



Assured Research, LLC

**Seminar on Reinsurance**  
***Economic and Social Inflation***

*Assured Research*

*June 14, 2022*

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*Research and Analysis for Insurance and Investment Professionals*

## ABOUT ASSURED RESEARCH

- ◆ Assured Research is a research firm focused exclusively on the P/C insurance industry. (Re)insurers controlling some \$250 billion in premiums subscribe to the Assured Research Package.
- ◆ We also offer educational presentations to subscribers.
- ◆ We offer investment-oriented research through our affiliation with Gordon Haskett Research Advisors.
- ◆ Learn more and request free trial at [www.assuredresearch.com](http://www.assuredresearch.com)
- ◆ Follow us on Twitter @AssuredResearch

## OUTLINE OF EXHIBITS

- ◆ **Our Takeaways!**
- ◆ **Economic Inflation**
  - Causes
  - Tools for looking back/tracking in “real” time
  - Tools for looking ahead
- ◆ **Social Inflation**
  - Indicators that we are watching
  - Don’t expect tort reform
- ◆ **An Historical Look at the Impact of Inflation: (Re)insurers got this!**
  - U/W and inflation
  - ROEs and inflation
- ◆ **Summary and Looking Ahead**

IF YOU TAKEAWAY ONE POINT...

***We don't mean to imply that anticipating or measuring economic inflation to build into insurance rates is an easy task...we're sure it is not.***

***But...***

**IF YOU TAKEAWAY ONE POINT...**

***Over the long arc of history and through many economic cycles, insurers have proven adept at neutralizing the negative impacts of inflation via pricing actions...***

***...while their investment income rises as inflation takes interest rates higher.***

***ROEs are positively correlated with inflation.***

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## ECONOMIC INFLATION/RECESSION INTERRELATED

### ◆ Demand >> Supply

- D ↑ both during and “post” pandemic; initially for goods...increasingly services
- Against: S ↓ supply chain snarls (Covid lockdowns– ongoing in China, catastrophes), geopolitical standoffs/war, S (Labor) ↓, S(\$)  
↑ both fiscal and monetary policies...stimulated demand ↻

### ◆ Concern: Rising inflation expectations into longer-lived contracts (wages, rents, annual contracts, multi-year labor agmt)

### ◆ Action: Raise interest rates, slow (or limit new) fiscal spending

### ◆ Risk: A “Volcker-style, Fed-induced” recession

## TRACKING ECONOMIC INFLATION – MAIN POINTS

- ◆ **Looking Back...**
  - Many will subscribe to various industry sources of cost indicators, but...
  - Price indicators for many of the components of loss costs are available monthly (e.g., building materials/property; used car/materials for auto)...they are on your desktops
- ◆ **Useful to think about how inflation differs: sticky vs. flexible; goods vs. services**
- ◆ **Looking Ahead...**
  - An explosion of 'real time' indicators of activity
  - Many commodities have an active futures market.



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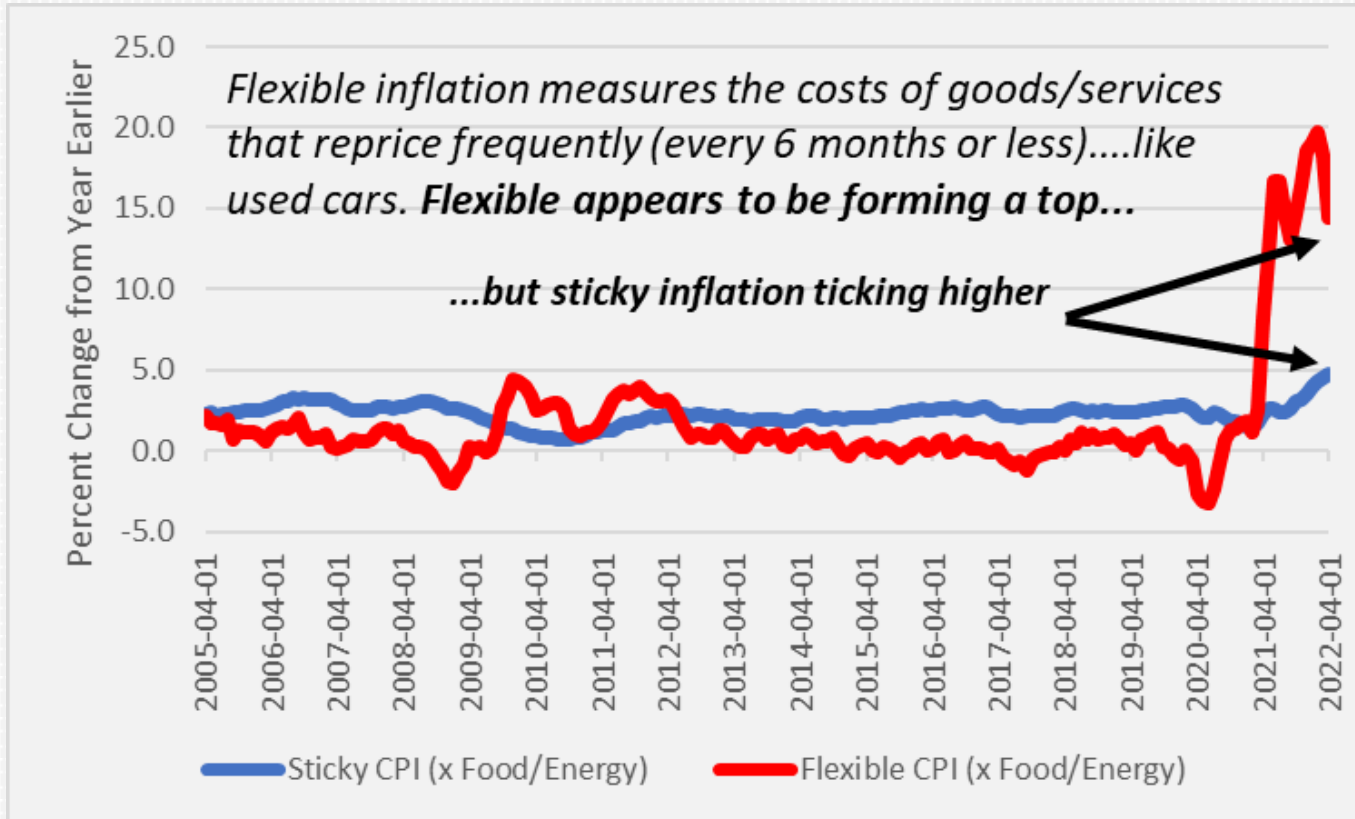
## A FABULOUS SOURCE FOR PRICE DATA (AND LOTS MORE)



The [St. Louis Fed \(FRED\)](#) site includes thousands of time series across the economic spectrum; that includes myriad prices relevant to insurers' loss costs  
Ex. PPI components!

professionals

## STICKY VS. FLEXIBLE INFLATION? STICKY IS RISING



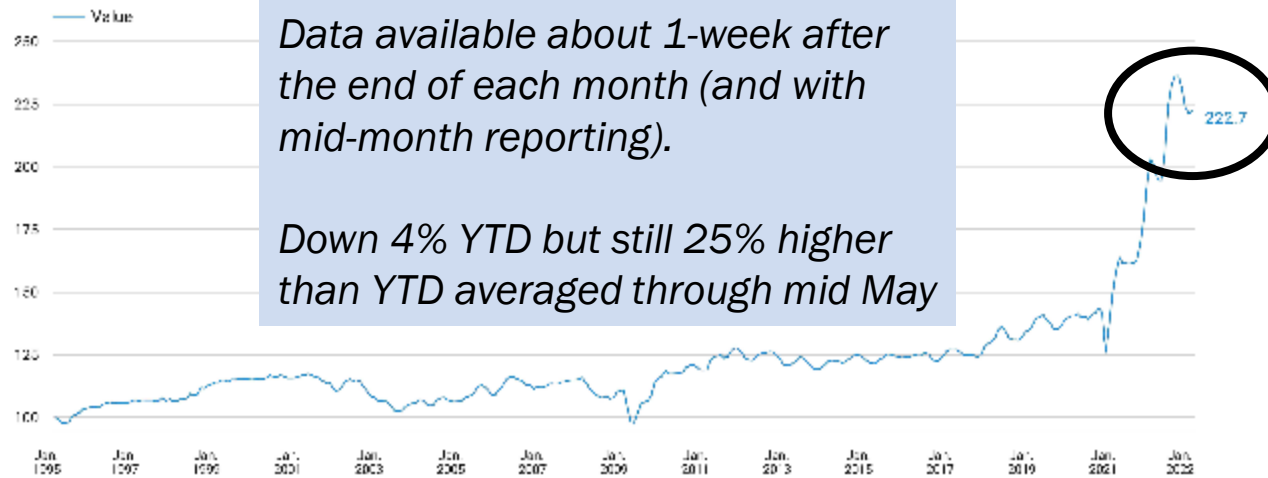
Most components of auto inflation are flexible; contracts or prices that reprice regularly. Sticky = annual contracts like home/rent, medical, education...

Source: Federal Reserve Bank of Atlanta (via FRED), Assured Research

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## MANHEIM USED CAR INDEX – FLEXIBLE INFLATION

MANHEIM USED VEHICLE VALUE INDEX  
Mid-May 2022



Data available about 1-week after the end of each month (and with mid-month reporting).

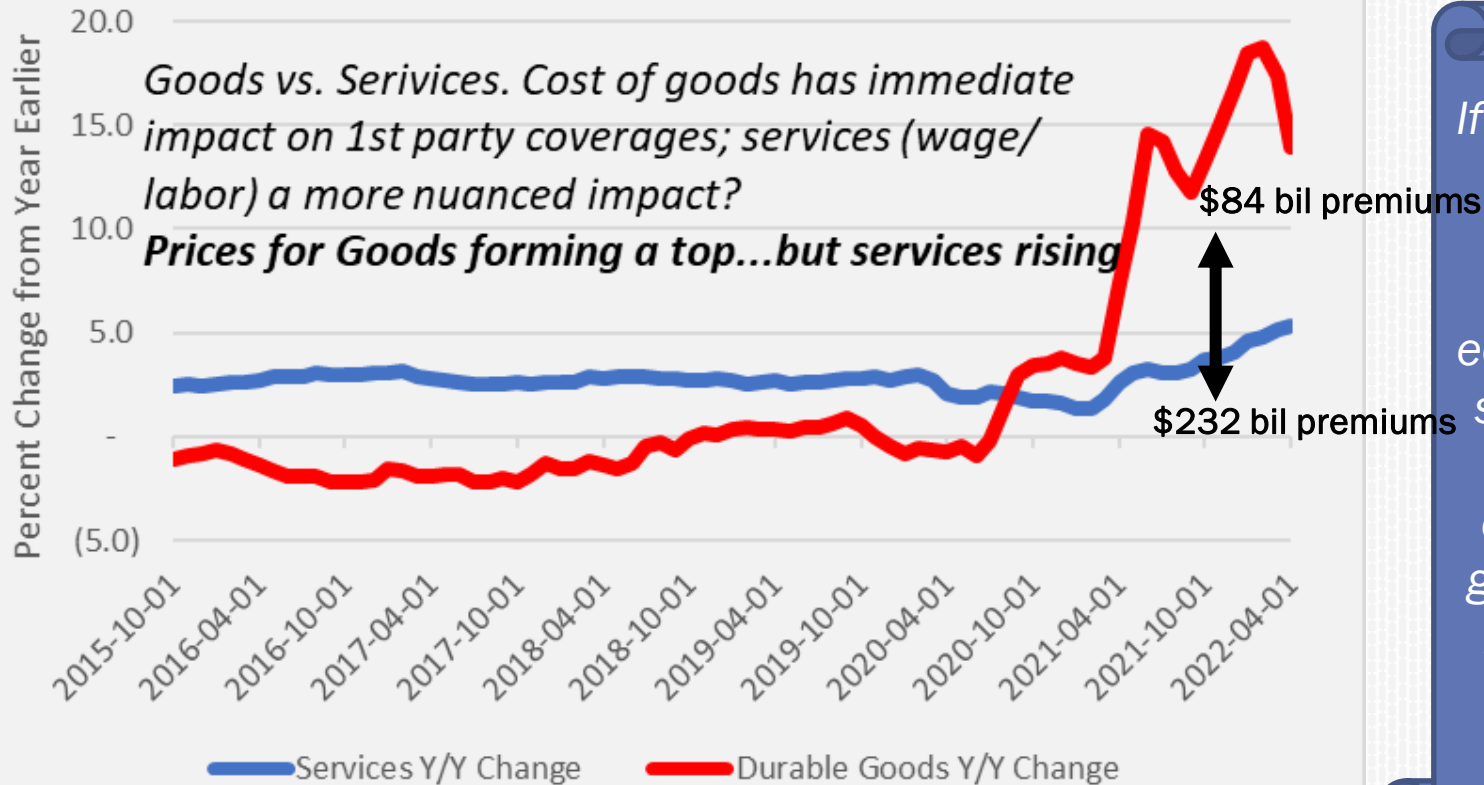
Down 4% YTD but still 25% higher than YTD averaged through mid May

COX AUTOMOTIVE\* Manheim

Reasonable hope that used car prices will decline. Supply of new vehicles expected to be up ~low double digits and demand waning in face of prices

Source: [Manheim.com](https://www.manheim.com), Assured Research

## DEMAND DESTRUCTION FROM A FED-INDUCED RECESSION?



*If interest rate increases overshoot, greater economic risk seems to be to the demand for goods and to longer-lived capital projects*

Source: Federal Reserve Bank of Atlanta (via FRED), ISO MarketStance, Assured Research

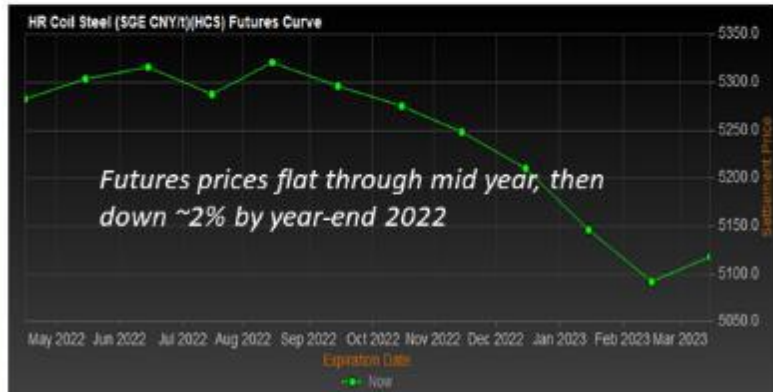
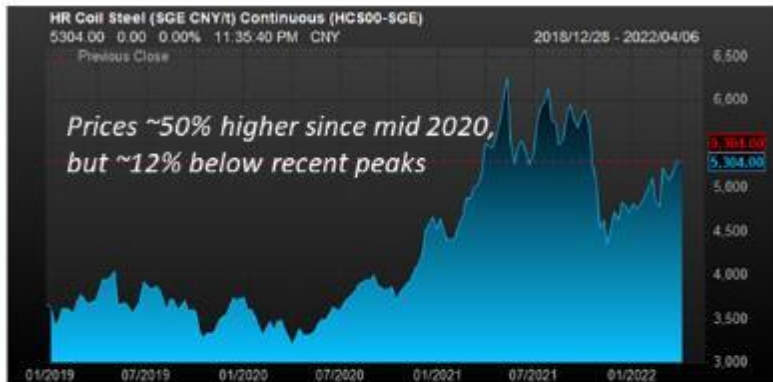
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## OTHER TOOLS FOR TRACKING TRENDS THAT IMPACT LOSS COSTS

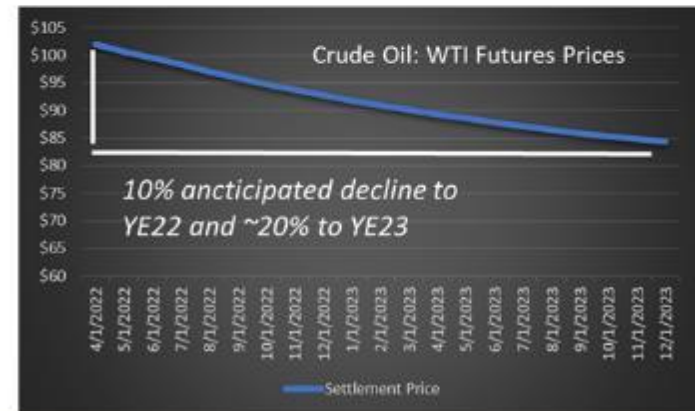
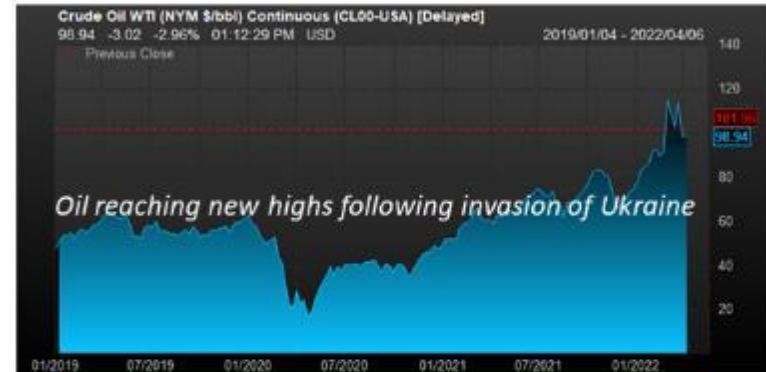
- ◆ Explosion of tools available to everyday users since onset of pandemic
- ◆ Google Trends and other mobility indicators
- ◆ Real time auto crash data available at a host of states
- ◆ Office occupancy indicators provide a view on commuting trends ([Kastle](#))
- ◆ Public transportation data available across the nation ([APTA](#))
- ◆ Publicly traded companies in areas where YOUR company has concentrations...sales, margins, trends in labor/staffing
- ◆ Many raw materials for 1<sup>st</sup> party claims have active futures markets

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## Steel



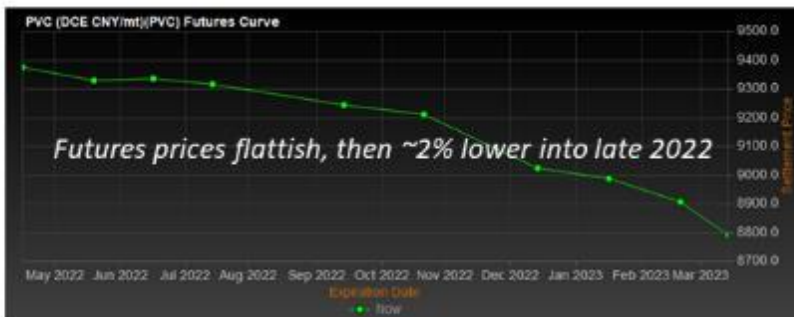
## Oil



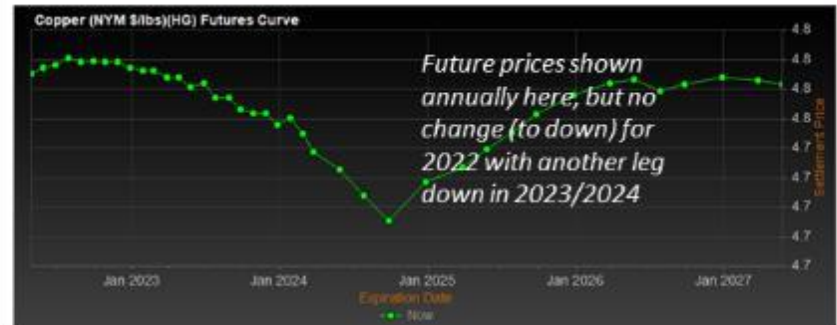
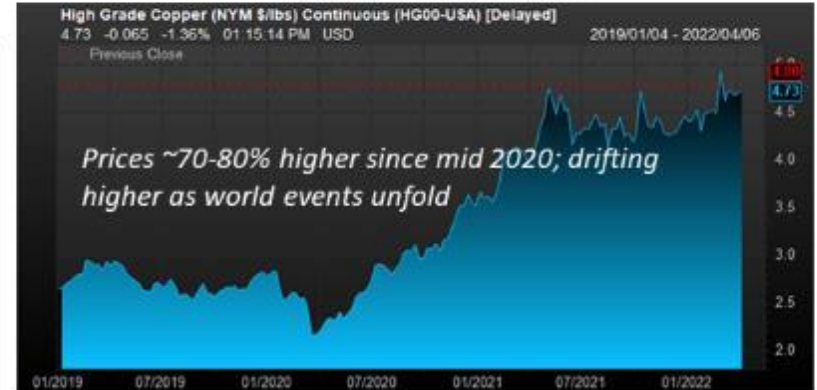
Source: FACTSET via Gordon Haskett, Assured Research. Prices as of 4/6/22

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## PVC



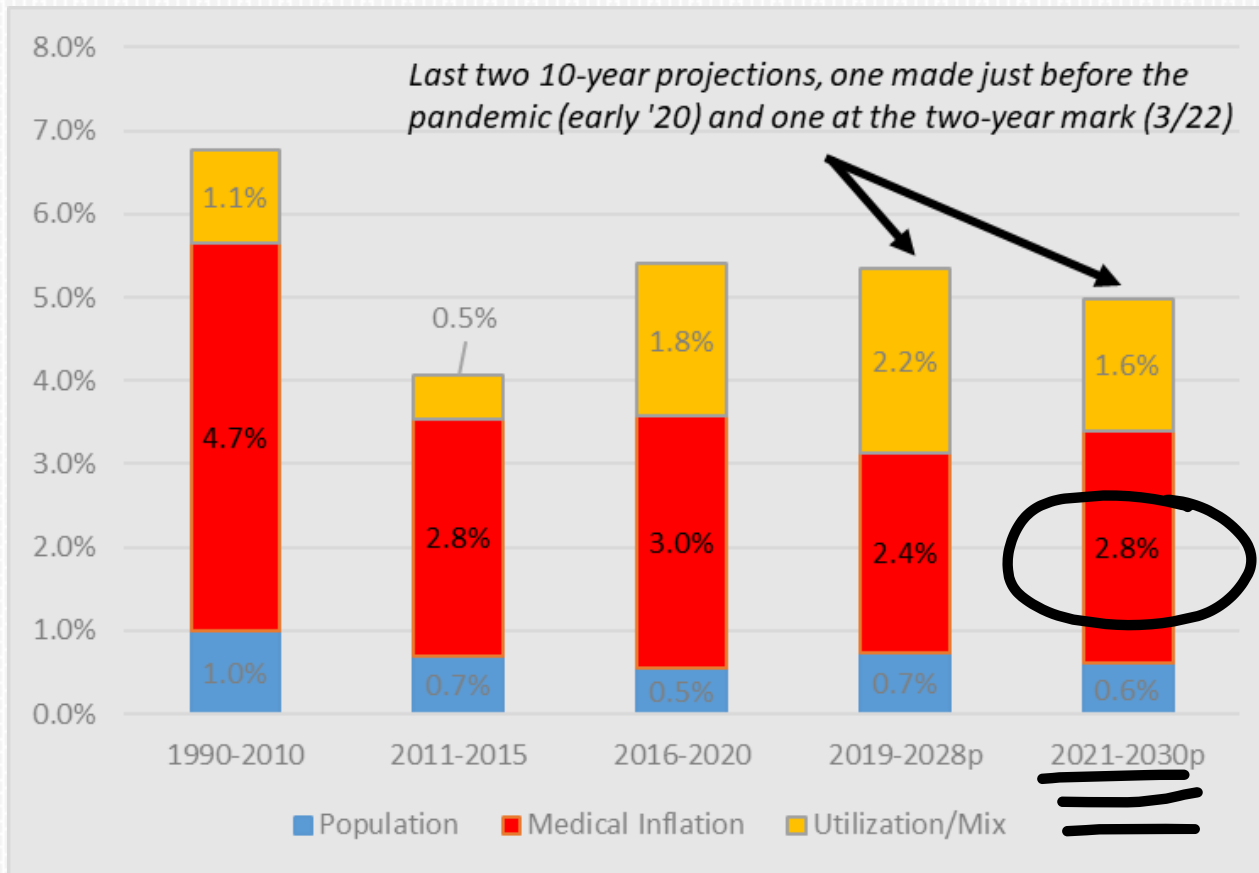
## High Grade Copper



Source: FACTSET via Gordon Haskett, Assured Research. Prices as of 4/6/22

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## MEDICAL INFLATION: NATIONAL HEALTH EXPENDITURES AND INFLATION



*WC insurers enjoy a natural hedge against rising labor costs IF wage inflation exceeds medical cost inflation.*

Source: [CMS Office of the Actuary](#), Assured Research

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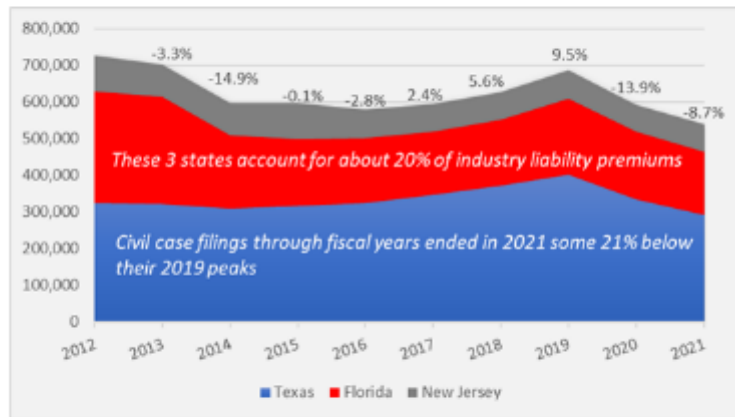
## SOCIAL INFLATION – MAIN POINTS

- ◆ Whereas (we will show) insurers do a good job neutralizing economic inflation through pricing actions...
- ◆ Social inflation matters more than core inflation
- ◆ We're watching 'real wages' as a proxy for inequality
- ◆ We're watching Bellwether Trials from several mass tort filings/MDL
- ◆ We're not anticipating that tort reform will come to the rescue, except...
- ◆ In Florida where HO market shows parallels to the tort reform movement from the 1980s

*Social inflation is more relevant than core inflation  
in P&C  
Swiss Re '22 Investor Day*

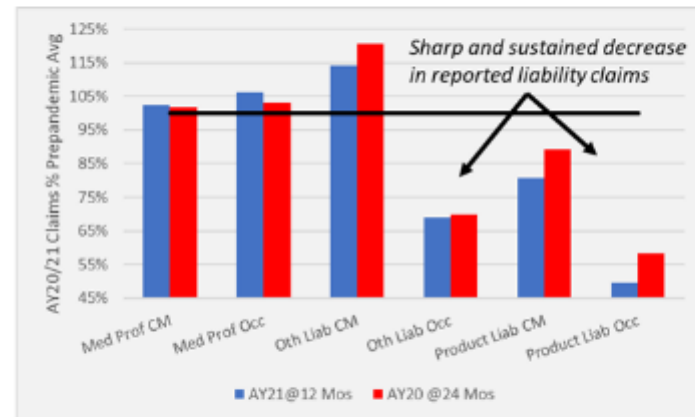
## SOCIAL INFLATION: ISSUE IS SEVERITY; NOT FREQUENCY

*Civil case filings fell in both 2020 and 2021*



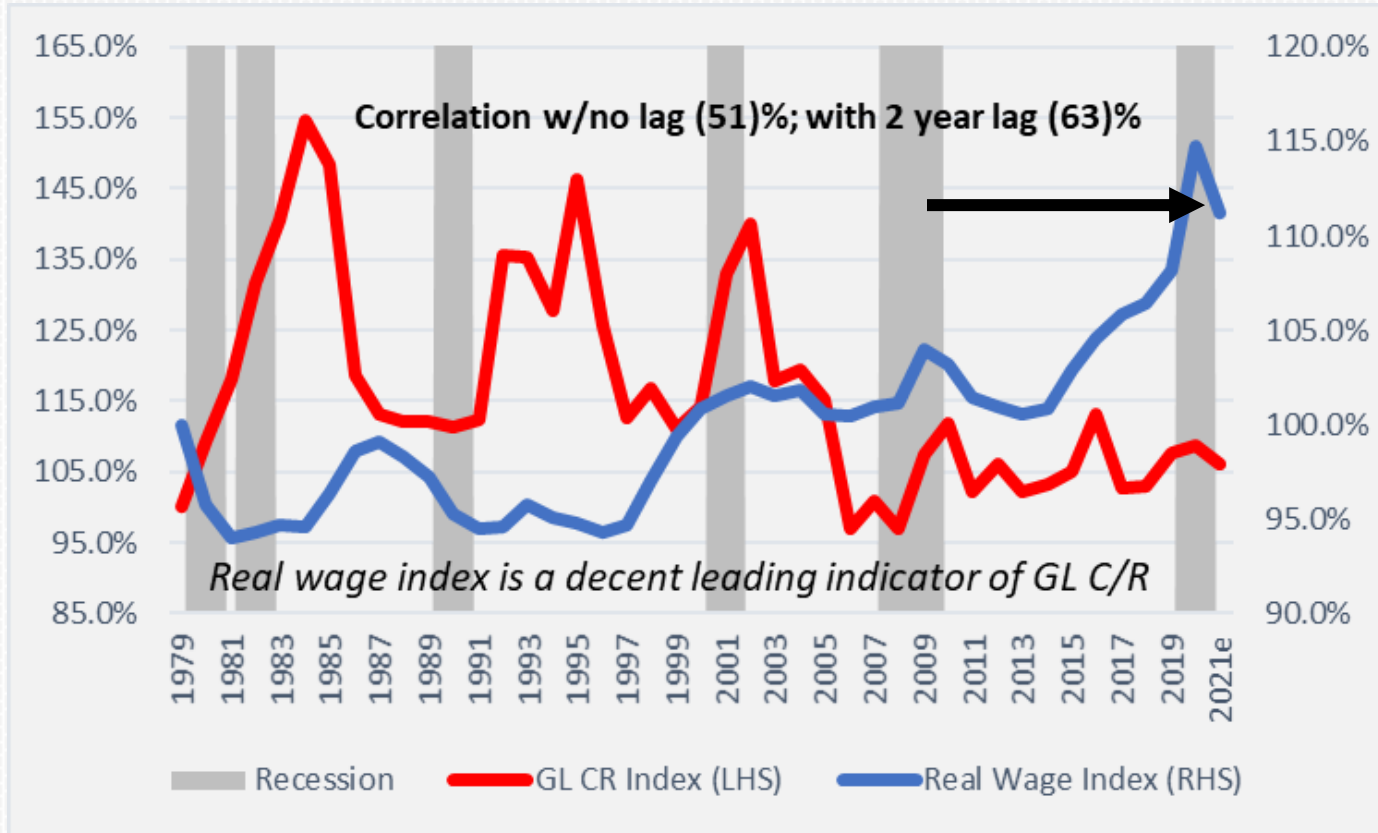
Source: ©2022 S&P Global Market Intelligence, State Court Websites, Assured Research

*Reported liability claims down even further with...*



*...Other Liability Occurrence accounting for ~87% of claim volume across these liability lines*

## INEQUALITY: MAYBE REAL WAGES ARE AN INDICATOR?



*“Inflation adjusted wages are falling faster than they have in 40 years”*  
 WSJ April 13<sup>th</sup>

*Real wages fall, the liability loss ratio rises!*

Sources: St. Louis Fed (FRED), ©2022 S&P Global Market Intelligence, Assured Research

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## MDLS/MASS TORT CASES: LARGE CASE SETTLEMENTS BEGET LARGE CASE SETTLEMENTS

### ◆ Bayer/Monsanto--Roundup


- **Legal issue:** Does Roundup contain a carcinogen that leads to non-Hodgkin's lymphoma?
- Bayer lost first three trials but have recently won two.
- Proposed \$10 billion settlement for "current claimants," but Court rejected \$2 billion proposal for "futures claimants."
- Settlement talks on hold as company waits to see if Supreme Court hears its appeal

### ◆ Johnson & Johnson--Talcum Powder

- **Legal issue:** Does talcum powder cause ovarian cancer?
- Several trial losses and Supreme Court declines to review \$2.0 billion appeal
- Company placed talc claims in a separate (bankrupt) subsidiary.

### ◆ 3M--Combat Arms Earplugs

- **Legal issue:** Did faulty earplugs cause hearing loss among military personnel?
- 285,000 military claimants make this the largest MDL in history (by far).
- Bellwether case decisions have been split
- Our view: We expect a settlement; can't run all these cases through the courts!



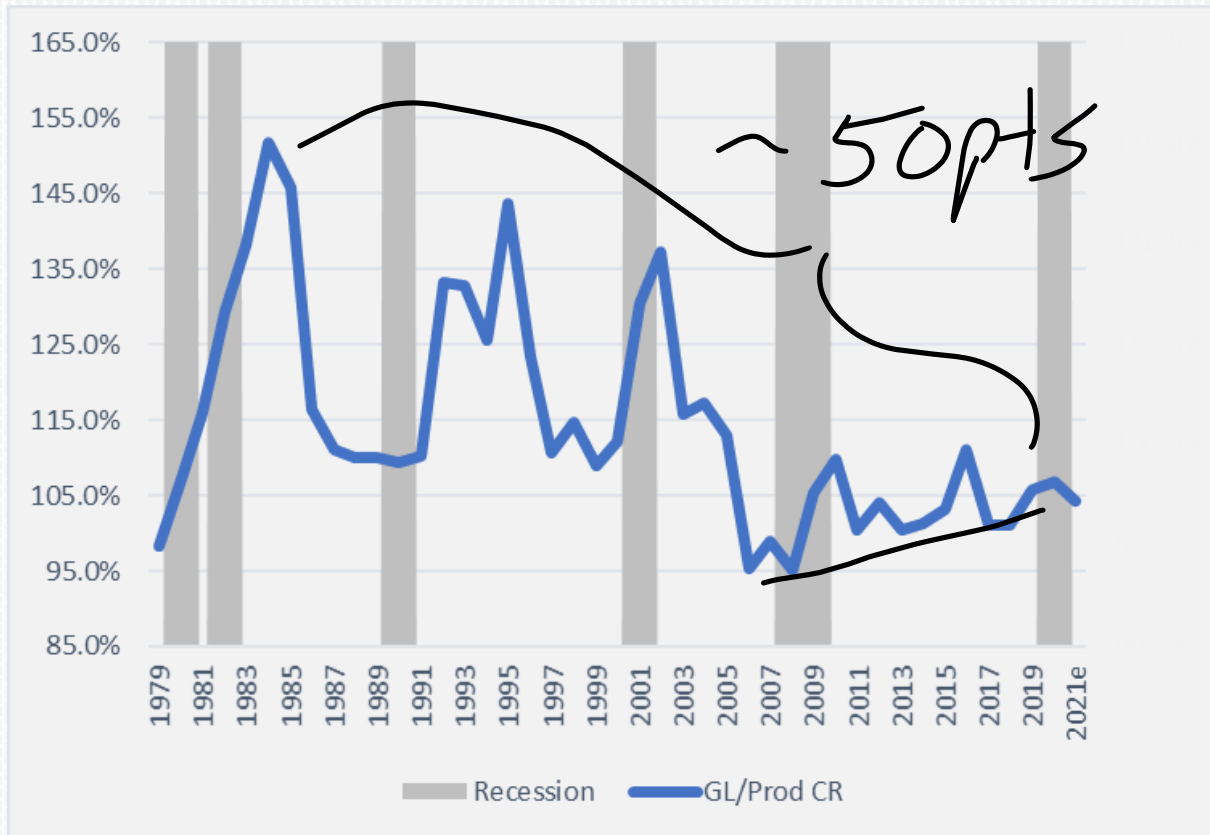
Watch  
bellwethers,  
they matter!

## WATCH FOR EXPANDED GOVERNMENTAL ACTIONS

- ◆ **Buoyed by the \$26 billion opioid settlement; Attorneys General, will expand “public nuisance” and “consumer protection” actions**
- ◆ **Oil and gas companies re: climate change**
  - Many states have filed suits against companies arguing fossil fuels are a public nuisance
  - Current question is whether suits should be pursued in State or Federal Courts; will take years to determine
- ◆ **E-cigarettes re: cause addiction and engage in deceptive marketing**
  - Nine states have sued JUUL Labs
  - 39 states investigating health claims and marketing
  - JUUL settles \$40 million claim with North Carolina
  - Also, numerous civil suits including 3,300 claimants in MDL

## NO MAJOR INCENTIVES FOR TORT REFORM

Liability (GL + Product) Combined Ratio since 1979: *Not that bad!*



An upward trend since ~2007/08 warrants correction; different order-of-magnitude from mid 1980s

Source: A. M. Best, ©2022 S&P Global Market Intelligence, Assured Research

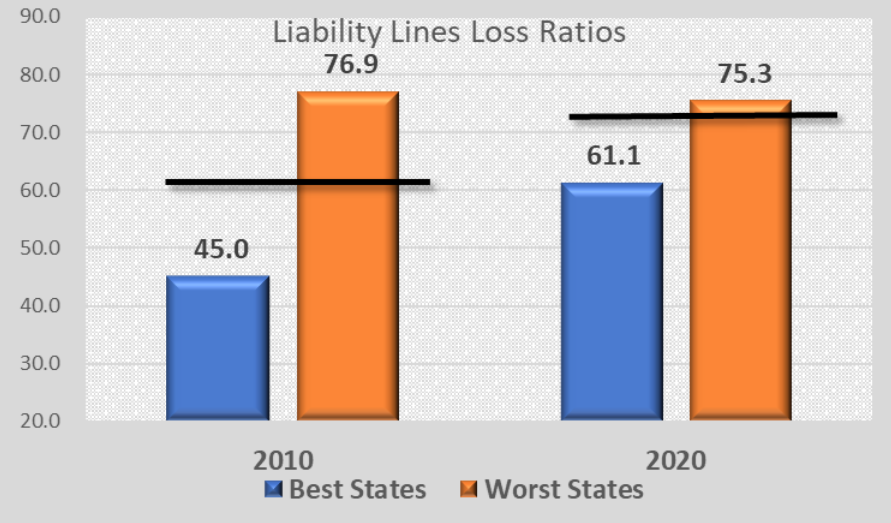
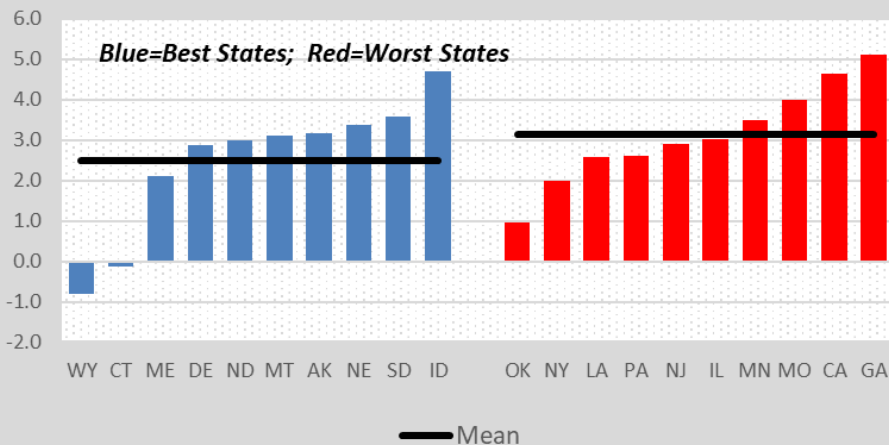
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## NO MAJOR INCENTIVES FOR TORT REFORM

*Economic growth in worst states is similar to the best states!*

*Loss ratios in worst states are higher, but not deteriorating!*

10 year=2010-2020



Source: Institute for Legal Reform (state rankings), Bureau of Economic Analysis (GDP), S&P Global (loss ratios), Assured Research

**Black lines = National Average**

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## FL EXCEPTION! Illustrates just how dire...before Gov't Rx

Income Statement \$000							Income Statement; % NPE						
	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>		<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Net Premiums Earned	3,050,466	3,253,272	3,451,163	3,357,257	3,478,996	3,505,419	Net Premiums Earned	100%	100%	100%	100%	100%	100%
Losses Incurred	1,694,228	1,903,225	2,078,649	2,115,494	2,675,905	2,529,847	Losses Incurred	56%	59%	60%	63%	77%	72%
LAE Incurred	461,482	491,665	417,852	451,257	583,517	557,602	LAE Incurred	15%	15%	12%	13%	17%	16%
Other U/E Expense	1,082,407	1,119,142	1,190,347	1,142,933	1,055,781	1,139,799	Other U/E Expense	35%	34%	34%	34%	30%	33%
U/W Gain/(Loss)	-191,531	-264,761	-239,658	-356,332	-840,432	-727,008	U/W Gain/(Loss)	-6%	-8%	-7%	-11%	-24%	-21%
							<b>Combined Ratio</b>	<b>106%</b>	<b>108%</b>	<b>107%</b>	<b>111%</b>	<b>124%</b>	<b>121%</b>
Net Investment Income	93,061	106,903	127,568	144,276	115,165	77,406	Net Investment Income	3%	3%	4%	4%	3%	2%
Net Realized G/(L)	13,294	21,131	-3,240	18,472	127,449	7,897	Net Realized G/(L)	0%	1%	0%	1%	4%	0%
Other Income	19,107	5,295	50,519	28,087	11,129	27,066	Other Income	1%	0%	1%	1%	0%	1%
Net Income BT	-66,068	-131,432	-64,811	-165,498	-586,689	-614,639	Net Income BT	-2%	-4%	-2%	-5%	-17%	-18%
Net Income AT	-52,383	-74,518	-75,602	-145,876	-428,796	-562,660	Net Income AT	-2%	-2%	-2%	-4%	-12%	-16%
Resv Dev%NEP (+ Adverse)	1.4%	2.3%	4.7%	4.2%	1.6%	7.4%							
Premium Analysis \$000							Premium Analysis; % D&A						
	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>		<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Direct & Assumed	6,516,425	6,910,665	7,227,530	7,898,533	8,963,003	9,629,349	Direct & Assumed	100%	100%	100%	100%	100%	100%
Ceded	3,465,782	3,572,276	3,799,878	4,583,528	5,547,871	5,939,227	Ceded	53%	52%	53%	58%	62%	62%
Net Written Premium	3,096,924	3,392,220	3,472,780	3,363,914	3,495,509	3,852,781	Net Written Premium	48%	49%	48%	43%	39%	40%

36 Insurers writing >50% FL HO Premiums

Source: ©2022 S&P Global Market Intelligence, Assured Research

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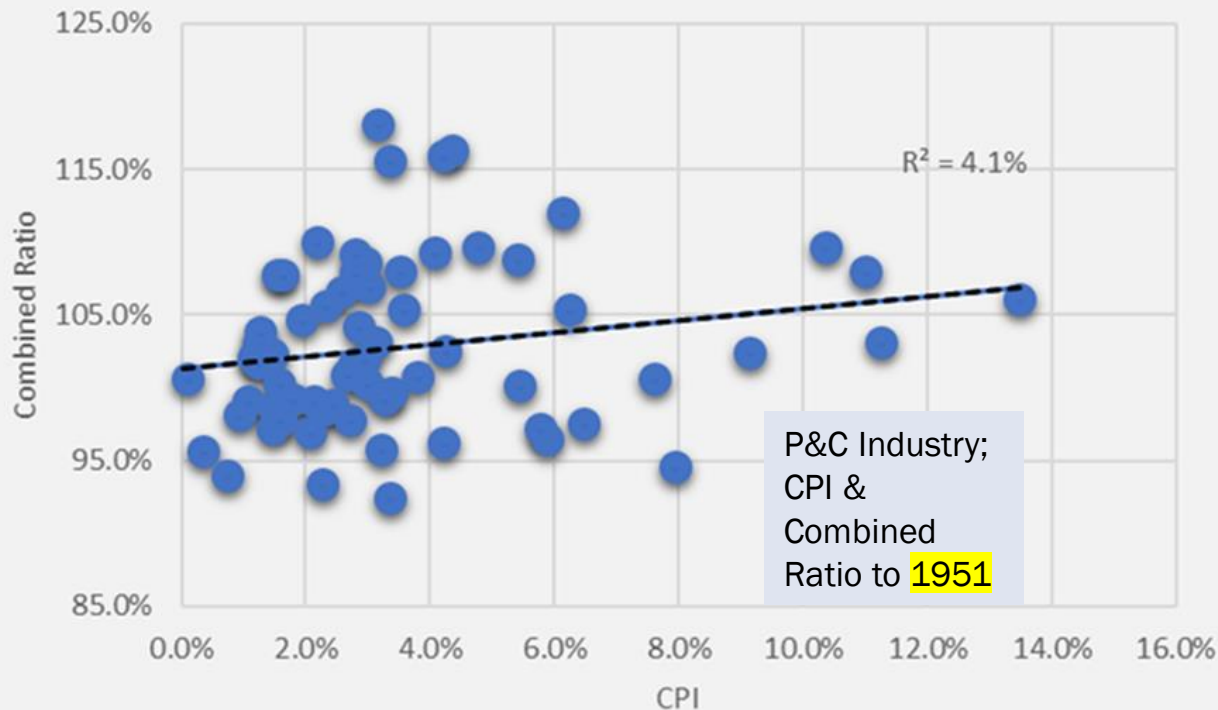
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## **INFLATION: (RE)INSURERS GOT THIS!**

- ◆ **Insurers do a good job neutralizing economic inflation through pricing actions...**
  - **No meaningful correlation between UW and CPI over ~all lines**
- ◆ **Weather impacts property and social inflation more impactful for liability**
- ◆ **But there is a notable correlation between inflation and ROEs. Why?**
- ◆ **Because investment returns rise with rising yields**

## NO STRONG ASSOCIATION BETWEEN U/W AND INFLATION: INDUSTRY



*“Inflation is top of mind for everyone in the P&C industry, which to its credit, has historically been adept at adequately responding to inflation trends.”*

*CEO of Arch Capital speaking on 1Q22 CC*

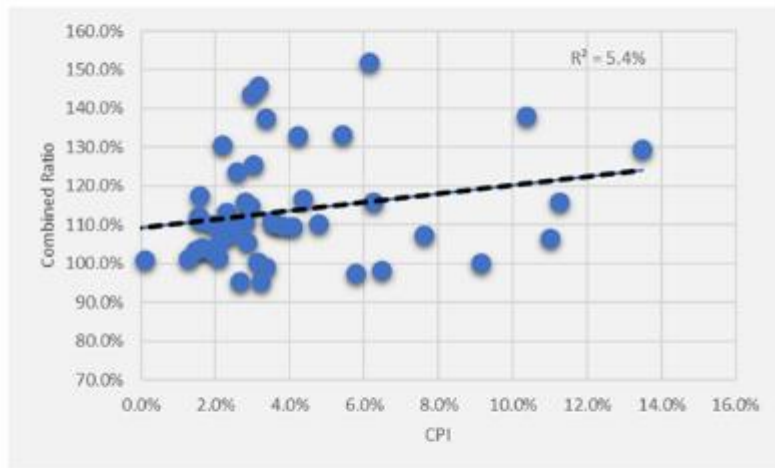
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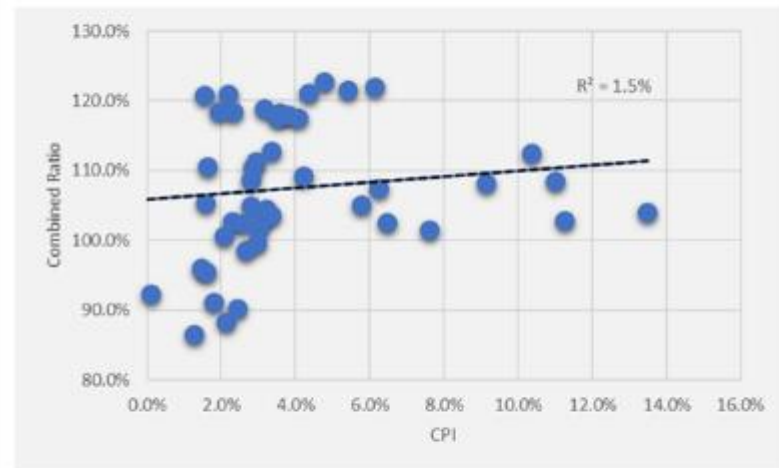
## NO STRONG ASSOCIATION BETWEEN U/W AND INFLATION: COMMERCIAL LINES

Liability Lines: Combined Ratio and CPI



*One Year Lag: CPI Yr. X and Insurance Datapoint Yr. X+2*

Workers' Compensation: Combined Ratio and CPI



*One Year Lag: CPI Yr. X and Insurance Datapoint Yr. X+2*

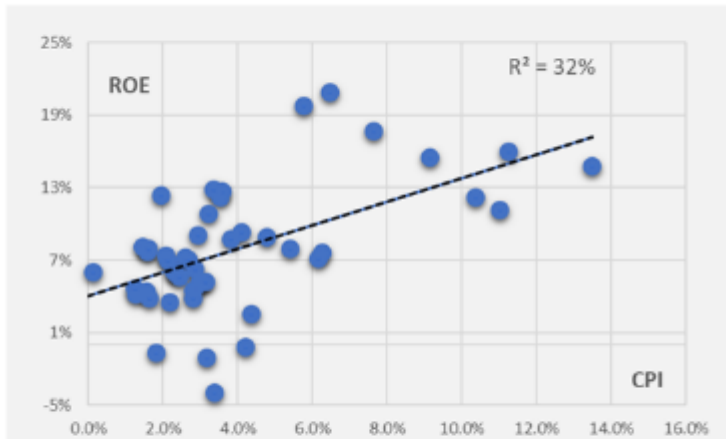
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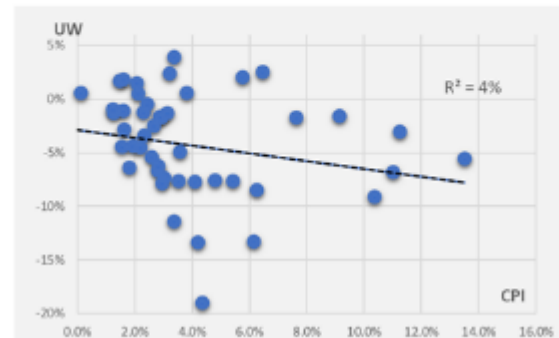
## POSITIVE CORRELATION BETWEEN CPI AND COMMERCIAL LINES ROE

Commercial Lines: ROE and the CPI (1 Year Lag)

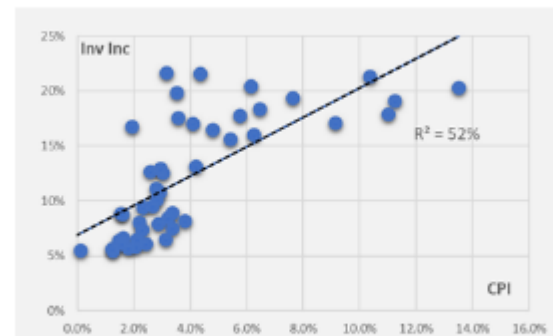


Source: A.M. Best, ©2022 S&P Global Market Intelligence, Assured Research

Commercial Lines: UW/CPI (1 Year Lag)



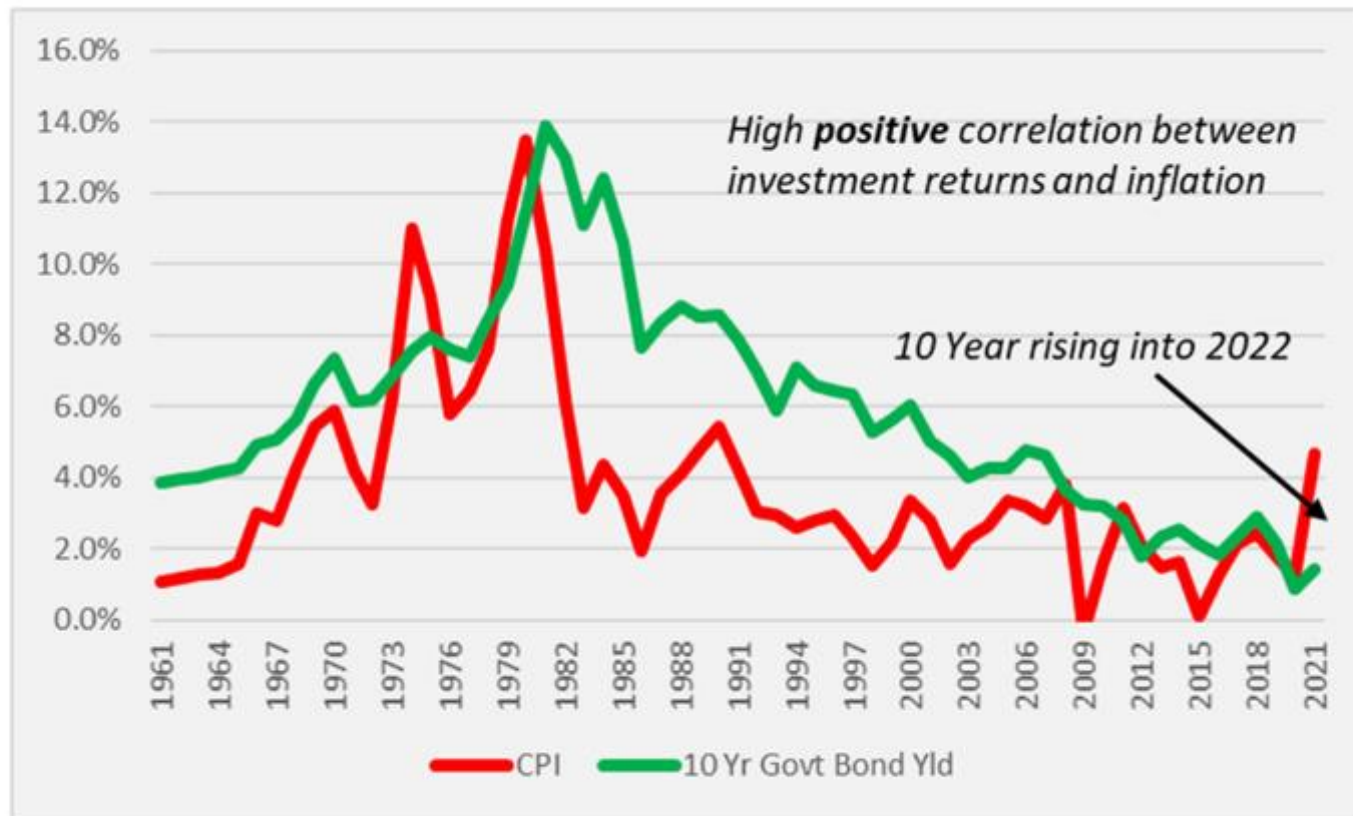
Commercial Lines: NII/CPI (1 Year Lag)



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## STRONG POSITIVE CORRELATION CPI/INTEREST RATES



Source:  
U.S. BLS  
via FRED,  
Assured  
Research

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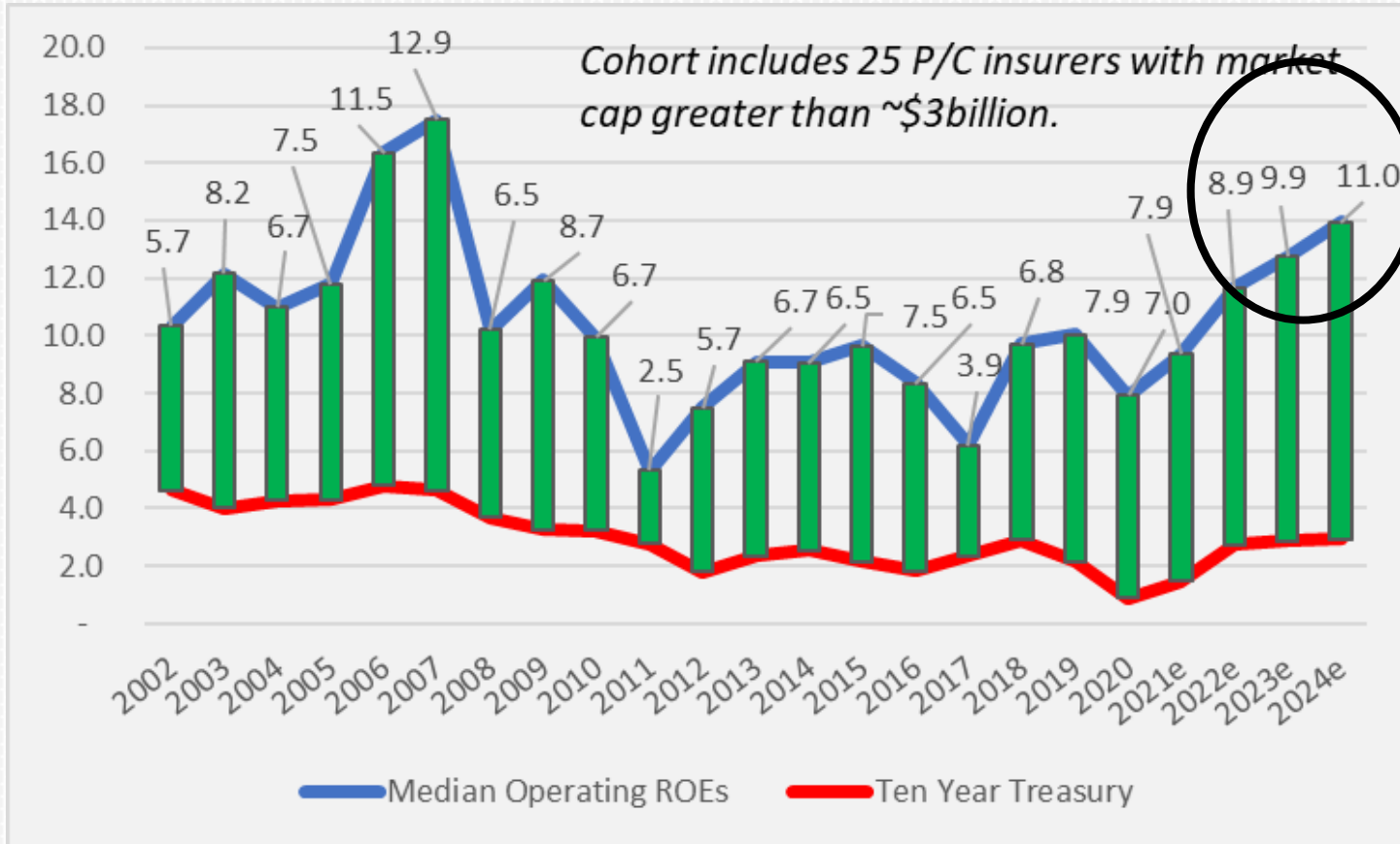
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## PUTTING IT ALL TOGETHER

- ◆ **History teaches us that the earnings cycle follows the pricing cycle**
  - CR tends to decline for ~ 3 years after the peak of each pricing cycle
- ◆ **Reserve balances appear broadly healthy with particular redundancies (we think) in workers' compensation**
- ◆ **Insurers are adept at neutralizing the adverse impact of inflation through pricing; investment income rises as interest rates increase**
- ◆ **That means...**
- ◆ **Insurers' ROEs can be expected to increase over the next few years**

## EARNINGS FORECASTED TO RISE 2022-2024E



*The earnings cycle follows the pricing cycle...and neither analysts nor insurers seem offput by rising economic inflation (or risk of recession)*

Sources: ©2022S&P Global Market Intelligence, WSJ (Treasury forecast April, 2022), Assured Research. Pricing data as of 5/18/2022



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your  
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*Economic and Social Inflation***

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