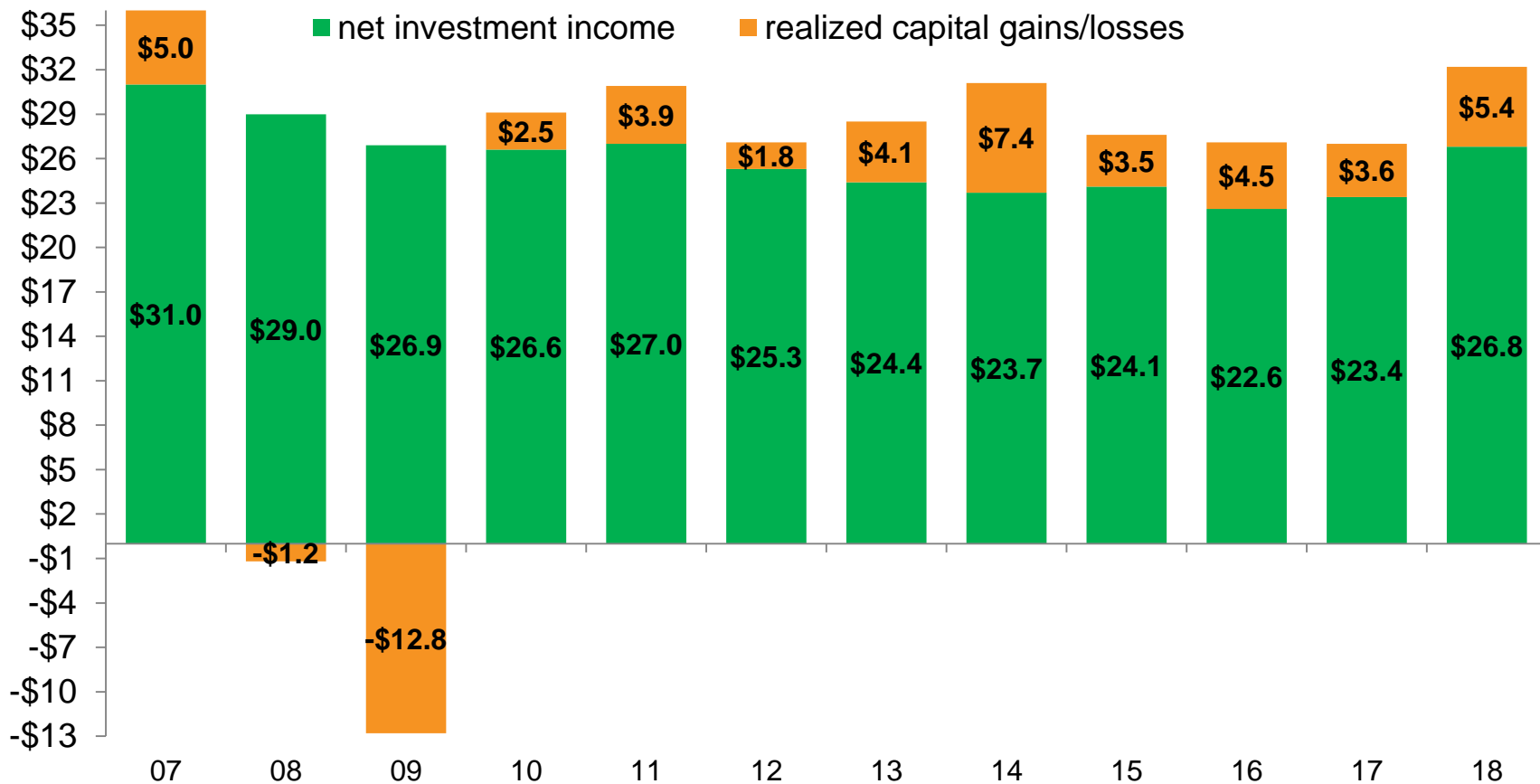


**Even as Prevailing Rates Rise in the Next Few Years,
Portfolio Yields Are Unlikely to Rise Quickly,
Since Low Yields of Recent Years Are “Baked In” to Future Returns.**



Net Investment Gains Vary Mainly With Realized Capital Gains/Losses, 1st Halves, 2007-2018

\$ Billions



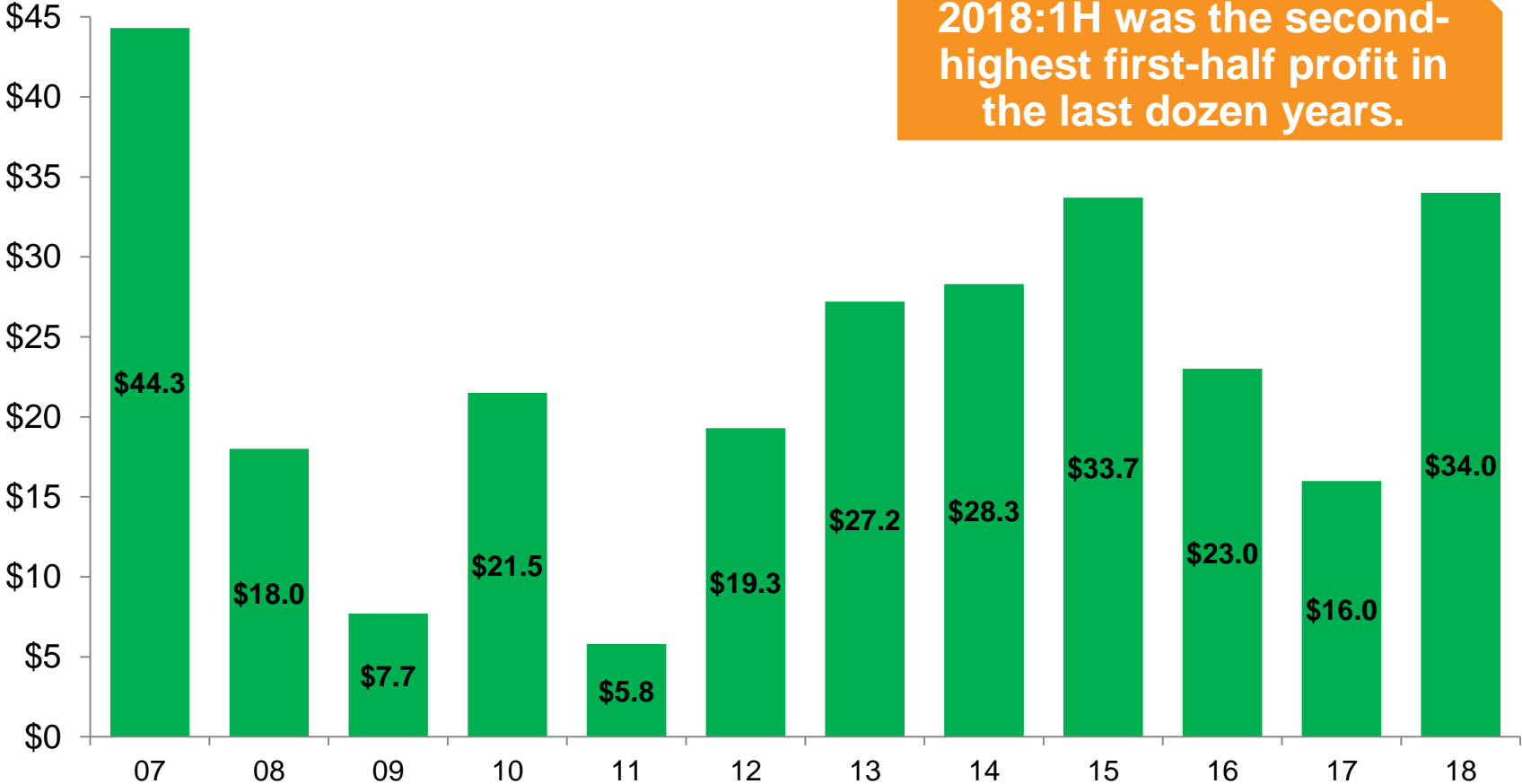
In the first half of the year, net investment income has been steady but realized capital gains/losses have been variable.



Sources: ISO/PCI; Insurance Information Institute.

P/C Industry Net Income After Taxes*, 1st Halves, 2007-2018

\$ Billions,
2018 dollars



In the first half of the year, net income varied considerably.

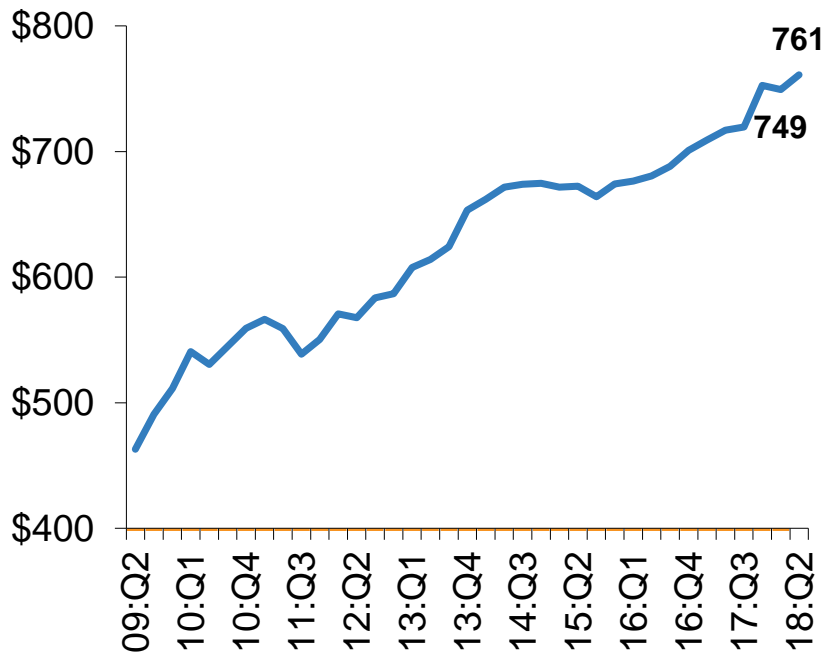


*adjusted for inflation using the BLS CPI calculator, to 2018 dollars
Sources: ISO, a Verisk Analytics company; Insurance Information Institute.

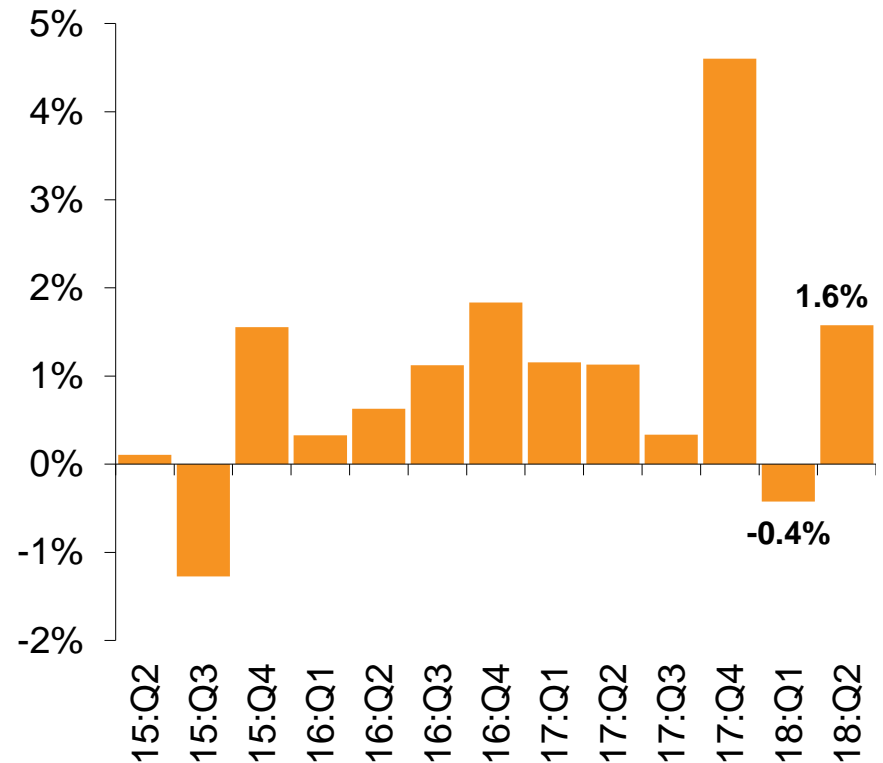
Policyholder Surplus By Quarter

Amount of Surplus

(\$ Billions)



Change from Prior Quarter



Tax Law Increased Surplus at Year-End 2017 and Makes Surplus Growth a Bit More Volatile. \$1.30 Surplus per \$1 Premium.

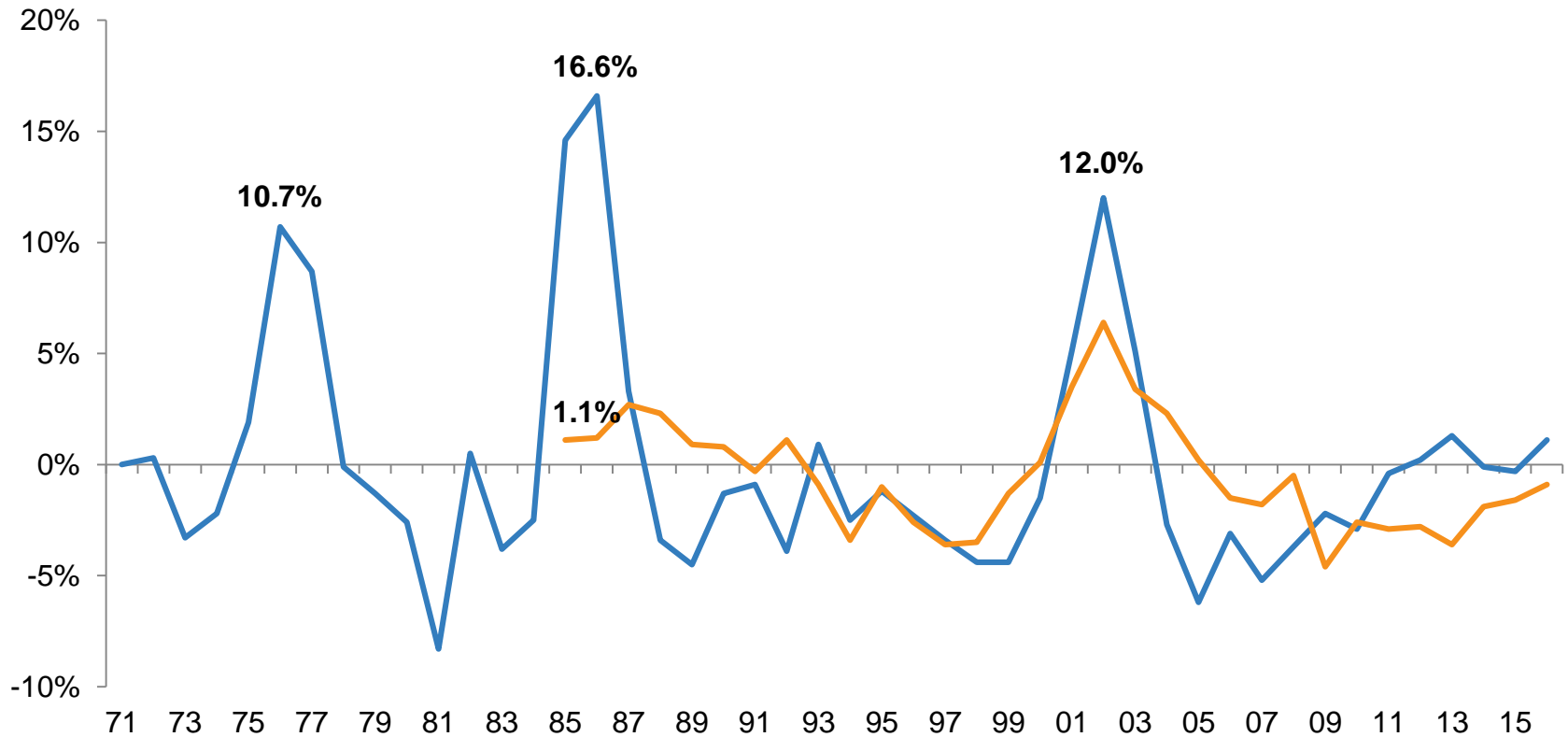


2017:Q4 Scuttlebutt

Is a hard market coming?

Three Hard Markets in the Last 45 Years

Net Premium Growth (All P/C Lines) Minus Nominal GDP, Annual Change



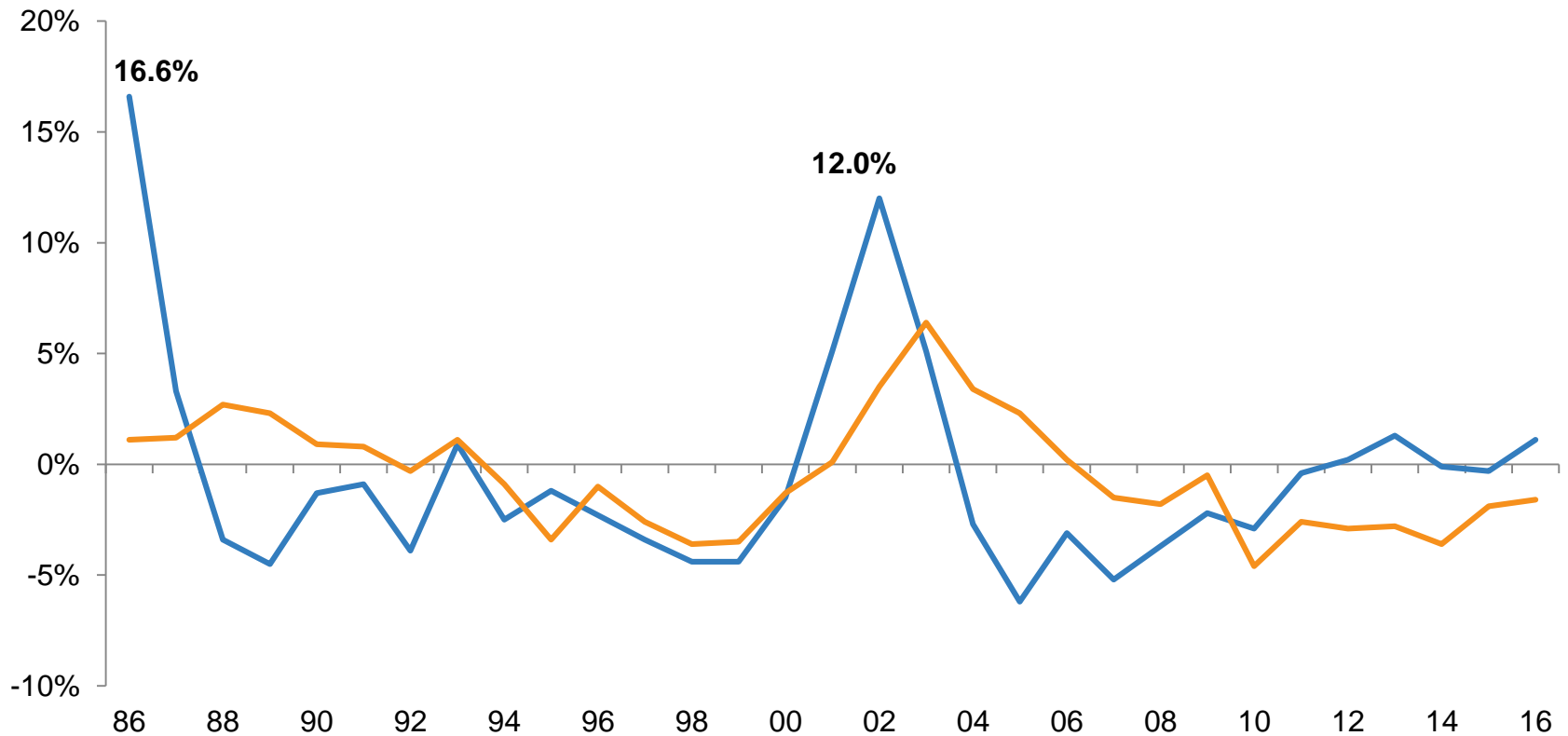
▼ The three “hard markets” in this 45-year span were in 1976–77, 1985–86, and 2001–03.



Sources: A.M. Best (1971-2017), ISO (2014-16), A.M. Best, Insurance Information Institute (1986-1994); U.S. Commerce Dept., Bureau of Economic Analysis; Insurance Information Institute calculations.

Two Hard Markets in the Last 21 Years

Net Premium Growth (All P/C Lines) Minus Nominal GDP, Annual Change



▼ The two “hard markets” in this 21-year span were in 1985–86, and 2001–03.



Sources: A.M. Best (1986-2016), ISO (2014-16), A.M. Best, Insurance Information Institute (1986-1994); U.S. Commerce Dept., Bureau of Economic Analysis; Insurance Information Institute calculations.

I.I.I. Hypothesis

What causes a hard market?

- ▲ Return on equity falls to 4% or below?
- ▲ Surplus drops due to financial market declines and/or significant underwriting losses?
- ▲ Unusually large losses due to catastrophes?



P/C Industry ROE and Hard Markets

Year	ROE	NWP-GDP Growth 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	5.0%	0.4%*	No



* Direct Written Premium – GDP Growth through Second Quarter

Policyholder Surplus and Hard Markets

Year	Surplus Decline	NWP-GDP Growth 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	+7.4%	0.4%	No



* Direct Written Premium – GDP Growth through Second Quarter

CAT Claims and Hard Markets

Year	CAT Claims Over \$25 billion (2016 Adjusted)	NWP-GDP Growth in Following Year	Hard Market?
1992	\$39.6	0.9%	No
1994	\$27.7	-1.2%	No
2001	\$36.4	12.0%	Yes
2004	\$36.4	-6.2%	No
2005	\$77.1	-3.1%	No
2008	\$30.7	-2.2%	No
2011	\$35.2	0.2%	No
2012	\$36.8	1.3%	No
2017	\$90.5	0.4%	No



Hard Market in 2018?

▲ **Strong indicator: $\leq 4\%$ ROE**

- ◆ Consistent hard markets in years comparisons.

▲ **Indifferent indicator: Surplus Increase/Decrease**

- ◆ Inconsistent hard/soft markets in years comparisons.

▲ **Weak indicator: Large Cat Losses**

- ◆ Consistent non-movement; even with 2017 potentially being one of the worst years on record.

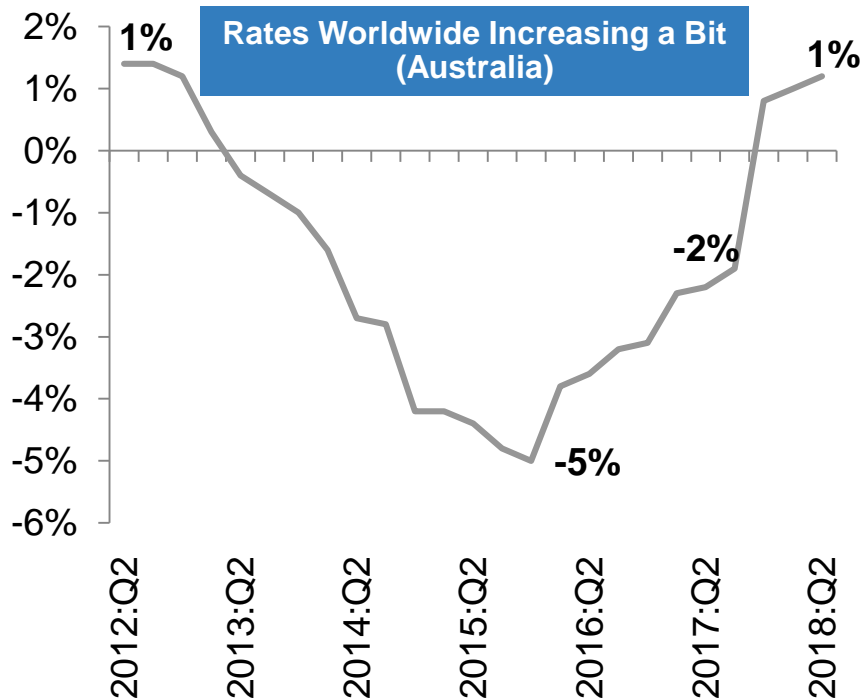
Commercial Rate Changes

Commercial Auto . . . And Everything Else

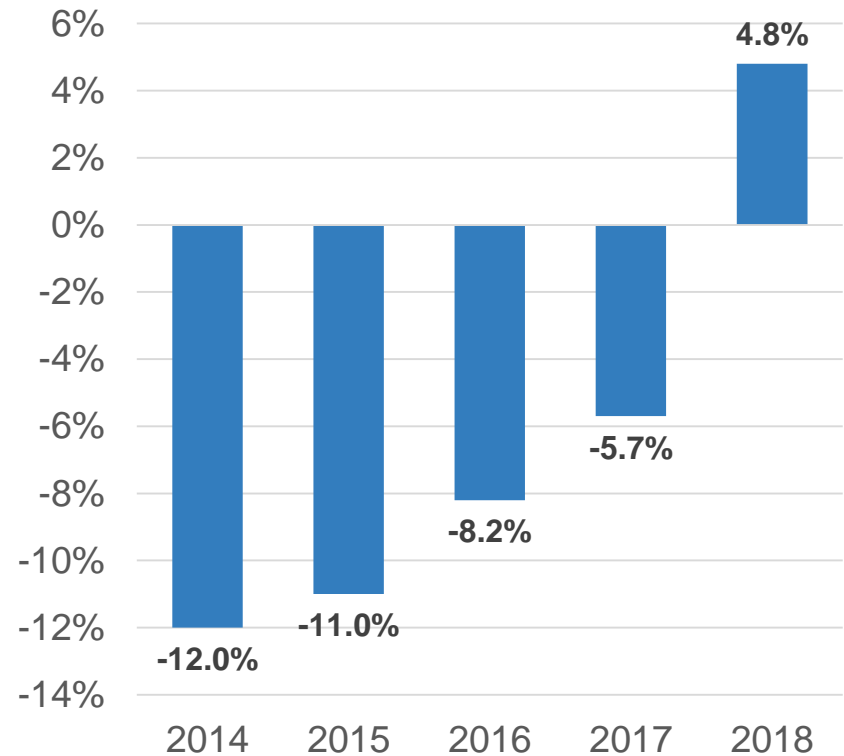
Rate Changes Worldwide

Rates Soft/Flat, Especially in Reinsurance

Global Insurance Rates Through Q2 2018



Global Reinsurance January Renewals

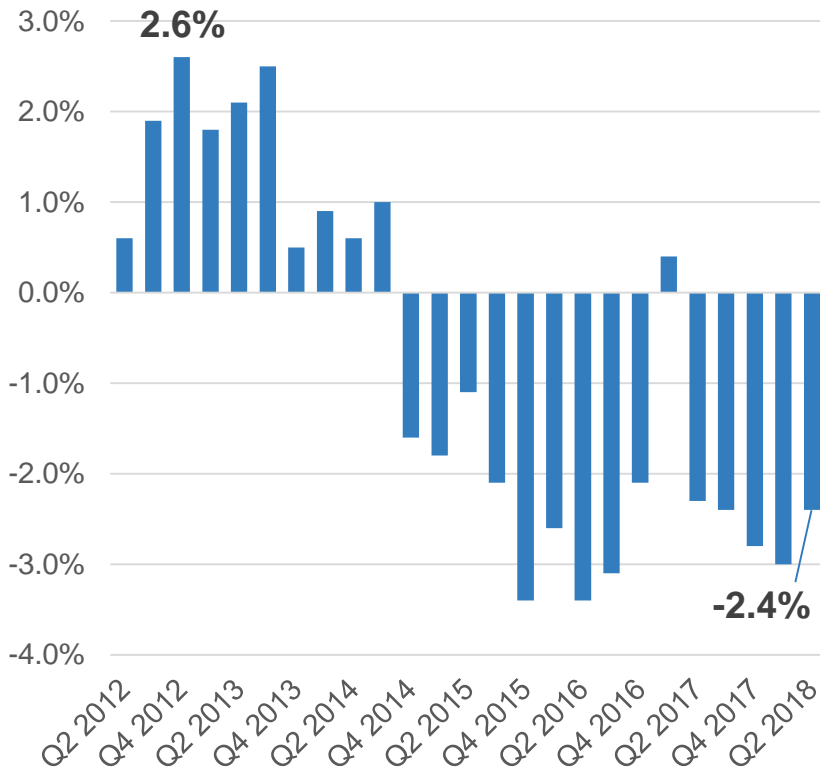


Sources: Marsh Insurance Market Index, JLT Re.

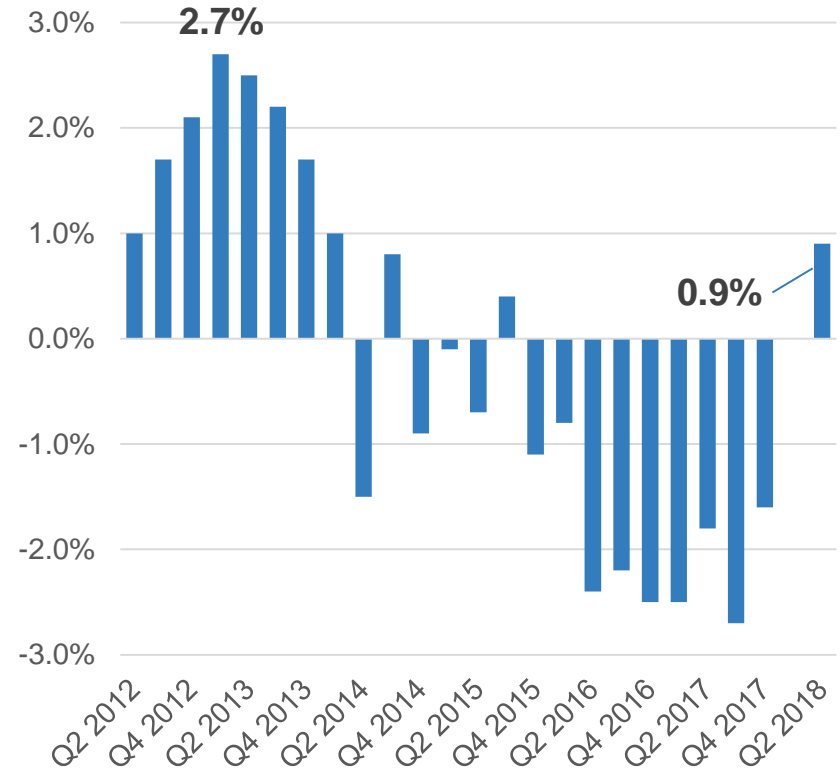
Liability Rate Changes

Slight Softening, Though Local Markets Vary

U.S. Casualty



U.S. Financial and Prof Liab

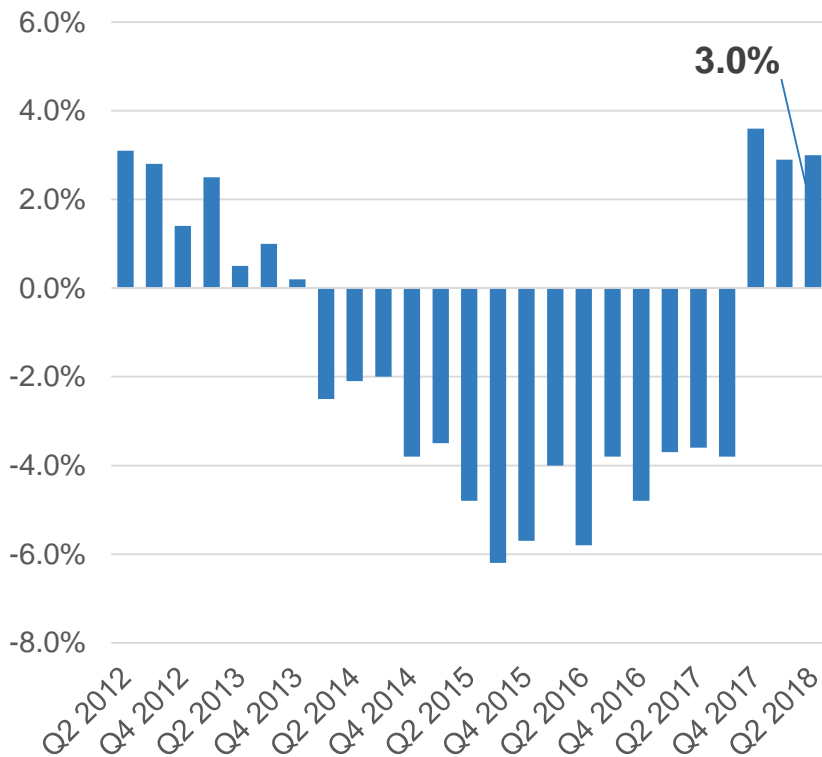


SOURCE: Marsh Insurance Market Index.

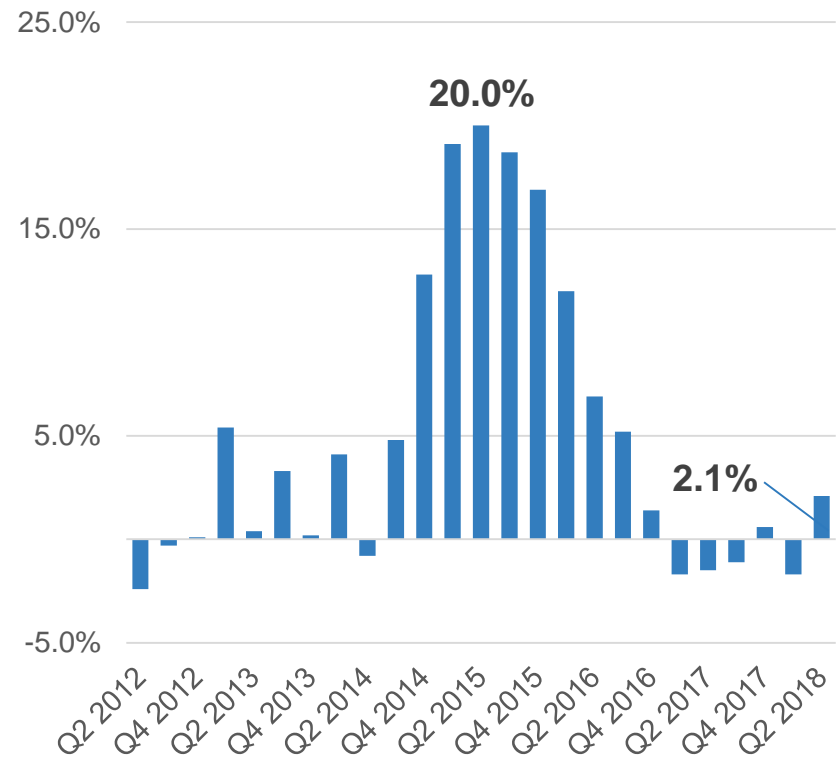
Property/Cyber Rate Changes

A Flat Market, Though Local Markets Vary

U.S. Property

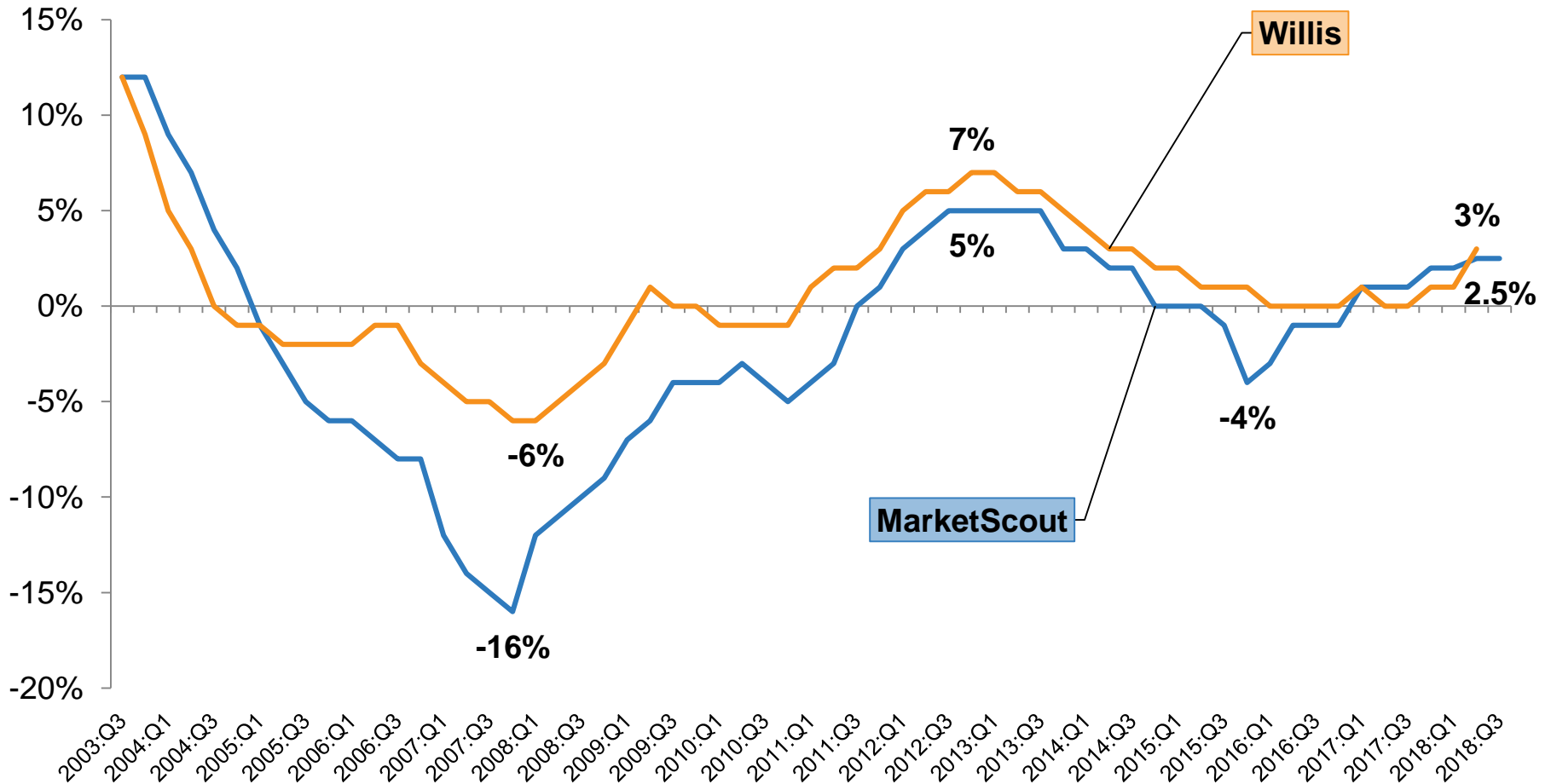


U.S. Cyber



SOURCE: Marsh Insurance Market Index.

Commercial Lines Rate Change

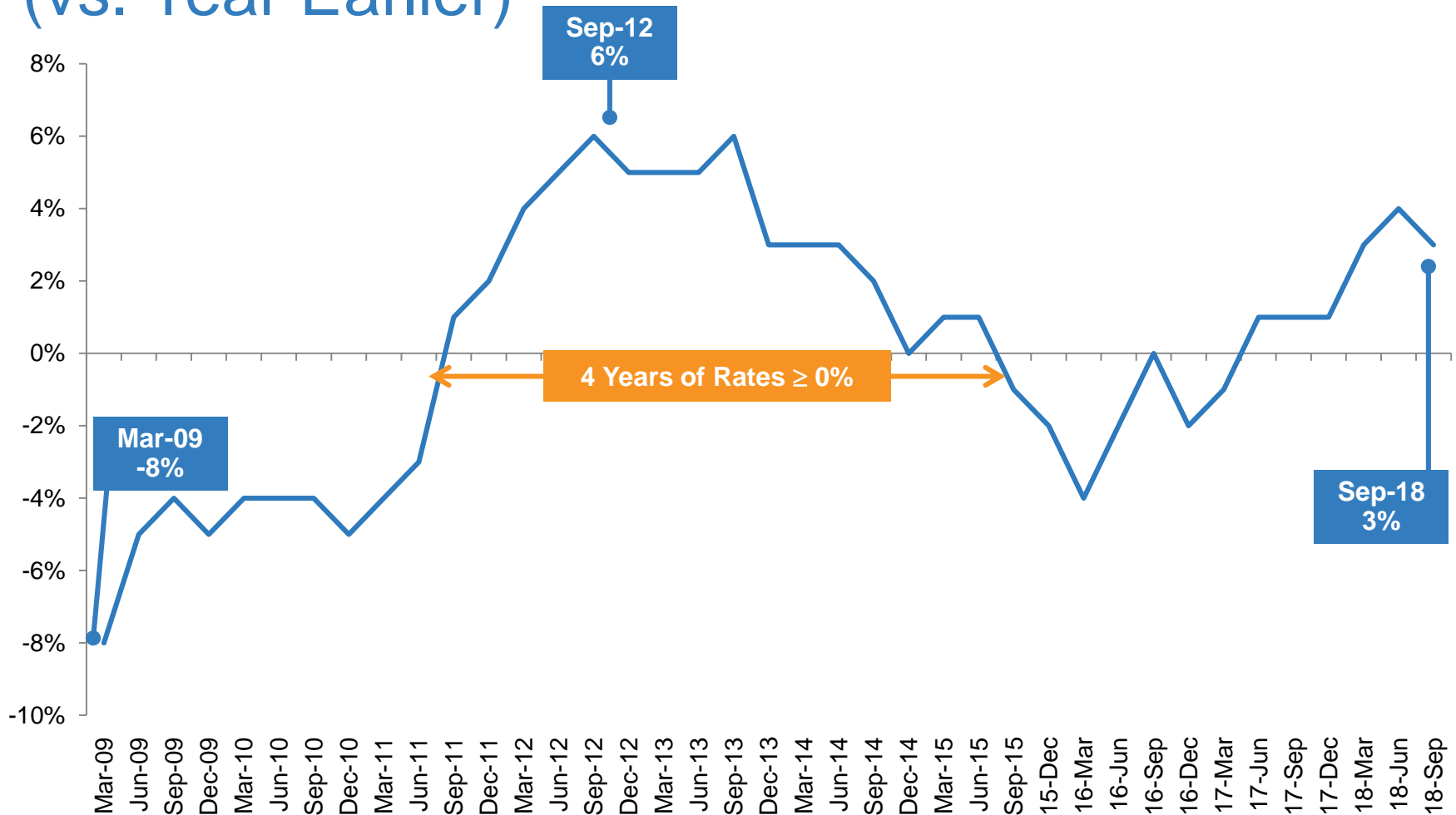


'Material' Increases in Auto, Property, Umbrella; Q2 Increases > Q1 Increases



Sources: Willis Towers Watson, MarketScout.

Commercial Property Rate Change (vs. Year Earlier)

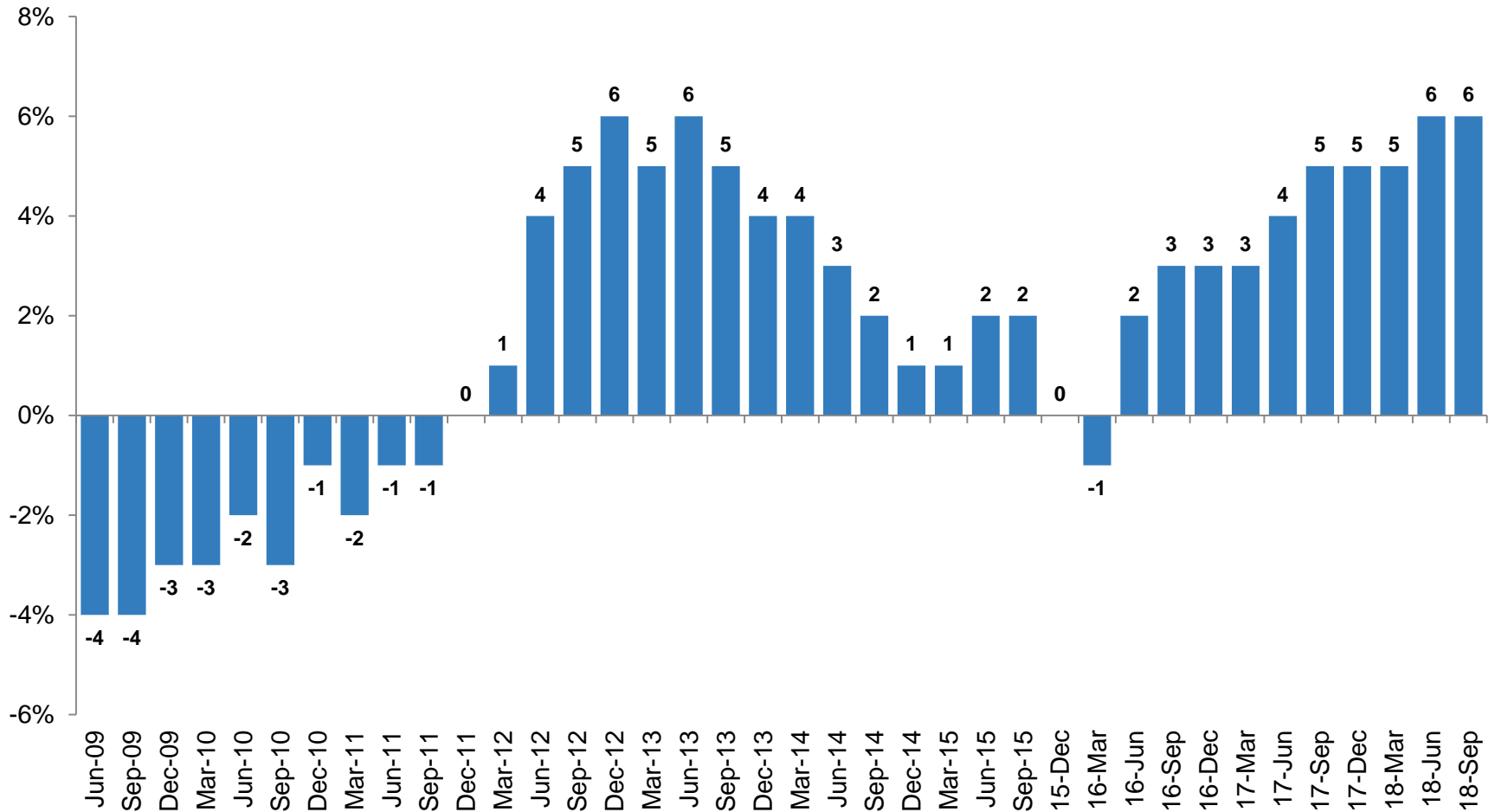


Property Rates Closely Following Loss Experience, Especially in Catastrophe Prone Areas.



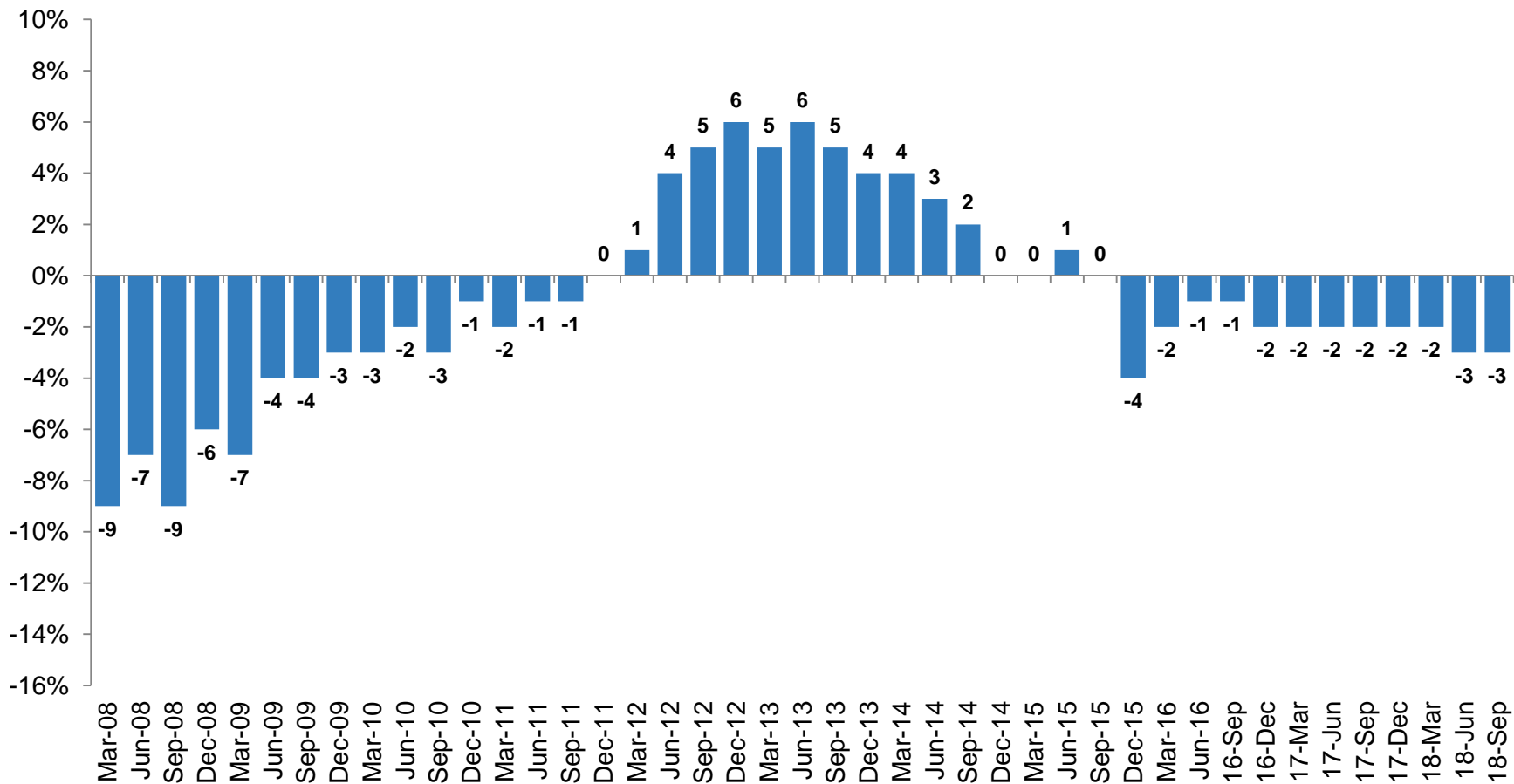
Sources: MarketScout, Insurance Information Institute..

Commercial Auto Rate Change (vs. Year Earlier)



Sources: MarketScout, Insurance Information Institute.

Workers Comp Rate Change (vs. Year Earlier)



Stellar Results Have Created a Soft Market.



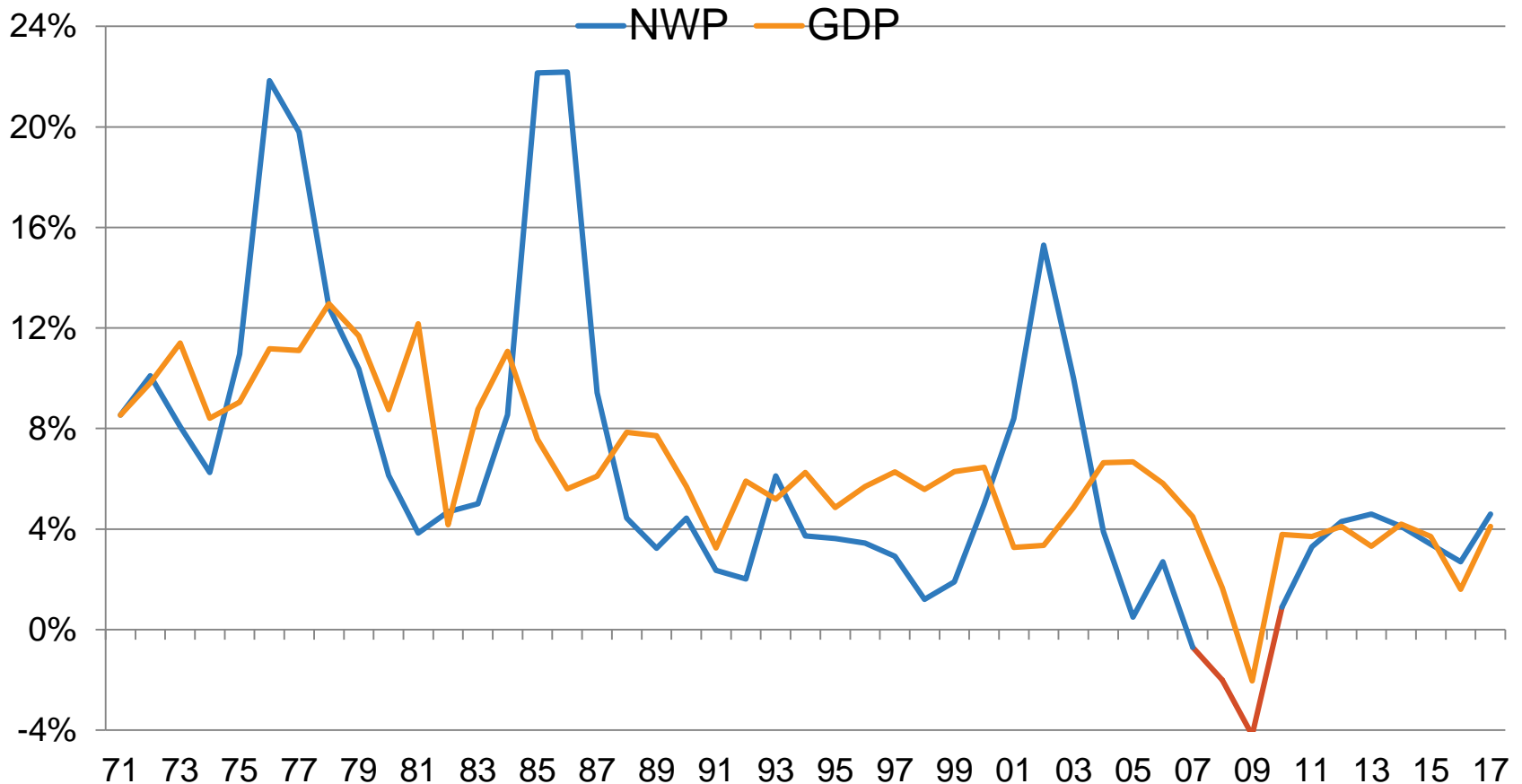
Sources: MarketScout, Insurance Information Institute.

Economic Outlook

The Strength of the Economy
Will Influence the Insurance Environment

The Economy Drives P/C Insurance Industry Premiums:

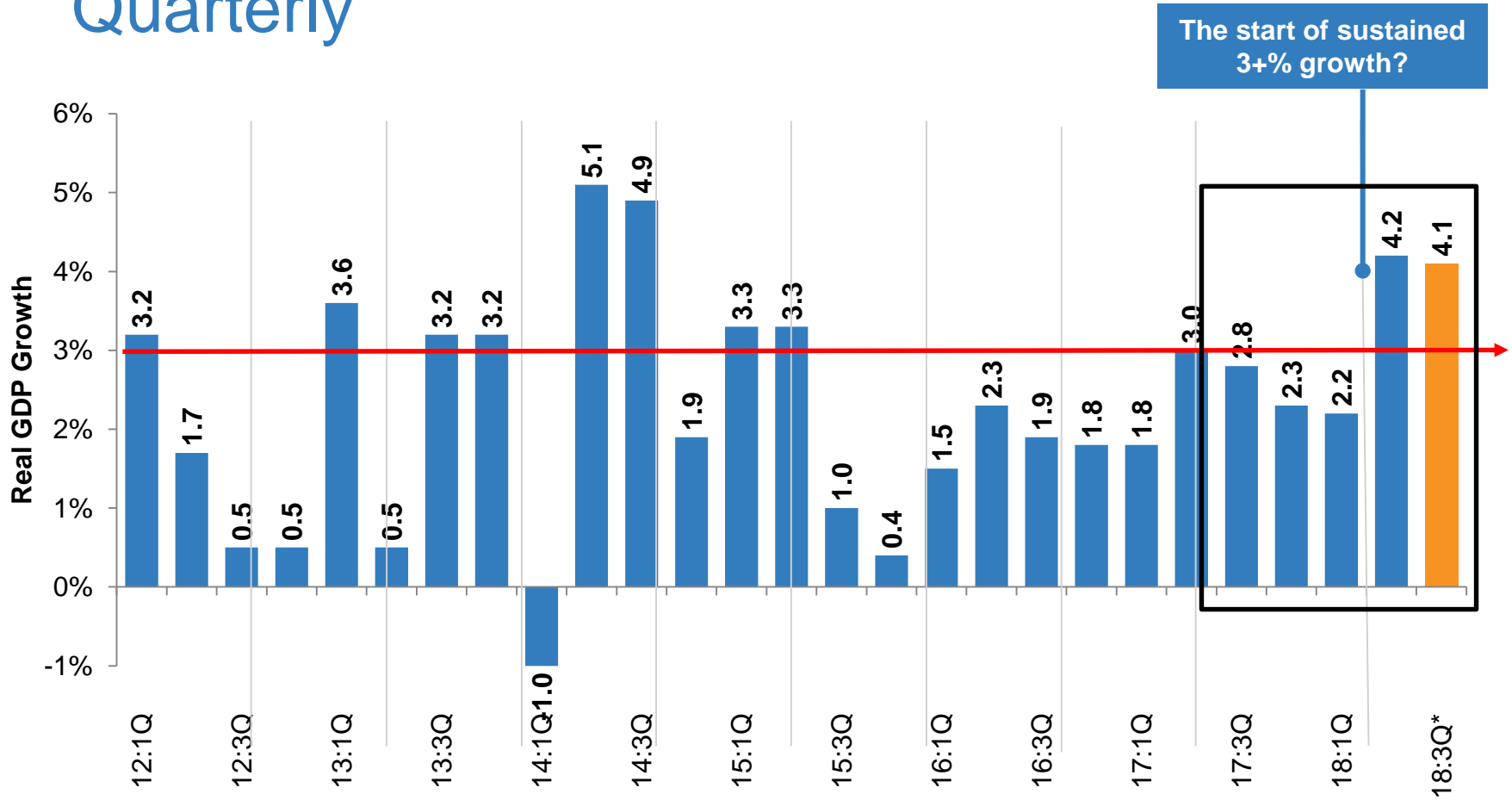
Net Premium Growth (All P/C Lines) vs. Nominal GDP: Annual Change, 1971-2017



Except for the three “hard markets” in this 47-year period, Net Written Premiums track Nominal GDP—not year by year but fairly well.



U.S. Post-Recession Real GDP Growth,** Quarterly



Since the start of 2012, the economy (as measured by real GDP) grew 3% or faster (at an annual rate) in a calendar quarter only 10 times in 22 quarters. But twice in the last 5.

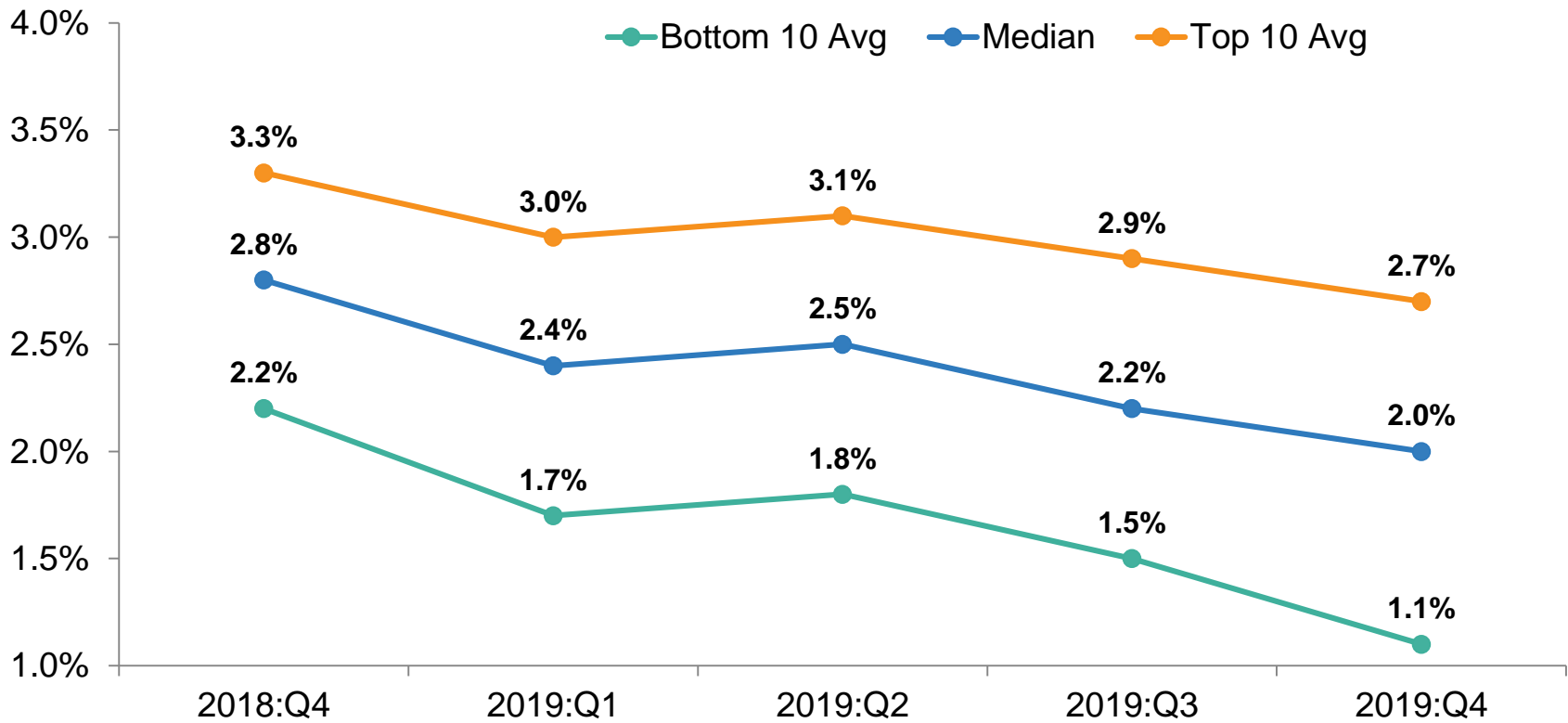


*GDPnow estimate

**Percent change from previous quarter, seasonally-adjusted at an annual rate

Sources: U.S. Department of Commerce; Insurance Information Institute.

Quarterly U.S. Real GDP Growth: Range of Forecasts



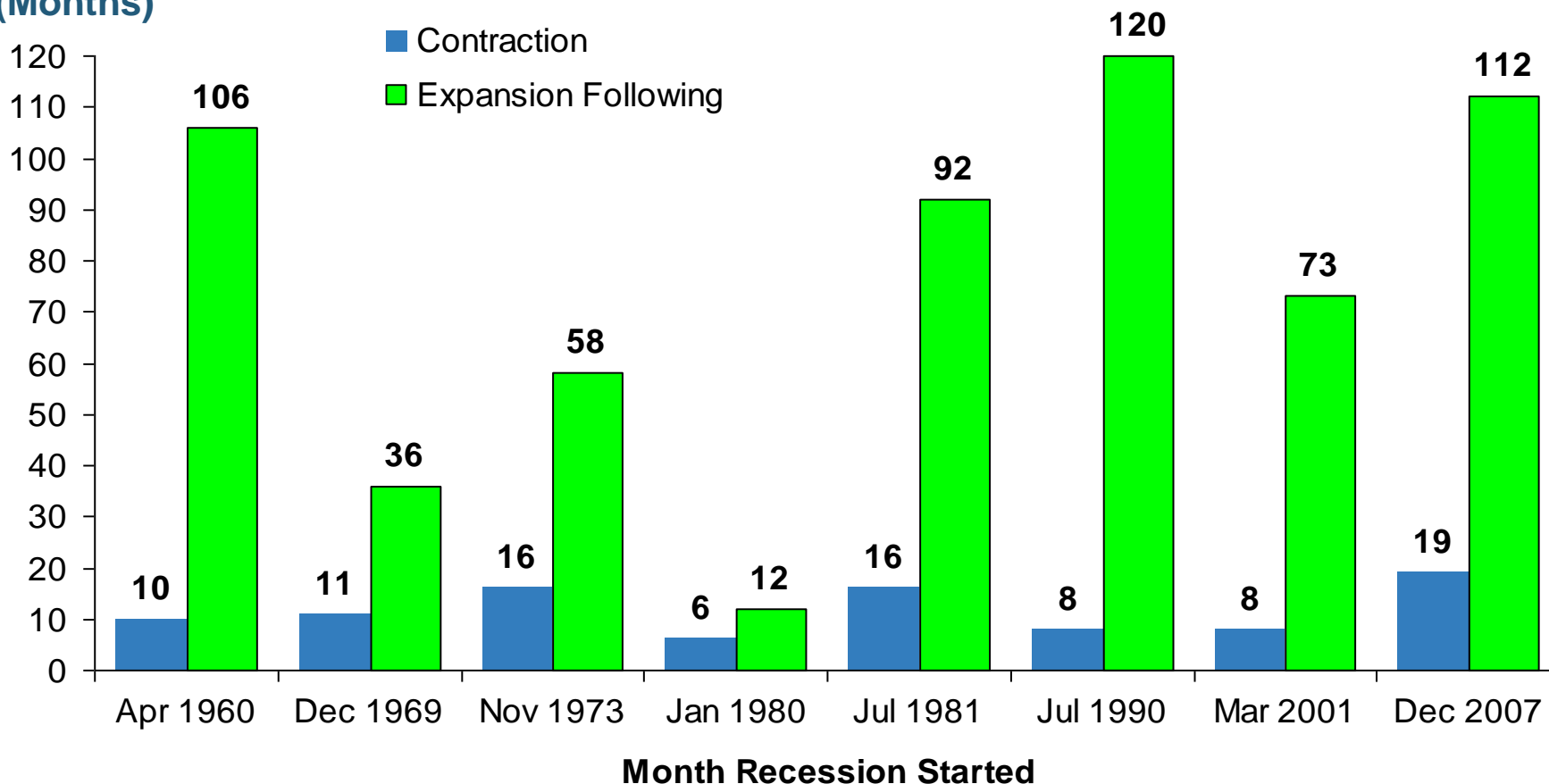
Tough times ahead? With interest rates rising, most forecasts expect U.S. growth to slow by 2020; some foresee a sharp slowdown.



Length of US Business Cycles, 1960–Present*

Duration
(Months)

■ Contraction
■ Expansion Following



The length of the expansions greatly exceeds the length of contractions (recessions).

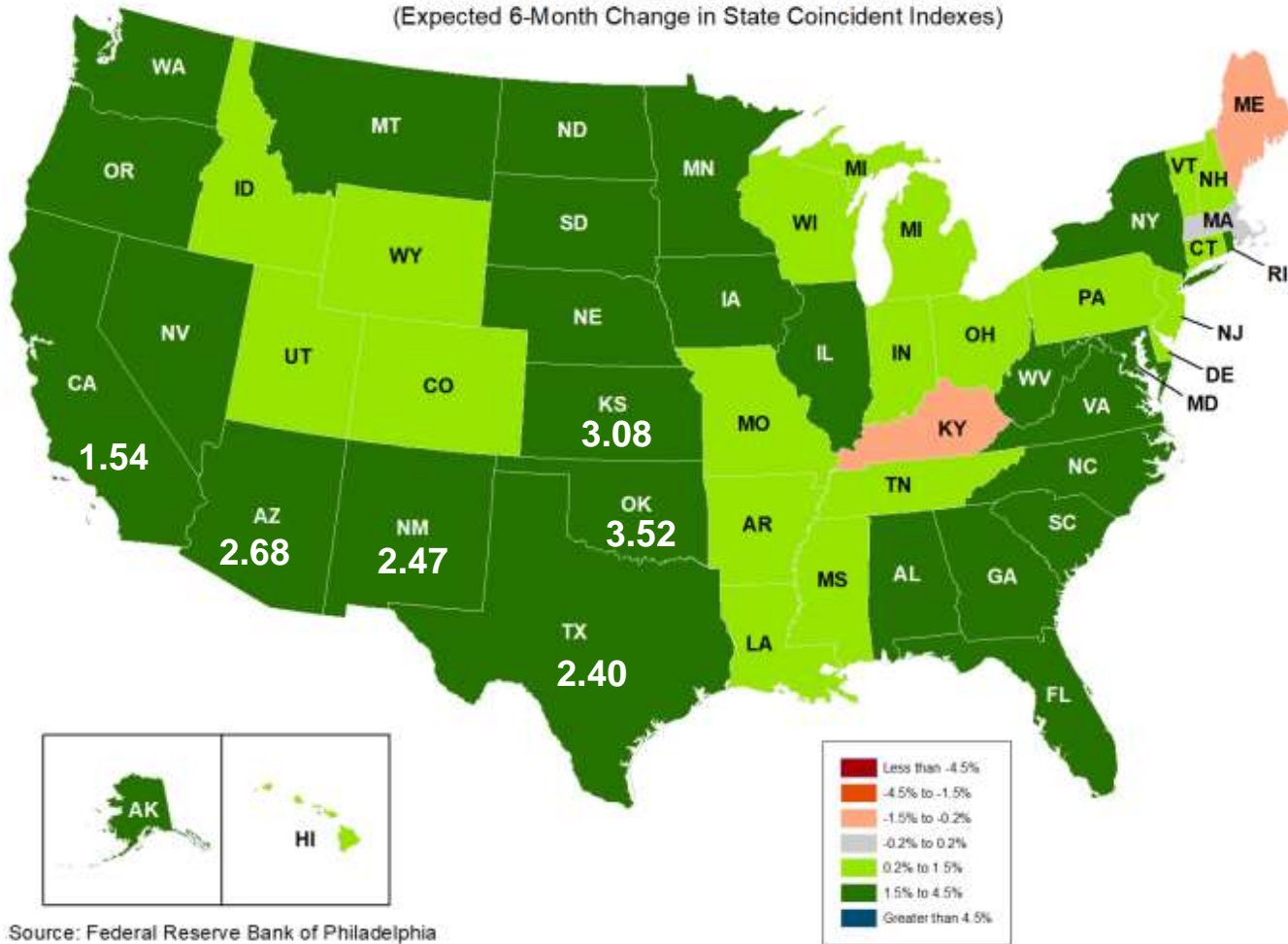


*Through October 2018; June 2009 was the “official” end of recession.

Sources: National Bureau of Economic Research; Insurance Information Institute.

State-by-State Leading Indicators through February 2019

August 2018 State Leading Indexes
(Expected 6-Month Change in State Coincident Indexes)



Near-term growth forecasts vary widely by state. Strongest growth = dark green (1.5%-4.5%); then light green; then gray; weakest = beige (-1.5% to -4.5%)

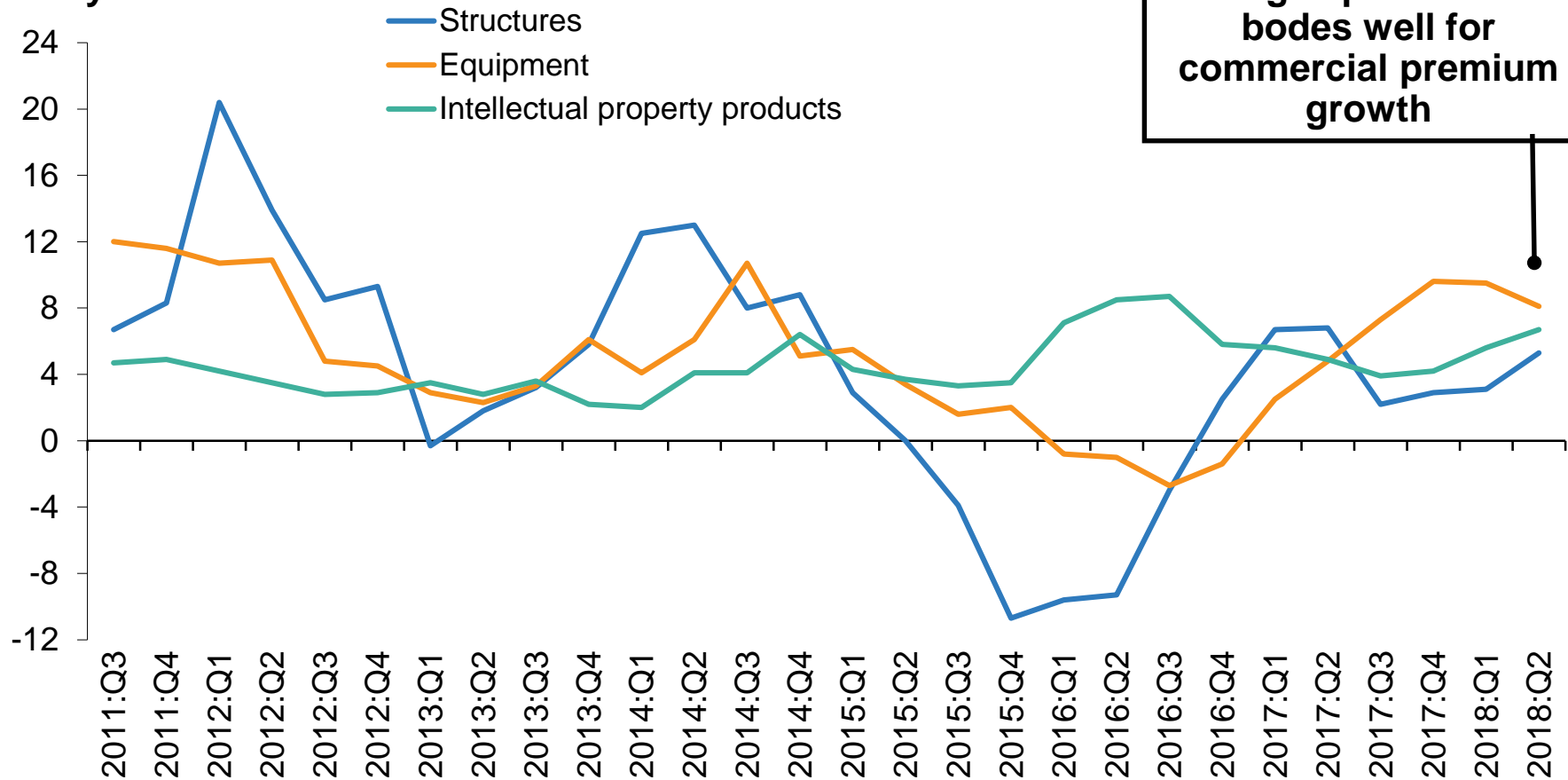
Source: Federal Reserve Bank of Philadelphia



Sources: Federal Reserve Bank of Philadelphia at www.philadelphiafed.org/index.cfm , released October 4, 2018; Next release is November 5, 2018; Insurance Information Institute.

Growth of Nonresidential Fixed Investment: Implications for Commercial Insurance

Percent Change
from same quarter,
prior year

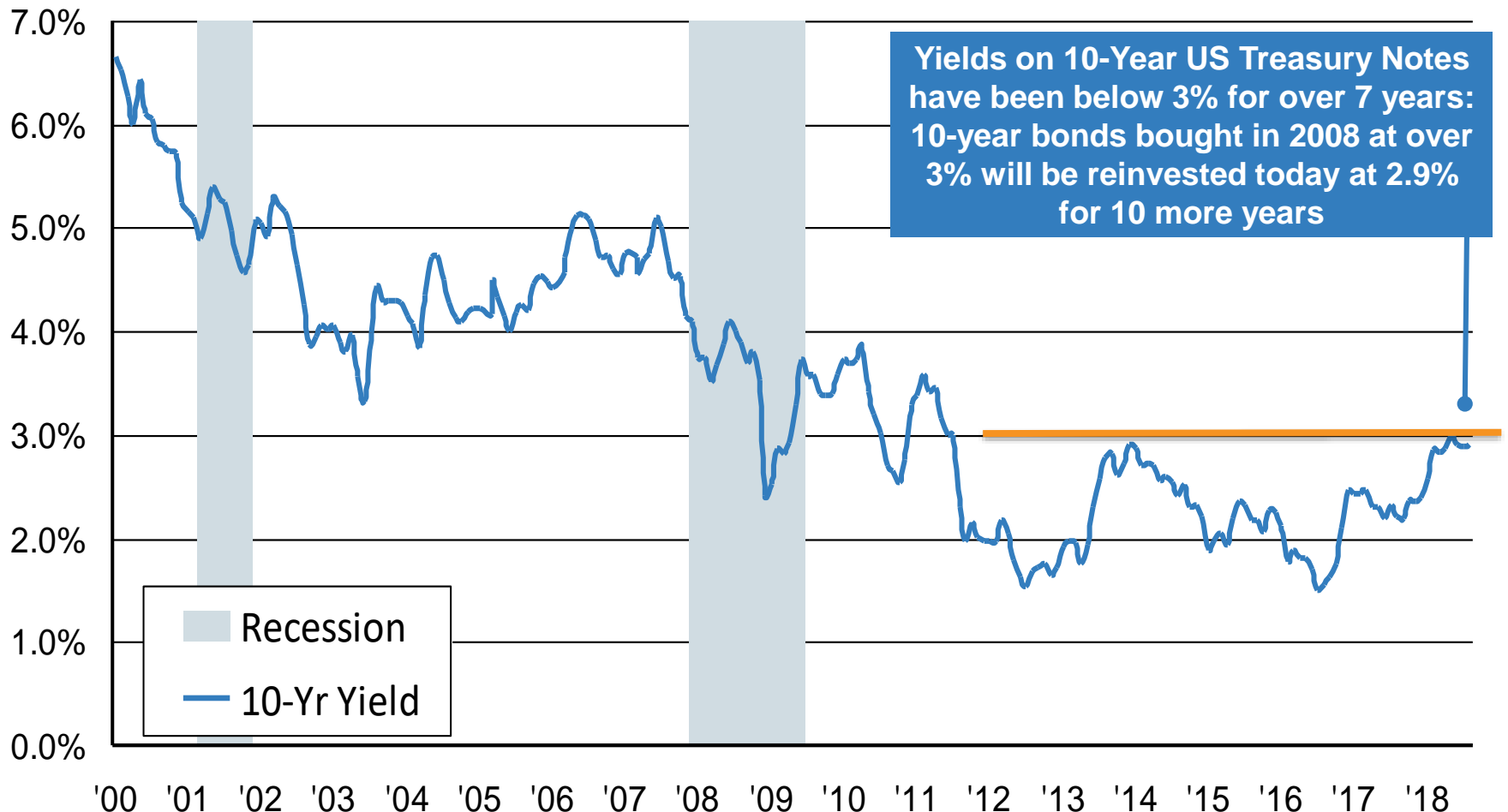


**Rising exposure base
bodes well for
commercial premium
growth**



Sources: bea.gov, news release "Gross Domestic Product: Second Quarter 2018 (Second Estimate), Table 6; Insurance Information Institute.

US Treasury Note 10-Year Yields*: Is the long downward trend over?



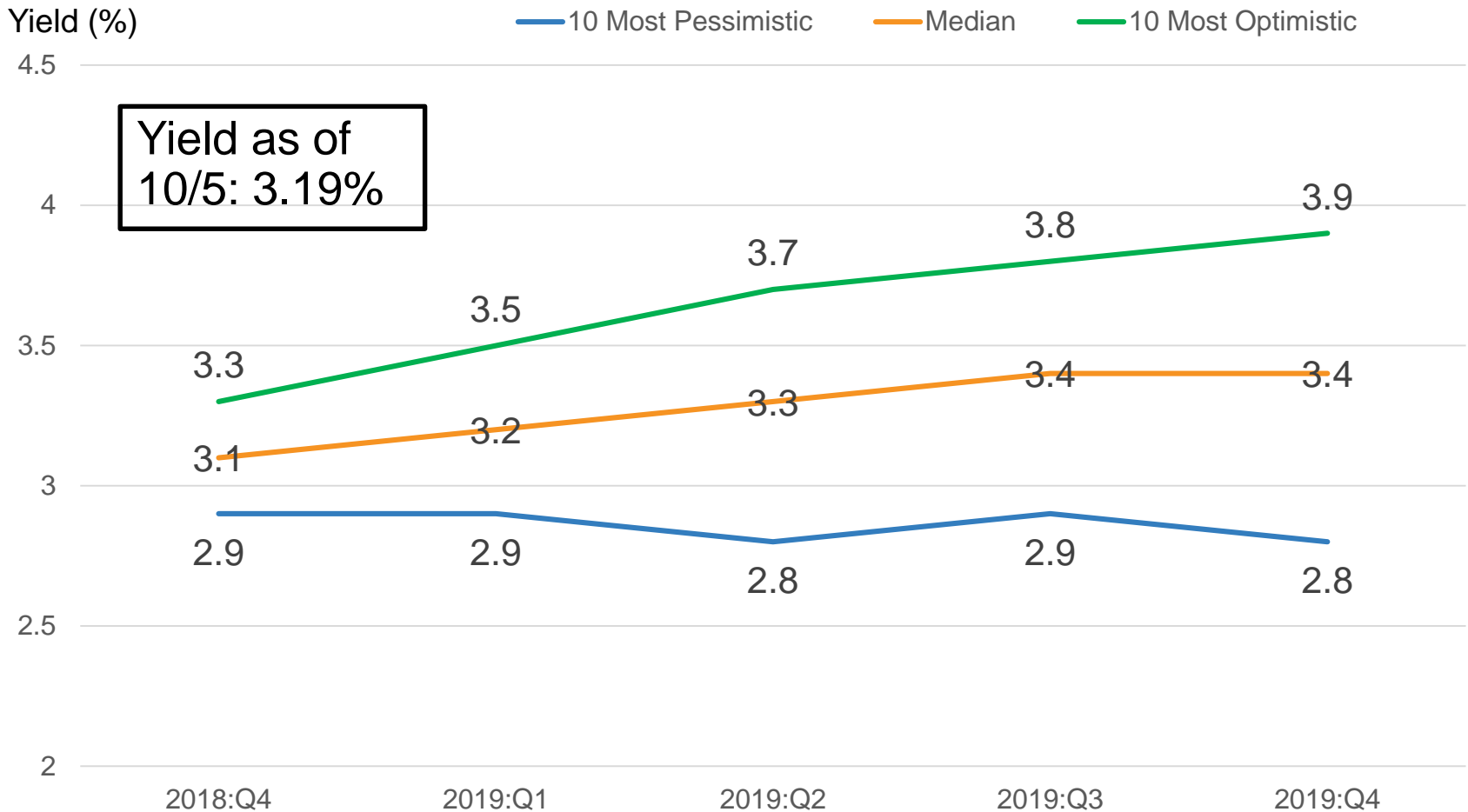
Since nearly 50% of P/C bond/cash investments are in 5-year or longer maturities, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through August 2018.



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

September 2018: Quarterly Yield Forecasts for 10-Year US Treasury Bonds in 2018-19



Many of the 53 forecasts in the Blue Chip survey expect continual increases in the yield of 10-year T-bonds in 2018-19.

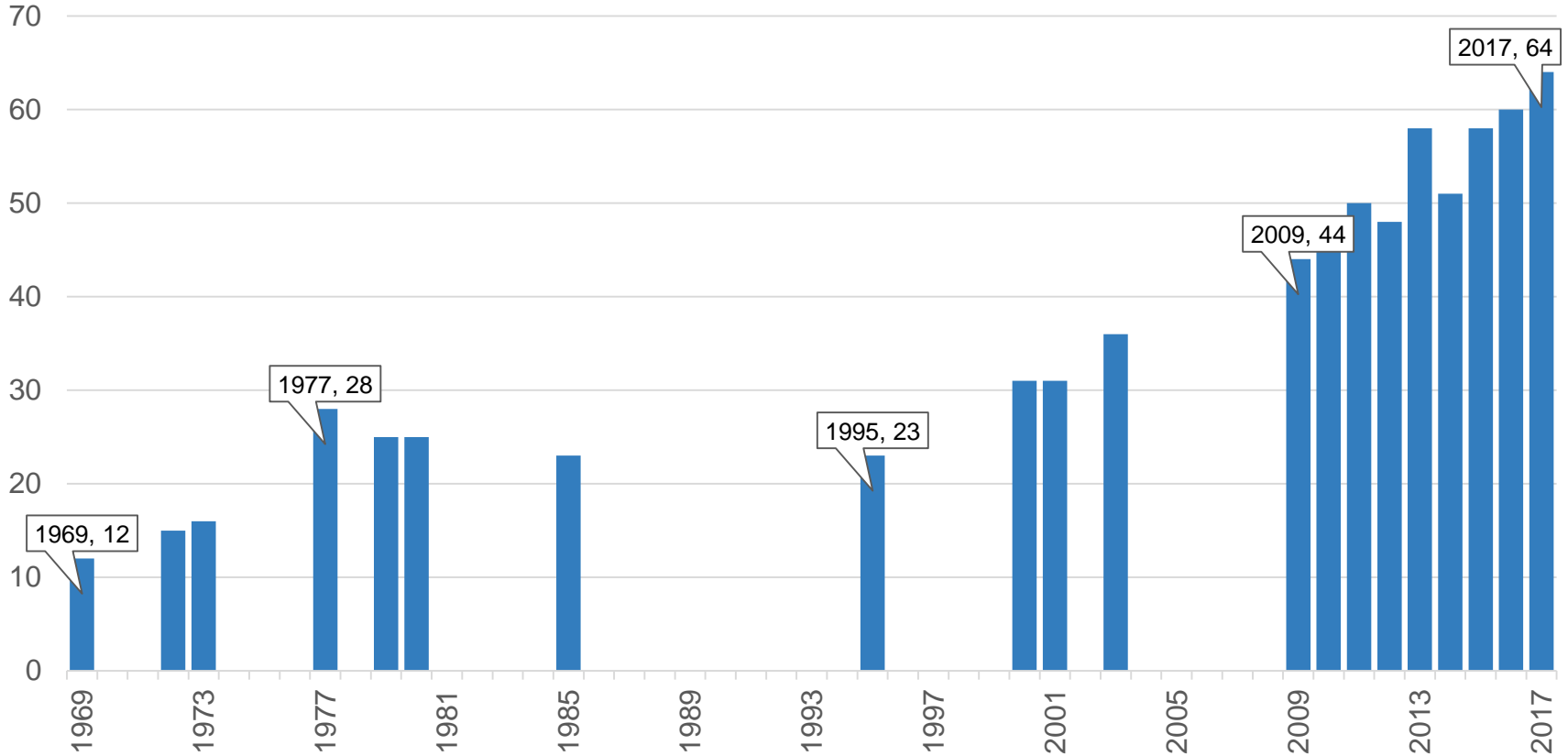


Cannabis and Insurance

A Sensitive Issue

Support for Legalization Grows

% Saying Yes



“Do You Think the Use of Marijuana Should Be Made Legal, Or Not?”



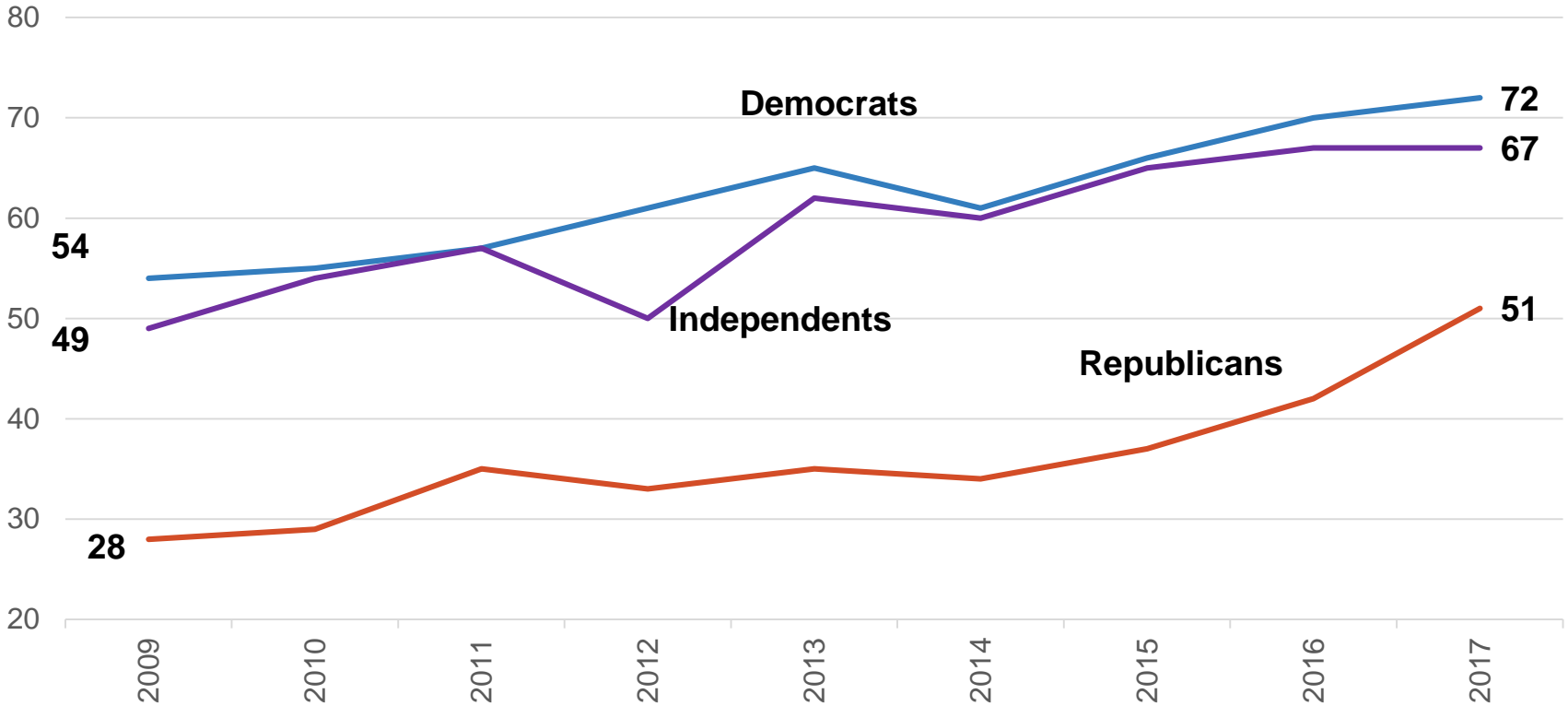
No survey in years where no data appears.

SOURCES: Gallup Poll Social Series, <http://news.gallup.com/file/poll/221027/171025Marijuana.pdf>.

Support for Legalization Grows

% Saying Yes

— Democrats — Independents — Republicans



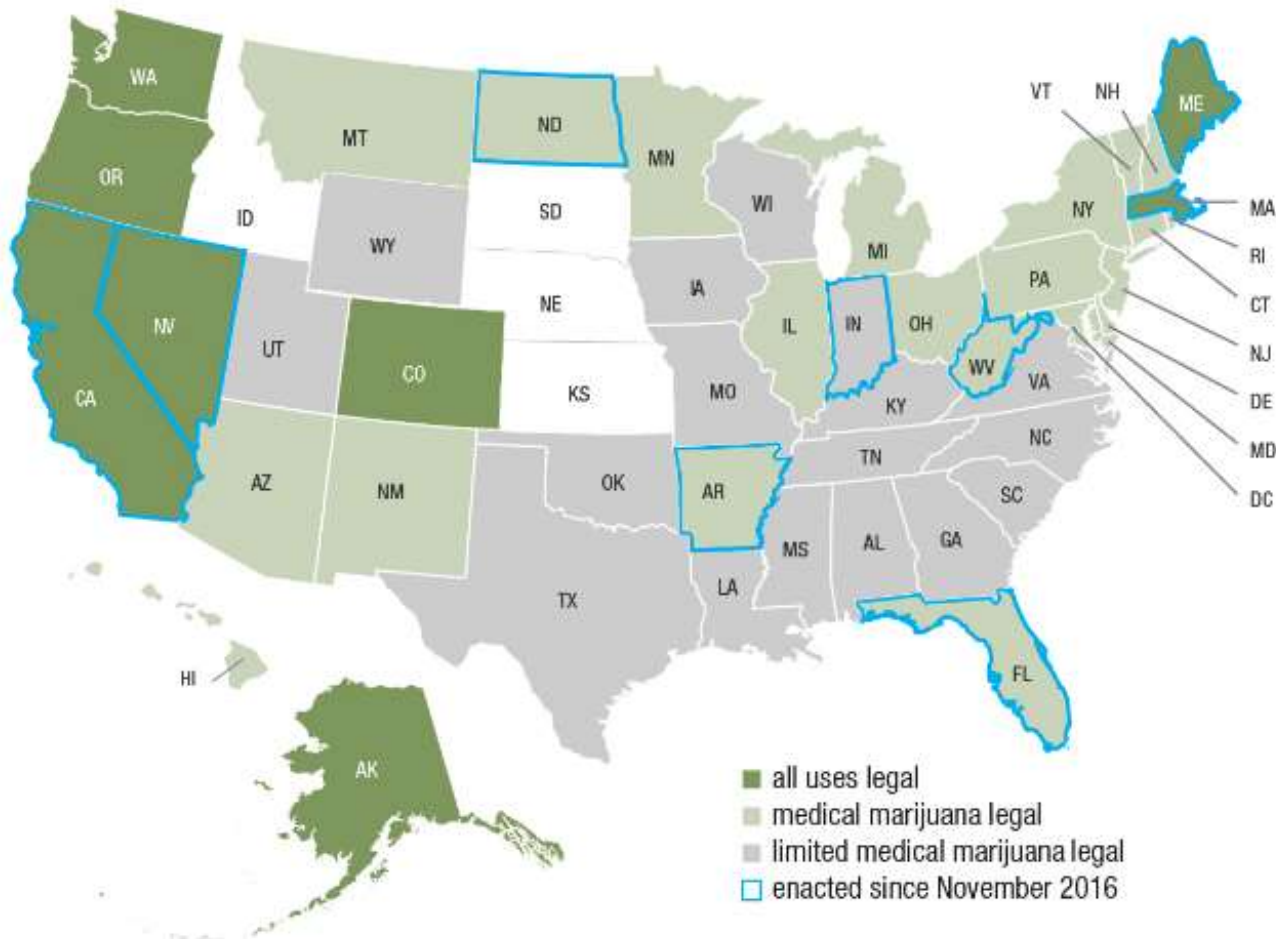
“Do You Think the Use of Marijuana Should Be Made Legal, Or Not?”



SOURCES: Gallup Poll Social Series, <http://news.gallup.com/poll/221018/record-high-support-legalizing-marijuana.aspx>

Cannabis in the USA

Legalization is Accelerating



Congressional Cannabis Caucus



Rohrbacher
(CA)



Blumenauer
(OR)



Young
(AK)



Polis
(CO)

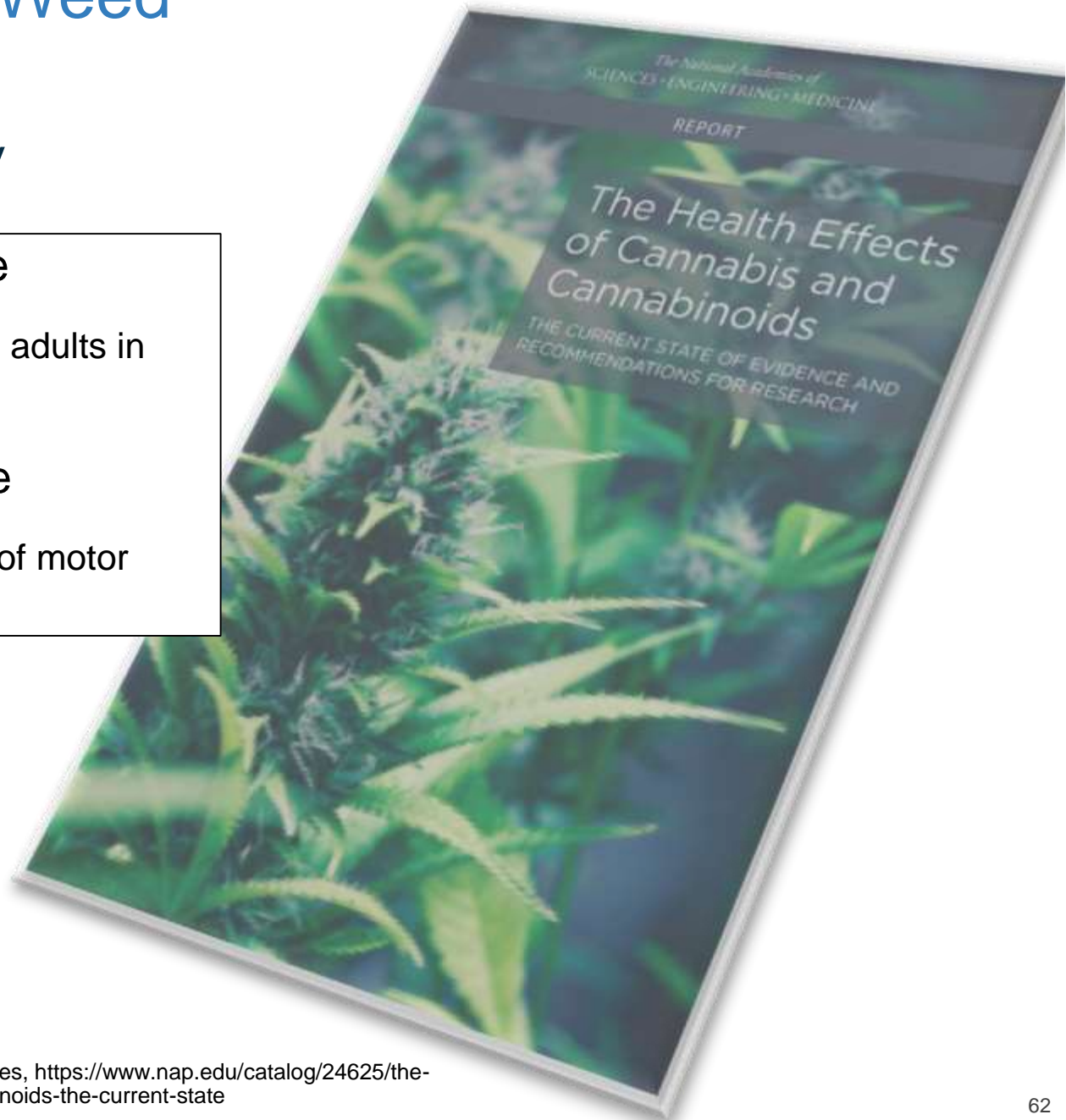


SOURCE: National Journal.

The Science of Weed

What the Experts Say

- ▲ **Conclusive evidence**
 - ▲ Improves the lot of adults in chronic pain.
- ▲ **Substantial evidence**
 - ▲ Increases the risk of motor vehicle crashes.



Cannabis as Medicine

Treatments for Occupational-Related Conditions

Work-Related Conditions

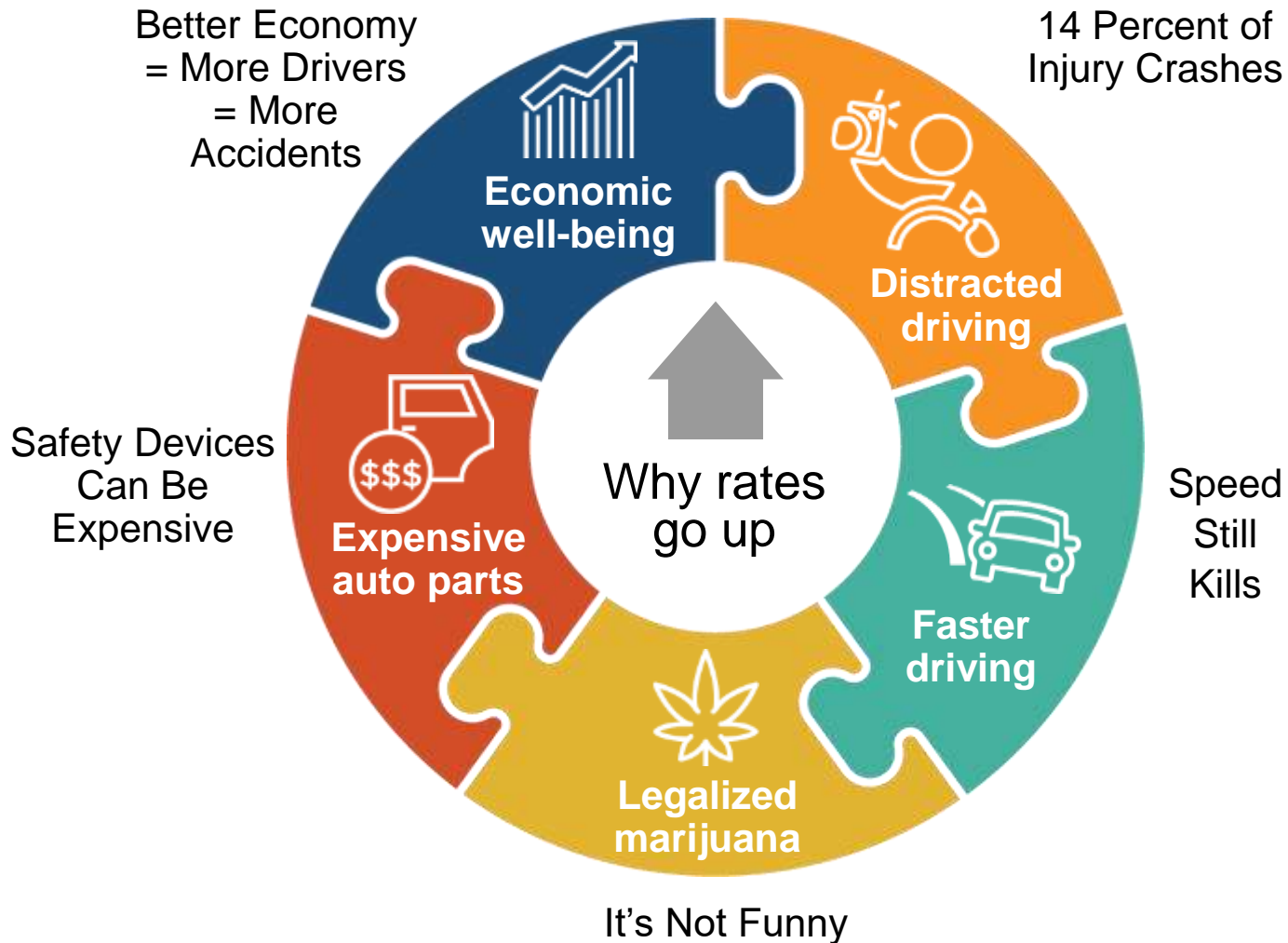
- ▲ Chronic Pain
- ▲ Anxiety and Depression
- ▲ PTSD
- ▲ Traumatic Brain Injury
- ▲ Spasticity Following Spinal Cord Injury

Cannabis vs. Opioids

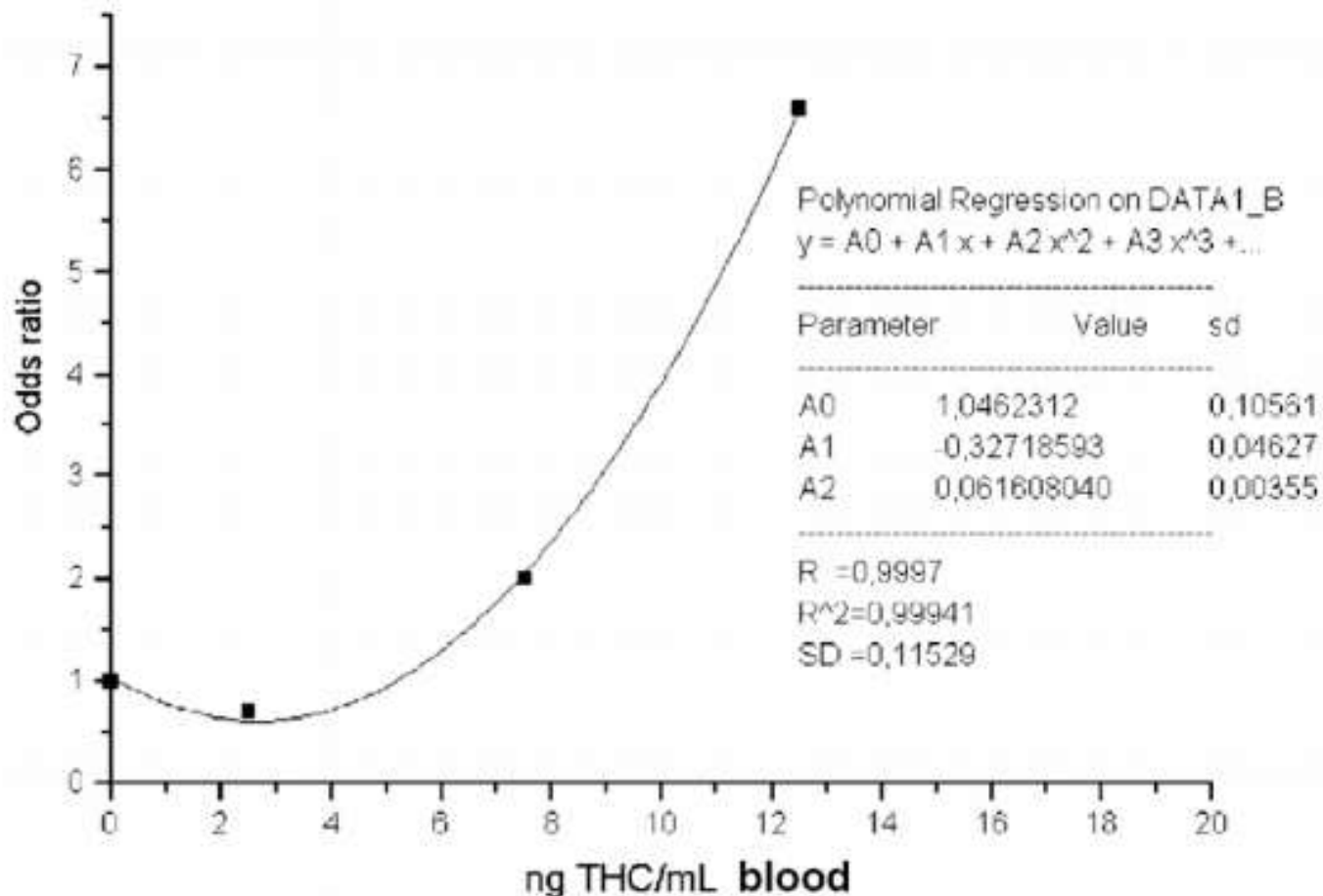
- ▲ ‘Highly suggestive studies’
 - ◆ Death Certificate Study
 - ◆ Dispensaries Study
 - ◆ Medicare/Medicaid Study
 - ◆ Auto Fatality Study
- ▲ Not conclusive – Further Study Needed



Road Safety



Accident Probability



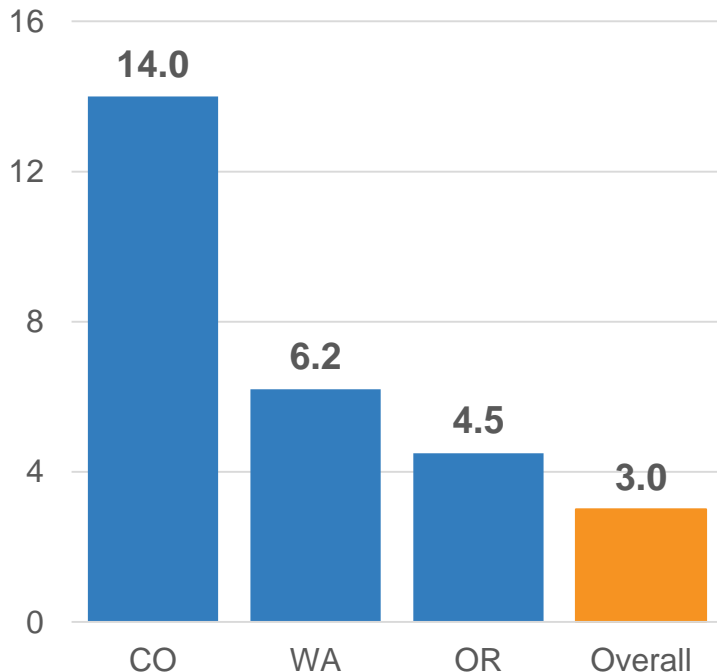
Chance of Accident Rises Sharply As Consumption Rises.



SOURCE: Sewell, Poling, Sofuoglu, "The Effect of Cannabis Compared with Alcohol on Driving," American Journal on Addictions, 2009.

Legal Sales Lead to More Accidents

Percent Change in Collision Frequency,
2012-2016*



* Vs. Neighboring States.

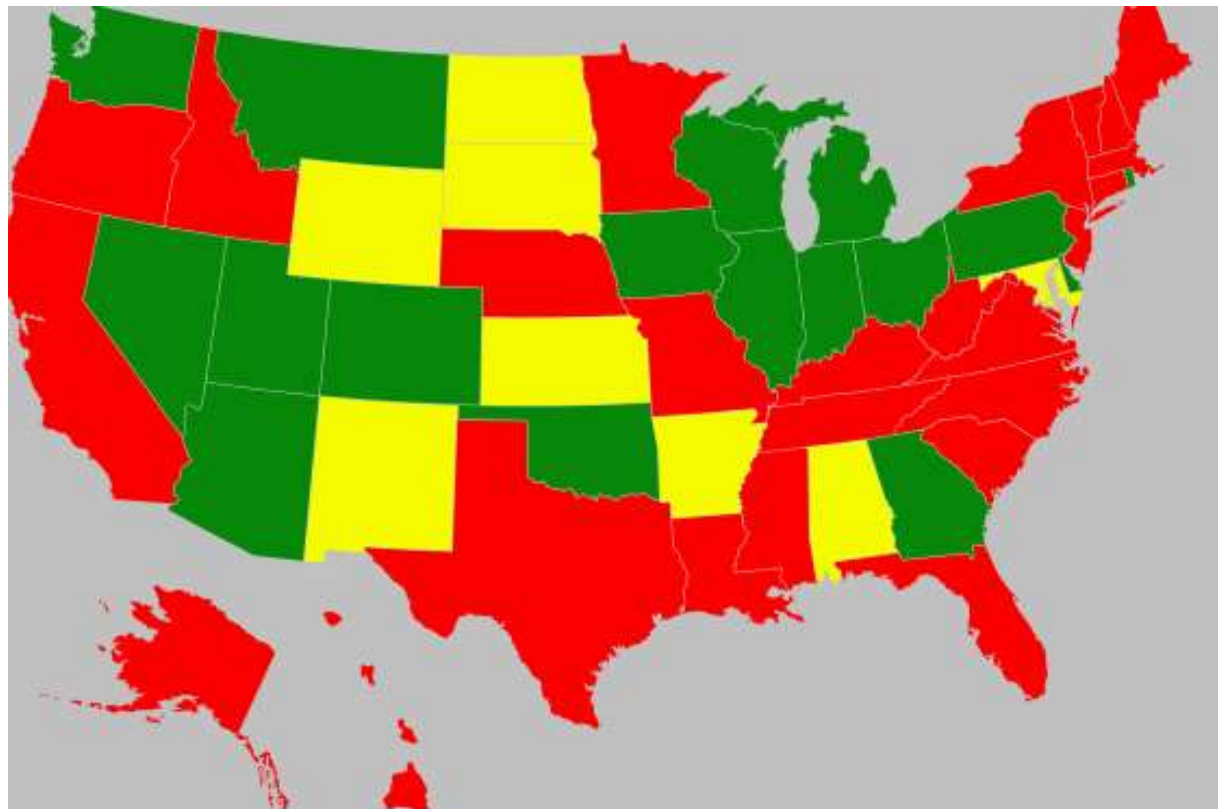
- ▲ Look at 'Real World' Crashes
- ▲ All Measures Statistically Significant
- ▲ 'Overall' Measure a Good Proxy for What Will Happen in Any State
- ▲ Auto Accidents are 6% of WC claims; 12% of Losses



SOURCE: Highway Loss Data Institute.

Driving While High – the Legal Framework

Illegal Everywhere, but What Makes You High?

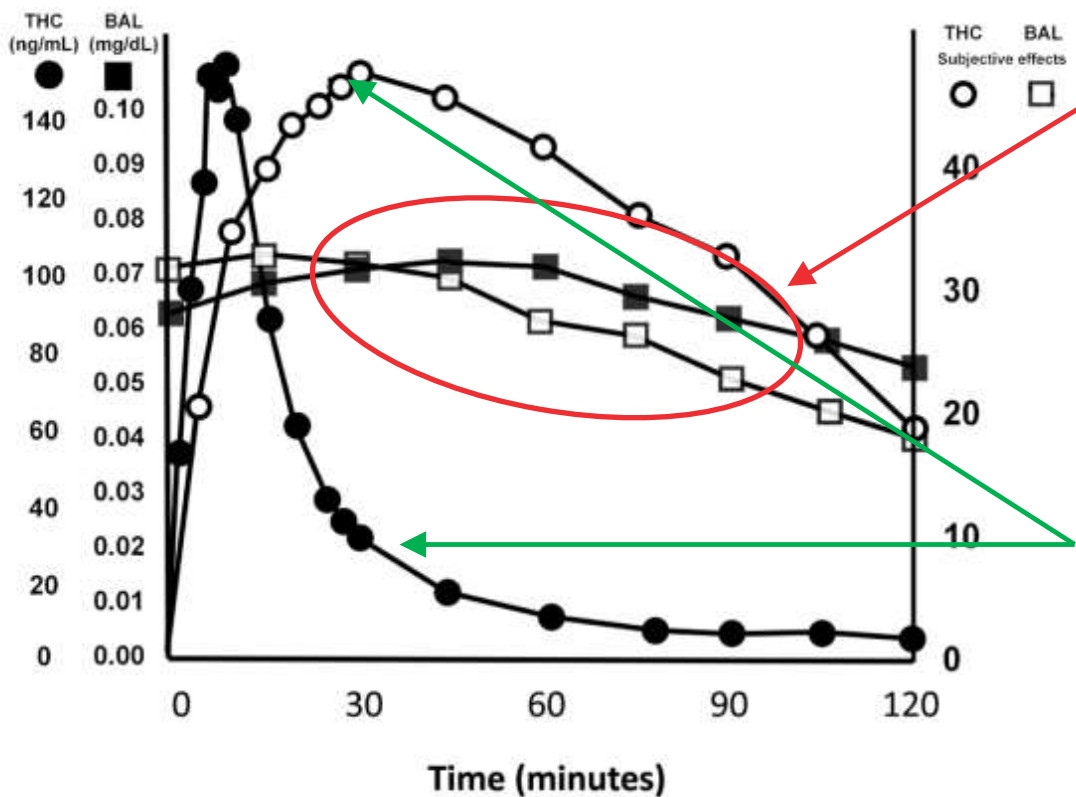


- Under the Influence
- Per Se
- Incapacitated

RI: 'Zero Tolerance (Medical Exception).' Rest of NE: 'Incapable of Driving Safely.'



Blood Levels vs. Intoxication



BAC and 'feeling drunk' rise and fall in lockstep

THC levels in blood and 'feeling high' rise and fall at different rates

It Is Difficult to Use Blood Test to Measure Whether Someone is High.



SOURCE: Sewell, Poling, Sofuoglu, "The Effect of Cannabis Compared with Alcohol on Driving," American Journal on Addictions, 2009.

State of the Debate

Lots of Questions

Insurers Are Asking

- ▲ Will Schedule I Status Change?
- ▲ Is Medical Marijuana Covered?

Employers Are Asking

- ▲ Does WC Cover a High Worker?
- ▲ Is Drug-Free Workplace Affected?

Regulators Are Asking

- ▲ How Can Reimbursement Be Handled?
- ▲ Can Worker Rights, Employer Needs Be Balanced?

Legislators Are Asking

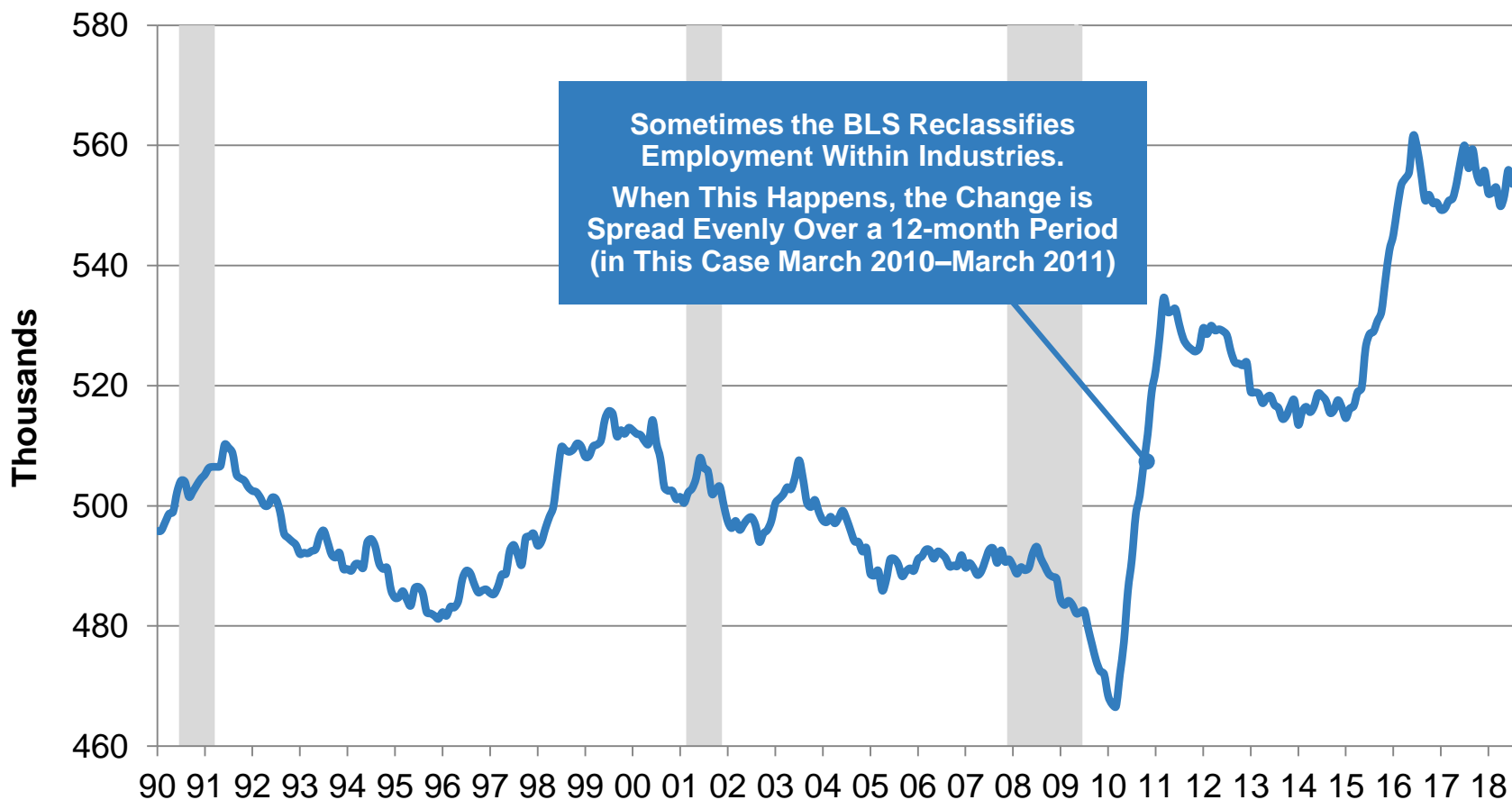
- ▲ What Are the Key Issues in the Debate?
- ▲ If We Legalize, What Will Feds Do?



Employment Trends in Insurance

We're Doing More With No More People

U.S. Employment in the Direct P/C Insurance Industry: 1990–2018*



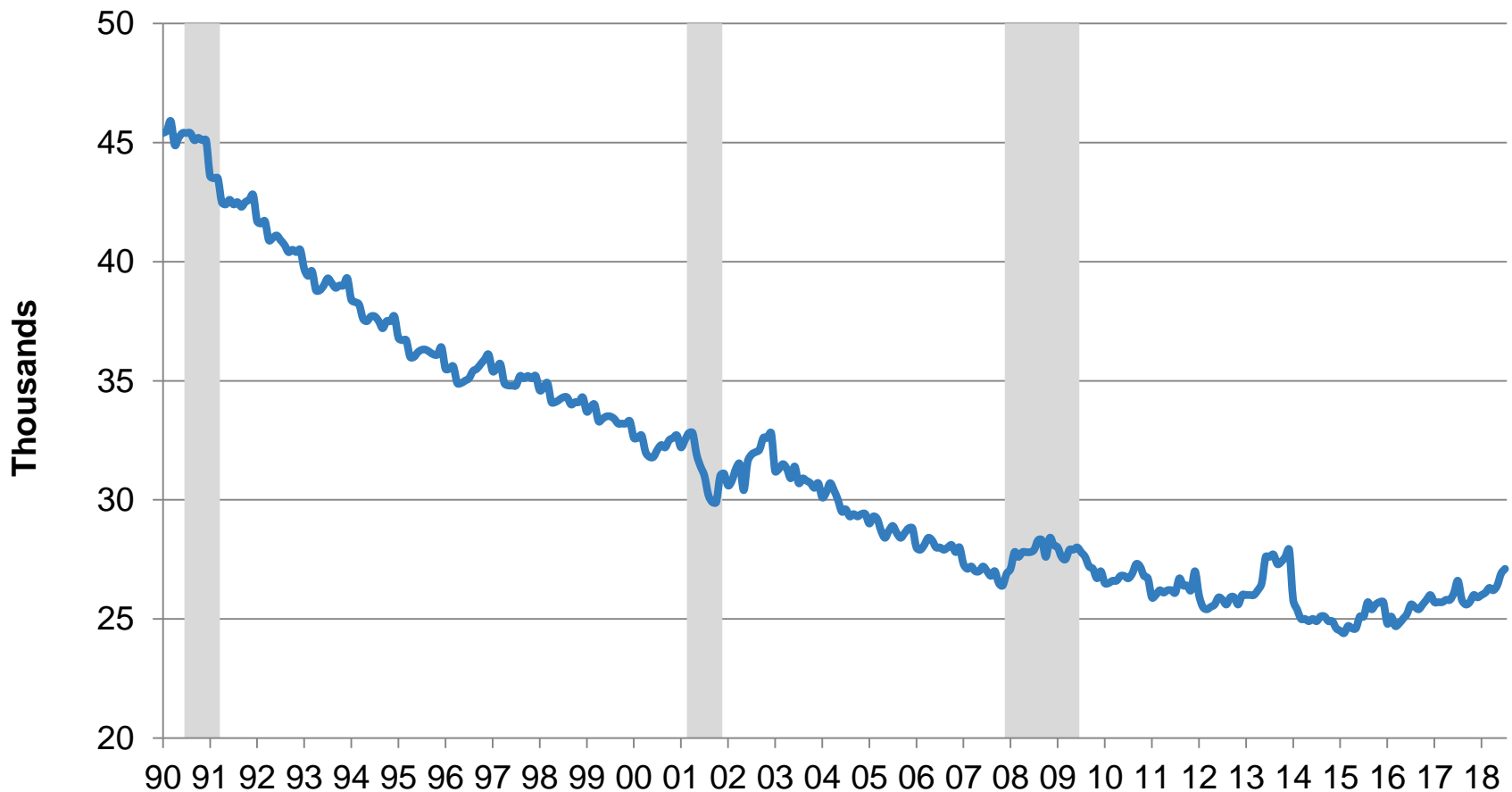
*As of July 2018; not seasonally adjusted; Does not include agents & brokers.

Note: Recessions indicated by gray shaded columns.

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



U.S. Employment in the Reinsurance Industry: 1990–2018*



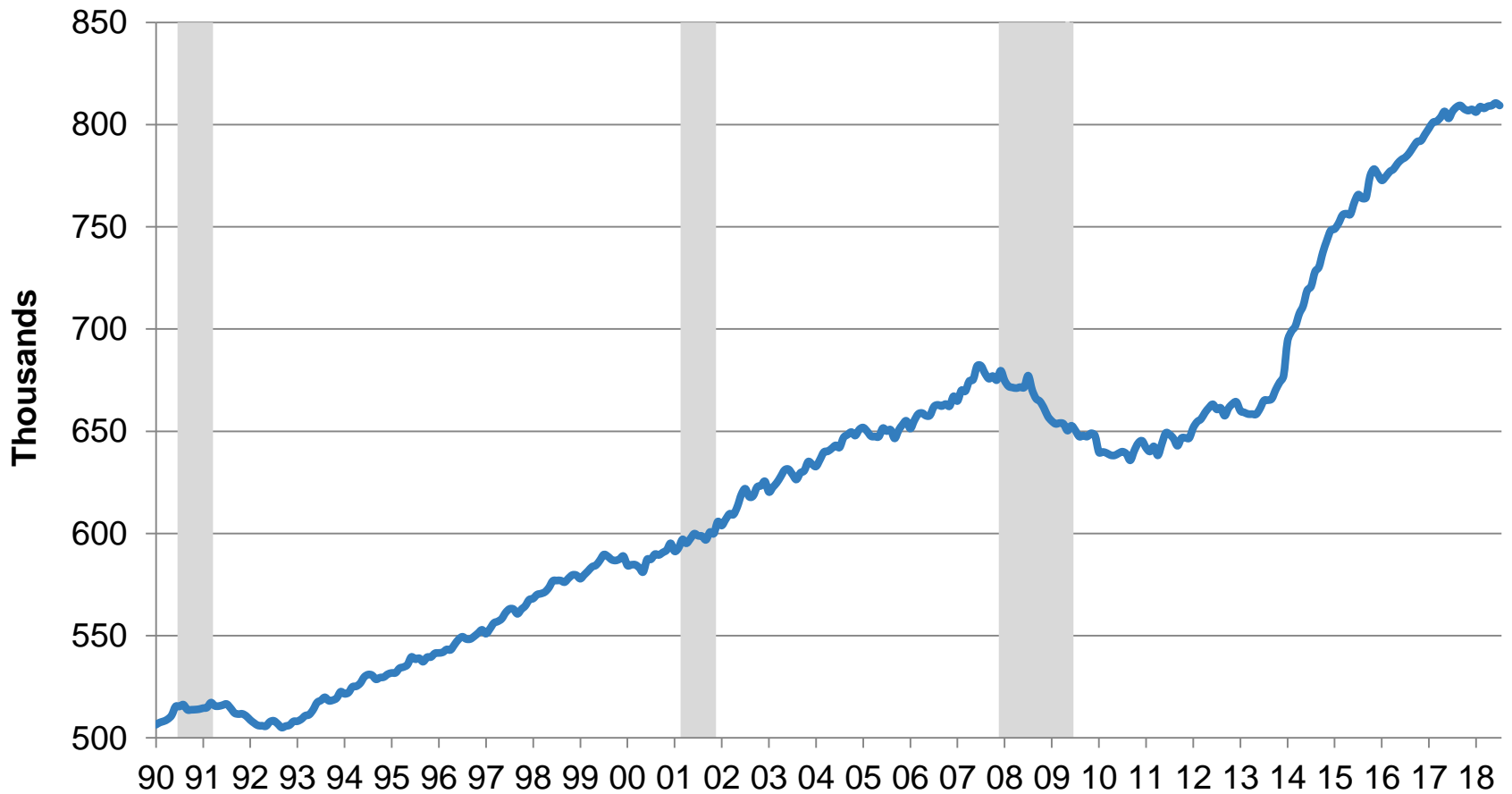
*As of July 2018; not seasonally adjusted; Does not include agents & brokers.

Note: Recessions indicated by gray shaded columns.

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



U.S. Employment in Insurance Agencies & Brokerages: 1990–2018*



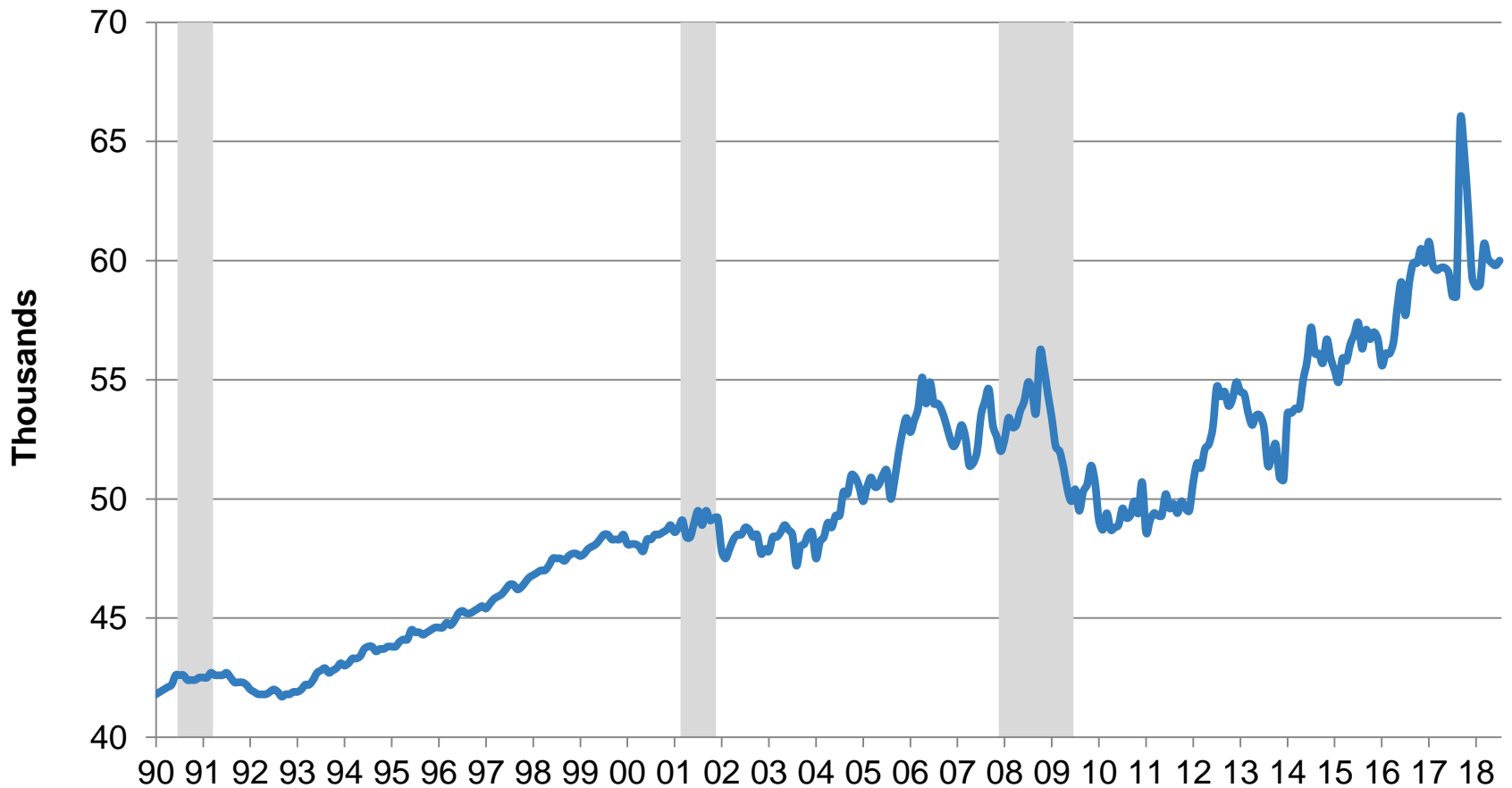
*As of July 2018; not seasonally adjusted. Includes all types of insurance.

Note: Recessions indicated by gray shaded columns.

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



U.S. Employment in Independent Claims Adjusting: 1990–2018*



*As of July 2018; not seasonally adjusted.

Note: Recessions indicated by gray shaded columns.

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



Questions?



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