



The NAIC Capital Markets Bureau monitors developments in the capital markets globally and analyzes their potential impact on the investment portfolios of U.S. insurance companies. Previously published [NAIC Capital Markets Bureau Special Reports](#) are available via its web page and the NAIC archives (for reports published prior to 2016).

## Small Increase in U.S. Insurers' Exposure to the Federal Home Loan Bank System from 2020 to 2021

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### Executive Summary

- Approximately 11.5% of U.S. insurers were Federal Home Loan Bank (FHLB) members at year-end 2021 and totaled about 527 in number, mostly split between life (42%) and property/casualty (P/C) companies (47%).
- A total of \$6.6 billion in par value of capital stock was held by U.S. insurers at year-end 2021, a small increase from \$6.3 billion at year-end 2020.
- U.S. insurers reported about \$117 billion in book/adjusted carrying value (BACV) of FHLB advances outstanding at year-end 2021, representing a 3% increase from \$113.5 billion at year-end 2020.
- About 76% of U.S. insurer outstanding FHLB advances at year-end 2021 were in the form of funding agreements, compared to 73% at year-end 2020.
- A total of \$180.1 billion of collateral was pledged to the FHLB system by U.S. insurers at year-end 2021 (\$191.5 billion in fair value), representing a 7.5% increase from year-end 2020—the majority of which were agency residential mortgage-backed securities (RMBS).
- Total U.S. insurers' investment in FHLB bonds was about \$8 billion in 2021, up from \$7 billion at year-end 2020 but down from \$12.4 billion in 2019.

As of year-end 2021, approximately 527 U.S. insurers were FHLB members, with P/C companies accounting for 47% of the total, followed by life companies at 42%. This is a 13% increase in number from about 465 U.S. insurers at year-end 2020, and it was about 11.5% of the number of all U.S. insurers for both year-end 2020 and 2021. U.S. insurers may borrow from the FHLB regional banks—i.e., advances—if they purchase capital stock and become members. U.S. insurers may also hold FHLB bonds, but they do not have to be members to do so. FHLB bonds are reported in the annual statement filings within Schedule D Part 1 – Long-Term Bonds. More discussion on the FHLB system and U.S. insurers as FHLB members may be found in the NAIC Capital Markets Bureau's Primer on the [FHLB](#) published on Feb. 8, 2021.



## U.S. Insurers' Exposure to FHLB Capital Stock

U.S. insurers reported holdings of FHLB capital stock with a par value of \$6.6 billion in 2021, up from \$6.3 billion in 2020. (See Table 1.) Life companies accounted for the majority of FHLB capital stock (close to 90% of the total) in both years. FHLB capital stock is reported at par value in the statutory financial statements, and it is only redeemable with the FHLB at par. Under the *Statement of Statutory Accounting Principles (SSAP) No. 30R—Unaffiliated Common Stock*, U.S. insurers must disclose FHLB capital stock that is eligible for redemption and the anticipated redemption time frame. FHLB capital stock is not traded on the open market; therefore, it is not subject to market value risk. The risk-based capital (RBC) charge for FHLB capital stock for life companies is 1.1%. For P/C companies, the RBC charge is 15% as it is included among unaffiliated common stock.

**Table 1: U.S. Insurers' Exposure to Capital Stock by Company Type, Year-End 2021 and 2020 (\$par value in millions)**

Industry Type	2021	% of 2021 Total	2020	% of 2020 Total
Life	\$ 5,727.8	87%	\$ 5,318.5	85%
P/C	\$ 659.2	10%	\$ 793.4	12%
Title	\$ 0.1	0%	\$ 0.7	0%
Health	\$ 215.9	3%	\$ 175.3	3%
<b>Total</b>	<b>\$ 6,603.0</b>	<b>100%</b>	<b>\$ 6,287.9</b>	<b>100%</b>

The amount of activity-based stock held is a determinant of the number of advances that an FHLB member can take. Excess capital stock is any amount held that is greater than required under the particular district bank capital requirement. U.S. insurer capital stock holdings consisted of activity-based stock (\$4.6 billion), Class A stock (about \$150 million), Class B stock (\$1.5 billion), and excess capital stock (about \$300 million) at year-end 2021. The increase in FHLB capital stock reported by U.S. insurers from 2020 to 2021 corresponds to the increase in reported advances for the same time frame.

Large life companies—i.e., greater than \$10 billion in total cash and invested assets—held \$5.1 billion of the \$5.7 billion in FHLB capital stock held by all life companies. (See Table 2.) Large insurers across all insurer types accounted for \$5.4 billion, or 83% of total U.S. insurer exposure to FHLB capital stock.

**Table 2: U.S. Insurers' Year-End 2021 Exposure to FHLB Capital Stock by Total Cash and Invested Assets (\$BACV in millions)**



Industry Type	Less Than \$250mm	Between \$250mm and \$500mm	Between \$500mm and \$1B	Between \$1B and \$2.5B	Between \$2.5B and \$5B	Between \$5B and \$10B	Greater than \$10B	Total	Pct of Total
Life	\$ 10.7	\$ 9.2	\$ 33.5	\$ 55.1	\$ 163.7	\$ 346.2	\$ 5,109.4	\$ 5,727.8	87%
P/C	\$ 12.6	\$ 16.3	\$ 41.2	\$ 90.6	\$ 119.9	\$ 58.7	\$ 319.9	\$ 659.2	10%
Title	\$ 0.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.1	0%
Health	\$ 1.7	\$ 1.3	\$ 16.7	\$ 61.7	\$ 51.2	\$ 60.8	\$ 22.5	\$ 215.9	3%
<b>Total</b>	<b>\$ 25.1</b>	<b>\$ 26.7</b>	<b>\$ 91.4</b>	<b>\$ 207.3</b>	<b>\$ 334.9</b>	<b>\$ 465.8</b>	<b>\$ 5,451.8</b>	<b>\$ 6,603.0</b>	<b>100%</b>
Pct of Total	0%	0%	1%	3%	5%	7%	83%	100%	

## U.S. Insurers' FHLB Advances and Pledged Collateral

### Advances

For any U.S. insurer to borrow funds from an FHLB regional bank, also known as advances, they must be a member of the specific FHLB regional bank. To become a member of an FHLB regional bank, U.S. insurers must first acquire FHLB capital stock. Then, prior to applying for an advance, insurers must acquire activity-based FHLB stock in an amount equal to a specified percentage of the outstanding principal balance of the extended advance.<sup>1</sup> FHLB capital stock held by insurers is reported as common stock, regardless of whether capital stock reflects membership, activity, or excess stock and regardless of the form of the advance; i.e., debt or funding agreement. The disclosure requirements for FHLB borrowings are included in SSAP No. 30R. U.S. insurers are required to disclose the aggregate amount of their borrowings from the FHLB, reflecting a compilation of all advances divided into categories of debt, funding agreements, and "other." Items captured as "other" could reflect repurchase agreements, securities lending, or other such transactions. FHLB advances are a stable source of low-cost funding with maturities that can vary from short-term to up to 30 years based on the needs of the U.S. insurer. Advances can be structured in different forms and are generally reflected as debt or funding agreements; i.e., for life companies that are licensed to issue deposit-type contracts. Advances may be used for a variety of purposes. For U.S. insurers, there has been increased usage of FHLB advances over the years, particularly in the form of funding agreements. According to *SSAP No. 15—Debt and Holding Company Obligations* and *SSAP No. 52—Deposit-Type Contracts*, U.S. insurer advances from an FHLB are evaluated on an individual basis and accounted for in accordance with the individual agreement. If the arrangement is, in substance, a funding agreement, it would be accounted for under SSAP No. 52 with established policy reserves for all contractual obligations arising from the contract provisions.

Per the statutory financial statements for year-end 2021, about 256 U.S. insurers reported having FHLB advances throughout the year, up from 240 at year-end 2020. This is about half of the total number of U.S. insurers that were FHLB members based on capital stock owned for both year-end 2021 and year-end 2020. Similar to year-end 2020, about half of U.S. insurers reporting having FHLB advances in 2021

<sup>1</sup> FHLB New York, FHLB System Debt and Capital Stock Overview.



were life companies (139 in number), followed by 89 P/C companies, and 28 title and health companies combined.

U.S. insurers reported *maximum* advances totaling about \$141.4 billion for 2021, representing a 5.3% increase from \$134.3 billion at year-end 2020. (See Table 3 and Table 4.) Maximum advances are the total amount borrowed by U.S. insurers at any point of time during a given calendar year. Large U.S. insurers, or those with total cash and invested assets greater than \$10 billion, accounted for 87% (or \$123.2 billion) of FHLB aggregate maximum advances in 2021; large life companies accounted for about \$114.7 billion of this total. Overall, life companies accounted for 89% of U.S. insurers' total FHLB maximum advances at year-end 2021, compared to 86% at year-end 2020.

**Table 3: U.S. Insurers' Year-End 2021 FHLB Maximum Advances by Total Cash and Invested Assets (\$BACV in millions)**

Industry Type	Less Than \$250M	Between \$250M and \$500M	Between \$500M and \$1B	Between \$1B and \$2.5B	Between \$2.5B and \$5B	Between \$5B and \$10B	Greater than \$10B	Total	Pct of Total
Life	\$ 167.8	\$ 126.2	\$ 382.8	\$ 753.6	\$ 3,094.2	\$ 6,040.7	\$ 114,716.3	\$125,281.7	89%
P/C	\$ 112.0	\$ 139.2	\$ 358.4	\$ 1,035.6	\$ 2,098.9	\$ 830.9	\$ 7,830.5	\$ 12,405.4	9%
Title	\$ 17.9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17.9	0%
Health	\$ 0.3	\$ 10.0	\$ 209.6	\$ 1,251.2	\$ 775.4	\$ 739.1	\$ 700.0	\$ 3,685.6	3%
<b>Total</b>	<b>\$ 297.9</b>	<b>\$ 275.4</b>	<b>\$ 950.8</b>	<b>\$ 3,040.4</b>	<b>\$ 5,968.4</b>	<b>\$ 7,610.7</b>	<b>\$123,246.9</b>	<b>\$141,390.5</b>	<b>100%</b>
Pct of Total	0%	2%	1%	4%	0%	5%	87%	100%	

**Table 4: U.S. Insurers' Year-End 2020 FHLB Maximum Advances by Total Cash and Invested Assets (\$BACV in millions)**

Industry Type	Less Than \$250M	Between \$250M and \$500M	Between \$500M and \$1B	Between \$1B and \$2.5B	Between \$2.5B and \$5B	Between \$5B and \$10B	Greater than \$10B	Total	Pct of Total
Life	\$ 208.5	\$ 48.4	\$ 488.5	\$ 1,214.2	\$ 2,043.9	\$ 9,211.0	\$ 101,661.4	\$ 114,876.0	86%
P/C	\$ 406.9	\$ 271.9	\$ 460.2	\$ 1,537.5	\$ 1,956.4	\$ 1,182.8	\$ 8,099.4	\$ 13,915.1	10%
Title	\$ 24.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24.1	0%
Health	\$ 288.0	\$ 10.0	\$ 326.4	\$ 633.9	\$ 1,261.7	\$ 1,135.3	\$ 1,847.9	\$ 5,503.3	4%
<b>Total</b>	<b>\$ 927.5</b>	<b>\$ 330.3</b>	<b>\$ 1,275.2</b>	<b>\$ 3,385.6</b>	<b>\$ 5,262.0</b>	<b>\$ 11,529.2</b>	<b>\$ 111,608.7</b>	<b>\$ 134,318.4</b>	<b>100%</b>
Pct of Total	1%	0%	1%	3%	4%	9%	83%	100%	

Total advances *outstanding* at year-end 2021 were \$117 billion in BACV for U.S. insurers, representing a 3% increase from \$113.5 billion at year-end 2020. Chart 1 shows the trend in U.S. insurers' FHLB advances over the last seven years. Note the slowdown in advances from 2020 to 2021, as compared to the 19% increase from 2019 to 2020; this may be due in part to market participants' uncertainty regarding the potential for increasing interest rates. As FHLB advances have represented an inexpensive source of funding, U.S. insurers still continue to increasingly use them for financial leverage—i.e., a spread investment—whereby they borrow funds at a relatively low rate from an FHLB and invest in higher yielding assets, thus generating income from the spread differential.





**Chart 1: U.S. Insurers’ Historical FHLB Advances (\$BACV in millions)**

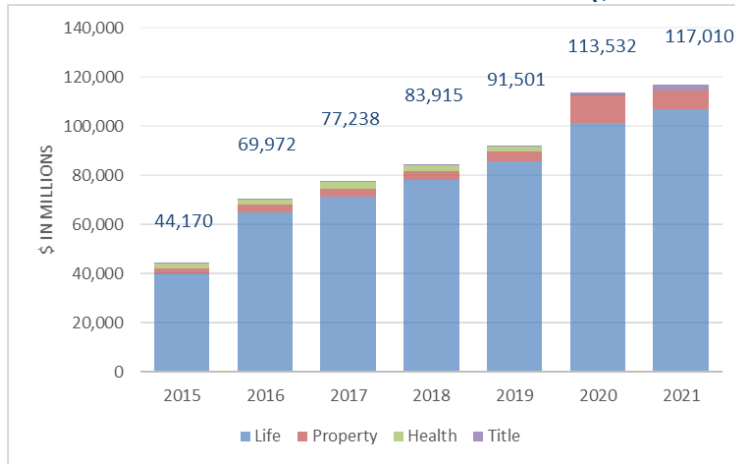
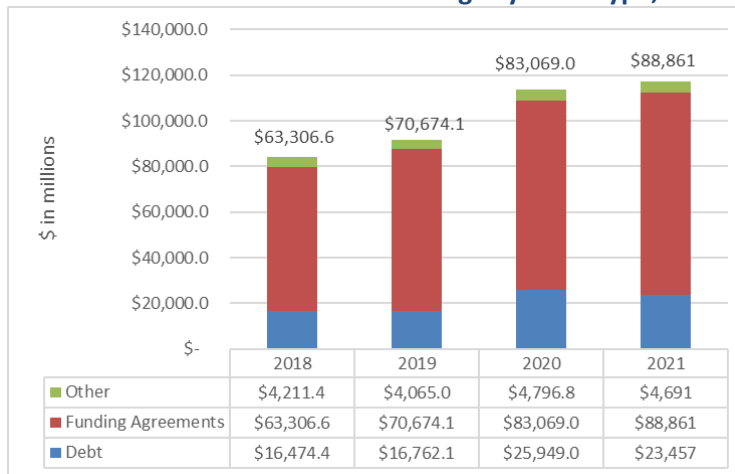


Chart 2 shows the composition of U.S. insurers’ FHLB advances from 2018 through 2021 as reported in the annual statement filings to the NAIC. Funding agreements—i.e., deposit-type contracts that pay a guaranteed rate of return over a specified time period—made up the largest proportion in all four years, ranging between 73% and 77% of the total. Debt accounted for most of the remainder, with other types of borrowings at 5% or less of total advances in each of the three years.

**Chart 2: U.S. Insurers’ FHLB Borrowings by Debt Type, 2018–2021 (\$BACV in millions)**



At year-end 2021, 22 private equity (PE)-owned U.S. insurers were FHLB members. Of those 22 insurers, 12 had outstanding FHLB advances of \$11.7 billion. Throughout 2021, the maximum amount of FHLB advances for these 12 insurers totaled approximately \$12.8 billion.

*Collateral*

To obtain an FHLB advance, U.S. insurers must not only purchase activity-based stock in an amount equal to a certain percentage of the requested advance, but also they must pledge high-credit quality eligible collateral to the FHLB. Eligible collateral includes mortgages, government securities, or other real



estate-related loan types, such as commercial real estate. The amount of collateral required depends on the type of collateral pledged, which must also be identified as a restricted asset in the statutory financial statements. That is, *SSAP No. 1—Accounting Policies, Risks & Uncertainties and Other Disclosures* requires U.S. insurers to disclose amounts that are reported in the financial statements but are “restricted” because they are pledged as collateral or under the exclusive control of the insurer.

In the Notes to the Financial Statements (Note 11 – Debt), U.S. insurers reported \$180.1 billion in assets pledged as collateral to the FHLB system at year-end 2021, up from \$167.4 billion as of year-end 2020. (See Table 4.) Each FHLB member must pledge collateral to receive advances, and the fair value of pledged collateral is required to exceed the amount of the FHLB advance. The value allowed in the calculation also varies depending on the quality and liquidity of the asset. The maximum collateral pledged by U.S. insurers in 2021 was \$209.2 billion, compared to \$193.9 billion in 2020.

**Table 4: U.S. Insurers’ Pledged Collateral, Year-End 2020 and 2021 (\$BACV in millions)**

Industry Type	2021	2021	% of 2021	2020	2020	% of 2020
	Maximum Collateral	Collateral Pledged	Total Collateral	Maximum Collateral	Collateral Pledged	Total Collateral
Life	\$ 180,274.7	\$ 159,725.3	89%	\$ 164,195.1	\$ 143,989.2	86%
P/C	\$ 21,428.0	\$ 14,921.8	8%	\$ 22,506.7	\$ 19,184.3	11%
Title	\$ 31.5	\$ -	0%	\$ 38.5	\$ 32.6	0%
Health	\$ 6,507.5	\$ 5,520.2	3%	\$ 7,139.8	\$ 4,196.0	3%
<b>Total</b>	<b>\$ 208,241.7</b>	<b>\$ 180,167.3</b>	<b>100%</b>	<b>\$ 193,880.1</b>	<b>\$ 167,402.1</b>	<b>100%</b>

The overcollateralization, or excess of collateral over advances, provides the FHLB with additional cushion in the event of a member default. FHLB members may also pledge collateral in anticipation of FHLB advances to minimize any delay in accessing the liquidity. As such, the \$12.7 billion increase in pledged collateral from 2020 to 2021 was for existing advances, as well as for the intention of maintaining an open but undrawn liquidity source, which includes any potential overall overcollateralization.

The most-named collateral type posted to the FHLB by U.S. insurers at year-end 2021 consisted of agency RMBS. The collateral type is coded by insurers, as pledged to the FHLB in the Notes to the Financial Statements.

### U.S. Insurers’ Exposure to FHLB Bonds

In addition to obtaining FHLB advances and capital stock holdings, U.S. insurers may invest in bonds issued by the FHLB system. U.S. insurers do not have to be FHLB members to invest in debt issued by an FHLB. U.S. insurers reported exposure to FHLB bonds with a BACV of \$8.1 billion at year-end 2021, up 15% from \$7 billion in 2020. (See Table 5.) In percentage terms, the proportion of FHLB bonds across industry types remained relatively unchanged year-over-year (YOY) from 2020 to 2021. Life and P/C insurers held almost 90% of the industry’s FHLB bonds at year-end 2021, similar to prior years.

**Table 5: U.S. Insurers' Year-End 2021 and 2020 Exposure to FHLB Bonds (\$BACV in millions)**

Insurer Type	2021	Pct of Total	2020	Pct of Total
Life	\$ 4,180.9	51%	\$ 3,595.1	51%
P/C	\$ 2,969.5	36%	\$ 2,595.2	37%
Title	\$ 14.7	0%	\$ 21.6	0%
Health	\$ 999.3	12%	\$ 801.1	11%
<b>Total</b>	<b>\$ 8,164.4</b>	<b>100%</b>	<b>\$ 7,013.0</b>	<b>100%</b>

Large U.S. insurers made up 43% of reported exposure to FHLB bonds (in terms of BACV) at year-end 2020. (See Table 6.) The majority were large life companies, which accounted for \$3.2 billion of total FHLB bond exposure at year-end 2021 (or 40% of total U.S. insurers' FHLB bond exposure). U.S. insurers with between \$1 billion and \$5 billion total cash, and invested assets under management accounted for 25% of FHLB bond exposure.

**Table 6: U.S. Insurers' Year-End 2020 Exposure to FHLB Bonds by Total Cash and Invested Assets (\$BACV in millions)**

Industry Type	Less Than \$250M	Between \$250M and \$500M	Between \$500M and \$1B	Between \$1B and \$2.5B	Between \$2.5B and \$5B	Between \$5B and \$10B	Greater than \$10B	Total	Pct of Total
Life	\$ 65.4	\$ 53.2	\$ 109.1	\$ 108.4	\$ 380.2	\$ 180.7	\$ 3,283.8	\$ 4,180.9	51%
P/C	\$ 412.5	\$ 373.9	\$ 633.7	\$ 550.3	\$ 527.9	\$ 208.7	\$ 262.4	\$ 2,969.5	36%
Title	\$ 4.7	\$ 0.6	\$ -	\$ -	\$ 9.5	\$ -	\$ -	\$ 14.7	0%
Health	\$ 190.8	\$ 91.6	\$ 152.7	\$ 358.2	\$ 176.4	\$ 24.9	\$ 4.7	\$ 999.3	12%
<b>Total</b>	<b>\$ 673.4</b>	<b>\$ 519.3</b>	<b>\$ 895.5</b>	<b>\$ 1,016.9</b>	<b>\$ 1,094.1</b>	<b>\$ 414.3</b>	<b>\$ 3,551.0</b>	<b>\$ 8,164.4</b>	<b>100%</b>
Pct of Total	8%	6%	11%	12%	13%	5%	43%	100%	

The distribution of FHLB bond maturities consisted of 48% of FHLB bonds held by U.S. insurers having maturities of five years or less. In comparison, about 36% of total FHLB bonds held by U.S. insurers at year-end 2021 had maturities of greater than 11 years. About half of the FHLB bonds held by life insurers had maturities greater than 11 years at year-end 2021. The difference in the concentration of maturities across insurer types is typically a function of asset-liability matching.

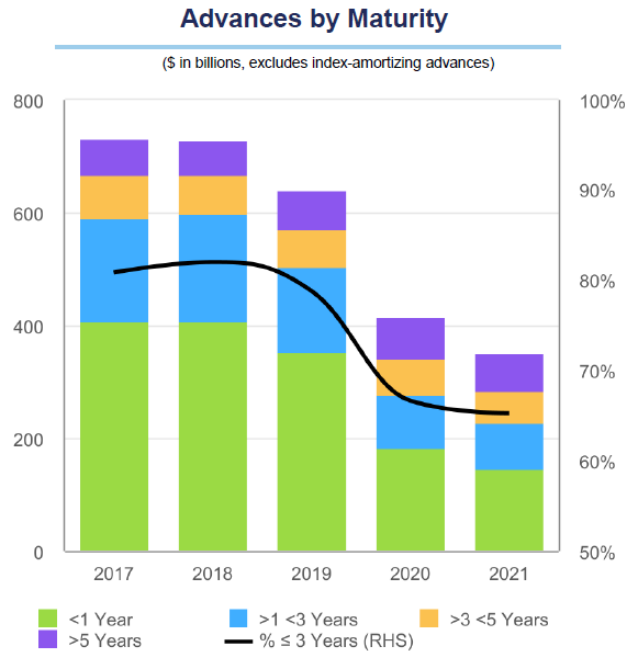
### The FHLB System – Advances, Pledged Collateral, and Debt

As of year-end 2021, the FHLB system had about \$723 billion in total assets, \$351 billion of which represented advances, or lent funds, to *all* members. In comparison, at year-end 2020, the FHLB system had about \$820.7 billion in total assets, with \$422.6 billion in advances. The YOY decrease is due in part to banks and other members paying down advances, as the data referenced above shows U.S. insurers as FHLB members increased their YOY advances. Chart 3 shows FHLB advances by maturity; about 62% had a term of three years or less at year-end 2021, representing a large decline from about 90% in 2018.





Chart 3:

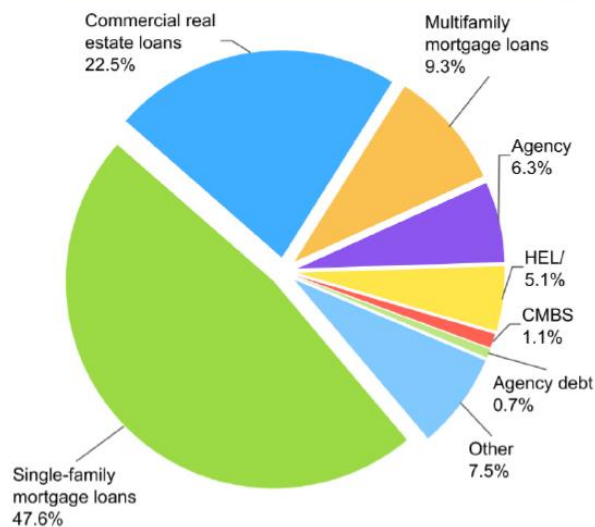


Source: FHLB Investor Presentation, April 2022.

Similar to the year prior, the majority of collateral posted by members to secure FHLB advances consisted of single-family residential mortgage loans at 47.6% of the total at year-end 2021, followed by commercial real estate loans at 23% of the total. (See Chart 4.)

Chart 4:

### Type of Collateral Securing Advances and Other Credit Products Outstanding



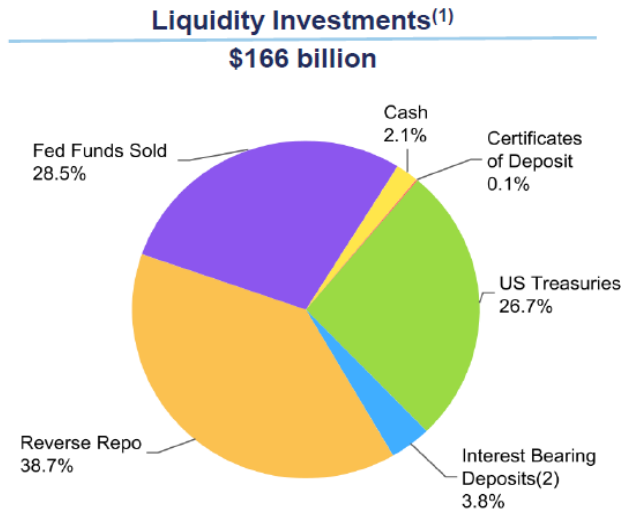
Source: FHLB Investor Presentation, April 2022.



The FHLB issues senior unsecured bonds through its Office of Finance that are “joint and several” obligations (or consolidated obligations) of all its regional banks. This means that all regional banks are responsible for the full and timely payment of principal and interest on the bonds regardless of which one of the 11 issued the bonds. Investors in FHLB bonds include domestic and international institutional investors, as well as individuals. The bonds are high-credit quality, rated AA+ and AAA by S&P Global and Moody’s Investors Service, respectively. As of Dec. 31, 2021, the FHLB had about \$651.9 billion in outstanding consolidated obligations according to the FHLB Combined Financial Report dated Dec. 31, 2021.

The FHLB is responsible for maintaining a liquidity portfolio of cash and short-term investments in the event of a market disruption that results in an inability to access the capital markets. As of year-end 2021, the liquidity portfolio represented 23% of the FHLB’s total assets, or \$166 billion. The largest short-term asset was reverse repos at 38.7% of the total. (See Chart 5.)

Chart 5:



1. Liquidity investments presented herein include all U.S. Treasury securities; however, FHFA regulations state that only those securities classified as trading and AFS (for accounting purposes) and with remaining maturity less than 10 years may be considered for contingent liquidity. (See [Investments](#) for more details.)
2. Depositors may include FHLBank Members.

Source: FHLB Investor Presentation, April 2022.

The Capital Markets Bureau will continue to monitor trends with U.S. insurers’ exposure to the FHLB and report, as deemed appropriate.

Questions and comments are always welcome. Please contact the Capital Markets Bureau at [CapitalMarkets@naic.org](mailto:CapitalMarkets@naic.org).



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