ALM models

Beyond basic compliance mandates

Institutions increasingly need to utilize ALM models in strategic ways that go beyond the basic mandates of regulatory compliance, in order to strengthen forward-looking business decisions, an industry strategist advises.

Given the risks embedded in today's balance sheets, failure to use such models properly, and comprehensively, can result in serious adverse consequences.

"The consequences are greater than they have ever been—it has never been more important to do modeling right and do it well," says Mike Guglielmo, managing director, Darling Consulting Group, Newburyport, Mass.

Tougher stance

Guglielmo pointed out that examiners recently have been taking a tougher stance towards risk-management issues, including ALM modeling. Regulators earlier this year issued advisories on IRR exposures and liquidity risks, which noted tremendous concern over the possible adverse impact of rising interest rates on earnings in today's environment.

"In general, there's going to be little tolerance for weak IRR management practices," he said. "Institutions need to be much more forward-thinking in terms of their processes."

To comply with mandates on modeling, he said institutions must ensure that:

- They are in control of ALM model assumptions.
- Net income simulations look out beyond 12 months.
- Yield-curve risk is analyzed with different types of scenarios.
- There is accountability throughout the organization.
- The board is informed and educated about the modeling process.

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> *Mike Guglielmo, Managing Director*
> *Darling Consulting Group*
> *Newburyport, Mass.*

"We're seeing a lot of heavy-handed exams," Guglielmo said. Among other things, examiners have intensified their scrutiny of liquidity risk, IRR, credit, capital, and earnings.

"The feedback we're getting from a lot of organizations is that the examiners are coming in loaded for bear and already have a pre-conceived downgrade for the bank," he said. "No matter what you (institutions) are doing, they (examiners) are expecting more," he added.

Risk exposures

He said he believes that examiners are closely scrutinizing different institutions to determine the level of risk exposures. As part of the review, they want ALM modeling scenarios to trigger options embedded in the balance sheet, in order to reveal "who's showing any sign of duress."

For example, in the current rate environment, examiners have advised institutions to model IRR scenarios that show larger increases in short-term rates, in some cases up 400 to 500 basis points.

As a result, Guglielmo said that he has been advising client institutions to run IRR scenarios of a flattening yield curve, with the short end rising by 500 basis points and the long end remaining static.

One significant problem he often sees is that lots of institutions don't know what assumptions and data are going into their ALM models, especially when the modeling process is outsourced.

"If they're outsourcing, they often abdicate any responsibility for the critical assumptions that go into it,"

he said. "As a result, the models might not fully represent the risk profiles."

"Because of the complexities of the systems and tools, and the efforts required to do this effectively, more banks are seeking outsourced solutions," he said. However, because the various types of such solutions are not necessarily similar, and there is such a wide range of services, a key challenge for institutions is to ensure that quality considerations are adequately in place.

"Not every outsourcer is on an equal footing in terms of the level of service and quality of results," Guglielmo said. "Some are very cookie cutter—they just take the raw data, dump it in, and spit out reports and provide it to the bank."

On the other hand, other vendors may offer a more customized approach with more model validation and assumption support—while still others "simply do it to sell securities."

Since there are no binding industry standards concerning model outsourcing, CFOs and others must always recognize their responsibility for asking questions, reviewing various models, and making a well educated choice.

Guglielmo also offered some significant pitfalls that CFOs and others must avoid when using ALM models.

One pitfall involves the way that modeling data and results are presented in ALCO packages. There are usually two extremes—both of which should be avoided—either presenting too little information, or too much information, Guglielmo said.

The modeling information needs to be presented in a way that is conducive to discussion and decision making—focusing on key data or trends, offering various approaches and the strengths and weaknesses of each, and presenting this in an easily digestible format.

Secondly, institutions must not "over-rely" on modeling results, and must not be afraid to challenge the data when appropriate. "They (institutions) sometimes take the results as gospel," he explained. "But these models are chock full of assumptions."

Guglielmo emphasized that it's essential to ensure that the assumptions used in the ALM model are "on target," since the assumptions and data handling are absolutely vital to the modeling process.

Indeed, the validity of modeling assumptions has become more critical than ever, due to increased balance sheet complexity, more volatile market factors, greater competitive pressures, and less margin for error.

Faulty assumptions

Faulty assumptions, and the modeling of faulty results based on those assumptions, can result in lost revenue opportunities, poor financial performance, restatements and credit downgrades. Such mistakes also will draw criticism from examiners, especially in today's hyper-vigilant environment.

Thus, it's especially important for CFOs to develop an ongoing process for reviewing assumptions. Key elements of such a process include back-testing of actual data versus forecast data, historically based studies and analyses, model validations, and stress-testing, Guglielmo said.

For example, in back-testing the modeler may compare prior projections versus actual results for rolling 90-day look-back periods. The process also may involve review of major variances by portfolio and product, in which the modeler "drills down" appropriately into the data.

In addition, it's important to test the assumptions periodically by utilizing alternative assumptions during model reviews. Institutions should evaluate various scenarios using the alternative assumptions for deposit pricing and sensitivity, prepayments, changes in growth, and non-parallel yield curves, Guglielmo said.

He noted that the ALCO and senior management are ultimately responsible for development and support of an institution's assumptions, and that senior management must create an appropriate level of controls and discuss the need for modification of assumptions on a regular basis.

Obviously, boards must understand, at least conceptually, what's going on at the ALCO, including the modeling process, Guglielmo said. Board education and involvement are naturally enhanced in institutions that adopt a more proactive approach towards ALCO strategy.

"Board members have skin in the game, and the consequences of being wrong can be profound for them," he added.

Guglielmo stressed that it's essential for institutions to go beyond the all too common practice of simply using the ALM model process as a means of regulatory compliance. All too frequently, when an ALCO fails, it's because the committee members have looked at models as simply a compliance issue, and not as a strategic tool that should be used to help steer the future direction of the institution. **FMU**