CAPITAL MARKETS
Special Report

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

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 webpage and the NAIC archives (for reports published prior to 2016).

U.S. Insurers' Exposure to the Federal Home Loan Bank (FHLB) System at Year-End 2020

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Executive Summary

- U.S. insurers represented less than 10% of total FHLB members at year-end 2020 and totaled about 465 in number, mostly split between life (44%) and property/casualty (P/C) companies (46%).
- A total of $6.3 billion in book/adjusted carrying value (BACV) of capital stock was held by U.S. insurers at year-end 2020, up from $5.2 billion in 2019.
- U.S. insurers reported about $113.5 billion in BACV of FHLB advances outstanding at year-end 2020, representing a 24% increase from $91.5 billion at year-end 2019. About 73% of U.S. insurer outstanding FHLB advances at year-end 2020 were in the form of funding agreements.
- A total of $167.4 billion of collateral was pledged to the FHLB system by U.S. insurers at year-end 2020 ($182.2 billion in fair value), the majority of which were agency residential mortgage-backed securities (RMBS).
- Total U.S. insurers' investment in FHLB bonds was about $7 billion in 2020, down from $12.4 billion in 2019.

As of year-end 2020, approximately 465 U.S. insurers were FHLB members, with P/C companies accounting for 46% of the total, followed by life companies at 44%. 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.

U.S. Insurers' Exposure to FHLB Capital Stock

U.S. insurers reported holdings of FHLB capital stock with a BACV of $6.3 billion in 2020, up from $5.2 billion in 2019 (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. Note that FHLB capital stock can only be redeemed with the FHLB after written notification on the intent to redeem and after a specified waiting period. Class B stock has a five-year waiting period after submitting written notification to redeem. 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 is the same for life companies and P/C companies, at 1.1%.

Table 1: U.S. Insurers' Exposure to Capital Stock by Company Type ($BACV mil.)

Industry Type	2020	% of 2020 Total	2019	% of 2019 Total
Life	$ 5,318.5	85%	$ 4,610.3	89%
P/C	$ 793.4	12%	$ 406.7	8%
Title	$ 0.7	0%	$ 0.9	0%
Health	$ 175.3	3%	$ 158.8	3%
Total	**$ 6,287.9**	**100%**	**$ 5,176.7**	**100%**

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. For example, if additional capital stock were acquired to receive an advance and the insurer repaid the advance, the additional capital stock held would be classified as excess stock. U.S. insurer capital stock holdings consisted of activity-based stock ($4.2 billion), Class A stock ($175 million), Class B stock ($1.6 billion), and excess capital stock ($256 million) at year-end 2020. The increase in FHLB capital stock reported by U.S. insurers from 2019 to 2020 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 $4.6 billion of the $5.3 billion in FHLB capital stock held by all life companies (see Table 2). Large insurers across all insurer types accounted for $5 billion, or 80% of total U.S. insurer exposure to FHLB capital stock.

Table 2: U.S. Insurers' Year-End 2020 Exposure to FHLB Capital Stock by Total Cash and Invested Assets ($BACV mil.)

Industry Type	< 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	% of Total
Life	$ 12.4	$ 4.1	$ 34.9	$ 68.5	$ 125.9	$ 450.7	$ 4,622.0	$5,318.5	85%
P/C	$ 23.8	$ 17.2	$ 35.3	$ 101.7	$ 126.0	$ 64.9	$ 424.6	$ 793.4	13%
Title	$ 0.7	$ -	$ -	$ -	$ -	$ -	$ -	$ 0.7	0%
Health	$ 11.0	$ 0.4	$ 11.9	$ 30.2	$ 52.0	$ 64.7	$ 5.1	$ 175.3	3%
Total	**$ 47.9**	**$ 21.7**	**$ 82.2**	**$ 200.4**	**$ 303.8**	**$ 580.2**	**$ 5,051.7**	**$6,287.9**	**100%**
% of Total	1%	0%	1%	3%	5%	9%	80%	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.[1] 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. This disclosure is required for outstanding advances at the reporting date and the maximum number of aggregate borrowings from an FHLB at any time during the current reporting period.

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

[1] FHLB New York, FHLB System Debt and Capital Stock Overview.

would be accounted for under SSAP No. 52 with established policy reserves for all contractual obligations arising from the contract provisions.

In December 2013, the FHLB proposed amendments to states' receivership laws that would allow an exemption from stay and voidable preference provisions for security agreements with the FHLB regional banks. As of November 2020, 19 states had adopted the legislative changes, which basically states that the FHLB is exempt from any stays regarding the collateral pledged by U.S. insurers for FHLB agreements if the insurer is placed into receivership.

Per the statutory financial statements for year-end 2020, about 240 U.S. insurers reported having FHLB advances throughout the year—i.e., maximum advances—half of which were life companies, followed by 90 P/C companies and 24 title and health companies combined. Note that this is about half of the 462 U.S. insurers that were FHLB members based on capital stock owned at year-end 2020.

U.S. insurers reported *maximum* advances totaling about $134.3 billion at year-end 2020 (see Table 3). Maximum advances are the total amount borrowed by U.S. insurers at any point of time during 2020. Large U.S. insurers, or those with total cash and invested assets greater than $10 billion, accounted for 83% (or $111.6 billion) of FHLB aggregate maximum advances in 2020; large life companies accounted for about $101.7 billion of this total. Overall, life companies accounted for 86% of U.S. insurers' total FHLB maximum advances at year-end 2020.

Table 3: U.S. Insurers' Year-End 2020 FHLB Maximum Advances by Total Cash and Invested Assets ($BACV mil.)

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	% 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%
Total	**$ 927.5**	**$ 330.3**	**$ 1,275.2**	**$ 3,385.6**	**$ 5,262.0**	**$ 11,529.2**	**$ 111,608.7**	**$ 134,318.4**	**100%**
% of Total	1%	0%	1%	3%	4%	9%	83%	100%	

Total advances *outstanding* at year-end 2020 were $113.5 billion in BACV for U.S. insurers. Chart 1 shows the trend in U.S. insurers' FHLB advances over the last six years. The 19% increase from 2019 to 2020 may be due in part to attractive funding opportunities in the continued low interest rate environment. It includes a larger proportion of P/C companies with FHLB advances in 2020 compared to prior years. As FHLB advances represent an inexpensive source of funding, U.S. insurers have been increasingly using 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 mil.)

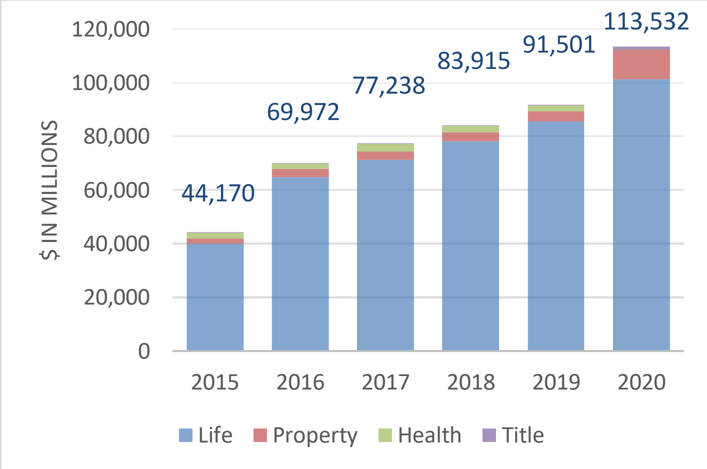
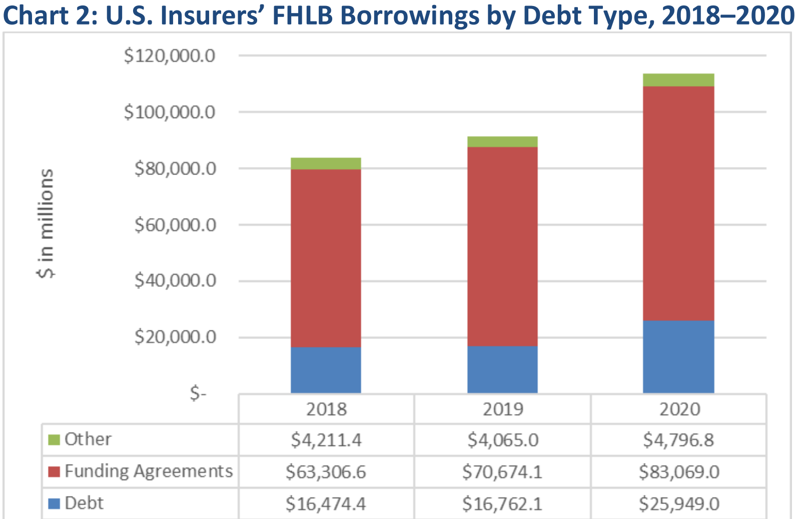


Chart 2 shows the composition of U.S. insurers' FHLB advances from 2018 through 2020 as reported in the annual statement filings to the NAIC. Funding agreements—i.e., deposit-type contracts that pay a guaranteed rate of return over a specified time period—made up the largest proportion in all three years, 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, 2018–2020 ($BACV mil.)



At year-end 2020, 18 private equity (PE)-owned U.S. insurers were FHLB members. Of those 18 insurers, 12 had outstanding FHLB advances of $14.5 billion. Throughout 2020, the maximum amount of FHLB advances for these 12 insurers totaled approximately $15.2 billion. Being PE-owned, an insurer's asset sourcing capabilities tend to benefit from the PE firms' networking capabilities.

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 they must also 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, among others. 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. FHLB capital stock held and assets that are pledged as collateral to an FHLB are considered restricted assets subject to this disclosure.

In the Notes to the Financial Statements (Note 11 – Debt), U.S. insurers reported $167.4 billion in assets pledged as collateral to the FHLB system at year-end 2020, up from $132.3 billion as of year-end 2019 (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 2020 was $193.9 billion, compared to $150.5 billion in 2019.

Table 4: U.S. Insurers' Year-End 2020 FHLB Pledged Collateral ($BACV mil.)

Industry Type	2020 Maximum Collateral Pledged	2020 Collateral Pledged	% of 2020 Total Collateral Pledged	2019 Maximum Pledged Collateral	2019 Pledged Collateral	% of 2019 Total Collateral Pledged
Life	$ 164,195.1	$ 143,989.2	86%	$ 134,585.0	$ 118,523.5	90%
P/C	$ 22,506.7	$ 19,184.3	11%	$ 11,680.9	$ 10,645.7	8%
Title	$ 38.5	$ 32.6	0%	$ 33.1	$ 31.0	0%
Health	$ 7,139.8	$ 4,196.0	3%	$ 4,178.0	$ 3,147.9	2%
Total	**$ 193,880.1**	**$ 167,402.1**	**100%**	**$ 150,477.0**	**$ 132,348.1**	**100%**

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 $35.1 billion increase in pledged collateral from 2019 to 2020 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 2020 consisted of agency RMBS. The collateral type is coded by insurers, as pledged to the FHLB in the Notes to the Financial Statements. The second most-named pledged collateral type was commercial mortgage-backed securities (CMBS).

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 $7 billion at year-end 2020, down from $12.4 billion in 2019 and $14.6 billion in 2018. This downward trend may be due in part to insurers seeking more attractive yield opportunities in other types of investments.

Life and P/C insurers held almost 90% of the industry's FHLB bonds at year-end 2020, similar to the two prior years (see Table 5). On a stand-alone basis, however, there was an increasing trend with P/C companies' exposure to direct FHLB bonds and a decreasing trend with life companies' exposure for the same time period (in percentage terms).

Table 5: U.S. Insurers' Year-End 2020, 2019 and 2018 Exposure to FHLB Bonds ($BACV mil.)

Insurer Type	2020	% of 2020 Total	2019	% of 2019 Total	2018	% of 2018 Total
Life	$ 3,595.1	51%	$ 6,948.0	56%	$ 9,330.5	64%
P/C	$ 2,595.2	37%	$ 4,318.3	35%	$ 3,938.9	27%
Title	$ 21.6	0%	$ 45.2	0%	$ 24.0	0%
Health	$ 801.1	11%	$ 1,137.9	9%	$ 1,329.9	9%
Total	**$ 7,013.0**	**100%**	**$ 12,449.3**	**100%**	**$ 14,623.3**	**100%**

Large U.S. insurers made up 39% of reported exposure to FHLB bonds (in terms of BACV) at year-end 2020 (see Table 6). U.S. insurers with between $1 billion and $5 billion total cash and invested assets under management accounted for 28% of FHLB bond exposure.

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

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	% of Total
Life	$ 121.1	$ 50.7	$ 158.4	$ 119.8	$ 307.1	$ 367.3	$ 2,470.7	$ 3,595.1	51%
P/C	$ 476.4	$ 150.9	$ 376.0	$ 702.0	$ 378.8	$ 270.4	$ 240.7	$ 2,595.2	37%
Title	$ 5.0	$ -	$ -	$ -	$ 16.6	$ -	$ -	$ 21.6	0%
Health	$ 262.2	$ 51.7	$ 47.7	$ 232.9	$ 182.2	$ 20.2	$ 4.7	$ 801.6	11%
Total	**$ 864.7**	**$ 253.3**	**$ 582.2**	**$ 1,054.7**	**$ 884.7**	**$ 657.9**	**$ 2,716.1**	**$ 7,013.5**	**100%**
% of Total	12%	4%	8%	15%	13%	9%	39%	100%	

The distribution of FHLB bond maturities was tilted toward the long end, with 48% of FHLB bonds held by U.S. insurers having maturities of greater than 11 years (see Table 7). In comparison, about 34% of total FHLB bonds held by U.S. insurers at year-end 2020 mature within five years or less. FHLB bonds held by life insurers were even more weighted toward longer-dated bonds, with 71% of their exposures having maturities greater than 11 years. The difference in the concentration of maturities across insurer types is a function of asset-liability matching. Almost all of the FHLB bonds held by health companies matured in 10 years or less.

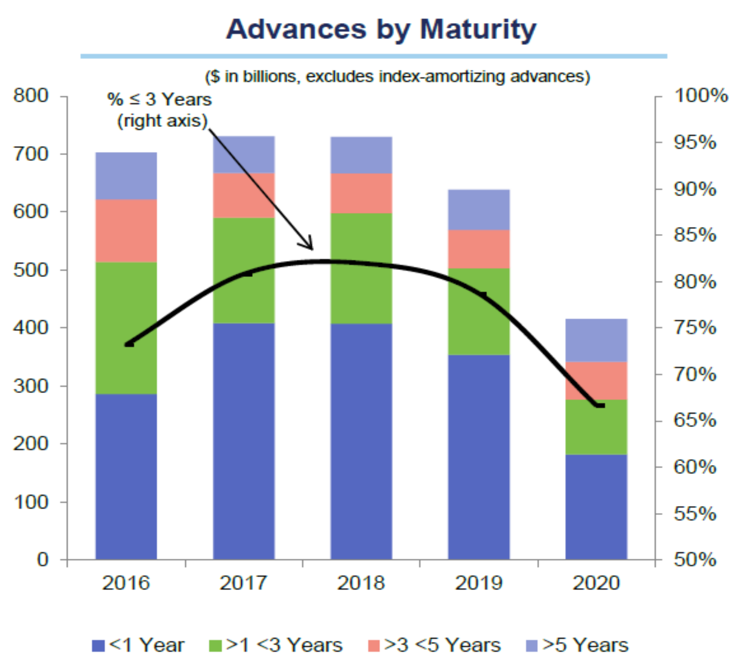
Table 7: U.S. Insurers' Year-End 2020 Exposure to FHLB Bonds by Maturity

Industry Type	1yr or Less	1yr to 5yrs	6yrs to 10yrs	11yrs to 20yrs	Greater than 20yrs
Life	6%	7%	17%	68%	3%
P/C	25%	21%	24%	24%	6%
Title	5%	20%	10%	65%	0%
Health	32%	54%	8%	3%	3%
Total	**16%**	**18%**	**18%**	**44%**	**4%**

The FHLB System – Advances, Pledged Collateral and Debt

As of year-end 2020, the FHLB system had about $820.7 billion in total assets, $422.6 billion of which represented advances, or lent funds, to all members; i.e., insurers and others. In comparison, at year-end 2019, the FHLB system had about $1.1 trillion in total assets, with $642 billion in advances. The year-over-year (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 67% had a term of three years or less at year-end 2020, representing a decline from almost 85% in 2018.

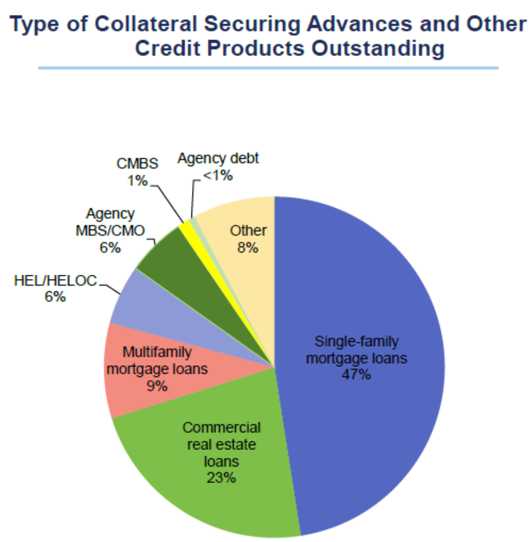
Chart 3:



Source: FHLB Investor Presentation, April 2021.

The majority of collateral posted by members to secure FHLB advances consisted of single-family residential mortgage loans at 47% of the total at year-end 2020 (see Chart 4), followed by commercial real estate loans at 23% of the total.

Chart 4:

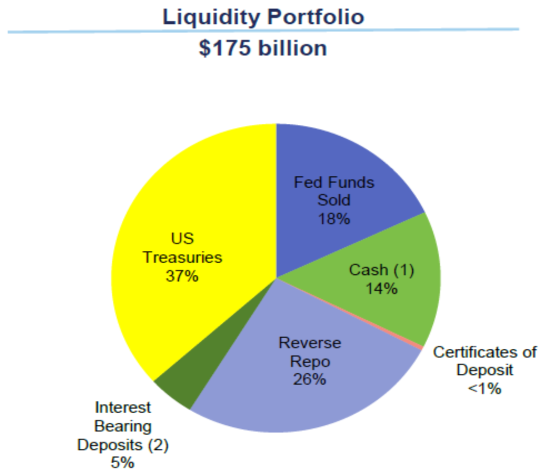


Source: FHLB Investor Presentation, April 2021.

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, 2020, the FHLB had about $750 billion in outstanding consolidated obligations according to the FHLB Combined Financial Report dated Dec. 31, 2020.

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 2020, the liquidity portfolio represented 21% of the FHLB's total assets, or $175 billion. The largest short-term asset was U.S. Treasuries at 37% of the total (see Chart 5).

Chart 5:



(1) Includes collected cash balances with commercial banks in return for services, and pass-through reserves deposited with Federal Reserve Banks on behalf of members
(2) May include FHLBank Members

Source: FHLB Investor Presentation, April 2021.

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.