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FEDERAL HOUSING FINANCE AGENCY

ADVISORY BULLETIN

AB 2018-03

ADVANCES PRICING

Purpose

This Advisory Bulletin provides Federal Housing Finance Agency (FHFA) guidance to the Federal Home Loan Banks (FHLBanks or Banks) on the methods a FHLBank may use to demonstrate and document its compliance with the minimum advance pricing requirements set forth in FHFA's regulations. The methods described in this Advisory Bulletin are not exclusive and Banks may choose other methods to demonstrate and document compliance.

Background

Section 1266.5(b)(1) of FHFA's regulation on Bank advances states:

"A Bank shall not price its advances to members below:

(i) The marginal cost to the Bank of raising matching term and maturity funds in the marketplace, including embedded options; and
(ii) The administrative and operating costs associated with making such advances to members."[1]

The above requirement establishes the minimum price a Bank must charge on an advance.[2] The minimum price of an advance must be no lower than the sum of the following two components: (1) the cost to issue debt with matching terms and conditions (marginal cost), and (2) the administrative and operating costs associated with making the advance (administrative and operating costs).

[1] 12 CFR 1266.5(b)(1). The advance pricing minimum does not apply to a Bank's CICA programs or any other advances programs that are volume limited and specifically approved by the Bank's board of directors. Volume limited programs are generally associated with disaster relief efforts. 12 CFR § 1266.5(3).
[2] These pricing requirements apply to advances to housing associates, as well as to members. 12 CFR § 1266.17(c)(2).

Marginal Cost – The FHLBanks have introduced advance products tailored to meet changing member needs. In cases where the structure of an advance is more complex, a Bank may find it more difficult to identify Bank-issued debt in the marketplace with terms and conditions matching those of the advance.[3] While a FHLBank may choose not to match-fund the advance, the advance pricing must reflect a fully matched position to comply with the regulation.[4] This Advisory Bulletin describes several methods a Bank may use to demonstrate and document its compliance with the minimum pricing requirement of the advances regulation when a Bank-issued debt equivalent is not available in the marketplace.

Administrative and Operating Costs – In addition to the marginal cost component, the minimum price of an advance must cover the administrative and operating costs associated with making the advance. This Advisory Bulletin provides general guidance for allocating the administrative and operating costs associated with making an advance.

Guidance

Before setting the price of an advance, a FHLBank must determine that the proposed price complies with the minimum pricing requirements of FHFA's advances regulation. FHFA expects each Bank to create and retain documentation supporting those determinations. When documenting compliance, a Bank should explain how the particular features of the advance affect the Bank's marginal, administrative, and operating costs of issuing that advance. Such features may include options and interest rate caps and floors that are embedded in the advance terms, and other components, as appropriate. In making its determinations, the Bank should ensure the timeliness of all data used to establish the cost of the advance and chosen price relative to the anticipated issuance date of the advance. Periodically, examiners will review each Bank's determinations regarding its compliance with the regulatory pricing requirements, including the Bank's documentation for establishing the cost of advances.

Documenting the Marginal Cost Component

For simple advances with no special features, such as prepayment or extension options, or interest rate caps or floors, documenting the cost of the advance would require identifying the marginal cost of issuing debt with the same contractual maturity.[5] For a fixed-rate advance, the marginal cost to the FHLBank of issuing that advance would be the marginal cost of issuing fixed-rate debt of the same tenor as the advance being offered. Thus, the Bank's marginal cost of issuing additional debt with the same contractual tenor as the advance being offered would form the basis for the Bank's "marginal cost of the advance." Similarly, for a simple floating-rate advance with no other special features, the marginal cost of that advance would reflect the marginal cost of issuing floating-rate debt of the same tenor as the advance being offered.

[3] In this Advisory Bulletin, "FHLBank-issued debt" is defined as debt actually issued by the FHLBanks, swapped versions thereof, and pricing indications for FHLBank debt provided by the Office of Finance.
[4] Examiners will assess the safety and soundness of the FHLBank's funding and hedging strategy separately.
[5] Note that the regulation requires reference to the marketplace for the cost of issuing debt with terms that mirror those of the advance, but does not require consideration of actual funding choices or the actual use of other sources of funds such as capital.

FHFA recognizes that, in the case of Office of Finance (OF) indications, the matching tenor debt may not be issued contemporaneously or issued at all. In such circumstances, the FHLBank may use the OF's consolidated obligation indicative curves, which currently include: Cost of Funds Curve, Callable Indications, and Discount Note Indications. FHFA expects the FHLBanks to document that the System can issue debt near the indicative prices through backtesting and other model risk oversight found in *Advisory Bulletin 2013-07, Model Risk Management.* If the OF maintains such documentation, a FHLBank may reference such OF documentation, to the extent it meets the expectations set in the Advisory Bulletin, and provided the Bank has assured itself of the adequacy of that documentation.

The price of either synthetically created fixed- or floating-rate advances should reflect the Bank's constructed cost of the underlying debt plus the constructed costs associated with creating the synthetic feature (*i.e*., either the floating or fixed rate) of the advance.

Determining and documenting compliance with the marginal cost component of the minimum pricing requirement is more challenging when no matching FHLBank-issued debt exists with the tenor and unique features offered by the Bank for its advance. FHLBanks may use the following pricing frameworks to establish the marginal costs associated with an advance when information on matching FHLBank-issued debt is not readily ascertainable from the marketplace.[6] A Bank should use the alternative or combination of alternatives that is most likely to reflect the actual costs it would incur in the marketplace and provide support for this choice in its documentation.

Capital Markets Proxy – A FHLBank may identify and use a capital markets proxy, consisting of a single debt security with a liquid market that has been issued by an entity other than the Office of Finance, with tenors and features similar to those of the advance, to demonstrate appropriate pricing. Appropriate documentation to support pricing would include adjustments to the proxy's price based on differences in features such as settlement date, term, rate structure, and credit risk, among others. Several such securities can be used as individual proxies to reduce uncertainty for complex advances or in cases that require many adjustments to the proxies.

Synthetic Security – A FHLBank may demonstrate compliance through a derivatives pricing or replicating portfolio framework by pricing a synthetic security that captures the underlying maturity, rate structure, and any other features of the advance. For example, the Bank could replicate the contractual cash flows of the advance through a synthetic portfolio of actual consolidated obligations and derivative instruments used to support the underlying structure of the advance. In this case, the FHLBank may use models to generate and value cash flows that match the contractual cash flows from the advance to demonstrate compliance with the regulation. When matching the advance's contractual cash flows, the Bank should make conservative assumptions, unless there is clear and convincing market-derived information about the assumptions that market participants would likely use to price similar obligations.

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[6] The regulation requires that a FHLBank price advances above the cost of funds, as determined by the price of matching debt. However, the regulation does not prohibit a FHLBank from using a more expensive cost of funds to determine prices. The spread above the more expensive cost of funds will necessarily exceed the required cost of funds. The Bank may choose a more expensive cost of funds in the case where it is more easily measured than the required cost of funds.

Price Indication – When a capital markets proxy is unavailable and a FHLBank is unable to reference a synthetic security, it may obtain pricing indications on the same debt from reliable sources, preferably dealers that are market makers in these types of financial instruments and that take account of all appropriate terms required to support the advance's structure. A Bank using a price indication approach should obtain an appropriate number of indications to provide a range of estimates. If possible, the debt indications should have sufficient documentation to support the price quotes, ideally including any theory, assumptions, and observable market prices, among other factors. The Bank should support in documentation its reasoning for choosing whatever indication it ultimately uses as a representation for the cost of debt supporting the advance.

In its pricing evaluation, to the extent a FHLBank uses models, the Bank should provide in its documentation a sufficient discussion of model theory, assumptions, data inputs, and monitoring to allow an independent reviewer to replicate and evaluate the Bank's chosen method. When reviewing documentation that supports the marginal cost component of the advance to determine compliance with the regulatory requirements on advance pricing, examiners will apply AB 2013-07, *Model Risk Management Guidance,* to these pricing models in determining whether a Bank's rationale and documentation for its advance pricing are sufficient.

Documenting Administrative and Operating Costs

In addition to the marginal cost component, the advances regulation requires FHLBanks to include the administrative and operating cost (AOC) associated with making advances in setting the advance price. Charging only for the marginal AOC does not account for the appropriate allocation of fixed AOC. To demonstrate compliance with the AOC component of the regulation, the Banks should document the allocation of total Bank operational expenses across all business lines no less than annually. The allocation should be specific enough for an outside party to evaluate whether the advance price includes an appropriate charge for expenses related to making the advance. The allocation should reflect each Bank's business model and supportable considerations.

Advances with Accompanying Derivatives

The regulation requires a FHLBank to consider *embedded options* in advances when establishing advances pricing. However, the underlying principle of Bank advance pricing reflecting the marginal cost to the Bank of creating the product extends to other aspects of the advance and accompanying derivatives the Bank may offer the member. For example, if the Bank offers the member a cap on the rate of an advance, the Bank should document and incorporate in the advance price the cost of obtaining that cap offered to the member for the advance. A Bank should ensure that its advances pricing incorporates the cost of derivatives when they are associated with advances offerings.

Effective Date

The FHLBanks should apply the guidance in this Advisory Bulletin, where possible and as appropriate, by January 1, 2019. FHFA understands that adjustments to systems and processes and model validations may, in some cases, take additional time. Notwithstanding, FHFA will continue to assess compliance with applicable regulatory requirements through ongoing supervision and examination processes.

Advisory bulletins communicate guidance to FHFA supervision staff and the regulated entities on specific supervisory matters pertaining to the Federal Home Loan Banks, the Office of Finance, Fannie Mae, and Freddie Mac. Questions may be directed to SupervisionPolicy@fhfa.gov.