

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q

- ☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended September 30, 2022
OR
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**
Commission file number 001-34057



AGNC INVESTMENT CORP.
(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

26-1701984
(I.R.S. Employer
Identification No.)

2 Bethesda Metro Center, 12th Floor
Bethesda, Maryland 20814
(Address of principal executive offices)
(301) 968-9315
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Exchange on Which Registered
Common Stock, par value \$0.01 per share	AGNC	The Nasdaq Global Select Market
Depository shares of 7.000% Series C Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock	AGNCN	The Nasdaq Global Select Market
Depository shares of 6.875% Series D Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock	AGNCM	The Nasdaq Global Select Market
Depository shares of 6.50% Series E Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock	AGNCO	The Nasdaq Global Select Market
Depository shares of 6.125% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock	AGNCP	The Nasdaq Global Select Market
Depository shares of 7.75% Series G Fixed-Rate Reset Cumulative Redeemable Preferred Stock	AGNCL	The Nasdaq Global Select Market

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller Reporting Company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares of the issuer's common stock, \$0.01 par value, outstanding as of October 31, 2022 was 571,621,541.

AGNC INVESTMENT CORP.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

AGNC INVESTMENT CORP. CONSOLIDATED BALANCE SHEETS (in millions, except per share data)

	September 30, 2022	December 31, 2021
	(Unaudited)	
Assets:		
Agency securities, at fair value (including pledged securities of \$37,886 and \$47,601, respectively)	\$ 41,740	\$ 52,396
Agency securities transferred to consolidated variable interest entities, at fair value (pledged securities)	149	208
Credit risk transfer securities, at fair value (including pledged securities of \$815 and \$510, respectively)	860	974
Non-Agency securities, at fair value (including pledged securities of \$775 and \$571, respectively)	869	843
U.S. Treasury securities, at fair value (including pledged securities of \$1,213 and \$471, respectively)	1,213	471
Cash and cash equivalents	976	998
Restricted cash	2,186	527
Derivative assets, at fair value	851	317
Receivable for investment securities sold (including pledged securities of \$1,163 and \$0, respectively)	1,169	—
Receivable under reverse repurchase agreements	7,577	10,475
Goodwill	526	526
Other assets	408	414
Total assets	<u>\$ 58,524</u>	<u>\$ 68,149</u>
Liabilities:		
Repurchase agreements	\$ 40,306	\$ 47,381
Debt of consolidated variable interest entities, at fair value	98	126
Payable for investment securities purchased	1,279	80
Derivative liabilities, at fair value	1,221	86
Dividends payable	92	88
Obligation to return securities borrowed under reverse repurchase agreements, at fair value	7,469	9,697
Other liabilities	837	400
Total liabilities	<u>51,302</u>	<u>57,858</u>
Stockholders' equity:		
Preferred Stock - aggregate liquidation preference of \$1,688 and \$1,538	1,634	1,489
Common stock - \$0.01 par value; 1,500 shares authorized; 551.3 and 522.2 shares issued and outstanding, respectively	6	5
Additional paid-in capital	13,999	13,710
Retained deficit	(7,610)	(5,214)
Accumulated other comprehensive income	(807)	301
Total stockholders' equity	<u>7,222</u>	<u>10,291</u>
Total liabilities and stockholders' equity	<u>\$ 58,524</u>	<u>\$ 68,149</u>

See accompanying notes to consolidated financial statements.

AGNC INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited)
(in millions, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Interest income:				
Interest income	\$ 373	\$ 293	\$ 1,243	\$ 1,099
Interest expense	196	14	303	60
Net interest income	177	279	940	1,039
Other gain (loss), net:				
Gain (loss) on sale of investment securities, net	(560)	(5)	(1,848)	7
Unrealized loss on investment securities measured at fair value through net income, net	(1,738)	(141)	(5,257)	(1,124)
Gain on derivative instruments and other securities, net	1,474	101	4,474	922
Total other loss, net:	(824)	(45)	(2,631)	(195)
Expenses:				
Compensation and benefits	11	14	36	42
Other operating expense	8	8	24	26
Total operating expense	19	22	60	68
Net income (loss)	(666)	212	(1,751)	776
Dividends on preferred stock	26	25	76	75
Net income (loss) available (attributable) to common stockholders	\$ (692)	\$ 187	\$ (1,827)	\$ 701
Net income (loss)	\$ (666)	\$ 212	\$ (1,751)	\$ 776
Unrealized gain (loss) on investment securities measured at fair value through other comprehensive income (loss), net	(372)	6	(1,108)	(308)
Comprehensive income (loss)	(1,038)	218	(2,859)	468
Dividends on preferred stock	26	25	76	75
Comprehensive income (loss) available (attributable) to common stockholders	\$ (1,064)	\$ 193	\$ (2,935)	\$ 393
Weighted average number of common shares outstanding - basic	528.7	526.7	526.4	529.0
Weighted average number of common shares outstanding - diluted	528.7	528.6	526.4	530.8
Net income (loss) per common share - basic	\$ (1.31)	\$ 0.36	\$ (3.47)	\$ 1.33
Net income (loss) per common share - diluted	\$ (1.31)	\$ 0.35	\$ (3.47)	\$ 1.32
Dividends declared per common share	\$ 0.36	\$ 0.36	\$ 1.08	\$ 1.08

See accompanying notes to consolidated financial statements.

AGNC INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)
(in millions)

	Preferred Stock	Common Stock		Additional Paid-in Capital	Retained Deficit	Accumulated Other Comprehensive Income (Loss)	Total
		Shares	Amount				
Balance, June 30, 2021	\$ 1,489	524.9	\$ 5	\$ 13,741	\$ (4,972)	\$ 405	\$ 10,668
Net income	—	—	—	—	212	—	212
Other comprehensive income:							
Unrealized gain on available-for-sale securities, net	—	—	—	—	—	6	6
Stock-based compensation, net	—	—	—	6	—	—	6
Preferred dividends declared	—	—	—	—	(25)	—	(25)
Common dividends declared	—	—	—	—	(188)	—	(188)
Balance, September 30, 2021	<u>\$ 1,489</u>	<u>524.9</u>	<u>\$ 5</u>	<u>\$ 13,747</u>	<u>\$ (4,973)</u>	<u>\$ 411</u>	<u>\$ 10,679</u>
Balance, June 30, 2022	\$ 1,489	522.7	\$ 5	\$ 13,707	\$ (6,726)	\$ (435)	\$ 8,040
Net loss	—	—	—	—	(666)	—	(666)
Other comprehensive loss:							
Unrealized loss on available-for-sale securities, net	—	—	—	—	—	(372)	(372)
Stock-based compensation, net	—	—	—	4	—	—	4
Issuance of preferred stock, net of offering cost	145	—	—	—	—	—	145
Issuance of common stock, net of offering cost	—	28.6	1	288	—	—	289
Preferred dividends declared	—	—	—	—	(26)	—	(26)
Common dividends declared	—	—	—	—	(192)	—	(192)
Balance, September 30, 2022	<u>\$ 1,634</u>	<u>551.3</u>	<u>\$ 6</u>	<u>\$ 13,999</u>	<u>\$ (7,610)</u>	<u>\$ (807)</u>	<u>\$ 7,222</u>
Balance, December 31, 2020	\$ 1,489	539.5	\$ 5	\$ 13,972	\$ (5,106)	\$ 719	\$ 11,079
Net income	—	—	—	—	776	—	776
Other comprehensive loss:							
Unrealized loss on available-for-sale securities, net	—	—	—	—	—	(308)	(308)
Stock-based compensation, net	—	0.4	—	14	—	—	14
Repurchase of common stock	—	(15.0)	—	(239)	—	—	(239)
Preferred dividends declared	—	—	—	—	(75)	—	(75)
Common dividends declared	—	—	—	—	(568)	—	(568)
Balance, September 30, 2021	<u>\$ 1,489</u>	<u>524.9</u>	<u>\$ 5</u>	<u>\$ 13,747</u>	<u>\$ (4,973)</u>	<u>\$ 411</u>	<u>\$ 10,679</u>
Balance, December 31, 2021	\$ 1,489	522.2	\$ 5	\$ 13,710	\$ (5,214)	\$ 301	\$ 10,291
Net loss	—	—	—	—	(1,751)	—	(1,751)
Other comprehensive loss:							
Unrealized loss on available-for-sale securities, net	—	—	—	—	—	(1,108)	(1,108)
Stock-based compensation, net	—	1.1	—	2	—	—	2
Issuance of preferred stock, net of offering cost	145	—	—	—	—	—	145
Issuance of common stock, net of offering cost	—	32.7	1	338	—	—	339
Repurchase of common stock	—	(4.7)	—	(51)	—	—	(51)
Preferred dividends declared	—	—	—	—	(76)	—	(76)
Common dividends declared	—	—	—	—	(569)	—	(569)
Balance, September 30, 2022	<u>\$ 1,634</u>	<u>551.3</u>	<u>\$ 6</u>	<u>\$ 13,999</u>	<u>\$ (7,610)</u>	<u>\$ (807)</u>	<u>\$ 7,222</u>

See accompanying notes to consolidated financial statements.

AGNC INVESTMENT CORP.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(in millions)

	Nine Months Ended September 30,	
	2022	2021
Operating activities:		
Net income (loss)	\$ (1,751)	\$ 776
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Amortization of premiums and discounts on mortgage-backed securities, net	(42)	231
Stock-based compensation, net	2	14
(Gain) loss on sale of investment securities, net	1,848	(7)
Unrealized loss on investment securities measured at fair value through net income, net	5,257	1,124
Gain on derivative instruments and other securities, net	(4,474)	(922)
Increase in other assets	(59)	(33)
Increase (decrease) in other liabilities	138	(19)
Net cash provided by operating activities	919	1,164
Investing activities:		
Purchases of Agency mortgage-backed securities	(20,847)	(34,575)
Purchases of credit risk transfer and non-Agency securities	(1,132)	(1,405)
Proceeds from sale of Agency mortgage-backed securities	18,100	27,713
Proceeds from sale of credit risk transfer and non-Agency securities	841	994
Principal collections on Agency mortgage-backed securities	5,514	12,167
Principal collections on credit risk transfer and non-Agency securities	186	73
Payments on U.S. Treasury securities	(17,946)	(18,560)
Proceeds from U.S. Treasury securities	16,584	15,261
Net proceeds from reverse repurchase agreements	2,966	2,129
Net proceeds from derivative instruments	3,754	918
Net cash provided by investing activities	8,020	4,715
Financing activities:		
Proceeds from repurchase arrangements	1,749,235	1,650,800
Payments on repurchase agreements	(1,756,310)	(1,656,634)
Payments on debt of consolidated variable interest entities	(19)	(39)
Net proceeds from preferred stock issuance	145	—
Net proceeds from common stock issuances	339	—
Payments for common stock repurchases	(51)	(239)
Cash dividends paid	(641)	(646)
Net cash used in financing activities	(7,302)	(6,758)
Net change in cash, cash equivalents and restricted cash	1,637	(879)
Cash, cash equivalents and restricted cash at beginning of period	1,525	2,324
Cash, cash equivalents and restricted cash at end of period	<u>\$ 3,162</u>	<u>\$ 1,445</u>

See accompanying notes to consolidated financial statements.

AGNC INVESTMENT CORP.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 1. Organization

AGNC Investment Corp. (referred throughout this report as the "Company," "we," "us" and "our") was organized in Delaware on January 7, 2008 and commenced operations on May 20, 2008 following the completion of our initial public offering. Our common stock is traded on The Nasdaq Global Select Market under the symbol "AGNC."

We are a leading provider of private capital to the U.S. housing market, enhancing liquidity in the residential real estate mortgage markets and, in turn, facilitating home ownership in the U.S. We invest primarily in Agency residential mortgage-backed securities ("Agency RMBS") for which the principal and interest payments are guaranteed by a U.S. Government-sponsored enterprise ("GSE") or a U.S. Government agency. We also invest in other types of mortgage and mortgage-related securities, such as credit risk transfer ("CRT") securities and non-Agency residential and commercial mortgage-backed securities ("non-Agency RMBS" and "CMBS," respectively), where repayment of principal and interest is not guaranteed by a GSE or U.S. Government agency, and other assets related to the housing, mortgage or real estate markets. We fund our investments primarily through collateralized borrowings structured as repurchase agreements.

We operate to qualify to be taxed as a real estate investment trust ("REIT") under the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"). As a REIT, we are required to distribute annually 90% of our taxable income, and we will generally not be subject to U.S. federal or state corporate income tax to the extent that we distribute our annual taxable income to our stockholders on a timely basis. It is our intention to distribute 100% of our taxable income within the time limits prescribed by the Internal Revenue Code, which may extend into the subsequent tax year.

We are internally managed with the principal objective of providing our stockholders with favorable long-term returns on a risk-adjusted basis through attractive monthly dividends. We generate income from the interest earned on our investments, net of associated borrowing and hedging costs, and net realized gains and losses on our investment and hedging activities.

Note 2. Summary of Significant Accounting Policies

Basis of Presentation

Our accompanying consolidated financial statements and related notes have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and pursuant to the requirements for reporting on Form 10-Q and Article 10 of Regulation S-X. The accompanying consolidated financial statements and related notes are unaudited and include the accounts of all our wholly-owned subsidiaries and variable interest entities for which we are the primary beneficiary. Significant intercompany accounts and transactions have been eliminated. The accompanying consolidated financial statements and related notes should be read in conjunction with the audited consolidated financial statements included in our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of income and expenses during the reporting period. In the opinion of management, all adjustments, consisting solely of normal recurring accruals, necessary for the fair presentation of consolidated financial statements for the interim period have been included. The current period's results of operations are not necessarily indicative of results that ultimately may be achieved for the year.

Investment Securities

Agency RMBS consist of residential mortgage pass-through securities and collateralized mortgage obligations ("CMOs") guaranteed by the Federal National Mortgage Association ("Fannie Mae"), Federal Home Loan Mortgage Corporation ("Freddie Mac," and together with Fannie Mae, the "GSEs") or the Government National Mortgage Association ("Ginnie Mae").

CRT securities are risk sharing instruments issued by the GSEs, and similarly structured transactions issued by third-party market participants, that synthetically transfer a portion of the risk associated with credit losses within pools of conventional residential mortgage loans from the GSEs and/or third parties to private investors. Unlike Agency RMBS, full repayment of the original principal balance of CRT securities is not guaranteed by a GSE or U.S. Government agency; rather, "credit risk transfer" is achieved by writing down the outstanding principal balance of the CRT securities if credit losses on a related pool of loans exceed certain thresholds. By reducing the amount that they are obligated to repay to holders of CRT securities, the GSEs and/or other third parties offset credit losses on the related loans.

Non-Agency RMBS and CMBS (together, "Non-Agency MBS") are backed by residential and commercial mortgage loans, respectively, packaged and securitized by a private institution, such as a commercial bank. Non-Agency MBS typically benefit from credit enhancements derived from structural elements, such as subordination, over-collateralization or insurance, but nonetheless carry a higher level of credit exposure than Agency RMBS.

All of our securities are reported at fair value on our consolidated balance sheet. Accounting Standards Codification ("ASC") Topic 320, *Investments—Debt and Equity Securities*, requires that at the time of purchase, we designate a security as held-to-maturity, available-for-sale or trading, depending on our ability and intent to hold such security to maturity. Alternatively, we may elect the fair value option of accounting for securities pursuant to ASC Topic 825, *Financial Instruments*. Prior to fiscal year 2017, we primarily designated our investment securities as available-for-sale. On January 1, 2017, we began electing the fair value option of accounting for all investment securities newly acquired after such date. Unrealized gains and losses on securities classified as available-for-sale are reported in accumulated other comprehensive income ("OCI"), whereas unrealized gains and losses on securities for which we elected the fair value option, or are classified as trading, are reported in net income through other gain (loss). Upon the sale of a security designated as available-for-sale, we determine the cost of the security and the amount of unrealized gain or loss to reclassify out of accumulated OCI into earnings based on the specific identification method. In our view, the election of the fair value option simplifies the accounting for investment securities and more appropriately reflects the results of our operations for a reporting period by presenting the fair value changes for these assets in a manner consistent with the presentation and timing of the fair value changes for our derivative instruments.

We generally recognize gains or losses through net income on available-for-sale securities only if the security is sold; however, if the fair value of a security declines below its amortized cost and we determine that it is more likely than not that we will incur a realized loss on the security when we sell the asset, we will recognize the difference between the amortized cost and the fair value in net income as a component of other gain (loss). Since all of our available-for-sale designated securities consist of Agency RMBS, we do not have an allowance for credit losses. We have not recognized impairment losses on our available-for-sale securities through net income for the periods presented in our consolidated financial statements.

Interest Income

Interest income is accrued based on the outstanding principal amount of the investment securities and their contractual terms. Premiums or discounts associated with the purchase of Agency RMBS and non-Agency MBS of high credit quality are amortized or accreted into interest income, respectively, over the projected lives of the securities, including contractual payments and estimated prepayments, using the effective interest method in accordance with ASC Subtopic 310-20, *Receivables—Nonrefundable Fees and Other Costs*.

We estimate long-term prepayment speeds of our mortgage securities using a third-party service and market data. The third-party service provider estimates prepayment speeds using models that incorporate the forward yield curve, primary to secondary mortgage rate spreads, current mortgage rates, mortgage rates of the outstanding loans, age and size of the outstanding loans, loan-to-value ratios, interest rate volatility and other factors. We review the prepayment speeds estimated by the third-party service for reasonableness with consideration given to both historical prepayment speeds and current market conditions. If based on our assessment, we believe that the third-party model does not fully reflect our expectations of the current prepayment landscape, such as during periods of elevated market uncertainty or unique market conditions, we may make adjustments to the models. We review our actual and anticipated prepayment experience on at least a quarterly basis and effective yields are recalculated when differences arise between (i) our previous estimate of future prepayments and (ii) actual prepayments to date and our current estimate of future prepayments. We are required to record an adjustment in the current period to premium amortization / discount accretion for the cumulative effect of the difference in the effective yields as if the recalculated yield had been in place as of the security's acquisition date through the reporting date.

At the time we purchase CRT securities and non-Agency MBS that are not of high credit quality, we determine an effective yield based on our estimate of the timing and amount of future cash flows and our cost basis. Our initial cash flow estimates for these investments are based on our observations of current information and events and include assumptions related to interest rates, prepayment rates, collateral call provisions, and the impact of default and severity rates on the timing and amount of credit losses. On at least a quarterly basis, we review the estimated cash flows and make appropriate adjustments based on inputs and analysis received from external sources, internal models, and our judgment regarding such inputs and other factors. Any resulting changes in effective yield are recognized prospectively based on the current amortized cost of the investment adjusted for credit impairments, if any.

Repurchase Agreements

We finance the acquisition of securities for our investment portfolio primarily through repurchase agreements with financial institutions. Repurchase arrangements involve the sale and a simultaneous agreement to repurchase the transferred

assets at a future date. We maintain a beneficial interest in the specific securities pledged during the term of each repurchase arrangement and we receive the related principal and interest payments. Pursuant to ASC Topic 860, *Transfers and Servicing*, we account for repurchase agreements as collateralized financing transactions, which are carried at their contractual amounts (cost), plus accrued interest. Our repurchase agreements typically have maturities of less than one year.

Reverse Repurchase Agreements and Obligation to Return Securities Borrowed under Reverse Repurchase Agreements

We borrow securities to cover short sales of U.S. Treasury securities through reverse repurchase transactions under our master repurchase agreements (see *Derivative Instruments* below). We account for these as securities borrowing transactions and recognize an obligation to return the borrowed securities at fair value on the balance sheet based on the value of the underlying borrowed securities as of the reporting date. We may also enter into reverse repurchase agreements to earn a yield on excess cash balances. The securities received as collateral in connection with our reverse repurchase agreements mitigate our credit risk exposure to counterparties. Our reverse repurchase agreements typically have maturities of 30 days or less.

Derivative Instruments

We use a variety of derivative instruments to hedge a portion of our exposure to market risks, including interest rate, prepayment, extension and liquidity risks. The objective of our risk management strategy is to reduce fluctuations in net book value over a range of interest rate scenarios. In particular, we attempt to mitigate the risk of the cost of our variable rate liabilities increasing during a period of rising interest rates. The primary instruments that we use are interest rate swaps, options to enter into interest rate swaps ("swaptions"), U.S. Treasury securities and U.S. Treasury futures contracts. We also use forward contracts in the Agency RMBS "to-be-announced" market, or TBA securities, to invest in and finance Agency securities and to periodically reduce our exposure to Agency RMBS.

We account for derivative instruments in accordance with ASC Topic 815, *Derivatives and Hedging* ("ASC 815"). ASC 815 requires an entity to recognize all derivatives as either assets or liabilities in our accompanying consolidated balance sheets and to measure those instruments at fair value. None of our derivative instruments have been designated as hedging instruments for accounting purposes under the provisions of ASC 815, consequently changes in the fair value of our derivative instruments are reported in gain (loss) on derivative instruments and other securities, net in our consolidated statements of comprehensive income.

Our derivative agreements generally contain provisions that allow for netting or setting off derivative assets and liabilities with the counterparty; however, we report related assets and liabilities on a gross basis in our consolidated balance sheets. Derivative instruments in a gain position are reported as derivative assets at fair value and derivative instruments in a loss position are reported as derivative liabilities at fair value in our consolidated balance sheets. Changes in fair value of derivative instruments and periodic settlements related to our derivative instruments are recorded in gain (loss) on derivative instruments and other securities, net in our consolidated statements of comprehensive income. Cash receipts and payments related to derivative instruments are classified in our consolidated statements of cash flows according to the underlying nature or purpose of the derivative transaction, generally in the investing section.

Interest rate swap agreements

We use interest rate swaps to economically hedge the variable cash flows associated with our borrowings made under repurchase agreements. Under our interest rate swap agreements, we typically pay a fixed rate and receive a floating rate ("payer swaps") based on a short-term benchmark rate, such as the Secured Overnight Financing Rate ("SOFR") and Overnight Index Swap Rate ("OIS"). Our interest rate swaps typically have terms from one to 10 years. Our interest rate swaps are centrally cleared through a registered commodities exchange. The clearing exchange requires that we post an "initial margin" amount determined by the exchange. The initial margin amount is intended to be set at a level sufficient to protect the exchange from the interest rate swap's maximum estimated single-day price movement and is subject to adjustment based on changes in market volatility and other factors. We also exchange daily settlements of "variation margin" based upon changes in fair value, as measured by the exchange. Pursuant to rules governing central clearing activities, we recognize variation margin settlements as a direct reduction of the carrying value of the interest rate swap asset or liability.

Interest rate swaptions

We purchase interest rate swaptions to help mitigate the potential impact of larger, more rapid changes in interest rates on the performance of our investment portfolio. Interest rate swaptions provide us the option to enter into an interest rate swap agreement for a predetermined notional amount, stated term and pay and receive interest rates in the future. Our interest rate swaption agreements are not subject to central clearing. The difference between the premium paid and the fair value of the swaption is reported in gain (loss) on derivative instruments and other securities, net in our consolidated statements of comprehensive income. If a swaption expires unexercised, the realized loss on the swaption would be equal to the premium

paid. If we sell or exercise a swaption, the realized gain or loss on the swaption would be equal to the difference between the cash or the fair value of the underlying interest rate swap and the premium paid.

TBA securities

A TBA security is a forward contract for the purchase or sale of Agency RMBS at a predetermined price, face amount, issuer, coupon and stated maturity on an agreed-upon future date. The specific Agency RMBS to be delivered into the contract are not known until shortly before the settlement date. We may choose, prior to settlement, to move the settlement of these securities out to a later date by entering into an offsetting TBA position, net settling the offsetting positions for cash, and simultaneously purchasing or selling a similar TBA contract for a later settlement date (together referred to as a "dollar roll transaction"). The Agency securities purchased or sold for a forward settlement date are typically priced at a discount to equivalent securities settling in the current month. This difference, or "price drop," is the economic equivalent of interest income on the underlying Agency securities, less an implied funding cost, over the forward settlement period (referred to as "dollar roll income"). Consequently, forward purchases of Agency securities and dollar roll transactions represent a form of off-balance sheet financing.

We account for TBA contracts as derivative instruments since either the TBA contracts do not settle in the shortest period of time possible or we cannot assert that it is probable at inception and throughout the term of the TBA contract that we will physically settle the contract on the settlement date. We account for TBA dollar roll transactions as a series of derivative transactions.

U.S. Treasury securities

We use U.S. Treasury securities and U.S. Treasury futures contracts to mitigate the potential impact of changes in interest rates on the performance of our portfolio. We borrow U.S. Treasury securities under reverse repurchase agreements to cover short sales of U.S. Treasury securities. We account for these as securities borrowing transactions and recognize an obligation to return the borrowed securities at fair value on our accompanying consolidated balance sheets based on the value of the underlying U.S. Treasury security as of the reporting date. Gains and losses associated with U.S. Treasury securities and U.S. Treasury futures contracts are recognized in gain (loss) on derivative instruments and other securities, net in our consolidated statements of comprehensive income.

Fair Value Measurements

We determine the fair value of financial instruments based on our estimate of the price that would be received to sell the asset or paid to transfer the liability in an orderly transaction between market participants at the measurement date. We utilize a three-level valuation hierarchy for disclosure of fair value measurements based upon the transparency of inputs to the valuation of the instrument as of the measurement date. We categorize a financial instrument within the hierarchy based upon the lowest level of input that is significant to the fair value measurement.

The three levels of valuation hierarchy are defined as follows:

- Level 1 Inputs —Quoted prices (unadjusted) for identical unrestricted assets and liabilities in active markets that are accessible at the measurement date.
- Level 2 Inputs —Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.
- Level 3 Inputs —Instruments with primarily unobservable market data that cannot be corroborated.

The majority of our financial instruments are classified as Level 2 inputs. The availability of observable inputs can be affected by a wide variety of factors, including the type of instrument, whether the instrument is new and not yet established in the marketplace and other characteristics particular to the instrument. We typically obtain price estimates from multiple third-party pricing sources, such as pricing services and dealers, or, if applicable, the registered clearing exchange. We make inquiries of third-party pricing sources to understand the significant inputs and assumptions they used to determine their prices and that they are derived from orderly transactions, particularly during periods of elevated market turbulence and reduced market liquidity. We also review third-party price estimates and perform procedures to validate their reasonableness, including an analysis of the range of estimates for each position, comparison to recent trade activity for similar securities and for consistency with market conditions observed as of the measurement date. While we do not adjust prices we obtain from pricing sources, we will exclude prices for securities from our estimation of fair value if we determine based on our validation procedures and our market knowledge and expertise that the price is significantly different from what observable market data

would indicate and we cannot obtain an understanding from the third-party source as to the significant inputs used to determine the price.

The following is a description of the valuation methodologies used for financial instruments measured at fair value on a recurring basis classified as Level 2 inputs. These instruments trade in active markets such that participants transact with sufficient frequency and volume to provide transparent pricing information on an ongoing basis. The liquidity of these markets and the similarity of our instruments to those actively traded enable our pricing sources and us to utilize the observed quoted prices as a basis for formulating fair value measurements.

Investment securities - are valued based on prices obtained from multiple third-party pricing sources. The pricing sources utilize various valuation approaches, including market and income approaches. For Agency RMBS, the pricing sources primarily utilize a matrix pricing technique that interpolates the estimated fair value based on observed quoted prices for forward contracts in the Agency RMBS "to-be-announced" market ("TBA securities") of the same coupon, maturity and issuer, adjusted to reflect the specific characteristics of the pool of mortgages underlying the Agency security, such as maximum loan balance, loan vintage, loan-to-value ratio, geography and other characteristics as may be appropriate. For other investment securities, the pricing sources primarily utilize discounted cash flow model-derived pricing techniques to estimate the fair value. Such models incorporate market-based discount rate assumptions based on observable inputs such as recent trading activity, credit data, volatility statistics, benchmark interest rate curves, spread measurements to benchmark curves and other market data that are current as of the measurement date and may include certain unobservable inputs, such as assumptions of future levels of prepayment, defaults and loss severities.

TBA securities - are valued using prices obtained from third-party pricing sources based on pricing models that reference recent trading activity.

Interest rate swaps - are valued using the daily settlement price, or fair value, determined by the clearing exchange based on a pricing model that references observable market inputs, including current benchmark rates and the forward yield curve.

Interest rate swaptions - are valued using prices obtained from the counterparty and other third-party pricing models. The pricing models are based on the value of the future interest rate swap that we have the option to enter into as well as the remaining length of time that we have to exercise the option based on observable market inputs, adjusted for non-performance risk, if any.

U.S. Treasury securities and futures are valued based on quoted prices for identical instruments in active markets and are classified as Level 1 assets. None of our financial instruments are classified as Level 3 inputs.

Recent Accounting Pronouncements

We consider the applicability and impact of all ASUs issued by the FASB. There are no unadopted ASUs that are expected to have a significant impact on our consolidated financial statements when adopted or other recently adopted ASUs that had a significant impact on our consolidated financial statements upon adoption.

Note 3. Investment Securities

As of September 30, 2022 and December 31, 2021, our investment portfolio consisted of: \$43.6 billion and \$54.4 billion investment securities, at fair value, respectively; \$17.9 billion and \$27.1 billion net TBA securities, at fair value, respectively; and, as of December 31, 2021, \$0.4 billion forward settling non-Agency securities, at fair value. Our net TBA position and forward settling non-Agency securities are reported at their net carrying value totaling \$(1.2) billion and \$(44) million as of September 30, 2022 and December 31, 2021, respectively, in derivative assets / (liabilities) on our accompanying consolidated balance sheets. The net carrying value of our TBA position and forward settling non-Agency securities represents the difference between the fair value of the underlying security and the cost basis or the forward price to be paid or received for the underlying security.

As of September 30, 2022 and December 31, 2021, our investment securities had a net unamortized premium balance of \$1.5 billion and \$1.8 billion, respectively.

The following tables summarize our investment securities as of September 30, 2022 and December 31, 2021, excluding TBA and forward settling securities, (dollars in millions). Details of our TBA and forward settling securities as of each of the respective dates are included in Note 5.

Investment Securities	September 30, 2022		December 31, 2021	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Agency RMBS:				
Fixed rate	\$ 47,027	\$ 41,578	\$ 51,546	\$ 52,289
Adjustable rate	129	127	45	47
CMO	144	136	182	188
Interest-only and principal-only strips	56	48	70	80
Total Agency RMBS	47,356	41,889	51,843	52,604
Non-Agency RMBS ¹	254	222	325	329
CMBS	651	621	505	514
CRT securities	901	860	955	974
Total investment securities	\$ 49,162	\$ 43,592	\$ 53,628	\$ 54,421

Investment Securities	September 30, 2022						
	Agency RMBS			Non-Agency ¹			Total
	Fannie Mae	Freddie Mac	Ginnie Mae	RMBS	CMBS	CRT	
Available-for-sale securities:							
Par value	\$ 5,015	\$ 1,609	\$ 1	\$ —	\$ —	\$ —	\$ 6,625
Unamortized discount	(1)	—	—	—	—	—	(1)
Unamortized premium	296	99	—	—	—	—	395
Amortized cost	5,310	1,708	1	—	—	—	7,019
Gross unrealized gains	—	1	—	—	—	—	1
Gross unrealized losses	(606)	(202)	—	—	—	—	(808)
Total available-for-sale securities, at fair value	4,704	1,507	1	—	—	—	6,212
Securities remeasured at fair value through earnings:							
Par value	27,731	11,474	2	263	657	894	41,021
Unamortized discount	(127)	(21)	—	(12)	(10)	(7)	(177)
Unamortized premium	899	379	—	3	4	14	1,299
Amortized cost	28,503	11,832	2	254	651	901	42,143
Gross unrealized gains	—	—	—	—	1	4	5
Gross unrealized losses	(3,346)	(1,314)	—	(32)	(31)	(45)	(4,768)
Total securities remeasured at fair value through earnings	25,157	10,518	2	222	621	860	37,380
Total securities, at fair value	\$ 29,861	\$ 12,025	\$ 3	\$ 222	\$ 621	\$ 860	\$ 43,592
Weighted average coupon as of September 30, 2022	3.51 %	3.63 %	4.67 %	3.80 %	5.06 %	6.93 %	3.63 %
Weighted average yield as of September 30, 2022 ²	2.98 %	3.09 %	2.56 %	4.13 %	5.91 %	7.76 %	3.14 %

1. Amount excludes mortgage credit investment fund limited partnership interest totaling approximately \$27 million, as of September 30, 2022, reported in non-Agency securities on the accompanying consolidated balance sheets.
2. Incorporates a weighted average future constant prepayment rate assumption of 7.0% based on forward rates as of September 30, 2022.

	December 31, 2021						
	Agency RMBS			Non-Agency			
Investment Securities	Fannie Mae	Freddie Mac	Ginnie Mae	RMBS	CMBS	CRT	Total
Available-for-sale securities:							
Par value	\$ 6,345	\$ 2,111	\$ 2	\$ —	\$ —	\$ —	\$ 8,458
Unamortized discount	(3)	(1)	—	—	—	—	(4)
Unamortized premium	299	105	—	—	—	—	404
Amortized cost	6,641	2,215	2	—	—	—	8,858
Gross unrealized gains	234	67	—	—	—	—	301
Gross unrealized losses	—	—	—	—	—	—	—
Total available-for-sale securities, at fair value	6,875	2,282	2	—	—	—	9,159
Securities remeasured at fair value through earnings:							
Par value	27,952	13,680	3	327	508	950	43,420
Unamortized discount	(14)	(4)	—	(6)	(6)	(7)	(37)
Unamortized premium	924	444	—	4	3	12	1,387
Amortized cost	28,862	14,120	3	325	505	955	44,770
Gross unrealized gains	517	213	—	6	11	21	768
Gross unrealized losses	(181)	(89)	—	(2)	(2)	(2)	(276)
Total securities remeasured at fair value through earnings	29,198	14,244	3	329	514	974	45,262
Total securities, at fair value	\$ 36,073	\$ 16,526	\$ 5	\$ 329	\$ 514	\$ 974	\$ 54,421
Weighted average coupon as of December 31, 2021	3.09 %	2.98 %	4.69 %	3.33 %	3.60 %	3.74 %	3.08 %
Weighted average yield as of December 31, 2021 ¹	2.38 %	2.29 %	2.54 %	5.68 %	4.28 %	4.47 %	2.43 %

1. Incorporates a weighted average future constant prepayment rate assumption of 10.9% based on forward rates as of December 31, 2021.

As of September 30, 2022 and December 31, 2021, our investments in CRT and non-Agency securities had the following credit ratings (in millions):

CRT and Non-Agency Security Credit Ratings ¹	September 30, 2022			December 31, 2021		
	CRT	RMBS ²	CMBS	CRT	RMBS	CMBS
AAA	\$ —	\$ 129	\$ 190	\$ —	\$ 164	\$ 10
AA	—	2	97	—	21	111
A	6	14	52	17	28	45
BBB	81	31	81	75	51	85
BB	298	29	105	126	43	126
B	121	5	79	327	7	117
Not Rated	354	12	17	429	15	20
Total	\$ 860	\$ 222	\$ 621	\$ 974	\$ 329	\$ 514

1. Represents the lowest of Standard and Poor's ("S&P"), Moody's, Fitch, DBRS, Kroll Bond Rating Agency ("KBRA") and Morningstar credit ratings, stated in terms of the S&P equivalent rating as of each date.

2. RMBS excludes mortgage credit investment fund limited partnership interest totaling approximately \$27 million, as of September 30, 2022, reported in non-Agency securities on the accompanying consolidated balance sheets.

Our CRT securities reference the performance of loans underlying Agency RMBS issued by Fannie Mae or Freddie Mac, which were subject to their underwriting standards.

The actual maturities of our investment securities are generally shorter than their stated contractual maturities. The actual maturities of our Agency and high credit quality non-Agency RMBS are primarily affected by principal prepayments and to a lesser degree the contractual lives of the underlying mortgages and periodic contractual principal repayments. The actual maturities of our credit-oriented investments are primarily impacted by their contractual lives and default and loss recovery rates. As of September 30, 2022 and December 31, 2021, the weighted average expected constant prepayment rate ("CPR") over the remaining life of our Agency and high credit quality non-Agency RMBS investment portfolio was 7.0% and 10.9%, respectively. Our estimates can differ materially for different securities and thus our individual holdings have a wide range of projected CPRs. The following table summarizes our investments as of September 30, 2022 and December 31, 2021 according to their estimated weighted average life classification (dollars in millions):

Estimated Weighted Average Life of Investment Securities ¹	September 30, 2022				December 31, 2021			
	Fair Value	Amortized Cost	Weighted Average Coupon	Weighted Average Yield	Fair Value	Amortized Cost	Weighted Average Coupon	Weighted Average Yield
≤ 3 years	\$ 516	\$ 537	4.56%	4.37%	\$ 1,677	\$ 1,642	3.64%	3.69%
> 3 years and ≤ 5 years	2,641	2,838	4.18%	3.80%	11,214	10,868	3.97%	2.74%
> 5 years and ≤ 10 years	30,520	34,456	3.71%	3.07%	36,936	36,490	2.87%	2.32%
> 10 years	9,915	11,331	3.23%	3.14%	4,594	4,628	2.48%	2.09%
Total	<u>\$ 43,592</u>	<u>\$ 49,162</u>	<u>3.63%</u>	<u>3.14%</u>	<u>\$ 54,421</u>	<u>\$ 53,628</u>	<u>3.08%</u>	<u>2.43%</u>

1. Table excludes mortgage credit investment fund limited partnership interest totaling approximately \$27 million, as of September 30, 2022, reported in non-Agency securities on the accompanying consolidated balance sheets.

The following table presents the gross unrealized loss and fair values of securities classified as available-for-sale by length of time that such securities have been in a continuous unrealized loss position as of September 30, 2022 and December 31, 2021 (in millions):

Securities Classified as Available-for-Sale	Unrealized Loss Position For					
	Less than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
September 30, 2022	\$ 6,175	\$ (807)	\$ 5	\$ (1)	\$ 6,180	\$ (808)
December 31, 2021	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —

Gains and Losses on Sale of Investment Securities

The following table is a summary of our net gain (loss) from the sale of investment securities for the three and nine months ended September 30, 2022 and 2021 by investment classification of accounting (in millions):

Investment Securities	Three Months Ended September 30,					
	2022			2021		
	Available-for-Sale Securities ²	Fair Value Option Securities	Total	Available-for-Sale Securities ²	Fair Value Option Securities	Total
Investment securities sold, at cost	\$ 3	\$ (5,901)	\$ (5,898)	\$ (309)	\$ (9,285)	\$ (9,594)
Proceeds from investment securities sold ¹	(3)	5,341	5,338	313	9,276	9,589
Net gain (loss) on sale of investment securities	<u>\$ —</u>	<u>\$ (560)</u>	<u>\$ (560)</u>	<u>\$ 4</u>	<u>\$ (9)</u>	<u>\$ (5)</u>
Gross gain on sale of investment securities	\$ —	\$ 4	\$ 4	\$ 4	\$ 63	\$ 67
Gross loss on sale of investment securities	—	(564)	(564)	—	(72)	(72)
Net gain (loss) on sale of investment securities	<u>\$ —</u>	<u>\$ (560)</u>	<u>\$ (560)</u>	<u>\$ 4</u>	<u>\$ (9)</u>	<u>\$ (5)</u>

Investment Securities	Nine Months Ended September 30,					
	2022			2021		
	Available-for-Sale Securities ²	Fair Value Option Securities	Total	Available-for-Sale Securities ²	Fair Value Option Securities	Total
Investment securities sold, at cost	\$ (600)	\$ (21,358)	\$ (21,958)	\$ (4,953)	\$ (23,808)	\$ (28,761)
Proceeds from investment securities sold ¹	576	19,534	20,110	4,989	23,779	28,768
Net gain (loss) on sale of investment securities	<u>\$ (24)</u>	<u>\$ (1,824)</u>	<u>\$ (1,848)</u>	<u>\$ 36</u>	<u>\$ (29)</u>	<u>\$ 7</u>
Gross gain on sale of investment securities	\$ 2	\$ 8	\$ 10	\$ 36	\$ 160	\$ 196
Gross loss on sale of investment securities	(26)	(1,832)	(1,858)	—	(189)	(189)
Net gain (loss) on sale of investment securities	<u>\$ (24)</u>	<u>\$ (1,824)</u>	<u>\$ (1,848)</u>	<u>\$ 36</u>	<u>\$ (29)</u>	<u>\$ 7</u>

1. Proceeds include cash received during the period, plus receivable for investment securities sold during the period as of period end.
2. See Note 10 for a summary of changes in accumulated OCI.

Note 4. Repurchase Agreements and Reverse Repurchase Agreements

Repurchase Agreements

We pledge our securities as collateral under our borrowings structured as repurchase agreements with financial institutions. Amounts available to be borrowed are dependent upon the fair value of the securities pledged as collateral, which fluctuates with changes in interest rates, type of security and liquidity conditions within the banking, mortgage finance and real estate industries. If the fair value of our pledged securities declines, lenders will typically require us to post additional collateral or pay down borrowings to re-establish agreed upon collateral requirements, referred to as "margin calls." Similarly, if the fair value of our pledged securities increases, lenders may release collateral back to us. As of September 30, 2022, we had met all margin call requirements. For additional information regarding our pledged assets, please refer to Note 7.

As of September 30, 2022 and December 31, 2021, we had \$40.3 billion and \$47.4 billion, respectively, of repurchase agreements outstanding used to fund our investment portfolio and temporary holdings of U.S. Treasury securities. The terms and conditions of our repurchase agreements are typically negotiated on a transaction-by-transaction basis. Our repurchase agreements with original maturities greater than one year may have floating interest rates based on an index plus or minus a fixed spread. The following table summarizes our borrowings under repurchase agreements by their remaining maturities as of September 30, 2022 and December 31, 2021 (dollars in millions):

Remaining Maturity	September 30, 2022			December 31, 2021		
	Repurchase Agreements	Weighted Average Interest Rate	Weighted Average Days to Maturity	Repurchase Agreements	Weighted Average Interest Rate	Weighted Average Days to Maturity
Agency repo:						
≤ 1 month	\$ 21,182	3.08 %	11	\$ 23,747	0.14 %	13
> 1 to ≤ 3 months	16,457	2.67 %	47	14,781	0.15 %	61
> 3 to ≤ 6 months	—	— %	—	4,576	0.19 %	154
> 6 to ≤ 9 months	1,432	1.42 %	233	2,445	0.21 %	264
> 9 to ≤ 12 months	—	— %	—	1,362	0.23 %	307
Total Agency repo	39,071	2.85 %	35	46,911	0.15 %	63
U.S. Treasury repo:						
≤ 1 month	1,235	2.68 %	3	470	(0.05)%	4
Total	\$ 40,306	2.84 %	34	\$ 47,381	0.15 %	63

As of September 30, 2022 and December 31, 2021, \$10.9 billion and \$0.8 billion, respectively, of our Agency repurchase agreements had an overnight maturity of one business day and none of our repurchase agreements were due on demand. As of September 30, 2022, we had \$2.8 billion of forward commitments to enter into repurchase agreements with a weighted average forward start date of 3 days and a weighted average interest rate of 3.10%. As of December 31, 2021, we had \$9.8 billion of forward commitments to enter into repurchase agreements, with a weighted average forward start date of 3 days and a weighted average interest rate of 0.08%. As of September 30, 2022 and December 31, 2021, 50% and 43%, respectively, of our repurchase agreement funding was sourced through our wholly-owned captive broker-dealer subsidiary, Bethesda Securities, LLC ("BES"). Amounts sourced through BES include funding from the General Collateral Finance Repo service ("GCF Repo") offered by the Fixed Income Clearing Corporation ("FICC"), which totaled 48% and 42% of our repurchase agreement funding outstanding as of September 30, 2022 and December 31, 2021, respectively.

Reverse Repurchase Agreements

As of September 30, 2022 and December 31, 2021, we had \$7.6 billion and \$10.5 billion, respectively, of reverse repurchase agreements outstanding used primarily to borrow securities to cover short sales of U.S. Treasury securities, for which we had associated obligations to return borrowed securities at fair value of \$7.4 billion and \$9.7 billion, respectively. As of September 30, 2022 and December 31, 2021, \$1.7 billion and \$3.0 billion, respectively, of our reverse repurchase agreements were with the FICC sourced through BES.

Note 5. Derivative and Other Hedging Instruments

We hedge a portion of our interest rate risk primarily utilizing interest rate swaps, interest rate swaptions, U.S. Treasury securities and U.S. Treasury futures contracts. We utilize TBA securities primarily as a means of investing in the Agency

securities market. For additional information regarding our derivative instruments and our overall risk management strategy, please refer to the discussion of derivative and other hedging instruments in Note 2.

Derivative and Other Hedging Instrument Assets (Liabilities), at Fair Value

The table below summarizes fair value information about our derivative and other hedging instrument assets/(liabilities) as of September 30, 2022 and December 31, 2021 (in millions):

Derivative and Other Hedging Instruments	Balance Sheet Location	September 30, 2022	December 31, 2021
Interest rate swaps ¹	Derivative assets, at fair value	\$ 73	\$ —
Swaptions	Derivative assets, at fair value	357	290
TBA and forward settling non-Agency securities	Derivative assets, at fair value	—	27
U.S. Treasury futures - short	Derivative assets, at fair value	421	—
Total derivative assets, at fair value		<u>\$ 851</u>	<u>\$ 317</u>
TBA and forward settling non-Agency securities	Derivative liabilities, at fair value	(1,214)	(71)
U.S. Treasury futures - short	Derivative liabilities, at fair value	(7)	(15)
Credit default swaps ¹	Derivative liabilities, at fair value	—	—
Total derivative liabilities, at fair value		<u>\$ (1,221)</u>	<u>\$ (86)</u>
U.S. Treasury securities - long	U.S. Treasury securities, at fair value	\$ 1,213	\$ 471
U.S. Treasury securities - short	Obligation to return securities borrowed under reverse repurchase agreements, at fair value	(7,469)	(9,697)
Total U.S. Treasury securities, net at fair value		<u>\$ (6,256)</u>	<u>\$ (9,226)</u>

1. As of September 30, 2022 and December 31, 2021, the net fair value of our interest rate swaps excluding the recognition of variation margin settlements as a direct reduction of carrying value (see Note 2) was a net asset (liability) of \$5.3 billion and \$1.6 billion, respectively. As of September 30, 2022, the net fair value of our credit default swaps excluding the recognition of variation margin settlements was \$1 million. We did not have credit default swaps outstanding as of December 31, 2021.

The following tables summarize certain characteristics of our derivative and other hedging instruments outstanding as of September 30, 2022 and December 31, 2021 (dollars in millions):

Pay Fixed / Receive Variable Interest Rate Swaps	September 30, 2022				December 31, 2021			
	Notional Amount	Average Fixed Pay Rate	Average Receive Rate	Average Maturity (Years)	Notional Amount	Average Fixed Pay Rate	Average Receive Rate	Average Maturity (Years)
≤ 3 years	\$ 26,750	0.11%	3.00%	1.9	\$ 22,500	0.10%	0.05%	2.0
> 3 to ≤ 5 years	11,300	0.22%	3.00%	4.0	16,800	0.22%	0.06%	4.0
> 5 to ≤ 7 years	4,950	0.52%	2.98%	6.2	6,050	0.29%	0.05%	6.0
> 7 to ≤ 10 years	3,150	0.40%	3.00%	8.2	4,400	0.46%	0.05%	8.5
> 10 years	975	0.51%	3.01%	13.8	1,475	0.47%	0.05%	13.2
Total	<u>\$ 47,125</u>	<u>0.21%</u>	<u>3.00%</u>	<u>3.5</u>	<u>\$ 51,225</u>	<u>0.20%</u>	<u>0.05%</u>	<u>4.0</u>

Pay Fixed / Receive Variable Interest Rate Swaps by Receive Index (% of Notional Amount)	September 30, 2022	December 31, 2021
SOFR	80 %	75 %
OIS	20 %	25 %
Total	<u>100 %</u>	<u>100 %</u>

Payer Swaptions	Option			Underlying Payer Swap		
			Average Months to Current Option Expiration Date ¹		Average Fixed Pay Rate ²	Average Term (Years)
Current Option Expiration Date	Cost Basis	Fair Value		Notional Amount		
September 30, 2022						
≤ 1 year	\$ 23	\$ 163	6	\$ 1,350	2.02%	9.5
> 1 year ≤ 2 years	46	194	20	2,050	2.46%	10.0
Total	<u>\$ 69</u>	<u>\$ 357</u>	<u>14</u>	<u>\$ 3,400</u>	<u>2.28%</u>	<u>9.8</u>
December 31, 2021						
≤ 1 year	\$ 101	\$ 64	6	\$ 3,800	1.81%	8.5
> 1 year ≤ 2 years	128	147	20	5,150	1.69%	10.0
> 2 year ≤ 3 years	99	79	28	4,050	2.35%	10.0
Total	<u>\$ 328</u>	<u>\$ 290</u>	<u>18</u>	<u>\$ 13,000</u>	<u>1.93%</u>	<u>9.6</u>

1. As of September 30, 2022 and December 31, 2021, ≤ 1 year notional amount includes \$0 million and \$700 million of Bermudan swaptions where the options may be exercised on predetermined dates up to their final exercise date, which is six months prior to the underlying swaps' maturity date.
2. As of September 30, 2022, 100% and —% of the underlying swap receive rates were tied to SOFR and 3-Month LIBOR, respectively. As of December 31, December 31, 2021, 95% and 5% of the underlying swap receive rates were tied to SOFR and 3-Month LIBOR, respectively.

U.S. Treasury Securities	September 30, 2022			December 31, 2021		
Maturity	Face Amount Long/(Short)	Cost Basis ¹	Fair Value	Face Amount Long/(Short)	Cost Basis ¹	Fair Value
5 years	\$ (830)	\$ (834)	\$ (786)	\$ (310)	\$ (306)	\$ (293)
7 years	(970)	(970)	(833)	(1,218)	(1,218)	(1,206)
10 years	(5,071)	(5,095)	(4,137)	(7,590)	(7,593)	(7,727)
20 years	(552)	(500)	(500)	—	—	—
Total U.S. Treasury securities	<u>\$ (7,423)</u>	<u>\$ (7,399)</u>	<u>\$ (6,256)</u>	<u>\$ (9,118)</u>	<u>\$ (9,117)</u>	<u>\$ (9,226)</u>

1. As of September 30, 2022 and December 31, 2021, short U.S. Treasury securities totaling \$(7.5) billion and \$(9.7) billion, at fair value, respectively, had a weighted average yield of 1.82% and 1.56%, respectively. As of September 30, 2022 and December 31, 2021, long U.S. Treasury securities totaling \$1.2 billion and \$0.5 billion, at fair value, respectively, had a weighted average yield of 3.61% and 1.18%, respectively.

U.S. Treasury Futures	September 30, 2022				December 31, 2021			
Maturity	Notional Amount Long (Short)	Cost Basis	Fair Value	Net Carrying Value ¹	Notional Amount Long (Short)	Cost Basis	Fair Value	Net Carrying Value
5 years	\$ (1,082)	\$ (1,204)	\$ (1,163)	\$ 41	\$ —	\$ —	\$ —	\$ —
10 years	(9,801)	(11,356)	(10,983)	373	(1,500)	(1,942)	(1,957)	(15)
Total U.S. Treasury futures	<u>\$ (10,883)</u>	<u>\$ (12,560)</u>	<u>\$ (12,146)</u>	<u>\$ 414</u>	<u>\$ (1,500)</u>	<u>\$ (1,942)</u>	<u>\$ (1,957)</u>	<u>\$ (15)</u>

1. Net carrying value represents the difference between the fair market value and the cost basis (or the forward price to be paid/(received) for the underlying U.S. Treasury security) of the U.S. Treasury futures contract as of period-end and is reported in derivative assets/(liabilities), at fair value in our consolidated balance sheets.

TBA Securities by Coupon ²	September 30, 2022				December 31, 2021			
	Notional Amount Long (Short)	Cost Basis	Fair Value	Net Carrying Value ¹	Notional Amount Long (Short)	Cost Basis	Fair Value	Net Carrying Value ¹
15-Year TBA securities:								
≤ 2.5%	\$ —	\$ —	\$ —	\$ —	\$ 2,039	\$ 2,056	\$ 2,059	\$ 3
Total 15-Year TBA securities	—	—	—	—	2,039	2,056	2,059	3
30-Year TBA securities:								
≤ 2.5%	(14)	71	(19)	(90)	20,494	20,825	20,788	(37)
3.0% - 4.0%	6,026	6,059	5,538	(521)	4,140	4,303	4,293	(10)
≥ 4.5%	12,907	12,986	12,383	(603)	—	—	—	—
Total 30-Year TBA securities, net	18,919	19,116	17,902	(1,214)	24,634	25,128	25,081	(47)
Total TBA securities, net	\$ 18,919	\$ 19,116	\$ 17,902	\$ (1,214)	\$ 26,673	\$ 27,184	\$ 27,140	\$ (44)

1. Net carrying value represents the difference between the fair market value and the cost basis (or the forward price to be paid/(received) for the underlying Agency security) of the TBA contract as of period-end and is reported in derivative assets/(liabilities), at fair value in our consolidated balance sheets.

2. Table excludes forward settling non-Agency securities totaling \$0.4 billion fair value and \$0.2 million net carrying value as of December 31, 2021.

As of September 30, 2022, we had \$290 million notional value of centrally cleared credit default swaps ("CDS") outstanding that reference the Markit CDX Investment Grade Index, maturing in June 2027. Under the terms of our CDS, we pay fixed periodic payments equal to 1% of the notional value and we are entitled to receive payments for qualified credit events. As of September 30, 2022, the CDS had a market value of \$1 million, and a carrying value of zero dollars net of variation margin settlements posted to us. Pursuant to rules governing central clearing activities, we recognize variation margin settlements as a direct reduction of the carrying value of the CDS asset or liability.

Gain (Loss) From Derivative Instruments and Other Securities, Net

The following table summarizes changes in our derivative and other hedge portfolio and their effect on our consolidated statements of comprehensive income for the three and nine months ended September 30, 2022 and 2021 (in millions):

Derivative and Other Hedging Instruments	Beginning Notional Amount	Additions	Settlement, Termination, Expiration or Exercise	Ending Notional Amount	Gain/(Loss) on Derivative Instruments and Other Securities, Net ¹
Three months ended September 30, 2022:					
TBA securities, net	\$ 15,927	78,067	(75,075)	\$ 18,919	\$ (1,192)
Interest rate swaps - payer	\$ 49,935	—	(2,810)	\$ 47,125	1,464
Credit default swaps - CDX IG - buy protection	\$ (215)	(365)	290	\$ (290)	—
Payer swaptions	\$ 6,800	—	(3,400)	\$ 3,400	194
Receiver swaptions	\$ (150)	—	150	\$ —	—
U.S. Treasury securities - short position	\$ (9,243)	(2,696)	3,192	\$ (8,747)	532
U.S. Treasury securities - long position	\$ 1,902	2,149	(2,727)	\$ 1,324	(3)
U.S. Treasury futures contracts - short position	\$ (8,105)	(11,241)	8,463	\$ (10,883)	483
					<u>\$ 1,478</u>

Three months ended September 30, 2021:

TBA securities, net	\$	26,567	86,363	(85,301)	\$	27,629	\$	30
Forward settling non-Agency securities	\$	300	750	(600)	\$	450		3
Interest rate swaps - payer	\$	49,725	500	(500)	\$	49,725		57
Payer swaptions	\$	11,450	3,000	(1,500)	\$	12,950		28
U.S. Treasury securities - short position	\$	(10,893)	(1,443)	3,498	\$	(8,838)		(11)
U.S. Treasury securities - long position	\$	397	4,098	(3,846)	\$	649		(8)
U.S. Treasury futures contracts - short position	\$	(1,500)	(1,500)	1,500	\$	(1,500)		5
							\$	104

Nine months ended September 30, 2022:

TBA securities, net	\$	26,673	228,904	(236,658)	\$	18,919	\$	(3,030)
Forward settling non-Agency securities	\$	450	—	(450)	\$	—		—
Interest rate swaps - payer	\$	51,225	2,970	(7,070)	\$	47,125		4,235
Credit default swaps - CDX IG - buy protection	\$	—	(5,835)	5,545	\$	(290)		21
Payer swaptions	\$	13,000	1,750	(11,350)	\$	3,400		866
Receiver swaptions	\$	—	(150)	150	\$	—		—
U.S. Treasury securities - short position	\$	(9,590)	(9,604)	10,447	\$	(8,747)		1,620
U.S. Treasury securities - long position	\$	472	7,725	(6,873)	\$	1,324		(32)
U.S. Treasury futures contracts - short position	\$	(1,500)	(26,466)	17,083	\$	(10,883)		818
							\$	4,498

Nine months ended September 30, 2021:

TBA securities, net	\$	30,364	273,947	(276,682)	\$	27,629	\$	(500)
Forward settling non-Agency securities	\$	—	1,050	(600)	\$	450		3
Interest rate swaps - payer	\$	43,225	7,500	(1,000)	\$	49,725		781
Payer swaptions	\$	10,400	7,250	(4,700)	\$	12,950		102
U.S. Treasury securities - short position	\$	(11,287)	(9,289)	11,738	\$	(8,838)		463
U.S. Treasury securities - long position	\$	—	6,749	(6,100)	\$	649		(19)
U.S. Treasury futures contracts - short position	\$	(1,000)	(4,500)	4,000	\$	(1,500)		37
							\$	867

1. Amounts exclude other miscellaneous gains and losses recognized in gain (loss) on derivative instruments and other securities, net in our consolidated statements of comprehensive income.

Note 6. Other Assets and Other Liabilities

The following tables summarize other assets and other liabilities as of September 30, 2022 and December 31, 2021 (in millions):

Other Assets	September 30, 2022	December 31, 2021
Interest receivable	\$ 147	\$ 130
Receivable for unsettled transactions	184	180
Venture capital investments	52	95
Other	25	9
Total other assets	<u>\$ 408</u>	<u>\$ 414</u>

Other Liabilities	September 30, 2022	December 31, 2021
Interest payable	\$ 43	\$ 43
Cash pledged from counterparties	634	336
Payable for unsettled transactions	95	—
Other	65	21
Total other liabilities	<u>\$ 837</u>	<u>\$ 400</u>

Note 7. Pledged Assets

Our funding agreements require us to fully collateralize our obligations under the agreements based upon our counterparties' collateral requirements and their determination of the fair value of the securities pledged as collateral, which fluctuates with changes in interest rates, credit quality and liquidity conditions within the investment banking, mortgage finance and real estate industries. Our derivative contracts similarly require us to fully collateralize our obligations under such agreements, which will vary over time based on similar factors as well as our counterparties' determination of the value of the derivative contract. We are typically required to post initial margin upon execution of derivative transactions, such as under our interest rate swap agreements and TBA contracts, and subsequently post or receive variation margin based on daily fluctuations in fair value. Our brokerage and custody agreements and the clearing organizations utilized by our wholly-owned captive broker-dealer subsidiary, Bethesda Securities, LLC, also require that we post minimum daily clearing deposits. If we breach our collateral requirements, we will be required to fully settle our obligations under the agreements, which could include a forced liquidation of our pledged collateral.

Our counterparties also apply a "haircut" to our pledged collateral, which means our collateral is valued at slightly less than market value and limits the amount we can borrow against our securities. This haircut reflects the underlying risk of the specific collateral and protects our counterparty against a change in its value. Our agreements do not specify the haircut; rather, haircuts are determined on an individual transaction basis. Consequently, our funding agreements and derivative contracts expose us to credit risk relating to potential losses that could be recognized if our counterparties fail to perform their obligations under such agreements. We minimize this risk by limiting our counterparties to major financial institutions with acceptable credit ratings or to registered clearinghouses and U.S. government agencies, and we monitor our positions with individual counterparties. In the event of a default by a counterparty, we may have difficulty obtaining our assets pledged as collateral to such counterparty and may not receive payments as and when due to us under the terms of our derivative agreements. In the case of centrally cleared instruments, we could be exposed to credit risk if the central clearing agency or a clearing member defaults on its respective obligation to perform under the contract. However, we believe that the risk is minimal due to the clearing exchanges' initial and daily mark-to-market margin requirements, clearinghouse guarantee funds and other resources that are available in the event of a clearing member default.

As of September 30, 2022, our maximum amount at risk with any counterparty related to our repurchase agreements, excluding the Fixed Income Clearing Corporation, was less than 3% of our tangible stockholders' equity (or the excess/shortfall of the value of collateral pledged/received over our repurchase agreement liabilities/reverse repurchase agreement receivables). As of September 30, 2022, approximately 7% of our tangible stockholder's equity was at risk with the Fixed Income Clearing Corporation.

Assets Pledged to Counterparties

The following tables summarize our assets pledged as collateral under our funding, derivative and brokerage and clearing agreements by type, including securities pledged related to securities sold but not yet settled, as of September 30, 2022 and December 31, 2021 (in millions):

September 30, 2022				
Assets Pledged to Counterparties ¹	Repurchase Agreements ²	Debt of Consolidated VIEs	Derivative Agreements and Other ³	Total
Agency RMBS - fair value	\$ 38,527	\$ 149	\$ 532	\$ 39,208
CRT - fair value	834	—	—	834
Non-Agency - fair value	797	—	—	797
U.S. Treasury securities - fair value	1,213	—	—	1,213
Accrued interest on pledged securities	129	1	2	132
Restricted cash	257	—	1,929	2,186
Total	<u>\$ 41,757</u>	<u>\$ 150</u>	<u>\$ 2,463</u>	<u>\$ 44,370</u>

December 31, 2021				
Assets Pledged to Counterparties ¹	Repurchase Agreements ²	Debt of Consolidated VIEs	Derivative Agreements and Other ³	Total
Agency RMBS - fair value	\$ 46,943	\$ 208	\$ 739	\$ 47,890
CRT - fair value	510	—	—	510
Non-Agency - fair value	571	—	—	571
U.S. Treasury securities - fair value	1,084	—	208	1,292
Accrued interest on pledged securities	117	1	2	120
Restricted cash	15	—	512	527
Total	<u>\$ 49,240</u>	<u>\$ 209</u>	<u>\$ 1,461</u>	<u>\$ 50,910</u>

1. Includes repledged assets received as collateral from counterparties and securities sold but not yet settled.
2. Includes \$51 million and \$81 million of retained interests in our consolidated VIEs pledged as collateral under repurchase agreements as of September 30, 2022 and December 31, 2021, respectively.
3. Includes deposits under brokerage and clearing agreements.

The following table summarizes our securities pledged as collateral under our repurchase agreements by the remaining maturity of our borrowings, including securities pledged related to sold but not yet settled securities, as of September 30, 2022 and December 31, 2021 (in millions). For the corresponding borrowings associated with the following amounts and the interest rates thereon, refer to Note 4.

Securities Pledged by Remaining Maturity of Repurchase Agreements ^{1,2}	September 30, 2022			December 31, 2021		
	Fair Value of Pledged Securities	Amortized Cost of Pledged Securities	Accrued Interest on Pledged Securities	Fair Value of Pledged Securities	Amortized Cost of Pledged Securities	Accrued Interest on Pledged Securities
≤ 30 days	\$ 25,506	\$ 28,541	\$ 80	\$ 24,548	\$ 24,075	\$ 61
> 30 and ≤ 60 days	9,339	10,669	29	7,869	7,735	19
> 60 and ≤ 90 days	4,641	5,300	14	7,006	6,906	16
> 90 days	1,885	2,148	6	9,073	9,036	21
Total	<u>\$ 41,371</u>	<u>\$ 46,658</u>	<u>\$ 129</u>	<u>\$ 48,496</u>	<u>\$ 47,752</u>	<u>\$ 117</u>

1. Includes \$51 million and \$81 million of retained interests in our consolidated VIEs pledged as collateral under repurchase agreements as of September 30, 2022 and December 31, 2021, respectively.
2. Excludes zero and \$0.6 billion of repledged U.S. Treasury securities received as collateral from counterparties as of September 30, 2022 and December 31, 2021, respectively.

Assets Pledged from Counterparties

As of September 30, 2022 and December 31, 2021, we had assets pledged to us from counterparties as collateral under our reverse repurchase and derivative agreements summarized in the tables below (in millions).

Assets Pledged to AGNC	September 30, 2022				December 31, 2021			
	Reverse Repurchase Agreements	Derivative Agreements	Repurchase Agreements	Total	Reverse Repurchase Agreements	Derivative Agreements	Repurchase Agreements	Total
U.S. Treasury securities - fair value ¹	\$ 7,437	\$ —	\$ 6	\$ 7,443	\$ 10,420	\$ —	\$ 11	\$ 10,431
Cash	—	433	21	454	—	303	7	310
Total	\$ 7,437	\$ 433	\$ 27	\$ 7,897	\$ 10,420	\$ 303	\$ 18	\$ 10,741

1. As of September 30, 2022 and December 31, 2021, amounts include \$7.4 billion and \$9.7 billion, respectively, of U.S. Treasury securities received from counterparties that were used to cover short sales of U.S. Treasury securities.

Offsetting Assets and Liabilities

Certain of our repurchase agreements and derivative transactions are governed by underlying agreements that generally provide for a right of setoff under master netting arrangements (or similar agreements), including in the event of default or in the event of bankruptcy of either party to the transactions. We present our assets and liabilities subject to such arrangements on a gross basis in our consolidated balance sheets. The following tables present information about our assets and liabilities that are subject to master netting arrangements and can potentially be offset on our consolidated balance sheets as of September 30, 2022 and December 31, 2021 (in millions):

Offsetting of Financial and Derivative Assets						
	Gross Amounts of Recognized Assets	Gross Amounts Offset in the Consolidated Balance Sheets	Net Amounts of Assets Presented in the Consolidated Balance Sheets	Gross Amounts Not Offset in the Consolidated Balance Sheets		Net Amount
				Financial Instruments	Collateral Received ²	
September 30, 2022						
Interest rate swap and swaption agreements, at fair value ¹	\$ 430	\$ —	\$ 430	\$ —	\$ (350)	\$ 80
Receivable under reverse repurchase agreements	7,577	—	7,577	(5,768)	(1,809)	—
Total	\$ 8,007	\$ —	\$ 8,007	\$ (5,768)	\$ (2,159)	\$ 80
December 31, 2021						
Interest rate swap and swaption agreements, at fair value ¹	\$ 290	\$ —	\$ 290	\$ —	\$ (290)	\$ —
TBA securities, at fair value ¹	27	—	27	(27)	—	—
Receivable under reverse repurchase agreements	10,475	—	10,475	(6,087)	(4,381)	7
Total	\$ 10,792	\$ —	\$ 10,792	\$ (6,114)	\$ (4,671)	\$ 7
Offsetting of Financial and Derivative Liabilities						
	Gross Amounts of Recognized Liabilities	Gross Amounts Offset in the Consolidated Balance Sheets	Net Amounts of Liabilities Presented in the Consolidated Balance Sheets	Gross Amounts Not Offset in the Consolidated Balance Sheets		Net Amount
				Financial Instruments	Collateral Pledged ²	
September 30, 2022						
TBA securities, at fair value ¹	\$ 1,214	\$ —	\$ 1,214	\$ —	\$ (1,214)	\$ —
Repurchase agreements	40,306	—	40,306	(5,767)	(34,539)	—
Total	\$ 41,520	\$ —	\$ 41,520	\$ (5,767)	\$ (35,753)	\$ —
December 31, 2021						
Repurchase agreements	\$ 47,381	\$ —	\$ 47,381	\$ (6,087)	\$ (41,294)	\$ —
Total	\$ 47,452	\$ —	\$ 47,452	\$ (6,114)	\$ (41,338)	\$ —

1. Reported under derivative assets / liabilities, at fair value in the accompanying consolidated balance sheets. Refer to Note 5 for a reconciliation of derivative assets / liabilities, at fair value to their sub-components.
2. Includes cash and securities pledged / received as collateral, at fair value. Amounts include repledged collateral. Amounts presented are limited to collateral pledged sufficient to reduce the net amount to zero for individual counterparties, as applicable.

Note 8. Fair Value Measurements

The following table provides a summary of our assets and liabilities that are measured at fair value on a recurring basis, as of September 30, 2022 and December 31, 2021, based on their categorization within the valuation hierarchy (in millions). There were no transfers between valuation hierarchy levels during the periods presented in our accompanying consolidated statements of comprehensive income.

	September 30, 2022			December 31, 2021		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets:						
Agency securities	\$ —	\$ 41,740	\$ —	\$ —	\$ 52,396	\$ —
Agency securities transferred to consolidated VIEs	—	149	—	—	208	—
Credit risk transfer securities	—	860	—	—	974	—
Non-Agency securities	—	869	—	—	843	—
U.S. Treasury securities	1,213	—	—	471	—	—
Interest rate swaps ¹	—	73	—	—	—	—
Swaptions	—	357	—	—	290	—
TBA and forward settling securities	—	—	—	—	27	—
U.S. Treasury futures	421	—	—	—	—	—
Total	\$ 1,634	\$ 44,048	\$ —	\$ 471	\$ 54,738	\$ —
Liabilities:						
Debt of consolidated VIEs	\$ —	\$ 98	\$ —	\$ —	\$ 126	\$ —
Obligation to return U.S. Treasury securities borrowed under reverse repurchase agreements	7,469	—	—	9,697	—	—
Credit default swaps ¹	—	—	—	—	—	—
TBA and forward settling securities	—	1,214	—	—	71	—
U.S. Treasury futures	7	—	—	15	—	—
Total	\$ 7,476	\$ 1,312	\$ —	\$ 9,712	\$ 197	\$ —

1. As of September 30, 2022 and December 31, 2021, the net fair value of our interest rate swaps excluding the recognition of variation margin settlements as a direct reduction of carrying value was a net asset (liability) of \$5.3 billion and \$1.6 billion, respectively, based on "Level 2" inputs. As of September 30, 2022, the net fair value of our credit default swaps excluding the recognition of variation margin settlements was \$1 million based on "Level 2" inputs. We did not have credit default swaps outstanding as of December 31, 2021. See Notes 2 and 5 for additional details.

Excluded from the table above are financial instruments presented in our consolidated financial statements at cost. The fair value of our repurchase agreements approximated cost as of September 30, 2022 and December 31, 2021, as the rates on our outstanding repurchase agreements largely corresponded to prevailing rates observed in the repo market. The fair value of cash and cash equivalents, restricted cash, receivables and other payables were determined to approximate cost as of such dates due to their short duration. We estimate the fair value of these instruments carried at cost using "Level 1" or "Level 2" inputs.

Note 9. Net Income (Loss) Per Common Share

Basic net income (loss) per common share is computed by dividing (i) net income (loss) available (attributable) to common stockholders by (ii) the sum of our weighted-average number of common shares outstanding and the weighted-average number of vested but not yet issued time and performance-based restricted stock units ("RSUs") outstanding for the period granted under our long-term incentive program to employees and non-employee Board of Directors. Diluted net income (loss) per common share assumes the issuance of all potential common stock equivalents unless the effect is to reduce a loss or increase the income per common share. Our potential common stock equivalents consist of unvested time and performance-based RSUs. The following table presents the computations of basic and diluted net income (loss) per common share for the periods indicated (shares and dollars in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Weighted average number of common shares issued and outstanding	527.2	524.9	524.8	527.4
Weighted average number of fully vested restricted stock units outstanding	1.5	1.8	1.6	1.6
Weighted average number of common shares outstanding - basic	528.7	526.7	526.4	529.0
Weighted average number of dilutive unvested restricted stock units outstanding	—	1.9	—	1.8
Weighted average number of common shares outstanding - diluted	528.7	528.6	526.4	530.8
Net income (loss) available (attributable) to common stockholders	\$ (692)	\$ 187	\$ (1,827)	\$ 701
Net income (loss) per common share - basic	\$ (1.31)	\$ 0.36	\$ (3.47)	\$ 1.33
Net income (loss) per common share - diluted	\$ (1.31)	\$ 0.35	\$ (3.47)	\$ 1.32

For the three and nine months ended September 30, 2022, 1.1 million and 1.1 million, respectively, of potentially dilutive unvested time and performance based RSUs outstanding were excluded from the computation of diluted net income (loss) per common share because to do so would have been anti-dilutive for the period.

Note 10. Stockholders' Equity

Preferred Stock

We are authorized to designate and issue up to 10.0 million shares of preferred stock in one or more classes or series. As of September 30, 2022 and December 31, 2021, 13,800, 10,350, 16,100 and 23,000 shares of preferred stock were designated as 7.00% Series C Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, 6.875% Series D Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, 6.50% Series E Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock and 6.125% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, respectively, (referred to as "Series C, D, E and F Preferred Stock", respectively). As of September 30, 2022, an additional 6,900 shares were designated as 7.75% Series G Fixed-Rate-Reset Cumulative Redeemable Preferred Stock (referred to as "Series G Preferred Stock"). As of September 30, 2022 and December 31, 2021, 13,000, 9,400, 16,100 and 23,000 shares of Series C, D, E and F Preferred Stock, respectively, were issued and outstanding. As of September 30, 2022, an additional 6,000 shares of Series G Preferred Stock were issued and outstanding. Each share of preferred stock is represented by 1,000 depositary shares. Each share of preferred stock has a liquidation preference of \$25,000 per share (\$25 per depositary share).

Our preferred stock ranks senior to our common stock with respect to the payment of dividends and the distribution of assets upon a voluntary or involuntary liquidation, dissolution or winding up of the Company. Our preferred stock has no stated maturity, is not subject to any sinking fund or mandatory redemption and each series of preferred stock ranks on parity with one another. Under certain circumstances upon a change of control, our preferred stock is convertible to shares of our common stock. Holders of our preferred stock and depositary shares underlying our preferred stock have no voting rights, except under limited conditions. Beginning on each series' optional redemption date, we may redeem shares at \$25.00 per depositary share, plus accumulated and unpaid dividends (whether or not declared), exclusively at our option.

The following table includes a summary of preferred stock depositary shares issued and outstanding as of September 30, 2022 (dollars and shares in millions):

Cumulative Redeemable Preferred Stock ¹	Issue Date	Depositary Shares Issued and Outstanding	Carrying Value	Aggregate Liquidation Preference	Per Annum Dividend Rate	First Optional Redemption Date/ Conversion Date ²	Conversion Rate
Fixed-to-Floating Rate:							
Series C	August 22, 2017	13.0	\$ 315	\$ 325	7.000%	October 15, 2022	3M LIBOR + 5.111%
Series D	March 6, 2019	9.4	227	235	6.875%	April 15, 2024	3M LIBOR + 4.332%
Series E	October 3, 2019	16.1	390	403	6.500%	October 15, 2024	3M LIBOR + 4.993%
Series F	February 11, 2020	23.0	557	575	6.125%	April 15, 2025	3M LIBOR + 4.697%
Fixed-Rate-Reset:							
Series G	September 14, 2022	6.0	145	150	7.750%	October 15, 2027	5 YR US Treasury Rate + 4.39%
Total		67.5	\$ 1,634	\$ 1,688			

1. Preferred stock accrue dividends at an initial annual fixed rate of the \$25.00 liquidation preference per depositary share from the issuance date up to, but not including, the fixed-to-floating rate or fixed-rate-reset conversion date; thereafter, dividends will accrue on a floating rate or fixed-rate-reset basis equal to the conversion rate plus a fixed spread.
2. Shares may be redeemed prior to our optional redemption date under certain circumstances intended to preserve our qualification as a REIT for U.S. federal income tax purposes.

At-the-Market Offering Program

We are authorized by our Board of Directors to enter into agreements with sales agents to publicly offer and sell shares of our common stock in privately negotiated and/or at-the-market transactions from time-to-time up to a maximum aggregate offering price of our common stock. During the three and nine months ended September 30, 2022, we sold 28.6 million and 32.7 million shares, respectively, of our common stock under the sales agreements for proceeds of \$289 million and \$339 million, respectively, or \$10.10 and \$10.36 per common share, respectively, net of offering costs. As of September 30, 2022, shares of our common stock with an aggregate offering price of \$0.9 billion remained authorized for issuance under this program through June 11, 2024.

Common Stock Repurchase Program

We are authorized by our Board of Directors to repurchase shares of our common stock in open market or through privately negotiated transactions or pursuant to a trading plan that may be adopted in accordance with Rule 10b5-1 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). During the nine months ended September 30, 2022, we

repurchased 4.7 million shares, or \$51 million, of our common stock for an average repurchase price of \$10.78 per common share, inclusive of transaction costs. As of September 30, 2022, shares of our common stock with an aggregate repurchase price of \$0.9 billion remained authorized for repurchase through December 31, 2022. (See Note 11. Subsequent Event for additional information regarding our stock repurchase plan.)

Accumulated Other Comprehensive Income (Loss)

The following table summarizes changes to accumulated OCI for the three and nine months ended September 30, 2022 and 2021 (in millions):

Accumulated Other Comprehensive Income (Loss)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Beginning Balance	\$ (435)	\$ 405	\$ 301	\$ 719
OCI before reclassifications	(372)	10	(1,132)	(272)
Net loss amounts for available-for-sale securities reclassified from accumulated OCI to realized gain (loss) on sale of investment securities, net	—	(4)	24	(36)
Ending Balance	<u>\$ (807)</u>	<u>\$ 411</u>	<u>\$ (807)</u>	<u>\$ 411</u>

Note 11. Subsequent Event

Common Stock Repurchase Program

During October 2022, our Board of Directors terminated our existing stock repurchase plan (see Note 10. Stockholders' Equity) that was due to expire on December 31, 2022 and replaced it with a new plan authorizing us to repurchase up to \$1 billion of common stock through December 31, 2024. Under the new plan, we may repurchase shares in the open market or through privately negotiated transactions or pursuant to a trading plan that may be adopted in accordance with Rule 10b5-1 of the Exchange Act. Our stock repurchase program may be limited or terminated at any time without prior notice. We intend to repurchase shares under the stock repurchase program only when the repurchase price is less than our then-current estimate of tangible net book value per common share.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is designed to provide a reader of AGNC Investment Corp.'s consolidated financial statements with a narrative from the perspective of management and should be read in conjunction with the consolidated financial statements and accompanying notes included in this Quarterly Report on Form 10-Q for quarterly period ended September 30, 2022. Our MD&A is presented in the following sections:

- Executive Overview
- Financial Condition
- Results of Operations
- Liquidity and Capital Resources
- Off-Balance Sheet Arrangements
- Forward-Looking Statements

EXECUTIVE OVERVIEW

We are a leading provider of private capital to the U.S. housing market, enhancing liquidity in the residential real estate mortgage markets and, in turn, facilitating home ownership in the U.S. We invest primarily in Agency residential mortgage-backed securities ("Agency RMBS") on a leveraged basis. These investments consist of residential mortgage pass-through securities and collateralized mortgage obligations for which the principal and interest payments are guaranteed by a U.S. Government-sponsored enterprise, such as Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac," and together with Fannie Mae, the "GSEs"), or by a U.S. Government agency, such as Government National Mortgage Association ("Ginnie Mae"). We may also invest in other assets related to the housing, mortgage or real estate markets that are not guaranteed by a GSE or U.S. Government agency.

We are internally managed with the principal objective of providing our stockholders with favorable long-term returns on a risk-adjusted basis through attractive monthly dividends. We generate income from the interest earned on our investments, net of associated borrowing and hedging costs, and net realized gains and losses on our investment and hedging activities. We fund our investments primarily through collateralized borrowings structured as repurchase agreements. We operate in a manner to qualify to be taxed as a REIT under the Internal Revenue Code.

The size and composition of our investment portfolio depends on the investment strategies we implement, availability of attractively priced investments, suitable financing to appropriately leverage our investment portfolio and overall market conditions. Market conditions are influenced by a variety of factors, including interest rates, prepayment expectations, liquidity, housing prices, unemployment rates, general economic conditions, government participation in the mortgage market, regulations and relative returns on other assets.

Trends and Recent Market Impacts

Financial markets experienced broad-based weakness in the third quarter of 2022. Macroeconomic and monetary policy uncertainty both domestically and abroad intensified, leading to a sharp decline in investor sentiment and a significant repricing in the fixed income markets. For the third quarter, the unlevered Bloomberg Aggregate Bond Index declined -4.75%, representing a year-to-date decline of -14.6%. As the most liquid spread product within the fixed income spectrum, Agency RMBS often face greater selling pressure than other asset classes further down the liquidity and credit spectrum in the early stages of market downturns as investors seek to convert their holdings to cash. This dynamic caused Agency RMBS to significantly underperform interest rate hedges and other fixed income products in the third quarter and was the primary driver of AGNC's economic loss on tangible net book value per common share of -17.4 % for the quarter (or -35.5% year-to-date) comprised of dividends declared and the decline in tangible net book value per common share.

As a result of these challenging market conditions, we continued to prioritize risk management and a strong liquidity position in the third quarter. We mitigated our interest rate exposure during the quarter with a hedge portfolio totaling 118% of the outstanding balance of our Agency repurchase agreements, net TBA position and other debt as of September 30, 2022. Further, we operated with a reduced "at-risk" leverage position, as compared to historical operating levels, averaging 8.1x tangible stockholders' equity for the third quarter. As of September 30, 2022, our unencumbered assets totaled \$3.7 billion, or 56% of tangible equity, consisting of \$3.6 billion of unencumbered cash and Agency RMBS and \$0.1 billion of unencumbered credit assets. Additionally, during the third quarter, we opportunistically issued approximately \$290 million of common equity through our at-the-market offering program and \$150 million of fixed-rate reset preferred equity.

AGNC generated strong net spread and dollar roll income during the first three quarters of the year. Excluding “catch-up” amortization, net spread and dollar roll income increased to \$0.84 and \$2.38 per common share for the three and nine months ended September 30, 2022, respectively, from \$0.75 and \$2.27 per common share for the comparable prior year period, respectively, as higher asset yields and our large pay-fixed/receive-variable interest rate swap portfolio more than offset rising repo funding costs and moderating TBA dollar roll income.

Looking ahead, the longer-term outlook for Agency RMBS has improved substantially. Although Agency RMBS spreads relative to benchmark interest rates could potentially widen further, the historic move in these spreads that has already occurred, coupled with positive developments in the supply and demand outlook for Agency RMBS, suggest that this recent period of weakness in the Agency RMBS market may be nearing its end. Importantly, although the Federal Reserve has begun to reduce its portfolio through prepayments, the pace of this runoff is expected to be materially slower than previously anticipated as a result of significantly higher mortgage rates. At current valuation levels, we believe that Agency RMBS are extremely attractive on both an absolute and relative basis and that AGNC is well-positioned to take advantage of this historically favorable risk-adjusted return environment as overall financial market volatility and uncertainty subside.

For information regarding non-GAAP financial measures, including reconciliations to the most comparable GAAP measure please refer to Results of Operations included in this MD&A below. For further discussion regarding the sensitivity of our tangible net book value to changes in interest rates and mortgage spreads, please refer to Item 3. *Quantitative and Qualitative Disclosures about Market Risk* in this form 10-Q.

Market Information

The following table summarizes benchmark interest rates and prices of generic fixed rate Agency RMBS as of each date presented below:

Interest Rate/Security Price ¹	Sept. 30, 2021	Dec. 31, 2021	Mar. 31, 2022	June 30, 2022	Sept. 30, 2022	Sept. 30, 2022 vs June 30, 2022	Sept. 30, 2022 vs Dec. 31, 2021
Target Federal Funds Rate:							
Target Federal Funds Rate - Upper Band	0.25%	0.25%	0.50%	1.75%	3.25%	+150 bps	+300 bps
SOFR:							
SOFR Rate	0.05%	0.05%	0.29%	1.50%	2.98%	+148 bps	+293 bps
SOFR Interest Rate Swap Rate:							
2-Year Swap	0.24%	0.74%	2.28%	2.99%	4.25%	+126 bps	+351 bps
5-Year Swap	0.83%	1.12%	2.25%	2.79%	3.85%	+106 bps	+273 bps
10-Year Swap	1.26%	1.32%	2.13%	2.81%	3.59%	+78 bps	+227 bps
30-Year Swap	1.52%	1.46%	1.97%	2.66%	3.07%	+41 bps	+161 bps
U.S. Treasury Security Rate:							
2-Year U.S. Treasury	0.28%	0.73%	2.34%	2.96%	4.28%	+132 bps	+355 bps
5-Year U.S. Treasury	0.97%	1.26%	2.46%	3.04%	4.09%	+105 bps	+283 bps
10-Year U.S. Treasury	1.49%	1.51%	2.34%	3.02%	3.83%	+81 bps	+232 bps
30-Year U.S. Treasury	2.05%	1.90%	2.45%	3.19%	3.78%	+59 bps	+188 bps
30-Year Fixed Rate Agency Price:							
2.0%	\$100.21	\$99.79	\$92.84	\$86.96	\$80.91	-\$6.05	-\$18.88
2.5%	\$103.04	\$102.12	\$95.45	\$90.09	\$83.94	-\$6.15	-\$18.18
3.0%	\$104.61	\$103.68	\$97.86	\$93.27	\$86.97	-\$6.30	-\$16.71
3.5%	\$105.80	\$105.32	\$100.21	\$96.29	\$89.95	-\$6.34	-\$15.37
4.0%	\$107.13	\$106.44	\$102.10	\$98.74	\$92.73	-\$6.01	-\$13.71
4.5%	\$108.13	\$107.19	\$103.73	\$100.51	\$95.21	-\$5.30	-\$11.98
15-Year Fixed Rate Agency Price:							
1.5%	\$100.95	\$100.33	\$94.81	\$91.16	\$85.61	-\$5.55	-\$14.72
2.0%	\$102.96	\$102.45	\$97.11	\$93.52	\$88.06	-\$5.46	-\$14.39
2.5%	\$104.16	\$103.45	\$98.83	\$95.70	\$90.50	-\$5.20	-\$12.95
3.0%	\$105.14	\$104.59	\$100.70	\$97.82	\$92.89	-\$4.93	-\$11.70
3.5%	\$106.56	\$105.52	\$101.97	\$99.52	\$94.49	-\$5.03	-\$11.03
4.0%	\$106.06	\$105.47	\$102.50	\$100.95	\$96.43	-\$4.52	-\$9.04

1. Price information is for generic instruments only and is not reflective of our specific portfolio holdings. Price information is as of 3:00 p.m. (EST) on such date and can vary by source. Prices in the table above were obtained from Barclays. Interest rates were obtained from Bloomberg.

The following table summarizes mortgage and credit spreads as of each date presented below:

Mortgage Rate/Credit Spread	Sept. 30, 2021	Dec. 31, 2021	Mar. 31, 2022	June 30, 2022	Sept. 30, 2022	Sept. 30, 2022 vs June 30, 2022	Sept. 30, 2022 vs Dec. 31, 2021
Mortgage Rate: ¹							
30-Year Agency Current Coupon Yield to 5-Year U.S. Treasury Spread	100	81	103	134	159	+25	+78
30-Year Agency Current Coupon Yield	1.97%	2.07%	3.49%	4.38%	5.68%	+130 bps	+361 bps
30-Year Mortgage Rate	3.18%	3.27%	4.90%	5.83%	7.06%	+123 bps	+379 bps
Credit Spread (in bps): ²							
CRT M2	166	175	385	544	633	+89	+458
CMBS AAA	71	74	101	131	145	+14	+71
CDX IG	53	49	67	101	108	+7	+59

1. 30-Year Current Coupon Yield represents yield on new production Agency RMBS. 30-Year Current Coupon Yield and 30-Year Mortgage Rate are sourced from Bloomberg.
2. CRT and CDX spreads sourced from JP Morgan. CMBS spreads are the average of spreads sourced from JP Morgan and Wells Fargo.

FINANCIAL CONDITION

As of September 30, 2022 and December 31, 2021, our investment portfolio totaled \$61.5 billion and \$82.0 billion, respectively, consisting of: \$43.6 billion and \$54.4 billion investment securities, at fair value, respectively; \$17.9 billion and \$27.1 billion net TBA securities, at fair value, respectively; and, as of December 31, 2021, \$0.4 billion forward settling non-Agency securities, at fair value. The following table is a summary of our investment portfolio as of September 30, 2022 and December 31, 2021 (dollars in millions):

Investment Portfolio (Includes TBAs)	September 30, 2022				December 31, 2021			
	Amortized Cost	Fair Value	Average Coupon	%	Amortized Cost	Fair Value	Average Coupon	%
Fixed rate Agency RMBS and TBA securities:								
≤ 15-year:								
≤ 15-year RMBS	\$ 1,805	\$ 1,661	3.25 %	3 %	\$ 2,570	\$ 2,652	3.27 %	3 %
15-year TBA securities, net ¹	3	—	— %	— %	2,056	2,059	1.71 %	3 %
Total ≤ 15-year	1,808	1,661	3.25 %	3 %	4,626	4,711	2.57 %	6 %
20-year RMBS	1,746	1,465	2.49 %	2 %	1,948	1,942	2.52 %	2 %
30-year:								
30-year RMBS	43,476	38,452	3.59 %	63 %	47,028	47,695	3.04 %	58 %
30-year TBA securities, net ¹	19,113	17,902	4.42 %	29 %	25,128	25,081	2.54 %	31 %
Total 30-year	62,589	56,354	3.85 %	92 %	72,156	72,776	2.87 %	89 %
Total fixed rate Agency RMBS and TBA securities	66,143	59,480	3.80 %	97 %	78,730	79,429	2.84 %	97 %
Adjustable rate Agency RMBS	129	127	3.66 %	— %	45	47	2.23 %	— %
CMO Agency RMBS:								
CMO	144	136	3.16 %	— %	182	188	3.12 %	— %
Interest-only strips	24	18	3.15 %	— %	31	37	5.60 %	— %
Principal-only strips	32	30	— %	— %	39	43	— %	— %
Total CMO Agency RMBS	200	184	2.82 %	— %	252	268	4.08 %	1 %
Total Agency RMBS and TBA securities	66,472	59,791	3.79 %	97 %	79,027	79,744	2.85 %	98 %
Non-Agency RMBS ²	254	222	3.80 %	— %	763	767	2.85 %	1 %
CMBS	651	621	5.06 %	1 %	505	514	3.60 %	1 %
CRT	901	860	6.93 %	1 %	955	974	3.74 %	1 %
Total investment portfolio	\$ 68,278	\$ 61,494	3.84 %	100 %	\$ 81,250	\$ 81,999	2.85 %	100 %

1. TBA securities are presented net of long and short positions. For further details of our TBA securities refer to Note 5 of our Consolidated Financial Statements in this Form 10-Q.

2. September 30, 2022 non-Agency RMBS balance includes mortgage credit investment fund limited partnership interest totaling approximately \$27 million reported in non-Agency securities on the accompanying consolidated balance sheets. Average coupon excludes limited partnership interest. December 31, 2021 balance includes \$0.4 billion of forward settling non-Agency securities reported in derivative assets/(liabilities) on the accompanying consolidated balance sheets.

TBA and forward settling securities are recorded as derivative instruments in our accompanying consolidated financial statements, and our TBA dollar roll transactions represent a form of off-balance sheet financing. As of September 30, 2022 and December 31, 2021, our TBA position and forward settling securities had a net carrying value of \$(1.2) billion and \$(44) million, respectively, reported in derivative assets/(liabilities) on our accompanying consolidated balance sheets. The net carrying value represents the difference between the fair value of the underlying security in the TBA contract or forward purchase agreement and the price to be paid or received for the underlying security.

As of September 30, 2022 and December 31, 2021, the weighted average yield on our investment securities (excluding TBA and forward settling securities) was 3.14% and 2.43%, respectively.

The following tables summarize certain characteristics of our fixed rate Agency RMBS portfolio, inclusive of TBA securities, as of September 30, 2022 and December 31, 2021 (dollars in millions):

	September 30, 2022								
Fixed Rate Agency RMBS and TBA Securities	Includes Net TBA Position				Excludes Net TBA Position				
	Par Value	Amortized Cost	Fair Value	Specified Pool % ¹	Amortized Cost Basis	Weighted Average			Projected CPR ³
						WAC ²	Yield ³	Age (Months)	
Fixed rate									
≤ 15-year:									
≤ 2.5%	319	335	289	100%	105.2%	2.97%	1.30%	33	8%
3.0% - 4.0%	1,435	1,470	1,369	98%	102.2%	3.98%	2.74%	56	11%
≥ 4.5%	3	3	3	97%	102.8%	5.03%	2.71%	142	16%
Total ≤ 15-year	1,757	1,808	1,661	98%	102.8%	3.80%	2.48%	52	11%
20-year:									
≤ 2.5%	1,338	1,387	1,134	—%	103.6%	2.98%	1.60%	24	5%
3.0% - 4.0%	256	263	241	86%	102.8%	4.14%	2.91%	87	10%
≥ 4.5%	92	96	90	99%	105.2%	5.00%	3.18%	71	12%
Total 20-year	1,686	1,746	1,465	20%	103.6%	3.26%	1.88%	36	6%
30-year:									
≤ 2.5%	8,580	8,842	7,112	41%	102.1%	3.01%	1.98%	17	6%
3.0% - 4.0%	28,068	28,906	25,798	62%	103.7%	4.15%	3.01%	57	7%
≥ 4.5%	24,348	24,841	23,444	32%	103.6%	5.32%	4.02%	23	7%
Total 30-year	60,996	62,589	56,354	47%	103.3%	4.23%	3.08%	40	7%
Total fixed rate	\$ 64,439	\$ 66,143	\$ 59,480	48%	103.3%	4.18%	3.01%	40	7%

1. Specified pools include pools backed by lower balance loans with original loan balances of up to \$200K, HARP pools (defined as pools that were issued between May 2009 and December 2018 and backed by 100% refinance loans with original LTVs ≥ 80%), and pools backed by loans 100% originated in New York and Puerto Rico. As of September 30, 2022, lower balance specified pools had a weighted average original loan balance of \$123,000 and \$136,000 for 15-year and 30-year securities, respectively, and HARP pools had a weighted average original LTV of 128% and 138% for 15-year and 30-year securities, respectively.
2. WAC represents the weighted average coupon of the underlying collateral.
3. Portfolio yield incorporates a projected life CPR based on forward rate assumptions as of September 30, 2022.

	December 31, 2021								
Fixed Rate Agency RMBS and TBA Securities	Includes Net TBA Position				Excludes Net TBA Position				
	Par Value	Amortized Cost	Fair Value	Specified Pool % ¹	Amortized Cost Basis	Weighted Average			Projected CPR ³
						WAC ²	Yield ³	Age (Months)	
Fixed rate									
≤ 15-year:									
≤ 2.5%	\$ 2,410	\$ 2,445	\$ 2,444	16%	105.0%	2.97%	1.18%	25	13%
3.0% - 4.0%	2,132	2,176	2,262	98%	102.0%	3.97%	2.66%	53	17%
≥ 4.5%	5	5	5	97%	102.8%	5.01%	2.67%	133	21%
Total ≤ 15-year	4,547	4,626	4,711	55%	102.5%	3.82%	2.44%	49	16%
20-year:									
≤ 2.5%	1,472	1,522	1,496	—%	103.4%	2.98%	1.44%	15	11%
3.0% - 4.0%	302	310	325	87%	102.5%	4.15%	2.88%	79	14%
≥ 4.5%	110	116	121	100%	104.7%	5.00%	3.13%	63	16%
Total 20-year	1,884	1,948	1,942	21%	103.3%	3.29%	1.77%	28	12%
30-year:									
≤ 2.5%	43,195	44,005	43,762	15%	102.1%	3.00%	1.94%	7	7%
3.0% - 4.0%	22,258	23,270	23,930	73%	104.7%	4.24%	2.69%	72	13%
≥ 4.5%	4,606	4,881	5,084	97%	106.0%	5.02%	3.06%	53	16%
Total 30-year	70,059	72,156	72,776	40%	103.5%	3.71%	2.36%	38	11%
Total fixed rate	\$ 76,490	\$ 78,730	\$ 79,429	41%	103.5%	3.70%	2.34%	38	11%

1. See Note 1 of preceding table for specified pool composition. As of December 31, 2021, lower balance specified pools had a weighted average original loan balance of \$119,000 and \$117,000 for 15-year and 30-year securities, respectively, and HARP pools had a weighted average original LTV of 127% and 138% for 15-year and 30-year securities, respectively.
2. WAC represents the weighted average coupon of the underlying collateral.
3. Portfolio yield incorporates a projected life CPR based on forward rate assumptions as of December 31, 2021.

For additional details regarding our CRT and non-Agency securities, including credit ratings, as of September 30, 2022 and December 31, 2021, please refer to Note 3 of our Consolidated Financial Statements in this Form 10-Q.

RESULTS OF OPERATIONS

Non-GAAP Financial Measures

In addition to the results presented in accordance with GAAP, our results of operations discussed below include certain non-GAAP financial information, including "economic interest income," "economic interest expense," "net spread and dollar roll income" and "net spread and dollar roll income, excluding 'catch-up' premium amortization, available to common stockholders," "estimated taxable income (loss)" and the related per common share measures and certain financial metrics derived from such non-GAAP information.

"Economic interest income" is measured as interest income (GAAP measure), adjusted to (i) exclude retrospective "catch-up" adjustments to premium amortization cost associated with changes in projected CPR estimates and (ii) include TBA dollar roll implied interest income. "Economic interest expense" is measured as interest expense (GAAP measure) adjusted to include TBA dollar roll implied interest expense/benefit and interest rate swap periodic cost/income. "Net spread and dollar roll income, excluding 'catch-up' premium amortization, available to common stockholders" is measured as comprehensive income (loss) available (attributable) to common stockholders (GAAP measure) adjusted to: (i) exclude gains/losses on investment securities recognized through net income or other comprehensive income and gains/losses on derivative instruments and other securities (GAAP measures) and (ii) include interest rate swap periodic income/cost and TBA dollar roll income. As defined "Net spread and dollar roll income, excluding 'catch-up' premium amortization, available to common stockholders" includes (i) the components of "economic interest income" and "economic interest expense" less (ii) total operating expenses and dividends on preferred stock (GAAP measures).

By providing such measures, in addition to the related GAAP measures, we believe we give greater transparency into the information used by our management in its financial and operational decision-making. We also believe it is important for users of our financial information to consider information related to our current financial performance without the effects of certain measures and one-time events that are not necessarily indicative of our current investment portfolio performance and operations.

Specifically, in the case "net spread and dollar roll income, excluding 'catch-up' premium amortization, available to common stockholders" and components of such measure, "economic interest income" and "economic interest expense," we believe the inclusion of TBA dollar roll income is meaningful as TBAs, which are accounted for under GAAP as derivative instruments with gains and losses recognized in other gain (loss) in our consolidated statement of comprehensive income, are economically equivalent to holding and financing generic Agency RMBS using short-term repurchase agreements. Similarly, we believe that the inclusion of periodic interest rate swap settlements is meaningful as interest rate swaps are the primary instrument we use to economically hedge against fluctuations in our borrowing costs and it is more indicative of our total cost of funds than interest expense alone. Additionally, we believe the exclusion of "catch-up" premium amortization adjustments is meaningful as it excludes the cumulative effect from prior reporting periods due to current changes in future prepayment expectations and, therefore, exclusion of such adjustments is more indicative of the current earnings potential of our investment portfolio. In the case of "estimated taxable income (loss)", we believe it is meaningful information because it directly relates to the amount of dividends that we are required to distribute to maintain our REIT qualification status.

However, because such measures are incomplete measures of our financial performance and involve differences from results computed in accordance with GAAP, they should be considered as supplementary to, and not as a substitute for, results computed in accordance with GAAP. In addition, because not all companies use identical calculations, our presentation of such non-GAAP measures may not be comparable to other similarly-titled measures of other companies. Furthermore, estimated taxable income can include certain information that is subject to potential adjustments up to the time of filing our income tax returns, which occurs after the end of our fiscal year.

Selected Financial Data

The following selected financial data is derived from our interim consolidated financial statements and the notes thereto. The tables below present our condensed consolidated balance sheets as of September 30, 2022 and December 31, 2021 and condensed consolidated statements of comprehensive income and key statistics for the three and nine months ended September 30, 2022 and 2021 (in millions, except per share amounts):

Balance Sheet Data	September 30, 2022		December 31, 2021	
	(Unaudited)			
Investment securities, at fair value	\$	43,618	\$	54,421
Total assets	\$	58,524	\$	68,149
Repurchase agreements and other debt	\$	40,404	\$	47,507
Total liabilities	\$	51,302	\$	57,858
Total stockholders' equity	\$	7,222	\$	10,291
Net book value per common share ¹	\$	10.04	\$	16.76
Tangible net book value per common share ²	\$	9.08	\$	15.75

Statement of Comprehensive Income Data (Unaudited)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Interest income	\$ 373	\$ 293	\$ 1,243	\$ 1,099
Interest expense	196	14	303	60
Net interest income	177	279	940	1,039
Other gain (loss), net	(824)	(45)	(2,631)	(195)
Operating expenses	19	22	60	68
Net income (loss)	(666)	212	(1,751)	776
Dividends on preferred stock	26	25	76	75
Net income (loss) available (attributable) to common stockholders	\$ (692)	\$ 187	\$ (1,827)	\$ 701
Net income (loss)	\$ (666)	\$ 212	\$ (1,751)	\$ 776
Other comprehensive income (loss), net	(372)	6	(1,108)	(308)
Comprehensive income (loss)	(1,038)	218	(2,859)	468
Dividends on preferred stock	26	25	76	75
Comprehensive income (loss) available (attributable) to common stockholders	\$ (1,064)	\$ 193	\$ (2,935)	\$ 393
Weighted average number of common shares outstanding - basic	528.7	526.7	526.4	529.0
Weighted average number of common shares outstanding - diluted	528.7	528.6	526.4	530.8
Net income (loss) per common share - basic	\$ (1.31)	\$ 0.36	\$ (3.47)	\$ 1.33
Net income (loss) per common share - diluted	\$ (1.31)	\$ 0.35	\$ (3.47)	\$ 1.32
Comprehensive income (loss) per common share - basic	\$ (2.01)	\$ 0.37	\$ (5.58)	\$ 0.74
Comprehensive income (loss) per common share - diluted	\$ (2.01)	\$ 0.37	\$ (5.58)	\$ 0.74
Dividends declared per common share	\$ 0.36	\$ 0.36	\$ 1.08	\$ 1.08

Other Data (Unaudited) *	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Average investment securities - at par	\$ 46,863	\$ 49,077	\$ 49,355	\$ 53,655
Average investment securities - at cost	\$ 48,362	\$ 50,866	\$ 50,897	\$ 55,579
Average net TBA dollar roll position - at cost	\$ 20,331	\$ 30,312	\$ 21,184	\$ 30,132
Average total assets - at fair value	\$ 58,701	\$ 68,472	\$ 63,619	\$ 74,952
Average repurchase agreements and other debt outstanding ³	\$ 40,530	\$ 45,847	\$ 43,344	\$ 50,909
Average stockholders' equity ⁴	\$ 8,040	\$ 10,638	\$ 8,748	\$ 11,018
Average tangible net book value "at risk" leverage ⁵	8.1:1	7.5:1	8.1:1	7.7:1
Tangible net book value "at risk" leverage (as of period end) ⁶	8.7:1	7.5:1	8.7:1	7.5:1
Economic return on tangible common equity - unannualized ⁷	(17.4)%	2.3 %	(35.5)%	4.7 %
Expenses % of average total assets - annualized	0.13 %	0.13 %	0.13 %	0.12 %
Expenses % of average assets, including average net TBA position - annualized	0.10 %	0.09 %	0.09 %	0.09 %
Expenses % of average stockholders' equity - annualized	0.95 %	0.83 %	0.91 %	0.82 %

* Except as noted below, average numbers for each period are weighted based on days on our books and records.

1. Net book value per common share is calculated as total stockholders' equity, less preferred stock liquidation preference, divided by number of common shares outstanding as of period end.
2. Tangible net book value per common share excludes goodwill.
3. Amount excludes U.S. Treasury repurchase agreements and TBA contracts. Other debt includes debt of consolidated VIEs.
4. Average stockholders' equity calculated as average month-ended stockholders' equity during the period.
5. Average tangible net book value "at risk" leverage is calculated by dividing the sum of daily weighted average repurchase agreements used to fund our investment securities, other debt, and TBA and forward settling securities (at cost) (collectively "mortgage borrowings") outstanding for the period by the sum of average stockholders' equity adjusted to exclude goodwill for the period. Leverage excludes U.S. Treasury repurchase agreements.
6. Tangible net book value "at risk" leverage as of period end is calculated by dividing the sum of mortgage borrowings outstanding and receivable/payable for unsettled investment securities as of period end by the sum of total stockholders' equity adjusted to exclude goodwill as of period end. Leverage excludes U.S. Treasury repurchase agreements.
7. Economic return on tangible common equity represents the sum of the change in tangible net book value per common share and dividends declared per share of common stock during the period over beginning tangible net book value per common share.

Economic Interest Income and Asset Yields

The following table summarizes our economic interest income (a non-GAAP measure) for the three and nine months ended September 30, 2022 and 2021, which includes the combination of interest income (a GAAP measure) on our holdings reported as investment securities on our consolidated balance sheets, adjusted to exclude estimated "catch-up" premium amortization adjustments for the cumulative effect from prior reporting periods due to changes in our CPR forecast, and implied interest income on our TBA securities (dollars in millions):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2022		2021		2022		2021	
	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
Interest income:								
Cash/coupon interest income	\$ 409	3.49 %	\$ 399	3.25 %	\$1,201	3.24 %	\$1,330	3.31 %
Net premium amortization benefit (cost)	(36)	(0.40)%	(106)	(0.95)%	42	0.02 %	(231)	(0.67)%
Interest income (GAAP measure)	373	3.09 %	293	2.30 %	1,243	3.26 %	1,099	2.64 %
Estimated "catch-up" premium amortization cost (benefit) due to change in CPR forecast	(18)	(0.15)%	2	0.02 %	(243)	(0.64)%	(140)	(0.34)%
Interest income, excluding "catch-up" premium amortization	355	2.94 %	295	2.32 %	1,000	2.62 %	959	2.30 %
TBA dollar roll income - implied interest income ^{1,2}	213	4.18 %	142	1.88 %	516	3.24 %	397	1.75 %
Economic interest income, excluding "catch-up" amortization (non-GAAP measure) ³	\$ 568	3.31 %	\$ 437	2.16 %	\$1,516	2.80 %	\$1,356	2.11 %
Weighted average actual portfolio CPR for investment securities held during the period	9.2 %		22.5 %		12.2 %		24.5 %	
Weighted average projected CPR for the remaining life of investment securities held as of period end	7.0 %		10.7 %		7.0 %		10.7 %	
30-year fixed rate mortgage rate as of period end ⁴	7.06 %		3.18 %		7.06 %		3.18 %	
10-year U.S. Treasury rate as of period end ⁴	3.83 %		1.49 %		3.83 %		1.49 %	

1. Reported in gain (loss) on derivatives instruments and other securities, net in the accompanying consolidated statements of operations.
2. Implied interest income from TBA dollar roll transactions is computed as the sum of (i) TBA dollar roll income and (ii) estimated TBA implied funding cost (see *Economic Interest Expense and Aggregate Cost of Funds* below). TBA dollar roll income represents the price differential, or "price drop," between the TBA price for current month settlement versus the TBA price for forward month settlement and is the economic equivalent to interest income on the underlying Agency securities, less an implied funding cost, over the forward settlement period. Amount is net of TBAs used for hedging purposes. Amount excludes TBA mark-to-market adjustments.
3. The combined asset yield is calculated on a weighted average basis based on our average investment and TBA balances outstanding during the period and their respective yields.
4. Source: Bloomberg

The principal elements impacting our economic interest income are the size of our average investment portfolio and the yield on our securities. The following table includes a summary of the estimated impact of each of these elements on our economic interest income for the three and nine months ended September 30, 2022 compared to the prior year period (in millions):

Impact of Changes in the Principal Elements Impacting Economic Interest Income			
Periods ended September 30, 2022 vs. September 30, 2021			
Three months ended:	Total Increase / (Decrease)	Due to Change in Average	
		Portfolio Size	Asset Yield
Interest Income (GAAP measure)	\$ 80	\$ (14)	\$ 94
Estimated "catch-up" premium amortization due to change in CPR forecast	(20)	—	(20)
Interest income, excluding "catch-up" premium amortization	60	(14)	74
TBA dollar roll income - implied interest income	71	(47)	118
Economic interest income, excluding "catch-up" amortization (non-GAAP measure)	\$ 131	\$ (61)	\$ 192
Nine months ended:	Total Increase / (Decrease)	Due to Change in Average	
		Portfolio Size	Asset Yield
Interest Income (GAAP measure)	\$ 144	\$ (93)	\$ 237
Estimated "catch-up" premium amortization due to change in CPR forecast	(103)	—	(103)
Interest income, excluding "catch-up" premium amortization	41	(93)	134
TBA dollar roll income - implied interest income	119	(118)	237
Economic interest income, excluding "catch-up" amortization (non-GAAP measure)	\$ 160	\$ (211)	\$ 371

Our average investment portfolio, inclusive of TBAs (at cost), decreased 15% and 16% for the three and nine months ended September 30, 2022, respectively, compared to the prior year period, due to a decline in stockholders' equity. The average yield on our investment portfolio, including TBA implied asset yields and excluding "catch-up" premium amortization, increased 115 and 69 basis points, respectively, due to changes in asset composition and slower CPR projections.

Leverage

Our primary measure of leverage is our tangible net book value "at risk" leverage ratio, which is measured as the sum of our repurchase agreements and other debt used to fund our investment securities and net TBA and forward settling securities position (at cost) (together referred to as "mortgage borrowings") and our net receivable/payable for unsettled investment securities, divided by our total stockholders' equity adjusted to exclude goodwill.

We include our net TBA position in our measure of leverage because a forward contract to acquire Agency RMBS in the TBA market carries similar risks to Agency RMBS purchased in the cash market and funded with on-balance sheet liabilities. Similarly, a TBA contract for the forward sale of Agency securities has substantially the same effect as selling the underlying Agency RMBS and reducing our on-balance sheet funding commitments. (Refer to *Liquidity and Capital Resources* for further discussion of TBA securities and dollar roll transactions). Repurchase agreements used to fund short-term investments in U.S. Treasury securities ("U.S. Treasury repo") are excluded from our measure of leverage due to the temporary and highly liquid nature of these investments. The following table presents a summary of our leverage ratios for the periods listed (dollars in millions):

Quarter Ended	Repurchase Agreements and Other Debt ¹			Net TBA Position Long/(Short) ²		Average Tangible Net Book Value "At Risk" Leverage during the Period ³	Tangible Net Book Value "At Risk" Leverage as of Period End ⁴
	Average Daily Amount	Maximum Daily Amount	Ending Amount	Average Daily Amount	Ending Amount		
September 30, 2022	\$ 40,530	\$ 41,834	\$ 39,169	\$ 20,331	\$ 19,116	8.1:1	8.7:1
June 30, 2022	\$ 42,997	\$ 44,243	\$ 41,406	\$ 19,653	\$ 16,001	7.8:1	7.4:1
March 31, 2022	\$ 46,570	\$ 47,940	\$ 44,150	\$ 23,605	\$ 20,152	7.8:1	7.5:1
December 31, 2021	\$ 46,999	\$ 48,524	\$ 47,037	\$ 29,014	\$ 27,622	7.6:1	7.7:1
September 30, 2021	\$ 45,847	\$ 49,021	\$ 45,723	\$ 30,312	\$ 28,912	7.5:1	7.5:1
June 30, 2021	\$ 52,374	\$ 60,186	\$ 48,488	\$ 28,082	\$ 27,611	7.6:1	7.9:1
March 31, 2021	\$ 54,602	\$ 57,153	\$ 55,221	\$ 32,022	\$ 25,355	8.0:1	7.7:1

1. Other debt includes debt of consolidated VIEs. Amounts exclude U.S. Treasury repo agreements.
2. Daily average and ending net TBA position outstanding measured at cost. Includes forward settling non-Agency securities.
3. Average tangible net book value "at risk" leverage during the period represents the sum of our daily weighted average repurchase agreements and other debt used to fund acquisitions of investment securities and net TBA and forward settling securities position outstanding, divided by the sum of our average month-ended stockholders' equity, adjusted to exclude goodwill.
4. Tangible net book value "at risk" leverage as of period end represents the sum of our repurchase agreements and other debt used to fund acquisitions of investments securities, net TBA and forward settling securities position (at cost), and net receivable/payable for unsettled investment securities outstanding as of period end, divided by total stockholders' equity, adjusted to exclude goodwill as of period end.

Economic Interest Expense and Aggregate Cost of Funds

The following table summarizes our economic interest expense and aggregate cost of funds (non-GAAP measures) for the three and nine months ended September 30, 2022 and 2021 (dollars in millions), which includes the combination of interest expense on Agency repurchase agreements and other debt (GAAP measure), implied financing cost (benefit) of our TBA securities and interest rate swap periodic cost (benefit):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2022		2021		2022		2021	
Economic Interest Expense and Aggregate Cost of Funds ¹	Amount	Cost of Funds	Amount	Cost of Funds	Amount	Cost of Funds	Amount	Cost of Funds
Repurchase agreement and other debt - interest expense (GAAP measure)	\$ 196	1.89 %	\$ 14	0.12 %	\$ 303	0.92 %	\$ 60	0.16 %
TBA dollar roll income - implied interest expense (benefit) ^{2,3}	94	1.80 %	(33)	(0.42)%	63	0.38 %	(94)	(0.41)%
Economic interest expense - before interest rate swap periodic cost (income), net ⁴	290	1.86 %	(19)	(0.10)%	366	0.74 %	(34)	(0.05)%
Interest rate swap periodic cost (income), net ^{2,5}	(211)	(1.36)%	13	0.07 %	(242)	(0.49)%	44	0.07 %
Total economic interest expense (non-GAAP measure)	\$ 79	0.50 %	\$ (6)	(0.03)%	\$ 124	0.25 %	\$ 10	0.02 %

1. Amounts exclude interest rate swap termination fees and variation margin settlements paid or received, forward starting swaps and the impact of other supplemental hedges, such as swaptions and U.S. Treasury positions.
2. Reported in gain (loss) on derivative instruments and other securities, net in our consolidated statements of comprehensive income.
3. The implied funding cost (benefit) of TBA dollar roll transactions is determined using the price differential, or "price drop," between the TBA price for current month settlement versus the TBA price for forward month settlement and market based assumptions regarding the "cheapest-to-deliver" collateral that can be delivered to satisfy the TBA contract, such as the anticipated collateral's weighted average coupon, weighted average maturity and projected 1-month CPR. The average implied funding cost (benefit) for all TBA transactions is weighted based on our daily average TBA balance outstanding for the period.
4. The combined cost of funds for total mortgage borrowings outstanding, before interest rate swap costs, is calculated on a weighted average basis based on average repo, other debt and TBA balances outstanding during the period and their respective cost of funds.
5. Interest rate swap periodic income/cost is measured as a percent of average mortgage borrowings outstanding for the period.

The principal elements impacting our economic interest expense are (i) the size of our average mortgage borrowings and interest rate swap portfolio outstanding during the period, (ii) the average interest rate on our mortgage borrowings and (iii) the average net interest rate paid/received on our interest rate swaps. The following table includes a summary of the estimated impact of these elements on our economic interest expense for the three and nine months ended September 30, 2022 compared to the prior year period (in millions):

Impact of Changes in the Principal Elements of Economic Interest Expense

Periods ended September 30, 2022 vs. September 30, 2021

		Due to Change in Average	
	Total Increase / (Decrease)	Borrowing / Swap Balance	Borrowing / Swap Rate
Three months ended:			
Repurchase agreements and other debt interest expense	\$ 182	\$ (2)	\$ 184
TBA dollar roll income - implied interest benefit/expense	127	11	116
Interest rate swap periodic income/cost	(224)	—	(224)
Total change in economic interest benefit/expense	<u>\$ 85</u>	<u>\$ 9</u>	<u>\$ 76</u>

Our average mortgage borrowings, inclusive of TBAs, decreased 20% for the three and nine months ended September 30, 2022 compared to the prior year period due to a decline in stockholders' equity and smaller asset base. The average interest rate on our mortgage borrowings for the three and nine months ended September 30, 2022 increased 196 and 79 basis points, respectively, due to higher short-term rates. The decrease in our interest rate swap periodic cost for the three and nine months ended September 30, 2022 was primarily a function of higher receive rates. The following is a summary of our average interest rate swaps outstanding and the related average swap pay and receive rates for the three and nine months ended September 30, 2022 and 2021 (dollars in millions). Amounts exclude forward starting swaps not yet in effect.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Average Ratio of Interest Rate Swaps (Excluding Forward Starting Swaps) to Mortgage Borrowings Outstanding				
Average Agency repo and other debt outstanding	\$ 40,530	\$ 45,847	\$ 43,344	\$ 50,909
Average net TBA dollar roll position outstanding - at cost	\$ 20,331	\$ 30,312	\$ 21,184	\$ 30,132
Average mortgage borrowings outstanding	\$ 60,861	\$ 76,159	\$ 64,528	\$ 81,041
Average notional amount of interest rate swaps outstanding (excluding forward starting swaps)	\$ 49,147	\$ 49,268	\$ 50,484	\$ 48,108
Ratio of average interest rate swaps to mortgage borrowings outstanding	81 %	65 %	78 %	59 %
Average interest rate swap pay-fixed rate (excluding forward starting swaps)	0.25 %	0.17 %	0.25 %	0.17 %
Average interest rate swap receive-floating rate	(1.95)%	(0.07)%	(0.89)%	(0.05)%
Average interest rate swap net pay/(receive) rate	(1.70)%	0.10 %	(0.64)%	0.12 %

For the three and nine months ended September 30, 2022, we had an average forward starting swap balance of zero and \$31 million, respectively, and for the three and nine months ended September 30, 2021, an average forward starting swap balance of \$9 million and \$97 million, respectively. Forward starting interest rate swaps do not impact our economic interest expense and aggregate cost of funds until they commence accruing net interest settlements on their forward start dates.

Net Interest Spread

The following table presents a summary of our net interest spread (including the impact of TBA dollar roll income, interest rate swaps and excluding "catch-up" premium amortization) for the three and nine months ended September 30, 2022 and 2021:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Investment and TBA Securities - Net Interest Spread				
Average asset yield, excluding "catch-up" premium amortization	3.31 %	2.16 %	2.80 %	2.11 %
Average aggregate cost of funds	(0.50)%	0.03 %	(0.25)%	(0.02)%
Average net interest spread, excluding "catch-up" premium amortization	2.81 %	2.19 %	2.55 %	2.09 %

Net Spread and Dollar Roll Income

The following table presents a reconciliation of net spread and dollar roll income, excluding "catch-up" premium amortization, available to common stockholders (non-GAAP measure) from comprehensive income (loss) available (attributable) to common stockholders (the most comparable GAAP financial measure) for the three and nine months ended September 30, 2022 and 2021 (dollars in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Comprehensive income (loss) available (attributable) to common stockholders	\$ (1,064)	\$ 193	\$ (2,935)	\$ 393
Adjustments to exclude realized and unrealized (gains) losses reported through net income:				
Realized (gain) loss on sale of investment securities, net	560	5	1,848	(7)
Unrealized loss on investment securities measured at fair value through net income, net	1,738	141	5,257	1,124
Gain on derivative instruments and other securities, net	(1,474)	(101)	(4,474)	(922)
Adjustment to exclude unrealized (gain) loss reported through other comprehensive income				
Unrealized (gain) loss on available-for-sale securities measure at fair value through other comprehensive income, net	372	(6)	1,108	308
Other adjustments				
TBA dollar roll income, net ¹	119	175	453	491
Interest rate swap periodic (cost) income, net ¹	211	(13)	242	(44)
Net spread and dollar roll income available to common stockholders (non-GAAP measure)	462	394	1,499	1,343
Estimated "catch-up" premium amortization cost (benefit) due to change in CPR forecast ²	(18)	2	(243)	(140)
Net spread and dollar roll income, excluding "catch-up" premium amortization, available to common stockholders (non-GAAP measure)	\$ 444	\$ 396	\$ 1,256	\$ 1,203
Weighted average number of common shares outstanding - basic	528.7	526.7	526.4	529.0
Weighted average number of common shares outstanding - diluted	529.8	528.6	527.5	530.8
Net spread and dollar roll income per common share - basic	\$ 0.87	\$ 0.75	\$ 2.85	\$ 2.54
Net spread and dollar roll income per common share - diluted	\$ 0.87	\$ 0.75	\$ 2.84	\$ 2.53
Net spread and dollar roll income, excluding "catch-up" premium amortization, per common share - basic	\$ 0.84	\$ 0.75	\$ 2.39	\$ 2.27
Net spread and dollar roll income, excluding "catch-up" premium amortization, per common share - diluted	\$ 0.84	\$ 0.75	\$ 2.38	\$ 2.27

1. Reported in gain (loss) on derivative instruments and other securities, net in our consolidated statements of comprehensive income.

2. Reported in interest income in our consolidated statements of comprehensive income.

Gain (Loss) on Investment Securities, Net

The following table is a summary of our net gain (loss) on investment securities for the three and nine months ended September 30, 2022 and 2021 (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Gain (Loss) on Investment Securities, Net ¹				
Gain (loss) on sale of investment securities, net	\$ (560)	\$ (5)	\$ (1,848)	\$ 7
Unrealized loss on investment securities measured at fair value through net income, net ²	(1,738)	(141)	(5,257)	(1,124)
Unrealized loss on investment securities measured at fair value through other comprehensive income, net	(372)	6	(1,108)	(308)
Total loss on investment securities, net	\$ (2,670)	\$ (140)	\$ (8,213)	\$ (1,425)

1. Amounts exclude gain (loss) on TBA securities, which are reported in gain (loss) on derivative instruments and other securities, net in our Consolidated Statements of Comprehensive Income.

2. Investment securities acquired after fiscal year 2016 are measured at fair value through net income (see Note 2 of our Consolidated Financial Statements in this Form 10-Q).

Gain (Loss) on Derivative Instruments and Other Securities, Net

The following table is a summary of our gain (loss) on derivative instruments and other securities, net for the three and nine months ended September 30, 2022 and 2021 (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
TBA securities, dollar roll income	\$ 119	\$ 175	\$ 453	\$ 491
TBA securities, mark-to-market loss	(1,311)	(145)	(3,483)	(991)
Interest rate swaps, periodic cost	211	(13)	242	(44)
Interest rate swaps, mark-to-market gain	1,253	70	3,993	825
Credit default swaps - CDX IG - buy protection	—	—	21	—
Payer swaptions	194	28	866	102
U.S. Treasury securities - short position	532	(11)	1,620	463
U.S. Treasury securities - long position	(3)	(8)	(32)	(19)
U.S. Treasury futures contracts - short position	483	5	818	37
Other	(4)	(3)	(24)	55
Total gain (loss) on derivative instruments and other securities, net	\$ 1,474	\$ 101	\$ 4,474	\$ 922

For further details regarding our use of derivative instruments and related activity refer to Notes 2 and 5 of our Consolidated Financial Statements in this Form 10-Q.

Estimated Taxable Income (Loss)

For the three months ended September 30, 2022 and 2021, we had estimated taxable income (loss) attributed to common stockholders of \$174 million and \$45 million, respectively, or \$0.33 and \$0.09 per diluted common share, respectively. For the nine months ended September 30, 2022 and 2021, we had estimated taxable income (loss) attributed to common stockholders of \$153 million and \$(277) million, respectively, or \$0.29 and \$(0.52) per diluted common share, respectively. Income determined under GAAP differs from income determined under U.S. federal income tax rules because of both temporary and permanent differences in income and expense recognition. The primary differences are (i) unrealized gains and losses on investment securities and derivative instruments marked-to-market in current income for GAAP purposes, but excluded from taxable income until realized, settled or amortized over the instrument's original term, (ii) timing differences, both temporary and potentially permanent, in the recognition of certain realized gains and losses and (iii) temporary differences related to the amortization of premiums and discounts on investments. Furthermore, our estimated taxable income is subject to potential adjustments up to the time of filing our appropriate tax returns, which occurs after the end of our fiscal year. The following is a

reconciliation of our GAAP net income to our estimated taxable income (loss) for the three and nine months ended September 30, 2022 and 2021 (dollars in millions, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Net income (loss)	\$ (666)	\$ 212	\$ (1,751)	\$ 776
Book to tax differences:				
Premium amortization, net	(15)	(45)	(269)	(313)
Realized gain/loss, net	(1,454)	(342)	(5,029)	(1,793)
Net capital loss/(utilization of net capital loss carryforward)	353	(141)	2,887	—
Unrealized loss, net	2,034	358	4,406	1,055
Other	(2)	3	(15)	(2)
Total book to tax differences	916	(167)	1,980	(1,053)
REIT taxable income (loss)	250	45	229	(277)
REIT taxable income attributed to preferred stock	76	—	76	—
REIT taxable income (loss) attributed to common stock	\$ 174	\$ 45	\$ 153	\$ (277)
Weighted average common shares outstanding - basic	528.7	526.7	526.4	529.0
Weighted average common shares outstanding - diluted	529.8	528.6	527.5	529.0
REIT taxable income (loss) per common share - basic	\$ 0.33	\$ 0.09	\$ 0.29	\$ (0.52)
REIT taxable income (loss) per common share - diluted	\$ 0.33	\$ 0.09	\$ 0.29	\$ (0.52)
Beginning net capital loss carryforward	\$ 2,534	\$ 141	\$ —	\$ —
Increase (decrease) in net capital loss carryforward	353	(141)	2,887	—
Ending net capital loss carryforward	\$ 2,887	\$ —	\$ 2,887	\$ —
Ending net capital loss carryforward per common share	\$ 5.24	\$ —	\$ 5.24	\$ —

LIQUIDITY AND CAPITAL RESOURCES

Our business is dependent on our ability to maintain adequate levels of liquidity and capital resources to fund day-to-day operations, fulfill collateral requirements under our funding and derivative agreements, and to satisfy our dividend distribution requirement of at least 90% of our taxable income to maintain our qualification as a REIT. Our primary sources of liquidity are unencumbered cash and securities, borrowings available under repurchase agreements, TBA dollar roll financing and monthly receipts of principal and interest payments. We may also conduct asset sales, change our asset or funding mix, issue equity or undertake other capital enhancing actions to maintain adequate levels of liquidity and capital resources. There are various risks and uncertainties that can impact our liquidity, such as those described in Item 1A. *Risk Factors* of our most recent Annual Report on Form 10-K and Item 3. *Quantitative and Qualitative Disclosures of Market Risks* in this Form 10-Q. In assessing our liquidity, we consider a number of factors, including our current leverage, collateral levels, access to capital markets, overall market conditions, and the sensitivity of our tangible net book value over a range of scenarios. We believe that we have sufficient liquidity and capital resources available to meet our obligations and execute our business strategy.

Leverage and Financing Sources

Our leverage will vary depending on market conditions and our assessment of relative risks and returns, but we generally expect our leverage to be between six and twelve times the amount of our tangible stockholders' equity, measured as the sum of our total mortgage borrowings and net payable / (receivable) for unsettled investment securities, divided by the sum of our total stockholders' equity adjusted to exclude goodwill. Our tangible net book value "at risk" leverage ratio was 8.7x and 7.7x as of September 30, 2022 and December 31, 2021, respectively. The following table includes a summary of our mortgage borrowings outstanding as of September 30, 2022 and December 31, 2021 (dollars in millions). For additional details of our mortgage borrowings refer to Notes 2, 4 and 5 to our Consolidated Financial Statements in this Form 10-Q.

Mortgage Borrowings	September 30, 2022		December 31, 2021	
	Amount	%	Amount	%
Repurchase agreements ^{1,2}	\$ 39,071	67 %	\$ 46,911	63 %
Debt of consolidated variable interest entities, at fair value	98	— %	126	— %
Total debt	39,169	67 %	47,037	63 %
TBA and forward settling non-Agency securities, at cost	19,116	33 %	27,622	37 %
Total mortgage borrowings	\$ 58,285	100 %	\$ 74,659	100 %

1. As of September 30, 2022 and December 31, 2021, 48% and 42%, respectively, of our repurchase agreements were funded through the Fixed Income Clearing Corporation's GCF Repo service.

2. Amounts exclude U.S. Treasury repurchase agreements.

Our primary financing sources are collateralized borrowings structured as repurchase agreements. We enter into repurchase agreements, or "repo," through bi-lateral arrangements with financial institutions and independent dealers. We also enter into third-party repurchase agreements through our wholly-owned registered broker-dealer subsidiary, Bethesda Securities, LLC, such as tri-party repo offered through the FICC's GCF Repo service. We manage our repurchase agreement funding position through a variety of methods, including diversification of counterparties, maintaining a staggered maturity profile and utilization of interest rate hedging strategies. We also use TBA dollar roll transactions as a means of synthetically financing Agency RMBS.

The terms and conditions of our repurchase agreements are determined on a transaction-by-transaction basis when each such borrowing is initiated or renewed and, in the case of GCF Repo, by the variable margin requirements calculated by the FICC, which acts as the central counterparty. The amount borrowed is generally equal to the fair value of the securities pledged, as determined by the lending counterparty, less an agreed-upon discount, referred to as a "haircut," which reflects the underlying risk of the specific collateral and protects the counterparty against a change in its value. Interest rates are generally fixed based on prevailing rates corresponding to the term of the borrowing. None of our repo counterparties are obligated to renew or otherwise enter into new borrowings at the conclusion of our existing borrowings.

The use of TBA dollar roll transactions increases our funding diversification, expands our available pool of assets, and increases our overall liquidity position, as TBA contracts typically have lower implied haircuts relative to Agency RMBS pools funded with repo financing. TBA dollar roll transactions may also have a lower implied cost of funds than comparable repo funded transactions (referred to as "dollar roll specialness") offering incremental return potential. However, if it were to become uneconomical to roll our TBA contracts into future months it may be necessary to take physical delivery of the underlying securities and fund those assets with cash or other financing sources, which could reduce our liquidity position.

Collateral Requirements and Unencumbered Assets

Amounts available to be borrowed under our repurchase agreements are dependent upon prevailing interest rates, the lender's "haircut" requirements and collateral value. Each of these elements may fluctuate with changes in interest rates, credit quality and liquidity conditions within the financial markets. To help manage the adverse impact of interest rate changes on our borrowings, we utilize an interest rate risk management strategy involving the use of derivative financial instruments. In particular, we attempt to mitigate the risk of the cost of our short-term funding liabilities increasing at a faster rate than the earnings of our long-term fixed rate assets during a period of rising interest rates.

The collateral requirements, or haircut levels, under our repo agreements are typically determined on an individual transaction basis or by the prevailing requirements established by the FICC for GCF tri-party repo. Consequently, haircut levels and minimum margin requirements can change over time and may increase during periods of elevated market volatility. If the fair value of our collateral declines, our counterparties will typically require that we post additional collateral to re-establish the agreed-upon collateral levels, referred to as "margin calls." Similarly, if the estimated fair value of our investment securities increases, we may request that counterparties release collateral back to us. Our counterparties typically have the sole discretion to determine the value of pledged collateral but are required to act in good faith in making determinations of value. Our agreements generally provide that in the event of a margin call, collateral must be posted on the same business day, subject to notice requirements. As of September 30, 2022, we had met all our margin requirements.

The value of Agency RMBS collateral is impacted by market factors and is reduced by monthly principal pay-downs on the underlying mortgage pools. Fannie Mae and Freddie Mac publish monthly security pay-down factors for their mortgage pools on the fifth day after month-end, but do not remit payment to security holders until generally the 25th day after month-end. Bi-lateral repo counterparties assess margin to account for the reduction in value of Agency collateral when factors are released. The FICC assesses margin on the last day of each month, prior to the factor release date, based on its internally projected pay-down rates (referred to as the "blackout period exposure adjustment" or "blackout margin"). On the factor release date, the blackout margin is released and collateralization requirements are adjusted to actual factor data. Due to the timing difference between associated margin calls and our receipt of principal pay-downs, our liquidity is temporarily reduced each month for principal repayments. We attempt to manage the liquidity risk associated with principal pay-downs by monitoring conditions impacting prepayment rates and through asset selection. As of September 30, 2022, approximately 29% of our investment portfolio consisted of TBA securities, which are not subject to monthly principal pay-downs. The remainder of our portfolio, primarily consisted of Agency RMBS, which had an average one-year CPR forecast of 5%.

Collateral requirements under our derivative agreements are subject to our counterparties' assessment of their maximum risk of loss associated with the derivative instrument, referred to as the initial or minimum margin requirement, and may be adjusted based on changes in market volatility and other factors. We are also subject to daily variation margin requirements based on changes in the value of the derivative instrument and/or collateral pledged. Daily variation margin requirements also entitle us to receive collateral if the value of amounts owed to us under the derivative agreement exceeds the minimum margin requirement. The collateral requirements under our TBA contracts are governed by the Mortgage-Backed Securities Division ("MBSD") of the FICC and, if applicable, by third-party brokerage agreements, which may establish margin levels in excess of the MBSD. Collateral levels for interest rate derivative agreements are typically governed by the central clearing exchange and the associated futures commission merchants ("FCMs"), which may establish margin levels in excess of the clearing exchange. Collateral levels for interest rate derivative agreements not subject to central clearing are established by the counterparty financial institution.

Haircut levels and minimum margin requirements imposed by our counterparties reduce the amount of our unencumbered assets and limit the amount we can borrow against our investment securities. During the nine months ended September 30, 2022, haircuts on our repo funding arrangements remained stable. As of September 30, 2022, the weighted average haircut on our repurchase agreements was approximately 3.9% of the value of our collateral, compared to 3.8% as of December 31, 2021.

To mitigate the risk of margins calls, we seek to maintain excess liquidity by holding unencumbered liquid assets that can be used to satisfy collateral requirements, collateralize additional borrowings or sold for cash. As of September 30, 2022, our unencumbered assets totaled approximately \$3.7 billion, or 56% of tangible equity, consisting of \$3.6 billion of unencumbered cash and Agency RMBS and \$0.1 billion of unencumbered credit assets. This compares to \$6.5 billion of unencumbered assets, or 67% of tangible equity, as of December 31, 2021, consisting of \$5.8 billion of unencumbered cash and Agency RMBS and \$0.7 billion of unencumbered credit assets.

Counterparty Risk

Collateral requirements imposed by counterparties subject us to the risk that the counterparty does not return pledged assets to us as and when required. We attempt to manage this risk by monitoring our collateral positions and limiting our

counterparties to registered clearinghouses and major financial institutions with acceptable credit ratings. We also diversify our funding across multiple counterparties and by region.

As of September 30, 2022, our maximum amount at risk (or the excess/shortfall of the value of collateral pledged/received over our repurchase agreement liabilities/reverse repurchase agreement receivables) with any of our repurchase agreement counterparties, excluding the FICC, was less than 3% of our tangible stockholders' equity, with our top five repo counterparties, excluding the FICC, representing approximately 6% of our tangible stockholders' equity. As of September 30, 2022, approximately 7% of our tangible stockholder's equity was at risk with the FICC. Excluding central clearing exchanges, as of September 30, 2022, our amount at risk with any counterparty to our derivative agreements was less than 1% of our stockholders' equity.

Asset Sales

Agency RMBS securities are among the most liquid fixed income securities, and the TBA market is the second most liquid market (after the U.S. Treasury market). Although market conditions fluctuate, the vitality of these markets enables us to sell assets under most conditions to generate liquidity through direct sales or delivery into TBA contracts, subject to "good delivery" provisions promulgated by the Securities Industry and Financial Markets Association ("SIFMA"). Under certain market conditions, however, we may be unable to realize the full carrying value of our securities. We attempt to manage this risk by maintaining at least a minimum level of securities that trade at or near TBA values that in our estimation enhances our portfolio liquidity across a wide range of market conditions. Please refer to *Trends and Recent Market Impacts* of this Management Discussion and Analysis for further information regarding Agency RMBS and TBA market conditions during the third quarter.

Capital Markets

The equity capital markets serve as a source of capital to grow our business and to meet potential liquidity needs of our business. The availability of equity capital is dependent on market conditions and investor demand for our common and preferred stock. We will typically not issue common stock at times when we believe the capital raised will not be accretive to our tangible net book value or earnings, and we will typically not issue preferred equity when its cost exceeds acceptable hurdle rates of return on our equity. There can be no assurance that we will be able to raise additional equity capital at any particular time or on any particular terms. Furthermore, when the trading price of our common stock is less than our estimate of our current tangible net book value per common share, among other conditions, we may repurchase shares of our common stock. Please refer to Note 10 of our Consolidated Financial Statements in this Form 10-Q for further details regarding our recent equity capital transactions, if any.

OFF-BALANCE SHEET ARRANGEMENTS

As of September 30, 2022, we did not maintain relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance, or special purpose or variable interest entities, established to facilitate off-balance sheet arrangements or other contractually narrow or limited purposes. Additionally, as of September 30, 2022, we had not guaranteed obligations of unconsolidated entities or entered into a commitment or intent to provide funding to such entities.

FORWARD-LOOKING STATEMENTS

The statements contained in this Quarterly Report that are not historical facts, including estimates, projections, beliefs, expectations concerning conditions, events, or the outlook for our business, strategy, performance, operations or the markets or industries in which we operate, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act. Forward-looking statements are typically identified by words such as "believe," "plan," "expect," "anticipate," "see," "intend," "outlook," "potential," "forecast," "estimate," "will," "could," "should," "likely" and other similar, correlative or comparable words and expressions.

Forward looking statements are based on management's assumptions, projections and beliefs as of the date of this Quarterly Report, but they involve a number of risks and uncertainties. Actual results may differ materially from those anticipated in forward-looking statements, as well as from historical performance. Factors that could cause actual results to vary from our forward-looking statements include, but are not limited to, the following:

- changes in U.S. monetary policy or interest rates, including actions taken by the Federal Reserve to normalize monetary policy, to terminate its purchases of Agency RMBS and to reduce the size of its U.S. Treasury and Agency RMBS bond portfolio;
- fluctuations in the yield curve;
- fluctuations in mortgage prepayment rates on the loans underlying our Agency RMBS;

- the availability and terms of financing;
- changes in the market value of our assets, including from changes in net interest spreads, and changes in market liquidity or depth;
- the effectiveness of our risk mitigation strategies;
- conditions in the market for Agency RMBS and other mortgage securities;
- the impact of the COVID-19 pandemic and of measures taken in response to the COVID-19 pandemic by various governmental authorities, businesses and other third parties;
- actions by the federal, state, or local governments to stabilize the economy, the housing sector or financial markets;
- changes to laws, regulations, rules or policies that affect U.S. housing finance activity, the GSE's or the markets for Agency RMBS
- legislative or regulatory changes that affect our status as a REIT, our exemption from the Investment Company Act of 1940 or the mortgage markets in which we participate; and
- other risks discussed under the heading "Risk Factors" herein and in our Annual Report on Form 10-K.

Forward-looking statements speak only as of the date made, and we do not assume any duty and do not undertake to update forward-looking statements. A further discussion of risks and uncertainties that could cause actual results to differ from any of our forward-looking statements is included in our most recent Annual Report on Form 10-K and this document under Item 1A. *Risk Factors*. We caution readers not to place undue reliance on our forward-looking statements.

Item 3. *Quantitative and Qualitative Disclosures about Market Risk*

Market risk is the exposure to loss resulting from changes in market factors such as interest rates, foreign currency exchange rates, commodity prices and equity prices. The primary market risks that we are exposed to are interest rate, prepayment, spread, liquidity, extension and credit risks.

Interest Rate Risk

We are subject to interest rate risk in connection with the fixed income nature of our assets and the short-term, variable rate nature of our financing obligations. Our operating results depend in large part on differences between the income earned on our assets and our cost of borrowing and hedging activities. The costs associated with our borrowings are generally based on prevailing market interest rates. During a period of rising interest rates, our borrowing costs generally will increase while the yields earned on our existing portfolio of leveraged fixed-rate assets will largely remain static. This can result in a decline in our net interest spread. Changes in the level of interest rates can also affect the rate of mortgage prepayments and the value of our assets.

Interest rates are highly sensitive to many factors, including fiscal and monetary policies and domestic and international economic and political considerations, as well as other factors beyond our control. Subject to maintaining our qualification as a REIT, we engage in a variety of interest rate management techniques to mitigate the influence of interest rate changes on our net interest income and fluctuations of our tangible net book value. The principal instruments that we use to hedge our interest rate risk are interest rate swaps, swaptions, U.S. Treasury securities and U.S. Treasury futures contracts. Our hedging techniques are highly complex and are partly based on assumed levels of prepayments of our assets. If prepayments are slower or faster than assumed, the maturity of our investments will also differ from our expectations, which could reduce the effectiveness of our hedging strategies and may cause losses on such transactions and adversely affect our cash flow.

The severity of potential declines in our tangible net book value due to fluctuations in interest rates would depend on our asset, liability, and hedge composition at the time, as well as the magnitude and duration of the interest rate change. Primary measures of an instrument's price sensitivity to interest rate fluctuations are its duration and convexity. Duration measures the estimated percentage change in market value of an instrument that would be caused by a parallel change in short and long-term interest rates. The duration of our assets will vary with changes in interest rates and tends to increase when interest rates rise and decrease when interest rates fall. This "negative convexity" generally increases the interest rate exposure of our investment portfolio in excess of what is measured by duration alone.

We estimate the duration and convexity of our assets using a third-party risk management system and market data. We review the estimates for reasonableness, giving consideration to any unique characteristics of our securities, market conditions and other factors likely to impact these estimates, and based on our judgement we may make adjustments to the third-party estimates.

The table below quantifies the estimated changes in the fair value of our investment portfolio (including derivatives and other securities used for hedging purposes) and in our tangible net book value per common share as of September 30, 2022 and

December 31, 2021 should interest rates go up or down by 25, 50 and 75 basis points, assuming instantaneous parallel shifts in the yield curve and including the impact of both duration and convexity. All values in the table below are measured as percentage changes from the base interest rate scenario. The base interest rate scenario assumes interest rates and prepayment projections as of September 30, 2022 and December 31, 2021.

To the extent that these estimates or other assumptions do not hold true, which may be more likely during periods of elevated market volatility, actual results could differ materially from our projections. Moreover, if different models were employed in the analysis, materially different projections could result. Lastly, while the table below reflects the estimated impact of interest rate changes on a static portfolio, we actively manage our portfolio and we continuously adjust the size and composition of our asset and hedge portfolio.

Change in Interest Rate	Interest Rate Sensitivity ^{1,2}			
	September 30, 2022		December 31, 2021	
	Estimated Change in Portfolio Market Value	Estimated Change in Tangible Net Book Value Per Common Share	Estimated Change in Portfolio Market Value	Estimated Change in Tangible Net Book Value Per Common Share
-75 Basis Points	+0.8%	+9.6%	-0.6%	-6.4%
-50 Basis Points	+0.6%	+6.7%	-0.2%	-2.3%
-25 Basis Points	0.3%	+3.5%	0.0%	-0.3%
+25 Basis Points	-0.3%	-3.8%	-0.1%	-1.3%
+50 Basis Points	-0.6%	-7.8%	-0.4%	-3.8%
+75 Basis Points	-1.0%	-11.9%	-0.7%	-7.4%

1. Derived from models that are dependent on inputs and assumptions, assumes there are no changes in mortgage spreads and assumes a static portfolio. Actual results could differ materially from these estimates.
2. Includes the effect of derivatives and other securities used for hedging purposes. Interest rates are assumed to be floored at 0% in down rate scenarios.

Prepayment Risk

Prepayment risk is the risk that our assets will be repaid at a faster rate than anticipated. Interest rates and numerous other factors affect the rate of prepayments, such as housing prices, general economic conditions, loan age, size and loan-to-value ratios, and GSE buyouts of delinquent loans underlying our securities. Generally, declining mortgage rates increase the rate of prepayments, while rising rates have the opposite effect.

If our assets prepay at a faster rate than anticipated, we may be unable to reinvest the repayments at acceptable yields. If the proceeds are reinvested at lower yields than our existing assets, our net interest income would be negatively impacted. We also amortize or accrete premiums and discounts we pay or receive at purchase relative to the stated principal of our assets into interest income over their projected lives using the effective interest method. If the actual and estimated future prepayment experience differs from our prior estimates, we are required to record an adjustment to interest income for the impact of the cumulative difference in the effective yield.

Extension Risk

Extension risk is the risk that our assets will be repaid at a slower rate than anticipated and generally increases when interest rates rise. In a rising or higher interest rate environment, we may be required to finance our investments at potentially higher costs without the ability to reinvest principal into higher yielding securities as a result of borrowers prepaying their mortgages at a slower pace than originally anticipated, adversely impacting our net interest spread, and thus our net interest income.

As of September 30, 2022 and December 31, 2021, our investment securities (excluding TBAs) had a weighted average projected CPR of 7.0% and 10.9%, respectively, and a weighted average yield of 3.14% and 2.43%, respectively. The table below presents estimated weighted average projected CPRs and yields for our investment securities should interest rates go up or down instantaneously by 25, 50 and 75 basis points. Estimated yields exclude the impact of retroactive "catch-up" premium amortization adjustments for prior periods due to changes in the projected CPR assumption.

Interest Rate Sensitivity ¹				
Change in Interest Rate	September 30, 2022		December 31, 2021	
	Weighted Average Projected CPR	Weighted Average Asset Yield ²	Weighted Average Projected CPR	Weighted Average Asset Yield ²
-75 Basis Points	7.4%	3.11%	17.0%	2.21%
-50 Basis Points	7.2%	3.12%	14.1%	2.30%
-25 Basis Points	7.0%	3.13%	12.2%	2.37%
Actual as of Period End	7.0%	3.14%	10.9%	2.43%
+25 Basis Points	6.8%	3.15%	9.9%	2.47%
+50 Basis Points	6.7%	3.16%	9.1%	2.51%
+75 Basis Points	6.6%	3.17%	8.4%	2.54%

1. Derived from models that are dependent on inputs and assumptions and assumes a static portfolio. Actual results could differ materially from these estimates. Table excludes TBA securities.
2. Asset yield based on historical cost basis and does not include the impact of retroactive "catch-up" premium amortization adjustments due to changes in projected CPR.

Spread Risk

Spread risk is the risk that the market spread between the yield on our assets and the yield on benchmark interest rates linked to our interest rate hedges, such as U.S. Treasury rates and interest rate swap rates, may vary. As a levered investor in mortgage-backed securities, spread risk is an inherent component of our investment strategy. Therefore, although we use hedging instruments to attempt to protect against moves in interest rates, our hedges are generally not designed to protect against spread risk, and our tangible net book value could decline if spreads widen.

Fluctuations in mortgage spreads can occur due to a variety of factors, including changes in interest rates, prepayment expectations, actual or anticipated monetary policy actions by the U.S. and foreign central banks, liquidity conditions, required rates of returns on different assets and other market supply and demand factors. The table below quantifies the estimated changes in the fair value of our assets, net of hedges, and our tangible net book value per common share as of September 30, 2022 and December 31, 2021 should spreads widen or tighten by 10, 25 and 50 basis points. The estimated impact of changes in spreads is in addition to our interest rate shock sensitivity included in the interest rate shock table above. The table below assumes a spread duration of 6.1 and 5.4 years as of September 30, 2022 and December 31, 2021, respectively, based on interest rates and prices as of such dates; however, our portfolio's sensitivity to mortgage spread changes will vary with changes in interest rates and in the size and composition of our portfolio. Therefore, actual results could differ materially from our estimates.

Spread Sensitivity ^{1,2}				
Change in MBS Spread	September 30, 2022		December 31, 2021	
	Estimated Change in Portfolio Market Value	Estimated Change in Tangible Net Book Value Per Common Share	Estimated Change in Portfolio Market Value	Estimated Change in Tangible Net Book Value Per Common Share
-50 Basis Points	+3.1%	+37.5%	+2.7%	+27.1%
-25 Basis Points	+1.5%	+18.8%	+1.4%	+13.6%
-10 Basis Points	+0.6%	+7.5%	+0.5%	+5.4%
+10 Basis Points	-0.6%	-7.5%	-0.5%	-5.4%
+25 Basis Points	-1.5%	-18.8%	-1.4%	-13.6%
+50 Basis Points	-3.1%	-37.5%	-2.7%	-27.1%

1. Spread sensitivity is derived from models that are dependent on inputs and assumptions, assumes there are no changes in interest rates and assumes a static portfolio. Actual results could differ materially from these estimates.
2. Includes the effect of derivatives and other securities used for hedging purposes.

Liquidity Risk

Our liquidity risk principally arises from financing long-term fixed rate assets with shorter-term variable rate borrowings. Future borrowings are dependent upon the willingness of lenders to finance our investments, lender collateral

requirements and the lenders' determination of the fair value of the securities pledged as collateral, which fluctuates with changes in interest rates and liquidity conditions within the commercial banking and mortgage finance industries.

As of September 30, 2022, we believe that we have sufficient liquidity and capital resources available to execute our business strategy (see *Liquidity and Capital Resources* in this Form 10-Q for additional details). However, should the value of our collateral or the value of our derivative instruments suddenly decrease, or initial/minimum margin requirements increase, margin calls relating to our funding liabilities and derivative agreements could increase, causing an adverse change in our liquidity position. Furthermore, there is no assurance that we will always be able to renew (or roll) our short-term funding liabilities. In addition, our counterparties have the option to increase our haircuts (margin requirements) on the assets we pledge against our funding liabilities, thereby reducing the amount that can be borrowed against an asset even if they agree to renew or roll our funding liabilities. Significantly higher haircuts can reduce our ability to leverage our portfolio or may even force us to sell assets, especially if correlated with asset price declines or faster prepayment rates on our assets.

Credit Risk

Our credit sensitive investments, such as CRT and non-Agency securities, expose us to the risk of nonpayment of principal, interest or other remuneration we are contractually entitled to. We are also exposed to credit risk in the event our repurchase agreement counterparties default on their obligations to resell the underlying collateral back to us at the end of the repo term or in the event our derivative counterparties do not perform under the terms of our derivative agreements.

We accept credit exposure related to our credit sensitive assets at levels we deem prudent within the context of our overall investment strategy. We attempt to manage this risk through careful asset selection, pre-acquisition due diligence, post-acquisition performance monitoring, and the sale of assets where we identify negative credit trends. We may also manage credit risk with credit default swaps or other financial derivatives that we believe are appropriate. Additionally, we may vary the mix of our interest rate and credit sensitive assets or our duration gap to adjust our credit exposure and/or improve the return profile of our assets, such as when we believe credit performance is inversely correlated with changes in interest rates. Our credit risk related to derivative and repurchase agreement transactions is largely mitigated by limiting our counterparties to major financial institutions with acceptable credit ratings or to registered central clearinghouses and monitoring concentration levels with any one counterparty. We also continuously monitor and adjust the amount of collateral pledged based on changes in market value.

There is no guarantee that our efforts to manage credit risk will be successful and we could suffer losses if credit performance is worse than our expectations or our counterparties default on their obligations. Excluding central clearing exchanges, as of September 30, 2022, our maximum amount at risk with any counterparty related to our repurchase agreements and derivative agreements was approximately 3% and less than 1%, respectively, of tangible stockholders' equity.

Item 4. Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure based on the definition of "disclosure controls and procedures" as promulgated under the Exchange Act and the rules and regulations thereunder. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

We, including our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of September 30, 2022. Based on the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There have been no changes in our "internal control over financial reporting" (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. *Legal Proceedings*

Neither we, nor any of our consolidated subsidiaries, are currently subject to any material litigation nor, to our knowledge, is any material litigation threatened against us or any consolidated subsidiary, other than routine litigation and administrative proceedings arising in the ordinary course of business. Such proceedings are not expected to have a material adverse effect on the business, financial conditions, or results of our operations.

Item 1A. *Risk Factors*

There have been no material changes to the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2021.

Item 2. *Unregistered Sales of Equity Securities and Use of Proceeds*

None.

Item 3. *Defaults upon Senior Securities*

None.

Item 4. *Mine Safety Disclosures*

Not applicable.

Item 5. *Other Information*

None.

Item 6. *Exhibits and Financial Statement Schedules*

(a) Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
*3.1	AGNC Investment Corp. Amended and Restated Certificate of Incorporation, as amended, incorporated by reference from Exhibit 3.1 of Form 10-K for the year ended December 31, 2021 (File No. 001-34057), filed February 23, 2022.
*3.2	AGNC Investment Corp. Fourth Amended and Restated Bylaws, as amended, incorporated herein by reference to Exhibit 3.1 of Form 8-K (File No. 001-34057), filed March 11, 2021.
*3.3	Certificate of Designations of 7.00% Series C Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, incorporated herein by reference to Exhibit 3.5 of Form 8-A (File No. 001-34057), filed August 18, 2017.
*3.4	Certificate of Elimination of 8.000% Series A Cumulative Redeemable Preferred Stock, incorporated herein by reference to Exhibit 3.1 of Form 8-K (File No 001-34057), filed October 26, 2017.
*3.5	Certificate of Designations of 6.875% Series D Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, incorporated herein by reference to Exhibit 3.5 of Form 8-A (File No 001-34057), filed March 6, 2019.
*3.6	Certificate of Designations of 6.50% Series E Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, incorporated herein by reference to Exhibit 3.6 of Form 8-A (File No 001-34057), filed October 3, 2019.
*3.7	Certificate of Elimination of 7.750% Series B Cumulative Redeemable Preferred Stock, incorporated herein by reference to Exhibit 3.1 of Form 8-K (File No 001-34057), filed December 13, 2019.
*3.8	Certificate of Designations of 6.125% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, incorporated herein by reference to Exhibit 3.6 of Form 8-A (File No 001-34057), filed February 11, 2020.
*3.9	Certificate of Designations of 7.75% Series G Fixed-Rate Reset Cumulative Redeemable Preferred Stock, incorporated herein by reference to Exhibit 3.7 of Form 8-A (File No 001-34057), filed September 14, 2022.

- *4.1 Instruments defining the rights of holders of securities: See Article IV of our Amended and Restated Certificate of Incorporation, as amended, incorporated herein by reference to Exhibit 3.1 of Form 10-K for the year ended December 31, 2021 (File No. 001-34057), filed February 23, 2022.
- *4.2 Instruments defining the rights of holders of securities: See Article VI of our Fourth Amended and Restated Bylaws, as amended, incorporated herein by reference to Exhibit 3.1 of Form 8-K, filed March 11, 2021.
- 4.3 Form of Certificate for Common Stock, filed herewith.
- *4.4 Specimen 7.00% Series C Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock Certificate, incorporated herein by reference to Exhibit 4.1 of Form 8-A (File No. 001-34057), filed August 18, 2017.
- *4.5 Specimen 6.875% Series D Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock Certificate, incorporated herein by reference to Exhibit 4.1 of Form 8-A (File No. 001-34057), filed March 6, 2019.
- *4.6 Specimen 6.50% Series E Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock Certificate, incorporated herein by reference to Exhibit 4.1 of Form 8-A (File No. 001-34057), filed October 3, 2019.
- *4.7 Specimen 6.125% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock Certificate, incorporated herein by reference to Exhibit 4.1 of Form 8-A (File No 001-34057), filed February 11, 2020.
- *4.8 Specimen 7.75% Series G Fixed-Rate Reset Cumulative Redeemable Preferred Stock Certificate, incorporated herein by reference to Exhibit 4.1 of Form 8-A (File No 001-34057), filed September 14, 2022.
- *4.9 Deposit Agreement relating to 7.00% Series C Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, dated August 22, 2017, among AGNC Investment Corp., Computershare Inc. and Computershare Trust Company, N.A., jointly as depositary, incorporated herein by reference to Exhibit 4.2 of Form 8-K (File No. 001-34057) filed August 22, 2017.
- *4.10 Form of Depositary Receipt representing 1/1,000th of a share of 7.00% Series C Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock (included as part of Exhibit 4.9), incorporated herein by reference to Exhibit A of Exhibit 4.2 of Form 8-K (File No. 001-34057) filed August 22, 2017.
- *4.11 Deposit Agreement relating to 6.875% Series D Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, dated March 6, 2019, among AGNC Investment Corp., Computershare Inc. and Computershare Trust Company, N.A., jointly as depositary, incorporated herein by reference to Exhibit 4.2 of Form 8-K (File No. 001-34057) filed March 6, 2019.
- *4.12 Form of Depositary Receipt representing 1/1,000th of a share of 6.875% Series D Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock (included as part of Exhibit 4.11), incorporated herein by reference to Exhibit A of Exhibit 4.2 of Form 8-K (File No. 001-34057) filed March 6, 2019.
- *4.13 Deposit Agreement relating to 6.50% Series E Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, dated October 3, 2019, among AGNC Investment Corp., Computershare Inc. and Computershare Trust Company, N.A., jointly as depositary, incorporated herein by reference to Exhibit 4.2 of Form 8-K (File No. 001-34057) filed October 3, 2019.
- *4.14 Form of Depositary Receipt representing 1/1,000th of a share of 6.50% Series E Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock (included as part of Exhibit 4.13), incorporated herein by reference to Exhibit A of Exhibit 4.2 of Form 8-K (File No. 001-34057) filed October 3, 2019.
- *4.15 Deposit Agreement relating to 6.125% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, dated February 11, 2020, among AGNC Investment Corp., Computershare Inc. and Computershare Trust Company, N.A., jointly as depositary, incorporated herein by reference to Exhibit 4.1 of Form 8-K (File No. 001-34057) filed February 11, 2020.
- *4.16 Form of Depositary Receipt representing 1/1,000th of a share of 6.125% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock (included as part of Exhibit 4.15), incorporated herein by reference to Exhibit A of Exhibit 4.1 of Form 8-K (File No. 001-34057) filed February 11, 2020.
- *4.17 Deposit Agreement relating to 7.75% Series G Fixed-Rate Reset Cumulative Redeemable Preferred Stock, dated September 14, 2022, among AGNC Investment Corp., Computershare Inc. and Computershare Trust

Company, N.A., jointly as depositary, incorporated herein by reference to Exhibit 4.2 of Form 8-K (File No. 001-34057) filed September 14, 2022.

*4.18	Form of Depositary Receipt representing 1/1,000th of a share of 7.75% Series G Fixed-Rate Reset Cumulative Redeemable Preferred Stock (included as part of Exhibit 4.17), incorporated herein by reference to Exhibit A of Exhibit 4.2 of Form 8-K (File No. 001-34057) filed September 14, 2022.
31.1	Certification of CEO Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.
31.2	Certification of CFO Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.
32	Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS**	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB**	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document

* Previously filed

** This exhibit is being furnished rather than filed, and shall not be deemed incorporated by reference into any filing, in accordance with Item 601 of Regulation S-K

- (b) Exhibits
See the exhibits filed herewith.
- (c) Additional financial statement schedules
None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AGNC INVESTMENT CORP.

By: /s/ PETER J. FEDERICO
Peter J. Federico
President and
Chief Executive Officer (Principal Executive Officer)

Date: November 7, 2022

By: /s/ BERNICE E. BELL
Bernice E. Bell
Executive Vice President and
Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

Date: November 7, 2022