



FHLB SPREAD-BASED BORROWING PROGRAM FOR INSURERS: A FRAMEWORK

FHLB Insurance Membership Perspectives

GROWTH

The number of life, property and casualty, and health insurance company members of the Federal Home Loan Bank (FHLB) System has grown significantly since 2000, increasing from roughly 50 to approximately 400 at the end of 2017.¹ The relatively low-cost of wholesale funding via the FHLB, known as “advances,” combined with the ease of accessing liquidity when needed, has helped drive this growth. In addition, the process of drawing down is fairly straightforward and customizable, offering fixed and floating rates across numerous maturities.

LIQUIDITY

While insurance companies have many reasons to become members of the FHLB system, having access to some form of liquidity (including back-up liquidity, emergency liquidity, or creating liquidity from illiquid assets) has been the primary driver. Historically, many insurance company members have not maintained advances from the FHLB. Most outstanding advances have been generated by a small set of large insurance company members — primarily life insurance companies.

TRENDS

In the current low yield environment, and further removed from the financial crisis of nearly 10 years ago, the need for increased operating income has become just as important as liquidity for insurance company members. Currently, the FHLB is seeing both smaller and non-life insurance company members implementing, or considering the implementation of, a spread-based program.²

SPREAD-BASED BORROWING FRAMEWORK

As the name implies, a spread-based borrowing program is simply investing low cost FHLB advances in higher earning assets to generate a target rate of return on capital. While the concept is straightforward, establishing an effective, risk-controlled program requires a well-defined framework with several key considerations:

- ▶ Investment Policy Statement (IPS)
- ▶ Return on Capital Model
- ▶ Timely Investments Ideas
- ▶ Monitoring and Reporting

FRAMEWORK

KEY CONSIDERATIONS

Investment Policy Statement (IPS)

The IPS should be specific to the spread-based borrowing program (separate from the General Account or Surplus IPS) with appropriate oversight from a Funding Agreement Committee or similar panel.

Key components of the IPS should address:

- ▶ FHLB Liability Description (FHLB product type, credited rates, rate setting, optionality guarantees, and authorization limits)
- ▶ Portfolio Objectives (Multi-objective ALM, including return on capital threshold, operating income, ALM spread, and AUM of the program)
- ▶ Portfolio Constraints (Subject to enterprise IPS, asset class type, duration, insurance investment law, cash flow testing, and return on capital requirements)
- ▶ Investment Strategy (Asset sector, diversification, NAIC quality targets, risk weighted NAIC quality limit, RBC ratio target)
- ▶ Performance and Compliance Reporting (Investment department/outside manager reporting, treasury department, risk management)

Return on Capital Model

This should be well documented and audited, complete with the assumptions used in projecting the individual security or portfolio level investment impact.

Key model inputs and outputs include:

- ▶ Projected bond yields, funding rates, collateral, RBC inputs and calculations, default charges, and level of duration mismatch
- ▶ Program management expenses, including manager fees, bank fees, etc.
- ▶ Impact on overall RBC
- ▶ Projected return on capital
- ▶ Projected earnings impact

Timely Investment Ideas

Taking advantage of the term structure of the liability as favorable borrowing opportunities present themselves is critical.

Thus, it is important to have access to timely investment ideas that:

- ▶ Are both strategic and tactical
- ▶ Are diverse and actionable
- ▶ Are coordinated and are executed hand-in-hand with the borrowing process
- ▶ Fit within the IPS

Monitoring and Reporting

This is an ongoing part of the process, coupled with communication across the organization (i.e., with the board, investment committee, treasury, risk management, actuarial, funding agreement committee, and investment manager).

This includes a framework to monitor and report on:

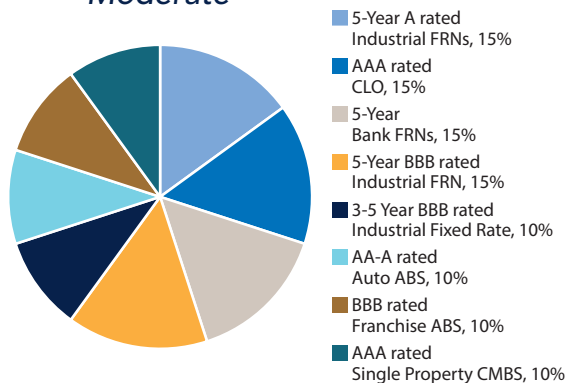
- ▶ Investment Policy Compliance
- ▶ Portfolio Performance
- ▶ Asset Liability Review

SPREAD-BASED PROGRAM ILLUSTRATION

The following shows a hypothetical FHLB model portfolio assuming a moderate risk profile. This assumes an asset allocation using securities with a blend of rating structures, as well as varying spreads, liquidity, and complexity.

FHLB Spread-based Program Example – Moderate Portfolio³ Model Portfolio Size – \$100,000,000

Moderate

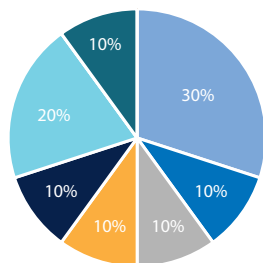


PORTFOLIO CHARACTERISTICS	
Portfolio Weighted Average Yield	3.41
Liability Weighted Average Yield	2.31
Program Spread	1.10
Portfolio Average Quality (NAIC)	1.43

FHLB PROGRAM FLOWS	
Bond Income (Interest Income based on portfolio weighted average yield)	\$3,410,000
FHLB Dividend Income	\$200,000
FHLB Advance Expense (Interest Expense on borrowed funds)	(\$2,310,000)
Program Management Fee	(\$200,000)
Program Default Assumption	(\$136,000)
Pre-tax Income	\$964,000
Net Income	\$761,560
Estimated Risk-Based Capital (RBC)	\$3,547,350
Program ROE	21.5%

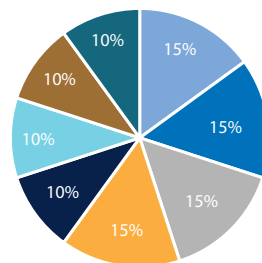
The charts below show hypothetical breakdowns of conservative, moderate, and aggressive asset mixes. A conservative mix assumes assets that are higher rated, more liquid, less complex, and generate a lower spread. A moderate mix assumes assets with a blend of rating structures, liquidity, complexity, as well as generating varying spreads. An aggressive mix assumes assets that are lower rated, less liquid, complex, and generate a higher spread.

Conservative



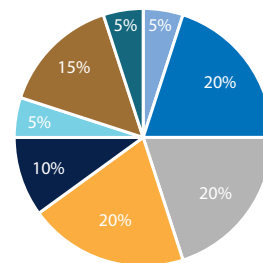
Program Spread: 96
NAIC Quality: 1.25
Pre-tax Income: \$824,000
Program ROE: 19.5%

Moderate

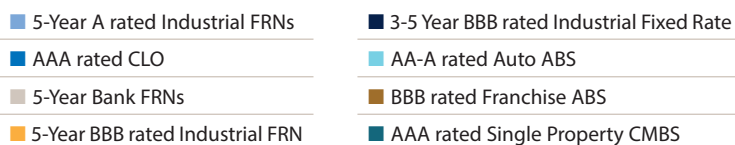


Program Spread: 110
NAIC Quality: 1.43
Pre-tax Income: \$964,000
Program ROE: 21.5%

Aggressive



Program Spread: 120
NAIC Quality: 1.55
Pre-tax Income: \$1,064,000
Program ROE: 22.8%



See page 4 for important disclosures.

ABOUT FORT WASHINGTON

- ▶ \$55.3 billion in total assets under management.⁴
- ▶ Deep experience in short and intermediate duration fixed income assets across many fixed income sectors.
- ▶ Experience managing portfolios on a total return, yield, and ALM-basis, including customized portfolios.
- ▶ Management of FHLB programs for both its parent company, Western & Southern Financial Group (W&SFG), and third parties. Over 10 years of experience actively contributing and collaborating on the \$2.7 billion FHLB program of W&SFG.

CONTACT US

Barry D. Pavlo, CFA, CAIA

Vice President, Business Development
216.543.4528
barry.pavlo@fortwashington.com

1. FHLB New York <http://www.fhlbny.com/one-page/insurance-companies-and-the-federal-home-loan-banks-a-growing-relationship.aspx>

2. FHLB Boston <http://www.fhlbboston.com/downloads/learningportal/webinar/2016-11-01-InsuranceFundingStrategyWebinar.pdf>

3. Assumptions: 5% FHLB dividend; 20 basis point incremental program management expense; Static 13.6 basis points actuarial default charge, based on NAIC classes; Tax rate of 21%. Spreads and ROE model assumptions are for illustrative purposes only. Model used is proprietary. These assumptions assume matched durations of assets and liability. Mismatching asset and liability durations increases the overall risk of the program but could offer additional spread income. ALM of the FHLB program should be determined in conjunction with enterprise level ALM needs. Note: there are various requirements of membership, activity stock, and collateral among the 11 FHLB banks that will impact financial return. This includes varying dividend rates by FHLB bank.

4. Fort Washington Investment Advisors, Inc. Assets as of 6/30/18. Includes assets under management by Fort Washington Investment Advisors, Inc. (Fort Washington) of \$52.0 billion, and \$3.3 billion in commitments managed by Fort Washington Capital Partners Group (FW Capital), a division, and Peppertree Partners LLC, a subsidiary.

Past performance is not indicative of future results. This publication contains the current opinions of the author but not necessarily those of Fort Washington Investment Advisors, Inc. Such opinions are subject to change without notice. This publication has been distributed for informational purposes only and should not be considered as investment advice or a recommendation of any particular security, strategy, or investment product. Information and statistics contained herein have been obtained from sources believed to be reliable and are accurate to the best of our knowledge. No part of this publication may be reproduced in any form, or referred to in any other publication, without express written permission of Fort Washington Investment Advisors, Inc. The information presented above was derived through the use of a hypothetical analysis and strategy evaluation and is based on assumptions and future projections. Actual returns and results may vary significantly from those presented due to material market or economic factors. The performance shown above is derived through the use of hypothetical model backtesting and strategy evaluation. Backtested performance does not represent actual performance and should not be interpreted as an indication of such performance. Backtested performance results are achieved by means of the retroactive application of backtested trading strategies and, as such, the corresponding results have inherent limitations: (1) the results do not reflect the results of actual trading using client assets but were achieved by means of the retroactive application of model portfolios, certain aspects of which may have been designed with the benefit of hindsight and, as such, may theoretically be changed from time to time; (2) backtested performance may not reflect the impact that any material market or economic factors might have had if the model portfolio had been used during the period to trade actual investment assets; (3) actual client accounts may have experienced investment results during the corresponding time periods that were materially different from those portrayed in described portfolios. Performance results are presented gross of advisory fees and other expenses for illustrative purposes only. For example, an advisory fee of 1% compounded over a 10-year period would reduce a 10% annual return to 8.9%. Advisory fees are described in Form ADV Part 2A. Please visit www.fortwashington.com or contact us for a copy.

©2018 Fort Washington Investment Advisors, Inc.



**Fort Washington
Investment Advisors, Inc.**

A member of Western & Southern Financial Group