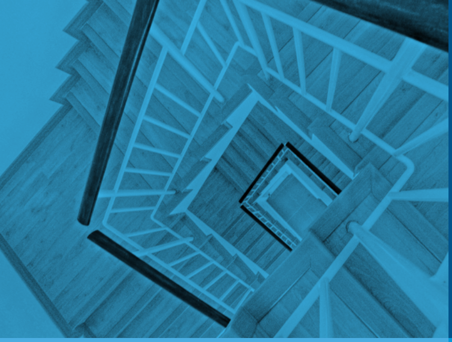

NEAM VANTAGE POINT

Perspectives

NOVEMBER 2024

OUR VIEW ON INSURANCE CAPITAL MANAGEMENT TOPICS

IN THIS ISSUE ▶

Enterprise Risk Capacity: Shifts in Risk Volume II

Since 2020 U.S. property and casualty insurers reduced certain risks in investment portfolios and assumed more underwriting risk against a backdrop of rising yields, choppy returns on average equity and surplus growth.

EXECUTIVE SUMMARY

This issue of *Perspectives* explores the evolution of the risk and return profile of the U.S. property and casualty (P&C) industry over the past 20 years ending in 2023. It is an update to a previous *Perspectives*, "Enterprise Risk Capacity: Shifts in Risk" published in January 2022, that focused on data as of year-end 2020. Our motivation for this update was to evaluate if or how the industry's risk profile evolved given the impact of the Covid-19 pandemic and subsequent dramatic changes in interest rates and inflation since 2020. Our financial performance and analysis consider statutory accounting and related filings.

Insurance company executives are expected to leverage their firm's risk capacity in ways to produce and enhance stable returns in alignment with stakeholders' expectations. We use available capital and surplus as a barometer of risk capacity, which has grown at a faster pace than invested assets and net written premiums from 2004 to 2023 despite some recent swings since 2020. Insurance leaders consider trade-offs within investments and underwriting as they balance the risk and return expectations of these areas, and the respective levered implications to capital and surplus. Notably, in recent years insurers appeared to increase allocations to high quality bonds, increase premium retentions and demonstrate lower enterprise risk.

REVIEW OF RISK CAPACITY – AVAILABLE CAPITAL AND LEVERAGE

Successful enterprise risk management begins with an organization's awareness of risk preferences and how these are linked to risk capacity.[1] Risk capacity for insurers begins with available capital and surplus. From year-end 2013 to year-end 2023 the U.S. P&C insurance industry posted a 56.2% growth in year-end capital and surplus. Figure 1 shows capital and surplus levels and growth over the past 10 years. Over this period there were two years of surplus decline. Notably in 2022 capital and surplus declined by 6.7% largely from drawdowns in common equities, which directly impact statutory surplus. Rising inflation, and the corresponding counteraction by the Federal Reserve to raise short-term rates to curb inflation, put downward pressure on the stock market with the S&P 500 posting a -18.1% return in 2022.

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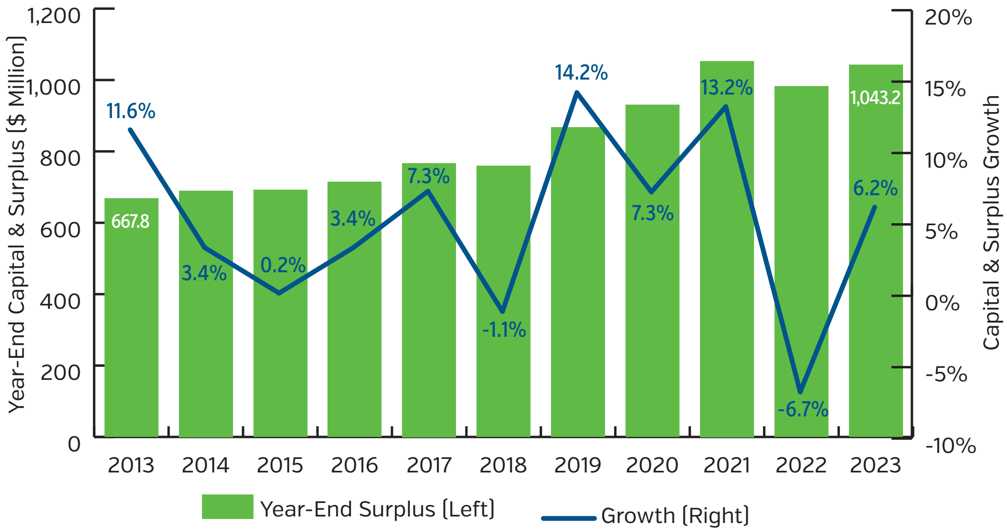
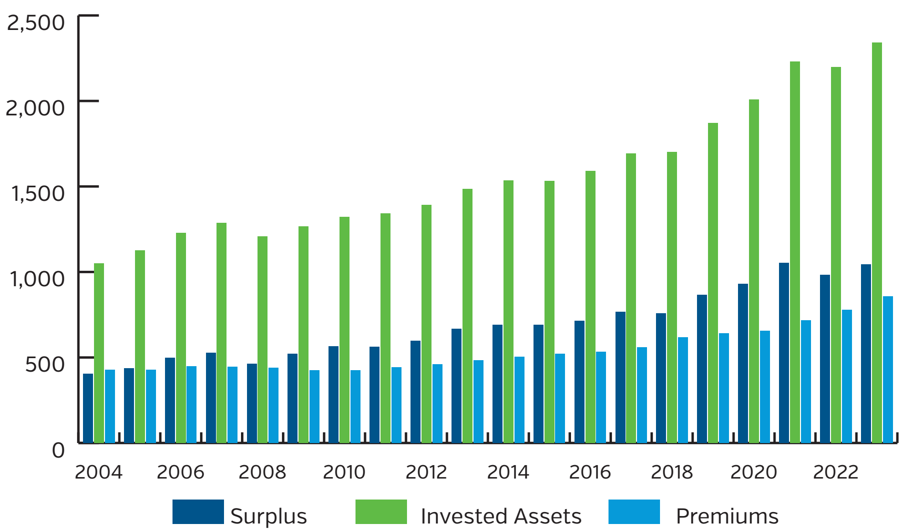
Figure 1. U.S. P&C insurance Industry Year-End Surplus and Growth from 2013 to 2023



Source: Standard & Poor's Capital IQ, NEAM

Despite the challenges of 2022, the key drivers for return on capital for the P&C insurance industry – invested assets, net premiums and surplus – exhibited an upward trend over the past 20 years. Figure 2 shows the 20-year trend of surplus, invested assets and premiums ending in 2023. Surplus, invested assets and net premiums grew at compounded annual rates of 4.9%, 4.1% and 3.6% respectively.

Figure 2. US P&C Invested Assets, Surplus and Premiums from 2004 to 2023



Source: Standard & Poor's Capital IQ, NEAM Analytics

The Dupont return on equity (ROE) decomposition in Figure 3 illustrates how leverage impacts ROE. As noted above, industry capital and surplus growth outpaced growth of invested assets and net premiums over the past 20 years.

Figure 3. Dupont Decomposition P&C Insurer ROE. Premium Leverage = Net Premiums/Surplus. Investment Leverage = Invested Assets/Surplus

$$\text{Return on Equity} = \left(\text{Premium Leverage} \times \text{U/W Margin}\right) + \left(\text{Investment Leverage} \times \text{Investment Returns}\right)$$

Source: NEAM

However, the impacts of rising interest rates and inflation to insurers' operating performance in recent years is noteworthy. Since 2021 both investment leverage and premium leverage increased[2] along with a large swing in ROE. Table 1 shows how these statistics trended over the past 10 years.

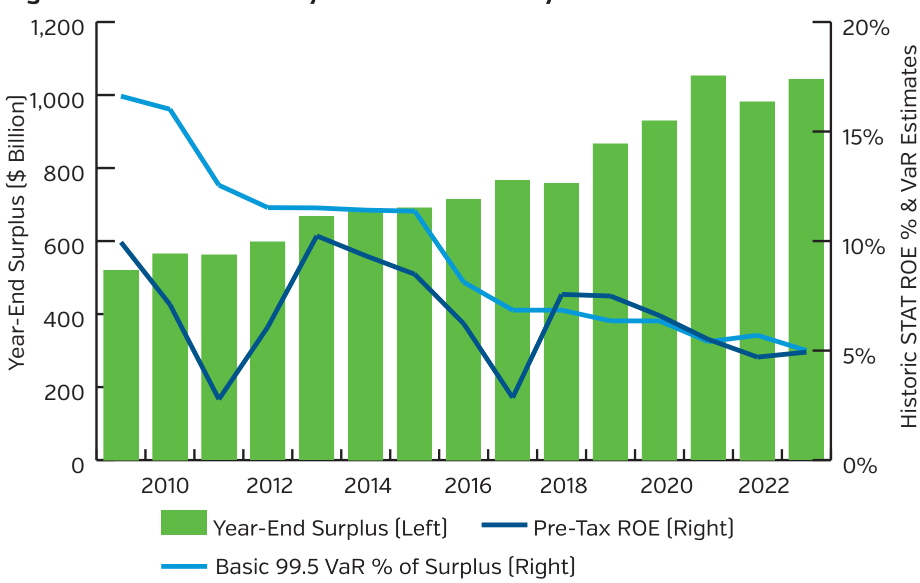
Table 1. Trailing 10-Year Trend of Year-End Statutory Returns, Leverage and Enterprise Risk Estimates for U.S. P&C Insurers

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
ROE %	8.60	3.72	6.36	6.82	7.80	8.01	5.51	6.34	8.40	9.53
ROA %	4.70	2.49	4.60	7.71	1.83	8.70	5.35	7.84	-1.32	8.56
U/W Margin %	-1.79	-2.41	0.26	1.23	1.01	0.74	-3.77	-0.76	2.06	2.81
Investment Leverage	2.24	2.24	2.12	2.16	2.16	2.24	2.20	2.22	2.22	2.22
Premium Leverage	0.82	0.79	0.68	0.71	0.74	0.81	0.73	0.75	0.75	0.73
ROE 10-year Std Deviation %	1.71	2.09	1.70	2.13	2.13	2.13	2.89	3.38	4.03	4.16
Basic 12-Month 99.5 VaR %	4.40	5.37	4.37	5.49	5.48	5.50	7.46	8.72	10.38	10.72

Source: Standard & Poor's Capital IQ, NEAM

Despite recent year-over-year variation in key operating metrics, the long-term trend of enterprise risk and return we observed through year-end 2023 is consistent with what was observed as of year-end 2020. Figure 4 shows the industry's enterprise risk, as measured by Value-at-Risk[3] (VaR) of capital and surplus and statutory pre-tax ROE volatility, continued a downward trend. The average pre-tax ROE over this period was 6.7%. Figure 4 also shows that the ROE varied significantly from 2009 to 2018 and varied less after 2018, coinciding with a downward trend in VaR. Apparently, over time the industry produced similar returns with less risk. Surplus VaRs trending downward might imply underutilized risk capacity or redundant risk capacity. If so, perhaps this could be deployed to support operational opportunities or returned to shareholders[4] and policyholders.

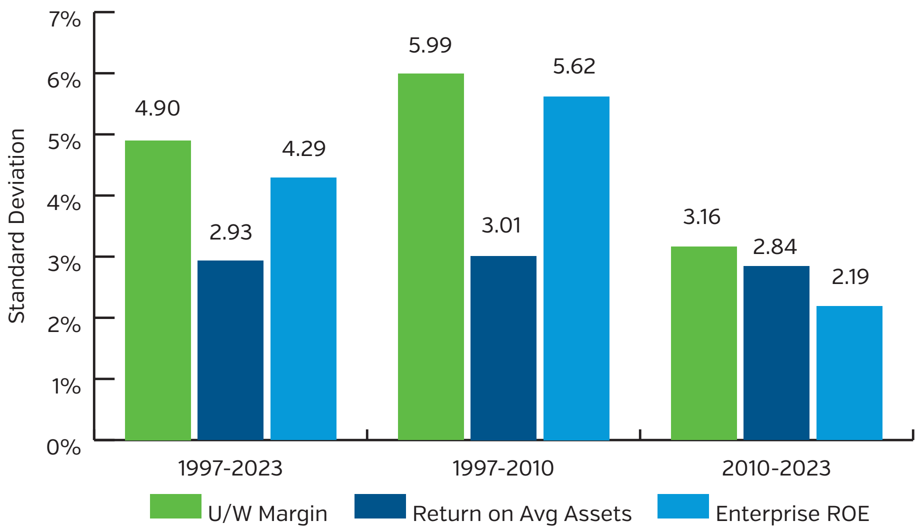
Figure 4. U.S. P&C Industry's Pre-Tax Statutory ROE and 10-Year VaR Trends



Source: Standard & Poor's Capital IQ, NEAM

The downward trend in enterprise volatility may seem counterintuitive given several headlines about the struggles of personal lines in recent years. Calendar-year[5] combined ratios for personal lines and even certain commercial lines products breached 100% for three straight years ending in 2023. Despite negative underwriting margins, the variability around that margin was smaller from 2010 to 2023 versus 1997 to 2010 for most[6] lines of business. Additionally, investment performance usually compliments underwriting performance for ROE. Investment returns[7] exhibited volatility at ~3.0% since 1997, and that volatility decreased after 2010. Figure 5 illustrates these statistics.

Figure 5. The Change in Volatility Estimates for Underwriting Margin, Investment Returns and Enterprise ROE Between 1997 and 2023

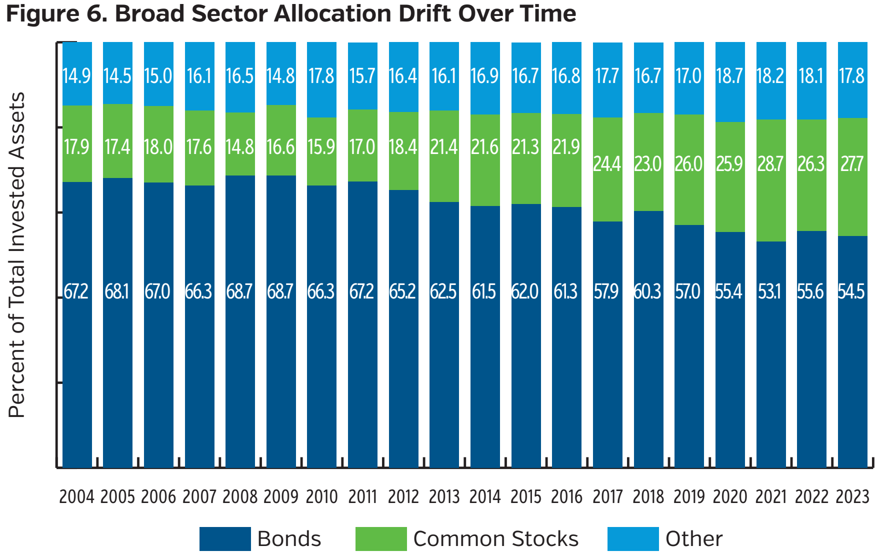


Source: Standard & Poor's Capital IQ, NEAM

REDIRECTING RISK CAPACITY

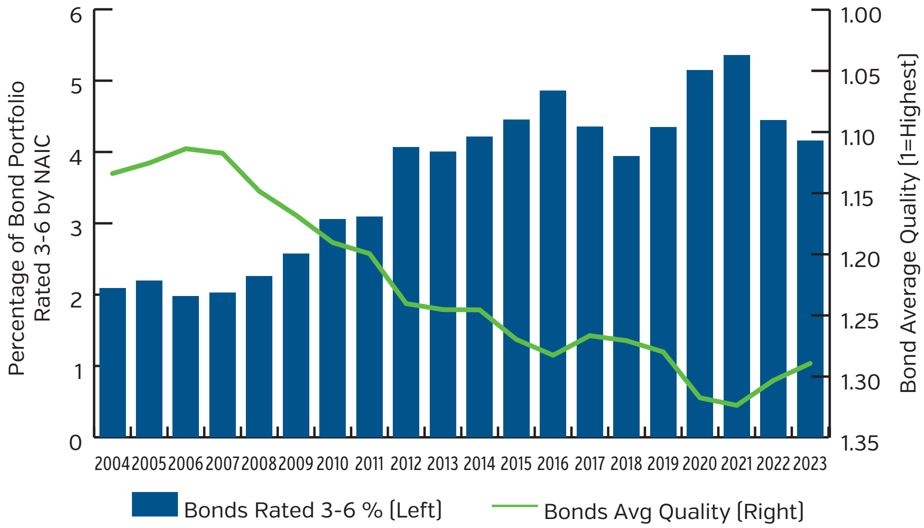
Figure 6 and Figure 7 show facets of how investment portfolios changed[8] over the past 20 years. Bond allocations increased relative to common stocks in 2022. Also, insurers held less NAIC 3-6 rated bonds in 2022 and 2023 after those holdings peaked in 2021, improving average credit quality of portfolios.

Figure 6. Broad Sector Allocation Drift Over Time



Source: Standard & Poor's Capital IQ, NEAM

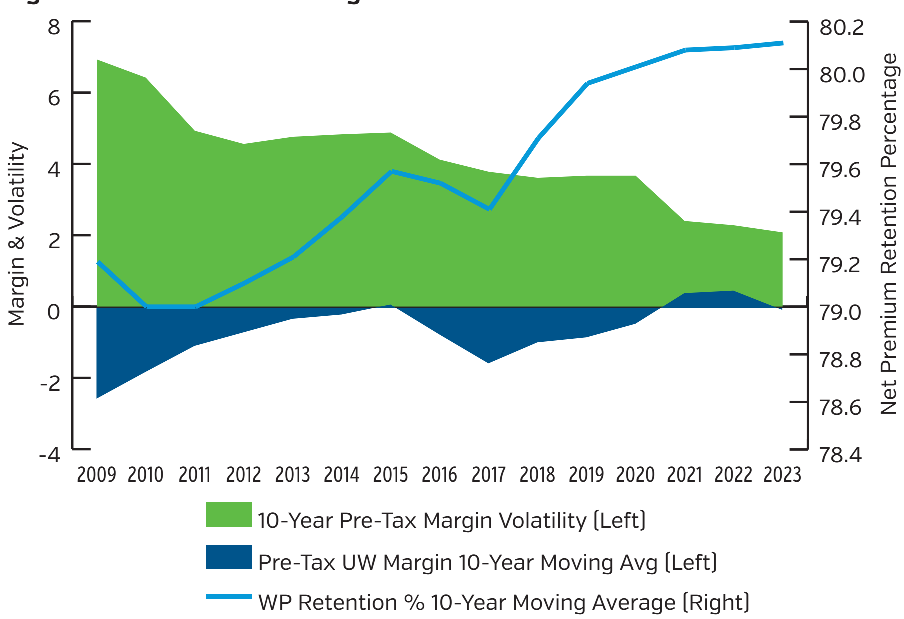
Figure 7. Bond Quality Allocation Drift Over Time



Source: Standard & Poor's Capital IQ, NEAM

High level indicators suggest risk reduction with investments since 2021. In contrast, insurers appeared to assume more risk from an underwriting perspective, and in some instances not by choice. Figure 8 shows trends for underwriting margins and related volatility and net premium retention. Insurers retained more underwriting risk after 2017 and continued to do so through year-end 2023. Insurance rate increases and rising reinsurance costs in recent years likely contributed to certain changes in underwriting risk preferences.

Figure 8. 15-Year Underwriting Performance Trends

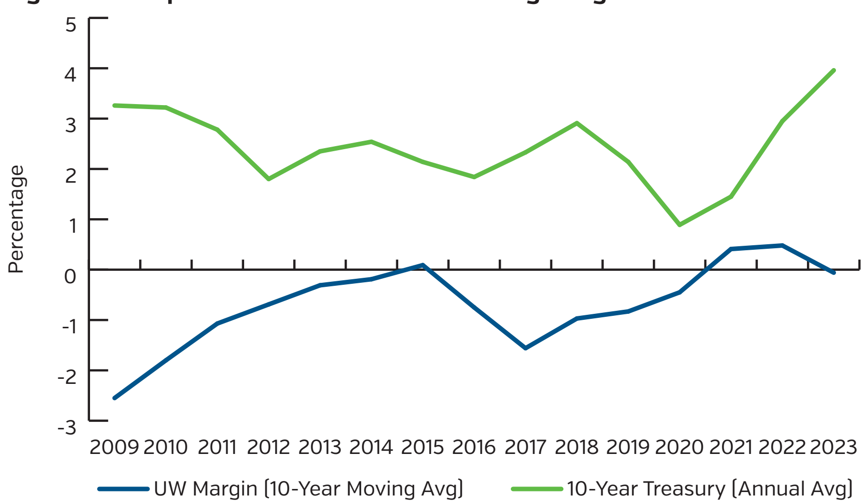


Source: Standard & Poor's Capital IQ, NEAM

LINKAGES WITH INSURANCE AND INVESTMENTS

Over the past 10 years, the insurance industry exhibited a downward trend in enterprise risk as measured by a 99.5% surplus VaR given statutory ROE. Insurers appeared to utilize less enterprise risk capacity despite long-term capital and surplus growth, perhaps due to changes in risk preferences. One metric that may illustrate this is the change in market yields. Figure 9 highlights an apparent inverse relationship with 10-year U.S.Treasury bond rates and underwriting margins over the past 15 years.[9] This is consistent with findings from our initial "Enterprise Risk Capacity: Shifts in Risk" *Perspectives*. One possible interpretation is that over a cycle of rising interest rates insurers choose to take advantage of higher bond yields by increasing allocations to high quality assets (marginal investment risk reduction), which potentially offsets increased premium retention (marginal underwriting risk expansion). The opposite could be true when market yields are compressed, and allocations increase to low quality assets and equities to sustain or enhance investment return targets. That is not to say that such choices are mutually exclusive, but more so that modern insurers with an enterprise risk management (ERM) mindset appear to consider risk and reward trade-offs holistically as risk capacity utilization decisions are made.

Figure 9. Comparison of 10-Year Underwriting Margin to 10-Year U.S. Treasury Rates



Source: Standard & Poor's Capital IQ, macrotrends.net, NEAM

KEY TAKEAWAYS

An insurer's ability to assume risk depends on the level of capital and surplus on its balance sheet, which we define as risk capacity. Insurers shift their utilization of risk capacity as market dynamics evolve. With the recent cycle of attractive market yields, many insurers shifted allocations toward high quality bonds. Additionally, insurers are writing more premiums and retaining more underwriting risk. This inverse relationship between investment risk and underwriting risk was apparent in our earlier previous *Perspectives*, "Enterprise Risk Capacity – Shifts in Risk" published in January 2022. Some key takeaways from this analysis:

- Despite surplus decreasing in 2022, the U.S. P&C insurance industry's capital and surplus (or risk capacity) increased by close to 5% on average over the past 20 years.
- VaR data suggests that the 2023 U.S. P&C insurers' enterprise risk profile continued a 10-year downward trend in risk to surplus, despite increased leverage over the past three years.
- Echoing our prior analysis, data implies that insurers retained more underwriting risk and reduced certain aspects of investment risk since 2017. Multiple factors likely contributed to this: reinsurance costs, increased insurance rates, market yields and other factors.

Optimal capital allocation and efficient use of risk capacity is unique for each insurer. Risk and return characteristics within capital markets and insurance markets, coupled with an insurer's risk preferences and stakeholder expectations, are integral to decisions about risk capacity utilization. NEAM suggests using a holistic insurance asset management approach, such as Enterprise Based Asset Allocation,™ to evaluate opportunities and costs across the enterprise to support these decisions.

ENDNOTES

[1] *We encourage review of NEAM's* Perspectives *"Layering Enterprise Risk Preferences & Rewards, February 2023, for a full discussion on the concept of insurer risk capacity, risk preferences and risk budgeting.*

[2] *Increases in investment income and insurance rates were likely contributors to the growth of invested assets and net written premiums.*

[3] *VaR estimates are based on a simple standard-normal end of period VaR at a 99.5% confidence for discussion purposes, using 10 years of historic volatility of statutory ROE. We encourage organizations to use a more dynamic and advanced method to measure their downside risk, including full mark to market asset valuation impacts.*

[4] *We encourage review of Dowling & Partners' IBNR Weekly #36, September 5, 2024, for a deeper discussion on valuation considerations and share buybacks for P&C insurers.*

[5] *Accident year loss ratios/combined ratios and reserve development should also be considered for a deeper discussion regarding long-term underwriting performance.*

[6] *There were two notable exceptions – homeowners and workers compensation – which both had increased volatility with their respective combined ratio.*

[7] *Investment returns = (investment income + net (un)realized capital gains)/average invested assets.*

[8] *We encourage review of NEAM's* Perspectives *"2023 P&C Industry Investment Highlights: Treading the Upward Path!" July 2024, for a deeper discussion of U.S. P&C industry investment trends through year-end 2023.*

[9] *Our estimated Pearson correlation coefficient between the 10-Year U.S. Treasury yield and 10-year average underwriting margin for the period 2005 to 2023 was -0.70.*

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