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Tax Reform Law Bulletin: The Effect of Tax Reform on Interest-Rate Swaps

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When the Tax Cuts and Jobs Act passed in December 2017, the playbook for managing not-for-profit hospital and health system debt changed overnight. Among the many effects of the law, its impact on interest rate swap transactions merits careful evaluation.

Kaufman, Hall & Associates, LLC, is publishing a series of bulletins related to the capital structure implications of the new tax reform legislation. In this bulletin, we explore the impact of tax reform on:

- Legacy swap portfolios
- Relationship with bonds as hedging instruments
- Future use of derivatives

Legacy Swap Portfolios

Depending on a particular hospital or health system's underlying floating rate product mix, tax reform may have had a significant or marginal impact on the net performance of a legacy synthetic fixed rate structure; however, any cost adjustment is based on a change in debt pricing rather than in swap performance.

Most hospitals and health systems started their swap journey by using fixed pay interest rate swaps to hedge a specific series of tax-exempt floating rate debt. The underlying debt was likely insured auction rate securities, and the swap structure was most likely a percentage of LIBOR; the swap floating rate ratio was probably designed to attempt to anticipate the trading relationship between the specific tax-exempt floating rate product and the taxable-indexed hedge.

As the credit crisis developed and the auction rate market collapsed, hospitals and health systems began to adjust their underlying debt structures – sometimes converting existing floating to fixed and sometimes shifting to different floating rate products. As these transitions occurred, there was typically a whole new floating rate debt profile and a corresponding deterioration in the relationship between cash flow risk (on the floating rate debt) and the related hedging portfolio (fixed pay swaps). This deterioration often took the form of differences in par, notional and amortization, as well as in how each of the floating rate legs of the synthetic structure were priced. For many organizations, what started as a specific hedging program transitioned into a portfolio hedging program – wherein a portfolio of legacy fixed pay swaps was *generally* hedging a portfolio of floating rate debt.

The post-credit crisis debt product of choice for many hospitals and health systems was direct bank placements. Under this product, the hospital or health system paid a straight ratio of 1-Month LIBOR, usually in the 67%-72% range, depending on the bank's particular tax circumstances. Interestingly, for many organizations this generated solid hedging outcomes – with floating rate debt priced off a percentage of 1-Month LIBOR paired with swaps that were priced off a percentage of 1-Month LIBOR that was generally fairly close to the debt ratio. Due to the corresponding very low floating rate environment, any ratio difference resulted in a negligible cost and a net synthetic cost of funds that was fairly close to the identified fixed pay rate.

For hospitals and health systems that moved into SIFMA based products (like Variable Rate Demand Bonds), the experience was quite different. During the period since the credit crisis, the SIFMA Index has been fairly volatile when viewed on a ratio of 1-Month LIBOR basis – at times trading at a relatively high percentage of LIBOR and at other times at an extraordinarily low percentage of LIBOR. So organizations realizing a constant percentage of 1-Month LIBOR receipt on their swaps were seeing varying ratio costs on their debt, with net synthetic performance moving around in response. Some periods resulted in exceptional net performance, whereas other periods resulted in higher than expected cost. However, other than a few periods of really extraordinary ratio divergence, the low rate environment muted any economic differences.

Tax reform's impact is generally more profound for organizations with LIBOR-based bank debt than those with SIFMA-based debt. The shift in corporate tax rates has increased the 67%-72% of 1-Month LIBOR bank pricing band to 80%-85%; in the current LIBOR environment, this translates into an increased cost of 20+ basis points, which will increase as the Federal Reserve continues to raise short-term rates. SIFMA products are driven more by *personal* tax rates, which were not materially adjusted by tax reform (at least at the higher end). So the SIFMA pricing ratio should theoretically remain in the 65%-70% range, although realized performance may be quite different due to non-tax factors such as product supply-demand.

The cash flow threat compounds when a larger debt/hedge ratio gap gets paired with higher short-term interest rates. A debt portfolio that effectively prices at 80% of 1-Month LIBOR and is hedged by a swap portfolio that includes a 68% of LIBOR receive leg results in 18 basis points of realized negative basis in a 1.50% 1-Month LIBOR environment and 36 basis points of additional cost as LIBOR moves to 3.00%. Realized ratio risk is modest when floating rates are low but can become quite significant as rates move higher.

The takeaway is that hedge portfolio *cash flow* performance may deteriorate in response to tax reform, and the consequences may be material as short-term rates move higher. The appropriate response is first to determine which floating rate product to utilize (whether to remain in bank debt or move to a new product) and what the expected pricing/ratio performance might look like, and second to determine whether to take action to adjust hedges. Hedge choices would range from doing nothing – and carrying the ratio risk into a higher rate environment – to increasing the receive ratio on the floating rate leg to better match the expected debt pricing metric. Adjusting the pricing ratio increases the fixed pay rate but eliminates the “ratio basis” risk and locks in the tax reform cost. This is not a straight-forward analysis, so hospitals and health systems should be careful about making abrupt decisions on either the debt or the swap side of the synthetic structure.

Future Use of Derivatives

The tax reform law repealed advance refundings using tax-exempt bonds, significantly limiting refinancing options and potential capital structure flexibility for hospitals.

Historically, advance refundings have enabled not-for-profit hospitals to seek a one-time advance refinancing of a bond to lower their overall borrowing costs. As described in our bulletin “[Alternatives to Advance Refundings](#),” advance refundings can still be accomplished in a variety of ways, but they largely involve the use of derivatives because there are few good alternatives to derivative when looking to lock-in or hedge a future issue/value.

Because of this, the core question is: *Does tax reform change the natural product-mix landscape and create opportunities for synthetic structures to emerge?*

Kaufman Hall expects synthetic structures will become more relevant in the capital structure decision-making process. Below is a summary of three products that might become part of the conversation.

Synthetic forward refundings. These products enable hospitals to enter into swap transactions now and later refinance fixed-rate bonds with variable-rate debt once they become callable, creating a synthetic structure.

- **Benefits:** Synthetic forward refundings enable borrowers to lock in the synthetic fixed rate now versus waiting for the right market conditions once the bond becomes callable. In addition to swap rates remaining near long-term historic lows, the forward premium for forward swaps is very low. Assuming a 20-year duration, premium ranges from 2 to 4 basis points for a six-month to 18-month forward delivery.
- **Considerations:** There are no immediate cash flow benefits associated with this strategy; the benefits are realized following the call date when the synthetic structure becomes effective and replaces the refunded fixed rate debt.
- **Risks:** The primary risk associated with this structure is that it assumes that floating rate debt can be accessed at the call date and that it will remain available over the full term of the swap; other risks include those associated with any swap transaction, including basis, mark-to-market, collateral posting, and counterparty.
- **Flexibility:** There is a possibility that the swap could be unwound at the call date and replaced with natural fixed rate debt; this outcome will depend on swap valuation and relative value performance between the synthetic and natural options. While this is a theoretical possibility, hospitals and health systems considering a synthetic forward refunding should assume that they will need to “take delivery” of the swap and issue underlying floating rate debt (that they will wind up having limited flexibility at the call date).
- **Other variations:** A variation on swaps would be to use a swap option or “swaption” strategy, wherein the borrower buys or sells the right to enter into a swap contract similar to the one mentioned above at a pre-determined point in time (i.e., the call date). If the option is sold by the borrower, then the counterparty has the right to exercise the option and the borrower should assume that the option will be exercised and that variable rate refunding bonds will need to be issued in the future. If the borrower purchases the option, then they control the exercise decision at the call date and have effectively “capped” the economic downside to the amount of the up-front option premium. The primary considerations in this type of contract are the size of the payment to be made/received and whether option control is retained (purchased) or transferred (sold). Swaption contracts carry various risks, including interest rate risk and counterparty risk and should be vetted with your bond counsel and financial advisor prior to execution.

Hedging future issuance. Organizations can hedge components of interest rate risk while waiting for the call date or in expectation of a future issuance for new money debt. A fairly effective hedge for a future tax-exempt issue is a MMD rate lock; however, historically they have been expensive and relatively short in tenor. The most efficient markets for hedging future issuance are LIBOR and the U.S. Treasury markets. However, depending on the primary funding market and product choice, the effectiveness of the hedge would need to be carefully evaluated. None of these hedges account for swings in credit spreads, or the market’s premium charged to your organization above the benchmark rate.

Kaufman Hall is also closely monitoring the following two structures that are not driven by tax reform, but based on general market changes.

Fixed-receiver swaps. A synthetic variable rate structure could serve as an alternative to bank-based floating-rate products through the use of fixed receiver swaps. The basic mechanics include a swap whereby the hospital pays floating and receives a fixed rate, overlaid with a fixed rate loan or bond. The resulting funding cost is a variable rate plus a spread. However, the rate environment remains low, which means the rates that organizations can lock in

with a fixed receiver swap are low. If paired with a short duration fixed rate issuance and focus fixed-to-floating rate exposure in the three to five-year range, this could be a very attractive form of variable rate capital. One important question to consider: If interest rates move high enough to create an attractive cash-flow opportunity, is the organization extending so far in duration that it is potentially introducing unacceptable levels of event risk or capital structure-flexibility risk? Fixed receiver swaps are the mirror opposites of fixed-payer swaps, in which extending tenor increases the fixed receive rate, which should lower the overall floating rate cost of funds. However, the price is the potential for collateral posting exposure in a rising rate environment and for the inability to unwind the position because the mark-to-market has become so high.

Evaluating Your Options

As with any capital structure decision, options should be rigorously analyzed and their implications studied as they apply to each hospital's situation. Various factors influence the decision of whether a solution is suitable for the organization. We recommend that any alternatives should be discussed with each organization's independent financial advisor.

Kaufman Hall will continue to provide insight on the impact of the new tax reform law for our nation's hospitals. Visit our [Tax Reform page](#) for additional resources, and contact your Kaufman Hall financial advisor for more information. You may also reach us at taxreform@kaufmanhall.com.

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