



**INSURANCE
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Insurance 2020

Casualty Actuaries of the Mid-Atlantic Region

May 21, 2020

James Lynch, FCAS MAAA, Chief Actuary and Senior Vice President, Research and Education

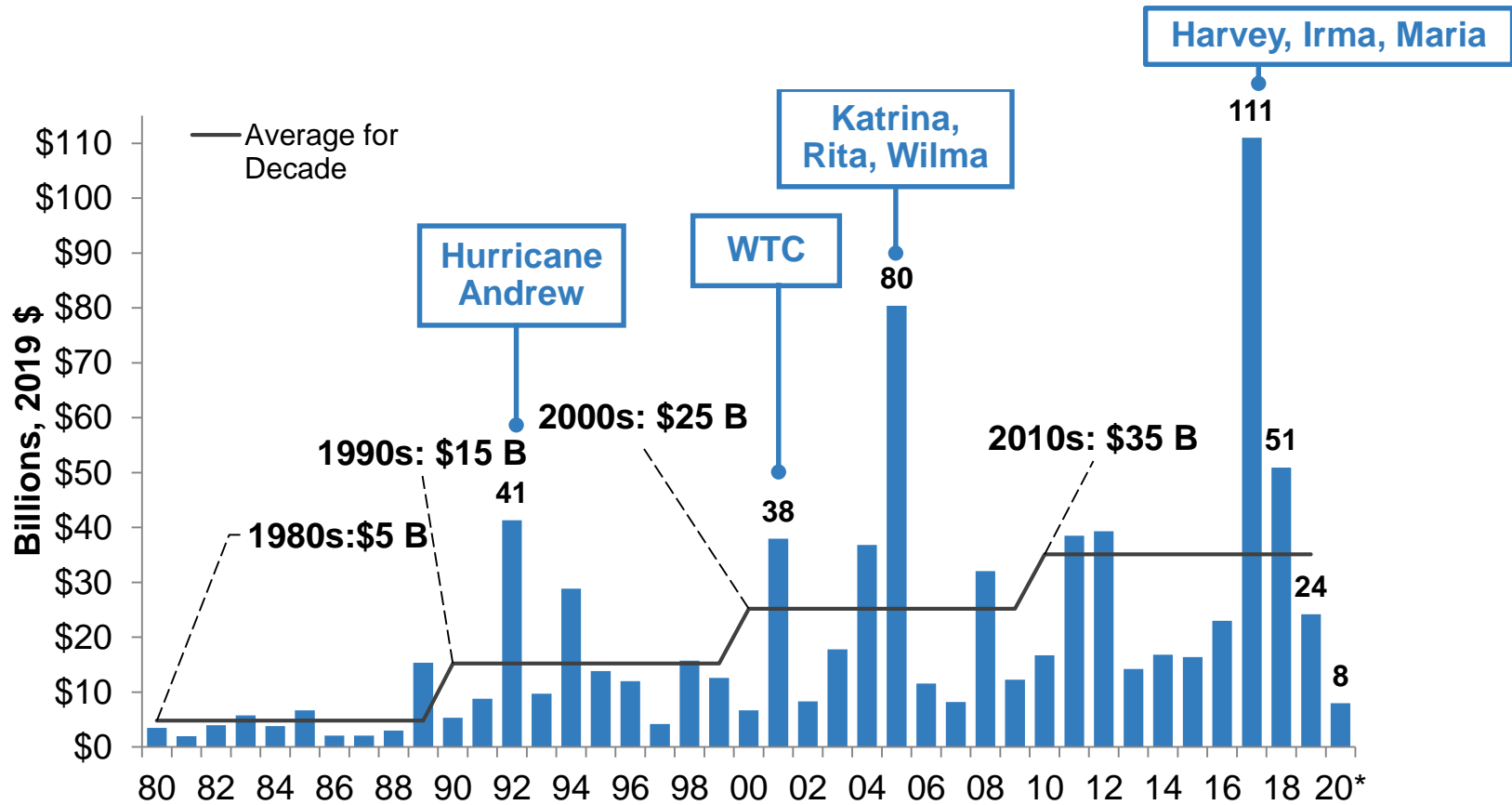
Insurance Information Institute ♦ 110 William Street ♦ New York, NY 10038

Tel: 212.346.5533 ♦ jamesl@iii.org ♦ www.iii.org

The Financial Picture

2019 Was A Good Year

U.S. Inflation-Adjusted Insured Cat Losses

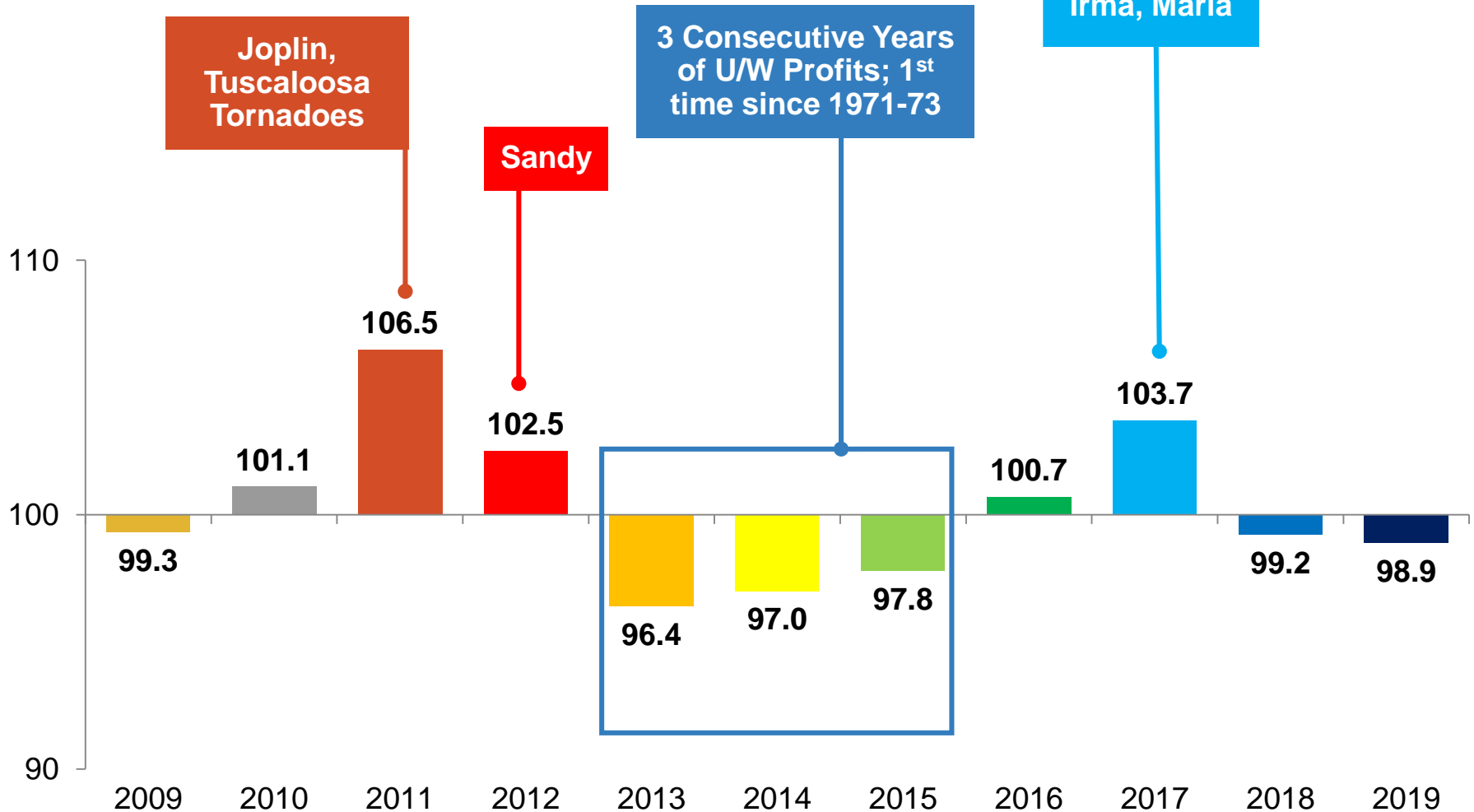


2019 was a relatively mild year; 2020 faces pandemic, above-average hurricane forecast

*Aon estimate through April. 2010s is average of 2010 to 2019. All losses are Direct.
Sources: Property Claims Service, a Verisk Analytics business; Aon; Insurance Information Institute.



P/C Insurance Industry Combined Ratio*



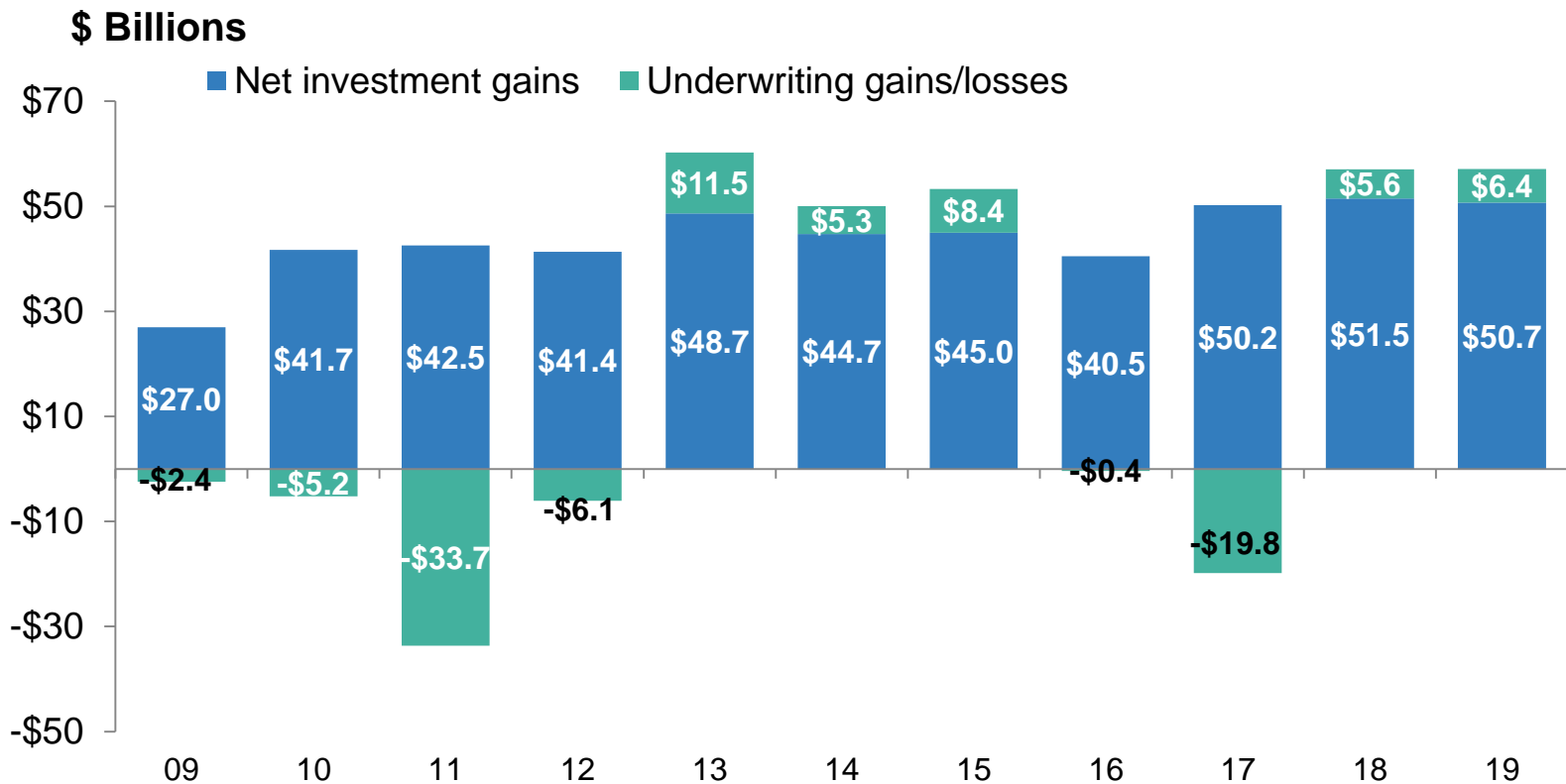
*Excludes Mortgage & Financial Guaranty insurers before 2014.

Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014: = 97.0.

Sources: A.M. Best; ISO, a Verisk Analytics® business; I.I.I.



Key sources of P/C insurer profits



Strong capital gains, underwriting results lifted profits



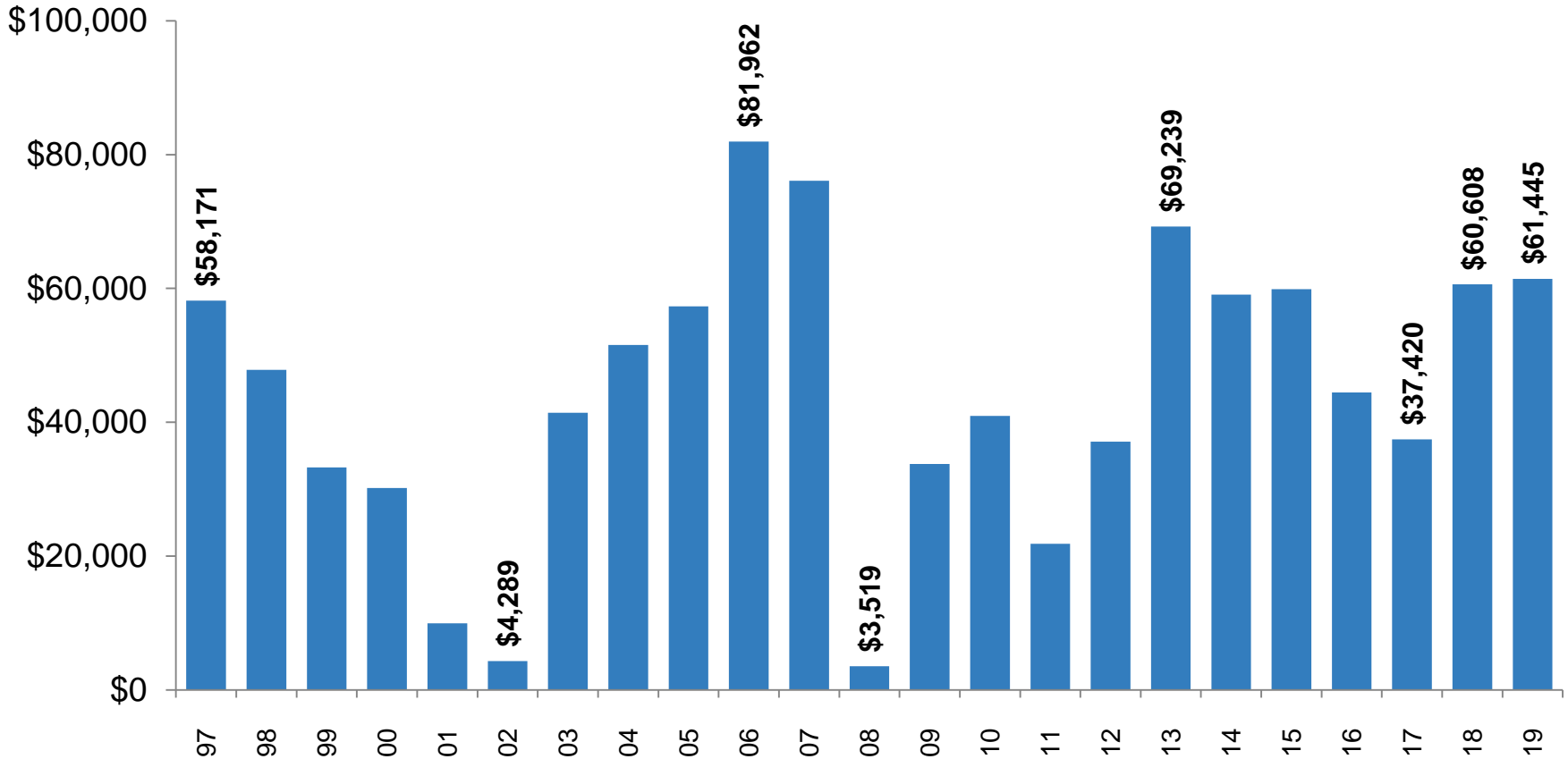
Through third quarter.

Data are before taxes and exclude extraordinary items.

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

P/C Industry Net Income After Taxes* 1997-2019

\$ Millions,
2019 dollars

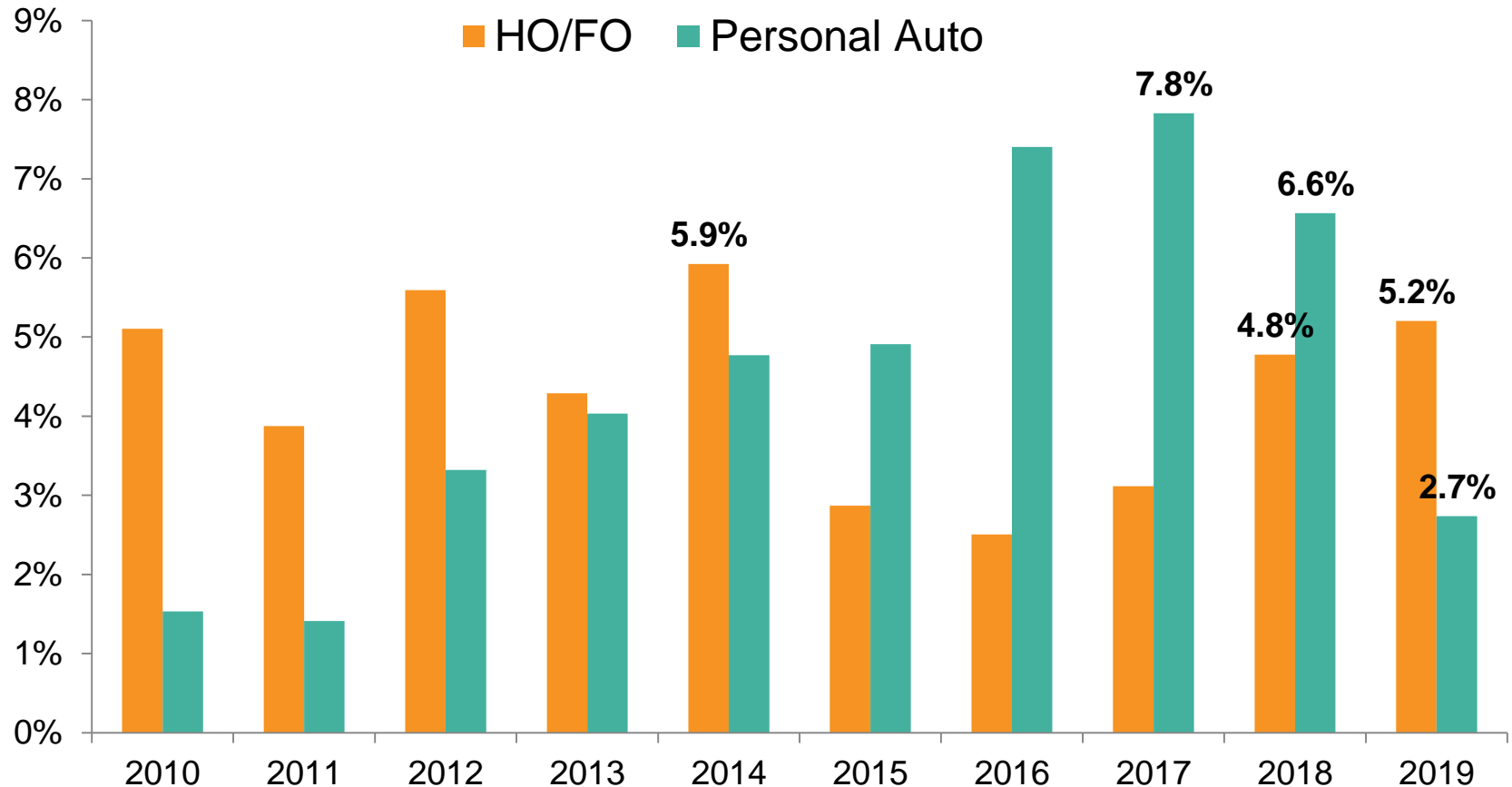


*Adjusted for inflation using the BLS CPI calculator, to 2019 dollars
Sources: A.M. Best; ISO, a Verisk Analytics® business; Insurance Information Institute.

The Personal Lines Picture

2020 Was Looking Good

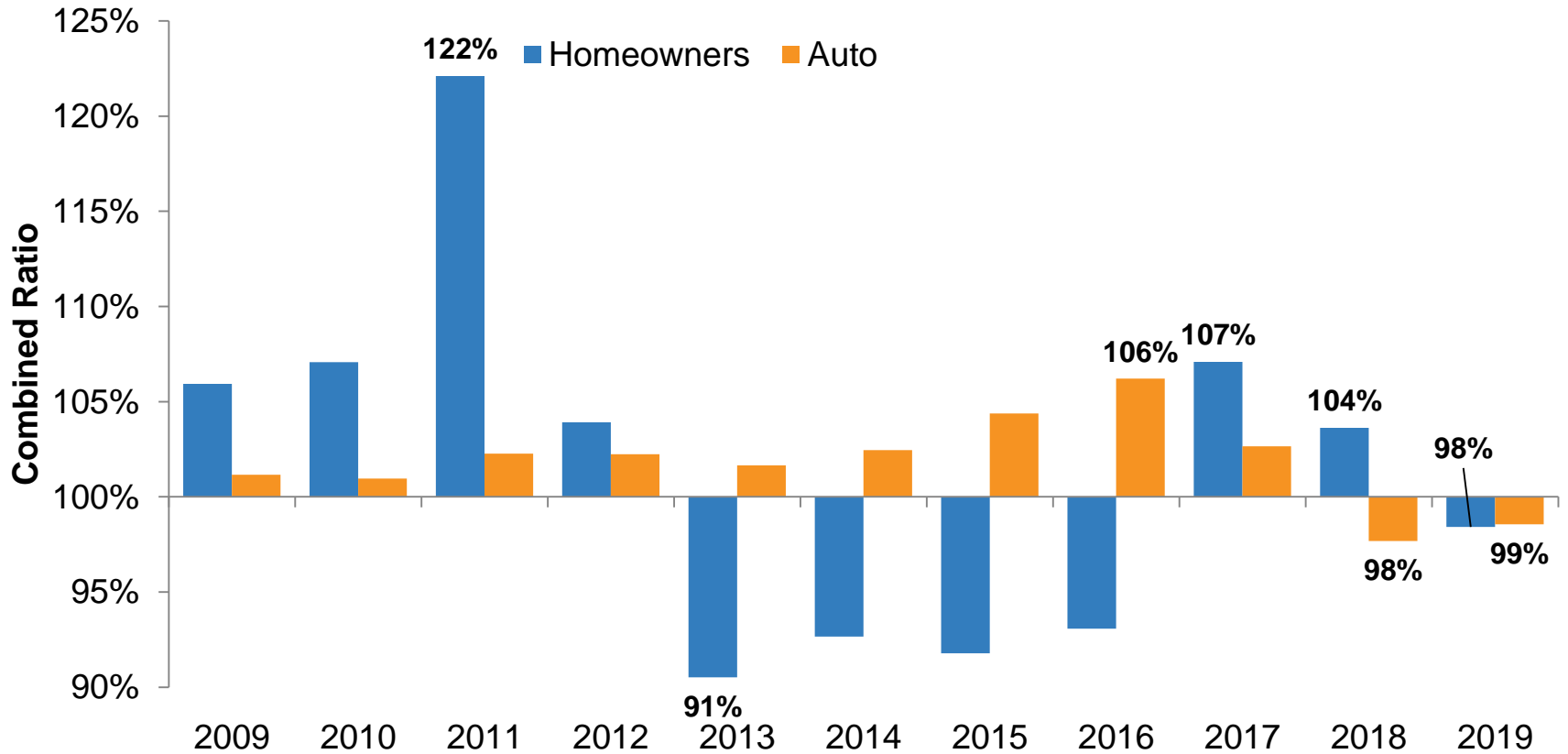
Direct Written Premium Growth By Year



HO writings more stable than auto, which grew in response to rising costs till recently.



Personal Lines Results

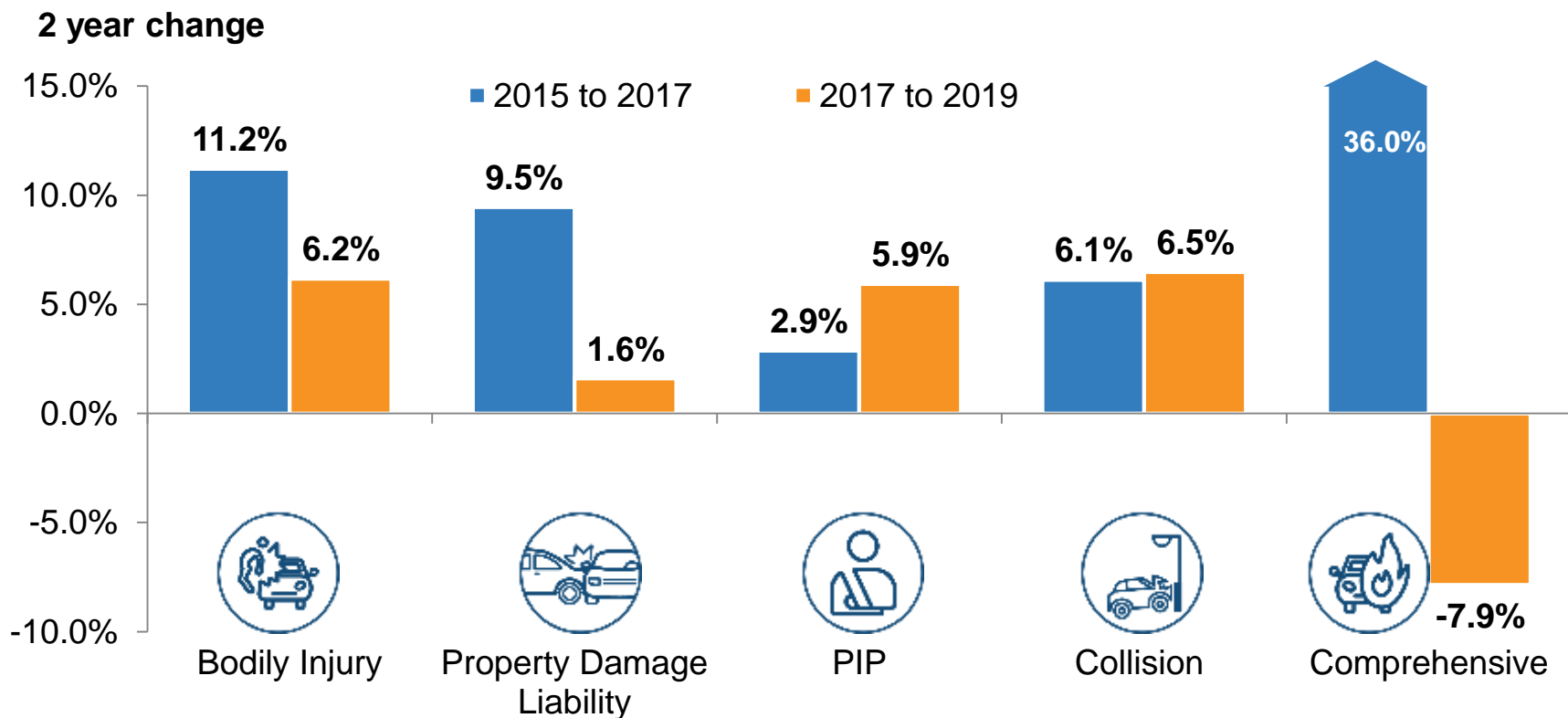


Personal auto has returned to underwriting profitability. Homeowners results depend on catastrophe season.



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

Loss Costs Have Tapered Off the Past 2 Years



The cost of accidents has tapered off in recent years

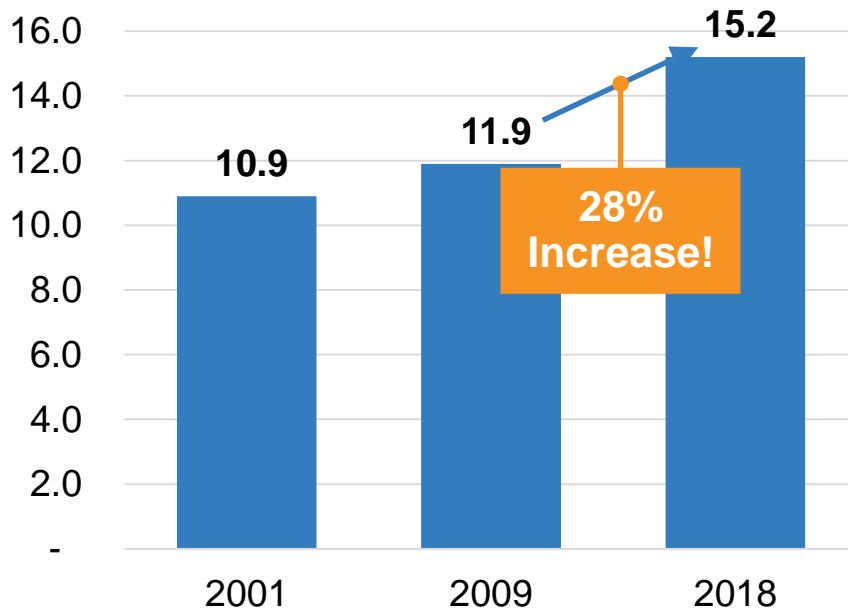


Auto Repair: Complexity Grows

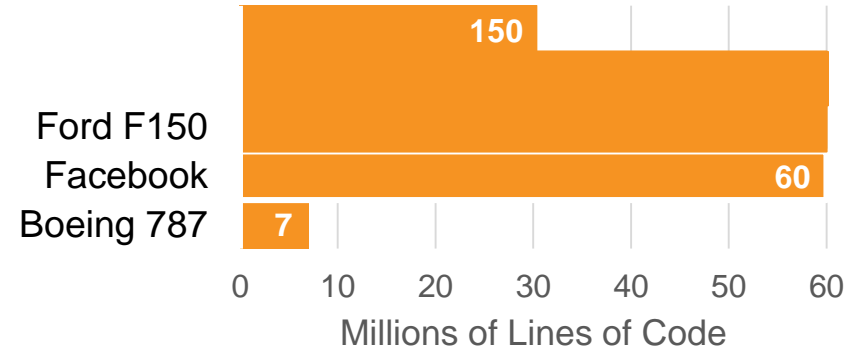
More Cool Stuff to Fix

More Parts, More Labor: Higher Costs

Parts/Collision Claim on Current Year Car



Electronics Add to Cost, Complexity



- ▶ Electronics: 40-50% of cost of vehicle
 - ◆ Pre-repair scan: \$63
 - ◆ Post-repair scan: \$93
 - ◆ Calibration labor: sublet at \$150
 - ◆ OEM: 98% of camera/sensors



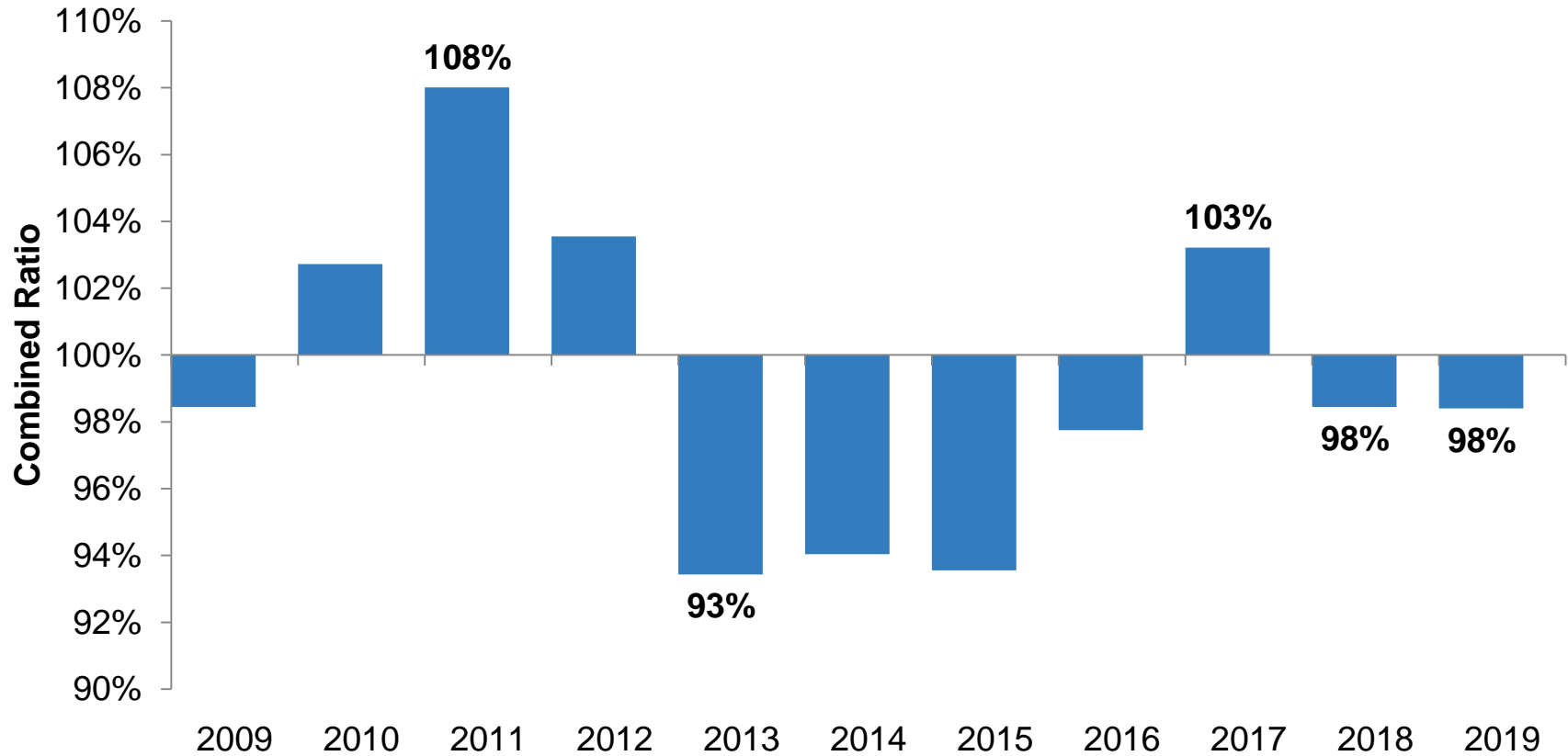
* Property Damage Only.

SOURCES: "2019 Crash Course," CCC Information Services; Ford Motor Co.;

The Commercial Lines Picture

2020 Was Looking Good

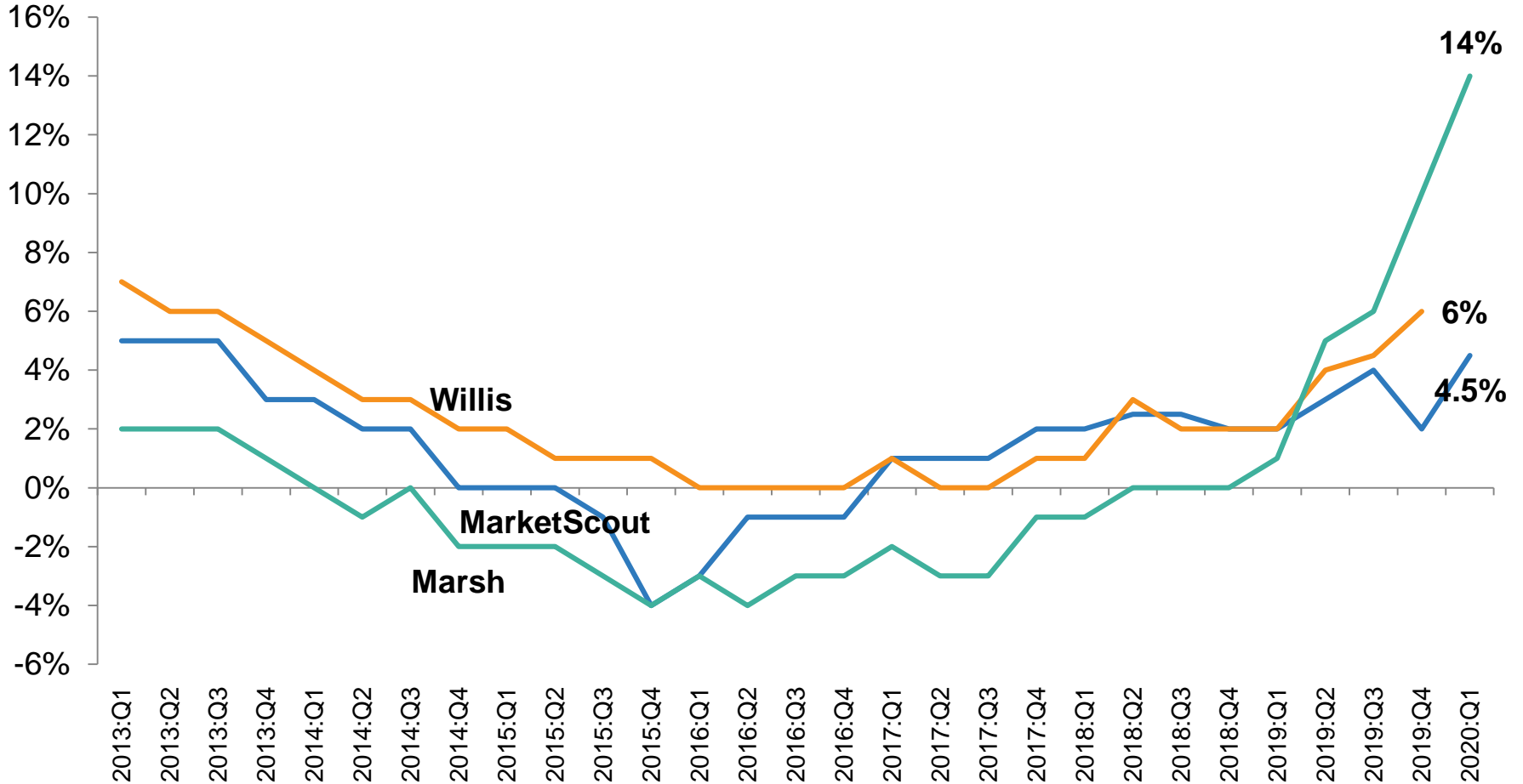
Commercial Lines Results



Excellent workers comp results have more than made up for problems in auto, general liability.



Commercial Lines Rate Changes



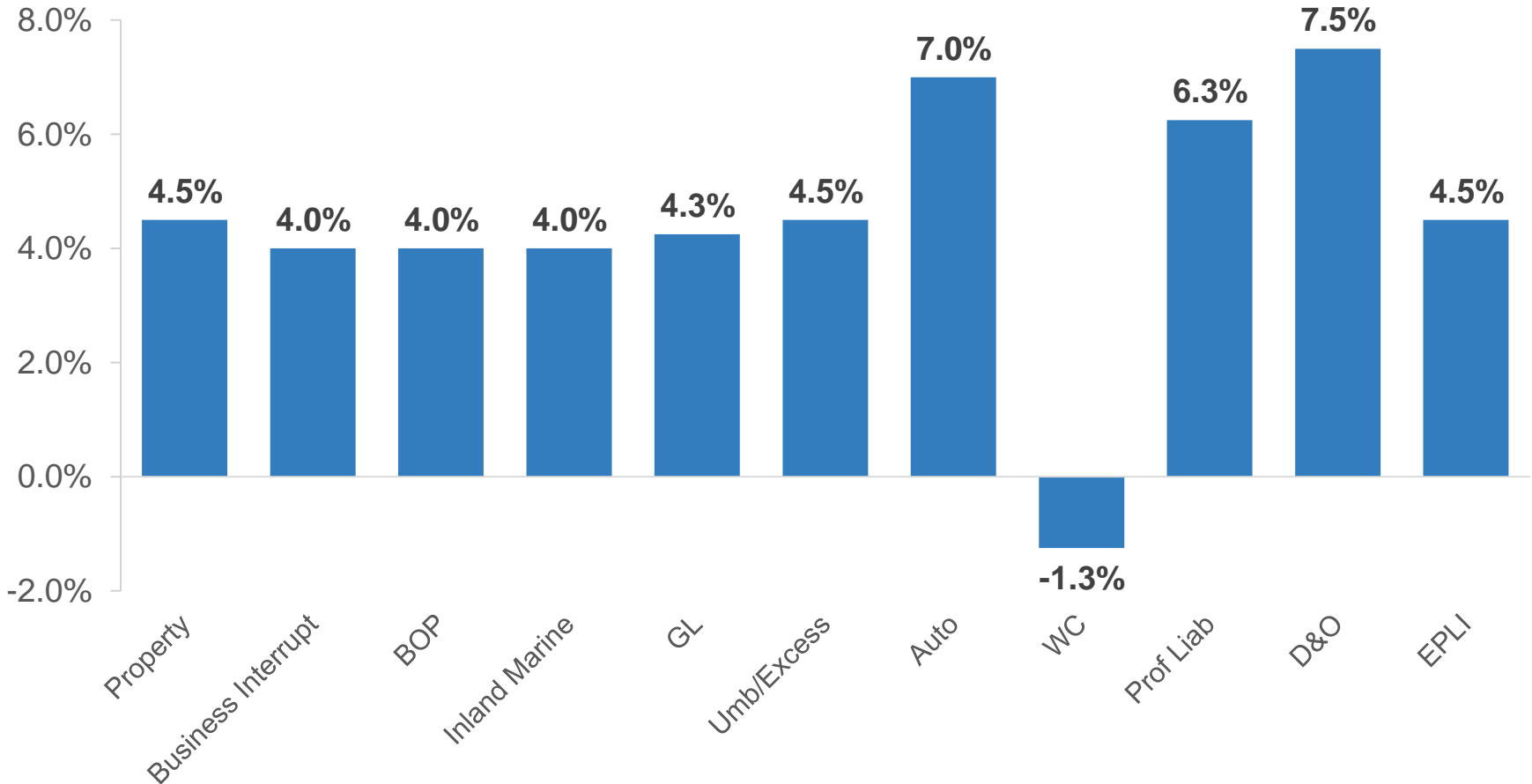
Rates have been rising. Is it a hard market?



Sources: Willis Towers Watson, MarketScout, Marsh.

Commercial Rate Changes

By Line, 2020:Q1

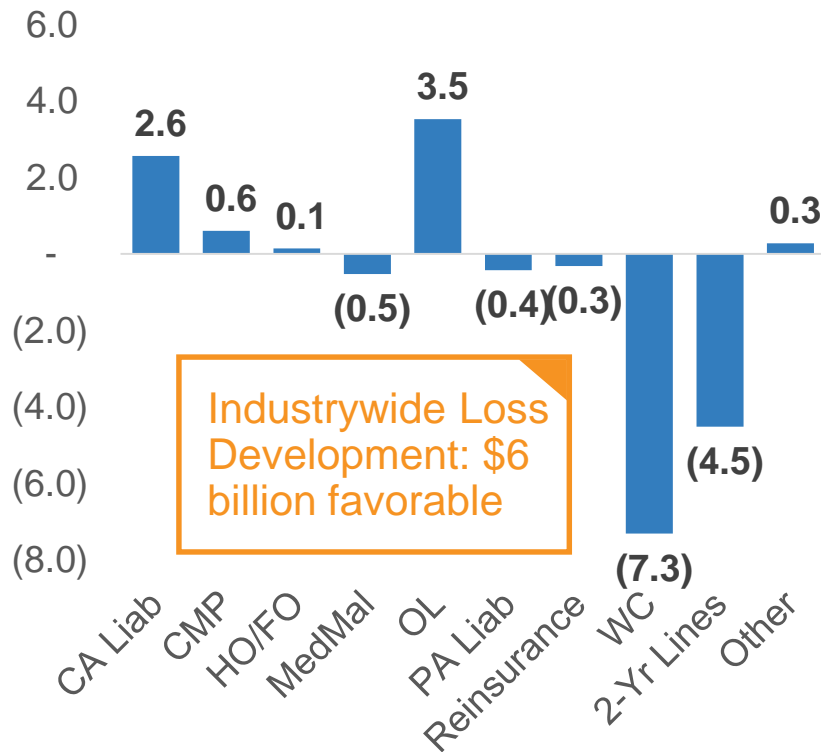


Source: MarketScout.

Key Trends

(at Year-End)

Loss Development



What's Happening

- ▲ PA: Moderating frequency, some severity movement
- ▲ WC: Frequency plunging
- ▲ D&O: Securities litigation explosion (event driven)
- ▲ EPLI: #Metoo
- ▲ GL: Social inflation
- ▲ CA: Social Inflation



Social Inflation

An Actuarial Examination

Social Inflation

Coming to Terms

A Good Definition

- ▲ “a fancy term to describe rising litigation costs and their impact on insurers’ claim payouts, loss ratios, and, ultimately, how much policyholders pay for coverage.”

Actuarial Interpretation

- ▲ “Excessive inflation in claims.”
 - ◆ Occurs when development defies key assumption: Loss Development is RV about stable mean



Triple-I Analysis

What We Studied and Why

- ▲ Hypothesis: Rising LDFs → Social Inflation
- ▲ Method:
 - ◆ Focus on Long-Tailed Liability Lines
 - Minimizes Catastrophe's Impact
 - 12:120 LDF > 1.8 (Workers Comp)
 - Included: Comm Auto Liability, MedMal, Other Liability, Product Liability
 - Excluded: Personal Auto Liability, Workers Comp, Special Liability
 - ◆ Look for Rising LDFs



Upward Creep in Loss Development

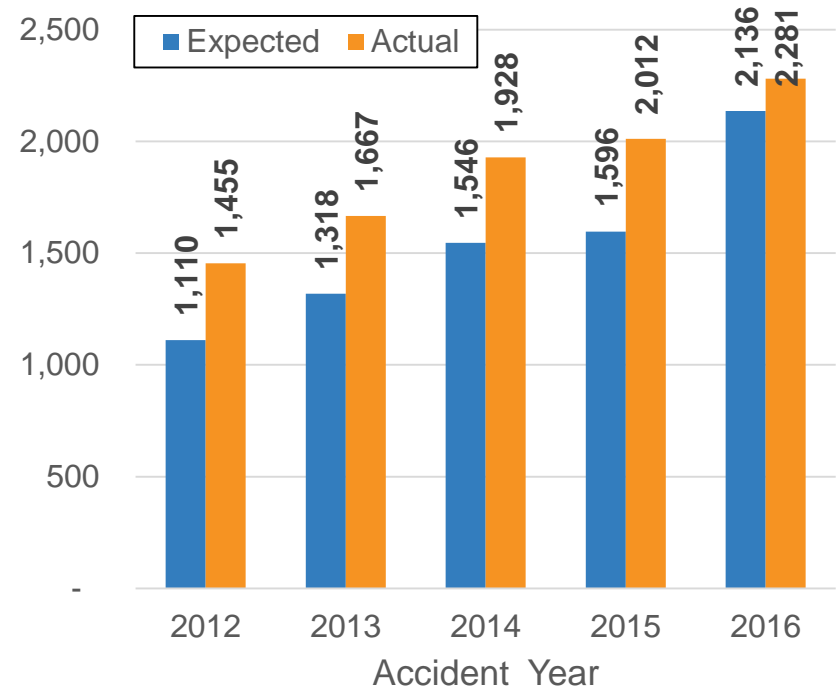
Key Assumption: LDF is RV about mean + inflation

Comm Auto LDFs

	12	24	36	48
2009	1.34	1.14	1.08	1.03
2010	1.36	1.16	1.08	1.04
2011	1.40	1.16	1.08	1.04
2012	1.40	1.16	1.09	1.04
2013	1.41	1.18	1.10	1.04
2014	1.42	1.19	1.10	1.05
2015	1.45	1.18	1.11	
2016	1.43	1.20		
2017	1.44			

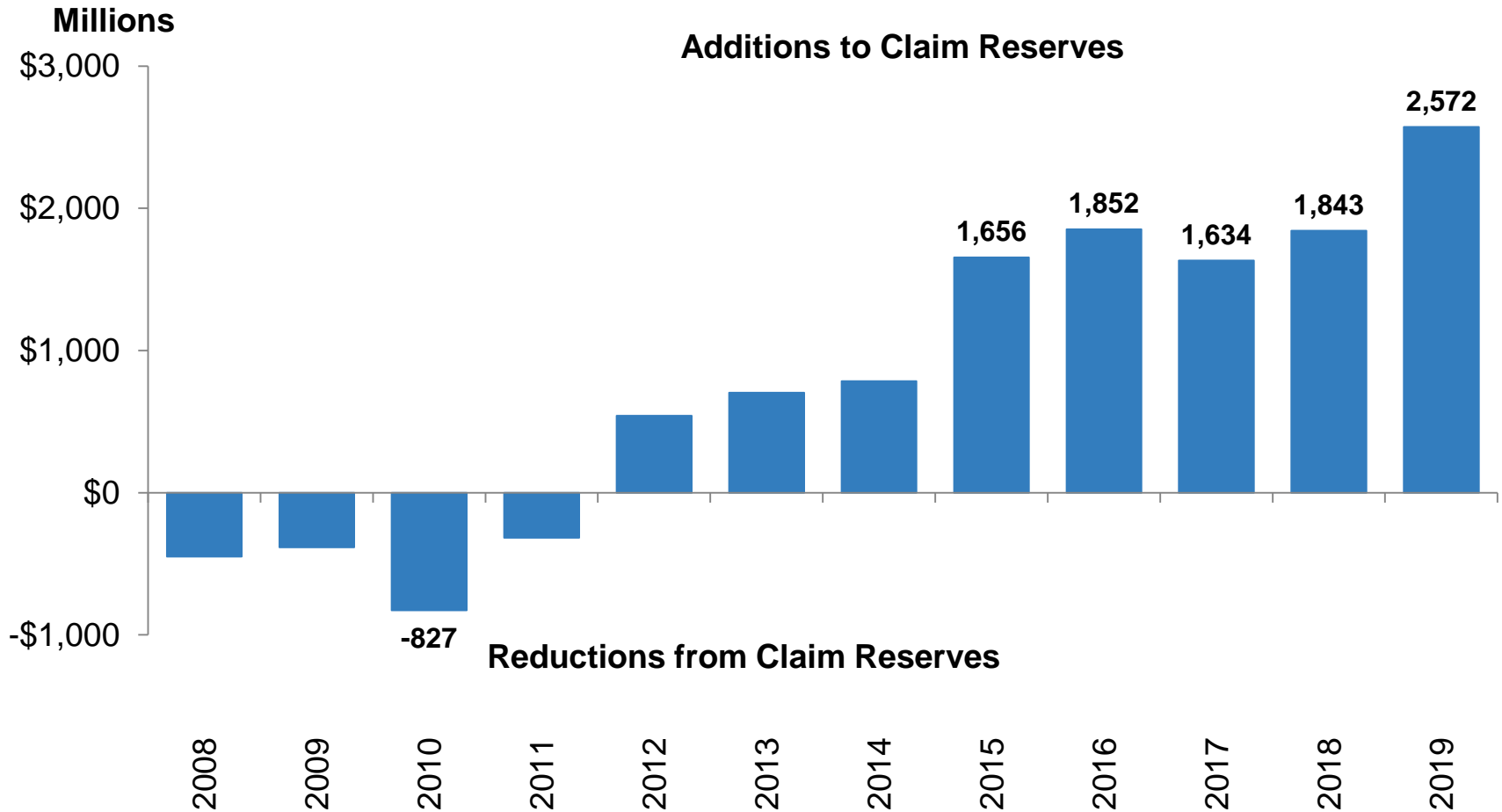
2-Year Expected vs. Actual

12-36 Development (\$ Millions)



Social Inflation: The Toll

Reserve Development, Commercial Auto Liability

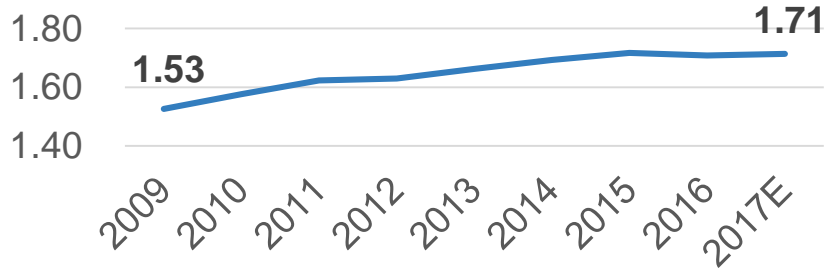


Sources: NAIC data sourced from S&P Market Intelligence; Insurance Information Institute.

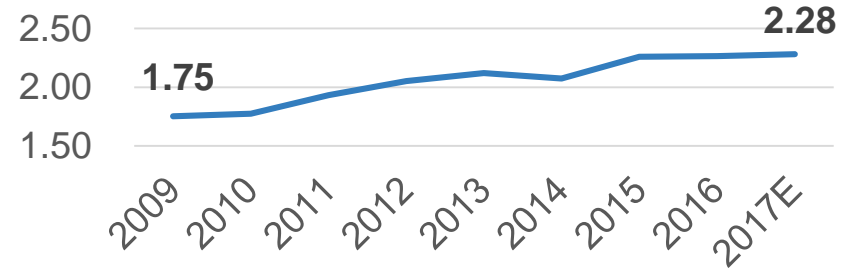
It's Not Just Auto

12:36 Loss Development Factors by Year, Long-Tailed Lines

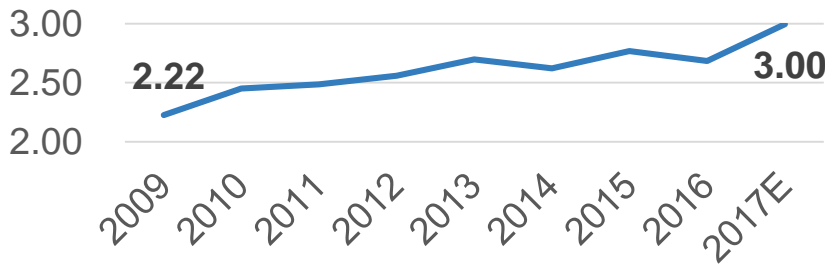
Commercial Auto



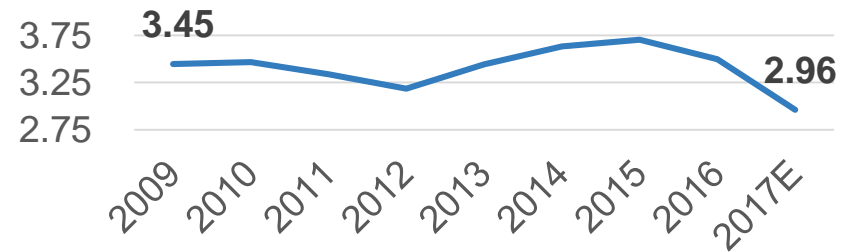
MedMal Claims-Made



Other Liability Occurrence



Other Long-Tailed Lines*



• Medical Malpractice Occurrence, Other Liability Claims-Made, Products Liability Occurrence, Products Liability Claims-Made.
 Estimate assumes 24:36 Factor is straight average of previous three years.
 Source: NAIC data, sourced from S&P Global Market Intelligence; Insurance Information Institute.

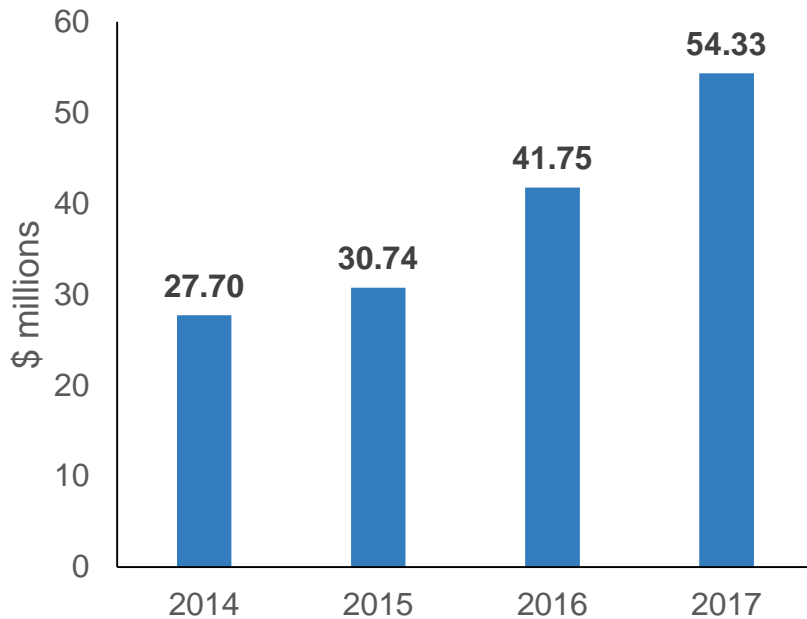


Why Is It Happening?

The Changing Legal Environment

“Jackpot Justice”

Median, 50 Largest Jury Verdicts

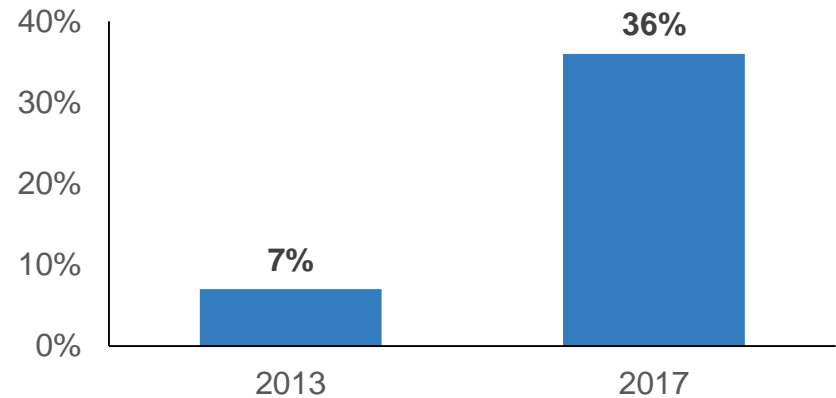


Litigation Financing

Litigation is a financeable asset.

- 68% of US Law Firms

% of US Law Firms Using Litigation Financing



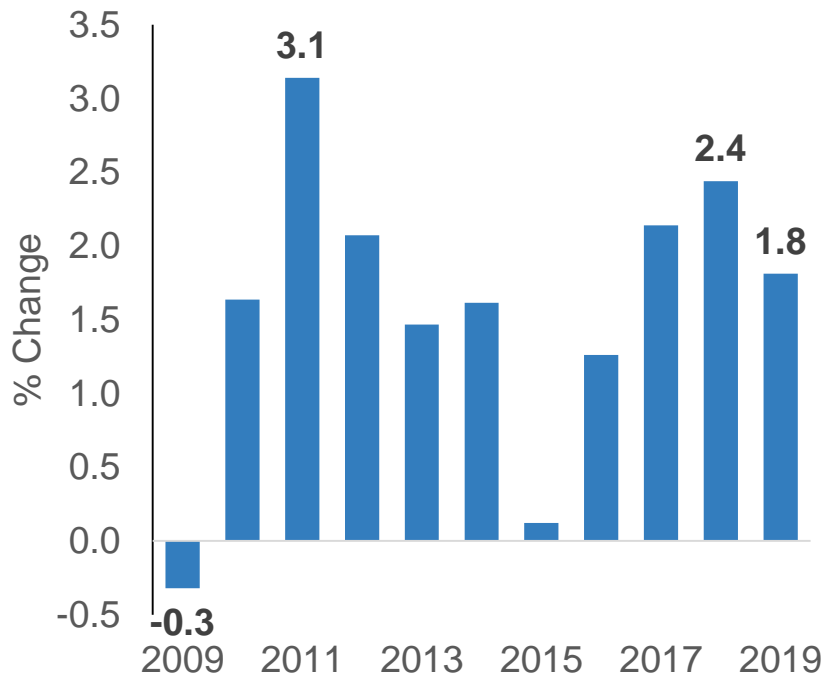
Why It Is Happening

Why Social Inflation Hits Insurance

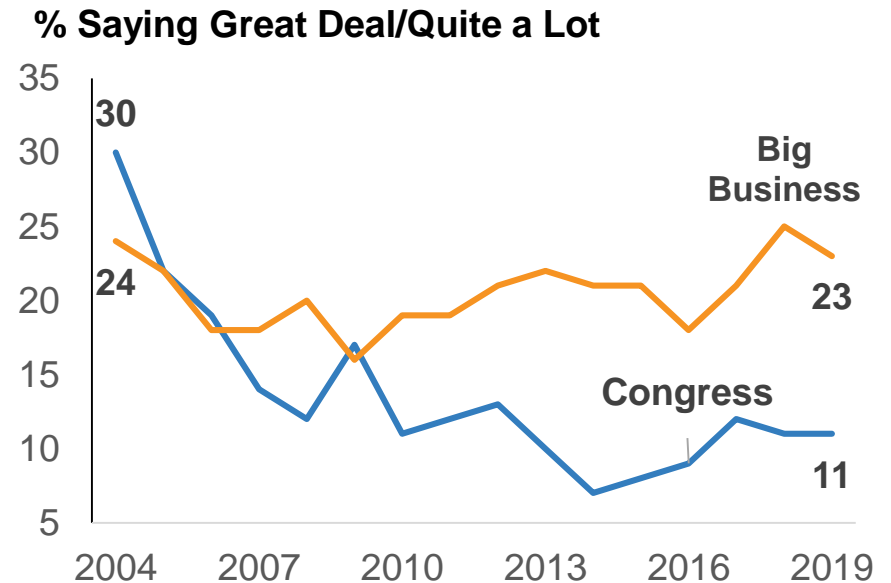
Overall Inflation Remains Steady

Who Solves Problems?

CPI Change vs Year Earlier



Confidence in Institutions

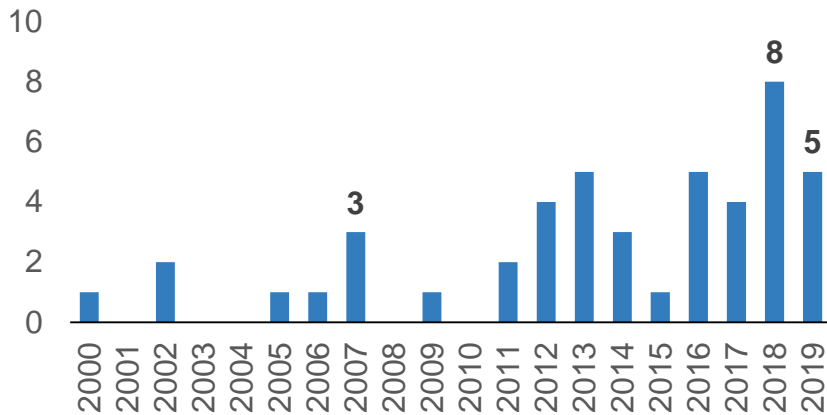


Why Is It Happening?

Social Trends Set the Stage

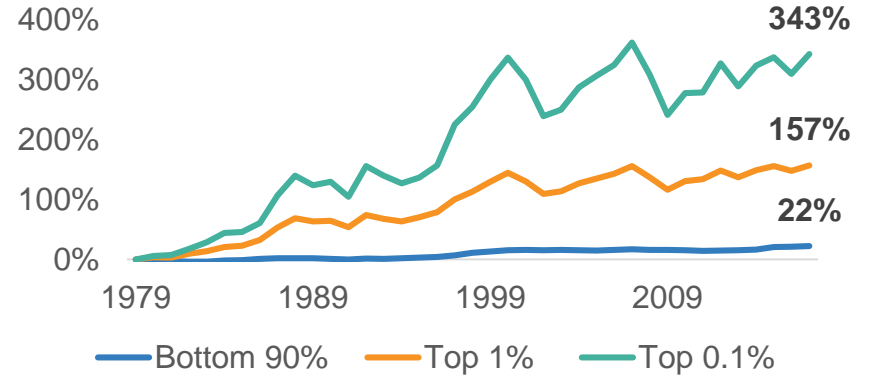
Big Payout Expectations

No. of \$300M Lottery Jackpots

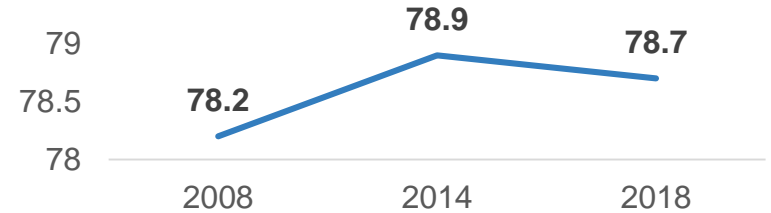


Dystopian Days

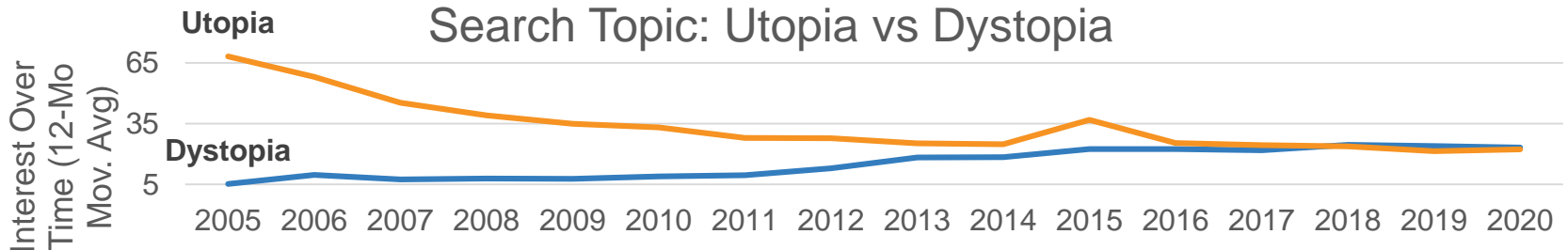
% Chg, Real Income Since 79



Life Expectancy at Birth



Search Topic: Utopia vs Dystopia



Summary

2019 was a solid year for property/casualty insurers

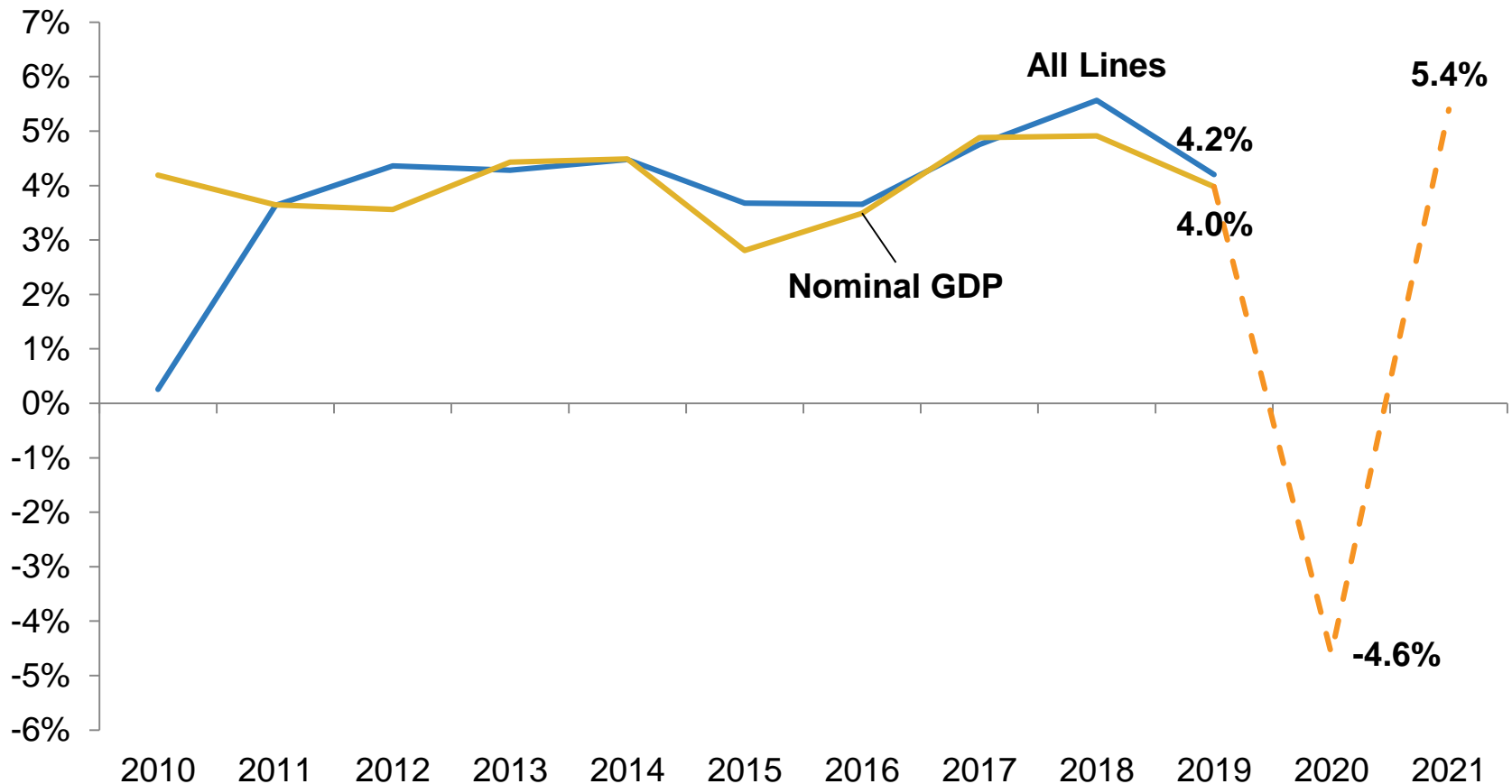
- ▲ Healthy economy grew exposures
- ▲ Falling frequency helped personal auto, workers comp
- ▲ Low cat losses helped property lines
- ▲ Social inflation a growing concern



The Global Pandemic

An Unprecedented P/C Insurance Toll

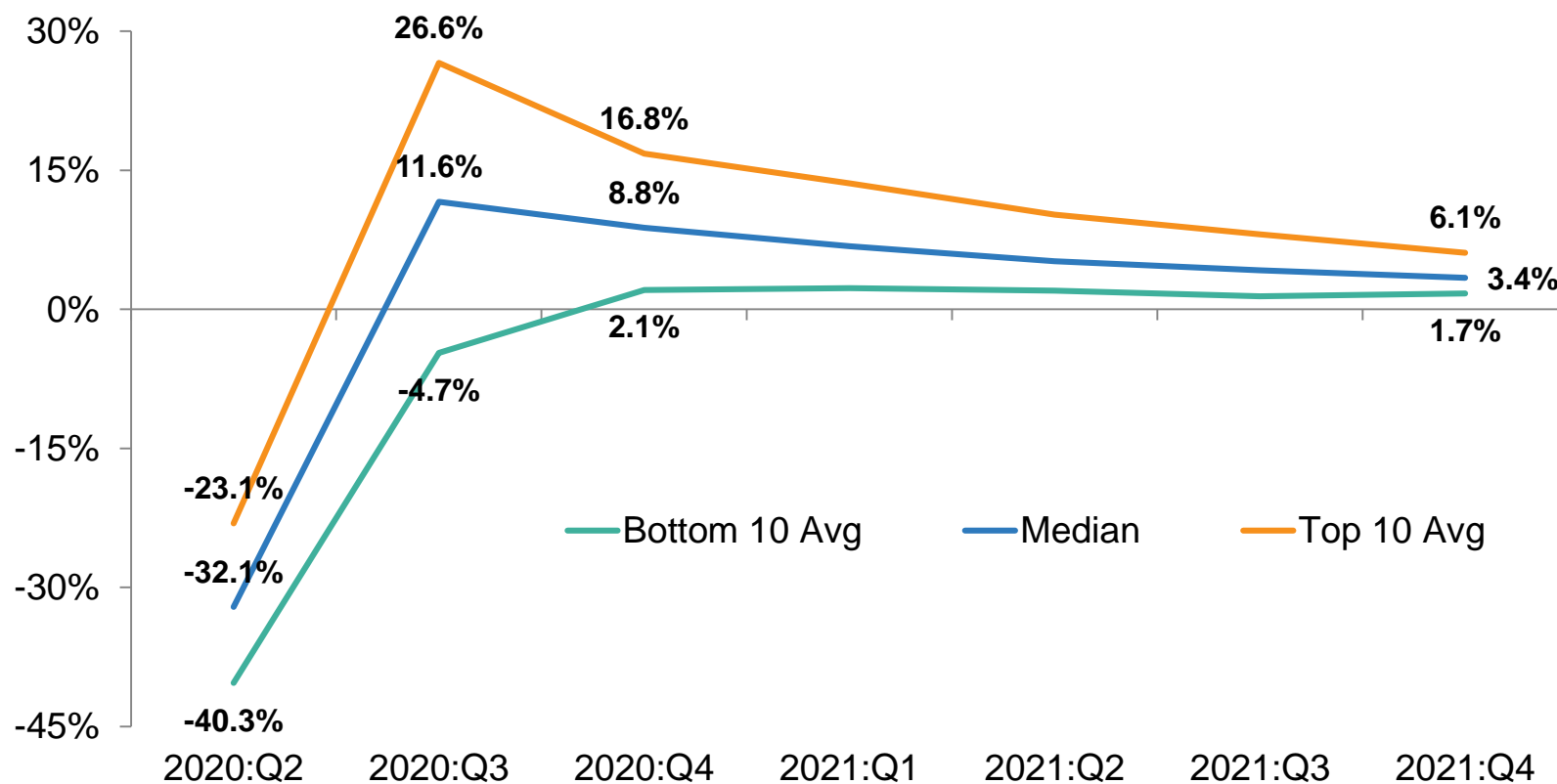
Direct Written Premium Growth By Year



Normally premium grows at about the same rate as the economy, which bodes ill for insurers this year.



Quarterly* U.S. Real GDP Growth



Most economists predict a quick bounceback but GDP won't reach a new high until 2022.

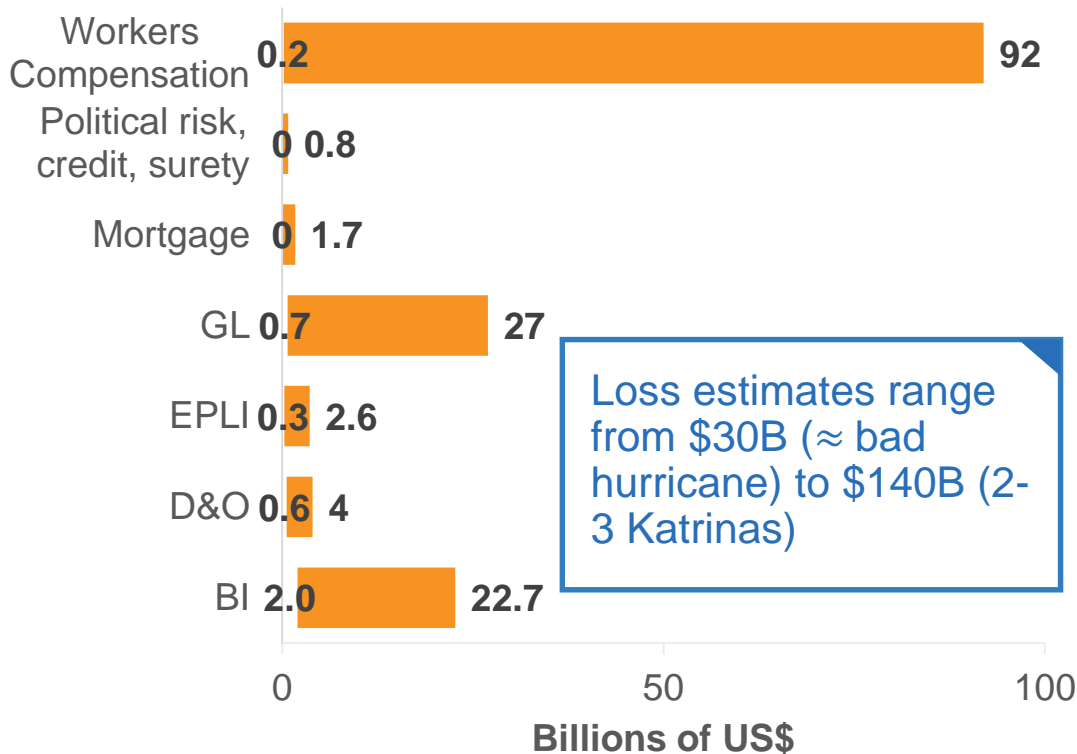


*at an annual rate
Sources: Blue Chip Economic Indicators, May 2020.

COVID-19's Impact

Unprecedented Spread of Loss, Deterioration of Exposure

Potential Loss Impact



Exposure Impact

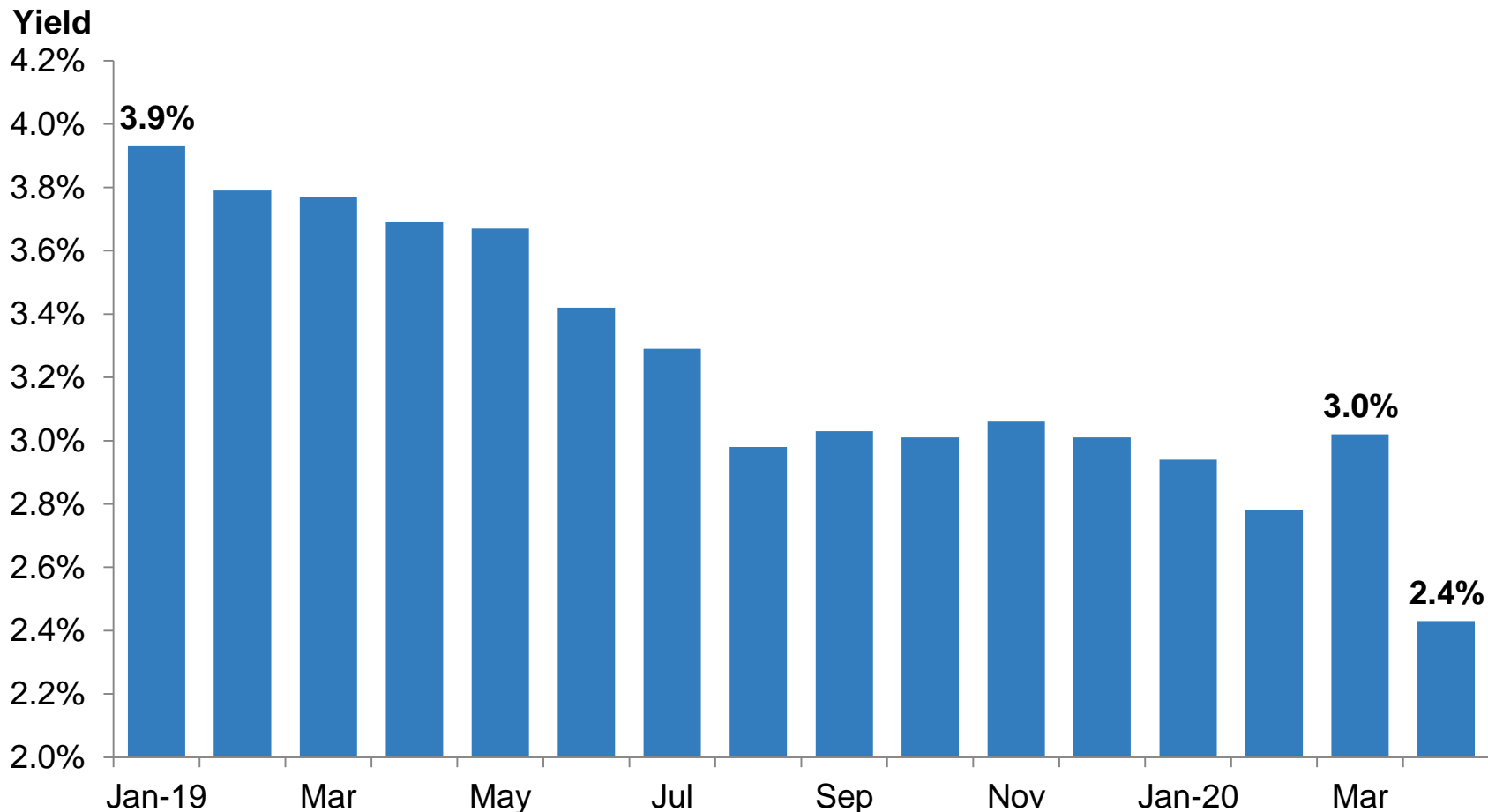
- ▲ \$10.5B auto premium
- ▲ Employment related exposures (GL, WC)

Investment

- ▲ Stock prices, bond yields plunging
- ▲ Lloyd's estimate: \$96B in investment losses



Moody's Seasoned AAA Corporate Bond Yields, Monthly



Interest rates continue to decline, making the insurance 'float' less lucrative.



Sources: FRED, St. Louis Federal Reserve Bank <https://fred.stlouisfed.org/series/AAA119>

Insurance Issues by Line of Business

Before the Pandemic and Now

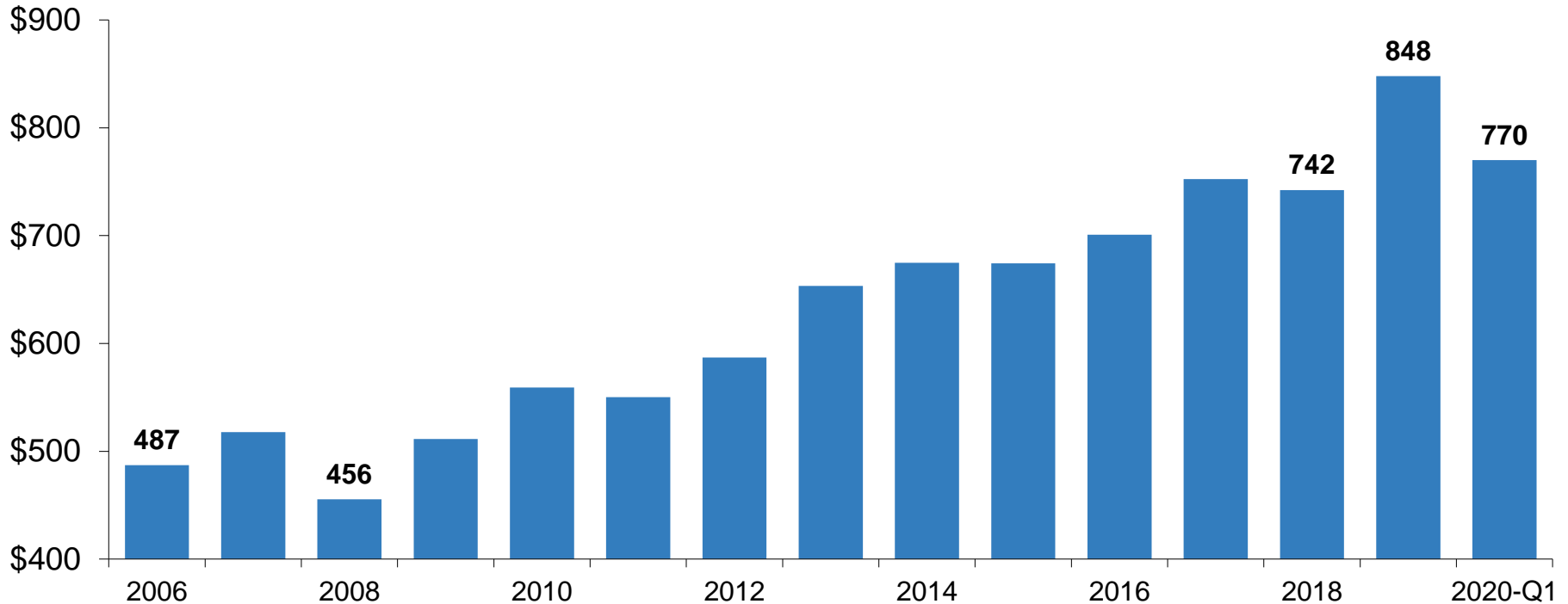
2020 Forecast and Reforecast

Line	Before the Pandemic	Now
Property	Trapped capital, rates	Business interruption
Personal Auto	Lower frequency, rates	Less driving (but faster), premium givebacks
D&O	Event-driven securities class actions, rates	Hindsight litigation of securities filings
Cyber	Public sector ransomware	Hospital ransomware, phishing
Commercial Auto	Continuing deterioration	Less driving, HOS rules suspended
Workers Comp	Falling frequency, solid profits	Fewer exposures, first responders



Policyholder Surplus

(\$ Billions)



At year-end the industry had \$1 of surplus for every \$0.75 of NPW, the strongest claims-paying status in its history.

The P/C insurance industry entered 2020 in exceptionally strong financial condition.



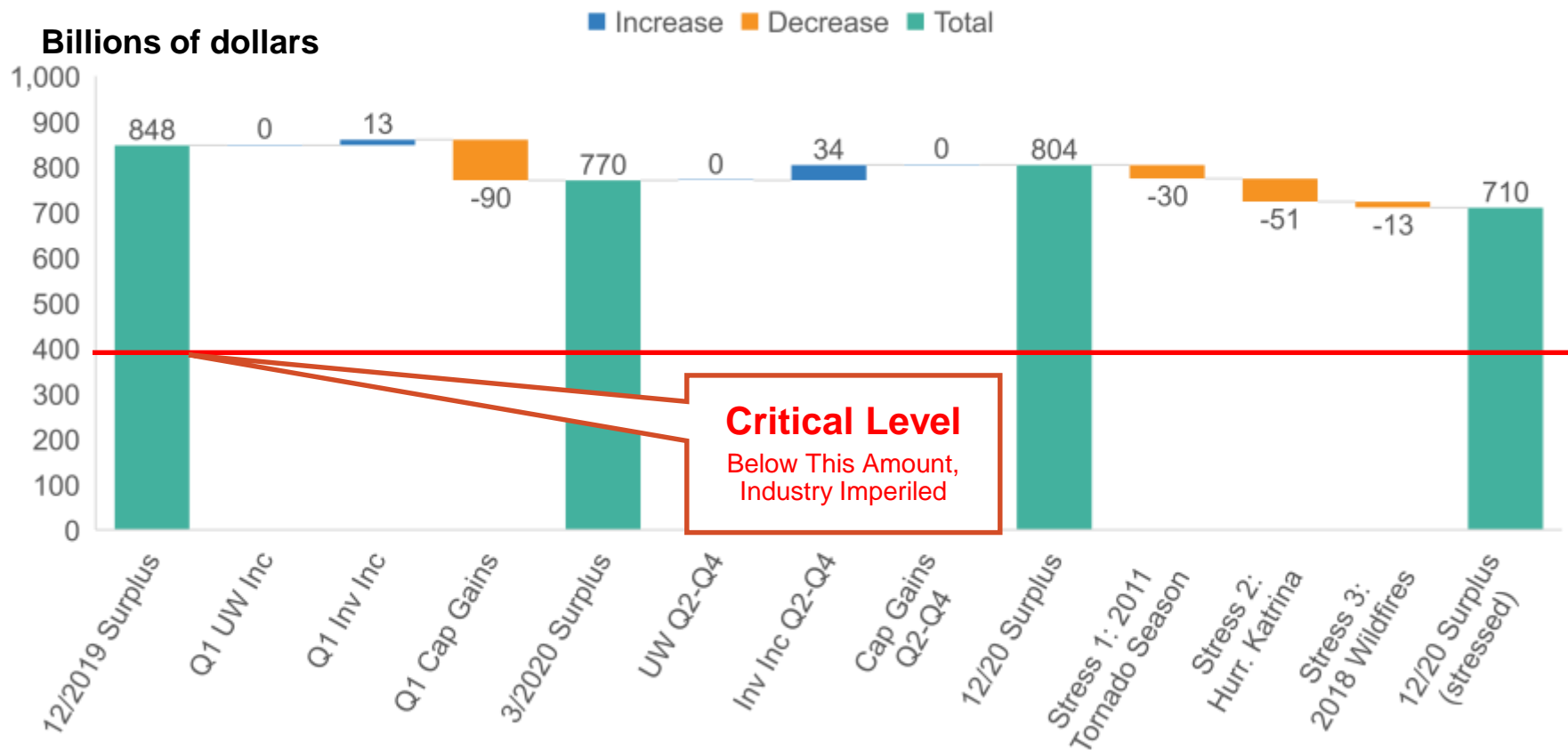
Sources: ISO, Insurance Information Institute.

Retroactive Business Interruption

An Existential Threat

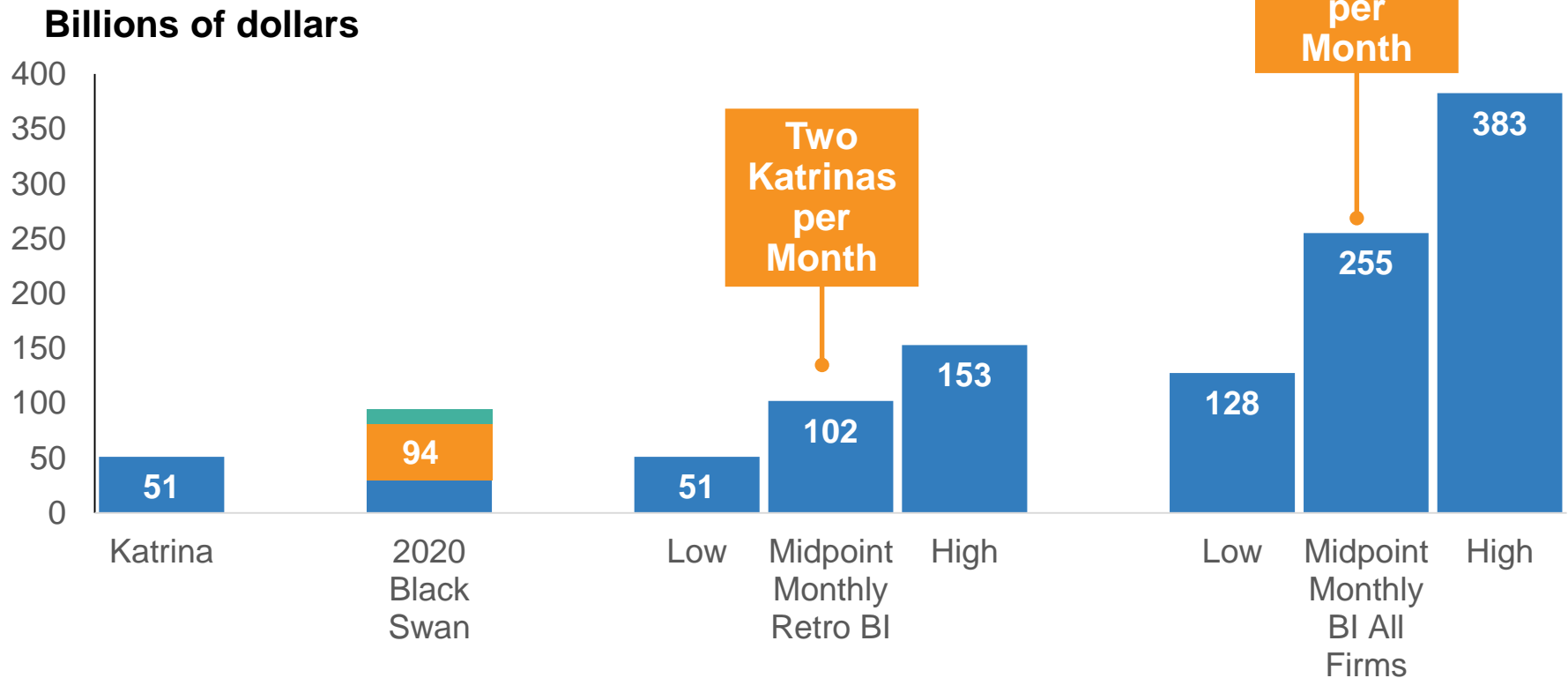
Stress Testing P/C Insurers

How Resilient Is the Industry?



The Biggest Threat: Retroactive BI

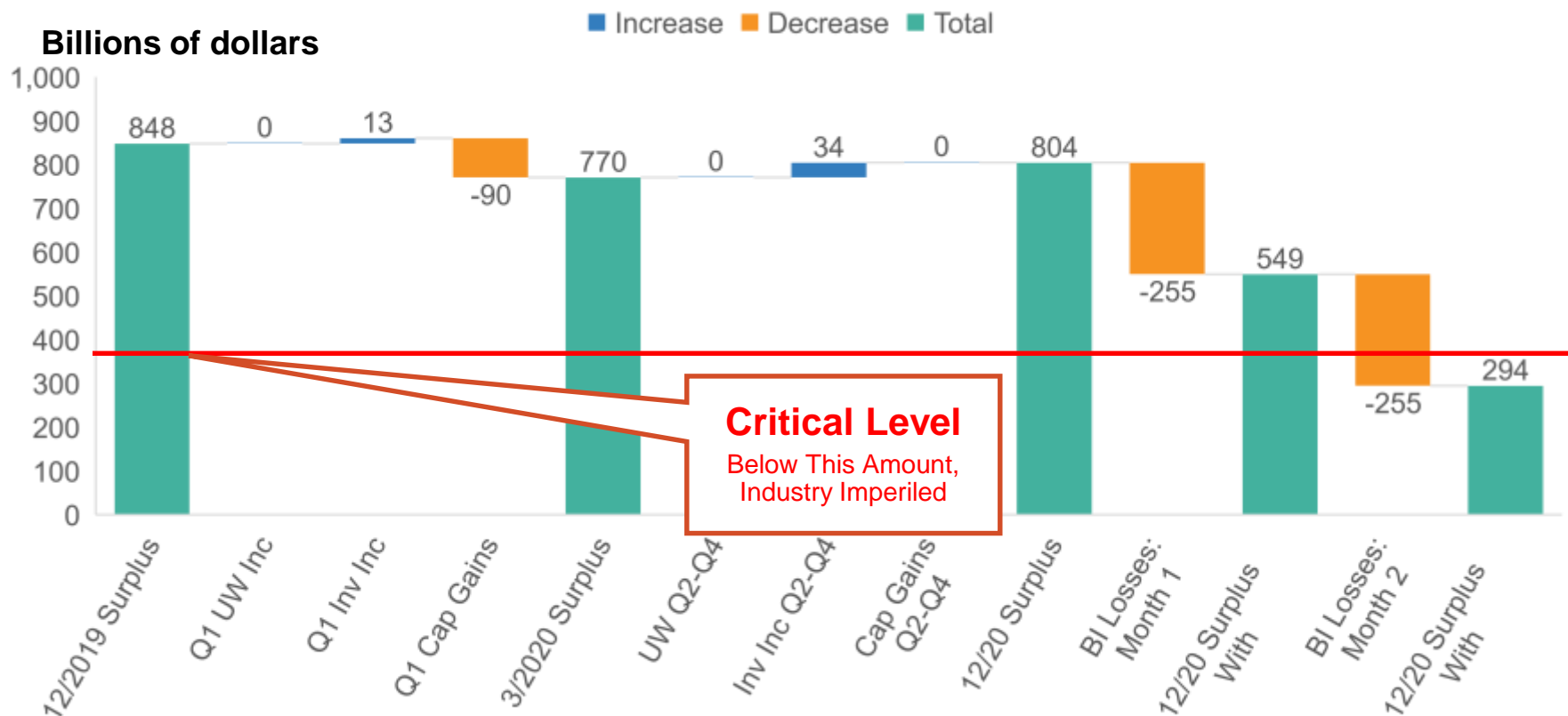
Estimates dwarf other black swan scenarios



Source: Insurance Information Institute.

Stress Testing P/C Insurers

How Resilient Is the Industry?



Summary: COVID-19 Edition

Unprecedented

- ▲ Virtually all lines will be affected
- ▲ Recession will dramatically decrease exposures and losses in several lines
- ▲ Workers comp, D&O, GL and business interruption could face significant increases in claims
- ▲ Retroactive BI would be an existential threat





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Thank you for your time
and your attention!