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ALCO

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It seems fitting that in Issue 1 of a magazine titled ALCO, we present an article on the Asset and Liability Committee (ALCO) itself, and specifically on ALCO and credit risk. As finance students know the world over, the biggest driver of bank regulatory capital requirements is credit risk. For the ALCO to do its job properly, it has to have an element of ownership and oversight in this area, and Dr. Bace provides an eloquent rationale for why the ALCO should have this authority.

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In a field of arcane and often opaque risk metrics, asset encumbrance and its management are perhaps the most arcane and opaque. We are pleased to have the market's leading authority on this subject, Enrique Benito, share with ALCO readers the main pointers on how best to measure and monitor asset encumbrance levels. He also presents best-practice principles for asset encumbrance policy.

08 STEERING BASEL III'S LIQUIDITY RATIOS — 36
BY CHRISTIAN BUSCHMANN AND CHRISTIAN SCHMALTZ
In every issue of ALCO, we will be presenting one in-depth technical article, the aim of which is to generate debate as well as to inform. For Issue 1, we consider the issue of compliance with Basel III liquidity standards (those bywords for assumptions-based risk estimation, LCR, and NSFR), and their impact on the balance sheet. For many banks this is materially significant, as entire business lines may have to be re-designed or even divested as they become more expensive to run or, indeed, unviable. For insight into steering one's way around the LCR and NSFR maze, Christian Buschmann's and Christian Schmaltz's article on the challenges posed by Basel III liquidity compliance is top notch.

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BY PROFESSOR MOORAD CHOUDHRY

market participants assumed there would always be a price so they could take on what turned out to be excessive risk. Liquidity disappeared when it was needed most, and its fragility should never be forgotten. The dealer community is focusing attention on newer initiatives that could make it even more difficult for market-making and liquidity, including the Fundamental Review of the Trading Book (FRTB), EU Bank Structural Reforms, and Financial Transaction Taxes.

So where are we now on this debate? Regulators acknowledge that we are in a "brave new world" that is working well enough for now. But, the cumulative effects of the mass of new regulation are not yet fully known, especially as full implementation is not yet complete. The new market structure has never been tested in a crisis.

Well-functioning secondary markets are key to the continued robust primary market upon which the global economy has come to depend, as investors will not buy new bonds if they are having difficulties with the ones the already own. Super low rates, QE, and a benign credit cycle have made for near perfect bond markets conditions where investors compete for supply. Even the most lowly rate sovereign credits are able to issue on attractive terms, with one recently defaulted country launching a successful 100-year bond. What happens when these conditions change? At least there is always some natural and largely captive demand from central banks and banks, collateral providers, and insurance companies and pension funds that match longer-term liabilities with assets.

Central banks have learned more about intervening in bond markets through QE, in addition to their historic focus on stabilizing banks. For now, authorities are focused on collecting and analyzing more high quality and uniform data. The need for a better understanding of linkages and likely behaviors in disrupted markets is fully appreciated.

Peter Eisenhardt is Secretary General of the International Council of Securities Associations. He has worked in treasury, money market trading, bond options trading, repo, credit, and debt origination in New York, London, and Tokyo over a 30-year career at Bank of America Merrill Lynch and J.P. Morgan.

CREDIT RISK AND ALM

BY DR. EDWARD BACE, DEPUTY HEAD OF FACULTY, BTRM

What does credit risk have to do with asset and liability management (ALM)? Plenty! The risks faced by financial institutions are diverse, but interconnected. Financial institutions attempt to manage risk, among other ways, through product features, such as variable interest rate products, to mitigate the interest rate risk arising from changes in interest rates.

These efforts can, of course, affect future levels of credit risk. As rates rise, borrowers have to pay higher interest, and this heightens the risk that borrowers will be unable to make those higher payments, which naturally raises concerns among financial institutions about credit risk.

Effective credit risk management, therefore, needs to incorporate a framework integrated with the overall ALM process. This is critical for financial institutions as they trade off interest rate risk for credit risk. This is where the Asset and Liability Committee (ALCO) plays a key role.
In the first instance, an effective credit risk management system should have three main elements:

- Risk scoring or loan grading
- Stress testing and
- Loan loss reserving

These elements must be embedded in the financial institution's credit and lending policies. These policies form part of a living document that changes and adapts as new regulations are introduced and as the institution's business strategy develops.

Risk Scoring

Following are key principles of an effective credit policy:

- Risk scoring models should be designed so that consistent measurements can be applied to similar types of loans.
- A good risk scoring model should include both objective and subjective factors that give an accurate reflection of a borrower's ability to repay debt.
- If a model is too objective, it can create a "black box" that lenders will try to circumvent.

- If a model is too subjective, lack of consistency results, which can create additional risk in the loan portfolio.

The key is finding the right balance between regulatory scrutiny and adequate flexibility for lenders to pursue transactions acceptable to the financial institution's risk profile.

Stress Testing

The Dodd-Frank Act requires the largest financial institutions to carry out stress tests, and guidance has been given on stress testing for community banks with assets over US$10 billion. This guidance suggests that institutions should calculate and document their relevant loss rates for two-year stressed scenarios according to a base line, adverse circumstances, and severely adverse circumstances.

Naturally, these losses are carried forward to the income statement and the balance sheet, where the capital ratios are ultimately assessed. A robust stress testing process will leverage the risk-scoring models to assess the actual impact of each of the stress scenarios carried out. The institution's ALCO has to be made aware of these results, as the bank may be required to raise additional capital and funding.

Credit Risk Assessments and Mitigants

Many banks have developed their own internal rating models to form their own view of customer creditworthiness. These internal models also help banks reflect on why rating agencies may not agree with each other.

Internal rating models have also enabled banks to obtain capital treatment advantages, balanced by the significant costs to developing and sustaining these models.

Setting Credit Limits

Best practice dictates establishment of a credit risk appetite for each counterparty, industry, and group to which there is actual or potential exposure. Limits should also be set to cover the overall exposure to the highest risks (as these are the most likely to default and, hence, to create losses for the bank).

ALCO should be aware of the approaches utilized in considering issues related to the availability of liquidity and capital. A bank should organize its ALCO and Executive Committee structure in a way that ensures that ALCO has ultimate authority over credit risk policy.

A sensible approach is to ensure that the credit risk appetite for better quality clients is higher than for the weaker clients. However, one must consider "what-if" scenarios, allowing the re-setting of lower limits in anticipation of credit deterioration.

Other mitigants include use of credit derivatives, and possibly structured financings.

Credit Products

It is very important to understand the borrower's business and its funding base. It is equally important to ensure that borrowers are well positioned to meet their objectives.

A lender should feel confident that the borrower is trying to neutralize the effect of market risk movements (including changes in interest rates and exchange rates), and that they borrow in currencies that match their assets and liabilities appropriately. Just as ALCO reviews the bank's ALM to measure the potential effect of rate changes, so should the borrower regularly undertake a similar review. Borrowers or counterparties who run significant mismatches must be treated with caution, as handsome profits today could easily turn into large losses tomorrow.

ALCO, moreover, should consider carefully how best to raise funds for the bank. Debt investors have different objectives, and some are seeking higher (gross) returns than others.

Debt Structure

In this respect, it is important to be able to offer investors different types of debt instruments.

Subordinated debt, for instance, not only offers higher returns than other forms of debt, but also provides an extra layer of protection for unsecured creditors, in addition to shareholders' equity. Unsecured creditors will be very focused on how much asset value could be lost before their own debt is at risk.

The relative rates of return for different levels of seniority will vary according to the strength of the counterparty, reflecting the risk of loss. A senior secured creditor will be in the safest position, albeit at a low return, while an ordinary shareholder is in the riskiest position, and expects a much higher return.

Banking versus Trading Book

As we know, the banking book positions generally reflect assets intended to be held until maturity (e.g., bank loans). The trading book positions tend to reflect instruments held for a short period of time and then sold (e.g., a portfolio of bonds and shares). Credit risk obviously has to be considered for both, but even more so for banking book positions.

Deterioration in the creditworthiness of borrowers within the trading book could result in difficulties in selling the asset later. Therefore, when acquiring an asset and reviewing it on an ongoing basis, it remains critically important to be aware of issues that may affect a borrower's creditworthiness.

Pricing Credit Risk

In simplistic terms, credit pricing is driven by default probability, exposure, loss given default, and the cost of the capital a lender is required to hold to support its lending activities. All these have to be covered to allow a bank to break even. Credit risk costs are, therefore, higher for higher-risk clients and/or for longer-term lending.

In this context the evaluation and monitoring process is fundamental. Anomalies should be fully communicated, also to ALCO, so that everyone is aware, particularly if default is a possibility.

Loan Loss Reserves (Provisioning)

Eventually one has to decide whether a loan loss provision needs to be raised to cover an expected shortfall.

Trading book assets are valued daily according to market price, which ought to include any inherent expectation about credit risk and ultimate shortfall (so an additional provision is, perhaps, not necessary). Clearly however, if the bank held a significant proportion of the debt issue and did not believe the holding could be sold at the stated market price, then an adjustment would be necessary.

For banking book assets, clear concerns should be manifested before taking action. Initially, when concern arises, interest income should no longer be accrued to profits on a daily basis; it should be suspended and only credited to profits on receipt of payment. This ensures that the principal loan amount does not increase with capitalized interest.

When concerns are heightened that the principal may not be repaid, the likely shortfall should be assessed and a provision raised.
In assessing the level of provision required, the likelihood of default should be considered, and if this should occur, the level of shortfall that could

be expected. Predictions, alas, are always fraught with uncertainty. It is certainly not an exact science, but auditors have to be satisfied that the view expressed is within the realm of reason. In addition to specific provisions (against identified problems), banks are also required to charge general provisions, which reflect problems at the balance sheet date which are yet to be recognized (there is always a lag period before information is known).

One may take the view that the information base is typically two months out of date, and, therefore, two months' worth of recent annual provision charges should be applied (if this is deemed to be a reasonable proxy).

Much debate has occurred in recent years over the provisioning approach, with many participants unhappy with the accounting treatment (believing that that it does not provide an accurate view of asset quality).

A new bank, which is adding new high-risk loans and charging high rates of interest, will not detect problems with the loan book at an early stage, and profits will appear impressive. However, problems will inevitably emerge in later years, when the "expected losses" begin flowing through.

New rules under IFRS 9 recognize that a loan is acquired at the outset with a loss expectation. Therefore, going forward, through analyzing cash flows over the life of a financial obligation and applying a default-probability factor, an appropriate discounted value can be obtained.

ALCO and Credit Risk

Our recommended operating model is that ALCO have effective authority to monitor, and ultimately approve, all operational aspects that impact the balance sheet. By definition, therefore, that would include credit risk, as that is the biggest driver of most banks' regulatory capital requirement. The best-practice infrastructure is shown in Exhibit 1. Exhibit 2 shows the interplay of risks across the balance sheet.

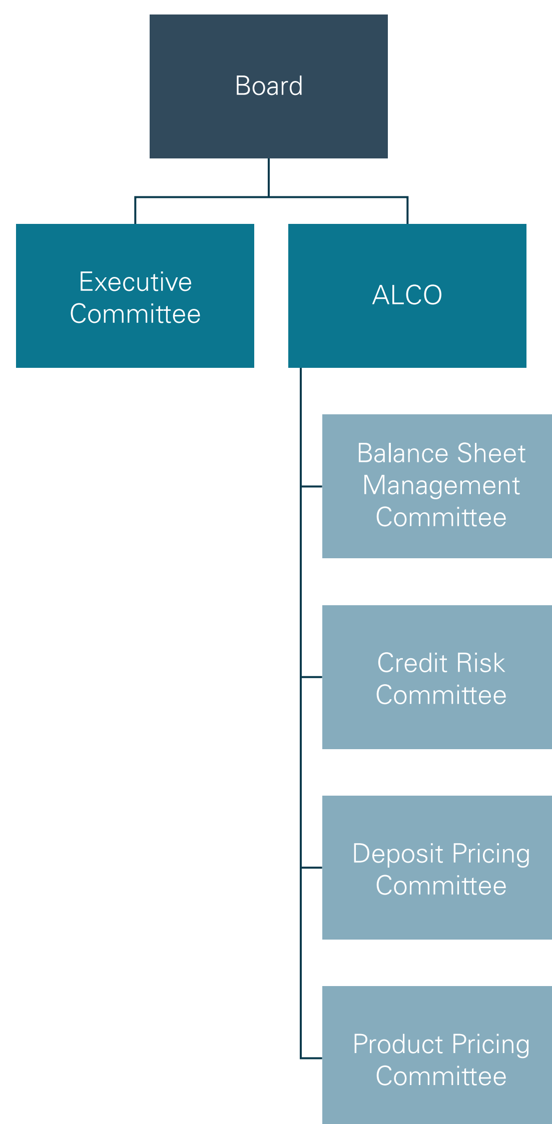

Exhibit 1: Best Practice Board and Executive Committee Structure

Source: Choudhry (2012) The Principles of Banking. Reproduced with permission.

Exhibit 2: ALCO and Risk Committee Interaction

Source: Choudhry (2012) The Principles of Banking. Reproduced with permission.

Given the importance to the balance sheet, ALCO can only pursue its mission effectively if it has final authority on credit risk exposure and adherence to credit risk appetite. This means the overall policy of the Credit Risk Committee must be subject to ALCO review. Such an operating model is not unknown, but it is not common. The rationale is clear enough, however: ALCO has responsibility for through-the-cycle sustainability of the balance sheet. Credit risk exposure is the main negative impact potential on the balance sheet; therefore, ALCO must have oversight of it. This does not mean day-to-day running and minutiae of credit origination. It means approval of policies, monitoring of exposure and, approval authority on significant transactions and any changes to policy.
Of course, ultimately, the best credit risk mitigation is sound origination policy.

Conclusion

This article has attempted to reinforce the vital role of the ALCO in credit risk, as part of the wider balance sheet risk operating model. In order to be able to fulfill the mission effectively, the recommended approach is to operate a technical and pricing sub-committee structure reporting to ALCO.

This helps to ensure that ALCO has oversight of the credit risk policy in the bank, given that credit risk is the main risk exposure on the balance sheet, and that ALCO has primary and paramount responsibility for the balance sheet.

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