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Adapting your Capital Management Strategy to Changing Market Conditions

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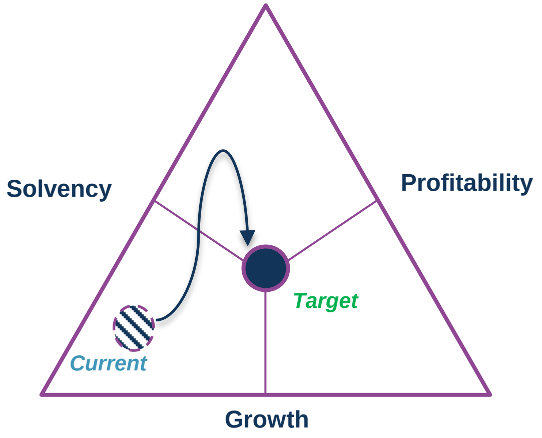
Setting Strategic Objectives

An insurer's value is dependent upon management's ability to outperform in four main areas:

Franchise multiple driven by performance in the following areas

Shareholder Value = ***Company Net Asset Value*** + ***Earnings Growth*** | ***Underwriting Effectiveness*** | ***Operational Efficiency*** | ***Capital Efficiency***

(Thomas Wilson – CRO, Allianz SE)

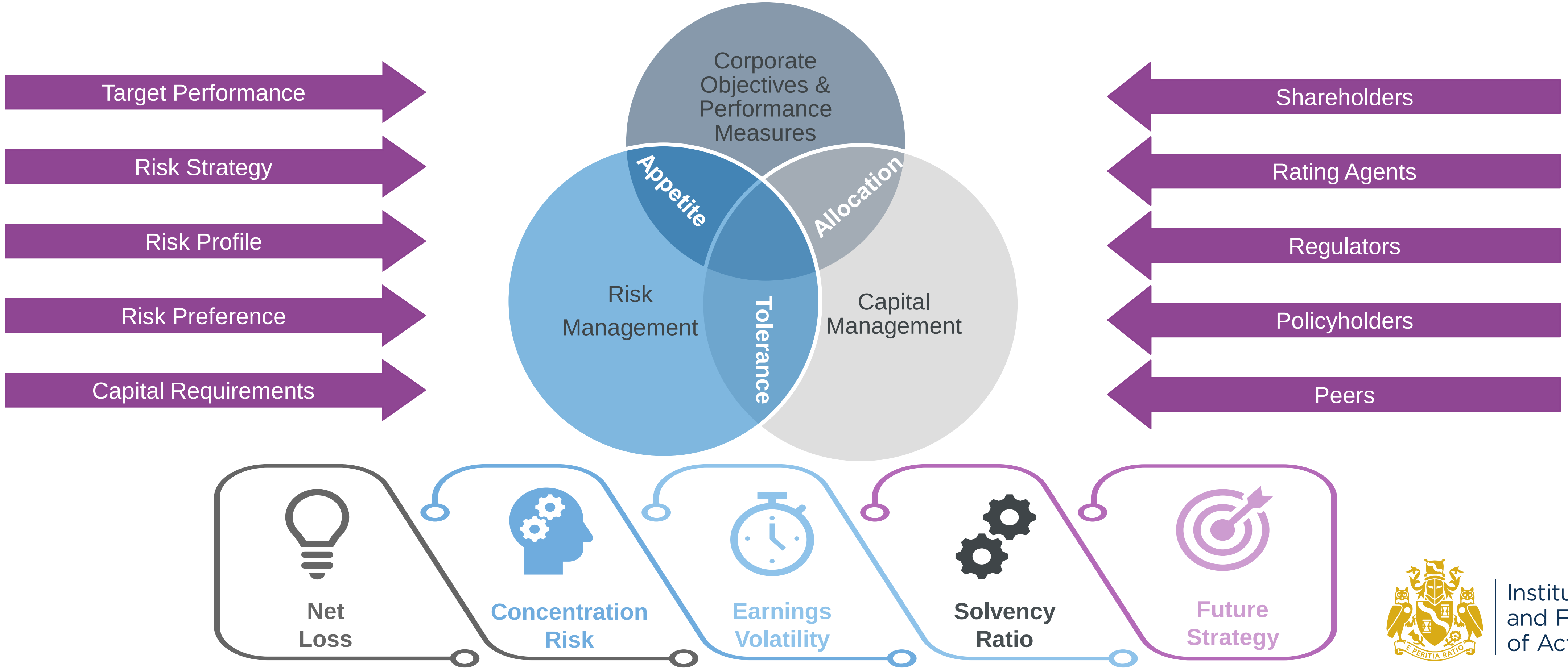


Capital management

- Capital management stands at the convergence of potentially conflicting objectives.
- Managing the capital is all about optimising under constraints.
- Setting a risk appetite framework is key before determining the optimal capital management strategy.

Establishing Risk Appetite

- Balance is key when setting risk appetite



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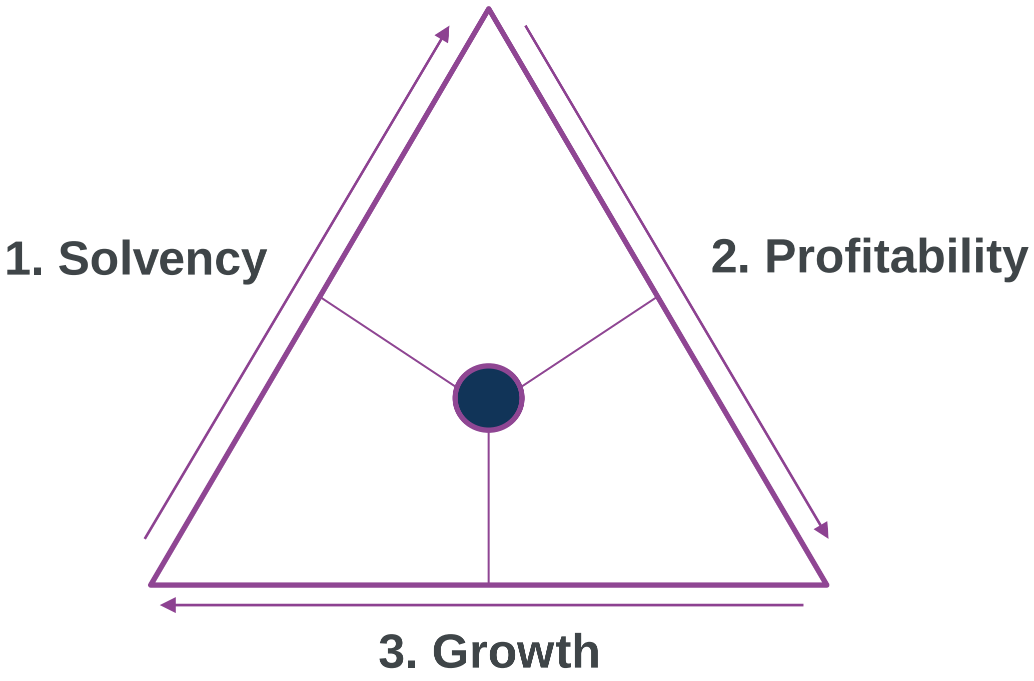
Performance Optimization



Key Considerations

- ***Risk Appetite*** – The amount and type of risk the company is willing to assume to meet the business objectives
- ***Business Objectives*** of the short term, medium term and long term
- ***Peer studies*** – How does the current and prospective programme compare against peers in the market

1. *Capital and Solvency comes first to meet policyholder obligations…*
2. *Managing profit stability over the short and long term comes next...*
3. *Maximise growth opportunities under constraints of Profitability and Solvency*

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Capital Management Themes

There are a number of situations, or combination of situations, that place pressure on capital…..

Underwriting Event Shock

Reserve Shock

Interest rates up = Bond values down

Bond downgrade/ impairment
= Bond values down

Other asset reduce in value

Reinsurer failure

Weakening Currency ➔ Inflation

Growing market / penetration
Bigger business ➔ more capital needed

Grow market share
Bigger business ➔ more capital needed

New line of business
Bigger business ➔ more capital needed

Inflation
Claims up ➔ Premiums up ➔ Regulatory capital up ➔ more capital needed

Regulation Change

Law Change ➔ Reserve Shock

Acquisition Opportunity

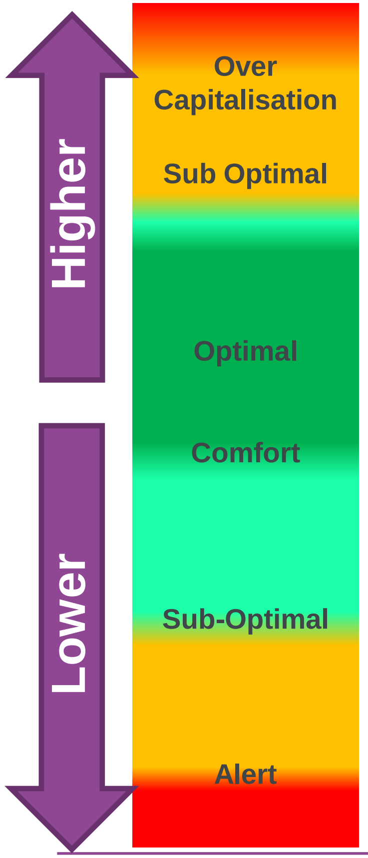
Special Dividend to Shareholders

Change to Capital Light Model
Reduce Capital ➔ Increase RoE
Reduce capital back to shareholders

Capital Management Strategies

Capital strategies will vary depending on level of solvency compared to risk appetite

Solvency Ratio Position



Action Category	Possible Alternative Strategies
Redeploy Capital	• Enter new business lines. • Buyback issued debt capital. • Issue dividends to shareholders / premium discounts (mutual). • Buyback shares (publicly traded). • Increase allocation to investment risky assets. • Hold excess capital to satisfy rating agency needs. • Enlarge growth of diversified insurance business. • Increase ESG Score.
Fine-tune Underwriting and Investment Strategy	• Optimum level of capitalisation. • Continuous performance optimisation to remain in the optimal zone.
Re-structure Underwriting and Investment Strategy	• Improve diversification within the group. • Improve investment strategy. • Optimise use of alternative reinsurance capital.
Improve Efficiency of Capital Use	• Increase reinsurance cover / protection by class of business or in the aggregate. • Issue debt capital, equity or premiums calls (mutual). • Slow down growth strategy. • Scale-down operational activities. • Restructure investment and business portfolio.
Restore Capital Position	• Consider private capital relief (Alternative Reinsurance Capital). • Consider raising premiums from members. • Consider sale of non-performing business lines. • Supplementary calls (mutual).

High Level Capital Strategy

- Underwriting Management
- Reinsurance Solutions
- Investment Strategy
- Capital Planning
- Other

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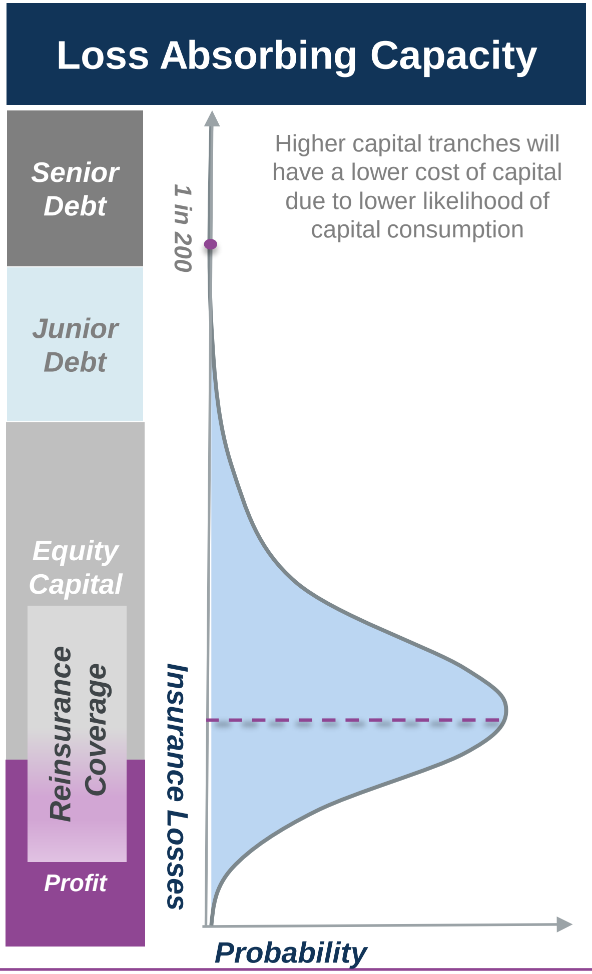
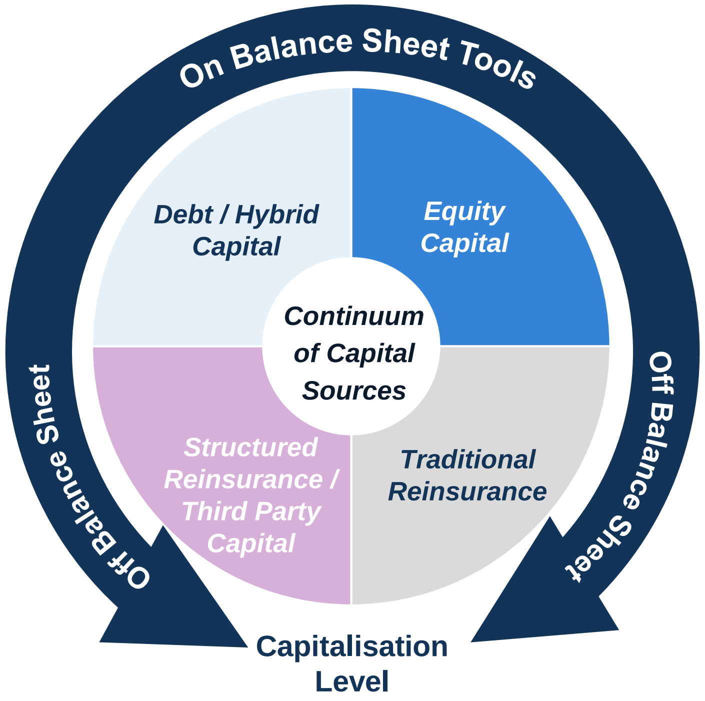
Expanding the Capital Toolkit

Assessing the Insurer’s external capital management tools based on loss absorbing capacity

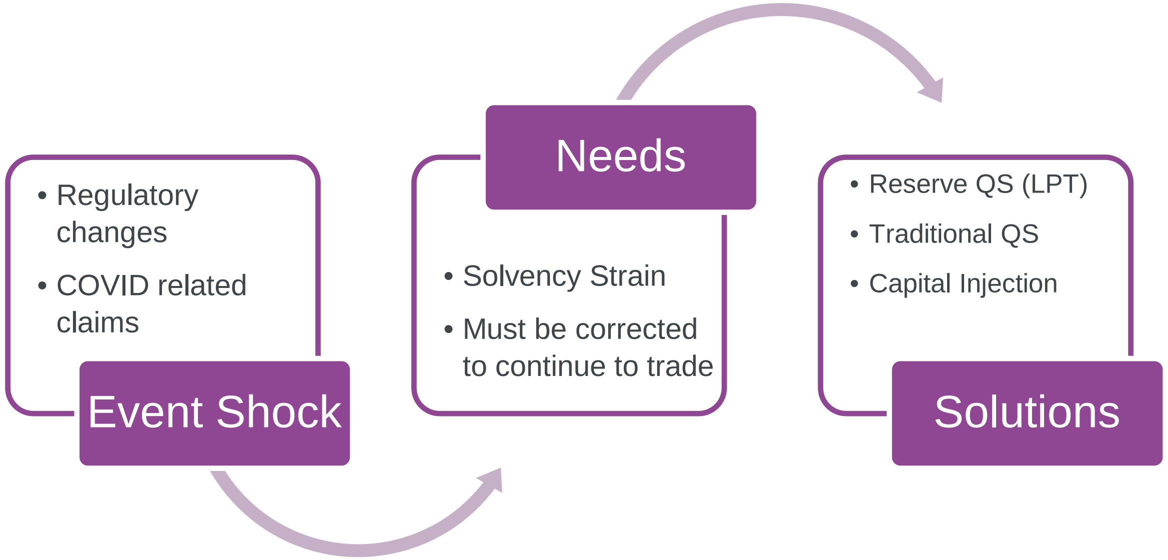
	Reinsurance	Sub-Debt	Equity
Term	*Expiration of liabilities or commutation*	*Defined – 10 year/ 5-year non-call*	*Perpetual*
Risk Transfer	*Yes*	*No*	*No*
Flexibility	*Adjust annually*	*Call provisions*	*Dividend/Share buyback*
Risk Coverage	*Insurance risk*	*All risks*	*All risks*
Tax Deductible	*Yes*	*Yes*	*No*
Cost of capital	*Varies – competitive relative to debt*	*Market rate c.7%-10% net rising*	*Higher than Reinsurance and debt*

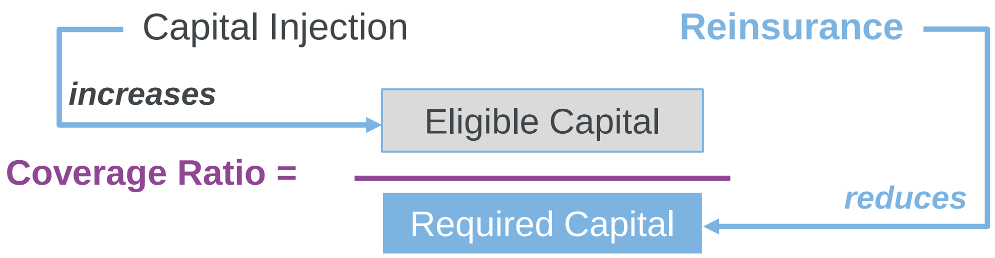




Responding to Capital Issues

- Less reinsurance required to achieve the same effect as a capital injection





Less reinsurance to achieve the same effect as a capital injection

Before transaction: $200\% = \frac{200}{100}$

After Injection: $220\% = \frac{200 + 20}{100}$

After Reinsurance $220\% = \frac{200}{100 - 9}$

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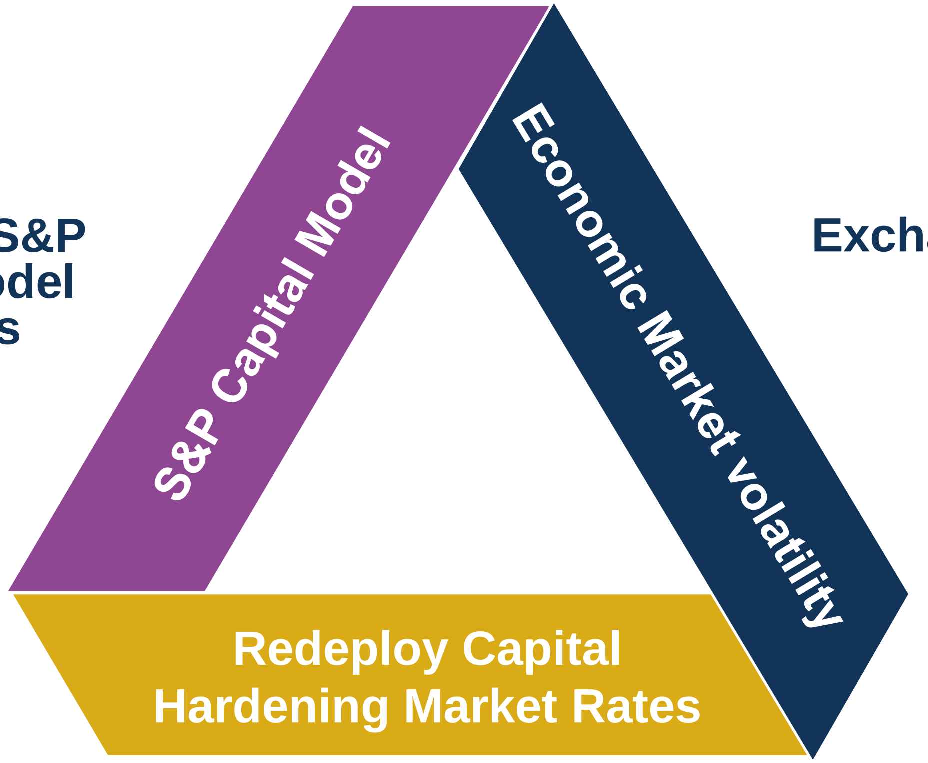
Addressing changing Market Conditions

Proposed S&P
Capital Model
Changes



Exchange Rate Volatility

Interest Rates

Inflation

Maximize Current Market Opportunities

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Looking ahead to 2023 market conditions

Headwinds

- Rising inflation risk
- Weaker economic resilience and associated risk of inflation / stagflation
- Social claims inflation (notably in the US)
- Russia / Ukraine overhang and loss emergence
- Exchange Rate volatility
- Cat Experience / Hurricane Ian Development
- Climate Change

Tailwinds

- Positive pricing trends with focus on underwriting discipline
- Reduced uncertainty around Covid-19 losses
- Leap towards digitisation and market modernisation
- Rising interest rates
- Hardening Market Rates

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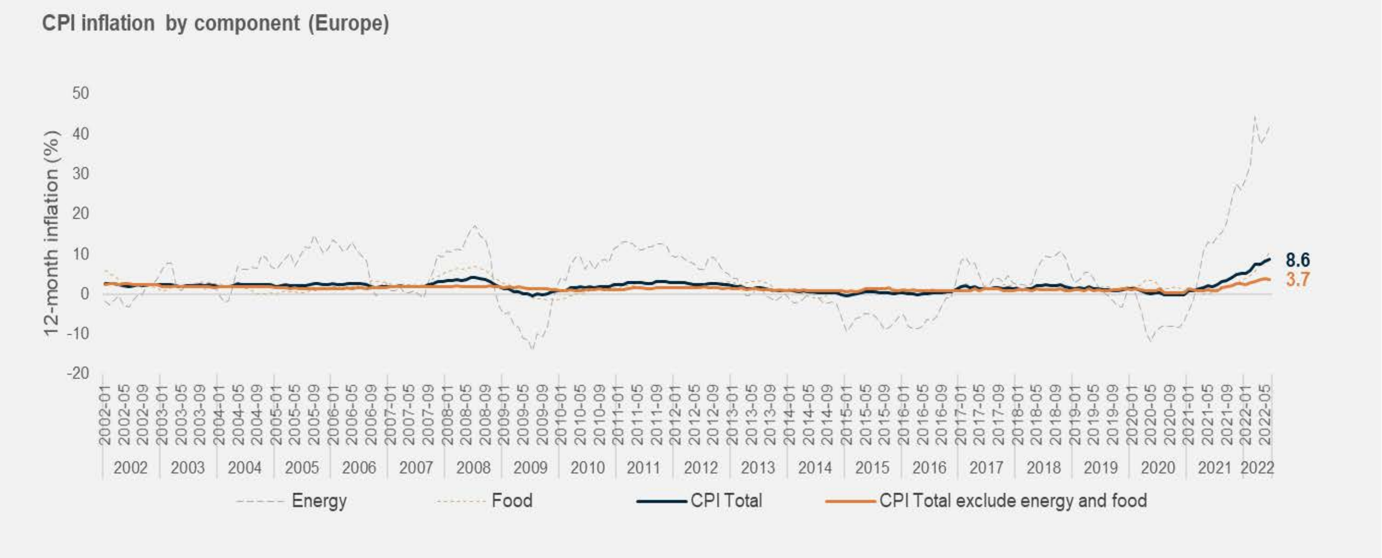
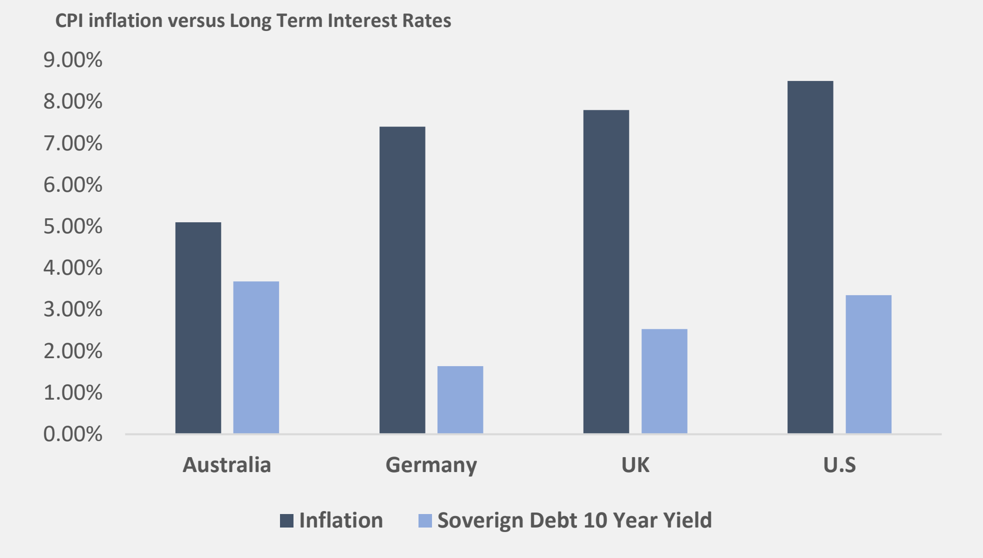
Increasing Inflation and Interest Rates

- In most major economies a combination of expansion monetary policy, COVID-induced supply constraints and war in Ukraine has created an inflation spike.
- Interest rates are being increased by central banks in an attempt to control inflation





Inflationary trends are expected to continue: current expectations are a peak in latter half of 2022 and gradually falling through 2023

Inflation has spiked, bond yields have recently responded

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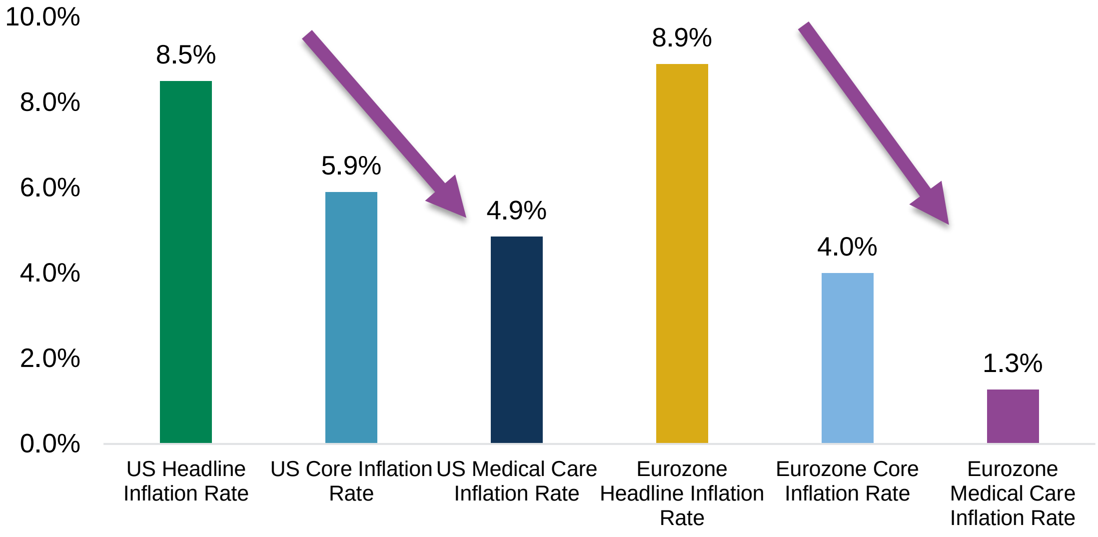
Implication of Inflation Risk

- Inflation is impacting drivers of short-tail claim cost ...But longer-tail lines are less impacted

Drivers of casualty claims are running at a lower inflation rate

Annualized Inflation Rate for 2022: Medical & Core are Lower than Headline

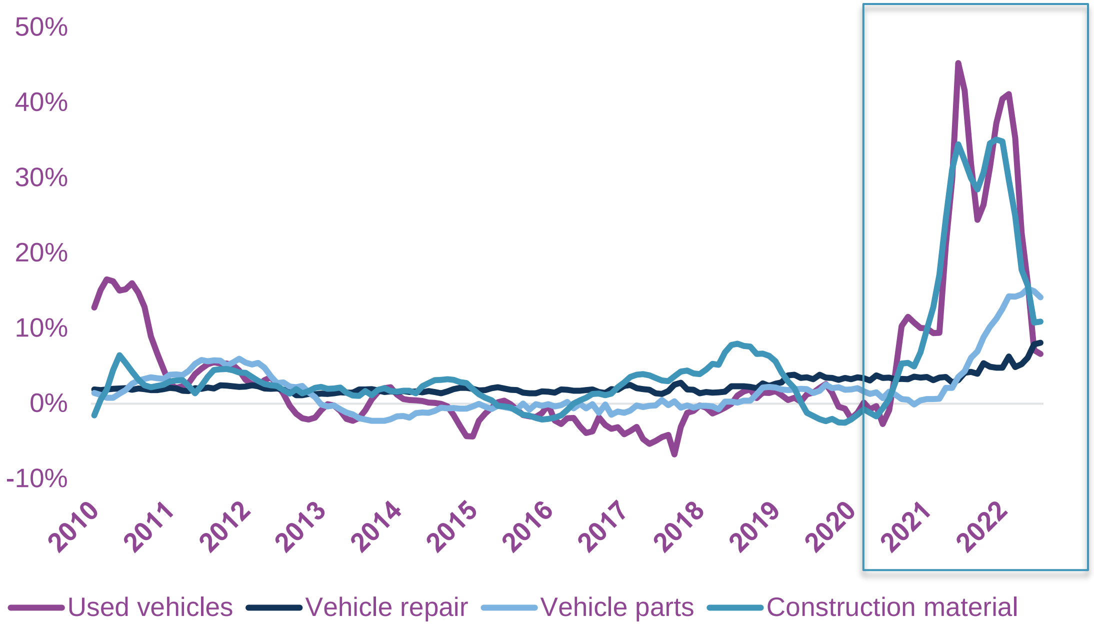


US Medical Inflation 4.9% is much lower than headline 8.5%

Eurozone Medical Inflation 1.3% is much lower than headline 8.9%

US CPI for motor and construction

Year on year change %



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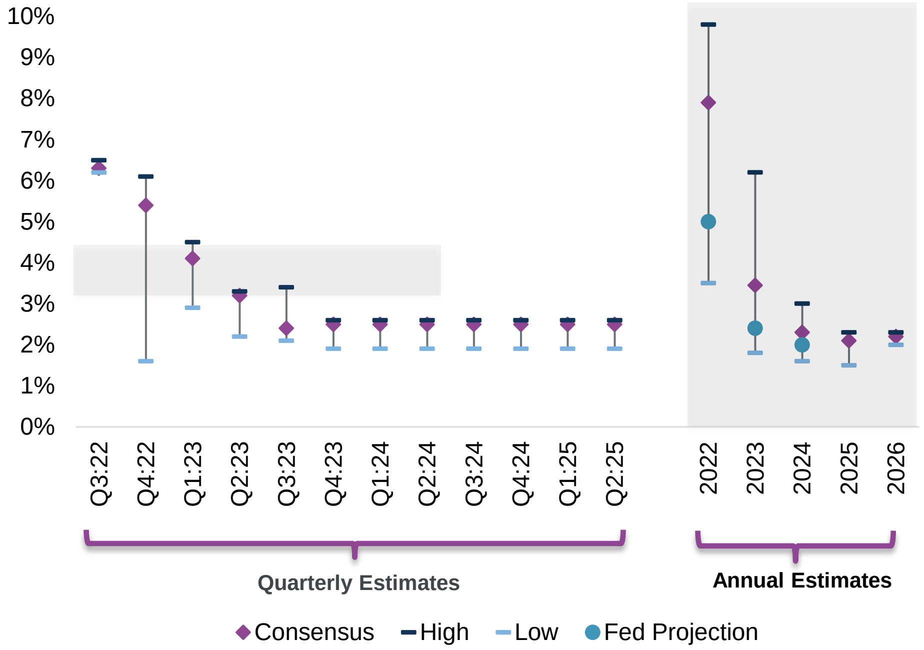
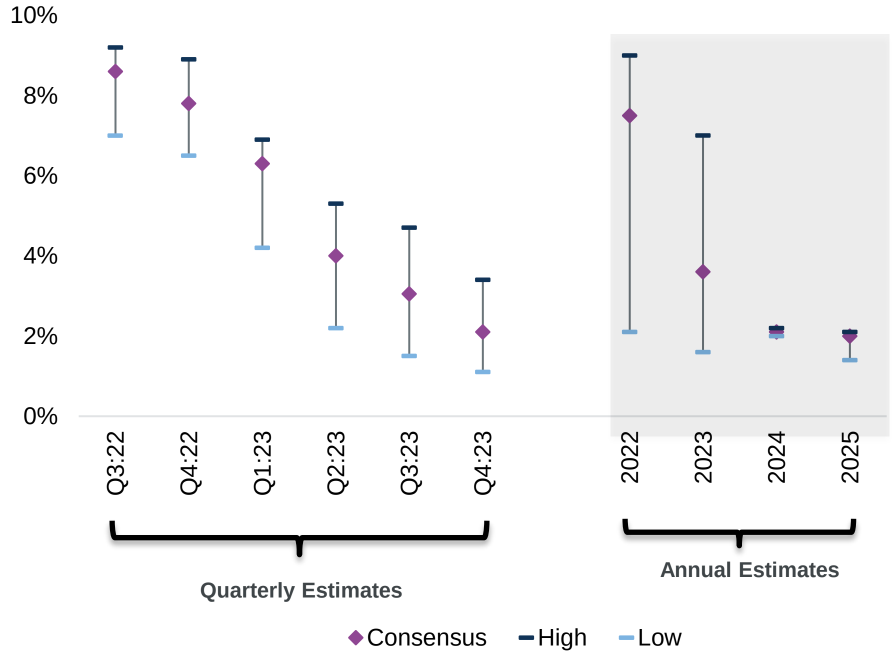
Future Inflation Outlook beyond 2022

- Consensus does expect inflation to return to 'normal' . . .
- Inflation risk will be revert to normal levels by H2 2023 according to the Federal Reserve and consensus

Estimated US CPI Inflation Rate – Consensus vs High / Low



Estimated Eurozone CPI Inflation Rate



Source: FactSet, The US Federal Reserve
Note FactSet consensus is larger for the annual estimates with forecasts from 75 macro-forecasters compared to 15 forecasts for quarterly estimates

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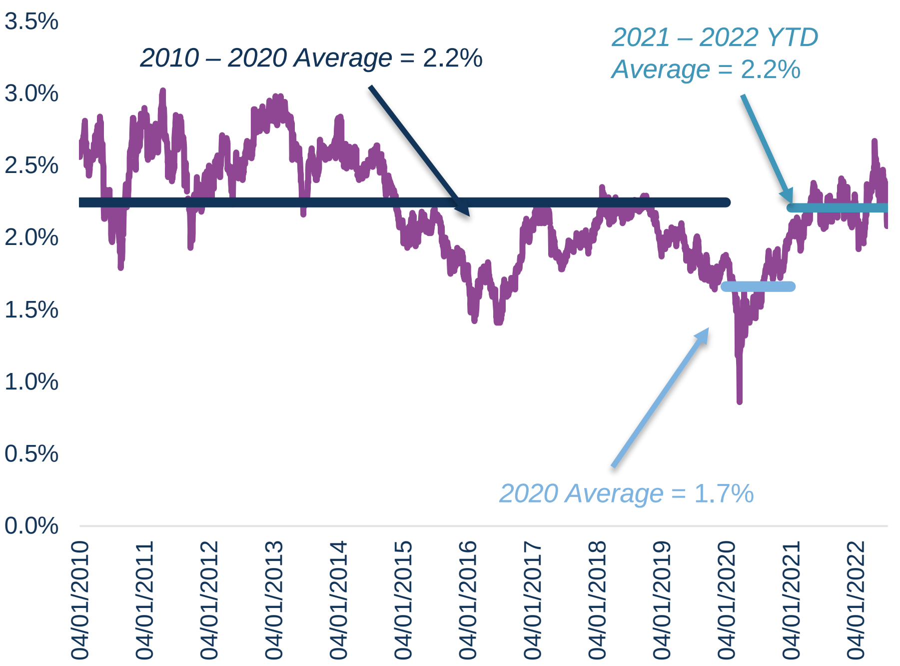
Rise in Interest Rates

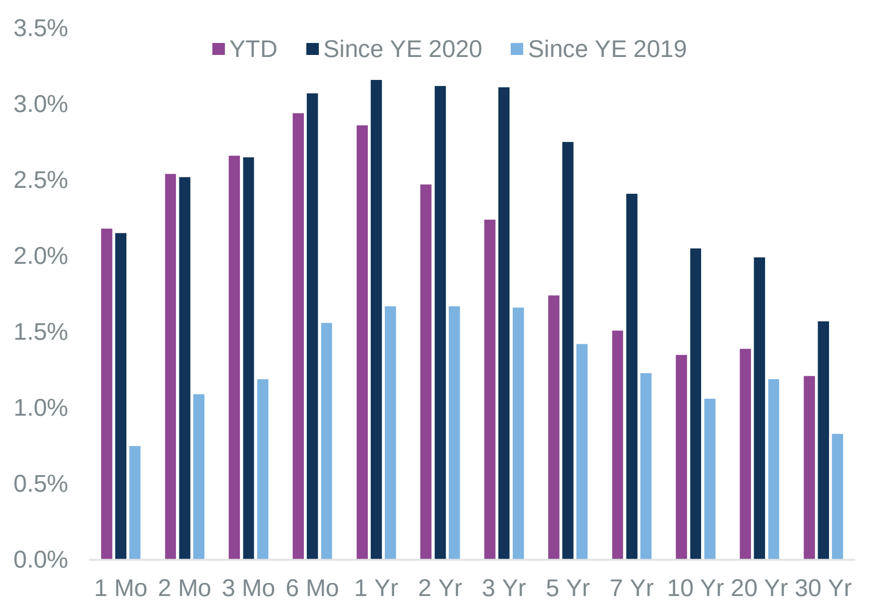
- Rise in yields could be higher than the expected increase in long-run inflation

Five-Year Forward Five-Year Inflation Expectation Rate



Source: Federal Reserve Bank of St. Louis

Change in Yields For U.S. Treasuries – Various Maturities



Source: U.S. Federal Reserve

- Long run inflation expectations higher than pandemic-induced low but still anchored at long-run levels prior to the pandemic.
- But interest rates across all maturities are up significantly, ~100-150bps higher than pre-2020 levels.
- According to estimates by Dowling & Partners research, P&C companies under coverage benefit on average by 2pts of ROE for every 100BPS rise in NII[1].
- Inflation and Interest rates impact both sides of the balance sheet. Expect ALM matching to be a key theme.

Footnote: Average of D&P estimates for 46 covered companies excluding BRK in IBNR Weekly #24 2022. Estimates are for 100bps increase in P&C fixed income yield, including short-term and cash. Impact to company ROE depends on portfolio duration among other factors, but estimates represent a proxy for AY sensitivity to NII yields.

Adapting Capital Strategies

High Level Capital Strategy	Considerations
• Underwriting Management	• Revisit underwriting adequacy based on revised views of inflation • Are revised hurdle rates being applied in new business decisions?
• Reinsurance Solutions	• Increased justification to use reinsurance, particularly as de-risking can reduce exposure to inflation volatility
• Investment Strategy	• Expected reduction to the value of bonds due to interest rate increases • Increase in risk free rate can make certain classes appear more desirable (e.g. cash)
• Capital Planning	• Review in line with revised Weighted Average Cost of Capital (WACC) • Has cost of debt increased and does this need to be reviewed to consider alternatives? • Does the dividend strategy need to be reviewed?
• Other	• Do the changes in market conditions increase credit risk for any third parties involved?

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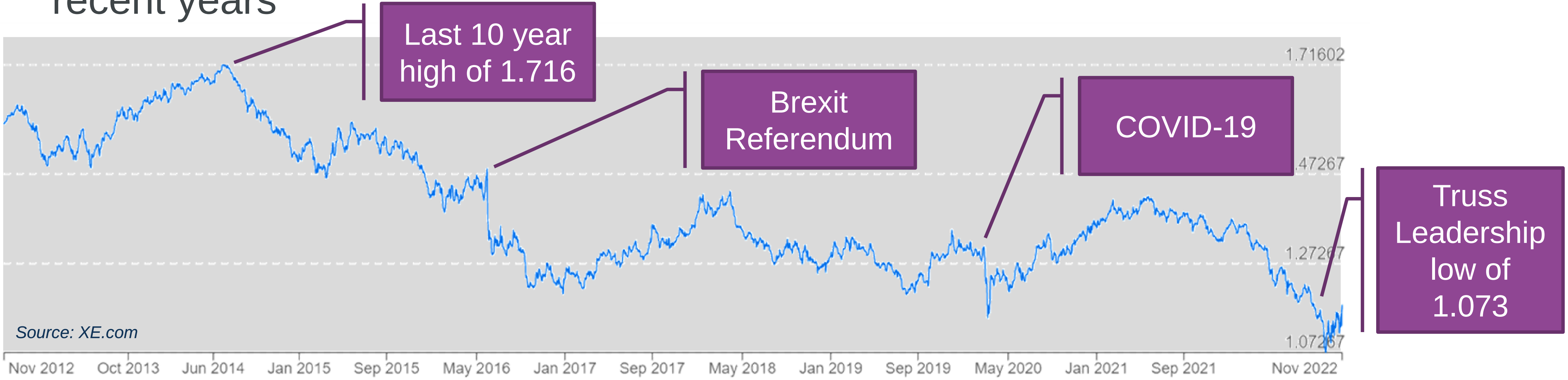
Exchange Rate Movements

- A knock-on impact of geo-political issues, and differences in central bank policies (e.g. interest rates) has led to significant exchange rate volatility in recent years



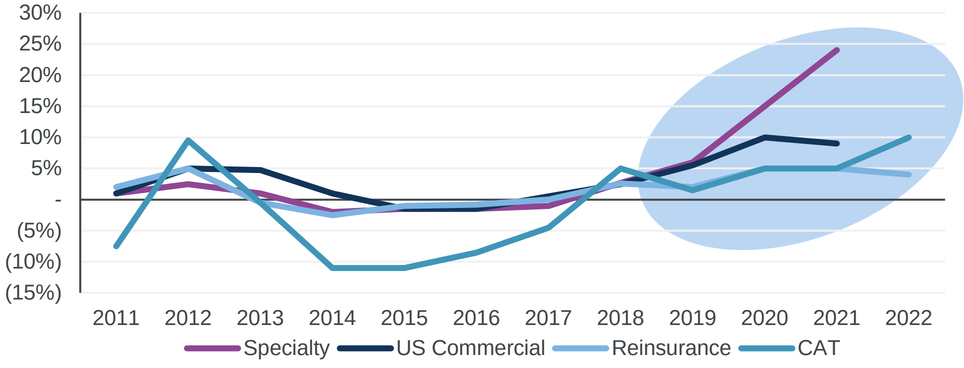
- GBP relative to USD has fallen by almost 50% over 10 years
- Over the last year alone, the value has fallen by approx. 15%

Adapting Capital Strategies

High Level Capital Strategy	Considerations
• Underwriting Management	• Redeployment of capital across business may be required where class of business adequacies have changed materially (perhaps due to currency weightings)
• Reinsurance Solutions	• Do existing reinsurance arrangements mitigate or worsen exposures against currency?
• Investment Strategy	• Closer currency matching where possible (unless taking an active position)
• Capital Planning	• Solvency position may have improved or worsened depending on base currency and method to determine capital adequacy
• Other	• Consider hedging strategies for large individual claims in minor currencies

Highly Attractive Rating Environment

P&C rates are increasing across all sub-segments[1]



- Current rate momentum creates opportunities for (re)insurers with relevant specialisms to profit significantly
- The market has seen consistent price rises across nearly all insurance sub-segments
- This is coupled with a tightening of the terms and conditions of the underwritten policies
- Whilst 2018-2020 was a period during which (re)insurers focused on expense control and remediation of their underwriting portfolios, current market focus is on capturing the rate increase momentum and underwriting profitable new business

Source: Aon, RBC Capital Markets; (1) Specialty rates based on Beazley's reported group rates, US commercial rates from the CIAB, reinsurance rates based on the average of reported renewal rates of the four European reinsurers, CAT rates from Guy Carpenter global property CAT Rate-on-Line Index

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Adapting Capital Strategies

High Level Capital Strategy	Considerations
• Underwriting Management	• Improved rate adequacy will likely change the focus of business plans around certain classes of business
• Reinsurance Solutions	• Additional reinsurance may be required to manage capital alongside additional growth in profitable classes
• Investment Strategy	• Refinement of investment strategy as improved underwriting profitability may lead to less capital being allocated to investments
• Capital Planning	• Expectation is that solvency position will improve as more profits are generated, but it could worsen in the short term if using a factor-based premium model (e.g. S&P) • Growth plans due to improved profitability may require raising additional capital
• Other	• Is rate change and adequacy adequately captured and reliable enough to use for business decisions?

Changes to S&P Capital Methodology

- Anticipated changes to S&P capital methodology include general increases in capital charges and an increase in diversification benefits

Capital Adequacy Model Output

Total Adjusted Capital (Capital Held)	Risk Based Capital (Capital Requirement)
↑ Allowance of non-life DAC and removal of various downward reserve adjustments to capital	↓ Recalibration of the model to higher confidence levels
↓ Calculation of hybrid capital tolerance using narrower capital denominator could lower limits in absolute terms	↓ Higher reserve risk charges
↑ Higher tolerance limit percentages for hybrid capital	↓ Higher charges for natural catastrophe
↓ Stricter eligibility criteria for debt-funded capital	↑ Lower credit risk for reinsurance
	↑ More explicit and higher diversification benefits

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Adapting Capital Strategies

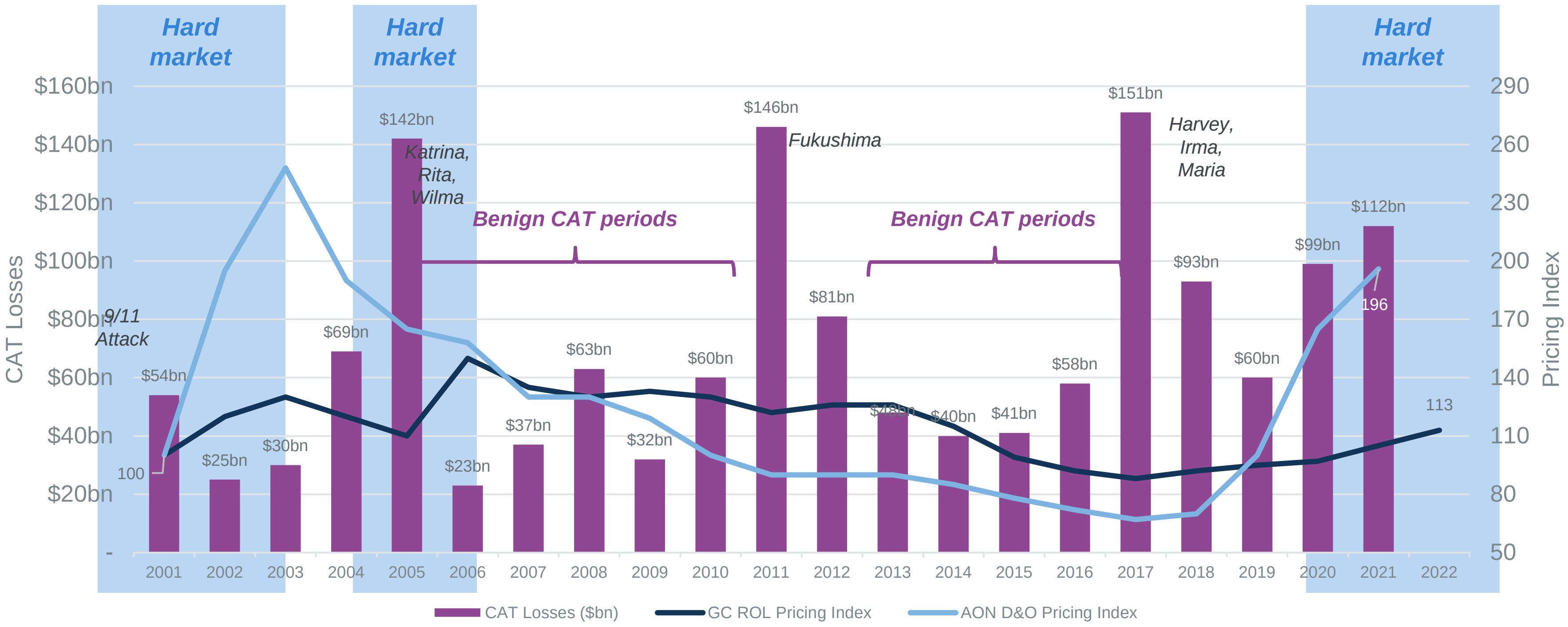
High Level Capital Strategy	Considerations
• Underwriting Management	• New methodology will lead to a higher charge for non-life reserve risk
• Reinsurance Solutions	• Additional tail cover for catastrophe risk may be required to address the increase in pre-diversified cat risk charge • A higher charge for non-life reserve risk could be managed through retrospective solutions include LPT, ADC or legal transfers (Reinsurance to close, Novations, Insurance business transfer).
• Investment Strategy	• Higher market risk charges (equities and alternative investments) may lead to a change in strategic investment allocation towards fixed income assets. • Could justify a change in capital deployment strategies between core (re)insurance underwriting and investments.
• Capital Planning	• Stricter eligibility criteria for debt-funded capital means that alternative structures may need to be considered (e.g. sidecars, ILS, collateralized reinsurance, equity or qualifying hybrid capital).
• Other	• Do the changes provide an opportunity to reassess the expected capital adequacy level held to by S&P?

The Rise of ESG

- Environmental, Social and Governance issues continue to grow in focus with key stakeholders, including investors, policyholders, regulators and rating agencies
- In particular, incoming regulatory requirements are leading to significant changes in internal processes and levels of disclosure
- Climate change is a key consideration under environmental issues, and is manifesting itself through increased frequency and severity of catastrophe events, as well as transitional climate risks

Historical Catastrophe Activity

- Since 2005-6, there have been prolonged periods of soft market conditions



Lloyd's COR (reported)	*140%*	*99%*	*91%*	*97%*	*112%*	*83%*	*84%*	*91%*	*86%*	*93%*	*107%*	*91%*	*87%*	*88%*	*90%*	*98%*	*114%*	*105%*	*102%*	*110%*	*94%*

- Significantly elevated level of cat activity over last 5 years (both severity and frequency), which has caused significant insured losses
- Hurricane Ian in 2022 in 2022 is also expected to lead to significant market losses.

Sources: Swiss Re Institute, Lloyd's of London, AON, Reuters, AJ Gallagher research

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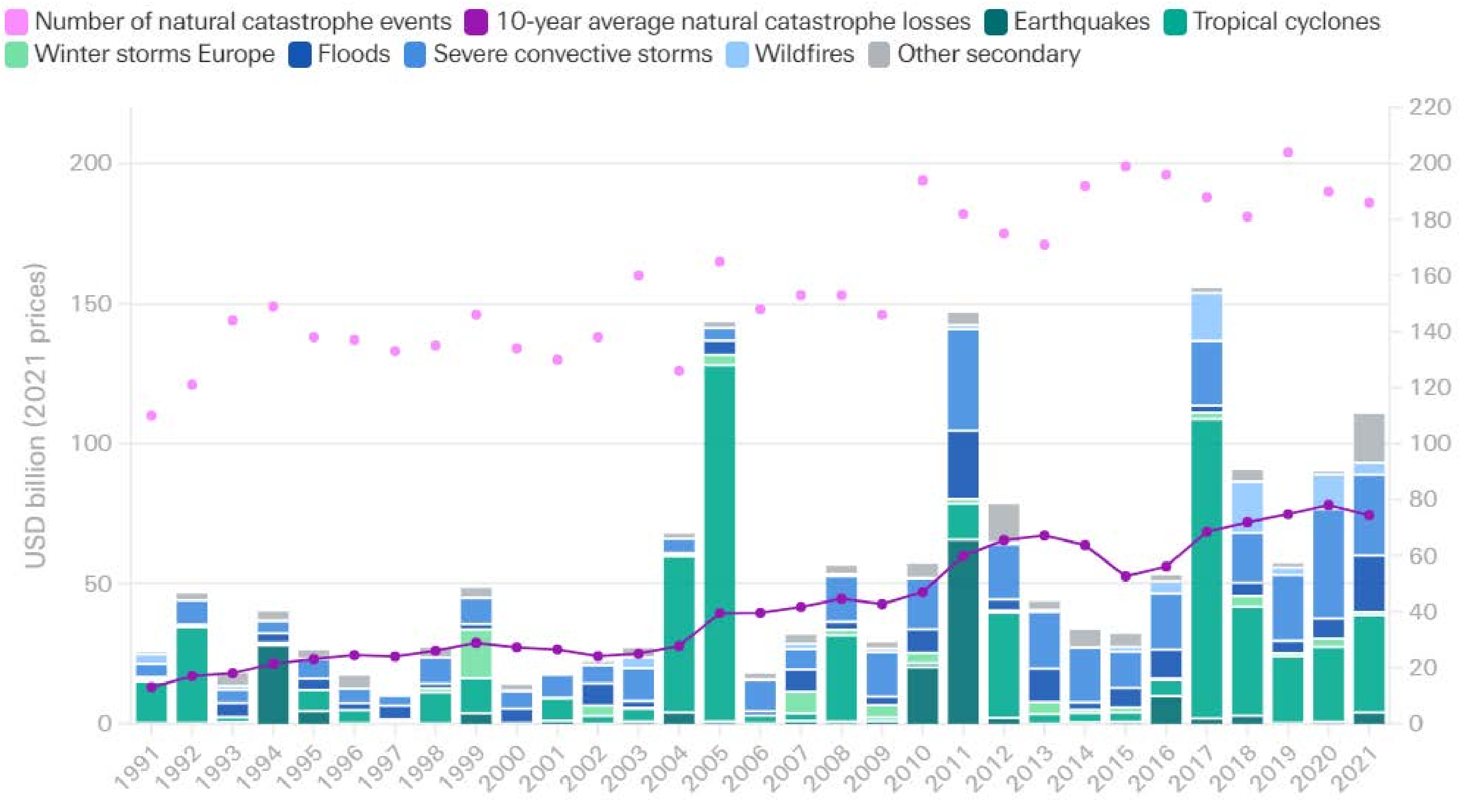
Increasing Loss Cost of Secondary Perils

Global insured losses from secondary perils, by peril type since 1970



Sources: Swiss Re Institute

Note: Primary Perils: earthquake, tropical cyclone, winter storm Europe Secondary Perils: flood, severe convective storm, wildfire

- Secondary perils are increasingly becoming insured losses
- The market is seeing increasing loss costs of secondary perils, which are estimated to have accounted for more than 70% of natural catastrophe losses in 2020
- Primary perils have the highest loss potential, are well monitored, and usually covered by catastrophe models
- By contrast, secondary perils generate small-to-medium losses (e.g. those caused by hail, storms and bushfires) and often have less mature modelling capabilities

Adapting Capital Strategies

High Level Capital Strategy	Considerations
• Underwriting Management	• Is cat exposed business still being priced adequately? • Does a sustainable underwriting strategy lead to a material change in capital allocation between classes or sectors?
• Reinsurance Solutions	• Potential exhaustion issues relating to cat reinsurance or other classes • Potential future RI coverage issues if business includes ESG sensitive sectors
• Investment Strategy	• Investment considerations around sustainability are becoming requirements for many regulators
• Capital Planning	• Are additional capital raises required due to cat loss activity?
• Other	• Review of overall strategies above to consider sustainability and other ESG metrics

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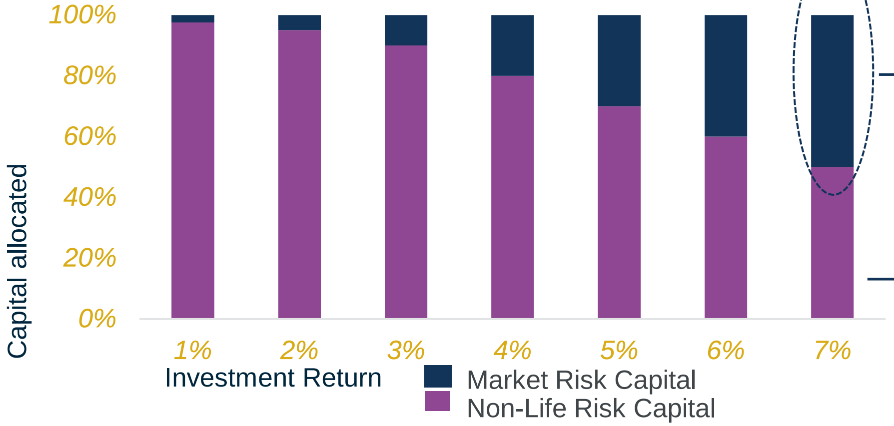
Capital Optimisation

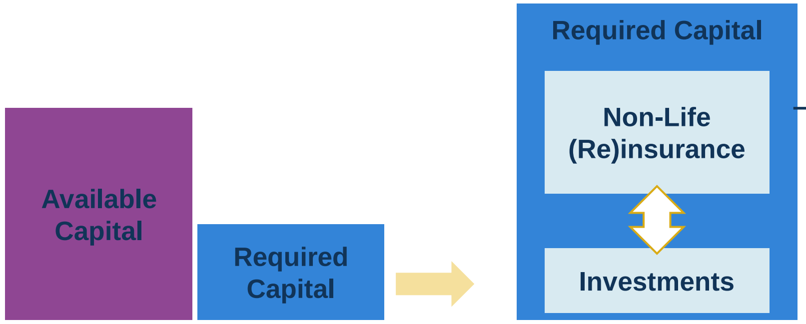
Determine the right balance between underwriting, reserves and investments to enhance overall earnings and meet the cost of capital

Capital allocation across investment strategies



Higher allocation to equity, alternatives and high-yield fixed income investments.

Reinsurance can be used to release capital on prospective & retrospective risk.



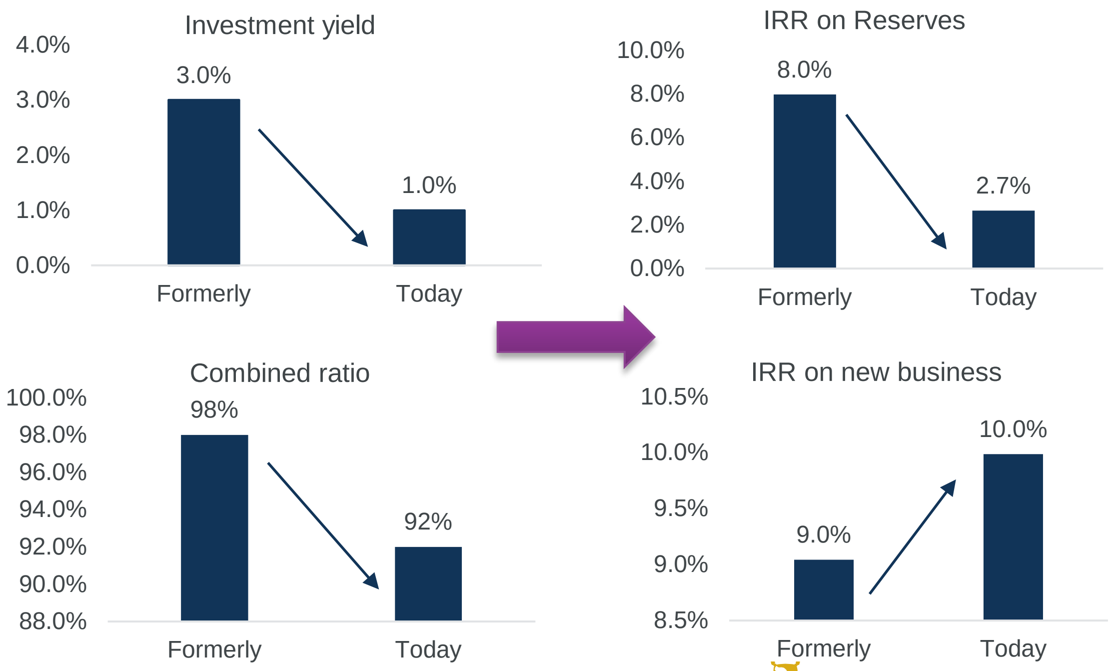
Maintain target solvency ratio (~150% to 175%)

Dynamic Allocation of Capital

Higher allocation to prospective business could generate higher returns on equity thanks to firmer pricing.

Retrospective solutions can be used to release trapped capital and re-allocate to profitable business

Hypothetical example: IRR on capital backing in-force has come down, while the IRR on capital backing new business has increased



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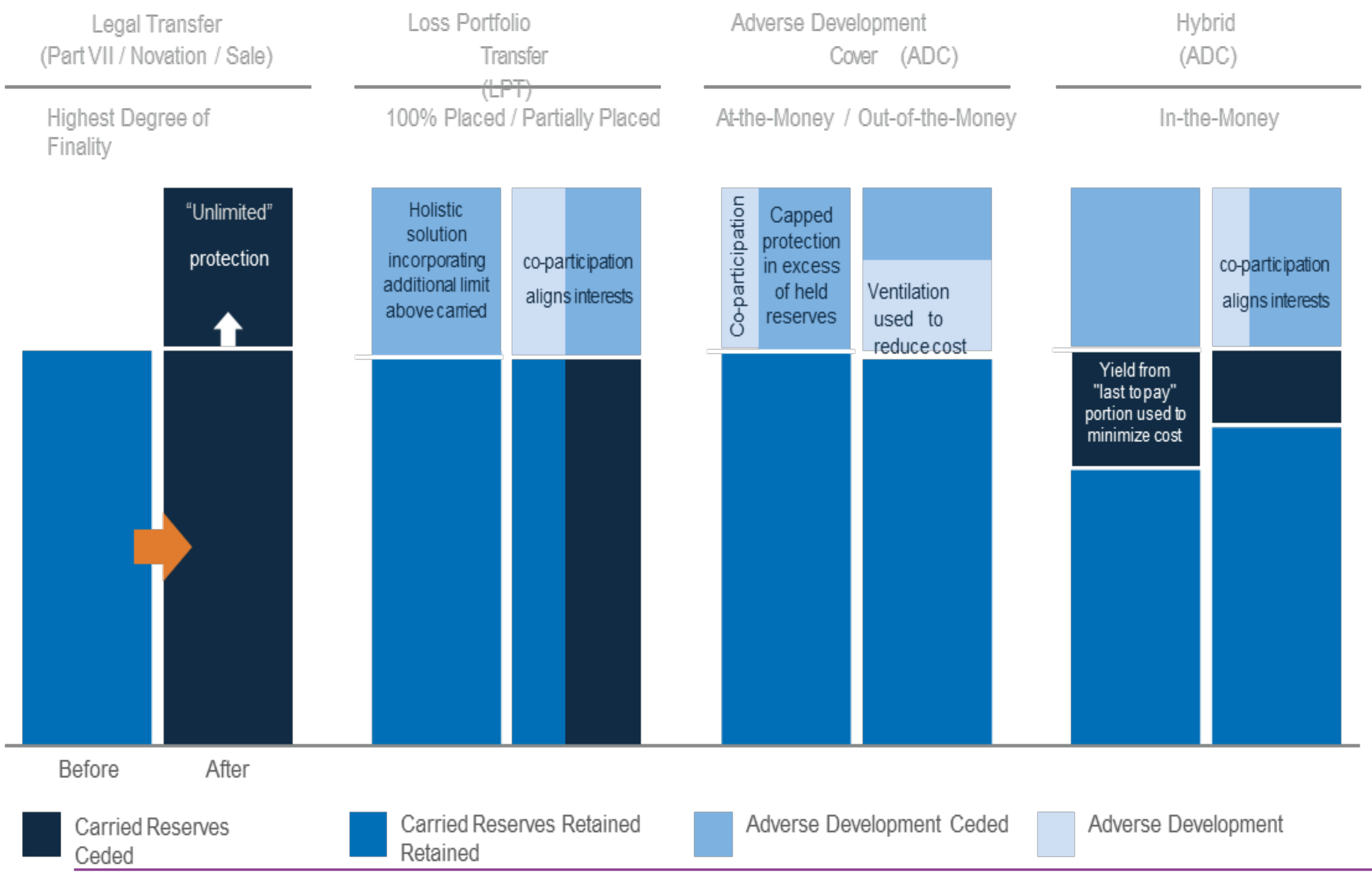
Reserve Management

A retrospective transaction can reallocate capital towards more profitable new business to improve capital efficiency



- A combination of lower investment yields and a firmer insurance pricing cycle has shifted the way non-life insurers make money.
- The return on capital backing in-force reserves has come down due to lower yields.
- At the same time, the return on capital backing new business has increased thanks to firming pricing.
- It may therefore make sense to use a retrospective solution to free up capital backing in-force and re-allocate that capital to new business generation.

In Summary

- Clearly defined business strategy and risk appetites are essential before looking to enhance capital strategy
- Many tools can be used to adapt your capital strategy

“The Best Time To Plant a Tree Was 30 Years Ago,
the Second Best Time To Plant a Tree Is Now”

Anon

- With significant uncertainty around the corner…
- …is it time to review **all** aspects of your capital strategy now?

Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

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Thank you

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