Overview & Outlook for the Personal Lines P/C Insurance Industry

Trends, Challenges and Opportunities

J.D. Power Insurance Advisory Board
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Darla Moore School of Business

P/C Insurance Industry Financial Overview

CATS, Non-CAT Underwriting Losses Impacted Insurer Balance Sheets

Industry Remains Strong

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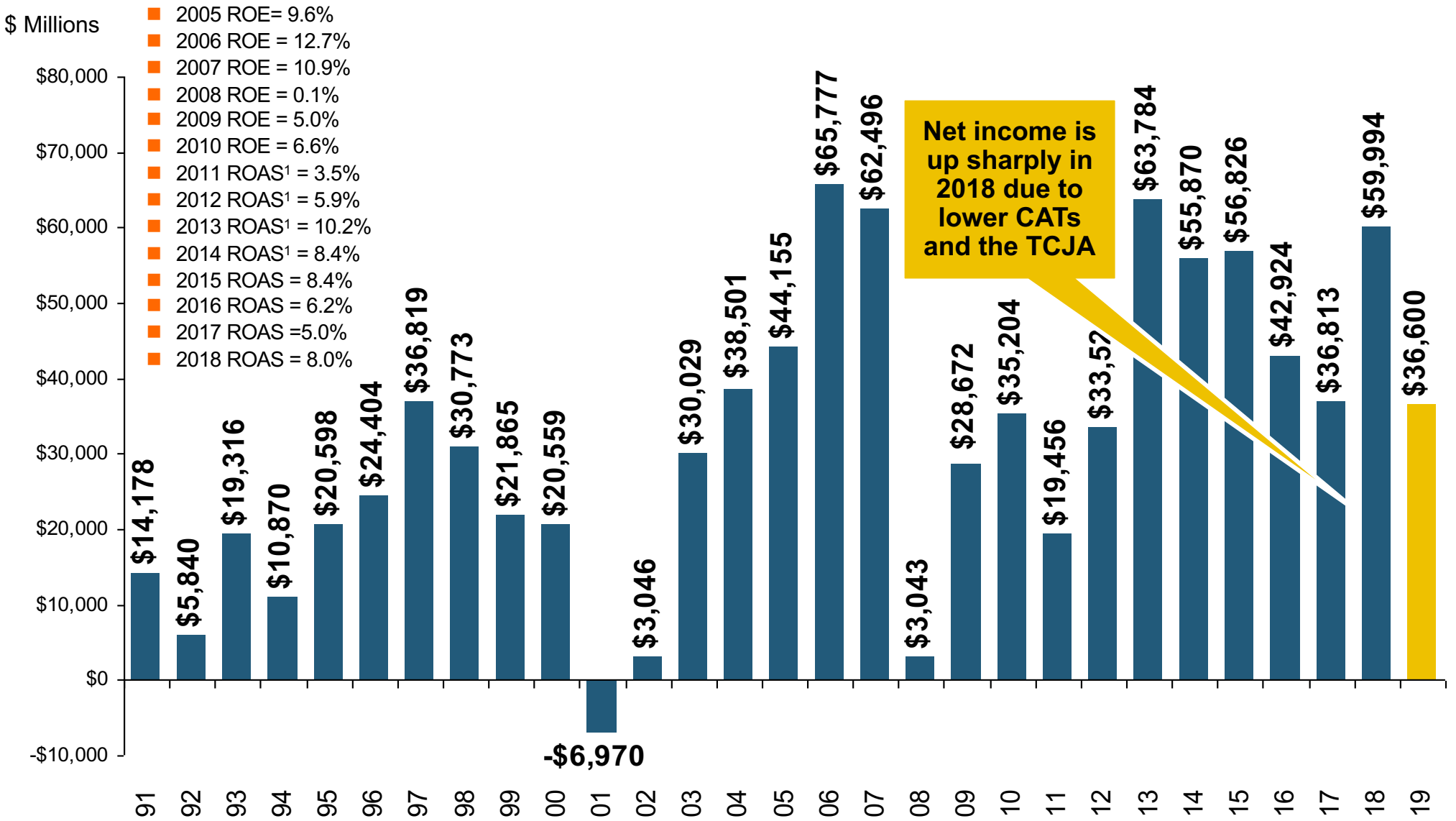
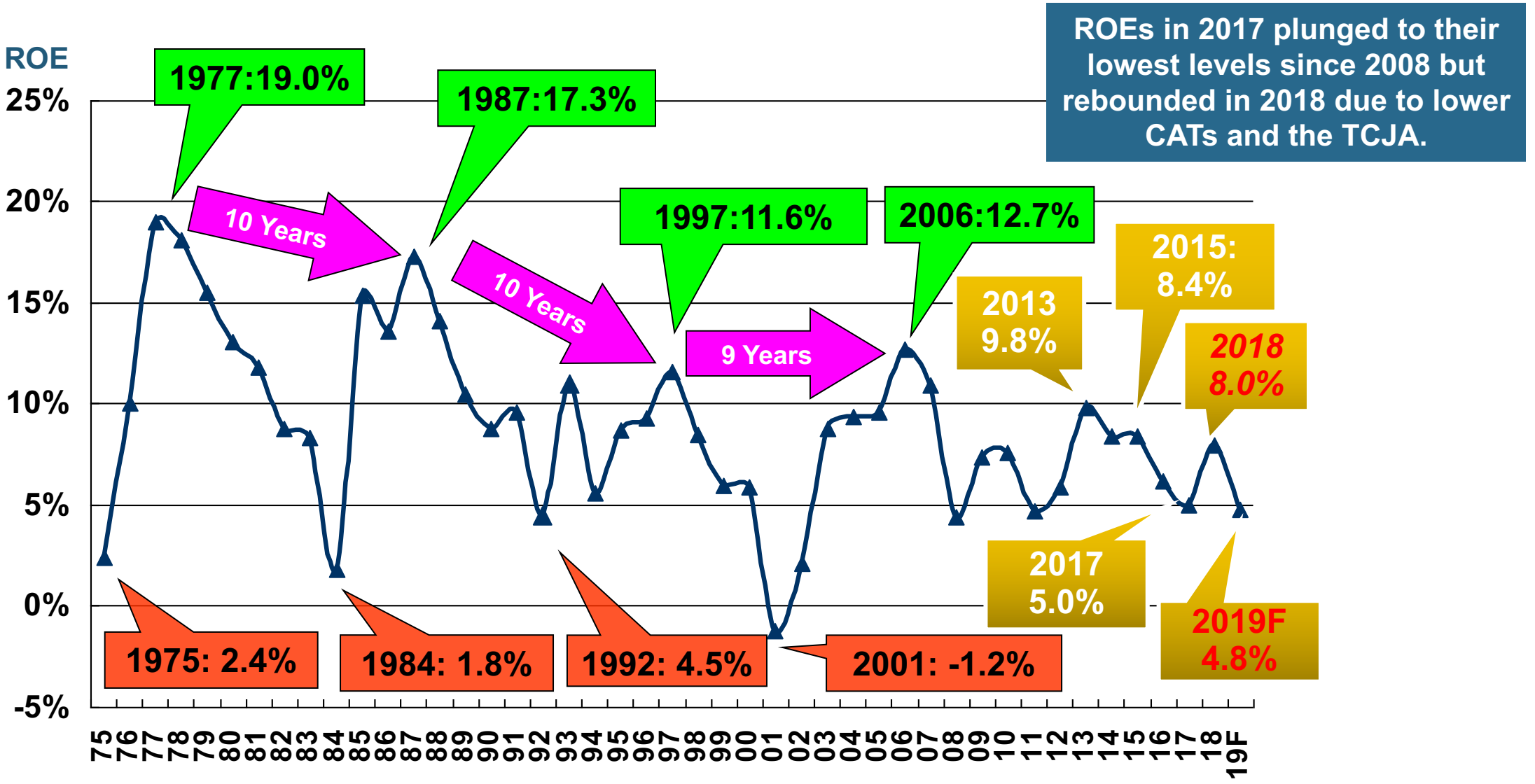
P/C Industry Net Income After Taxes, 1991–2019F



•ROE figures are GAAP; [1]Return 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;

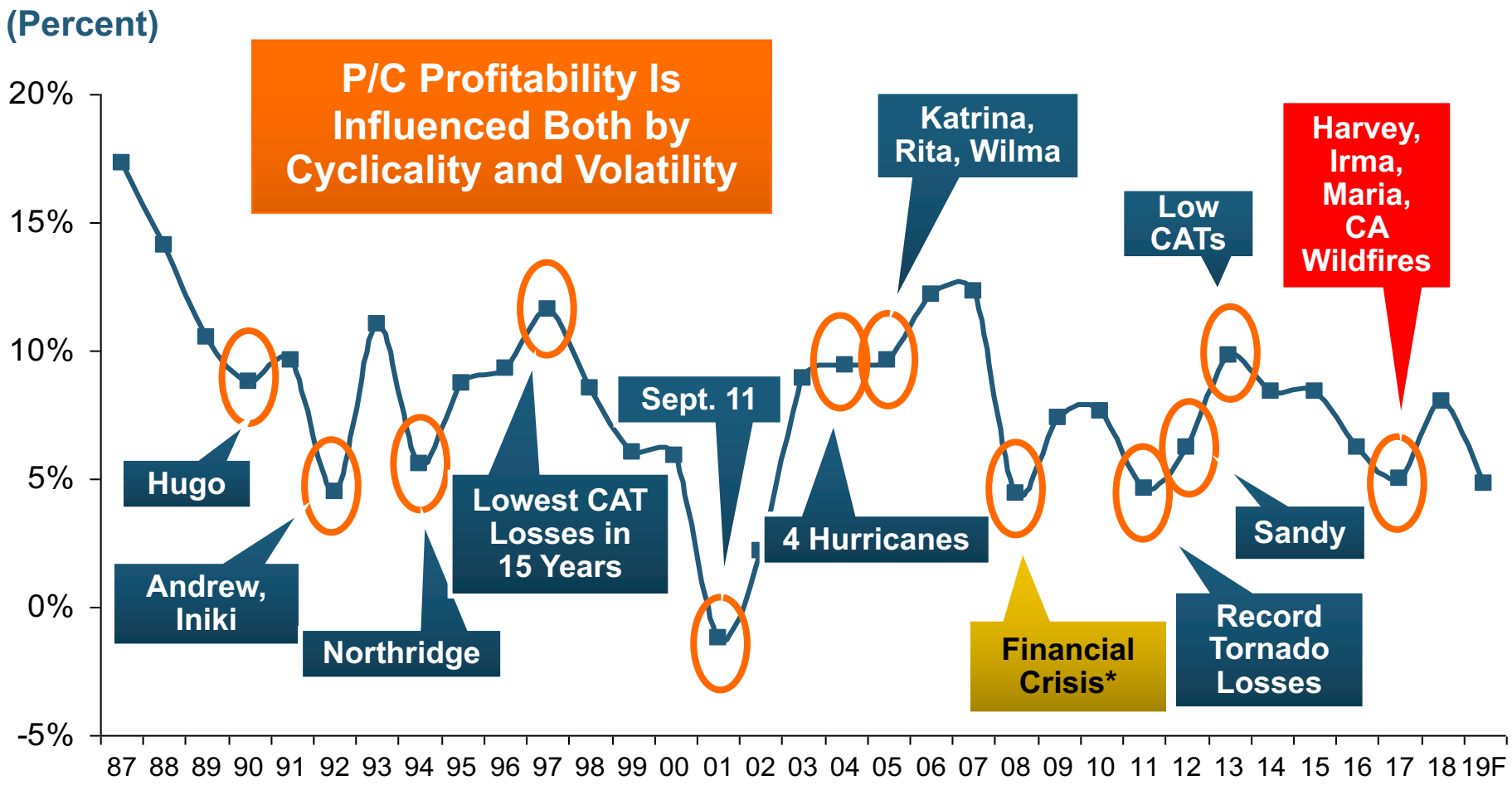
Sources: A.M. Best, ISO.

Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2019F



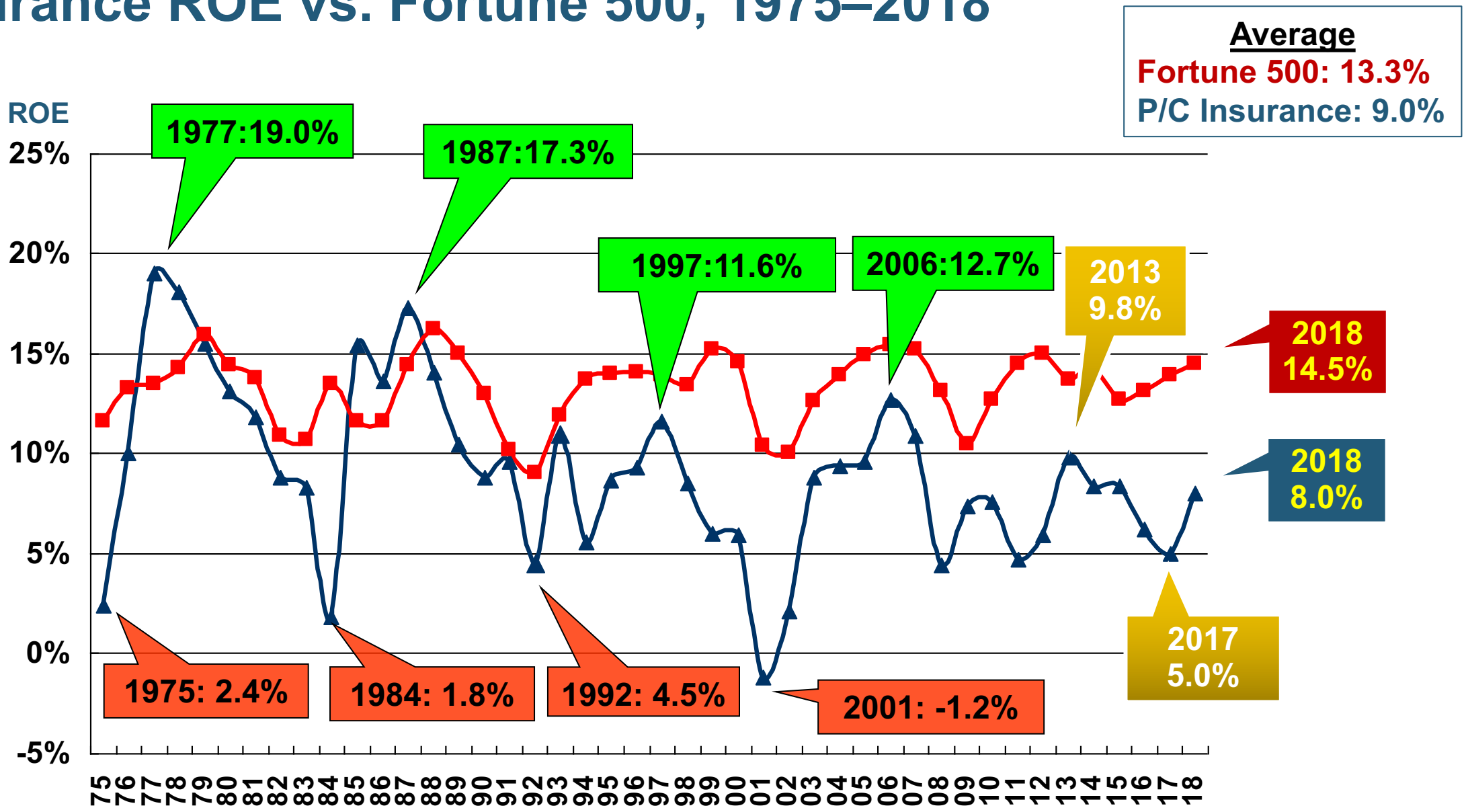
Profitability = P/C insurer ROEs. 2011-18 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.
Source: NAIC, ISO, A.M. Best, USC RUM Center.

ROE: Property/Casualty Insurance by Major Event, 1987–2019F



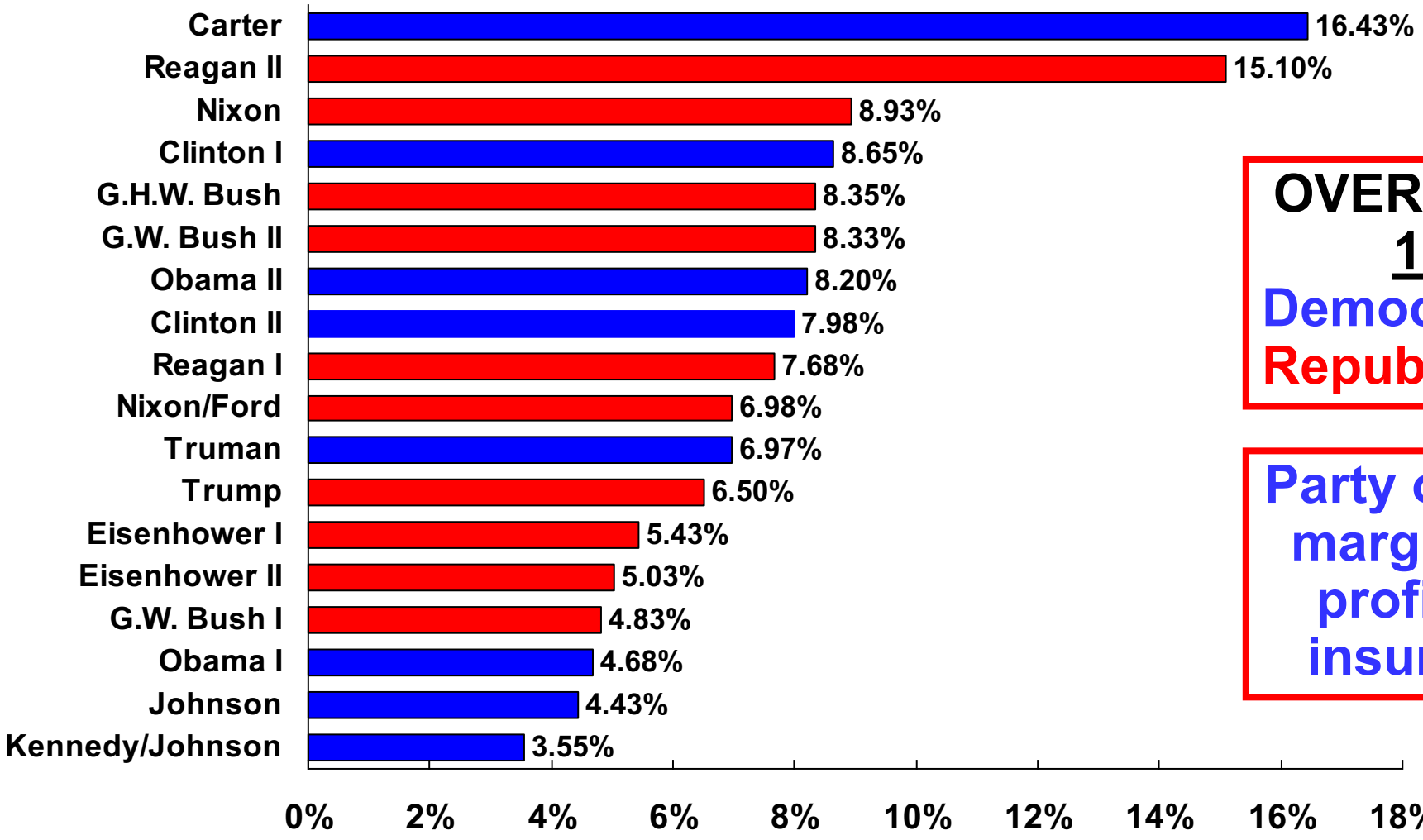
*Excludes Mortgage & Financial Guarantee in 2008 – 2014.
Sources: ISO, *Fortune*; A.M. Best (2018E-2019F); USC RUM Center.

P/C Insurance ROE vs. Fortune 500, 1975–2018



Profitability = P/C insurer ROEs. 2011-18 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.
Source: NAIC, ISO, *Fortune*.

P/C Insurance Industry ROE by Presidential Administration, 1950-2018*



OVERALL RECORD: 1950-2018*

Democrats 7.61%

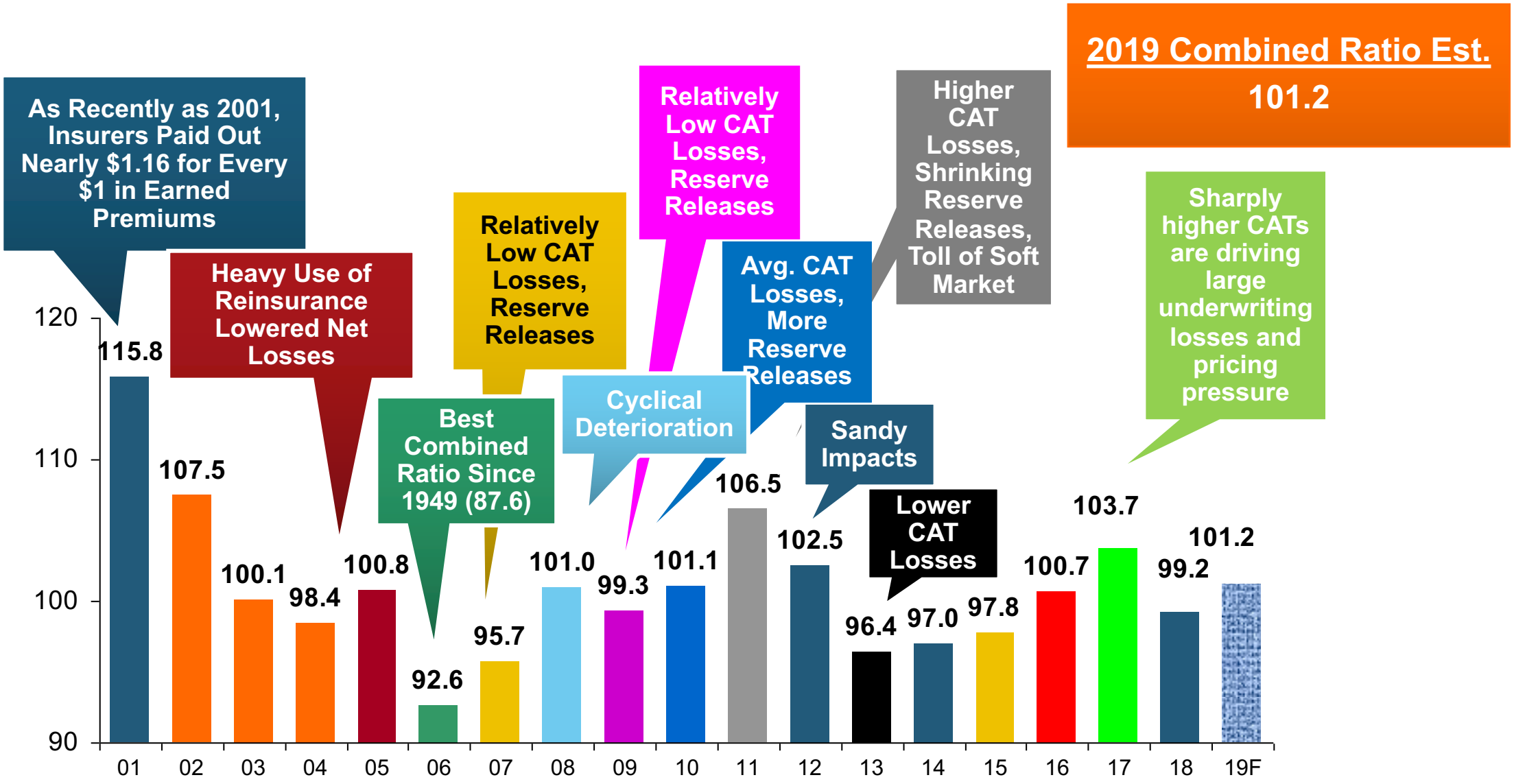
Republicans 7.75%

Party of President has marginal bearing on profitability of P/C insurance industry

*Truman administration ROE of 6.97% based on 3 years only, 1950-52.

Source: University of South Carolina, Risk and Uncertainty Management Center.

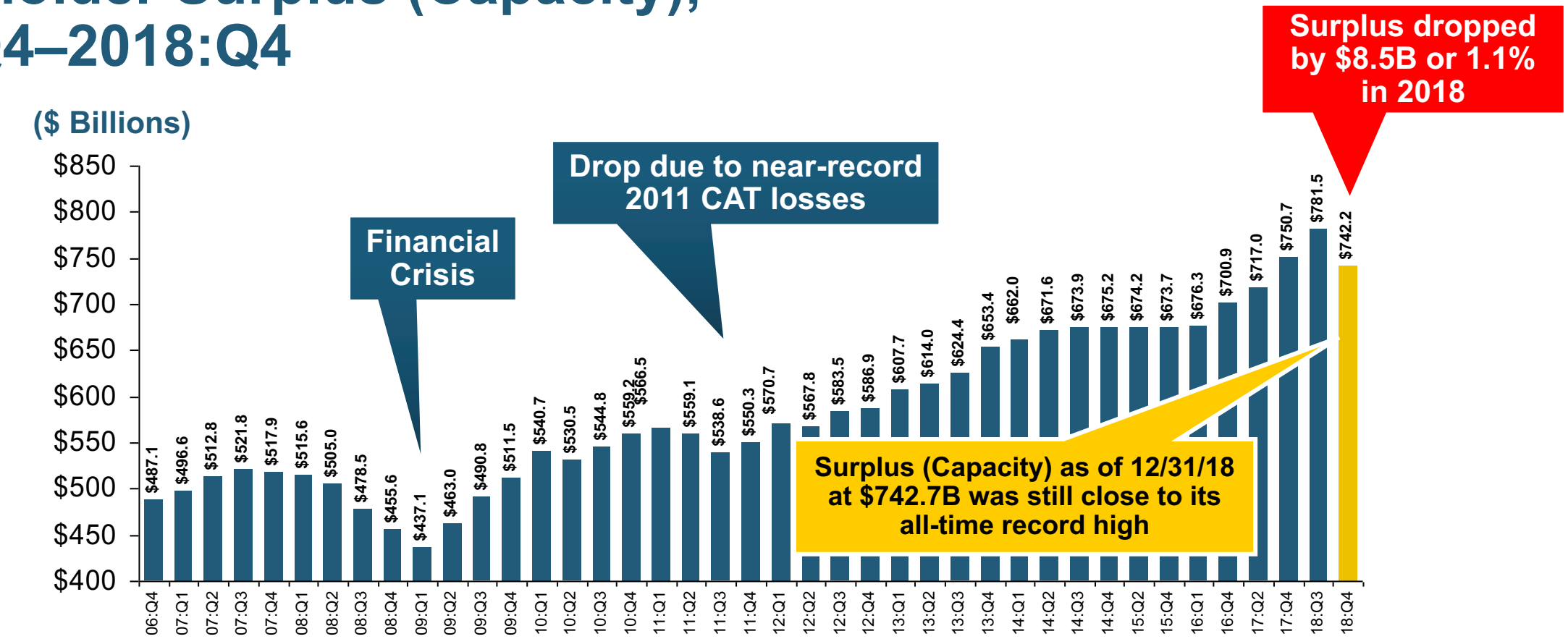
P/C Insurance Industry Combined Ratio, 2001–2019E



* 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 104.1 through Q3 (Q3 combined ratio alone was 110.7).

Sources: A.M. Best, ISO (2014-2016); Figure for 2017 from ISO.

Policyholder Surplus (Capacity), 2006:Q4–2018:Q4



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 do not on their own drive a sustained firming of the pricing environment

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

Net Premium Growth (All P/C Lines): Annual Change, 1971—2019F

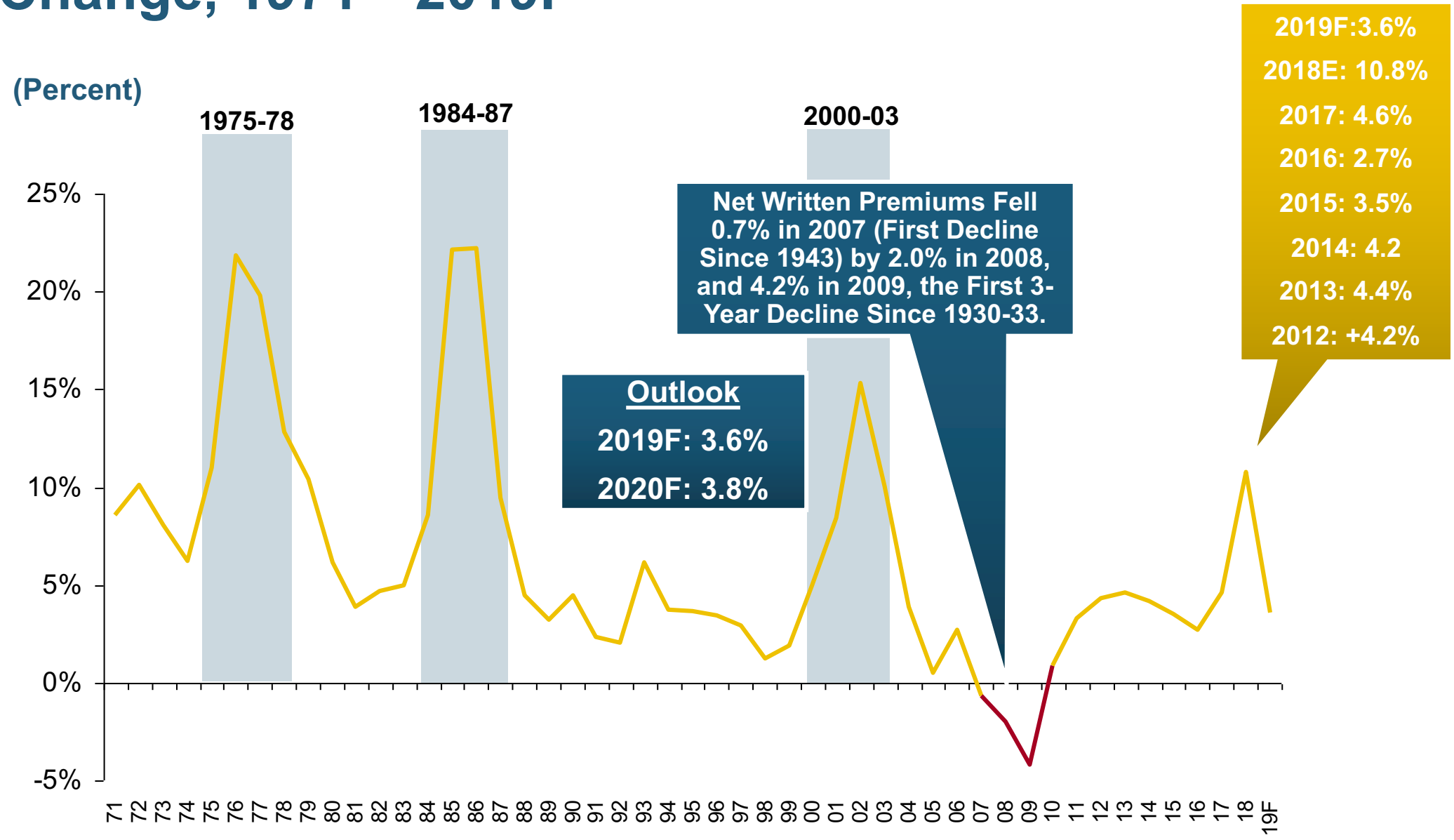
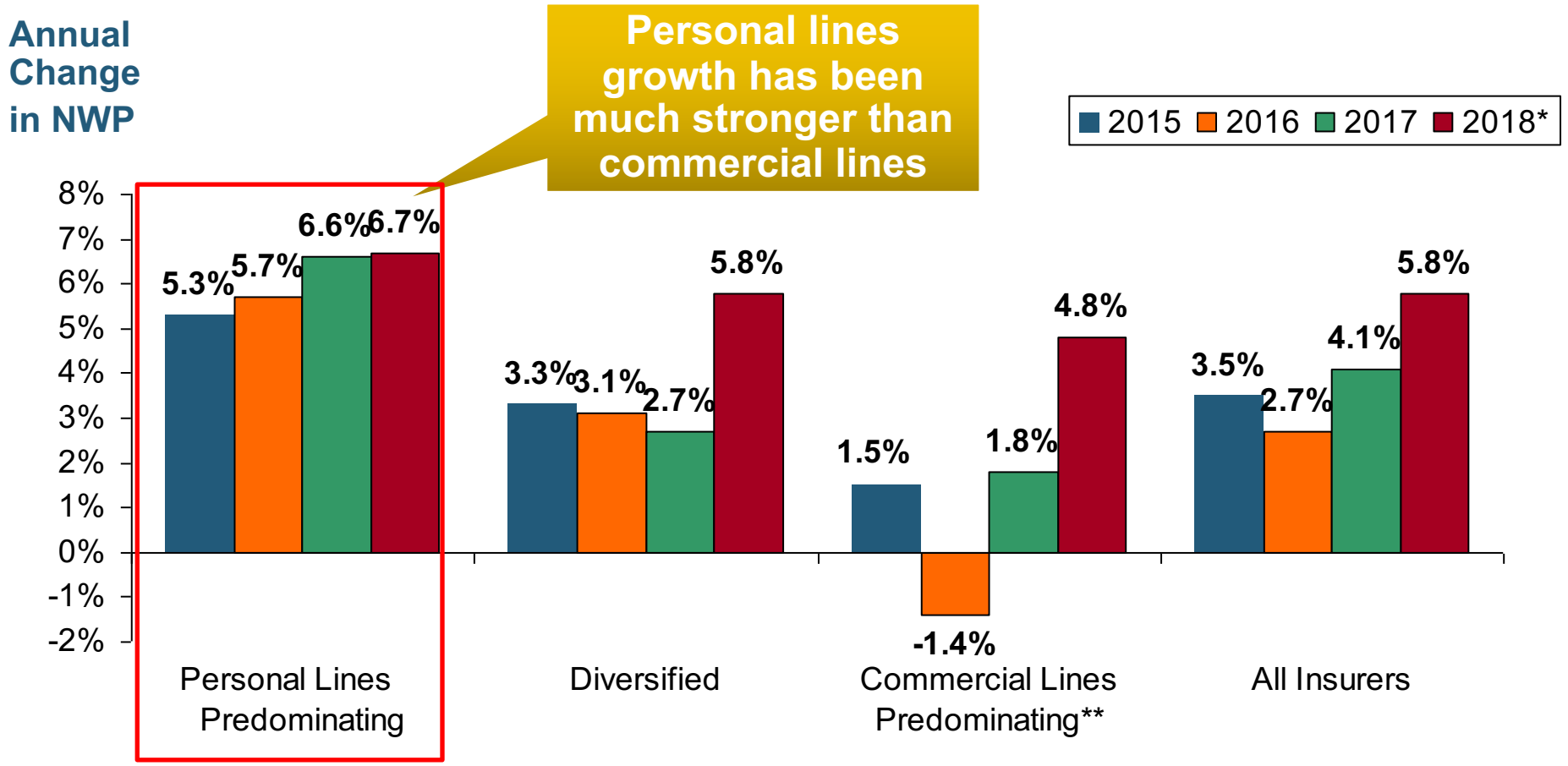


*Figure is actual 2018:9M vs. 2017:9M change adjusted for affects of the TCJA of 2017. Shaded areas denote “hard market” periods
Sources: A.M. Best (1971-2013, 18E, 19F), ISO (2014-17).

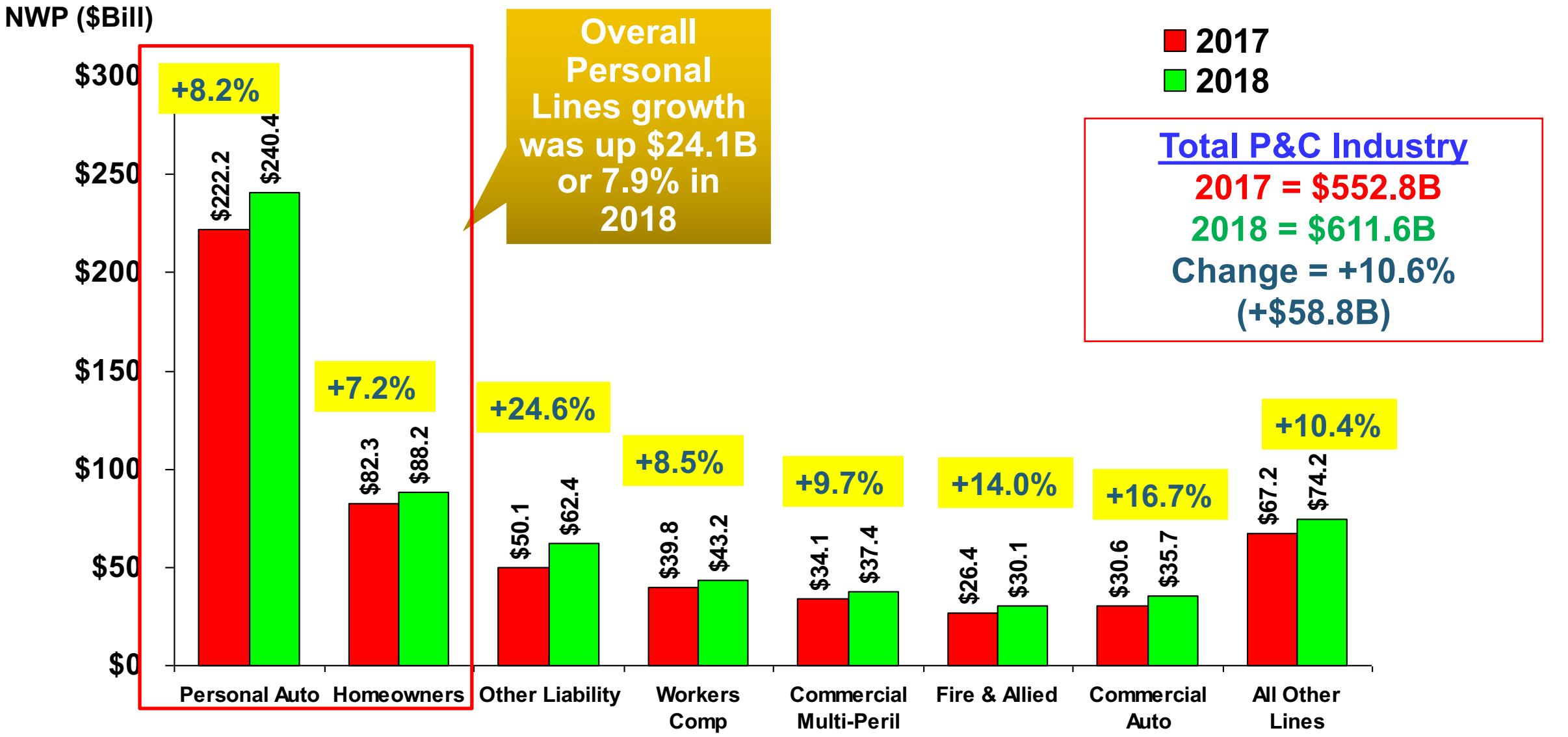
Growth in Net Written Premium: Personal vs. Commercial, 2015 – 2018*



The divergence in growth between personal and commercial lines is large but may be narrowing

*2018 is an estimate based on actual data through Q4:2018. Commercial lines figure has been adjusted from actual value of 19.3% to account for distortionary affects from the TCJA 2017, which impacted reinsurance utilization, largely in the commercial segment.
Source: ISO. University of South Carolina Risk and Uncertainty Management Center.

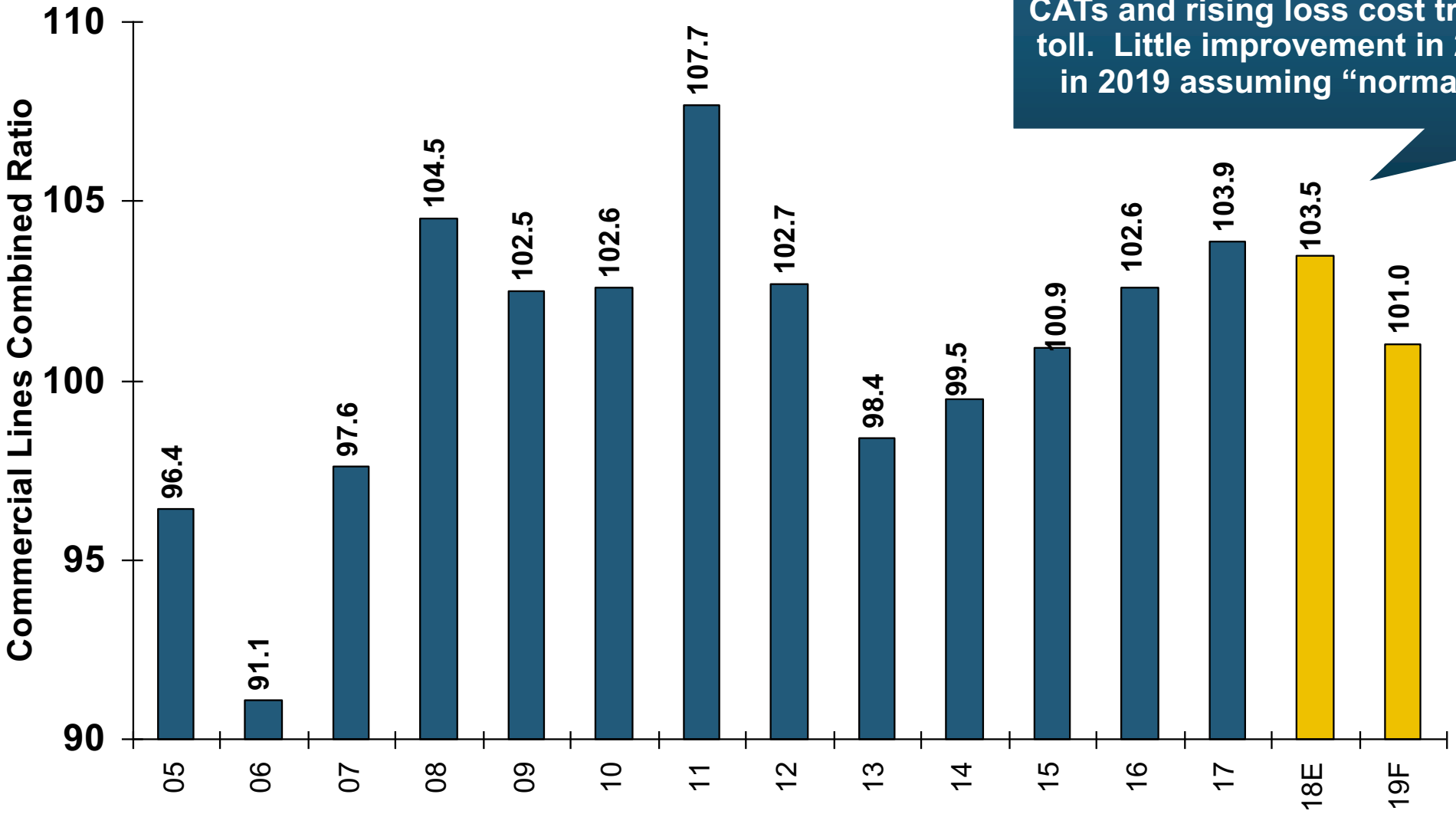
Net Written Premium, by Line: 2017 vs 2018*



* 2018 figure is preliminary. Figure is impacted by Tax Cuts and Jobs Act of 2017.
Sources: NAIC; NCCI; Risk and Uncertainty Management Center, University of South Carolina.

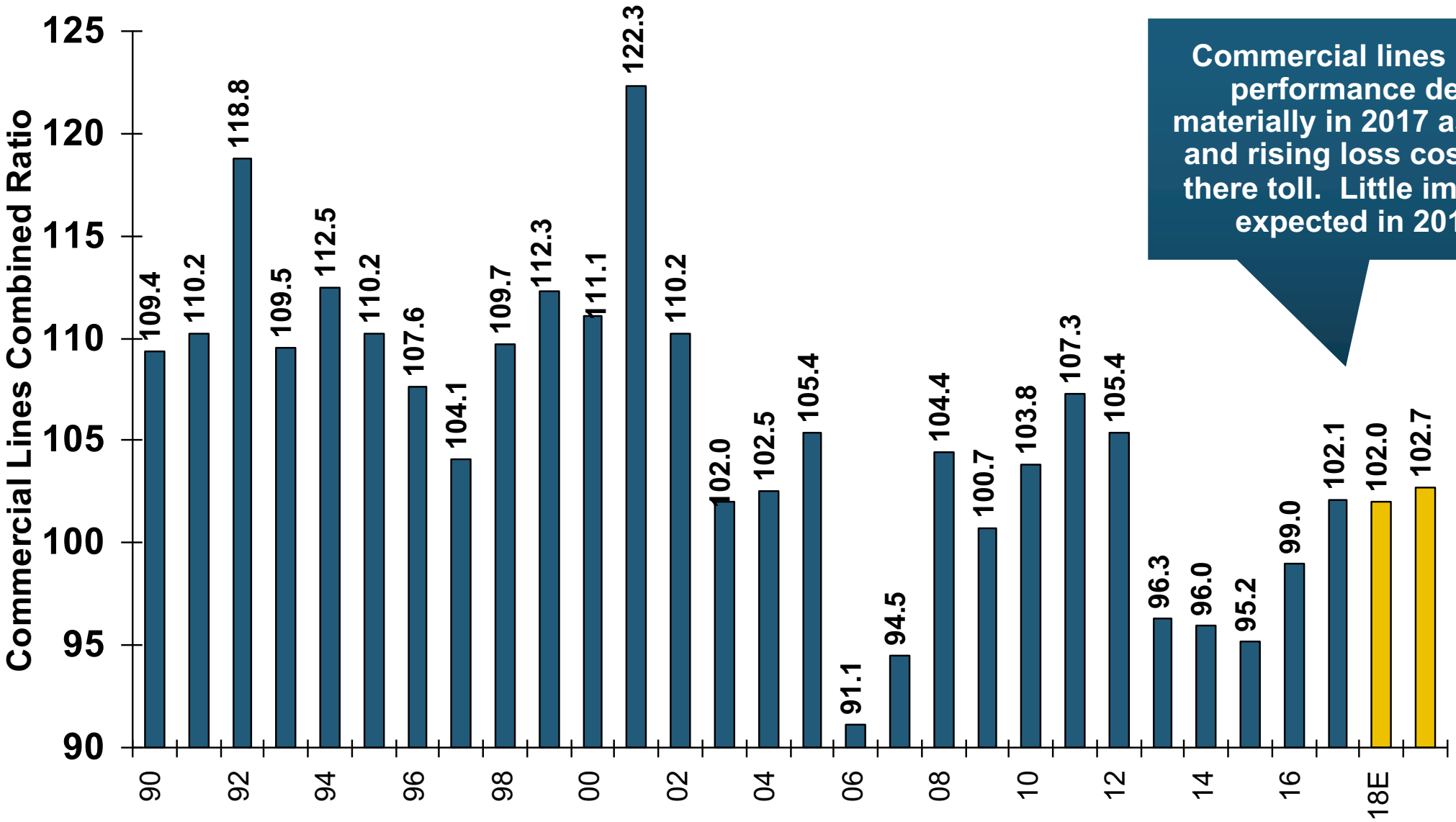
Personal Lines Combined Ratio, 2005-2019F*

Personal lines underwriting performance deteriorated from 2014-2017 as record CATs and rising loss cost trends took their toll. Little improvement in 2018, but more in 2019 assuming "normal" cat activity



*2007-2012 figures exclude mortgage and financial guaranty segments.
Source: A.M. Best (1990-2017F). Risk and Uncertainty Management Center, Univ. of South Carolina (2018E – 2019F).

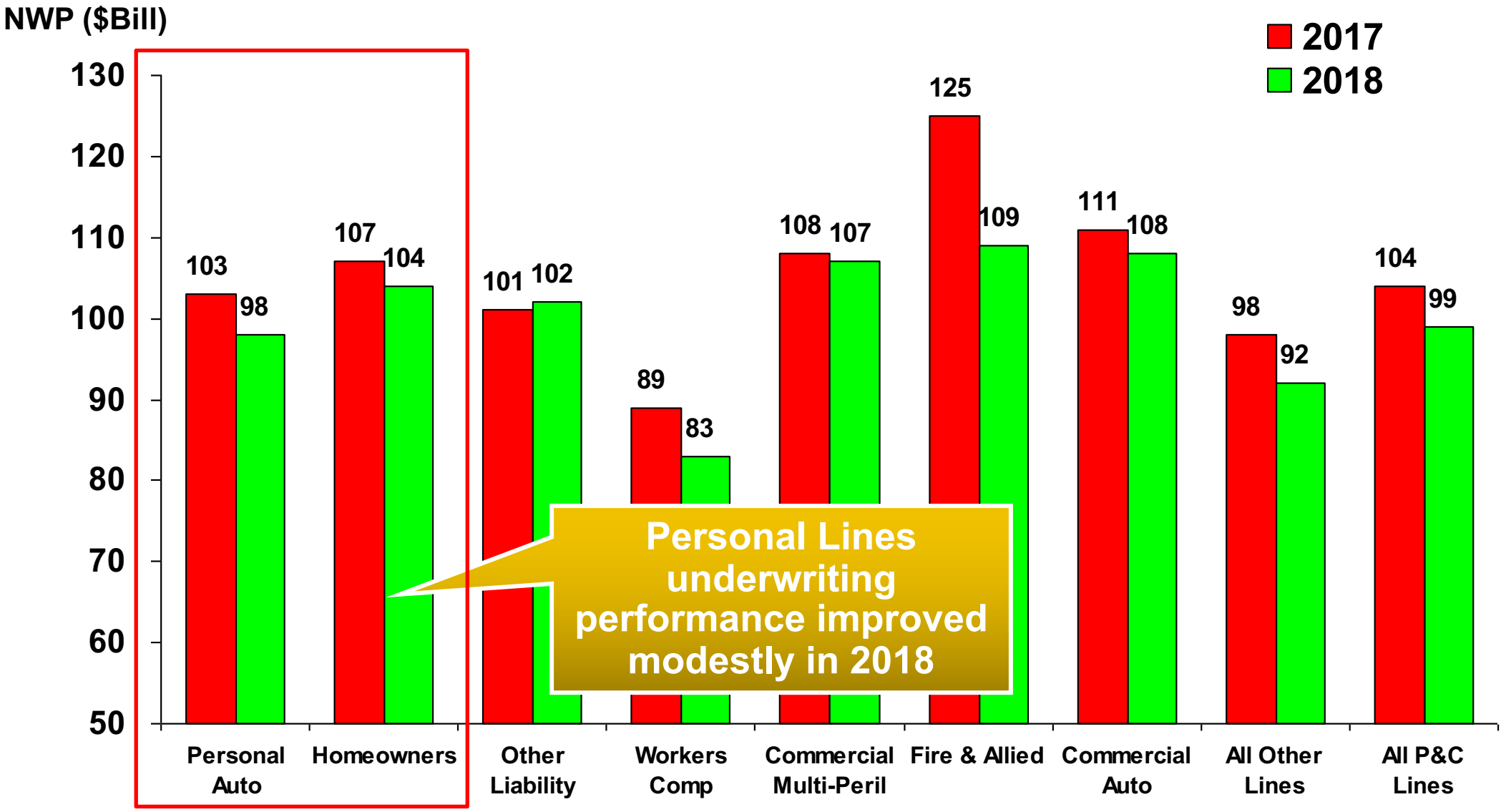
Commercial Lines Combined Ratio, 1990-2019F*



Commercial lines underwriting performance deteriorated materially in 2017 as record CATs and rising loss cost trends took there toll. Little improvement is expected in 2018 or 2019

*2007-2012 figures exclude mortgage and financial guaranty segments.
Source: A.M. Best (1990-2019F).

Combined Ratio, by Line: 2017 vs 2018*



* 2018 figure is preliminary.
Sources: NAIC; NCCI; Risk and Uncertainty Management Center, University of South Carolina.

Merger & Acquisition Activity

M&A Activity Accelerated in 2018

Many Carriers Remain Unsatisfied with Organic Growth Opportunities

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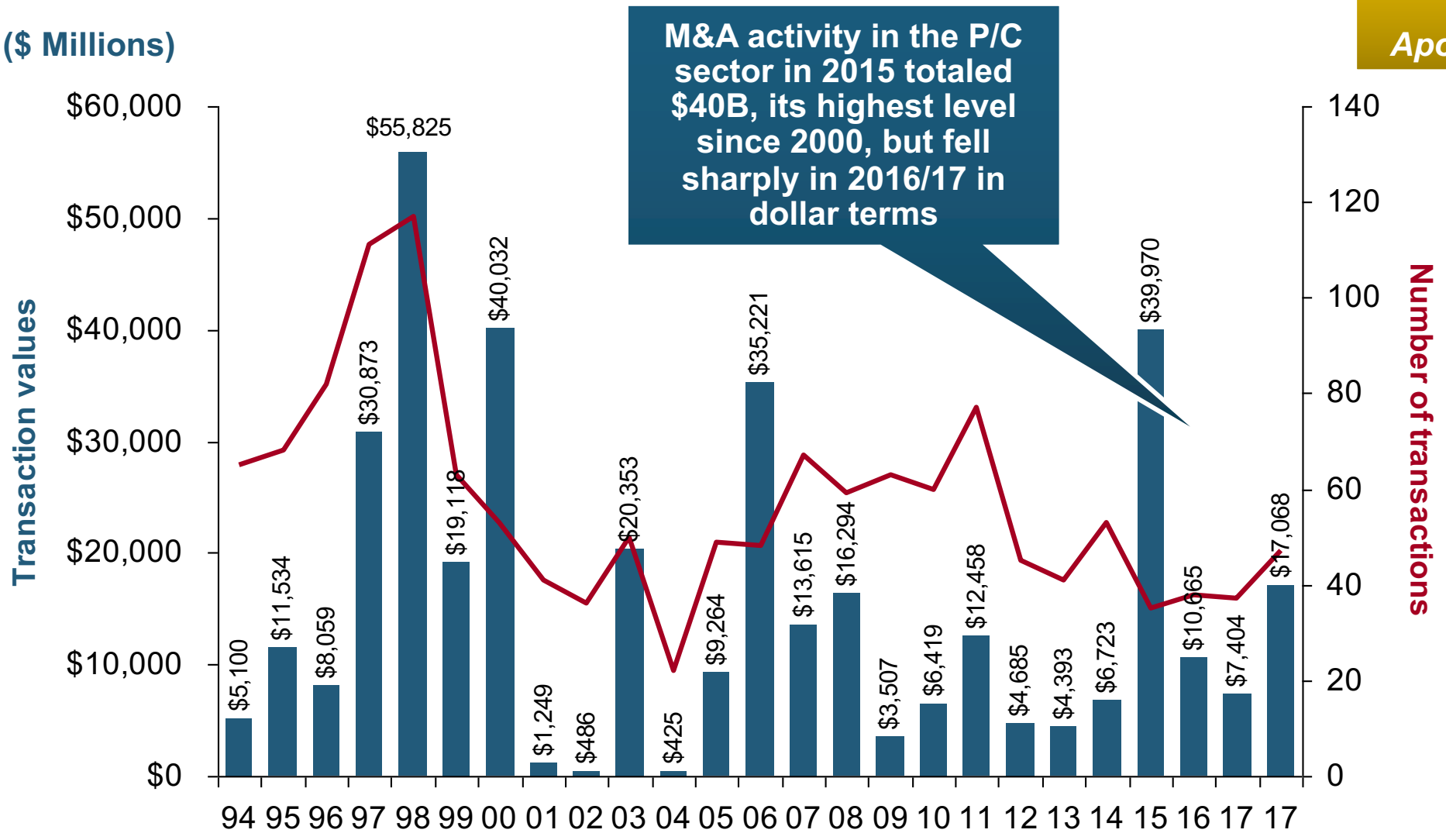
U.S. INSURANCE MERGERS AND ACQUISITIONS, P/C SECTOR, 1994-2018 (1)

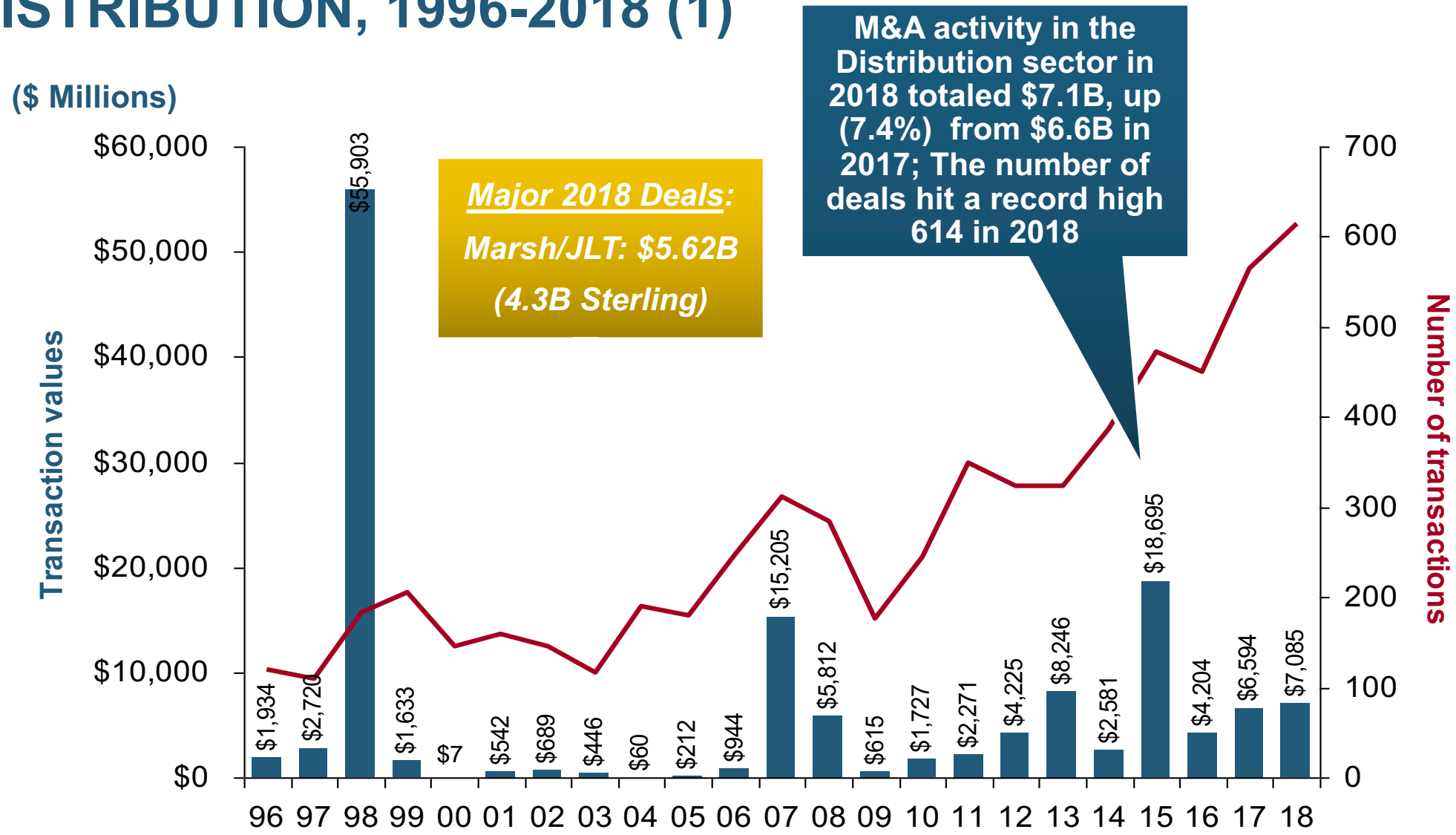
Major 2018 Deals:
AIG/Validus: $5.56B
Axa/XL: $15.3B
Apollo/Aspen: $2.6B



(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, 1996-2018 (1)



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

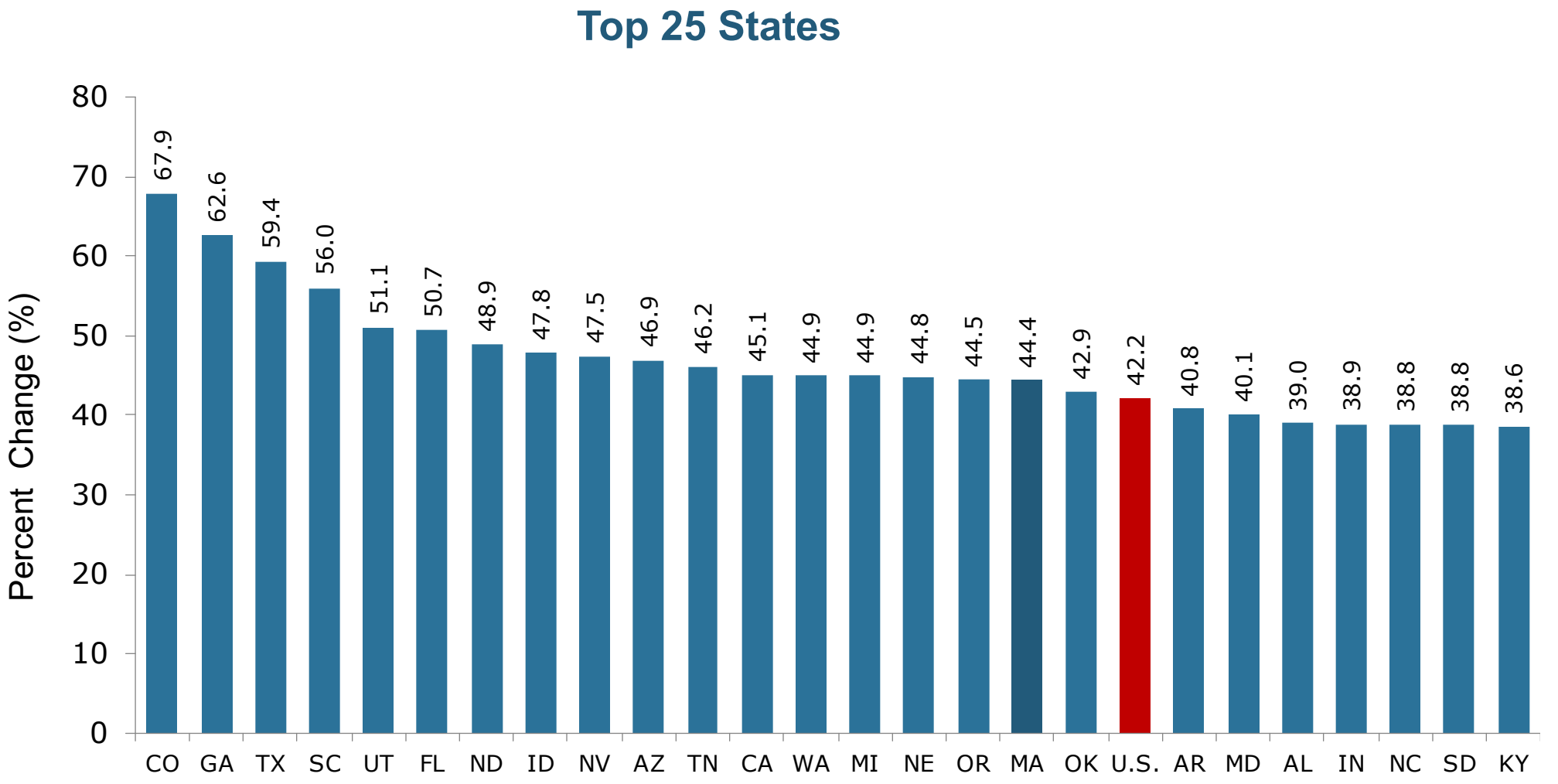
Source: Conning proprietary database.

Profitability and Growth

Comparisons, by Key Line and State
2009 - 2018

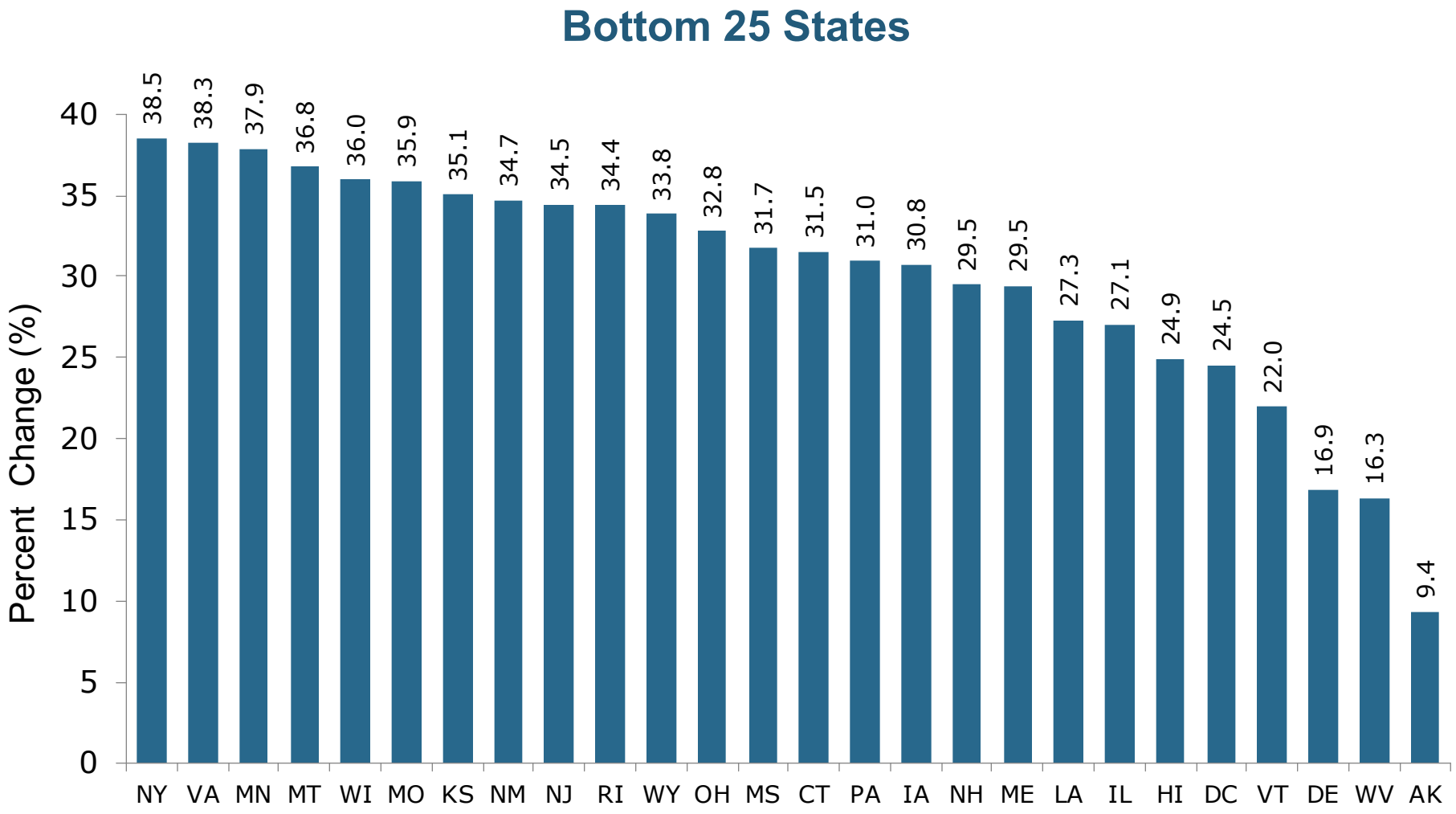
21

Direct Premiums Written: All Lines, Percent Change by State, 2009-2018



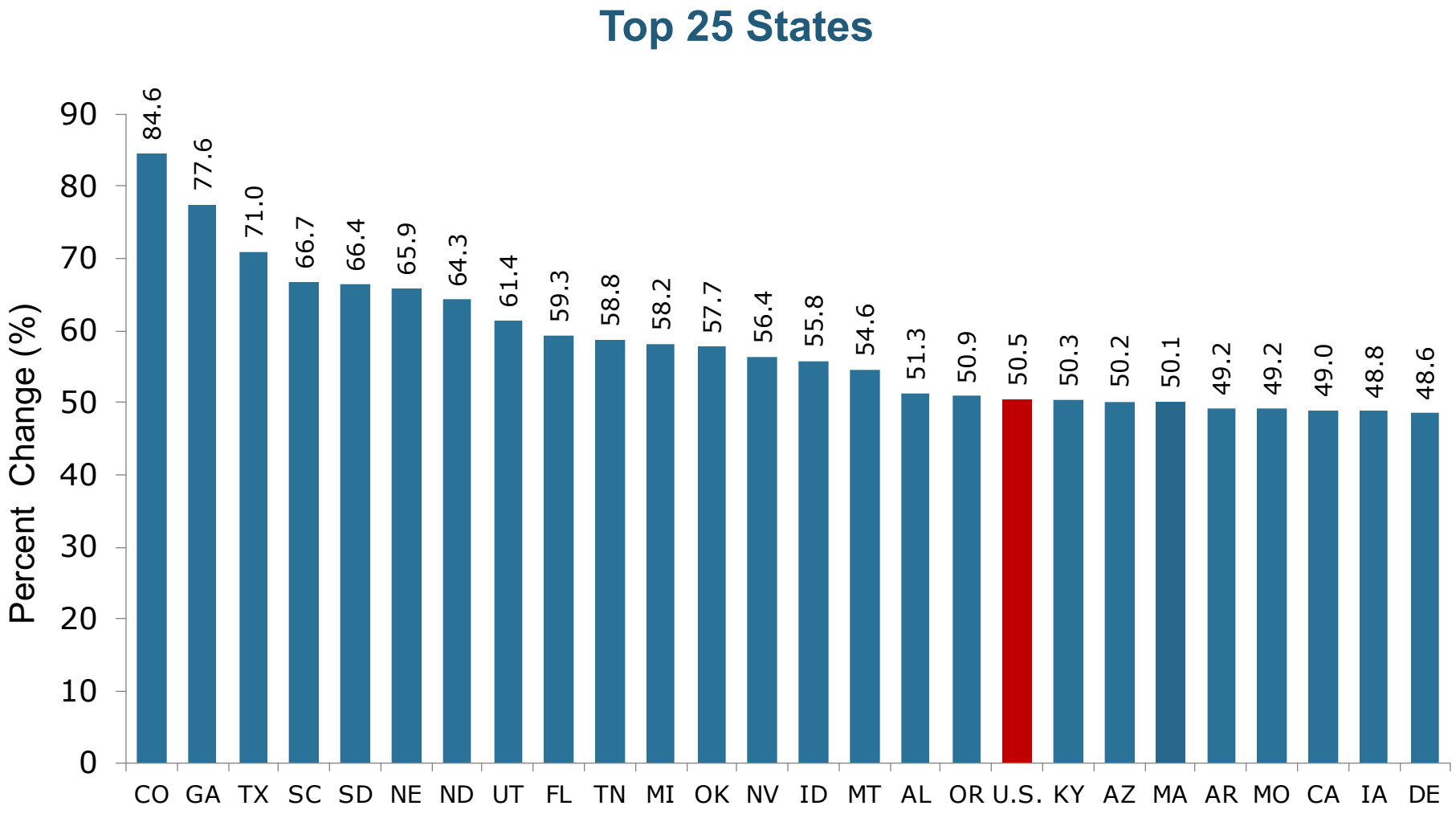
Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: All Lines, Percent Change by State, 2009-2018



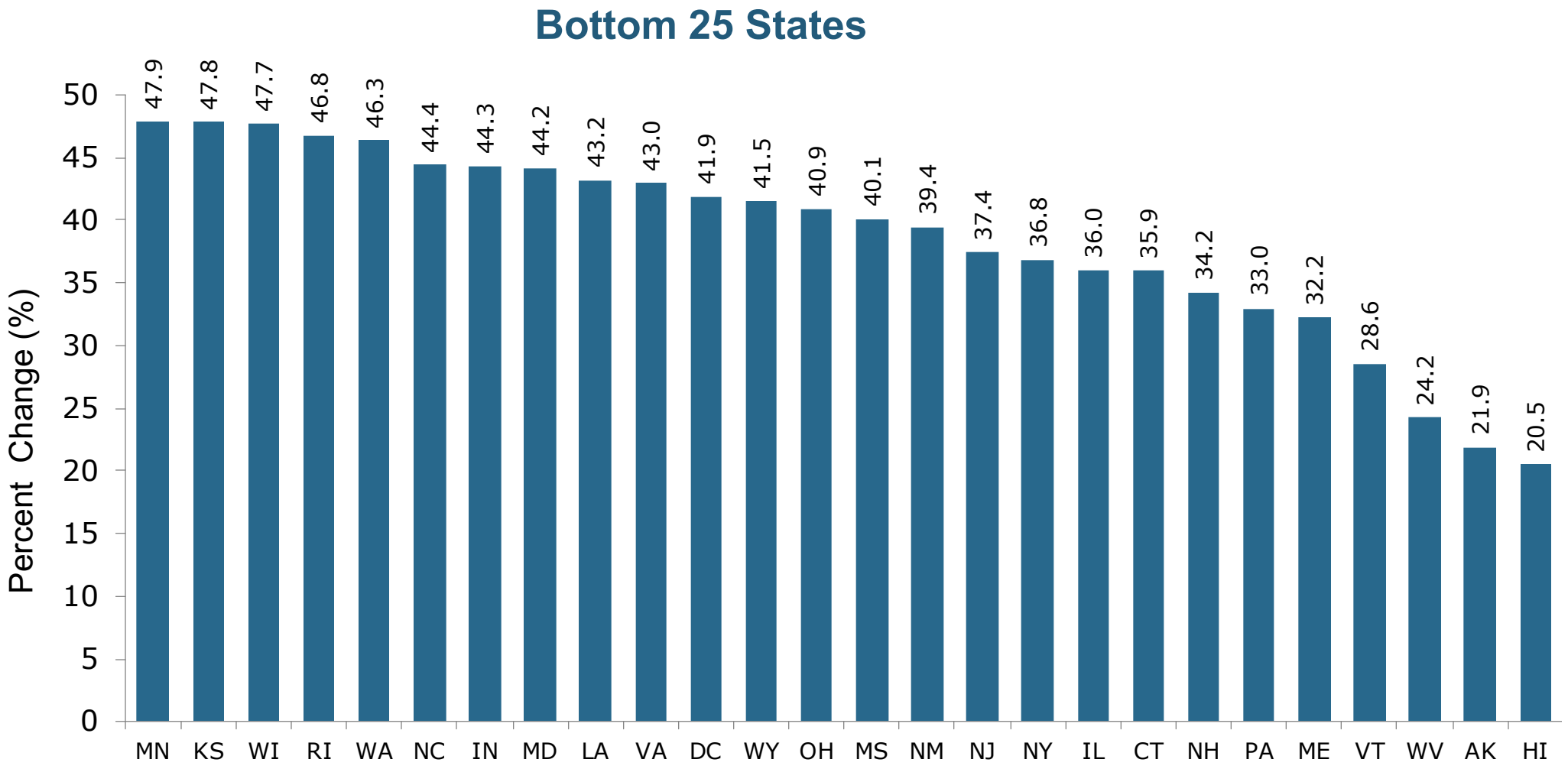
Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: Personal Lines Percent Change by State, 2009-2018



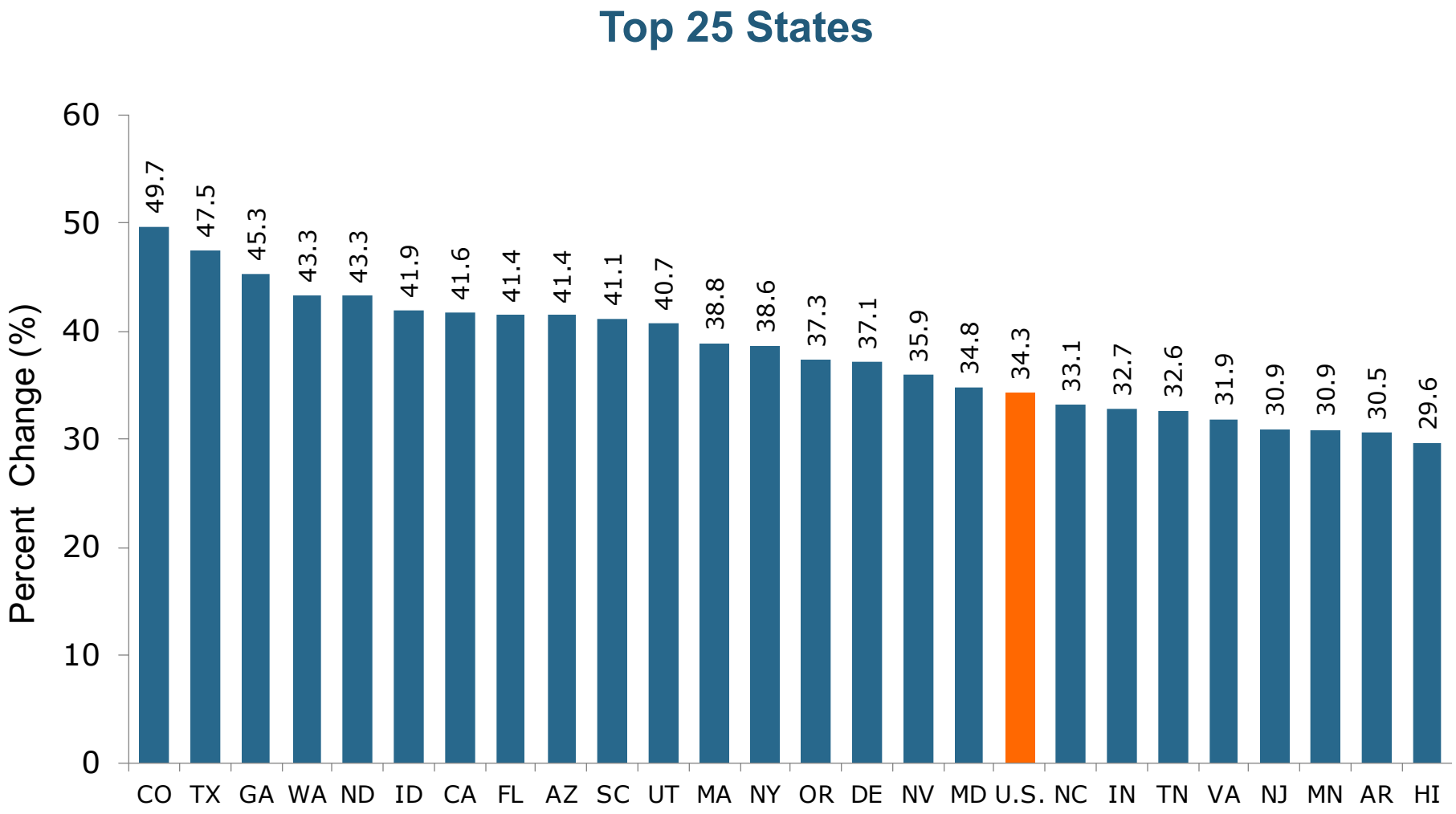
Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: Personal Lines, Percent Change by State, 2009-2018



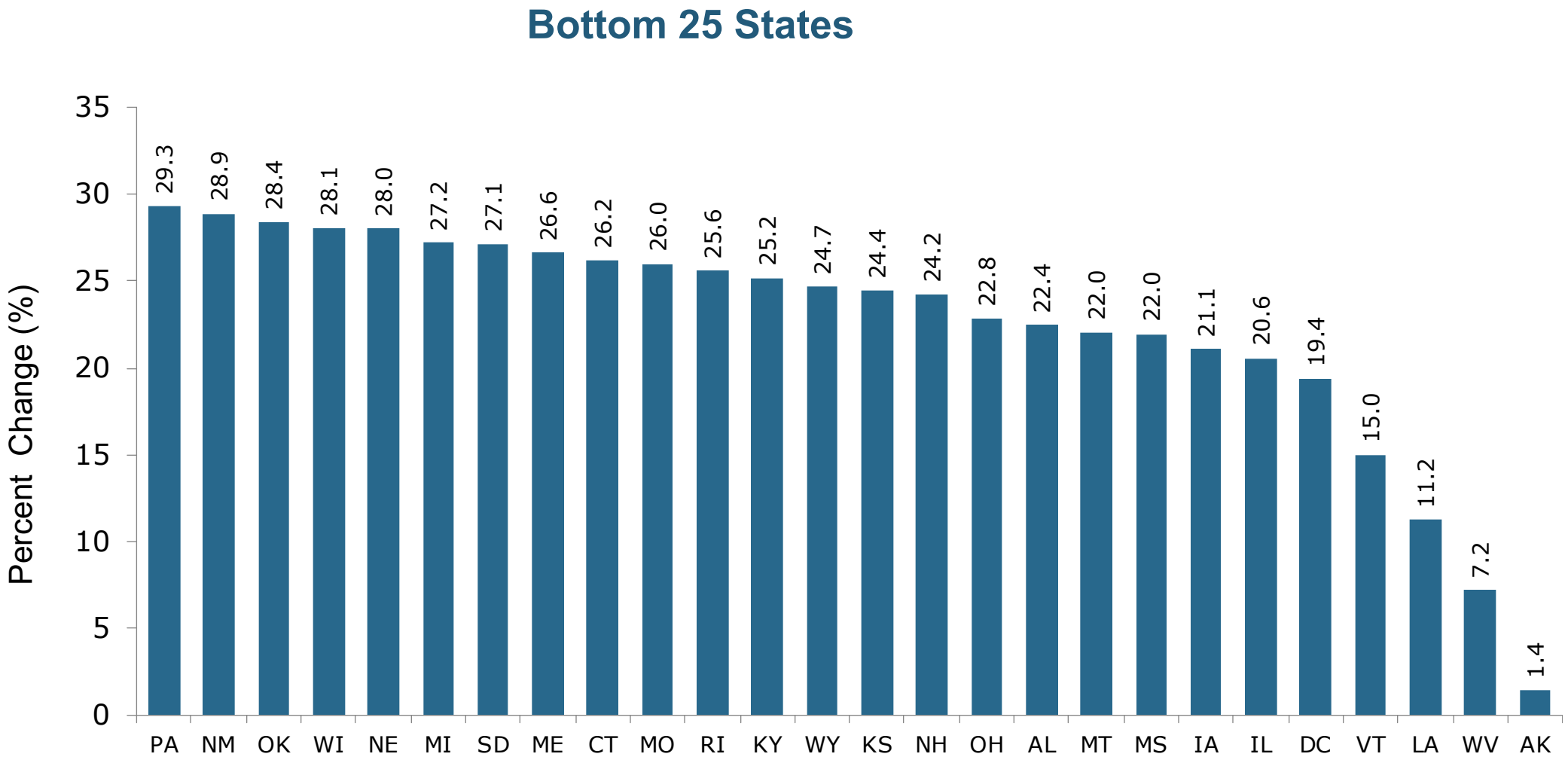
Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: Commercial Lines, Percent Change by State, 2009-2018



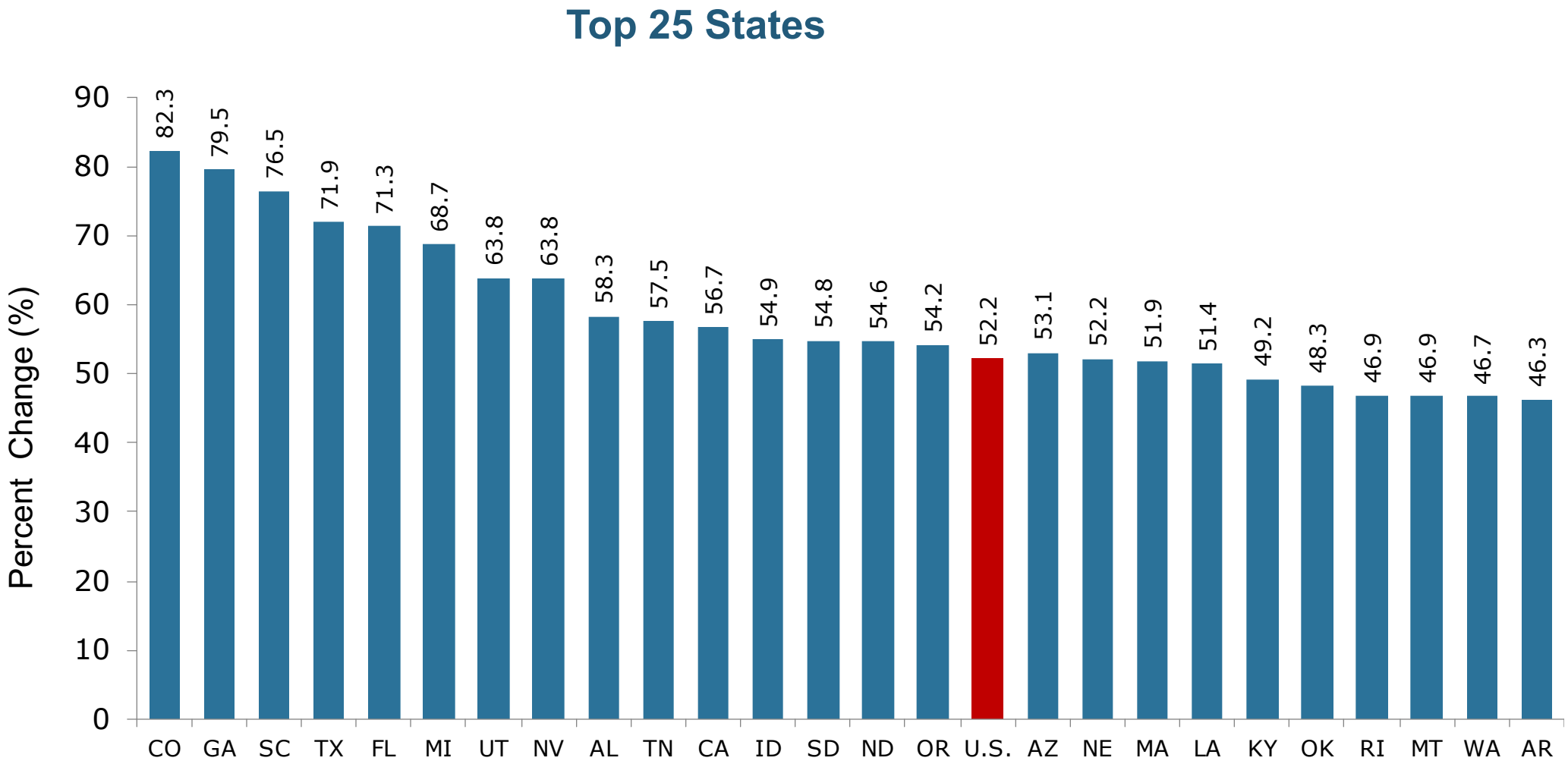
Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: Commercial Lines Change by State, 2009-2018



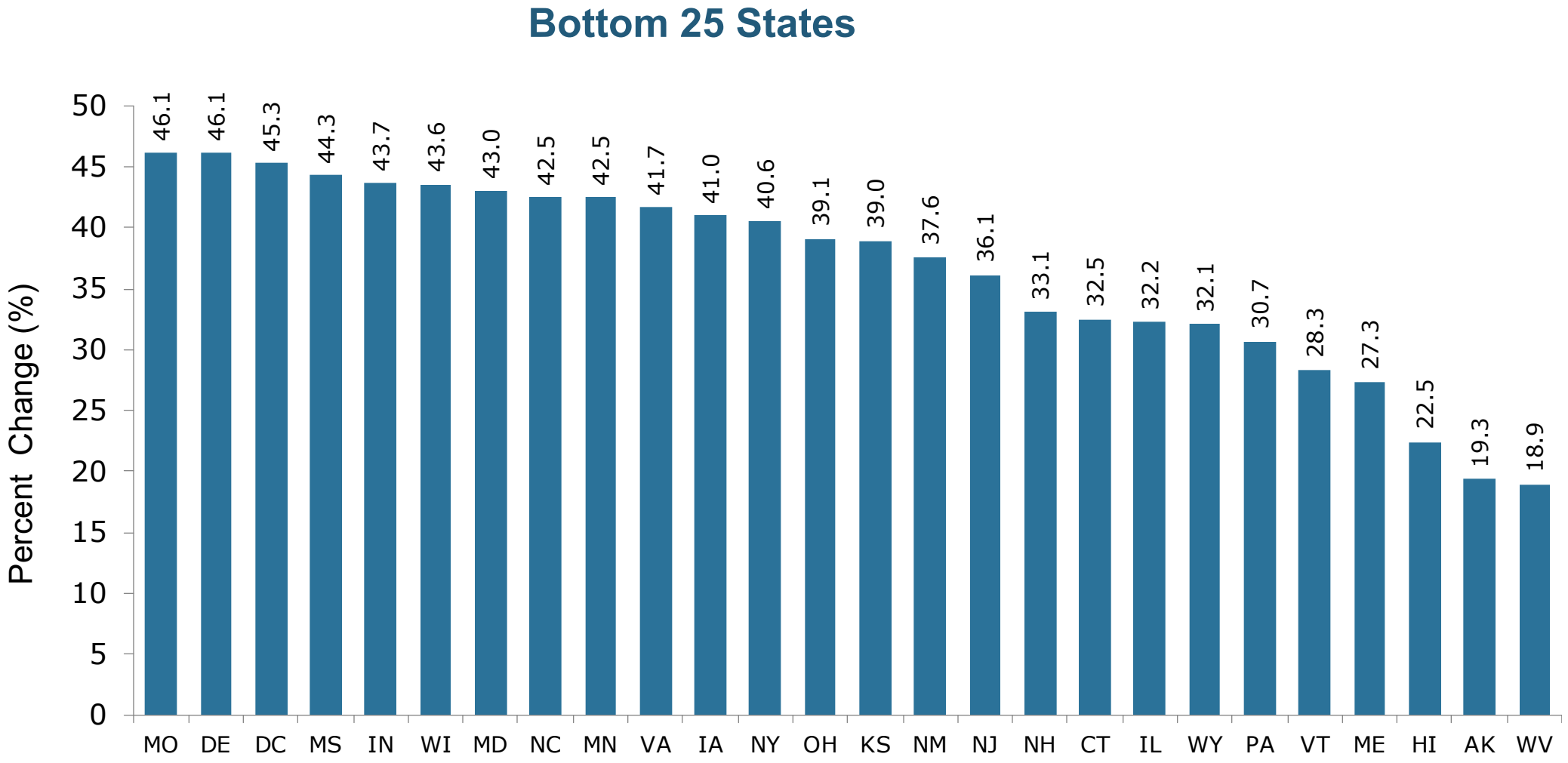
Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: Personal Auto, Percent Change by State, 2009-2018



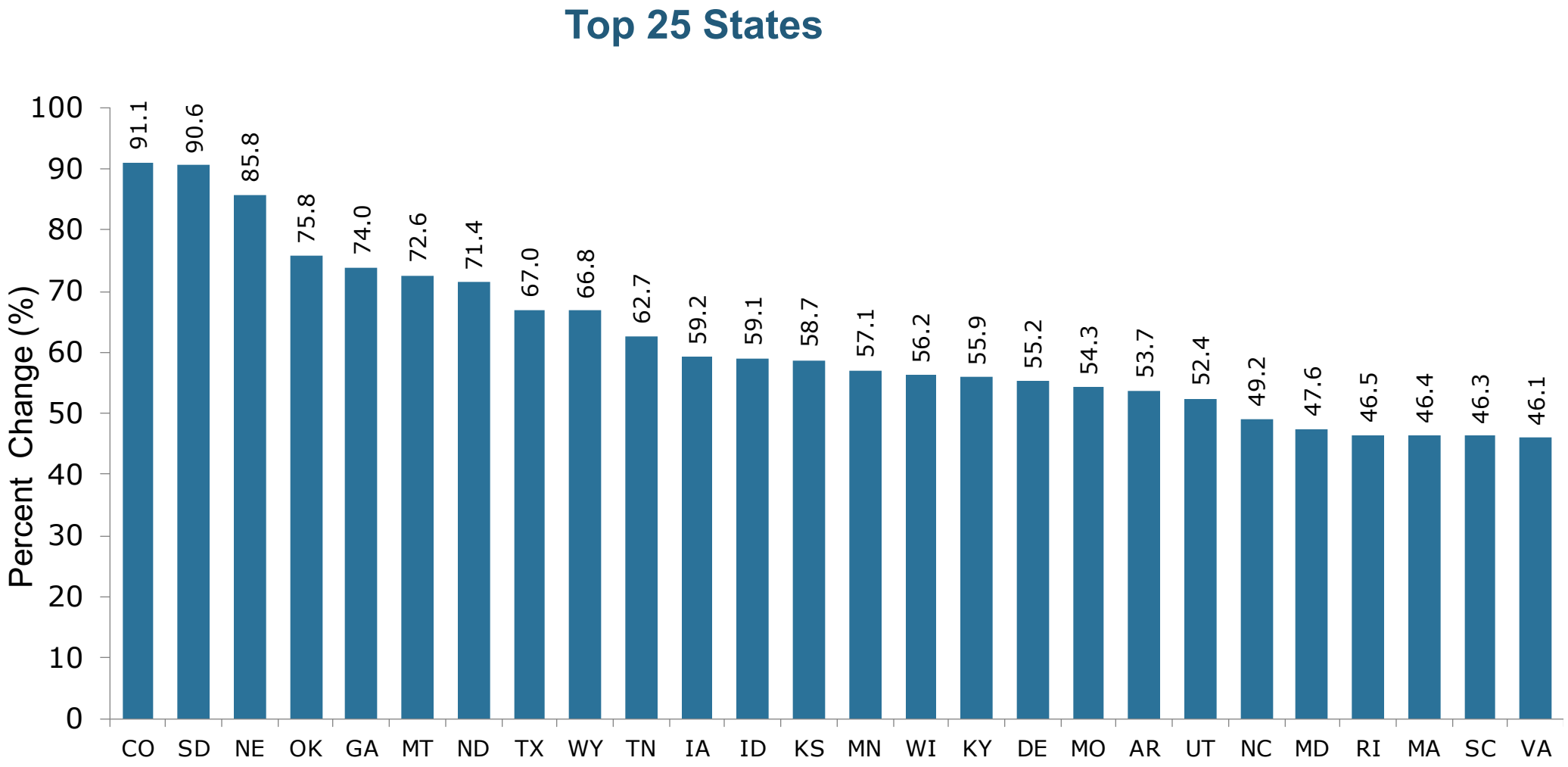
Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: Personal Auto, Percent Change by State, 2009-2018



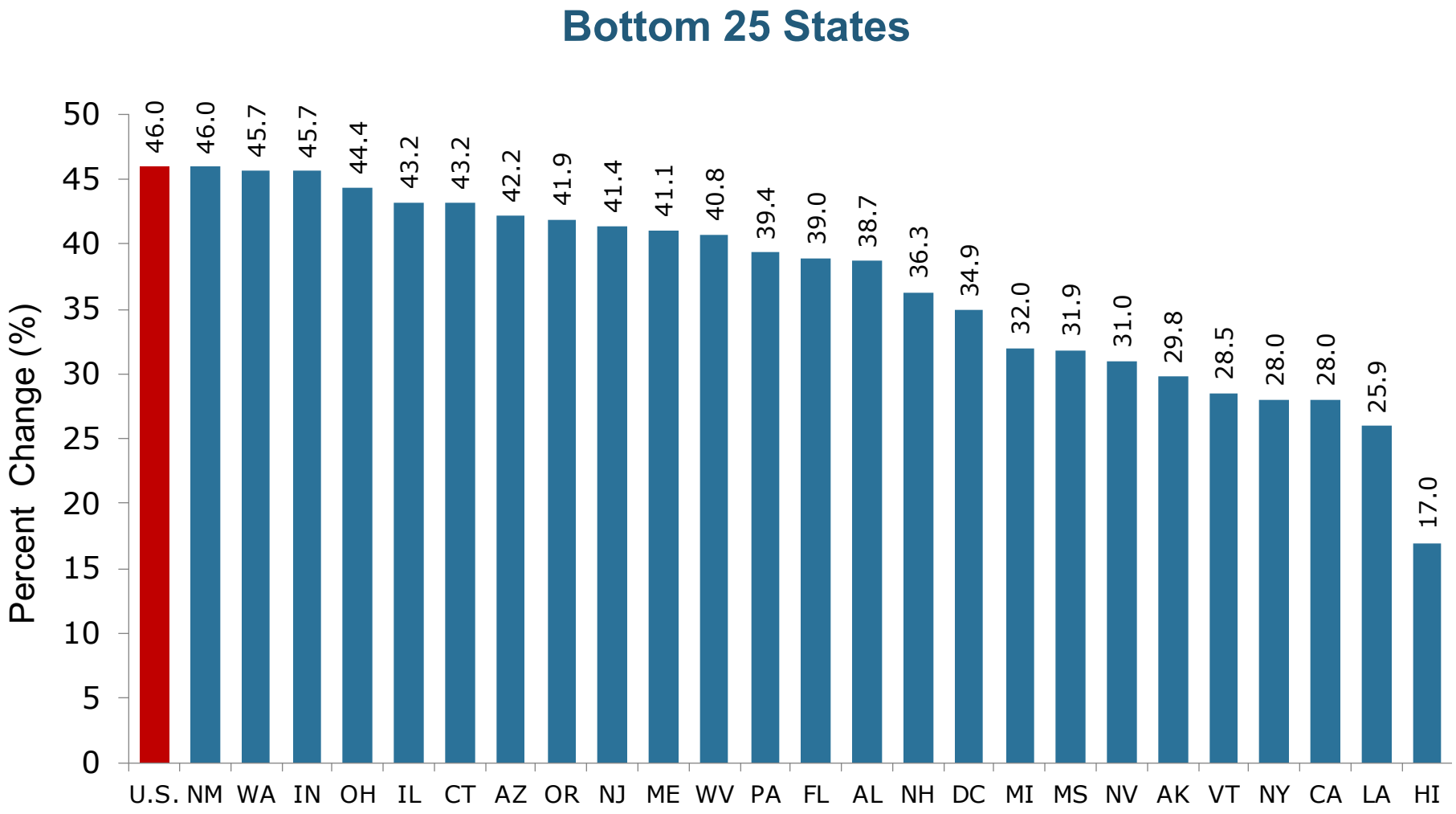
Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: Homeowners, Percent Change by State, 2009-2018



Sources: S&P Global, Insurance Information Institute.

Direct Premiums Written: Homeowners Change by State, 2009-2018



Sources: S&P Global, Insurance Information Institute.

Catastrophe Loss Update: *Major Driver of Rate Pressure*

2018 CAT Losses Were Down from 2017, One of the Costliest Years Ever for US Insurers

Wildfires, Hurricanes Have Exacted a Huge Toll in Recent Years

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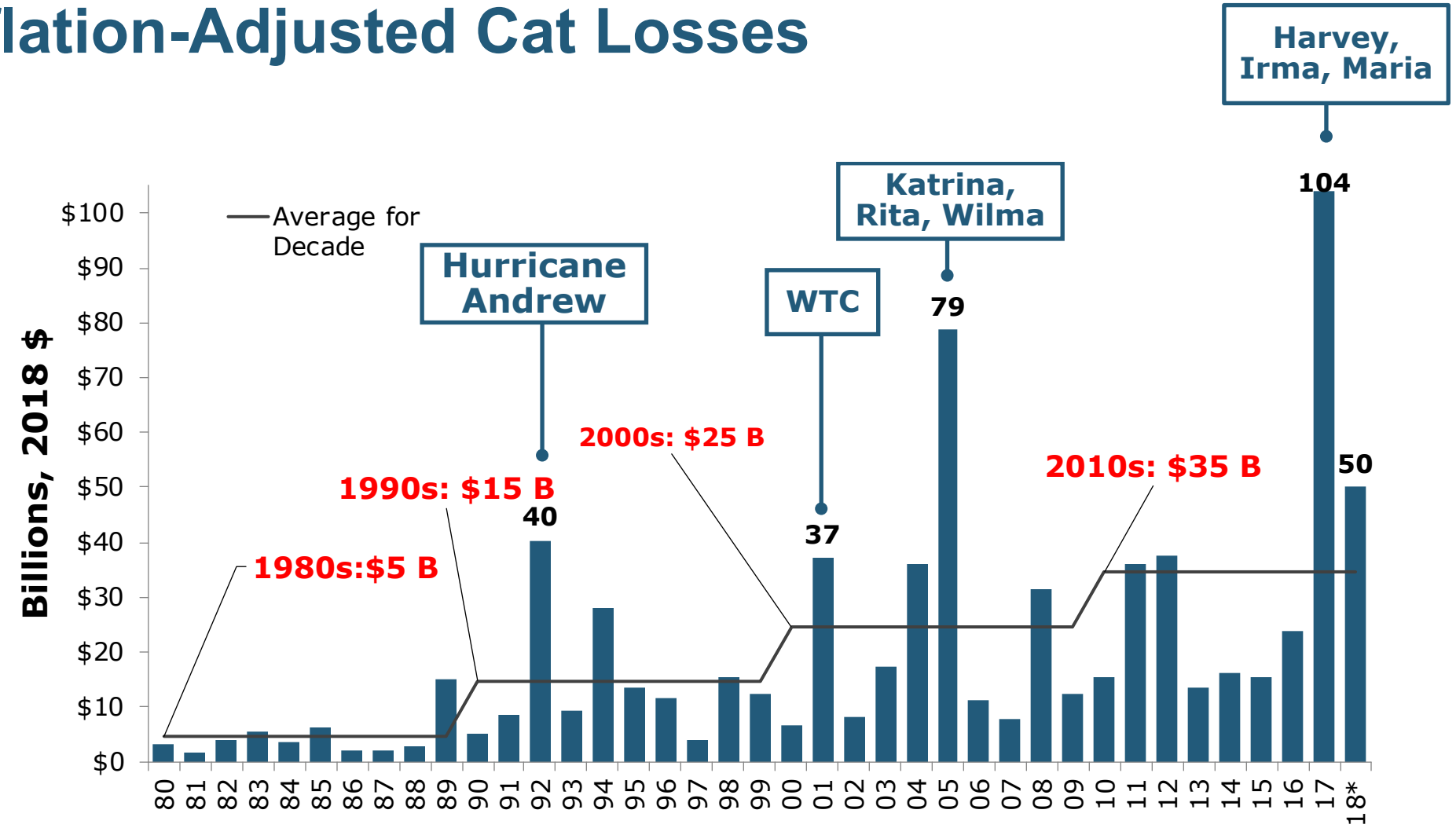
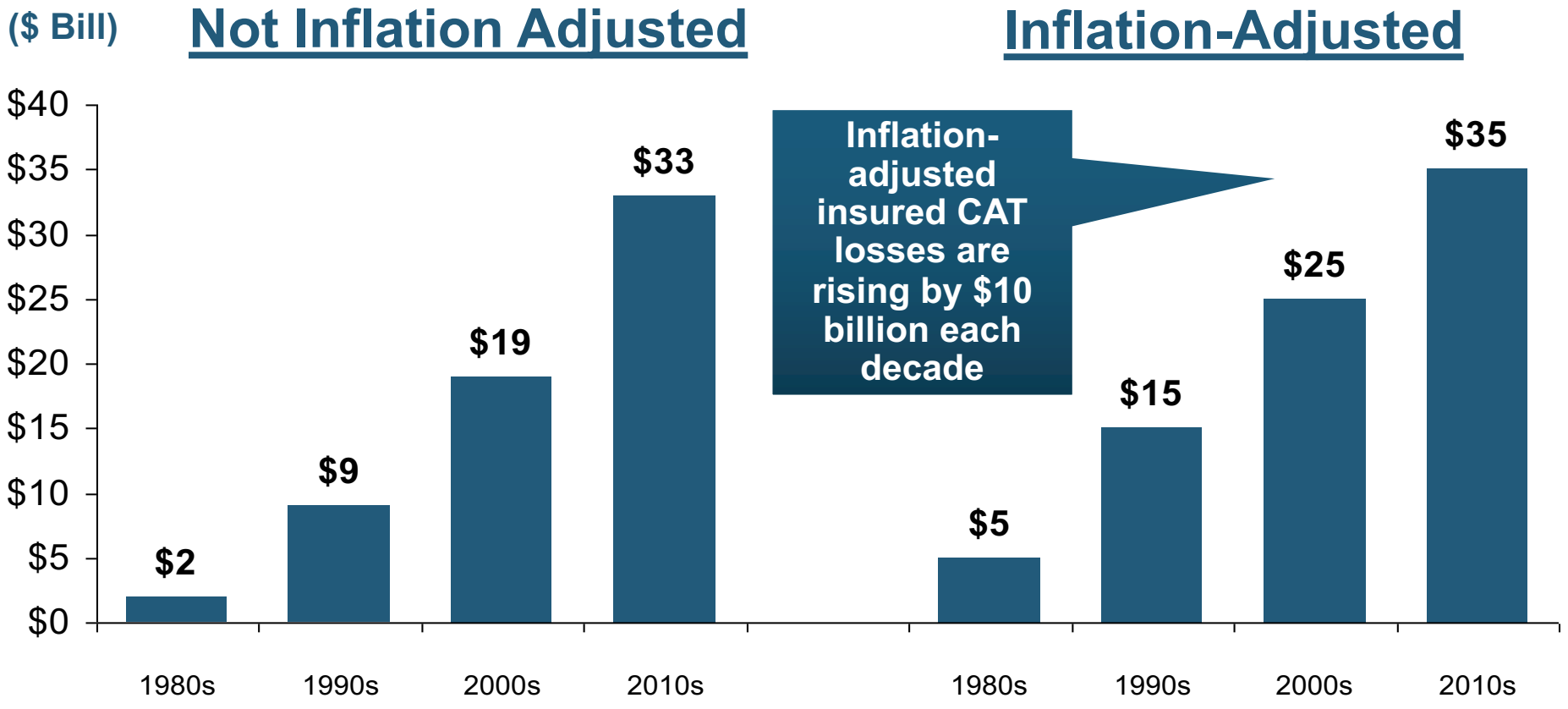
U.S. Inflation-Adjusted Cat Losses



2018 – Third worst year for U.S. Insured Catastrophe Losses.
Average Insured Loss per Year for 1980-2018 is $19.3 B.

*2018: Inflation-adjusted estimate, subject to change. 2010s is average of 2010 to 2018.
Sources: Property Claims Service, a Verisk Analytics business; Insurance Information Institute.

US Insured Catastrophe Losses by Decade: 1980s – 2010s*

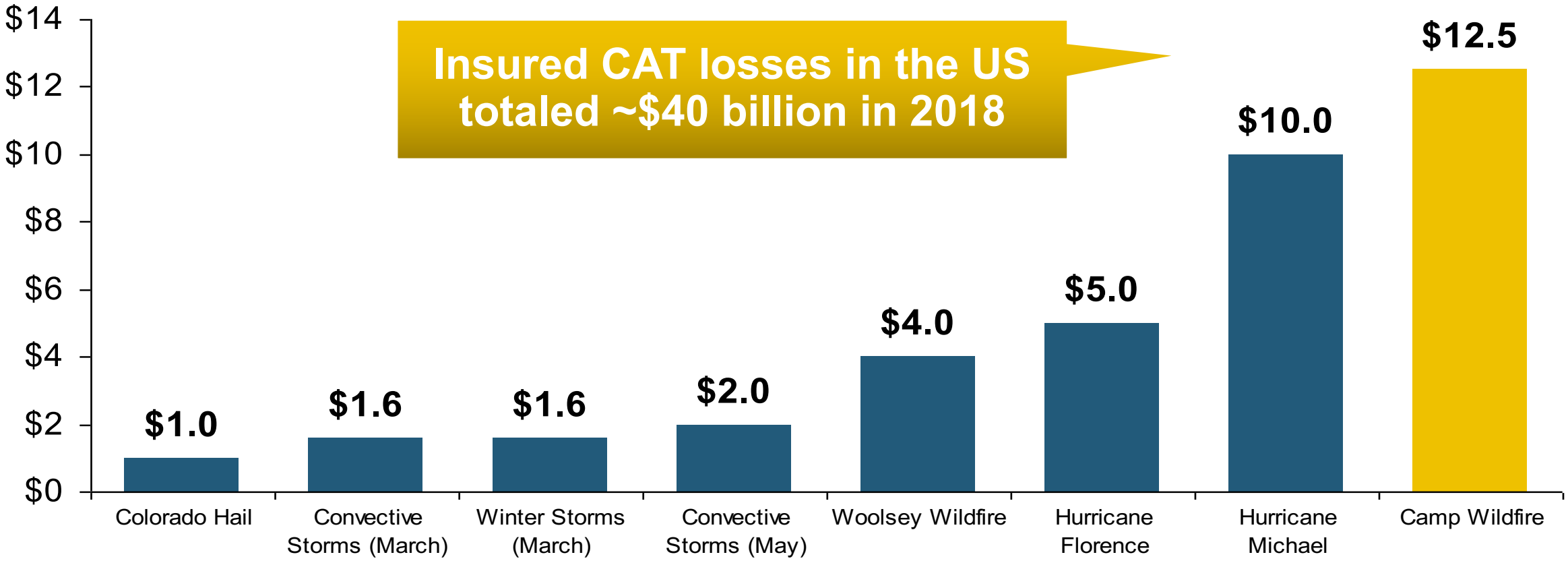


Serious efforts to mitigate against climate risk must be led by government at all levels. Requires enormous long-term infrastructure investments that funded primarily through debt

*2010s figures is the average of the years 2010-2018.
Sources: Property Claims Service, a Verisk Analytics business; Insurance Information Institute.

Top 8 US Catastrophe Losses of 2018, by Insured Loss

(Insured Losses, 2018 Dollars, $ Billions)*



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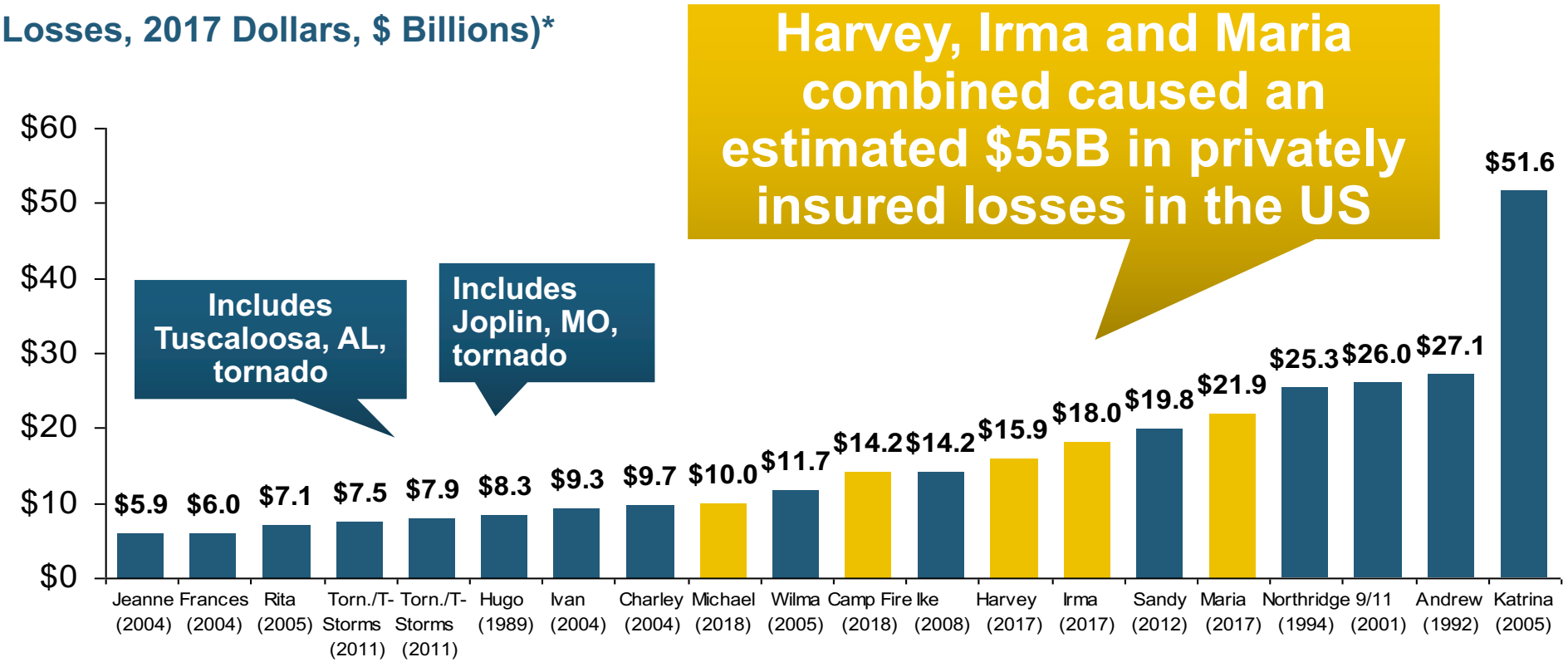
Sources: PCS; Munich Re; Reinsurance News: https://www.reinsurancene.ws/insurance-industry-losses-events-data/

Top 20 Most Costly Disasters in U.S. History—Katrina Still Ranks #1

(Insured Losses, 2017 Dollars, $ Billions)*

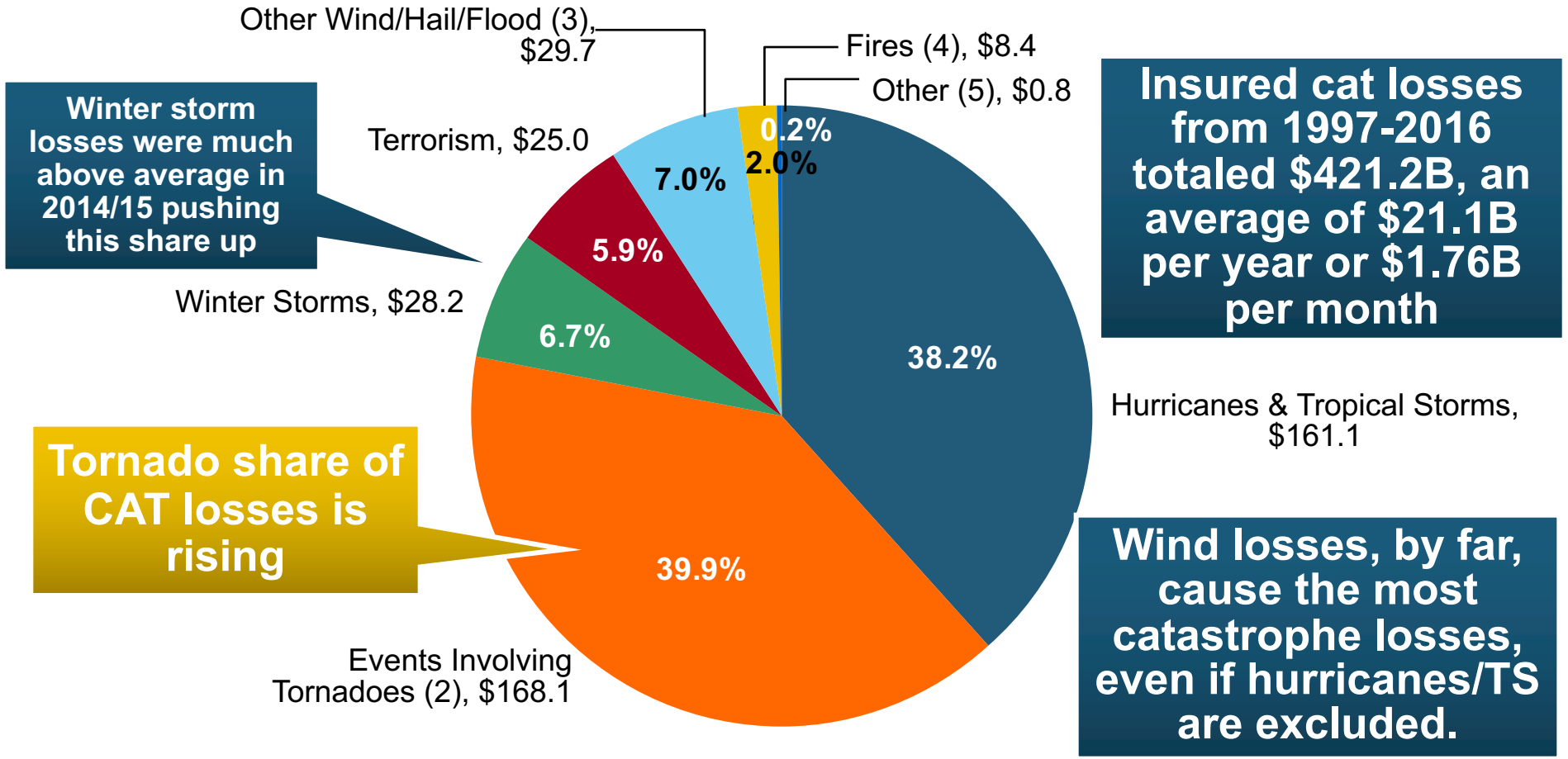


17 of the 20 Most Expensive Insurance Events in US History Have Occurred Since 2004—5 of those in 2017/18

*Estimated.

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

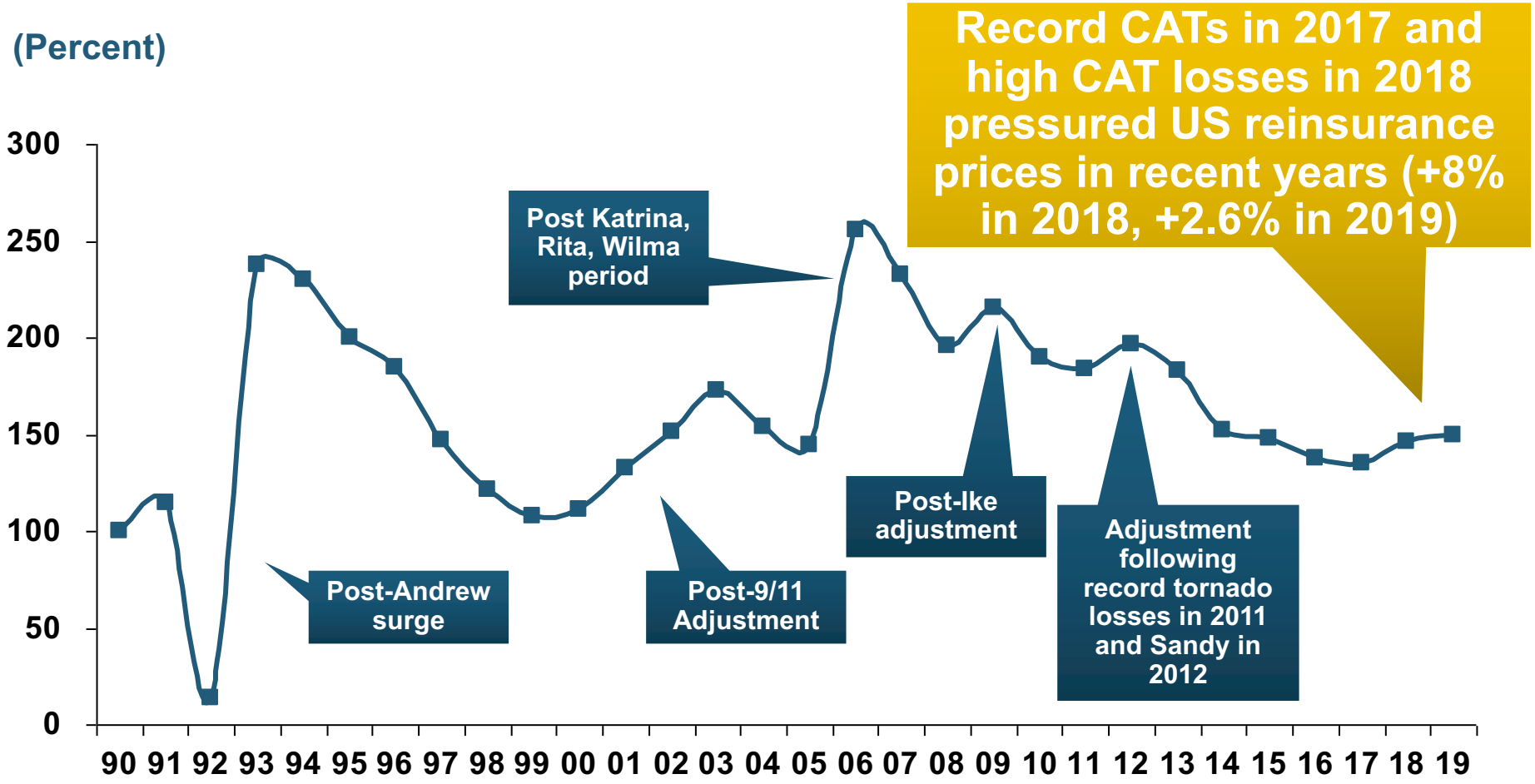
Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1997–2016[1]



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.

US Property Catastrophe Rate-on-Line Index: 1990 – 2019*



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

*As of January 1 each year.

Source: Guy Carpenter; Artimes.bm accessed at: http://www.artemis.bm/us-property-cat-rate-on-line-index

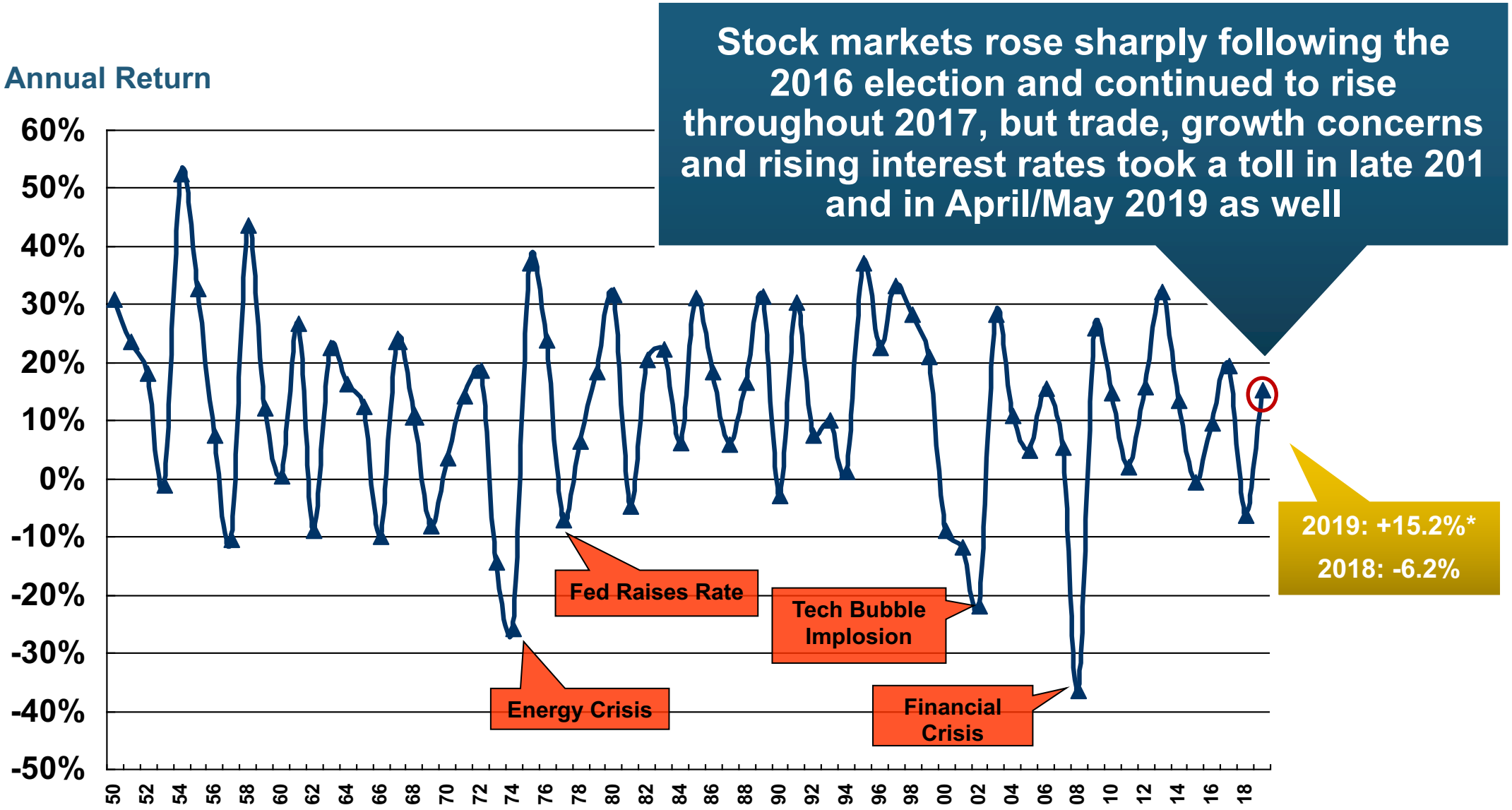
INVESTMENTS: THE NEW REALITY

Investment Performance Is a Key Driver of Insurer Profitability

The Fed's New Dovish Turn, Oval Office Pressure Don't Bode Well for Insurers

Obstacles to Growing Investment Earnings Are Mounting

S&P 500 Index Returns, 1950–2019*



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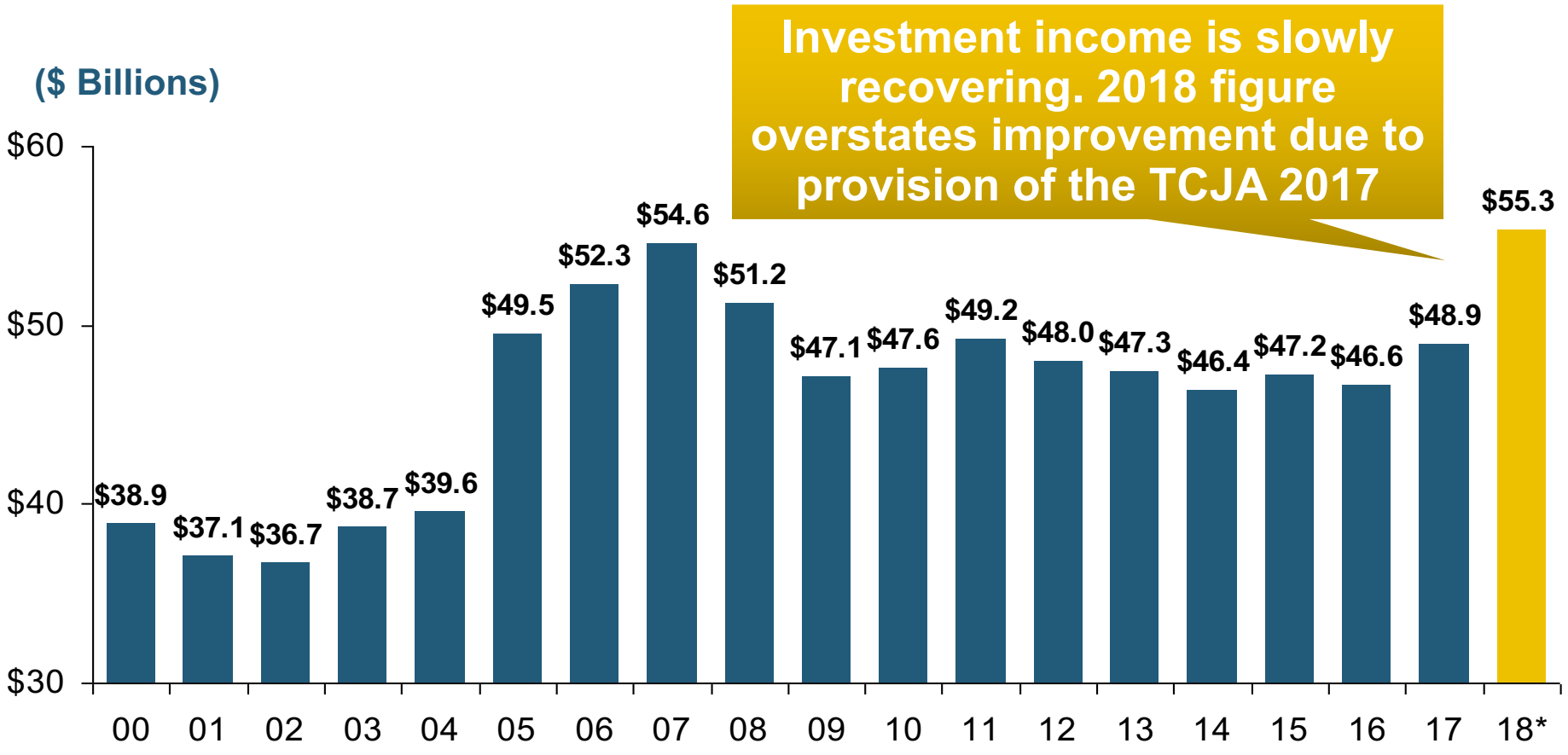
*Through June 14, 2019.
Source: NYU Stern School of Business: http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html; Center for Risk and Uncertainty Management, University of South Carolina

Property/Casualty Insurance Industry Investment Income: 2000–2018

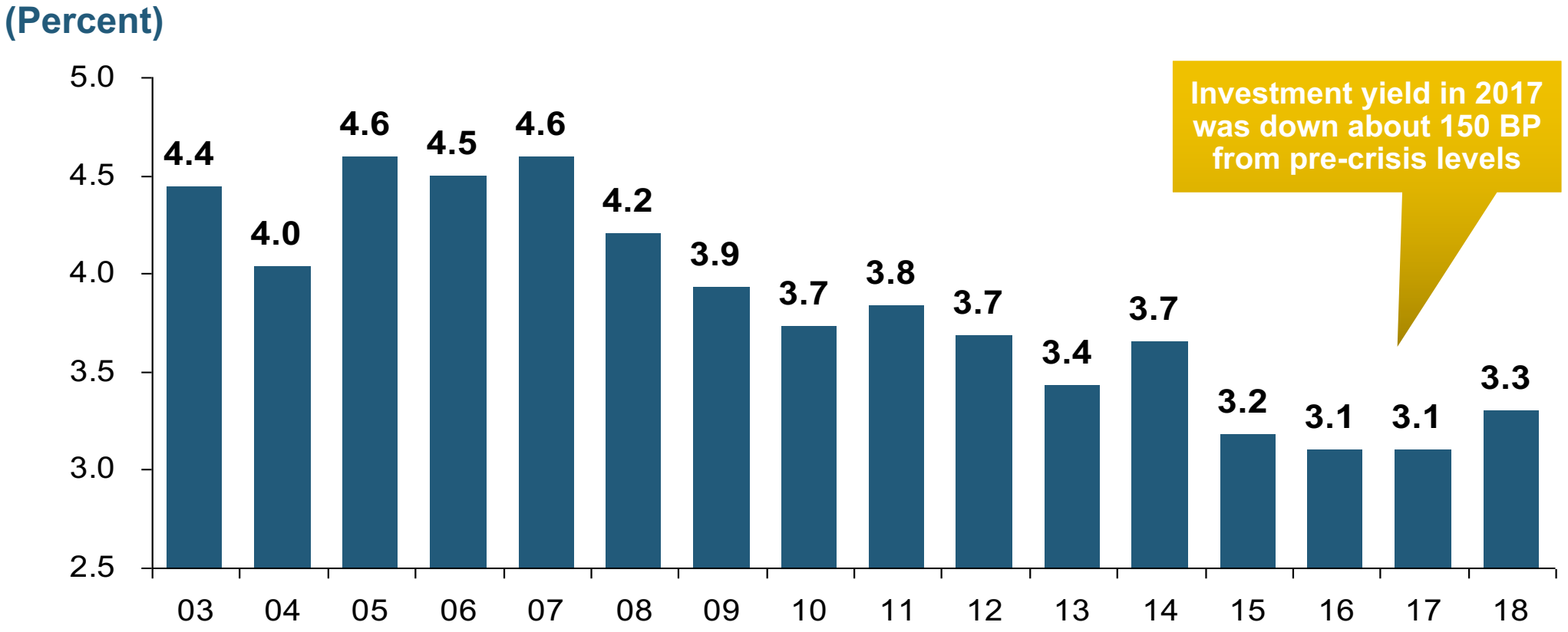


Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014 but showed a small (1.7%) increase in 2015—though 2016 experienced another decline. Up 5.1% in 2017 and 13.1% in 2018

*2018 figure is distorted by provisions of the TCJA of 2017.

[1] Investment gains consist primarily of interest and stock dividends. Sources: ISO; University of South Carolina, Center for Risk and Uncertainty Management.

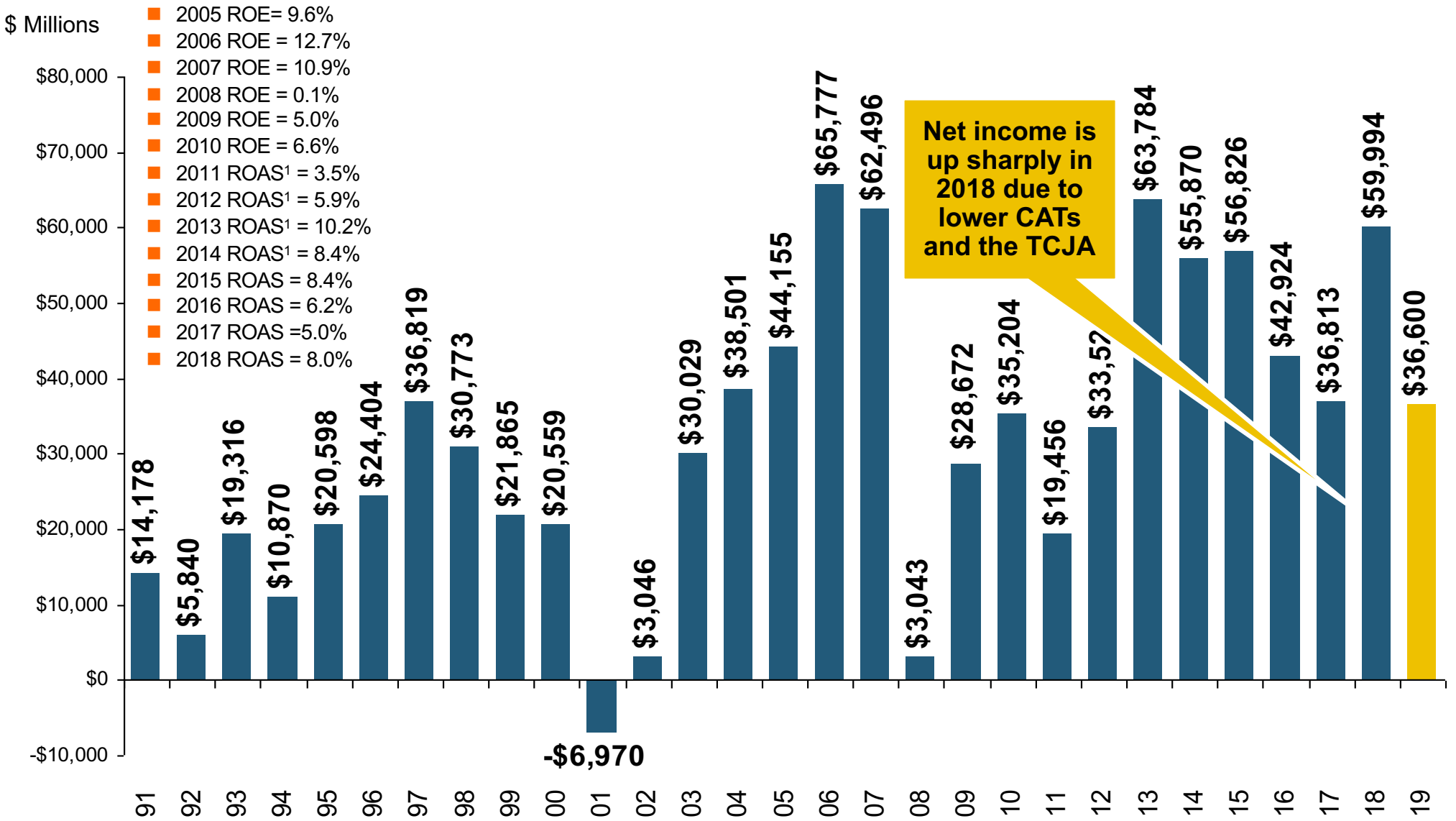
Net Investment Yield on Property/Casualty Insurance Invested Assets, 2007–2018*



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. Shrinking of Fed's balance sheet should help too.

Sources: NAIC data, sourced from S&P Global Market Intelligence; 2017 figure is from ISO.

P/C Industry Net Income After Taxes,1991–2019F



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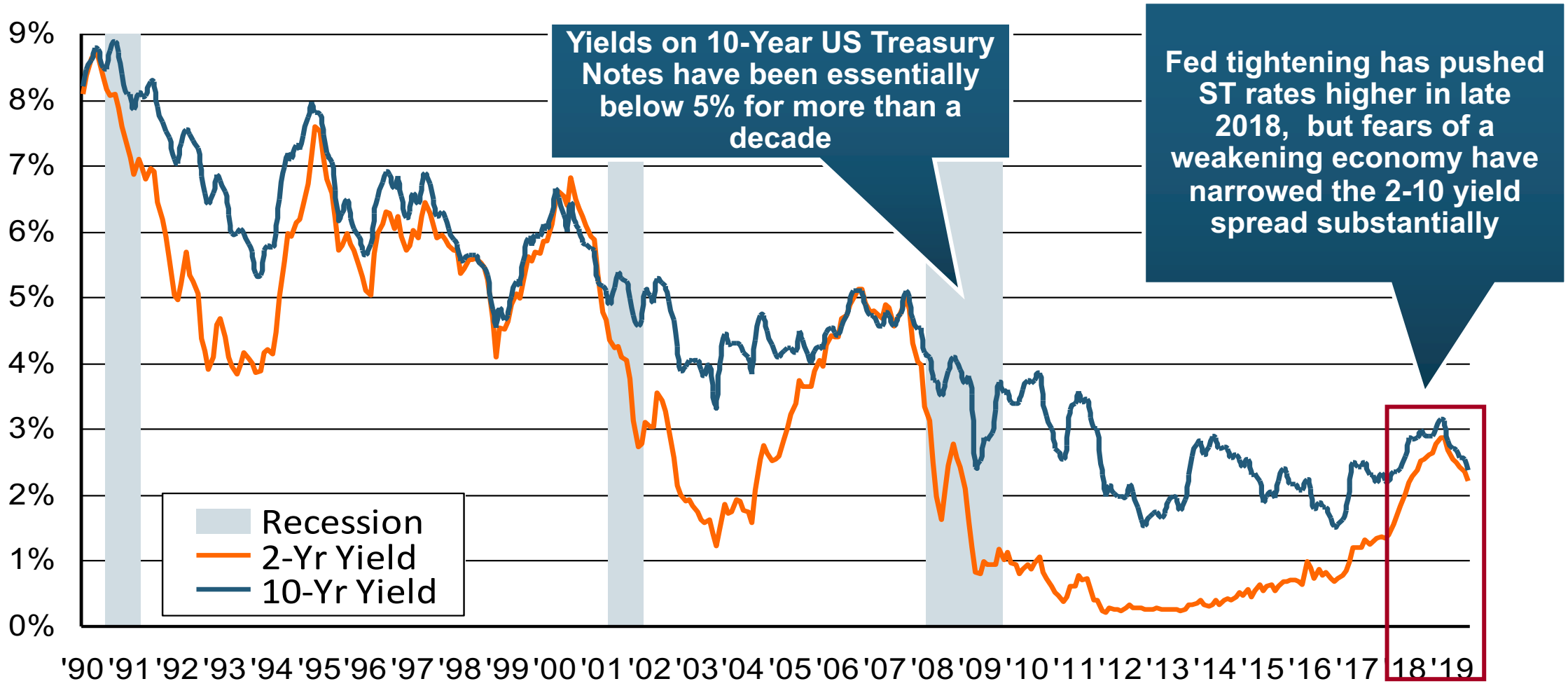
Sources: A.M. Best, ISO.

INTEREST RATE AND INFLATION TRENDS

Federal Reserve Policy, Economic Strength, Trade Policy and Deficits Will Drive Interest Rates and Inflation

2020 Election Politics Will Have an Increasing Impact Too!

US Treasury Security Yields: A Long Downward Trend, 1990–2019*

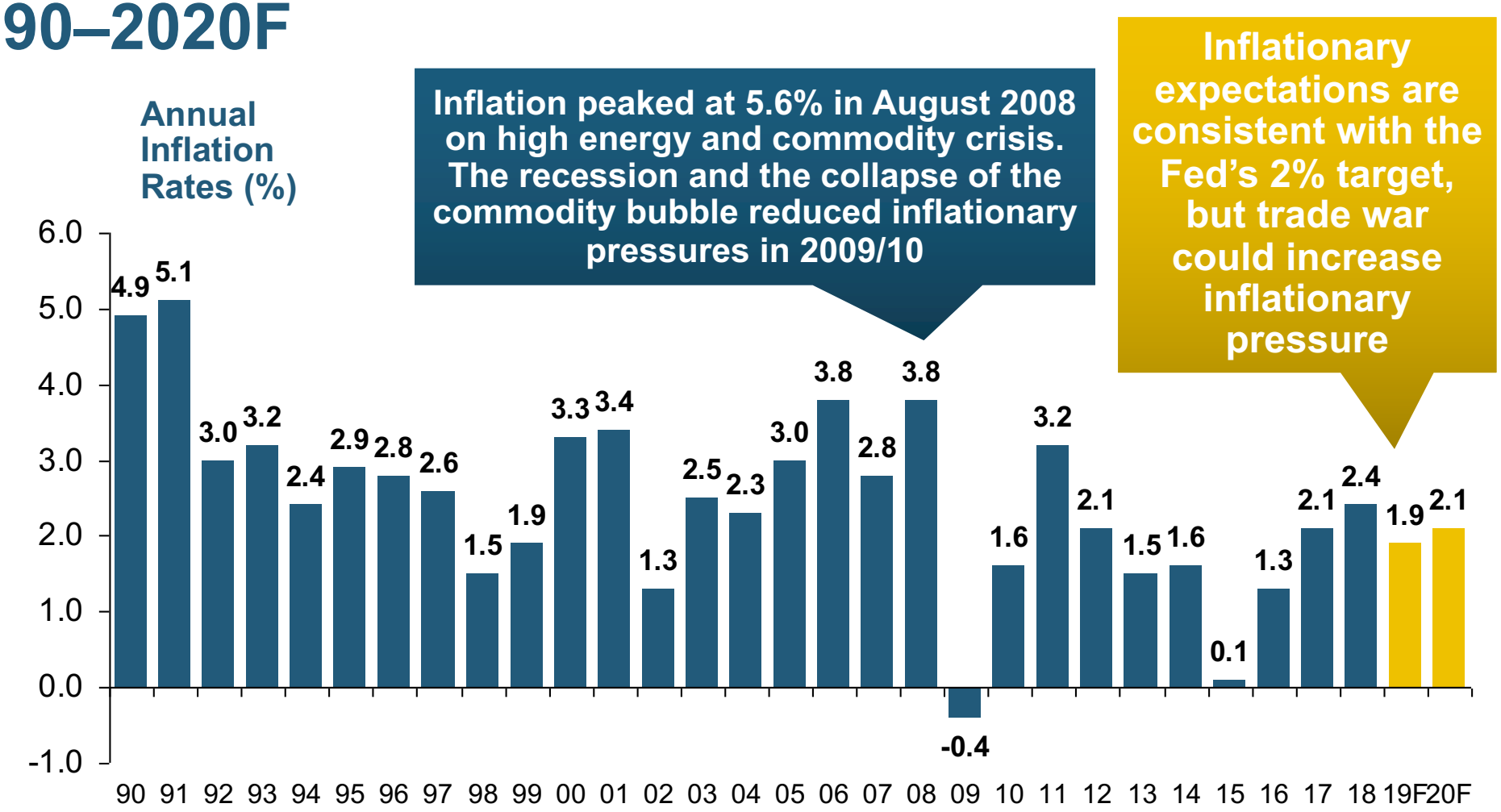


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through Apr. 2019; May 2019 observation is for week of May 24.

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

Annual Inflation Rates, (CPI-U, %), 1990–2020F



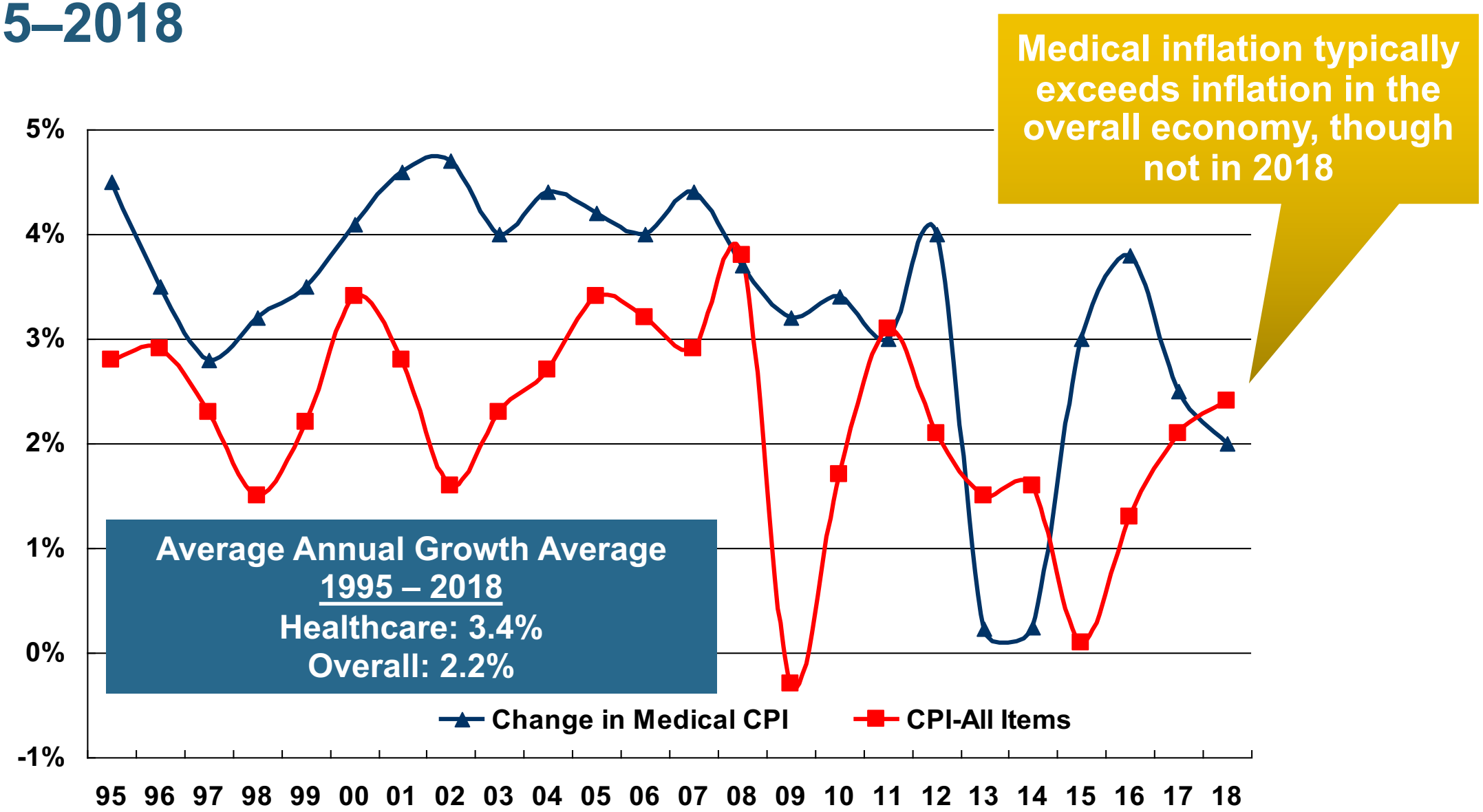
Inflation remains remarkably tame despite a tight US labor market, modest economic growth, rising energy prices, tariff-induced price increases and a rapidly rising federal budget deficit.

Trade War Alert

A sustained trade war with China could increase inflation by 0.1 to 0.4 points. Mexico tariffs will intensify inflationary pressures

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators, 5/19 (forecasts).

Medical Cost Inflation vs. Overall CPI, 1995–2018



Sources: US Bureau of Labor Statistics.

THE ECONOMY

The Strength of the Economy Has Always Influenced Growth in Insurers' Exposure Base Across Most Lines

The Links Between the Economy and the P/C Insurance Industry Are Strengthening

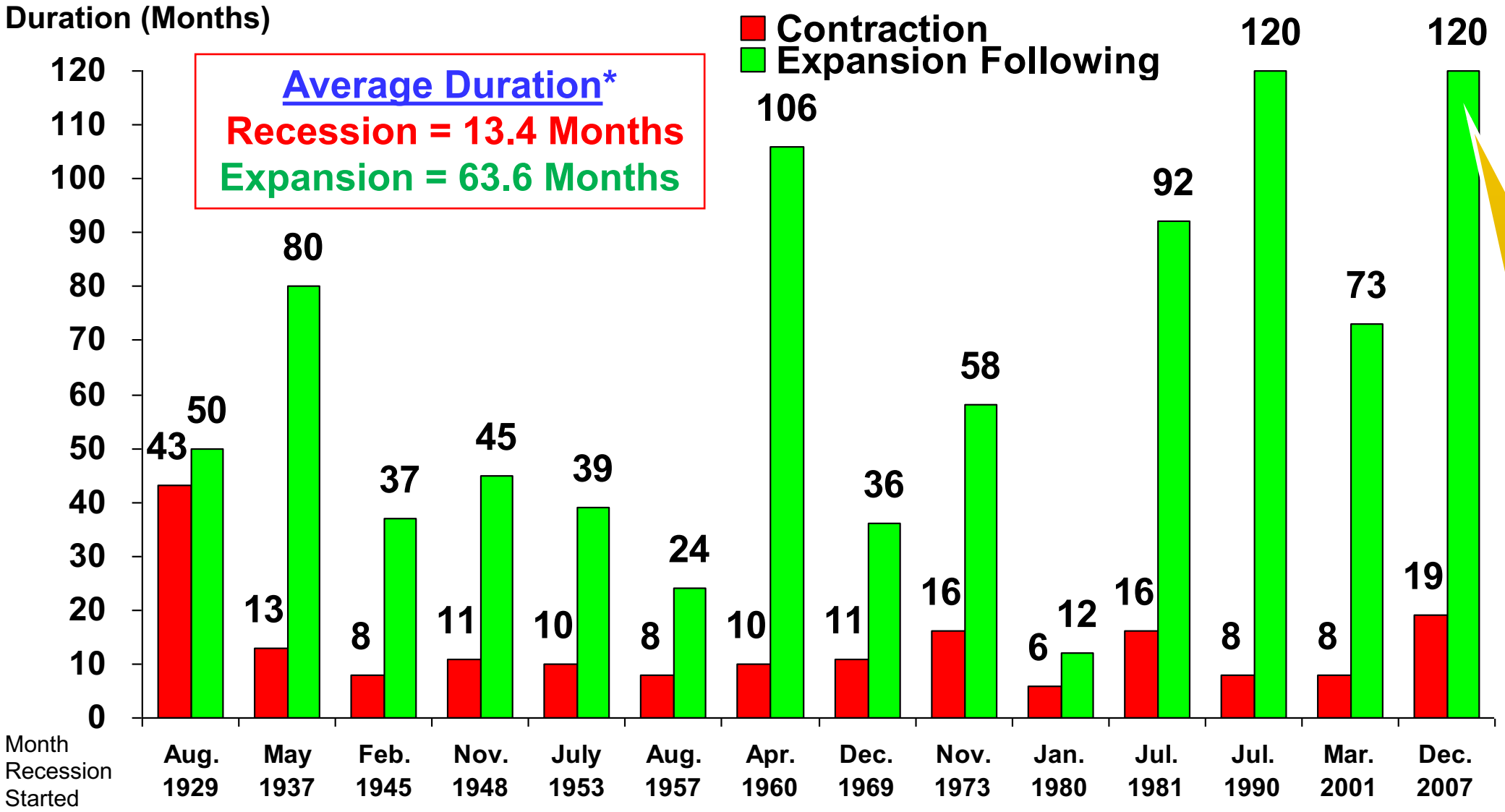
Recent Top Economic Headlines…A Tale of Two Economies

- **Unemployment Rate: 3.6%**
  - Best since 1969
- **Job Growth: 218K Jobs Created on Average Over the Past 12 Months**
  - Close to the best 12-month stretch in the post-crisis period (May 2018 – April 2019)
- **GDP Growth: 3.2% in Q1 2019**
  - Best start to the year since 2015
- **Wage Gains: 3.2% in April 2019**
  - Strongest in post-crisis era

But the Economic Outlook Is Getting Cloudy …

- **Trade War: Tariffs Increased to 25% on Most Chinese Imports** ***(Mexico too?)***
  - China Retaliates with tariffs on $60B of US products
- **Stock Markets: Dow Sheds 1,600 Points (6%+) in May**
  - Expectations for Q2 GDP growth fall to < 1.5%

Length of US Business Cycles, 1929-Present*



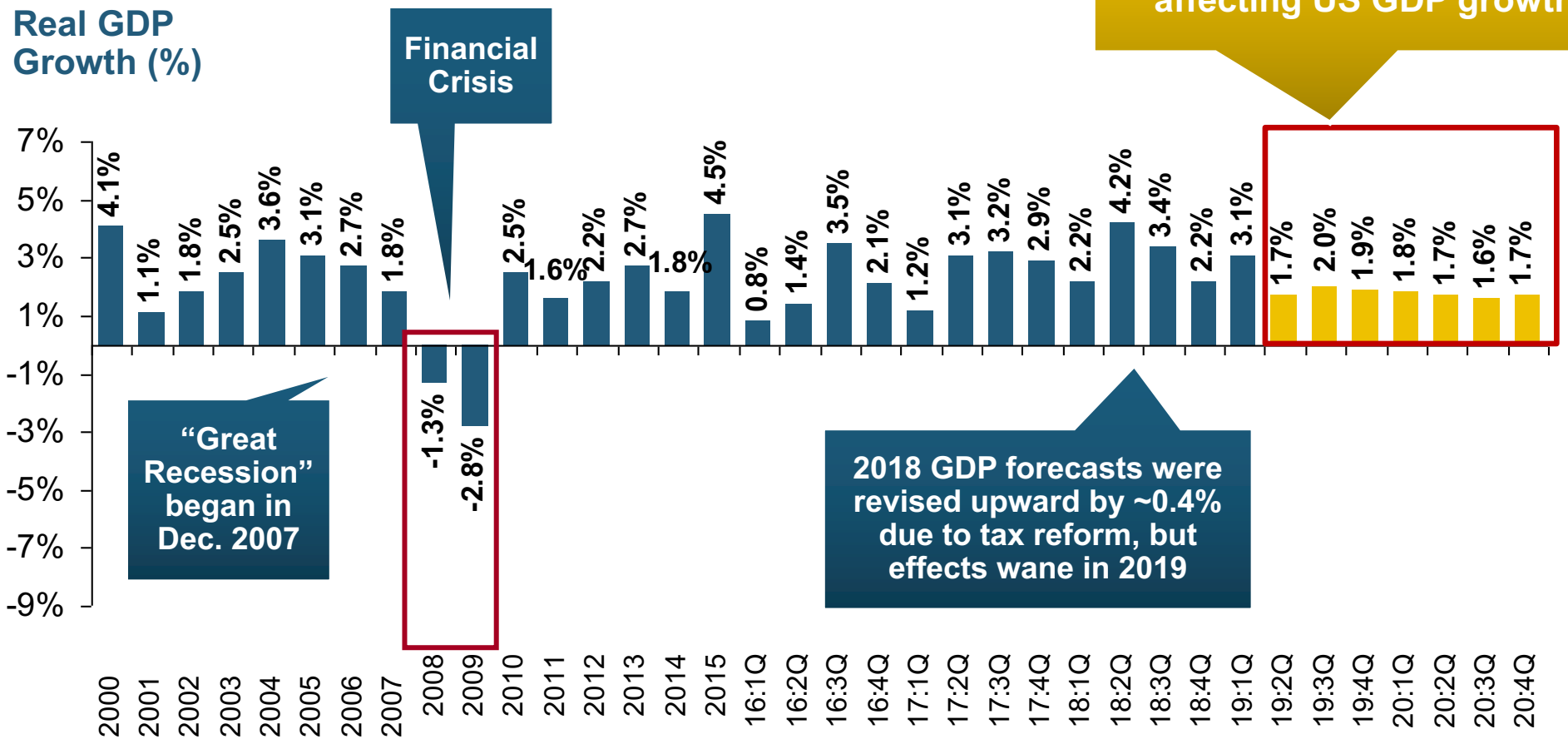
The current economic expansion (as of June 2019) is now tied for the longest in US history (began July 2009)

* As of June 2019, inclusive

Sources: National Bureau of Economic Research; Risk and Uncertainty Management Center, University of South Carolina.

US Real GDP Growth*

Tax cuts help jolt growth from early 2018 to Q1 2019, but effects are waning. Trade war, weaker global growth are adversely affecting US GDP growth in 2019/20.



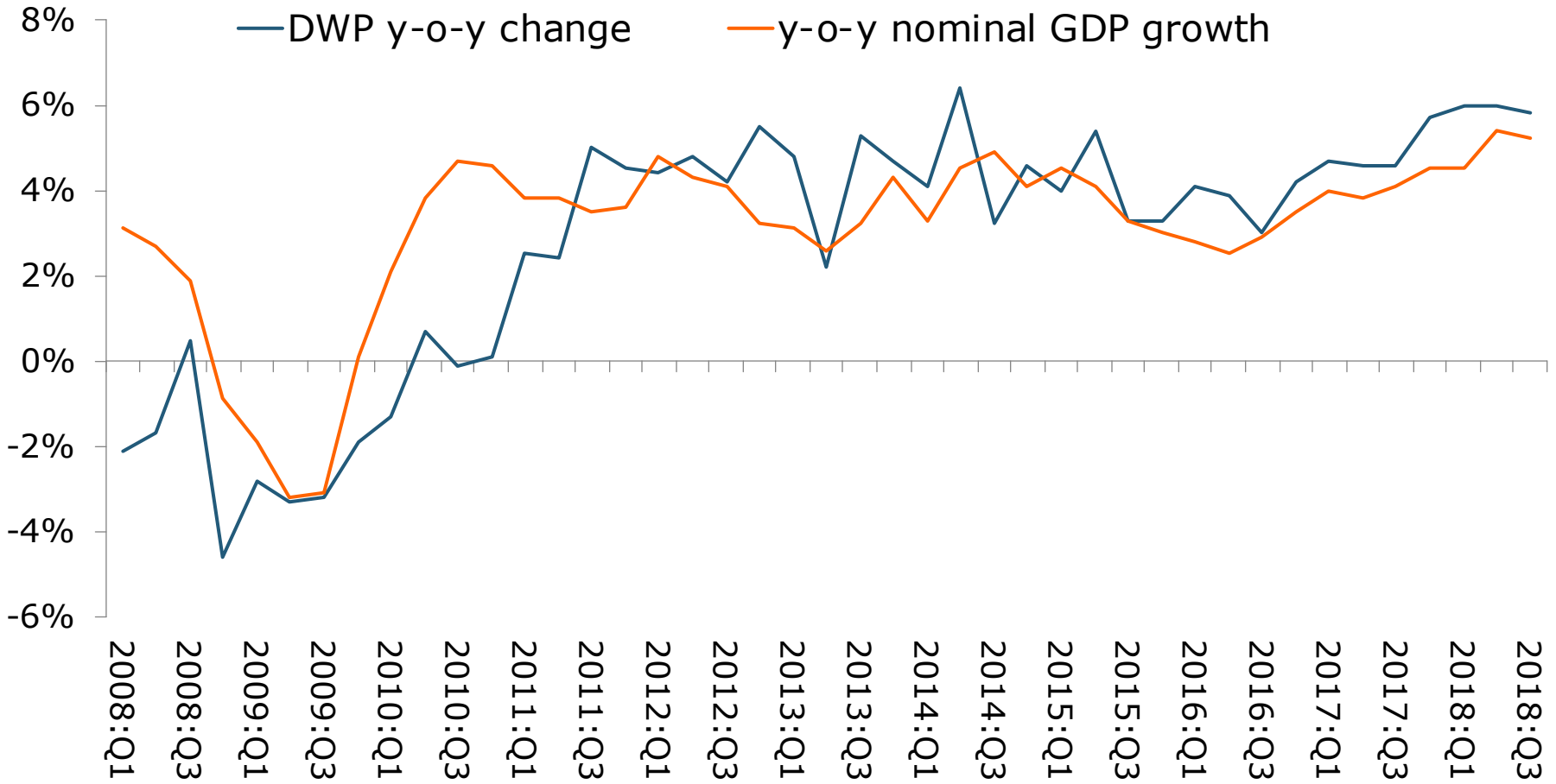
Demand for Insurance Should Increase in 2019 as GDP Growth Continues at a Steady Pace and Gradually Benefits the Economy Broadly

* Estimates/Forecasts from Blue Chip Economic Indicators.

Source: US Department of Commerce, Blue Economic Indicators 6/19; Center for Risk and Uncertainty Management, University of South Carolina.

The Economy Drives P/C Insurance Industry Premiums: 2006:Q1–2018:Q4

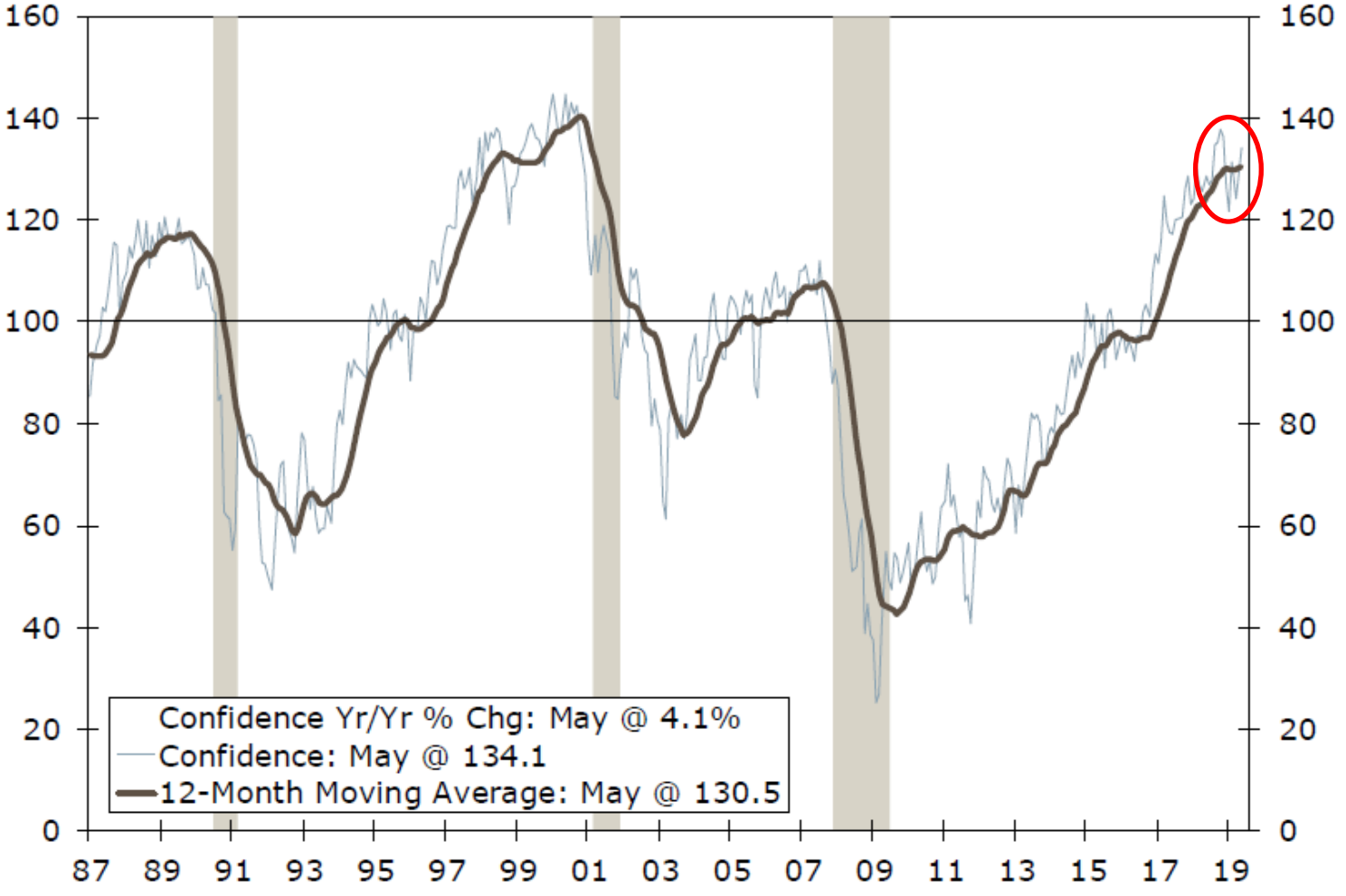
Direct Premium Growth (All P/C Lines) vs. Nominal GDP: Quarterly Y-o-Y Pct. Change



Direct written premiums track nominal GDP fairly tightly over time, suggesting the P/C insurance industry's growth prospects inextricably linked to economic performance.

Sources: SNL Financial; U.S. Commerce Dept., Bureau of Economic Analysis; I.I.I.

Consumer Confidence Index: Jan. 1987– May 2019

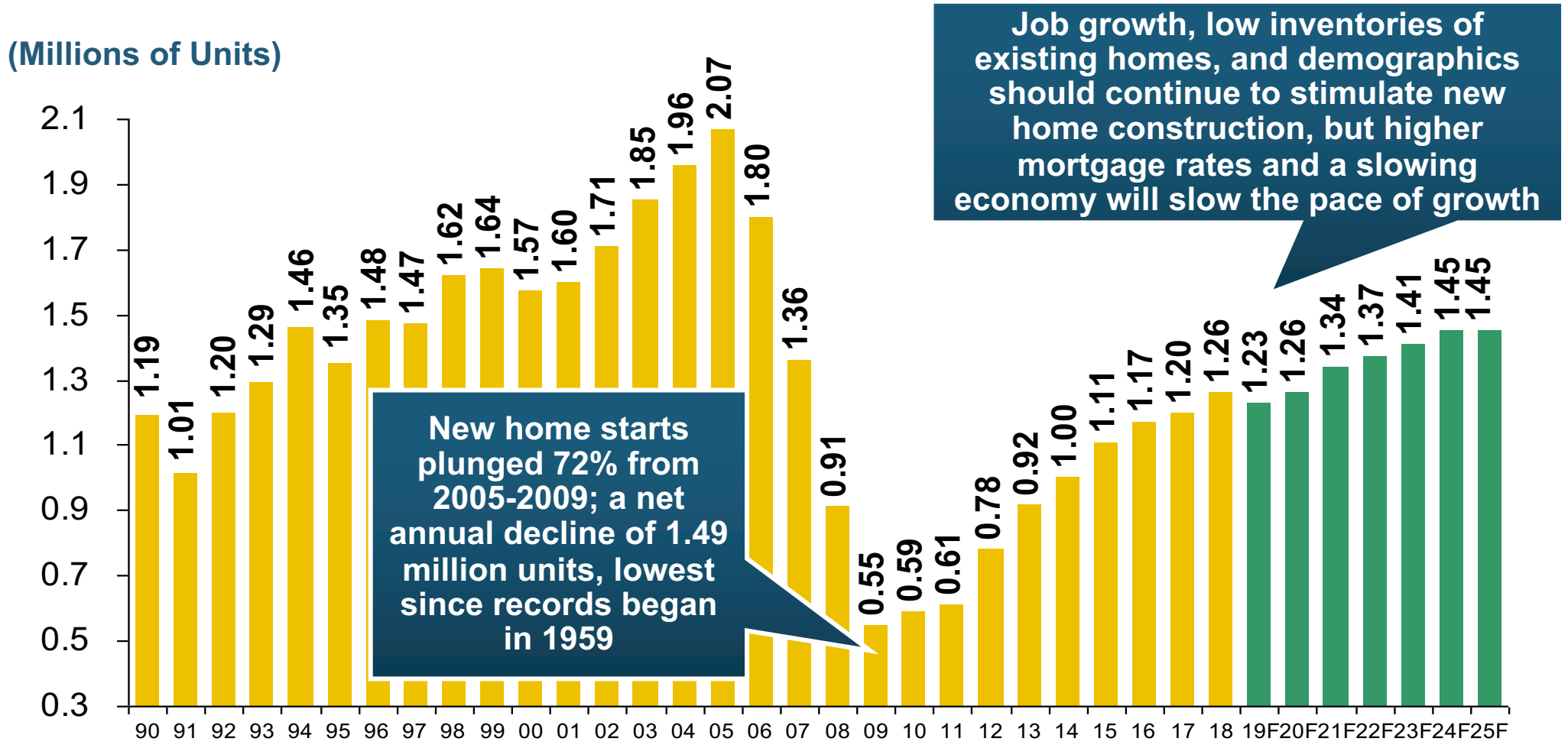


The Conference Board's Consumer Confidence Index stood at 134.1 in May, down from its post-recession high in Q3 2018 but is rebounding from a drop in late 2019/early 2019

Outlook: Consumer confidence was shaken by financial volatility in late 2018/early 2019—but confidence is rebounding. 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 growth of insurable exposures.

Source: The Conference Board; Wells Fargo Research.

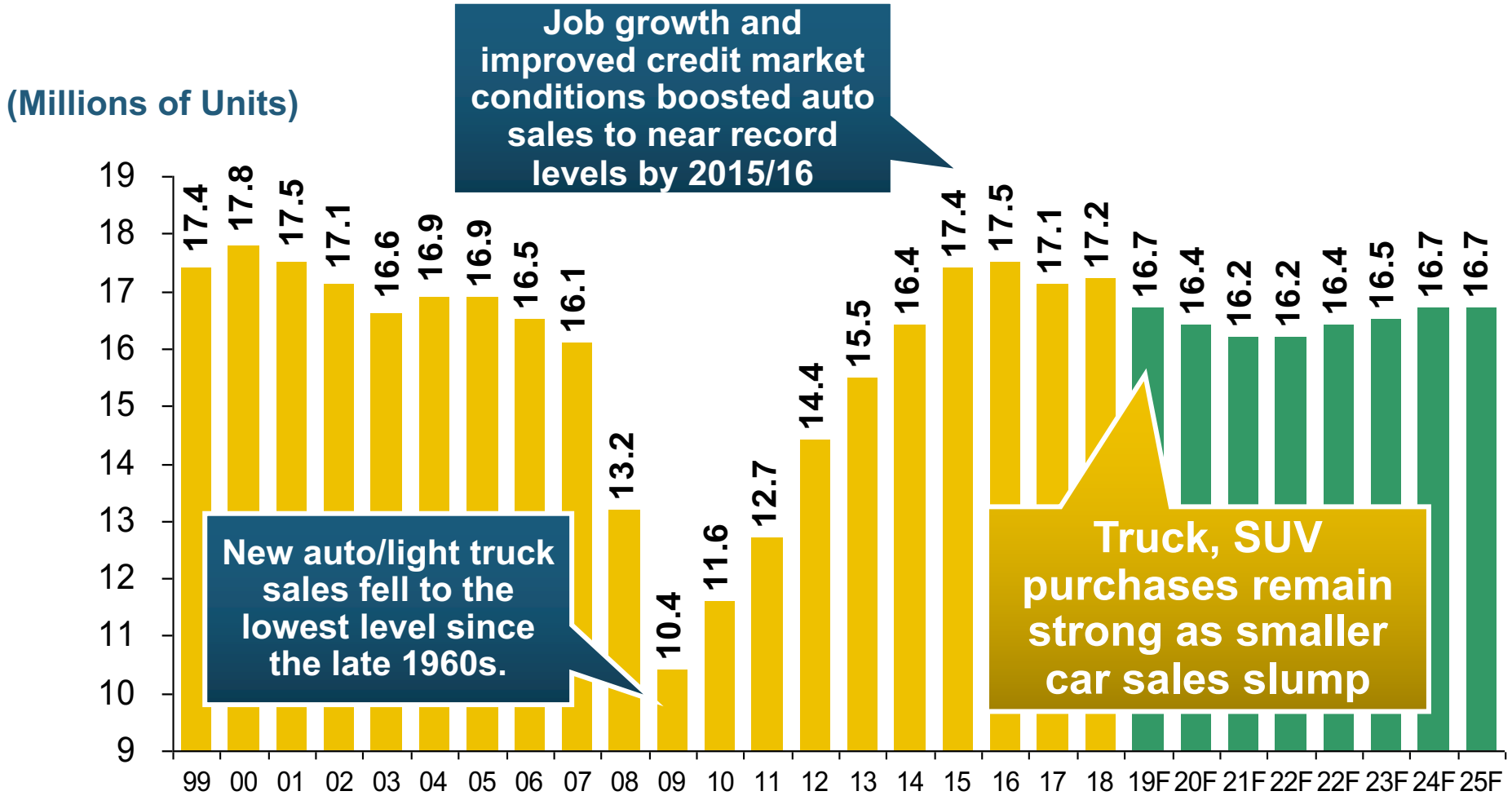
New Private Housing Starts, 1990-2025F



Insurers 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

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (6/19 for 2019-20; 3/19 for 2021-25F); University. of South Carolina, Center for Risk and Uncertainty Management..

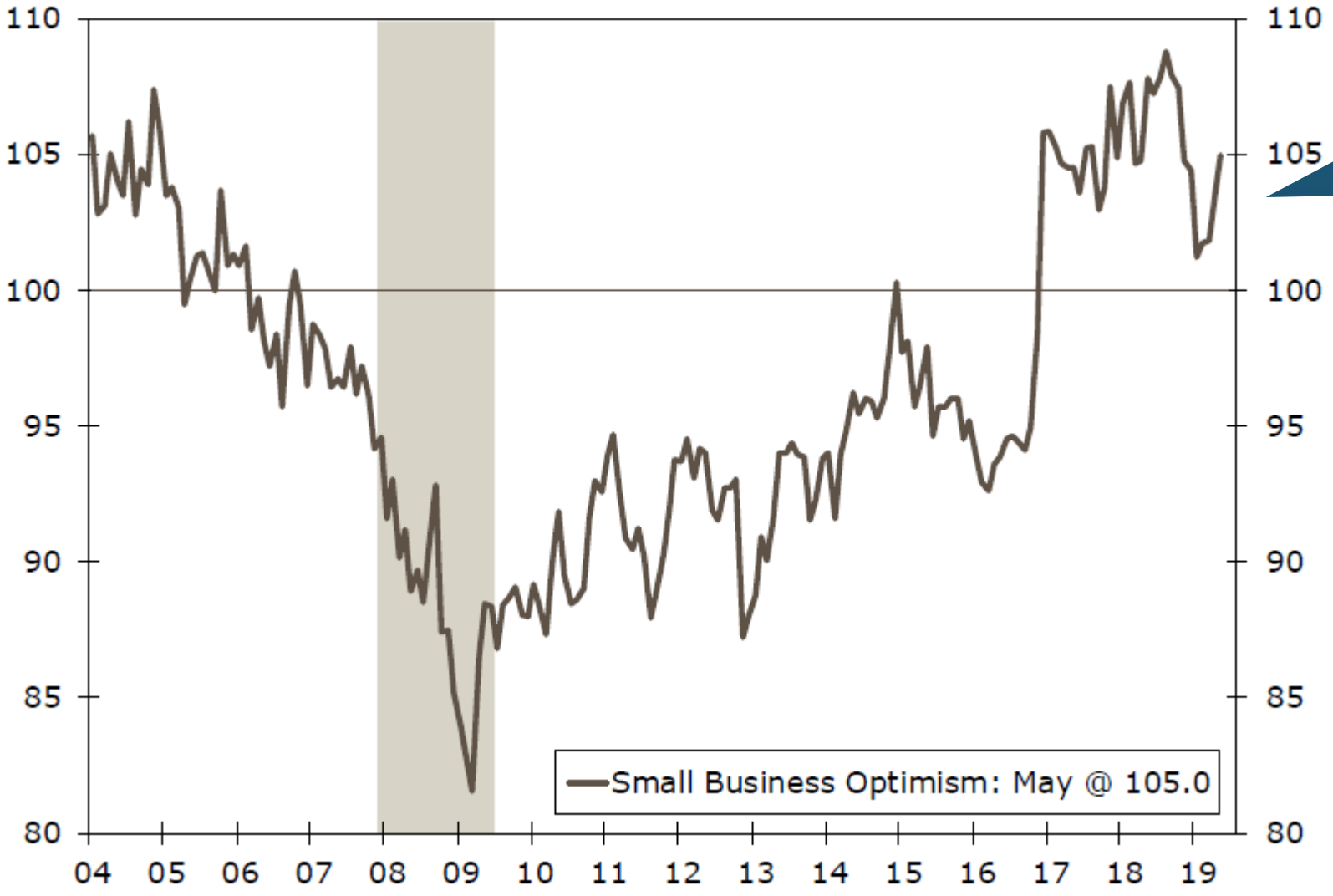
Auto/Light Truck Sales, 1999-2023F



Yearly car/light truck sales are slowing slightly, as demand tapers. But shifting consumer preferences for more expensive trucks, SUVs and crossovers will contirbue continued exposure growth. PP Auto premium might grow by 3.5% - 5%.

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (6/19 for 2019-20; 3/19 for 2021-25F); Univ. of South Carolina, Center for Risk and Uncertainty Management.

NFIB Small Business Optimism Index: Jan. 1988–May 2019



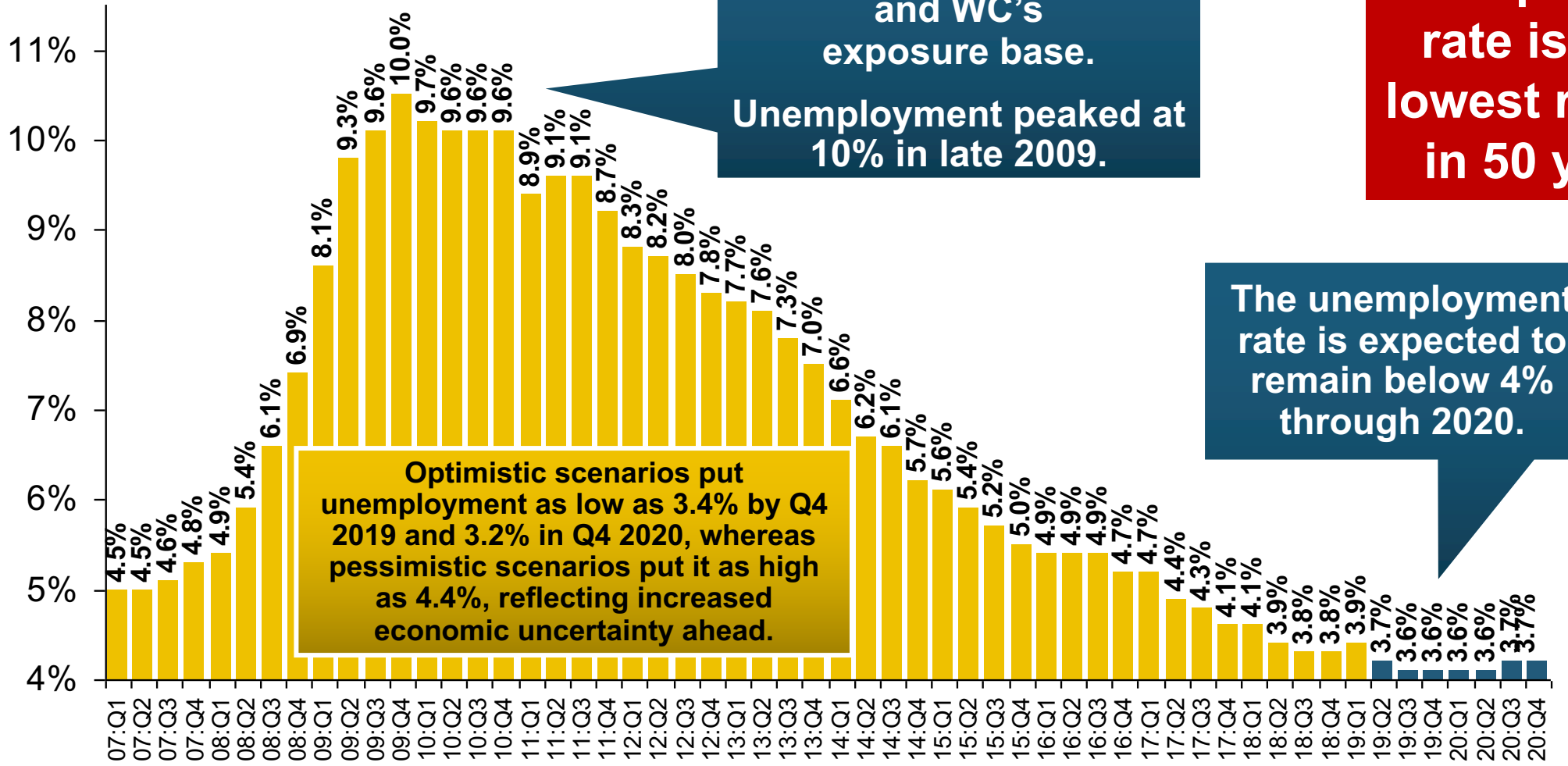
Small Business Optimism took a big hit in late 2018/early 2019 on fears of a greater economic uncertainty (esp. trade war fears and concerns over rising interest rates). Tax reform, reduced regulations and strong sales have driven investment, hiring and exposures.

Outlook: Small businesses increasingly concerned about the future

Trade wars (actual and threatened actions) are introducing massive uncertainty in to the markets

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

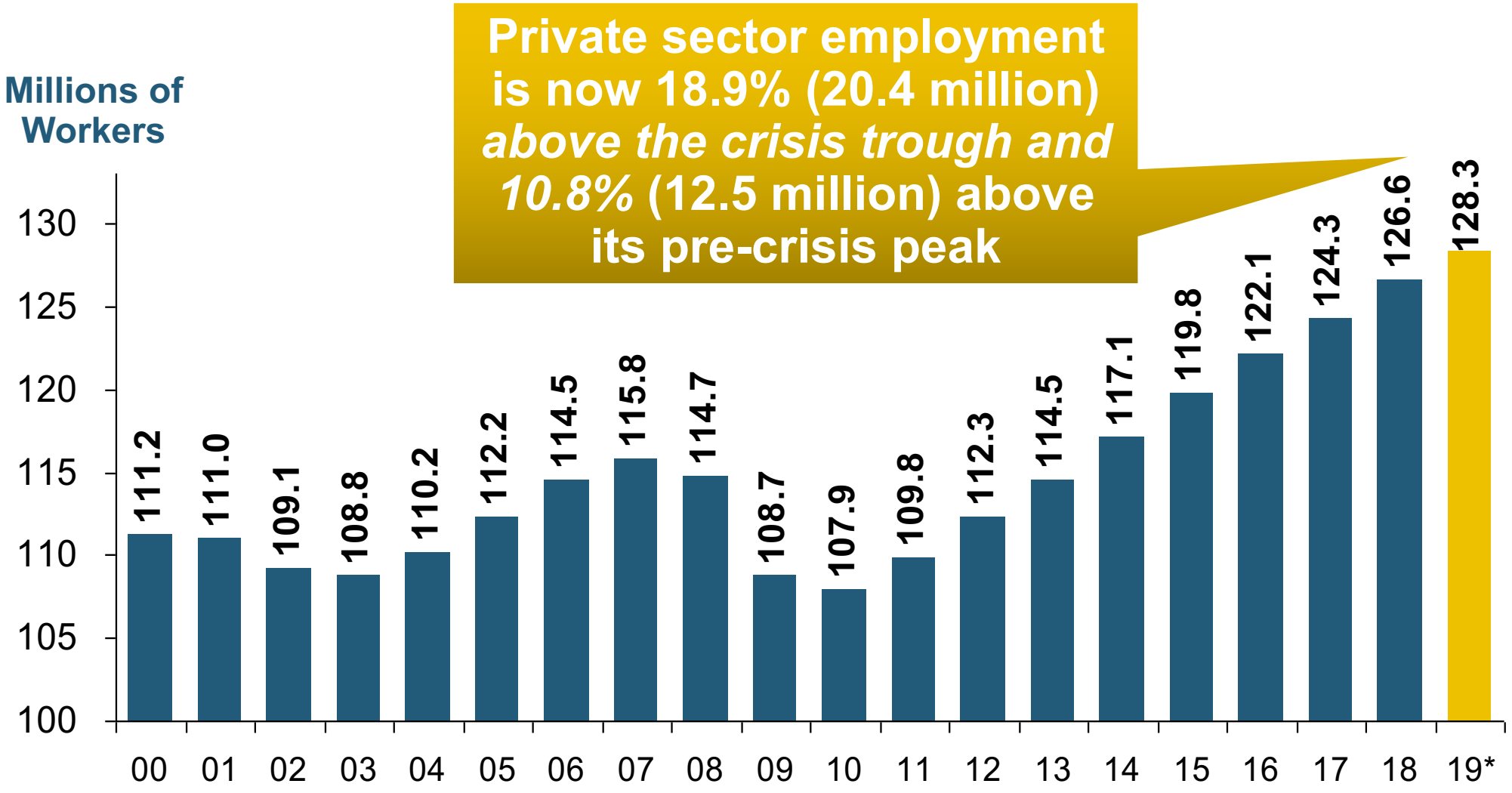
US Unemployment Rate Forecast: 2007:Q1–2020:Q4



* = actual; = forecasts

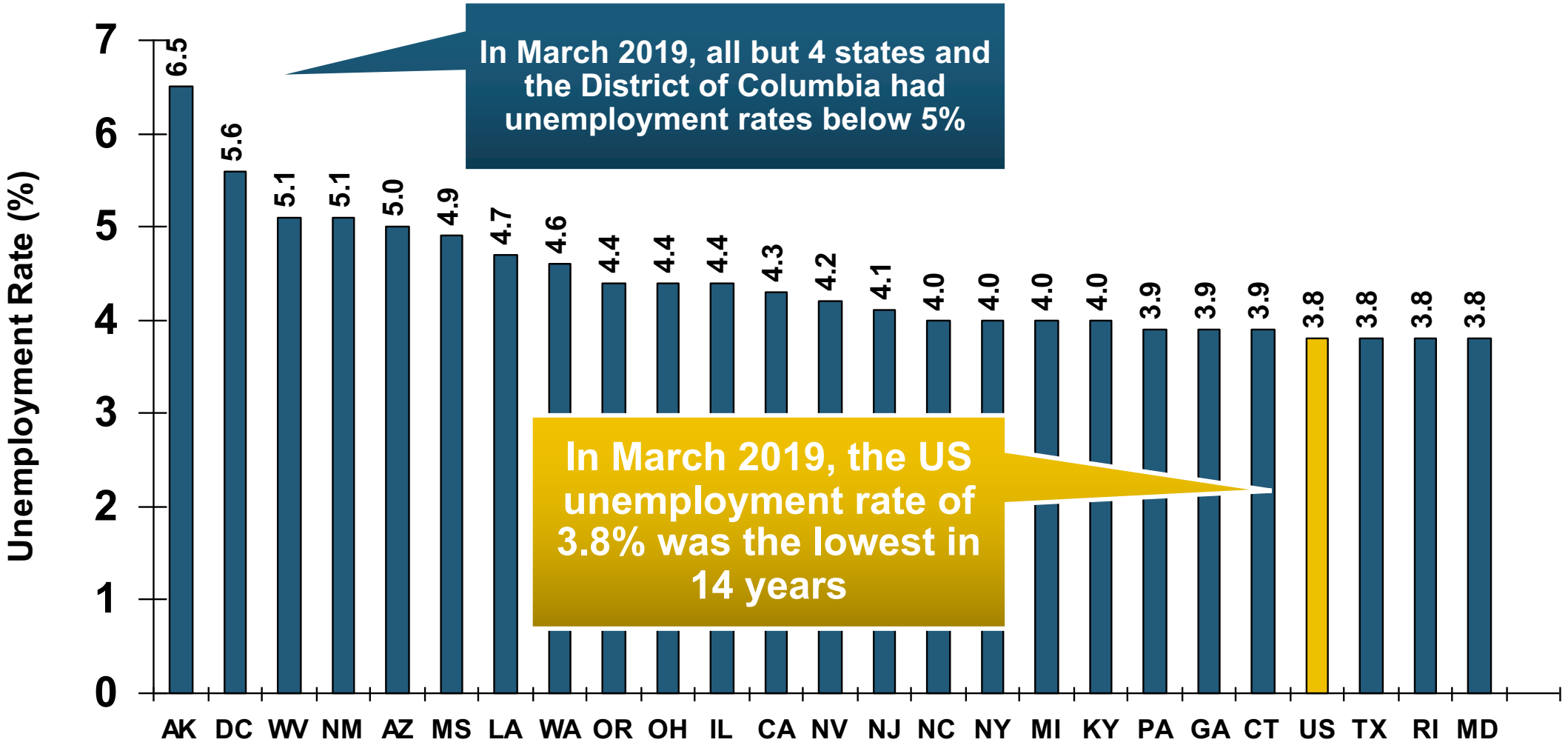
Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (6/19 edition); Risk and Uncertainty Management Center, University of South Carolina.

Private Sector Employment, 2000-2019*



*Annual averages of monthly data. 2019 figure is annualized based on data through April.
Sources: US Bureau of Labor Statistics; Risk and Uncertainty Management Center, University of South Carolina.

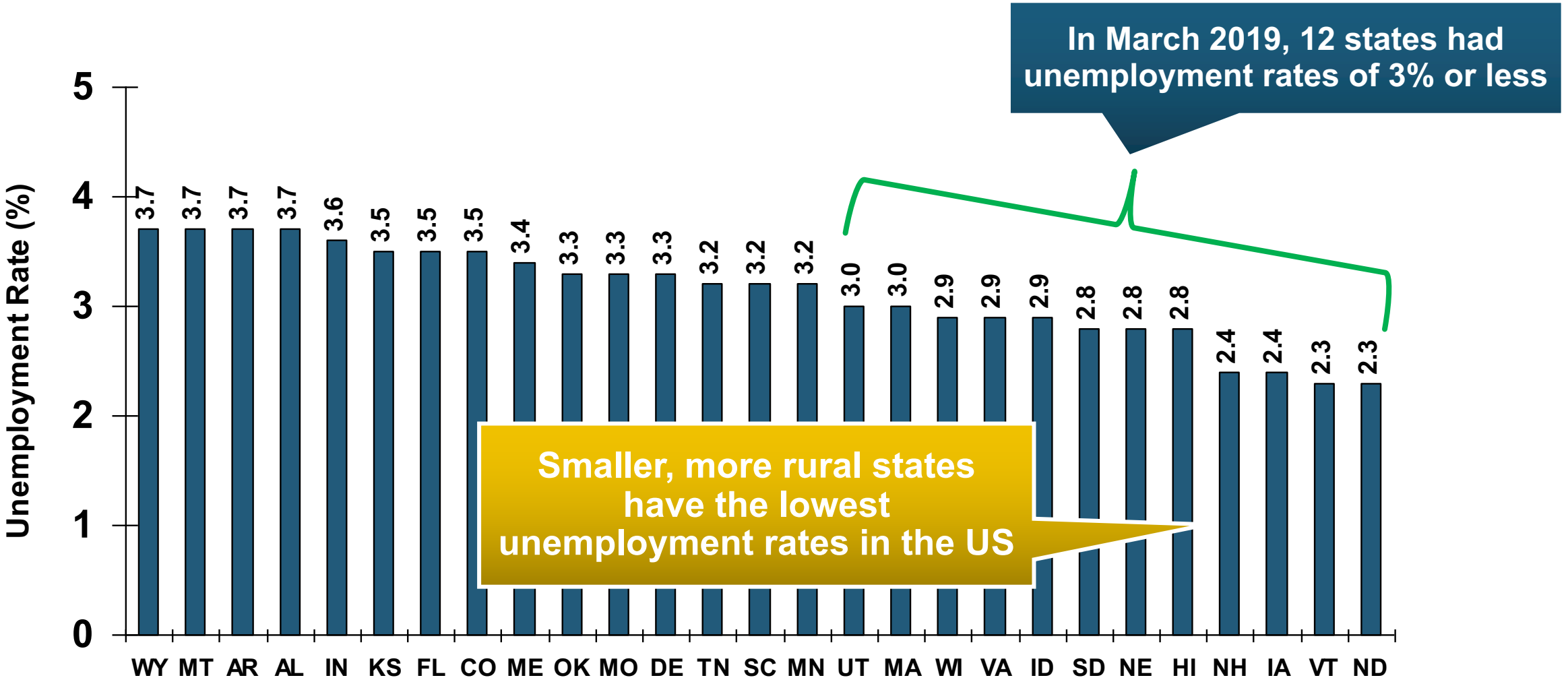
Unemployment Rates by State, March 2019: Highest 25 States*



*Provisional figures for March 2019, seasonally adjusted.

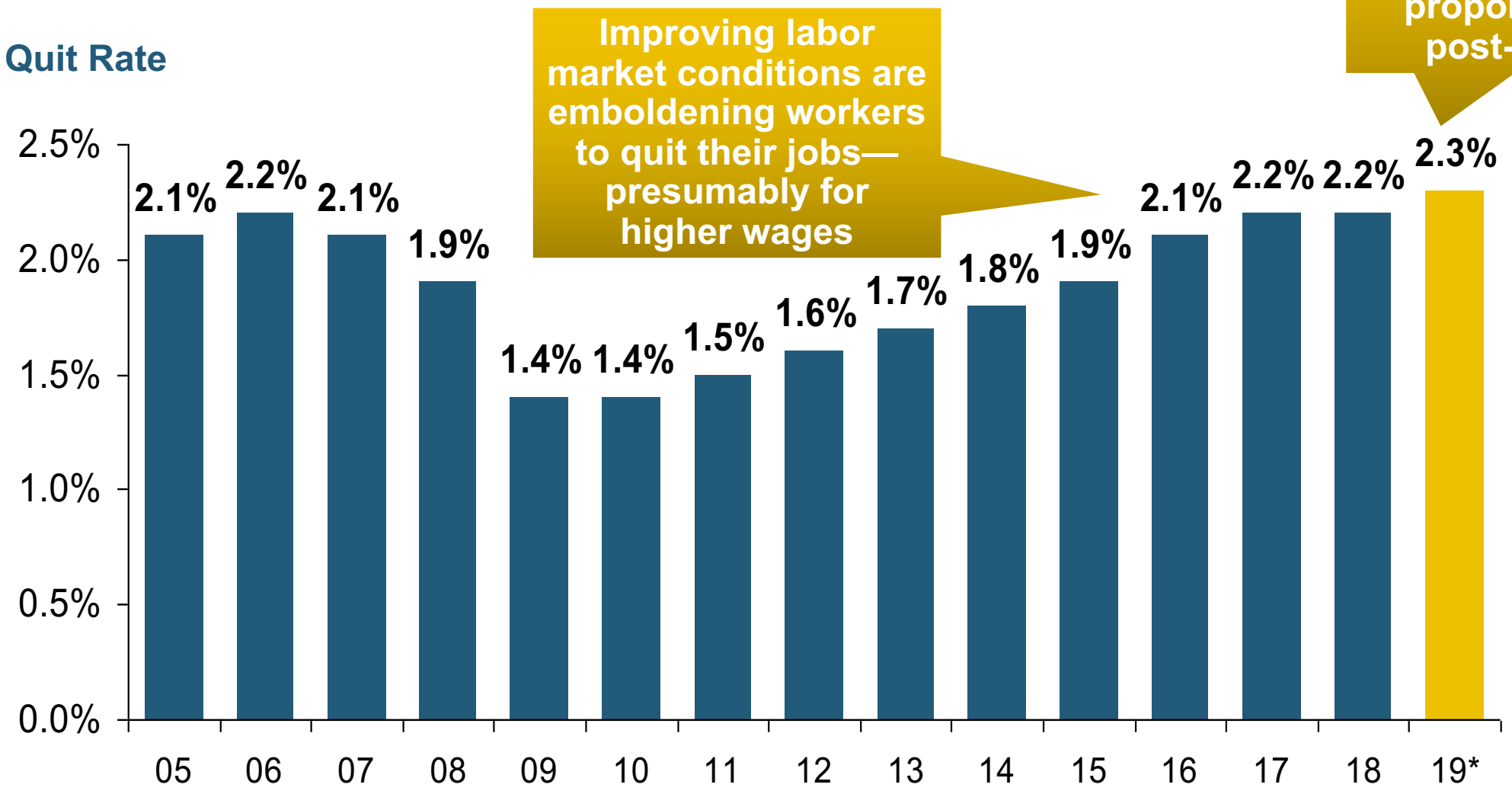
Sources: US Bureau of Labor Statistics.

Unemployment Rates by State, March 2019: Lowest 25 States*



*Provisional figures for March 2019, seasonally adjusted.
Sources: US Bureau of Labor Statistics.

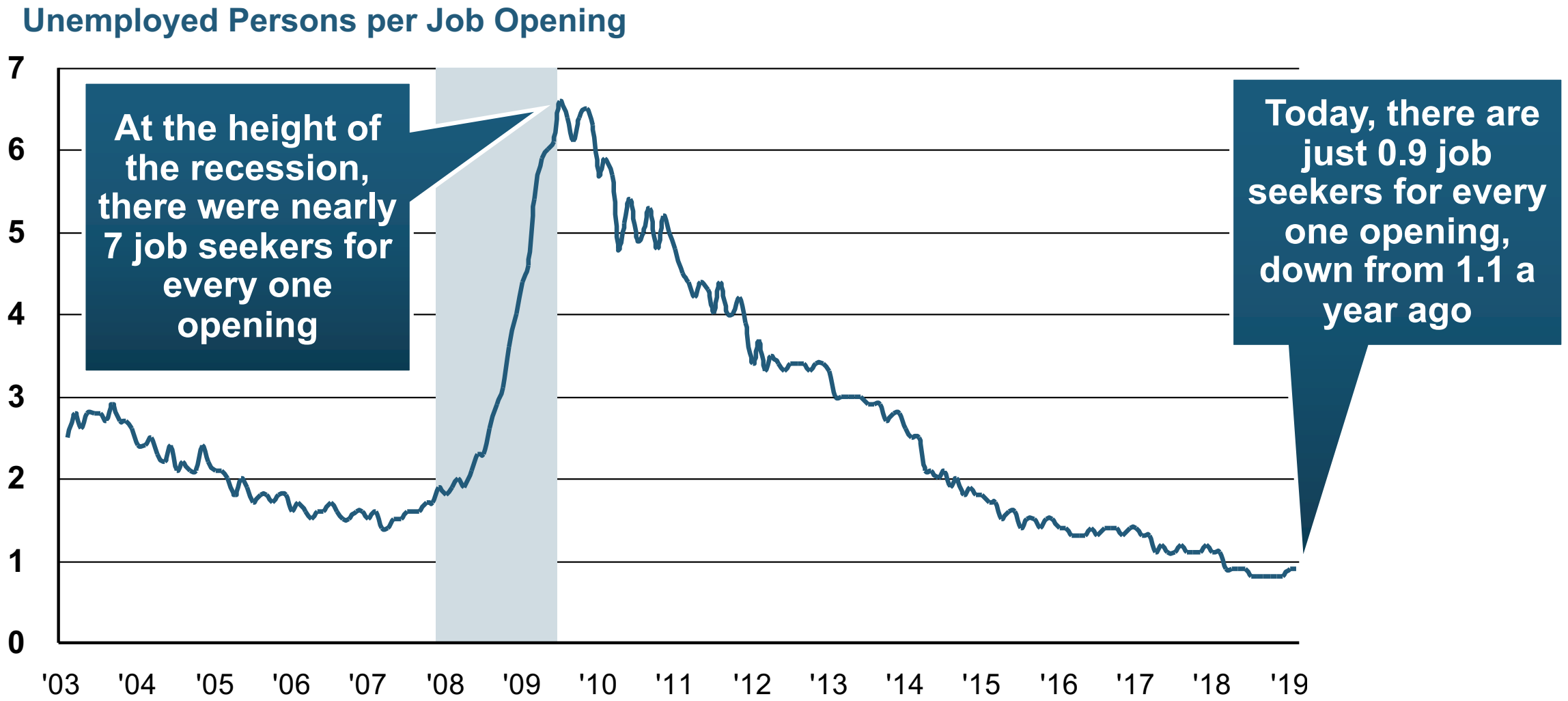
Take This Job And … Quit It!
Quit Rate, 2005–2019*



*Annual figures calculated from month seasonally adjusted data. 2019 figure through February.

Sources: US Bureau of Labor Statistics JOLTS Survey at https://www.bls.gov/jlt/ ; Risk and Uncertainty Management Center, University of South Carolina.

Number of Unemployed Persons per Job Opening, Feb. 2003—Feb. 2019*



*Seasonally adjusted

Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics JOLTS survey: at http://www.bls.gov/jlt/; National Bureau of Economic Research (recession dates); Center for Risk and Uncertainty Management, University of South Carolina.

US TRADE POLICY

How Will the P/C Insurance Industry Be Impacted by Escalating Trade Disputes?

Trade Actions and Workers Compensation

Major Trade Actions Announced So Far

- March 2018: Steel and Aluminum
  - 25% tariff on foreign steel, 10% tariff on imported aluminum
- April 2018: $50B in tariffs announced on some 1,300 Chinese products
- Sept. 2018: 10% tariffs on $200B worth of Chinese products
  - China retaliates immediate with highly targeted tariffs on American products
- May 10, 2019: 10% tariffs → 25% on $200B on Chinese products
  - Threat to implement 25% on remaining $325B not currently subject to tariff
  - China retaliates with $60B in tariffs on US goods
- May 31: Tariffs of Up to 25% Threatened Against all $370B in Mexican Imports
  - Agreement reached June 8; Tariffs tabled for now but could pose future threat

Potential Impacts: Job and Income Losses Could Be Severe if Targeted Countries Retaliate

- Hundreds of thousands of jobs would be lost across many industries
- P/C premium shrinkage would be measured in the billions as hundreds of billions as exposure growth slows or shrinks in key lines

Trade Actions and P/C Insurance

Potential Impacts on P/C Insurance

- **Personal Auto repair costs likely to rise by 2.7% or about $3.4B annually, assuming 25% tariffs on imported parts**
- **Tariffs against Mexico could have cost insurers/consumers up to $5B**
  - **Mexico is the largest source of imported auto parts (~40% or $60B)**
- **Analogous impacts in Commercial Auto**
- **Tariffs on Canadian lumber is raising construction costs**

Insight

At Large

Trade War Casualties

Policyholders are in the crosshairs when tariffs increase.

By Robert P. Hartwig

To the average insurance consumer, the notion that their next policy renewal could contain a rate increase courtesy of the Trump administration's increasingly aggressive trade policies may seem strange. Yet they need look no further than those hunks of steel and aluminum on wheels in their driveway or that pile of lumber they call home for the reason.

Indeed, with tariffs of 25% on steel, 10% on aluminum and 20% on lumber already in place, the lumber used in American homes in recent years comes from Canadian sources. U.S. lumber mills can't fill the void, so prices are skyrocketing—up some 40% through the first half of 2018.

Insurers have sharp pencils and have been working through the math, particularly in the auto insurance lines, which collectively account for more than 40% of all property/casualty premiums written. According to a consortium of insurer trade groups, some 31 countries in 2017 exported

"Economists agree on few things, but one of the few things they do agree upon are the benefits of free trade. In a trade war, there are no winners—only losers. Tens of millions of policyholders are about to join the long list of America's trade war casualties."

Bob Hartwig
University of South Carolina

obvious, but policyholders will be forgiven if they still fail to see the supporting logic and rationale of how auto parts were conscripted into the front lines of today's trade war. To make that happen, the U.S. Commerce Department

2017 will increase the federal budget deficit by an estimated $1.44 trillion over the next decade according to the Congressional Budget Office. Financing these deficits will lead directly to even more borrowing and higher trade deficits.

Tariffs will increase claims costs by billions of dollars—impact personal auto more than any other line

Source: Available at: http://news.ambest.com/articlecontent.aspx?refnum=276836&altsrc=43

Who Bears the Cost of Tariffs on Chinese Goods?

5 Possibilities

1. **Importer Gets Chinese Firms to Agree to Pay Tariffs**
   - Chinese firm absorbs full cost of tariff and makes due with lower profits
2. **Chinese Firms Cut Costs to Partially Offset Impact of Tariffs**
   - Reducing costs will allow the importer to moderate price increase to consumer
3. **Importer Negotiates Discount on Chinese Products**
   - Results in only part of price increase being passed along to consumer
4. **Importer Finds Alternatives to Chinese Production**
   - Benefits exporters in other countries; Helps limit domestic price increase
5. **Pass Costs Through Cost of Tariff to Consumer**
   - Buyer of product bears the full price increase due to the tariff

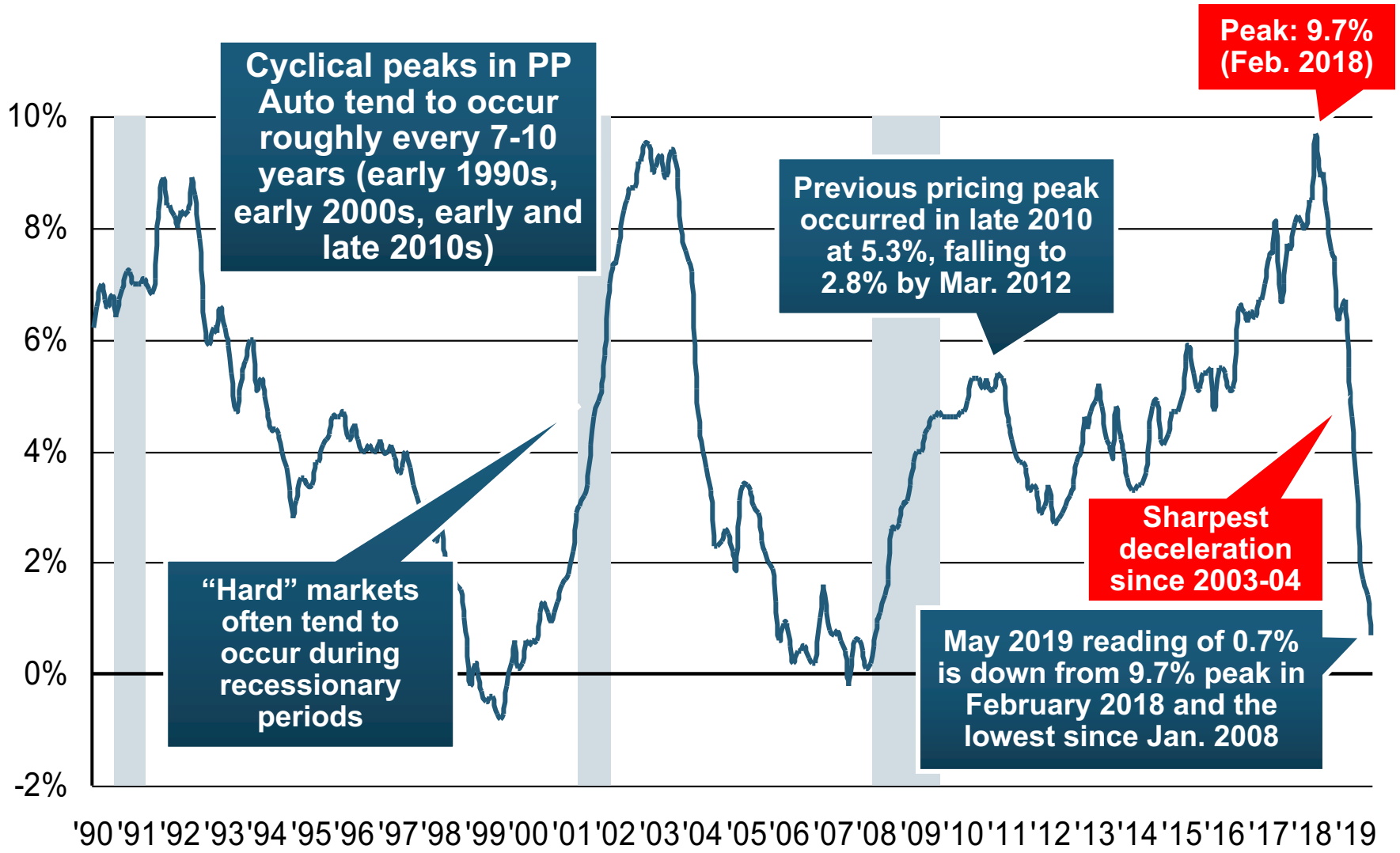
Note: As a practical matter, some combination of all 5 take place.

But: **Insurance is a pass-through industry. Most costs borne by consumer.**

Personal Lines
Growth Drivers

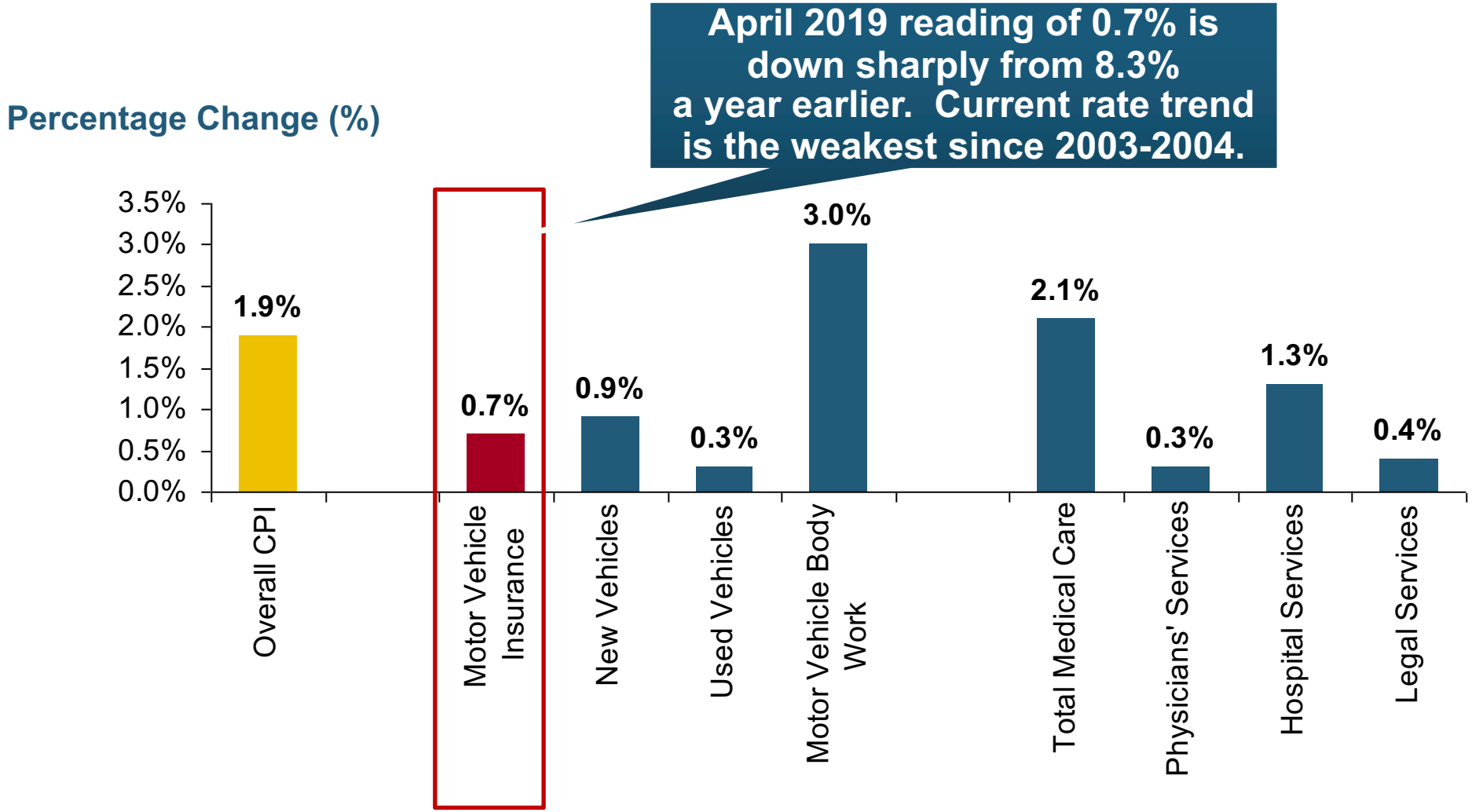
Rate and Exposure are Both Presently Important Growth Drivers

Monthly Change in Auto Insurance Prices, 1991–2019*



*Percentage change from same month in prior year; through May 2019; seasonally adjusted.
Note: Recessions indicated by gray shaded columns.
Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institute.

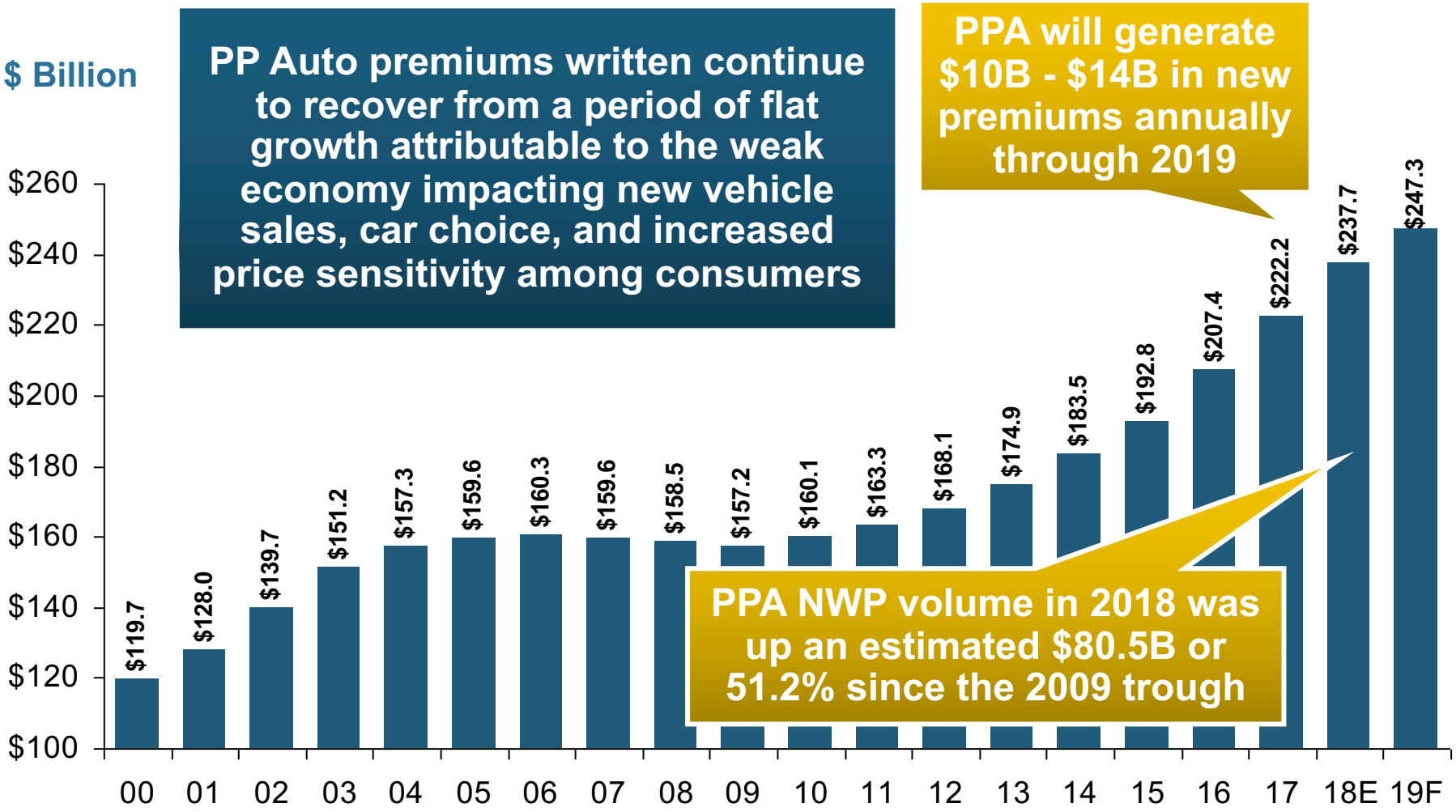
Personal Auto Insurance: Key CPI Cost Component Changes: 2019 vs. 2018*



*May 2019 vs. May 2018.

Source: US Bureau of Labor Statistics; USC Center for Risk and Uncertainty Management.

Private Passenger Auto Insurance Net Written Premium, 2000–2019F



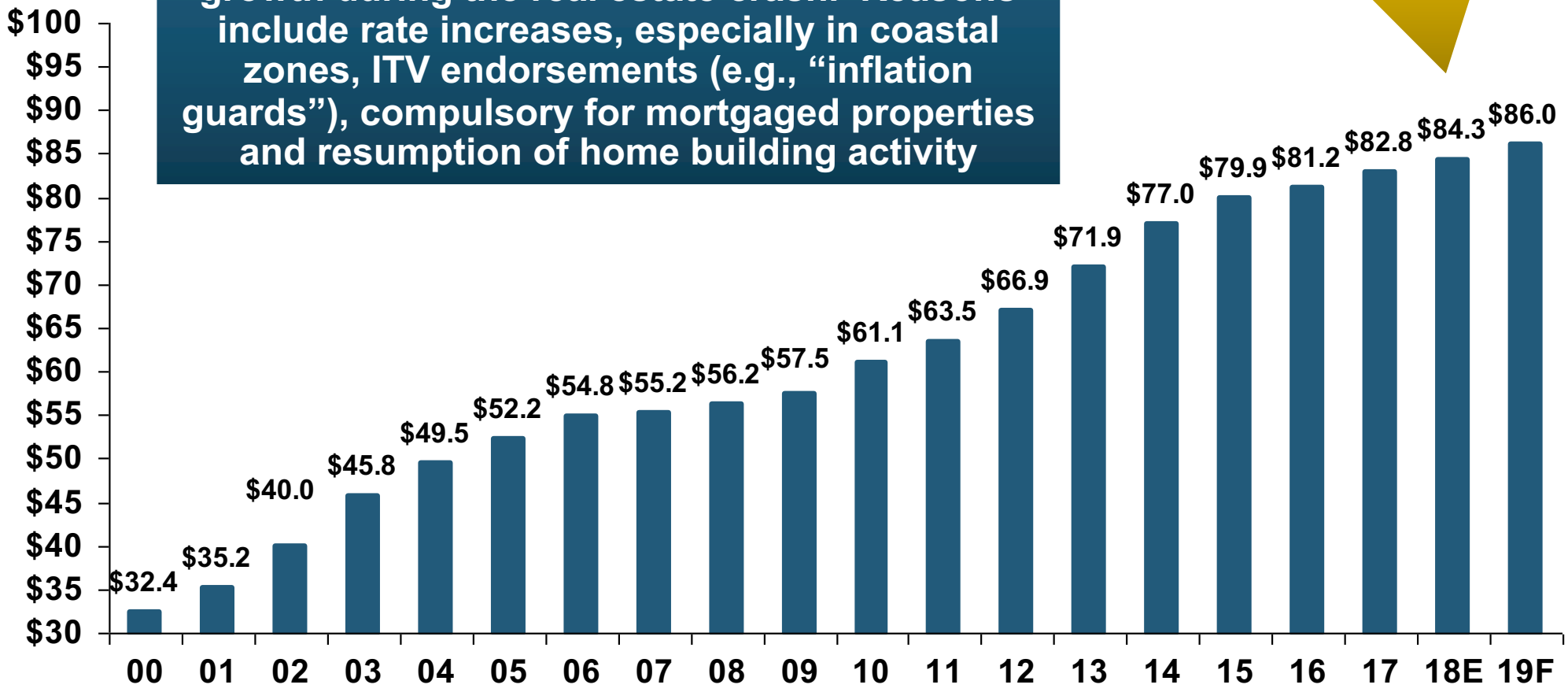
Sources: A.M. Best (1990-2017); USC RUM (2018E-2019F).

Homeowners Insurance
Net Written Premium, 2000–2019F

$ Billions

Homeowners insurance NWP continues to rise (up 165% 2000-2018E) despite very little unit growth during the real estate crash. Reasons include rate increases, especially in coastal zones, ITV endorsements (e.g., "inflation guards"), compulsory for mortgaged properties and resumption of home building activity

The Homeowners line will generate about $1.5B in new premiums annually through 2019



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

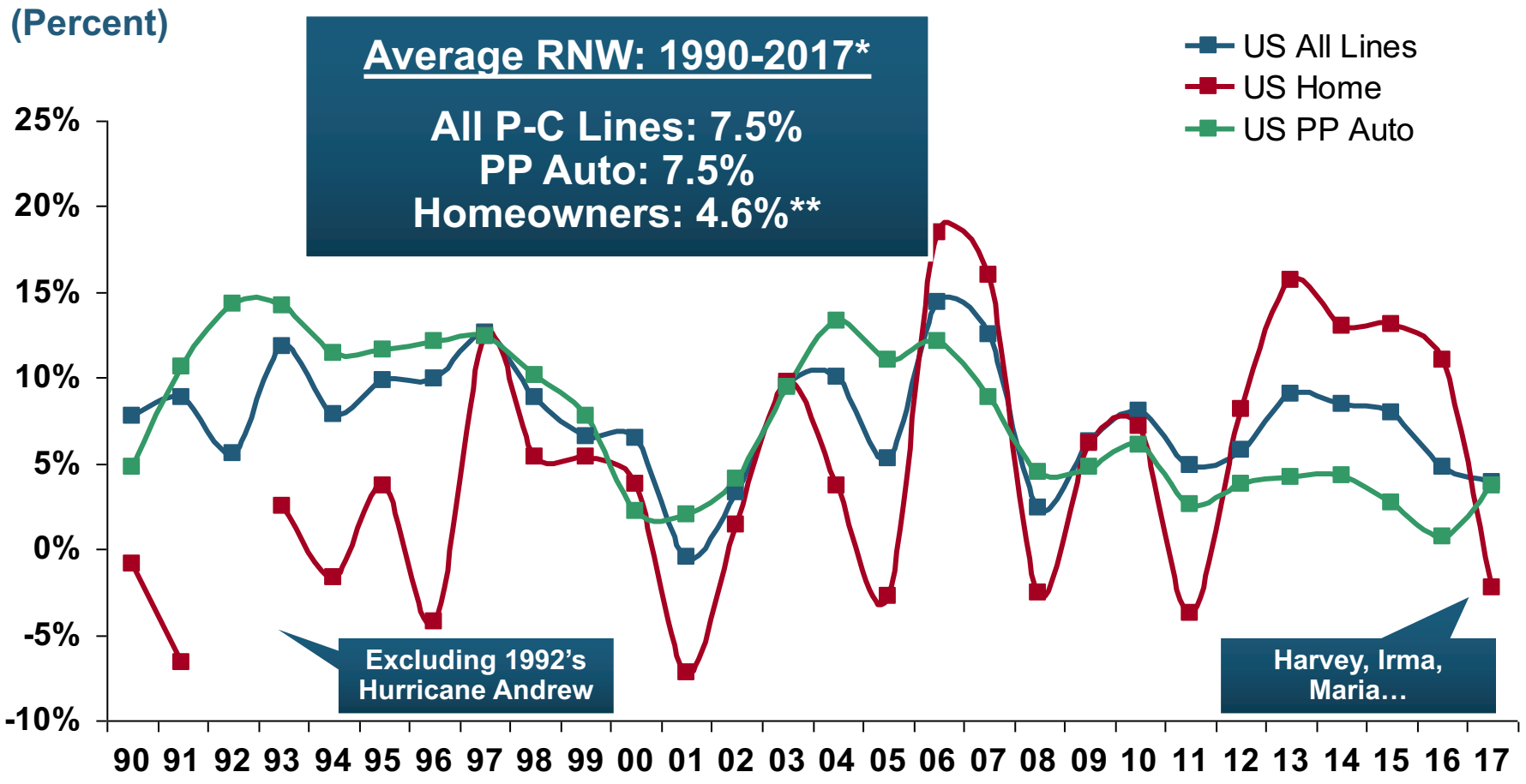
State of the Personal Lines Market

Auto Frequency and Severity Are an Immediate Challenge

Homeowners Majorly Impacted by CATs in 2017/18

90

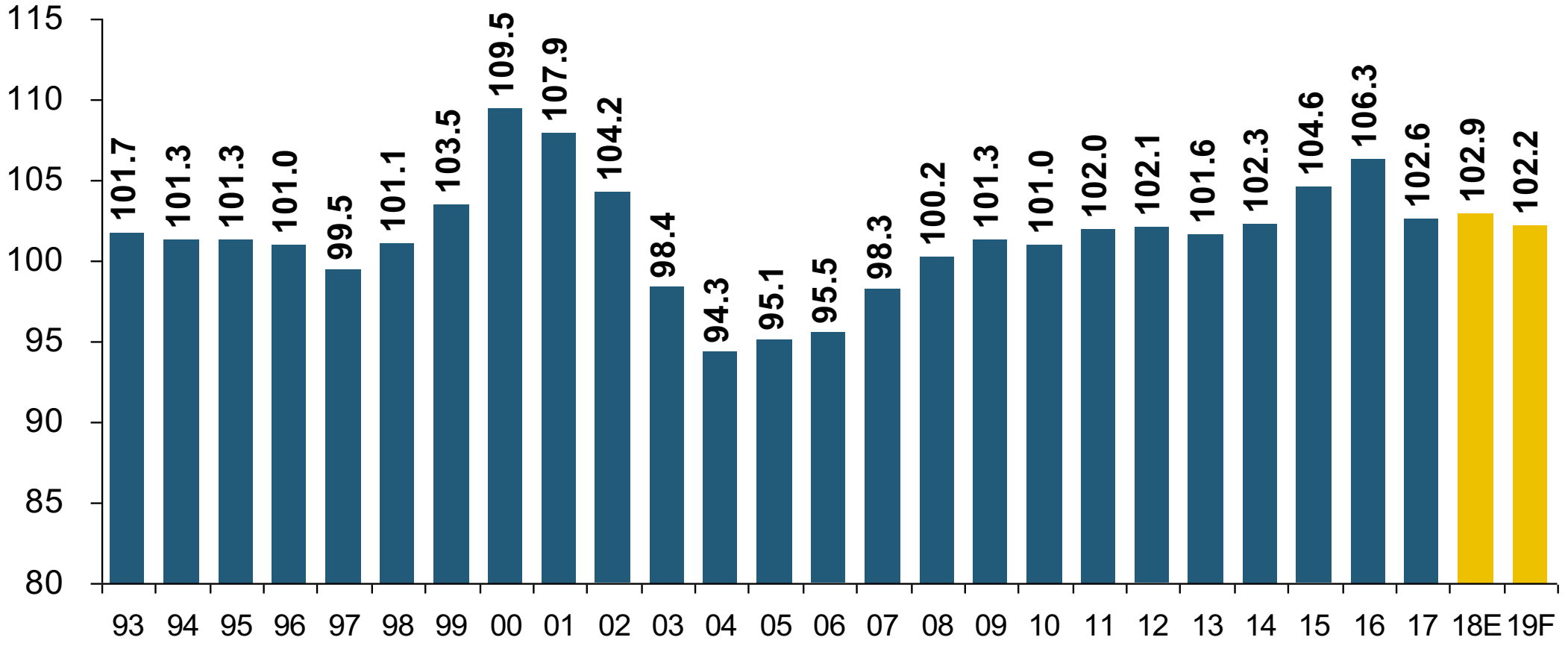
Return on Net Worth: All P-C Lines vs. Homeowners & Pvt. Pass. Auto, 1990-2017*



Homeowners is Had Been Outperforming Pvt.Pass. Auto and P-C Industry as a Whole. Heavy CATs in 2017 Caused Profiability to Plunge

*Latest available.
**Excludes 1992, the year of Hurricane Andrew. If 1992 is included the resulting homeowners RNW is 2.1%
Sources: NAIC; Insurance Information Institute.

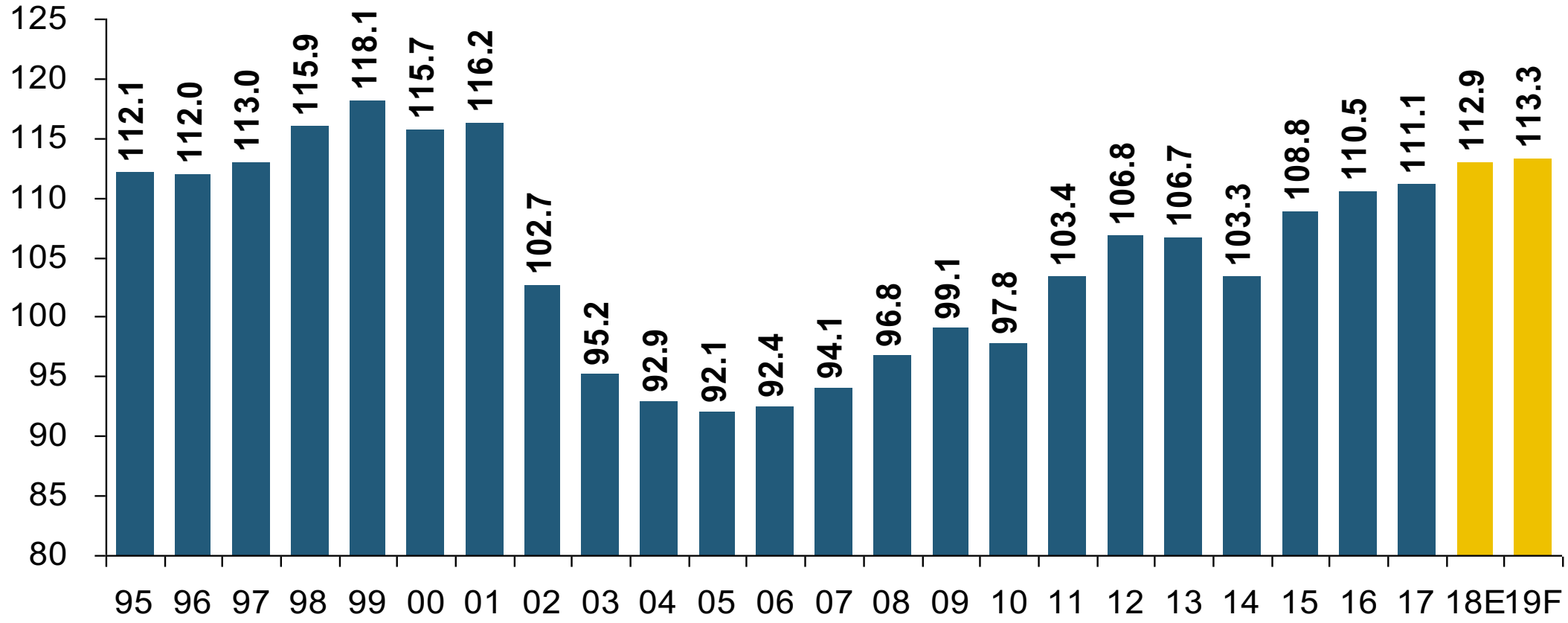
Private Passenger Auto Combined Ratio: 1993–2019F



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

Sources: A.M. Best (1990-2019F); USC RUM Center.

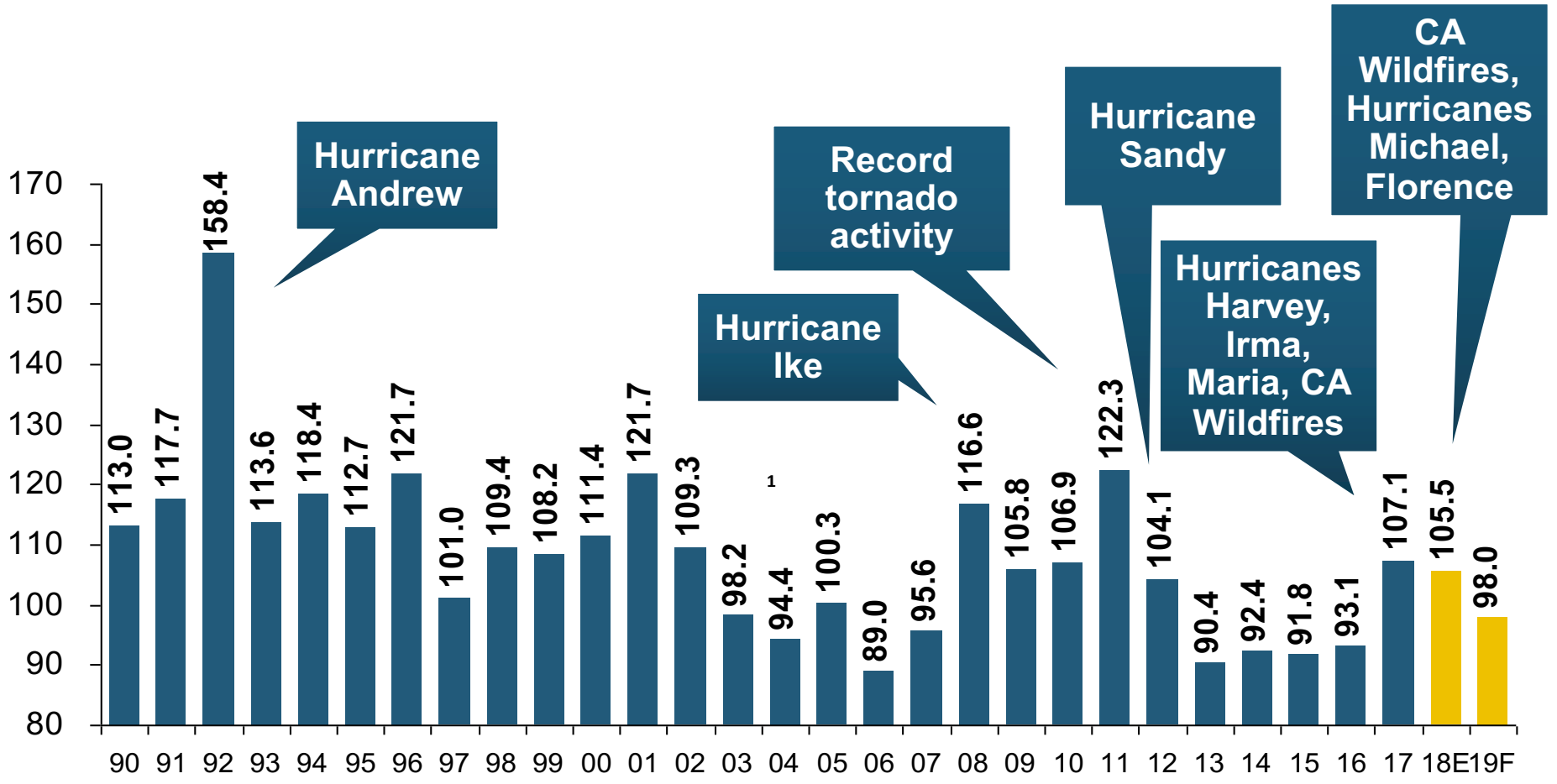
Commercial Auto Combined Ratio: 1993–2019F



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

Sources: A.M. Best (1990-2019F); Center for Risk and Uncertainty Management, University of South Carolina.

Homeowners Insurance Combined Ratio: 1990–2019F



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

Sources: A.M. Best (1990-2019F); USC RUM Center.

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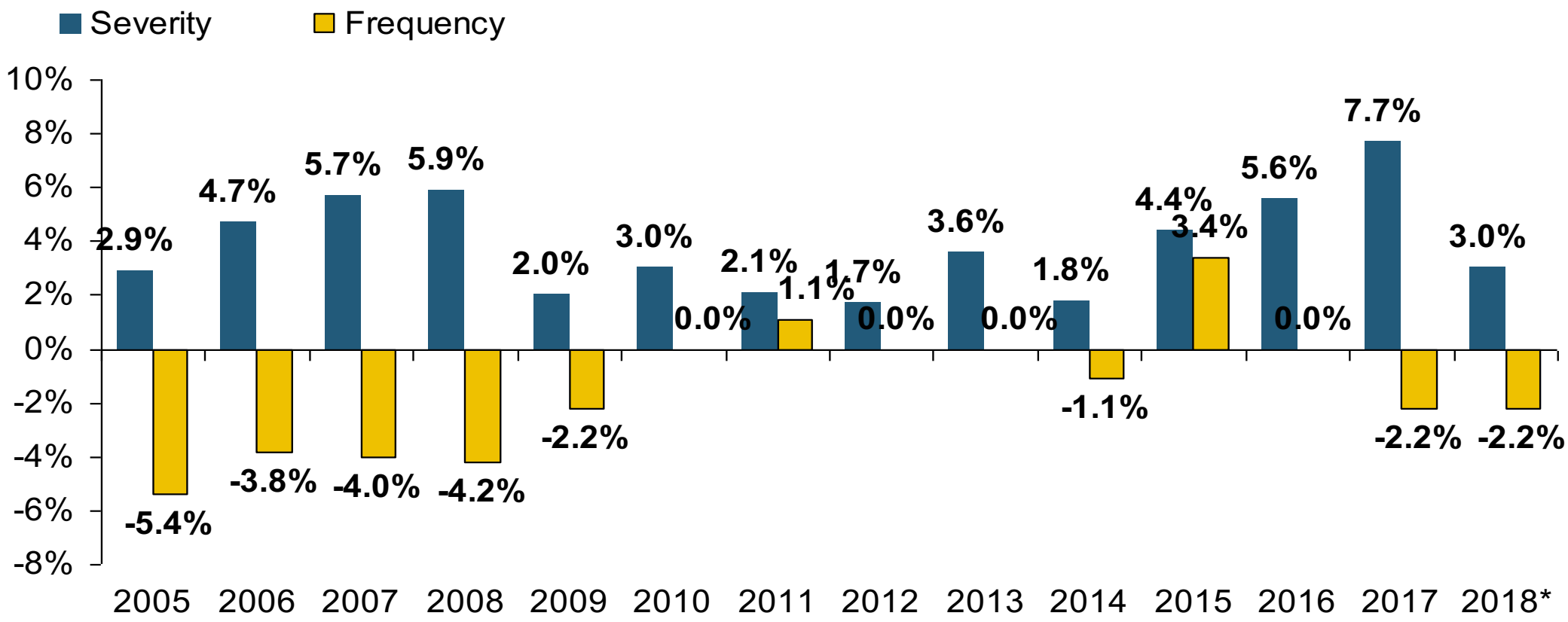
Private Passenger Auto Frequency & Severity Trends

Frequency, Severity and Loss Ratio Trends Are Mixed

Bodily Injury: Severity Trend Is Up, Frequency Decline Returning?

Annual Change, 2005 through 2018*



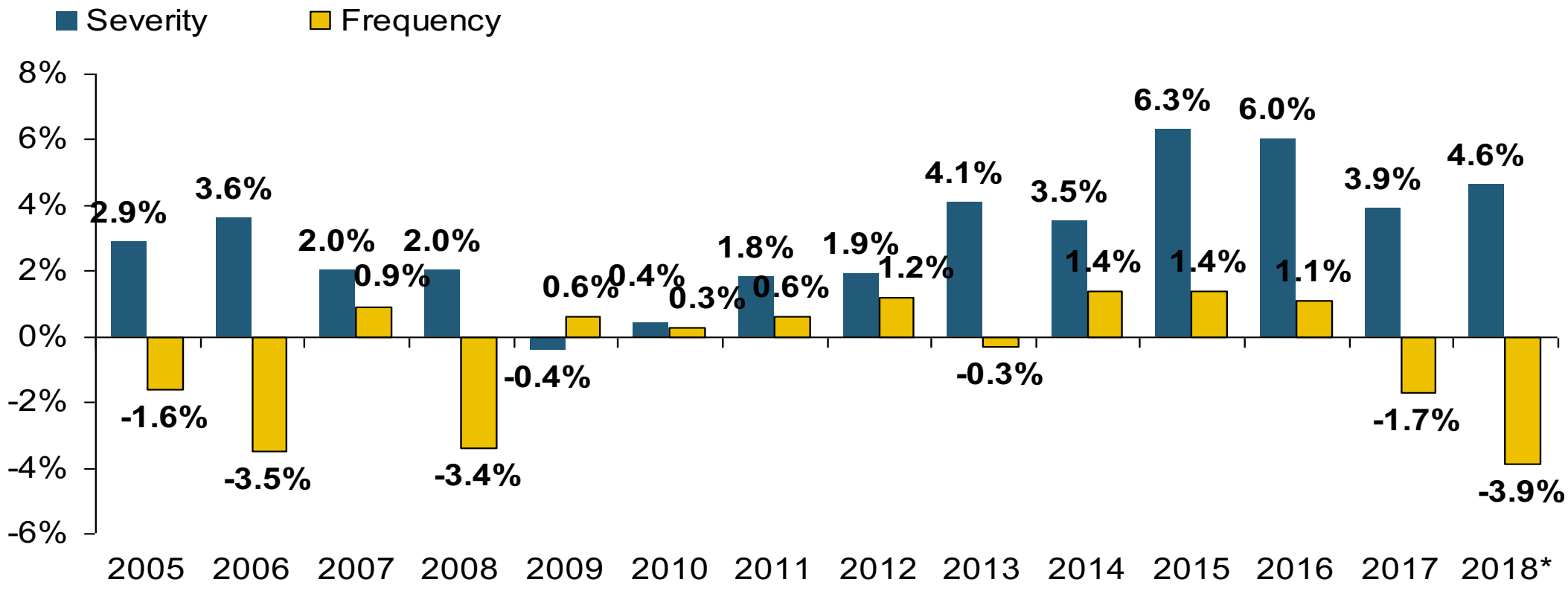
BI Severity Trend is a Major Cost Driver

*2018 figure is for the 4 quarters ending 2018:Q4.

Source: ISO/PCI *Fast Track* data; Center for Risk and Uncertainty Management, Univ. of South Carolina.

Property Damage Liability: Severity Up and Frequency Down

Annual Change, 2005 through 2018*



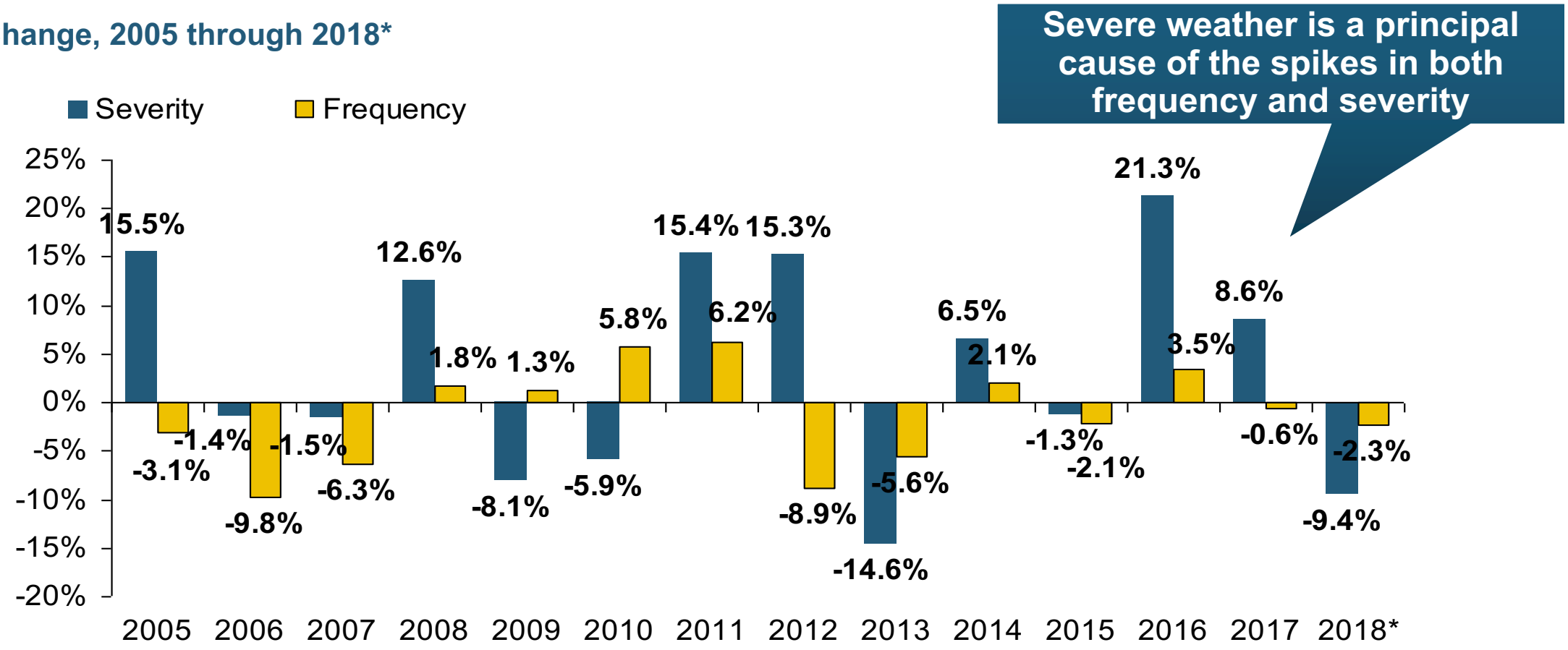
Severity/Frequency Trends Have Been Volatile, But Rising Severity since 2011 Is a Concern

*2018 figure is for the 4 quarters ending 2018:Q4.

Source: ISO/PCI *Fast Track* data; Center for Risk and Uncertainty Management, Univ. of South Carolina.

Comprehensive Coverage: Frequency and Severity Trends Are Volatile

Annual Change, 2005 through 2018*

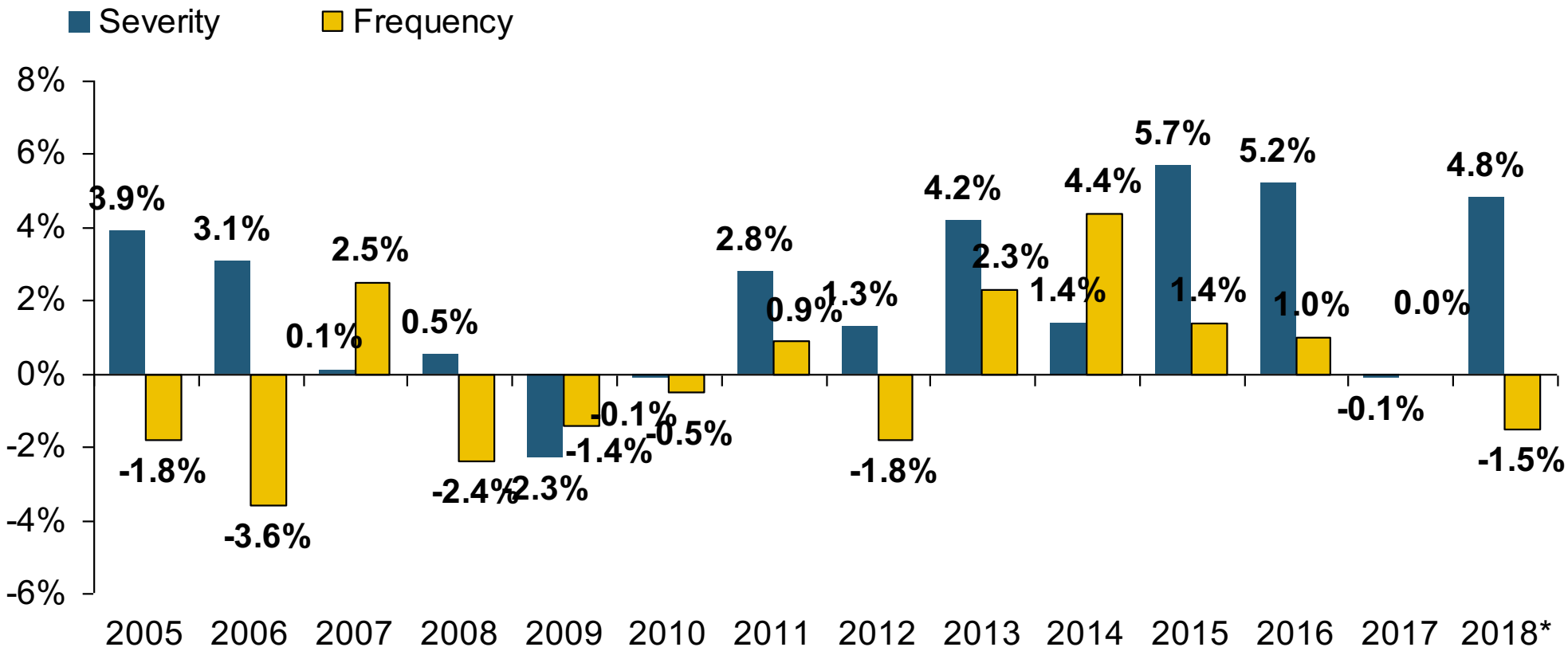


Weather Creates Volatility for Comprehensive Coverage. Comprehensive Losses Were Down in 2018 Following Severe Losses Due Largely to Hurricanes Harvey, Irma and Maria in 2017

*2018 figure is for the 4 quarters ending 2018:Q4.
Source: ISO/PCI *Fast Track* data; Center for Risk and Uncertainty Management, Univ. of South Carolina.

Collision Coverage: Severity Trends Are a Concern*

Annual Change, 2005 through 2018*

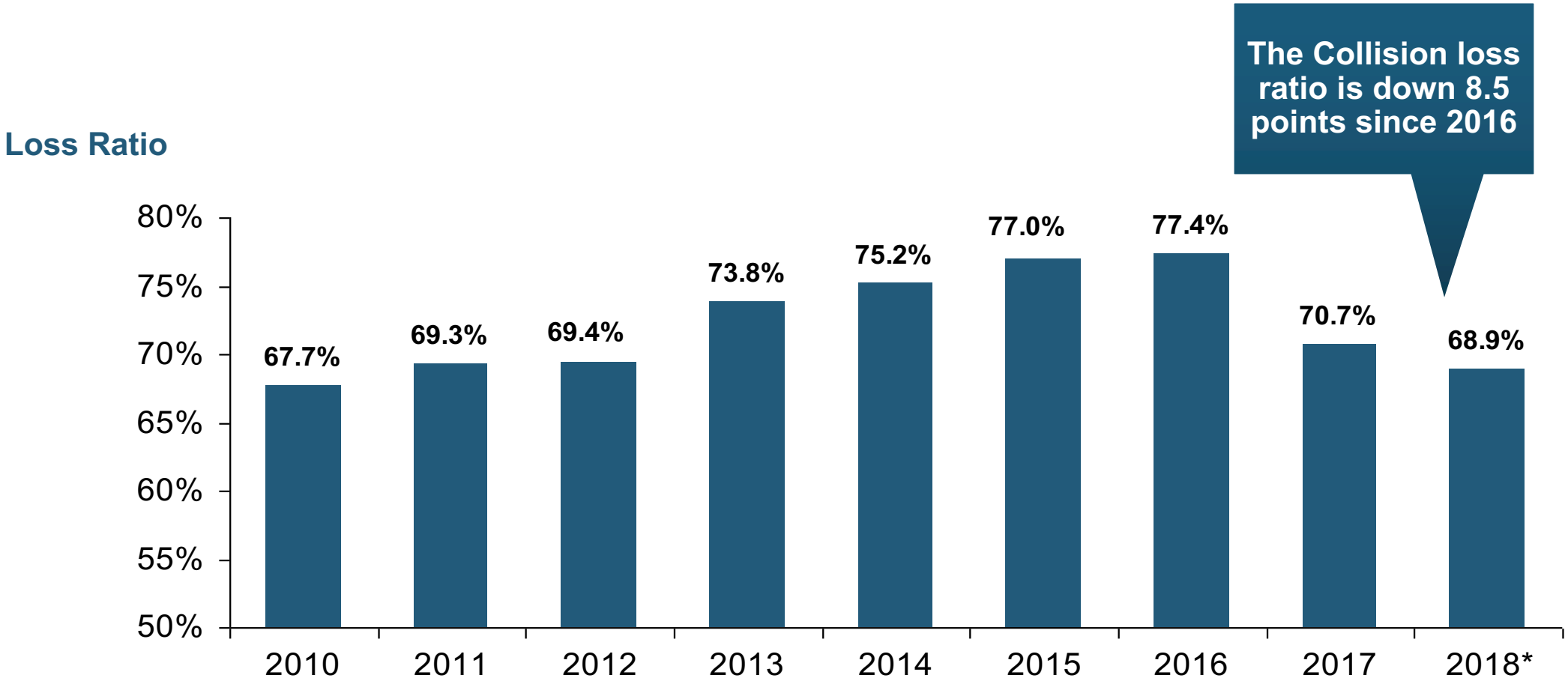


The Recession, High Fuel Prices Helped Temper Frequency and Severity, But that Trend Clearly Reversed, Consistent with Experience from Past Recoveries, though Frequency is Subdued

*2018 figure is for the 4 quarters ending 2018:Q4.

Source: ISO/PCI *Fast Track* data; Center for Risk and Uncertainty Management, Univ. of South Carolina.

Collision Loss Ratio Trending Downward: Pvt. Passenger Auto, 2010 – 2018*



Collision Loss Ratios Fell for the Second Straight Year in 2018

*2018 data are for the 4 quarters ending Dec. 31, 2018.
Source: ISO/PCI *Fast Track* data; Insurance Information Institute

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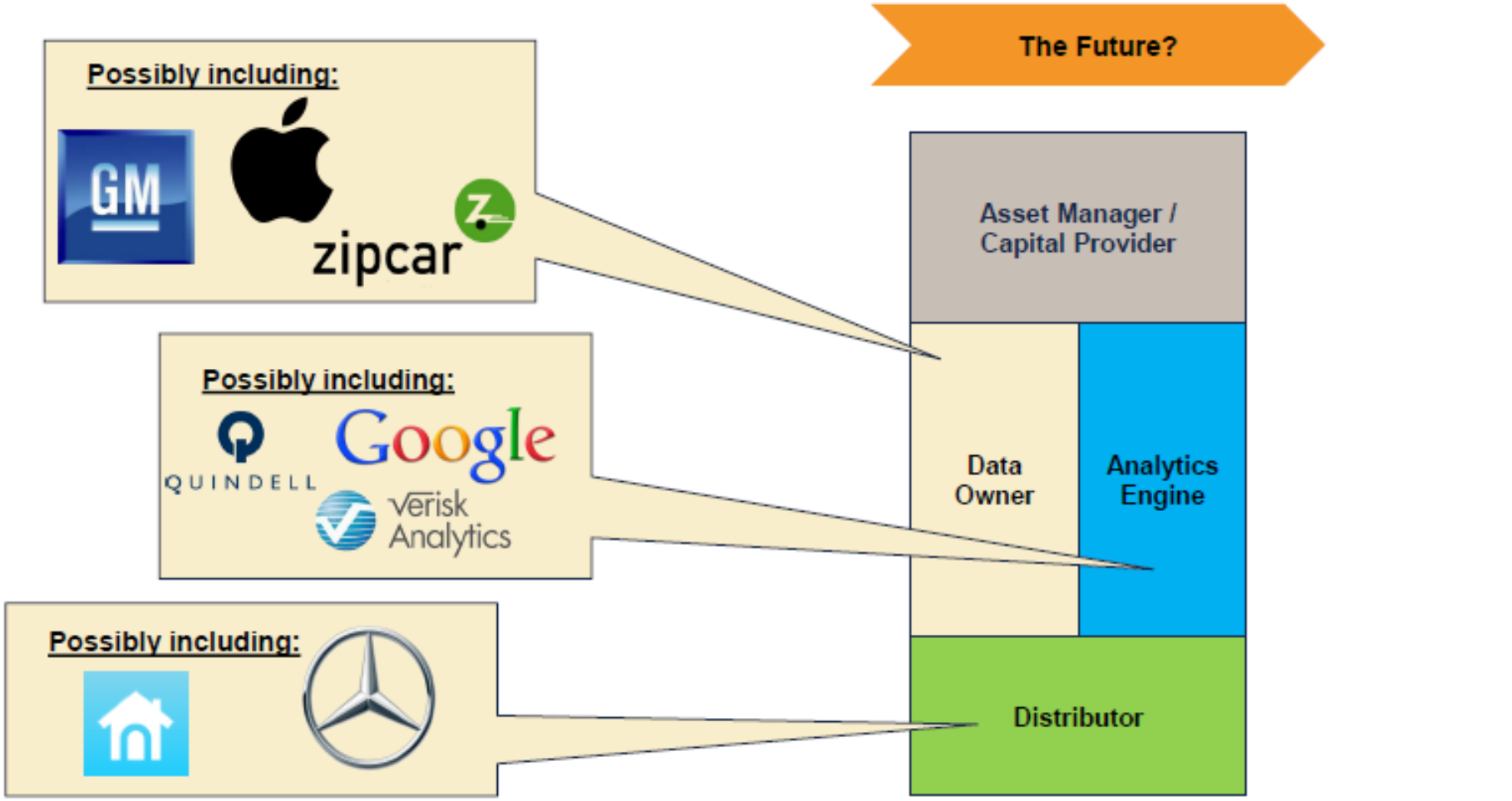
The Future of the Insurance Industry

Looking Into the Crystal Ball

From Technology to Talent

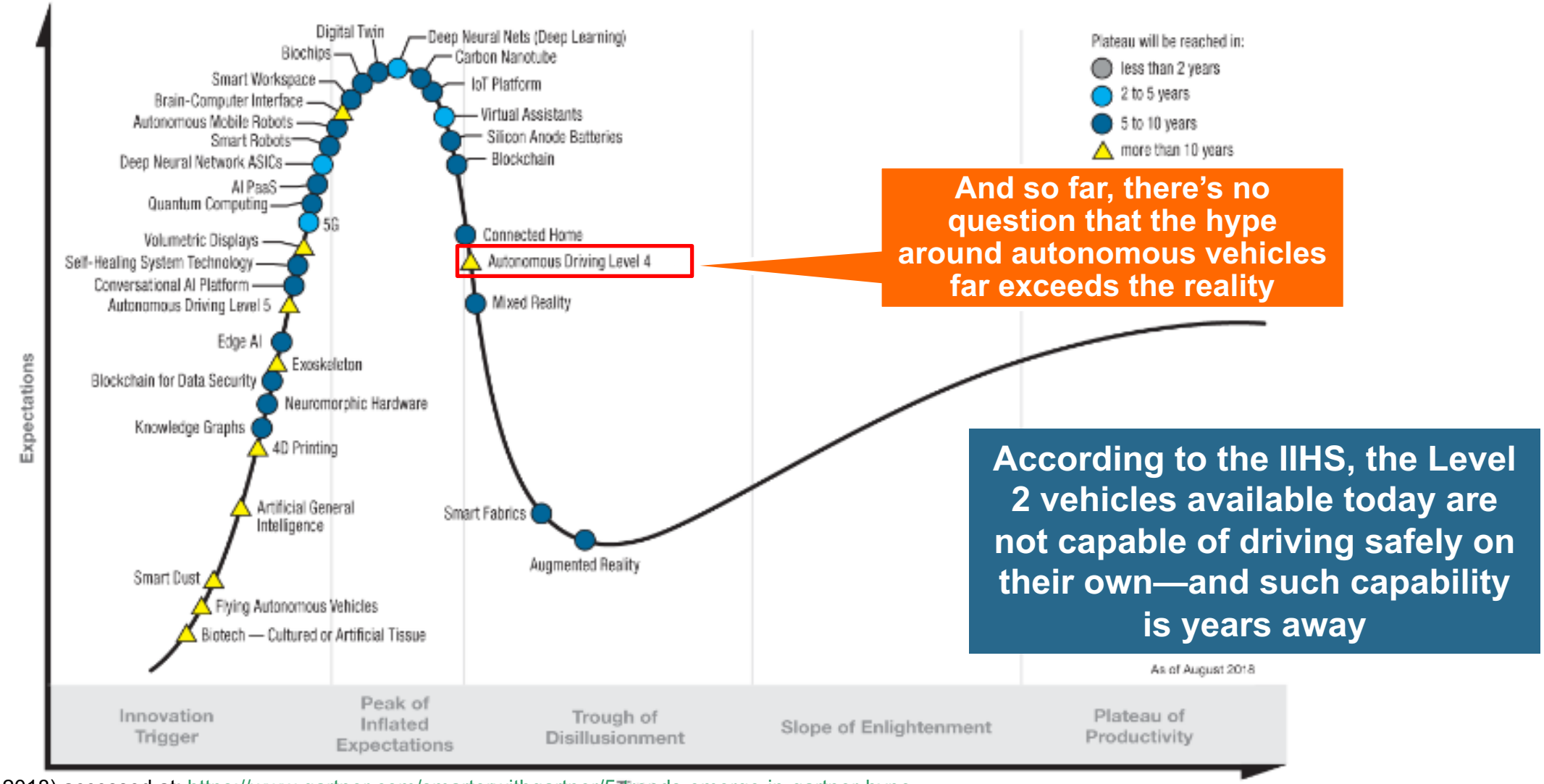
The Internet of Things and the Insurance Industry Value Chain



Who owns the data? Where does It flow? Who does the analytics? Who is the capital provider?

Source: Willis Capital Markets & Advisory; Insurance Information Institute.

Technology Hype Curve: Many Technologies Potentially Impacting the P/C Insurance Industry Have Been Heavily Hyped

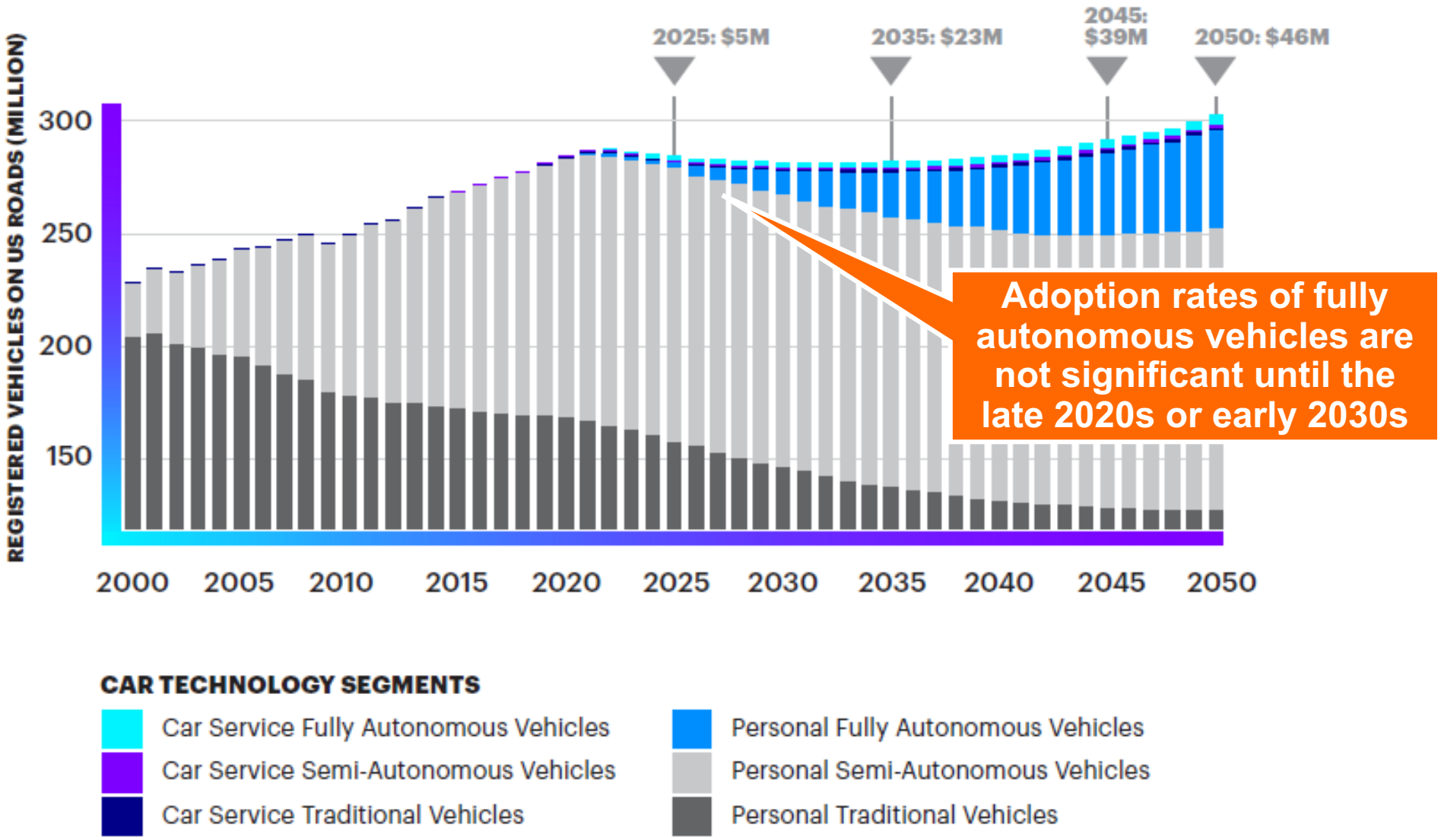


And so far, there's no question that the hype around autonomous vehicles far exceeds the reality

According to the IIHS, the Level 2 vehicles available today are not capable of driving safely on their own—and such capability is years away

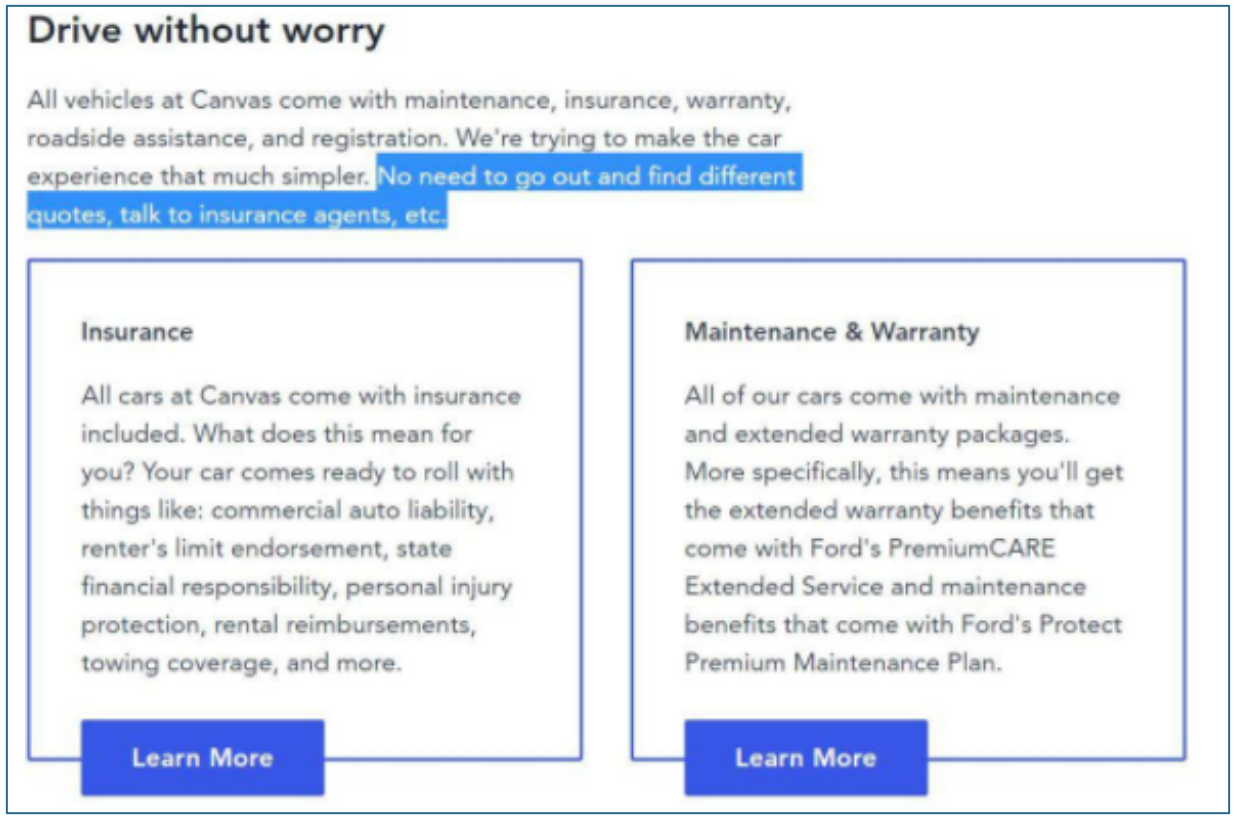
Source: Gartner (Aug. 2018) accessed at: https://www.gartner.com/smarterwithgartner/5-trends-emerge-in-gartner-hype-cycle-for-emerging-technologies-2018/

Autonomous Vehicle Adoption Rates, by Degree of Autonomy: 2000 – 2050F



Source: Accenture and Stevens Institute of Technology (2017), *Insuring Autonomous Vehicles*.

Car Subscription Services: A Threat to Personal Auto?



- **Liberty Mutual, Assurant, Chubb have struck multiple deals**
- **Volvo, Ford, Cadillac, Porsche, BMW and Mercedes-Benz have either launched or announced plans to launch car subscription models**

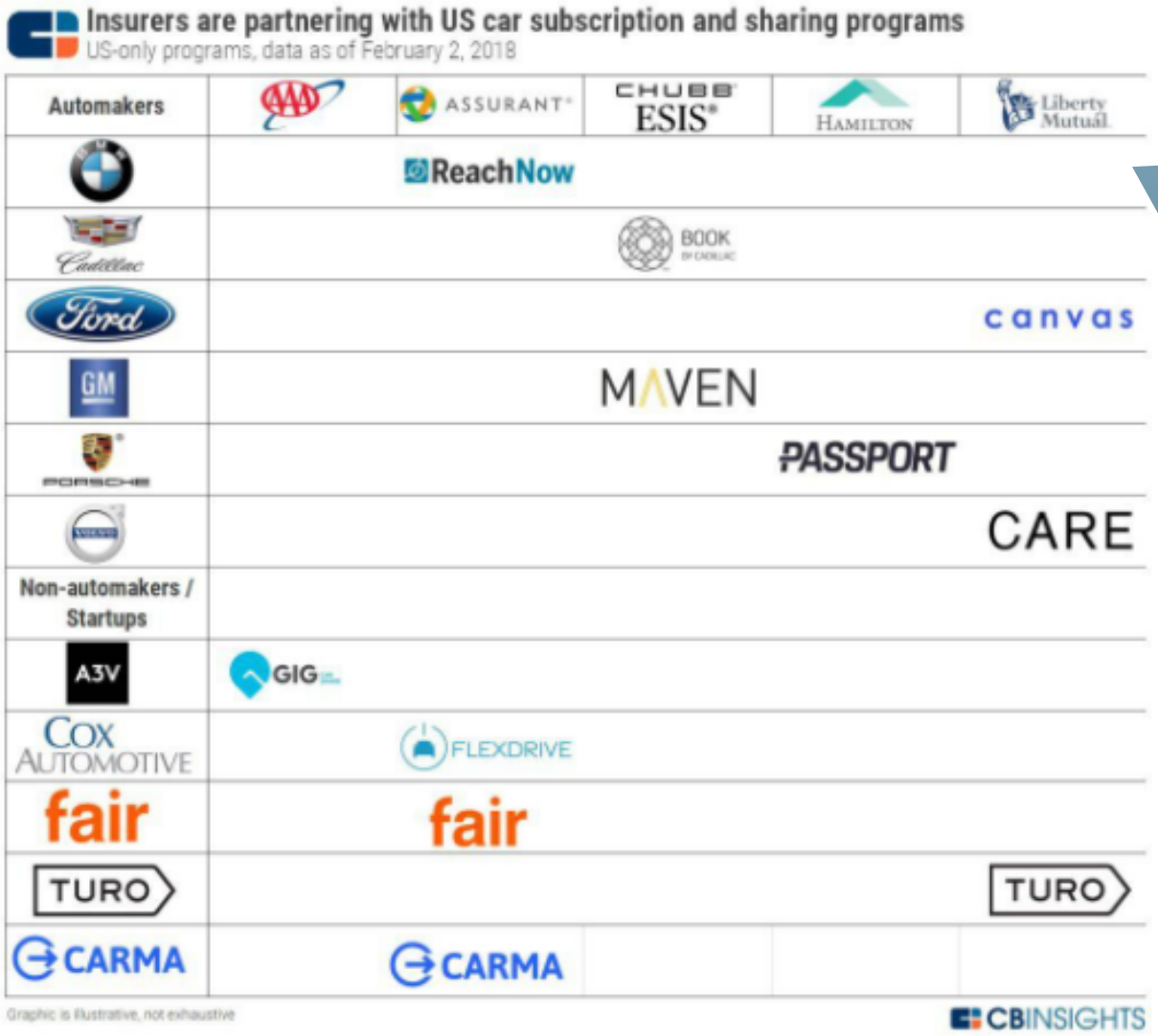
Source: CB Insights accessed 3/14/18 at: https://www.cbinsights.com/research/insurance-car-subscription-partnerships/

Car Subscription Services: A Threat to Personal Auto?

- **Ford's Canvas programs states that it provides: BI & PD Liability $300K combined single limit), PIP, Med Pay, UI/UIM, Collision & Comprehensive ($500 deductible), Roadside Assistance, Rental Reimbursement**
- **No flexibility in coverage but can use own auto insurance as primary and Canvas as excess**

Source: www.drivecanvas.com accessed 3/14/18.

Car Subscription Services: Insurers Partnering with US Car Subscription and Sharing Programs



The car subscription service is tiny—and how much it will grow is uncertain;

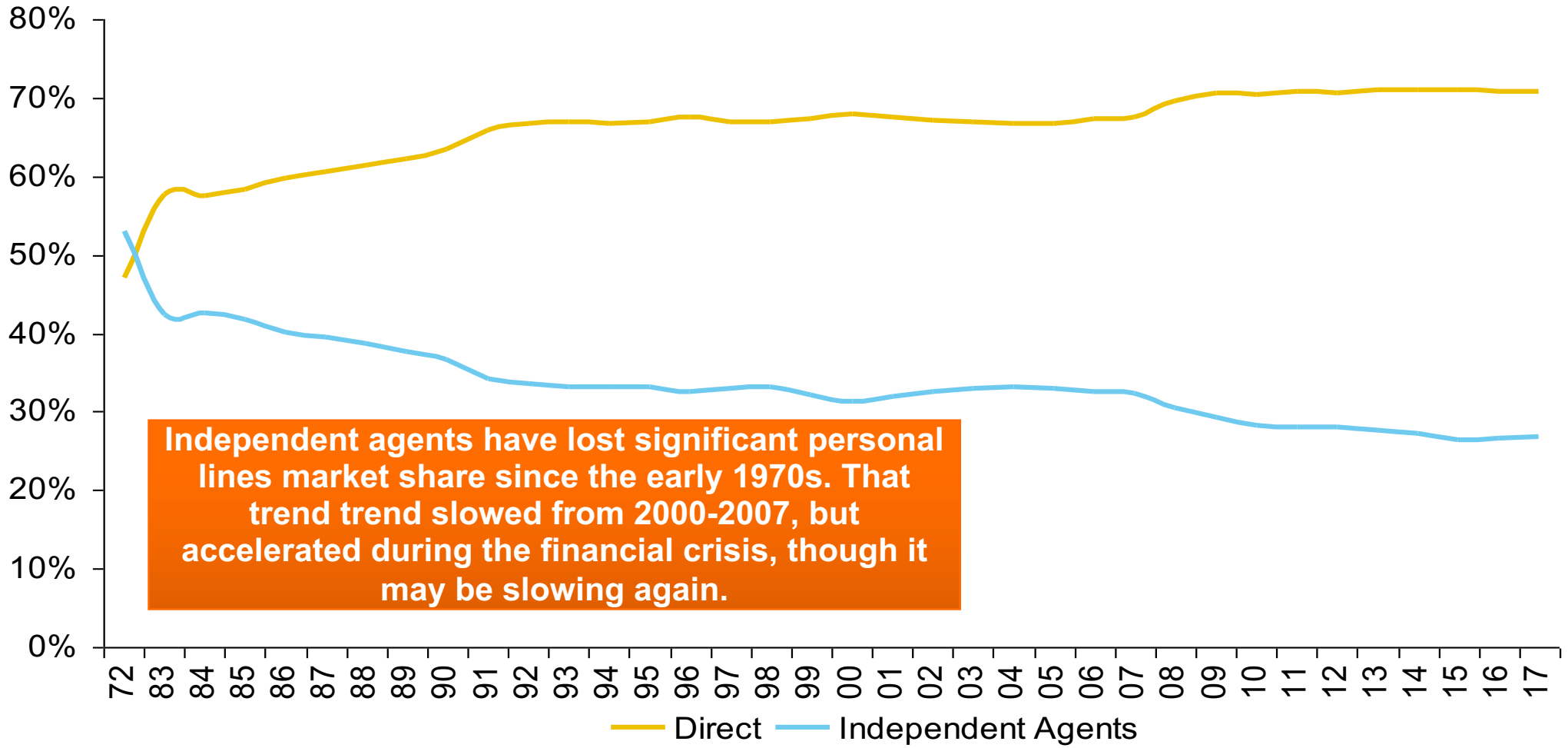
For auto manufacturers car subscriptions are a variation on leasing. For auto insurers, there is a more meaningful distinction (e.g., personal or commercial exposure)

Source: CB Insights accessed 3/14/18 at: https://www.cbinsights.com/research/insurance-car-subscription-partnerships/

Distribution Trends

Distribution by Channel Type Continues to Evolve Around the World

Personal Lines Distribution Channels, Direct vs. Independent Agents, 1972-2017



Source: Univ, of South Carolina, Risk and Uncertainty Management Center based on data from Conning and A.M. Best.

InsurTech Investors

Who Invests in What—and Why

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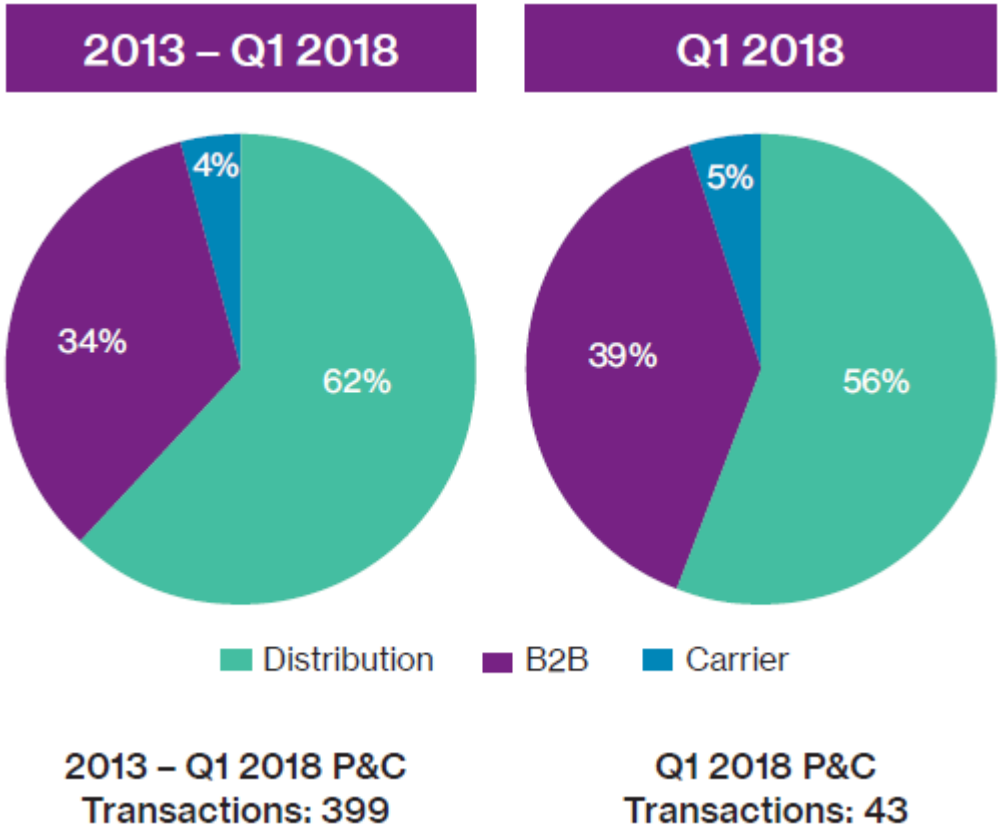
P/C InsurTech Transactions by Subsector



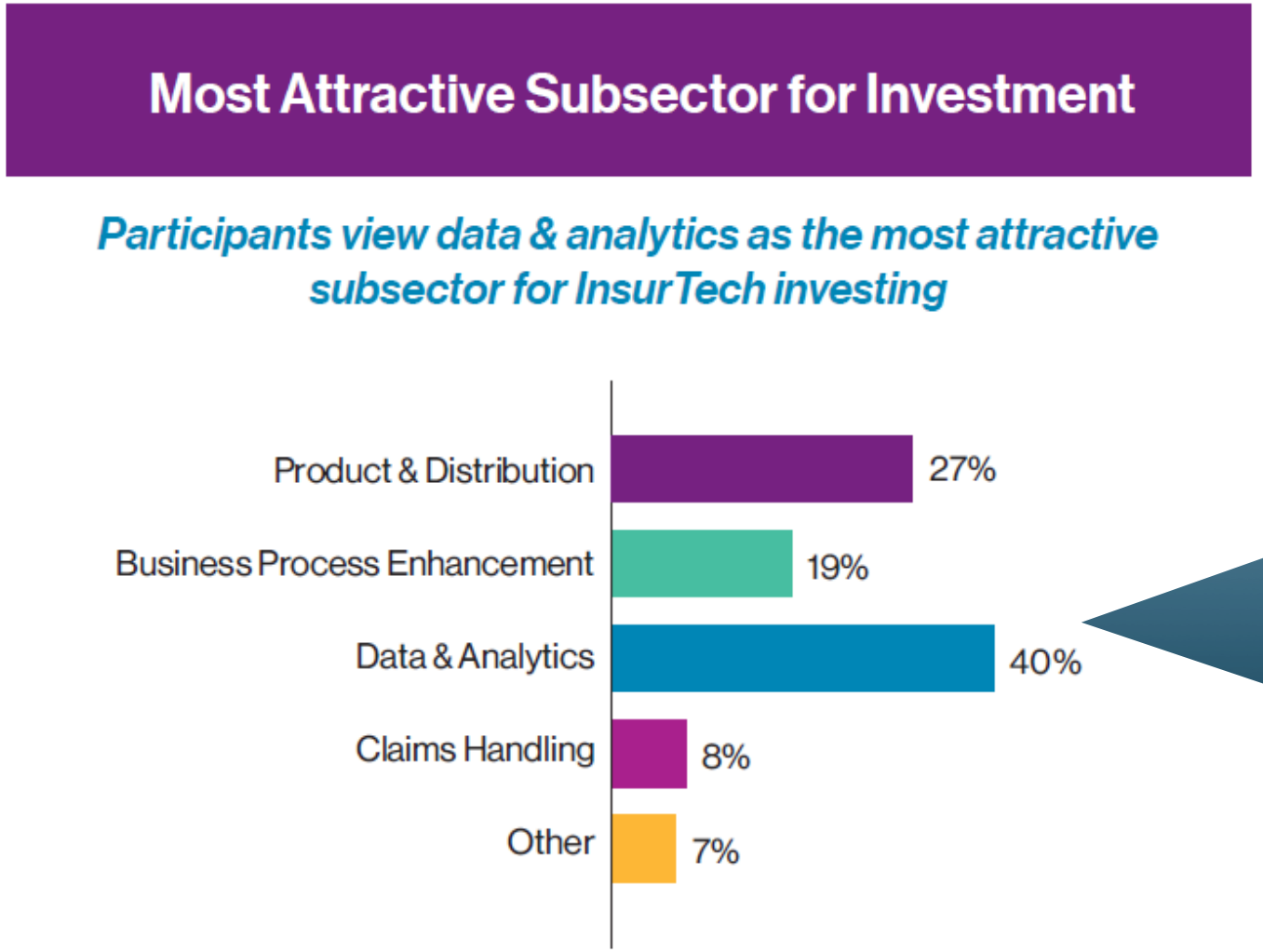
Distribution consistently accounts for the majority of P/C transactions

B2B share is growing

Actual carrier start-ups are quite rare

Source: CB Insights, *Quarterly InsurTech Briefing,*, Q1 2018.

Which InsurTech Segments Are the Most Attractive to VCs?



VCs believe that Data & Analytics followed by Product & Distribution and Business Process Enhancement are the most attractive subsectors for investment

Source: CB Insights, *Quarterly InsurTech Briefing,*, Q1 2018. Drawn from InsurTech Investor Survey.

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Thank you for your time and your attention!

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