

Consistent Performance Measurement

Aligning Risk, Value and Capital Management

EXECUTIVE SUMMARY

One of the many challenges multiline insurers face is finding a consistent approach to measuring and managing diverse risk portfolios, which typically include a mix of short- and long-term businesses and various risk types. While some of these risks are fairly predictable, others may not be, due to extreme events with significant impact, such as claim fluctuations from a natural catastrophe or a sudden plunge in the stock market. Companies have traditionally measured these different businesses by applying a variety of analytical techniques.

However, using a consistent approach to performance management is an essential part of both embedding enterprise risk management (ERM) and demonstrating its value. By taking this route, management can gain a more uniform view of how each product in its portfolio is performing, and make better decisions about pricing, product strategy and capital budgeting. And by linking financial targets to organizational roles, management can also link performance to pay.

Here we describe an analytical framework that can be applied to an insurer's internal measurement and management system to align risk, value assessment and capital management. Using this framework for setting financial targets and monitoring performance will allow companies to differentiate between their insurance and investment operations, and the value of the current year's underwriting activity (versus the runoff of existing business).

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MEASURING AND REPORTING PERFORMANCE

RoRAC: A Commonly Used Measure Has Limitations

As multiline insurers well know, it's nearly impossible to accurately gauge performance without a common approach for measuring financial results across businesses. A quick look at the annual reports of major multinational insurers reveals that companies use a number of financial measures.

Return on risk-adjusted capital (RoRAC), a commonly used performance indicator for external communication with investors and analysts, has limitations as a single measure of internal performance management processes.

■ RoRAC is not consistently applied across lines of business

RoRAC measures return in proportion to current risk-adjusted capital. If the return is calculated on an accounting basis, the expected return of long-term business (such as life insurance or liability coverage) over the lifetime of the contract is not fully reflected, making cross-line-of-business comparisons meaningless. If measured on an economic basis, expected future profits over the entire contract term are recognized. This economic-based return is only related to the current capital employed, which represents a single-point-in-time view that ignores future capital requirements and business developments, making future cross-line-of-business comparisons invalid.

To establish meaningful return-on-capital comparisons for different businesses and products, it's important to consider a product's capital needs over its lifetime. For example, a product with a low initial capital requirement may require subsequent injections of capital, which should be reflected by whatever capital metric is used.

■ **RoRAC covers very different activities**
A single RoRAC figure covers a number of different activities that, for internal management purposes, may be better analyzed

separately. For example, one of the downsides of this approach is that similar RoRAC results for two insurers may mask significantly different sources of value creation. Especially in today's environment of extreme financial market volatility, having a clear and distinct view of the insurance and investment components of performance is critical for both internal decision making and capital allocation.

Case Study — Part One*

A large U.K. insurance group needed a consistent approach for embedding stronger risk awareness into its life and property & casualty (P&C) insurance businesses. At the outset, life and P&C business pricing and profitability considerations were based on, and managed by, different and difficult-to-compare metrics.

Towers Perrin worked with this client to develop a number of principles to govern future product pricing. After extensive discussions with the insurer's joint project team, we used a step-by-step approach to build consensus within the businesses for introducing a market-consistent pricing approach across both product lines. The new approach included a revised process for allocating required capital to each line.

By having consistent internal processes in place for its life and P&C businesses, the company was able to take a more strategic approach to pricing.

*This case study, provided for the purpose of demonstrating the application of a consistent approach for embedding risk awareness into a company's day-to-day operations, has been sourced from a combination of Towers Perrin projects, rather than one specific project, ensuring that client confidentiality is safeguarded.

Insurers can segment returns and performance measures between investment and insurance activities.

INTERNAL MANAGEMENT

Finding a Better Way

Although the RoRAC approach is still widely used for external communication, its limitations have led various insurers to develop more sophisticated metrics for internal measurement and management that align risk, value assessment and capital management.

Components of Value Creation

Exhibit 1 illustrates how insurers can segment returns and performance measures between investment and insurance activities.

The insurance component includes the value added by the current year's underwriting activity, plus the incremental value from operational gains generated by the runoff of existing business. The investment component can be split into contributions from the insurer's strategic asset allocation and tactical allocation.

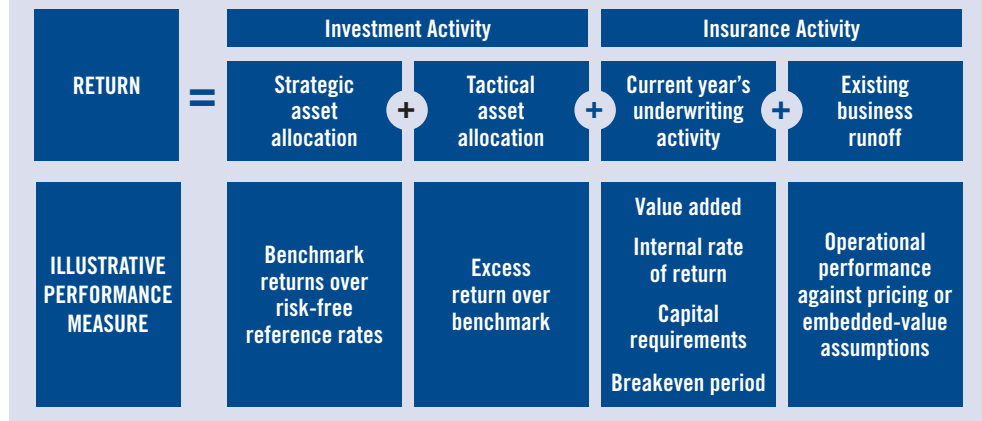
Return calculations are based on market-consistent approaches using "best estimate" operational assumptions. Importantly, under this approach, there is no capitalization of assumed risk premiums on investment assets.

Setting Financial Targets and Monitoring Measurement

By following the approach outlined above, insurers can differentiate between insurance and investment operations when setting financial targets and monitoring performance.

- For **strategic asset allocation**, the return represents the market return on benchmark assets, less the return on a replicating portfolio of insurance liabilities. This is equivalent to the return on the mismatch

EXHIBIT 1
Analyzing Results Between Investment and Insurance Activities



portfolio. Note that the return relates to a net position of assets owned, less liabilities owed. Even so, the return can be referred to as the market return, or beta.

The strategic asset allocation often represents a substantial part of a company's total risk exposure and can generate large positive or negative variances. Therefore, separate consideration of this element — including separation of risk capital and capital charges — is particularly important in tracking the value creation of the underlying insurance business.

Targets can be expressed as benchmark returns over expected risk-free reference rates or based on management expectations of performance for different asset classes.

- In the analysis of returns from **tactical asset allocation**, measured overperformance or underperformance (also referred to as alpha) corresponds to the period analyzed.

Tactical asset allocation targets can be described in terms of a margin of expected return over relevant benchmarks.

- On the insurance side, the **value of the current year's underwriting activity** measures the value created by new policy sales, over the expected lifetime of the business issued, net of applicable acquisition expenses. A separate analysis of this value is essential not only for life insurance business, where the return is created over a long period of time, but also for P&C business, where analysis is critical to understanding and managing the insurance cycle.

Risk capital can be measured as the present value of risk capital requirements over the lifetime of the business.

Targets for the new business should include both value and capital efficiency measures and should not be based solely on new business volume.

Targets can be translated into performance metrics typically associated with, and relevant to, each line of business.

■ The return from the **runoff of the existing business** is driven by the unwinding of the assumed discount rate, combined with variances between actual and expected operational experience. What this means is that most return from prior years’ business is already released in economic terms. As a result, the outstanding return is relatively modest and, in most cases, will be substantially below overall target returns set by insurers. However, risk associated with the outstanding return may represent a large proportion of the overall insurance risk capital.

Targets may be set for managing outcomes within the operational assumptions underlying the expected business runoff return. Due to lower expected return on this component, it is inappropriate to target return on risk capital for the runoff component equivalent to the target return on the current year’s underwriting activity. The need to set different return targets for different activities demonstrates how distortions can be introduced through the inappropriate application of a uniform RoRAC target across different entities.

APPLYING THE METRICS

Aligning Targets and Organizational Roles

Once targets are differentiated by line of business and operating unit for insurance operations, they can be translated into performance metrics typically associated with, and relevant to, each line of business across the organization. For example, P&C insurance targets can be expressed as a certain combined ratio, while life insurance targets might use specific business premium margins.

To be fully effective, the four return components, shown in Exhibit 1, should both align with a company’s internal organizational responsibilities and be consistent with its organizational structure. Performance against each of the targets can then be applied to an insurer’s relevant management roles (*Exhibit 2*).

■ On the investment side, management or the asset/liability committee (ALCO) may set the strategic asset allocation, thereby defining any potential deviation from a liability benchmark.

■ This strategic asset allocation is then transformed into specific asset management mandates for different asset managers, and the return from their tactical asset allocation decisions is measured against a relevant benchmark.

■ On the insurance side, sales, marketing and product development decisions impact the value added by the current year’s underwriting activity. Sales, marketing and product development may share common targets for total new business value creation.

■ For the runoff of the existing business portfolio, analysis of actual operational experience, relative to assumptions used in pricing or embedded-value calculations, provides an understanding of value gains or losses from emerging experience, which provides an opportunity for management intervention.

Targets may be set, and performance may be monitored, for individual department functions to operate the business within given operational assumptions. Monitoring actual operational outcomes against assumptions also provides valuable input for future pricing processes.

EXHIBIT 2
Value Attribution Is Based on Financial Responsibilities

COMPONENT	Investment Activity		Insurance Activity	
	Strategic asset allocation	Tactical asset allocation	Current year’s underwriting activity	In-force runoff
OWNERSHIP	ALCO/management	Investment manager	Distribution Product management	Operations
VALUE	Market movements (beta)	Outperformance (alpha)	Value creation by new underwriting activity	Actual to expected on runoff business
CAPITAL	Capital for mismatch risk	Capital for deviation from strategic asset allocation	Nonhedgeable for new business	Nonhedgeable for in-force

A more sophisticated component approach allows insurers to consistently analyze, monitor and manage performance internally across varying insurance business activities.

Benefits of the Value Component Approach

While RoRAC is often used as a return-on-capital performance indicator for external communication with investors and analysts, it has substantial limitations as a single measure for internal performance management processes.

Instead, we recommend a more sophisticated component approach that allows insurers to consistently analyze, monitor and manage performance internally across varying insurance business activities.

At the end of the day, ongoing performance analysis provides management with invaluable information about sources of value creation and, ultimately, a company's key value drivers. This approach also establishes a natural and logical structure for setting future financial performance targets and can be used consistently across territories and different lines of business and functions within an organization. We also recommend this strategy for key decision making in product development, pricing and capital management. Clearly, establishing a link between risk, value and capital management is essential to managing a company in a consistent, coherent way.

Case Study — Part Two

Building on the pricing work Towers Perrin completed, the U.K. insurer asked us to develop a "return on risk" metric for internal performance management that could also be used as the basis for capital budgeting.

To achieve this goal, we facilitated a series of collaborative workshops focused on developing risk-sensitive performance metrics for a variety of applications and business processes, including setting the risk appetite, corporate strategy formulation, business unit performance targeting, performance and result diagnosis and attribution, and product development.

The new metrics provided this client with a common risk language to use across various business processes and lines of business. The outcome? A more consistent and stringent approach to capital budgeting.

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