

March 23, 2018

*Note - Each answer in this document is written as if it were a stand-alone response. Therefore, some information may be repeated.*

### **What is an advance and how do advances work?**

The FHLBanks provide liquidity to members and housing associates through secured loans known as advances. Each FHLBank makes advances based on the security of mortgage loans and other types of eligible collateral pledged by the borrowing institutions. Advances are the FHLBanks' largest asset category on a combined basis, representing 66.3% and 66.7% of combined total assets at December 31, 2017 and December 31, 2016. Advances are secured by mortgage loans held in borrower portfolios and other eligible collateral pledged by borrowers. Because members may originate loans that are not sold in the secondary mortgage market, FHLBank advances can serve as a funding source for a variety of mortgages, including those focused on very low-, low-, and moderate-income households. In addition, FHLBank advances can provide interim funding for those members that choose to sell or securitize their mortgages.

Each FHLBank develops its program of advances to meet the particular needs of its borrowers, consistent with the safe and sound operation of the FHLBank. Each FHLBank offers a wide range of fixed- and variable-rate advance products with different maturities, interest rates, payment characteristics, and optionality, with maturities ranging from one day to 30 years.

### **Who can borrow from the FHLBanks?**

The FHLBanks are cooperative institutions, and each FHLBank conducts its advance business almost exclusively with its members and housing associates. Membership in an FHLBank is generally limited to federally-insured depository institutions, insurance companies engaged in housing finance, and community development financial institutions (CDFIs). Members include commercial banks, thrifts, insurance companies, credit unions, and CDFIs. A CDFI is eligible to become a member of an FHLBank if it has been certified by the U.S. Department of the Treasury. Eligible institutions include community development loan funds, community development venture capital funds, and state-chartered credit unions without federal insurance.

FHLBank advances are made to members of all sizes, but can also be a source of funding to smaller lenders that may not have access to all of the funding options available to large financial institutions. The FHLBanks give members access to wholesale funding at competitive prices.

### **How do FHLBanks assess and mitigate the credit risk of advances?**

Each FHLBank manages its credit exposure to advances through an integrated approach that provides for the ongoing review of the financial condition of its borrowers coupled with collateral and lending policies and procedures designed to limit its risk of loss while balancing its borrowers' needs for a reliable source of funding. Each FHLBank uses a methodology to evaluate its borrowers, based on financial, regulatory, and other qualitative information, including examination reports. Each FHLBank reviews its borrowers' financial condition on an ongoing basis using current information and makes changes to its collateral guidelines to mitigate the credit risk on advances. As of December 31, 2017, the management of each FHLBank believed it had adequate policies and procedures in place to manage its credit risk on advances effectively.

In addition to having access to quarterly call reports and other financial data for members, as reported to their primary regulator, the FHLBanks have access to federal supervisory examination information regarding the safety and soundness of operations within member depository institutions. FHLBanks require insurance companies to provide copies of audited financial reports that are filed with state regulators, and may have access to their supervisory examinations or comprehensive statutory financial data, as well as independent ratings. FHLBanks may also require supplemental information as necessary to determine the financial condition of a borrower. Based on the evaluation of financial trends and condition of a borrower, the FHLBank may take additional steps to protect its security interest in collateral pledged and impose borrowing limitations (e.g., term, product type, amount) to reduce credit exposure to a borrower experiencing financial decline. The financial condition of a borrower will generally also have a bearing on the frequency and degree of collateral reviews, the level of required overcollateralization to secure advances, and the level of haircuts assigned to pledged assets.

The FHLBanks protect against credit risk on advances by collateralizing all advances. The FHLBank Act requires that FHLBanks obtain and maintain collateral from their borrowers to secure the advances at the time the advances are originated or renewed. The FHLBank Act requires the FHLBanks to accept as eligible collateral for advances only certain United States government or government agency securities, residential mortgage loans and securities backed by such, cash, deposits in the FHLBank, and other real estate related assets. In addition, the FHLBank Act states that notwithstanding any other provision of law, any security interest granted to an FHLBank by any member of any FHLBank, or any affiliate of any member, is entitled to a priority over the claims and rights of any party (including any receiver, conservator, trustee, or similar lien creditor), other than claims and rights that (1) would be entitled to priority under otherwise applicable law, and (2) are held by actual bona fide purchasers for value or by actual secured parties that are secured by actual perfected security interests.

Collateral arrangements will vary with borrower credit quality, borrowing capacity, and collateral availability as well as the FHLBank's overall credit exposure to the borrower. Each FHLBank establishes each borrower's borrowing capacity by determining the amount it will lend against each collateral type. Borrowers are also required to collateralize the face amount of any letters of credit issued for their benefit by an FHLBank. Each FHLBank can require additional or substitute collateral during the life of an advance to protect its security interest. Substitution generally occurs if the borrower does not have sufficient excess collateral pledged to support outstanding credit exposure. The call for additional collateral can include requesting ineligible collateral to secure advances if an FHLBank believes that it needs the collateral in order to protect itself. However, that ineligible collateral cannot serve as the basis for issuing or renewing an advance for a borrower.

At December 31, 2017, each FHLBank had rights to collateral (either loans or securities) on a borrower-by-borrower basis with an estimated value equal to, or greater than, its outstanding extensions of credit.

In summary, the FHLBanks limit their risk of loss on advances by:

- securing borrowings with sufficient acceptable collateral;
- monitoring the creditworthiness and financial condition of borrowers;
- performing collateral reviews and valuation procedures; and
- having the ability to demand additional collateral, or substitute collateral, during the life of an advance.

Since 1932, no FHLBank has incurred any losses on its credit products, including advances, based on the collateral held as security, each FHLBank management's credit extension and collateral policies, and repayment

history on credit products. Accordingly, at December 31, 2017, no FHLBank recorded any allowance for credit losses on these credit products, and no FHLBank recorded any liability to reflect an allowance for credit losses for off-balance sheet credit exposures. This position is supported by the independent external auditor's examination and annual unqualified audit opinion of each FHLBank's financial position, including a determination that no loss reserves are necessary.

**What types of collateral are acceptable for advances? Who determines "acceptable" collateral types and who sets and monitors the haircuts as a function of collateral? What are the requirements and characteristics of assets that may be pledged?**

The FHLBanks are required by the FHLBank Act and Federal Housing Finance Agency regulation to obtain a security interest in sufficient collateral on advances to protect against losses. Only certain types of asset classes are deemed to be eligible collateral for advances, but each FHLBank has the latitude within the statutory and regulatory guidance to determine what specific types of collateral it will accept and the lending value that it will assign to these specific types of collateral. The approval of a new collateral type typically involves a risk management assessment and recommendation, and may require approval from the Federal Housing Finance Agency as a new business activity.

As a general rule, an FHLBank's Board of Directors or their designees approve the acceptable collateral types within FHLBank Act regulations and the policies established by the Federal Housing Finance Agency. FHLBank management evaluates and monitors borrowers' collateral to ensure that it complies with its FHLBank's policies and procedures.

Collateral eligible under statute or regulation to secure new or renewed advances to all borrowers includes:

- one-to-four family and multifamily mortgage loans (no more than 90 days delinquent) and securities representing these mortgages;
- loans and securities issued, insured, or guaranteed by the U.S. government or any U.S. government agency (for example, mortgage-backed securities issued or guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae);
- cash or deposits in the FHLBank;
- certain other collateral that is real estate-related, provided that the collateral has a readily ascertainable value and that the FHLBank can perfect a security interest in it; and
- certain qualifying securities representing undivided equity interests in eligible advances collateral.

Residential mortgage loans are the principal form of collateral for advances. An FHLBank perfects its security interests in collateral by filing applicable financing statements or taking delivery of collateral. In addition, an FHLBank must take any steps necessary to ensure that its security interests in all collateral pledged by non-depository member institutions, such as insurance companies and housing associates, is as secure as its security interests in collateral pledged by depository member institutions.

Under the FHLBank Act, an FHLBank has a statutory lien on that FHLBank's capital stock held by its members, which serves as further collateral for the indebtedness of these members to the FHLBank. The FHLBank Act also allows the FHLBanks to further protect their security position with respect to advances by allowing them to require the posting of additional collateral, whether or not that additional collateral is eligible to originate or renew an advance.

**What are the acceptable methods of pledging collateral to the FHLBanks and how do these methods differ?**

Based on the financial condition of the borrower, each FHLBank classifies each borrower by the method of pledging collateral into one of three collateral categories: (1) blanket lien status; (2) listing (specific identification) status; or (3) delivery (possession) status. The blanket lien status is the least restrictive collateral status, and is generally assigned to lower risk institutions pledging collateral. Under the blanket lien status, an individual FHLBank allows a borrower to retain possession of eligible collateral pledged to that FHLBank, provided the borrower executes a written security agreement and agrees to hold the collateral for the benefit of that FHLBank. Origination of new advances or renewal of advances must only be supported by certain eligible collateral categories. A blanket lien is typically accepted by the FHLBanks only for loan collateral; most securities collateral must be delivered to an FHLBank, or an FHLBank-approved third-party custodian, and pledged for the benefit of that FHLBank.

Typically, the FHLBanks monitor eligible collateral under blanket lien status using regulatory financial reports, which most borrowers submit quarterly, and periodic collateral "certification" documents, or reports submitted to the FHLBanks by all significant borrowers. The FHLBanks' blanket lien security agreements typically cover the majority of the borrowers' assets, whether or not the FHLBank accepts the assets as eligible collateral, although the FHLBanks can only originate new advances or renew advances against certain eligible collateral categories. Borrowers on blanket lien status agree to inform their FHLBank within a designated time period of any event that materially reduces the principal amount of, or otherwise changes, collateral pledged to the FHLBank under the FHLBank's blanket lien security agreement.

The FHLBanks file Uniform Commercial Code financing statements against borrowers' assets pledged under the blanket lien security agreements. Borrowers are required to maintain at all times an amount of eligible collateral that satisfies the minimum collateral requirement established by the FHLBank for each borrower. All borrowers in blanket lien status must either: (a) submit to the FHLBank, on a periodic basis, with frequency depending upon the borrower's financial strength and condition, an audit opinion that confirms that the borrower is maintaining sufficient amounts of eligible collateral in accordance with the FHLBank's policies (agreed-upon procedures or positive assurance); or (b) undergo a periodic on-site field review of pledged collateral performed by FHLBank staff or its agent. The FHLBanks may require their borrowers to certify their collateral holdings on a periodic basis. Collateral verifications and on-site reviews can also be performed by the FHLBanks whenever it is determined necessary.

An FHLBank may require borrowers to provide a detailed listing of eligible advance collateral being pledged to the FHLBank due to their high usage of FHLBank credit products, the type of assets being pledged, or the credit condition of the borrower. Under the listing status, the borrower retains physical possession of specific collateral pledged to an FHLBank, but the borrower provides listings of loans pledged to its FHLBank with detailed loan information, such as loan amount, payments, maturity date, interest rate, loan-to-value, collateral type, and FICO® scores. From a borrower's perspective, the benefit of listing collateral in lieu of a blanket lien security agreement is that, in some cases, the discount or haircut applicable to that collateral may be lower than that for blanket lien collateral. From an FHLBank's perspective, the benefit of listing collateral is that it provides more detailed loan information to arrive at a more precise valuation.

Under the delivery status, an FHLBank requires the borrower to place physical possession of eligible collateral with the FHLBank or a third-party custodian to sufficiently secure all outstanding obligations. Typically, an

FHLBank would take physical possession or control of collateral if the financial condition of the borrower was deteriorating or if the borrower exceeded certain credit product usage triggers. However, to ensure its position as a first-priority secured creditor, an FHLBank will generally require insurance company borrowers to place physical possession of all pledged eligible collateral with the FHLBank or deposit it with a custodian or control agent. Delivery of collateral may also be required if there is a regulatory action against the borrower by its regulator that would indicate inadequate controls or other conditions that would be of concern to that FHLBank.

**Are there limits to the amount that an FHLBank will lend a borrower?**

Each FHLBank generally establishes an overall FHLBank credit limit for each borrower, which caps the amount of FHLBank credit availability to that borrower. This limit is designed to reduce an FHLBank's credit exposure to an individual borrower, while encouraging borrowers to diversify their funding sources. A borrower's total credit limit with an FHLBank includes the principal amount of outstanding advances, the face amount of outstanding letters of credit, the total exposure of the FHLBank to the borrower under any derivative contract, and credit enhancement obligation of the borrower on mortgage loans sold to the FHLBank. Each FHLBank determines the credit limit of its borrower by evaluating a wide variety of factors, including, but not limited to, the borrower's overall creditworthiness and collateral management practices. The credit limit is typically calculated by dividing the borrower's total credit obligations to the FHLBank by the borrower's total assets. The FHLBanks impose borrowing limits on most borrowers with a maximum ranging from 20% to 60% of a borrower's total assets. However, certain borrowers may be approved for a higher borrowing limit when it is supported by that borrower's creditworthiness and collateral. Borrowing in excess of an FHLBank's maximum borrowing limit requires special approval of that FHLBank's board or management.

Generally, a borrower's creditworthiness is periodically assessed by an FHLBank using the borrower's financial information, regulatory examination and enforcement actions, and other public information. An FHLBank typically requires borrowers to update periodically their collateral reporting information in order to establish the amount it will lend to each borrower. The FHLBank or its agent may also perform a periodic on-site field review of pledged collateral.

During an FHLBank collateral field review of a borrower, an FHLBank may examine a statistical sample of each borrower's pledged loans. A borrower's review frequency typically depends on certain factors, including the risk profile of the borrower and the manner in which the collateral is pledged. The loan review validates the loan ownership and existence of the loan note, verifies whether the FHLBank has a perfected interest in the loans, determines that the loan qualifies under the FHLBank's collateral policies (e.g., loan type, current payment status, etc.), and validates that the critical legal documents exist and are accessible to the FHLBank. The loan review also may identify applicable secondary market discounts in order to assess saleability and liquidation risk and lending value.

**What are the haircuts on the various types of collateral for advances?**

Advances and other credit product obligations to an FHLBank are fully secured with eligible collateral, the value of which is discounted to protect the FHLBanks from credit loss. Collateral discounts, or haircuts, used in determining lending values of the collateral, are calculated to project that the lending value of collateral securing each borrower's obligations exceeds the amount the borrower may borrow from the FHLBanks. That is, collateral is discounted to the point where its lending value will exceed the amount that may be owed to the FHLBank if

any borrower defaults in all but the worst outcomes. Collateral lending values are determined by subtracting the collateral haircut from 100%.

Eligible collateral values are determined by the market value for securities collateral, and the market value or unpaid principal balance for all loan collateral. The lending values assigned to the various types of eligible collateral generally include margins for: (a) estimated costs to sell or liquidate and (b) the risk of a decline in the value of the collateral due to market or credit volatility.

Generally, collateral discounts, or lending values as a function of the acceptable collateral types, are ultimately established by an FHLBank's Board of Directors and are subsequently monitored by collateral or credit risk management.

Lending value ranges for each collateral type depend on the credit and financial strength ratings assigned to the borrower, the method of pledging collateral, the quality and performance of the collateral such as individual borrower payment history and debt service coverage ratios for mortgages, collateral liquidity, the results of any field reviews of that collateral to the extent they result in adjustments to loan eligibility or additional discounts due to credit administration issues, the level of subprime and nontraditional mortgage loans pledged and the quality of those loans, and the existence of any formal regulatory action against the borrower. Additional factors that affect collateral lending value ranges include, but are not limited to: collateral reporting frequency, borrower debt ratios, and the type and quality of collateral documentation.

An FHLBank may adjust collateral lending values based upon individual loan portfolio performance or detailed file reviews that evaluate a sample of loans for each portfolio type pledged. When assigning collateral haircuts for a particular borrower, an FHLBank typically considers the borrower's overall financial condition, the date of the borrower's last field review, the amount of the FHLBank's credit exposure to the borrower, potential concerns regarding the borrower's credit quality, the borrower's ratio of advances to assets, and the level of reliance on a particular collateral type.

FHLBanks that accept subprime loans as collateral may adjust the collateral haircut based on various factors including the amount and composition of subprime collateral in the portfolio, the borrower's level of charge-offs, and the number of loans on nonaccrual status. Mortgage loan collateral must be performing loans that are not more than 90 days delinquent, consistent with Federal Housing Finance Agency regulation.

Effective lending value percentages are equal to collateral lending value divided by the market value or unpaid principal balance of eligible loan collateral or market value of eligible securities collateral. Average effective lending values are calculated based on the total lending value against eligible collateral for all borrowers without regard to the amount of credit extended to any particular borrower; however, individual borrower credit obligations to the FHLBanks are not cross-collateralized between borrowers. Each FHLBank computes the lending value of each borrower's collateral without consideration of the FHLBank capital stock owned by the borrower. The FHLBank capital stock serves as security above and beyond the lending value assigned to the borrower's collateral.



The following table presents the range of collateral lending values for the blanket lien, listing, and delivery methods of pledging collateral across the FHLBanks at December 31, 2017.

Collateral Type	December 31, 2017	
	Effective Lending Values Applied to Collateral	Average Effective Lending Value
<b>Blanket Lien</b>		
Single-family mortgage loans(1)	39%-94%	78%
Multifamily mortgage loans	25%-78%	71%
Other U.S. government-guaranteed loans	77%-92%	84%
Home equity loans and lines of credit	4%-83%	60%
Community Financial Institutions (CFI) collateral	13%-87%	56%
Commercial real estate loans	11%-87%	69%
Other loan collateral	32%-82%	48%
<b>Listing</b>		
Single-family mortgage loans(1)	1%-96%	82%
Multifamily mortgage loans	27%-89%	78%
Other U.S. government-guaranteed loans	91%	91%
Home equity loans and lines of credit	2%-92%	67%
CFI collateral	25%-73%	71%
Commercial real estate loans	32%-89%	72%
Other loan collateral	39%-96%	80%
<b>Delivery</b>		
Cash, U.S. government, and U.S. Treasury securities	79%-100%	93%
State and local government securities	8%-98%	89%
Municipal debt	54%-94%	76%
U.S. agency securities	75%-98%	95%
U.S. agency MBS and collateralized mortgage obligations (CMOs)	71%-98%	95%
Private-label MBS and CMOs	50%-96%	86%
CFI securities	93%-100%	96%
Commercial MBS	50%-97%	86%
Equity securities	67%-88%	84%
Other securities	51%-97%	87%
Single-family mortgage loans(1)	17%-93%	81%
Multifamily mortgage loans	50%-83%	73%
Home equity loans and lines of credit	9%-87%	67%
CFI collateral	30%-65%	53%
Commercial real estate loans	22%-87%	69%
Other loan collateral	10%-77%	76%
Student loan securities	95%-97%	95%

1) Includes Federal Housing Administration and Department of Veterans Affairs loans.

**What types of collateral secure the FHLBanks' advance balances?**

As of December 31, 2017, there were 110 individual FHLBank borrowers (109 FHLBank members and 1 non-member financial institutions) that each held advance balances of at least \$1.0 billion. When a non-member financial institution acquires some or all of the assets and liabilities of an FHLBank member, including outstanding advances and FHLBank capital stock, an FHLBank may allow those advances to remain outstanding to that non-member financial institution. The non-member borrower would be required to meet all of that FHLBank's credit and collateral requirements, including requirements regarding creditworthiness and collateral borrowing capacity.

A borrower's total credit obligation to an FHLBank could include outstanding advances, notional amount of letters of credit, collateralized derivative contracts, and credit enhanced obligations on mortgage loans sold to the FHLBank. Eligible collateral values include market values for securities and the unpaid principal balance for all other collateral pledged by the blanket lien, listing, or delivery method. The collateralization ratio was 2.5 at December 31, 2017, which represents the total of these 110 individual FHLBank borrowers' eligible collateral divided by these borrowers' advances and other credit products outstanding. The collateralization ratio for all borrowers was 3.0 at December 31, 2017. However, individual borrower credit obligations to the FHLBanks are not cross-collateralized between borrowers.

The following table presents advances, other credit products (which primarily includes letters of credit), and collateral outstanding for borrowers with at least \$1.0 billion of advances outstanding as compared to all borrowers.

	December 31, 2017		
	Borrowers with at Least \$1.0 Billion of Advances Outstanding	All Borrowers	Percentage
<i>(dollars in millions)</i>			
Advances outstanding, principal amount	\$ 527,795	\$ 732,114	72.1%
Other credit products	\$ 79,685	\$ 148,076	53.8%
Collateral outstanding	\$ 1,528,348	\$ 2,617,811	58.4%



The following table presents information on a combined basis regarding the type of collateral securing advances and other credit products outstanding for all borrowers.

Collateral Type	December 31, 2017							
	Blanket Lien		Listing		Delivery		Total	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
Single-family mortgage loans <sup>(1)</sup>	\$ 466,551	17.8%	\$ 920,822	35.2%	\$ 5,482	0.2%	\$ 1,392,855	53.2%
Commercial real estate loans	351,425	13.4%	116,330	4.4%	28,906	1.1%	496,661	18.9%
Multifamily mortgage loans	66,892	2.6%	150,001	5.7%	11,279	0.5%	228,172	8.8%
Home equity loans and lines of credit	62,976	2.4%	99,250	3.8%	35	—%	162,261	6.2%
U.S. agency MBS and CMOs	—	N/A	—	N/A	136,107	5.2%	136,107	5.2%
Other real estate loans	77,508	3.0%	7,249	0.3%	3,128	0.1%	87,885	3.4%
CFI loans	37,863	1.4%	1,731	0.1%	6	—%	39,600	1.5%
U.S. agency securities (excluding MBS)	—	N/A	—	N/A	18,378	0.7%	18,378	0.7%
Commercial MBS	—	N/A	—	N/A	16,030	0.6%	16,030	0.6%
Private-label MBS and CMOs	—	N/A	—	N/A	4,948	0.2%	4,948	0.2%
Other	586	—%	3,171	0.1%	31,157	1.2%	34,914	1.3%
<b>Total collateral</b>	<b>\$ 1,063,801</b>	<b>40.6%</b>	<b>\$ 1,298,554</b>	<b>49.6%</b>	<b>\$ 255,456</b>	<b>9.8%</b>	<b>\$ 2,617,811</b>	<b>100.0%</b>

(1) Includes Federal Housing Administration and Department of Veterans Affairs loans.  
 N/A Collateral is not pledged using this pledging method.

**How do the FHLBanks value collateral? What happens if the pledged collateral drops in value? Does the FHLBank have any recourse?**

Typically, an FHLBank establishes collateral valuation methodologies for each collateral type and calculates the lending value of the pledged collateral to determine whether a borrower has satisfied its collateral maintenance requirement. Lending values for the various types of eligible collateral accepted by each FHLBank are adjusted on a periodic basis depending upon market conditions. To the extent the lending value for collateral is calculated using some type of estimated fair value (i.e., versus book value), the amounts used in determining lending values are updated by an FHLBank on a periodic basis, with some updated as frequently as daily (e.g., securities collateral may be re-valued daily). An FHLBank may also conduct periodic collateral field reviews to establish the amount it will lend against each collateral type for each borrower, or to make additional adjustments to a borrower’s pledged mortgage collateral, based on the results of an on-site review. This review may involve a qualitative assessment of risk factors that includes an examination of legal documentation and credit underwriting on mortgage collateral. This valuation process takes into account any risk factors the FHLBank may consider in liquidating the collateral to obtain repayment of an advance in the event of a borrower’s default. The types of risks addressed in the collateral valuation process typically include holding, resolution and disposition costs, as well as discounts applied by the secondary market to account for:

- change in market value of the pledged loan or security due to current interest rates;
- decline in underlying real estate values of the properties backing the loan or security;
- credit underwriting of the assets; and
- any documentation deficiencies.

For collateral which market prices are not readily available, the FHLBanks may use internal or external valuation models or methodologies to determine the fair value of the collateral. These valuation models incorporate assumptions related to factors that may affect collateral values, such as market liquidity, discounts rates, potential prepayments, and liquidation and servicing costs in the event of default, among others, which may be adjusted in response to changes in economic and market conditions in order to produce reliable results. Third-party valuations may be obtained on a periodic basis, which can be as often as daily for securities collateral. Mortgage loan collateral, for which a lending value is calculated, could be priced using a combination of a vendor pricing model and the results of discounts from the on-site review of the collateral, as well as discounted cash flow analysis. No loan is given a lending value in excess of the outstanding principal balance. Securities delivered to an FHLBank, or a third-party for the benefit of the FHLBank, as collateral for advances are generally held in separate collateral safekeeping accounts and are marked-to-market using independent sources such as Bloomberg, Interactive Data, or the FHLBank's third-party safekeeping agents. Subsequently, mark-to-market prices on securities are updated daily or weekly.

**What is the policy and practice for subprime and nontraditional loans? What is the collateral replacement rate for mortgages pledged as collateral and whole loans purchased?**

Most of the FHLBanks do not strictly prohibit the pledging of subprime loans as collateral for advances. However, some of the FHLBanks do not accept any loans as collateral with subprime or nontraditional characteristics. Those FHLBanks that accept subprime loans as eligible collateral may require borrowers to identify subprime types pledged, which may result in haircuts being established at higher levels to discount sufficiently this collateral type. In addition, higher haircuts could be applied to portfolios pledged by certain higher risk borrowers. Subprime product is further identified through on-site collateral reviews and FICO score reporting. Some FHLBanks perform due diligence reviews, order exam reports, and perform on-site collateral verifications on borrowers that are repeatedly identified as having high-risk collateral. Borrowers are responsible for collateral pledged, regardless of whether they originated or purchased the residential mortgages. In all cases, mortgage loan collateral must be performing loans with delinquencies not to exceed a maximum of 90 days. The majority of the FHLBanks' collateral policies are more conservative and consider mortgage loans to be eligible collateral only if the delinquencies do not exceed 30 to 60 days.

Furthermore, the FHLBanks promote responsible and anti-predatory lending by their borrowers. Therefore, any mortgage loan pledged would have to comply with the FHLBanks' anti-predatory lending policies that require all loans pledged to the FHLBanks as collateral to comply with all applicable federal, state, and local laws. The FHLBanks typically receive qualified collateral reports or updates from the borrowers on at least a quarterly basis in order to confirm that the pledged loan collateral conforms to the FHLBank's requirements. The FHLBanks use a risk-based concept to evaluate collateral and establish appropriate discounts or haircuts using this concept. The FHLBanks might identify certain types of single-family residential mortgage collateral that may present increased credit risks. Accordingly, an individual FHLBank would choose to monitor the volume of subprime mortgage loans and nontraditional residential mortgage loans pledged by its borrowers to secure advances and other credit obligations. If the FHLBank determines that the level of subprime or nontraditional residential mortgage loans pledged by a borrower indicates a potentially heightened risk, the FHLBank may perform an extended credit review of the borrower, which may result in the FHLBank imposing restrictions designed to mitigate the FHLBank's credit risk exposure.

**Under what circumstances would an FHLBank take possession of collateral? What happens if a borrower fails?**

An FHLBank would typically take physical possession because of the deteriorating financial condition of a borrower, but there could be other situations, such as regulatory actions by a borrower's primary regulator, that would indicate inadequate controls or other conditions that would cause an FHLBank to take physical possession of collateral. Historically, when an insured depository institution borrower has failed, the FHLBank has been repaid in full because the value of the collateral, including any FHLBank stock owned by the borrower, has far exceeded the outstanding advances and other credit obligations to the FHLBank. However, every FHLBank has a collateral liquidation plan in place in case the FHLBank would have to liquidate the collateral to satisfy the failed borrower's outstanding advances and other credit obligations to the FHLBank.

Under the FHLBank Act, any security interest granted to an FHLBank by any member of any FHLBank, or any affiliate of any member, is entitled to a priority over the claims and rights of any party (including any receiver, conservator, trustee, or similar lien creditor), other than claims and rights that (1) would be entitled to priority under otherwise applicable law, and (2) are held by actual bona fide purchasers for value or by actual secured parties that are secured by actual perfected security interests.

During the year ended December 31, 2017, no FHLBank incurred any credit loss on any of its advances, including advances to failed borrowers.

**Are the FHLBanks holding any collateralized debt obligations (CDOs) as collateral, and if so, how are they being valued?**

CDOs are not considered an eligible collateral asset class by any of the FHLBanks. However, it is possible that one or more of the FHLBanks have CDOs pledged as collateral through the blanket lien status (i.e., pledged under the blanket lien status, although not considered eligible collateral for purposes of originating or renewing an advance). Because all securities collateral typically must be delivered to the FHLBanks, an FHLBank would not originate or renew advances without acceptable eligible collateral. In addition, securities held as collateral are subject to substitution if downgraded below an acceptable level.