PNC HEALTHCARE

A NEW WAY TO EVALUATE LIABILITY PORTFOLIO RISK

Risk Budget Model can help reduce the cost of capital within acceptable risk tolerances

When it comes to managing liability portfolios in the healthcare industry, standard practice consists of evaluating finance alternatives based upon a comparison of cost of capital followed by an assessment of the risk of each product alternative.

Developed by PNC's Capital Markets group, a new model called the Risk Budget Model (RBM) reverses this practice and starts with assessing risk in a healthcare system's existing liability portfolio.

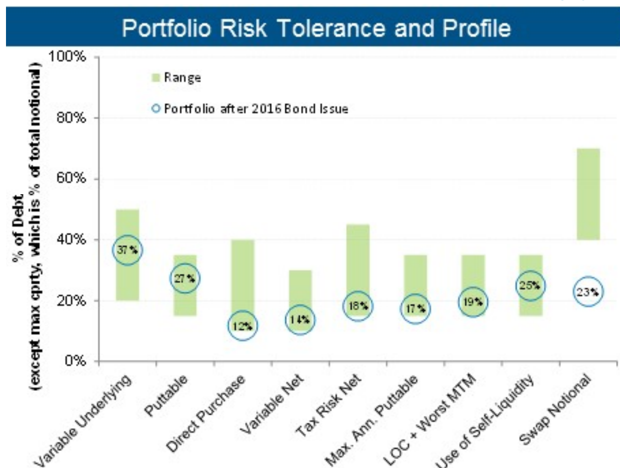
STAGE 1 – DEFINE PORTFOLIO LIABILITY RISK

PNCCM defines portfolio liability risk in two broad categories: interest rate risk and liquidity risk.

Interest rate risk is composed of three types: general level of interest rates, basis risk and tax risk. We created scenarios to show the potential of these risks to reduce operating margin.

Liquidity risk consists of put risk associated with debt products and mark-to-market ("MTM") risk associated with interest rate swaps. We created scenarios to demonstrate the potential of these risks to reduce days cash on hand ("DCOH"). Chart A provides a summary of risks of a healthcare system's current portfolio and ranges of acceptable risks.

Chart A



RBM ASSUMPTIONS

1. Variable rates used in the RBM are assumed to be one-year SIFMA and/or LIBOR depending upon tax status.
2. Base case assumes tax risk at ratios of 70%.
3. Liquidity Risk I relates to mark-to-market risk on swaps (MTM).
4. Liquidity Risk II related to MTM put risk of various products based upon time to put as a ratio of time to maturity.
5. Liquidity Risk III is MTM risk and put risk under extreme stress scenario.

The projections or other information generated by the Risk Budget Model regarding the likelihood of various outcomes are hypothetical in nature, do not reflect actual results, and are not guarantees of future results.

STAGE 2 – EVALUATE THE NEGATIVE IMPACT OF THE RISKS

Once liability portfolio risks are defined, the RBM creates scenarios to stress the negative impact of these risks on a healthcare system's balance sheet and income statement.

STAGE 3 – CREATE BUDGETS TO PLACE LIMITS ON INCREMENTAL RISKS

Once a healthcare system's existing liability portfolio has been stressed and the potential negative impact on its balance sheet and income statement are understood, budgets can be created to place limits on incremental risk the system is willing to tolerate to raise additional (or refinance existing) capital.

For example, a system may limit interest expense increase to $10 million for $300 million of new capital. The RBM will stress POF alternatives and reject all that exceed $10 million in the stress scenarios.

The RBM also establishes liquidity risk tolerance. For example, a system may limit put and MTM risk by limiting the potential of a product to negatively impact DCOH to 50 days for $300 million of new capital. The RBM will stress POF alternatives and reject all that exceed 50 DCOH.

STAGE 4 – DEFINE ALTERNATIVES

The RBM has preloaded 25 POF alternatives to be evaluated when new debt is incurred. The RBM also pulls down current market rates from Bloomberg and has inputs for risk premiums by products based upon the views of the healthcare system's treasury executives.

STAGE 5 – TEST ALTERNATIVES

Once the existing portfolio is loaded and risk tolerances are added, the model runs each alternative through each stress scenario and computes the maximum interest expense and DCOH to determine whether or not it violates the risk tolerances.

Charts B and C illustrate testing of one POF alternative against interest rate and liquidity budgets. Both charts show an alternative that passes the test. (The blue bar is less than the gold outlined limits.)

Chart B

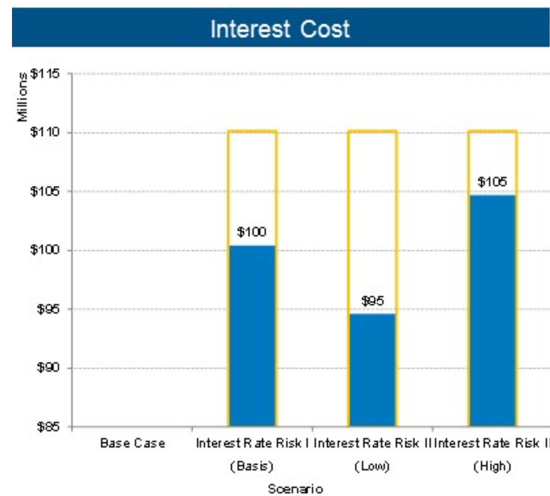
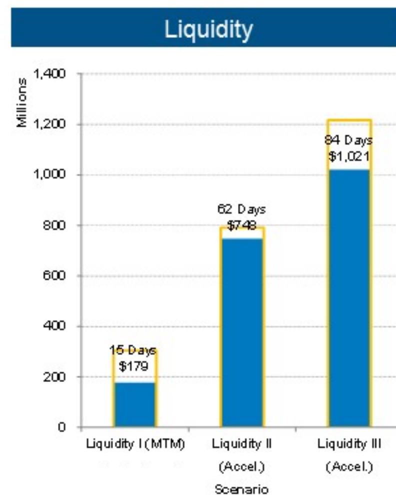


Chart C



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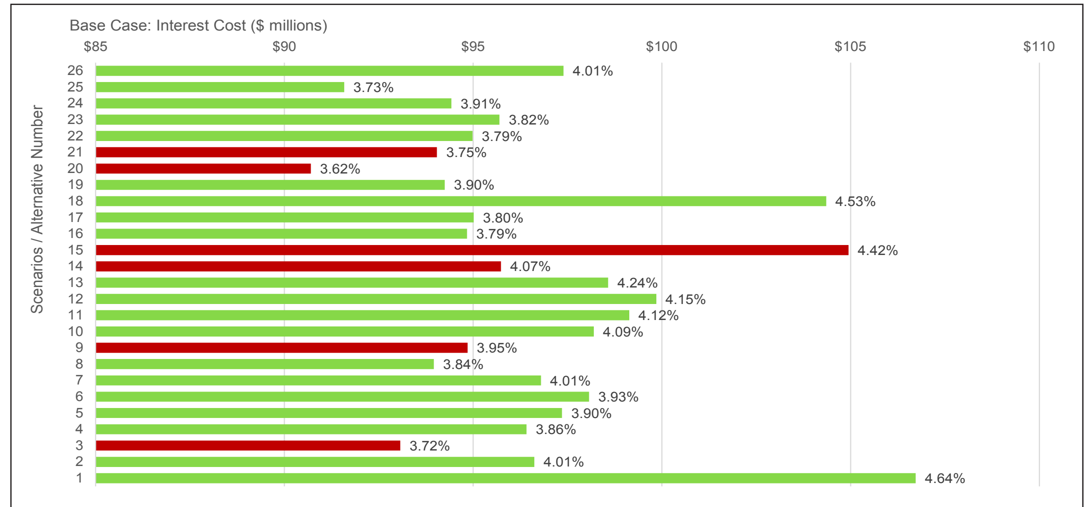
STAGE 6 – GENERATE A SUMMARY

Once the evaluation of each POF alternative is completed, a summary designates each plan as pass or fail and ranks them according to cost of capital.

Chart D shows a summary of 26 POF alternatives on the basis of portfolio cost of capital. The green bars pass the risk tests and the red bars fail.

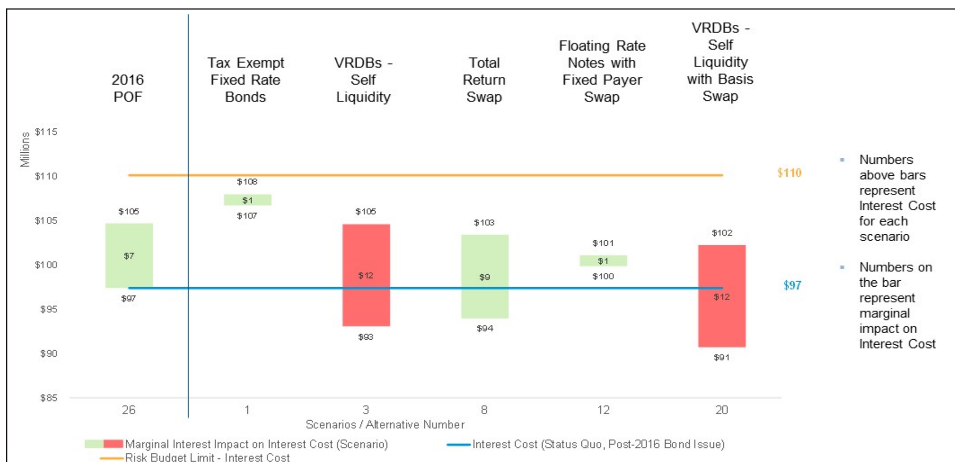
Chart D



Any returns on capital cannot be predicted or guaranteed.

The RBM also compares selected alternatives in terms of expected versus worst-case interest cost scenarios. Chart E illustrates one such example.

Chart E



BENEFITS

Using the RBM tool, healthcare organizations may:

- Define budgets for acceptable levels of risk in their liability portfolios.
- Create an education process for the Board and Finance Committee to understand the system's liability portfolio risks.
- Help control the cost of capital within acceptable organization risk tolerances.

READY TO HELP

At PNC, we combine a wider range of financial resources with a deeper understanding of your business to help you achieve your goals. To learn more about how we can bring ideas, insight and solutions to you, please contact your PNC Healthcare representative or visit **pnc.com/healthcare**.

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