



REPORT ON COLLATERAL PLEDGED TO FEDERAL HOME LOAN BANKS

PREPARED FOR THE SENATE COMMITTEE ON BANKING,
HOUSING AND URBAN AFFAIRS AND THE HOUSE
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Section 1 - Background

Congress established the Federal Home Loan Bank System (System) under the Federal Home Loan Bank Act of 1932 (the Bank Act). The Federal Home Loan Banks (FHLBanks or Banks) provide liquidity to their members and eligible non-member housing associates by making loans to them, referred to as advances.^{1,2} Consistent with the provisions of the Bank Act, the Banks require their members to pledge collateral in the form of mortgages and other eligible assets to secure their advances and other collateralized products offered by the Banks to their members.

Federal law requires the Federal Housing Finance Agency (FHFA) to submit an annual report to Congress on the collateral pledged to the FHLBanks, including an analysis of collateral by type and by Bank district.³ FHFA's Report on Collateral Pledged to Federal Home Loan Banks provides the required information as well as additional analysis of data on the types and amounts of collateral pledged to the Banks to secure advances and other collateralized products offered by the Banks to their members. The information in this report uses data collected through a quarterly data collection conducted by FHFA's Division of Federal Home Loan Bank Regulation (DBR), and most charts and graphs report data on the book value of eligible collateral pledged by Bank members as of December 31, 2018.⁴

Collateral at the FHLBanks

The Bank Act and FHFA regulations require the FHLBanks to obtain and maintain collateral from their borrowers to secure advances at the time the borrower originates or renews advances.⁵

¹ Members of the FHLBanks include commercial banks, savings banks and savings associations, credit unions, insurance companies, and community development financial institutions (CDFIs). The Bank Act, at 12 U.S.C. § 1424(a)(1), outlines eligibility requirements for Bank membership, and the regulations of the Department of Treasury, at 12 CFR § 1805.200, outline eligibility requirements for becoming a CDFI.

² Entities, such as state housing finance agencies, that meet certain requirements may obtain advances if they are designated as FHLBank non-member "housing associates." Housing associates must also provide a more limited range of collateral, federally insured mortgage loans, to secure their advances. For the purposes of this report, any reference to members includes non-member housing associates.

³ 12 U.S.C. § 1430(j)(12)(C).

⁴ This report defines eligible collateral as the total book value or unpaid principal balance of collateral pledged by a member and deemed eligible by the FHLBank. Eligible collateral is a "pre-haircut" measure. This definition of eligible collateral excludes ineligible collateral (the difference between the pledged and eligible collateral values) pledged by members. However, this may or may not account for ineligibility factors Banks incorporate based on their collateral reviews as some Banks may impose the ineligibility factor as part of the haircut. The Banks will have ineligible collateral pledged as part of the blanket lien agreements with members.

⁵ 12 U.S.C. § 1430(a)(1). In addition to advances, the Banks also require members to pledge collateral to secure other products offered by the Banks to their members



In general, the Banks comply with this requirement by requiring each member or housing associate to sign a collateral security agreement that gives the Bank a security interest in some or all of its assets in an amount that exceeds the amount of advances outstanding to the member. The most commonly used agreement is a blanket lien, under which the Bank's security interest attaches to all of a member's assets or, in some cases, to specified categories of a member's assets. Under a blanket lien, the Bank has a security interest in the member's assets that are subject to the lien, but it does not necessarily have detailed information about the specific assets covered by the lien.

The board of directors of each FHLBank establishes its Bank's collateral policy, consistent with statutory and regulatory requirements. Each Bank's collateral policy identifies the types and amounts of eligible collateral it will accept, and each Bank specifies its own method to establish collateral discounts, or "haircuts," on various types of collateral. To determine the lending value or borrowing capacity of the collateral, each Bank discounts, or gives a "haircut," to the reported market or par value of pledged collateral to ensure that the liquidation value of pledged collateral exceeds the value of the product it is securing.⁶

Collateral policies differ across FHLBanks, often reflecting differences in the types of members served by each Bank, the risk tolerances of each Bank, and the methods and vendors used by each Bank to determine collateral lendable values. Key collateral policy differences include the various types of eligible collateral each Bank will accept, the levels of collateral discount required, and the conditions under which a member must deliver its collateral to the Bank in order to be able to borrow against it.⁷

Section 2 of this report provides an overview and analysis of the System's collateral by composition, collateral type, and other relevant categories. This section includes graphs and tables reporting collateral data for both the System and for individual FHLBanks. Section 3 provides a glossary and definitions of terms used through the report.

⁶ The haircuts depend on many factors and may differ by FHLBank for similar collateral. These factors typically include the specific type of collateral pledged, the quality of the member's credit underwriting policies and practices, the method of securing the collateral pledged, the financial condition of the member, recent trends in asset values, and estimated losses under adverse macroeconomic conditions.

⁷ Each Bank has a set of criteria under which it requires a member to deliver collateral to the Bank in order to protect itself. For example, having a Bank member credit rating fall below a specific level can trigger delivery by the member.



Section 2 – Analysis

Total advances at the FHLBanks as of year-end 2018 were \$728.8 billion, a decrease of about four percent from \$731.5 billion as of year-end 2017.⁸ Over the same period, the total book value of the Bank’s eligible collateral rose to \$3.2 trillion from just under \$3.0 trillion, an increase of about seven percent.⁹ In contrast, the total book value of pledged collateral increased marginally, suggesting that the members are pledging less ineligible collateral overall. The reported borrowing capacity of that collateral was \$2.3 trillion, up from \$2.25 trillion as of year-end 2017.

Table 1: System Collateral (\$Trillions)

| | 2017 | 2018 | Volume Change | Percent Change |
|---------------------------------|--------|--------|---------------|----------------|
| System Book Value (BV) Pledged | \$3.48 | \$3.50 | \$0.03 | 0.72% |
| System Book Value (BV) Eligible | \$2.98 | \$3.20 | \$0.22 | 7.27% |
| System Borrowing Capacity (BC) | \$2.25 | \$2.30 | \$0.05 | 2.43% |

FHLBank members pledge various types of collateral to the Banks to secure advances and other Bank products. This report aggregates collateral into five general categories based on the most common collateral types. We further split several of these categories into more granular subcategories. Categories (and subcategories) include:

- Single-family (SF) 1-4 unit residential first liens;¹⁰
- Securities:
 - Agency mortgage backed securities (MBS)/collateralized mortgage obligations (CMOs);¹¹
 - Non-MBS agency securities;
 - Commercial MBS (CMBS);

⁸ Advances information is based on data from the FHFA Call Report System (CRS). Unless otherwise noted, all other data is based on the Quarterly Collateral Survey. All volume changes and percentages are calculated prior to rounding.

⁹ The book value of eligible collateral excludes any known ineligible collateral and may account for ineligibility factors extrapolated from collateral reviews. Unless otherwise specified, reported collateral values reflect all eligible collateral pledged by all members and housing associates, including non-members.

¹⁰ Single-family indicates fully disbursed, 1-4 unit first mortgage loans on improved residential property, including non-traditional loans, subprime loans, and government-guaranteed loans.

¹¹ Includes all Agency mortgage-backed securities and collateralized mortgage obligations, e.g., Fannie Mae, Freddie Mac, Ginnie Mae, etc.



- Private-label MBS (PLMBS); and
 - All other authorized securities (Other Securities);¹²
- Multifamily (MF) first and second liens;
- Other real estate related collateral (ORERC):
 - Commercial real estate (CRE) first and second liens;
 - Closed-end SF second liens (SF second liens, home equity loans) and open-ended SF first and second liens (home equity lines of credit (HELOCS));
 - Land loans; and
 - Other ORERC.¹³
- Community financial institution (CFI) collateral¹⁴
 - Small business loans/securities;
 - Small farm loans/securities;
 - Small agribusiness loans/securities;
 - Community development loans/securities; and
 - Not specified.¹⁵

Single-family loan collateral remained the largest single collateral category at year-end 2018, accounting for approximately 52 percent of all eligible collateral pledged across the FHLBanks. Table 2 shows the composition of collateral pledged to the Banks based on the categories above. The amount of SF loan collateral pledged increased by \$89 billion or approximately 6 percent from year-end 2017 to year-end 2018. Notable changes occurred year over year in other collateral categories as well. For example, the amount of CRE loan collateral pledged increased by 11 percent from year-end 2017 and remained the second largest collateral category at \$634 billion. MF loan collateral also increased from 2017 to 2018 by \$22 billion or 9 percent. However, the largest percentage changes in collateral pledged across the Banks occurred within the securities categories. Agency MBS/CMOs, CMBS, PLMBS, and Other Securities increased by 15, 18, 59, and 17 percent between 2017 and 2018.

¹² Other Securities include (among others) U.S. treasuries, eligible municipal bonds, cash, and certificates of deposit.

¹³ Other ORERC includes (among others) real estate construction loans, participation loans, and loans covered by a loss sharing agreement.

¹⁴ For 2018, a CFI is a FHLBank member whose deposits are insured under the Federal Deposit Insurance Act and has average total assets less than \$1.173 billion. The FHLBanks are authorized to accept from CFI members (and their affiliates) additional types of collateral that would not otherwise be considered eligible as security for advances, including small business loans, small farm loans, small agribusiness loans, community development loans, and securities representing a whole interest in such loans. 12 U.S.C. § 1430(a)(3)(E); 12 CFR § 1266.7(b)(1).

¹⁵ CFI collateral: Not specified is a catch-all category for any Banks not reporting the level of granularity in the above categories.



Table 2: System Eligible Collateral by Category (\$B)

| Collateral Category | 2017 | 2018 | Change in Eligible Collateral (Volume) | Change in Eligible Collateral (Percent) |
|-------------------------------|-----------|-----------|--|---|
| SF 1st lien | \$1,581.4 | \$1,670.3 | \$88.9 | 5.6% |
| MF | \$238.8 | \$260.8 | \$22.0 | 9.2% |
| ORERC: CRE | \$569.5 | \$634.1 | \$64.5 | 11.3% |
| ORERC: HELOCS and SF 2nd lien | \$222.8 | \$223.1 | \$0.3 | 0.1% |
| ORERC: Land | \$53.4 | \$58.3 | \$4.9 | 9.1% |
| Other ORERC | \$35.4 | \$37.5 | \$2.1 | 6.0% |
| CFI | \$51.4 | \$49.7 | -\$1.7 | -3.4% |
| Agency MBS/CMOs | \$144.4 | \$165.5 | \$21.1 | 14.6% |
| Non-MBS Agency Securities | \$19.9 | \$20.9 | \$1.0 | 4.8% |
| CMBS | \$21.6 | \$25.5 | \$3.9 | 17.9% |
| PLMBS | \$5.4 | \$8.6 | \$3.2 | 58.9% |
| Other Securities | \$40.1 | \$47.0 | \$6.9 | 17.2% |
| Total | \$2,984.3 | \$3,201.3 | \$217.0 | 7.3% |

I. Distribution of Collateral by Type and Bank

The distribution of eligible collateral varied across the FHLBanks. Mirroring the System, SF first lien loan collateral was the largest collateral category at 10 of the Banks. The FHLBank of Dallas was the only Bank that reported having more eligible CRE loan collateral (\$107 billion) pledged than SF loan collateral (\$98 billion). CRE loan collateral was the second largest collateral category at seven Banks, MF loan collateral was the second largest category at two Banks (FHLBanks of New York and Cincinnati), and CRE and CFI loan collateral tied for the second largest category at the FHLBank of Topeka. Four Banks – Atlanta, Boston, Cincinnati, and New York – reported having no eligible CFI collateral pledged by their members. Table 3 provides more detail on the distribution of collateral at each of the 11 Banks.



Report on Collateral Pledged to Federal Home Loan Banks

Table 3: Book Value of Eligible Collateral by Bank (\$B)¹⁶

| Collateral Category | BOS | NYK | PIT | ATL | CIN | IND | CHI | DSM | DAL | TOP | SFR | Total |
|-------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|---------|
| SF 1st lien | \$102 | \$161 | \$139 | \$273 | \$266 | \$37 | \$100 | \$263 | \$98 | \$46 | \$187 | \$1,670 |
| MF | \$5 | \$67 | \$25 | \$16 | \$65 | \$8 | \$10 | \$20 | \$12 | \$4 | \$31 | \$261 |
| ORERC: CRE | \$17 | \$57 | \$91 | \$77 | \$48 | \$24 | \$26 | \$88 | \$107 | \$18 | \$80 | \$634 |
| ORERC: HELOCS and SF 2nd lien | \$14 | \$14 | \$42 | \$38 | \$29 | \$3 | \$9 | \$23 | \$14 | \$4 | \$33 | \$223 |
| ORERC: Land | - | - | \$3 | \$0 | \$1 | - | \$1 | \$12 | \$40 | \$2 | - | \$58 |
| Other ORERC | \$1 | \$3 | \$0 | - | - | - | \$1 | \$10 | \$16 | \$3 | \$3 | \$38 |
| CFI | - | - | \$3 | - | - | \$0 | \$7 | \$5 | \$10 | \$18 | \$6 | \$50 |
| Agency MBS/CMOs | \$10 | \$28 | \$8 | \$18 | \$5 | \$8 | \$6 | \$13 | \$15 | \$10 | \$43 | \$166 |
| Non-MBS Agency Securities | - | \$4 | \$1 | \$3 | \$0 | \$2 | \$3 | \$2 | \$2 | \$1 | \$5 | \$21 |
| CMBS | \$0 | \$3 | \$3 | \$3 | \$2 | \$4 | \$1 | \$7 | \$2 | \$0 | \$0 | \$25 |
| PLMBS | - | - | \$3 | \$1 | \$1 | \$0 | \$0 | \$1 | \$2 | \$0 | \$0 | \$9 |
| Other Securities | \$5 | \$12 | \$2 | \$7 | \$2 | \$1 | \$6 | \$6 | \$4 | \$0 | \$2 | \$47 |
| Total | \$154 | \$348 | \$319 | \$435 | \$421 | \$87 | \$170 | \$449 | \$322 | \$107 | \$389 | \$3,201 |

¹⁶ For the purposes of this report, a dash (“-”) indicates no reported information, while a zero (“\$0”) indicates reported collateral that rounds to zero.

II. Member Lien and Collateral Reporting Status

FHLBanks secure advances and other collateralized products to a member through a lien agreement. There are two primary types of lien agreements:

- A blanket lien agreement occurs when the written agreement that creates the Bank's security interest provides that it applies to all of a member's assets or to all of a member's specific categories of assets.
- A specific lien agreement occurs when the Bank's written agreement that creates the Bank's security interest describes the specific assets that the member has pledged to the Bank as collateral.

When a Bank perfects its security interest in the assets described in the agreement, it acquires the right to liquidate any of those assets should the member default on its repayment obligation.

In addition to the lien agreements, the FHLBanks use different methods of collateral control (collateral reporting status) to protect themselves further. These methods of collateral control are summary reporting, listing, and delivery. Summary reporting is only available to members under a blanket lien agreement. Under summary reporting, a Bank has little information about the individual loans that secure the advances. A listing arrangement differs in that a member provides loan-level details about the collateral pledged. A listing arrangement can occur under either a blanket or specific lien agreement. A Bank may require a member to list collateral when the borrower's creditworthiness may be an issue or a member may elect to list collateral with the Bank for another reason.

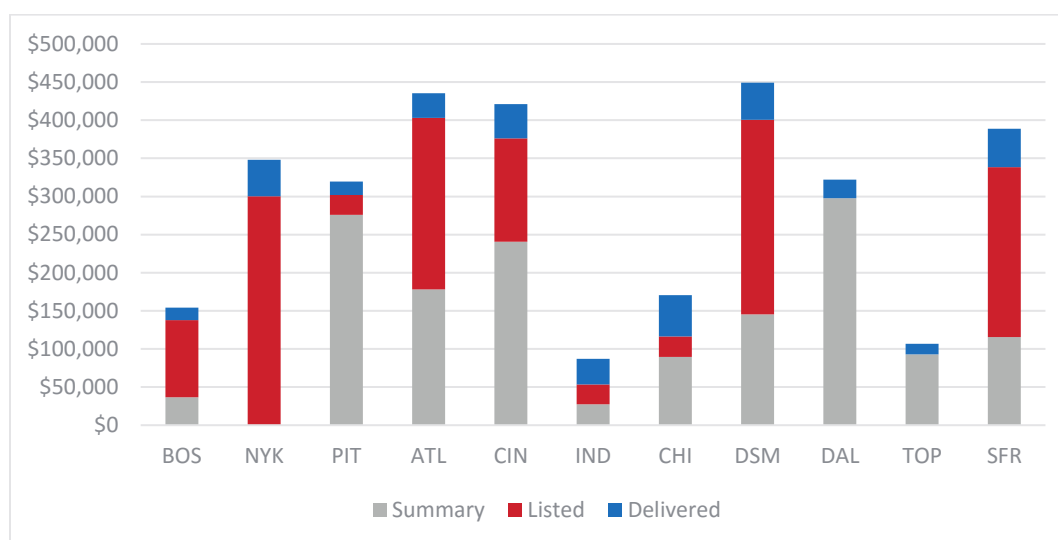
A delivery arrangement differs from both summary report and listing in that the Bank has possession of the collateral. A delivery arrangement requires that the member deliver to the Bank or the Bank's custodian some or all of the assets covered by the Bank's lien agreement. A Bank may require delivery of securities that exist only in electronic format in order to obtain a first priority perfected security interest in that collateral. A Bank often requires delivery of collateral that is readily transferrable by the member or if the Bank believes the member presents a heightened credit risk. A delivery arrangement can occur under a blanket or specific lien.

Members may receive greater borrowing capacity when they agree to provide a listing of collateral (either under a blanket or specific lien) or delivery of collateral because these methods provide specific information about the collateral pledged to the FHLBank. This allows the Bank to make a more precise determination of the value of the collateral.



Figure 1 shows the distribution of collateral for each FHLBank by the collateral reporting status (i.e., summary reporting, listing, or delivery) rather than by member lien. As of year-end 2018, the FHLBanks of Dallas, Pittsburgh, and Topeka reported that 86 percent or more of the book value of eligible collateral their members reported is under summary reporting, while the FHLBank of New York only reported listed and delivered collateral which is consistent with its practices. In addition to New York, the FHLBanks of Atlanta, Boston, Des Moines, and San Francisco also reported that members listed over 50 percent of these Banks' eligible collateral. The FHLBank of Indianapolis reported the highest percentage of eligible collateral delivered, over 38 percent, followed by the FHLBank of Chicago at about 32 percent. No other Bank reported having delivered collateral comprise more than 14 percent. The FHLBank of Indianapolis's higher than average share of securities as a percentage of total collateral pledged resulted in a higher proportion of delivered collateral, as all Banks generally require members to provide securities under delivery.¹⁷

Figure 1: Distribution of Book Value Eligible Collateral By Collateral Reporting Status (\$M)



III. Haircuts

Generally, the FHLBanks apply a haircut to either the market value of eligible collateral or the book value of eligible collateral. However, the Banks have different collateral practices

¹⁷ The FHLBank of Indianapolis also has a higher level of CRE collateral – about \$12.4 billion – pledged under delivery arrangements (including from insurance companies), further increasing its delivery percentage.

regarding eligibility, market valuations, and valuation caps, which affect each Bank's effective haircut differently. For the purposes of this report, we calculate the effective haircut as:

$$1 - \frac{\text{Borrowing capacity}}{\text{Book value of Pledged Collateral}}$$

This definition of a haircut identifies the difference between the reported book value pledged of collateral and the borrowing capacity reported by the Bank for a collateral line item. The borrowing capacity is the amount each Bank is willing to lend to that member for that collateral type. When aggregating by category, we weight each of the line-item haircuts by its share of the book value of pledged collateral within that collateral category.

The haircuts applied by the FHLBanks varied substantially based on the type of collateral pledged. Table 4 provides details on the haircuts for collateral categories. Securities generally have the lowest weighted average haircuts, ranging from about 4 to 20 percent. However, PLMBS have a higher weighted average haircut of almost 36 percent. Loan collateral has weighted average haircuts ranging from 23 percent for SF first liens to 51 percent for ORERC land loans (both farm and non-farm). Overall, the weighted average haircuts generally increase with the perceived risk of the collateral type.

Table 4: Weighted Haircuts by Collateral Type

| Collateral Category | Weighted Average Effective Haircut |
|-------------------------------|------------------------------------|
| SF 1st lien | 23.3% |
| MF | 25.4% |
| ORERC: CRE | 31.2% |
| ORERC: HELOCS and SF 2nd lien | 38.3% |
| ORERC: Land | 51.0% |
| Other ORERC | 40.5% |
| CFI | 46.6% |
| Agency MBS/CMOs | 5.8% |
| Non-MBS Agency Securities | 3.8% |
| CMBS | 14.9% |
| PLMBS | 35.7% |
| Other Securities | 20.3% |



IV. Single-Family Collateral

Single-family loan collateral includes a wide variety of residential loan types including traditional, subprime, nontraditional, held for sale, government guaranteed loans (e.g., FHA, VA, etc.). While the Quarterly Collateral Survey includes several subtypes for SF loan collateral (traditional, subprime, nontraditional, subprime and nontraditional, and other residential loans), not all FHLBanks segment their pledged collateral at this level of granularity.¹⁸ For the purposes of this report, we combine all of these subtypes of SF loan collateral into a single SF category for comparison purposes.

Single-family loan collateral represents the majority of eligible collateral pledged to the FHLBanks at 52 percent of all eligible collateral pledged to the Banks in 2018, a marginal decrease over year-end 2017. SF loan collateral increased in absolute terms by almost six percent in the System. Table 5 provides more information on the eligible book value of SF loan collateral.

Table 5: Single Family Book Value Eligible by Bank (\$M)

| Bank | 2017 | 2018 | Change in Eligible Collateral (Volume) | Change in Eligible Collateral (Percent) |
|-------|---------------|---------------|--|---|
| BOS | \$93,896.3 | \$101,930.3 | \$8,034.0 | 8.6% |
| NYK | \$159,339.5 | \$161,044.1 | \$1,704.6 | 1.1% |
| PIT | \$134,725.2 | \$138,732.7 | \$4,007.5 | 3.0% |
| ATL | \$272,446.7 | \$273,441.1 | \$994.4 | 0.4% |
| CIN | \$234,571.6 | \$265,980.5 | \$31,408.9 | 13.4% |
| IND | \$33,200.5 | \$36,782.8 | \$3,582.4 | 10.8% |
| CHI | \$94,898.1 | \$99,628.2 | \$4,730.0 | 5.0% |
| DSM | \$256,522.7 | \$262,711.9 | \$6,189.2 | 2.4% |
| DAL | \$88,308.1 | \$97,581.4 | \$9,273.3 | 10.5% |
| TOP | \$43,022.6 | \$45,930.9 | \$2,908.3 | 6.8% |
| SFR | \$170,486.1 | \$186,529.5 | \$16,043.5 | 9.4% |
| Total | \$1,581,417.5 | \$1,670,293.6 | \$88,876.1 | 5.6% |

Single-family loan collateral is the single largest collateral source at every Bank except the FHLBank of Dallas. As a percent of all eligible collateral, it ranges from 30 percent at the

¹⁸ For example, one Bank may report subprime loan collateral separately while another Bank may report subprime along with other SF subtypes together.



FHLBank of Dallas to 66 percent at the FHLBank of Boston as of year-end 2018. The amount of SF loan collateral as a percentage of all eligible collateral changed little year-over-year, although the share of SF loan collateral decreased by about 2.5 percentage points at four Banks.

Table 6: Single Family Percentage of Eligible Collateral

| Bank | 2017 | 2018 | Change |
|------|-------|-------|--------|
| BOS | 68.7% | 66.2% | -2.5 |
| NYK | 48.9% | 46.3% | -2.6 |
| PIT | 43.1% | 43.4% | 0.3 |
| ATL | 64.8% | 62.8% | -2.0 |
| CIN | 61.4% | 63.2% | 1.8 |
| IND | 41.8% | 42.3% | 0.4 |
| CHI | 60.8% | 58.5% | -2.3 |
| DSM | 61.3% | 58.5% | -2.8 |
| DAL | 29.9% | 30.3% | 0.4 |
| TOP | 43.2% | 43.1% | -0.1 |
| SFR | 47.6% | 48.0% | 0.5 |

V. Multifamily Collateral

System-wide, multifamily loans accounted for eight percent of eligible collateral pledged at year-end 2018, about the same percentage of eligible collateral reported at year-end 2017. However, the volume of eligible multifamily loan collateral increased about nine percent year over year. The FHLBank of Des Moines saw the largest percentage increase in eligible MF loan collateral at 31 percent while the FHLBank of New York saw the largest volume increase. The FHLBank of Pittsburgh was the only Bank where eligible MF loan collateral decreased. Table 7 provides more detail on MF loan collateral at the FHLBanks.

Additionally, the FHLBanks of Cincinnati and New York both reported MF loan collateral of 15 percent or more of eligible collateral, almost double the percentage of any other FHLBank in the System. Table 8 provides more detail on the percentage of MF loan collateral at each of the Banks.



Table 7: Multifamily Book Value Eligible by Bank (\$M)

| Bank | 2017 | 2018 | Change in Eligible Collateral (Volume) | Change in Eligible Collateral (Percent) |
|-------|-------------|-------------|--|---|
| BOS | \$3,933.2 | \$4,820.8 | \$887.6 | 22.6% |
| NYK | \$59,555.2 | \$66,744.6 | \$7,189.5 | 12.1% |
| PIT | \$25,144.5 | \$24,874.6 | -\$269.9 | -1.1% |
| ATL | \$13,983.2 | \$15,502.2 | \$1,519.0 | 10.9% |
| CIN | \$64,234.5 | \$65,401.2 | \$1,166.8 | 1.8% |
| IND | \$6,504.2 | \$7,548.0 | \$1,043.8 | 16.0% |
| CHI | \$8,979.1 | \$9,697.7 | \$718.7 | 8.0% |
| DSM | \$15,017.0 | \$19,689.4 | \$4,672.4 | 31.1% |
| DAL | \$10,584.5 | \$11,673.7 | \$1,089.3 | 10.3% |
| TOP | \$3,538.5 | \$4,104.2 | \$565.7 | 16.0% |
| SFR | \$27,354.3 | \$30,784.2 | \$3,429.9 | 12.5% |
| Total | \$238,828.0 | \$260,840.7 | \$22,012.7 | 9.2% |

Table 8: Multifamily Percentage of Eligible Collateral

| Bank | 2017 | 2018 | Change |
|------|-------|-------|--------|
| BOS | 2.9% | 3.1% | 0.3 |
| NYK | 18.3% | 19.2% | 0.9 |
| PIT | 8.0% | 7.8% | -0.3 |
| ATL | 3.3% | 3.6% | 0.2 |
| CIN | 16.8% | 15.5% | -1.3 |
| IND | 8.2% | 8.7% | 0.5 |
| CHI | 5.8% | 5.7% | -0.1 |
| DSM | 3.6% | 4.4% | 0.8 |
| DAL | 3.6% | 3.6% | 0.0 |
| TOP | 3.6% | 3.8% | 0.3 |
| SFR | 7.6% | 7.9% | 0.3 |

VI. Other Real Estate Related Collateral (ORERC)

ORERC collateral includes all real-estate related, non-residential whole loans, including CRE as well as participation loans and residential loans not included in the SF first liens and MF loan categories (e.g., HELOCs). To qualify as ORERC, by statute, an asset must have a readily



ascertainable value, and a FHLBank must be able to perfect a security interest in the collateral.¹⁹ The regulations further require that the ascertainable value must be such that a Bank can reliably discount the item to account for liquidation and other risks and to allow for liquidation in due course.²⁰ Among the eligible collateral types accepted by the Banks, the Banks generally apply larger haircuts to the value of ORERC to secure advances relative to securities and SF loans. All Banks report ORERC securing advances.

Overall, the amount of ORERC collateral increased in the System by eight percent between 2017 and 2018. Only the FHLBanks of Pittsburgh and Atlanta saw negligible changes in the book value of eligible collateral over this period. Table 9 provides more details on the ORERC collateral at each Bank. All FHLBanks report that ORERC represents 31 percent or less of eligible collateral except Dallas and Pittsburgh, which reported that ORERC collateral represented 55 and 43 percent of all eligible collateral pledged as of year-end 2018, respectively. Table 10 provides more details.

Table 9: ORERC Book Value Eligible by Bank (\$M)

| Bank | 2017 | 2018 | Change in Eligible Collateral (Volume) | Change in Eligible Collateral (Percent) |
|-------|-------------|-------------|--|---|
| BOS | \$26,871.5 | \$31,859.7 | \$4,988.2 | 18.6% |
| NYK | \$67,008.0 | \$73,773.5 | \$6,765.5 | 10.1% |
| PIT | \$135,514.8 | \$135,638.8 | \$124.0 | 0.1% |
| ATL | \$115,343.7 | \$115,119.4 | -\$224.3 | -0.2% |
| CIN | \$71,032.8 | \$78,272.3 | \$7,239.6 | 10.2% |
| IND | \$23,671.8 | \$26,709.9 | \$3,038.1 | 12.8% |
| CHI | \$33,856.7 | \$37,572.7 | \$3,716.1 | 11.0% |
| DSM | \$113,007.9 | \$133,312.9 | \$20,305.0 | 18.0% |
| DAL | \$163,238.7 | \$178,183.1 | \$14,944.4 | 9.2% |
| TOP | \$23,903.1 | \$26,991.3 | \$3,088.3 | 12.9% |
| SFR | \$107,712.6 | \$115,502.8 | \$7,790.2 | 7.2% |
| Total | \$881,161.6 | \$952,936.6 | \$71,775.0 | 8.1% |

¹⁹ 12 U.S.C. § 1430(a)(3)(D).

²⁰ 12 CFR § 1266.7(a)(4).

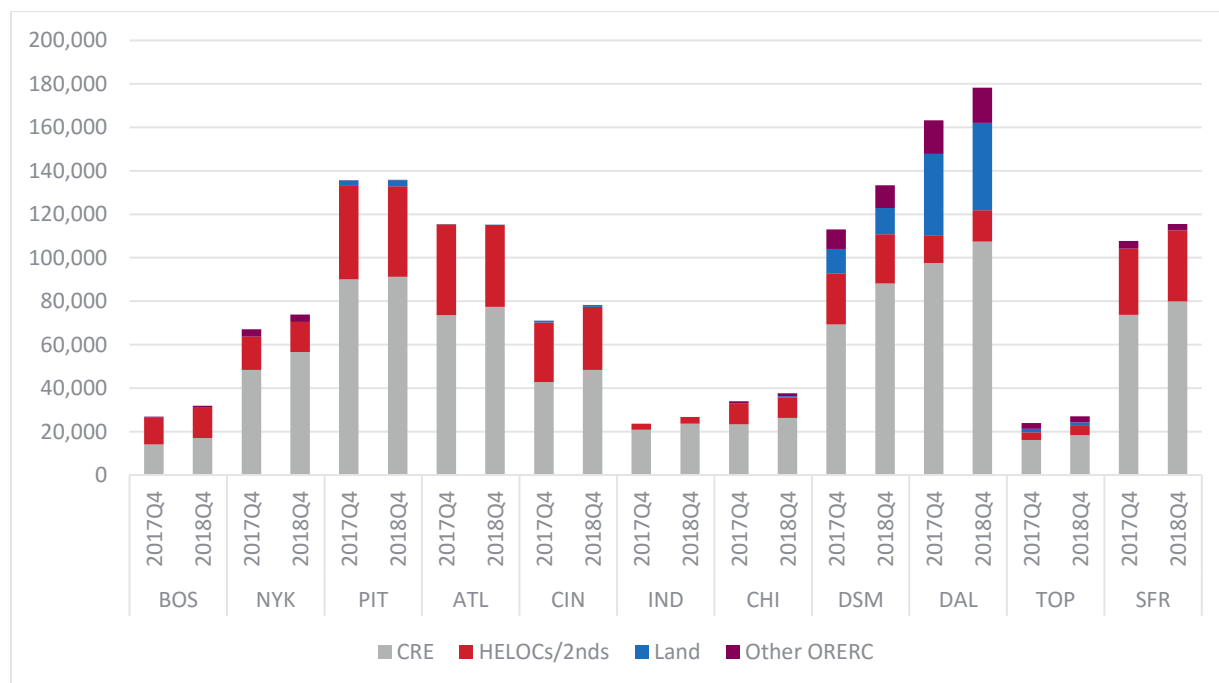


Table 10: ORERC Percentage of Eligible Collateral

| Bank | 2017 | 2018 | Change |
|------|-------|-------|--------|
| BOS | 19.6% | 20.7% | 1.0 |
| NYK | 20.5% | 21.2% | 0.6 |
| PIT | 43.4% | 42.5% | -0.9 |
| ATL | 27.4% | 26.5% | -1.0 |
| CIN | 18.6% | 18.6% | 0.0 |
| IND | 29.8% | 30.7% | 0.9 |
| CHI | 21.7% | 22.1% | 0.4 |
| DSM | 27.0% | 29.7% | 2.7 |
| DAL | 55.3% | 55.3% | 0.0 |
| TOP | 24.0% | 25.3% | 1.3 |
| SFR | 30.0% | 29.7% | -0.3 |

CRE loans remain the largest single ORERC collateral category and second largest collateral category System-wide as of year-end 2018. HELOCs and SF second liens remain the second largest category of ORERC collateral and fourth largest category of collateral System-wide. Figure 2 provides details on the breakdown of ORERC collateral by FHLBank and the year-over-year change.

Figure 2: Types of ORERC Collateral by Bank - 2017 Q4 vs 2018 Q4 (\$M)



CRE loans are also the largest ORERC collateral category at most FHLBanks, with Pittsburgh, Des Moines and Dallas reporting \$88 billion or more in eligible CRE collateral. Both Pittsburgh and Atlanta reported more than \$37 billion in eligible HELOC and SF second lien collateral. Land loans represented a noteworthy amount of collateral at only two Banks: Des Moines and Dallas. These two Banks account for almost 90 percent of all land loan collateral System wide.²¹

VII. CFI Collateral

The FHLBanks accept from CFI members (and their affiliates) additional types of collateral that would otherwise not be eligible collateral as security for advances, including small business loans, small farm loans, small agribusiness loans and community development loans, and securities representing a whole interest in such loans.²² Overall, the Banks reported approximately \$50 billion in eligible CFI collateral pledged, less than two percent of the total book value of eligible collateral System wide. Eligible CFI collateral pledged to the Banks decreased year over year. Table 11 provides more details on the CFI collateral pledged in the System.

Typically, the FHLBanks require larger haircuts for CFI collateral and four of the Banks – Atlanta, Boston, Cincinnati, and New York – reported no eligible CFI collateral pledged as of year-end 2018. The FHLBanks of Topeka and Dallas reported approximately \$18 billion and \$10 billion in eligible CFI collateral pledged, respectively, and accounted for 57 percent of all eligible CFI collateral pledged to the System. No other Bank held more than \$7 billion of eligible CFI collateral in its collateral portfolio. The FHLBank of Indianapolis saw the largest percentage increase in eligible CFI collateral at 34 percent, although the volume change was small. The FHLBank of Dallas saw the largest decrease in eligible CFI collateral in both percentage decrease (15 percent) and volume decrease (\$1.8 billion).

The FHLBank of Topeka has the largest percentage of eligible collateral in the CFI category at 17 percent. No other FHLBank has CFI collateral as a percentage of eligible collateral larger than just over four percent. Table 12 provides more detail on CFI as a percentage of eligible collateral at each Bank.

²¹ ORERC: Land collateral is loans secured by unimproved or agricultural land (non-CFI). This includes farm real estate loans not provided as community investment loans.

²² Several Banks also accept farmland loans from non-CFI members, which is included in the ORERC category.



Report on Collateral Pledged to Federal Home Loan Banks

Table 11: CFI Book Value Eligible by Bank (\$M)

| Bank | 2017 | 2018 | Change in Eligible Collateral (Volume) | Change in Eligible Collateral (Percent) |
|-------|------------|------------|--|---|
| BOS | - | - | - | - |
| NYK | - | - | - | - |
| PIT | \$3,235.3 | \$3,252.9 | \$17.6 | 0.5% |
| ATL | - | - | - | - |
| CIN | - | - | - | - |
| IND | \$223.7 | \$299.1 | \$75.4 | 33.7% |
| CHI | \$6,533.7 | \$6,964.1 | \$430.4 | 6.6% |
| DSM | \$4,985.6 | \$5,088.6 | \$103.1 | 2.1% |
| DAL | \$11,999.7 | \$10,172.2 | -\$1,827.5 | -15.2% |
| TOP | \$19,071.8 | \$18,163.2 | -\$908.6 | -4.8% |
| SFR | \$5,356.3 | \$5,739.8 | \$383.5 | 7.2% |
| Total | \$51,406.2 | \$49,679.9 | -\$1,726.2 | -3.4% |

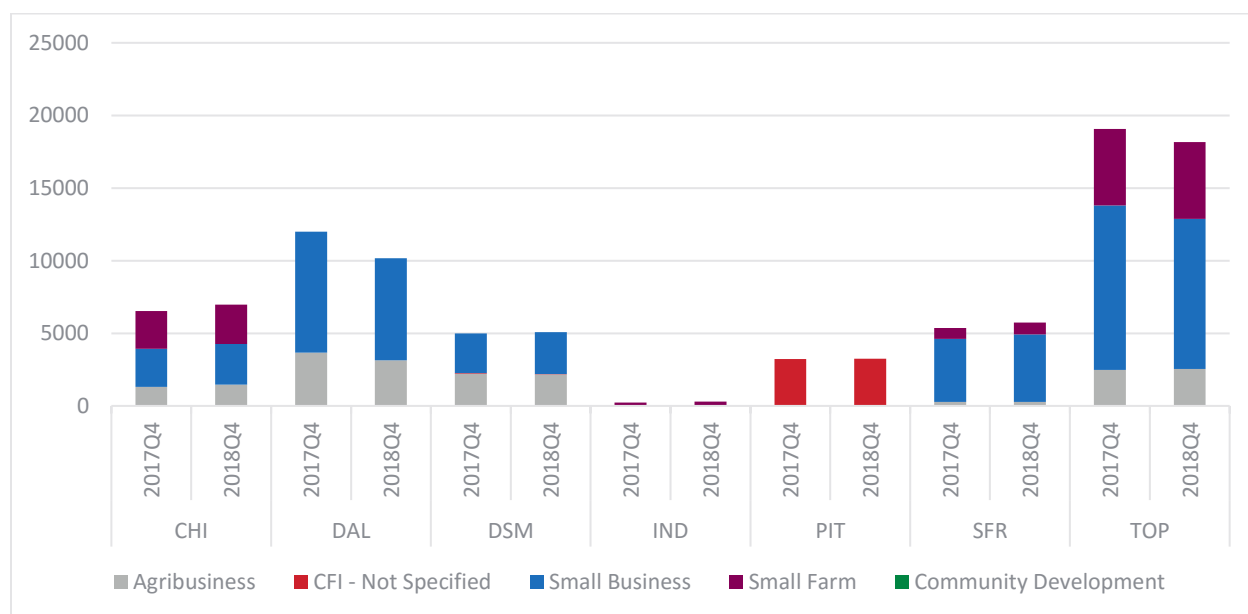
Table 12: CFI Percentage of Eligible Collateral

| Bank | 2017 | 2018 | Change |
|------|-------|-------|--------|
| BOS | - | - | - |
| NYK | - | - | - |
| PIT | 1.0% | 1.0% | 0.0 |
| ATL | - | - | - |
| CIN | - | - | - |
| IND | 0.3% | 0.3% | 0.1 |
| CHI | 4.2% | 4.1% | -0.1 |
| DSM | 1.2% | 1.1% | -0.1 |
| DAL | 4.1% | 3.2% | -0.9 |
| TOP | 19.2% | 17.0% | -2.1 |
| SFR | 1.5% | 1.5% | 0.0 |

The largest category of CFI collateral is small business loans, which represented approximately 54 percent of all eligible CFI collateral as of year-end 2018. While small business loans are also the largest CFI collateral category at most FHLBanks, the FHLBank of Pittsburgh reports all of its CFI collateral not specified. Agribusiness and small farm accounted for approximately 19 percent and 18 percent of CFI collateral, respectively. The Banks did not report any collateral in the community development category. Figure 3 provides details on the breakdown of CFI collateral by Bank and the year-over-year change.



Figure 3: Types of CFI Collateral by Bank – 2017 Q4 vs 2018 Q4²³



VIII. Securities Collateral

Members pledge many different types of securities to the FHLBanks as collateral for advances and other collateralized products, which includes Cash and Certificates of Deposit, Treasuries, Agency MBS/CMOs, Non-MBS Agency securities, CMBS, PLMBS, and others. System-wide, eligible securities collateral increased in total book value by almost 16 percent from 2017 to 2018. By securities type, the increases ranged from five percent increase to almost 68 percent. Only three Banks saw a decrease in the dollar value of eligible securities collateral (Cincinnati, Indianapolis, and Des Moines). Table 13 provides more detail on the securities collateral pledged in the System and at each Bank.

While securities represented approximately eight percent of eligible collateral across the System as a whole, they represented a larger percentage of collateral at three FHLBanks. The FHLBanks of Indianapolis, New York, and San Francisco reported that securities – primarily Agency MBS – represented 12 percent or more of the book value of their eligible collateral portfolio. Table 14 provides more details.

²³ We excluded the Banks with no reported CFI collateral from this figure.



Table 13: Securities Book Value Eligible by Bank (\$M)

| Bank | 2017 | 2018 | Change in Eligible Collateral (Volume) | Change in Eligible Collateral (Percent) |
|-------|-------------|-------------|--|---|
| BOS | \$12,070.2 | \$15,380.7 | \$3,310.5 | 27.4% |
| NYK | \$40,174.9 | \$46,562.0 | \$6,387.1 | 15.9% |
| PIT | \$13,788.4 | \$16,843.8 | \$3,055.5 | 22.2% |
| ATL | \$18,511.5 | \$31,085.5 | \$12,574.1 | 67.9% |
| CIN | \$12,183.8 | \$11,232.3 | -\$951.5 | -7.8% |
| IND | \$15,734.8 | \$15,647.1 | -\$87.7 | -0.6% |
| CHI | \$11,763.4 | \$16,514.7 | \$4,751.3 | 40.4% |
| DSM | \$28,710.6 | \$28,208.0 | -\$502.6 | -1.8% |
| DAL | \$20,970.0 | \$24,630.8 | \$3,660.8 | 17.5% |
| TOP | \$9,982.3 | \$11,413.4 | \$1,431.1 | 14.3% |
| SFR | \$47,619.1 | \$50,013.5 | \$2,394.3 | 5.0% |
| Total | \$231,509.2 | \$267,531.8 | \$36,022.6 | 15.6% |

Table 14: Securities Percentage of Eligible Collateral

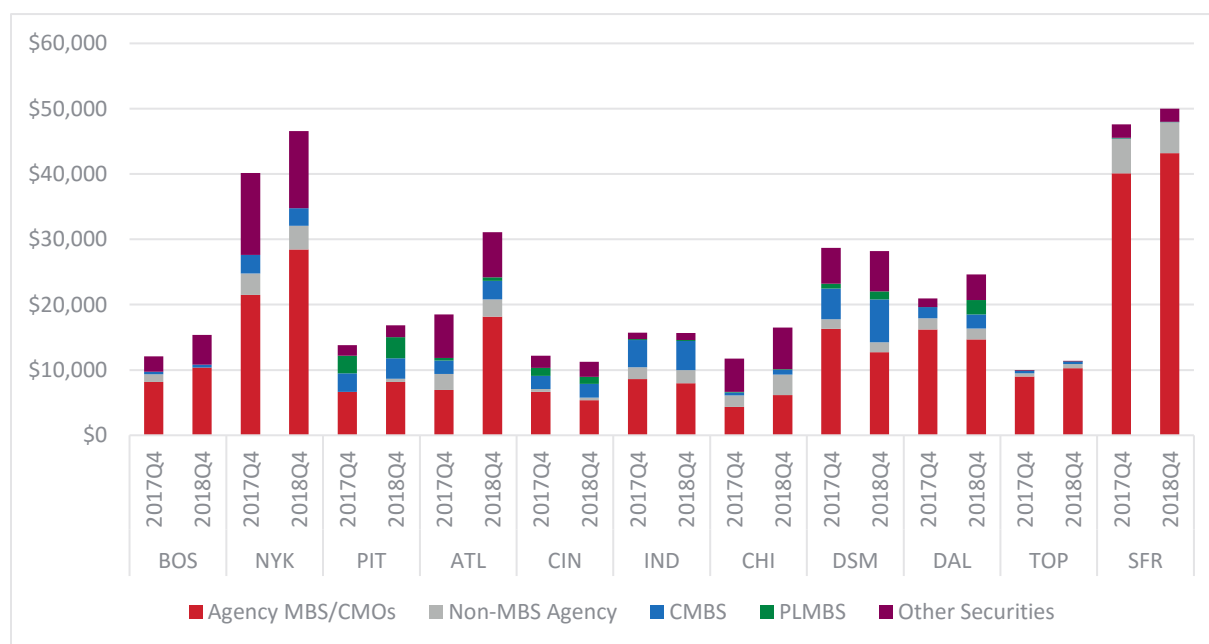
| Bank | 2017 | 2018 | Change |
|------|-------|-------|--------|
| BOS | 8.8% | 10.0% | 1.2 |
| NYK | 12.3% | 13.4% | 1.1 |
| PIT | 4.4% | 5.3% | 0.9 |
| ATL | 4.4% | 7.1% | 2.7 |
| CIN | 3.2% | 2.7% | -0.5 |
| IND | 19.8% | 18.0% | -1.8 |
| CHI | 7.5% | 9.7% | 2.2 |
| DSM | 6.9% | 6.3% | -0.6 |
| DAL | 7.1% | 7.6% | 0.5 |
| TOP | 10.0% | 10.7% | 0.7 |
| SFR | 13.3% | 12.9% | -0.4 |

Within securities collateral, Agency MBS/CMOs constitutes 62 percent of all eligible securities pledged to the FHLBanks as of year-end 2018. Agency MBS/CMOs includes all Agency mortgage-backed securities and collateralized mortgage obligations (e.g., GNMA, FNMA, etc.). Non-MBS agency securities are an additional eight percent of all eligible securities pledged to the Banks, representing the fourth largest category. Other securities, the second largest category,



represent almost 18 percent of eligible securities pledged to the Banks.²⁴ The third largest category, CMBS, represents 10 percent of all eligible securities pledged as collateral. PLMBS is the fifth largest category, and represents just three percent of all eligible securities pledged as collateral. Figure 4 provides more detail on the securities collateral breakdown by type of securities.

Figure 4: Types of Securities Collateral by Bank - 2017 Q4 vs 2018 Q4 (\$M)



²⁴ Other Securities include (among others) U.S. treasuries, eligible municipal bonds, cash, and certificates of deposit.

Section 3 – Glossary

Advance – A secured extension of credit or loan from a FHLBank to a member or housing associate.

Agency Mortgage-Backed Securities (MBS) and Collateralized Mortgage Obligations (CMOs) – MBS and CMOs issued, insured, or guaranteed by the U.S. Government or a U.S. Agency thereof. This definition includes Fannie Mae and Freddie Mac.

Blanket lien – A form of collateral security agreement under which the member grants a FHLBank a security interest in all or most of its assets, or one or more broad categories of assets, to secure advances.

Book value of eligible collateral – The total book value or unpaid principal balance of all collateral pledged and eligible. This definition excludes any ineligible collateral and accounts for any ineligibility factors determined from collateral reviews by the FHLBanks.

Borrowing capacity – The lendable value of collateral pledged based on member and collateral type, net of haircuts and all other adjustments.

Community Financial Institution (CFI) – A member, the deposits of which are insured under the Federal Deposit Insurance Act, that has average total assets of \$1 billion or less, based on an average of total assets over the last 3 years. FHFA is required to adjust the \$1 billion asset threshold annually, based on the rate of inflation. For 2018, the threshold was \$1.173 billion. FHLBank members that are CFIs may pledge small business loans, small farm loans, small agribusiness loans, and community development loans, all of which may be fully secured by collateral other than real estate, and securities representing a whole interest in such loans.

Housing Associate – A housing associate is a non-member entity to which a FHLBank may make advances if it meets specific requirements in Federal Housing Finance Agency regulations. Housing associates are often state housing finance agencies.

Market value of eligible collateral – The total market value of all collateral pledged and eligible. If market value is not available or the collateral was not priced, the value defaults to the book value.

Member – A financial institution that has been approved for membership and has purchased stock in a FHLBank.

Non-Advance Product – FHLBank-originated financial instruments, such as standby letters or credit and interest rate swaps, and Acquired Member Assets.



Nontraditional Mortgage Loans – Nontraditional mortgage loans include those that allow negative amortization or the deferment of payments of principal or interest.

Other Real Estate Related Collateral (ORERC) – As defined under 12 CFR § 1266.7(a)(4). ORERC eligible collateral may include, but is not limited to: PLMBS not otherwise eligible; second mortgage loans including home equity loans; commercial real estate loans; mortgage loan participations; and securities representing equity interests in eligible advance collateral. Such collateral may be eligible provided that it has a readily ascertainable value, can be reliability discounted to account for liquidation and other risks, can be liquidated in due course, and the FHLBank can perfect a security interest in such collateral.

Specific lien – A form of collateral security agreement under which the member grants a FHLBank a security interest in a specific set or list of assets, to secure advances.

Subprime Mortgage Loan – A subprime loan generally is a loan to a borrower having a credit score below a threshold level. Because there is not standard threshold score that defines a subprime loan, threshold levels may vary within limits from lender to lender.

