Bank Strategy Insights
FINANCIAL SERVICES GROUP | BALANCE SHEET STRATEGIES
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Protecting Tangible Book Value Against Rising Rates… Again

*Please see this week's **Rate Sheet** and **Yield Curve Opportunities**.*

Despite the expectation that rates will remain low for an extended period of time, the fact of the matter is that they will eventually rise. As we've often preached the value of identifying, discussing, and potentially addressing exposures, the potential for rising rates has rekindled conversations around the impact to capital, earnings, and liquidity. One particular area of focus has been the impact to Tangible Book Value ("TBV") 'at risk' due to the mark-to-market of the available-for-sale ("AFS") securities portfolio. While this is certainly not a new issue, we have historically seen heightened focus in times of growing bond portfolios (excess liquidity), expectations for rates to rise, and sensitivity to tangible book value (from investors, regulators, Board members, etc.) This week we discuss ways to prepare your balance sheet, quantify your risk of rising rates, and reduce the downside that threatens your Common Equity.

The Current Situation

As with many things in 2020, now there is a perfect storm: lackluster loan demand and historically low-interest rates have caused financial institutions' securities portfolios to grow – particularly in lower-yielding assets. This increased exposure to low yield fixed rate securities will sting when market values decline as rates rise. The below chart shows the Tangible Common Equity (TCE) and Tangible Book Value (TBV) erosion that could occur assuming a 4 year portfolio duration and 21% tax rate.

Pro Forma TCE/TA (8% Start) From Unrealized Security Gain/Loss

Securities as a % of Assets	Rate Move (Instant Shock) +50	+100	+200	+300
10%	7.85%	7.71%	7.41%	7.12%
15%	7.78%	7.56%	7.12%	6.67%
20%	7.71%	7.41%	6.82%	6.22%
25%	7.64%	7.27%	6.52%	5.77%
30%	7.56%	7.12%	6.22%	5.31%

$ Decline in TBVPS ($10.00 start) From Unrealized Security Gain/Loss

Securities as a % of Assets	Rate Move (Instant Shock) +50	+100	+200	+300
10%	($0.18)	($0.35)	($0.70)	($1.05)
15%	($0.26)	($0.53)	($1.05)	($1.58)
20%	($0.35)	($0.70)	($1.40)	($2.11)
25%	($0.44)	($0.88)	($1.76)	($2.63)
30%	($0.53)	($1.05)	($2.11)	($3.16)

Fixed rate AFS securities attract more attention than other fixed rate assets, such as loans, because they are marked to market through accumulated other comprehensive income (AOCI), impacting GAAP equity and TBV/TCE. Though AOCI is generally excluded from regulatory capital, TCE is the most common capitalization metric for investors and TBV is currently used to value many bank stocks (especially in the challenging earnings environment). This erosion of value from rising rates can impact strategic decisions including M&A, dividend policy, and capital planning.

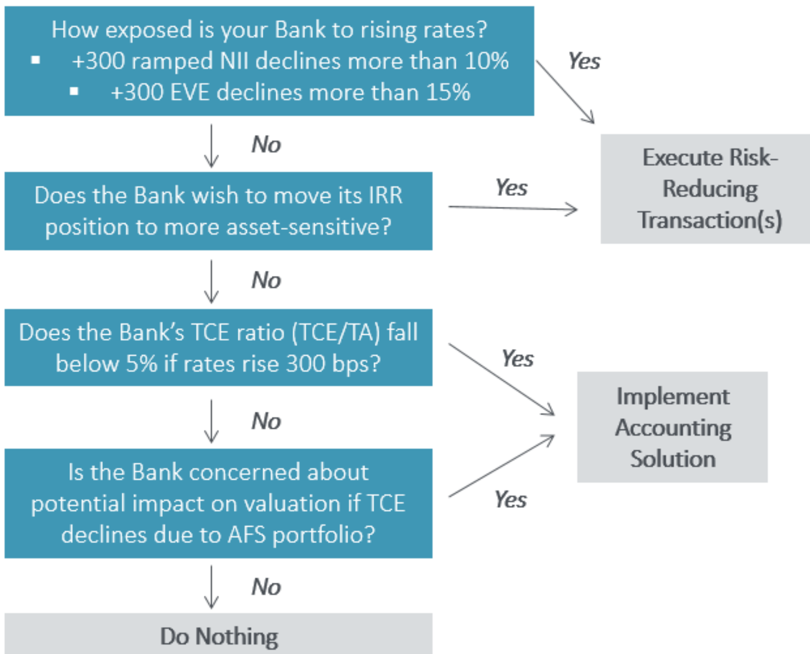
What are Your Options and How Should You Evaluate?

The most common strategies for addressing this issue fall into three main categories:

1. Executing transactions that will address the actual volatility, while improving the optics of the accounting risk

2. Implementing accounting tactics which reduce mark-to-market accounting risk without changing the core interest rate risk position
3. Doing nothing, only after evaluation of the risks and benefits of and need for other solutions

The below decision tree will help any institution understand their options and solutions, when considering the three broad categories:



How to Implement These Solutions

Executing transactions *is the most proactive and direct approach. It changes both the accounting and economic impact of a potential risk. The costs of a potential solution must be considered, along with practical considerations of implementation.*

<u>Sell securities to lock in current gain/loss</u>: Long-run economic impact depends on size of gain/loss, use of proceeds, and expected average life of securities sold. If gains are taken, the institution may need to substitute credit risk for duration risk to make revenue neutral, or add leverage to the balance sheet to replace lost earnings. If losses are taken, the institution may need to reinvest into loans to shorten the earn-back, or add leverage to the balance sheet to replace lost earnings.

As far as which securities to actually sell, there are often various answers, but most fall in line with other investment portfolio strategies we've identified in the current landscape: mortgage securities with fast speeds or significant extension risk, securities with significant optionality risk (e.g. callable agencies and some mortgage securities), longer duration securities where spreads have tightened, any security where the breakeven yield can be achieved on a shorter duration reinvestment option, or bonds with the lowest yield per duration profiles.

The institution must also consider what to do with the proceeds, and how to attempt to replace the lost earnings. What is an acceptable earn back on loss trades? Ultimately, the institution needs to maintain balance between yield, duration, and impact on tangible book value. If they give up too much in income, there is a risk of deteriorating capital over time (ending up where you started). If they add too much duration to replace forfeited earnings, they've accomplished nothing unless new securities are reclassified HTM.

<u>Pay fixed on swap or purchase a cap designated as cash flow hedge of current or future funding costs</u>: This approach has been popular in recent years due to straightforward accounting and minimal earnings give-up. We have covered this strategy in various pieces recently, and have helped many of our clients implement it. The TBV protection is significant, but secondary to the cost-savings, which is why so many institutions have explored this option in recent months.

<u>Synthetically convert fixed rate bonds to floating using an interest rate swap</u>: Recent hedge accounting rules provide more flexibility in this area. The impact to earnings will depend on future changes to interest rates. As noted above, banks can use pay-fixed swaps against floating-rate liabilities to synthetically extend liability duration (i.e., cash flow hedge). Institutions that do not have wholesale funding or index-based deposits can achieve a similar balance sheet impact by converting fixed-rate assets to floating (i.e., fair value hedge). It's actually simple, and also eliminates earnings volatility. For further information, please see our piece from May 28, 2020, entitled "Finding Value in Fair Value Hedges".

Implementing accounting tactics *reduces mark-to-market accounting risk without changing the core interest rate risk position.*

<u>Reclassify Securities to "Held to Maturity"</u>: This "locks in" current unrealized gains / losses currently in AOCI, which are then amortized away over the life of the security. Care must be taken when doing this to avoid taking away flexibility to manage the balance sheet going forward from a liquidity and interest rate risk perspective.

There are various areas to evaluate when considering the use of HTM. New securities can be classified to HTM at purchase, while existing securities can be reclassified to HTM. In either case, the bank must be able to assert the ability and intent to hold these securities to maturity. If securities are reclassified from AFS to HTM, the bond book value and book yield reverts to market levels, and the unrealized gain is "locked in" to OCI and amortized to earnings, leaving the resulting effective yield comparable to the original book yield.

Since the effect of using HTM is to "shield" TBV from shocked price changes going forward without changing the interest rate risk position of the balance sheet, regulators may require board approval, and/or stated rationale beyond simply "hiding risk." Further, this strategy reduces balance sheet liquidity and flexibility to reposition portfolios to adjust interest rate risk or asset mix going forward. An institution cannot designate HTM securities as the hedged item in fair value hedge relationships. Finally, there are accounting, technology, and operational implications from CECL implementation when utilizing the HTM designation.

There are various points in the process when the institution may determine that an accounting solution may not be appropriate. If the institution decides to proceed, often the best securities for this designation include securities with material extension risk (e.g callable agencies, certain MBS), and long duration securities that generate limited cash flow (municipals).

Naturally, there are numerous moving parts for many of these solutions. And sometimes, the best answer may be to do nothing at all. Find a partner that can help you consider all of your options. Piper Sandler's Balance Sheet Strategy Team is here to help.

If any of these observations pique your interest, please contact your Piper Sandler representative or email us at PSbankstrategyinsights@psc.com. For derivatives, please email our affiliate, Piper Sandler Hedging Services, LLC, at FSG-Derivatives@psc.com.

Other Thoughts from Around the Firm

FSG Solutions serves as the bridge between regulated financial institutions and market-leading enterprise ready financial technology.

- A recent example of FSG Solutions in action is the growing and deepening connection between Piper Sandler's financial institution clients and the blockchain-based lending platform Figure Technologies. Figure Technologies offers a dynamic and cost-efficient end-to-end blockchain-based lending solution that enables virtually any loan to be originated on the blockchain, thereby giving originators increased efficiency, control and flexibility, as well as lower-cost liquidity and T+0 settlement when and if they choose to sell the loan. Becoming a part of the Figure Technologies ecosystem consumes minimal IT resources and is accessible to virtually all loan market participants including banks, specialty lenders, credit unions and institutional loan buyers.

If learning more about our recent work is of interest to you, please don't hesitate to contact FSG-Solutions at FSG-Solutions@psc.com for more information.

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