Swiss Re

Capital management in Asia: an actuarial view on the context, options and implications

Valerie Gilles-Coeur
Bernice Zhang

Singapore Actuarial Conference 2024
28 August 2024

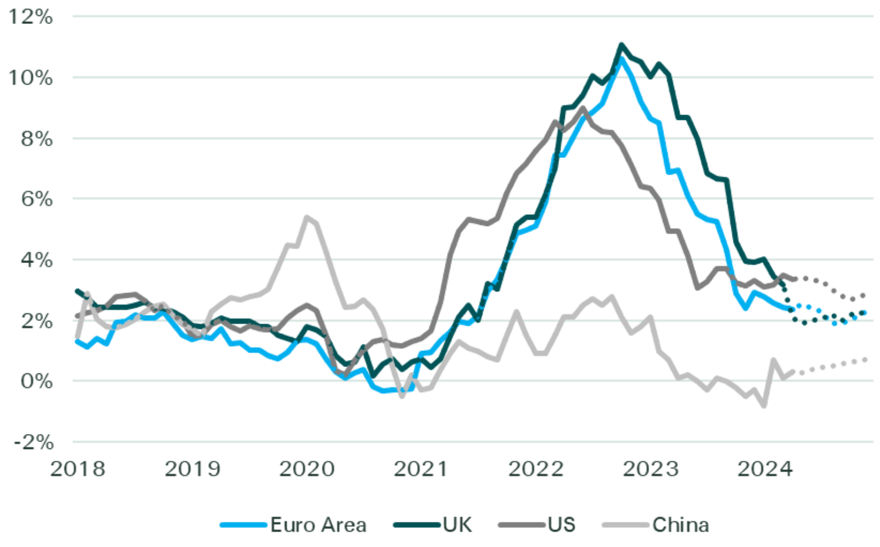
The constrained operating environment: through the lens of an insurer

SRI vs Consensus Forecasts

	Swiss Re Institute		Consensus	
	2024	**2025**	**2024**	**2025**
Real GDP (% change)				
Global	2.7	2.8	2.6	2.7
US	2.5	2.1	2.3	1.8
Eurozone	0.7	1.0	0.7	1.4
China	5.1	4.5	5.0	4.5
CPI (% change)				
Global	5.4	3.8	5.8	4.4
US	3.1	2.5	3.1	2.4
Eurozone	2.3	2.0	2.4	2.1
China	0.5	1.5	0.6	1.5
10y Gov. Bond Yield (%)				
US	4.4	4.2	4.1	3.9
Eurozone	2.2	2.0	2.2	2.1
China	2.3	2.4	2.3	2.2
Central bank rate (%)				
US	4.9	3.9	4.9	3.8
Eurozone	3.3	2.3	3.4	2.6
China	1.7	1.7	-	-

Sources: Bloomberg Consensus, Swiss Re Institute

Headline CPI inflation, year over year



Resilient global economy

Insurance market returns

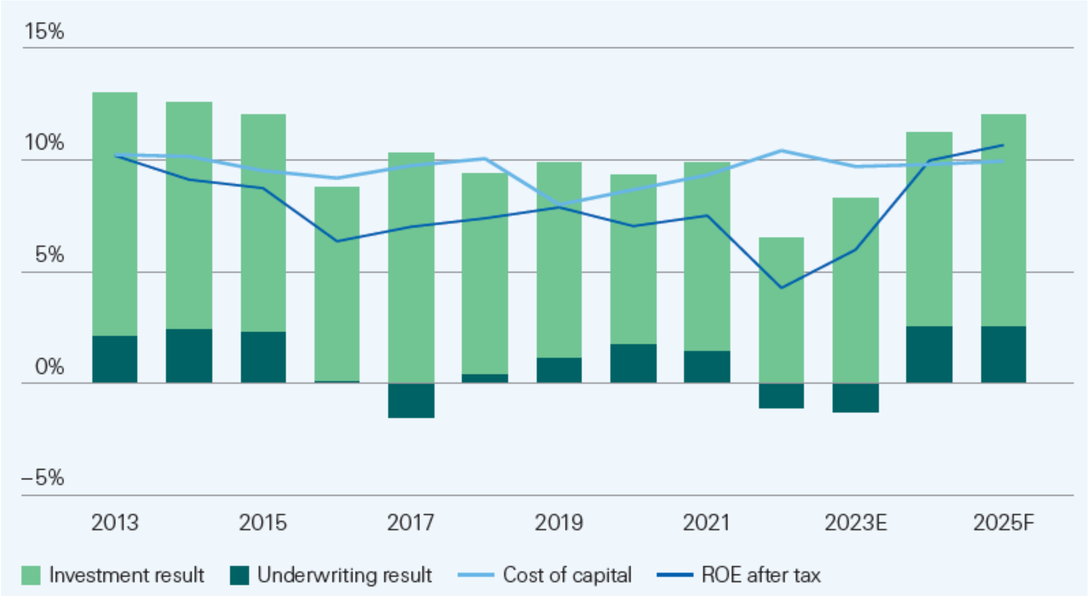
Underwriting cycle

Inflationary pressures

Regulatory calls for resilience

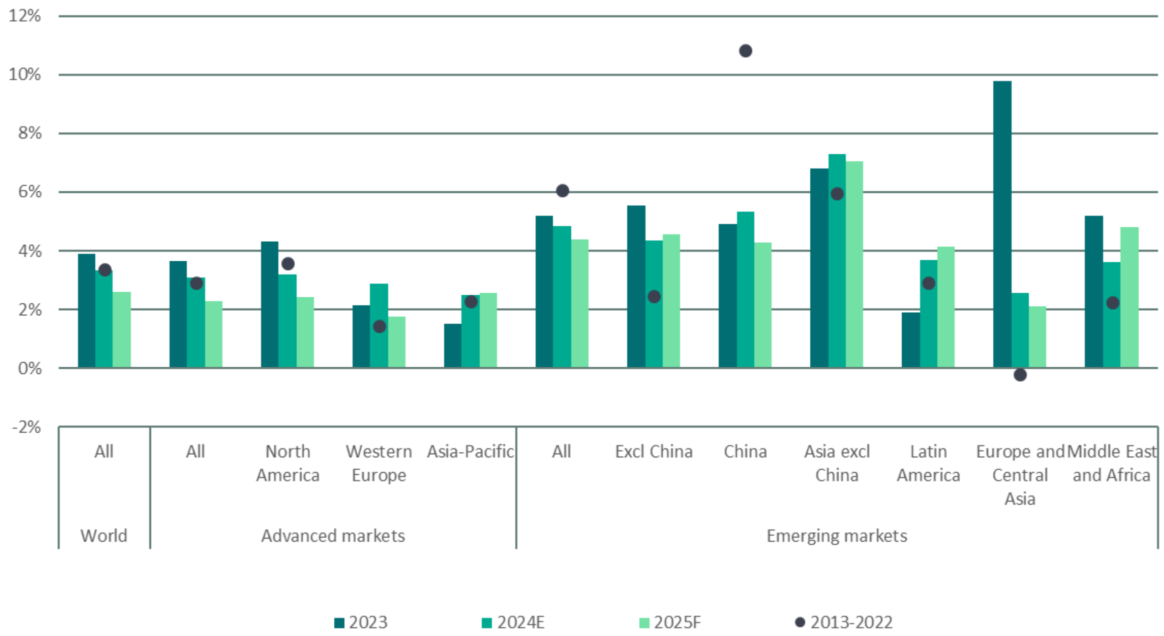
The constrained operating environment: through the lens of an insurer

Non-life insurance operating results and investment income, G8



Underwriting and investment results in % share of net premiums earned, ROE and CoC in %
Note: The eight markets covered are US, Canada, UK, Germany, Italy, France, Japan and Australia.
Source: Swiss Re Institute

Non-life real premium growth by regions



Resilient global economy

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The constrained operating environment: through the lens of an insurer

Claims

Disinflation in property and motor while social inflation and war-related risks persist.

Underwriting uncertainties continue

Catastrophe losses

Continued exposure growth at 5 – 7% CAGR

Profitability of new business

Adequate risk pricing after years of underpricing although direct price impact still trickling through.

However, more resilient underwriting structures

Re-investment yields

Current peak of yields although set to reduce with interest rate cuts expected in the medium term

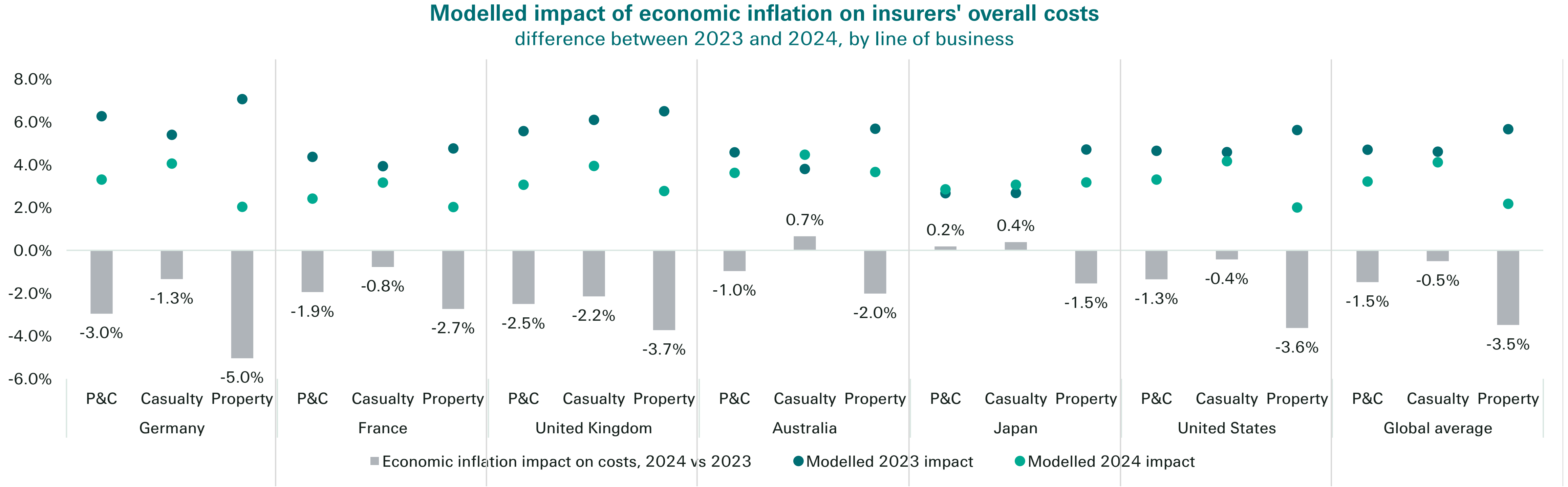
Balance sheet capital

Improving but still below year-end 2021 and the need to grow in line with risk

Source: Swiss Re Institute

Resilient global economy – Insurance market returns – **Underwriting cycle** – Inflationary pressures – Regulatory calls for resilience

The constrained operating environment: through the lens of an insurer



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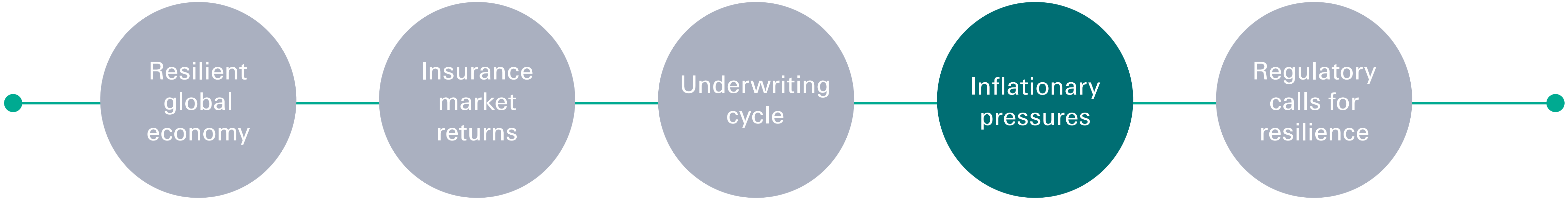
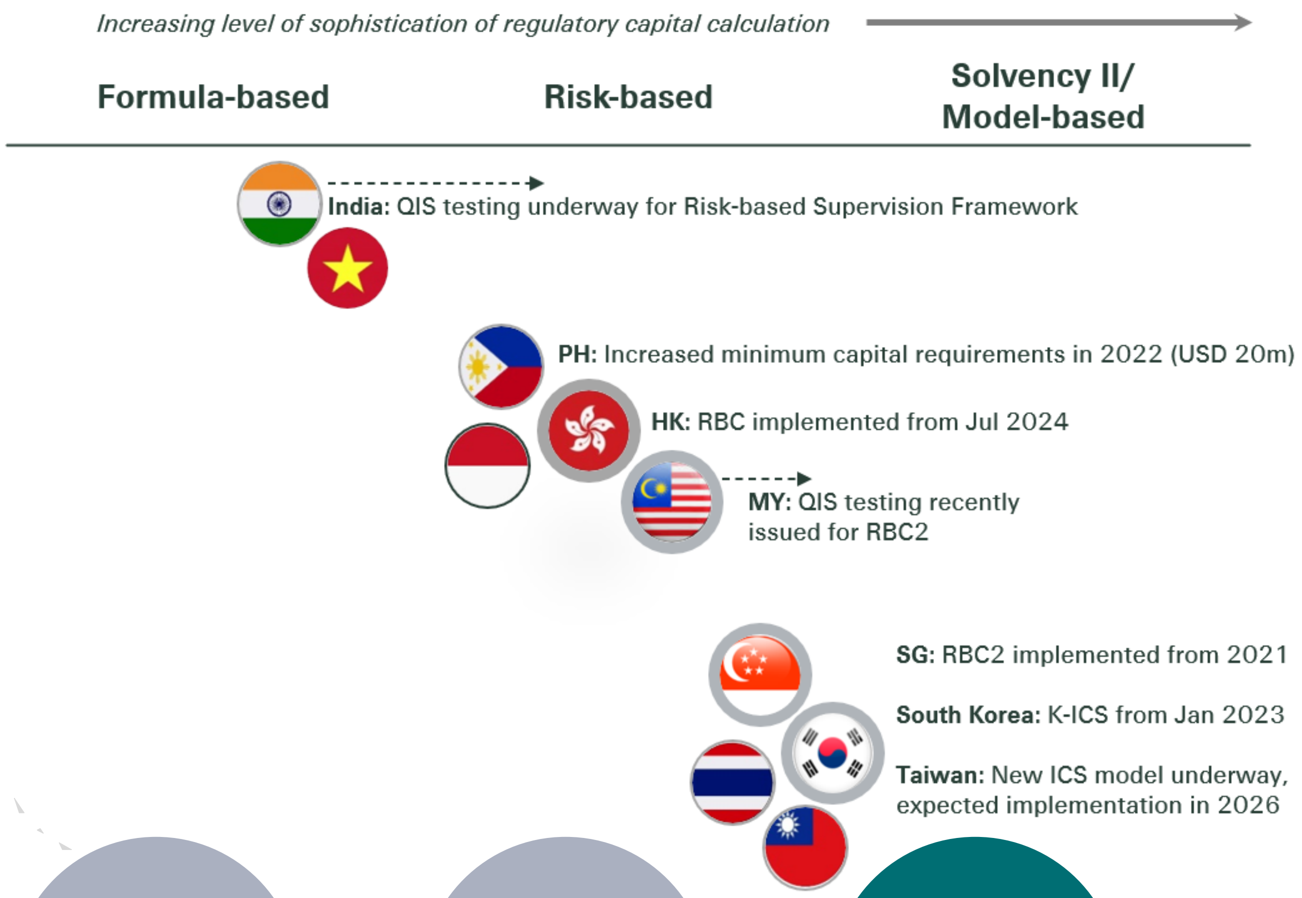


The constrained operating environment: through the lens of an insurer

Varying degrees of sophistication across regulatory capital regimes with changes expected in the medium term.



Spotlight on Indonesia ("Roadmap for the Development and Strengthening of the Indonesia Insurance Industry 2023 – 2027"):

- Increase in minimum capital requirements
- IFRS17
- Potential pricing tariff review
- Motor Third Party Liability Risk Pool
- Credit insurance regulation

Resilient global economy | Insurance market returns | Underwriting cycle | Inflationary pressures | **Regulatory calls for resilience**

Strategic refocus in theme: (re)insurers are adjusting business models to continue delivering required returns

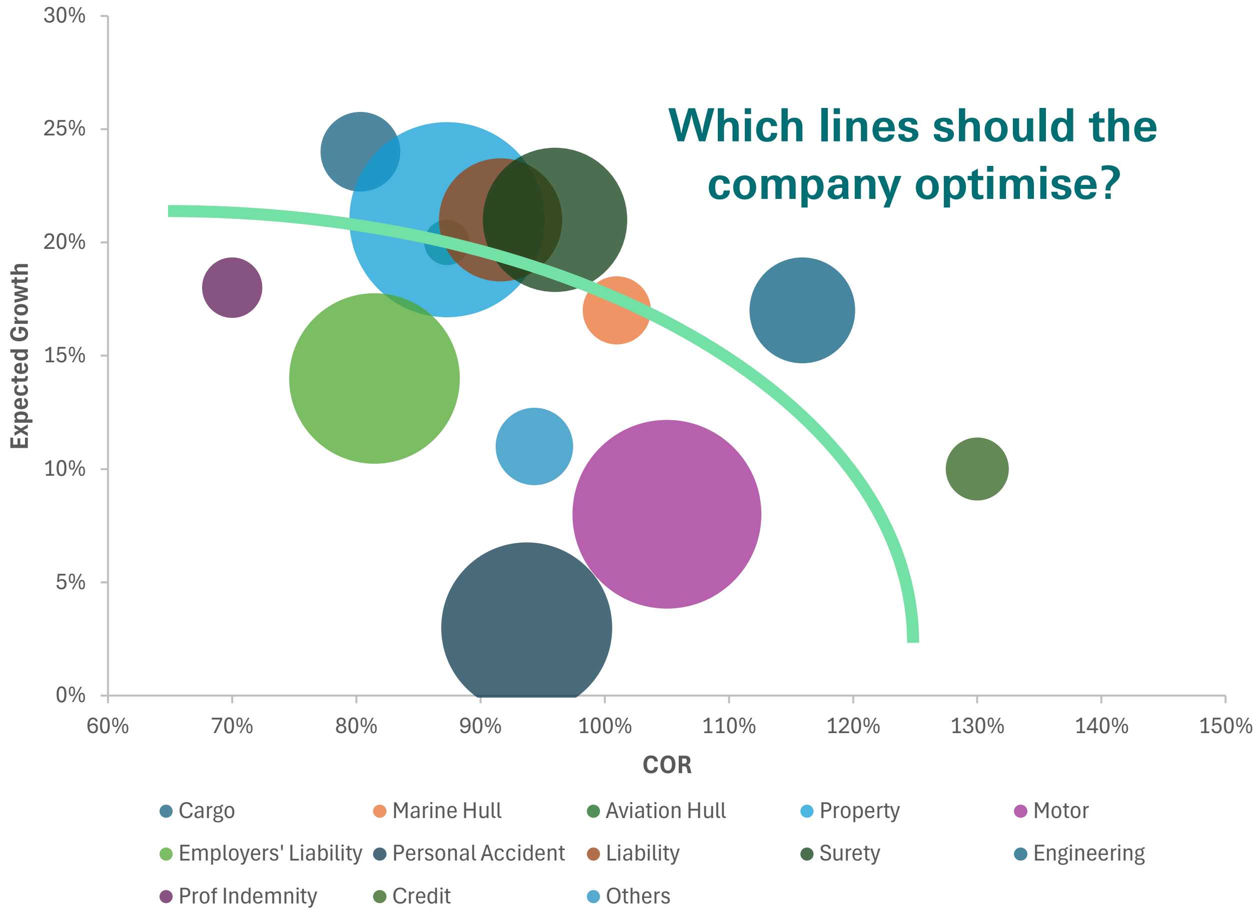
Market exit & M&A

Portfolio restructuring

A Strategic Review

Company is growing quickly at 15% CAGR, delivering returns on equity of 8% consistently in the past 2 years. Flattening hard market and rising claims inflation is expected to reduce this return.

Shareholders expectations have not tapered; 8% is still expected. A strategic review is being done to address capacity deployment against ROE expectations



CAGR: Compound Annual Growth Rate
COR: Combined Ratio
ROE: Return on Equity

Zooming into profitability measures

Loss ratio not fully representative of profitability to shareholders

	Retail shop insurance	Art gallery insurance
Sum insured up to	250,000	5,000,000
Average value of item sold	40	40,000
Loss Ratio	52%	24%

Zooming into profitability measures

	Retail shop insurance	Art gallery insurance
Sum insured up to	250,000	5,000,000
Average value of item sold	40	40,000
Loss Ratio	52%	24%
Insurance revenue	1,000,000	1,000,000
Insurance service expenses	870,000	620,000
Reinsurance result	(20,000)	(150,000)
Combined Ratio	89%	77%

- Acquisition cost by line easily obtained
- IFRS17 paves the way for expense allocation at a more granular level

Reinsurance result analysed on point estimate without consideration for volatility

Zooming into profitability measures

Each line of business requires different levels of capital

Allocating shareholder's equity to Line of Business allows for capital consumption consideration, accounting for:

- Large loss volatility
- Cat risk
- Distribution / tail of risk
- Run-off period

What is capital?

- All capital available
- Capital required

Allocation methods:

- Economic capital using an internal capital model
- Rating agency capital to achieve credit rating
- Required capital from local RBC formula – largely driven by regulatory regimes within Asia

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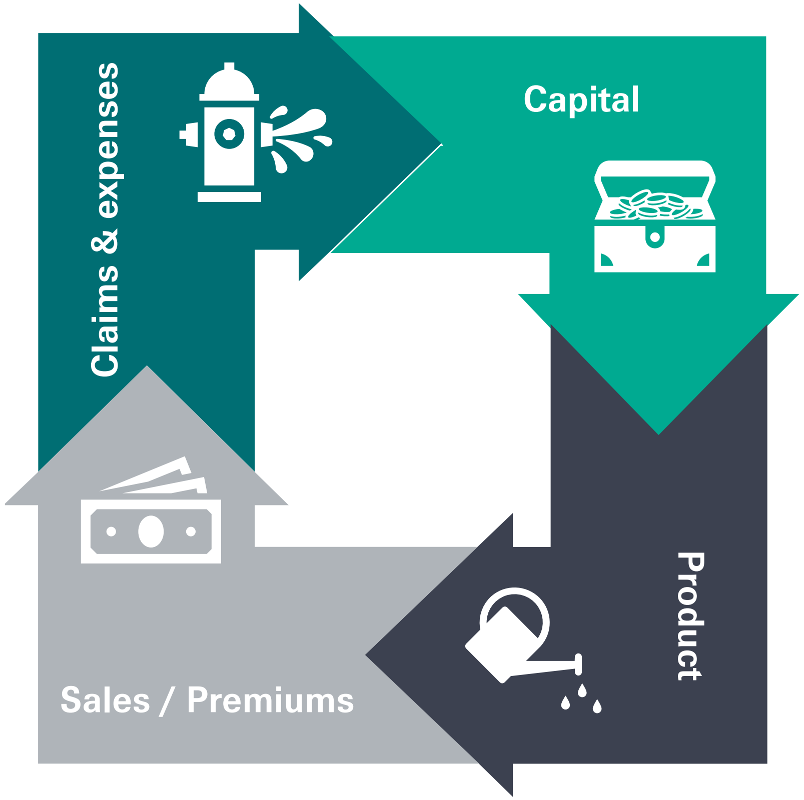
Insurance revenue	1,000,000	1,000,000
Insurance service expenses	870,000	620,000
Reinsurance result	(20,000)	(150,000)
Combined Ratio	89%	77%
Share of unallocated expenses	30,000	30,000
Allocated Shareholder's Equity	300,000	1,500,000
Return on Equity	27%	13%

Risk-adjusted metrics provide a fairer and more realistic performance assessment



Capital is at the root of insurance business

Capital needed to support the business

- ROE
- RORAC (Return on Risk Adjusted Capital)

Capital must be remunerated

Shareholders' expectations

- RAROC (Risk Adjusted Return on Capital)
- EVA (Economic Value Added i.e. Profit generated above the minimum return for the cost of capital consumed)

Embed capital supply in **performance assessment through**

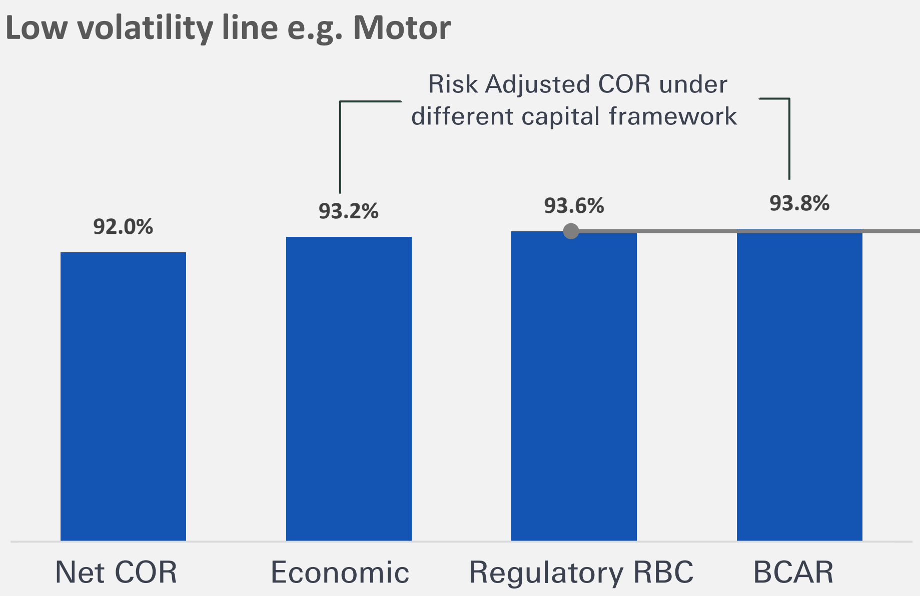
Risk-adjusted COR

$$= \frac{\text{Net UW expenses + Capital Cost}}{\text{Net Premium}}$$

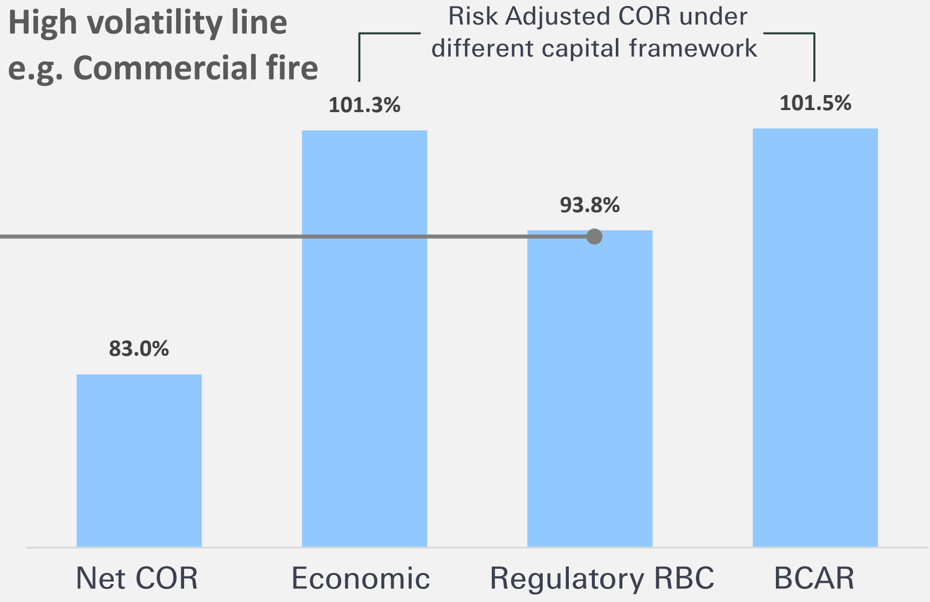
Capital cost being defined as internal capital model, rating agency model, RBC formula, a simple judgement-defined loading – as long as you account for it!

COR: Combined Ratio
ROE: Return on Equity

Risk-adjusted COR is more comprehensive and ties underwriting performance back to shareholders' expectations



Each capital environment has its own required capital thus a different resulting risk adjusted COR



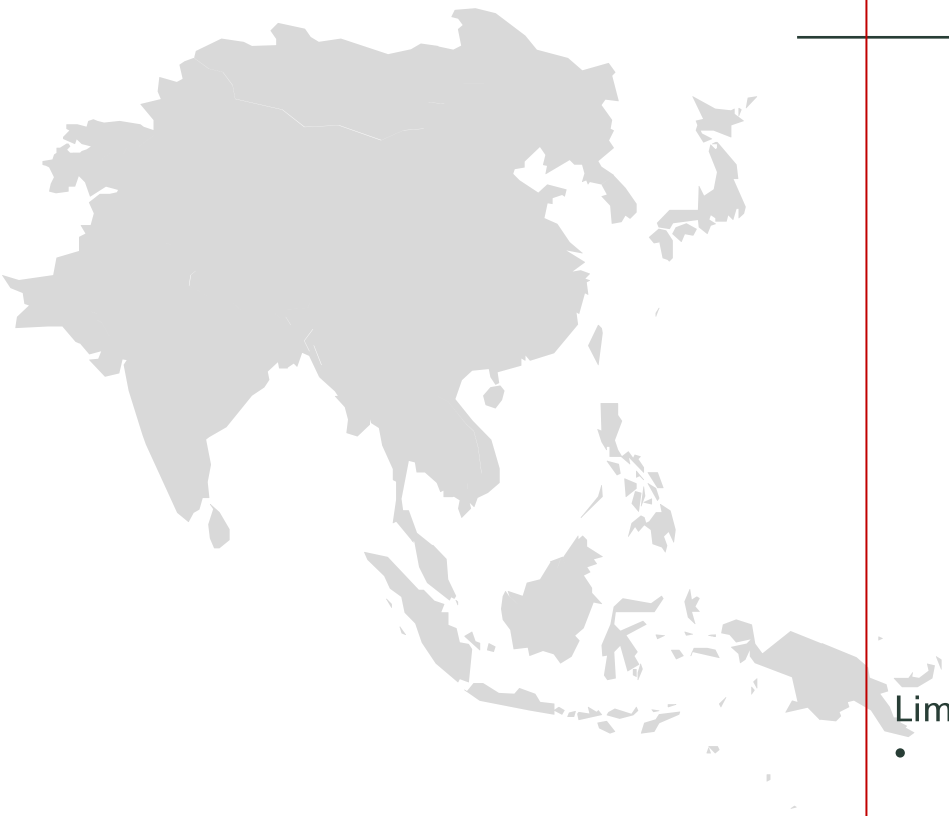
The more volatile is a line, the larger the impact of the assessment base is

Different environments are leading to very different conclusions

Defining the target clearly is critical to the quality of the outcome

COR: Combined Ratio
BCAR: Capital Adequacy Ratio in the environment of AmBest

Asia: Opportunities and limits of regulatory required capital to support such metrics



Increasing level of sophistication of regulatory capital calculation

Formula-based	Risk-based	Solvency II/ Model-based

India: QIS testing underway for Risk-based Supervision Framework

PH: Increased minimum capital requirements in 2022 (USD 20m)

HK: RBC implemented from Jul 2024

MY: QIS testing recently issued for RBC2

SG: RBC2 implemented from 2021

South Korea: K-ICS from Jan 2023

Taiwan: New ICS model underway, expected implementation in 2026

Limited interest:
- Split by Line of Business
- Representation of the reinsurance protection

Mind the recognition of reinsurance protection and the modelling of cat events

Economic capital, if well tested robust model, is ideal

Korea: K-ICS considers the amount of risk transferred (mini stochastic models)

IFRS17 already adopted

From concept to implementation:
How to make Risk Adjusted Metrics work well for your company?

Well defined target & risk environment

Good understanding of underlying models & assumptions

Simple enough to be usable for daily business decisions

Clear communication & embed thinking

A focus on capital management: in the context of corporate strategy

What's more beneficial – Reload hybrid capital or reinsurance

How can we secure dividend payment capacity?

What levers could accompany a re-underwriting?

Which product development achieves which differentiation?

- Shares and policyholder surplus
- Equalisation provision
- Hybrid capital
- Debt
- Retaining Profits
- Dividend policy
- …

Corporate Finance

available capital

required capital before risk management

- Market positioning
- Product mix (Motor OD vs Motor TP, Property, Liability)
- Growth
- Acquisitions (purchase)
- Divestures (sales)
- …

Strategy

–

capital relief due to risk management

- Strategic asset allocation
- Interest or inflation hedge
- Reinsurance
  - Natural perils
  - Volatility management
  - Reserve risk
- …

Risk Mgt

What is target level and volatility tolerance of capital adequacy?

What are opportunity costs of a different asset allocation?

Which surprise potential to be anticipated for insurance results?

How to free up capital deployed in less strategically relevant segments?

Case study #1

South-east Asian insurer captures growth of promising LOB through tailoring QS with capital as a focus

Motivation

- Given current distribution channels, Insurer can seek **30% growth**
- Internal target of **190% CAR** must be maintained
- Equity increase vs Reinsurance compared as part of **Capital Management Toolkit**

Capital Optimisation Options

	Current	Reinsurance: Simple QS	Equity as Capital
Premium	700	1,000	1,000
Gross COR	96.0%	96.0%	96.0%
Net COR	96.0%	96.2%	96.0%
Available Capital	599	599	855
Required Capital	315	315	450
Solvency Ratio	190% (Target)		
Cost of Capital	4.0%	4.0%	5.0%
Return on Equity	4.7%	4.4%	4.7%
Risk-adjusted COR	97.8%	98.0%	98.3%

Returns should also be analysed across time and over scenarios (lower/higher growth, lower/higher profitability, etc)

1. Net COR increases with reinsurance in place due to ceded margins
2. Leveraged effect of solvency ratio: increase in own funds >> reduction in required capital via reinsurance
3. Increased funding → higher cost of capital: **not captured in Net COR**

Risk-adjusted COR clarifies the picture of underwriting performance + expected shareholders returns

CAR: Capital Adequacy Ratio
COR: Combined Ratio

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Capital Optimisation Options

	Current	Reinsurance as Capital Option A: Simple QS	Reinsurance as Capital Option B: Structured QS	Equity as Capital
Premium	700	1,000	1,000	1,000
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Risk-adjusted COR	97.8%	98.0%	97.2%	98.3%

CAR: Capital Adequacy Ratio
COR: Combined Ratio
ROE: Return on Equity

Gaining an appropriate view of reinsurance as an option, insurer **further tailored reinsurance structure to optimise capital**:

1. **Reducing ceded ROE** to reinsurer by increasing alignment of interest through loss participation
2. **Solvency is optimised even within the year** by having a Quota Share on Flexible Cession each quarter. Reinsurance monitored closely and to be used flexibly against actual growth through quarters

Case study #2

Capital re-deployment by insurer in East Asia through loss portfolio transfer

Motivation

Return on Equity not meeting Cost of Capital: tasked to review strategic plan	Internal CAR target must be maintained with no other funding options

Strategic Review

- Insurer noticed gap between metrics for some lines of business:
  - Current profitability of business
  - Underlying allocated capital

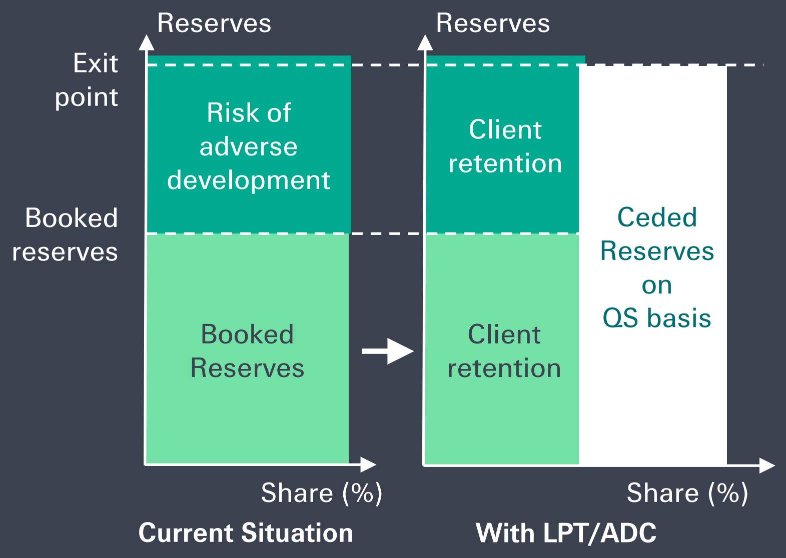
  (risk-adjusted COR would have been handy!)

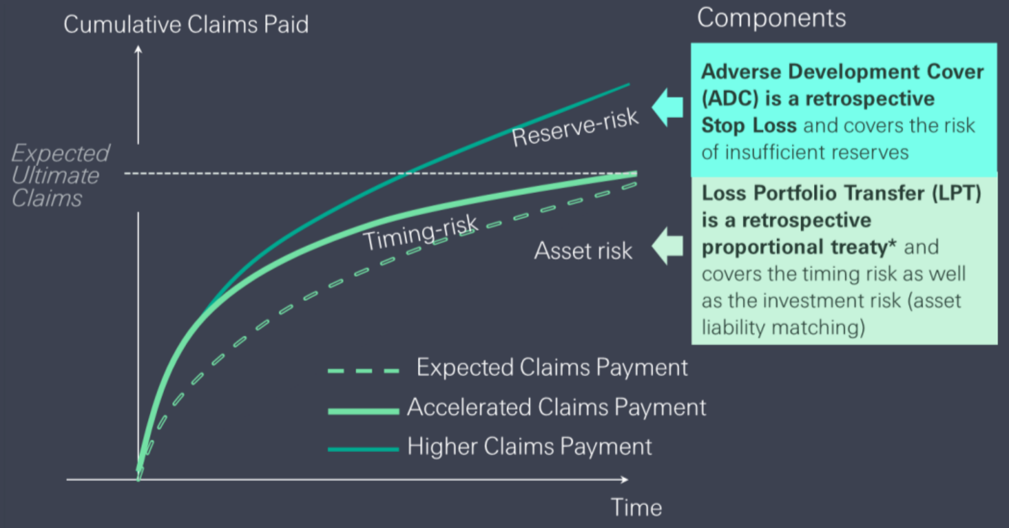
- Large part of capital is tied up in claims reserves

Solution

- **Reduce required capital** on capital-intensive lines of business through **Loss Portfolio Transfer / Adverse Development Cover (LPT/ADC)** – works like a Claims Reserves Quota Share with a cap
- **Freed-up capital redeployed** to focus on medium-term key growth strategies to increase ROE (one-time impact of reducing ROE due to ceded RI margins)

Structure Illustration



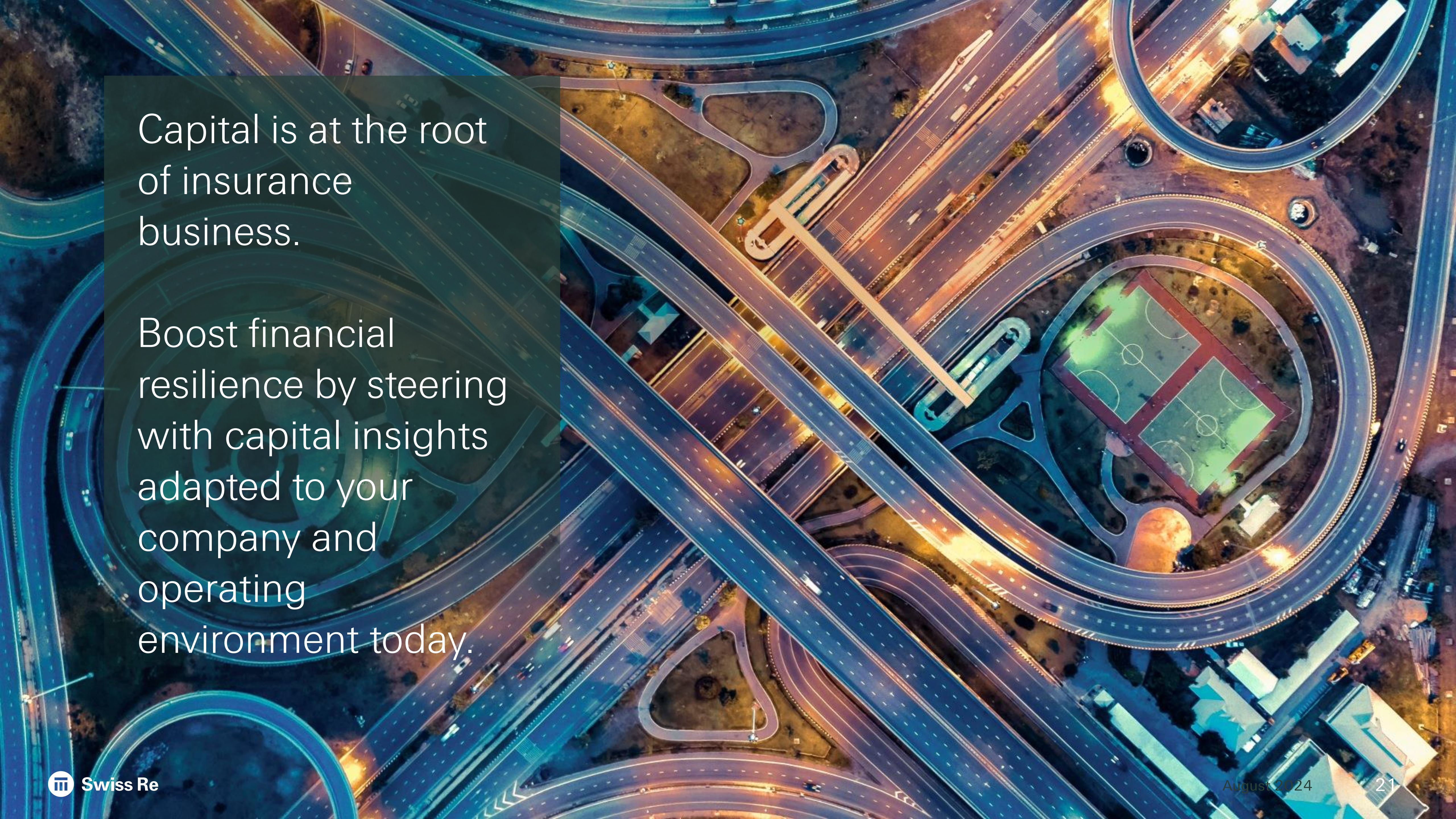


Reinsurance is an essential part of the capital management toolkit

Effective and flexible solutions to improve and protect your capital position

Keep & back them with capital Focus on increasing Available Capital			De-risk Capital Relief: focus on decreasing Required Capital Earnings Protection: stabilising Available Capital	
Raise new capital	Retained earnings	Unlock hidden capital	Exit risks	Mitigate risks
• Equity • Hybrid capital	• Reduce or stop Dividends • Reduce or stop Share buy-backs	• Reinsurance	• Stop writing new business • Sale of selected assets & businesses	• Reinsurance • Hedging

- Capital Relief Quota Share
- WAQS as equity substitute
- Loss Portfolio Transfer
- QS variations: Variable QS QS with AAD
- Retention Optimisation Solutions
- XOL structures for efficiency



Capital is at the root of insurance business.

Boost financial resilience by steering with capital insights adapted to your company and operating environment today.

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