Overview & Outlook for the P/C Insurance Industry: *Trends, Challenges and Opportunities in the Post-COVID Era*

Chubb P&C Market Agency Education Webinar
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P/C Insurance Overview & Outlook: Outline

- P/C Financial Overview & Outlook Amid the COVID-19 Pandemic
- Catastrophe Loss Trends
- Capital & Capacity
- Investment Market Issues: Volatility Rules and a Newly Hawkish Fed
- The Economy
  - Focus on Inflation & Impacts of the Russian invasion of Ukraine
- Commercial Lines: Growth and Pricing Trends
- Cyber Trends
- Distribution Trends
- Summary and Q&A

P/C Insurance Industry: Financial Overview Amid the COVID-19 Pandemic and Economic Uncertainty

The P/C Insurance Industry Entered and Emerged from the COVID-19 Pandemic from a Position of Financial Strength

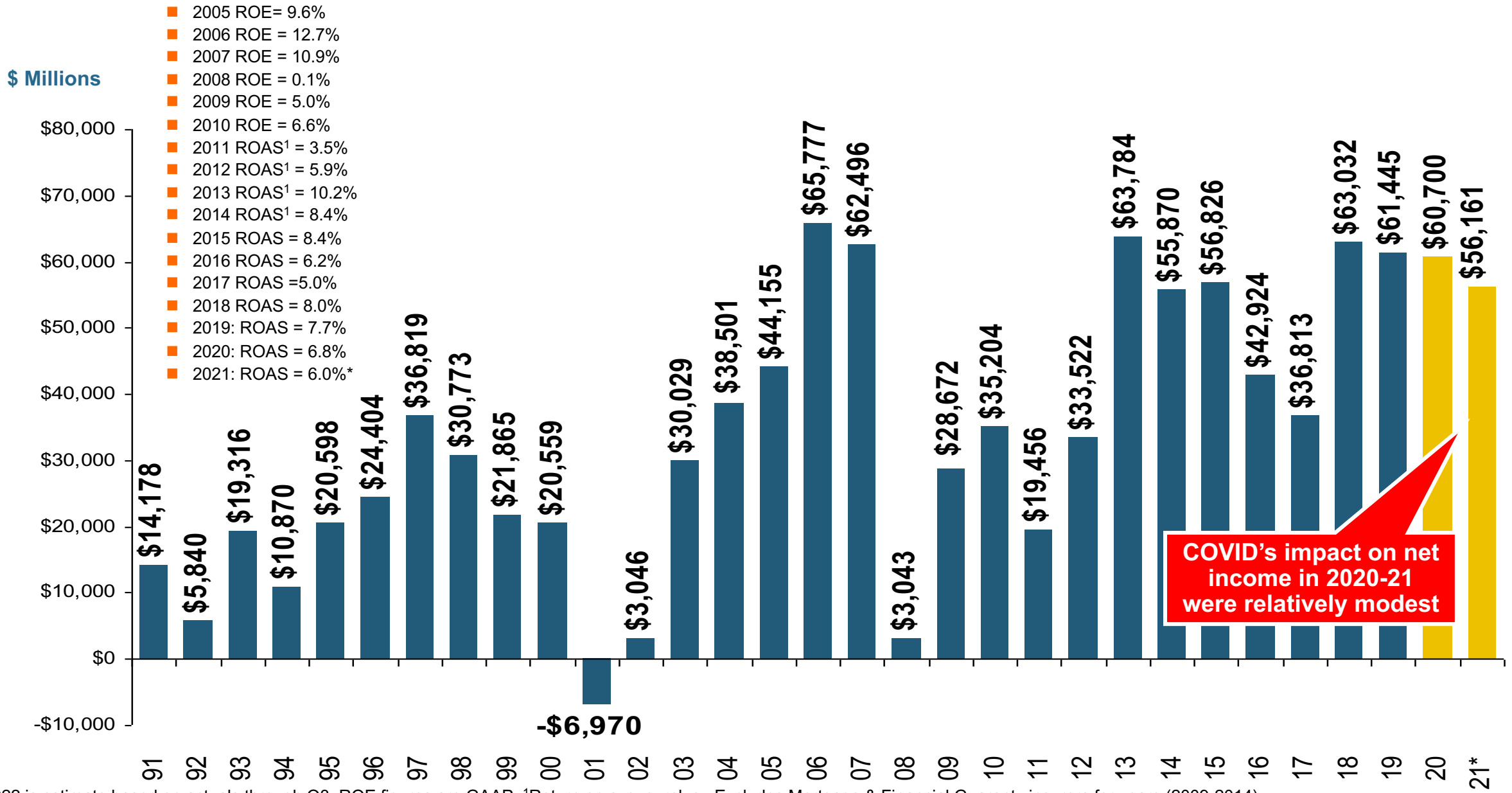
Industry Remains Strong

3

Profits and Profitability

P/C Profitability Is Extremely Volatile and Consistently Lags the Fortune 500

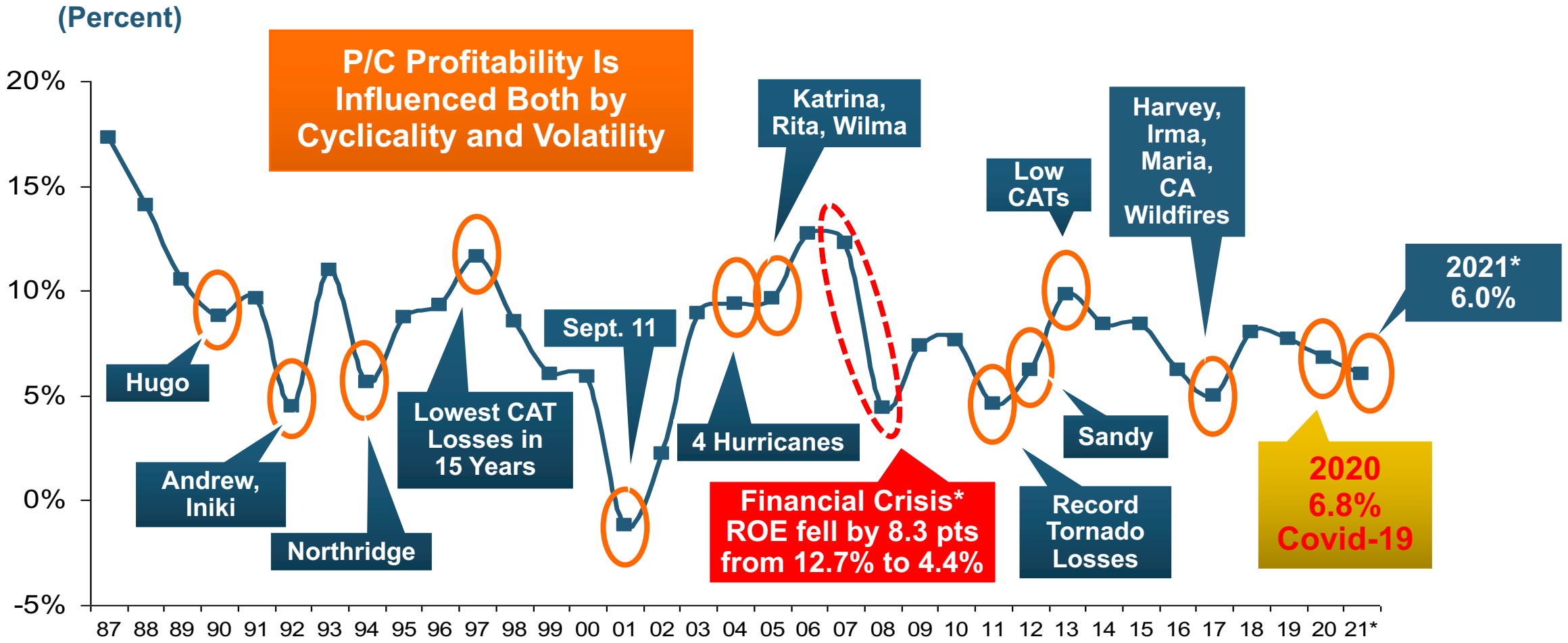
P/C Industry Net Income After Taxes, 1991–2021E*



*2022 is estimate based on actuals through Q3. ROE figures are GAAP; [1]Return on avg. surplus. Excludes Mortgage & Financial Guaranty insurers for years (2009-2014).

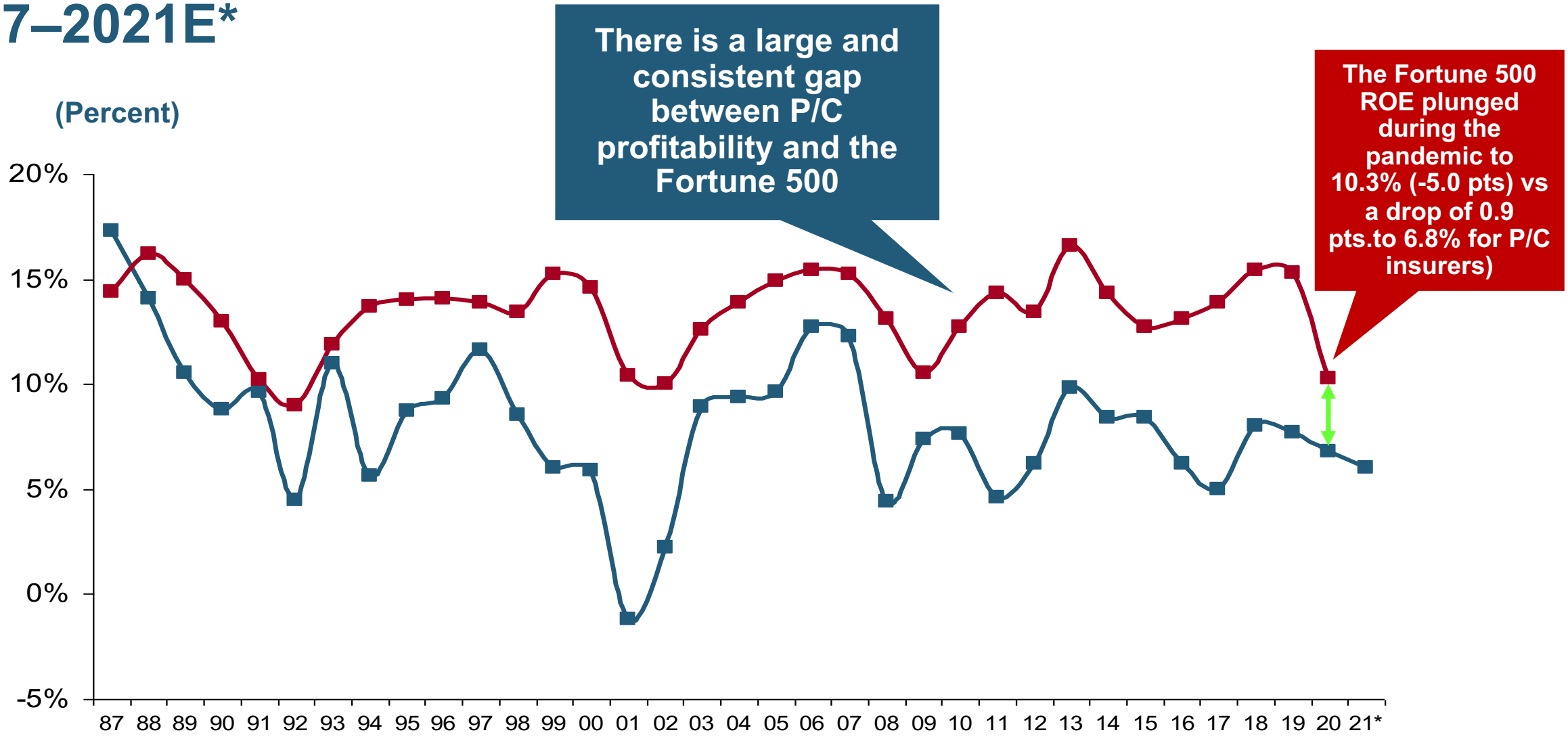
Sources: A.M. Best, ISO, APCIA.

ROE: Property/Casualty Insurance by Major Event, 1987–2021E*



*Excludes Mortgage & Financial Guarantee in 2008 – 2014. 2021 figure is estimate based on actual of 6.0% through Q3.
Sources: ISO, *Fortune,* APCIA; USC RUM Center.

ROE: Property/Casualty Insurance vs Fortune All Industry, 1987–2021E*



*Excludes Mortgage & Financial Guarantee in 2008 – 2014. 2021 P/C figure is estimate based on actual of 6.0% through Q3.
Sources: ISO, *Fortune,* APCIA; USC RUM Center.

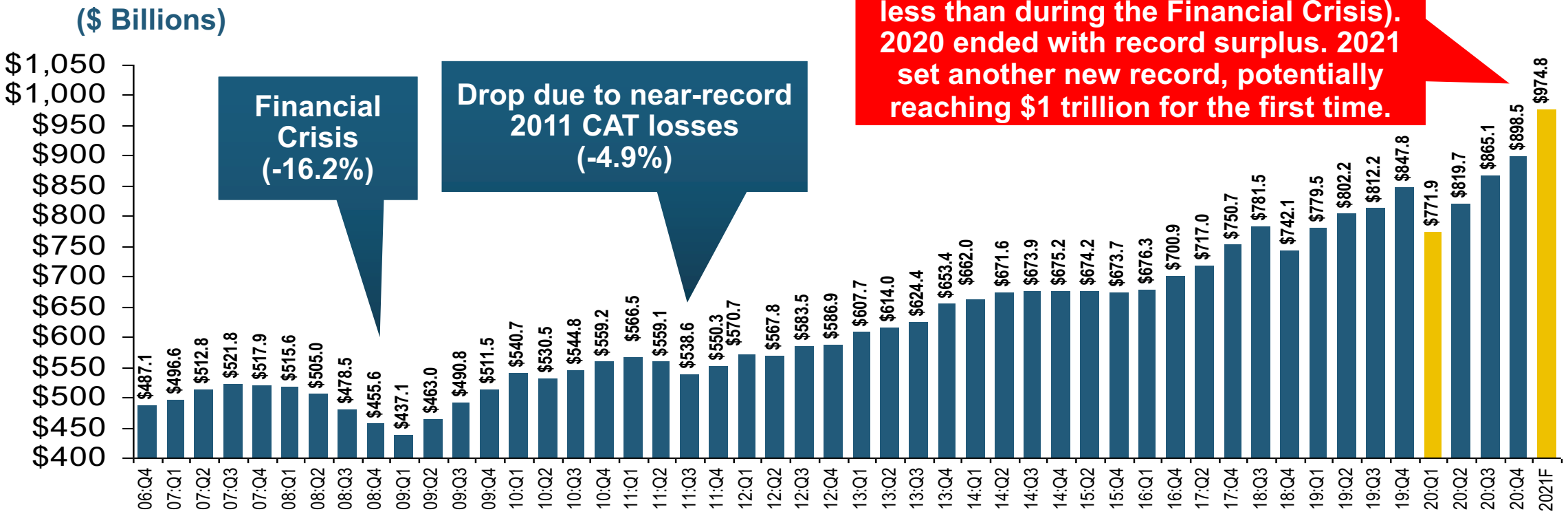
Capital and Capacity

P/C Insurance: Over or Under Capitalized?

Is the Industry Creating Economic Value?

Policyholder Surplus (Capacity), 2006:Q4–2021F*

The P/C insurance industry entered the COVID-19 pandemic from a position of strength and was able to withstand the 9.0% surplus decline in Q1 2020 (far less than during the Financial Crisis). 2020 ended with record surplus. 2021 set another new record, potentially reaching $1 trillion for the first time.



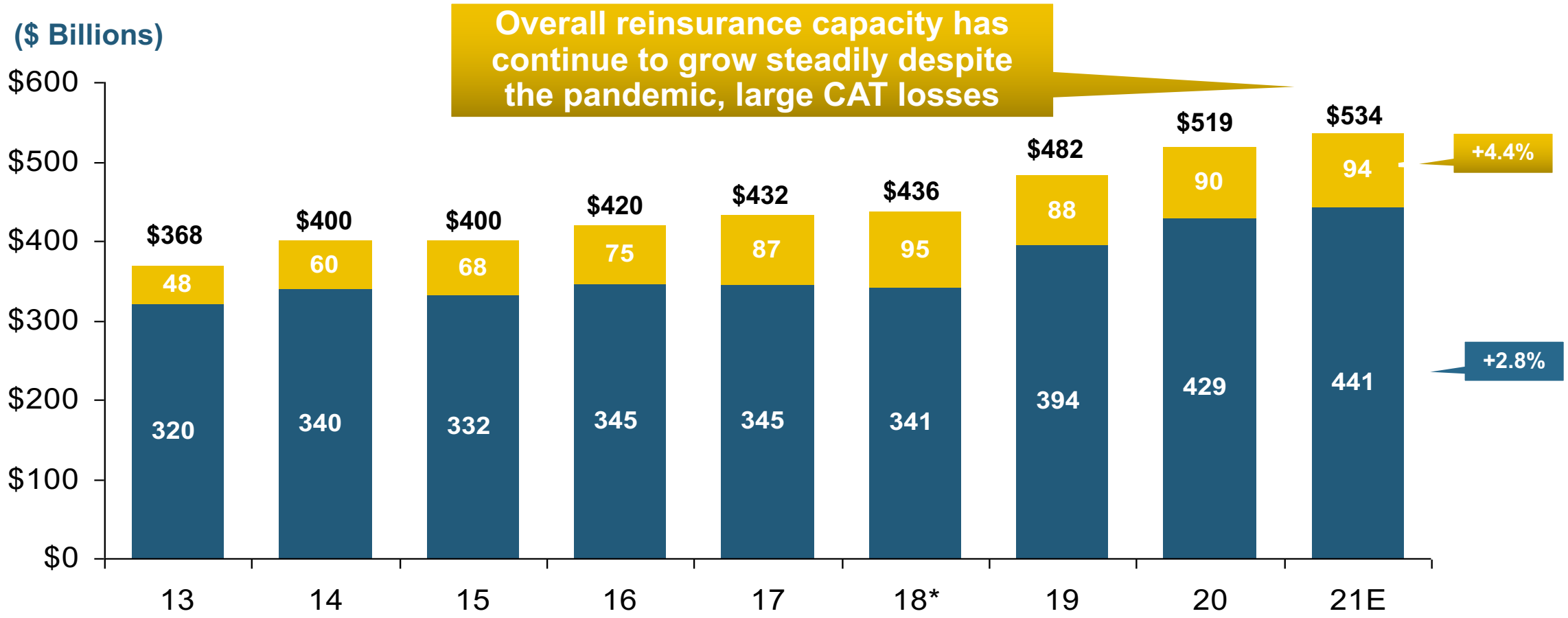
2010: Q1 data includes $22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business.

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.

*2021 figure is actual through Q3.

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

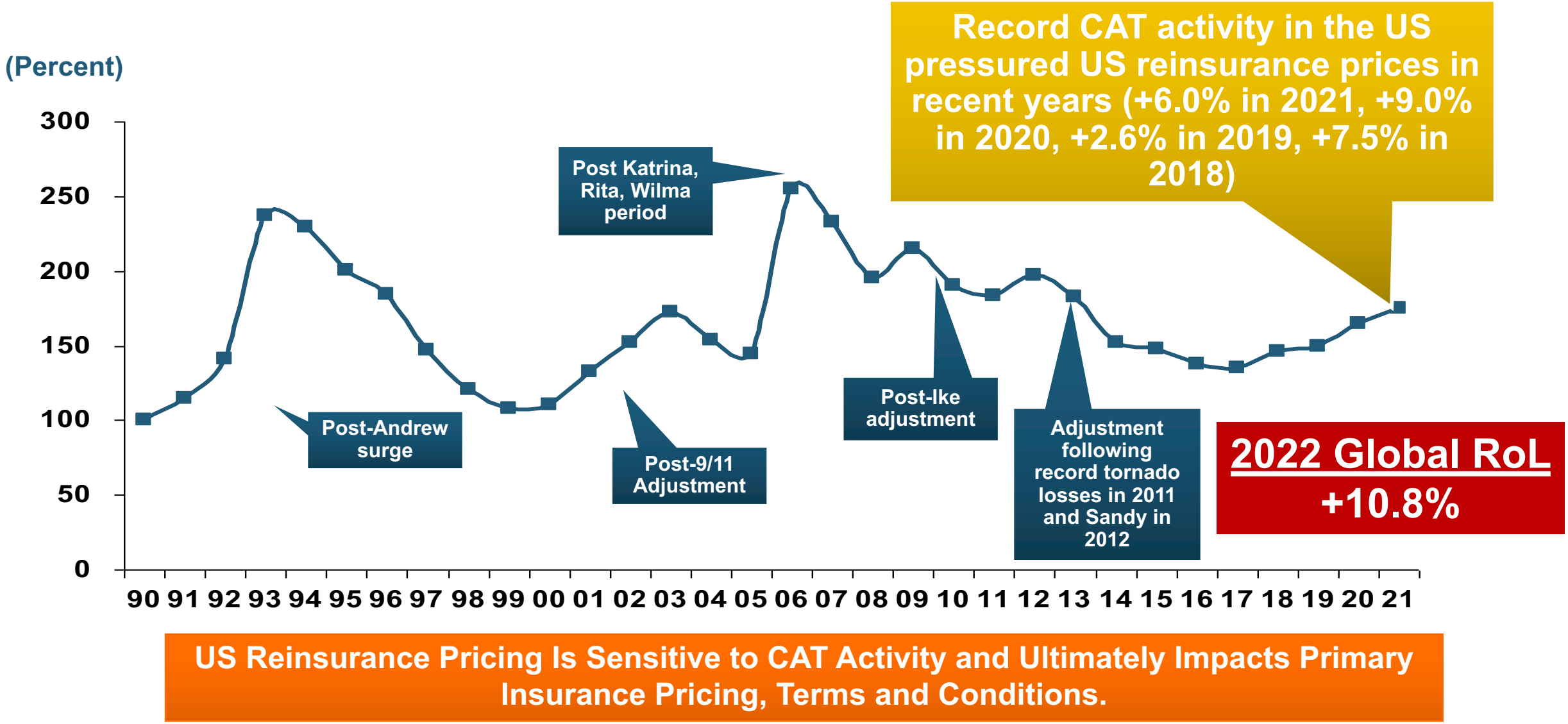
Traditional and ILS Reinsurance Capital, 2013–2021E



Strong global demand for reinsurance capacity will continue for the foreseeable future

Source: Artemis.bm at: https://www.artemis.bm/news/ils-capital-expands-in-2021-but-up-to-5-of-reinsurance-trapped-gc-am-best/; University of South Carolina, Risk and Uncertainty Management Center.

US Property Catastrophe Rate-on-Line Index: 1990 – 2021*



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

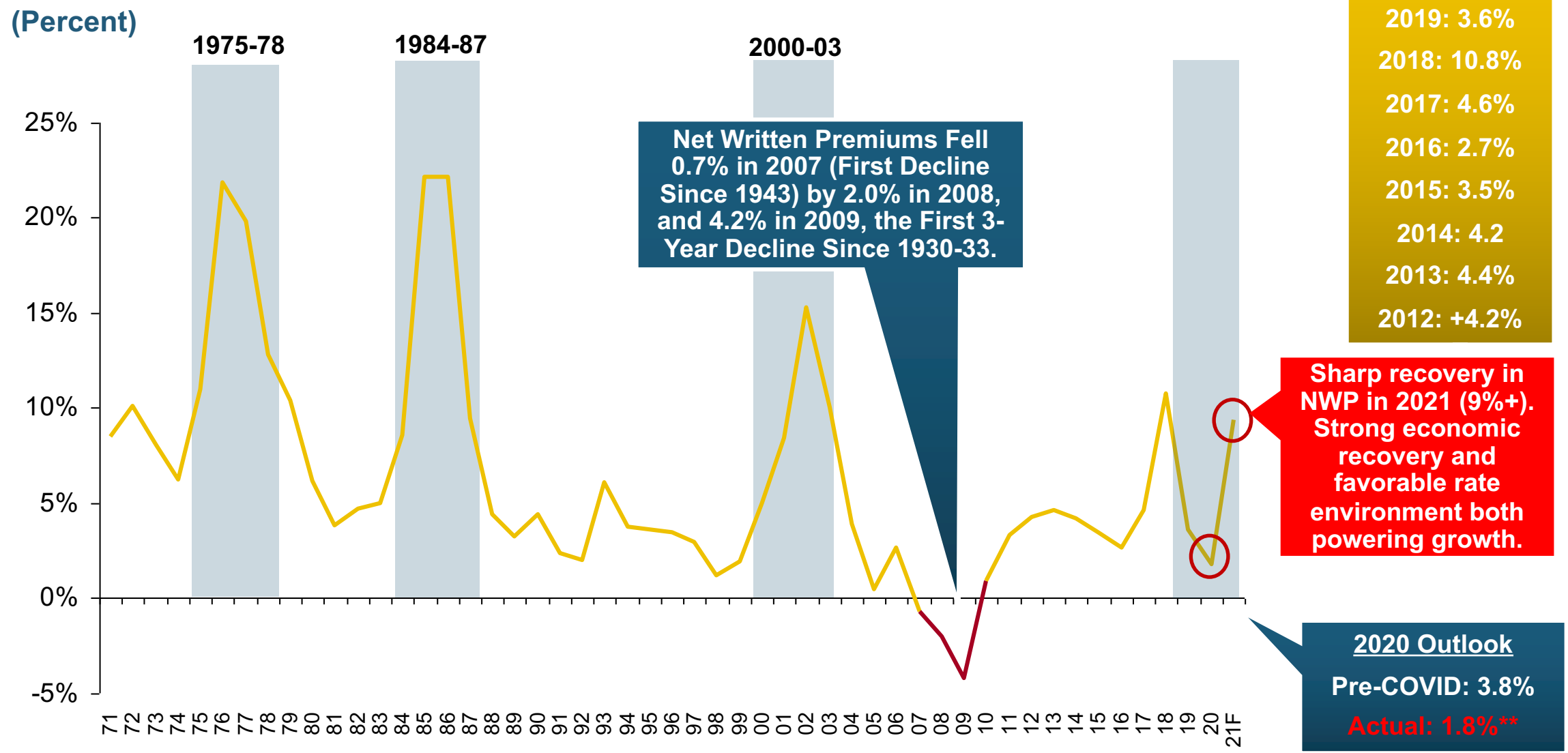
*As of January 1 each year.

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

Growth & Underwriting Performance

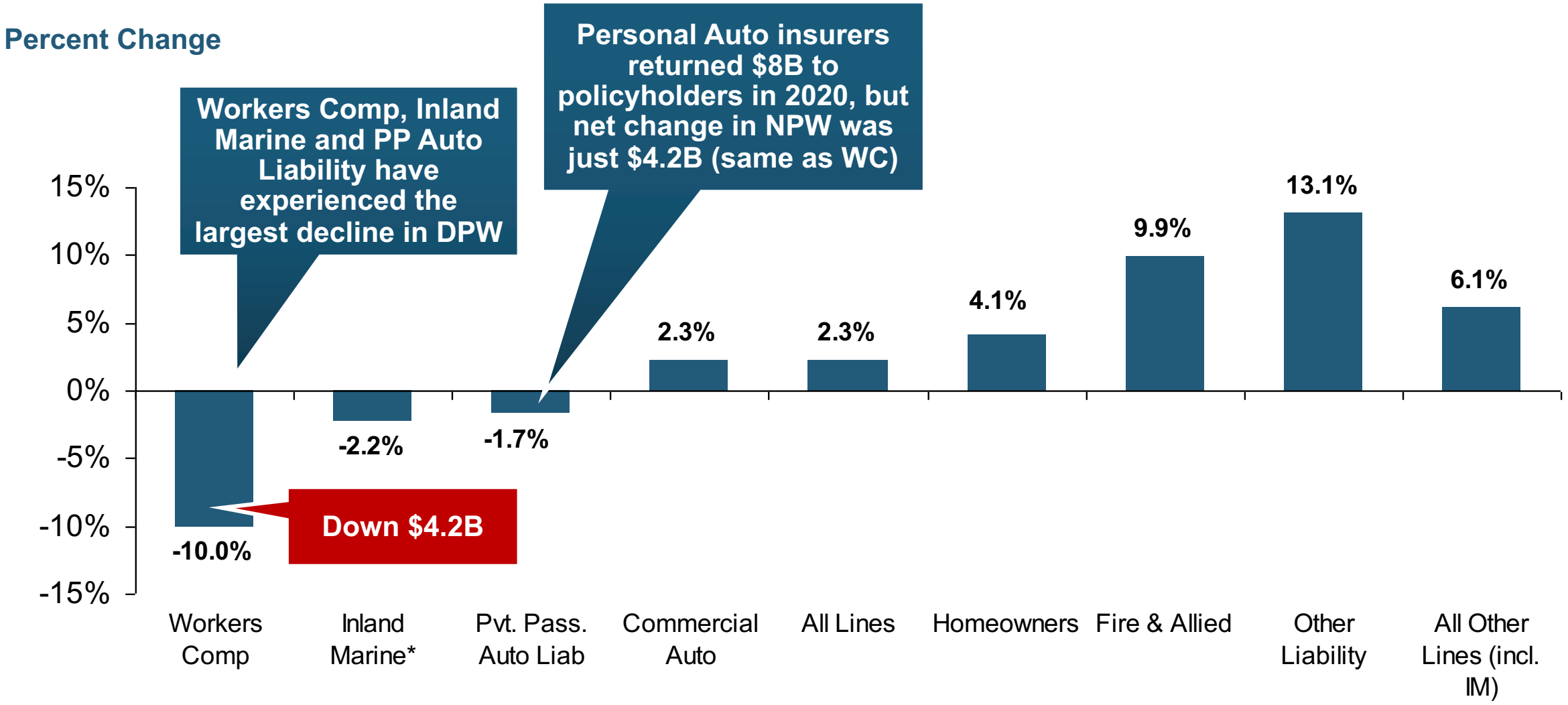
Growth Prospects Are Fairly Strong Given Economically-Driven Exposure Growth and Current Rate Trends

Net Written Premium Growth (All P/C Lines): Annual Change, 1971–2021F



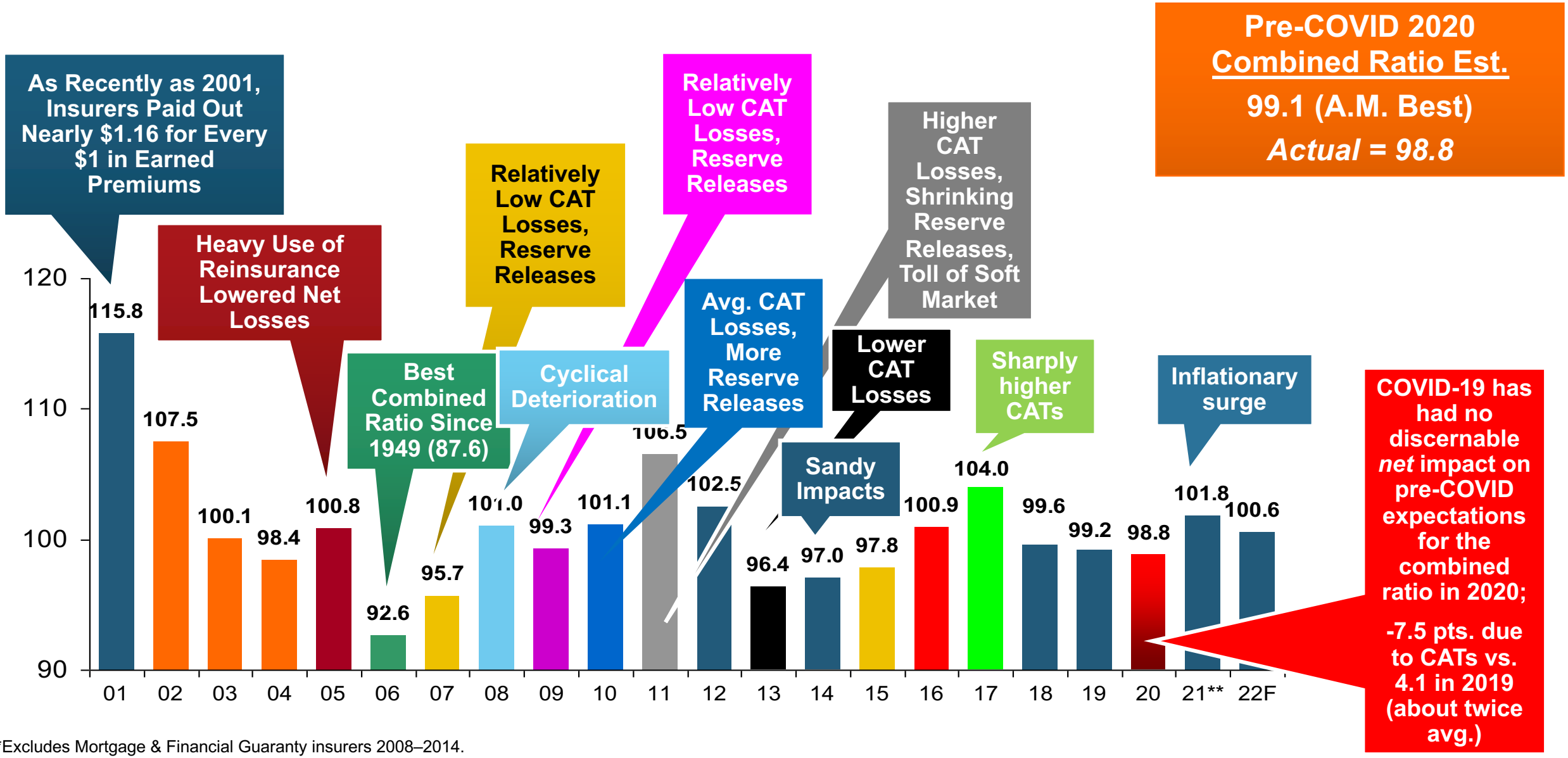
* **Pre/Post-COVID-19 forecast from A.M. Best Review & Preview (Feb. 2020, 2021). NOTE: Shaded areas denote "hard market" periods.
Sources: A.M. Best (1971-2013, 2021F), ISO (2014-19); Risk & Uncertainty Management Center, Univ. of South Carolina

COVID's Impact on NPW Growth for Largest P/C Lines: 2020



*Inland Marine figure is DPW though first 9-months of 2020 (A.M. Best).
Sources: NAIC Annual Statement data, NCCI; Risk and Uncertainty Management Center, Univ. of South Carolina.

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



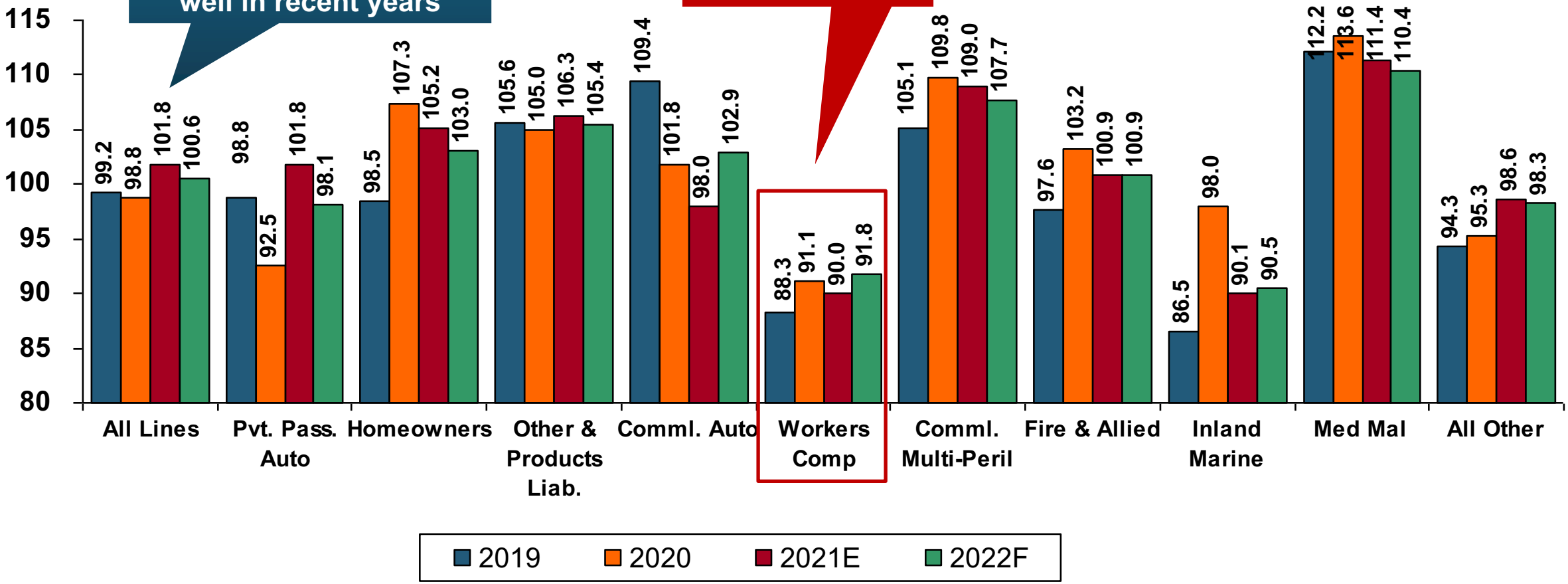
*Excludes Mortgage & Financial Guaranty insurers 2008–2014.
**2021 is estimate; 9-month actual = 99.5. (Q3 figure was 104.5)
Sources: A.M. Best, ISO (2014-2022F).

Combined Ratios by Line: 2019 – 2022F

Despite COVID and high CAT losses, the overall P/C industry has performed reasonably well in recent years

WC is the best performing line of insurance

Accelerating inflation could push the combined ratio upward in 2022 beyond the estimates shown here



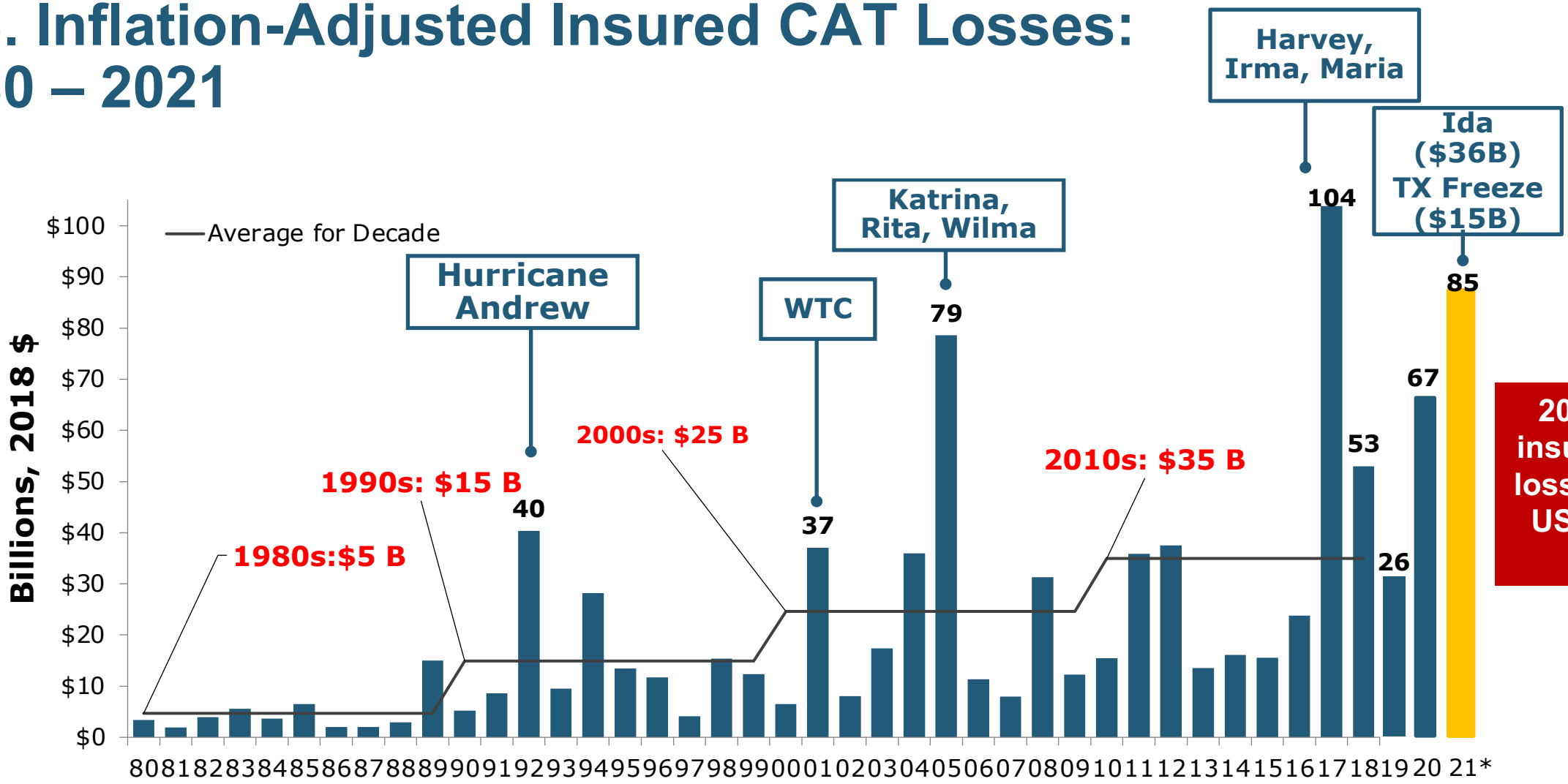
Source: A.M. Best *Review & Preview* (Feb. 2022); Univ. of South Carolina, Risk and Uncertainty Management Center.

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 – 2021



2021 CAT insured CAT losses in the US totaled $85B

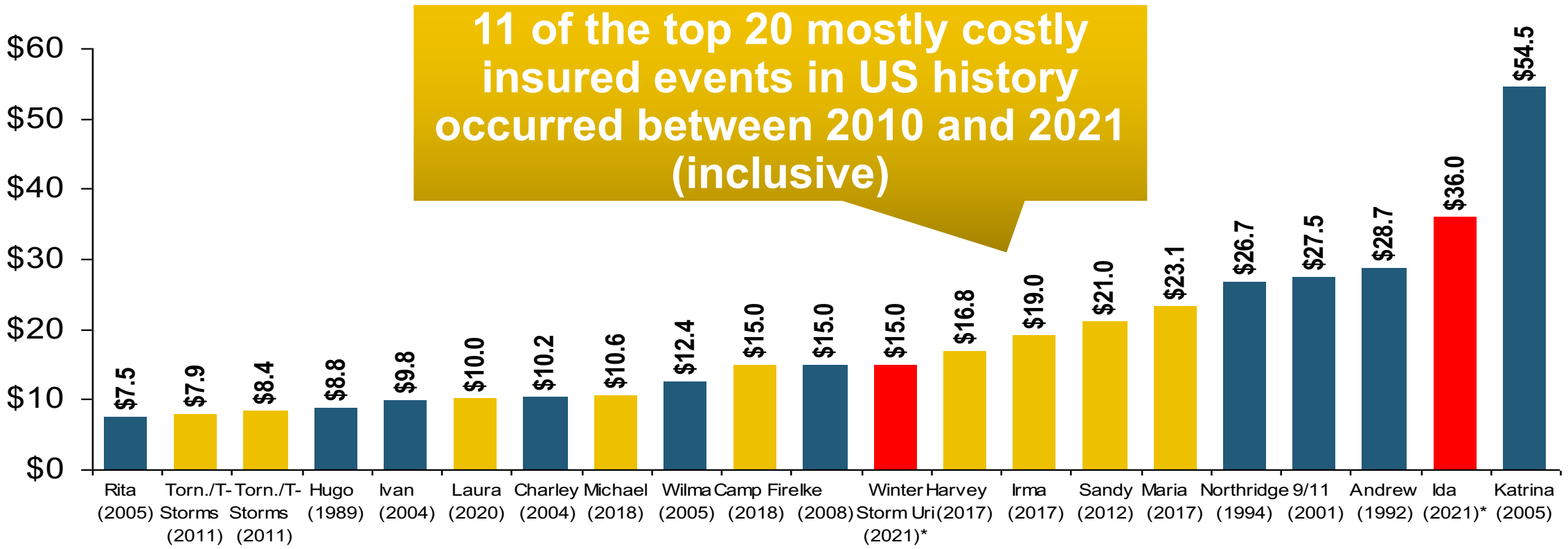
Average Insured Loss per Year for 1980-2020 is $22.2 Billion

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

Sources: Property Claims Service, a Verisk Analytics business (1980-2019); 2020 and 2021 figures from Munich Re; Insurance Information Institute; University of South Carolina, Risk & Uncertainty Management Center.

Top 21 Most Costly Disasters in U.S. History—Katrina Still Ranks #1

(Insured Losses, 2020 Dollars, $ Billions)



*Estimated (in 2021 dollars)

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

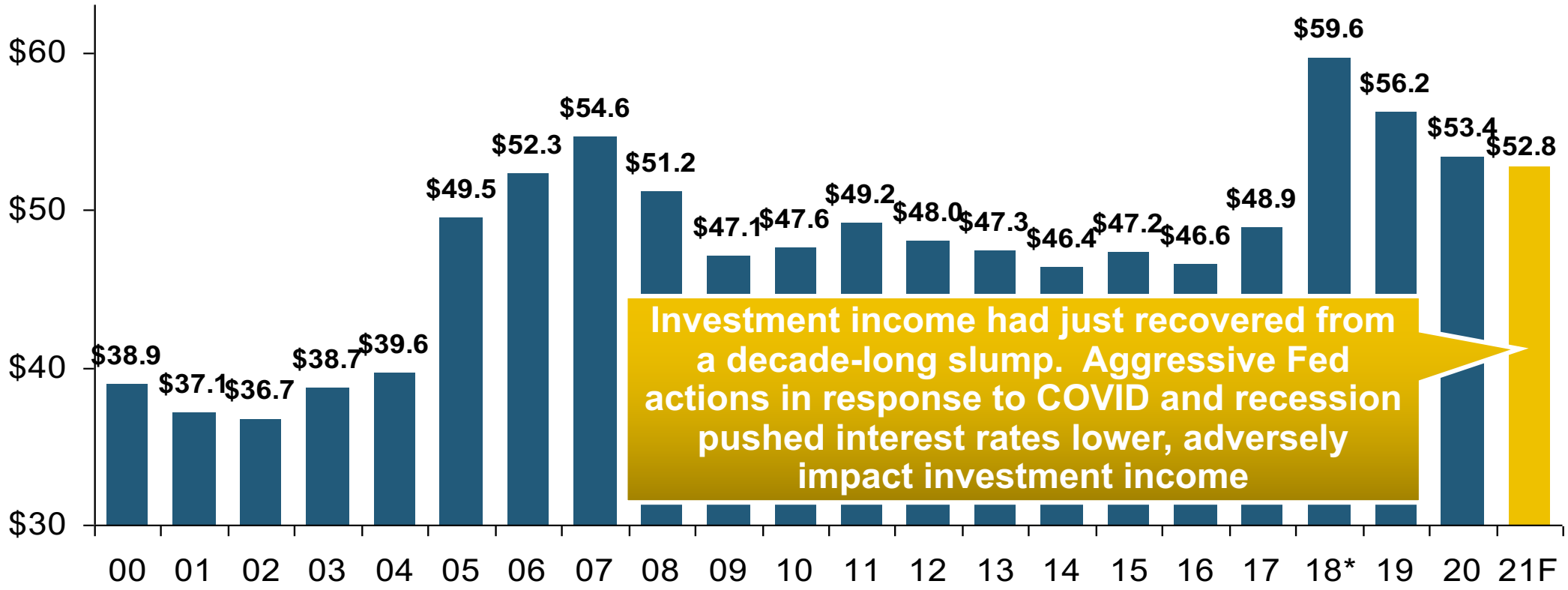
Investments

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: 2000–2021F

($ Billions)

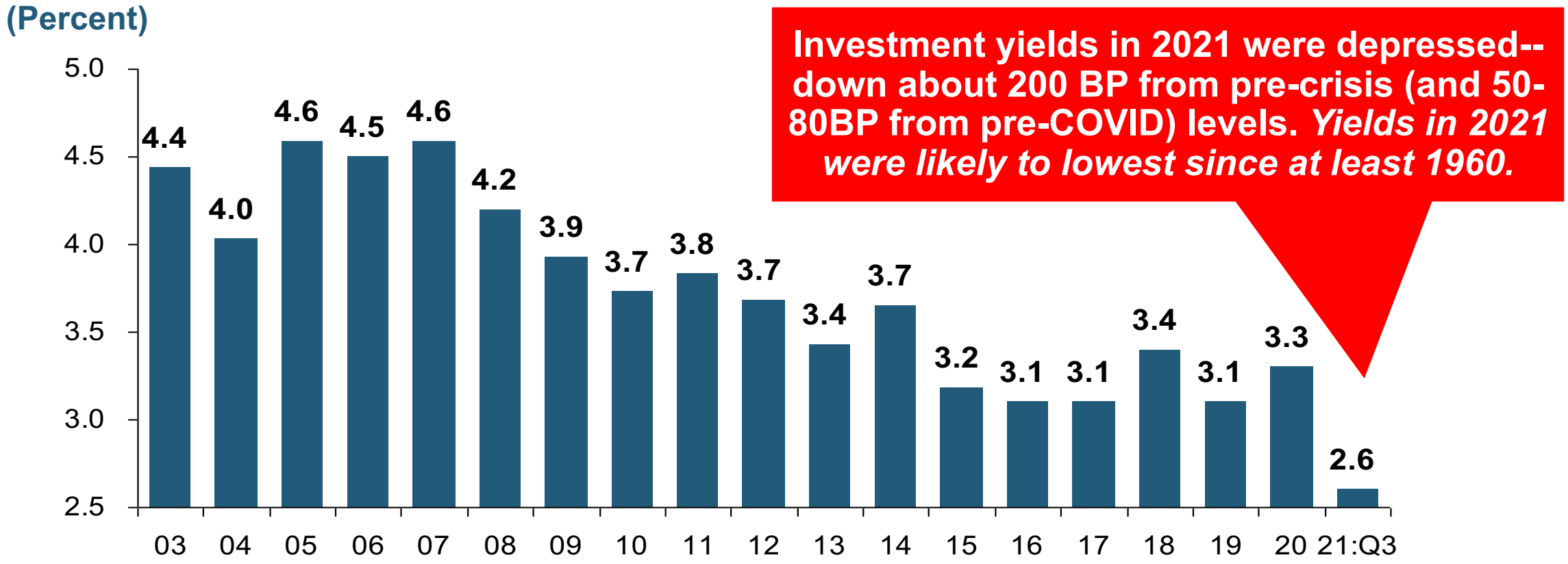


Due to persistently low interest rates, investment income remained below pre-crisis levels for a decade. Lower interest rates during COVID drove investment income down once again. Fed rate hikes in 2022 could reverse this trend.

*2021 figure is anualized YTD 9M actual figure of $39.564B. 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, 2007–2021:Q3



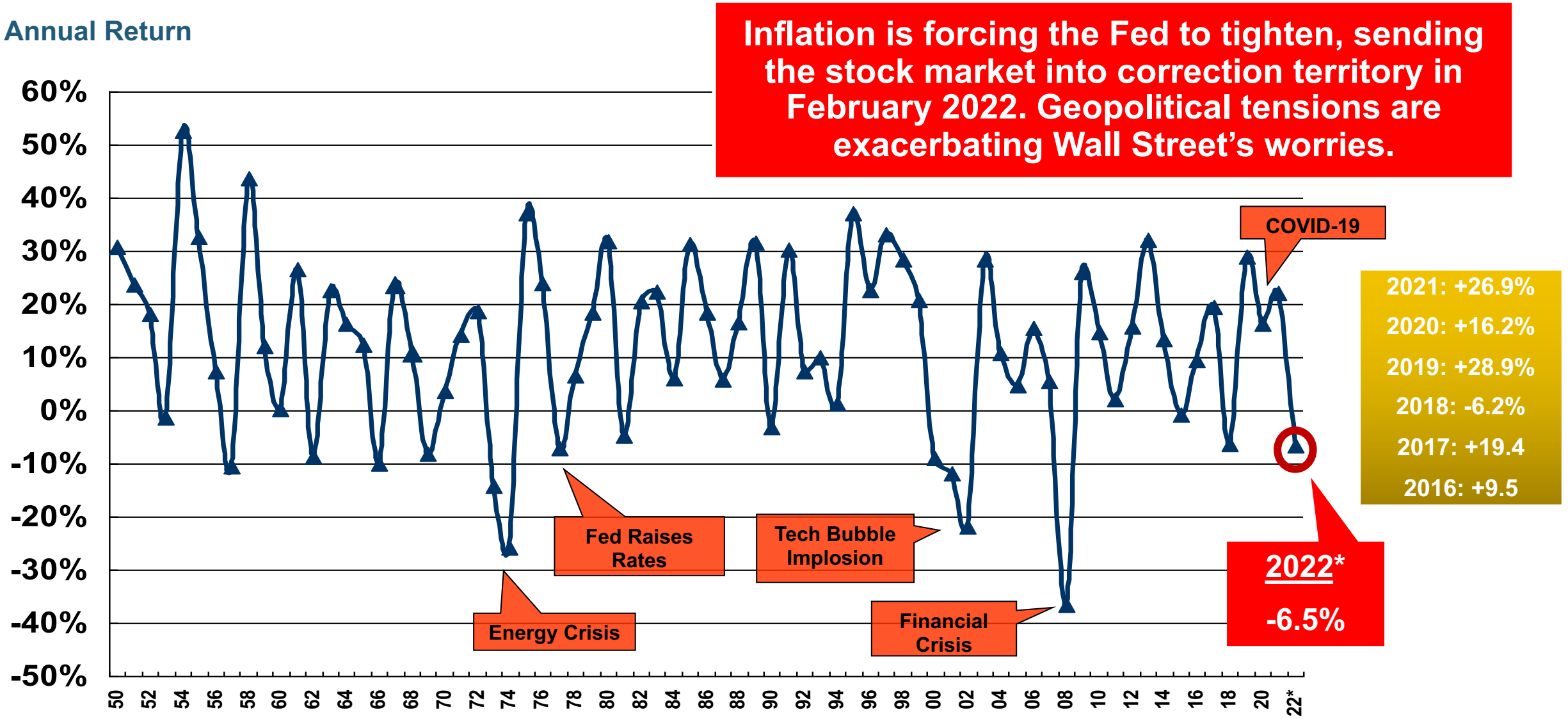
Investment yields in 2021 were depressed--down about 200 BP from pre-crisis (and 50-80BP from pre-COVID) levels. *Yields in 2021 were likely to lowest since at least 1960.*

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.

S&P 500 Index Returns, 1950–2022*



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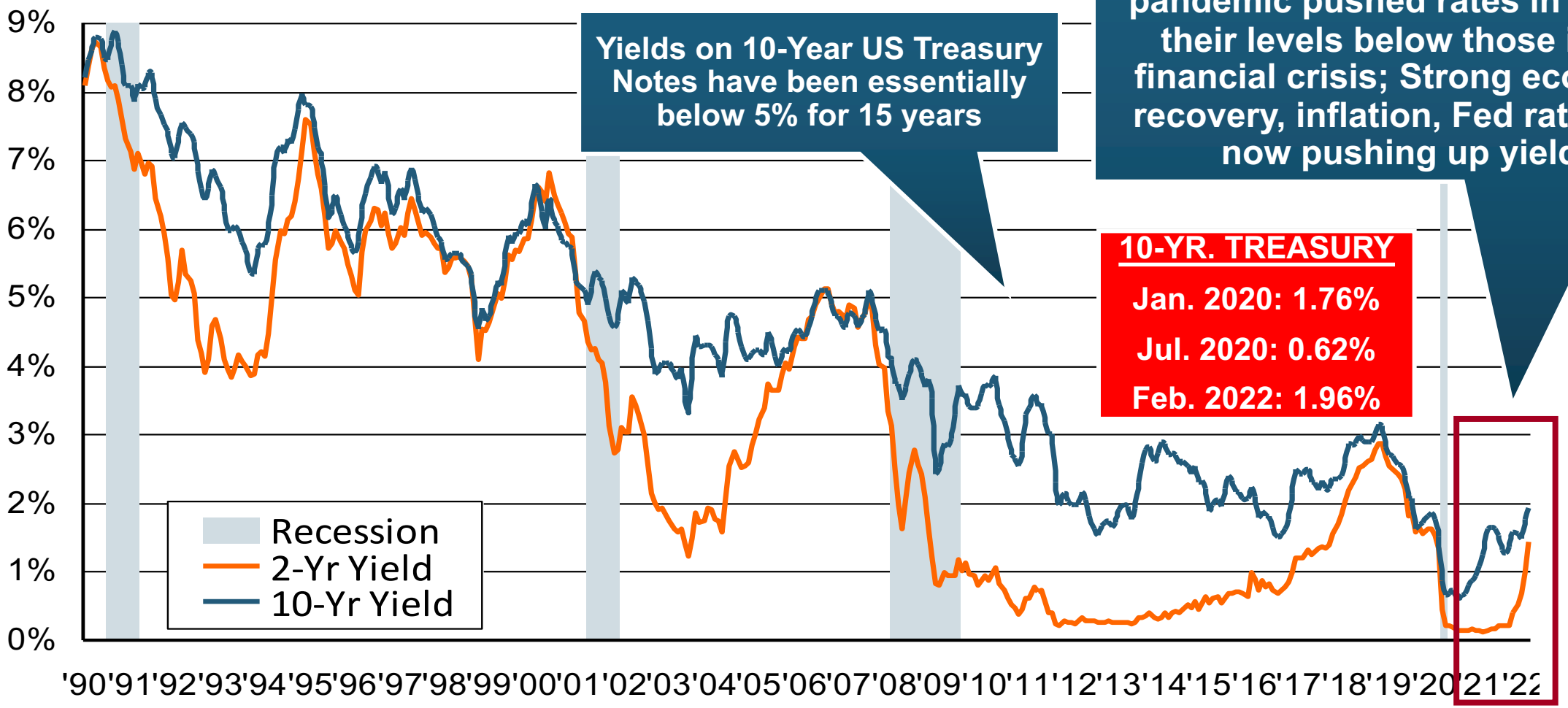
*Through Mar. 23, 2022.
Source: NYU Stern School of Business: http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html;
Center for Risk and Uncertainty Management, University of South Carolina.

US Treasury Security Yields: A Long Downward Trend, 1990–2022*

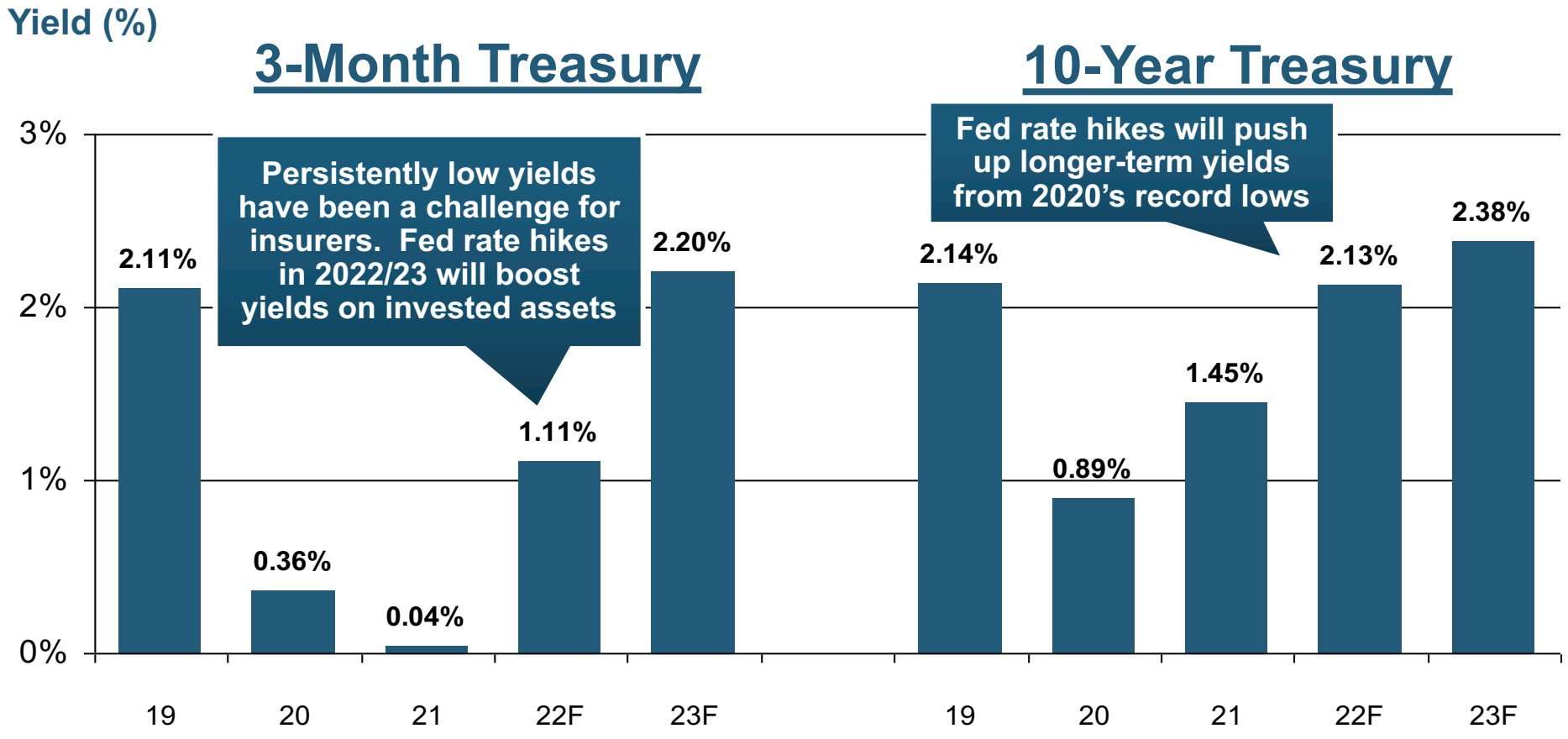


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, Fed rate hikes should over time provide a modest boost to P/C insurer portfolio yields

*Monthly, constant maturity, nominal rates, through Feb. 2022.

Sources: Federal Reserve Bank at http://www.federalreserve.gov/releases/h15/data.htm. National Bureau of Economic Research (recession dates); Risk and Uncertainty Management Center, University of South Carolina.

Interest Rate Forecasts: 2019 – 2023F



Rising interest rates will provide a modest tailwind for insurers as the Fed raises interest rates. This will be especially beneficial to longer-tailed lines such as Workers Comp.

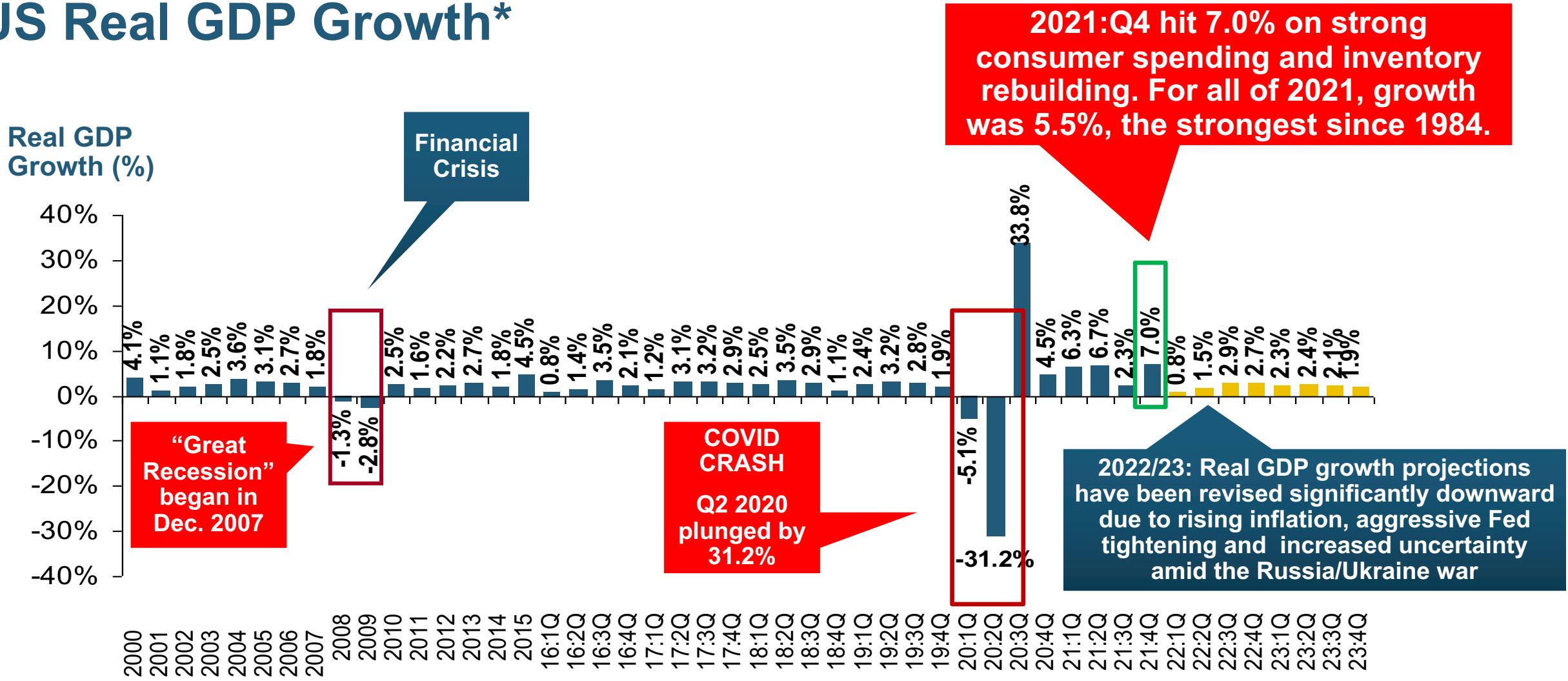
Sources: Wells Fargo Securities (3/22); Risk and Uncertainty Management Center, University of South Carolina.

The Economy

The Strength of the Economy Has Always Influenced Growth in Insurers' Exposure Base Across Most Lines—Including During the COVID-19 Pandemic

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

US Real GDP Growth*



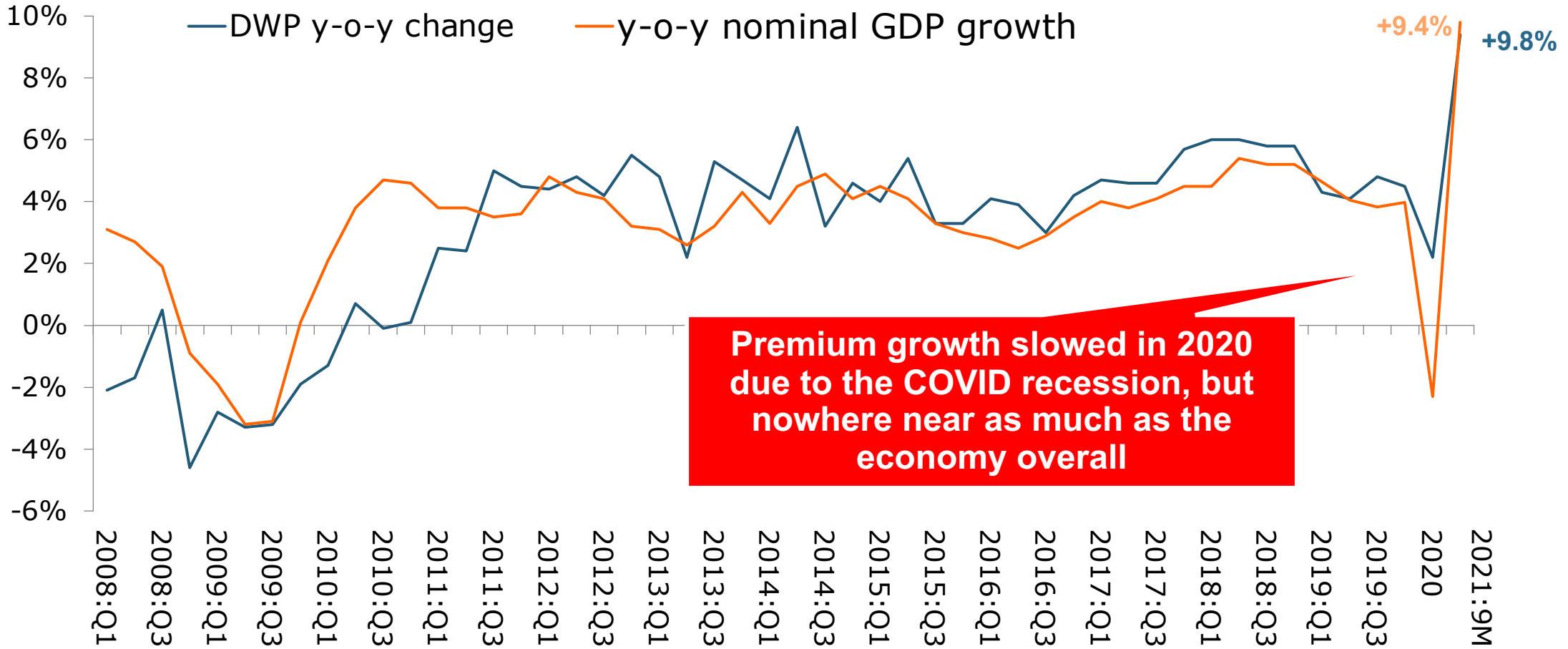
GDP Recovered to Q4 2019 Level in Q1 2021. Demand for Insurance Increasing Materially in 2021/22—Particularly in Economically Sensitive Commercial Lines Such as WC

* Estimates/Forecasts from Wells Fargo Securities.

Source: US Department of Commerce, Wells Fargo Securities 3/22; Center for Risk and Uncertainty Management, University of South Carolina.

The Economy Drives P/C Insurance Industry Premiums: 2006:Q1–2021:9M*

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



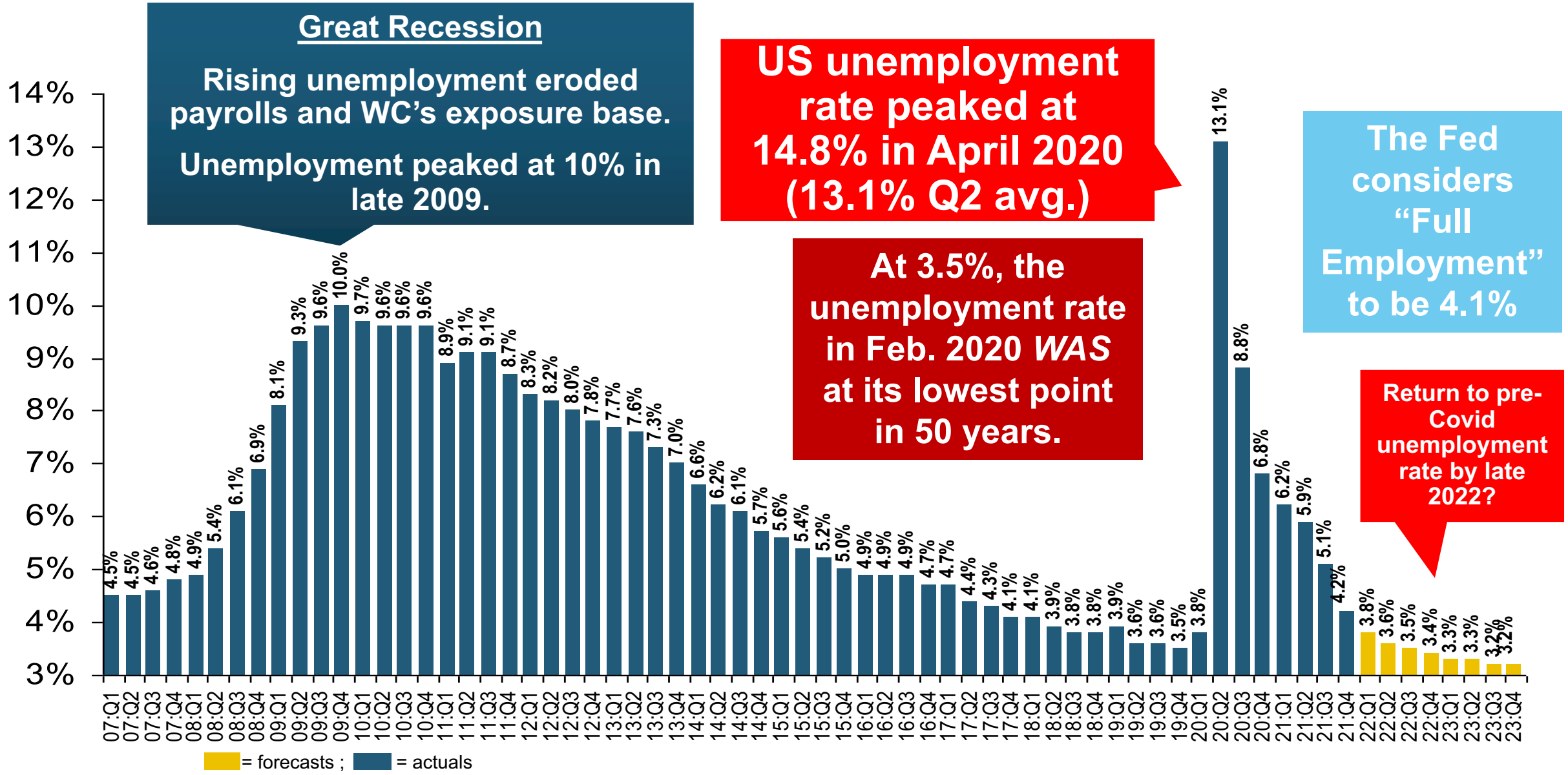
Premium growth slowed in 2020 due to the COVID recession, but nowhere near as much as the economy overall

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 figure is annual.

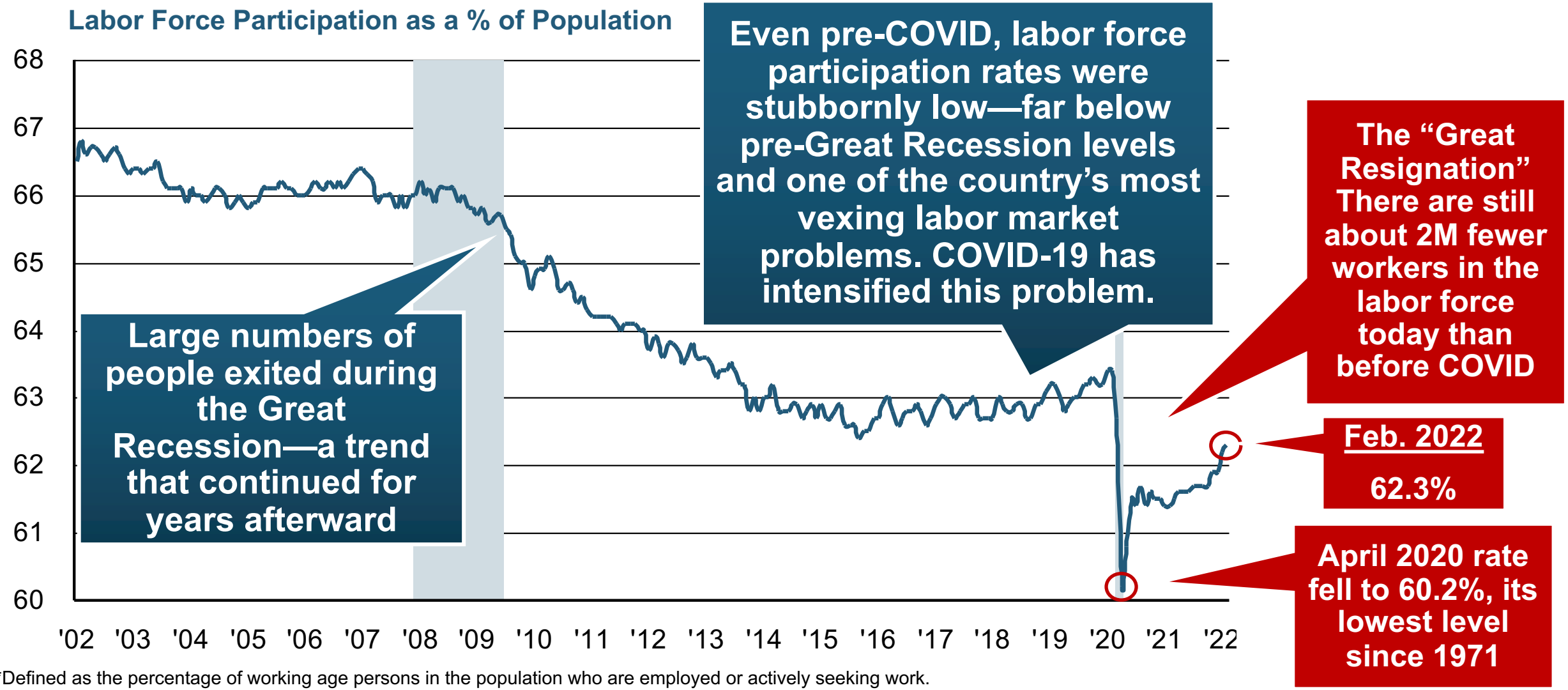
Sources: SNL Financial; U.S. Commerce Dept., Bureau of Economic Analysis; ISO; I.I.I.; Risk and Uncertainty Management Center, University of South Carolina.

US Unemployment Rate Forecast: 2007:Q1–2023:Q4



Sources: US Bureau of Labor Statistics; Wells Fargo Securities (3/22 edition); Risk and Uncertainty Management Center, University of South Carolina.

Labor Force Participation Rate, Jan. 2002–Feb. 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.

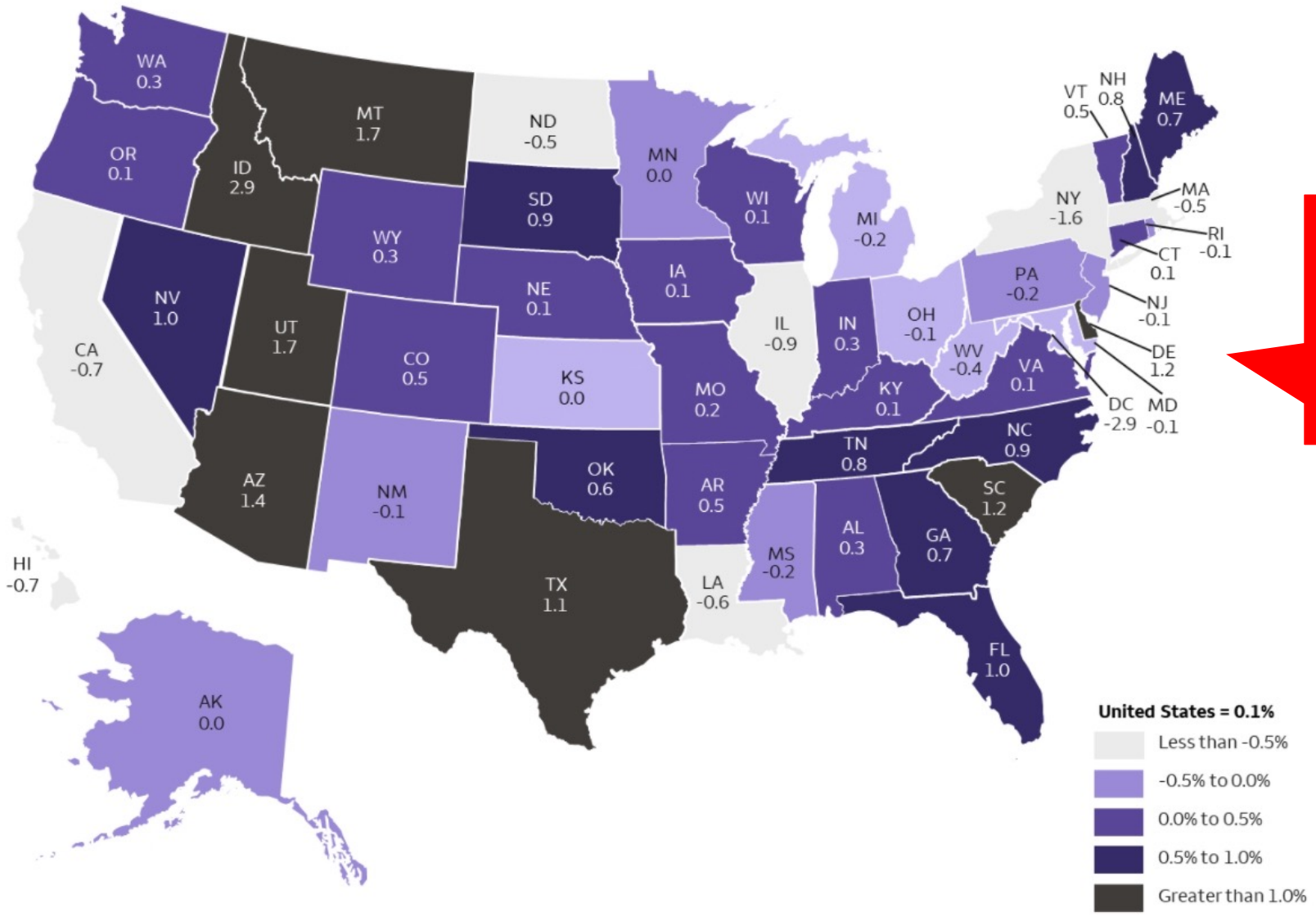
Population Change by State, July 2020–July 2021 (U.S.: 0.1%)

Top 5

ID	2.9%
MT	1.7%
UT	1.7%
AZ	1.4%
SC	1.2%

Bottom 5

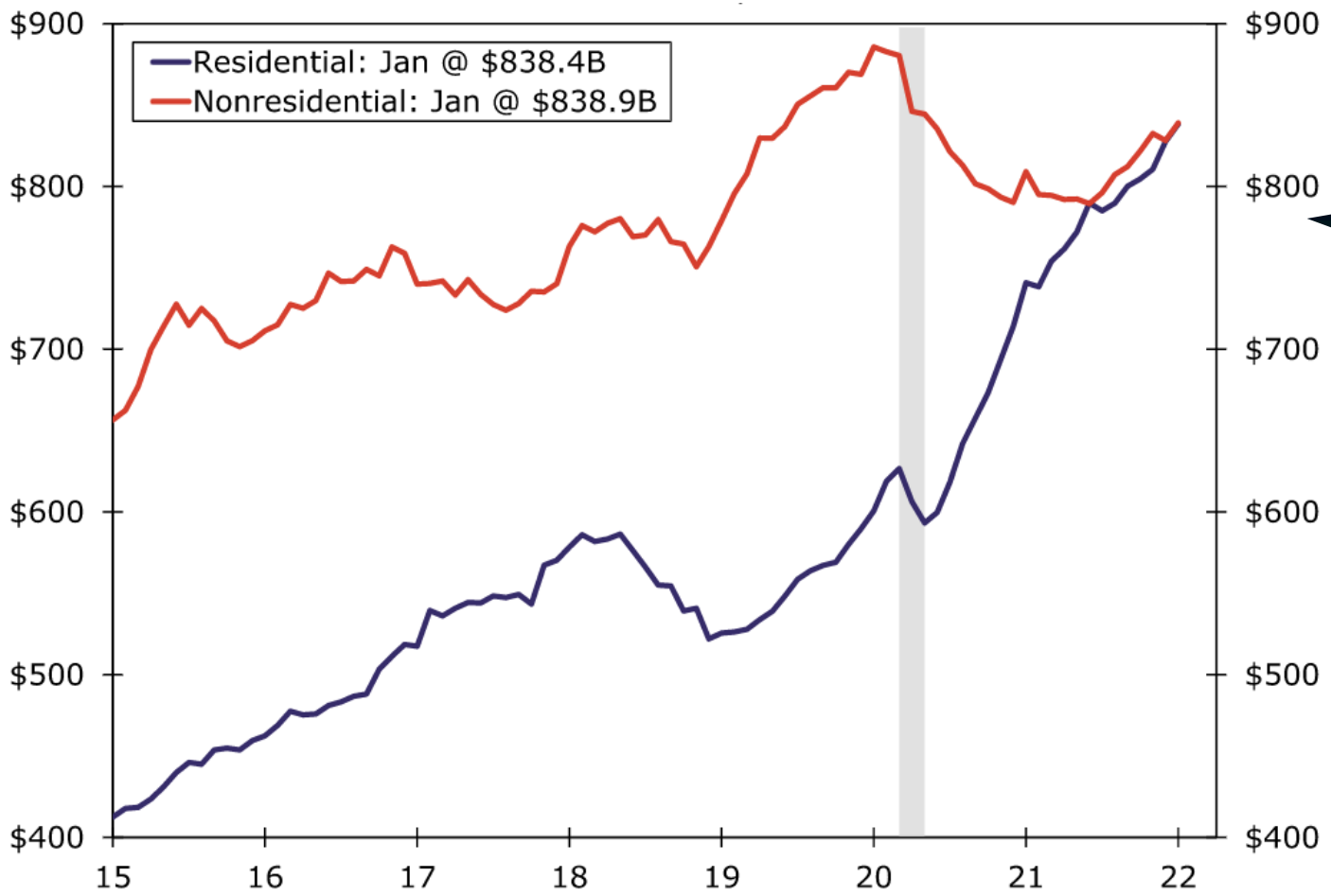
NY	-1.6%
IL	-0.9%
CA	-0.7%
HI	-0.7%
LA	-0.6%



Population growth is a driver of growth insurance demand and insurable exposure. Demographic trends in the Northeast are generally weak

Source: U.S. Census Bureau, Dec. 2021 estimates, www.census.gov/popest; Wells Fargo Securities; Risk an Uncertainty Management Center, University of South Carolina.

Private Residential Construction, Jan. 2003 – Jan. 2022*
($ Billions, Seasonally Adjusted Annual Rate)



The value of Residential Construction has skyrockted during the pandemic and is up ~30% from its pre-COVID peak.

Nonresidential Construction is down about 7% relative to pre-COVID levels

*Latest available.

Sources: US Department of Commerce; Wells Fargo Securities (3/22); Risk and Uncertainty Management Center, University of South Carolina.

INFLATION

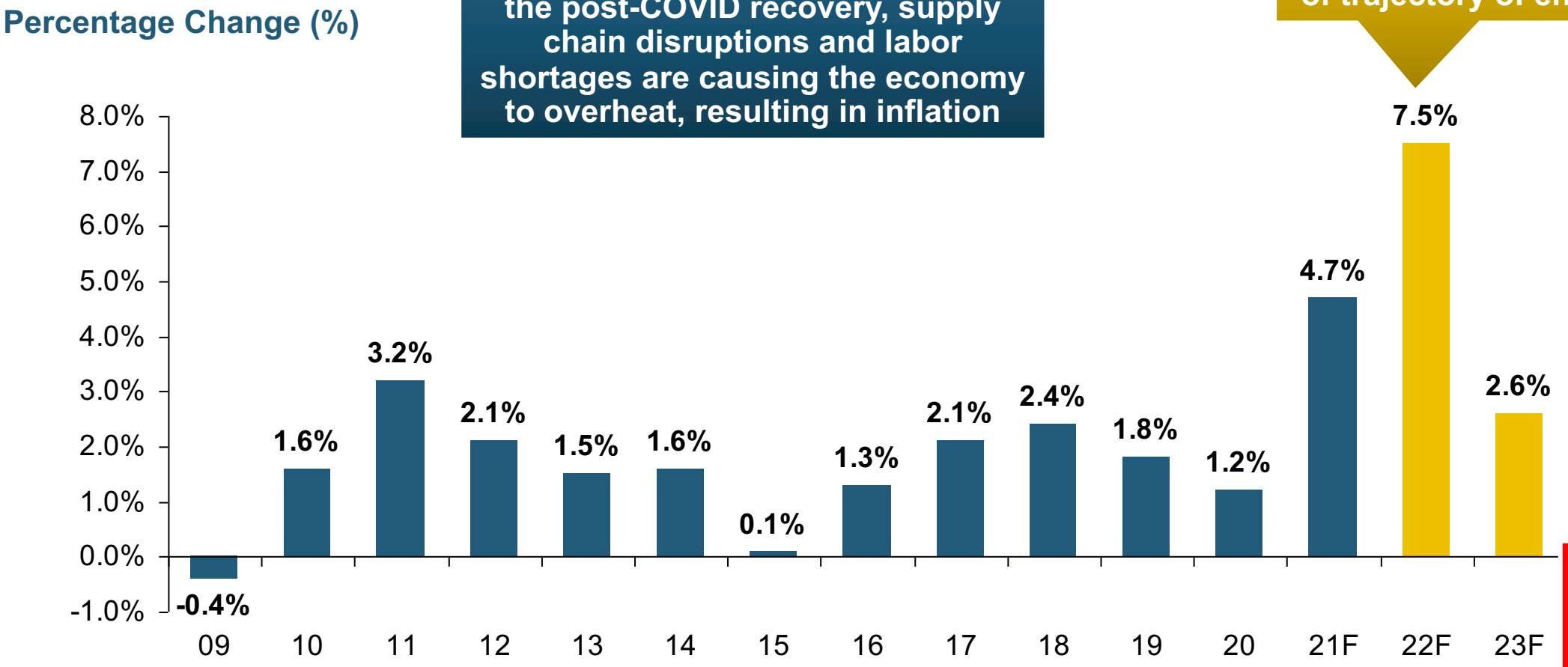
Claim Inflation Is Here Today

Rate and Reserve Adequacy Are Concerns if Current Inflationary Trends Persist

U.S. Inflation Rate: 2009-2023F*

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

Inflation accelerated sharply in 2021 and early 2022. Inflation is now not expected to moderate until Q2 2022; Forecast is highly dependent of trajectory of energy prices



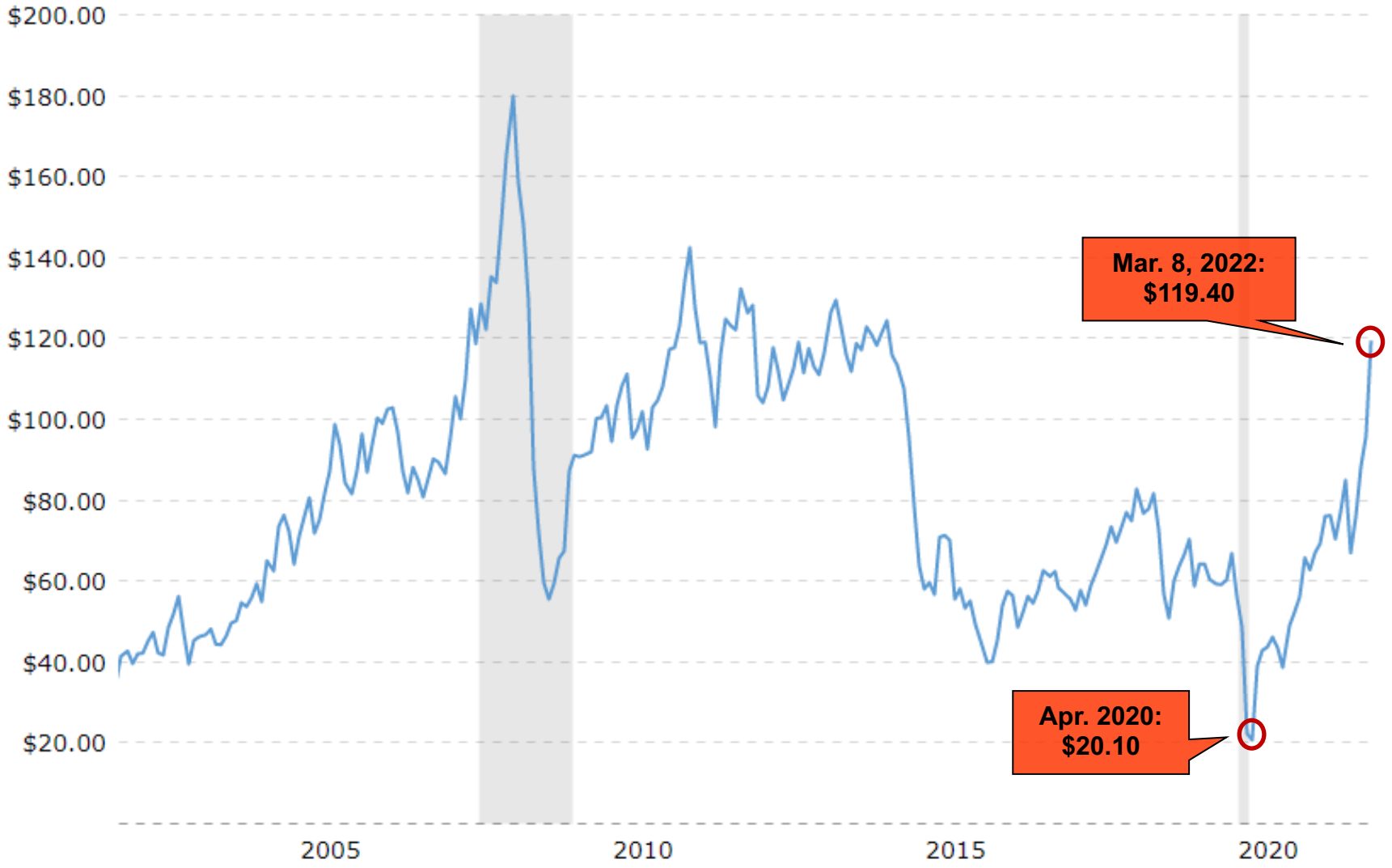
Insurer Concerns About Inflation

- Rate Inadequacy
- Reserve Inadequacy

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

Source: U.S. Bureau of Labor Statistics; Wells Fargo Securities (3/22); USC Center for Risk and Uncertainty Management.

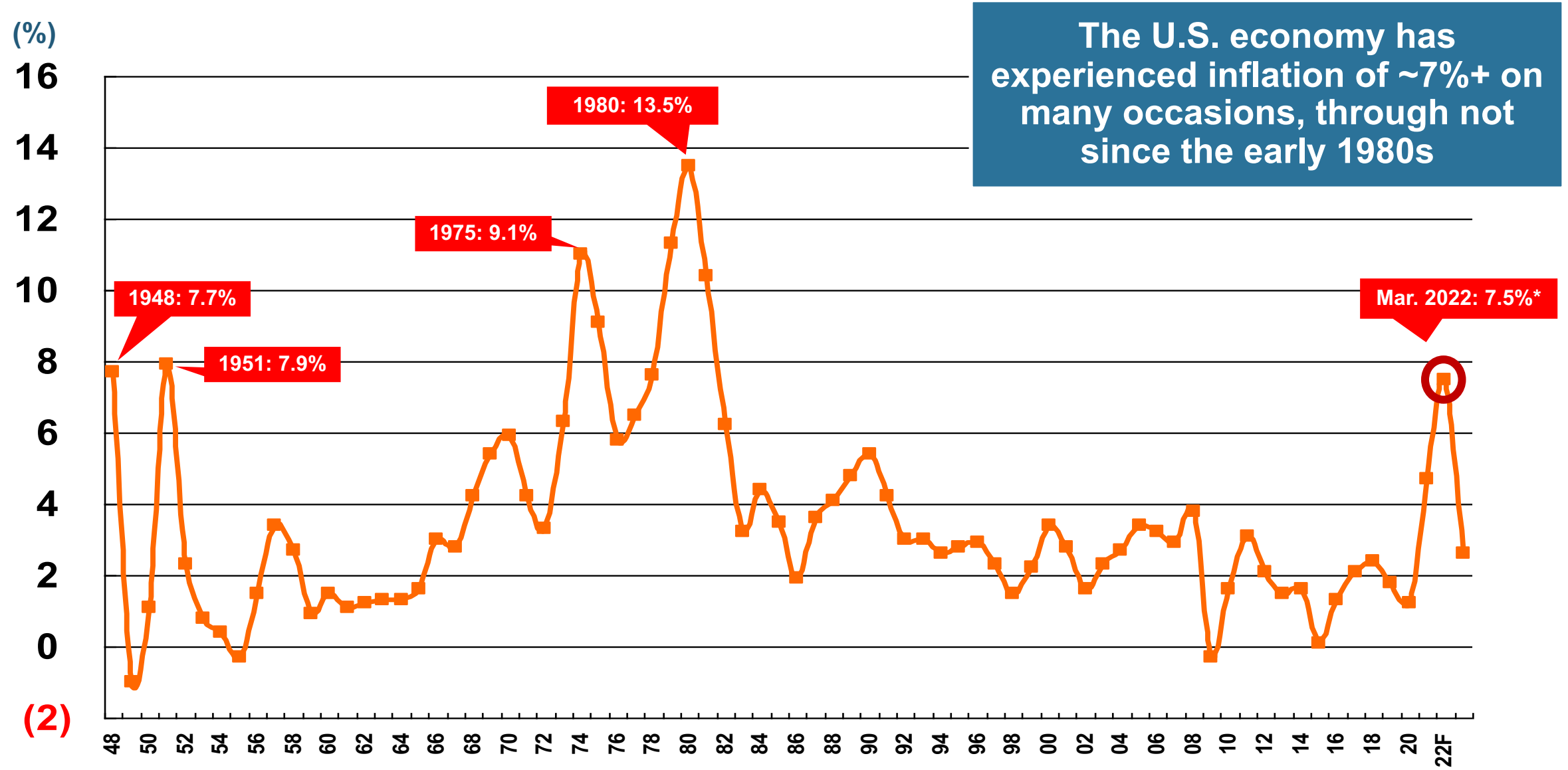
Crude Oil Prices: Price per Barrel, Mar. 2002 – Mar. 2022 (Inflation Adjusted)



Crude above $100/bbl—more than quadruple its pandemic low—causing market panic and fueling inflation fears. The Russian invasion of Ukraine, US ban of Russian oil is exacerbating oil price pressures.

Sources: Macrotrends.net accessed 3/8/22 at: https://www.macrotrends.net/1369/crude-oil-price-history-chart; Risk and Uncertainty Management Center, University of South Carolina.

Rate of Inflation (CPI-U), 1948–2023F*



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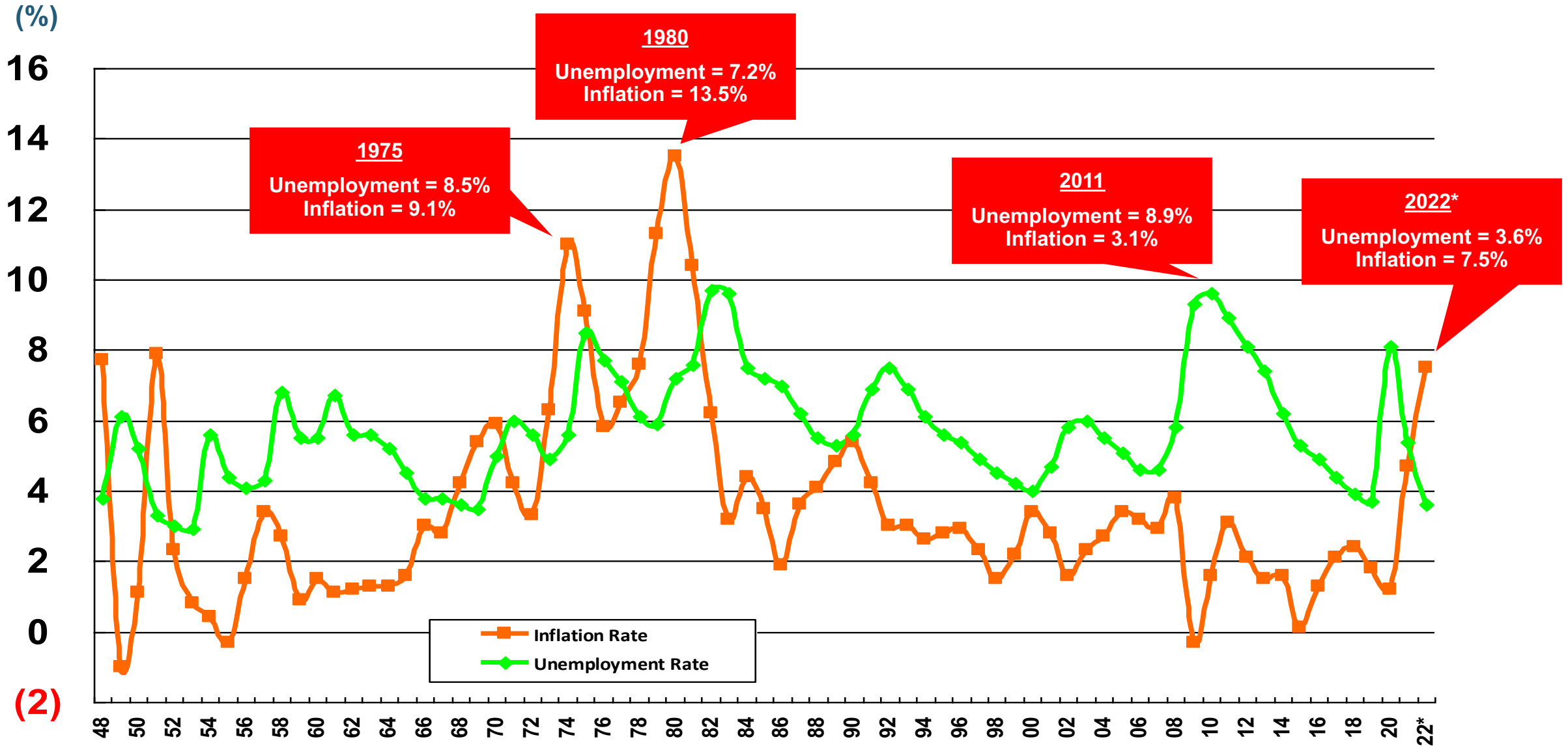
*2022/23 forecast are from (Wells Fargo Securities, Mar. 2022 forecast).
Source: U.S. Bureau of Labor Statistics; Center for Risk and Uncertainty Management, University of South Carolina.

Inflation and Unemployment Rate, 1948–2022*



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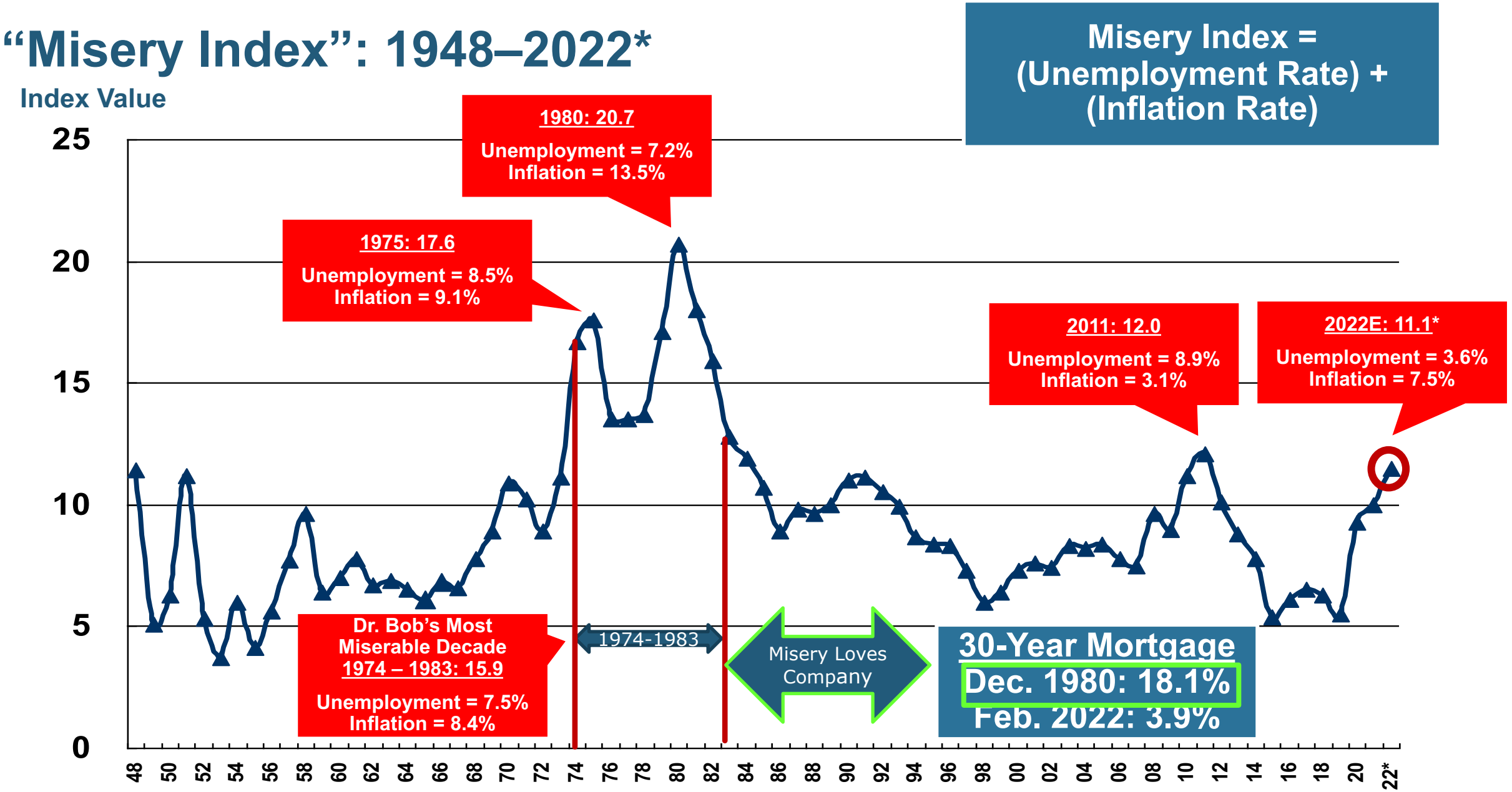
*2022 estimates based on Wells Fargo Securities forecasts (3/22).
Source: U.S. Bureau of Labor Statistics; Center for Risk and Uncertainty Management, University of South Carolina.

“Misery Index”: 1948–2022*



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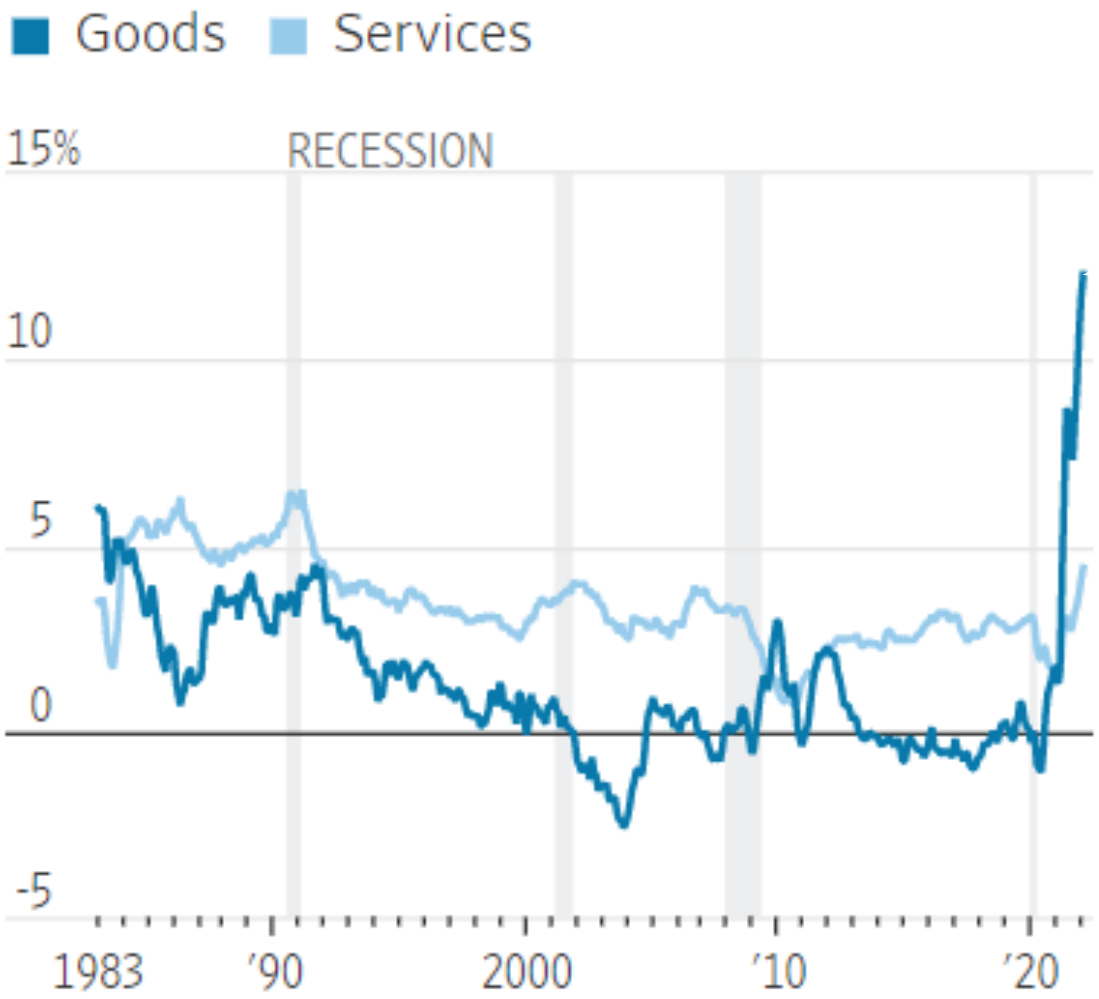
*Estimated based on Wells Fargo Securities forecasts as 3/22.
Source: U.S. Bureau of Labor Statistics; Center for Risk and Uncertainty Management, University of South Carolina.

Inflation: Goods vs Services, 1983:Q1 – 2022:Q1
(Y-o-Y Percent Change)



Goods: 12.3%

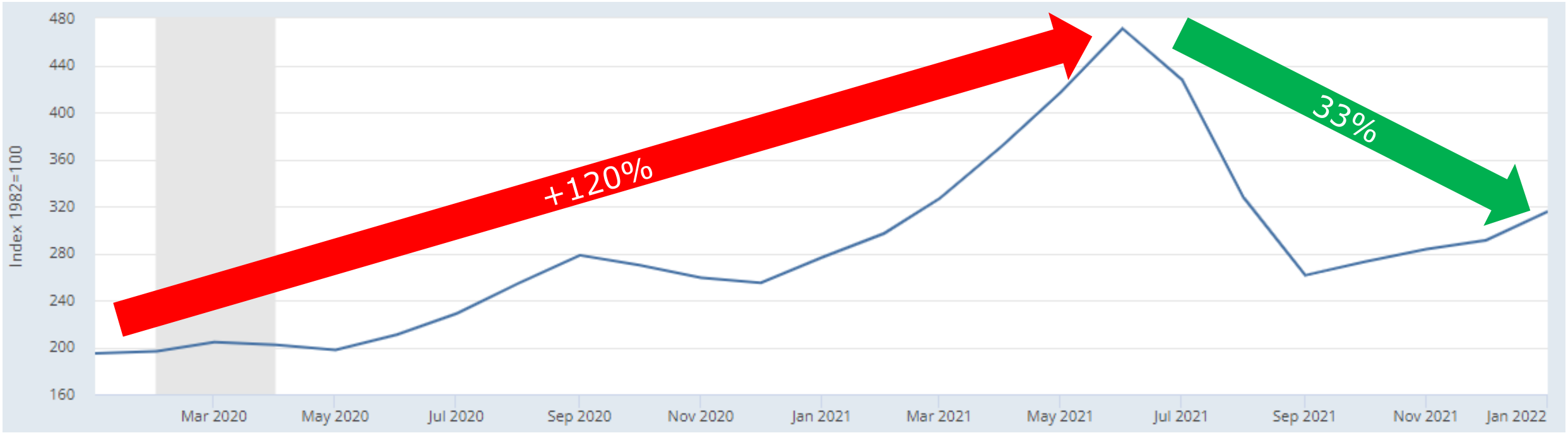
Services: 4.4%

Goods inflation is dominant, but inflation in the service sector (including medical services will follow)

Source: Wall Street Journal (3/15/22) from U.S. Bureau of Labor Statistics, accessed at: https://www.wsj.com/articles/ukraine-war-oil-gas-prices-inflation-federal-reserve-11647268257; USC Center for Risk and Uncertainty Management.

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

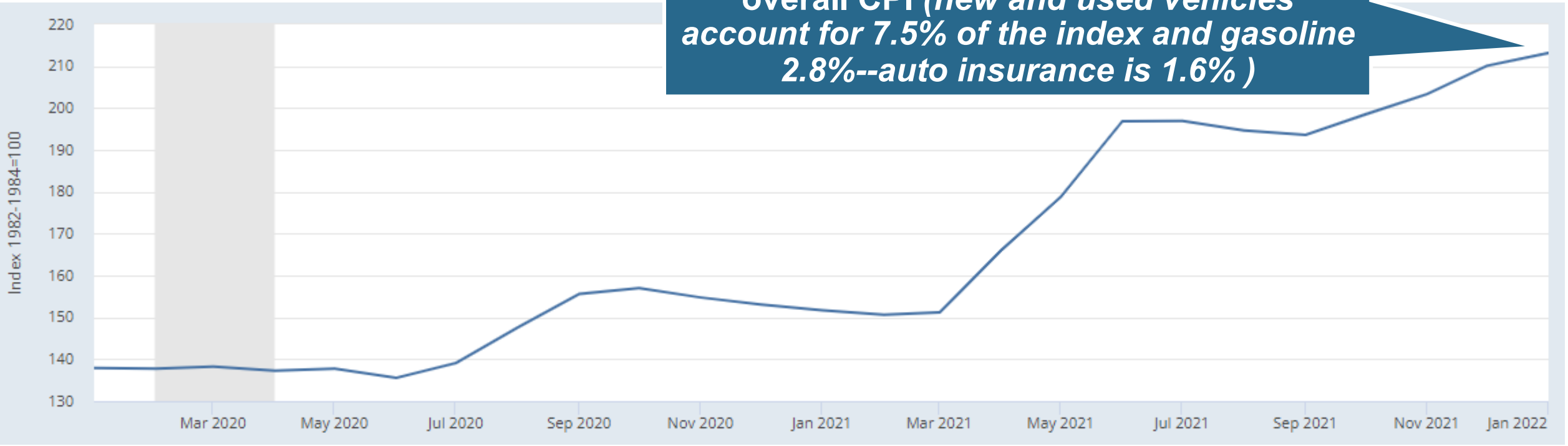
Lumber & Wood Product prices surged during the pandemic, peaking in mid-2021 and remain 62% above pre-COVID levels



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

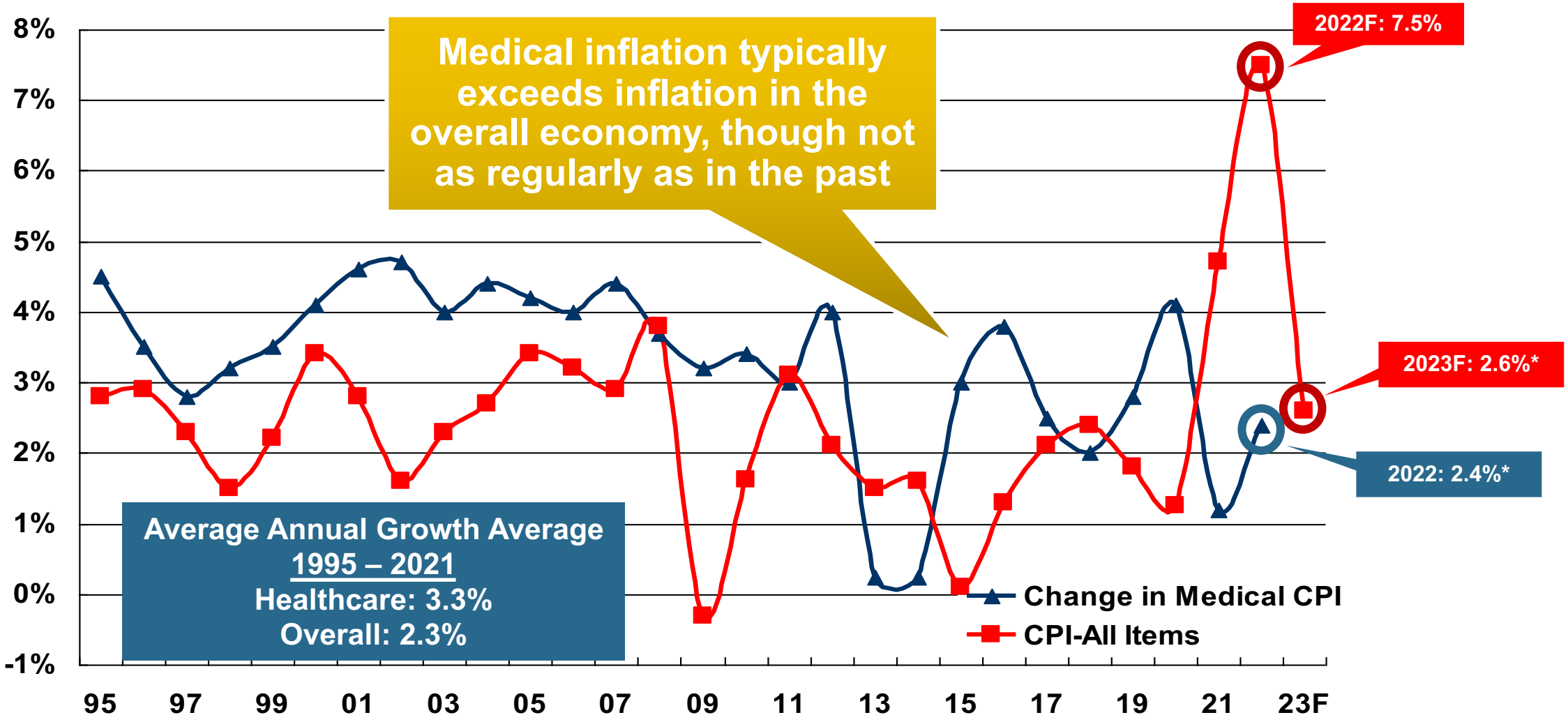
Price Index Changes for Used Cars & Trucks, Jan. 2020 – Jan. 2022

New and Used Vehicle prices have surged during the pandemic, +54.6% since Jan. 2020—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%)*



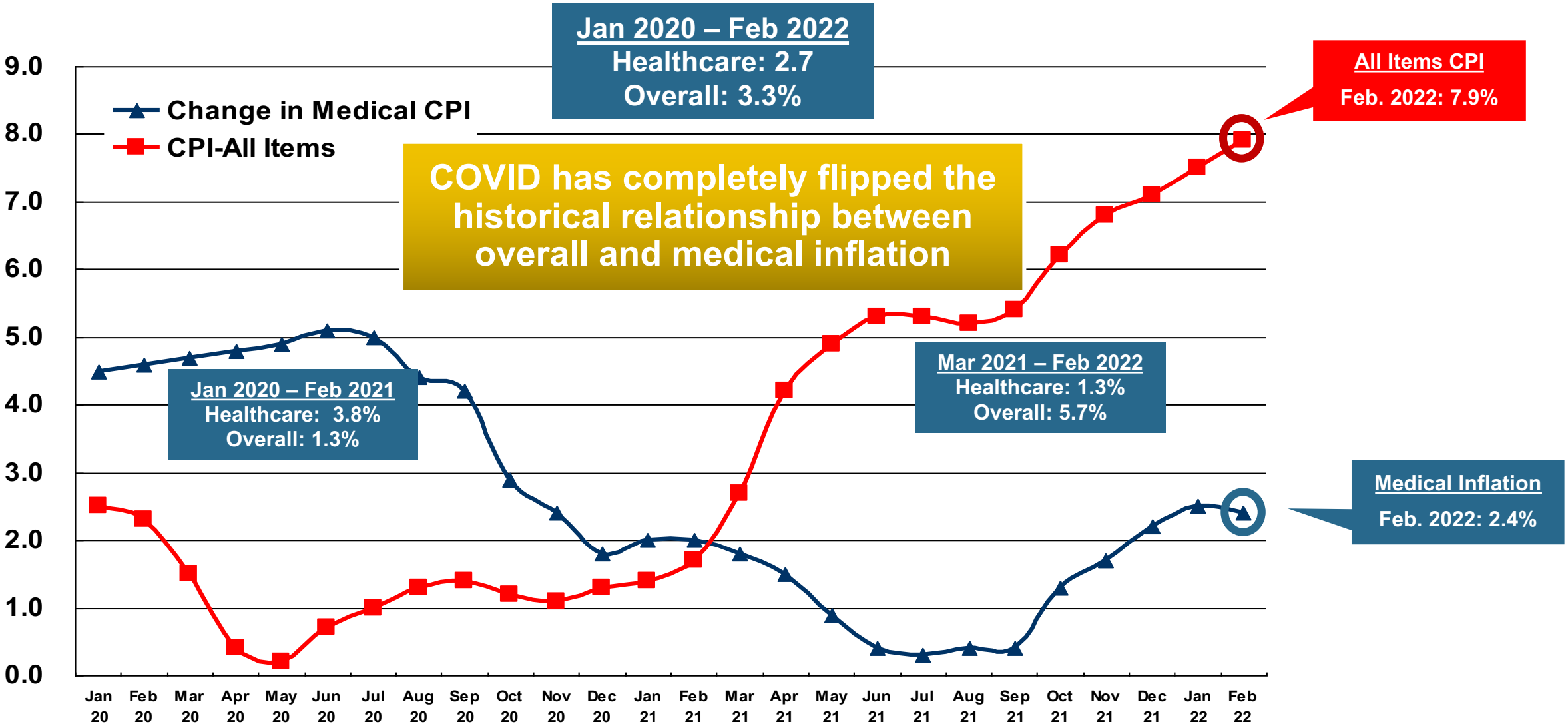
Sources: US Bureau of Labor Statistics; Risk and Uncertainty Management Center, University of South Carolina.

Medical Cost Inflation vs. Overall CPI, 1995–2023F



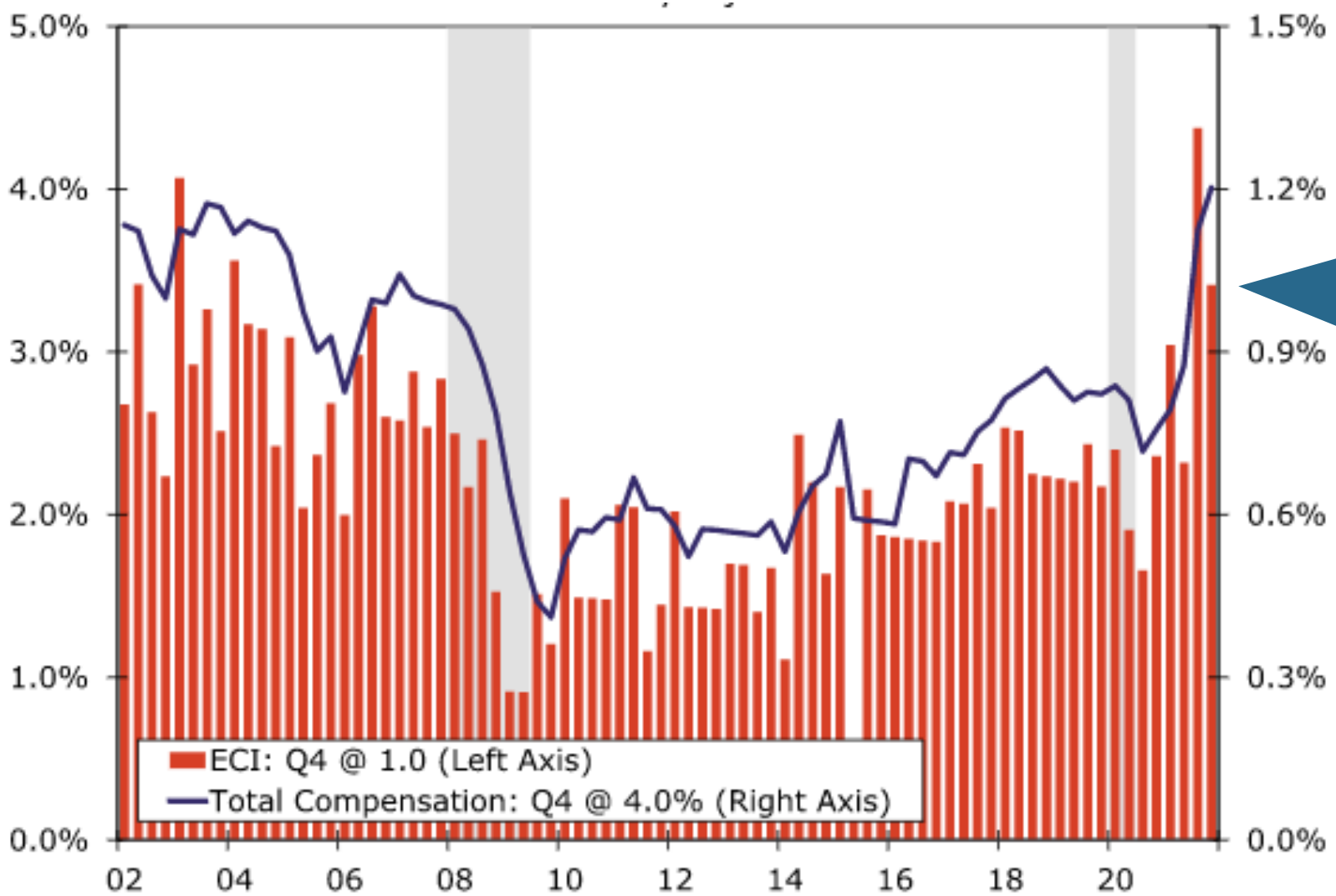
*2022 figure for Medical Cost Inflation is percentage change Feb. 2022 vs. Feb. 2021.
Sources: US Bureau of Labor Statistics; Wells Fargo Securities (2022F/23 for CPI-All Items); Risk and Uncertainty Management Center, University of South Carolina.

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



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

Employment Cost Index—All Workers
2002:Q1 – 2021:Q4



The ECI was up 1% in Q4:2021 (down from 1.3% in Q3) and up 4% for all of 2021, the highest 1-year gain based on data going back to 2002. Collectively, the data yet don't suggest a "wage-price spiral"

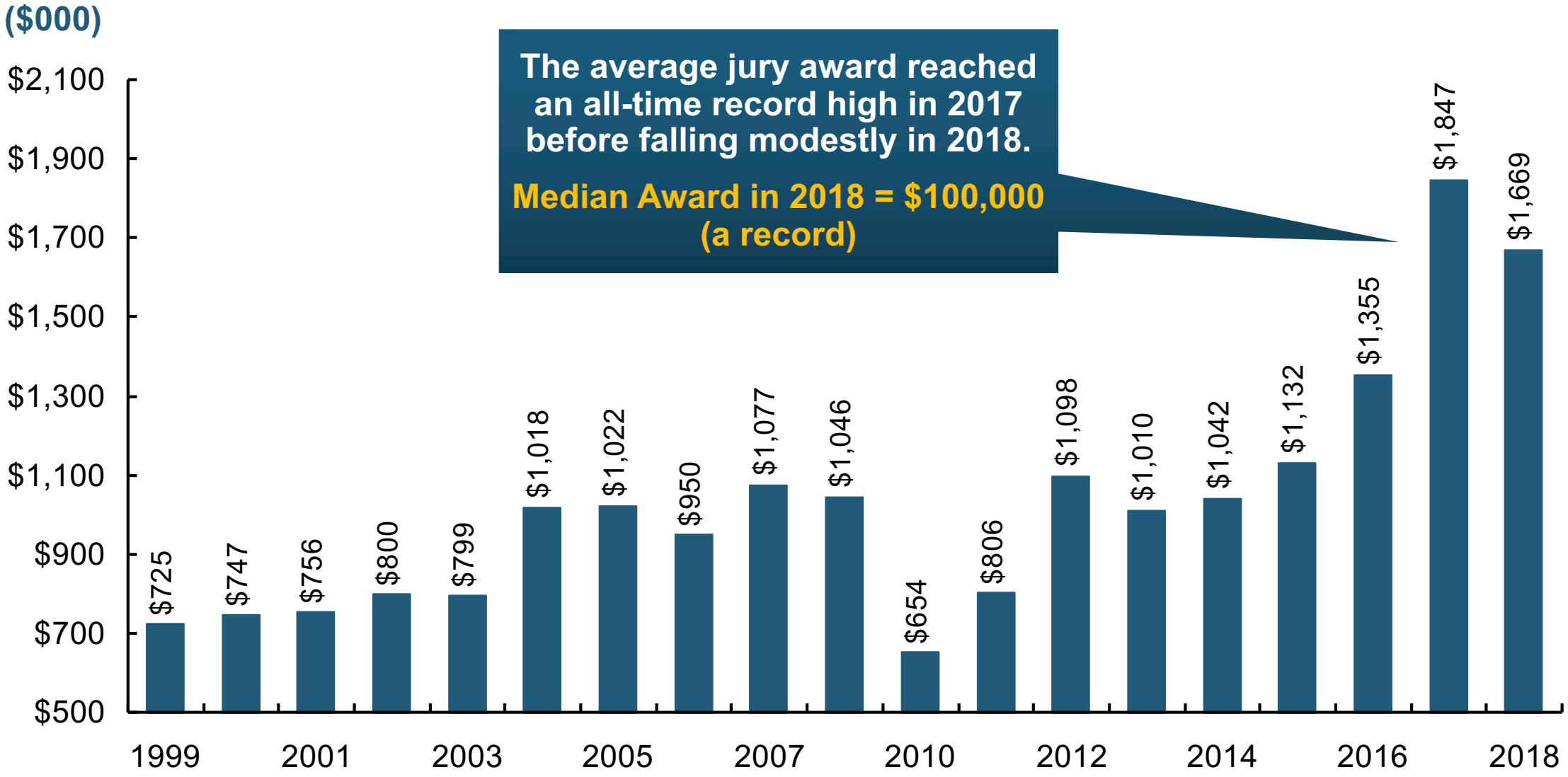
Sources: US Dept. of Labor; Risk and Uncertainty Management Center, University of South Carolina.

Social Inflation & Litigation Trends

Tort Pressures Are Rising

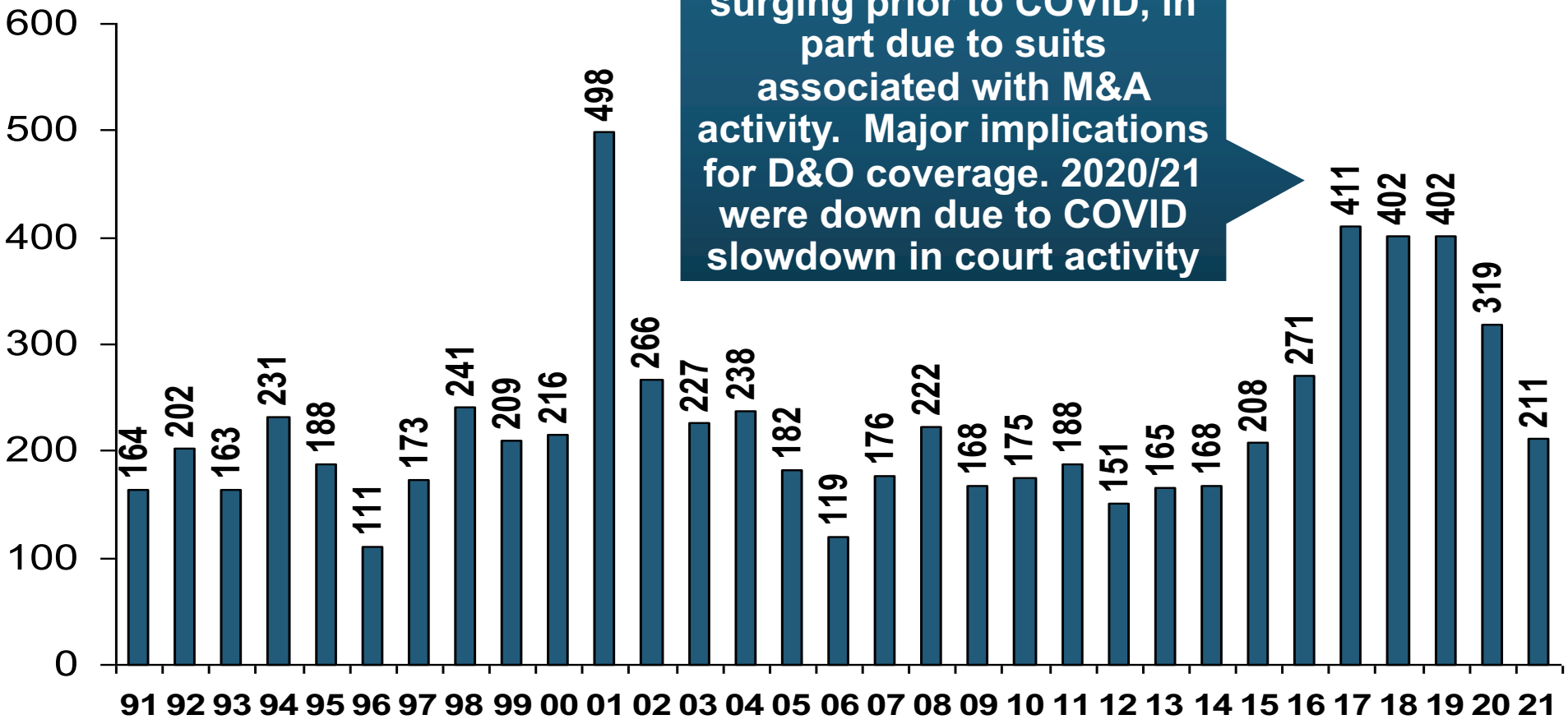
46

Average Jury Awards, 1999 – 2018 (latest available)



Source: Jury Verdict Research; *Current Award Trends in Personal Injury* (59th Edition), Thomson Reuters; Risk and Uncertainty Management Center, Univ. of South Carolina.

Shareholder Class Action Lawsuits

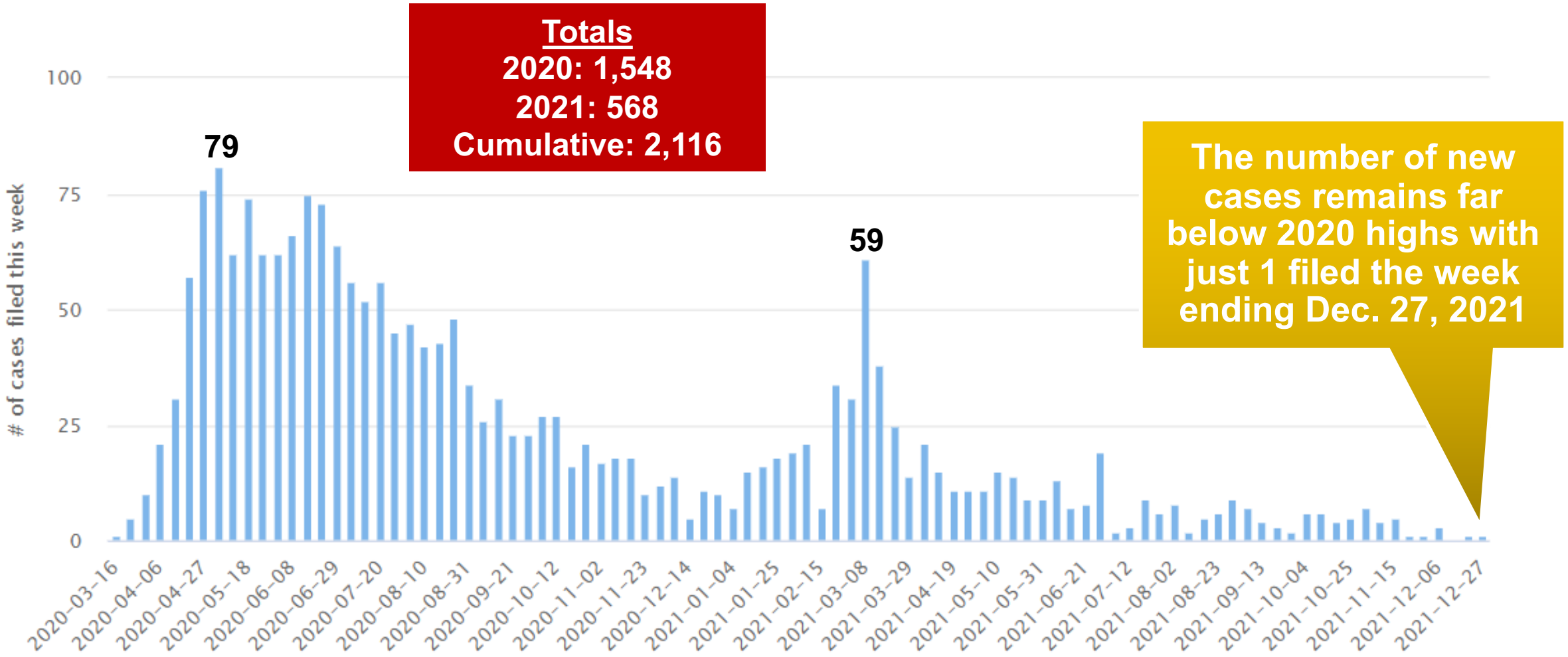


Top Trends in SCA Filings

- SPACs
- Cryptocurrency Litigation
- COVID-19
- Cannabis
- Data Breach
- Opioid Crisis

Source: Stanford University School of Law (securities.stanford.edu); Risk and Uncertainty Management Center, Univ. of South Carolina.

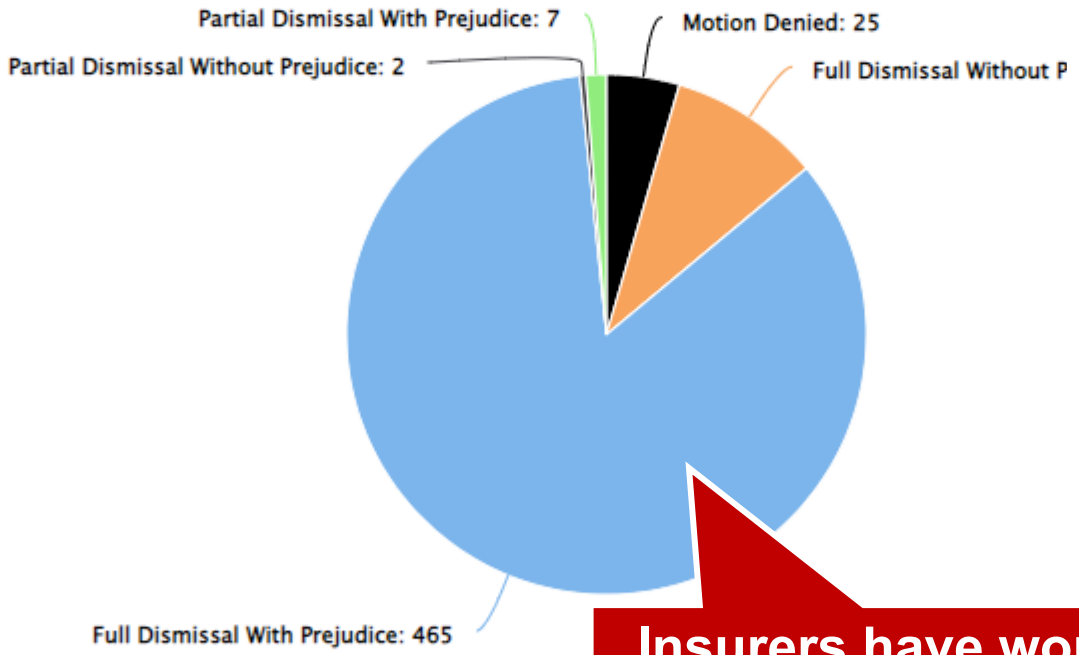
Weekly Number of COVID-Related Lawsuits Filed:
(Weeks Ending Mar. 16, 2020 to Dec. 27, 2021) [Latest Available]



Source: Covid Coverage Litigation Tracker, University of Pennsylvania School of Law. Accessed 2/22/22 at: https://cclt.law.upenn.edu

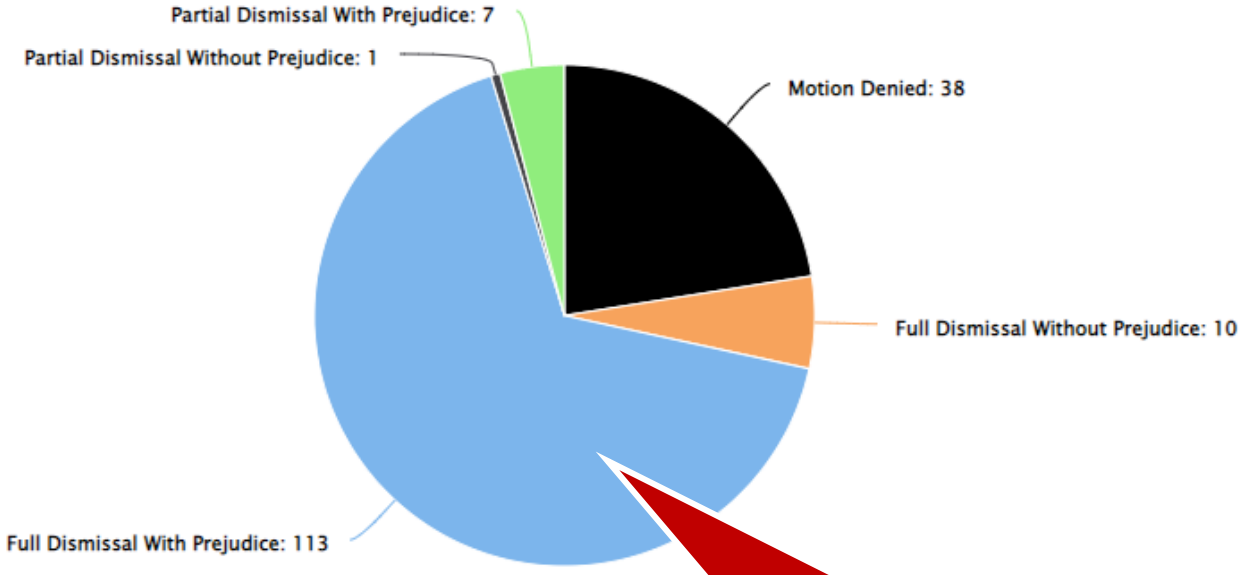
COVID Litigation: Merits Rulings on Motions to Dismiss: Federal vs. State Courts *(Total through Dec. 27, 2021) [Latest Available]*

Federal Courts



Insurers have won full dismissals in 95% of federal court cases involving Covid

State Courts



Insurers have won full dismissals in 78% of state court cases involving Covid

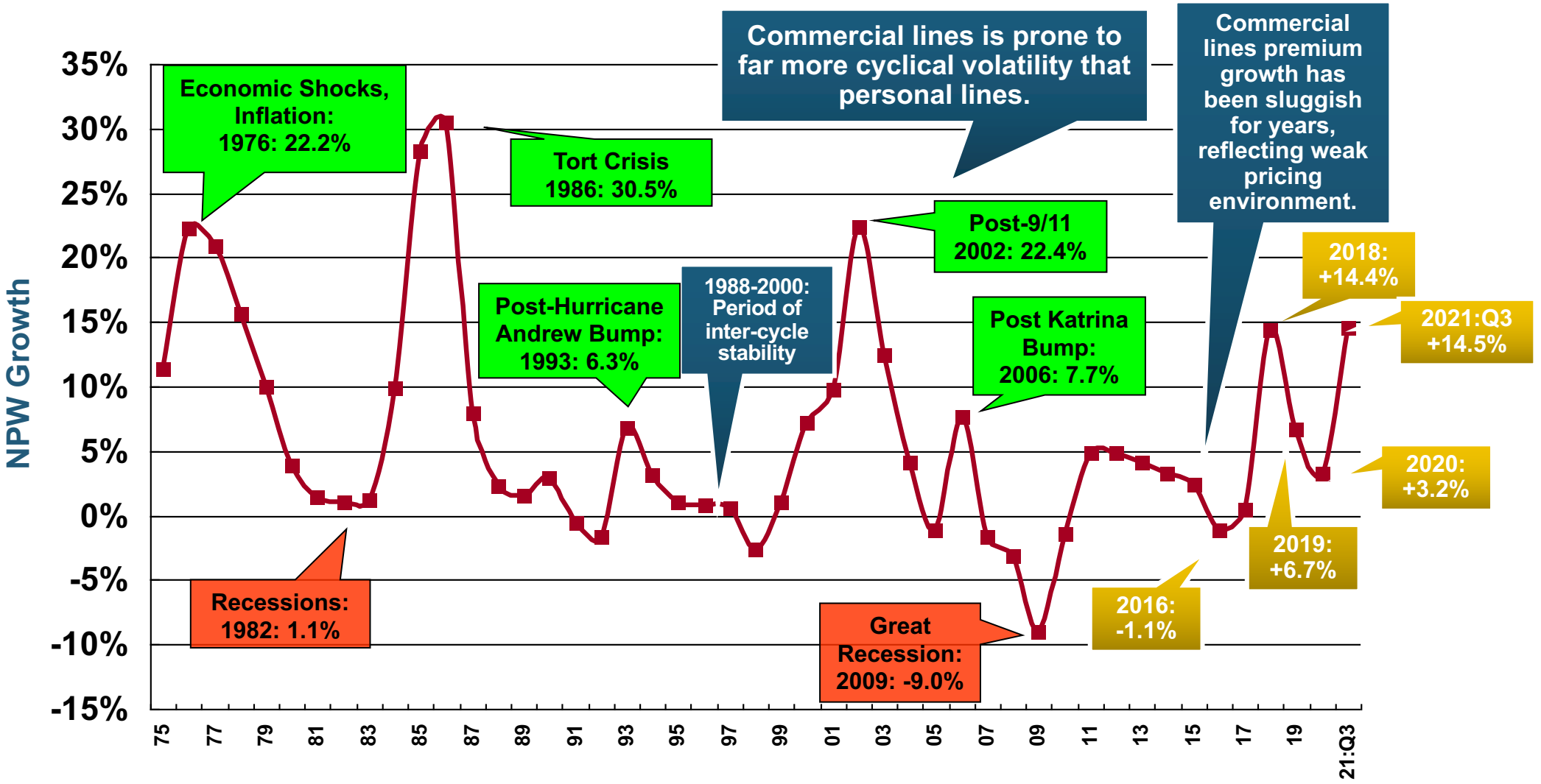
Source: Covid Coverage Litigation Tracker, University of Pennsylvania School of Law. Accessed 2/22/22 at: https://cclt.law.upenn.edu

Commercial Lines Growth, Underwriting Performance & Pricing Cyclicality

Pricing Pressures Remain

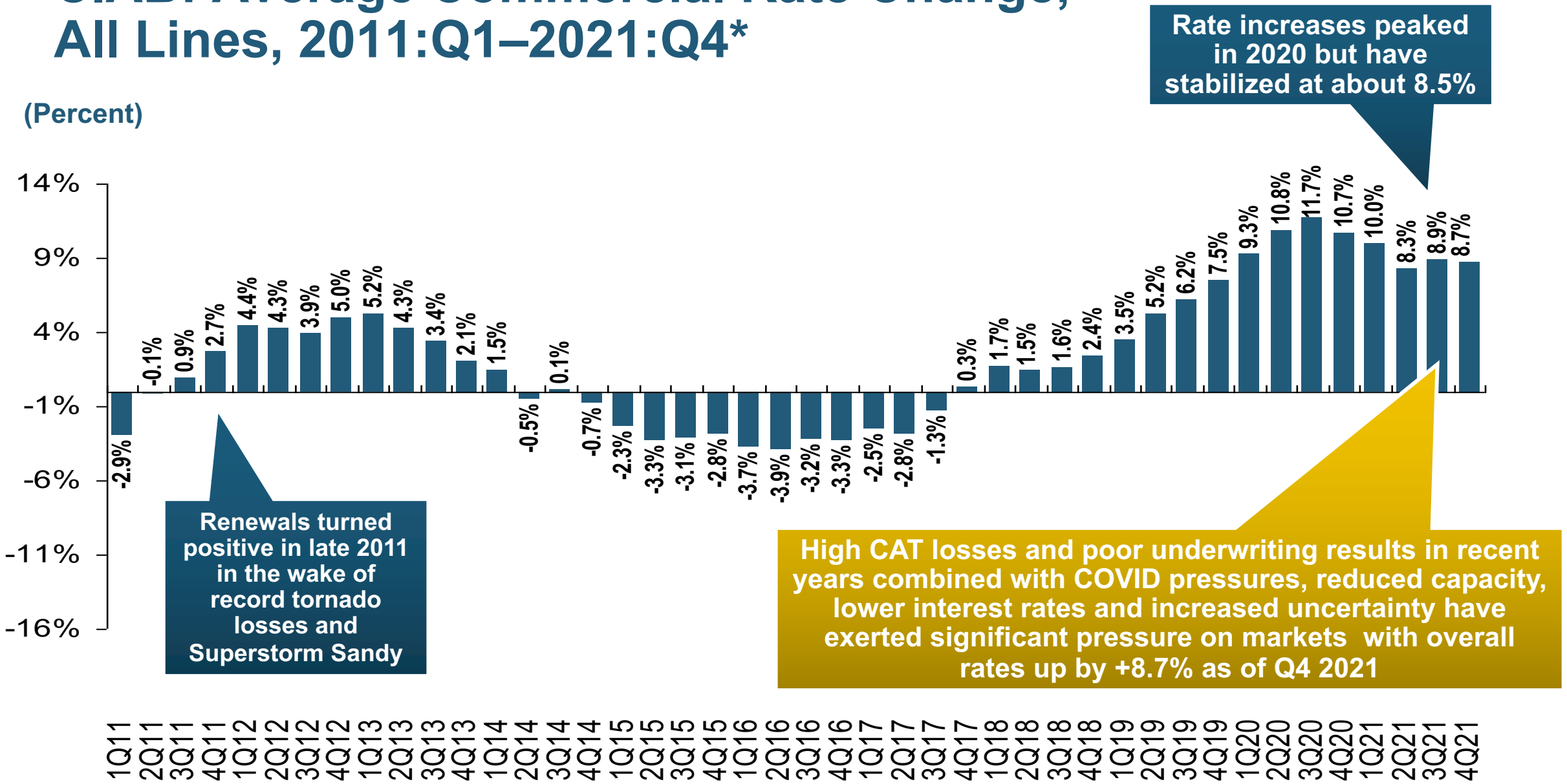
51

Commercial Lines NPW Premium Growth: 1975 – 2021:Q3



Note: Data include state funds beginning in 1998.
Source: A.M. Best; ISO; APCIA; Univ. of South Carolina Center for Risk and Uncertainty Management Center.

CIAB: Average Commercial Rate Change, All Lines, 2011:Q1–2021:Q4*

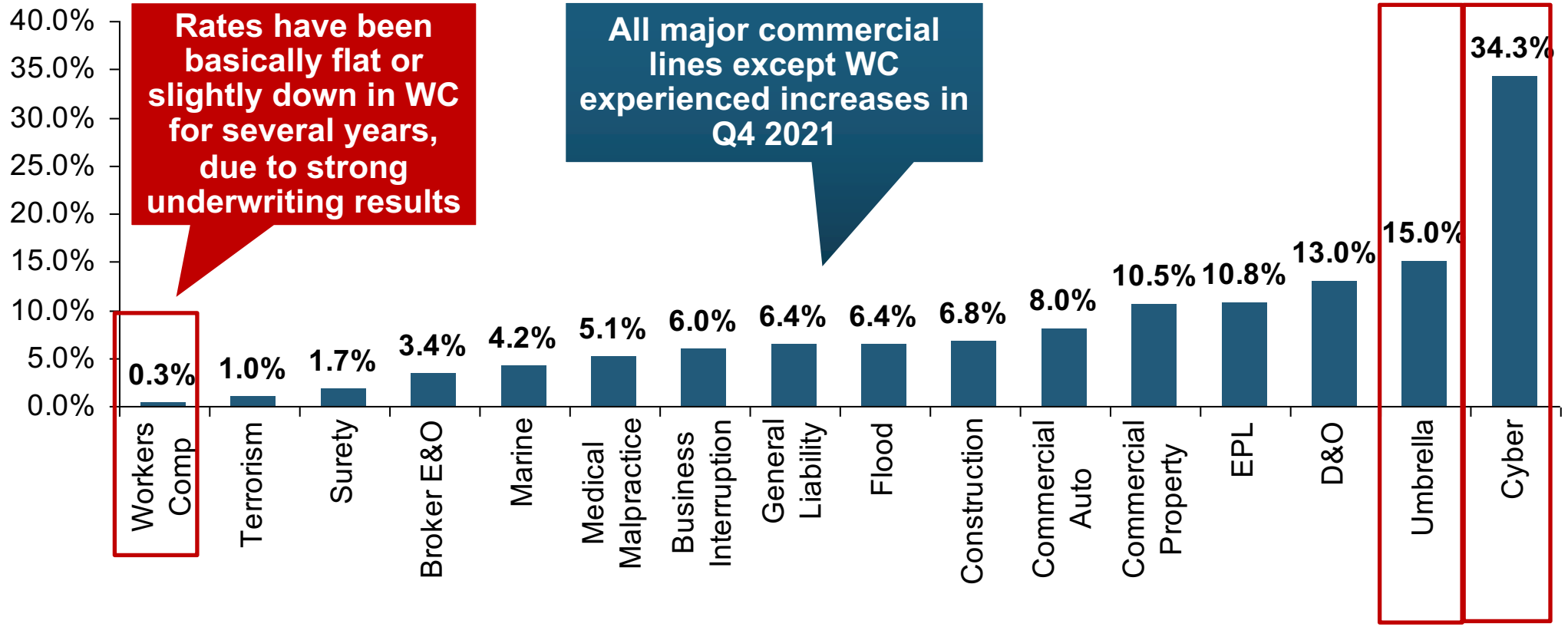


*Latest available.
Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.
Source: Council of Insurance Agents & Brokers; Center for Risk and Uncertainty Management, Univ. of South Carolina.

Change in Commercial Rate Renewals, by Line: 2021:Q4

Cyber is seeing record increase, in response to major breaches in 2020 and 2021, overtaking Commercial Umbrella

(Percent Change)



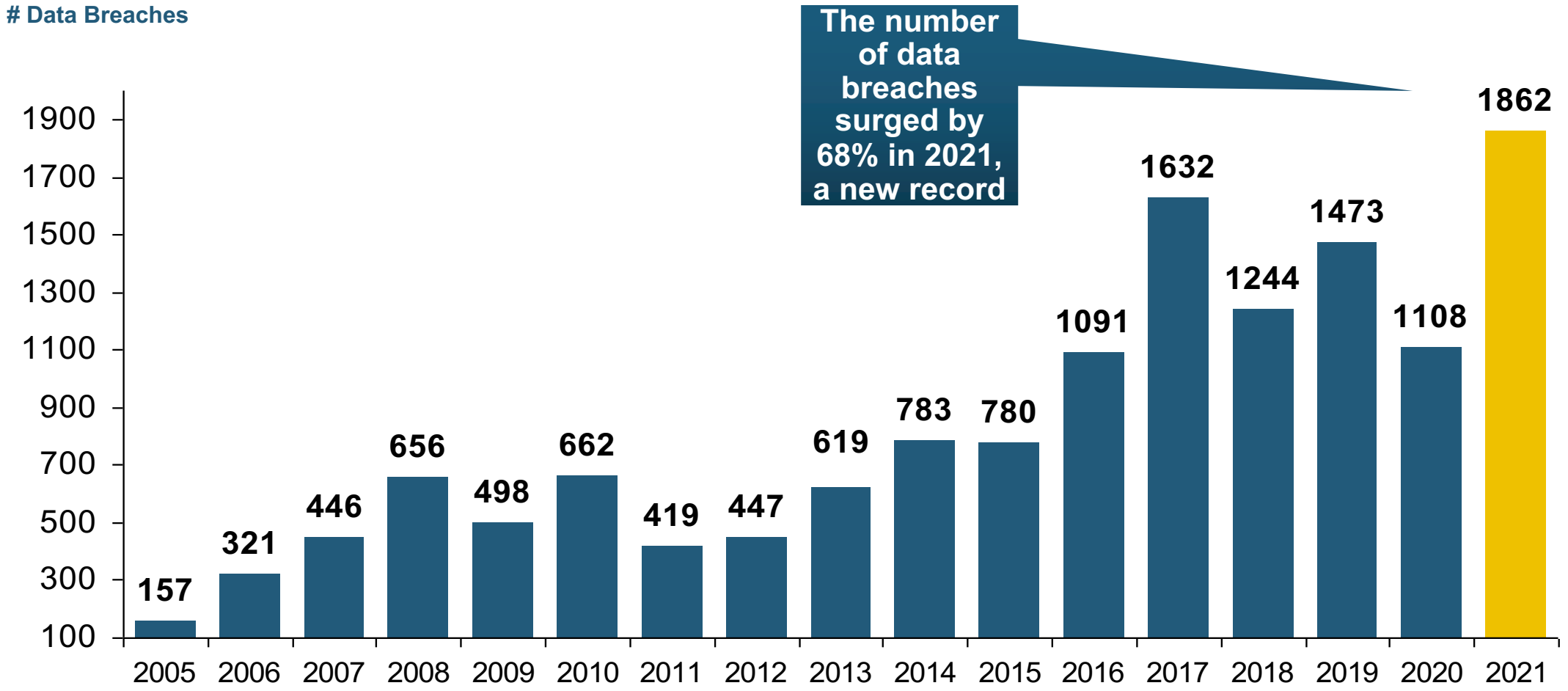
Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.

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

Technology Risks

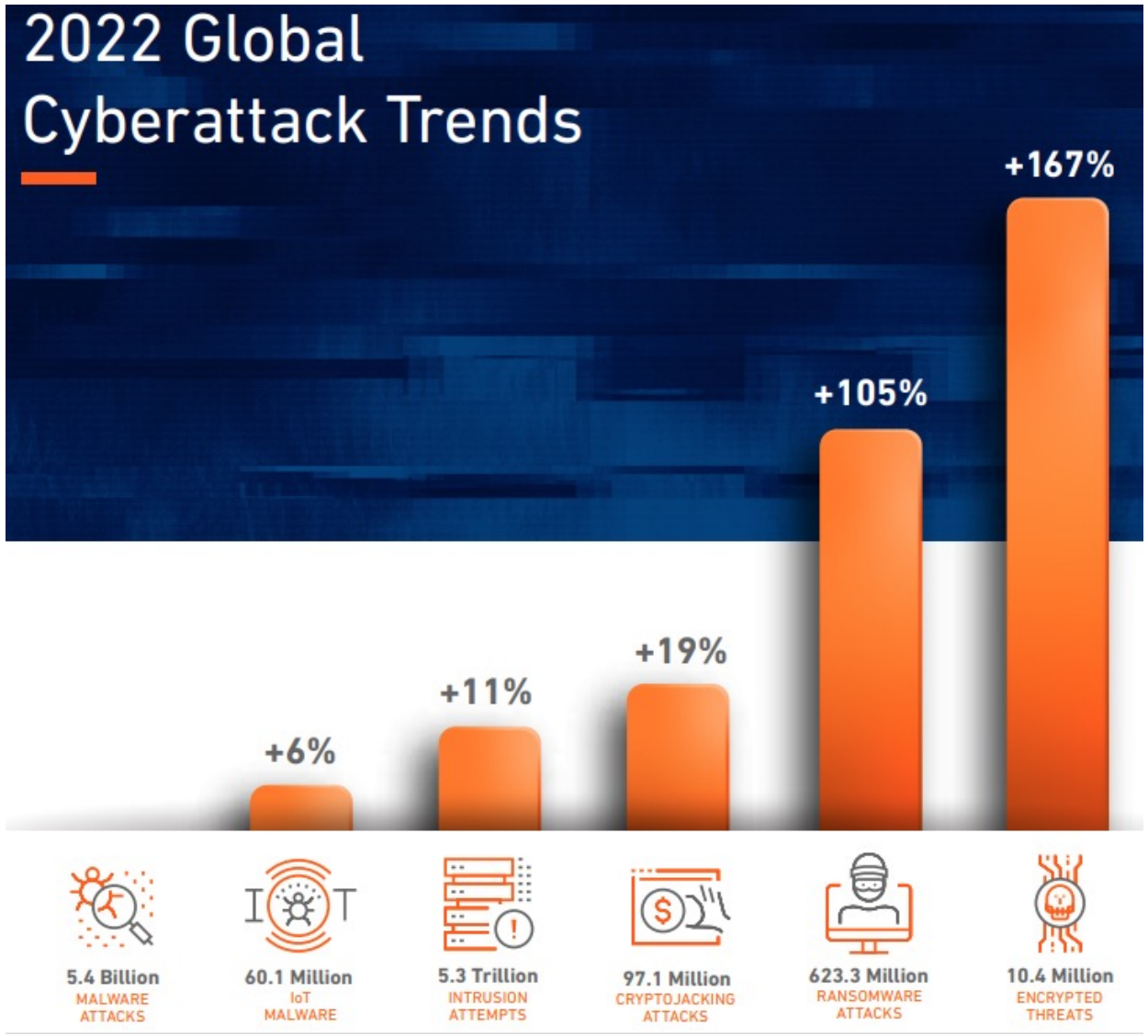
Large Increase in Attacks Leading to an Overdue Hardening of the Cyber Insurance Market

Data Breaches 2005-2021, by Number of Breaches (Compromises)



Source: Identity Theft Resource Center, accessed at: https://www.idtheftcenter.org/post/identity-theft-resource-center-2021-annual-data-breach-report-sets-new-record-for-number-of-compromises/ .

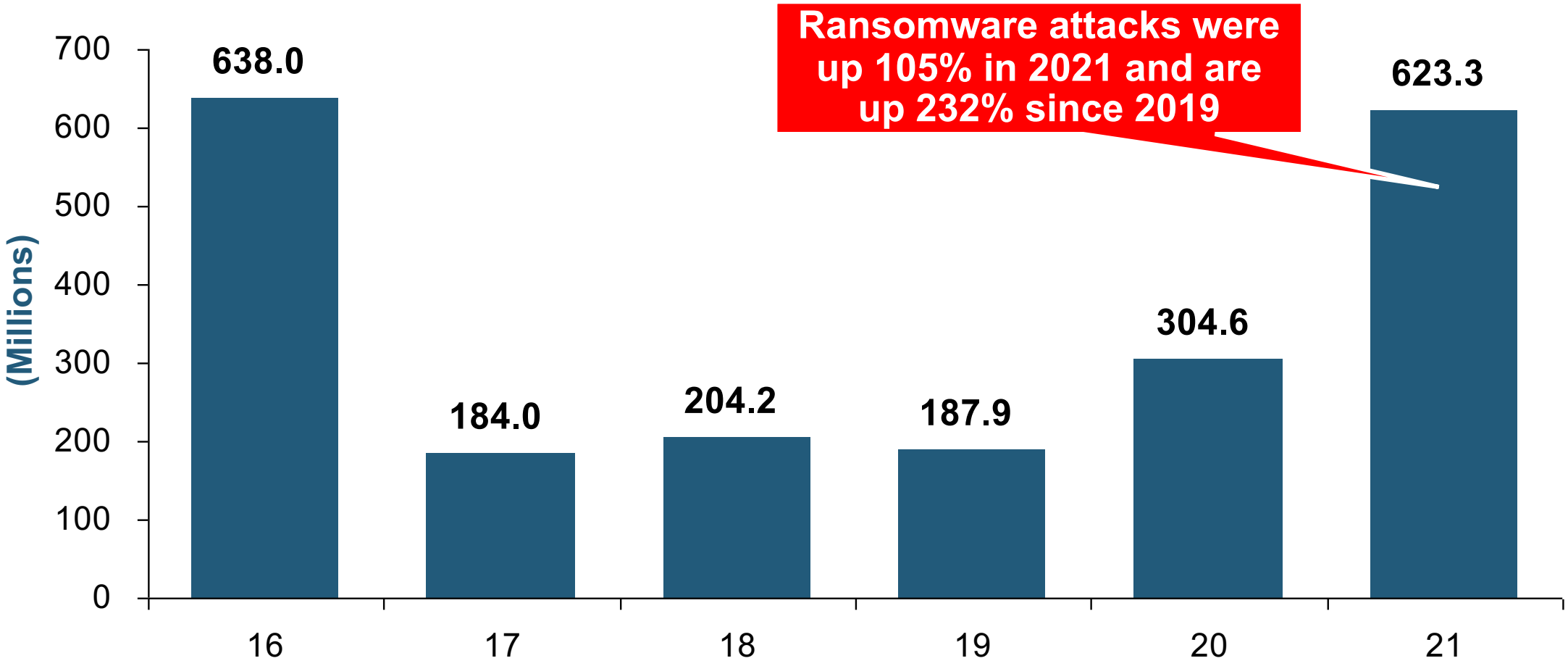
Cyber Attack Trend Summary



Ransomware attacks and Encrypted threats more than doubled last year

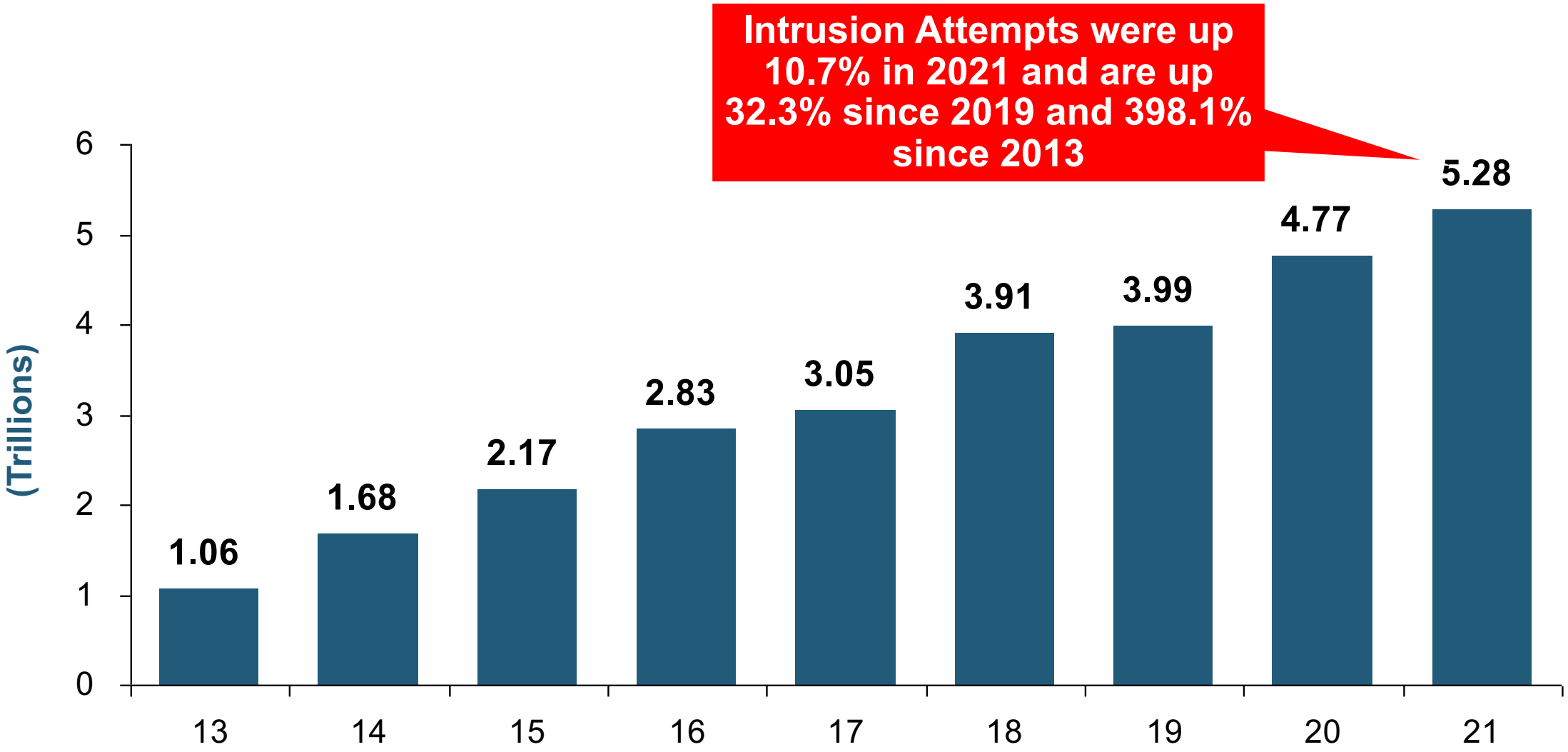
Sources: 2022 SonicWall Cyber Threat Report, accessed at: https://www.sonicwall.com/medialibrary/en/white-paper/2022-sonicwall-cyber-threat-report.pdf;
Risk and Uncertainty Management Center, Univ. of South Carolina.

Volume of Ransomware Attacks, 2016–2021
(Millions)



Sources: 2022 SonicWall Cyber Threat Report, accessed at: https://www.sonicwall.com/medialibrary/en/white-paper/2022-sonicwall-cyber-threat-report.pdf;
Risk and Uncertainty Management Center, Univ. of South Carolina.

Global Intrusion Attempts, 2013–2021
(Trillions)

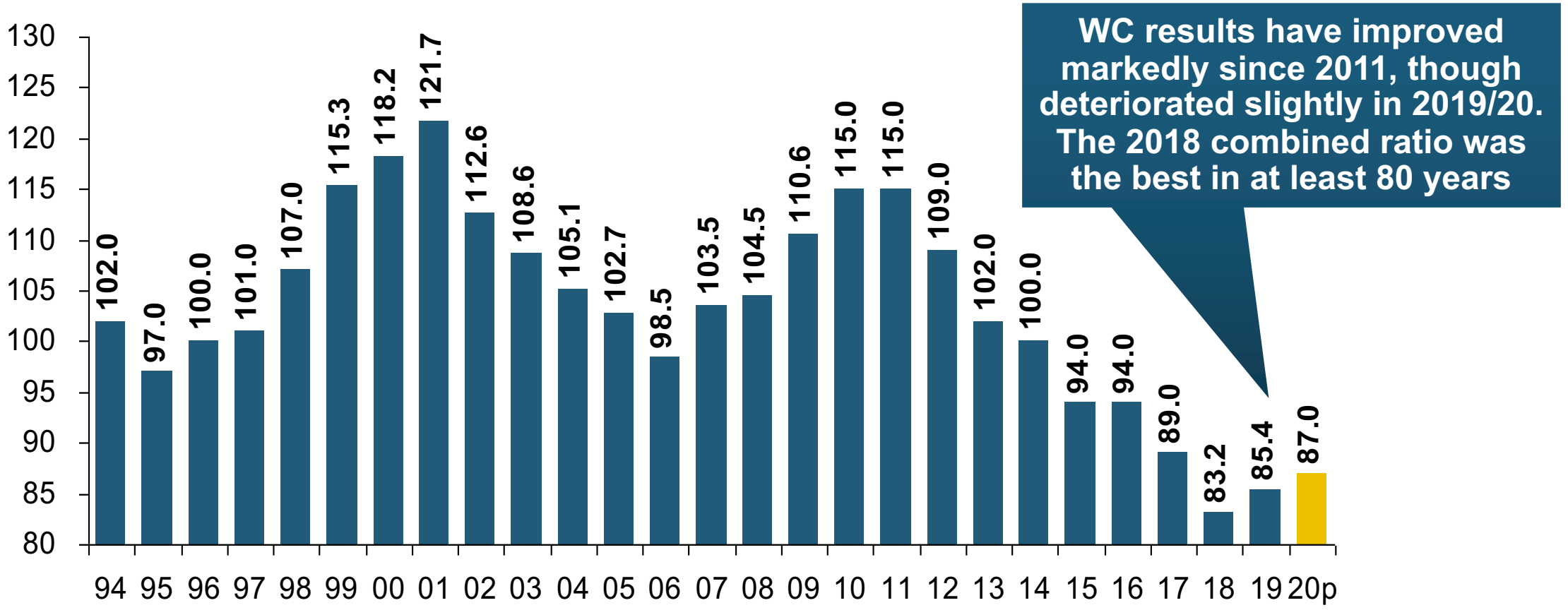


Sources: 2022 SonicWall Cyber Threat Report, accessed at: https://www.sonicwall.com/medialibrary/en/white-paper/2022-sonicwall-cyber-threat-report.pdf;
Risk and Uncertainty Management Center, Univ. of South Carolina.

Workers Compensation

A Strong Performer Despite COVID

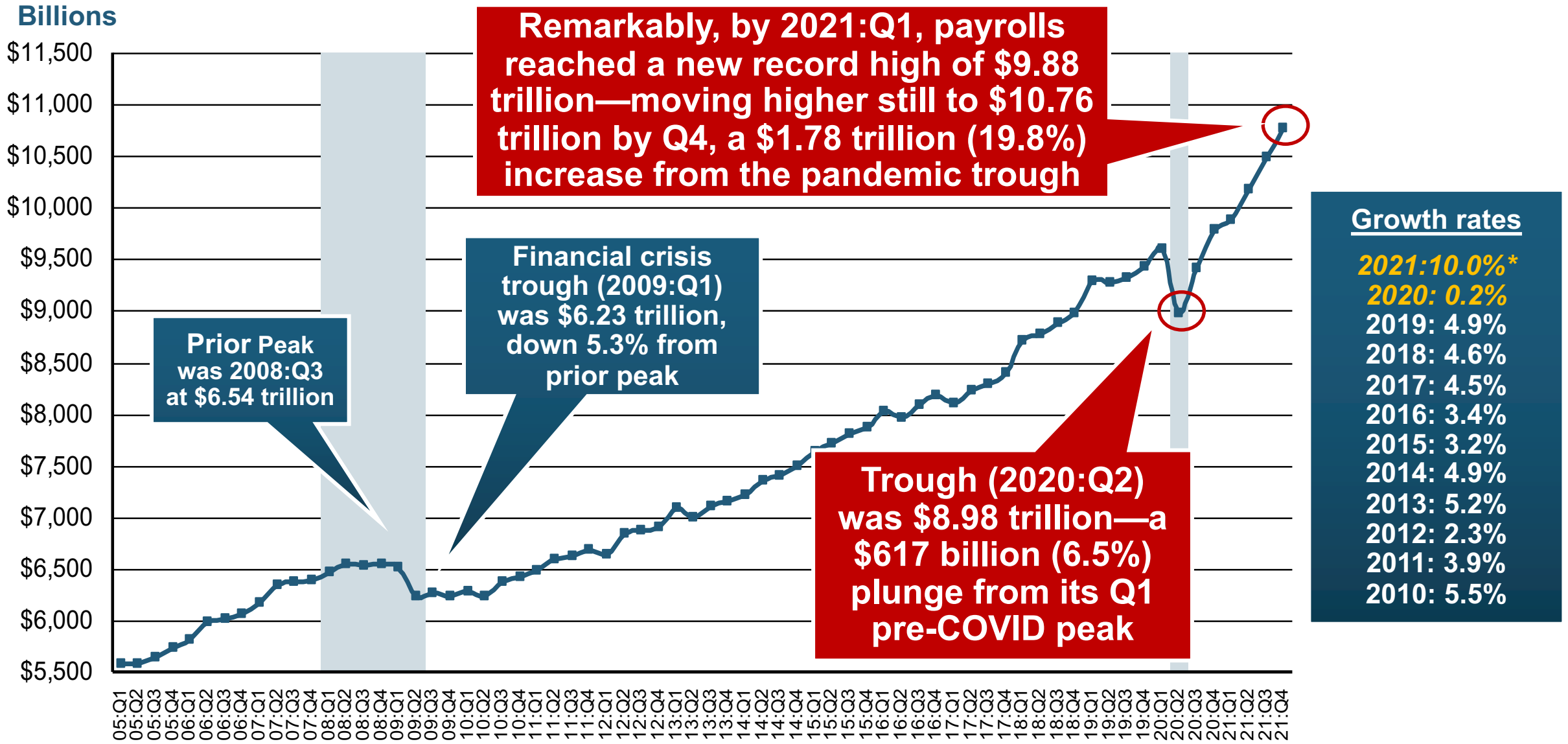
Workers Compensation Combined Ratio: 1994–2020P



Workers Comp Results Improved Substantially Over the Past Decade with COVID (So Far) Having Only Modest Impacts on Underwriting Performance

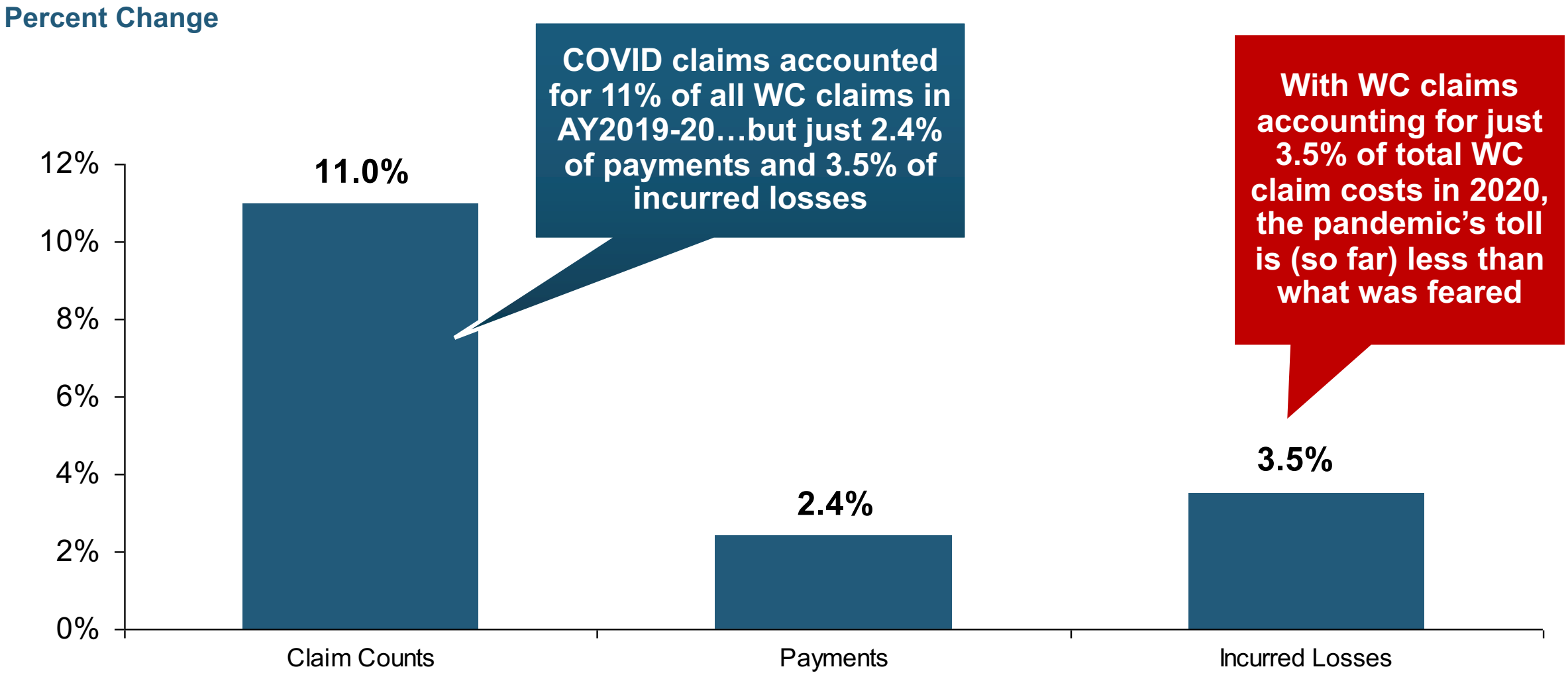
Sources: A.M. Best (1994-2009); NCCI (2010-2020P) and are for private carriers only..

Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2021:Q4



Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates. *Q4 2021 vs. Q4 2020.
Sources: http://research.stlouisfed.org/fred2/series/WASCUR; National Bureau of Economic Research (recession dates).

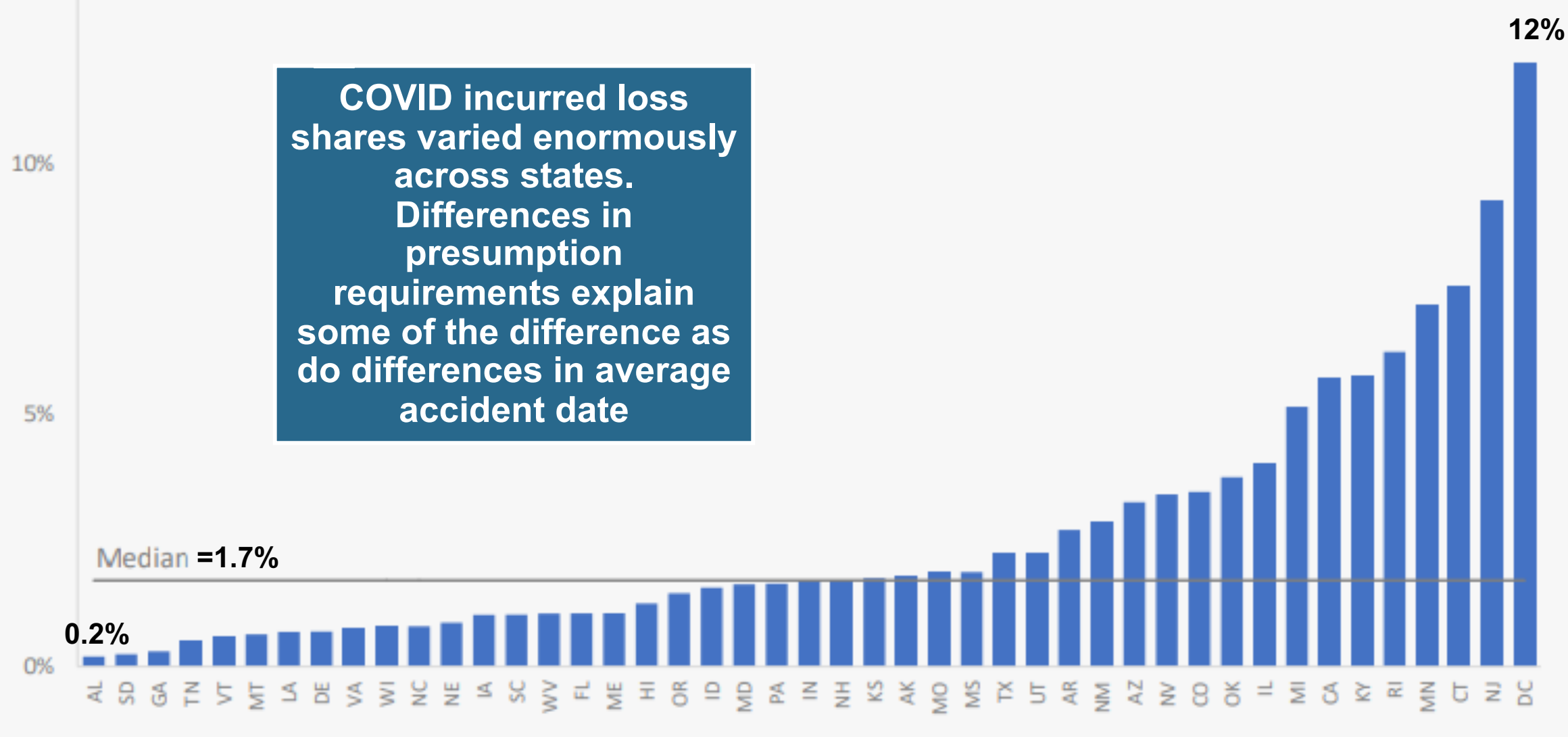
COVID-19 Shares of Claim Counts, Payments and Incurred Losses in 2020



*Data are from 45 jurisdictions (excludes MA, NY, ND, OH, WA and WY

Sources: *Covid-19's Impact on Workers Compensation: A Multi-Bureau Collaboration*, accessed from NCCI at: https://www.ncci.com/Articles/Documents/Insights-COVID19-Impact-on-WC.pdf; Risk and Uncertainty Management Center, Univ. of South Carolina.

COVID-19 Incurred Loss Share by State



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Sources: *Covid-19's Impact on Workers Compensation: A Multi-Bureau Collaboration*, accessed from NCCI at: https://www.ncci.com/Articles/Documents/Insights-COVID19-Impact-on-WC.pdf; Risk and Uncertainty Management Center, Univ. of South Carolina.

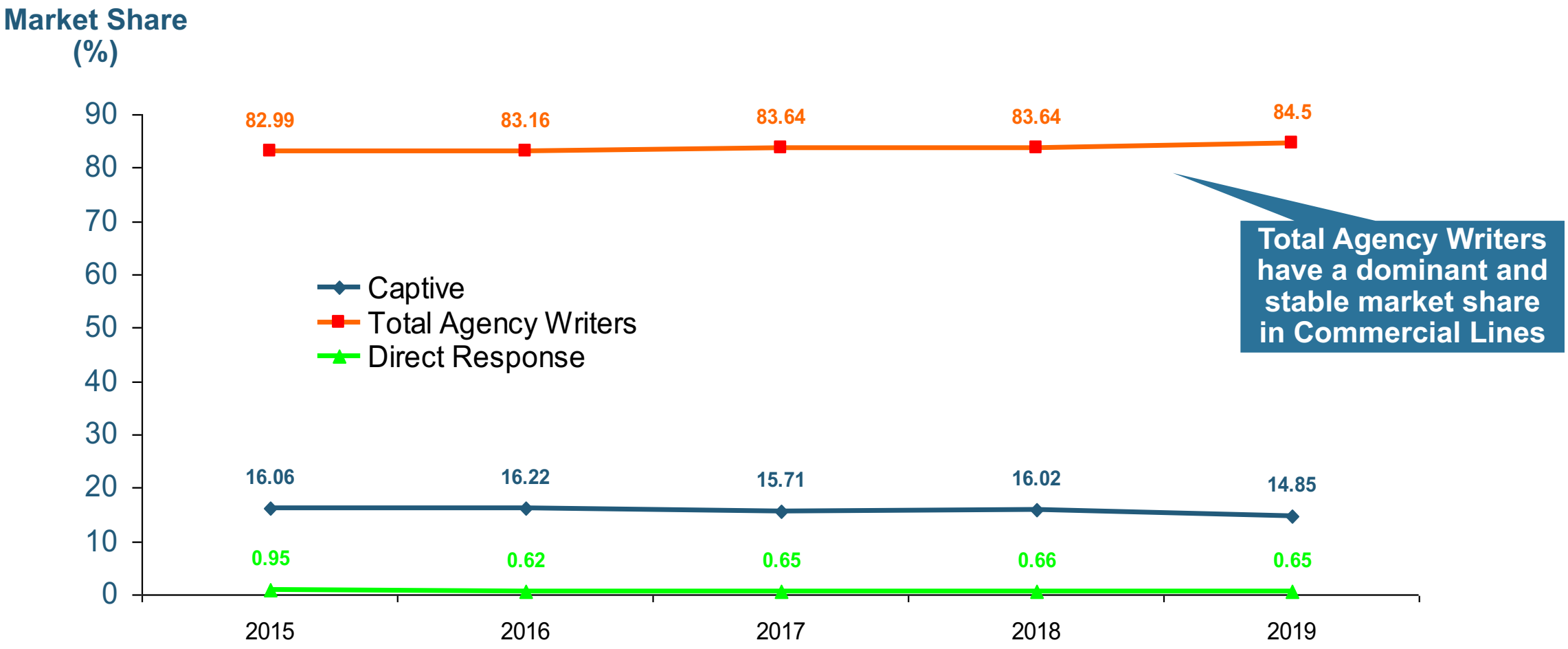
Distribution Trends

Independent Agents Are Holding their Ground in Commercial Lines

Private Equity Funds Are Hungry for Insurance Industry Growth

65

5-Year Market Share by Distribution Channel: *Commercial Lines*



Sources: 2020 Market Share Report (latest available), IIABA from A.M. Best data at https://www.independentagent.com/research/SiteAssets/MarketShareReport/default/2020-Market-Share-Report-BasedOn2019Data.pdf; University of South Carolina, Risk and Uncertainty Management Center.

SUMMARY

- The P/C Insurance Industry Remains Strong, Stable, Sound and Secure
- COVID Variants/Snarled Supply Chains Have Slowed the Economic Recovery, though a Second Recession Is Unlikely
  - Most P/C Exposures Restored to Pre-Pandemic Levels by mid-2022
- Variants/Supply Chain Disruptions along with Demand/Supply Imbalances Are Primary Drivers of Inflation
- Geopolitical (Russia/Ukraine) turmoil will add to pressure, with oil prices leading the way
- Asset Price Volatility Will Persist as Inflation, Fed and Geopolitical Concerns Mount
- Higher Interest Rates Will Help Provide a (Limited) Tailwind for Investment Income
- Bottom Line: Inflation Surge Will Linger Through late 2022, But Will Subside
  - Energy price shock due to Russia/Ukraine conflict could exacerbate and prolong inflation

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Thank you for your time and your attention!

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Download at www.uscriskcenter.com