P/C Insurance Overview & Outlook for 2023 and Beyond

Insurance at the Economic Crossroads

HUB Carolinas

2023 Sales Kickoff Meeting

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Robert P. Hartwig, PhD, CPCU

Clinical Associate Professor of Finance, Risk Management & Insurance

Darla Moore School of Business ♦ University of South Carolina

Robert.Hartwig@moore.sc.edu ♦ 803.777.6782

UNIVERSITY OF SOUTH CAROLINA

Darla Moore School of Business

P/C Insurance Overview & Outlook: Outline

- Economic Overview & Outlook—Impacts for P/C Insurers
  - Growth, Employment, Inflation, Recession…
- Inflation: Where it Is Headed & What It Means for P/C Insurers
  - Impacts on claim severities and loss ratios
  - Long-term inflation considerations
- P/C Financial Overview & Outlook in the Post-COVID, High-Inflation Era
  - Premium Growth
  - Underwriting Performance
  - CAT Loss Update
  - Investment Market Issues: Volatility Rules and the Hawkish Fed
- Legal System Abuse (Social Inflation) Overview
- Summary and Q&A

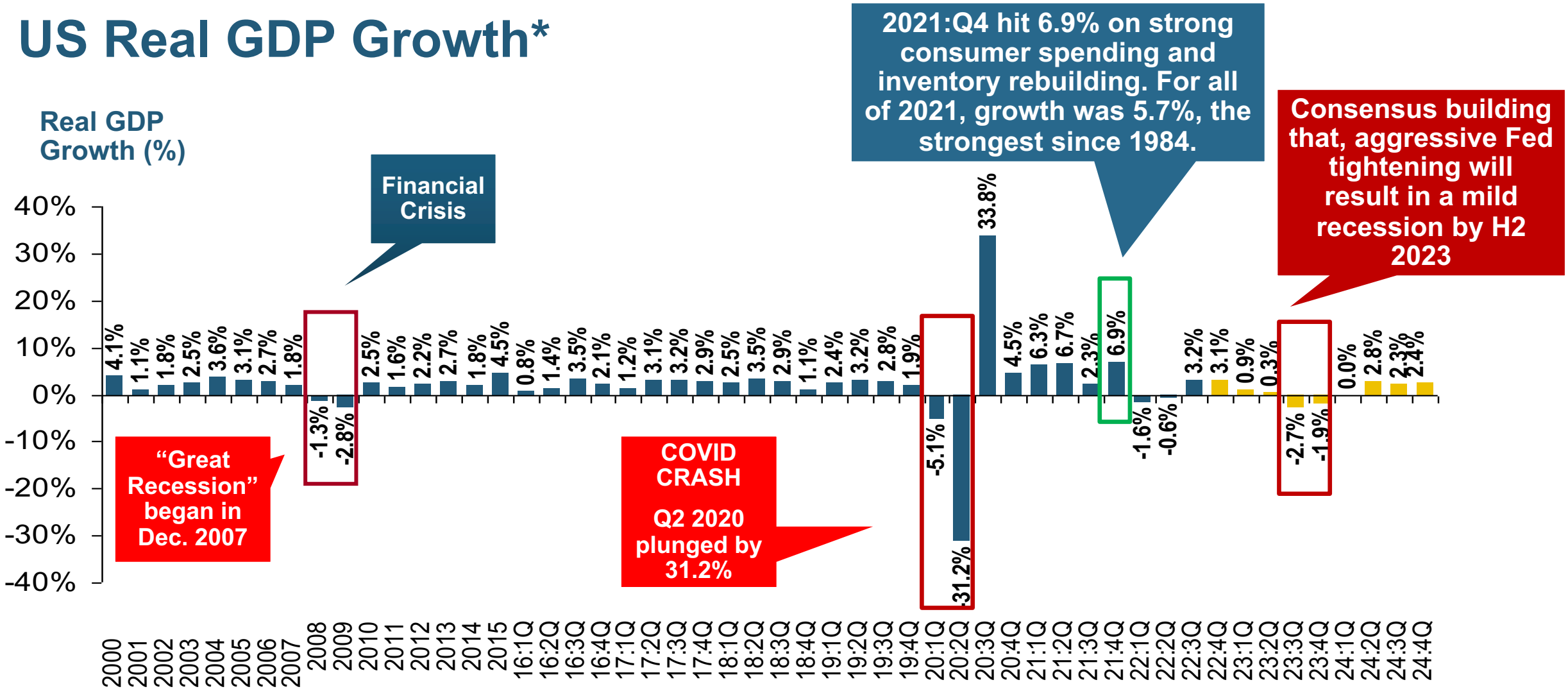
Economic Overview
Economic Optimism Plummeted in 2022
Inflation is Breeding Ground for Pessimism

Inflation, Geopolitical Conflicts and Rising Interest Rates and Weighing Heavily on Business and Consumer Sentiment

Can the Fed "Thread the Needle" and Achieve a "Soft Landing"?

3

US Real GDP Growth*

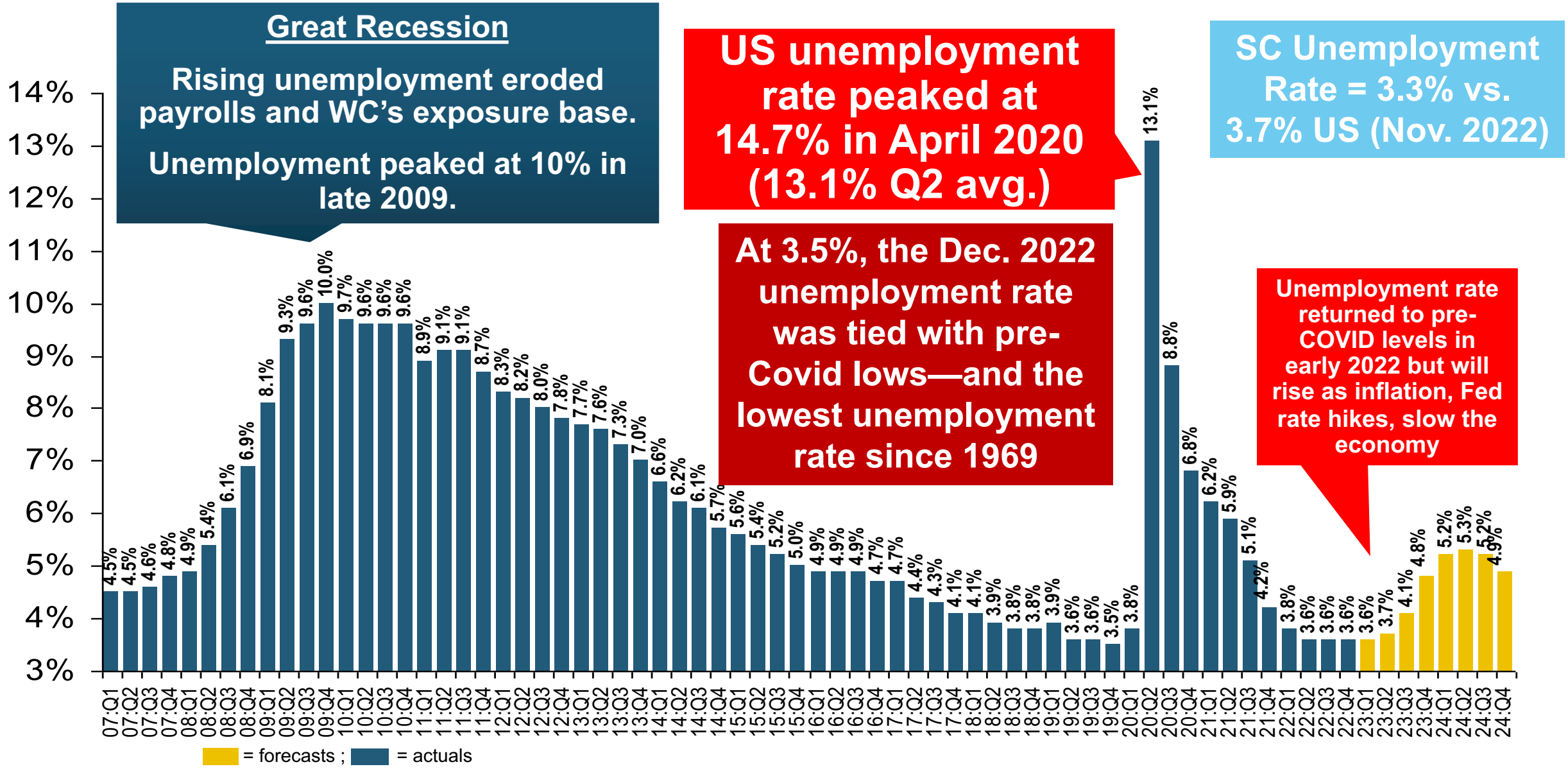


Demand for Insurance Increased Materially in 2021/22 During Recovery from the Pandemic—Particularly in Economically Sensitive Commercial Lines Such as WC. Premium growth will likely slow in 2023 as Economy Slows.

* Estimates/Forecasts from Wells Fargo Securities.

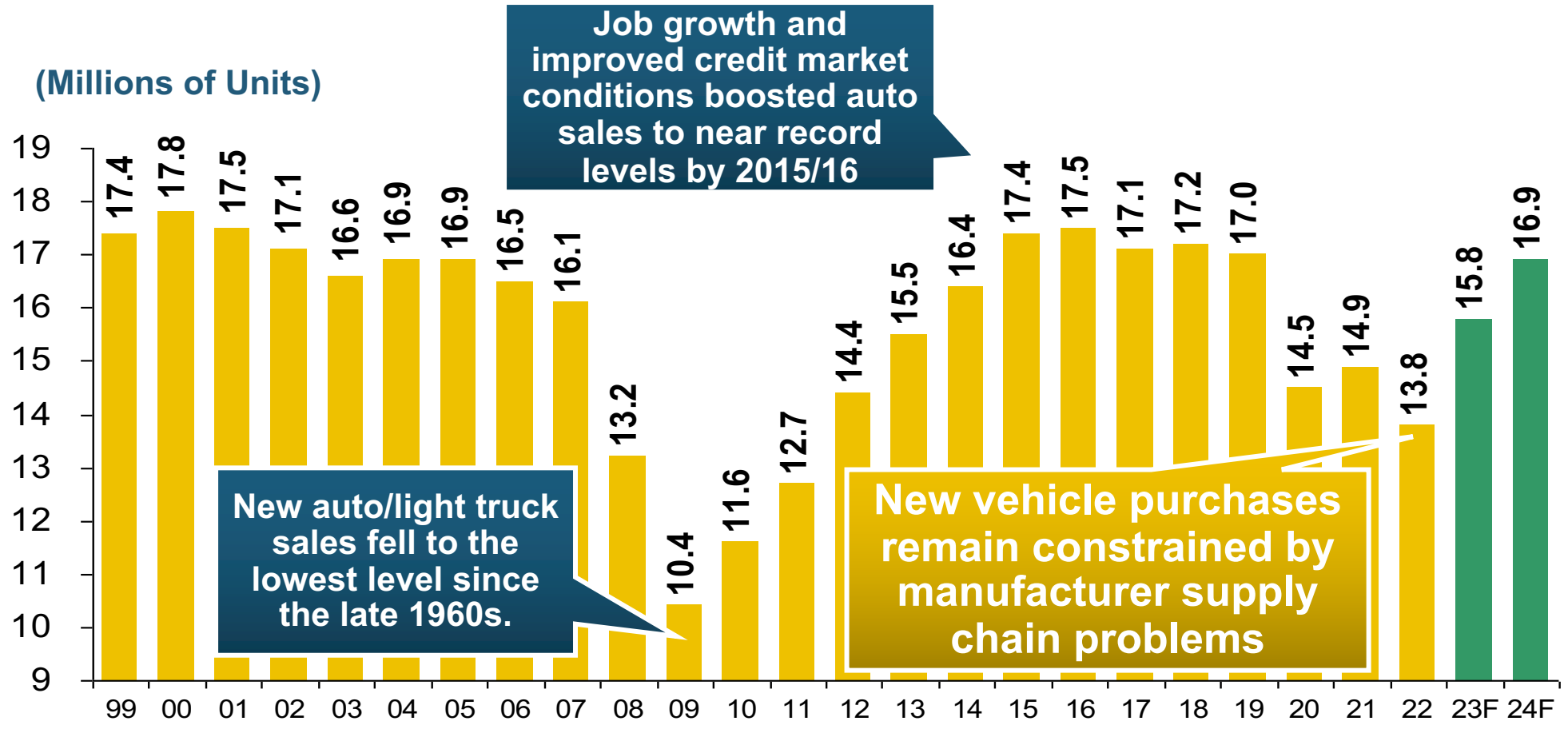
Source: US Department of Commerce, Wells Fargo Securities (1/23); Center for Risk and Uncertainty Management, University of South Carolina.

US Unemployment Rate Forecast: 2007:Q1–2024:Q4



Sources: US Bureau of Labor Statistics; Wells Fargo Securities (1/23 edition); Risk and Uncertainty Management Center, University of South Carolina.

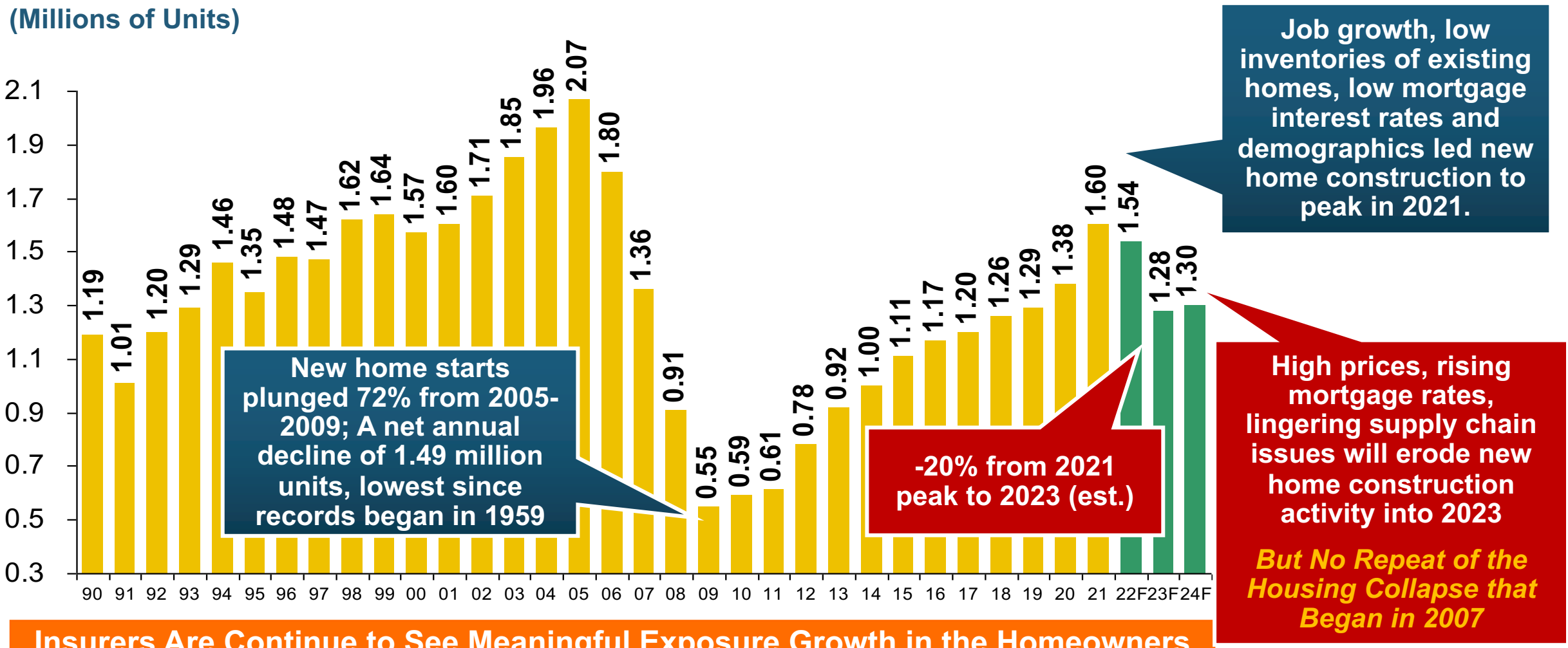
Auto/Light Truck Sales, 1999-2024F



Yearly car/light truck sales remain below pre-COVID levels. Auto manufacturer supply chain issues are expected to linger into early 2023. PP Auto premium might grow by 4%-5%.

Source: U.S. Department of Commerce; Wells Fargo Securities (1/23 for 2022-24F); Univ. of South Carolina, Center for Risk and Uncertainty Management..

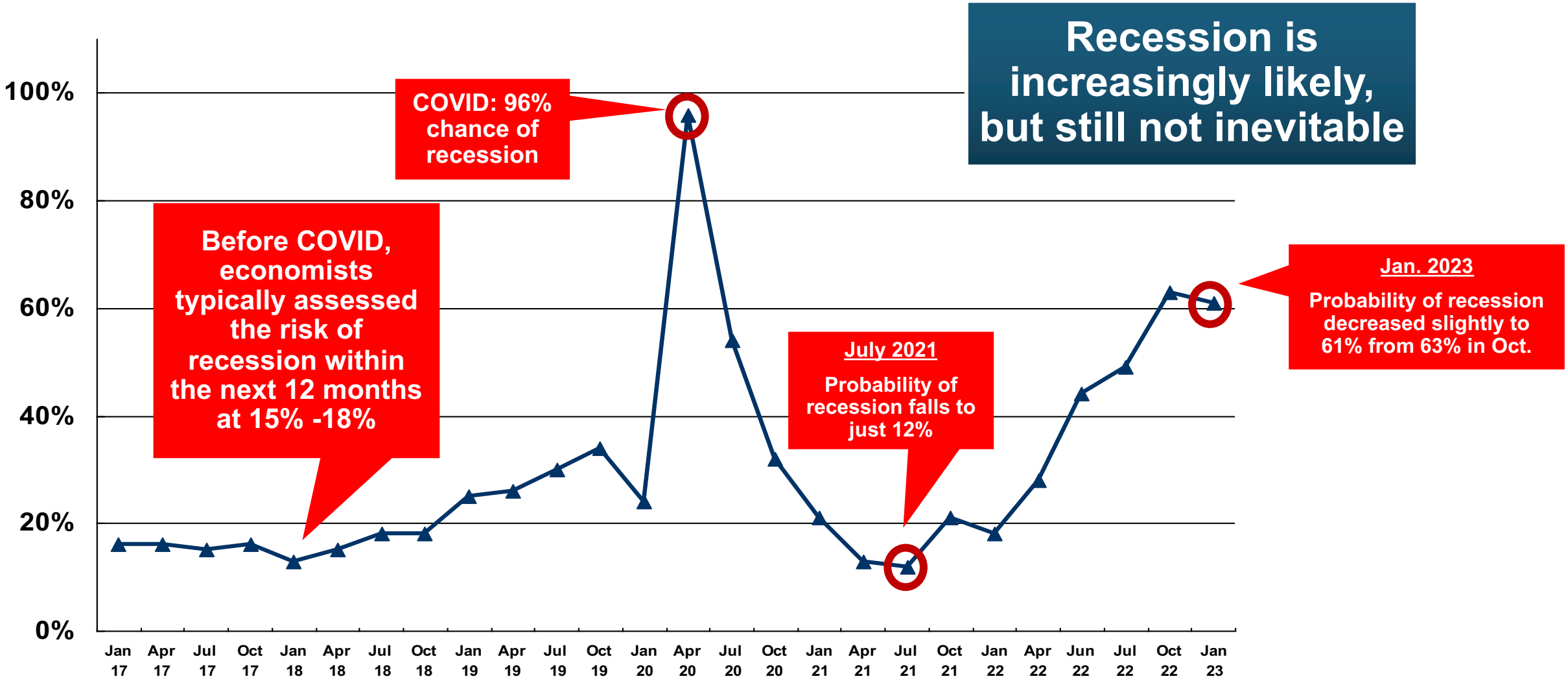
New Private Housing Starts, 1990-2024F



Insurers Are Continue to See Meaningful Exposure Growth in the Homeowners Line as well as Lines Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Source: U.S. Department of Commerce; Wells Fargo Securities (1/23 for 2022-24); Univ. of South Carolina, Center for Risk and Uncertainty Management..

Probability the U.S. Is in a Recession Within Next 12 Months: Jan. 2017 – Jan. 2023*

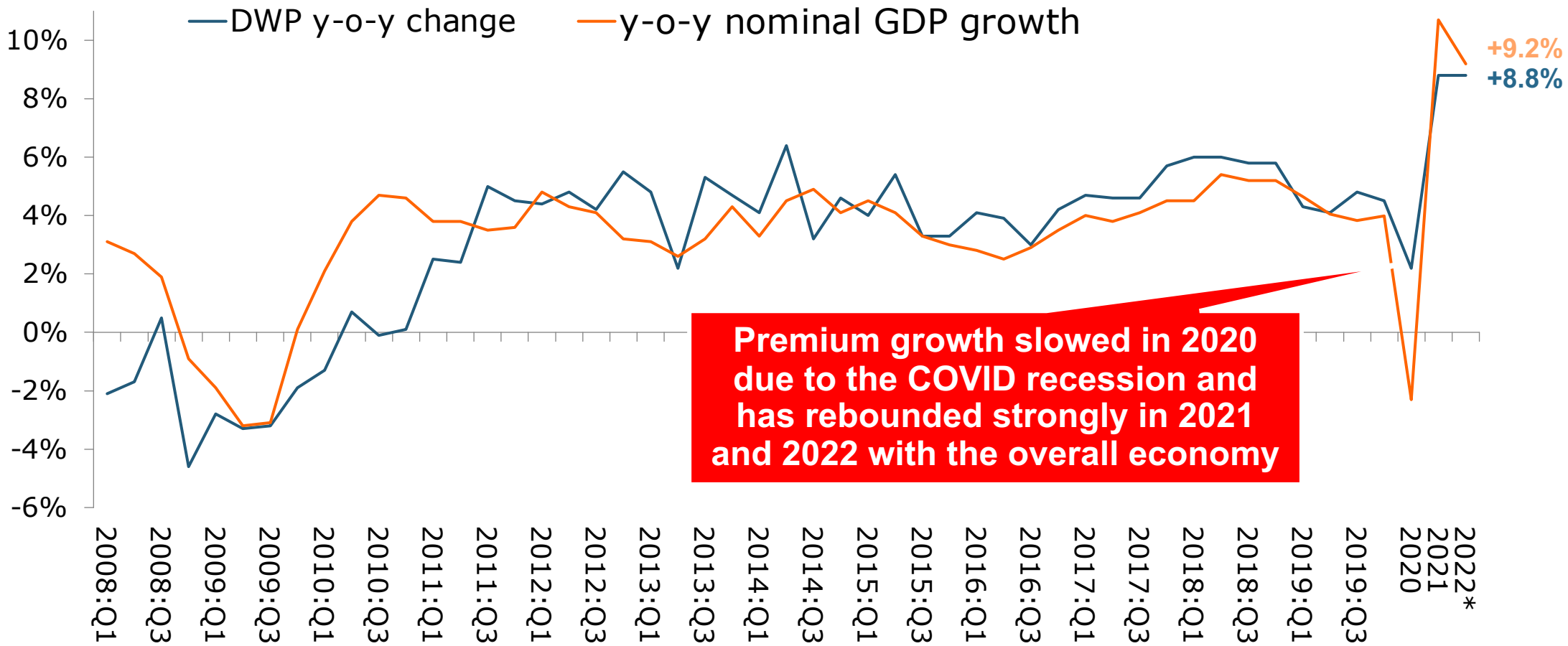


*Jan. 2023 survey included the responses of 71 economists.

Source: Wall Street Journal surveys of economists: https://www.wsj.com/articles/despite-easing-price-pressures-economists-in-wsj-survey-still-see-recession-this-year-11673723571; Risk and Uncertainty Management Center, University of South Carolina.

The Economy Drives P/C Insurance Industry Premiums: 2006:Q1–2022*

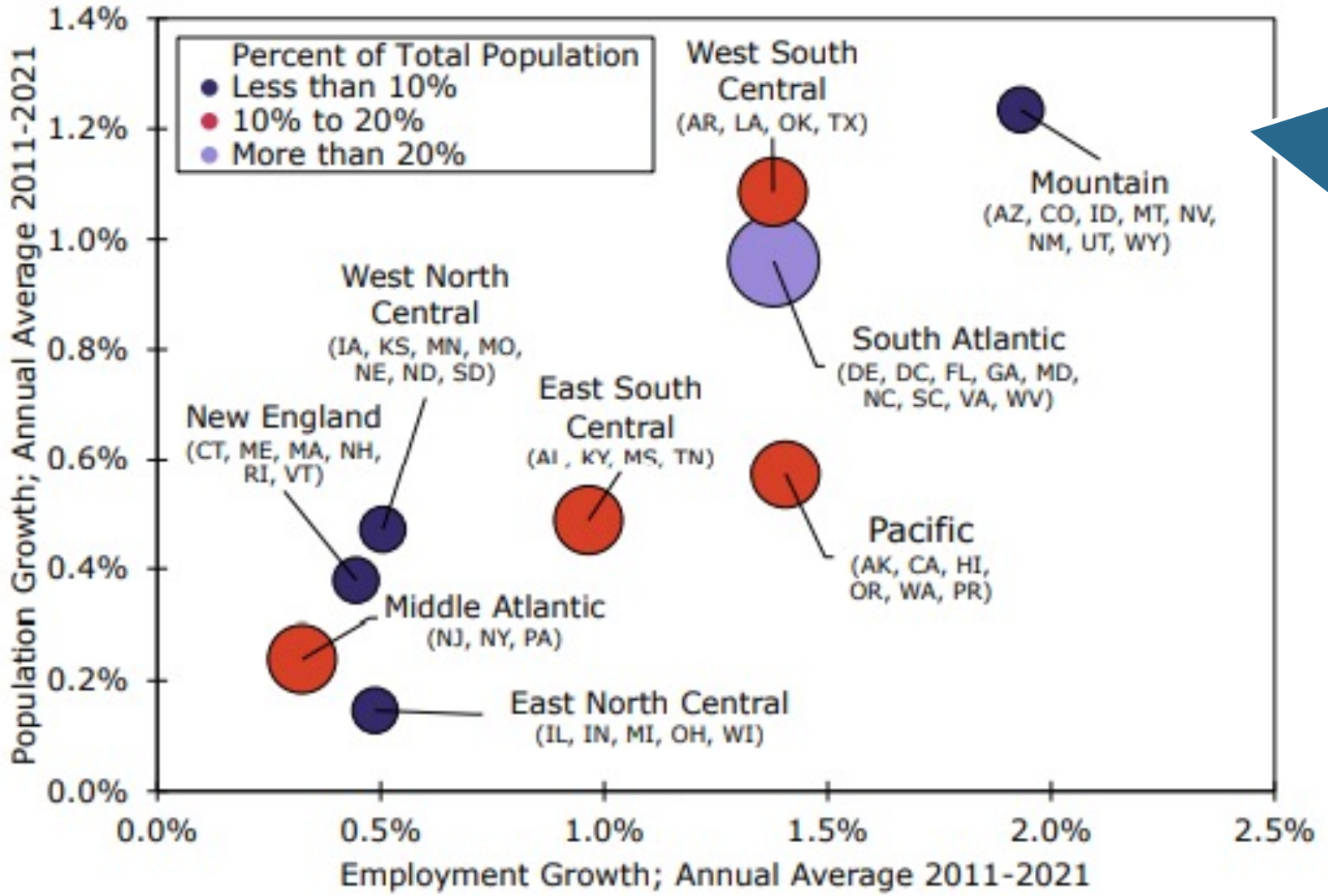
Direct Premium Growth (All P/C Lines) vs. Nominal GDP: Quarterly Y-o-Y Pct. Change



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

*2020-22 figures are annual; 2022 DWP figure is preliminary.
Sources: SNL Financial; U.S. Commerce Dept., Bureau of Economic Analysis; ISO; I.I.I.; Risk and Uncertainty Management Center, University of South Carolina.

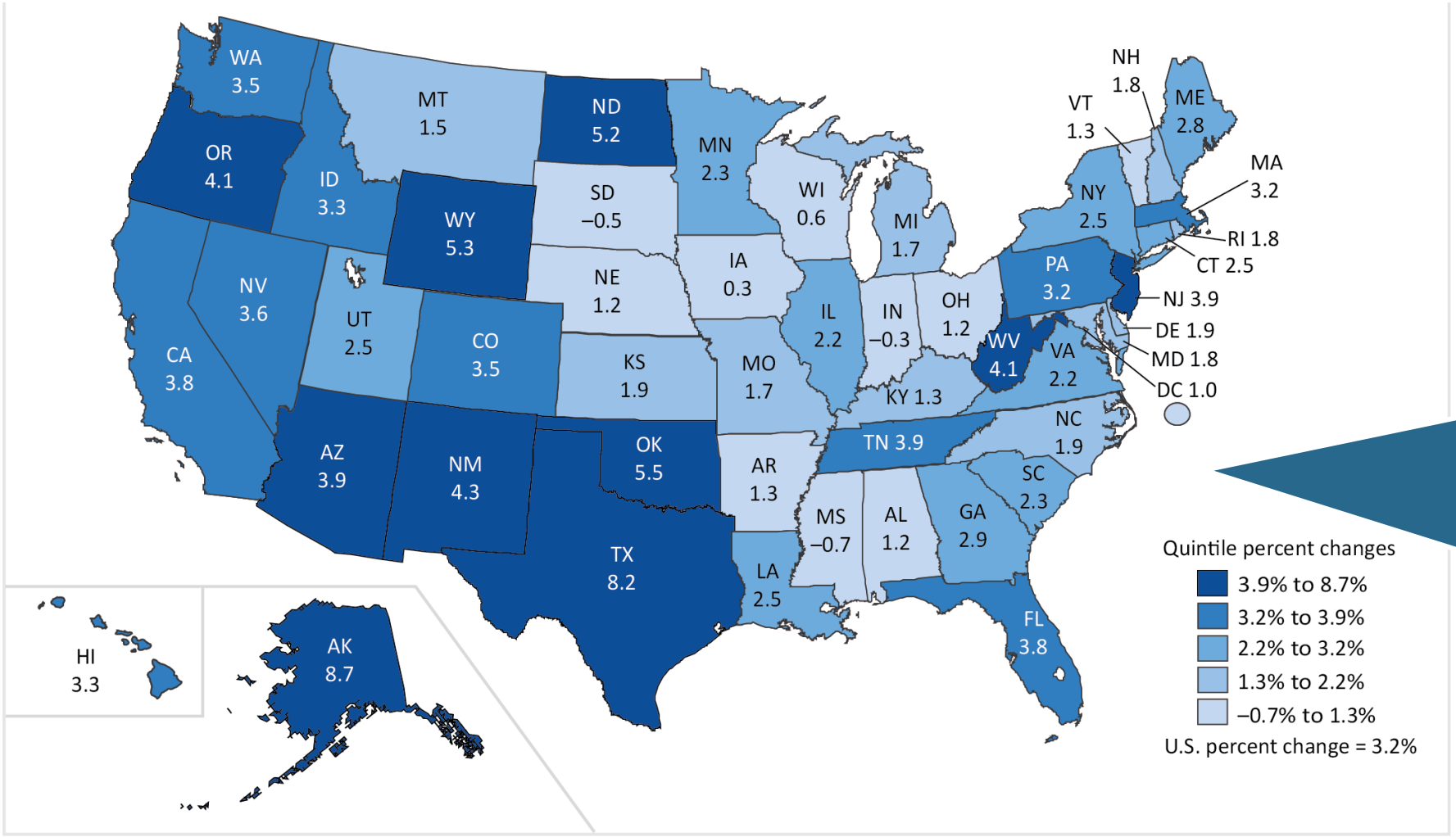
Regional Population Growth vs. Employment Growth, 2011 – 2021



- Although overall population growth is near zero in the US overall, insurers with exposure to states with rapid population and job growth with see signficantly larger gains in exposure
- Mountain, South Atlantic regions plus Texas lead the way

Sources: US Dept. of Labor; Wells Fargo Economics; Risk and Uncertainty Management Center, University of South Carolina.

Real GDP by State, 2022:Q2 – 2022:Q3



U.S. Bureau of Economic Analysis

- **Economies in the Southeast are performing well**
- **Will likely outperform the US if there is a national recession in H2 2023**

Sources: US Bureau of Economic Analysis at https://www.bea.gov/system/files/stgdppi3q22.png; Risk and Uncertainty Management Center, University of South Carolina.

Question: Is the U.S. economy already in recession?

ANSWER: NO! Even though Q1/Q2 2022 real GDP were negative, Q3 was strongly positive at +3.2%, while labor markets also remain strong. The notion that 2 consecutive quarters of negative real GDP define the start of a recession is incomplete.

The U.S. Inflation Threat

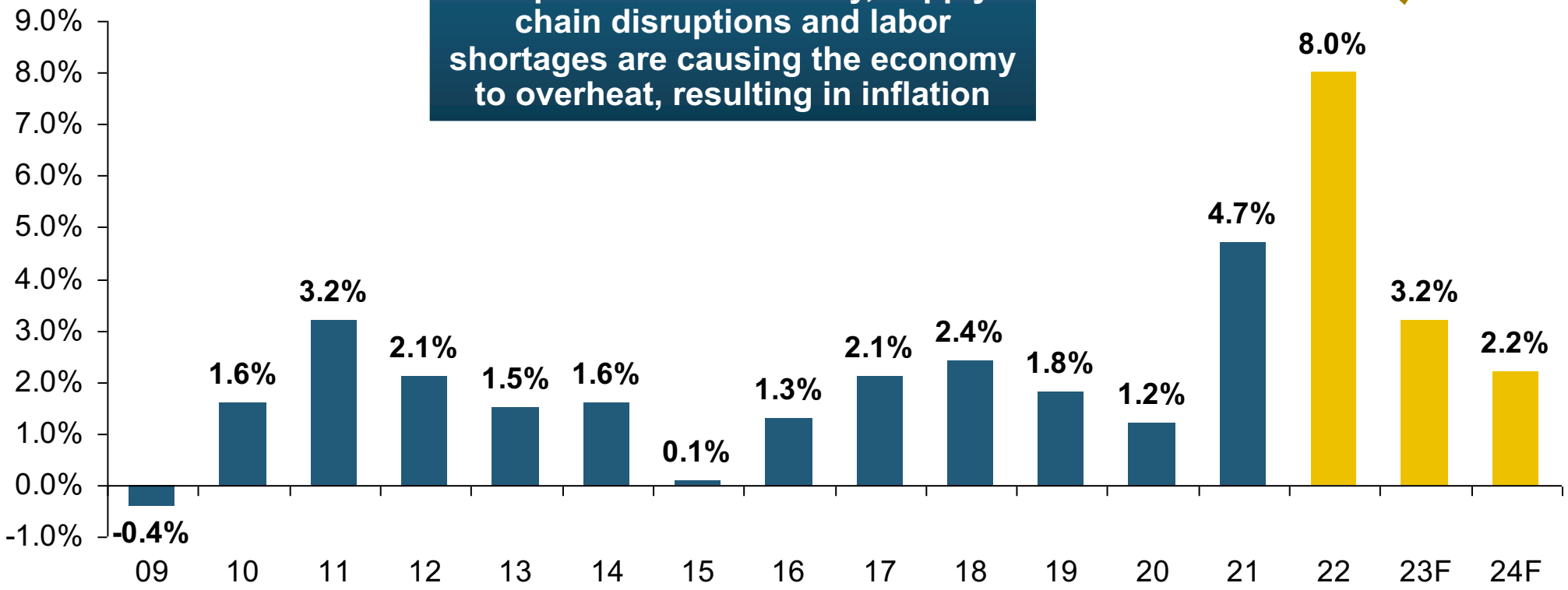
Inflation is the #1 Concern of U.S. Consumers and Corporations…

It's Also a Major Concern of Insurers

U.S. Inflation Rate: 2009-2024F*

Inflation accelerated sharply in 2021 before peaking at 9.1% in June 2022. Inflation should moderate through 2023/24; Forecast is highly dependent of trajectory of energy prices and Fed rate hikes.

There's a great deal of concern that trillions of dollars of stimulus plus the post-COVID recovery, supply chain disruptions and labor shortages are causing the economy to overheat, resulting in inflation



Insurer Concerns About Inflation

Rate Inadequacy

Reserve Inadequacy

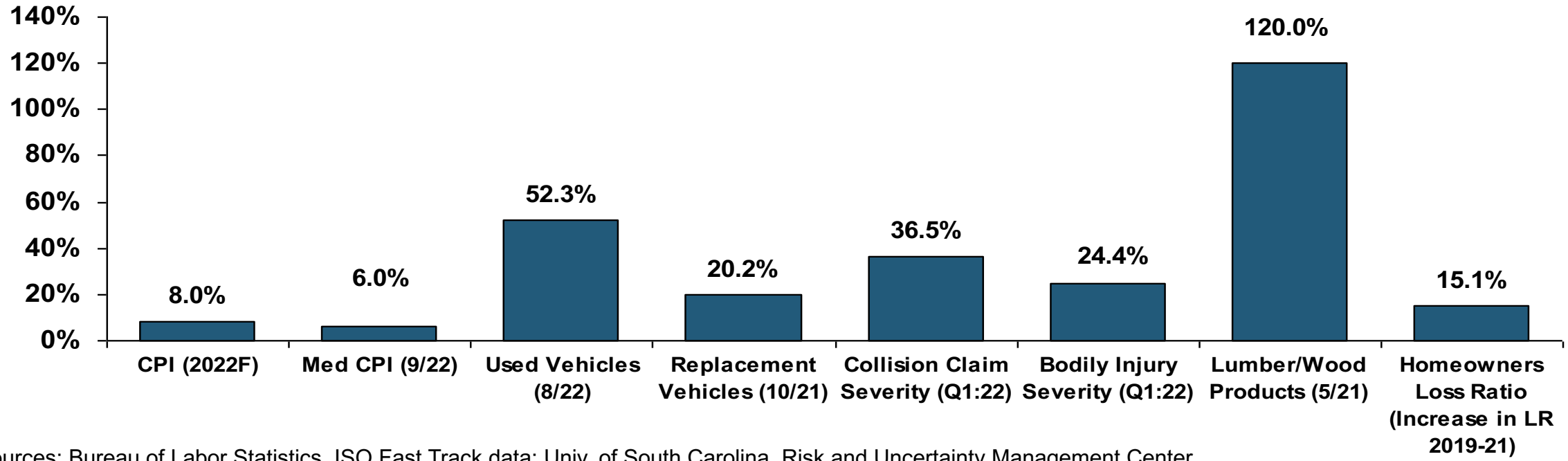
Insurance-to-Value

*Annual change in Consumer Price Index for All Urban Consumers (CPI-U).

Source: U.S. Bureau of Labor Statistics; Wells Fargo Securities (1/23); USC Center for Risk and Uncertainty Management.

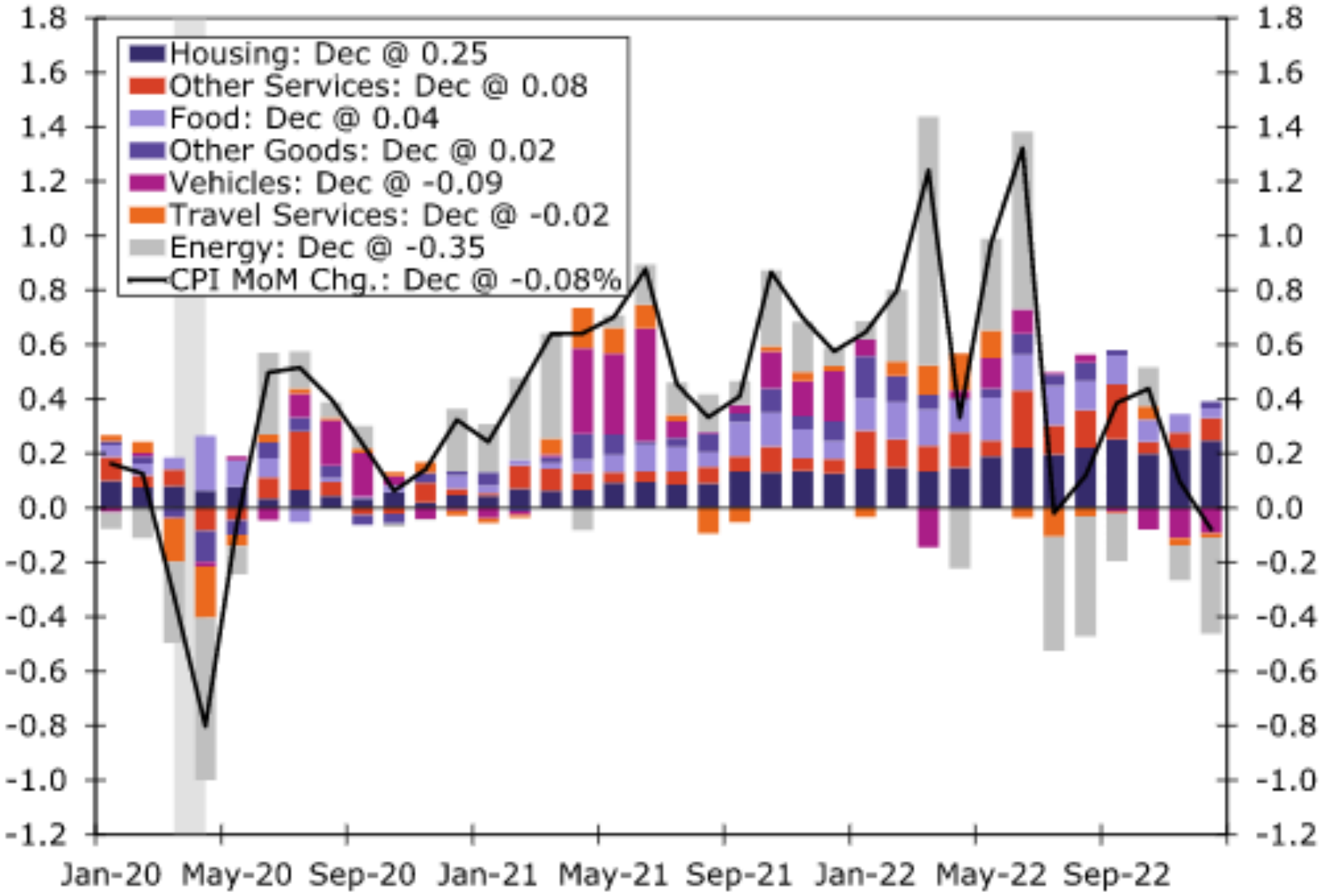
Inflation: Large, Immediate Impacts for Insurers

- Claims severities across property, auto and other lines have surged
- Medical inflation is now accelerating even as overall inflation eases
- Inherent lags in P/C ratemaking imply it will be years before rates are fully adequate
- If inflation persists, reserve adequacy could become a problem (as in the 1970s/80s)
- ITV is an increasing concern



Sources: Bureau of Labor Statistics, ISO Fast Track data; Univ. of South Carolina, Risk and Uncertainty Management Center.

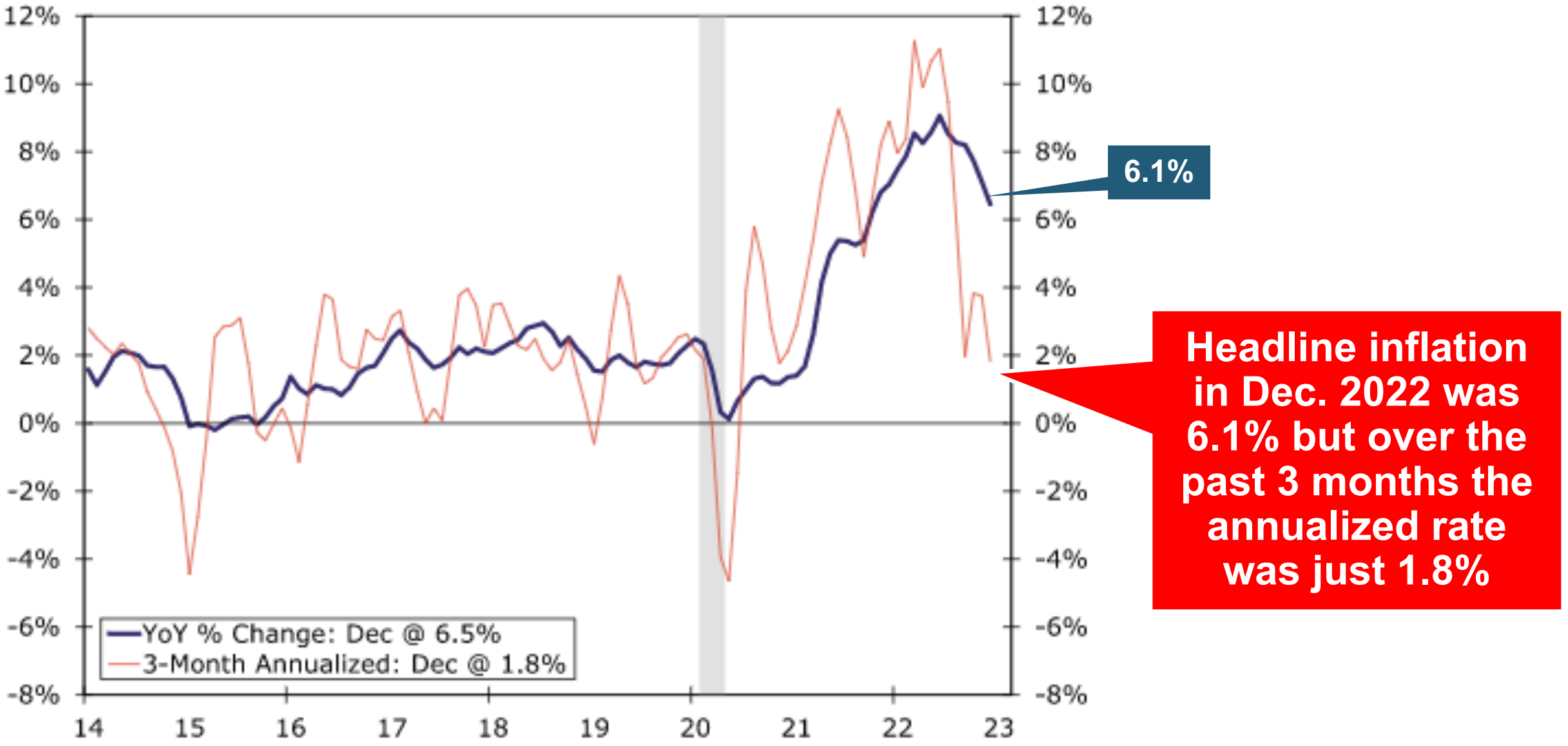
Contribution to CPI by Category: December 2022



Prices were up 6.5% in Dec. 2022 vs. a year ago, down from the June 2022 peak of 9.1%. Energy, Vehicles and Travel pulled CPI down in Dec., but increases in Housing, Food, and Other Services prevented a larger drop.

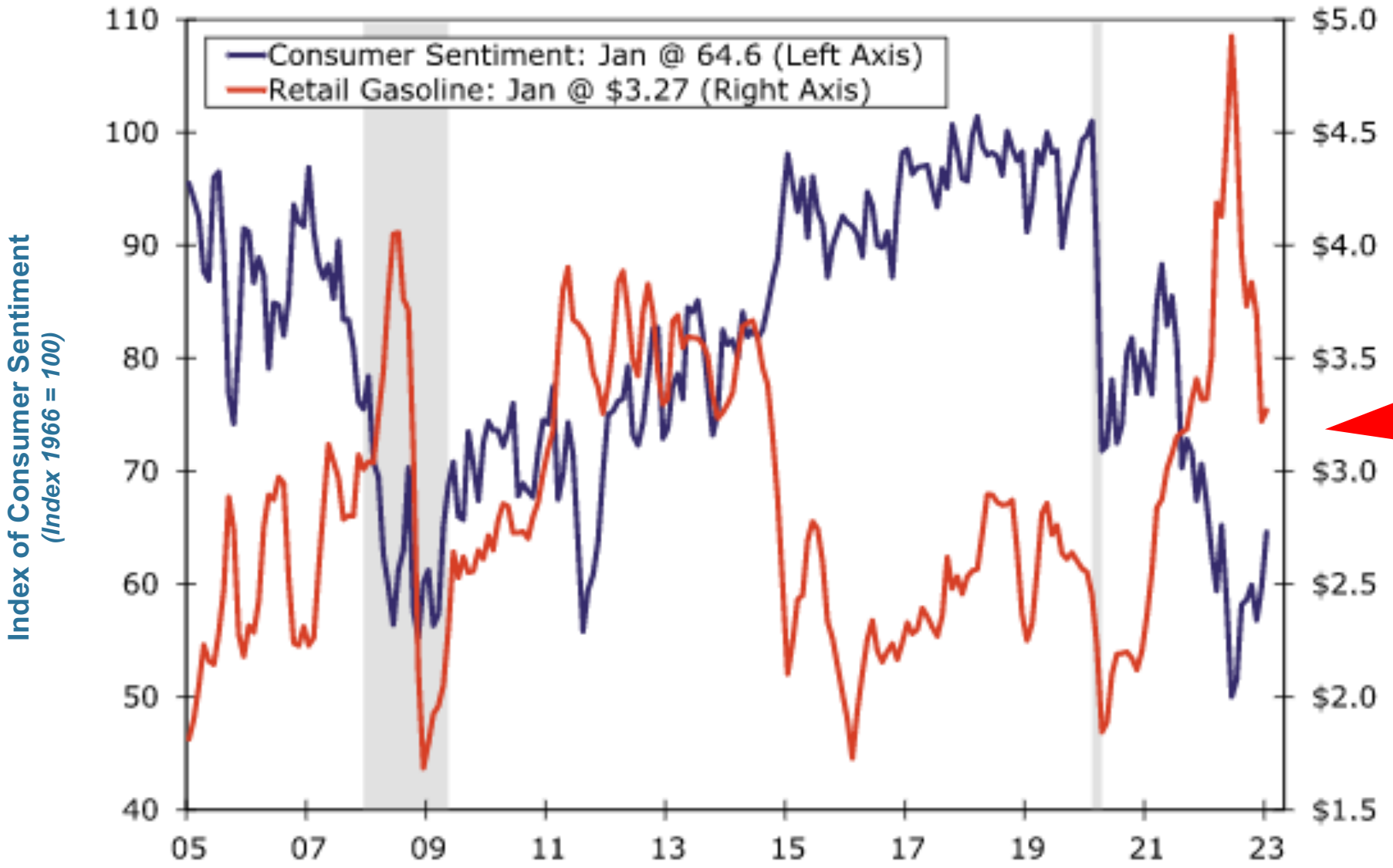
Source: U.S. Department of Commerce and Wells Fargo Economics.

CPI: Recent Months Show a Sharp Deceleration



Source: U.S. Department of Commerce and Wells Fargo Economics.

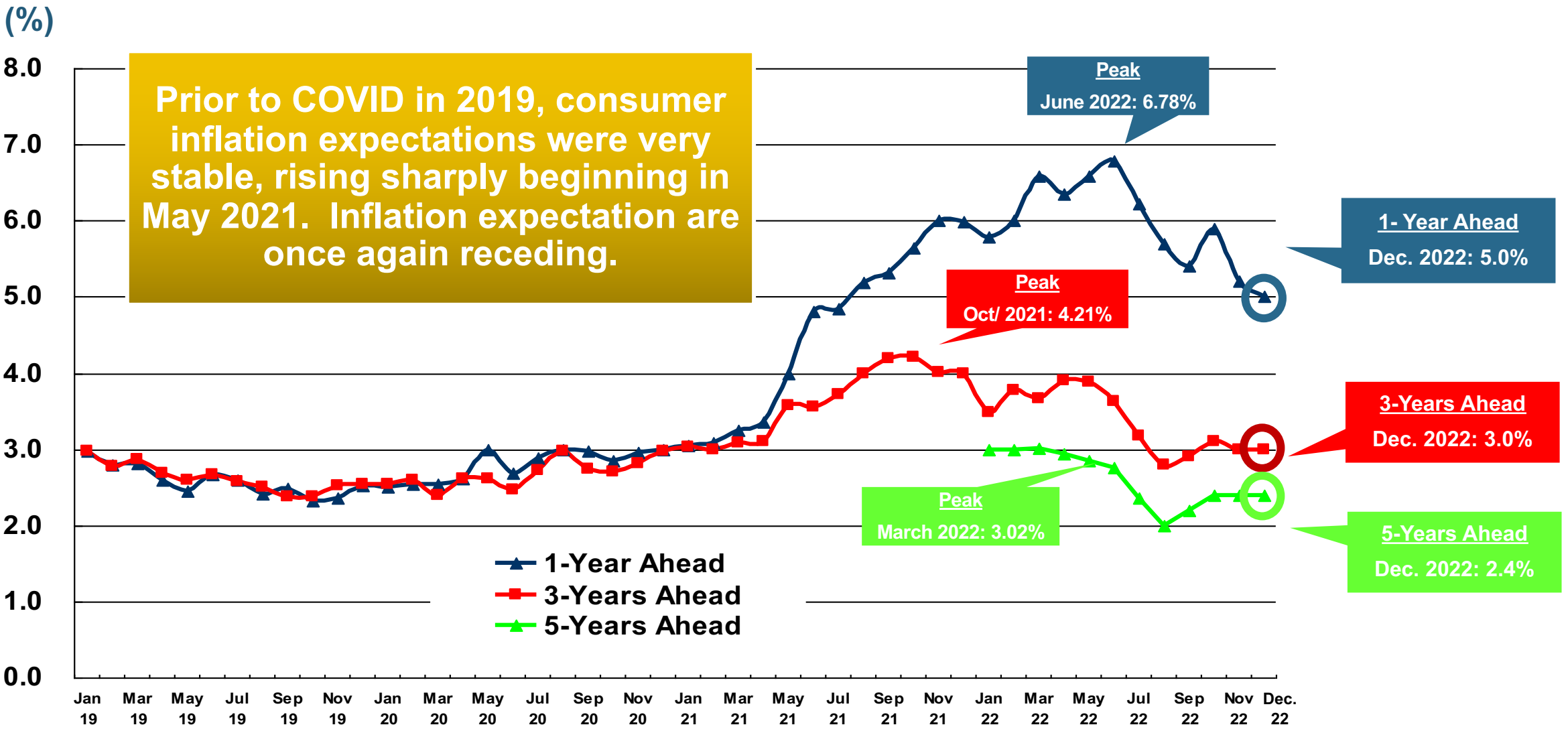
Consumer Sentiment: Very Sensitive to Gas Prices



Consumer sentiment tanks when the cost of filling the tank rises

Source: Bloomberg, University of Michigan and Wells Fargo Economics.

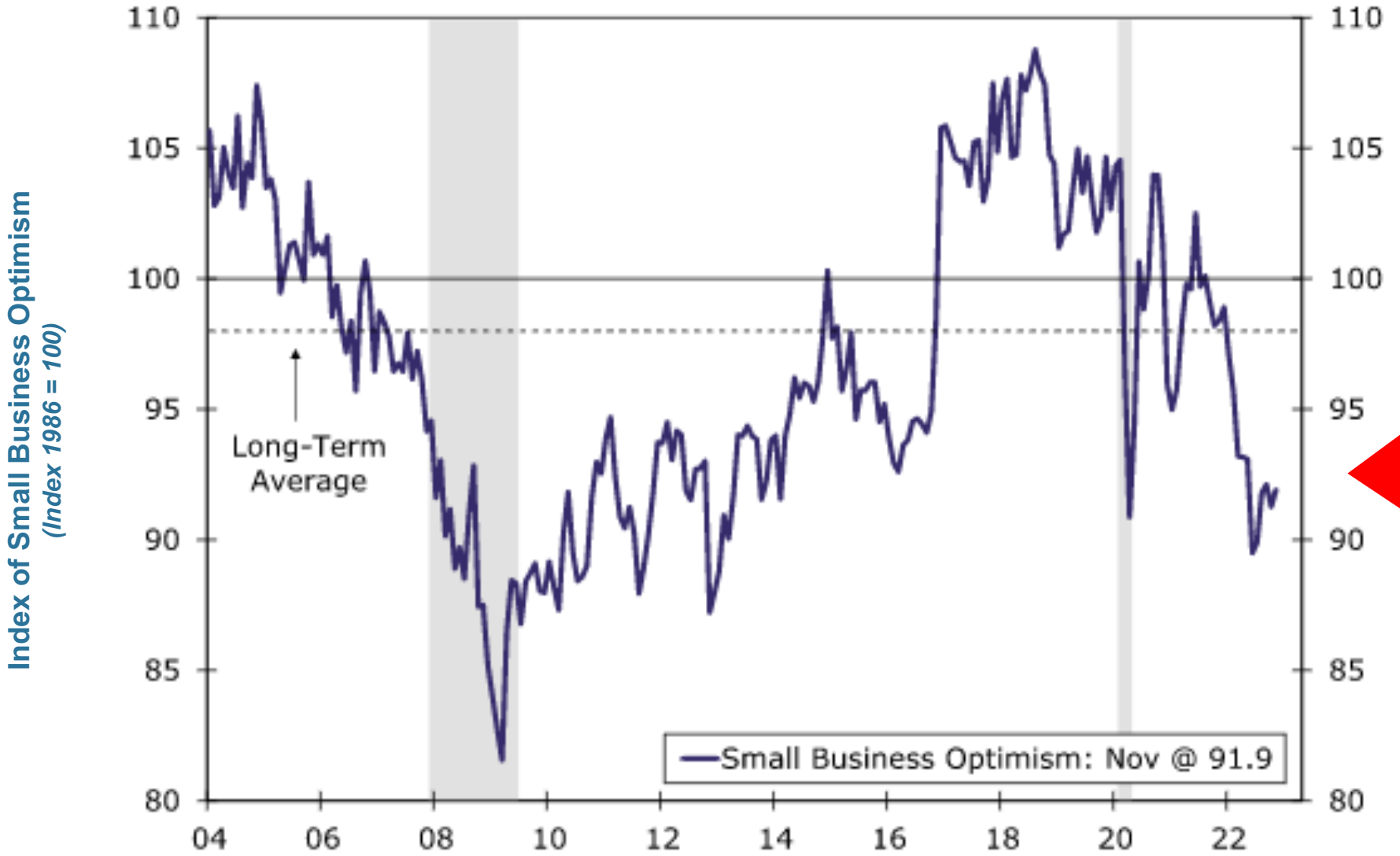
Consumer Inflation Expectations: 1, 3 and 5 Years Ahead*



*Survey data for 5-year ahead series begin in January 2022.

Sources: Federal Reserve Bank of New York, accessed at: https://www.newyorkfed.org/microeconomics/sce#/inflexp-1; Risk and Uncertainty Management Center, University of South Carolina.

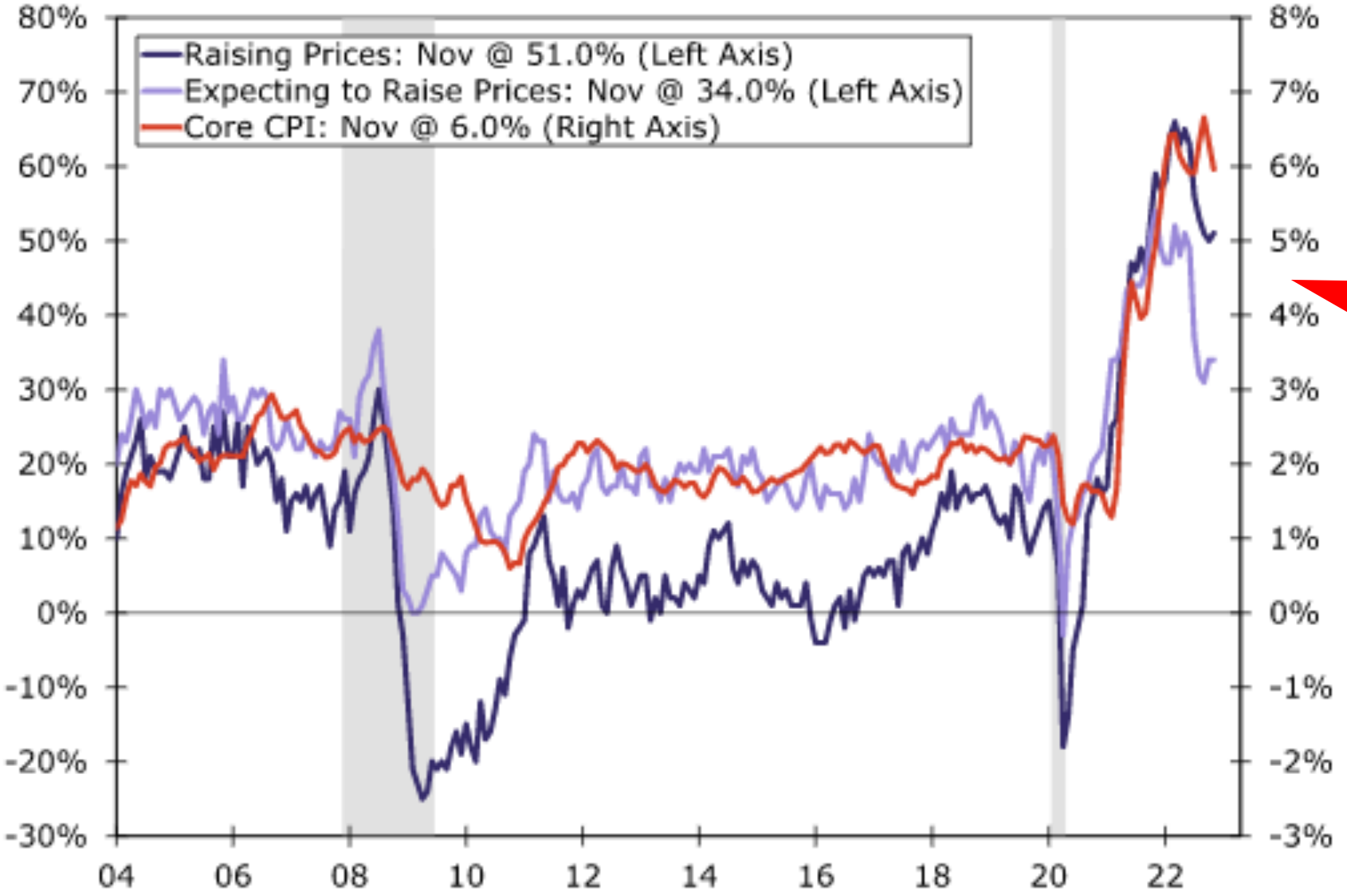
Small Business Optimism: Will the Sharp Decline Reverse?



Small businesses today (Nov. 22) are about as pessimistic as they were during the depths of pandemic (lowest since 2013), despite strong sales. Inflation and labor issues are leading concerns.

Source: NFIB, Wells Fargo Economics and tradingeconomics.com, accessed at: https://tradingeconomics.com/united-states/nfib-business-optimism-index.

Small Businesses: As Inflation Cools, Fewer Business Plan to Raise Prices



Inflation peaked in mid-2022 leading to fewer businesses indicating the need to increase prices

Source: NFIB and Wells Fargo Economics (Nov. 2022).

Annual Change in Average Hourly Wage, 2007–2022*

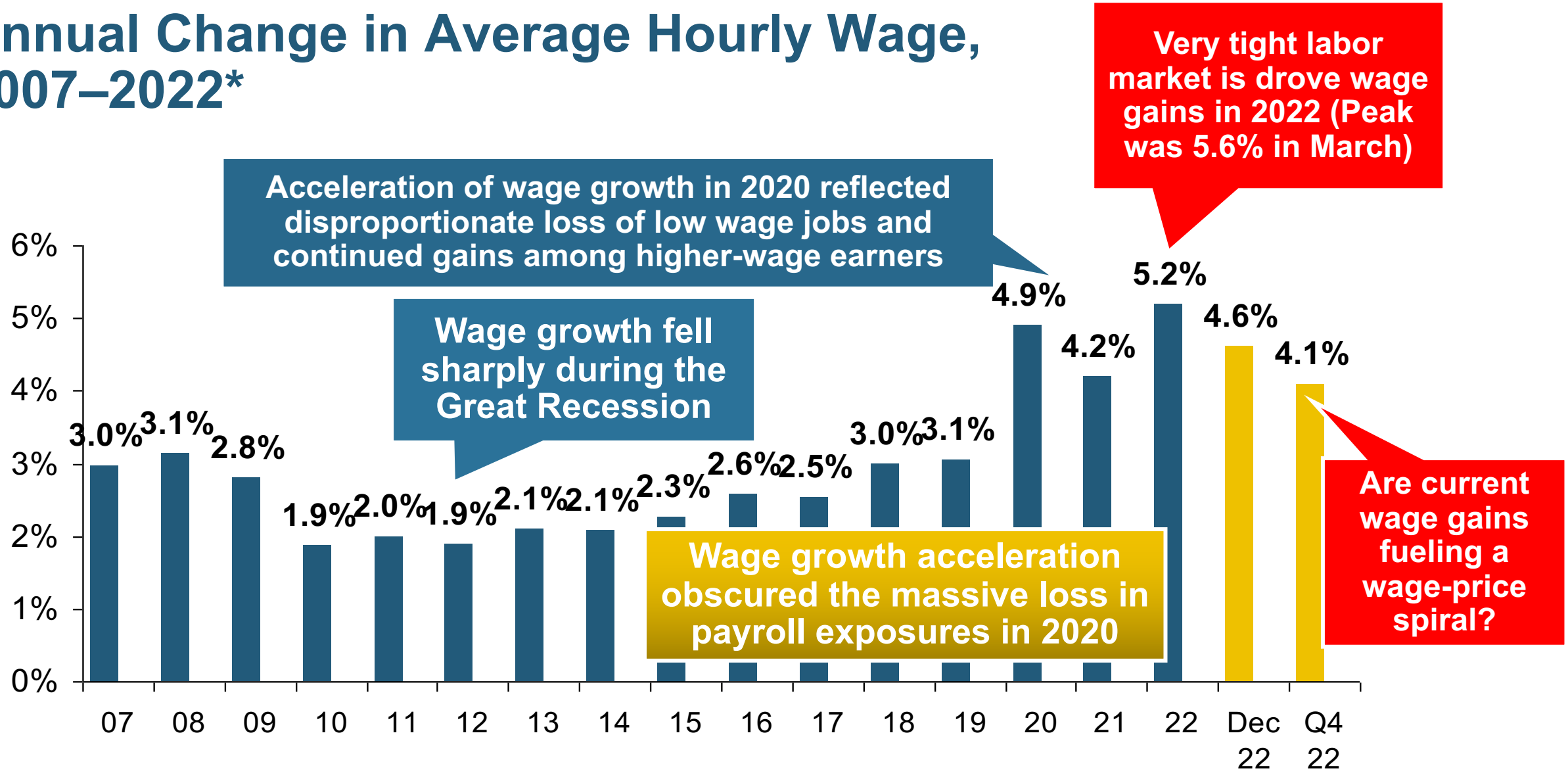
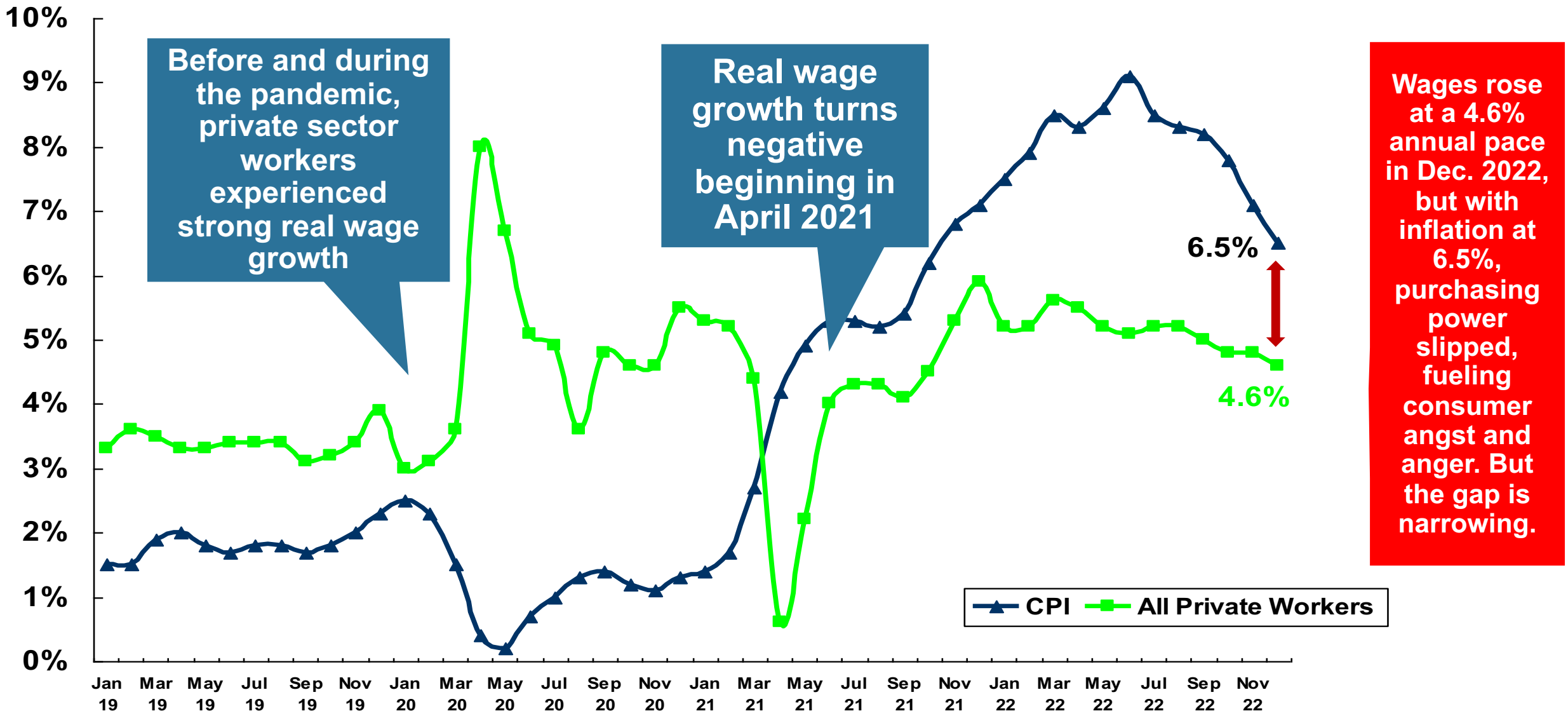


*Figure is year-over-year change from Dec. 2021 to Dec. 2022.

Sources: US Bureau of Labor Statistics at http://www.bls.gov/data/#employment; National Bureau of Economic Research (recession dates); Risk and Uncertainty Management Center, Univ. of South Carolina.

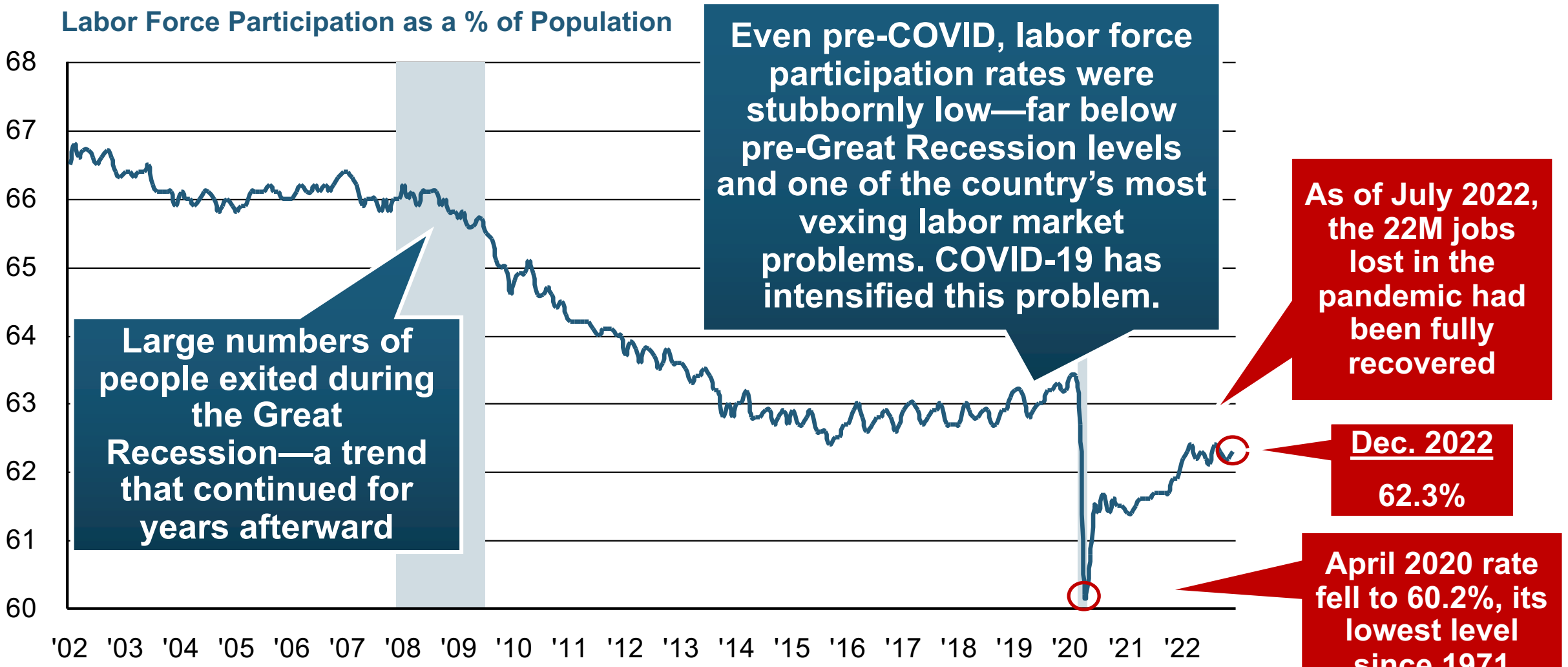
Inflation (CPI) vs. Hourly Earnings Growth: Jan. 2019 – Dec. 2022*



Wages rose at a 4.6% annual pace in Dec. 2022, but with inflation at 6.5%, purchasing power slipped, fueling consumer angst and anger. But the gap is narrowing.

Sources: U.S Bureau of Labor Statistics; Risk and Uncertainty Management Center, University of South Carolina.

Labor Force Participation Rate, Jan. 2002–Dec. 2022*

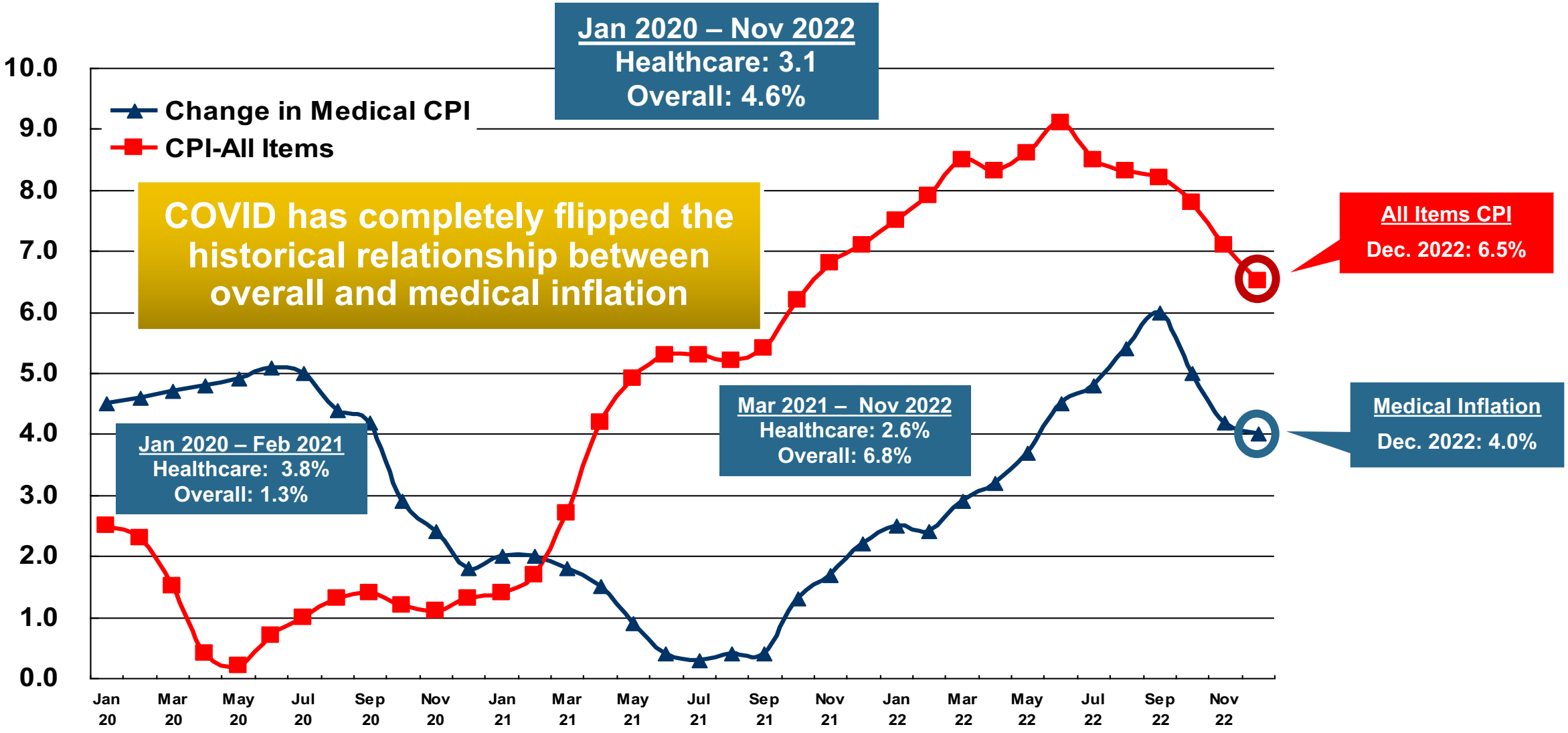


*Defined as the percentage of working age persons in the population who are employed or actively seeking work.

Note: Recessions indicated by gray shaded columns.

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

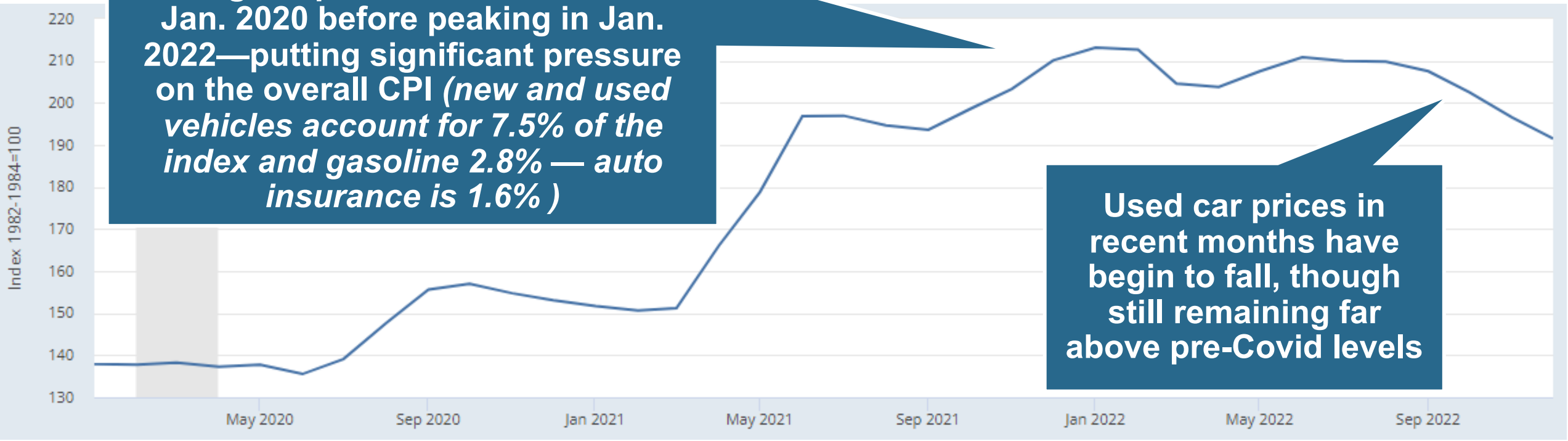
Medical Cost Inflation vs. Overall CPI During COVID, Jan. 2020 – Dec. 2022 *(Percent Change from Year Ago)*



Sources: US Bureau of Labor Statistics; Risk and Uncertainty Management Center, University of South Carolina.

Price Index Changes for Used Cars & Trucks, Jan. 2020 – Dec. 2022

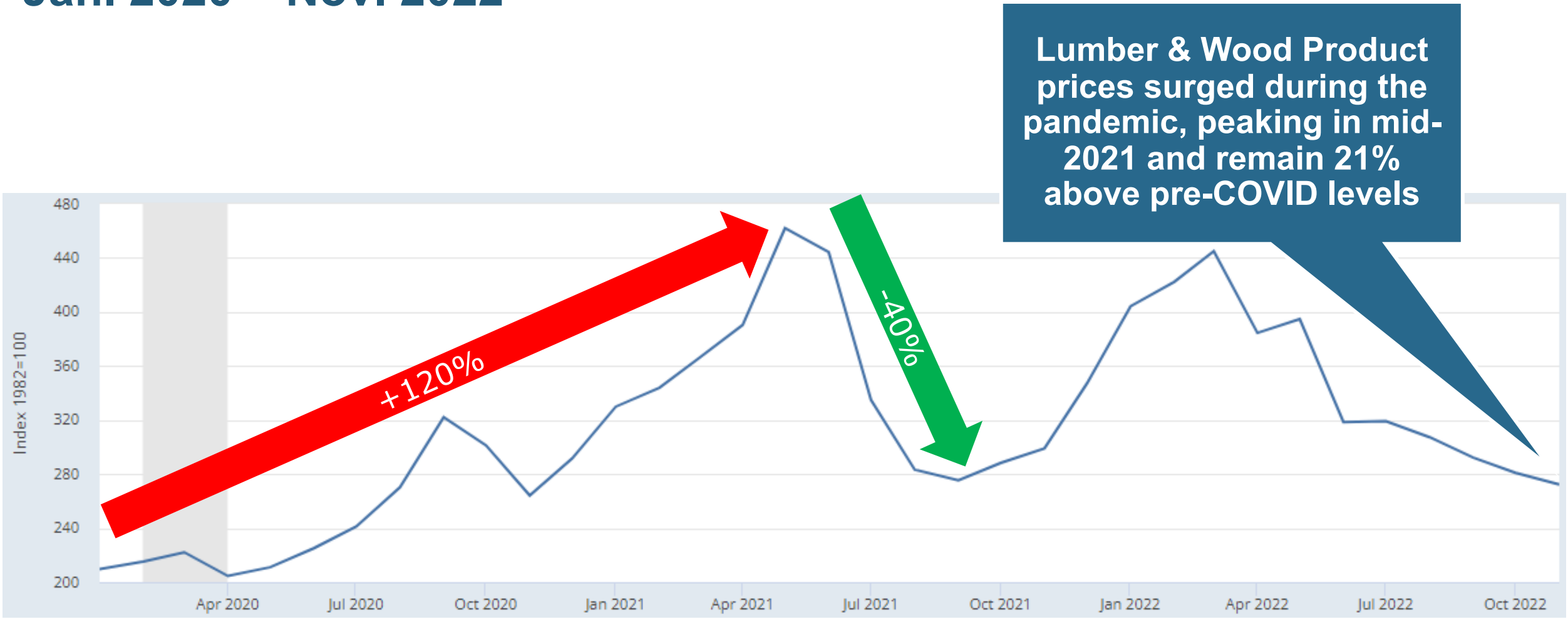
New and Used Vehicle prices surged during the pandemic, +52.3% from Jan. 2020 before peaking in Jan. 2022—putting significant pressure on the overall CPI *(new and used vehicles account for 7.5% of the index and gasoline 2.8% — auto insurance is 1.6%)*



Used car prices in recent months have begin to fall, though still remaining far above pre-Covid levels

Sources: US Bureau of Labor Statistics; Risk and Uncertainty Management Center, University of South Carolina.

Producer Price Index: Lumber and Wood Products,
Jan. 2020 – Nov. 2022

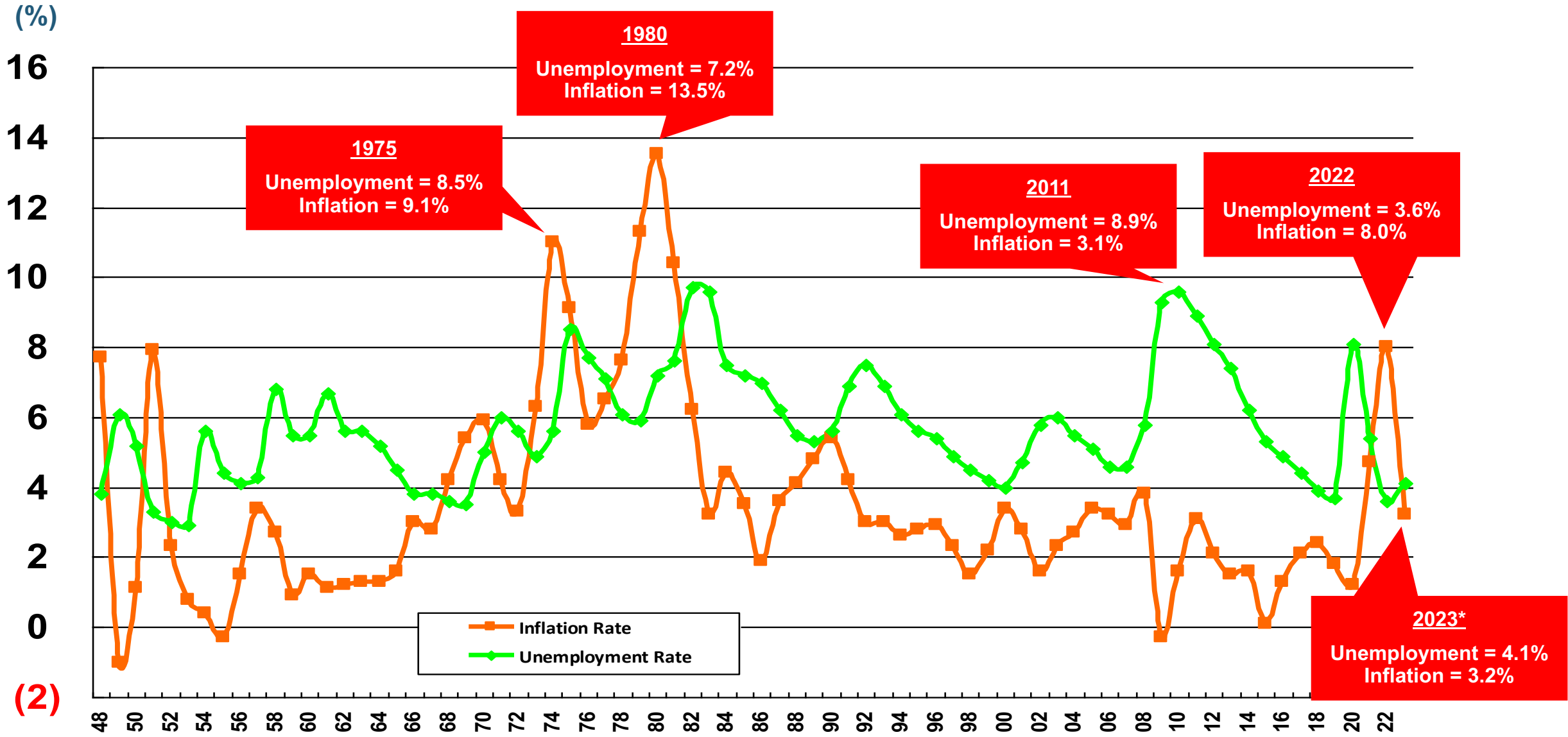


Sources: US Bureau of Labor Statistics; Risk and Uncertainty Management Center, University of South Carolina.

Are Things As Bad as Many Believe Them to Be?

A Quick Review of Economic History Is Helpful

Inflation and Unemployment Rate, 1948–2023*



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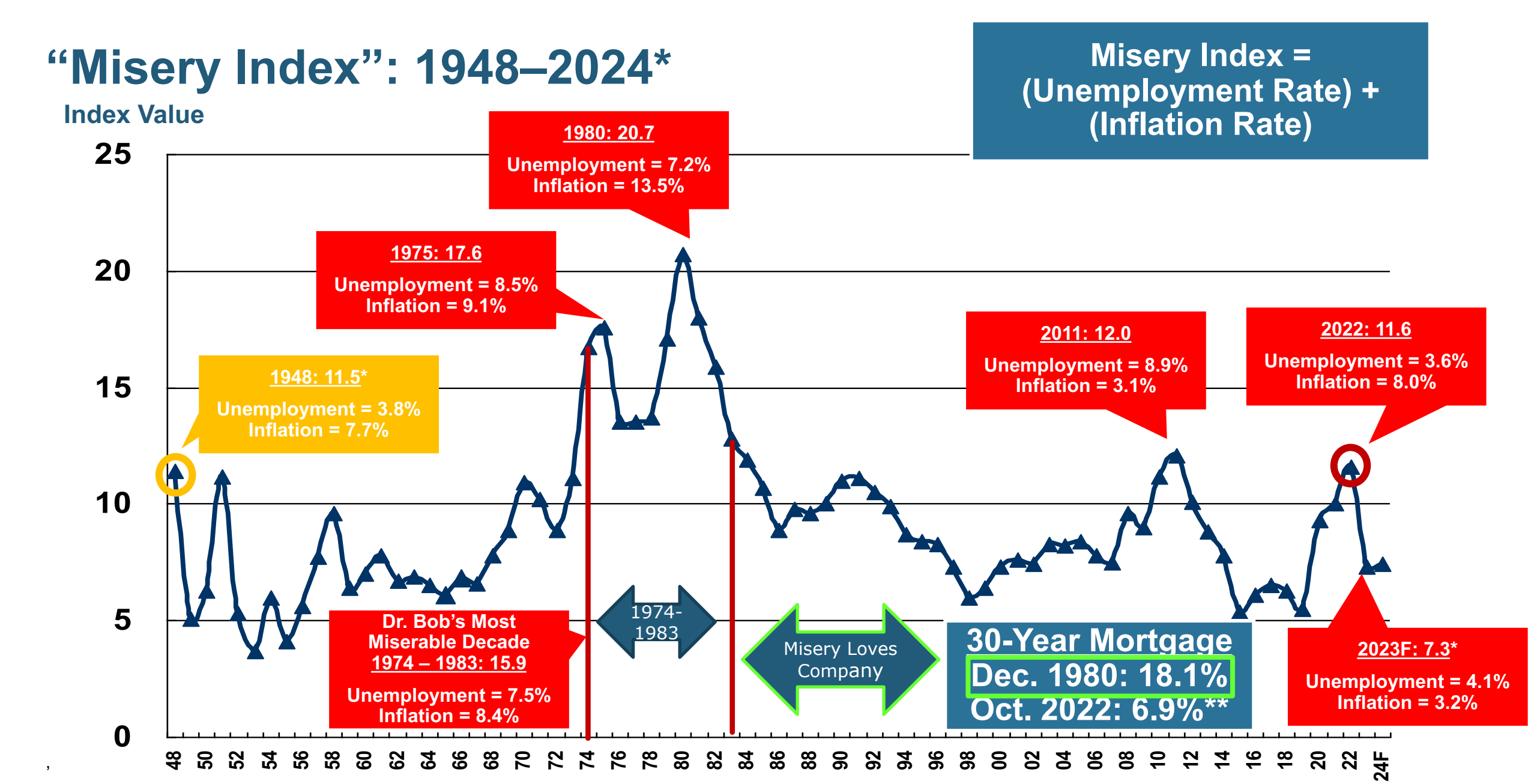
*2022 forecast based on Wells Fargo Securities forecasts (1/22).
Source: U.S. Bureau of Labor Statistics; Center for Risk and Uncertainty Management, University of South Carolina.

“Misery Index”: 1948–2024*



*Estimated based on Wells Fargo Securities forecasts (1/23).
**As of 10/20/22 based on Freddie Mac data.
Source: U.S. Bureau of Labor Statistics; Center for Risk and Uncertainty Management, University of South Carolina.

P/C Insurance Industry Financial Overview & Outlook:

Challenges Amid Rising Inflation and Higher Interest Rates

The Current Economic Environment Presents Many Challenges for P/C Insurers

Industry Remains Strong

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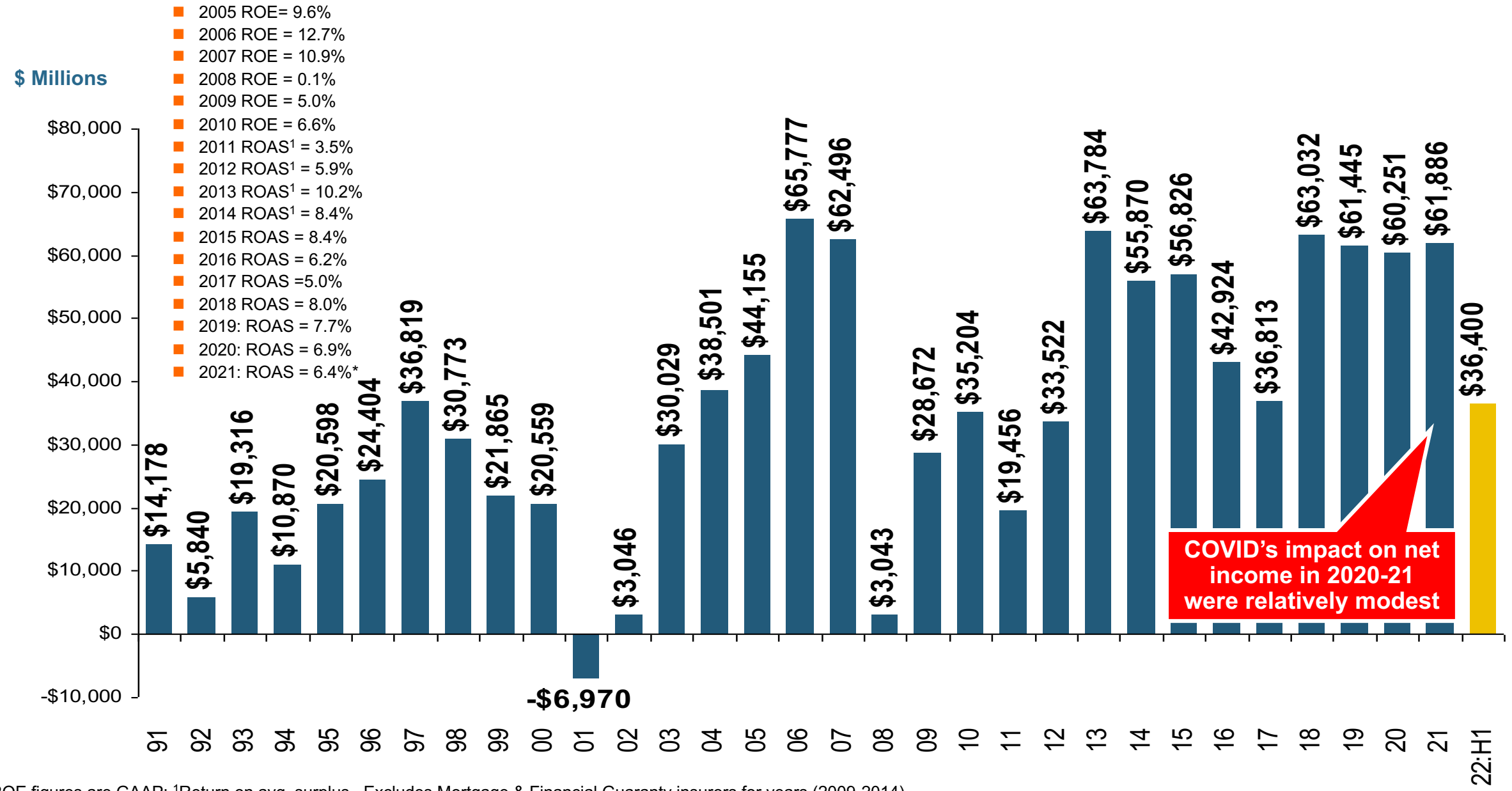
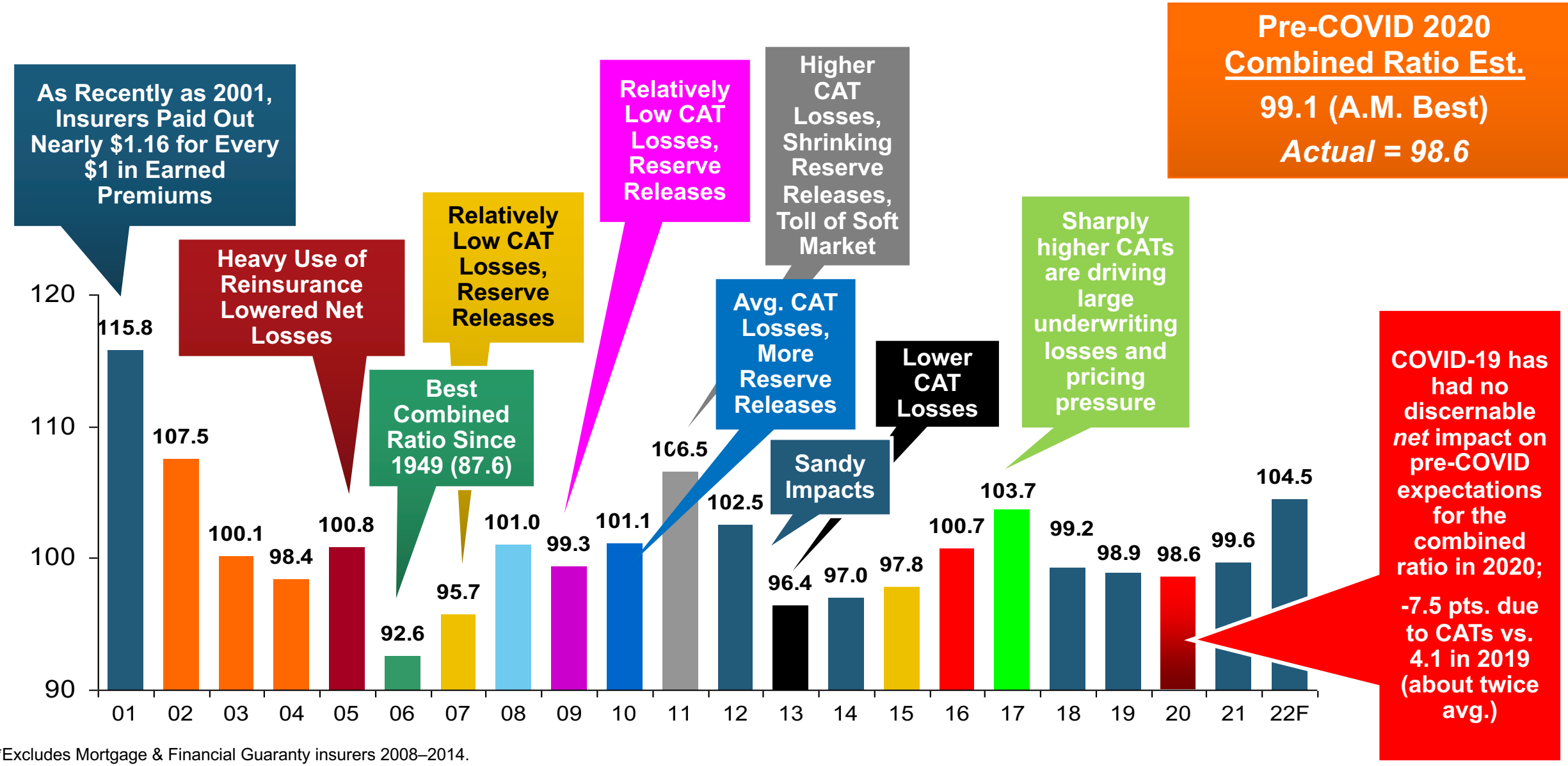
P/C Industry Net Income After Taxes, 1991–2022:H1*



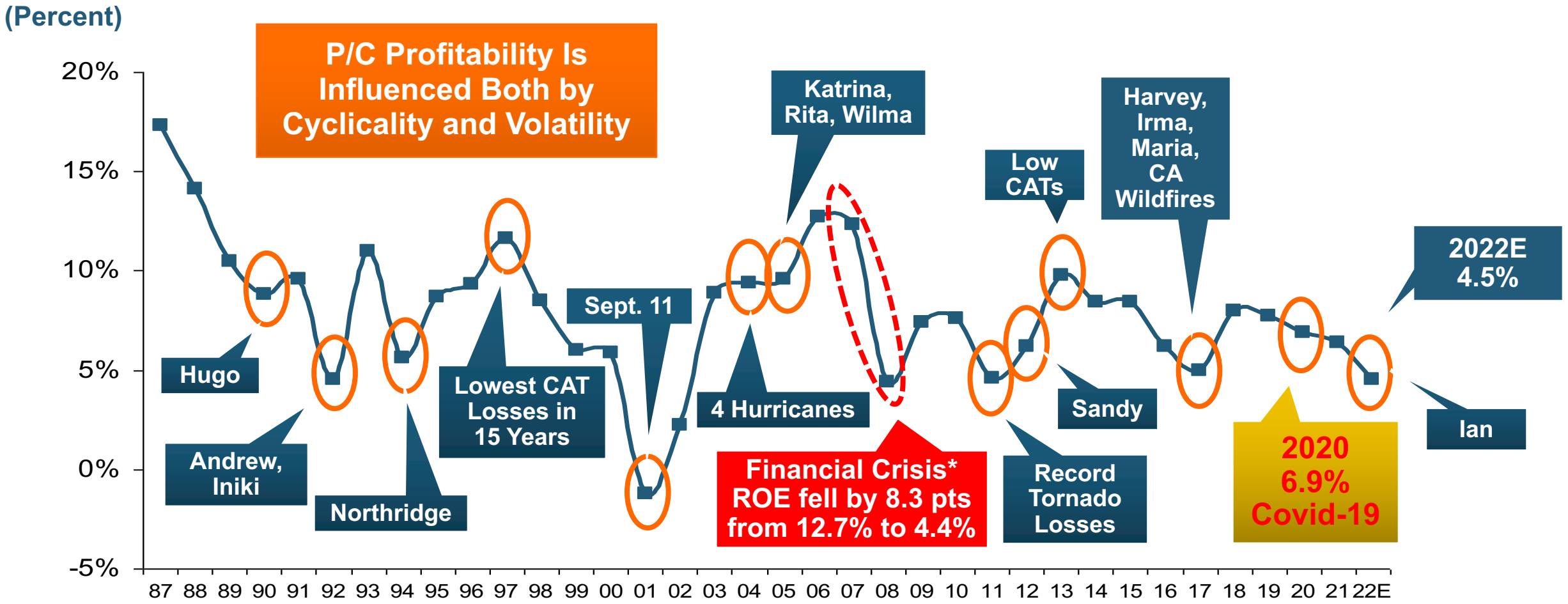
*ROE figures are GAAP; [1]Return on avg. surplus. Excludes Mortgage & Financial Guaranty insurers for years (2009-2014).
Sources: A.M. Best, ISO, APCIA.

P/C Insurance Industry Combined Ratio, 2001–2022F**



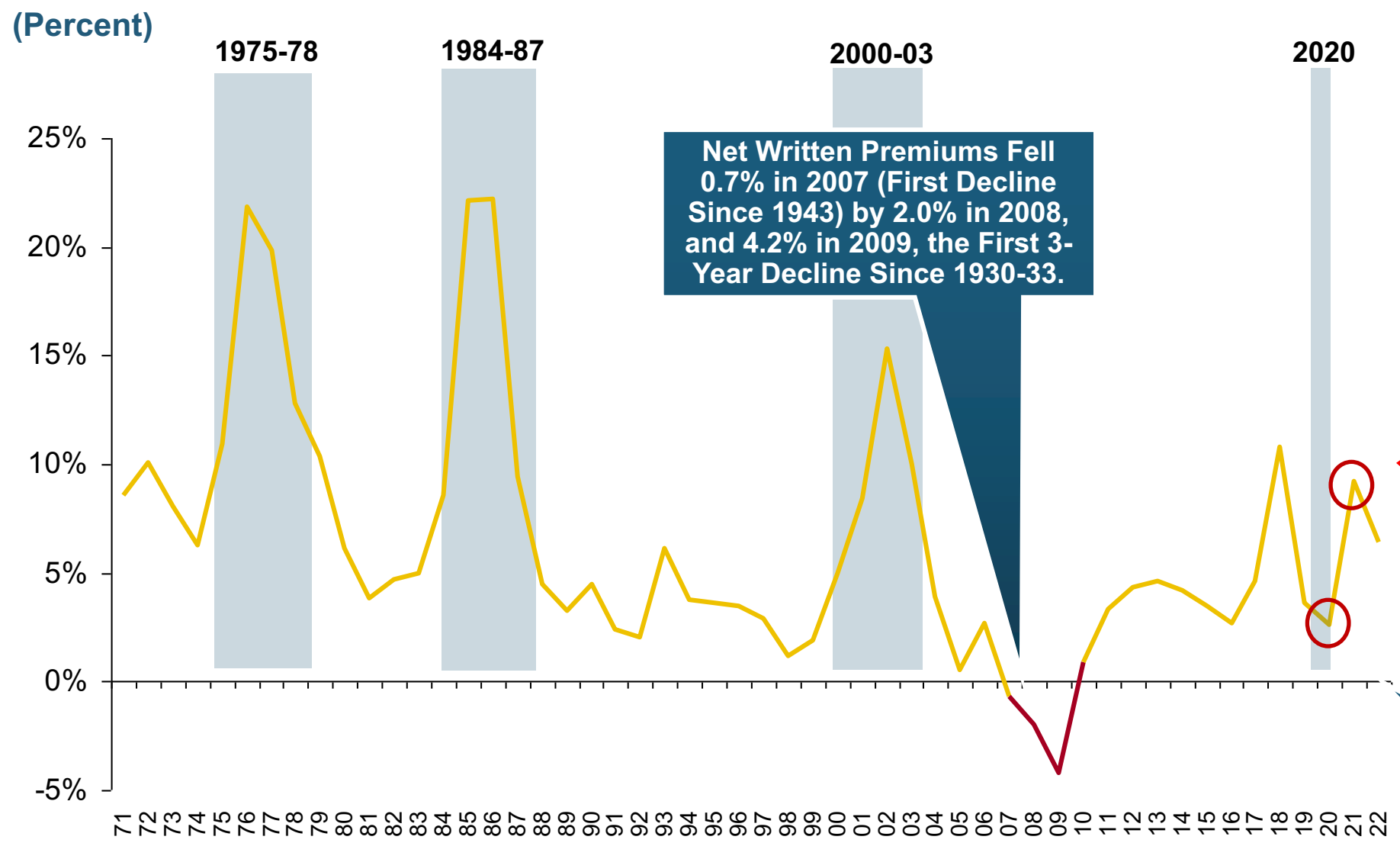
*Excludes Mortgage & Financial Guaranty insurers 2008–2014.
**2022 figure is forecast..
Sources: A.M. Best, ISO (2014-2022F).

ROE: Property/Casualty Insurance by Major Event, 1987–2022E*



*Excludes Mortgage & Financial Guarantee in 2008 – 2014.
Sources: ISO, *Fortune,* APCIA; USC RUM Center.

Net Written Premium Growth (All P/C Lines): Annual Change, 1971–2022F



Net Written Premiums Fell 0.7% in 2007 (First Decline Since 1943) by 2.0% in 2008, and 4.2% in 2009, the First 3-Year Decline Since 1930-33.

2022F: 6.4%
2021: 9.2%
2020: 2.6%
2019: 3.6%
2018: 10.8%
2017: 4.6%
2016: 2.7%
2015: 3.5%

Sharp recovery in NWP in 2021 (9.2%). Strong economic recovery and favorable rate environment both powered growth.

2020 Outlook

Pre-COVID: 3.8%

Actual: 2.6%**

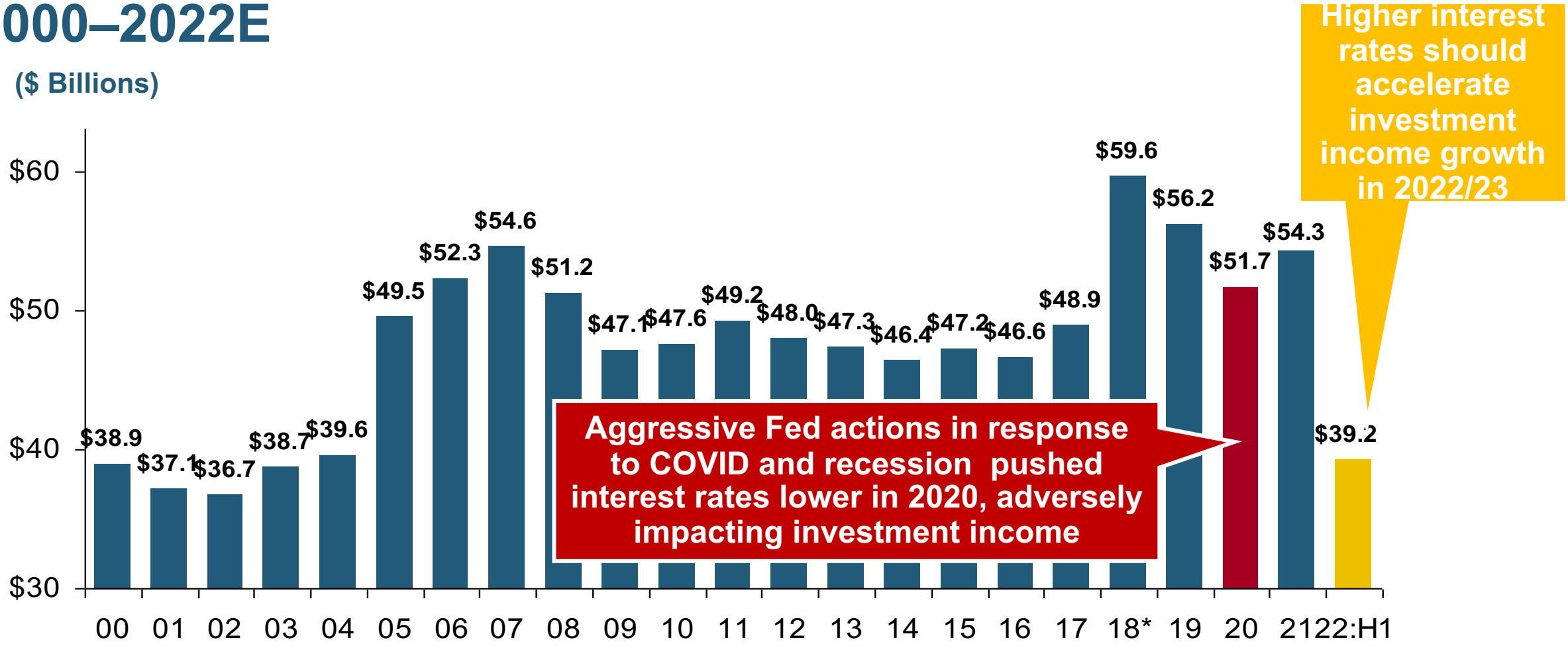
NOTE: Shaded areas denote "hard market" periods.
Sources: A.M. Best (1971-2013, 2022F), ISO (2014-21); Risk & Uncertainty Management Center, Univ. of South Carolina

Investments

Investment Performance Is a Key Driver of Insurer Profitability

Dove to Hawk: How Will an Aggressive Fed Impact Insurer Portfolios?

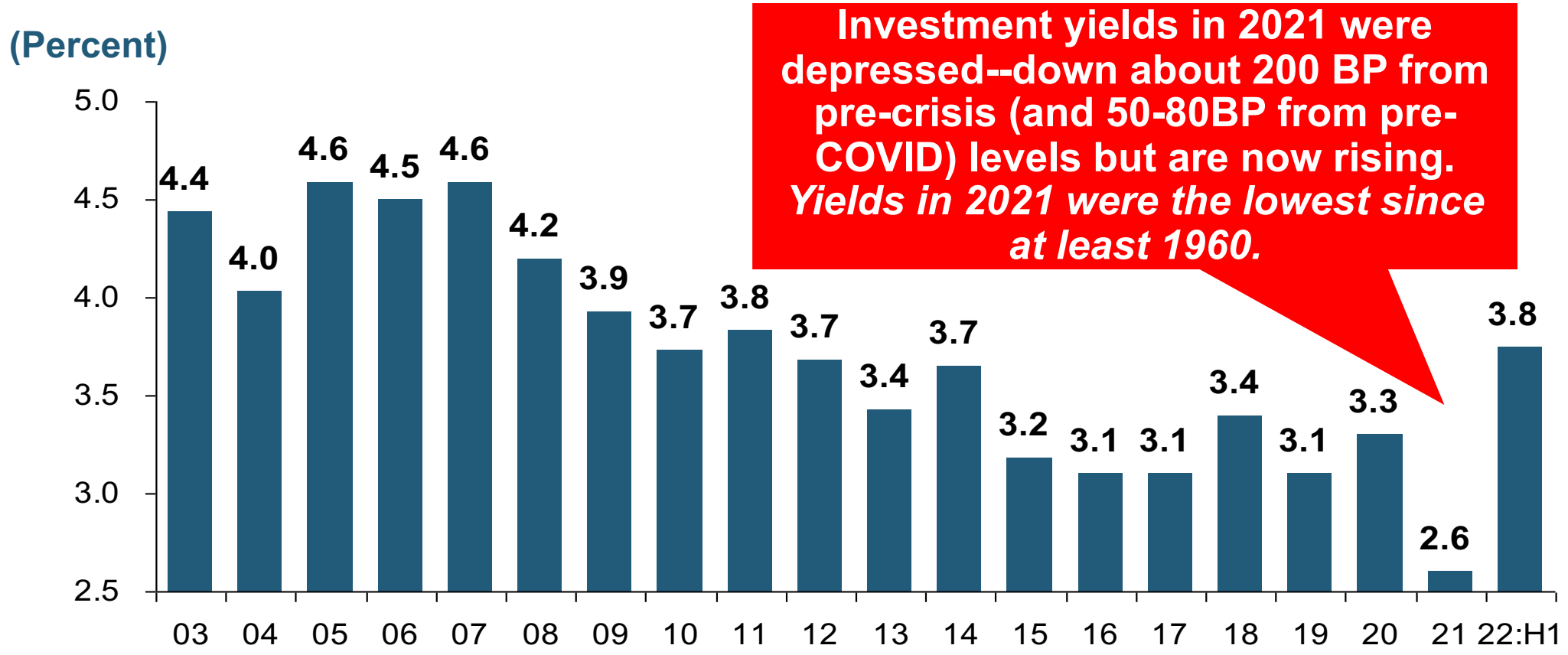
Property/Casualty Insurance Industry Investment Income: 2000–2022E



Due to persistently low interest rates, investment income remained below pre-crisis levels for a decade. Lower interest rates during COVID drove investment income down once again. Fed rate hikes in 2022 could reverse this trend.

*2021 figure is actual as of 12/31/21. 2018-19 figures are distorted by provisions of the TCJA of 2017. Increase reflects such items as dividends from foreign subsidiaries.
[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, 2007–2022:H1



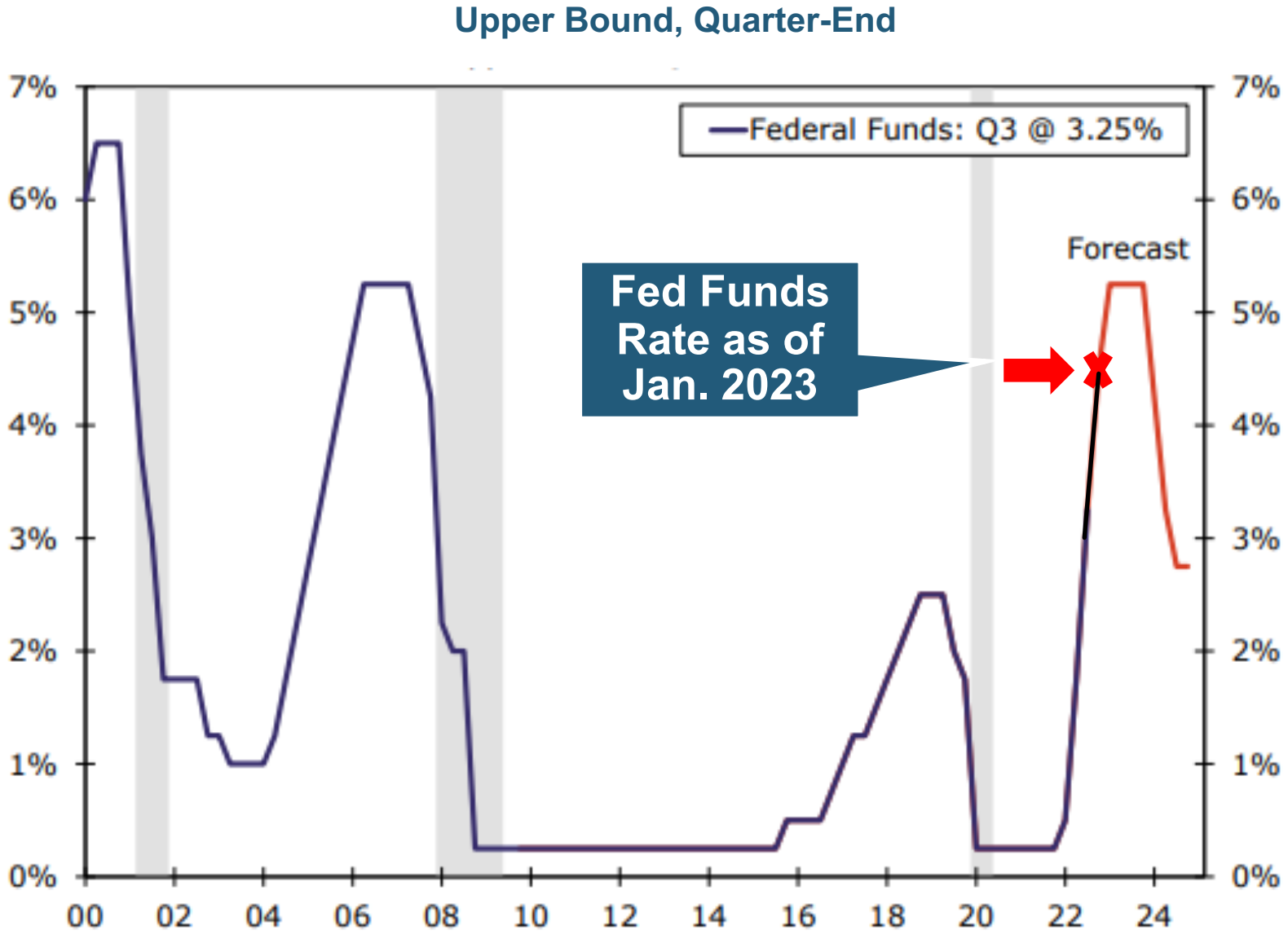
Investment yields in 2021 were depressed--down about 200 BP from pre-crisis (and 50-80BP from pre-COVID) levels but are now rising. ***Yields in 2021 were the lowest since at least 1960.***

The yield on invested assets remains depressed relative to pre-financial crisis and pre-COVID yields. Fed rate hikes in 2022 should begin to slowly lift yields.

Average: 1960-2019 = 4.9%
Low: 2.8% (1961)
High: 8.2% (1984/85)

Sources: NAIC data, sourced from S&P Global Market Intelligence; 2017-19 figures are from ISO. 2020-21 data from the APCIA. Risk and Uncertainty Management Center, Univ. of South Carolina.

Federal Funds Target Rate: Up, Up and Away!

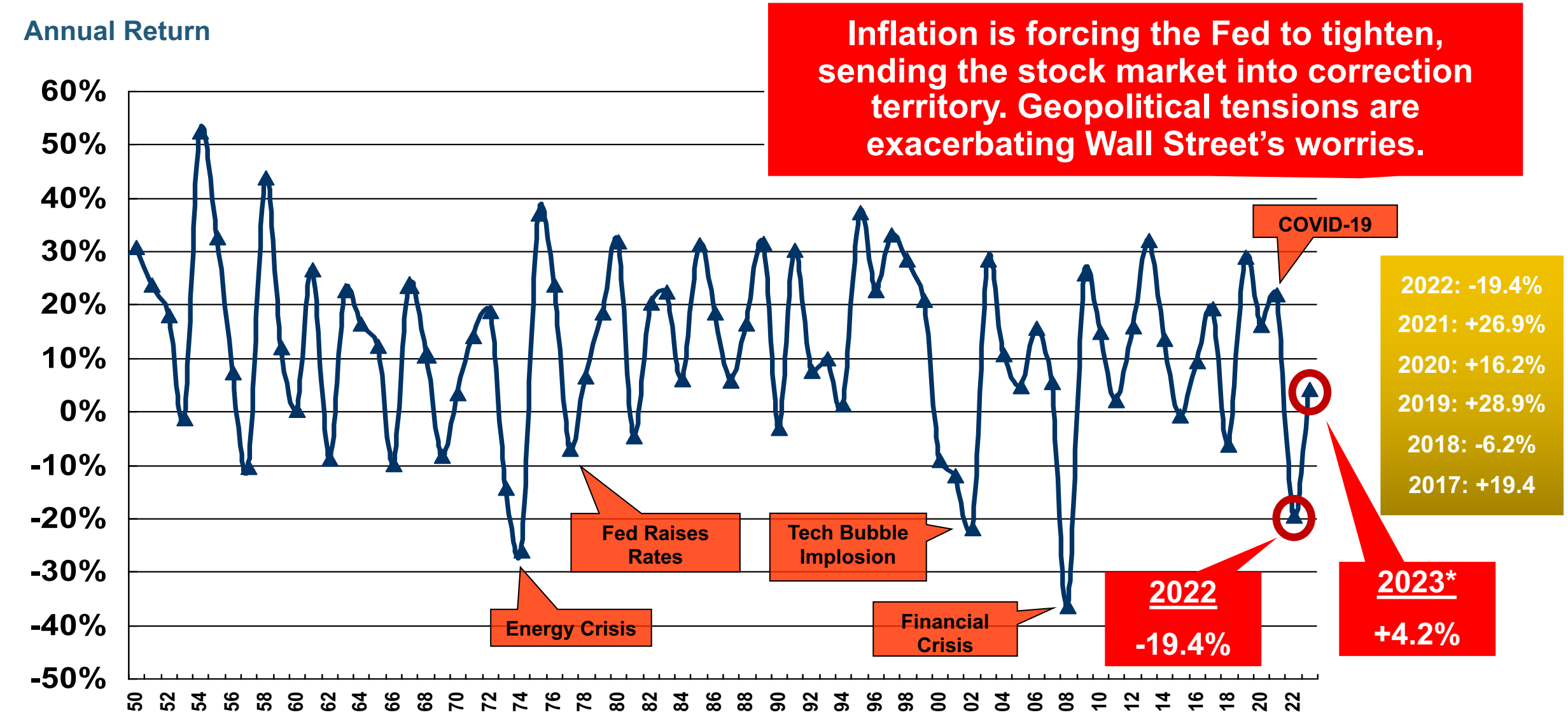


The Fed is expected to continue its rate hikes to a peak of 3.75% - 4.00% at year-end 2022. If the objective of lower inflation is met (or in sight), the Fed will likely lower rates in late 2023 to keep unemployment low

The Fed hiked short-term rates in Dec. 2022 by 50 basis points to a target range of between 4.25% and 4.50%

Source: Federal Reserve Board and Wells Fargo Economics (12/22); Risk and Uncertainty Management Center, University of South Carolina.

S&P 500 Index Returns, 1950–2023*



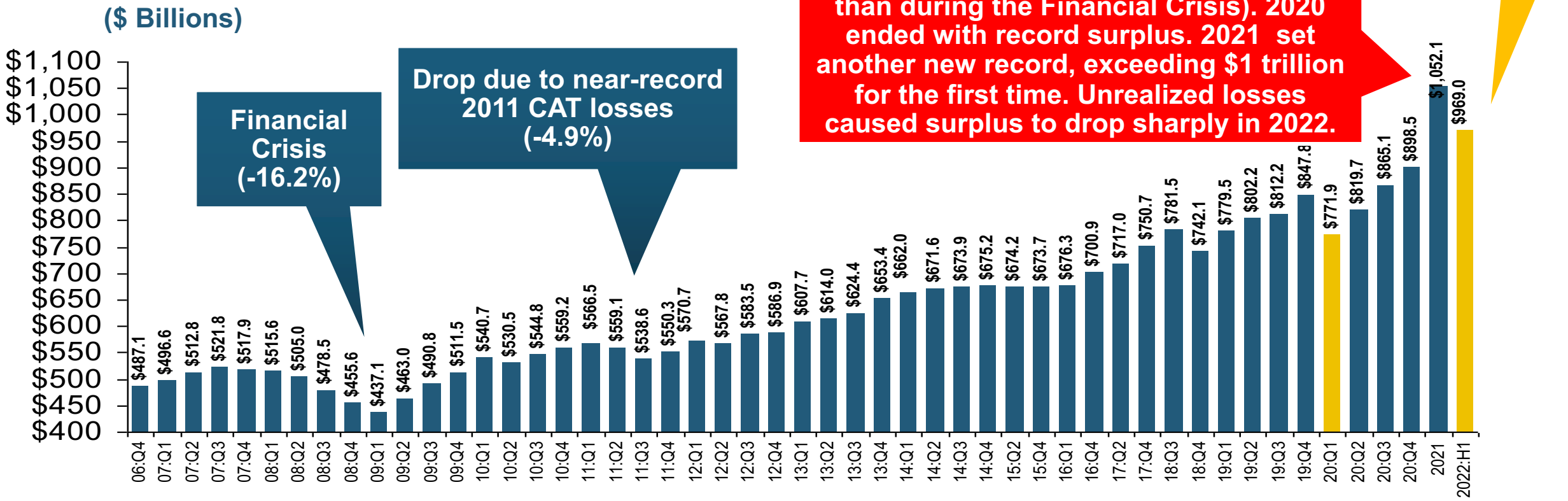
*Through Jan. 13, 2023.
Source: NYU Stern School of Business: http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html;
Center for Risk and Uncertainty Management, University of South Carolina.

Capital and Capacity

P/C Insurance: Over or Under Capitalized?

Is the Industry Creating Economic Value?

Policyholder Surplus (Capacity), 2006:Q4 – 2022:H1*

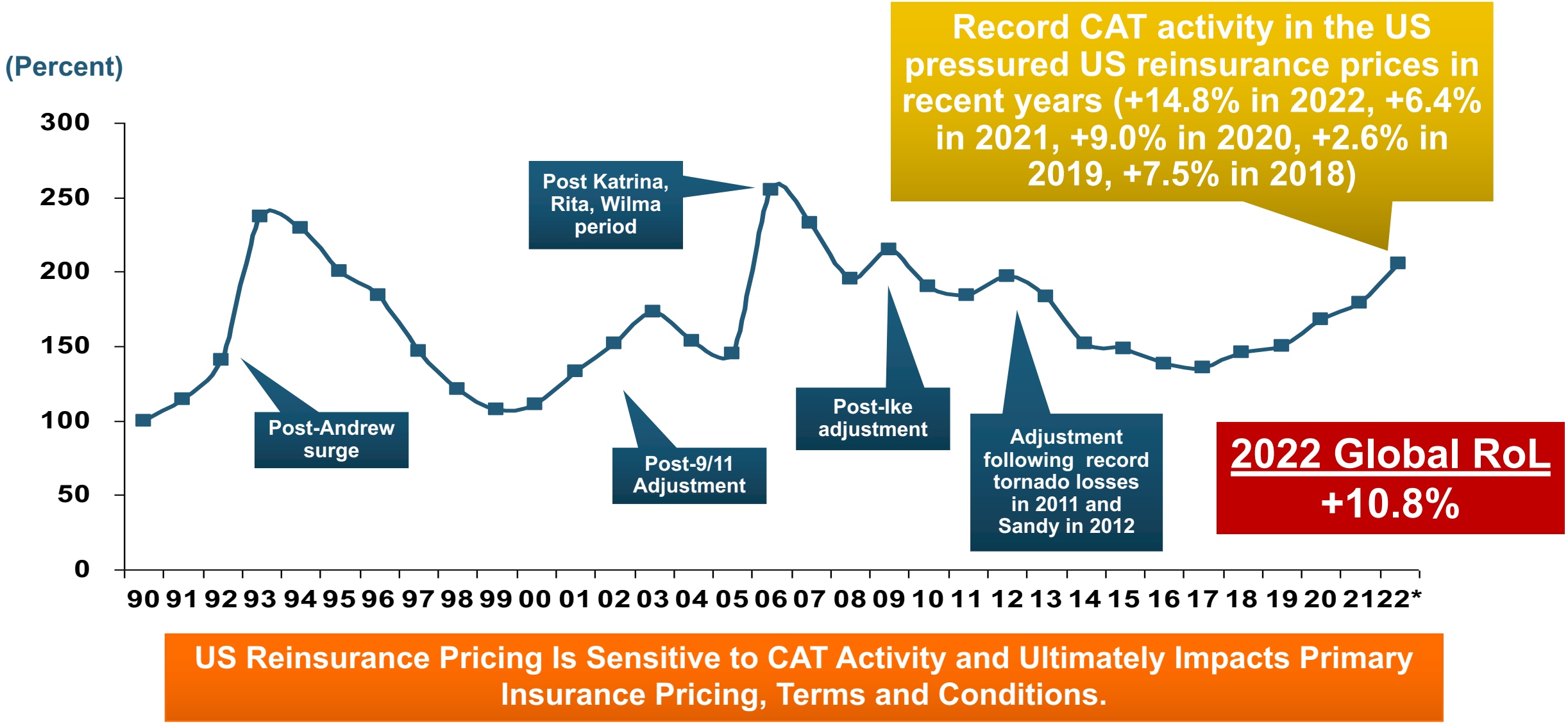


Policyholder Surplus is the industry's financial cushion against large insured events, periods of economic stress and financial market volatility. It is also a source of capital to underwrite new risks.

*2022 figure is actual through Q2.

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

US Property Catastrophe Rate-on-Line Index: 1990 – 2022*



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; Artemis.bm accessed at: http://www.artemis.bm/us-property-cat-rate-on-line-index

Property Reinsurance Rate Movements as of 1/1/23

Territory	Pro rata commission	Risk loss-free % change	Risk loss-hit % change	Catastrophe loss-free % change	Catastrophe loss-hit % change
Australia	-5.0% to -2.5%	+5% to +15%	+15% to +30%	+10% to +20%	+25% to +45%
Canada	-4% to -2%	+10% to +20%	+20% to +35%	+12% to +25%	+20% to +40%
Central & Eastern Europe	-1.5% to 0.0%	+5% to +20%	+20% to +35%	+10% to +30%	+20% to +50%
China	-4% to -1%	+15% to +30%	n/a	+20% to +30%	n/a
Europe	n/a	+20% to +30%	n/a	+25% to +40%	n/a
France, Belgium	n/a	+10% to +20%	+20% to +30%	n/a	+25 to +60%
Germany, Switzerland, and Austria	n/a	+25% to +60%	n/a	+25% to +60%	n/a
Italy	n/a	n/a	+5% to +25%	+7.5% to +20%	+10% to +35%
Indonesia	-2.5% to 0%	+5% to +20%	+30% to +40%	+5% to +20%	+30% to +40%
Korea	-10% to -5%	n/a	+50% to +100%	+15% to +20%	+50% to +100%
Latin America	-7% to 0%	0% to +12%	+10% to +25%	+7% to +35%	+10% to +45%
MENA, South Africa	-3% to 0%	+5% to +10%	+10% to +25%	+15% to +30%	+30% to +50%
Malaysia	-9%	+20% to +25%	+25% to +100%	+20% to +25%	+25% to +100%
Netherlands	-2% to 0%	+2.5% to +17.5%	+7.5% to +25%	+5% to +32.5%	+15% to +45%
Nordic Countries	n/a	+10% to +30%	+15% to +50%	+15% to +30%	+25% to +35%
Turkey	-5%	+20% to +50%	n/a	+20% to +50%	n/a
United Kingdom	n/a	+20 to +25%	+30% to +40%	+20 to +27.5%	n/a
United States	-6% to -3%	+15% to +25%	+35% to +150%	+25% to +50%	+45% to +100%

Property reinsurance prices are up around the world, especially for CAT-loss hit accounts:+45% to 100% increases in the US

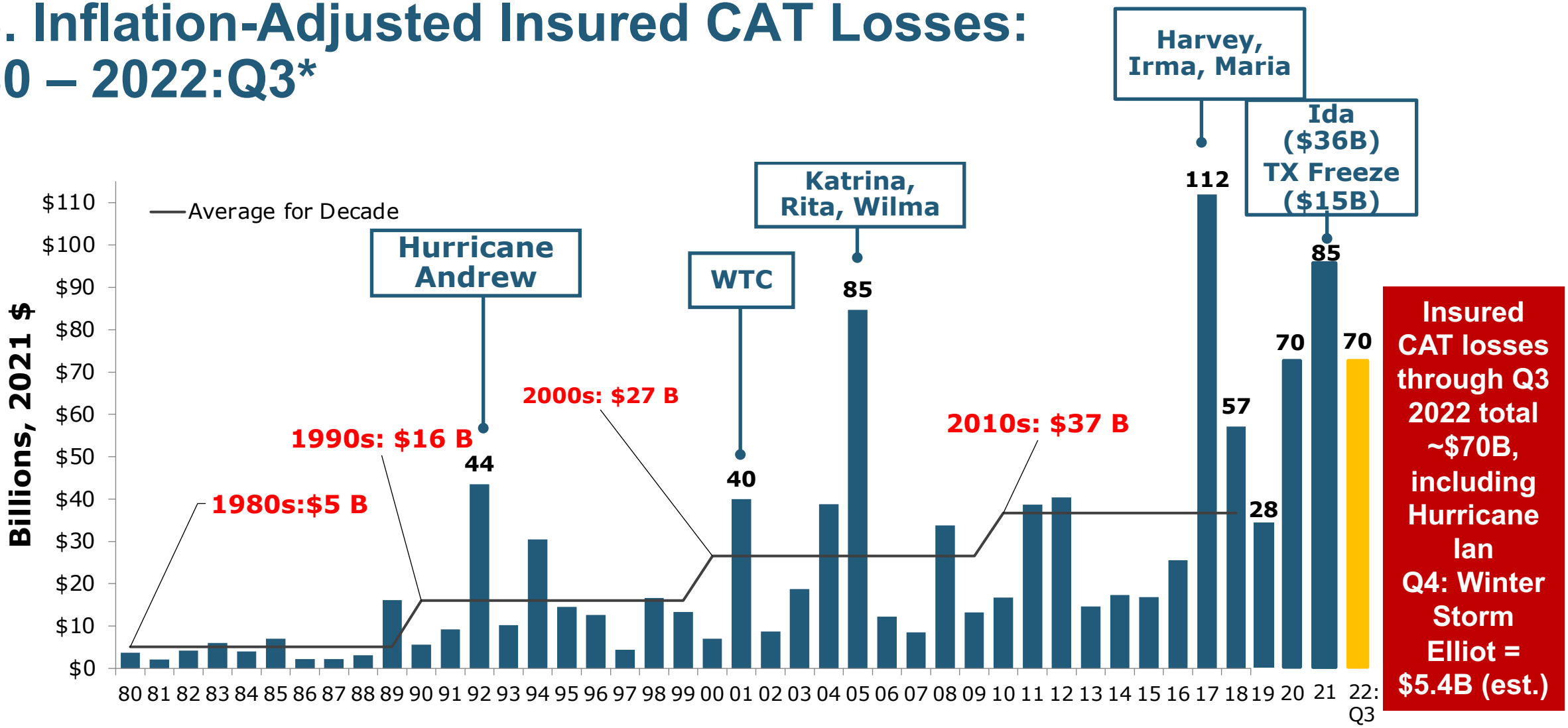
Source: Gallagher Re 1st View Report (Jan. 2023) available at: https://www.ajg.com/gallagherre/news-and-insights/2023/january/gallagher-re-first-view-market-turns/; Risk and Uncertainty Management Center, University of South Carolina.

Catastrophe Loss Trends

The Rise in CAT Losses Shows No Signs of Easing

The 2020s Are Off to an Ominous Beginning

U.S. Inflation-Adjusted Insured CAT Losses: 1980 – 2022:Q3*



Insured CAT losses through Q3 2022 total ~$70B, including Hurricane Ian
Q4: Winter Storm Elliot = $5.4B (est.)

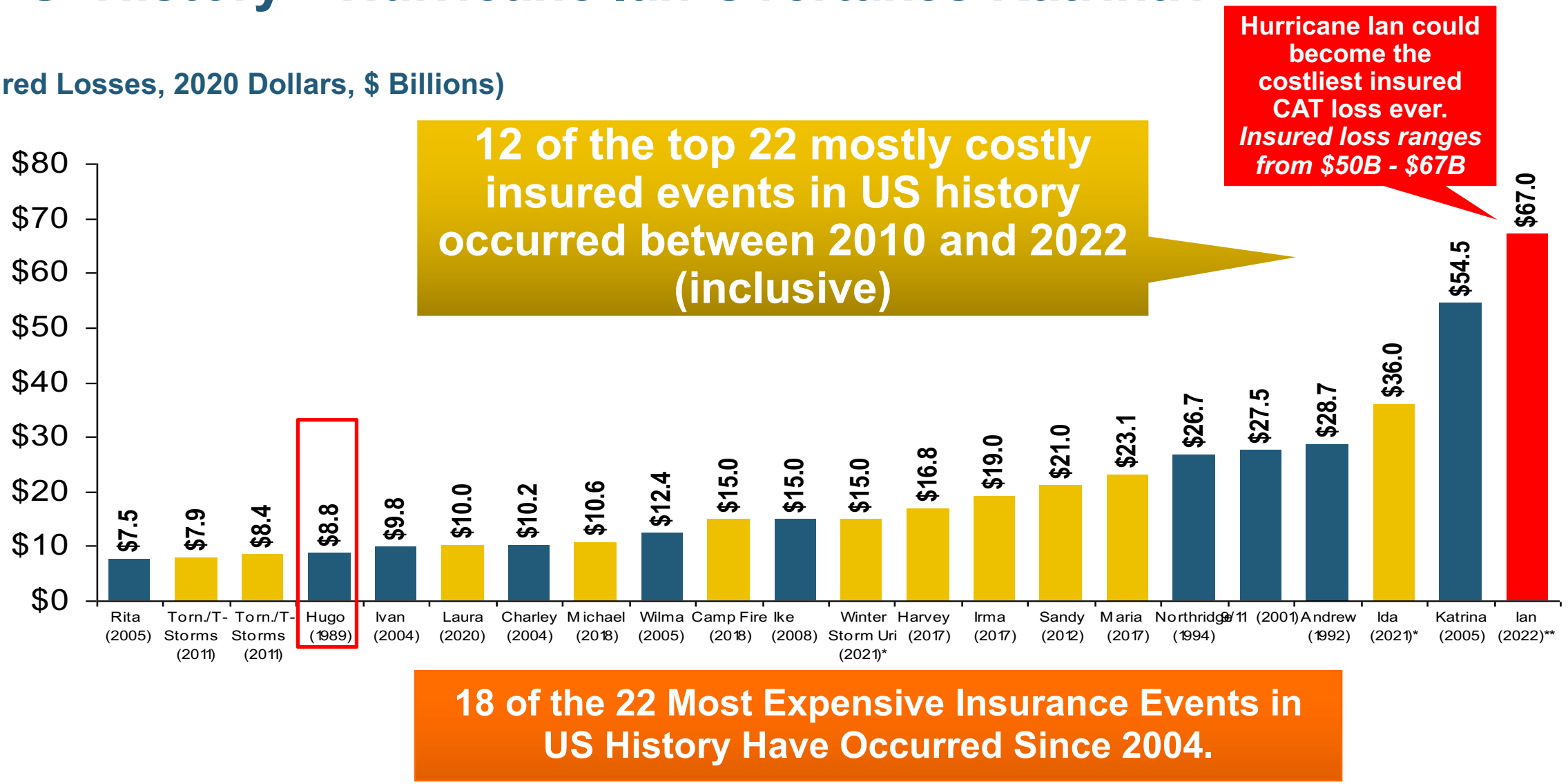
Average Insured Loss per Year*
1980-2021: $23.8 Billion
2012-2021: $44.1 Billion

The 2020s are off to an ominous start with $76B in average annual insured losses (2020-21)

*Stated in 2021 dollars except 2022:Q3 (2022 dollars).
Sources: Property Claims Service, a Verisk Analytics business (1980-2019); 2020-21 figures from Munich Re; 2023 YTD data from Aon; Insurance Information Institute; University of South Carolina, Risk & Uncertainty Management Center.

Top 22 Most Costly Disasters in U.S. History—Hurricane Ian Overtakes Katrina?

(Insured Losses, 2020 Dollars, $ Billions)



*2021 dollars; **2022 dollars (RMS private insurer estimate as of 10/10/22).

Sources: PCS, RMS, Aon, Karen Clark & Co; USC Center for Risk and Uncertainty Management adjustments to 2020 dollars using the CPI.

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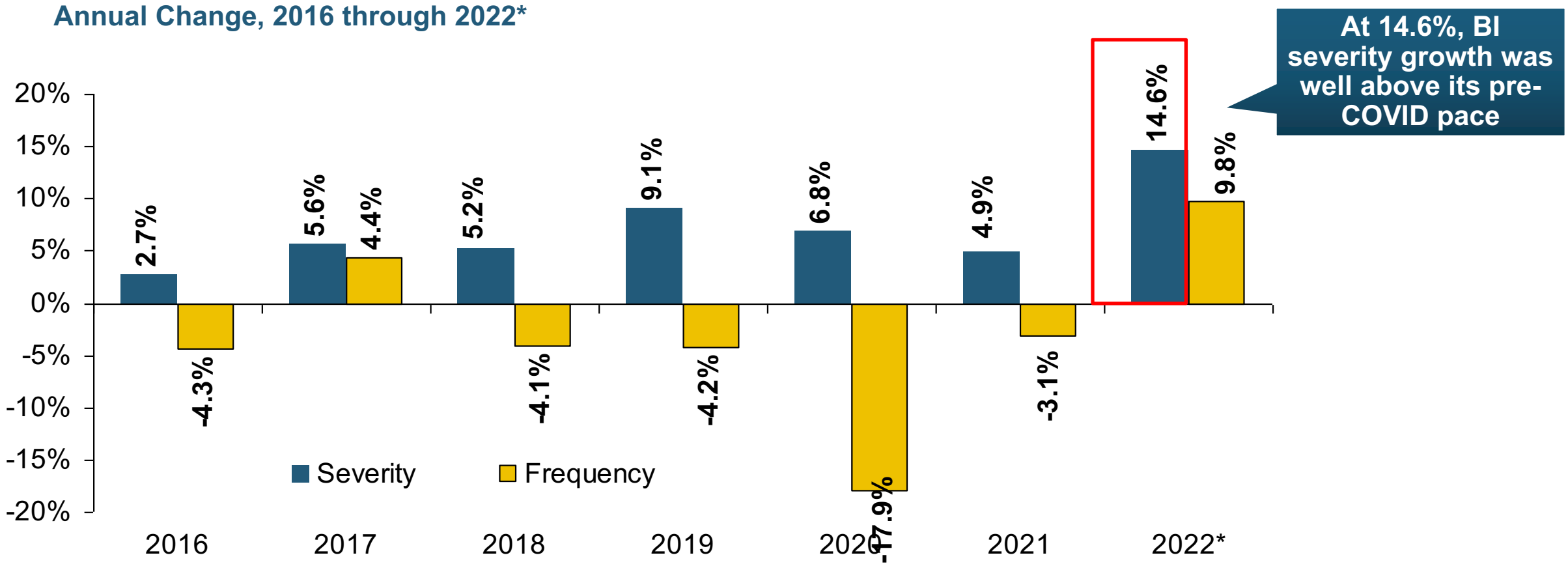
Private Passenger Auto Frequency & Severity Trends in South Carolina

Data Through Q3 2022 Show Large-Scale COVID Impacts on Claim Frequency and Severity

South Carolina Personal Auto: BI Severity Up, Frequency Recovering As State Emerges from the Pandemic*

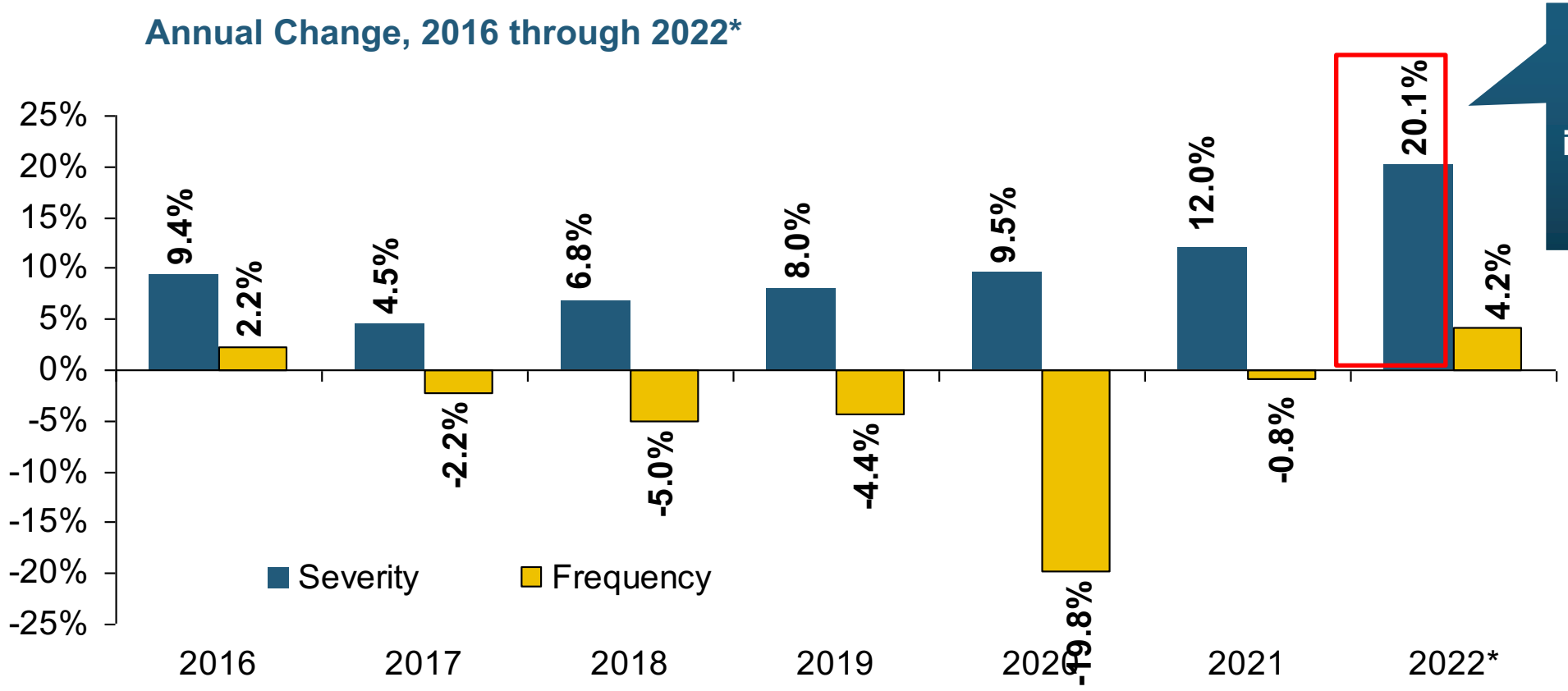


BI Severity Is Rising. Frequency will Likely Rise and Return to Pre-COVID Levels

*2022 data are for the 4 quarters ending September 30, 2022.

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

South Carolina Personal Auto: Prop. Damage Liability Frequency Recovering As Severity Trends Upward*



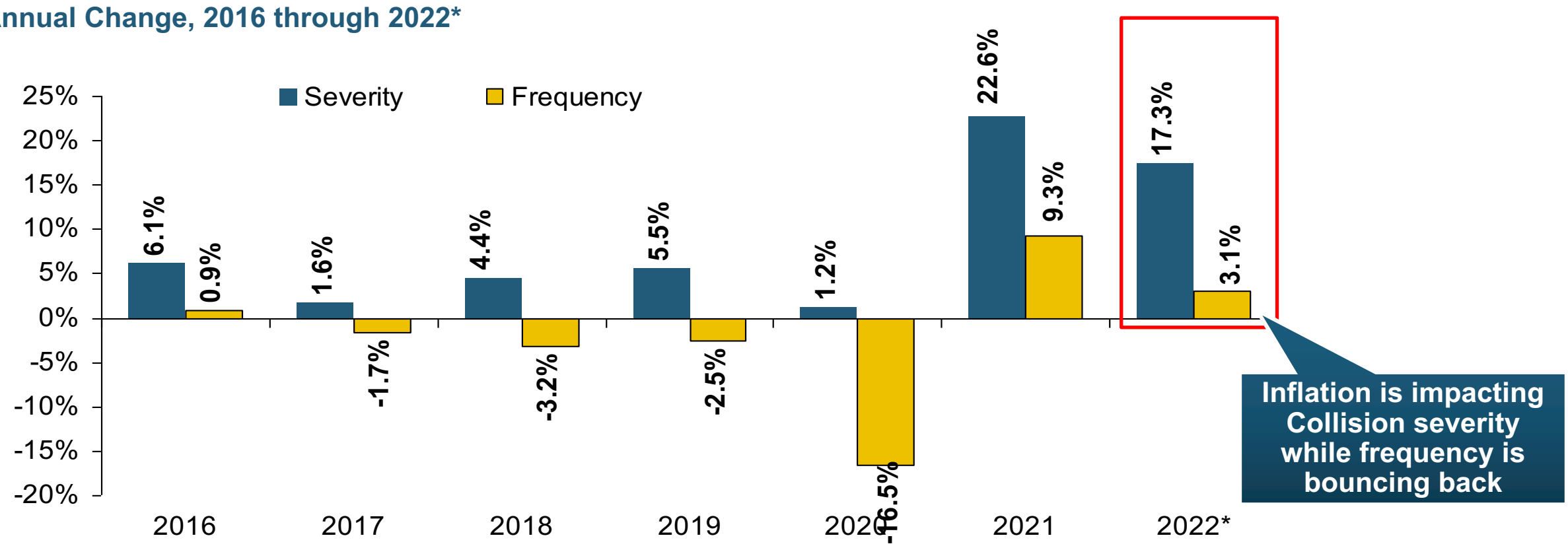
Accelerating inflation is an increasingly important driver of PD Liability severity

PD Severity Continued to Rise Throughout the Pandemic. Frequency Will Likely Snap Back Before Resuming Its Pre-COVID pattern

*2022 data are for the 4 quarters ending Sept. 30, 2022.

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

South Carolina Personal Auto: COVID Led to a Temporary, Sharp Drop in Collision Frequency; Both Frequency and Severity Are Rebounding Sharply*

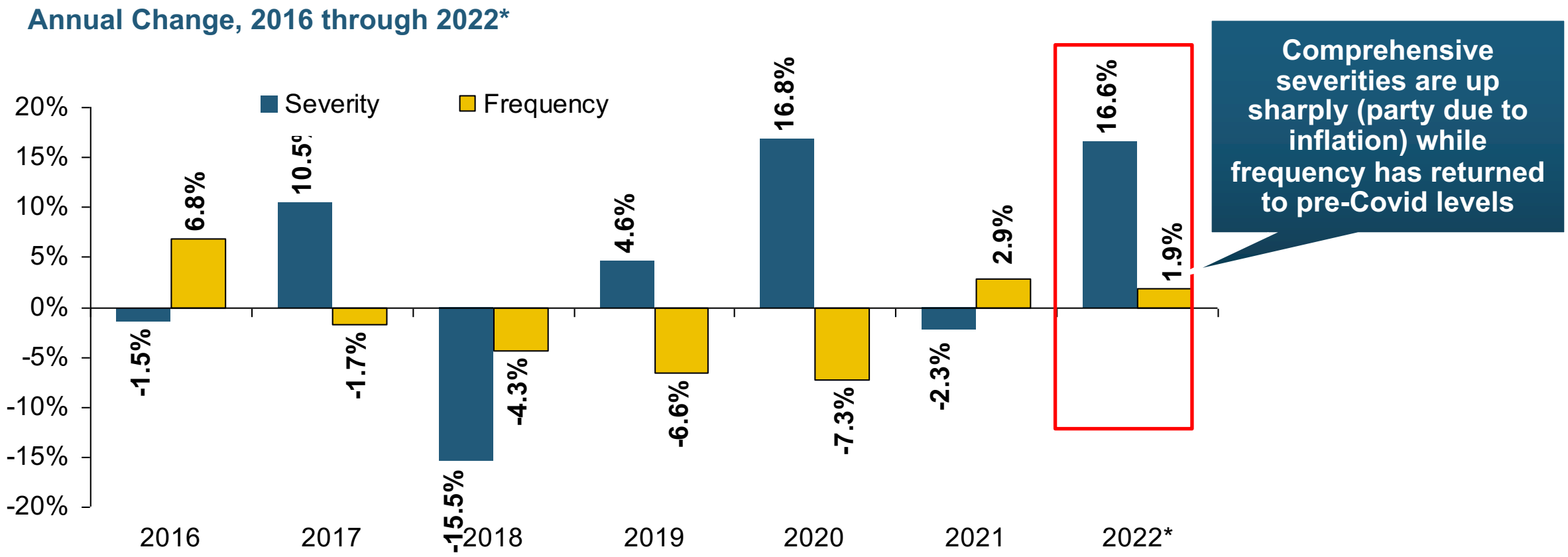


Adverse Frequency and Severity Trends Are Pushing SC's Personal Auto Loss Ratio Up Sharply

*2022 data are for the 4 quarters ending Sept. 30, 2022.

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

South Carolina: COVID Has Increased Comprehensive Claim Volatility*



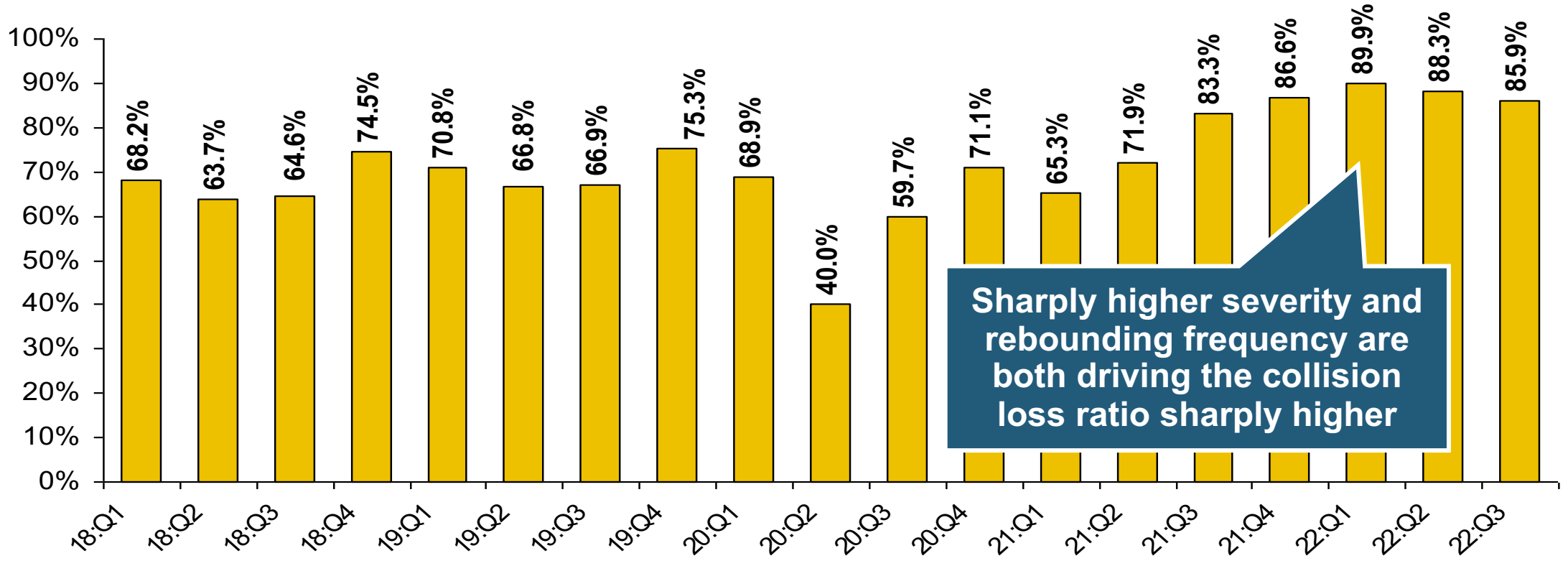
Collision Claim Frequency Is Volatile and Usually Most Impacted by Weather Impacts, though COVID Has Increased Overall Volatilty

*2022 data are for the 4 quarters ending Sept. 30, 2022.

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

SC Collision Loss: Rising Rapidly, 2018:Q1 – 2022:Q3

Paid Claim Frequency, 2018:Q1 through 2022:Q3



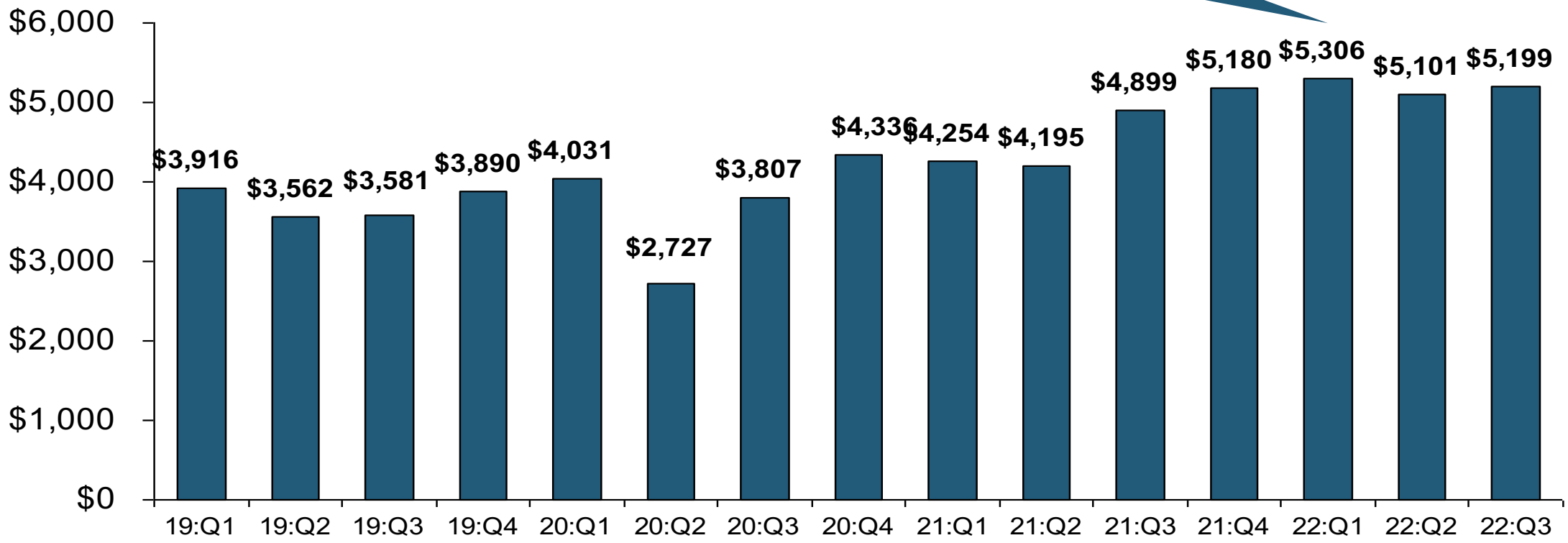
Collision Loss Ratio in 2022 Reached Its Highest Level in Many Years

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

SC Collision Claim Severity: Rising to New Highs

Average Loss, 2019:Q1 through 2022:Q3

Collision claim severity hit a (record?) high in Q1 2022, up 42% from full-year 2019



Severities Are Up Sharply—Inflation Is a Major Factor

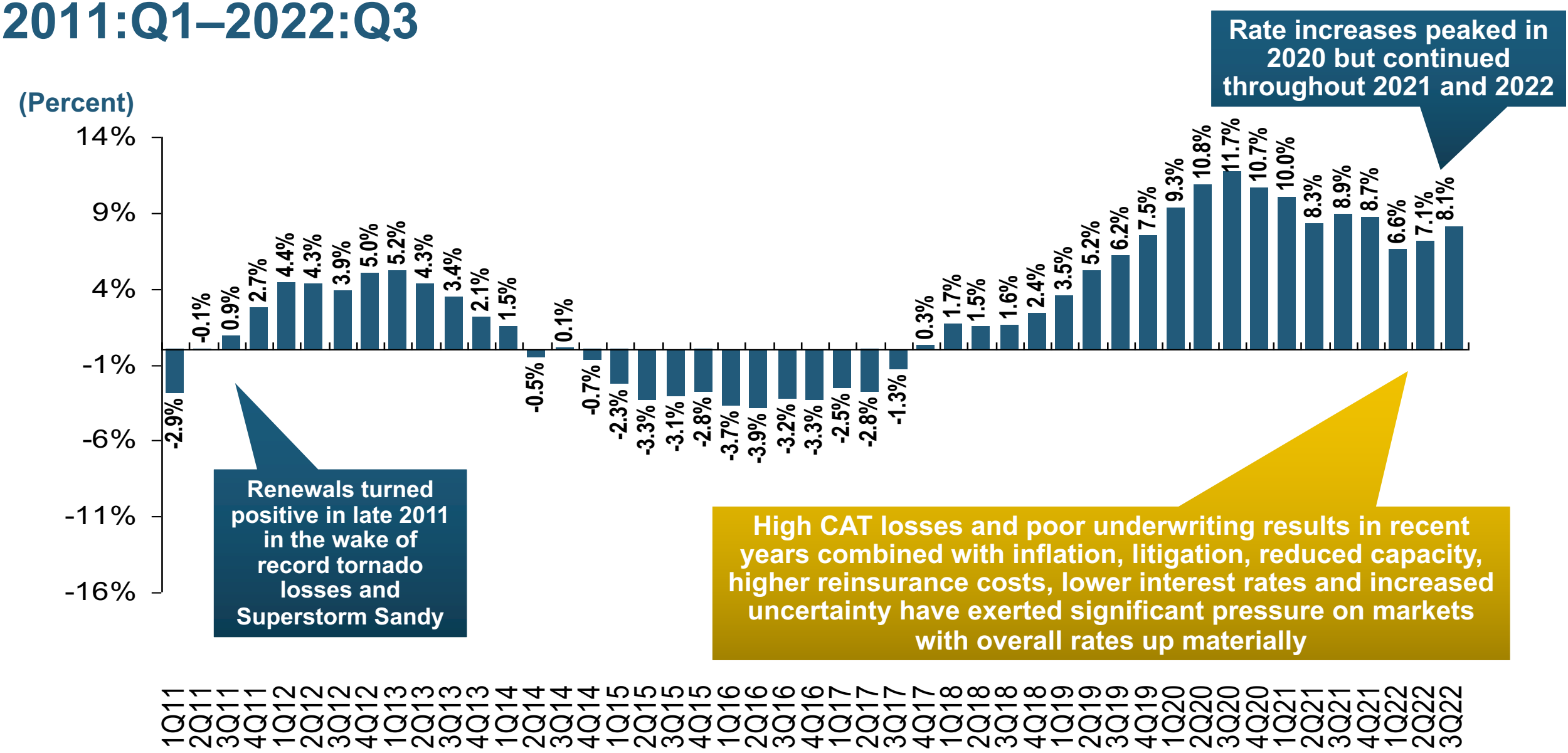
Source: ISO/PCI *Fast Track* data; Center for Risk and Uncertainty Management, Univ. of South Carolina.

Commercial Lines & Pricing Cyclicality

Economic and Tort Environment Create Pricing Pressure

76

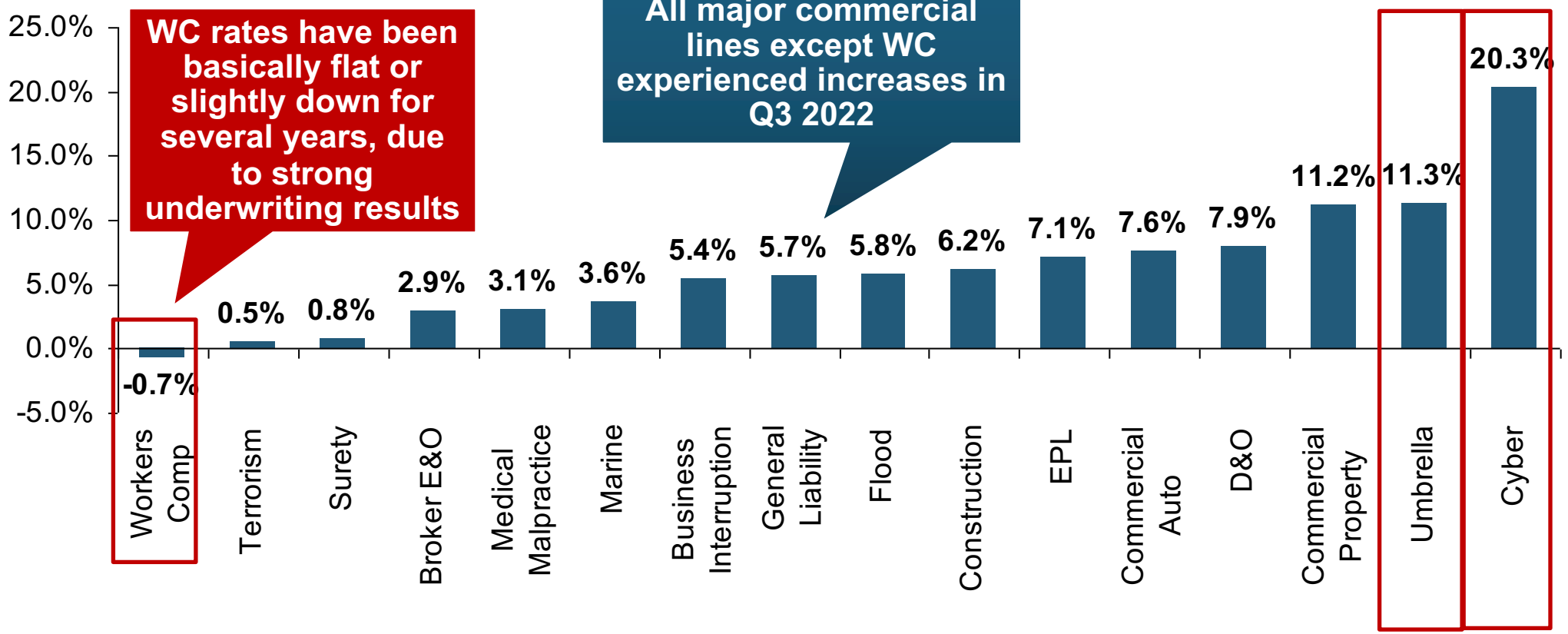
CIAB: Average Commercial Rate Change, All Lines, 2011:Q1–2022:Q3



Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.
Source: Council of Insurance Agents & Brokers; Center for Risk and Uncertainty Management, Univ. of South Carolina.

Change in Commercial Rate Renewals, by Line: 2022:Q3

(Percent Change)



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

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

Legal System Abuse (Social Inflation) & Litigation Trends

Rising Litigation Costs Are a Concern for Businesses Large and Small—*and Their Insurers*

Major Driver of Rate Across Multiple Lines

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Social Inflation: Many Interrelated Causes, Difficult to Manage

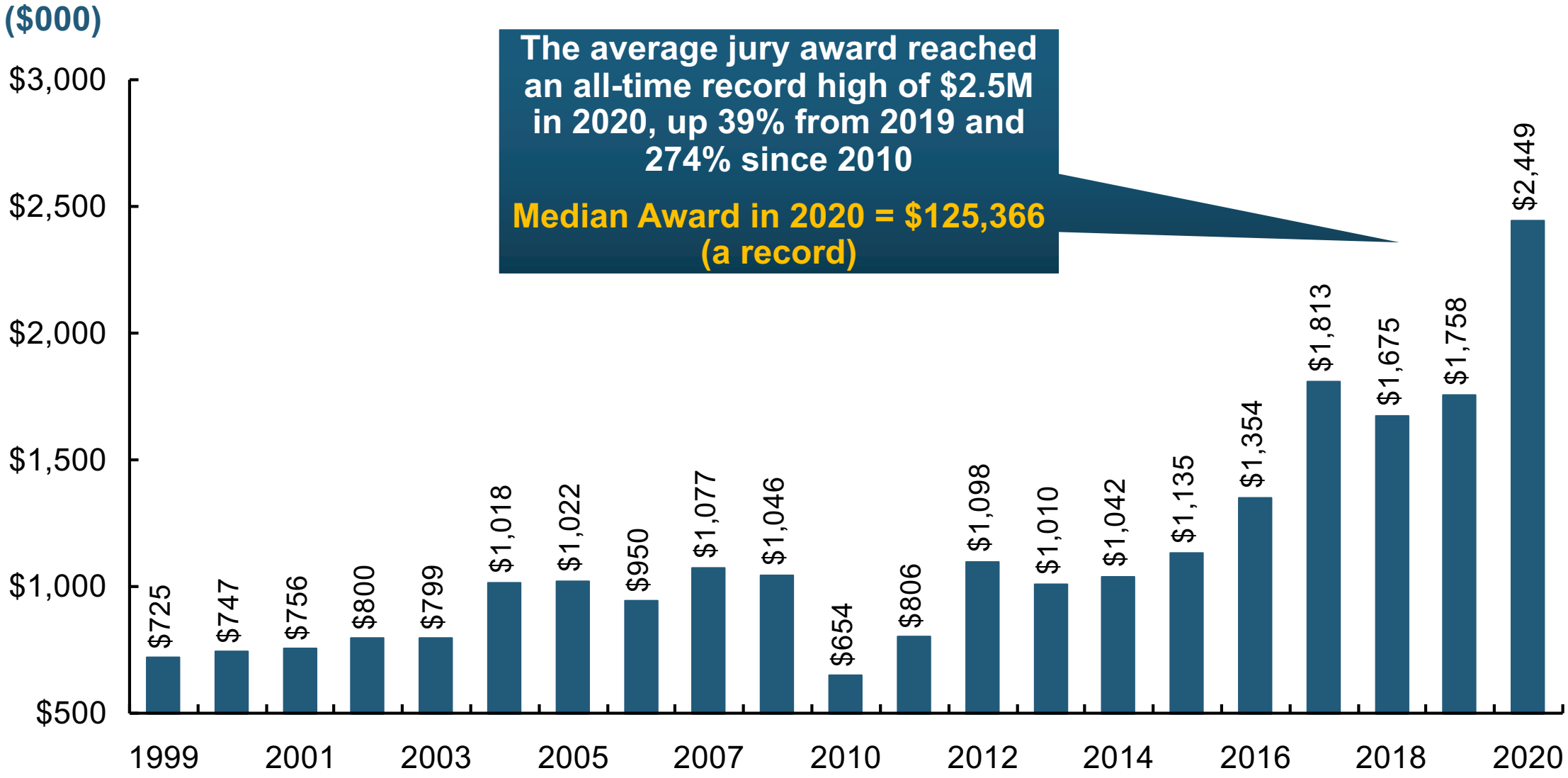
INSURANCE CLAIM COSTS

- Increasing Propensity to Sue
- Size of Jury Awards
- Courts/ Juries Favoring Plaintiffs
- Growing Distrust of Large Corps.
- Litigation Financing
- Aggressive Plaintiff Bar Ads
- Changes in Regulatory and Legal Environment Bar Ads

Applied to a seemingly limitless number of issues, these drivers are pushing tort costs (and therefore claim costs upward)

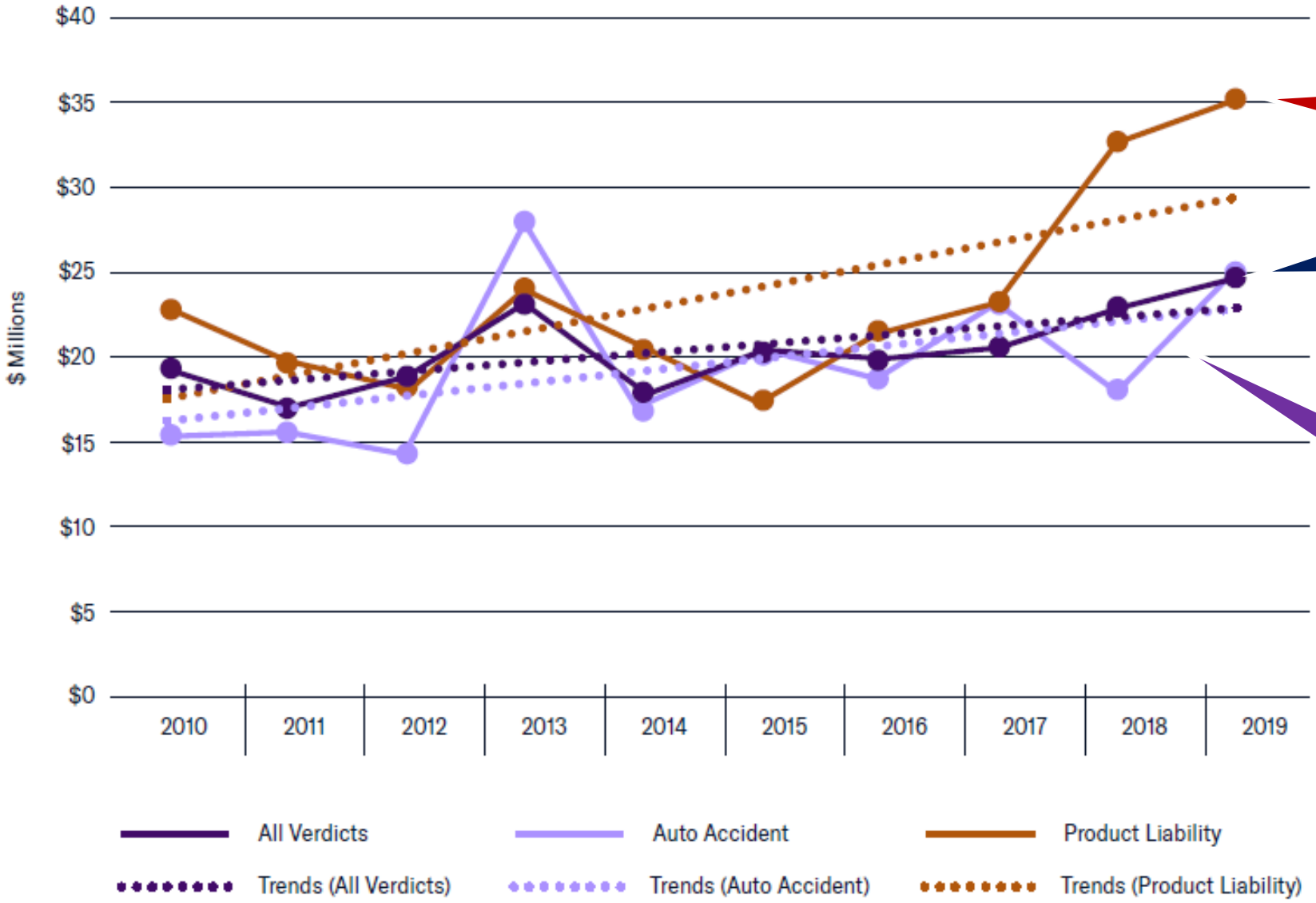
Source:Risk and Uncertainty Management Center, Univ. of South Carolina, adapted from Verisk “Social Inflation” presentation (2020).

Average Jury Awards, 1999 – 2020 (latest available)



Source: Jury Verdict Research; *Current Award Trends in Personal Injury* (61st Edition), Thomson Reuters; Risk and Uncertainty Management Center, Univ. of South Carolina.

Median Nuclear Verdict and Trend Line: 2010 – 2019*



Products Liability

+53.2% from $23.0M in 2010 to $35.1M in 2019

All Nuclear Verdicts

+27.5% from $19.3M in 2010 to $24.6M in 2019

Auto Accident

+63.2% from $15.2M in 2010 to $24.8M in 2019

**The ILR defines a nuclear verdict as a jury verdict of $10M or more.*

Source: US Chamber of Commerce Institute for Legal Reform (Sept. 2022), "*Nuclear Verdicts: Trends, Causes and Solutions,*" accessed at: https://instituteforlegalreform.com/research/nuclear-verdicts-trends-causes-and-solutions/. Risk and Uncertainty Management Center, Univ. of SC.

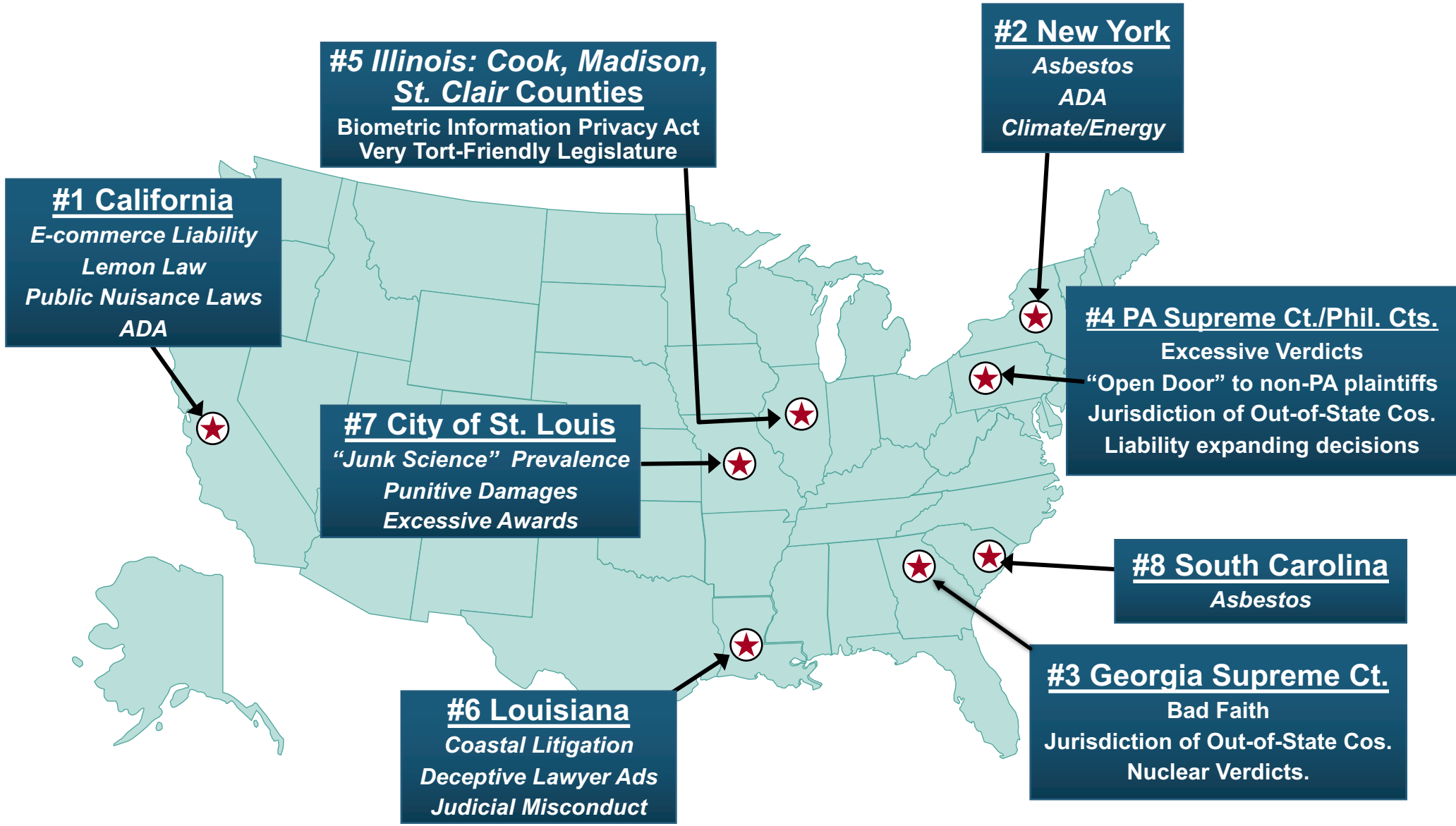
The Nation's Judicial Hellholes: 2021/2022

Watch List

- Florida Legislature
- Colorado
- TX Ct. of Appeals
- Minnesota
- Maryland

Dishonorable Mention

- American Law Inst.
- FL Appellate Ct.
- KY Atty. General
- Ohio
- Utah Supreme Ct.



Source: American Tort Reform Association; Risk & Uncertainty Management Center, University of South Carolina.

SUMMARY

- The P/C Insurance Industry Remains Strong, Stable, Sound and Secure
- A Shallow Recession is Increasingly Likely Beginning in Q3 or Q4 2023
- Asset Price Volatility Will Persist as Inflation Uncertainty
- Geopolitical Concerns Remain High→ Interconnectedness
- Higher Interest Rates Will Provide a Modest Tailwind for Investment Income
- Inflationary Pressures Will Persist in 2023, But Will Subside (Peak Reached in June 2022)
- Loss Cost Challenges Remain but Should Ease in 2023—Inflation, Supply Chain
- Legal System Abuse Issues Remain a Long-Term Challenge
- Immediate P/C Concerns: Capacity, CATs, Inflation→Rate/Reserve Adequacy, ITV

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Twitter: twitter.com/bob_hartwig

For a copy of this presentation, email me at robert.hartwig@moore.sc.edu or

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