The Asset-Liability Committee: Ensuring effective balance sheet risk management during a market-wide stress event

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Abstract Risk management in banking is universally the ultimate responsibility of the board of directors. That said, boards generally delegate various aspects of this responsibility to various executive management committees. Stewardship of the bank's balance sheet is given typically to the Asset-Liability Committee (ALCO). The mere existence and operation of an ALCO is not sufficient to prevent banks failing however, as the events of 2008 showed. Twelve years after that period, the markets are experiencing another global stress event, this time the impact of the coronavirus pandemic. This brings under focus again the role and effectiveness of the ALCO, as banks strive to assist their customer franchise while simultaneously ensuring the maintenance of balance sheet viability. The author assesses the factors that an ALCO must address if it is to remain fit-for-purpose during an economic crisis, and what specific operating methods and culture it should operate under. The paper concludes that an open culture at ALCO, which fully debates all issues is a key ingredient in this regard. Other aspects of importance include an appropriate governance structure, membership and reporting suite of risk indicators.

Keywords: *bank risk, risk management, capital, liquidity, asset-liability management (ALM), ALM Committee*

INTRODUCTION

During 2020, the response of governments to the coronavirus pandemic, principally the imposition of social distancing and 'lockdown' polices and restrictions on overseas travel, resulted in significant contraction in economic output over a prolonged period. This in turn resulted in banks worldwide experiencing impact on their balance sheet capital and liquidity position as their customers' revenues were, in the most severe cases, cut to essentially zero for a period of several months or longer. The coronavirus disease-2019 (COVID-19) policy response created a genuine market-wide stress event on par with that observed in the financial crash of 2008. The ultimate economic impact may prove to be more severe than that observed after the bank crash, because the current stress event is still being played out.

From the banks' perspective, the difference between 2008 and 2020 is noteworthy: unlike 2008, the stress event experienced during 2020 has not exhibited itself as an existential threat for banks, up to now. *The Economist* noted on 11th April, 2020, '[this event] is primarily an earnings issue, not a balance sheet one'. Bank balance sheets have experienced depletion of capital due to higher loan loss provisions being assigned, and withdrawal of deposit balances as customers use their cash reserves to replace loss of earnings, but critically banks entered the current stress period with large reserves of both due to the regulatory regime that was put in place after 2008, known as 'Basel III' (BIS 2008).

Although the circumstances behind the 2008 and 2020 stress events differ considerably, for banks the common theme in both cases has been the importance of maintaining balance sheet robustness. Entering into an economic downturn with a stress-resilient balance sheet is the single-most important factor that guarantees a bank's survival as a viable entity. The Basel III rules ensure that, in the first instance, all banks have sufficient reserves of capital and liquidity. That said, regulatory compliance may be considered a minimum level of safety. At the operating level, managing a bank's balance sheet before, during and after a stress event is the responsibility of its Asset-Liability Committee (ALCO), and unlike regulator guidelines, there is no universal standard for ALCO governance frameworks.

If one accepts that ensuring a robust balance sheet is vital for a bank's survival during a period of economic recession, then one will accept that the risk-management framework for managing the balance sheet is equally vital. This sets the ALCO apart from other executive forums in a bank, because in most banks the responsibility for stewardship of the balance sheet falls on the ALCO. How then, should the ALCO be organised so as to ensure continuous balance sheet viability at all times and under all conditions? What precisely should the role of ALCO be?

This paper addresses these questions. It also seeks to address the follow-up questions that arise as a result, these being:

- How best should banks address the need to ensure flexibility and rapid decision-making, while maintaining balance sheet robustness during a long-running stress event?
- How do we make the ALCO meaningful to the business lines, so that they derive the full value added that the ALCO should be delivering?

The author addresses these issues in the following discussion.

BALANCE SHEET MANAGEMENT AND THE ALCO GOVERNANCE MODEL

In theory, the ALCO has always been an important management committee in any bank. For instance,

> A greater number of financial institutions are enhancing their risk management function by adding to the responsibilities of . . . the Asset and Liability Committee (ALCO) . . . and integrating . . . traditional interest-rate risk management with credit risk and operational risk. In order to fulfil this more enhanced function, ALCO will require a more strategic approach to [its] function.[1]

Ideally, if an ALCO has genuine ownership of the balance sheet, then in theory the level of capital and liquidity reserves in place at any one time should be sufficient to enable the bank to remain viable during a market downturn. For example:

> The ALCO will have a specific remit to oversee all aspects of asset-liability management, from the front-office money market function to back-office operations and middle-office reporting and risk management.[2]

The starting point, as for any management committee, is the ALCO's Terms of Reference. The ToR must be articulated clearly to all of the bank management and approved annually by the Board of Directors. A frequent point of discussion is the frequency with which ALCO should meet. At a minimum, it should meet once every four weeks, ideally at the same time and on the same day each month. This establishes a pattern and ensures that the meeting is embedded in the firm's risk-management culture. If for any reason a discussion is required ahead of the next scheduled meeting, for example, during periods of market stress or because of a firm-specific issue of urgency, then an extraordinary meeting should be able to be called at short notice.

The ToR would be expected to articulate ALCO's ownership of the balance sheet. A template might be set out with the following headings:

- Strategic overview
- Capital management and credit risk oversight
- Liquidity and funding
- Market risk (interest rate and foreign exchange risk)
- Product pricing
- Stress testing framework
- Model validation
- Internal funds transfer pricing

The ToR is a formal statement of the primary aims and objective of the ALCO. It should be a succinct document. One observes that its remit covers every aspect of asset, liability, liquidity and capital management of the bank's operations.

Possibly the most significant element of ALCO organisation is its membership. There is no one universal model for ALCO membership, but an approach that ensured that all the relevant stakeholders with respect to balance sheet management were represented is noted in Table 1.[3]

Table 1: ALCO membership and attendance

Members
• Chief Executive Officer
• Chief Financial Officer (Chair)
• Head of Treasury (Deputy Chair)
• Head of Corporate Banking
• Head of Retail Banking
• Chief Risk Officer
• Head of Strategy
In attendance
• Head of ALM/Money Markets
• Head of Liquidity Risk
• Head of Valuation Control/Product Control
• MD, Products & Marketing
• Board NED
• Head of Internal Audit
• *Ad hoc* as required

The author notes the following:

- the committee is chaired by the chief financial officer (CFO) or in case of absence, the Head of Treasury, and not by the Chief Executive Officer (CEO) or any of the business line heads (where the Treasury desk is a profit centre and not a cost centre, the Head of Treasury must be mindful to not allow any conflict of interest whenever required to act as chair in the CFO's absence);
- the head of each business line must be represented, as must the head of the second line of defence (2LoD), often now termed the chief risk officer;
- selected members of staff of relevant departments can also be invited to attend as guests, for example, the head of money markets or ALM (who reports to the Head of Treasury). Where this occurs, the ToR must make clear such persons have voting powers in the absence of their department head. For effective management and decision-making, it is recommended that deputies be given such authority, so that the bank can function correctly in the absence of key senior individuals.

The presence, as voting member, of the chief risk officer (CRO) reflects that ALCO, like any committee in a bank, operates within the 'three lines of defence' (LoD) risk management framework. The 3LoD, namely Internal Audit, is also present at ALCO but as an attendee rather than a voting member. That said, the CRO is simply one member on ALCO. The role of 2LoD is no less or no greater than any other voting member. The membership of ALCO should be reasonably stable, but also flexible to allow for additional persons and expertise as and when necessary, for example technical experts by invitation.

In terms of organisation framework, at the time of 2008, the most common operating model showed the ALCO reporting to the CEO-chaired management committee or executive committee (Exco). This arrangement does not ensure the primacy of preserving balance sheet robustness during the period ahead of a stress event as the events of 2008, however, clearly showed for banks such as Lehman Brothers, Citigroup and Royal Bank

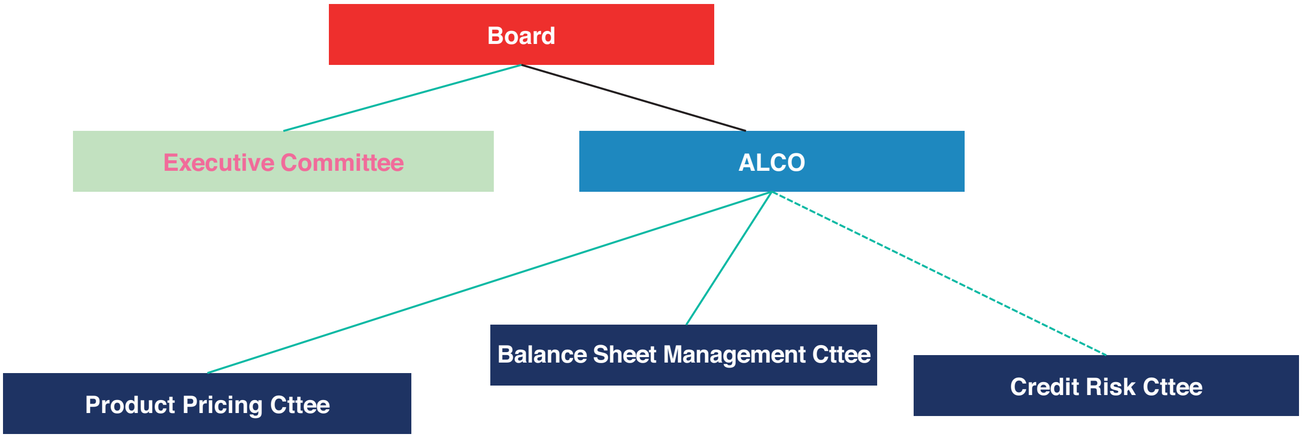

Figure 1: Asset-Liability Committee governance framework

of Scotland. For this reason, in the post-Basel III environment, the author's recommended operating model should be arranged as shown at Figure 1.

This arrangement ensures that oversight of capital management, which is impacted primarily by credit risk exposure and customer default levels, is the responsibility of the executive risk management forum that is responsible for the balance sheet as a whole.

GOVERNANCE EFFECTIVENESS

Risk managers should be aware of course that simply setting up a formal ToR for the ALCO and organising a monthly ALCO meeting do not necessarily make an ALCO fit-for-purpose — if by that the author means an ALCO that ensures that the bank's balance sheet remains robust and viable in perpetuity. Every failed bank in 2007 and 2008 had an ALCO organised under formal ToR, as all banks do today.

For this reason, it was welcome when the UK (United Kingdom) regulatory authority (then called the Financial Services Authority, now the Prudential Regulatory Authority or PRA) issued a 'Dear CEO' letter containing guidelines for effective ALCO practice three years after the bank crash.[4] This contained valuable guidance, including that the ALCO should:

- Proactively control the business in line with firm's objectives, focusing on the entire balance sheet.
- Act as the arbitrator in the debate and challenge process between business lines.
- Ensure issues are fully articulated and debated.
- Engage in active dialogue among various members and display a strong degree of challenge.

An ALCO that really did operate along these lines would be harder to render ineffective. That said, as for any committee the culture in place will influence strongly whether these directives are followed. For example, if the committee Chair is inclined towards the above behaviours, then there is more chance that ALCO will be able to act in line with these recommended guidelines. If the Chair is not so inclined, there is more chance that the ALCO is rendered less effective.

For the purposes of argument, let us assume that a bank did implement all that has been described up to now. Let us assume further that the organisation structure gives the ALCO real authority, it acts as a genuine and open debating chamber, and its membership and ToR are fit-for-purpose. Is this sufficient to ensure balance sheet viability during and after a market-wide stress event?

ALCO EFFECTIVENESS

A question asked frequently at seminars and workshops is, 'How can we make ALCO more meaningful and effective, especially to the business lines'? Alongside that is the related question, 'Often the metrics reported in the ALCO pack aren't 'real' to the business lines, for example earnings-at-risk (EaR) or economic value of equity (EVE) . . . how can we make the indicators more meaningful to the business, such that they actually assist the business in their planning and balance sheet optimisation'?

These are good questions. It is true that that certain risk indicators reported in the ALCO deck do not tell the business line managers anything of genuine value that assists them with their day-to-day work. And when this happens, it makes the ALCO process less effective than it could be, because it makes it more difficult for the first line of defence (1LOD) to engage fully during the meeting and during the overall ALCO process. It is certainly true that in many banks, ALCO is seen as a 'technical' committee that is less relevant to the front-line customer business.

ALCO needs to answer these questions fully, because otherwise it risks becoming less effective than it should be. There are two issues to address in connection with this.

In the first place, balance sheet risk metrics reported in the ALCO deck need to include meaningful indicators that actually help the business line heads manage their business from the product origination stage onwards. This goes beyond the metrics included for regulatory purposes: items such as common equity tier 1 (CET1) ratio and liquidity coverage ratio (LCR) would be included at the start to demonstrate compliance with regulatory requirements. We might label these 'Tier 1' metrics. This list of indicators, however, tends to include the net stable funding ratio (NSFR), economic value of equity (EVE), earnings at risk (EAR) and value-at-risk (VaR) type metrics, and while these are of course important tier 1 metrics, they are not necessarily the main indicators that are most transparent to business line heads.

To make ALCO meaningful at all levels and across the business lines requires that it also reports metrics that are transparent and easily discussed, and also can be understood immediately in terms of impact at the customer product origination stage. For instance:

- Liquidity: for example, customer loan-deposit ratio (LDR) and size of high quality liquid assets (HQLA) portfolio as a share of the balance sheet, and other measures that the 1LoD will use on a daily basis to help understand the business, alongside the standard regulatory metrics.
- Capital: for example, the level of buffer over the total capital requirement (TCR) and capital available to absorb unexpected losses on a going concern basis, and any 'pinch points' over (say) the next two quarters where this level may be a constraint on the lending plan.
- Earnings: for example, net interest income (NII) and net interest margin (NIM), and critically the sensitivity of these indicators to one or more changes in internal and external balance sheet factors (such as customer and product type changes).
- Nontraded market risk: for example, the NII metric and its sensitivity to 'business-as-usual' market changes alongside the prescribed stress scenarios.

There are, of course, any number of additional risk exposure numbers one can report, and the final suite of them will be a function of the size and business model of the institution. Including these additional risk indicators in the Tier 1 list of metrics alongside the standard regulator-driven ones in the monthly ALCO pack will make ALCO more meaningful to the business, and thereby assist in making the meeting itself more productive as all attendees engage in the proceedings.

In terms of order and layout, a suggested approach would be to ensure that the reporting layout of the ALCO management information (MI) pack is aligned fully with the bank's Board risk appetite statement (RAS) limit levels (ideally, the RAS would be designed around the layout from the ALCO MI pack, but the other way round is more common).

Using LDR as an example, this metric may appear in the Liquidity and Funding section of the RAS in the following format, as shown at Table 2.

The format would be replicated in the monthly ALCO MI pack, thereby giving instant conformation of compliance with the 'green zone' limit set out in the RAS. Hence, in this instance, as shown at Table 3.

The format should be used for all risk metrics reported in the ALCO pack. Tier 2 and Tier 3

Table 2: Extract from risk appetite statement (RAS) showing LDR risk calibration

Executive Responsible	Liquidity Risk Indicator	Red	Amber	Yellow	Green	Rationale	Comments
	Customer Loan-Deposit Ratio	>110%	>95%	>85%	<85%	Sets the bank's appetite for the extent of customer surplus funding of the balance sheet	LDR excludes any central bank facilities funding

Table 3: Aligning RAS format to the reporting format, showing LDR level

Liquidity Risk Indicator	Red	Amber	Yellow	Green	Comments
Customer Loan-Deposit Ratio				82%	

metrics, that may not appear in the RAS, would ideally be reported in the same way, again to enable ALCO attendees to note instantly that the balance sheet shape and structure is 'green'. Note that all Tier metrics would need to map into a specified Tier 2 metric, and the same approach should map Tier 2 risk indicators into Tier 1 ones.

Table 4 is an example of this 'tiering' set up for a bank's liquidity and funding risk metrics. The rationale for tiering key risk indicators is that it assists the Board in understanding as to which are the most important metrics for balance sheet management purposes.

In the second place, ALCO needs to be as open as possible, and a genuine debating chamber. This second point is more 'cultural' than technical and presents not an insignificant challenge. But getting the first point right will assist in making the meeting itself more meaningful to all attendees, especially the business lines. This will enable the ALCO to better fulfil its balance sheet viability objective.

ALCO AND ADAPTING TO EVENTS

The COVID-19 crisis and lockdown response to the spread of COVID-19 have demonstrated, among a number of things, the importance of a bank being able to react quickly and decisively to market-wide stress events. This time, unlike in 2008, banks are not part of the problem, but they can be part of the solution. We have observed pronouncement from central authorities noting that supporting the customer franchise through difficult economic times should be the primary objective for banks. In this regard, banks can take their cue from the central banks and regulatory authorities, who have implemented a number of support measures for consumers. The Bank for International Settlements (BIS) also published a statement on 3rd April, which included the guideline that capital and liquidity buffers were to be used during the period of stress, and that regulatory minimum, levels could be breached as banks sought to support their customers. This is significant because it gives an ALCO a support level for capital and liquidity management during the economic downturn.

A bank's ALCO ToR should ensure that it retains ownership of the balance sheet, under delegated authority of the Board. The ToR should enable ALCO to meet as frequently as needed (daily, if deemed necessary) during stressed market circumstances. As part of daily review, it should be monitoring balance sheet metrics for capital and liquidity, particularly the LCR and cashflow survival days measures. As part of ongoing and continuous balance sheet management, the ALCO should track customer behaviour closely, and the impact of this behaviour on the balance sheet. It can then

Table 4: Sample key risk indicator tiering framework

	Executive Responsible	Key Risk Indicator (KRI)	Frequency	Green	Yellow	Amber	Red	Rationale
Liquidity Risk Tier 1		Net Stable Funding Ratio	Monthly	>125%	<125%	<115%	<105%	Regulatory requirement
		Customer Loan-Deposit Ratio	Daily	<85%	>85%	>95%	>110%	Bank's appetite for the extent of customer surplus funding of the balance sheet
		Liquidity Coverage Ratio	Daily	>180%	<160%	<140%	<120%	Regulatory requirement
		Survival Days	Daily	>180	>180	<150	<120	Bank's appetite for how long it wishes to liquid in a stressed "market lockout" scenario
Tier 2		Available unencumbered liquid assets as % of total balance sheet	Monthly	>17%	>17%	<15%	<13%	Limits encumbrance of liquid assets
		Available unencumbered assets as % of total balance sheet	Monthly	>70%	<70%	<67.5%	<65%	Limits encumbrance of total assets
		Short-term (<1-yr) wholesale funding as share of total funding	Daily	<15%	>15%	>17%	>20%	Limits reliance on short-term wholesale funding
		Weighted-average tenor of customer funding (days)	Daily	>120	<120	<110	<100	Maintains minimum tenor of funding profile
		HQLA as % of total balance sheet	Monthly	tbc	tbc	tbc	tbc	Maintains minimum appetite for size of HQLA
		HQLA as % of total deposits	Monthly	tbc	tbc	tbc	tbc	Indicator of HQLA adequacy in event of deposit run
		Balance of Top 20 Deposit Customers as % of total deposits	Daily	<4%	>4%	>5%	>7%	Deposit concentration exposure indicator
		Cross-Currency Liquidity	N/A					The bank maintians an all-GBP balance sheet

respond as frequently as necessary with guidance for relationship managers to assist customers as required. In this respect, it can then recommend for Board approval any adjustment of the RAS and quantitative risk limits for capital and liquidity risk, if necessary. Thus, the communications responsibility for ALCO is two-way: upwards to the Board when recommending changes (temporary or otherwise) to the RAS for approval, and downwards to the business line level when confirming what level of capital and liquidity resources are available for it to use when seeking to support customers.

Balance sheet robustness remains key during any stress event, aligned with customer franchise support, and in this respect, ALCO remains the most important committee in the bank: as well as the communications responsibilities to business lines and to the Board, it also should own the communications relationship with external stakeholders, such as customers and the bank's supervising regulatory authority.. Once the market stress has passed, the key lesson learned for the medium term is to ensure that ALCO remains fit for purpose to manage balance sheet risk in the future. Its performance and the performance of the bank itself during the present time will be key pointers in this regard.

CONCLUSIONS

The concept of an ALCO is relatively speaking not new. The earliest articulation of the first instances of a formal committee with the remit of the modern-day ALCO were observed in the early 1970s.[5] Including an ALCO as part of a bank's formal corporate governance framework recognises the importance of managing the balance sheet during both bull and bear markets, to help ensure balance sheet viability (and thereby, the bank's viability). But as we noted, the mere existence of an ALCO is not sufficient to ensure a bank's survival, as the events of 2008 demonstrated. The imperative for any ALCO, as 2008 and now 2020 are demonstrating, is for it to have genuine ownership and control of the balance sheet and to operate in a way that demonstrates its relevance and importance to the business lines. This takes in both the formal risk-reporting mechanism, the way risk metrics are used to communicate risk exposure, and also the operating culture of the committee. It could be said that the latter is more difficult to implement in practice than the former, but it remains as important a factor.

References

1 Choudhry, M. (2001) *The bond and money markets*, Elsevier, Oxford.
2 Choudhry, M. (2007) *Bank asset and liability management*, John Wiley & Sons, Singapore.
3 Choudhry, M. (2012) *The Principles of Banking*, John Wiley & Sons, Singapore.
4 Prudential Regulation Authority (2013) 'Asset and liability management: Suggestions for greater effectiveness', LSS1/13, April 2013, available at: https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2013/asset-and-liability-management-suggestions-for-greater-effectiveness.pdf?la=en&hash=9E18F5CF0AAD6CDA73365CE2D60671498640484C (accessed 14th September, 2020).
5 Gup, B. E. (1983) *Principles of financial management*, John Wiley & Sons, Hoboken, NJ.

