



Striking a balance:

The challenge of preserving net interest margins with a flattening yield curve



With four Federal Open Market Committee (FOMC) rate increases totaling 100 basis points (1.00%) implemented since December 2015, U.S. financial institutions find themselves in the first rising rate environment since 2006.

Given the historically low rates in the interim, banks have experienced significant Net Interest Margin (NIM) compression as funding costs reached implicit floors and legacy higher-yielding assets gradually matured and were replaced at considerably lower rates and spreads due to a flattening of the yield curve. A flat yield curve impacts smaller banks in particular, due to the fact that they traditionally invest a greater percentage of their assets in longer-term investments. Because of this, they have not experienced the same NIM benefits as larger banks due to the rise in short-term rates: As of Q1 2017, more than half of all banks (53.7%) reported lower NIMs than at this time last year.¹ Moreover, margins will come under further pressure if and when big banks boost deposit rates for consumers. Once that happens, the future pace of deposit-rate increases may occur faster than in previous cycles, according to RBC Capital Markets analyst, Gerard Cassidy.² For now, the timing and magnitude of these events remain largely unknown.

While banks welcome these higher short-term rates, they are facing several key challenges. The first, as noted above, is when and by how much they should raise rates on their retail deposits. The second is that the longer end of the yield curve remains stubbornly moribund, resulting in a flattening curve at a time when bankers can least afford it. The traditional practice of funding short and lending long is not resulting in the spreads banks had experienced in the past. Third, with liquidity trends reflecting strengthening loans/deposits ratios the subsequent increase in wholesale funding reliance highlights the need for effective diversification and appropriate funding concentration limits. Discipline with respect to the pricing of core deposit bases is more relevant than at any time in the past 10 years. With regulators' heightened focus on operating liquidity, the aforementioned concerns are at the top of most Asset/Liability Committee (ALCO) agendas. This must be optimally managed by implementing sound funding strategies that include effective cost management, diversification and preservation of asset liquidity, all while ensuring appropriate levels of deposit retention.

¹ FDIC Quarterly Banking Profile, First Quarter 2017

² Kristin Broughton and Andy Peters, American Banker, "Enjoy Rising Margins While They Last, and other 2Q Previews," July 3, 2017



Below we will address these challenges and provide alternative funding scenarios in this current rate environment. We conclude by tying in interest rate risk strategies that address both asset-sensitive and liability-sensitive balance sheets.

Interest Rate Environment and Challenges

There has been some stabilization in asset yields, however, another 75 basis points of rate increases are needed before asset values begin to fully reverse declines experienced over the past several years. Therefore, we can expect another 18 to 24 months (given current³ FOMC rate-hike projections) before substantive Net Interest Income (NII) increases will be realized.



We can expect another 18 to 24 months (given current FOMC rate-hike projections) before substantive Net Interest Income (NII) increases will be realized.

Complicating matters is the fact that initial optimism surrounding the Trump administration's pledge to overhaul the tax code and increase spending on infrastructure has stalled as health care reform takes center stage. As a result, we have experienced a decline in confidence that has pushed long-term interest rates lower in the second quarter, leading to the aforementioned flattening of the yield curve. Following a pronounced increase in yields immediately after the election, (the 10-year Treasury note topped out at 2.6% in mid-March) the 10-year yield declined in late June and currently hovers in the range between 2.3% to 2.40%. At the same time, short-term rates have increased. The result: The difference in yields between the 10-year and two-year Treasury notes, which is a proxy for the profits banks can make from borrowing and lending money, fell below one percentage point in mid-May. It has remained there and closed the quarter at 0.90 percentage point. In the wake of the election, the same spread topped out at 1.35 percentage points in late December.⁴

All of this comes at a time when the Federal Reserve is preparing to announce plans to reduce their balance sheet, which ballooned from approximately \$900 billion in 2007 to a post-crisis high of \$4.5 trillion. Their strategy involves allowing an increasing amount of treasury and mortgage-backed securities to mature over time. While this would imply an attendant increase in long-term rates, a mid-May *Wall Street Journal* survey of private economists found that half of respondents believe the wind-down process would boost the yield on the 10-year Treasury note by just 0.2 percentage points or less over time. Moreover, a recent Fed board paper estimated that the expansion of Fed bondholdings since the crisis likely lowered the yield on the 10-year

³ As of July 2017

⁴ Telis Demos, WSJ, "What Not to Love About Bank Stocks Right Now," July 4, 2017



Treasury note by a full percentage point from where it would otherwise have been. By 2023, the paper said, the yield would still be about a quarter percentage point lower, all else being equal, despite an anticipated shrinkage in the balance sheet.⁵ This persistent flattening of the yield curve serves to heighten the focus on the optimization of banks' funding portfolios.

Deposit Pricing

Since the Fed began raising interest rates, the average yield on a \$25,000 money-market account has remained at 0.095%, according to RateWatch, and the average rate on a 12-month, \$10,000 certificate of deposit has only increased from 0.223% to 0.235%. Correspondingly, at the June 2017 Darling Consulting Group (DCG) conference in Boston, the vast majority of attendees admitted that they do not know if or when to raise deposit rates, with many waiting to see what the competition is going to do. This is due in large part to the aforementioned NIM compression and the fact that we have been locked in a period of historically low rates, with modest yield increases going largely unnoticed by depositors. A recent Raddon research study notes that only 21% of consumers said they had ever changed financial institutions to obtain a higher interest rate.⁶ While no one can be sure when it will be necessary to increase deposit rates, this research, as well as information presented by DCG, indicates that most consumers will need to see another 100 to 150 bps of FOMC hikes before they will consider moving to another financial institution. This implies banks can take a conservative approach and apply only modest rate increases toward the retention of existing depositors, with higher rates limited to the addition of new balances as needed. Certainly, banks with excess liquidity have no reason or incentive to increase their deposit pricing.

Only 21% of consumers said they had ever changed financial institutions to obtain a higher interest rate.

With banks' retail deposit pricing remaining largely unchanged during this new rate cycle, many institutions are opting instead for special promotions targeted to select customers. This is appropriate for cost management and customer retention, as it is critically important to avoid the impulse to increase pricing across an institution's entire retail deposit base. As a result, this approach must involve the identification of a bank's high-potential members; creation of a profile of their desired depositor (product, delivery channel usage, age, other/competing products, zip code, etc.); and a comprehensive review of depositors' data to determine the set that best represents this profile. Meanwhile, it is important to consider that such targeted pricing strategies include the implicit risk of cannibalization within the banks' own portfolios. Offering higher rates on existing products merely incents the customer to migrate into that tier. For this reason, banks must have a very clear understanding of the accounts and balances representing their most important customers, while simultaneously having the ability to identify the balances they are willing (and able) to lose by attrition. This requires effective design and implementation

⁵ Michael S. Derby, Fox Business, "Markets Await Fed Moves to Trim Balance Sheet," June 14, 2017

⁶ Jeffry Pilcher, The Financial Brand. "Brace Yourself: War For Deposit Dollars Looms – How Will You Survive?" May 30, 2017



of product structures and promotions that ensure new product growth exclusive of existing customers' balances. Complementing such sound liquidity management is a well-documented contingency plan for raising alternative sources of funds.

Funding Concentration and Alternatives

Optimization of a cost-effective funding portfolio remains a key topic at ALCO meetings in banks of all sizes, with diversification being a critical component. While core deposits remain a favored source of funds, regulators will want to see that institutions have sufficient alternative options in place, both for purposes of sound balance sheet management and for contingency planning requirements. As such, adopting a well-documented strategy that clearly and closely aligns a bank's enterprise-wide risk appetite with their liquidity policy and contingency funding plans (CFPs) is atop bank examiners' radars, requiring institutions to avoid an otherwise siloed approach to funds management.

Loans/Deposits and Loans/Assets ratios have been increasing since 2010, with a decline reflected in only one quarter during this period. This places greater reliance—and focus—on wholesale funding as retail deposit generation lags the increase in assets. Used in conjunction with the deposit retention strategies outlined above, the appropriate use of wholesale funding can be a practical mitigant to price-induced attrition, while enforcing retail pricing discipline and providing a cost-effective alternative. With targeted CD specials becoming a popular strategy once again, volume and pricing become key concerns: banks are loathe to cede any NIM gains that can be achieved in this difficult environment.

Two of the most widely used wholesale funding alternatives are FHLB advances and brokered deposits, provided that the appropriate combination of these options is closely aligned with each institution's internal policy limits. A prudent funding concentration strategy typically seeks to ensure that no more than 10% to 15% of assets are represented by any one source. Obviously, these should be adjusted downward if the perceived risk of a given source is high. Moreover, regulators will typically want to see that potentially volatile funding sources are capped in the aggregate at approximately 25% of assets. Such vehicles include large relationships representing > 2% of deposits; uninsured deposits; high-rate deposits (75 bps > national average); brokered deposits; fed funds purchased; certain repurchase transactions and internet deposits.

FHLB advances provide a stable source of funds, but it is important to ensure that reliance on this collateralized funding allows for an appropriate asset liquidity buffer. Regulators typically seek assurances that a minimum of 10% of assets are highly liquid, with an additional level of unencumbered assets that can be readily converted into liquidity via secured borrowings and/or securitizations. Given that FHLB advances are collateralized primarily with residential mortgages, this funding option represents effective utilization of assets that are largely ineligible for other collateralized borrowings. However, it is important to factor in the cost of this funding when constructing an effective funding portfolio: FHLB advances are more expensive than retail and brokered deposits across similar average durations. Pricing differences can range from 10-70 bps for tenors ranging from 1 week to 3 years.



Brokered deposits represent a cost-effective, stable funding strategy, requiring no asset liquidity encumbrance, marketing, or other overhead expenses, while providing effective portfolio diversification. Brokered MMDAs are typically priced at spreads to the Fed Funds Effective rate, but pricing structures are very flexible, allowing for any index that a bank may require: Fed Funds Effective, LIBOR, Overnight Bank Funding Rate, etc. Brokered CDs are currently clearing at approximately 10-50 bps higher than brokered MMDA, depending on the term. For those institutions seeking a term lock-in for matched-funding purposes or other asset/liability management concerns, a more cost-effective alternative is a fixed term brokered MMDA, which is priced 5 to 15 bps below brokered CDs. These highly flexible and stable deposits are structured identically to a brokered CD, replete with early withdrawal and redemption penalties. The only significant difference is that they are classified on the Call Report as an MMDA.



Brokered deposits represent a cost-effective, stable funding strategy, requiring no asset liquidity encumbrance, marketing, or other overhead expenses, while providing effect portfolio diversification.

Demonstrating the widespread adoption of these funding sources, the FDIC's consolidated industry balance sheet as of Q1 2017 reflects FHLB funding at 3.99% of total deposits and 3.47% of total assets. This is reasonably consistent with the average since Q1 2010 of 3.77% and 3.15%, respectively. The FHLBs were largely available to their members during the financial crisis, with some lines trimmed, relatively minor term restrictions imposed, revised collateral haircuts and moratoriums on capital stock dividends and redemptions. Advances were made available to members, with modifications made to the collateral pledging methodologies applied to banks based on their credit-worthiness. Currently, 3,197 institutions utilize FHLB advances, representing 55% of all U.S. banks.

Brokered deposit balances are currently at 6.81% of total deposits and 5.91% of total assets. Utilization of this funding over the aforementioned period has averaged 6.71% and 5.62%, respectively, with balance increases in all but six quarters.⁷ Currently, 2,521 institutions use brokered deposits, representing 43% of all U.S. banks. Consolidated balances increased during the financial crisis, as these funds remained available to all well-capitalized institutions and served as cost-effective and uncollateralized replacements to fed funds and FHLB advances.

Now that we have discussed alternatives to retail deposit funding based on costs, internal policy limits aimed at ensuring appropriate concentration levels and asset liquidity, we will now consider the structure of banks' individual balance sheets with respect to interest rate risk. Institutions that are asset-sensitive will typically seek to lengthen the duration of their assets while shortening their liabilities. Assuming appropriate shape of

⁷ FDIC Quarterly Banking Profile, First Quarter 2017



the yield curve and the nature of forward rates, the latter includes deposit pricing designed to create incentives for CD customers to stay short; brokered MMDA; callable brokered CDs; receive-fixed interest rate swaps; FHLB term floaters with no prepayment penalties at reset dates; and replacement of longer-term funding with short-tenor/variable rate issuance. Conversely, liability-sensitive institutions will look to lengthen the duration of their liabilities via FHLB non-callables; retail CD pricing that encourages extension via harsh early withdrawal penalties; brokered CDs (either callable or bullet structures, depending on the cost of the option); fixed-term brokered MMDA; and pay-fixed interest rate swaps.

Concluding Comments

In this new rising rate environment, the decision to increase retail deposit pricing, when to increase and by how much, requires a rigorous and disciplined approach. Detailed information about a bank's depositors is vital to understanding balances that are worth retaining and those that can be effectively replaced with other sources of funding. Such substitutions should be part of a comprehensive and well-documented funding strategy aimed at NIM preservation, sound liquidity management and interest rate risk. A prudent mix of FHLB advances and brokered deposits provides funding managers with additional flexibility to implement a well-balanced solution that addresses retail deposit pricing discipline while optimizing banks' funding portfolios.