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ALM TRANSFORMATION

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In a world of uncertainty, there are consistently two sure things—consultants love buzzwords, and consultants love creating solutions. Indulge us for a moment on both of these.

"Finance Transformation" is a buzzword for enabling chief financial officers (CFOs) and finance executives to improve business performance and shareholder value while actively improving the operational effectiveness and efficiency of the finance function mainly through information technology and process redesign.

Within Finance Transformation is "Actuarial Transformation," an effort to address accounting, risk and regulatory requirements by enhancing, among other things, the ability of actuaries to provide analysis of results and business intelligence, through process improvement and enhanced governance.

One of the functions within an insurer where actuarial concepts and contributions interact most significantly (and intricately) with the overall performance and operation of the business is asset-liability management (ALM). ALM is core to an organization, as it is critical to taking calculated risks and leveraging the time value of money through passive asset allocation, active tactical management of opportunities in investment markets and product portfolios, hedging, pricing, and capital structure decisions.

There is no "one-size-fits-all" structure that works, and care should be given in order to optimize how ALM is executed at any given firm, given its strengths and weaknesses, its underlying products, the related functions at the firm (such as Investments, ERM, Treasury and Capital Management), and the history and culture of the insurer. There are, however, certain principles and methodologies that allow for companies to take a fresh look at ALM today, given recent changes in the economy, the regulatory environment and technology. Now we see the dawn of a new buzzword … "ALM Transformation."

ALM Transformation represents the improvement of an organization's ability to carry out these activities in a transparent, sustainable and repeatable manner that applies industry-leading practices, sophisticated technology, clear documentation, and aligned goals and policies that integrate risk limits and profit objectives. As we have seen in our experiences, embracing ALM Transformation leads to a process that is efficient, effective, transparent, and able to support consistent and deliberate ALM decision-making.

WHAT ARE SOME OF THE CATALYSTS OF ALM TRANSFORMATION?

Recent History: Prior to the financial crisis of the late 2000s, the ALM function of insurance companies was considered to be largely effective for the risks and market movements that had been observed. However, the processes in place at many insurers were not robust enough, or focused well enough on the appropriate analyses and metrics, to respond actively and effectively to the economic conditions that were prevalent during the financial crisis, the effects of which are still being felt in 2014. Examples cited by insurance executives who dealt with ALM decision-making during the crisis include a lack of clarity around authority—especially given previously unseen conditions and threats; changes in key indicators such as market value drops, rate levels and implied volatility that had not been sensitivity-tested; and liquidity issues that had no associated contingent mitigation plans. Post-crisis changes are still evolving, including a trend toward clear policies, roles and responsibilities, controls, documentation and accountability.

Expanding Role: While duration management and immunization of the balance sheet continue to be crucial, the interest in accounting-based metrics such as earnings at risk and statutory surplus at risk is increasing for ALM as well as for new product decisions. As an example, it is sometimes said insurers generate return on equity (ROE) from sources such as underwriting margin (investing only in risk-free assets and no leverage), investment margin (earnings above risk-free when holding appropriate capital for

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the increased risk) and leverage margin (due to financing partly with debt). As growth rates and underwriting margins have fallen, attention has shifted in many ways to generating excess investment returns, at a time when perceived capital requirements are making the denominator of ROE and return-on-capital metrics more challenging. This puts ALM more fully in the center of the value-added puzzle for insurers. ALM becomes a key tool in executing enterprise risk management (ERM) and protecting the balance sheet at an acceptable cost against a range of movements due to plausible external factors.

Increased Scrutiny: Commensurate with the expanding role of ERM are the controls required to ensure the integrity of processes. The Dodd-Frank Wall Street Reform and Consumer Protection Act calls for increased monitoring of Systemically Important Financial Institutions (SIFIs). In particular, the newly created Financial Stability Oversight Council is charged with recommending heightened prudential standards, such as liquidity requirements, single-counterparty risk limits, and the establishment of risk management and risk committee requirements. Additional consideration also needs to be made for the National Association of Insurance Commissioners' (NAIC's) Solvency Modernization Initiative and Own Risk and Solvency Assessment, expansion of New York state's risk assessment and management activities, as well as global SIFI designation. ALM is front and center in many of these prudential standards.

WHAT ARE SOME OF THE CHALLENGES?

Human Resources: In many organizations, ALM responsibilities are assigned in part to individuals who aren't dedicated "full time" to ALM. "Finding someone who understands both sides of the balance sheet is difficult," one CFO who oversees ALM at a large U.S. insurer tells us. With many functions, ensuring appropriate training is important; but with ALM, that training can require multiple rotations—and therefore three to five years—before an individual is truly prepared to make important decisions, depending on the structure of the organization. This is a much longer time than in other rotations for actuaries or other professions. At the same time, demographic trends are leading to friction between the talent pool of young practitioners and seasoned executives.

Technology: Technological advances have increased modeling capabilities, which have, in turn, brought competing trends in approach, and several tough questions to answer. What do you say no to? Do you spend the financial investment in a robust system with longer projections, across more scenarios, with faster run-times and cutting-edge capabilities (e.g., stochastic-on-stochastic calculations) requiring thousands of servers? At what cost? Or, do you focus your efforts on stress testing, which may utilize a less precise model in aggregate, but will allow you to understand the impact of certain specific scenarios and explain a handful of well-understood economic risks and outcomes? The answer, of course, is typically a combination of both, but deciding where on the spectrum of possible approaches to land requires a careful agreement among all ALM-related

THE PEOPLE BEHIND THE ALM PROCESS SHOULD HAVE CLEARLY DEFINED ROLES AND RESPONSIBILITIES IN ORDER TO BE EMPOWERED.

internal stakeholders (from the actuary pricing products to the CFO planning to attribute accounting results to rating agencies).

Reporting: Along with the increased technological capabilities noted above comes the risk of being lulled into a sense of false precision due to voluminous data and reports. It is becoming increasingly important that there exist processes, including controls, which engage all ALM practitioners and motivate them to build consistency around assumption approval, model validation, data integrity, and the interpretation and use of results. A fresh review of ALM-related reports often results in one or more of the following conclusions: Some reports aren't being used; certain dashboard metrics are inconsistent with each other; timing or measurement differences causing confusion can be resolved with a clearly agreed definition of terms that is well-communicated; resources dedicated to reporting are suboptimal in their utilization; and not all internal customers who could benefit from the reports are receiving them.

Alignment: As noted above, ALM is core to the successful operation of the business, with increasing reliance; but it is not always positioned optimally to interact with other functions within the firm's operating model. Areas for improvement sometimes include:

(1) The need to formalize a product approval process that incorporates a clear ALM strategy, and, conversely, the need to eliminate ALM analysis performed not for implementation but only to win product approval.

(2) A desire to more effectively develop an aggregate portfolio management strategy that takes into account offsetting risks and optimizes a combination of sales, cash flow matching and profits.

(3) Room for improvement with respect to projecting the impact of ALM decisions or approaches on accounting and capital results.

Competing Objectives: Conflicting accounting and capital bases, and multiple stakeholders (regulators, agencies, analysts and policyholders), can cloud the fundamental objectives of the ALM function and lead to suboptimal decision-making such as holding on too long to carry trade "hedges" that generate net investment income (NII). A central starting point to determining whether objectives within the ALM function are clearly determined and communicated is to ask what the goals of ALM within the organization are. The answers typically include defeasing liabilities, assisting product development ideas, contributing to profit and beating benchmarks, but too often there is not a clear articulation of the prioritization of these objectives or how competing objectives are resolved.

WHAT ARE SOME OF THE KEYS TO SUCCESS?

ALM Vision: Effective ALM leaders have usually established and communicated a clear vision for their operating model. Every transaction—including not only buying or selling assets but also committing to, say, credited rates on liabilities either new or in force—can be traced to authority chains and policies the transactions acted within. Communication between the business units and the enterprise level in regard to the ALM strategy is consistent, clear and efficient. Also, risk limits are clearly established for the business units, and management within those limits is delegated.

Roles and Responsibilities: The people behind the ALM process should have clearly defined roles and responsibilities in order to be empowered. This should include escalation processes, challenging, setting limits and authority. Because of a culture of openness and accountability, decision-making roles are open to talent. It is relatively clear which decisions are successful or not and who made them.

Incentives: Having a company's objectives and incentives aligned encourages and reinforces the desired outcome of

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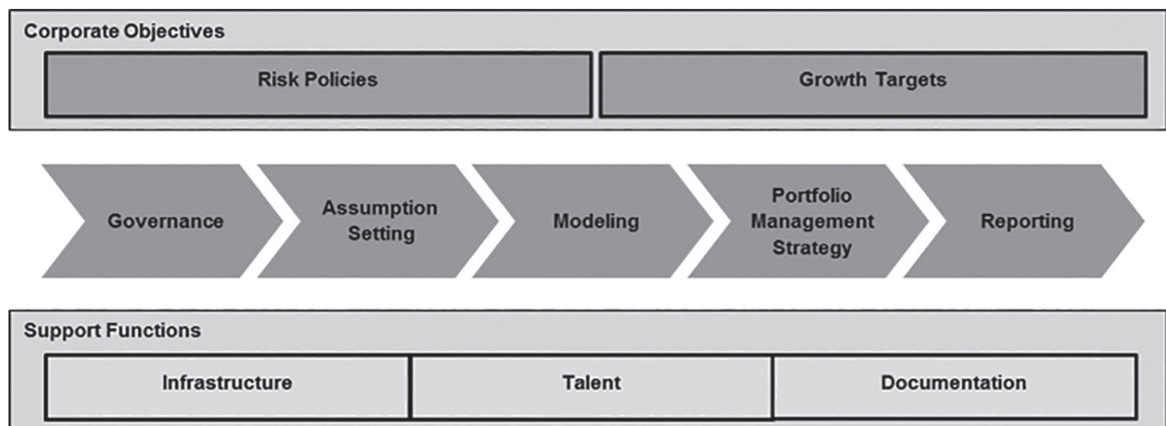

the ALM structure. Metrics should be established for each specific role and be reported on a regular basis to measure performance and promote accountability. The performance measures should strike a balance between both short-term and long-term objectives to achieve the desired ALM vision.

Defined Structure: As we noted earlier, ALM does not take the same form in each organization, nor should it. There are, however, certain themes behind many successful operating models, as described below.

- **Governance**: Establishing governance of the ALM function through a clear agreement and communication of an operating model is a critical first step. Concepts that can be used in establishing the governance framework include a committee structure, with charters that establish the roles, responsibilities (including decision-making) and membership, as well as policies, process and procedure documents, key metrics and risk limits.

- **Assumption Setting:** The roles and responsibilities regarding assumption setting should be clearly defined in order to establish proper governance and ensure those responsible have proper authority and expertise to be setting such assumptions. For example, the setting of assumptions requires approval of policyholder behavior and other assumptions that will define the portfolio benchmark as well as approval of capital markets assumptions embedded in scenario generation that establish the risk-reward trade-offs.

- **Modeling:** One specific principle is the identification and quantification of individual model risks (e.g., assumptions, source data and materiality) and aggregate risks (interaction and dependencies between models, common assumptions usage and methodology). There should be ongoing monitoring and reporting of changes to the models, as well as validation activities.

- **Portfolio Management Strategy:** The ALM strategy should be comprehensively vetted, reviewed and approved by the responsible parties. It should take into account all risk limits, and there should be clear documentation. Frequent review of the strategy is as important as initial development. An escalation process should be set up and there should be timely approval and execution of changes to the ALM strategy.

- **Reporting**: An efficient and robust reporting process develops reports that are clear, consistent, well-docu-

AN EFFICIENT AND ROBUST REPORTING PROCESS DEVELOPS REPORTS THAT ARE CLEAR, CONSISTENT, WELL-DOCUMENTED AND APPROPRIATE FOR THE AUDIENCE.

mented and appropriate for the audience. One goal of risk reporting is to summarize risk positions that the company has taken, at a given time. Another critical function is to attribute gains and losses in a recent period to market drivers and management decisions. Reports should be usable; that is, they should help in facilitating and driving both the company's decision-making process as well as the overall ALM strategy. Responsible parties should meet frequently to discuss if current metrics still hold value and evaluate if new metrics should be added in order to better manage new risks the company might take. Managers should implement regular, actionable reporting at appropriate frequencies, align reporting to internal and external risk factors, and establish interpolation estimates for interim reporting.

As we noted earlier, there is no "one-size-fits-all" approach to ALM, as different situations and risks will necessitate different processes. Some of the differences to consider include:

- Life insurers are more dependent on ALM and therefore require more complex interaction, whereas health and property and casualty (P&C) carriers/lines can take a given conservative assumed earned rate and work off an underwriting model for their pricing and product development.

- Larger insurers will be more likely to have a centralized ALM function, whereas small and medium insurers need more often to rely on committees like an ALCO to not only make larger strategic decisions but oversee tactical functions.

- Companies with a safer surplus position (however that is defined) are more likely to determine that some components of surplus can be treated as excess and therefore have a different ALM strategy around them.

- Firms that have more complex liabilities (e.g., fair value embedded derivatives) will by nature typically require more robust technology (speed and processing capability) that can then be leveraged for more sophisticated ALM decision-making above and beyond what the technology was originally tasked to do.

WHERE DO WE GO FROM HERE?

In this article, we have outlined the general concepts and principles underlying ALM Transformation. We hope this has provided some food for thought. Organizations, regardless of sophistication and product mix, could benefit from ALM Transformation, particularly from the perspective of those who have implemented such initiatives in other companies and who can help motivate and engage stakeholders toward more successful business processes.

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