REPORT ON COLLATERAL PLEDGED TO FEDERAL HOME LOAN BANKS

PREPARED FOR THE SENATE COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS AND THE HOUSE COMMITTEE ON FINANCIAL SERVICES

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Division of Bank Regulation

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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 System's mission is to support mortgage lending and related community investment. The Federal Home Loan Banks (FHLBanks or Banks) provide liquidity to their members[1] and eligible non-member housing associates[2] by making loans to them, referred to as advances. Consistent with the provisions of the Bank Act, the FHLBanks require their members to pledge collateral in the form of mortgages and other eligible assets to secure their advances.

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 FHLBank 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 FHLBanks to secure advances and other collateralized products offered by the Banks to their members. The information in this report is based on 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 FHLBank members as of December 31, 2017.[4]

I. Collateral at the FHLBanks

The Bank Act and FHFA regulations require FHLBanks to obtain and maintain collateral from their borrowers to secure advances at the time the advances are originated or renewed. In general, an FHLBank maintains a collateral security agreement with each member or housing associate and through that agreement the FHLBank obtains a security interest in some or all of a member's or housing associate's assets.

[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 FHLBank membership, and the regulations of the Department of the Treasury, at 12 C.F.R. § 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 "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 USC 1430(j)(12)(C).
[4] This report defines eligible collateral as the total book value or unpaid principal balance of all collateral pledged by a member and deemed eligible by the FHLBank and is a "pre-haircut" measure. This definition of eligible collateral excludes ineligible collateral pledged by members and may account for ineligibility factors FHLBanks incorporate based on their collateral reviews.

Each FHLBank's collateral policy identifies the types and amounts of eligible collateral it will accept, and each FHLBank specifies its own method to establish collateral discounts, or "haircuts," on various types of collateral. The reported market or par value of any pledged collateral is discounted, or given a "haircut," to ensure that the liquidation value of pledged collateral exceeds the value of the advances it is securing to make certain that the collateral pledged would fully secure any outstanding advances should a member default. The amount of collateral required to secure advances differs across the FHLBanks and depends on a number of factors. 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.

By statute,[5] all advances made by FHLBanks to their members must be fully secured. The FHLBanks comply with this requirement by requiring each member to sign an agreement that gives the FHLBank a security interest in some or all of its assets in an amount that exceeds the amount of advances made to the member. The most commonly used arrangement is a blanket lien, under which the FHLBank's security interest attaches to all of a member's assets or, in some cases, to particular specified categories of a member's assets. Under a blanket lien, the FHLBank has a security interest in the member's assets that are subject to the lien, but does not necessarily have detailed information about the specific assets that are covered by the lien. Section 2.IV provides more information on collateral pledged under other security agreements.

The board of directors of each FHLBank establishes its FHLBank's collateral policy, consistent with statutory and regulatory requirements. Accordingly, collateral policies differ across FHLBanks, often reflecting differences in the types of members served by each FHLBank, differences in the risk tolerances of each FHLBank, and differences in methods and vendors used by each FHLBank to determine collateral lendable values. Key collateral policy differences include the various types of eligible collateral each FHLBank will accept, the levels of collateral discounts required, and the conditions under which a member must deliver its collateral to the FHLBank in order to be able to borrow against it.

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 Banks. Section 3 provides a glossary and definitions of terms used throughout the report.

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[5] 12 U.S.C. § 1430(a)(1).

Section 2 – Analysis

I. Overview

Total advances at the FHLBanks as of year-end 2017 were $732 billion, an increase of 3.7 percent from $705 billion as of year-end 2016.[6] Over the same period, the total book value of the FHLBanks' eligible collateral rose to $3 trillion from $2.8 trillion, an increase of 7.6 percent.[7] The reported borrowing capacity of that collateral was $2.2 trillion, up from $2.1 trillion as of year-end 2016.[8]

II. Collateral Composition

FHLBank members are allowed to pledge various types of collateral to the FHLBanks to secure advances and other Bank products.[9] This report aggregates collateral into nine general categories based on the most common collateral types. Categories include:

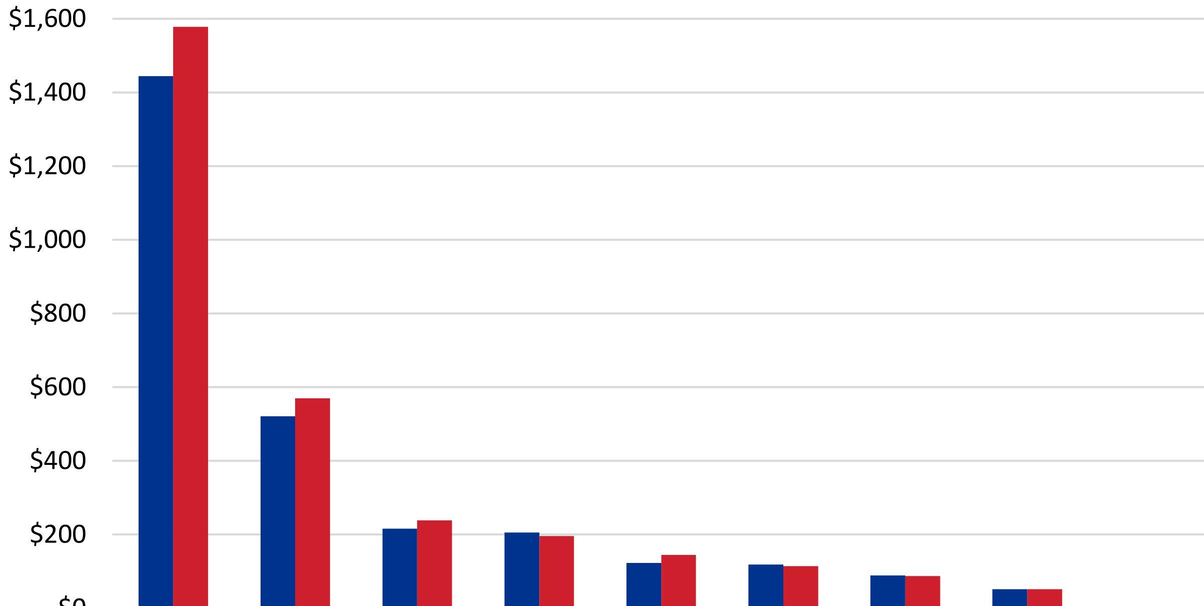
- *Single-Family 1-4 Unit Residential First Liens*[10]
- *Agency MBS/CMOs*[11]
- *All Other Authorized Securities*[12]
- *Multifamily First and Second Liens*
- *Other Real Estate Related Collateral (ORERC): Commercial Real Estate First and Second Liens*
- *ORERC: Home Equity Loans and Lines of Credit, First and Second Liens*
- *ORERC: Other Loans*[13]
- *Community Financial Institution (CFI)*[14] *Collateral*

[6] Advance information based on data from the Call Report System (CRS). Unless otherwise noted, all other data based on the Quarterly Collateral Survey. All percentages calculated prior to rounding.
[7] The book value of eligible collateral excludes any 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-borrowers.
[8] The report defines borrowing capacity as the lendable value of eligible collateral, net of haircuts and all other adjustments.
[9] 12 CFR 1266.7
[10] Single-family indicates fully disbursed, 1-4 unit first mortgage loans on improved residential property, including non-traditional, subprime loans, and government guaranteed loans.
[11] Includes all Agency mortgage-backed securities and collateralized mortgage obligations, e.g., FNMA, GNMA, etc.
[12] Includes U.S. Treasuries, Cash, and Certificates of Deposit.
[13] Includes Real Estate Construction Loans, Land Loans (non-Farm), Participation Loans, Residential Real Estate Closed End Second Liens, and Loans Covered by a Loss Sharing Agreement.
[14] A CFI is a FHLBank member whose deposits are insured under the Federal Deposit Insurance Act and 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 2017, the threshold was $1.148 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 USC § 1430(a)(3)(E); 12 CFR § 1266.7(b)(1).

- *Other Collateral*[15]

Single-family collateral remained the largest single collateral category at year-end 2017, accounting for approximately 53 percent of all eligible collateral pledged across the System. Graph 1 shows the composition of collateral pledged to the FHLBanks based on the categories above. Single-family traditional collateral increased by $134 billion or approximately nine percent from year-end 2016 to year-end 2017.

Graph 1: Book Value of Eligible Collateral ($Billions)



	Single-Family	Commercial Real Estate	Multifamily	HELOCs	US Agency MBS/CMOs	Other ORERC	Other Securities	CFI Collateral	All Other Collateral
2016	$1,444	$521	$216	$206	$123	$118	$89	$52	$4
2017	$1,579	$570	$239	$196	$144	$115	$87	$51	$4

Notable changes occurred year over year in other collateral categories as well. For example, the amount of commercial real estate collateral pledged increased by nine percent from year-end 2016 and remained the second largest collateral category at $570 billion. Agency MBS and CMOs also showed an increase from 2016 to 2017 of $21 billion or 17 percent. Table 1 below

[15] We dropped this category from most charts since the amount of "other" collateral was only 0.7 percent of all eligible collateral ($22 billion out of $3 trillion) System-wide in 2017.

provides details on the changes in the volume of eligible collateral pledged to the FHLBanks from 2016 to 2017 by category.

Table 1: Change in Eligible Collateral by Category ($Billions)

Collateral Category	2016	2017	Change in Eligible Collateral (Volume)[16]	Change in Eligible Collateral (Percent)
Single-Family	$1,444	$1,579	$134	9.3%
Commercial Real Estate	$521	$570	$48	9.3%
Multifamily	$216	$239	$23	10.5%
HELOCs	$206	$196	-$10	-4.8%
Agency MBS/CMOs	$123	$144	$21	17.2%
Other ORERC	$118	$115	-$4	-3.0%
Other Securities	$89	$87	-$2	-2.0%
CFI Collateral	$52	$51	-$1	-1.3%
All Other Collateral	$4	$4	-$1	-21.1%
System	$2,775	$2,984	$210	7.6%

III. Distribution of Collateral by Type and Bank

The distribution of eligible collateral varied across the Banks. Mirroring the System, single-family collateral was the largest collateral category at 10 Banks. Dallas was the only FHLBank that reported having more eligible commercial real estate collateral pledged ($98 billion) than single-family collateral ($88 billion). Commercial real estate was the second-largest collateral category at seven FHLBanks, multifamily was the second-largest category at two FHLBanks, and CFI collateral was the second-largest category at the Topeka Bank. Four FHLBanks – Atlanta, Boston, Cincinnati, and New York – reported having no eligible CFI collateral pledged by their members. Table 2 provides more detail on the distribution of collateral at each of the eleven FHLBanks.

[16] Numbers may not add up due to rounding.

Table 2: Book Value of Eligible Collateral by Bank ($Billions)[17]

FHLBank	Single-Family	US Agency MBS/CMOs	Other Securities	Commercial Real Estate	Multifamily	HELOCs	Other ORERC	CFI Collateral	All Other	Total
ATL	$272	$7	$12	$74	$14	$39	$3	-	-	$420
BOS	$94	$8	$4	$14	$4	$12	$1	-	-	$137
CHI	$95	$4	$7	$23	$9	$9	$2	$7	$0	$156
CIN	$235	$7	$6	$43	$64	$26	$2	-	-	$382
DAL	$88	$16	$5	$98	$11	$13	$53	$12	-	$295
DSM	$254	$16	$12	$69	$15	$20	$23	$5	$3	$418
IND	$33	$9	$7	$21	$7	$2	$1	$0	-	$79
NYK	$159	$22	$19	$48	$60	$13	$5	-	-	$326
PIT	$135	$7	$7	$90	$25	$38	$7	$3	$0	$312
SFR	$170	$40	$8	$74	$27	$21	$13	$5	-	$359
TOP	$43	$9	$1	$16	$4	$3	$5	$19	$0	$100
SYS	$1,579	$144	$87	$570	$239	$196	$115	$51	$4	$2,984

[17] For the purposes of this report, a dash ("-") indicates no reported information, while a zero ("$0") indicates reported collateral that rounds to zero.

IV. Member Lien and Pledge Status

The FHLBanks secure member advances using three basic types of lien arrangements:

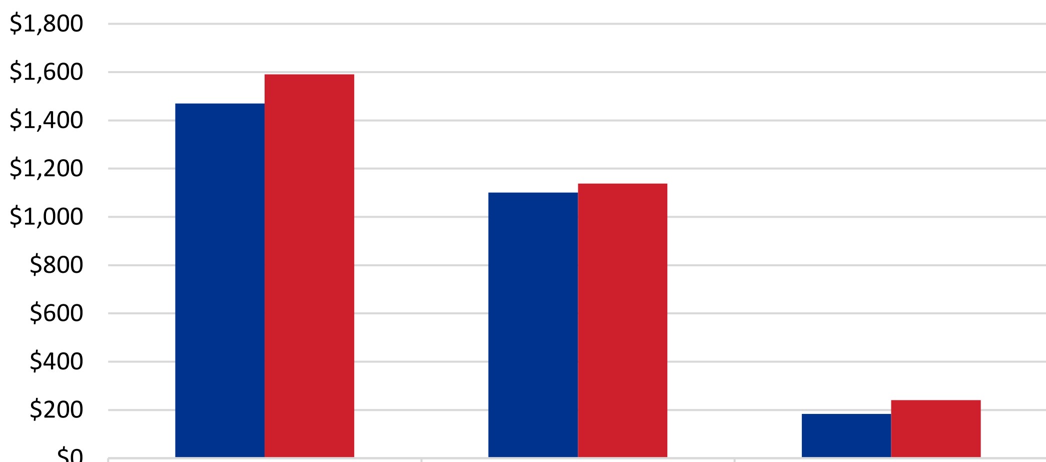
1) A *blanket* pledge or lien arrangement occurs when the written agreement that creates the FHLBank's security interest provides that it applies to all of a member's assets or to all of a member's specific categories of assets. When a FHLBank perfects its security interest in the assets described in the agreement, it acquires the right to liquidate any of those assets should the member default on its repayment obligation. In such cases, although the FHLBank would be fully secured on its credit exposure to the member, it would have little information about the individual loans or other assets that secure the advances.
2) A specific *listing* arrangement occurs when the FHLBank's security agreement describes the specific assets that the member has pledged to the FHLBank as collateral. In such cases, the FHLBank would also be fully secured on its credit exposure to the member and would be able to liquidate the covered collateral, but may have significantly more information about the individual assets that secure the advances prior to making the advance.
3) The *delivery* arrangement occurs when a FHLBank requires that the member actually deliver to the FHLBank or its custodian some or all of the assets that are covered by the FHLBank's security agreement. A FHLBank may require delivery of certain types of securities that exist only in electronic form in order to obtain a first priority perfected security interest in that collateral. A FHLBank also may require delivery of collateral if it is readily transferrable by the member or if the FHLBank believes that the member presents heightened credit risk.

Typically, FHLBanks grant members greater borrowing capacity when they agree to a collateral listing arrangement or delivery of collateral because these methods provide specific information regarding the collateral pledged to an FHLBank, which allows a Bank to make a more precise determination of the value of the collateral. Since these methods of collateral control provide better information and prospective liquidation efficiency than blanket lien arrangements, FHLBanks also often require a borrower to list or deliver collateral when the borrower's creditworthiness may be an issue.

Members pledging collateral under blanket lien arrangements continued to account for the largest dollar amount of eligible collateral, $1.6 trillion of eligible collateral or approximately 53 percent of eligible collateral System-wide, unchanged since 2016. Graph 2 displays the System-wide distribution of advances by the *member lien status* (i.e., blanket, listing, or delivery), which refers to the lien type assigned to members based on certain parameters determined by each

FHLBank, such as credit risk. Members covered under listing arrangements accounted for more than $1.1 trillion of eligible collateral System-wide. The eligible collateral of members under listing arrangements increased marginally in nominal terms but declined slightly as a percentage of System-wide eligible collateral, from 40 percent as of year-end 2016 to 38 percent as of year-end 2017. Collateral pledged by members under delivery arrangements increased from $183 billion, or approximately seven percent of System-wide eligible collateral in 2016, to $241 billion, or approximately eight percent of System-wide eligible collateral in 2017.[18]

Graph 2: Book Value of Collateral by Member Lien Status ($Billions)



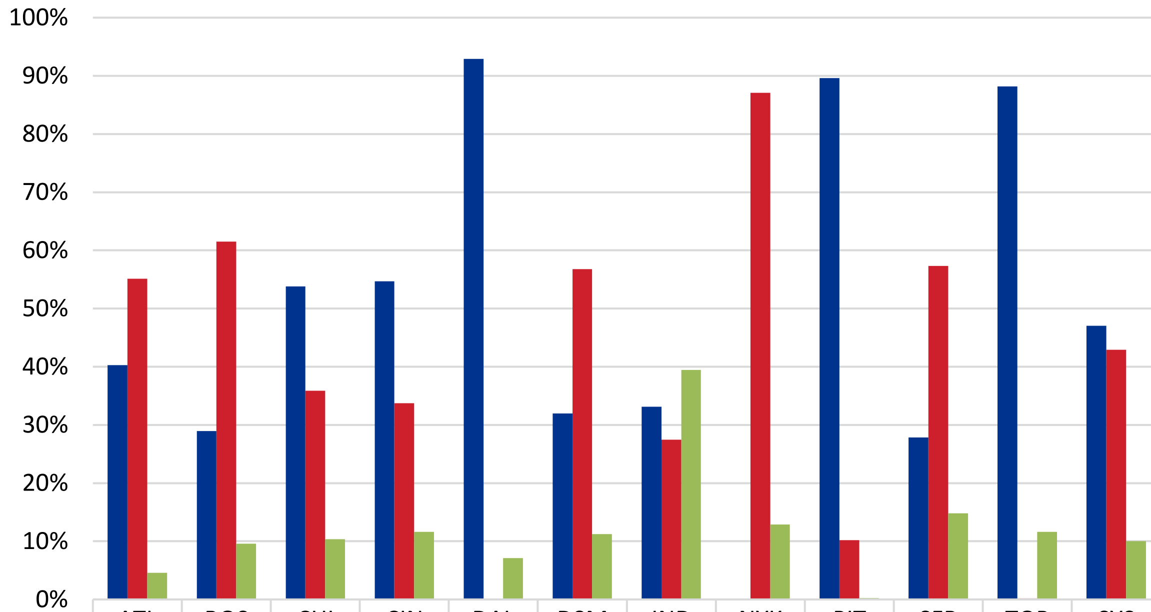
	Blanket	Listing	Delivery
2016	$1,470	$1,101	$183
2017	$1,591	$1,138	$241

In addition to member lien status, the FHLBanks also reported the *pledge status* of specific collateral, identifying those cases in which members provided more collateral detail either for reasons of their own (e.g., receiving a lower haircut) or due to FHLBank policies (e.g., FHLBanks typically require delivery of securities). Graph 3 presents the distribution of collateral for each FHLBank and for the System as a whole by the pledge status (i.e., blanket, listing, or delivery) of collateral rather than by the member lien status. As of year-end 2017, the FHLBanks of Dallas, Pittsburgh, and Topeka reported that 88 percent or more of the book value of eligible collateral they accepted was covered only under a blanket lien, while the FHLBank of

[18] The book value of eligible collateral pledged by members under lien arrangements identified as "other" than blanket, listing, or delivery remained unchanged at $14 billion as of year-end 2017, approximately 0.5 percent of System eligible collateral. A single member at one FHLBank accounted for over 99 percent of this total, although the FHLBank reported all individual collateral line-items for this member as pledged under a listing arrangement.

New York only reported listed and delivered collateral.[19] In addition to New York, the FHLBanks of Atlanta, Boston, Des Moines, and San Francisco also reported over 50 percent of their eligible collateral pledged under listing arrangements. The FHLBank of Indianapolis reported the highest percentage of eligible collateral covered under a delivery arrangement, over 39 percent. The FHLB of Indianapolis' higher than average share of securities as a percentage of total collateral pledged resulted in its higher proportion of delivered collateral, as all FHLBanks generally require members to provide securities under delivery arrangements.[20]

Graph 3: Book Value of Eligible Collateral by Collateral Pledge Status



	ATL	BOS	CHI	CIN	DAL	DSM	IND	NYK	PIT	SFR	TOP	SYS
Blanket	40%	29%	54%	55%	93%	32%	33%	0%	90%	28%	88%	47%
Listing	55%	61%	36%	34%	0%	57%	27%	87%	10%	57%	0%	43%
Delivery	5%	10%	10%	12%	7%	11%	39%	13%	0%	15%	12%	10%

[19] The FHLBank of New York requires most members to provide a blanket lien on all of their assets but requires more detail from members to grant credit based on that collateral.

[20] FHLBank Indianapolis also has a disproportionately high level of commercial real estate collateral – about $10.6 billion – pledged under delivery arrangements, further increasing its delivery percentage.

V. Haircuts

For the purposes of this report, we calculated the haircut as:

$$1 - \frac{Borrowing\ Capacity}{Market\ Value\ of\ Eligible\ Collateral}$$

This definition of a haircut identifies the difference between the reported market value of collateral and the borrowing capacity reported by the FHLBank for a collateral line-item.[21] Borrowing capacity accounts for ineligible collateral and any ineligibility criteria imposed by an FHLBank's collateral reviews, ensuring that this definition of "haircut" captures the additional reduction imposed by the FHLBanks for specific types of collateral compared to the pre-haircut market value. When aggregating by category and across pledge statuses, we weighted line-item haircuts by the book value of eligible collateral.

The haircuts applied by the FHLBanks varied substantially based on both the type of collateral pledged and how the members chose to pledge that collateral. Table 3 provides detail on the System-wide haircuts for the collateral categories described in Section 2.II and aggregated by the pledge status of the collateral.[22] Securities – specifically Agency MBS/CMOs – generally receive the lowest haircuts at 5.2 percent System-wide,[23] while single-family traditional mortgages receive an average haircut of 19.5 percent across the System. CFI collateral and other ORERC, which includes construction and land loans, receive some of the highest haircuts, averaging 43.1 percent and 44.3 percent respectively across the System. Collateral haircuts for other categories generally fall within this range, with riskier or less liquid assets typically receiving higher haircuts.

In addition to the type or quality of collateral driving the variation in haircuts, haircuts generally decline when FHLBank members provide more detailed information on the underlying collateral they pledge. For example, the delivery method of securing collateral is the most secure type of collateral control and generally results in lower haircuts than collateral secured under a blanket

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[21] Market value was unavailable for approximately 28 percent of collateral line-items. Some collateral types, such as CFI collateral, were much less likely to have a reported market value. Where market value was not available, we substituted book value of eligible collateral in the haircut calculation. This approach approximates collateral haircut methodology as practiced by the FHLBanks.

[22] Given the significant difference in haircuts reported by the FHLBanks for different types of single-family collateral, Table 3 splits single-family collateral into two subcategories: traditional and subprime/non-traditional.

[23] When borrowers pledge securities as collateral, FHLBanks generally require delivery of securities regardless of the member's financial condition. The FHLBanks reported over 98 percent of all securities pledged by FHLBank members delivered and 90 percent of the book value of those securities as delivered.

lien. Single-family traditional collateral receives an average haircut of 20.8 percent across the System when members pledge this collateral under a blanket lien. According to the data reported by the FHLBanks, the largest difference in haircuts between blanket and delivery status occurs for CFI collateral, while the differences in haircuts by pledge status are smaller for collateral categories such as commercial real estate.

Table 3: Weighted Haircuts by Collateral Type and Collateral Pledge Status

	Blanket	Listing	Delivery	System
SF: Traditional[24]	20.8%	13.5%	19.2%	19.5%
SF: Subprime/ Nontraditional[25]	26.7%	13.9%	14.1%	24.0%
Agency MBS/CMOs	5.3%	6.1%	5.2%	5.2%
Other Securities	11.9%	8.2%	9.5%	9.5%
Commercial Real Estate	29.7%	25.7%	28.3%	28.3%
Multifamily	26.2%	19.6%	25.6%	25.1%
HELOCs	36.1%	27.1%	24.2%	33.8%
Other ORERC	46.4%	27.5%	24.4%	44.3%
CFI Collateral	43.4%	50.0%	9.3%	43.1%

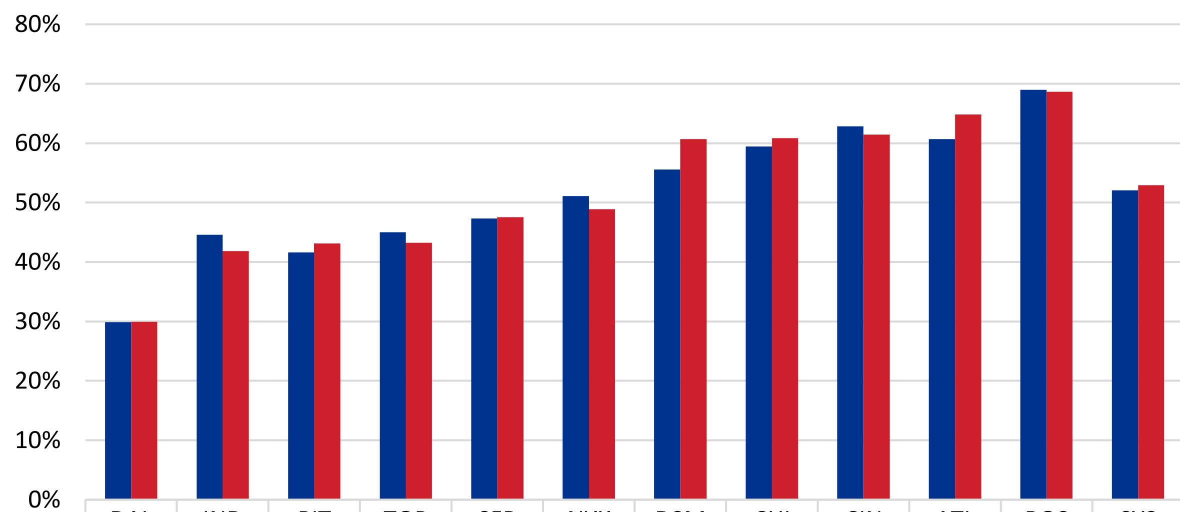
VI. Single-Family Collateral

Single-family loan collateral represents the majority of the eligible collateral pledged to the FHLBanks. Single-family collateral accounted for over half (53 percent) of all eligible collateral pledged to the FHLBanks in 2017, a marginal increase over year-end 2016. Graph 4 displays single-family loan collateral as a percentage of all eligible collateral for each FHLBank for year-

[24] Single-family traditional includes fully disbursed, 1-4 unit first mortgage loans on improved residential property, excluding subprime loans and government guaranteed loans. Single-family traditional loans do not allow for the deferment of payments of principal or interest or allow for negative amortization. Due to how the FHLBanks account for blanket lien loan collateral and reporting constraints, this category may include some unidentified nontraditional or subprime collateral.
[25] This category includes nontraditional 1-4 unit residential mortgage loans that allow negative amortization or the deferment of payments of principal or interest, as well as subprime loans to borrowers having a credit score below a threshold, debt to income ratio above a threshold, or other high risk characteristics. It also includes a residual other category that captures FHA and VA loans, manufactured housing, etc.

end 2016 and year-end 2017.[26] Single-family loan collateral is the single largest collateral source at every FHLBank except Dallas (see Table 2), but as a percent of all eligible collateral it ranges from 30 percent at Dallas to 69 percent at Boston as of year-end 2017. The amount of single-family loan collateral as a percentage of all eligible collateral changed little year-over-year, although the share of single-family loan collateral increased by 5.1 percentage points and 4.1 percentage points at Des Moines and Atlanta, respectively. The largest percentage decrease year-over-year was at the FHLBank of Indianapolis, where single-family loan collateral declined as a share of eligible collateral by 2.7 percentage points, even though in nominal terms single-family loan collateral increased by $3.5 billion. All other FHLBanks showed movements in single-family collateral of two percentage points or less.

Graph 4: Single-Family Collateral as a Percent of Eligible Collateral



	DAL	IND	PIT	TOP	SFR	NYK	DSM	CHI	CIN	ATL	BOS	SYS
2016	30%	45%	42%	45%	47%	51%	56%	59%	63%	61%	69%	52%
2017	30%	42%	43%	43%	48%	49%	61%	61%	61%	65%	69%	53%

Traditional single-family first lien mortgage loans represent the vast majority of eligible single-family loan collateral pledged to the FHLBanks ($1.3 trillion) and accounted for 44.6 percent of all eligible collateral pledged System-wide, an increase from 43.5 percent as of year-end 2016. Traditional single-family first liens are the largest category of single-family loans at all eleven FHLBanks, making up 84.4 percent of all eligible single-family loans pledged. Nontraditional single-family collateral, which includes loans allowing negative amortization or principal or

[26] This includes all single-family collateral: traditional, subprime, nontraditional, etc. More detail is available in Table 4.

interest payment deferment, accounts for another $178 billion of collateral System-wide, 11.3 percent of all eligible single-family loans pledged. Subprime single-family loan collateral accounts for $54.6 billion of pledged collateral System-wide, 3.5 percent of all eligible single-family loans pledged. Loans pledged that are both nontraditional and subprime made up only $5.2 billion System-wide. Table 4 provides more detailed information on single-family loan collateral at the FHLBanks.

Table 4: Detailed Single-Family Collateral ($Billions)[27, 28]

FHLBank	Traditional	Non-Traditional	Subprime	Non-Traditional & Subprime	Other Single-Family Collateral[29]	Total Single-Family Collateral
Atlanta	$235	$24	$12	$1	$1	$272
Boston	$80	$7	$6	-	$0	$94
Chicago	$95	-	-	-	-	$95
Cincinnati	$219	$6	$9	$0	-	$235
Dallas	$80	$3	$6	$0	-	$88
Des Moines	$233	$11	$9	-	$1	$254
Indianapolis	$31	$0	$1	$0	$1	$33
New York	$112	$38	$6	$1	$2	$159
Pittsburgh	$101	$33	-	-	-	$135
San Francisco	$107	$55	$5	$3	-	$170
Topeka	$39	$1	-	-	$4	$43
System	$1,332	$178	$55	$5	$9	$1,579

[27] Due to how the FHLBanks account for blanket lien collateral and reporting constraints, the numbers provided for single-family traditional collateral may include unidentified subprime and non-traditional loan collateral, and the data may not identify all subprime or non-traditional single-family collateral pledged.
[28] In this table, a dash ("-") indicates cells with no reported information, while a zero ("$0") indicates reported collateral that rounds to zero.
[29] This category includes other residential first liens such as FHA/VA loans, manufactured housing, etc. FHLBanks were asked to specify the type of collateral in their submissions.

VII. Subprime and Nontraditional Collateral

An FHLBank's eligible collateral may include any subprime and or nontraditional mortgages that a member originated or acquired after July 10, 2007 if those mortgages adhere to all aspects of the 2006 and 2007 Interagency Guidance on nontraditional and subprime mortgage loans issued by the Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of Thrift Supervision, and the National Credit Union Administration (the interagency guidance). Similarly, a FHLBank may include private-label mortgage-backed securities (PLMBS) that were issued after July 10, 2007 only if the underlying mortgages adhere to all aspects of the interagency guidance. The FHLBanks' policies and business practices require members to certify that subprime and non-traditional mortgages adhere to the interagency guidance. For PLMBS/CMO securities serving as collateral for advances, the FHLBanks report the securities according to how they categorized these securities under their internal policies.

As part of the Quarterly Collateral Survey, the FHLBanks report to FHFA on the amounts of subprime and nontraditional first lien residential mortgage loans,[30] second mortgages, home equity lines of credit, and residential construction loans pledged. The FHLBanks also report the amounts of subprime and Alt-A private-label mortgage-backed securities/collateralized mortgage obligations (PLMBS/CMOs) that FHLBank members have pledged. Table 5 provides detail on these collateral types.

Most FHLBanks report little or limited exposure to subprime and nontraditional collateral, with most FHLBanks reporting a decline in the percentage of eligible collateral categorized as subprime or nontraditional. Only three FHLBanks – Indianapolis, Dallas, and Des Moines – reported marginal increases in exposure to subprime and/or nontraditional collateral as a percentage of their portfolio. Overall, the percentage of System eligible collateral reported as subprime and nontraditional collateral declined slightly from year-end 2016 (8.6 percent) to year-end 2017 (8.3 percent). San Francisco retains the largest exposure to subprime and non-traditional collateral at $63.2 billion, although such collateral has declined as a percentage of its collateral portfolio from 18.3 percent as of year-end 2016 to 17.6 percent as of year-end 2017. Table 5 provides more detail on FHLBank exposure to different types of subprime and nontraditional collateral.

[30] As mentioned previously, the data may not identify all subprime or non-traditional single-family collateral pledged, given reporting constraints and how the FHLBanks address blanket liens.

Table 5: Subprime (SP) & Nontraditional (NT) Collateral by Bank ($Billions)[31]

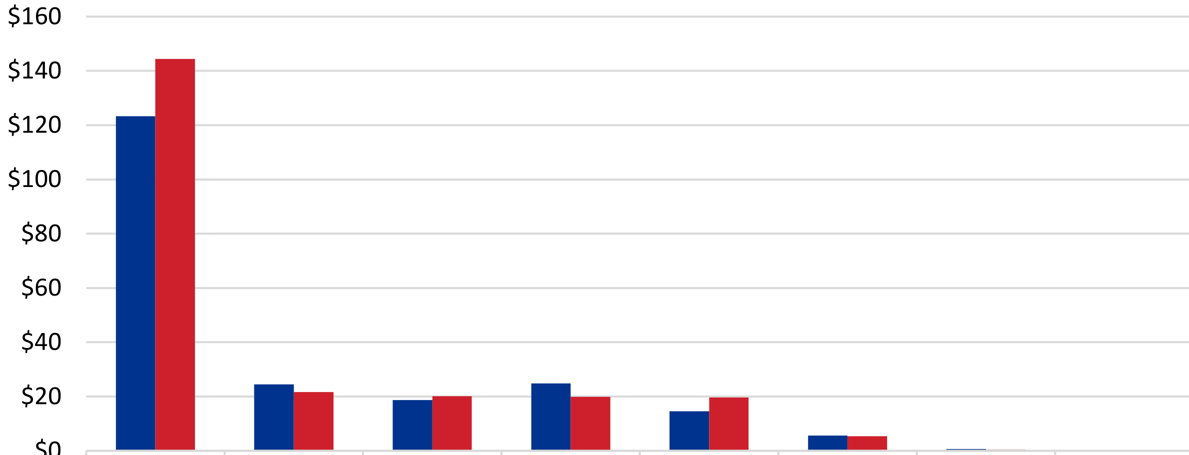
FHLBank	SP	NT	SP & NT	SF Other[32]	SP PLMBS /CMO	Alt-A PLMBS/ CMO	Total SP and NT	Total Eligible Collateral	Eligible Collateral Percentage (2016)	Eligible Collateral Percentage (2017)
ATL	$12	$24	$1	$1	$0	-	$38	$420	10.8%	9.0%
BOS	$6	$7	$0	$0	-	-	$14	$137	10.0%	9.9%
CHI	-	-	-	-	-	-	-	$156	0.0%	0.0%
CIN	$9	$6	$0	-	-	-	$15	$382	4.2%	4.1%
DAL	$6	$3	$0	$0	-	$0	$9	$295	2.0%	2.9%
DSM	$9	$11	$0	$1	-	-	$21	$418	4.7%	5.0%
IND	$1	$0	$0	$1	$0	$0	$2	$79	2.5%	3.1%
NYK	$6	$38	$1	$2	-	-	$47	$326	15.8%	14.5%
PIT	-	$33	-	-	-	-	$33	$312	10.2%	10.7%
SFR	$5	$55	$3	-	-	-	$63	$359	18.3%	17.6%
TOP	-	$1	-	$4	-	$0	$4	$100	5.5%	4.4%
SYS	$55	$178	$5	$9	$0	$0	$247	$2,984	8.6%	8.3%

VIII. Securities Collateral

Members pledge many different types of securities as collateral for advances. Agency MBS/CMOS, a category which includes all Agency mortgage-backed securities and collateralized mortgage obligations (e.g., FNMA, GNMA, etc.), constitutes 62.4 percent of all securities pledged to the FHLBanks as of year-end 2017. The next largest category, Commercial MBS, represents just 9.3 percent of all securities pledged as collateral. Graph 5 provides more detail on securities collateral volume for 2016 and 2017.

[31] In this table, a dash ("-") indicates cells with no reported information, while a zero ("$0") indicates reported collateral that rounds to zero.
[32] This category includes other residential first liens such as FHA/VA loans, manufactured housing, etc. FHLBanks were asked to specify the type of collateral in their submission.

Graph 5: Securities Collateral ($Billions)



	Agency MBS/ CMOs	Commercial MBS	US Treasuries	Non-Agency Securities	All Other Securities	All PLMBS/CMOs	Cash & Certificates of Deposit	HELOC/Home Equity Securities
2016	$123	$25	$19	$25	$15	$6	$1	$0
2017	$144	$22	$20	$20	$20	$5	$0	$0

While securities represented approximately eight percent of eligible collateral across the System as a whole, they represented a larger percentage of total collateral at four FHLBanks. The FHLBanks of Indianapolis, New York, San Francisco, and Topeka reported that securities – primarily Agency MBS – represented 10 percent or more of the book value of their eligible collateral portfolio. Securities represented just under 20 percent of the book value of the FHLBank of Indianapolis's eligible collateral, although San Francisco reported the largest whole dollar amount of eligible securities pledged ($47.6 billion). Table 6 contains more details on the composition of securities collateral at the individual FHLBanks.

Table 6: Securities Collateral by FHLBank ($Billions)[33]

	ATL	BOS	CHI	CIN	DAL	DSM	IND	NYK	PIT	SFR	TOP	SYS
HELOC/Home Equity Securities	$0	-	-	-	-	-	$0	-	-	-	$0	$0
Cash & Certificates of Deposit	$0	$0	$0	$0	$0	$0	$0	$0	$0	-	$0	$0
All PLMBS/CMOs	$0	-	$0	$1	$0	$1	$0	-	$3	$0	$0	$5
US Treasuries	$0	$0	$2	$0	$1	$4	$1	$8	$1	$2	$0	$20
Non-Agency Securities	$2	$1	$2	$0	$2	$2	$2	$3	-	$5	$0	$20
All Other Securities	$6	$2	$3	$2	$1	$1	$0	$4	$1	$0	$0	$20
Commercial MBS	$2	$0	$0	$2	$2	$5	$4	$3	$3	$0	$0	$22
Agency MBS/CMOs	$7	$8	$4	$7	$16	$16	$9	$22	$7	$40	$9	$144
Total Securities	$19	$12	$12	$12	$21	$29	$16	$40	$14	$48	$10	$232
Total Eligible Collateral	$420	$137	$156	$382	$295	$418	$79	$326	$312	$359	$100	$2,984
Securities Collateral Percentage	4.4%	8.8%	7.5%	3.2%	7.1%	6.9%	19.8%	12.3%	4.4%	13.3%	10.0%	7.8%

IX. Multifamily Collateral

System-wide, multifamily loans accounted for eight percent of eligible collateral pledged at year-end 2017, a slight increase from 7.8 percent reported at year-end 2016. The FHLBanks of Cincinnati and New York both reported multifamily collateral shares of 16 percent or more of eligible collateral, more than double the share at any other FHLBank in the System. Table 7 provides more detail on multifamily collateral at the FHLBanks.

[33] In this table, a dash ("-") indicates cells with no reported information, while a zero ("$0") indicates reported collateral that rounds to zero.

Table 7: Multifamily Collateral ($Billions)

FHLBank	Multifamily Loan Collateral (2016)	Multifamily Loan Collateral (2017)	Change in Multifamily Collateral	Eligible Collateral (2017)	Percent of Eligible Collateral (2017)
Atlanta	$14.1	$14.0	-$0.2	$420.3	3.3%
Boston	$3.5	$3.9	$0.5	$136.8	2.9%
Chicago	$7.7	$9.0	$1.3	$156.0	5.8%
Cincinnati	$58.8	$64.2	$5.5	$382.0	16.8%
Dallas	$8.9	$10.6	$1.7	$295.1	3.6%
Des Moines	$15.1	$15.0	-$0.1	$418.2	3.6%
Indianapolis	$5.1	$6.5	$1.5	$79.3	8.2%
New York	$51.5	$59.6	$8.1	$326.1	18.3%
Pittsburgh	$24.1	$25.1	$1.0	$312.4	8.0%
San Francisco	$24.4	$27.4	$3.0	$358.5	7.6%
Topeka	$3.1	$3.5	$0.5	$99.5	3.6%
System	$216.2	$238.8	$22.6	$2,984.3	8.0%

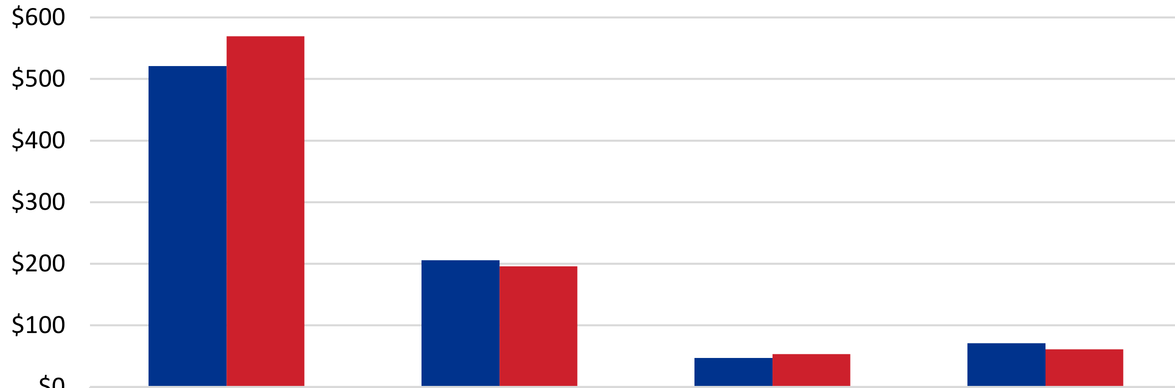
X. Other Real Estate Related (ORERC) Collateral

ORERC collateral includes all real estate-related, non-residential whole loans, including commercial real estate, plus participation loans and residential loans not included in the category of single-family first liens and multifamily loans (e.g., HELOCs). By statute, to qualify as ORERC, an asset must have a readily ascertainable value, and a FHLBank must be able to perfect a security interest in the collateral.[34] 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.[35] Among the eligible collateral types accepted by the FHLBanks, ORERC tends to be heavily discounted in terms of its value to secure advances compared to securities and single-family or multifamily loans. All FHLBanks report ORERC securing advances.

Commercial real estate remains the largest single ORERC collateral category and second largest collateral category System-wide as of year-end 2017. HELOCs remain the second largest category of ORERC collateral and fifth largest category of collateral System-wide. Graph 6 provides detail on the year-over-year change in major ORERC categories System-wide.

[34] 12 USC 1430(a)(3)(D).
[35] 12 CFR 1266.7(a)(4).

Graph 6: Other Real Estate Related Collateral Detail ($Billions)



	Commercial Real Estate	HELOCs	Land Loans	All Other ORERC
2016	$521	$206	$47	$71
2017	$570	$196	$53	$61

Commercial real estate remains the largest ORERC collateral category at most FHLBanks, with Pittsburgh and Dallas both reporting $90 billion or more in eligible commercial real estate collateral. Both Pittsburgh and Atlanta reported more than $38 billion in eligible HELOC collateral, accounting for approximately 40 percent of the System-wide total. Land loans represented a noteworthy amount of collateral at only two FHLBanks: Des Moines and Dallas. These two FHLBanks account for 91 percent of all land loan collateral System-wide. All FHLBanks report that ORERC represents less than 50 percent of eligible collateral except Dallas, which reported that commercial real estate, HELOCs, and other ORERC collateral represented 55 percent of all eligible collateral pledged as of year-end 2017. Table 8 provides more detail on specific ORERC collateral categories at the individual FHLBanks.

Table 8: Other Real Estate Related Collateral Detail ($Billions)[36]

FHLBank	Commercial Real Estate	HELOCs	Land Loans	All Other ORERC	Total ORERC	Eligible Collateral	ORERC Percent of Collateral
ATL	$74	$39	$0	$3	$115	$420	27.4%
BOS	$14	$12	-	$1	$27	$137	19.6%
CHI	$23	$9	-	$2	$34	$156	21.7%
CIN	$43	$26	$1	$2	$71	$382	18.6%
DAL	$98	$13	$37	$15	$163	$295	55.3%
DSM	$69	$20	$11	$12	$113	$418	26.9%
IND	$21	$2	-	$1	$24	$79	29.8%
NYK	$48	$13	-	$5	$67	$326	20.5%
PIT	$90	$38	$2	$5	$135	$312	43.4%
SFR	$74	$21	-	$13	$108	$359	30.0%
TOP	$16	$3	$2	$3	$24	$100	23.7%
SYS	$570	$196	$53	$61	$880	$2,984	29.5%

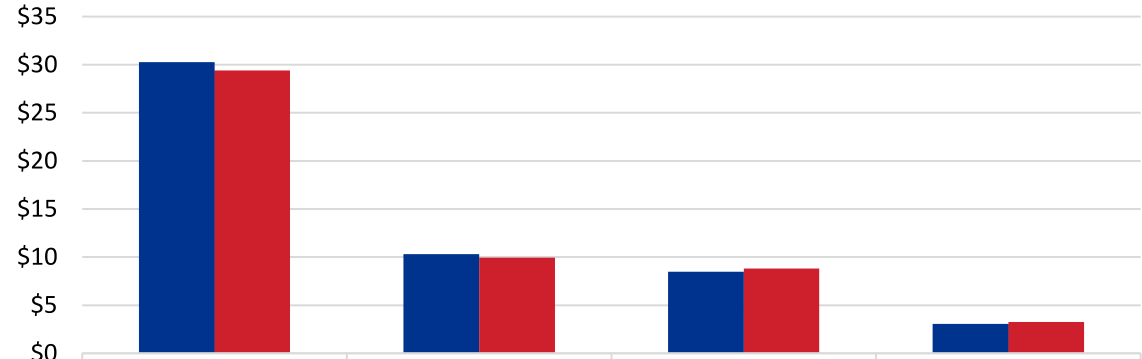
XI. Community Financial Institution (CFI) Collateral

The FHLBanks are authorized to accept from CFI members (and their affiliates) additional types of collateral that would not otherwise be considered 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.

Overall, the FHLBanks reported approximately $51.4 billion in eligible CFI collateral pledged, approximately 1.7 percent of the total book value of eligible collateral System-wide. The largest category of CFI collateral was small business loans, which represented approximately 57 percent of all eligible CFI collateral as of year-end 2017. Small farm loans and small agribusiness loans accounted for approximately 17 percent and 19 percent of CFI collateral, respectively.

[36] In this table, a dash ("-") indicates cells with no reported information, while a zero ("$0") indicates reported collateral that rounds to zero.

Graph 7: CFI Collateral by Category ($Billions)



	Small Business	Agribusiness Loans	Small Farm Loans	Other
2016	$30	$10	$8	$3
2017	$29	$10	$9	$3

Typically, the FHLBanks require larger haircuts for CFI collateral and four of the FHLBanks – Atlanta, Boston, Cincinnati, and New York – reported no eligible CFI collateral pledged as of year-end 2017. The FHLBanks of Dallas and Topeka reported approximately $12 billion and $19.1 billion in eligible CFI collateral pledged, respectively, and accounted for 60 percent of all eligible CFI collateral pledged to the FHLBank System. No other FHLBank held more than $7 billion of eligible CFI collateral in its collateral portfolio. Table 9 provides more detail on CFI collateral for those Banks reporting CFI collateral.

Table 9: CFI Collateral Detail ($Billions)[37]

FHLBank	Small Farm Loans	Agribusiness Loans	Small Business	Community Development	Other CFI	Total CFI Collateral	Eligible Collateral	CFI Percent of Collateral
CHI	$3	$1	$3	-	-	$7	$156	4.2%
DAL	-	$4	$8	-	-	$12	$295	4.1%
DSM	-	$2	$3	-	$0	$5	$418	1.2%
IND	$0	-	$0	-	-	$0	$79	0.3%
PIT	-	-	-	-	$3	$3	$312	1.0%
SFR	$1	$0	$4	-	-	$5	$359	1.5%
TOP	$5	$2	$11	-	-	$19	$100	19.2%
SYS	$9	$10	$29	-	$3	$51	$2,984	1.7%

[37] In this table, a dash ("-") indicates cells with no reported information, while a zero ("$0") indicates reported collateral that rounds to zero.

Section 3 – Glossary

Advance – A secured extension of credit or loan from an 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.

Alt-A PLMBS – Alt-A private-label mortgage-backed securities are typically those backed by mortgage loans to borrowers with prime credit scores but with features that included, for example, low or no borrower income or asset verification. However, an Alt-A PLMBS has no standard definition.

Blanket Lien – A form of collateral security arrangement under which the member grants an 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 2017, the threshold was $1.148 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 an 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 an FHLBank.

Non-Advance Products – FHLBank-originated financial instruments, such as standby letters of 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 advances collateral. Such collateral may be eligible provided that it has a readily ascertainable value, can be reliably 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.

Subprime Mortgage Loan – A subprime loan generally is a loan to a borrower having a credit score below a threshold level. Because there is no standard threshold score that defines a subprime loan, threshold levels may vary within limits from lender to lender.

Subprime PLMBS – Subprime private-label mortgage-backed securities are generally backed by residential first or second mortgage loans to subprime borrowers.