Asset Management

The Future of FORECASTING

In this age of disruption, insurers can no longer rely on traditional methods of predicting risk.

by Woody E. Bradford

As Mark Twain once cleverly observed, "Prophesy is a good line of business, but it is full of risks."

Financial forecasting has always been a challenging endeavor, and recent events are not making that any easier.

But the fallout from those events—including the Brexit vote and Donald Trump's surprise victory in the U.S. presidential race—on top of already unpredictable markets and a persistently low yield environment, make accurate risk modeling more important than ever to insurance companies and other institutional investors.

At the same time, it's become clear that traditional methods of forecasting have fallen short in generating actionable risk and return analyses, largely because they look only at past data, under the misguided assumption that the underlying information was rational and efficient and that history is a reliable benchmark for the future. To create more useful financial models, risk managers need to use all available tools and techniques, from advanced technology such as economic scenario generators to the latest insights into behavioral finance.

Key Points

Fallout: Recent events such as the Brexit vote and the U.S. presidential election, on top of already unpredictable markets and low yields, are contributing to the difficulty of financial forecasting.

Failure: Based on the record of inaccurate predictions by professional forecasters over the past five years, traditional approaches to analyzing markets and forecasting events are no longer acceptable for pricing value and risk.

Future: Investors must recognize the latest scientific research and integrate behavioral finance into modern forecasting.

A New View

Based on the record of failed predictions by professional forecasters over the past five years, traditional approaches to analyzing markets and predicting events are no longer acceptable for accurately pricing value and risk. Instead, the approaches must focus on the numerous and rapidly evolving variables that impact financial forecasting. They include underlying growth fundamentals, global capital flows, shifting yield curves, regulatory and central bank interventions, political uncertainty, credit and equity risk volatility and more. Beyond that, correlations and compounding effects are constantly changing and becoming more critical in determining solvency requirements and risk-adjusted returns on capital.

Institutional investors need to correctly evaluate the full range of possible economic scenarios in order to take on risks that appropriately align with their investment objectives. Often, risk managers use professional forecasts to predict interest rates and economic growth rates, yet these forecasts frequently miss the mark by quite a bit. This is demonstrated in comparing actual 10-year U.S. Treasury yields against 10-year Treasury forecasts in the *Survey of Professional Forecasters*, a quarterly survey of macroeconomic forecasts by economists and other analysts issued by the Federal Reserve Bank of Philadelphia. Even with the insight of these so-called experts, it is best not to bet on a single interest rate forecast or a single scenario.

When investors derive financial forecasts from past financial data, they often fail to consider the full range of factors associated with processing that information. This is because humans may subconsciously select facts and derive conclusions that support their current

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thinking, rather than consider situations objectively. This tendency to oversimplify or ignore actual outcomes likely results from various cognitive biases—ingrained in human nature—which lead to inaccurate results. At the same time, experts are increasingly confident in their models because they appear data-driven and scientific. This is a dangerous combination.

If we think in terms of possibilities, rather than forecasts, conventional approaches will be forced to consider the more unpredictable effects of government policies and global capital markets on the economy and interest rates. Yet, the potential still exists to be convinced by entrenched notions of "what we feel is right," rather than an objective, theoretical or rational outcome.

Natural biases—such as selection, confirmation, availability and regret aversion—tend to preserve, for example, the belief that interest rates must eventually revert to "normal" levels. This is why investors must recognize the latest scientific research and integrate behavioral finance into modern forecasting. Sophisticated technology has made it easier for investors to calibrate around human tendencies, but it is still challenging to accurately forecast events in such a complex economic environment. As a result, risk managers need to rely more and more on scenarios and stress tests rather than forecasts and predictions.

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In order to appropriately calibrate their approach, insurance industry leaders need to question conventional wisdom and create a culture of innovation. Executives need to understand and articulate risk characteristics that recognize both internal business requirements and expanding regulatory guidance. Insurance industry leaders who adapt the fastest will integrate investments more fully into their businesses, rather than investing through stand-alone investment departments. Investment risk will need to be considered in the context of the overall enterprise risk of the entire organization.

A Technological Assist

Technology is available to help investors devise a firm-wide enterprise risk management strategy. Economic scenario generators, or ESGs, provide essential insights into all the integrated complexities of macroeconomic trends and specific financial sectors, appropriately representing a range of black swan events that could happen across interconnected global markets. ESGs can help forecast not only possible scenarios, but also the severity of a hypothetical event's impact and its relative likelihood of occurring.

ERM frameworks using ESG technology are far less prone to selection biases and are essential for accurate asset-liability modeling, risk capital estimation, regulatory capital and embedded value calculations. Moreover, because they are software-based, ESG platforms are more efficient and involve less staff than traditional risk modeling methods, allowing firms, particularly small and midsized firms with limited resources, to do more with less. This can be a critical advantage in today's competitive financial climate.

While all financial institutions need strong risk management capabilities, the insurance industry is particularly sensitive to both macroeconomic trends and microeconomic particulars. Even among individual insurers, risk profiles differ on specific investment objectives, liability exposures, regulatory requirements and risk tolerances. A comprehensive ERM strategy needs to balance financial metrics such as capital preservation, cash flow management and income generation against key risk drivers such as catastrophic events, mortality rates, interest rates and inflation. The best risk management systems should be designed to reflect all these unique considerations in a comprehensive presentation of risks.

Another influence which is positively driving change among institutional investors is coming from regulatory agencies. The Own Risk Solvency Assessment, or ORSA, a core element of Solvency II, lays out a prescribed set of processes for determining solvency needs for an insurer's specific risk profile. Rules like these present quality requirements and establish an accountable risk management system at a global level.

So long as regulations are succinct, easy to implement and not overly burdensome, they force an insurer to not just forecast potential events, but to conduct an honest evaluation of their risk profiles, strengthening institutional investment practices. Of course, keeping regulations succinct and not overly burdensome has its own record of failure and is a challenge to debate another day. The end lesson remains that investors cannot outrun risk. They should instead work to anticipate it and use their understanding of it to their advantage. After all, the insurance industry is all about pricing risk. The goal is not to avoid risk entirely, but to find opportunities where compensation for risks taken is justified over a range of possible scenarios.

With the right combination of experience, expertise and technology embedded in the investment and product planning processes, insurance companies can be prepared for a range of potential outcomes and can improve returns for their policyholders and shareholders. BR