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: June 30, 2023

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE TRANSITION PERIOD FROM ______________ TO ________________

COMMISSION FILE NUMBER: 1-13447

ANNALY®

ANNALY CAPITAL MANAGEMENT INC

(Exact Name of Registrant as Specified in its Charter)

Maryland	**22-3479661**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
1211 Avenue of the Americas	
New York, New York	**10036**
(Address of principal executive offices)	(Zip Code)

(212) 696-0100

(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 Each Exchange on Which Registered
Common Stock, par value $0.01 per share	NLY	New York Stock Exchange
6.95% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock	NLY.F	New York Stock Exchange
6.50% Series G Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock	NLY.G	New York Stock Exchange
6.75% Series I Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock	NLY.I	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required 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 (§ 232.405 of this chapter) 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 the 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	☑	Accelerated filer	☐	Non-accelerated filer	☐	Smaller reporting company	☐	Emerging growth company	☐

If an emerging growth company, indicate by check mark if the 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 Act). Yes ☐ No ☑

The number of shares of the registrant's Common Stock outstanding on July 28, 2023 was 493,907,983.

WEBSITE AND SOCIAL MEDIA DISCLOSURE

We use our website (www.annaly.com) and LinkedIn account (www.linkedin.com/company/annaly-capital-management) as channels of distribution of company information. The information we post through these channels may be deemed material. Accordingly, investors should monitor these channels, in addition to following our press releases, SEC filings and public conference calls and webcasts. In addition, you may automatically receive email alerts and other information about Annaly when you enroll your email address by visiting the "Investors" section of our website, then clicking on "Investor Resources" and selecting "Email Alerts" to complete the email notification form. Our website, any alerts and social media channels are not incorporated into this annual report on Form 10-K.

ANNALY CAPITAL MANAGEMENT, INC.
FORM 10-Q
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PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

ANNALY CAPITAL MANAGEMENT, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL CONDITION
(dollars in thousands, except per share data)

	June 30, 2023 (Unaudited)	December 31, 2022 [1]
Assets		
Cash and cash equivalents (includes pledged assets of $1,060,005 and $1,424,160, respectively) [2]	$ **1,236,872**	$ 1,576,714
Securities (includes pledged assets of $63,021,106 and $60,660,121, respectively) [3]	**71,202,461**	65,789,907
Loans, net (includes pledged assets of $1,101,419 and $1,653,464, respectively) [4]	**1,154,320**	1,809,832
Mortgage servicing rights (includes pledged assets of $1,128,460 and $684,703, respectively)	**2,018,896**	1,748,209
Assets transferred or pledged to securitization vehicles	**11,318,419**	9,121,912
Derivative assets	**457,119**	342,064
Receivable for unsettled trades	**787,442**	575,091
Principal and interest receivable	**944,537**	637,301
Intangible assets, net	**15,163**	16,679
Other assets	**195,248**	233,003
Total assets	$ **89,330,477**	$ 81,850,712
Liabilities and stockholders' equity		
Liabilities		
Repurchase agreements	$ **61,637,600**	$ 59,512,597
Other secured financing	**500,000**	250,000
Debt issued by securitization vehicles	**9,789,282**	7,744,160
Participations issued	**492,307**	800,849
Derivative liabilities	**156,182**	204,172
Payable for unsettled trades	**4,331,315**	1,157,846
Interest payable	**140,620**	325,280
Dividends payable	**321,031**	412,113
Other liabilities	**74,795**	74,269
Total liabilities	**77,443,132**	70,481,286
Stockholders' equity		
Preferred stock, par value $0.01 per share, 63,500,000 authorized, issued and outstanding	**1,536,569**	1,536,569
Common stock, par value $0.01 per share, 1,468,250,000 and 2,936,500,000 authorized, 493,893,288 and 468,309,810 issued and outstanding, respectively	**4,939**	4,683
Additional paid-in capital	**23,550,346**	22,981,320
Accumulated other comprehensive income (loss)	**(2,382,531)**	(3,708,896)
Accumulated deficit	**(10,933,044)**	(9,543,233)
Total stockholders' equity	**11,776,279**	11,270,443
Noncontrolling interests	**111,066**	98,983
Total equity	**11,887,345**	11,369,426
Total liabilities and equity	$ **89,330,477**	$ 81,850,712

(1) Derived from the audited consolidated financial statements at December 31, 2022.

(2) Includes cash of consolidated Variable Interest Entities ("VIEs") of $3.5 million and $2.2 million at June 30, 2023 and December 31, 2022, respectively.

(3) Excludes $1.3 billion and $1.0 billion at June 30, 2023 and December 31, 2022, respectively, of non-Agency mortgage-backed securities in consolidated VIEs pledged as collateral and eliminated from the Company's Consolidated Statements of Financial Condition.

(4) Includes $1.1 million and $1.3 million of residential mortgage loans held for sale at June 30, 2023 and December 31, 2022, respectively.

See notes to consolidated financial statements.

ANNALY CAPITAL MANAGEMENT, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(dollars in thousands, except per share data)
(Unaudited)

	For The Three Months Ended June 30,		For The Six Months Ended June 30,	
	2023	2022	2023	2022
Net interest income				
Interest income	$ 921,494	$ 645,615	$ 1,739,744	$ 1,301,465
Interest expense	953,457	170,475	1,752,244	245,397
Net interest income	(31,963)	475,140	(12,500)	1,056,068
Net servicing income				
Servicing and related income	83,790	55,685	168,063	90,400
Servicing and related expense	8,930	5,949	16,810	9,706
Net servicing income	74,860	49,736	151,253	80,694
Other income (loss)				
Net gains (losses) on investments and other	(1,308,948)	(615,216)	(1,307,236)	(775,020)
Net gains (losses) on derivatives	1,475,325	1,015,643	574,573	2,657,671
Loan loss (provision) reversal	—	26,913	219	26,305
Business divestiture-related gains (losses)	—	(23,955)	—	(24,309)
Other, net	9,105	(5,486)	24,603	(2,428)
Total other income (loss)	175,482	397,899	(707,841)	1,882,219
General and administrative expenses				
Compensation expense	30,635	22,243	60,026	55,245
Other general and administrative expenses	12,280	13,795	23,717	26,557
Total general and administrative expenses	42,915	36,038	83,743	81,802
Income (loss) before income taxes	175,464	886,737	(652,831)	2,937,179
Income taxes	14,277	23,420	25,310	49,968
Net income (loss)	161,187	863,317	(678,141)	2,887,211
Net income (loss) attributable to noncontrolling interests	(5,846)	(3,379)	(918)	(1,740)
Net income (loss) attributable to Annaly	167,033	866,696	(677,223)	2,888,951
Dividends on preferred stock	35,766	26,883	67,641	53,766
Net income (loss) available (related) to common stockholders	$ 131,267	$ 839,813	$ (744,864)	$ 2,835,185
Net income (loss) per share available (related) to common stockholders				
Basic	$ 0.27	$ 2.21	$ (1.51)	$ 7.60
Diluted	$ 0.27	$ 2.20	$ (1.51)	$ 7.59
Weighted average number of common shares outstanding				
Basic	494,165,256	380,609,192	491,939,177	373,017,228
Diluted	494,358,982	380,898,750	491,939,177	373,313,723
Other comprehensive income (loss)				
Net income (loss)	$ 161,187	$ 863,317	$ (678,141)	$ 2,887,211
Unrealized gains (losses) on available-for-sale securities	(294,045)	(2,503,250)	381,329	(6,071,929)
Reclassification adjustment for net (gains) losses included in net income (loss)	462,128	657,806	945,036	802,593
Other comprehensive income (loss)	168,083	(1,845,444)	1,326,365	(5,269,336)
Comprehensive income (loss)	329,270	(982,127)	648,224	(2,382,125)
Comprehensive income (loss) attributable to noncontrolling interests	(5,846)	(3,379)	(918)	(1,740)
Comprehensive income (loss) attributable to Annaly	335,116	(978,748)	649,142	(2,380,385)
Dividends on preferred stock	35,766	26,883	67,641	53,766
Comprehensive income (loss) attributable to common stockholders	$ 299,350	$ (1,005,631)	$ 581,501	$ (2,434,151)

See notes to consolidated financial statements.

For The ANNALY CAPITAL MANAGEMENT, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(dollars in thousands)
(Unaudited)

	For The Three Months Ended June 30, 2023	For The Three Months Ended June 30, 2022	For The Six Months Ended June 30, 2023	For The Six Months Ended June 30, 2022
Preferred stock				
Beginning of period	**$ 1,536,569**	$ 1,536,569	**$ 1,536,569**	$ 1,536,569
End of period	**$ 1,536,569**	$ 1,536,569	**$ 1,536,569**	$ 1,536,569
Common stock				
Beginning of period	**$ 4,939**	$ 3,653	**$ 4,683**	$ 3,649
Issuance	**—**	369	**253**	372
Stock-based award activity	**—**	1	**3**	2
End of period	**$ 4,939**	$ 4,023	**$ 4,939**	$ 4,023
Additional paid-in capital				
Beginning of period	**$ 23,543,091**	$ 20,332,909	**$ 22,981,320**	$ 20,324,780
Issuance	**(118)**	949,126	**562,338**	955,227
Stock-based award activity	**7,373**	11,111	**6,688**	13,139
End of period	**$ 23,550,346**	$ 21,293,146	**$ 23,550,346**	$ 21,293,146
Accumulated other comprehensive income (loss)				
Beginning of period	**$ (2,550,614)**	$ (2,465,482)	**$ (3,708,896)**	$ 958,410
Unrealized gains (losses) on available-for-sale securities	**(294,045)**	(2,503,250)	**381,329**	(6,071,929)
Reclassification adjustment for net gains (losses) included in net income (loss)	**462,128**	657,806	**945,036**	802,593
End of period	**$ (2,382,531)**	$ (4,310,926)	**$ (2,382,531)**	$ (4,310,926)
Accumulated deficit				
Beginning of period	**$ (10,741,863)**	$ (7,980,407)	**$ (9,543,233)**	$ (9,653,582)
Net income (loss) attributable to Annaly	**167,033**	866,696	**(677,223)**	2,888,951
Dividends declared on preferred stock [1]	**(35,766)**	(26,883)	**(67,641)**	(53,766)
Dividends and dividend equivalents declared on common stock and stock-based awards [1]	**(322,448)**	(355,467)	**(644,947)**	(677,664)
End of period	**$ (10,933,044)**	$ (7,496,061)	**$ (10,933,044)**	$ (7,496,061)
Total stockholder's equity	**$ 11,776,279**	$ 11,026,751	**$ 11,776,279**	$ 11,026,751
Noncontrolling interests				
Beginning of period	**$ 116,911**	$ 51,528	**$ 98,983**	$ 25,499
Net income (loss) attributable to noncontrolling interests	**(5,846)**	(3,379)	**(918)**	(1,740)
Equity contributions from (distributions to) noncontrolling interests	**1**	15,000	**13,001**	39,390
End of period	**$ 111,066**	$ 63,149	**$ 111,066**	$ 63,149
Total equity	**$ 11,887,345**	$ 11,089,900	**$ 11,887,345**	$ 11,089,900

[1] Refer to the “Capital Stock” Note for dividends per share for each class of shares.

See notes to consolidated financial statements.

ANNALY CAPITAL MANAGEMENT, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(dollars in thousands)
(Unaudited)

	For The Six Months Ended June 30, 2023	For The Six Months Ended June 30, 2022
Cash flows from operating activities		
Net income (loss)	$ (678,141)	$ 2,887,211
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities		
Amortization of premiums and discounts of investments, net	105,438	19,404
Amortization of securitized debt premiums and discounts and deferred financing costs	6,435	(4,378)
Depreciation, amortization and other noncash expenses	12,032	11,145
Net (gains) losses on investments and derivatives	1,543,662	(1,944,200)
Business divestiture-related (gains) losses	—	24,309
Income (loss) from unconsolidated joint ventures	(289)	(10,378)
Loan loss provision (reversal)	(219)	(26,305)
Proceeds from sales and repayments of loans held for sale	747	1,619
Net receipts (payments) on derivatives	(332,685)	1,639,329
Net change in		
Other assets	(12,979)	(42,741)
Interest receivable	(306,771)	(19,128)
Interest payable	(184,660)	435
Other liabilities	(34,903)	180,529
Net cash provided by (used in) operating activities	117,667	2,716,851
Cash flows from investing activities		
Payments on purchases of securities	(18,067,651)	(14,422,639)
Proceeds from sales of securities	12,501,702	8,390,532
Principal payments on securities	3,012,034	5,737,737
Payments on purchases and origination of loans	(1,946,157)	(3,981,495)
Proceeds from sales of loans	—	1,832,930
Principal payments on loans	466,538	1,073,579
Payments on purchases of MSR	(213,346)	(683,972)
Proceeds from sales of MSR	—	9,065
Payments on purchases of interests in MSR	—	(4,913)
Proceeds from reverse repurchase agreements	32,900,024	7,750,024
Payments on reverse repurchase agreements	(32,900,024)	(7,750,024)
Net cash provided by (used in) investing activities	(4,246,880)	(2,049,176)
Cash flows from financing activities		
Proceeds from repurchase agreements and other secured financing	2,519,472,348	1,849,361,390
Payments on repurchase agreements and other secured financing	(2,517,093,741)	(1,853,629,599)
Proceeds from issuances of securitized debt	2,355,559	3,946,614
Principal payments on securitized debt	(397,043)	(843,470)
Payments on purchases of securitized debt	(2,504)	(2,990)
Proceeds from participations issued	532,445	1,216,950
Payments on repurchases of participations issued	(825,613)	(1,468,384)
Principal payments on participations issued	(20,954)	(31,844)
Net contributions (distributions) from (to) noncontrolling interests	13,001	39,390
Net proceeds from stock offerings, direct purchases and dividend reinvestments	562,591	955,599
Settlement of stock-based awards in satisfaction of withholding tax requirements	(5,810)	(3,050)
Dividends paid	(800,908)	(696,439)
Net cash provided by (used in) financing activities	3,789,371	(1,155,833)
Net (decrease) increase in cash and cash equivalents	(339,842)	(488,158)
Cash and cash equivalents including cash pledged as collateral, beginning of period	1,576,714	1,342,090
Cash and cash equivalents including cash pledged as collateral, end of period	$ 1,236,872	$ 853,932
Supplemental disclosure of cash flow information		
Interest received	$ 1,550,061	$ 1,144,124
Interest paid (excluding interest paid on interest rate swaps)	$ 1,780,252	$ 170,594
Net interest received (paid) on interest rate swaps	$ 618,036	$ (75,898)
Taxes received (paid)	$ (654)	$ (1,661)
Noncash investing and financing activities		
Receivable for unsettled trades	$ 787,442	$ 434,227
Payable for unsettled trades	$ 4,331,315	$ 1,995,960
Net change in unrealized gains (losses) on available-for-sale securities, net of reclassification adjustment	$ 1,326,365	$ (5,269,336)
Dividends declared, not yet paid	$ 321,031	$ 354,027

See notes to consolidated financial statements.

ANNALY CAPITAL MANAGEMENT, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. DESCRIPTION OF BUSINESS

Annaly Capital Management, Inc. (the "Company" or "Annaly") is a Maryland corporation that commenced operations on February 18, 1997. The Company is a leading diversified capital manager with investment strategies across mortgage finance. The Company owns a portfolio of real estate related investments, including mortgage pass-through certificates, collateralized mortgage obligations, credit risk transfer ("CRT") securities, other securities representing interests in or obligations backed by pools of mortgage loans, residential mortgage loans and mortgage servicing rights ("MSR"). The Company's principal business objective is to generate net income for distribution to its stockholders and optimize its returns through prudent management of its diversified investment strategies.

The Company is an internally-managed company that has elected to be taxed as a Real Estate Investment Trust ("REIT") as defined under the Internal Revenue Code of 1986, as amended, and regulations promulgated thereunder (the "Code").

The Company's three investment groups are primarily comprised of the following:

Investment Groups	Description
Annaly Agency Group	Invests in Agency mortgage-backed securities ("MBS") collateralized by residential mortgages which are guaranteed by Fannie Mae, Freddie Mac or Ginnie Mae and complementary investments within the Agency market, including Agency commercial mortgage-backed securities.
Annaly Residential Credit Group	Invests primarily in non-Agency residential whole loans and securitized products within the residential and commercial markets.
Annaly Mortgage Servicing Rights Group	Invests in MSR, which provide the right to service residential mortgage loans in exchange for a portion of the interest payments made on the loans.

2. BASIS OF PRESENTATION

The accompanying consolidated financial statements and related notes of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP").

The accompanying consolidated financial statements and related notes are unaudited and should be read in conjunction with the audited consolidated financial statements included in the Company's most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the "2022 Form 10-K"). The consolidated financial information as of December 31, 2022 has been derived from audited consolidated financial statements included in the Company's 2022 Form 10-K.

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported balance sheet amounts and/or disclosures at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates.

Reverse Stock Split

On September 8, 2022, the Company announced that its Board had unanimously approved a reverse stock split of the Company's common stock at a ratio of 1-for-4 (the "Reverse Stock Split"). The Reverse Stock Split was effective following the close of business on September 23, 2022 (the "Effective Time"). Accordingly, at the Effective Time, every four issued and outstanding shares of the Company's common stock were converted into one share of the Company's common stock. No fractional shares were issued in connection with the Reverse Stock Split. Instead, each stockholder that would have held fractional shares as a result of the Reverse Stock Split received cash in lieu of such fractional shares. The par value per share of the Company's common stock remained unchanged at $0.01 per share after the Reverse Stock Split. Accordingly, for all historical periods presented, an amount equal to the par value of the reduced number of shares resulting from the Reverse Stock Split was reclassified from Common stock to Additional paid in capital in the Company's Consolidated Statements of Financial Condition. All references made to share or per share amounts in the accompanying consolidated financial statements and disclosures have been retroactively adjusted, where applicable, to reflect the effects of the Reverse Stock Split.

3. SIGNIFICANT ACCOUNTING POLICIES

The Company's significant accounting policies are described below or are included elsewhere in these notes to the consolidated financial statements.

Principles of Consolidation – The consolidated financial statements include the accounts of the entities where the Company has a controlling financial interest. In order to determine whether the Company has a controlling financial interest, it first evaluates whether an entity is a voting interest entity ("VOE") or a variable interest entity ("VIE"). All intercompany balances and transactions have been eliminated in consolidation.

Voting Interest Entities – A VOE is an entity that has sufficient equity and in which equity investors have a controlling financial interest. The Company consolidates VOEs where it has a majority of the voting equity of such VOE.

Variable Interest Entities – A VIE is defined as an entity in which equity investors (i) do not have the characteristics of a controlling financial interest, and/or (ii) do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. A VIE is required to be consolidated by its primary beneficiary, which is defined as the party that has both (i) the power to control the activities that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE.

The Company performs ongoing reassessments of whether changes in the facts and circumstances regarding the Company's involvement with a VIE causes the Company's consolidation conclusion to change. Refer to the "Variable Interest Entities" Note for further information.

Equity Method Investments - For entities that are not consolidated, but where the Company has significant influence over the operating or financial decisions of the entity, the Company accounts for the investment under the equity method of accounting. In accordance with the equity method of accounting, the Company will recognize its share of earnings or losses of the investee in the period in which they are reported by the investee. The Company also considers whether there are any indicators of other-than-temporary impairment of joint ventures accounted for under the equity method. These investments are included in Other assets with income or loss included in Other, net.

Cash and Cash Equivalents – Cash and cash equivalents include cash on hand, cash held in money market funds on an overnight basis and cash pledged as collateral with counterparties. Cash deposited with clearing organizations is carried at cost, which approximates fair value. Cash and securities deposited with clearing organizations and collateral held in the form of cash on margin with counterparties to the Company's interest rate swaps and other derivatives totaled $1.1 billion and $1.4 billion at June 30, 2023 and December 31, 2022, respectively.

Fair Value Measurements and the Fair Value Option – The Company reports various investments at fair value, including certain eligible financial instruments elected to be accounted for under the fair value option ("FVO"). The Company chooses to elect the FVO in order to simplify the accounting treatment for certain financial instruments. Items for which the FVO has been elected are presented at fair value in the Consolidated Statements of Financial Condition and any change in fair value is recorded in Net gains (losses) on investments and other in the Consolidated Statements of Comprehensive Income (Loss). For additional information regarding financial instruments for which the Company has elected the FVO refer to the table in the "Financial Instruments" Note.

Refer to the "Fair Value Measurements" Note for a complete discussion on the methodology utilized by the Company to estimate the fair value of certain financial instruments.

Offsetting Assets and Liabilities - The Company elected to present all derivative instruments on a gross basis as discussed in the "Derivative Instruments" Note. Reverse repurchase and repurchase agreements are presented net in the Consolidated Statements of Financial Condition if they meet the offsetting criteria. Refer to the "Secured Financing" Note for further discussion on reverse repurchase and repurchase agreements.

Derivative Instruments – Derivatives are recognized as either assets or liabilities at fair value in the Consolidated Statements of Financial Condition with changes in fair value recognized in the Consolidated Statements of Comprehensive Income (Loss). The changes in the estimated fair value are presented within Net gains (losses) on derivatives. None of the Company's derivative transactions have been designated as hedging instruments for accounting purposes. Refer to the "Derivative Instruments" Note for further discussion.

Stock-Based Compensation – The Company measures compensation expense for stock-based awards at fair value, which is generally based on the grant-date fair value of the Company's common stock. Compensation expense is recognized ratably over the vesting or requisite service period of the award. Stock-based awards that contain market-based conditions are valued using a model.

Compensation expense for awards with performance conditions is recognized based on the probable outcome of the performance condition at each reporting date. Compensation expense for awards with market conditions is recognized irrespective of the probability of the market condition being achieved and is not reversed if the market condition is not met. Stock-based awards that do not require future service (i.e., vested awards) are expensed immediately. Forfeitures are recorded when they occur. The Company generally issues new shares of common stock upon delivery of stock-based awards.

Interest Income - The Company recognizes interest income primarily on Residential Securities (as defined in the "Securities" Note), residential mortgage loans, commercial investments and reverse repurchase agreements. Interest accrued but not received is recognized as Interest receivable on the Consolidated Statements of Financial Condition. Interest income is presented as a separate line item on the Consolidated Statements of Comprehensive Income (Loss).

For its securities, the Company recognizes coupon income, which is a component of interest income, based upon the outstanding principal amounts of the financial instruments and their contractual terms. In addition, the Company amortizes or accretes premiums or discounts into interest income for its Agency mortgage-backed securities (other than interest-only securities, multifamily and reverse mortgages), taking into account estimates of future principal prepayments in the calculation of the effective yield. The Company recalculates the effective yield as differences between anticipated and actual prepayments occur. Using third party model and market information to project future cash flows and expected remaining lives of securities, the effective interest rate determined for each security is applied as if it had been in place from the date of the security's acquisition. The amortized cost of the security is then adjusted to the amount that would have existed had the new effective yield been applied since the acquisition date, which results in a cumulative premium amortization adjustment in each period. The adjustment to amortized cost is offset with a charge or credit to interest income. Changes in interest rates and other market factors will impact prepayment speed projections and the amount of premium amortization recognized in any given period.

Premiums or discounts associated with the purchase of Agency interest-only securities, reverse mortgages and residential credit securities are amortized or accreted into interest income based upon current expected future cash flows with any adjustment to yield made on a prospective basis.

Premiums or discounts associated with the purchase of multifamily securities are amortized or accreted into interest income based upon their contractual payment terms. If a prepayment occurs, an adjustment is made to the unpaid principal balance and unamortized premium or discount in the current period and the original effective yield continues to be applied.

Premiums and discounts associated with the purchase of residential mortgage loans and with those transferred or pledged to securitization trusts are primarily amortized or accreted into interest income over their estimated remaining lives using the effective interest rates inherent in the estimated cash flows from the mortgage loans. Amortization of premiums and accretion of discounts are presented in Interest income in the Consolidated Statements of Comprehensive Income (Loss).

If collection of a loan's principal or interest is in doubt or the loan is 90 days or more past due, interest income is not accrued. For nonaccrual status loans carried at fair value or held for sale, interest is not accrued but is recognized on a cash basis. For nonaccrual status loans carried at amortized cost, if collection of principal is not in doubt but collection of interest is in doubt, interest income is recognized on a cash basis. If collection of principal is in doubt, any interest received is applied against principal until collectability of the remaining balance is no longer in doubt; at that point, any interest income is recognized on a cash basis. Generally, a loan is returned to accrual status when the borrower has resumed paying the full amount of the scheduled contractual obligation, if all principal and interest amounts contractually due are reasonably assured of repayment within a reasonable period of time and there is a sustained period of repayment performance by the borrower.

The Company has made an accounting policy election not to measure an allowance for loans losses for accrued interest receivable. If interest receivable is deemed to be uncollectible or not collected within 90 days of its contractual due date for commercial loans or 120 days for corporate debt carried at amortized cost, it is written off through a reversal of interest income. Any interest written off that is recovered is recognized as interest income.

Refer to the "Interest Income and Interest Expense" Note for further discussion of interest income.

Income Taxes – The Company has elected to be taxed as a REIT and intends to comply with the provisions of the Code, with respect thereto. As a REIT, the Company will not incur federal income tax to the extent that it distributes its taxable income to its stockholders. The Company and certain of its direct and indirect subsidiaries have made separate joint elections to treat these subsidiaries as taxable REIT subsidiaries ("TRSs"). As such, each of these TRSs is taxable as a domestic C corporation and subject to federal, state and local income taxes based upon its taxable income. Refer to the "Income Taxes" Note for further discussion on income taxes.

Recent Accounting Pronouncements

The Company considers the applicability and impact of all Accounting Standards Updates ("ASUs"). There were no recent ASUs that are expected to have a significant impact on the Company's consolidated financial statements when adopted or that had a significant impact on the Company's consolidated financial statements upon adoption.

4. FINANCIAL INSTRUMENTS

The following table presents characteristics for certain of the Company's financial instruments at June 30, 2023 and December 31, 2022.

Financial Instruments [(1)]

Balance Sheet Line Item	Type / Form	Measurement Basis	June 30, 2023	December 31, 2022
Assets		(dollars in thousands)		
Securities	Agency mortgage-backed securities [(2)]	Fair value, with unrealized gains (losses) through other comprehensive income	**$ 23,968,429**	$ 34,528,515
Securities	Agency mortgage-backed securities [(3)]	Fair value, with unrealized gains (losses) through earnings	**43,795,835**	27,746,380
Securities	Residential credit risk transfer securities	Fair value, with unrealized gains (losses) through earnings	**1,064,401**	997,557
Securities	Non-agency mortgage-backed securities	Fair value, with unrealized gains (losses) through earnings	**2,008,106**	1,991,146
Securities	Commercial real estate debt investments - CMBS	Fair value, with unrealized gains (losses) through earnings	**365,690**	508,406
Securities	Commercial real estate debt investments - credit risk transfer securities	Fair value, with unrealized gains (losses) through earnings	**—**	17,903
Total securities			**71,202,461**	65,789,907
Loans, net	Residential mortgage loans	Fair value, with unrealized gains (losses) through earnings	**1,154,320**	1,809,832
Total loans, net			**1,154,320**	1,809,832
Assets transferred or pledged to securitization vehicles	Residential mortgage loans	Fair value, with unrealized gains (losses) through earnings	**11,318,419**	9,121,912
Total assets transferred or pledged to securitization vehicles			**11,318,419**	9,121,912
Liabilities				
Repurchase agreements	Repurchase agreements	Amortized cost	**61,637,600**	59,512,597
Other secured financing	Loans	Amortized cost	**500,000**	250,000
Debt issued by securitization vehicles	Securities	Fair value, with unrealized gains (losses) through earnings	**9,789,282**	7,744,160
Participations issued	Participations issued	Fair value, with unrealized gains (losses) through earnings	**492,307**	800,849

[(1)] Receivable for unsettled trades, Principal and interest receivable, Payable for unsettled trades, Interest payable and Dividends payable are accounted for at cost.
[(2)] Includes Agency pass-through, collateralized mortgage obligation ("CMO") and multifamily securities purchased prior to July 1, 2022.
[(3)] Includes interest-only securities and reverse mortgages and, effective July 1, 2022, newly purchased Agency pass-through, collateralized mortgage obligation ("CMO") and multifamily securities.

5. SECURITIES

The Company's investments in securities include agency, credit risk transfer, non-agency and commercial mortgage-backed securities. All of the debt securities are classified as available-for-sale. Available-for-sale debt securities are carried at fair value, with changes in fair value recognized in other comprehensive income, unless the fair value option is elected in which case changes in fair value are recognized in Net gains (losses) on investments and other in the Consolidated Statements of Comprehensive Income (Loss). Effective July 1, 2022, the Company elected the fair value option for any newly purchased Agency mortgage-backed securities in order to simplify the accounting for these securities. Agency mortgage-backed securities purchased prior to July 1, 2022, are still classified as available-for-sale with changes in fair value recognized in other comprehensive income. During the three and six months ended June 30, 2023, ($744.7) million and $358.0 million, respectively, of unrealized gains (losses) on Agency mortgage-backed securities were reported in Net gains (losses) on investments and other in the Company's Consolidated Statements of Comprehensive Income (Loss). The Company has also elected the fair value option for CRT securities, interest only securities, Non-Agency and commercial mortgage-backed securities in order to simplify the accounting. Transactions for regular-way securities are recorded on trade date, including to-be-announced ("TBA") securities that meet the regular-way securities scope exception from derivative accounting. Gains and losses on disposals of securities are recorded on trade date based on the specific identification method.

Impairment – Management evaluates available-for-sale securities where the fair value option has not been elected and held-to-maturity debt securities for impairment at least quarterly, and more frequently when economic or market conditions warrant such evaluation. When the fair value of an available-for-sale security is less than its amortized cost, the security is considered impaired. For securities that are impaired, the Company determines if it (1) has the intent to sell the security, (2) is more likely than not that it will be required to sell the security before recovery of its amortized cost basis, or (3) does not expect to recover the entire amortized cost basis of the security. Further, the security is analyzed for credit loss (the difference between the present value of cash flows expected to be collected and the amortized cost basis). The credit loss, if any, will then be recognized in the Consolidated Statements of Comprehensive Income (Loss) as a securities loss provision and reflected as an allowance for credit losses on securities on the Consolidated Statements of Financial Condition, while the balance of losses related to other factors will be recognized as a component of Other comprehensive income (loss). When the fair value of a held-to-maturity security is less than the cost, the Company performs an analysis to determine whether it expects to recover the entire cost basis of the security.

Agency Mortgage-Backed Securities - The Company invests in mortgage pass-through certificates, collateralized mortgage obligations and other MBS representing interests in or obligations backed by pools of residential or multifamily mortgage loans and certificates. Many of the underlying loans and certificates are guaranteed by the Government National Mortgage Association ("Ginnie Mae"), the Federal Home Loan Mortgage Corporation ("Freddie Mac") or the Federal National Mortgage Association ("Fannie Mae") (collectively, "Agency mortgage-backed securities").

Agency mortgage-backed securities may include forward contracts for Agency mortgage-backed securities purchases or sales of a generic pool, on a to-be-announced basis. TBA securities without intent to accept delivery ("TBA derivatives") are accounted for as derivatives as discussed in the "Derivative Instruments" Note.

CRT Securities - CRT securities are risk sharing instruments issued by Fannie Mae and Freddie Mac, and similarly structured transactions arranged by third party market participants. CRT securities are designed to synthetically transfer mortgage credit risk from Fannie Mae and Freddie Mac to private investors.

Non-Agency Mortgage-Backed Securities - The Company invests in non-Agency mortgage-backed securities such as those issued in prime loan, prime jumbo loan, Alt-A loan, subprime loan, non-performing loan ("NPL") and re-performing loan ("RPL") securitizations.

Agency mortgage-backed securities, non-Agency mortgage-backed securities and residential CRT securities are referred to herein as "Residential Securities." Although the Company generally intends to hold most of its Residential Securities until maturity, it may, from time to time, sell any of its Residential Securities as part of the overall management of its portfolio.

Commercial Mortgage-Backed Securities ("Commercial Securities") - The Company invests in Commercial Securities such as conduit, credit CMBS, single-asset single borrower and collateralized loan obligations.

The following represents a rollforward of the activity for the Company's securities for the six months ended June 30, 2023:

	Agency Securities	Residential Credit Securities	Commercial Securities	Total
	(dollars in thousands)			
Beginning balance January 1, 2023	$ 62,274,895	$ 2,988,703	$ 526,309	$ 65,789,907
Purchases	20,646,908	563,963	23,940	21,234,811
Sales	(13,221,595)	(405,028)	(189,866)	(13,816,489)
Principal paydowns	(2,834,559)	(173,160)	(4,781)	(3,012,500)
(Amortization) / accretion	(100,881)	11,242	630	(89,009)
Fair value adjustment	999,496	86,787	9,458	1,095,741
Ending balance June 30, 2023	$ 67,764,264	$ 3,072,507	$ 365,690	$ 71,202,461

The following tables present the Company's securities portfolio that were carried at their fair value at June 30, 2023 and December 31, 2022:

	June 30, 2023						
	Principal / Notional	Remaining Premium	Remaining Discount	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Agency	(dollars in thousands)						
Fixed-rate pass-through	**$ 68,032,859**	**$ 1,851,124**	**$ (1,203,805)**	**$ 68,680,178**	**$ 43,777**	**$ (3,375,157)**	**$ 65,348,798**
Adjustable-rate pass-through	**209,207**	**18,434**	**(69)**	**227,572**	**1,963**	**(17,985)**	**211,550**
CMO	**97,934**	**1,715**	**—**	**99,649**	**—**	**(14,147)**	**85,502**
Interest-only	**2,308,196**	**492,333**	**—**	**492,333**	**1,913**	**(200,727)**	**293,519**
Multifamily(1)	**11,502,217**	**348,474**	**(1,549)**	**1,867,896**	**4,609**	**(75,382)**	**1,797,123**
Reverse mortgages	**27,225**	**3,310**	**—**	**30,535**	**—**	**(2,763)**	**27,772**
Total agency securities	**$ 82,177,638**	**$ 2,715,390**	**$ (1,205,423)**	**$ 71,398,163**	**$ 52,262**	**$ (3,686,161)**	**$ 67,764,264**
Residential credit							
Credit risk transfer	**$ 1,037,685**	**$ 3,987**	**$ (4,686)**	**$ 1,036,986**	**$ 32,292**	**$ (4,877)**	**$ 1,064,401**
Alt-A	**137,130**	**9**	**(5,054)**	**132,085**	**450**	**(13,320)**	**119,215**
Prime (2)	**837,579**	**9,454**	**(21,866)**	**234,903**	**1,488**	**(39,778)**	**196,613**
Subprime	**226,613**	**—**	**(30,469)**	**196,144**	**2,187**	**(17,445)**	**180,886**
NPL/RPL	**1,271,228**	**4,490**	**(13,052)**	**1,262,666**	**473**	**(69,789)**	**1,193,350**
Prime jumbo (>=2010 vintage) (3)	**8,388,475**	**63,124**	**(50,068)**	**351,332**	**6,797**	**(40,087)**	**318,042**
Total residential credit securities	**$ 11,898,710**	**$ 81,064**	**$ (125,195)**	**$ 3,214,116**	**$ 43,687**	**$ (185,296)**	**$ 3,072,507**
Total residential securities	**$ 94,076,348**	**$ 2,796,454**	**$ (1,330,618)**	**$ 74,612,279**	**$ 95,949**	**$ (3,871,457)**	**$ 70,836,771**
Commercial							
Commercial securities	**$ 375,364**	**$ —**	**$ (1,347)**	**$ 374,017**	**$ 93**	**$ (8,420)**	**$ 365,690**
Total securities	**$ 94,451,712**	**$ 2,796,454**	**$ (1,331,965)**	**$ 74,986,296**	**$ 96,042**	**$ (3,879,877)**	**$ 71,202,461**

	December 31, 2022						
	Principal / Notional	Remaining Premium	Remaining Discount	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Agency	(dollars in thousands)						
Fixed-rate pass-through	$ 63,232,479	$ 2,105,813	$ (1,003,225)	$ 64,335,067	$ 62,060	$ (4,367,369)	$ 60,029,758
Adjustable-rate pass-through	232,028	17,065	(85)	249,008	2,138	(16,759)	234,387
CMO	101,543	1,781	—	103,324	—	(13,714)	89,610
Interest-only	1,824,339	438,295	—	438,295	153	(220,371)	218,077
Multifamily (1)	9,801,375	311,785	(1,021)	1,750,737	7,588	(84,160)	1,674,165
Reverse mortgages	28,478	3,379	—	31,857	—	(2,959)	28,898
Total agency investments	$ 75,220,242	$ 2,878,118	$ (1,004,331)	$ 66,908,288	$ 71,939	$ (4,705,332)	$ 62,274,895
Residential credit							
Credit risk transfer	$ 1,013,368	$ 6,790	$ (4,828)	$ 1,015,330	$ 6,629	$ (24,402)	$ 997,557
Alt-A	111,009	9	(5,048)	105,970	—	(14,754)	91,216
Prime (2)	1,946,186	19,496	(17,375)	240,694	1,528	(44,352)	197,870
Subprime	202,304	—	(32,188)	170,116	1,275	(15,078)	156,313
NPL/RPL	1,426,616	1,624	(15,500)	1,412,740	87	(95,673)	1,317,154
Prime jumbo (>=2010 vintage) (3)	5,717,558	37,260	(29,242)	272,623	1,685	(45,715)	228,593
Total residential credit securities	$ 10,417,041	$ 65,179	$ (104,181)	$ 3,217,473	$ 11,204	$ (239,974)	$ 2,988,703
Total residential securities	$ 85,637,283	$ 2,943,297	$ (1,108,512)	$ 70,125,761	$ 83,143	$ (4,945,306)	$ 65,263,598
Commercial							
Commercial securities	$ 546,499	$ —	$ (2,405)	$ 544,094	$ —	$ (17,785)	$ 526,309
Total securities	$ 86,183,782	$ 2,943,297	$ (1,110,917)	$ 70,669,855	$ 83,143	$ (4,963,091)	$ 65,789,907

(1) Principal/Notional amount includes $10.0 billion and $8.4 billion of Agency Multifamily interest-only securities as of June 30, 2023 and December 31, 2022, respectively.
(2) Principal/Notional amount includes $0.6 billion and $1.7 billion of Prime interest-only securities as of June 30, 2023 and December 31, 2022, respectively.
(3) Principal/Notional amount includes $8.1 billion and $5.5 billion of Prime Jumbo interest-only securities as of June 30, 2023 and December 31, 2022, respectively.

The following table presents the Company's Agency mortgage-backed securities portfolio by issuing Agency at June 30, 2023 and December 31, 2022:

	June 30, 2023	December 31, 2022
Investment Type	(dollars in thousands)	
Fannie Mae	**$ 60,770,531**	$ 54,043,015
Freddie Mac	**6,938,615**	8,174,080
Ginnie Mae	**55,118**	57,800
Total	**$ 67,764,264**	$ 62,274,895

Actual maturities of the Company's Residential Securities are generally shorter than stated contractual maturities because actual maturities of the portfolio are affected by periodic payments and prepayments of principal on the underlying mortgages.

The following table summarizes the Company's Residential Securities at June 30, 2023 and December 31, 2022, according to their estimated weighted average life classifications:

	June 30, 2023		December 31, 2022	
	Estimated Fair Value	Amortized Cost	Estimated Fair Value	Amortized Cost
Estimated weighted average life	(dollars in thousands)			
Less than one year	**$ 205,983**	**$ 217,068**	$ 247,921	$ 264,637
Greater than one year through five years	**3,409,612**	**3,550,741**	3,002,471	3,206,250
Greater than five years through ten years	**64,372,051**	**67,829,362**	55,593,990	59,658,578
Greater than ten years	**2,849,125**	**3,015,108**	6,419,216	6,996,296
Total	**$ 70,836,771**	**$ 74,612,279**	$ 65,263,598	$ 70,125,761

The estimated weighted average lives of the Residential Securities at June 30, 2023 and December 31, 2022 in the table above are based upon projected principal prepayment rates. The actual weighted average lives of the Residential Securities could be longer or shorter than projected.

The following table presents the gross unrealized losses and estimated fair value of the Company's Agency mortgage-backed securities, accounted for as available-for-sale where the fair value option has not been elected, by length of time that such securities have been in a continuous unrealized loss position at June 30, 2023 and December 31, 2022.

	June 30, 2023			December 31, 2022		
	Estimated Fair Value (1)	Gross Unrealized Losses (1)	Number of Securities (1)	Estimated Fair Value (1)	Gross Unrealized Losses (1)	Number of Securities (1)
	(dollars in thousands)					
Less than 12 months	**$ 2,437,743**	**$ (145,721)**	**155**	$ 33,061,267	$ (3,448,120)	2,481
12 Months or more	**21,348,507**	**(2,241,721)**	**2,065**	1,260,378	(266,686)	129
Total	**$ 23,786,250**	**$ (2,387,442)**	**2,220**	$ 34,321,645	$ (3,714,806)	2,610

(1) Excludes interest-only mortgage-backed securities and reverse mortgages and effective July 1, 2022, newly purchased Agency pass-through, collateralized mortgage obligation ("CMO") and multifamily securities.

The decline in value of these securities is solely due to market conditions and not the quality of the assets. Substantially all of the Agency mortgage-backed securities have an actual or implied credit rating that is the same as that of the U.S. government. An impairment has not been recognized in earnings related to these investments because the decline in value is not related to credit quality, the Company currently has not made a decision to sell the securities nor is it more likely than not that the securities will be required to be sold before recovery.

During the three and six months ended June 30, 2023, the Company disposed of $8.4 billion and $13.6 billion of Residential Securities, respectively. During the three and six months ended June 30, 2022, the Company disposed of $6.6 billion and $9.4 billion of Residential Securities, respectively. The following table presents the Company's net gains (losses) from the disposal of Residential Securities for the three and six months ended June 30, 2023 and 2022, which is included in Net gains (losses) on investments and other in the Consolidated Statements of Comprehensive Income (Loss).

	Gross Realized Gains		Gross Realized Losses		Net Realized Gains (Losses)	
For the three months ended			(dollars in thousands)			
June 30, 2023	**$**	**9,496**	**$**	**(608,732)**	**$**	**(599,236)**
June 30, 2022	$	27,263	$	(684,560)	$	(657,297)
For the six months ended						
June 30, 2023	**$**	**13,765**	**$**	**(1,134,849)**	**$**	**(1,121,084)**
June 30, 2022	$	28,828	$	(830,615)	$	(801,787)

6. LOANS

The Company invests in residential loans. Loans are classified as either held for investment or held for sale. Loans are eligible to be accounted for under the fair value option. If loans are elected under the fair value option, they are carried at fair value with changes in fair value recognized in earnings. Otherwise, loans held for investment are carried at cost less impairment and loans held for sale are accounted for at the lower of cost or fair value.

Excluding loans transferred or pledged to securitization vehicles and loan warehouse facilities, as of June 30, 2023 and December 31, 2022, the Company reported $1.2 billion and $1.8 billion, respectively, of loans for which the fair value option was elected. If the Company intends to sell or securitize the loans and the securitization vehicle is not expected to be consolidated, the loans are classified as held for sale. If loans are held for sale and the fair value option was not elected, they are accounted for at the lower of cost or fair value. Any origination fees and costs or purchase premiums or discounts are deferred and recognized upon sale. The Company determines the fair value of loans held for sale on an individual loan basis. The carrying value of the Company's residential loans held for sale was $1.1 million and $1.3 million at June 30, 2023 and December 31, 2022, respectively.

Allowance for Losses – Prior to the sale of its corporate debt and commercial loan portfolios, the Company evaluated the need for a loss reserve on each of its loans classified as held-for investment and carried at amortized cost based upon estimated current expected credit losses.

The Company recorded net loan loss (provisions) reversals of $0.0 million and $26.9 million for the three months ended June 30, 2023 and 2022, respectively, and $0.2 million and $26.3 million for the six months ended June 30, 2023 and 2022, respectively.

The following table presents the activity of the Company's loan investments, excluding loans transferred or pledged to securitization vehicles and loan warehouse facilities, for the six months ended June 30, 2023:

	Residential	
	(dollars in thousands)	
Beginning balance January 1, 2023	**$**	**1,809,832**
Purchases / originations		**1,934,157**
Sales and transfers [1]		**(2,544,578)**
Principal payments		**(58,070)**
Gains / (losses)		**16,751**
(Amortization) / accretion		**(3,772)**
Ending balance June 30, 2023	**$**	**1,154,320**

[1] Includes transfer of residential loans to securitization vehicles with a carrying value of $2.5 billion during the six months ended June 30, 2023.

Residential

The Company's residential mortgage loans are primarily comprised of performing adjustable-rate and fixed-rate whole loans. The Company's residential loans are accounted for under the fair value option with changes in fair value reflected in Net gains (losses) on investments and other in the Consolidated Statements of Comprehensive Income (Loss). The Company also consolidates securitization trusts in which it had purchased subordinated securities because it also has certain powers and rights to direct the activities of such trusts. Refer to the "Variable Interest Entities" Note for further information related to the Company's consolidated residential mortgage loan trusts.

The mortgage loans are secured by first liens on primarily one-to-four family residential properties. A subsidiary of the Company has engaged a third party to act as its custodian, agent and bailee for the purposes of receiving and holding certain documents, instruments and papers related to the residential mortgage loans it purchases. Pursuant to the Company's custodial agreement, the custodian segregates and maintains continuous custody of all documents constituting the mortgage file with respect to each mortgage loan owned by the subsidiary in secure and fire resistant facilities and in a manner consistent with the standard of care employed by prudent mortgage loan document custodians. At or prior to the funding of any residential mortgage loan, the related seller, pursuant to the terms of our mortgage loan purchase agreement, must deliver to the custodian, the mortgage loan documents including the mortgage note, the mortgage and other related loan documents. In addition, a complete credit file for the related mortgage and borrower must be delivered to the subsidiary prior to the date of purchase.

The following table presents the fair value and the unpaid principal balances of the residential mortgage loan portfolio, including loans transferred or pledged to securitization vehicles and excluding loan warehouse facilities, at June 30, 2023 and December 31, 2022:

	June 30, 2023	December 31, 2022
	(dollars in thousands)	
Fair value	**$ 12,472,739**	$ 10,931,744
Unpaid principal balance	**$ 13,743,613**	$ 12,247,346

The following table provides information regarding the line items and amounts recognized in the Consolidated Statements of Comprehensive Income (Loss) for the three and six months ended June 30, 2023 and 2022 for these investments, excluding loan warehouse facilities:

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
	(dollars in thousands)			
Interest income	**$ 162,202**	$ 91,645	**$ 309,432**	$ 165,110
Net gains (losses) on disposal of investments (1)	**(1,495)**	(5,321)	**(2,272)**	(12,658)
Net unrealized gains (losses) on instruments measured at fair value through earnings (1)	**(167,759)**	(324,481)	**92,680**	(739,729)
Total included in net income (loss)	**$ (7,052)**	$ (238,157)	**$ 399,840**	$ (587,277)

(1) These amounts are presented in the line item Net gains (losses) on investments and other on the Consolidated Statements of Comprehensive Income (loss).

The following table provides the geographic concentrations based on the unpaid principal balances at June 30, 2023 and December 31, 2022 for the residential mortgage loans, including loans transferred or pledged to securitization vehicles:

Geographic Concentrations of Residential Mortgage Loans			
June 30, 2023		December 31, 2022	
Property location	% of Balance	Property location	% of Balance
California	**43.2%**	California	44.8%
New York	**10.0%**	New York	10.3%
Florida	**9.2%**	Florida	8.3%
Texas	**5.3%**	Texas	5.1%
All other (none individually greater than 5%)	**32.3%**	All other (none individually greater than 5%)	31.5%
Total	**100.0%**		100.0%

The following table provides additional data on the Company's residential mortgage loans, including loans transferred or pledged to securitization vehicles, at June 30, 2023 and December 31, 2022:

	June 30, 2023		December 31, 2022	
	Portfolio Range	Portfolio Weighted Average	Portfolio Range	Portfolio Weighted Average
	(dollars in thousands)			
Unpaid principal balance	**$3 - $4,396**	**$481**	$3 - $4,396	$489
Interest rate	**2.00% - 12.00%**	**4.97%**	2.00% - 15.00%	4.61%
Maturity	**7/1/2029 - 6/1/2063**	**12/9/2051**	7/1/2029 - 1/1/2063	10/6/2051
FICO score at loan origination	**588 - 839**	**758**	588 - 831	759
Loan-to-value ratio at loan origination	**5% - 100%**	**68%**	5% - 100%	68%

At June 30, 2023 and December 31, 2022, approximately 11% of the carrying value of the Company's residential mortgage loans, including loans transferred or pledged to securitization vehicles, were adjustable-rate.

The Company participates in an arrangement that provides a residential mortgage loan warehouse facility to a third-party originator. The Company has elected to apply the fair value option to this lending facility in order to simplify the accounting and keep the accounting consistent with other residential credit financial instruments with similar characteristics. At both June 30, 2023 and December 31, 2022, there were no outstanding balances on this warehouse facility.

Corporate Debt

In April 2022, the Company entered into a definitive agreement to sell substantially all of the corporate loan interests held by the MML business operated by the Company, as well as assets managed for third parties. All of the assets comprising the MML Portfolio were transferred by the end of 2022. Refer to the "Sale of Middle Market Lending Portfolio" Note for additional information on the transaction.

7. MORTGAGE SERVICING RIGHTS

MSR represent the rights and obligations associated with servicing pools of residential mortgage loans. The Company and its subsidiaries do not originate or directly service residential mortgage loans. Rather, these activities are carried out by duly licensed subservicers who perform substantially all servicing functions for the loans underlying the MSR. The Company generally intends to hold the MSR as investments and elected to account for all of its investments in MSR at fair value. As such, they are recognized at fair value on the accompanying Consolidated Statements of Financial Condition with changes in the estimated fair value presented as a component of Net gains (losses) on investments and other in the Consolidated Statements of Comprehensive Income (Loss).

Interests in MSR represent agreements to purchase all, or a component of, net servicing cash flows. A third party acted as a master servicer for the loans providing the net servicing cash flows represented by the Interests in MSR. The Company accounts for its Interests in MSR at fair value with change in fair value presented in Net gains (losses) on investments and other in the Consolidated Statements of Comprehensive Income (Loss). Cash flows received for Interests in MSR are recorded in Other, net in the Consolidated Statements of Comprehensive Income (Loss).

The following tables present activity related to MSR and Interests in MSR for the three and six months ended June 30, 2023 and 2022:

Mortgage Servicing Rights	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
	(dollars in thousands)			
Fair value, beginning of period	**$ 1,790,980**	$ 1,108,937	**$ 1,748,209**	$ 544,562
Purchases [1]	**177,521**	262,960	**214,151**	683,983
Sales	**—**	(9,065)	**—**	(9,075)
Change in fair value due to:				
Changes in valuation inputs or assumptions [2]	**80,323**	79,606	**110,530**	238,568
Other changes, including realization of expected cash flows	**(29,928)**	(21,018)	**(53,994)**	(36,618)
Fair value, end of period	**$ 2,018,896**	$ 1,421,420	**$ 2,018,896**	$ 1,421,420

[1] Includes adjustments to original purchase price from early payoffs, defaults, or loans that were delivered but were deemed to not be acceptable.
[2] Principally represents changes in discount rates and prepayment speed inputs used in valuation model, primarily due to changes in interest rates.

Interests in MSR	Three Months Ended		Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
	(dollars in thousands)			
Beginning balance	**$ —**	$ 85,653	**$ —**	**$ 69,316**
Purchases [1]	**—**	(53)	**—**	4,860
Gain (loss) included in net income	**—**	(1,978)	**—**	9,446
Ending balance	**$ —**	$ 83,622	**$ —**	$ 83,622

[1] Includes adjustments to original purchase price from early payoffs, defaults, or loans that were delivered but were deemed to not be acceptable.

8. VARIABLE INTEREST ENTITIES

The Company's exposure to the obligations of its VIEs is generally limited to the Company's investment in the VIEs of $1.2 billion at June 30, 2023. Assets of the VIEs may only be used to settle obligations of the VIEs. Creditors of the VIEs have no recourse to the general credit of the Company. The Company is not contractually required to provide and has not provided any form of financial support to the VIEs. No gains or losses were recognized upon consolidation of existing VIEs. Interest income and expense are recognized using the effective interest method.

Multifamily Securitization

In March 2020, the Company repackaged Fannie Mae guaranteed multifamily mortgage-backed securities with a principal cut-off balance of $0.5 billion and retained interest-only securities with a notional balance of $0.5 billion. At the inception of this arrangement, the Company determined that it was the primary beneficiary based upon its involvement in the design of this VIE and through the retention of a significant variable interest in the VIE. The Company elected the fair value option for the financial liabilities of this VIE in order to simplify the accounting; however, the financial assets were not eligible for the fair value option as it was not elected at purchase.

During the year ended December 31, 2022, the Company deconsolidated the 2020 multifamily VIE since it sold all of its interest-only securities and no longer retains a significant variable interest in the entity.

Residential Securitizations

The Company also invests in residential mortgage-backed securities issued by entities that are VIEs because they do not have sufficient equity at risk for the entities to finance their activities without additional subordinated financial support from other parties. The Company is not the primary beneficiary because it does not have the power to direct the activities that most significantly impact the VIEs' economic performance. For these entities, the Company's maximum exposure to loss is the amortized cost basis of the securities it owns and it does not provide any liquidity arrangements, guarantees or other commitments to these VIEs. Refer to the "Securities" Note for further information on Residential Securities.

OBX Trusts

Residential securitizations are issued by entities generally referred to collectively as the "OBX Trusts." These securitizations represent financing transactions which provide non-recourse financing to the Company that are collateralized by residential mortgage loans purchased by the Company. Residential securitizations closed during the year are included in the table below.

Securitization	Date of Closing	Face Value at Closing (dollars in thousands)
OBX 2023-NQM1	January 2023	$ 405,209
OBX 2023-J1	February 2023	$ 305,755
OBX 2023-NQM2	February 2023	$ 420,650
OBX 2023-NQM3	April 2023	$ 407,525
OBX 2023-NQM4	May 2023	$ 394,291
OBX 2023-INV1	May 2023	$ 314,839
OBX 2023-NQM5	June 2023	$ 390,271

As of June 30, 2023 and December 31, 2022, a total carrying value of $9.8 billion and $7.7 billion, respectively, of bonds were held by third parties and the Company retained $1.2 billion and $1.0 billion, respectively, of MBS, which were eliminated in consolidation. The Company is deemed to be the primary beneficiary and consolidates the OBX Trusts because it has power to direct the activities that most significantly impact the OBX Trusts' performance and holds a variable interest that could be potentially significant to these VIEs. Effective August 1, 2022, upon initial consolidation of new securitization entities, the Company elected to apply the measurement alternative for consolidated collateralized financing entities in order to simplify the accounting and valuation processes. The liabilities of these securitization entities are deemed to be more observable and are used to measure the fair value of the assets. The Company incurred $2.7 million and $1.8 million of costs during the three months ended June 30, 2023 and 2022, respectively, and $4.0 million and $5.1 million of costs during the six months ended June 30, 2023 and 2022, respectively, in connection with these securitizations that were expensed as incurred. The contractual principal amount of the OBX Trusts' debt held by third parties was $11.0 billion and $9.0 billion at June 30, 2023 and December 31, 2022, respectively. During the three months ended June 30, 2023 and 2022, the Company recorded $130.5 million and $395.9 million, respectively, and ($81.4) million and $694.0 million during the six months ended June 30, 2023 and 2022 of unrealized gains (losses) on debt held by third parties issued by OBX Trusts, which is reported in Net gains (losses) on investments and other in the Company's Consolidated Statements of Comprehensive Income (Loss).

Although the residential mortgage loans have been sold for bankruptcy and state law purposes, the transfers of the residential mortgage loans to the OBX Trusts did not qualify for sale accounting and are reflected as intercompany secured borrowings that are eliminated upon consolidation.

Credit Facility VIEs

In connection with the sale of all of the assets that comprise the MML Portfolio, the credit facilities which provided financing for the Company's corporate debt were paid-off and terminated during the three months ended June 30, 2022. Refer to the "Sale of Middle Market Lending Portfolio" Note for additional information on the transaction.

MSR VIEs

The Company owns variable interests in an entity that invests in MSR and has structured its operations, funding and capitalization into pools of assets and liabilities, each referred to as a "silo." Owners of variable interests in a given silo are entitled to all of the returns and subjected to the risk of loss on the investments and operations of that silo and have no substantive recourse to the assets of any other silo. While the Company previously held 100% of the voting interests in this entity, in August 2017, the Company sold 100% of such interests, and entered into an agreement with the entity's affiliated portfolio manager giving the Company the power over the silo in which it owns all of the beneficial interests. As a result, the Company is considered to be the primary beneficiary and consolidates this silo.

The Company owned variable interests in entities that invested in Interests in MSR. These entities were VIEs because they did not have sufficient equity at risk to finance their activities and the Company was the primary beneficiary because it had power to remove the decision makers with or without cause and held substantially all of the variable interests in the entities. During the quarter ended September 30, 2022, the Company terminated its contracts previously classified as Interests in MSR on its Consolidated Statements of Financial Condition and purchased the underlying MSR. As a result, consolidated VIEs holding the Interests in MSR and related assets and liabilities were liquidated. No gain or loss was recognized upon deconsolidation. The underlying MSR were initially recognized at fair value and subsequent changes in fair value are recognized in earnings. Refer to the "Mortgage Servicing Rights" Note and "Fair Value Measurements" Note for further information regarding MSR.

The statements of financial condition of the Company's VIEs, excluding the multifamily securitization, credit facility VIEs and OBX Trusts as the transfers of loans or securities did not meet the criteria to be accounted for as sales, that are reflected in the Company's Consolidated Statements of Financial Condition at June 30, 2023 and December 31, 2022 are as follows:

	MSR VIE	
	June 30, 2023	December 31, 2022
Assets	(dollars in thousands)	
Cash and cash equivalents	**$ 3,544**	$ 2,239
Loans	**1,148**	1,293
Mortgage servicing rights	**22**	27
Other assets	**378**	1,238
Total assets	**$ 5,092**	$ 4,797
Liabilities		
Payable for unsettled trades	**$ —**	$ 2,152
Other liabilities	**1,267**	1,409
Total liabilities	**$ 1,267**	$ 3,561

Corporate Debt Funds

The Company managed parallel funds investing in senior secured first and second lien corporate loans (the "Fund Entities"). The Fund Entities were considered VIEs because the investors did not have substantive liquidation, kick-out or participating rights. The fees that the Company earned were not considered variable interests of the VIE. The Company was not the primary beneficiary of the Fund Entities and therefore did not consolidate the Fund Entities. The corporate loans in the Fund Entities were assets managed for third parties and were part of the MML Portfolio transferred to Ares during the three months ended June 30, 2022. Refer to the "Sale of Middle Market Lending Portfolio" Note for additional information on the transaction.

Residential Credit Fund

The Company manages a fund investing in participations in residential mortgage loans. The residential credit fund is deemed to be a VIE because the entity does not have sufficient equity at risk to permit the legal entity to finance its activities without additional subordinated financial support provided by any parties, including equity holders, as capital commitments are not considered equity at risk. The Company is not the primary beneficiary and does not consolidate the residential credit fund as its only interest in the fund is the management and performance fees that it earns, which are not considered variable interests in the entity. As of June 30, 2023 and December 31, 2022, the Company had outstanding participating interests in residential mortgage loans of $492.3 million and $800.8 million, respectively. These transfers do not meet the criteria for sale accounting and are accounted for as secured borrowings, thus the residential loans are reported as Loans, net and the associated liability is reported as Participations issued in the Consolidated Statements of Financial Condition. The Company elected to fair value the participations issued through earnings to more accurately reflect the economics of the transfers as the underlying loans are carried at fair value through earnings.

9. SALE OF MIDDLE MARKET LENDING PORTFOLIO

In April 2022, the Company entered into a definitive agreement to sell substantially all of the corporate loan interests held by the MML business operated by the Company, as well as assets managed for third parties (collectively, the “MML Portfolio”) for $2.4 billion. The Company’s loans, having an unpaid principal balance of $1.9 billion, were transferred for cash proceeds of $1.9 billion and a realized gain of $20.4 million was recorded during the year ended December 31, 2022. All of the assets comprising the MML Portfolio were transferred by the end of 2022.

10. DERIVATIVE INSTRUMENTS

Derivative instruments include, but are not limited to, interest rate swaps, options to enter into interest rate swaps (“swaptions”), TBA derivatives, options on TBA securities (“MBS options”), U.S. Treasury and Secured Overnight Financing Rate (“SOFR”) futures contracts and certain forward purchase commitments. The Company may also enter into other types of mortgage derivatives such as interest-only securities, credit derivatives referencing the commercial mortgage-backed securities index and synthetic total return swaps.

In connection with the Company’s investment/market rate risk management strategy, the Company economically hedges a portion of its interest rate risk by entering into derivative financial instrument contracts, which include interest rate swaps, swaptions and futures contracts. The Company may also enter into TBA derivatives, MBS options and U.S. Treasury futures contracts, certain forward purchase commitments and credit derivatives to economically hedge its exposure to market risks. The purpose of using derivatives is to manage overall portfolio risk with the potential to generate additional income for distribution to stockholders. These derivatives are subject to changes in market values resulting from changes in interest rates, volatility, Agency mortgage-backed security spreads to U.S. Treasuries and market liquidity. The use of derivatives also creates exposure to credit risk relating to potential losses that could be recognized if the counterparties to these instruments fail to perform their obligations under the stated contract. Additionally, the Company may have to pledge cash or assets as collateral for the derivative transactions, the amount of which may vary based on the market value and terms of the derivative contract. In the case of market agreed coupon (“MAC”) interest rate swaps, the Company may make or receive a payment at the time of entering into such interest rate swaps, which represents fair value of these swaps, to compensate for the out of market nature of such interest rate swaps. Subsequent changes in fair value from inception of these interest rate swaps are reflected within Net gains (losses) on derivatives in the Consolidated Statements of Comprehensive Income (Loss). Similar to other interest rate swaps, the Company may have to pledge cash or assets as collateral for the MAC interest rate swap transactions. In the event of a default by the counterparty, the Company could have difficulty obtaining its pledged collateral as well as receiving payments in accordance with the terms of the derivative contracts.

Derivatives are recognized as either assets or liabilities at fair value in the Consolidated Statements of Financial Condition with changes in fair value recognized in the Consolidated Statements of Comprehensive Income (Loss). The changes in the estimated fair value are presented within Net gains (losses) on derivatives. None of the Company’s derivative transactions have been designated as hedging instruments for accounting purposes.

The Company also maintains collateral in the form of cash on margin with counterparties to its interest rate swaps and other derivatives. In accordance with a clearing organization’s rulebook, the Company presents the fair value of centrally cleared interest rate swaps net of variation margin pledged or received under such transactions. At June 30, 2023 and December 31, 2022, ($3.1) billion and ($3.2) billion, respectively, of variation margin was reported as an adjustment to interest rate swaps, at fair value.

Interest Rate Swap Agreements – Interest rate swap agreements are the primary instruments used to mitigate interest rate risk. In particular, the Company uses interest rate swap agreements to manage its exposure to changing interest rates on its repurchase agreements by economically hedging cash flows associated with these borrowings. The Company may have outstanding interest rate swap agreements where the floating leg is linked to the London Interbank Offered Rate ("LIBOR"), SOFR, the overnight index swap rate or another index. Interest rate swap agreements may or may not be cleared through a derivatives clearing organization ("DCO"). Uncleared interest rate swaps are fair valued using internal pricing models and compared to the counterparty market values. Centrally cleared interest rate swaps, including MAC interest rate swaps, are generally fair valued using the DCO's market values. If an interest rate swap is terminated, the realized gain (loss) on the interest rate swap would be equal to the difference between the cash received or paid and fair value.

Swaptions – Swaptions are purchased or sold to mitigate the potential impact of increases or decreases in interest rates. Interest rate swaptions provide 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. The Company's swaptions are not centrally cleared. The premium paid or received for swaptions is reported as an asset or liability in the Consolidated Statements of Financial Condition. If a swaption expires unexercised, the realized gain (loss) on the swaption would be equal to the premium received or paid. If the Company sells or exercises a swaption, the realized gain (loss) on the swaption would be equal to the difference between the cash received or the fair value of the underlying interest rate swap received and the premium paid. The fair value of swaptions are estimated using internal pricing models and compared to the counterparty market values.

TBA Dollar Rolls – TBA dollar roll transactions are accounted for as a series of derivative transactions. The fair value of TBA derivatives is based on methods similar to those used to value Agency mortgage-backed securities.

MBS Options – MBS options are generally options on TBA contracts, which help manage mortgage market risks and volatility while providing the potential to enhance returns. MBS options are over-the-counter traded instruments and those written on current-coupon mortgage-backed securities are typically the most liquid. MBS options are measured at fair value using internal pricing models and compared to the counterparty market values.

Futures Contracts – Futures contracts are derivatives that track the prices of specific assets or benchmark rates. Short sales of futures contracts help to mitigate the potential impact of changes in interest rates on the portfolio performance. The Company maintains margin accounts which are settled daily with Futures Commission Merchants ("FCMs"). The margin requirement varies based on the market value of the open positions and the equity retained in the account. Futures contracts are fair valued based on exchange pricing.

Forward Purchase Commitments – The Company may enter into forward purchase commitments with counterparties whereby the Company commits to purchasing residential mortgage loans at a particular price, provided the residential mortgage loans close with the counterparties. The counterparties are required to deliver the committed loans on a "best efforts" basis.

Credit Derivatives – The Company may enter into credit derivatives referencing a commercial mortgage-backed securities index, such as the CMBX index, and synthetic total return swaps.

The table below summarizes fair value information about the Company's derivative assets and liabilities at June 30, 2023 and December 31, 2022:

Derivatives Instruments	June 30, 2023	December 31, 2022
Assets	(dollars in thousands)	
Interest rate swaps	$ **30,026**	$ 33,006
Interest rate swaptions	**264,406**	256,991
TBA derivatives	**21,460**	17,056
Futures contracts	**139,108**	33,179
Purchase commitments	**2,119**	1,832
Total derivative assets	$ **457,119**	$ 342,064
Liabilities		
Interest rate swaps	$ **96,618**	$ 108,724
TBA derivatives	**19,187**	69,270
Futures contracts [(1)]	**37,049**	11,919
Purchase commitments	**3,328**	460
Credit derivatives [(2)]	**—**	13,799
Total derivative liabilities	$ **156,182**	$ 204,172

(1) As of June 30, 2023, this includes $36.4 million of SOFR futures options.

(2) The maximum potential amount of future payments is the notional amount of credit derivatives in which the Company sold protection of $420.0 million at December 31, 2022, plus any coupon shortfalls on the underlying tranche. As of December 31, 2022 the credit derivative tranches referencing the basket of bonds had a range of ratings between AAA and AA.

The following tables summarize certain characteristics of the Company's interest rate swaps at June 30, 2023 and December 31, 2022:

June 30, 2023				
Maturity	Current Notional [(1)(2)]	Weighted Average Pay Rate	Weighted Average Receive Rate	Weighted Average Years to Maturity [(3)]
	(dollars in thousands)			
0 - 3 years	$ **21,617,608**	**2.02 %**	**5.01 %**	**0.89**
3 - 6 years	**7,464,799**	**2.96 %**	**5.06 %**	**4.57**
6 - 10 years	**27,823,637**	**2.72 %**	**5.12 %**	**8.10**
Greater than 10 years	**2,081,060**	**3.71 %**	**4.84 %**	**24.43**
Total / Weighted average	$ **58,987,104**	**2.50 %**	**5.05 %**	**5.58**

December 31, 2022				
Maturity	Current Notional [(1)(2)]	Weighted Average Pay Rate	Weighted Average Receive Rate	Weighted Average Years to Maturity [(3)]
	(dollars in thousands)			
0 - 3 years	$ 26,355,700	0.88 %	4.33 %	0.75
3 - 6 years	1,120,400	2.53 %	3.95 %	4.07
6 - 10 years	22,492,200	2.54 %	4.24 %	8.76
Greater than 10 years	2,309,000	3.49 %	4.26 %	22.93
Total / Weighted average	$ 52,277,300	1.74 %	4.28 %	5.25

(1) As of June 30, 2023, 12%, 12% and 76% of the Company's interest rate swaps were linked to LIBOR, the Federal funds rate and the SOFR, respectively. As of December 31, 2022, 17%, 23% and 60% of the Company's interest rate swaps were linked to LIBOR, the Federal funds rate and the SOFR, respectively.

(2) As of June 30, 2023, notional amount includes $734.0 million of forward starting pay fixed swaps. There were no forward starting swaps at December 31, 2022.

(3) The weighted average years to maturity of payer interest rate swaps is offset by the weighted average years to maturity of receiver interest rate swaps. As such, the net weighted average years to maturity for each maturity bucket may fall outside of the range listed.

The following tables summarize certain characteristics of the Company’s swaptions at June 30, 2023 and December 31, 2022:

June 30, 2023					
	Current Underlying Notional	Weighted Average Underlying Fixed Rate	Weighted Average Underlying Floating Rate	Weighted Average Underlying Years to Maturity	Weighted Average Months to Expiration
(dollars in thousands)					
Long pay	**$2,500,000**	**2.02%**	**3M LIBOR**	**7.69**	**8.25**
Long receive	**$750,000**	**1.57%**	**3M LIBOR**	**10.57**	**6.79**

December 31, 2022					
	Current Underlying Notional	Weighted Average Underlying Fixed Rate	Weighted Average Underlying Floating Rate	Weighted Average Underlying Years to Maturity	Weighted Average Months to Expiration
(dollars in thousands)					
Long pay	$2,500,000	2.02%	3M LIBOR	8.19	14.28
Long receive	$750,000	1.57%	3M LIBOR	11.07	12.82

The following tables summarize certain characteristics of the Company’s TBA derivatives at June 30, 2023 and December 31, 2022:

June 30, 2023								
Purchase and sale contracts for derivative TBAs		Notional		Implied Cost Basis		Implied Market Value		Net Carrying Value
(dollars in thousands)								
Purchase contracts	**$**	**5,649,000**	**$**	**5,537,076**	**$**	**5,519,589**	**$**	**(17,487)**
Sale contracts		**(1,915,000)**		**(1,911,633)**		**(1,891,873)**		**19,760**
Net TBA derivatives	**$**	**3,734,000**	**$**	**3,625,443**	**$**	**3,627,716**	**$**	**2,273**

December 31, 2022								
(dollars in thousands)								
Purchase contracts	$	10,589,000	$	10,675,739	$	10,623,350	$	(52,389)
Sale contracts		(44,000)		(44,849)		(44,674)		175
Net TBA derivatives	$	10,545,000	$	10,630,890	$	10,578,676	$	(52,214)

The following tables summarize certain characteristics of the Company’s futures derivatives at June 30, 2023 and December 31, 2022:

June 30, 2023					
		Notional - Long Positions		Notional - Short Positions	Weighted Average Years to Maturity
(dollars in thousands)					
U.S. Treasury futures - 2 year	**$**	**—**	**$**	**(9,071,400)**	**1.97**
U.S. Treasury futures - 5 year		**98,000**		**—**	**4.39**
U.S. Treasury futures - 10 year and greater		**—**		**(2,439,800)**	**8.01**
Total	**$**	**98,000**	**$**	**(11,511,200)**	**3.26**

December 31, 2022					
		Notional - Long Positions		Notional - Short Positions	Weighted Average Years to Maturity
(dollars in thousands)					
U.S. Treasury futures - 2 year	$	—	$	(8,518,400)	1.96
U.S. Treasury futures - 5 year		—		(5,803,400)	4.37
U.S. Treasury futures - 10 year and greater		—		(6,866,900)	8.15
Total	$	—	$	(21,188,700)	4.63

The Company presents derivative contracts on a gross basis in the Consolidated Statements of Financial Condition. Derivative contracts may contain legally enforceable provisions that allow for netting or setting off receivables and payables with each counterparty.

The following tables present information about derivative assets and liabilities that are subject to such provisions and can be offset in our Consolidated Statements of Financial Condition at June 30, 2023 and December 31, 2022, respectively.

June 30, 2023				
		Amounts Eligible for Offset		
	Gross Amounts	Financial Instruments	Cash Collateral	Net Amounts
Assets		(dollars in thousands)		
Interest rate swaps, at fair value	**$ 30,026**	**$ (23,168)**	**$ —**	**$ 6,858**
Interest rate swaptions, at fair value	**264,406**	**(113,023)**	**(147,234)**	**4,149**
TBA derivatives, at fair value	**21,460**	**(1,699)**	**—**	**19,761**
Futures contracts, at fair value	**139,108**	**(24,822)**	**—**	**114,286**
Purchase commitments	**2,119**	**—**	**—**	**2,119**
Liabilities				
Interest rate swaps, at fair value	**$ 96,618**	**$ (57,398)**	**$ —**	**$ 39,220**
TBA derivatives, at fair value	**19,187**	**(16,480)**	**(1,761)**	**946**
Futures contracts, at fair value [(1)]	**37,049**	**(24,822)**	**(12,227)**	**—**
Purchase commitments	**3,328**	**—**	**—**	**3,328**

December 31, 2022				
		Amounts Eligible for Offset		
	Gross Amounts	Financial Instruments	Cash Collateral	Net Amounts
Assets		(dollars in thousands)		
Interest rate swaps, at fair value	$ 33,006	$ (24,625)	$ —	$ 8,381
Interest rate swaptions, at fair value	256,991	—	—	256,991
TBA derivatives, at fair value	17,056	(16,875)	—	181
Futures contracts, at fair value	33,179	(2,414)	—	30,765
Purchase commitments	1,832	—	—	1,832
Liabilities				
Interest rate swaps, at fair value	$ 108,724	$ (24,625)	$ (1,251)	$ 82,848
TBA derivatives, at fair value	69,270	(16,875)	—	52,395
Futures contracts, at fair value	11,919	(2,414)	(9,505)	—
Purchase commitments	460	—	—	460
Credit derivatives	13,799	—	(9,291)	4,508

(1) As of June 30, 2023, this includes $36.4 million of SOFR futures options.

The effect of interest rate swaps in the Consolidated Statements of Comprehensive Income (Loss) is as follows:

Location on Consolidated Statements of Comprehensive Income (Loss)			
	Net Interest Component of Interest Rate Swaps [(1)]	Realized Gains (Losses) on Termination of Interest Rate Swaps [(1)]	Unrealized Gains (Losses) on Interest Rate Swaps [(1)]
For the three months ended		(dollars in thousands)	
June 30, 2023	**$ 425,293**	**$ 48,148**	**$ 841,702**
June 30, 2022	$ 992	$ (16)	$ 897,537
For the six months ended			
June 30, 2023	**$ 810,999**	**$ (97,671)**	**$ (114,570)**
June 30, 2022	$ (61,549)	$ (16)	$ 2,220,976

(1) Included in Net gains (losses) on derivatives in the Consolidated Statements of Comprehensive Income (Loss).

The effect of other derivative contracts in the Company's Consolidated Statements of Comprehensive Income (Loss) is as follows:

Three Months Ended June 30, 2023			
Derivative Instruments	**Realized Gain (Loss)**	**Unrealized Gain (Loss)**	**Amount of Gain/(Loss) Recognized in Net Gains (Losses) on Derivatives**
	(dollars in thousands)		
Net TBA derivatives	**$ 99,361**	**$ (160,873)**	**$ (61,512)**
Net interest rate swaptions	**—**	**53,413**	**53,413**
Futures [1]	**(242,013)**	**413,240**	**171,227**
Purchase commitments	**—**	**(3,444)**	**(3,444)**
Credit derivatives	**(17,970)**	**18,468**	**498**
Total			**$ 160,182**

[1] For the three months ended June 30, 2023, this includes $18.8 million of unrealized loss related to SOFR futures options.

Three Months Ended June 30, 2022			
Derivative Instruments	**Realized Gain (Loss)**	**Unrealized Gain (Loss)**	**Amount of Gain/(Loss) Recognized in Net Gains (Losses) on Derivatives**
	(dollars in thousands)		
Net TBA derivatives	$ (1,064,242)	$ 280,992	$ (783,250)
Net interest rate swaptions	—	119,436	119,436
Futures	1,167,524	(380,436)	787,088
Purchase commitments	—	2,671	2,671
Credit derivatives	374	(9,189)	(8,815)
Total			$ 117,130

Six Months Ended June 30, 2023			
Derivative Instruments	**Realized Gain (Loss)**	**Unrealized Gain (Loss)**	**Amount of Gain/(Loss) Recognized in Net Gains (Losses) on Other Derivatives**
	(dollars in thousands)		
Net TBA derivatives	**$ (54,488)**	**$ 54,487**	**$ (1)**
Net interest rate swaptions	**2,323**	**7,415**	**9,738**
Futures [1]	**(123,681)**	**98,362**	**(25,319)**
Purchase commitments	**—**	**(2,581)**	**(2,581)**
Credit derivatives	**(19,282)**	**13,260**	**(6,022)**
Total			**$ (24,185)**

[1] For the six months ended June 30, 2023, this includes $18.8 million of unrealized loss related to SOFR futures options.

Six Months Ended June 30, 2022			
Derivative Instruments	**Realized Gain (Loss)**	**Unrealized Gain (Loss)**	**Amount of Gain/(Loss) Recognized in Net Gains (Losses) on Other Derivatives**
	(dollars in thousands)		
Net TBA derivatives	$ (1,820,381)	$ (79,239)	$ (1,899,620)
Net interest rate swaptions	(14,450)	242,058	227,608
Futures	1,720,678	458,516	2,179,194
Purchase commitments	—	2,172	2,172
Credit derivatives	1,434	(12,528)	(11,094)
Total			$ 498,260

Certain of the Company's derivative contracts are subject to International Swaps and Derivatives Association Master Agreements or other similar agreements which may contain provisions that grant counterparties certain rights with respect to the applicable agreement upon the occurrence of certain events such as (i) a decline in stockholders' equity in excess of specified thresholds or dollar amounts over set periods of time, (ii) the Company's failure to maintain its REIT status, (iii) the

Company's failure to comply with limits on the amount of leverage, and (iv) the Company's stock being delisted from the New York Stock Exchange.

Upon the occurrence of any one of items (i) through (iv), or another default under the agreement, the counterparty to the applicable agreement has a right to terminate the agreement in accordance with its provisions. The aggregate fair value of all derivative instruments with the aforementioned features were in a net asset position at June 30, 2023.

11. FAIR VALUE MEASUREMENTS

The Company follows fair value guidance in accordance with GAAP to account for its financial instruments and MSR that are accounted for at fair value. The fair value of a financial instrument and MSR is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

GAAP requires classification of financial instruments and MSR into a three-level hierarchy based on the priority of the inputs to the valuation technique. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

If the inputs used to measure the financial instrument and MSR fall within different levels of the hierarchy, the categorization is based on the lowest priority input that is significant to the fair value measurement of the instrument. Financial assets and liabilities recorded at fair value on the Consolidated Statements of Financial Condition or disclosed in the related notes are categorized based on the inputs to the valuation techniques as follows:

Level 1 – inputs to the valuation methodology are quoted prices (unadjusted) for identical assets and liabilities in active markets.

Level 2 – inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3 – inputs to the valuation methodology are unobservable and significant to overall fair value.

The Company designates its securities as trading, available-for-sale or held-to-maturity depending upon the type of security and the Company's intent and ability to hold such security to maturity. Securities classified as available-for-sale and trading are reported at fair value on a recurring basis.

The following is a description of the valuation methodologies used for instruments carried at fair value. These methodologies are applied to assets and liabilities across the three-level fair value hierarchy, with the observability of inputs determining the appropriate level.

Futures contracts are valued using quoted prices for identical instruments in active markets and are classified as Level 1.

Residential Securities, interest rate swaps, swaptions and other derivatives are valued using quoted prices or internally estimated prices for similar assets using internal models. The Company incorporates common market pricing methods, including a spread measurement to the Treasury curve as well as underlying characteristics of the particular security including coupon, prepayment speeds, periodic and life caps, rate reset period and expected life of the security in its estimates of fair value. Fair value estimates for residential mortgage loans are generated by a discounted cash flow model and are primarily based on observable market-based inputs including discount rates, prepayment speeds, delinquency levels, and credit losses. Management reviews and indirectly corroborates its estimates of the fair value derived using internal models by comparing its results to independent prices provided by dealers in the securities and/or third party pricing services. Certain liquid asset classes, such as Agency fixed-rate pass-throughs, may be priced using independent sources such as quoted prices for TBA securities.

Residential Securities, residential mortgage loans, interest rate swap and swaption markets, TBA derivatives and MBS options are considered to be active markets such that participants transact with sufficient frequency and volume to provide transparent pricing information on an ongoing basis. The liquidity of the Residential Securities, residential mortgage loans, interest rate swaps, swaptions, TBA derivatives and MBS options markets and the similarity of the Company's securities to those actively traded enable the Company to observe quoted prices in the market and utilize those prices as a basis for formulating fair value measurements. Consequently, the Company has classified Residential Securities, residential mortgage loans, interest rate swaps, swaptions, TBA derivatives and MBS options as Level 2 inputs in the fair value hierarchy.

The fair value of commercial mortgage-backed securities classified as available-for-sale is determined based upon quoted prices of similar assets in recent market transactions and requires the application of judgment due to differences in the underlying collateral. Consequently, commercial real estate debt investments carried at fair value are classified as Level 2.

For the fair value of debt issued by securitization vehicles, refer to the “Variable Interest Entities” Note for additional information.

The Company classifies its investments in MSR and Interests in MSR as Level 3 in the fair value measurements hierarchy. Fair value estimates for these investments are obtained from models, which use significant unobservable inputs in their valuations. These valuations primarily utilize discounted cash flow models that incorporate unobservable market data inputs including discount rates, prepayment rates, delinquency levels and costs to service. Model valuations are then compared to valuations obtained from third party pricing providers. Management reviews the valuations received from third party pricing providers and uses them as a point of comparison to modeled values. The valuation of MSR and Interests in MSR require significant judgment by management and the third party pricing providers. Assumptions used for which there is a lack of observable inputs may significantly impact the resulting fair value and therefore the Company’s financial statements.

The following tables present the estimated fair values of financial instruments and MSR measured at fair value on a recurring basis. There were no transfers between levels of the fair value hierarchy during the periods presented.

	June 30, 2023			
	Level 1	Level 2	Level 3	Total
Assets		(dollars in thousands)		
Securities				
Agency mortgage-backed securities	$ —	$ 67,764,264	$ —	$ 67,764,264
Credit risk transfer securities	—	1,064,401	—	1,064,401
Non-Agency mortgage-backed securities	—	2,008,106	—	2,008,106
Commercial mortgage-backed securities	—	365,690	—	365,690
Loans				
Residential mortgage loans	—	1,154,320	—	1,154,320
Mortgage servicing rights	—	—	2,018,896	2,018,896
Assets transferred or pledged to securitization vehicles	—	11,318,419	—	11,318,419
Derivative assets				
Interest rate swaps	—	30,026	—	30,026
Other derivatives	139,108	287,985	—	427,093
Total assets	$ 139,108	$ 83,993,211	$ 2,018,896	$ 86,151,215
Liabilities				
Debt issued by securitization vehicles	—	9,789,282	—	9,789,282
Participations issued	—	492,307	—	492,307
Derivative liabilities				
Interest rate swaps	—	96,618	—	96,618
Other derivatives	37,049	22,515	—	59,564
Total liabilities	$ 37,049	$ 10,400,722	$ —	$ 10,437,771

December 31, 2022				
	Level 1	Level 2	Level 3	Total
Assets	(dollars in thousands)			
Securities				
Agency mortgage-backed securities	$ —	$ 62,274,895	$ —	$ 62,274,895
Credit risk transfer securities	—	997,557	—	997,557
Non-Agency mortgage-backed securities	—	1,991,146	—	1,991,146
Commercial mortgage-backed securities	—	526,309	—	526,309
Loans				
Residential mortgage loans	—	1,809,832	—	1,809,832
Mortgage servicing rights	—	—	1,748,209	1,748,209
Assets transferred or pledged to securitization vehicles	—	9,121,912	—	9,121,912
Derivative assets				
Interest rate swaps	—	33,006	—	33,006
Other derivatives	33,179	275,879	—	309,058
Total assets	$ 33,179	$ 77,030,536	$ 1,748,209	$ 78,811,924
Liabilities				
Debt issued by securitization vehicles	$ —	$ 7,744,160	$ —	$ 7,744,160
Participations issued	—	800,849	—	800,849
Derivative liabilities				
Interest rate swaps	—	108,724	—	108,724
Other derivatives	11,919	83,529	—	95,448
Total liabilities	$ 11,919	$ 8,737,262	$ —	$ 8,749,181

Qualitative and Quantitative Information about Level 3 Fair Value Measurements

The Company considers unobservable inputs to be those for which market data is not available and that are developed using the best information available to us about the assumptions that market participants would use when pricing the asset. Relevant inputs vary depending on the nature of the instrument being measured at fair value. The sensitivities of significant unobservable inputs along with interrelationships between and among the significant unobservable inputs and their impact on the fair value measurements are described below. The effect of a change in a particular assumption in the sensitivity analysis below is considered independently from changes in any other assumptions. In practice, simultaneous changes in assumptions may not always have a linear effect on the inputs discussed below. Interrelationships may also exist between observable and unobservable inputs. Such relationships have not been included in the discussion below. For each of the individual relationships described below, the inverse relationship would also generally apply. For MSR and Interests in MSR, in general, increases in the discount, prepayment or delinquency rates or in annual servicing costs in isolation would result in a lower fair value measurement. A decline in interest rates could lead to higher-than-expected prepayments of mortgages underlying the Company's investments in MSR and Interests in MSR, which in turn could result in a decline in the estimated fair value of MSR and Interests in MSR. Refer to the "Mortgage Servicing Rights" Note for additional information, including rollforwards.

The table below presents information about the significant unobservable inputs used for recurring fair value measurements for Level 3 MSR and Interests in MSR. The table does not give effect to the Company's risk management practices that might offset risks inherent in these Level 3 investments.

Unobservable Input (1)	Range (Weighted Average) (2)	
	June 30, 2023	December 31, 2022
Discount rate	**7.6% - 10.2% (8.8%)**	8.4% - 10.7% (9.7%)
Prepayment rate	**4.6% - 9.0% (5.2%)**	4.8% - 8.1% (5.4%)
Delinquency rate	**0.2% - 3.9% (1.2%)**	0.2% - 4.5% (1.3%)
Cost to service	**$85 - $109 ($94)**	$86 - $118 ($95)

(1) Represents rates, estimates and assumptions that the Company believes would be used by market participants when valuing these assets.

(2) Weighted average discount rate computed based on the fair value of MSR, weighted average prepayment rate, delinquency rate and cost to service based on unpaid principal balances of loans underlying the MSR.

The following table summarizes the estimated fair values for financial assets and liabilities that are not carried at fair value at June 30, 2023 and December 31, 2022.

	June 30, 2023		December 31, 2022	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Financial liabilities				
Repurchase agreements	**$61,637,600**	**$61,637,600**	$59,512,597	$59,512,597
Other secured financing	**500,000**	**500,000**	250,000	250,000

The carrying values of repurchase agreements and short term other secured financing approximate fair value and are considered Level 2 fair value measurements. Long term other secured financing is valued using Level 2 inputs.

12. INTANGIBLE ASSETS

Intangible assets, net

Finite life intangible assets are amortized over their expected useful lives. As part of the Company's management internalization transaction, which closed on June 30, 2020, the Company recognized an intangible asset for the acquired assembled workforce of approximately $41.2 million based on the replacement cost of the employee base acquired by the Company.

The following table presents the activity of finite lived intangible assets for the six months ended June 30, 2023.

Intangible Assets, net (dollars in thousands)		
Beginning balance January 1, 2023	$	16,679
Less: amortization expense		(1,516)
Ending balance June 30, 2023	$	15,163

13. SECURED FINANCING

Reverse Repurchase and Repurchase Agreements – The Company finances a significant portion of its assets with repurchase agreements. At the inception of each transaction, the Company assessed each of the specified criteria in ASC 860, *Transfers and Servicing*, and has determined that each of the financing agreements should be treated as a secured financing.

The Company enters into reverse repurchase agreements to earn a yield on excess cash balances. To mitigate credit exposure, the Company monitors the market value of these securities and delivers or obtains additional collateral based on changes in market value of these securities. Generally, the Company receives or posts collateral with a fair value approximately equal to or greater than the value of the secured financing.

Reverse repurchase agreements and repurchase agreements with the same counterparty and the same maturity are presented net in the Consolidated Statements of Financial Condition when the terms of the agreements meet the criteria to permit netting. The Company reports cash flows on repurchase agreements as financing activities and cash flows on reverse repurchase agreements as investing activities in the Consolidated Statements of Cash Flows.

The Company had outstanding $61.6 billion and $59.5 billion of repurchase agreements with weighted average remaining maturities of 44 days and 27 days at June 30, 2023 and December 31, 2022, respectively. In connection with its residential mortgage loans, the Company has select arrangements with counterparties to enter into repurchase agreements for $2.0 billion with remaining capacity of $1.4 billion at June 30, 2023.

At June 30, 2023 and December 31, 2022, the repurchase agreements had the following remaining maturities, collateral types and weighted average rates:

June 30, 2023							
	Agency Mortgage-Backed Securities	CRTs	Non-Agency Mortgage-Backed Securities	Residential Mortgage Loans	Commercial Mortgage-Backed Securities	Total Repurchase Agreements	Weighted Average Rate
	(dollars in thousands)						
1 day	$ —	$ —	$ —	$ —	$ —	$ —	— %
2 to 29 days	**39,019,374**	**367,226**	**658,795**	—	**277,340**	**40,322,735**	**5.24 %**
30 to 59 days	**12,163,114**	**257,347**	**758,575**	—	—	**13,179,036**	**5.35 %**
60 to 89 days	**612,095**	—	**647,848**	—	**4,253**	**1,264,196**	**5.78 %**
90 to 119 days	**753,315**	—	**191,428**	**3,622**	**42,719**	**991,084**	**5.51 %**
Over 119 days (1)	**5,371,078**	—	—	**509,471**	—	**5,880,549**	**5.36 %**
Total	**$ 57,918,976**	**$ 624,573**	**$ 2,256,646**	**$ 513,093**	**$ 324,312**	**$ 61,637,600**	**5.29 %**

December 31, 2022							
	Agency Mortgage-Backed Securities	CRTs	Non-Agency Mortgage-Backed Securities	Residential Mortgage Loans	Commercial Mortgage-Backed Securities	Total Repurchase Agreements	Weighted Average Rate
	(dollars in thousands)						
1 day	$ —	$ —	$ —	$ —	$ —	$ —	— %
2 to 29 days	30,244,050	193,069	524,432	200,931	263,711	31,426,193	4.27 %
30 to 59 days	21,200,770	149,733	632,673	—	124,390	22,107,566	4.18 %
60 to 89 days	4,410,473	—	782,905	—	68,647	5,262,025	4.59 %
90 to 119 days	—	125,893	73,251	168,656	—	367,800	5.82 %
Over 119 days (1)	—	—	—	349,013	—	349,013	6.37 %
Total	$ 55,855,293	$ 468,695	$ 2,013,261	$ 718,600	$ 456,748	$ 59,512,597	4.29 %

(1) No repurchase agreements had a remaining maturity over 1 year at June 30, 2023. No repurchase agreements had a remaining maturity over 1 year at December 31, 2022.

The following table summarizes the gross amounts of reverse repurchase agreements and repurchase agreements, amounts offset in accordance with netting arrangements and net amounts of repurchase agreements and reverse repurchase agreements as presented in the Consolidated Statements of Financial Condition at June 30, 2023 and December 31, 2022. Refer to the "Derivative Instruments" Note for information related to the effect of netting arrangements on the Company's derivative instruments.

	June 30, 2023		December 31, 2022	
	Reverse Repurchase Agreements	Repurchase Agreements	Reverse Repurchase Agreements	Repurchase Agreements
	(dollars in thousands)			
Gross amounts	**$ —**	**$ 61,637,600**	$ —	$ 59,512,597
Amounts offset	**—**	**—**	—	—
Netted amounts	**$ —**	**$ 61,637,600**	$ —	$ 59,512,597

Other Secured Financing - As of June 30, 2023, the Company had $750 million in total committed credit facilities to finance a portion of its MSR portfolio. Outstanding borrowings under this facility as of June 30, 2023 totaled $500.0 million with maturities ranging between one to three years. The weighted average interest rate of the borrowings was 7.92% as of June 30, 2023. Borrowings are reported in Other secured financing in the Company's Consolidated Statements of Financial Condition.

Refer to the "Variable Interest Entities" Note for additional information on the Company's other secured financing arrangements at December 31, 2022.

Investments pledged as collateral under secured financing arrangements and interest rate swaps, excluding residential mortgage loans of consolidated VIEs, had an estimated fair value and accrued interest of $64.8 billion and $249.5 million, respectively, at June 30, 2023 and $62.2 billion and $226.4 million, respectively, at December 31, 2022.

14. CAPITAL STOCK

(A) Common Stock

The following table provides a summary of the Company’s common shares authorized, and issued and outstanding at June 30, 2023 and December 31, 2022.

	Shares authorized		Shares issued and outstanding		
	June 30, 2023	December 31, 2022	June 30, 2023	December 31, 2022	Par Value
Common stock	**1,468,250,000**	2,936,500,000	**493,893,288**	468,309,810	$0.01

In December 2020, the Company announced that its Board of Directors (“Board”) authorized the repurchase of up to $1.5 billion of its outstanding common shares through December 31, 2021 (the “Prior Share Repurchase Program”). In January 2022, the Company announced that its Board authorized the repurchase of up to $1.5 billion of its outstanding shares of common stock through December 31, 2024 (the “Current Share Repurchase Program”). The Current Share Repurchase Program replaced the Prior Share Repurchase Program. During the three and six months ended June 30, 2023 and 2022, no shares were purchased under the Current Share Repurchase Program or Prior Share Repurchase Program.

On August 6, 2020, the Company entered into separate Amended and Restated Distribution Agency Agreements (as amended by Amendment No. 1 to the Amended and Restated Distribution Agency Agreements on August 6, 2021 and Amendment No. 2 to the Amended and Restated Distribution Agency Agreements on November 3, 2022, collectively, the “Sales Agreements”) with each of Barclays Capital Inc., BofA Securities, Inc., Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC, Goldman Sachs & Co. LLC, Keefe, Bruyette & Woods, Inc., J.P. Morgan Securities LLC, RBC Capital Markets, LLC, UBS Securities LLC and Wells Fargo Securities, LLC (collectively, the “Sales Agents”). Pursuant to the Sales Agreements, the Company may offer and sell shares of its common stock, having an aggregate offering price of up to $1.5 billion, from time to time through any of the Sales Agents (the “at-the-market sales program”).

During the three months ended June 30, 2022, the Company closed the public offering of an original issuance of 25 million shares of common stock for proceeds of $645.0 million before deducting offering expenses. In connection with the offering, the Company granted the underwriters a thirty-day option to purchase up to an additional 3.75 million shares of common stock, which the underwriters exercised in full, resulting in an additional $96.8 million in proceeds before deducting offering expenses.

During the six months ended June 30, 2023, under the at-the-market sales program, the Company issued 25.3 million shares for proceeds of $562.7 million, net of commissions and fees. During the three and six months ended June 30, 2022, under the at-the-market sales program, the Company issued 8.3 million shares for proceeds of $214.9 million, and 8.4 million shares for proceeds of $221.1 million, respectively, each net of commissions and fees. The 2022 share amounts have been retroactively adjusted to reflect the effects of the Reverse Stock Split.

(B) Preferred Stock

The following is a summary of the Company’s cumulative redeemable preferred stock outstanding at June 30, 2023 and December 31, 2022. In the event of a liquidation or dissolution of the Company, the Company’s then outstanding preferred stock takes precedence over the Company’s common stock with respect to payment of dividends and the distribution of assets.

	Shares Authorized		Shares Issued And Outstanding		Carrying Value					
	June 30, 2023	December 31, 2022	June 30, 2023	December 31, 2022	June 30, 2023	December 31, 2022	Contractual Rate	Earliest Redemption Date (1)	Date At Which Dividend Rate Becomes Floating	Floating Annual Rate
Fixed-to-floating rate										
Series F	**28,800,000**	28,800,000	**28,800,000**	28,800,000	**696,910**	696,910	6.95%	9/30/2022	9/30/2022	3M LIBOR + 4.993%
Series G	**17,000,000**	17,000,000	**17,000,000**	17,000,000	**411,335**	411,335	6.50%	3/31/2023	3/31/2023	3M LIBOR + 4.172%
Series I	**17,700,000**	17,700,000	**17,700,000**	17,700,000	**428,324**	428,324	6.75%	6/30/2024	6/30/2024	3M LIBOR + 4.989%
Total	**63,500,000**	63,500,000	**63,500,000**	63,500,000	**$ 1,536,569**	$ 1,536,569				

(1) Subject to the Company’s right under limited circumstances to redeem preferred stock earlier in order to preserve its qualification as a REIT or under limited circumstances related to a change in control of the Company.

Each series of preferred stock has a par value of $0.01 per share and a liquidation and redemption price of $25.00, plus accrued and unpaid dividends through their redemption date. Through June 30, 2023, the Company had declared and paid all required quarterly dividends on the Company’s preferred stock.

The Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, Series G Fixed-to-Floating Rate Cumulative Preferred Stock and Series I Fixed-to-Floating Rate Cumulative Preferred Stock rank senior to the common stock of the Company.

On November 3, 2022, the Company's Board of Directors approved a repurchase plan for all of its existing outstanding Preferred Stock (as defined below, the "Preferred Stock Repurchase Program"). Under the terms of the plan, the Company is authorized to repurchase up to an aggregate of 63,500,000 shares of Preferred Stock, comprised of up to (i) 28,800,000 shares of its 6.95% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value $0.01 per share (the "Series F Preferred Stock"), (ii) 17,000,000 shares of its 6.50% Series G Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value $0.01 per share (the "Series G Preferred Stock"), and (iii) 17,700,000 shares of its 6.75% Series I Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value $0.01 per share (the "Series I Preferred Stock", and together with Series F Preferred Stock and Series G Preferred Stock, the "Preferred Stock"). The aggregate liquidation value of the Preferred Stock that may be repurchased by the Company pursuant to the Preferred Stock Repurchase Program, as of November 3, 2022, was approximately $1.6 billion. The Preferred Stock Repurchase Program became effective on November 3, 2022, and shall expire on December 31, 2024. No shares were repurchased with respect to the Preferred Stock Repurchase Program during the three and six months ended June 30, 2023.

(C) Distributions to Stockholders

The following table provides a summary of the Company's dividend distribution activity for the periods presented:

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2023	June 30, 2022	**June 30, 2023**	June 30, 2022
	(dollars in thousands, except per share data)			
Dividends and dividend equivalents declared on common stock and share-based awards	**$ 322,448**	$ 355,467	**$ 644,947**	$ 677,664
Distributions declared per common share	**$ 0.65**	$ 0.88	**$ 1.30**	$ 1.76
Distributions paid to common stockholders after period end	**$ 321,031**	$ 354,027	**$ 321,031**	$ 354,027
Distributions paid per common share after period end	**$ 0.65**	$ 0.88	**$ 0.65**	$ 0.88
Date of distributions paid to common stockholders after period end	**July 28, 2023**	July 29, 2022	**July 28, 2023**	July 29, 2022
Dividends declared to series F preferred stockholders	**$ 18,274**	$ 12,510	**$ 35,776**	$ 25,020
Dividends declared per share of series F preferred stock	**$ 0.635**	$ 0.434	**$ 1.242**	$ 0.869
Dividends declared to series G preferred stockholders	**$ 10,025**	$ 6,906	**$ 16,931**	$ 13,812
Dividends declared per share of series G preferred stock	**$ 0.590**	$ 0.406	**$ 0.996**	$ 0.813
Dividends declared to series I preferred stockholders	**$ 7,467**	$ 7,467	**$ 14,934**	$ 14,934
Dividends declared per share of series I preferred stock	**$ 0.422**	$ 0.422	**$ 0.844**	$ 0.844

15. INTEREST INCOME AND INTEREST EXPENSE

Refer to the "Significant Accounting Policies" Note for details surrounding the Company's accounting policy related to net interest income on securities and loans.

The following table summarizes the interest income recognition methodology for Residential Securities:

	Interest Income Methodology
Agency	
Fixed-rate pass-through (1)	Effective yield (3)
Adjustable-rate pass-through (1)	Effective yield (3)
Multifamily (1)	Contractual Cash Flows
CMO (1)	Effective yield (3)
Reverse mortgages (2)	Prospective
Interest-only (2)	Prospective
Residential credit	
CRT (2)	Prospective
Alt-A (2)	Prospective
Prime (2)	Prospective
Subprime (2)	Prospective
NPL/RPL (2)	Prospective
Prime jumbo (2)	Prospective

(1) Changes in fair value are recognized in Other comprehensive income (loss) on the accompanying Consolidated Statements of Comprehensive Income (Loss) for securities purchased prior to July 1, 2022. Effective July 1, 2022, changes in fair value are recognized in Net gains (losses) on investments and other on the accompanying Consolidated Statements of Comprehensive Income (Loss) for newly purchased securities.

(2) Changes in fair value are recognized in Net gains (losses) on investments and other on the accompanying Consolidated Statements of Comprehensive Income (Loss).

(3) Effective yield is recalculated for differences between estimated and actual prepayments and the amortized cost is adjusted as if the new effective yield had been applied since inception.

The following table presents the components of the Company's interest income and interest expense for the three and six months ended June 30, 2023 and 2022.

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2023	2022	2023	2022
Interest income	(dollars in thousands)			
Agency securities	**$ 686,912**	$ 497,135	**$ 1,290,014**	$ 1,020,086
Residential credit securities	**56,477**	30,037	**110,222**	52,159
Residential mortgage loans (1)	**162,202**	91,648	**309,433**	165,136
Commercial investment portfolio (1) (2)	**8,310**	26,575	**18,197**	63,858
Reverse repurchase agreements	**7,593**	220	**11,878**	226
Total interest income	**$ 921,494**	$ 645,615	**$ 1,739,744**	$ 1,301,465
Interest expense				
Repurchase agreements	**841,257**	105,608	**1,539,999**	132,487
Debt issued by securitization vehicles	**101,819**	50,303	**190,753**	84,928
Participations issued	**10,381**	9,379	**21,492**	15,231
Other	**—**	5,185	**—**	12,751
Total interest expense	**953,457**	170,475	**1,752,244**	245,397
Net interest income	**$ (31,963)**	$ 475,140	**$ (12,500)**	$ 1,056,068

(1) Includes assets transferred or pledged to securitization vehicles.
(2) Includes commercial real estate debt and preferred equity and corporate debt.

16. NET INCOME (LOSS) PER COMMON SHARE

The following table presents a reconciliation of net income (loss) and shares used in calculating basic and diluted net income (loss) per share for the three and six months ended June 30, 2023 and 2022.

	For the Three Months Ended		For the Six Months Ended	
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022
	(dollars in thousands, except per share data)			
Net income (loss)	$ **161,187**	$ 863,317	$ **(678,141)**	$ 2,887,211
Net income (loss) attributable to noncontrolling interests	**(5,846)**	(3,379)	**(918)**	(1,740)
Net income (loss) attributable to Annaly	**167,033**	866,696	**(677,223)**	2,888,951
Dividends on preferred stock	**35,766**	26,883	**67,641**	53,766
Net income (loss) available (related) to common stockholders	$ **131,267**	$ 839,813	$ **(744,864)**	$ 2,835,185
Weighted average shares of common stock outstanding-basic	**494,165,256**	380,609,192	**491,939,177**	373,017,228
Add: Effect of stock awards, if dilutive	**193,726**	289,558	**—**	296,495
Weighted average shares of common stock outstanding-diluted	**494,358,982**	380,898,750	**491,939,177**	373,313,723
Net income (loss) per share available (related) to common share				
Basic	$ **0.27**	$ 2.21	$ **(1.51)**	$ 7.60
Diluted	$ **0.27**	$ 2.20	$ **(1.51)**	$ 7.59

The computations of diluted net income (loss) per share available (related) to common share for the three and six months ended June 30, 2023 excludes 1.3 million and 1.8 million, respectively, and for the three and six months ended June 30, 2022 excludes 0.8 million and 0.7 million, respectively, of potentially dilutive restricted and performance stock units because their effect would have been anti-dilutive.

17. INCOME TAXES

For the three months ended June 30, 2023, the Company was qualified to be taxed as a REIT under Code Sections 856 through 860. As a REIT, the Company will not incur federal income tax to the extent that it distributes its taxable income to its stockholders. To maintain qualification as a REIT, the Company must distribute at least 90% of its annual REIT taxable income to its stockholders and meet certain other requirements that relate to, among other things, assets it may hold, income it may generate and its stockholder composition. It is generally the Company's policy to distribute 100% of its REIT taxable income. To the extent there is any undistributed REIT taxable income at the end of a year, the Company distributes such shortfall within the next year as permitted by the Code.

The Company and certain of its direct and indirect subsidiaries, including Annaly TRS, Inc. and certain subsidiaries of joint ventures, have made separate joint elections to treat these subsidiaries as TRSs. As such, each of these TRSs is taxable as a domestic C corporation and subject to federal, state and local income taxes based upon their taxable income.

The provisions of ASC 740, Income Taxes ("ASC 740"), clarify the accounting for uncertainty in income taxes recognized in financial statements and prescribe a recognition threshold and measurement attribute for uncertain tax positions taken or expected to be taken on a tax return. ASC 740 also requires that interest and penalties related to unrecognized tax benefits be recognized in the financial statements. The Company does not have any unrecognized tax benefits that would affect its financial position. Thus, no accruals for penalties and interest were deemed necessary at June 30, 2023 and December 31, 2022.

The state and local tax jurisdictions for which the Company is subject to tax-filing obligations recognize the Company's status as a REIT, and therefore, the Company generally does not pay income tax in such jurisdictions. The Company may, however, be subject to certain minimum state and local tax filing fees as well as certain excise, franchise or business taxes. The Company's TRSs are subject to federal, state and local taxes.

During the three and six months ended June 30, 2023, the Company recorded $14.3 million and $25.3 million, respectively, of income tax expense attributable to its TRSs. During the three and six months ended June 30, 2022, the Company recorded $23.4 million and $50.0 million, respectively, of income tax expense attributable to its TRSs. The Company's federal, state and local tax returns from 2019 and forward remain open for examination.

18. RISK MANAGEMENT

The primary risks to the Company are capital, liquidity and funding risk, investment/market risk, credit risk and operational risk. Interest rates are highly sensitive to many factors, including governmental monetary and tax policies, domestic and international economic and political considerations and other factors beyond the Company's control. Changes in the general level of interest rates can affect net interest income, which is the difference between the interest income earned on interest earning assets and the interest expense incurred in connection with the interest bearing liabilities, by affecting the spread between the interest earning assets and interest bearing liabilities. Changes in the level of interest rates can also affect the value of the interest earning assets and the Company's ability to realize gains from the sale of these assets. A decline in the value of the interest earning assets pledged as collateral for borrowings under repurchase agreements and derivative contracts could result in the counterparties demanding additional collateral or liquidating some of the existing collateral to reduce borrowing levels.

The Company may seek to mitigate the potential financial impact by entering into interest rate agreements such as interest rate swaps, interest rate swaptions and other hedges.

Weakness in the mortgage market, the shape of the yield curve, changes in the expectations for the volatility of future interest rates and deterioration of financial conditions in general may adversely affect the performance and market value of the Company's investments. This could negatively impact the Company's book value. Furthermore, if many of the Company's lenders are unwilling or unable to provide additional financing, the Company could be forced to sell its investments at an inopportune time when prices are depressed. The Company has established policies and procedures for mitigating risks, including conducting scenario and sensitivity analyses and utilizing a range of hedging strategies.

The payment of principal and interest on the Freddie Mac and Fannie Mae Agency mortgage-backed securities, which exclude CRT securities issued by Freddie Mac and Fannie Mae, is guaranteed by those respective agencies and the payment of principal and interest on Ginnie Mae Agency mortgage-backed securities is backed by the full faith and credit of the U.S. government.

The Company faces credit risk on the portions of its portfolio which are not guaranteed by the respective Agency or by the full faith and credit of the U.S. government. The Company is exposed to credit risk on commercial mortgage-backed securities, residential mortgage loans, CRT securities, and other non-Agency mortgage-backed securities. MSR values may also be adversely impacted by rising borrower delinquencies which would reduce servicing income and increase overall costs to service the underlying mortgage loans. The Company is exposed to risk of loss if an issuer, borrower or counterparty fails to perform its obligations under contractual terms. The Company has established policies and procedures for mitigating credit risk, including reviewing and establishing limits for credit exposure, limiting transactions with specific counterparties, pre-purchase due diligence, maintaining qualifying collateral and continually assessing the creditworthiness of issuers, borrowers and counterparties, credit rating monitoring and active servicer oversight.

The Company depends on third-party service providers to perform various business processes related to its operations, including mortgage loan servicers and sub-servicers. The Company's vendor management policy establishes procedures for engaging, onboarding and monitoring the performance of third-party vendors. For mortgage loan servicers and sub-servicers, these procedures include assessing a vendor's financial health as well as oversight of its compliance with applicable laws and regulations, cybersecurity and business continuity programs and security of personally identifiable information.

19. LEASE COMMITMENTS AND CONTINGENCIES

The Company's operating leases are primarily comprised of corporate office leases with remaining lease terms of approximately two years and five years, respectively. The corporate office leases include options to extend for up to five years, however the extension terms were not included in the operating lease liability calculation. Leases with an initial term of 12 months or less are not recorded on the balance sheet. The Company recognizes lease expense for these leases on a straight-line basis over the lease term. The lease cost for the three and six months ended June 30, 2023 and 2022 was $0.8 million and $1.6 million, and $0.8 million and $1.6 million, respectively.

Supplemental information related to leases as of and for the six months ended June 30, 2023 was as follows:

Operating Leases	Classification		June 30, 2023
Assets	(dollars in thousands)		
Operating lease right-of-use assets	Other assets	$	7,432
Liabilities			
Operating lease liabilities [(1)]	Other liabilities	$	9,422
Lease term and discount rate			
Weighted average remaining lease term			2.5 years
Weighted average discount rate [(1)]			3.2%
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows from operating leases		$	2,030

[(1)] For the Company's leases that do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at adoption date in determining the present value of lease payments.

The following table provides details related to maturities of lease liabilities:

		Maturity of Lease Liabilities
Years ending December 31,		(dollars in thousands)
2023 (remaining)	$	2,050
2024		4,107
2025		3,149
2026		261
2027		269
Later years		22
Total lease payments	$	9,858
Less imputed interest		436
Present value of lease liabilities	$	9,422

Contingencies

From time to time, the Company is involved in various claims and legal actions arising in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material effect on the Company's consolidated financial statements. There were no material contingencies at June 30, 2023 and December 31, 2022.

20. SUBSEQUENT EVENTS

In July 2023, the Company completed and closed the securitization of residential mortgage loans, OBX 2023-NQM6, with a face value of $400.5 million. The securitization represents financing transactions which provided non-recourse financing to the Company collateralized by residential mortgage loans purchased by the Company.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Special Note Regarding Forward-Looking Statements

Certain statements contained in this quarterly report, and certain statements contained in our future filings with the Securities and Exchange Commission (the "SEC" or the "Commission"), in our press releases or in our other public or stockholder communications contain or incorporate by reference certain forward-looking statements which are based on various assumptions (some of which are beyond our control) and may be identified by reference to a future period or periods or by the use of forward-looking terminology, such as "may," "will," "believe," "expect," "anticipate," "continue," or similar terms or variations on those terms or the negative of those terms. Such statements include those relating to the Company's future performance, macro outlook, the interest rate and credit environments, tax reform and future opportunities. Actual results could differ materially from those set forth in forward-looking statements due to a variety of factors, including, but not limited to, changes in interest rates; changes in the yield curve; changes in prepayment rates; the availability of mortgage-backed securities ("MBS") and other securities for purchase; the availability of financing and, if available, the terms of any financing; changes in the market value of the Company's assets; changes in business conditions and the general economy; the Company's ability to grow its residential credit business; the Company's ability to grow its mortgage servicing rights business; credit risks related to the Company's investments in credit risk transfer securities and residential mortgage-backed securities and related residential mortgage credit assets; risks related to investments in mortgage servicing rights; the Company's ability to consummate any contemplated investment opportunities; changes in government regulations or policy affecting the Company's business; the Company's ability to maintain its qualification as a REIT for U.S. federal income tax purposes; the Company's ability to maintain its exemption from registration under the Investment Company Act of 1940; operational risks or risk management failures by us or critical third parties, including cybersecurity incidents; and risks and uncertainties related to the COVID-19 pandemic, including as related to adverse economic conditions on real estate-related assets and financing conditions. For a discussion of the risks and uncertainties which could cause actual results to differ from those contained in the forward-looking statements, see "Risk Factors" in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q. The Company does not undertake, and specifically disclaims any obligation, to publicly release the result of any revisions which may be made to any forward-looking statements to reflect the occurrence of anticipated or unanticipated events or circumstances after the date of such statements, except as required by law.

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our most recent annual report on Form 10-K. All references to "Annaly," "we," "us," or "our" mean Annaly Capital Management, Inc. and all entities owned by us, except where it is made clear that the term means only the parent company. Refer to the section titled "Glossary of Terms" located at the end of this Item 2 for definitions of commonly used terms in this quarterly report on Form 10-Q.

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Overview

We are a leading diversified capital manager with investment strategies across mortgage finance. Our principal business objective is to generate net income for distribution to our stockholders and optimize our returns through prudent management of our diversified investment strategies. We are an internally-managed Maryland corporation founded in 1997 that has elected to be taxed as a REIT. Our common stock is listed on the New York Stock Exchange under the symbol "NLY."

We use our capital coupled with borrowed funds to invest primarily in real estate related investments, earning the spread between the yield on our assets and the cost of our borrowings and hedging activities.

For a full discussion of our business, refer to the section titled "Business Overview" in our most recent Annual Report on Form 10-K.

Reverse Stock Split

On September 8, 2022, we announced that our Board had unanimously approved a reverse stock split of our common stock at a ratio of 1-for-4 (the "Reverse Stock Split"). The Reverse Stock Split was effective following the close of business on September 23, 2022 (the "Effective Time"). Accordingly, at the Effective Time, every four issued and outstanding shares of our common stock were converted into one share of our common stock. No fractional shares were issued in connection with the Reverse Stock Split. Instead, each stockholder that would have held fractional shares as a result of the Reverse Stock Split received cash in lieu of such fractional shares. The par value per share of our common stock remained unchanged at $0.01 per share after the Reverse Stock Split. Accordingly, for all historical periods presented, an amount equal to the par value of the reduced number of shares resulting from the Reverse Stock Split was reclassified from Common stock to Additional paid in capital in our Consolidated Statements of Financial Condition. All references made to share or per share amounts in the accompanying consolidated financial statements and disclosures have been retroactively adjusted, where applicable, to reflect the effects of the Reverse Stock Split.

Business Environment

The U.S. economy remains on solid footing demonstrated by healthy gains in the labor market and economic growth consistent with the prior quarter as the regional banking stress has abated. Banks have largely been able to retain deposits and the main implication of the turbulence has been the overhang of assets from the Silicon Valley Bank and Signature Bank receiverships that need to be absorbed by private market participants. The Federal Deposit Insurance Corporation ("FDIC") began selling assets in the second quarter, which weighed on Agency MBS for parts of the quarter, but money manager demand and transparency on the disposition process have already helped the market digest a substantial portion of the $114 billion in assets.

Inflation remained elevated through most of the quarter. However, data began to signal a more pronounced slowdown in June as lower used-car prices, an improvement in shelter inflation, and a seemingly more price sensitive consumer have begun to put downward pressure on prices. Economic data during the quarter suggests that the likelihood of a "soft landing" has increased and that the Federal Reserve ("Fed") will hold interest rates higher for longer, particularly if the labor market continues to demonstrate resilience. We believe that the Fed has reached peak interest rate levels for the cycle after the 25 basis points increase at the Federal Open Market Committee ("FOMC") meeting in July, but upside surprises in inflation readings may lead to an additional hike this year.

The housing market has continued to perform well, having experienced five consecutive months of national home price increases according to Zillow. Recent momentum has turned positive even in previously hard-hit areas, as the top 50 metro areas all experienced positive month-over-month home price appreciation in June, with year-to-date national home prices now up 4.7%. Many market participants were projecting meaningful home price declines with the assumption that elevated mortgage rates and low affordability would translate to reduced housing demand. Although transactional activity has declined, the market has been supported by historically low available-for-sale inventory as existing borrowers with low mortgage rates are unwilling to move given the potential increase in payments. Total active inventory was down approximately 10% from last year and is currently 45% below June 2019 levels. The current balance of supply and demand in the housing market and resilient home prices are positive for both our Residential Credit and MSR portfolios as existing borrowers retain and build more equity.

Given the challenging supply and demand picture in the Agency MBS market in the early part of the quarter, we proactively reduced our exposure with our portfolio declining by roughly $5 billion in notional value in the quarter. This tactical shift proved to be beneficial as spreads reached their quarterly peak in late May and it afforded us flexibility to opportunistically deploy capital across our businesses amidst the volatility. In June, after the U.S. Congress resolved the debt ceiling and the banking sector recovered, risk-on sentiment reemerged and Agency MBS experienced broad-based outperformance, ultimately driving spreads modestly tighter for the quarter.

We continued to rotate our portfolio positioning into higher coupons, which provide the most attractive nominal spreads while reducing our holdings of seasoned intermediate coupons and 15-year MBS. As a result, the average coupon on our portfolio shifted modestly higher to 4.3%. We nonetheless remained disciplined in managing our convexity profile through collateral selection. We also took advantage of softer specific payups to replace over $8 billion TBAs with specified pools during the quarter. In addition to their favorable prepayment profile, specified pools provide incremental carry relative to TBAs in the current environment.

Meanwhile, the notional value of our hedges declined in line with our assets, keeping our hedge ratio relatively unchanged during the quarter. We maintained a slight flattening bias throughout the quarter as 2s/10s in Treasuries reached negative 100 basis points but have shifted to balanced curve positioning given the extreme inversion in the yield curve. The diversity of our assets allows us to be opportunistic in our rates exposure as the market stays highly sensitive to incoming data.

Residential credit spreads tightened during the quarter, resulting in a flatter credit curve given a supportive backdrop of limited net issuance, resiliency in the housing market, and a strong consumer. Benchmark CRT spreads with a below investment grade credit rating tightened 95 basis points on the quarter, while production coupon non-qualified mortgage (“Non-QM”) whole loan spreads were approximately 75 basis points tighter, reflecting a declining cost of funds in the securitization market. Annaly’s portfolio ended the quarter at $4.9 billion in market value, down approximately $300 million quarter-over-quarter given our increased pace of securitization activity. Whole loan purchases remained healthy, increasing 16% relative to the first quarter, with approximately $750 million of whole loans settled. We securitized $1.5 billion in loans in the second quarter through our OBX platform, generating $162 million of retained assets across our wholly-owned subsidiary Onslow Bay Financial LLC (“Onslow Bay”) and our joint venture. After pricing our latest Non-QM securitization in July, our aggregate year-to-date securitization volume totals over $3 billion across eight transactions.

Our securitization activity has been supported by our correspondent channel, which continues to gain momentum despite a challenging landscape for mortgage origination. Our second quarter loan lock volume of $1.5 billion was our largest since inception and the channel accounted for roughly 85% of our total whole loan settlements. We have maintained a disciplined credit focus as demonstrated by the current pipeline having a roughly 750 weighted average FICO, a 68% weighted average loan-to-value ratio as well as limited layered risk.

Finally, we grew our MSR portfolio by approximately $350 million during the quarter through the purchase of four bulk packages. Including $126 million market value of unsettled commitments, the portfolio now stands at just over $2 billion in market value and $150 billion in unpaid principal balance. The portfolio exhibited another quarter of slow prepayment speeds, prepaying approximately 4 CPR. Delinquencies were roughly unchanged and remained minimal. Our strategy of acquiring low note rate, high credit quality MSR continued to deliver predictable cash flows with attractive risk-adjusted returns. MSR trading volumes were strong in the second quarter as market participants efficiently absorbed high levels of bulk supply, a dynamic that we expect to persist for the foreseeable future. Despite elevated supply, pricing has held firm and MSR valuations improved driven by the rise in rates, modest spread tightening, and muted prepayment speeds.

Economic Environment

U.S. economic activity remained resilient to tighter financial conditions in the second quarter as gross domestic product rose 2.4% on a seasonally adjusted annualized rate. Measures of consumption have moderated from the strong pace seen at the beginning of the year, as spending on services has stabilized and spending on goods has slowed. However, consumer confidence remains high, in large part due to the ongoing strength of the labor market and healthy state of household balance sheets. Additionally, the housing sector has rebounded somewhat, with new home sales and construction manufacturing rising in the quarter, helped by fiscal measures such as the CHIPS Act. The effect of the resumption of student debt payments on disposable income and tighter lending standards from the U.S. regional banking sector are potential headwinds to growth in the near term.

We believe the U.S. labor market is softening at the margin but remains strong. According to the Bureau of Labor Statistics, seasonally adjusted total non-farm payroll employment rose at a slower rate in the second quarter than the prior quarter, with a monthly average 244,000 workers added in the second quarter of 2023 compared to an average 312,000 workers in the first quarter. Additionally, the unemployment rate ended the quarter at 3.6%, slightly higher than the historically low level of 3.4% reached in January. Labor demand remains high, with job openings, as measured by the Bureau of Labor Statistics, increasing by 1.6 million openings in the quarter and still significantly elevated from pre-COVID averages. Meanwhile, wage growth, as measured by the year-over-year change in private sector average hourly earnings, increased to 4.4% in June compared to 4.3% in March.

Inflation readings, as measured by the year-over-year changes in the Personal Consumption Expenditure Chain Price Index (“PCE”), remain above the Fed’s 2% inflation target. However, signs of slowing inflation have increased as the headline PCE measure has eased to 3.0% year-over-year in June compared to 4.2% in March. The more stable core PCE measure, which excludes volatile food and energy prices, registered a 4.1% year-over-year increase, also notably lower than the 4.6% in March.

Inflation pressures remain a major challenge for the United States and the broader global economy as price increases have moderated more slowly than previously expected. While forecasts continue to see further moderation in coming months, the degree of the slowdown remains uncertain.

The FOMC conducts monetary policy with a dual mandate: to ensure full employment and stable prices. The FOMC has aggressively tightened monetary policy to ensure it meets its mandate, although the pace of tightening has slowed in recent months to provide time to assess incoming data and the lagged effects of tightening thus far. Therefore, the FOMC raised the Federal Funds Target Rate by 25 basis points to the 5.0% - 5.25% range during the second quarter, relative to 50 bps the prior quarter. Regarding its balance sheet, the FOMC continues to decline at a pace of $95 billion per month across U.S. Treasuries and Agency MBS.

During the second quarter of 2023, the 10-year U.S. Treasury rate increased from 3.47% on March 31, 2023 to 3.84% on June 30, 2023. Interest rate volatility remained meaningfully elevated during the quarter, as seen in the 2-year U.S. Treasury rate that moved within a 148 basis point range. The mortgage basis, or the spread between the 30-year Agency MBS coupon and 10-year U.S. Treasury rate, remained historically wide and closed the quarter at 179 basis points given continued tightening in monetary policy, elevated financial market volatility, and reduced investor demand for Agency MBS.

The following table presents interest rates and spreads at each date presented:

	June 30, 2023	December 31, 2022	June 30, 2022
30-Year mortgage current coupon	**5.63%**	5.39%	4.38%
Mortgage basis	**179 bps**	152 bps	137 bps
10-Year U.S. Treasury rate	**3.84%**	3.87%	3.01%
LIBOR			
1-Month	**5.22%**	4.39%	1.79%
6-Month	**5.76%**	5.14%	2.94%
OIS SOFR Swaps			
1-Month	**5.14%**	4.36%	1.68%
6-Month	**5.37%**	4.80%	2.59%

London Interbank Offered Rate ("LIBOR") Transition

All LIBOR tenors relevant to us either are no longer published or are no longer representative. All of our LIBOR-linked instruments have fallen back, or will fall back upon the next scheduled reset date, to a non-LIBOR-based index, either by their contractual terms, pursuant to U.S. federal legislation, through clearinghouse action, or otherwise.

Income Tax Reform

On August 16, 2022, tax legislation, informally known as the Inflation Reduction Act (the "IRA"), was enacted, and included several changes impacting U.S. federal income tax laws applicable to corporations. The components most relevant to our business are the imposition of a 1% excise tax on stock repurchases by publicly-traded corporations and a 15% corporate minimum tax ("CMT") on GAAP financial statement income. However, the new legislation explicitly excludes REITs from the law and we do not expect the CMT to apply to our TRSs. In the event the application of the CMT were to be imposed on our TRSs, we do not expect a material impact to our operations as it would simply affect the timing of the payment of income taxes already accrued.

While technical corrections or other amendments to the IRA or administrative guidance interpreting the IRA may be forthcoming, we continue to analyze the overall effects of the IRA to our operations, our industry and the economy in general.

Results of Operations

The results of our operations are affected by various factors, many of which are beyond our control. Certain of such risks and uncertainties are described herein (see "Special Note Regarding Forward-Looking Statements" above) and in Part I, Item 1A. "Risk Factors" of our most recent Annual Report on Form 10-K and in Part II, Item 1A. "Risk Factors" in this Quarterly Report on Form 10-Q.

This Management Discussion and Analysis section contains analysis and discussion of financial results computed in accordance with U.S. generally accepted accounting principles ("GAAP") and non-GAAP measurements. To supplement our consolidated financial statements, which are prepared and presented in accordance with GAAP, we provide non-GAAP financial measures to enhance investor understanding of our period-over-period operating performance and business trends, as well as for assessing our performance versus that of industry peers.

Refer to the "Non-GAAP Financial Measures" section for additional information.

Net Income (Loss) Summary

The following table presents financial information related to our results of operations as of and for the three and six months ended June 30, 2023 and 2022.

	As of and for the Three Months Ended June 30,		As of and for the Six Months Ended June 30,	
	2023	2022	2023	2022
	(dollars in thousands, except per share data)			
Interest income	$ 921,494	$ 645,615	$ 1,739,744	$ 1,301,465
Interest expense	953,457	170,475	1,752,244	245,397
Net interest income	(31,963)	475,140	(12,500)	1,056,068
Servicing and related income	83,790	55,685	168,063	90,400
Servicing and related expense	8,930	5,949	16,810	9,706
Net servicing income	74,860	49,736	151,253	80,694
Other income (loss)	175,482	397,899	(707,841)	1,882,219
Less: Total general and administrative expenses	42,915	36,038	83,743	81,802
Income (loss) before income taxes	175,464	886,737	(652,831)	2,937,179
Income taxes	14,277	23,420	25,310	49,968
Net income (loss)	161,187	863,317	(678,141)	2,887,211
Less: Net income (loss) attributable to noncontrolling interests	(5,846)	(3,379)	(918)	(1,740)
Net income (loss) attributable to Annaly	167,033	866,696	(677,223)	2,888,951
Less: Dividends on preferred stock	35,766	26,883	67,641	53,766
Net income (loss) available (related) to common stockholders	$ 131,267	$ 839,813	$ (744,864)	$ 2,835,185
Net income (loss) per share available (related) to common stockholders				
Basic	$ 0.27	$ 2.21	$ (1.51)	$ 7.60
Diluted	$ 0.27	$ 2.20	$ (1.51)	$ 7.59
Weighted average number of common shares outstanding				
Basic	494,165,256	380,609,192	491,939,177	373,017,228
Diluted	494,358,982	380,898,750	491,939,177	373,313,723
Other information				
Investment portfolio at period-end	$ 85,694,096	$ 71,009,570	$ 85,694,096	$ 71,009,570
Average total assets	$ 88,081,247	$ 74,911,192	$ 86,004,402	$ 75,528,816
Average equity	$ 11,898,189	$ 11,284,335	$ 11,721,935	$ 11,921,332
GAAP leverage at period-end (1)	6.1:1	5.4:1	6.1:1	5.4:1
GAAP capital ratio at period-end (2)	13.3 %	15.1 %	13.3 %	15.1 %
Annualized return on average total assets	0.73 %	4.61 %	(1.58 %)	7.65 %
Annualized return on average equity	5.42 %	30.60 %	(11.57 %)	48.44 %
Net interest margin (3)	(0.15 %)	2.64 %	(0.03 %)	2.92 %
Average yield on interest earning assets (4)	4.27 %	3.58 %	4.12 %	3.60 %
Average GAAP cost of interest bearing liabilities (5)	5.00 %	1.12 %	4.77 %	0.80 %
Net interest spread	(0.73 %)	2.46 %	(0.65 %)	2.80 %
Weighted average experienced CPR for the period	7.0 %	14.9 %	6.3 %	15.8 %
Weighted average projected long-term CPR at period-end	8.6 %	7.7 %	8.6 %	7.7 %
Common stock book value per share	$ 20.73	$ 23.59	$ 20.73	$ 23.59
Non-GAAP metrics *				
Interest income (excluding PAA)	$ 909,571	$ 518,094	$ 1,728,312	$ 994,428
Economic interest expense (5)	$ 528,164	$ 169,483	$ 941,245	$ 306,946
Economic net interest income (excluding PAA)	$ 381,407	$ 348,611	$ 787,067	$ 687,482
Premium amortization adjustment cost (benefit)	$ (11,923)	$ (127,521)	$ (11,432)	$ (307,037)
Earnings available for distribution (6)	$ 389,475	$ 490,802	$ 816,605	$ 921,433
Earnings available for distribution per average common share	$ 0.72	$ 1.22	$ 1.52	$ 2.33
Annualized EAD return on average equity (excluding PAA)	13.22 %	17.49 %	14.06 %	15.52 %
Economic leverage at period-end (1)	5.8:1	6.6:1	5.8:1	6.6:1
Economic capital ratio at period-end (2)	14.3 %	13.0 %	14.3 %	13.0 %
Net interest margin (excluding PAA) (3)	1.66 %	2.20 %	1.71 %	2.12 %
Average yield on interest earning assets (excluding PAA) (4)	4.22 %	2.87 %	4.09 %	2.75 %
Average economic cost of interest bearing liabilities (5)	2.77 %	1.11 %	2.56 %	1.00 %
Net interest spread (excluding PAA)	1.45 %	1.76 %	1.53 %	1.75 %

* Represents a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures" section for additional information.

(1) GAAP leverage is computed as the sum of repurchase agreements, other secured financing, debt issued by securitization vehicles, and participations issued divided by total equity. Economic leverage is computed as the sum of recourse debt, cost basis of to-be-announced ("TBA") and CMBX derivatives outstanding, and net forward purchases (sales) of investments divided by total equity. Recourse debt consists of repurchase agreements and other secured financing. Debt issued by securitization vehicles and participations issued are non-recourse to us and are excluded from economic leverage.

(2) GAAP capital ratio is computed as total equity divided by total assets. Economic capital ratio is computed as total equity divided by total economic assets. Total economic assets include the implied market value of TBA derivatives and net of debt issued by securitization vehicles.

(3) Net interest margin represents our interest income less interest expense divided by the average interest earning assets. Net interest margin does not include net interest component of interest rate swaps. Net interest margin (excluding PAA) represents the sum of our interest income (excluding PAA) plus TBA dollar roll income and CMBX coupon income less interest expense and the net interest component of interest rate swaps divided by the sum of average interest earning assets plus average outstanding TBA contract and CMBX balances.

(4) Average yield on interest earning assets represents annualized interest income divided by average interest earning assets. Average interest earning assets reflects the average amortized cost of our investments during the period. Average yield on interest earning assets (excluding PAA) is calculated using annualized interest income (excluding PAA).

(5) Average GAAP cost of interest bearing liabilities represents annualized interest expense divided by average interest bearing liabilities. Average interest bearing liabilities reflects the average balances during the period. Average economic cost of interest bearing liabilities represents annualized economic interest expense divided by average interest bearing liabilities. Economic interest expense is comprised of GAAP interest expense and the net interest component of interest rate swaps.

(6) Excludes dividends on preferred stock.

GAAP

Net income (loss) was $161.2 million, which includes ($5.8) million attributable to noncontrolling interests, or $0.27 per average basic common share, for the three months ended June 30, 2023 compared to $863.3 million, which includes ($3.4) million attributable to noncontrolling interests, or $2.21 per average basic common share, for the same period in 2022. We attribute the majority of the change in net income (loss) to an unfavorable change in net gains (losses) on investments and other and net interest income, partially offset by a favorable change in net gains (losses) on derivatives and net servicing income. Net gains (losses) on investments and other was ($1.3) billion for the three months ended June 30, 2023 compared to ($615.2) million for the same period in 2022. Net interest income for the three months ended June 30, 2023 was ($32.0) million compared to $475.1 million for the same period in 2022. Net gains (losses) on derivatives was $1.5 billion for the three months ended June 30, 2023 compared to $1.0 billion for the same period in 2022. Net servicing income for the three months ended June 30, 2023 was $74.9 million compared to $49.7 million for the same period in 2022. Refer to the section titled "Other income (loss)" located within this Item 2 for additional information related to these changes.

Net income (loss) was ($678.1) million, which includes ($0.9) million attributable to noncontrolling interests, or ($1.51) per average basic common share, for the six months ended June 30, 2023 compared to $2.9 billion which includes ($1.7) million attributable to noncontrolling interests, or $7.60 per average basic common share, for the same period in 2022. We attribute the majority of the change in net income (loss) to an unfavorable change in net gains (losses) on derivatives, net interest income, and net gains (losses) on investments and other, partially offset by a favorable change in net servicing income and business divestiture-related losses. Net gains on derivatives for the six months ended June 30, 2023 was $574.6 million compared to $2.7 billion for the same period in 2022. Net interest income for the six months ended June 30, 2023 was ($12.5) million compared to $1.1 billion for the same period in 2022. Net gains (losses) on investments and other was ($1.3) billion for the six months ended June 30, 2023 compared to ($775.0) million for the same period in 2022. Net servicing income for the six months ended June 30, 2023 was $151.3 million compared to $80.7 million for the same period in 2022. Business divestiture-related (losses) was $0.0 million for the six months ended June 30, 2023 compared to ($24.3) million for the same period in 2022. Refer to the section titled "Other income (loss)" located within this Item 2 for additional information related to these changes.

Non-GAAP

Earnings available for distribution were $389.5 million, or $0.72 per average common share, for the three months ended June 30, 2023, compared to $490.8 million, or $1.22 per average common share, for the same period in 2022. The change in earnings available for distribution during the three months ended June 30, 2023 compared to the same period in 2022 was primarily due to higher interest expense from an increase in average borrowing rates and average interest bearing liabilities and a decline in TBA dollar roll income on reduced balances and specialness, partially offset by a favorable change in the net interest component of interest rate swaps, lower premium amortization expense, excluding PAA, resulting from purchasing assets with lower premium to par, and higher net servicing income.

Earnings available for distribution were $816.6 million, or $1.52 per average common share, for the six months ended June 30, 2023, compared to $921.4 million, or $2.33 per average common share, for the same period in 2022. The change in earnings available for distribution during the six months ended June 30, 2023 compared to the same period in 2022 was primarily due to to higher interest expense from an increase in average borrowing rates and average interest bearing liabilities and a decline in TBA dollar roll income on reduced balances and specialness, partially offset by a favorable change in the net interest component of interest rate swaps, higher coupon income from increased rates, lower premium amortization expense, excluding PAA, resulting from purchasing assets with lower premium to par, and higher net servicing income.

Non-GAAP Financial Measures

To supplement our consolidated financial statements, which are prepared and presented in accordance with GAAP, we provide the following non-GAAP financial measures:

- earnings available for distribution ("EAD");
- earnings available for distribution attributable to common stockholders;
- earnings available for distribution per average common share;
- annualized EAD return on average equity;
- economic leverage;
- economic capital ratio;
- interest income (excluding PAA);
- economic interest expense;
- economic net interest income (excluding PAA);
- average yield on interest earning assets (excluding PAA);
- average economic cost of interest bearing liabilities;
- net interest margin (excluding PAA); and
- net interest spread (excluding PAA).

These measures should not be considered a substitute for, or superior to, financial measures computed in accordance with GAAP. While intended to offer a fuller understanding of our results and operations, non-GAAP financial measures also have limitations. For example, we may calculate our non-GAAP metrics, such as earnings available for distribution, or the PAA, differently than our peers making comparative analysis difficult. Additionally, in the case of non-GAAP measures that exclude the PAA, the amount of amortization expense excluding the PAA is not necessarily representative of the amount of future periodic amortization nor is it indicative of the term over which we will amortize the remaining unamortized premium. Changes to actual and estimated prepayments will impact the timing and amount of premium amortization and, as such, both GAAP and non-GAAP results.

These non-GAAP measures provide additional detail to enhance investor understanding of our period-over-period operating performance and business trends, as well as for assessing our performance versus that of industry peers. Additional information pertaining to our use of these non-GAAP financial measures, including discussion of how each such measure may be useful to investors, and reconciliations to their most directly comparable GAAP results are provided below.

Earnings Available for Distribution, Earnings Available for Distribution Attributable to Common Stockholders, Earnings Available for Distribution Per Average Common Share and Annualized EAD Return on Average Equity

Our principal business objective is to generate net income for distribution to our stockholders and optimize our returns through prudent management of our diversified investment strategies. We generate net income by earning a net interest spread on our investment portfolio, which is a function of interest income from our investment portfolio less financing, hedging and operating costs. Earnings available for distribution, which is defined as the sum of (a) economic net interest income, (b) TBA dollar roll income and CMBX coupon income, (c) net servicing income less realized amortization of MSR, (d) other income (loss) (excluding amortization of intangibles, non-EAD income allocated to equity method investments and other non-EAD components of other income (loss)), (e) general and administrative expenses (excluding transaction expenses and non-recurring items), and (f) income taxes (excluding the income tax effect of non-EAD income (loss) items), and excludes (g) the PAA representing the cumulative impact on prior periods, but not the current period, of quarter-over-quarter changes in estimated long-term prepayment speeds related to our Agency mortgage-backed securities, is used by management and, we believe, used by analysts and investors to measure our progress in achieving our principal business objective.

We seek to fulfill our principal business objective through a variety of factors including portfolio construction, the degree of market risk exposure and related hedge profile, and the use and forms of leverage, all while operating within the parameters of our capital allocation policy and risk governance framework.

We believe these non-GAAP measures provide management and investors with additional details regarding our underlying operating results and investment portfolio trends by (i) making adjustments to account for the disparate reporting of changes in fair value where certain instruments are reflected in GAAP net income (loss) while others are reflected in other comprehensive income (loss), and (ii) by excluding certain unrealized, non-cash or episodic components of GAAP net income (loss) in order to provide additional transparency into the operating performance of our portfolio. In addition, EAD serves as a useful indicator for investors in evaluating our performance and ability to pay dividends. Annualized EAD return on average equity, which is calculated by dividing earnings available for distribution over average stockholders' equity, provides investors with additional detail on the earnings available for distribution generated by our invested equity capital.

The following table presents a reconciliation of GAAP financial results to non-GAAP earnings available for distribution for the periods presented:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2023	2022	2023	2022
	(dollars in thousands, except per share data)			
GAAP net income (loss)	**$ 161,187**	$ 863,317	**$ (678,141)**	$ 2,887,211
Adjustments to exclude reported realized and unrealized (gains) losses				
Net (gains) losses on investments and other (1)	**1,316,837**	615,216	**1,315,125**	775,020
Net (gains) losses on derivatives (2)	**(1,050,032)**	(1,014,651)	**236,426**	(2,719,220)
Loan loss provision (reversal) (3)	**—**	(29,380)	**(219)**	(28,568)
Business divestiture-related (gains) losses	**—**	23,955	**—**	24,309
Other adjustments				
Amortization of intangibles	**758**	1,302	**1,516**	2,432
Non-EAD (income) loss allocated to equity method investments (4)	**541**	(3,270)	**297**	(13,190)
Transaction expenses and non-recurring items (5)	**2,650**	1,751	**4,008**	5,101
Income tax effect of non-EAD income (loss) items	**12,364**	28,841	**20,642**	55,932
TBA dollar roll income and CMBX coupon income (6)	**1,734**	161,673	**19,917**	291,165
MSR amortization (7)	**(41,297)**	(33,810)	**(84,720)**	(53,462)
EAD attributable to noncontrolling interests	**(3,344)**	3,379	**(6,814)**	1,740
Premium amortization adjustment cost (benefit)	**(11,923)**	(127,521)	**(11,432)**	(307,037)
Earnings available for distribution *	**389,475**	490,802	**816,605**	921,433
Dividends on preferred stock	**35,766**	26,883	**67,641**	53,766
Earnings available for distribution attributable to common stockholders *	**$ 353,709**	$ 463,919	**$ 748,964**	$ 867,667
GAAP net income (loss) per average common share	**$ 0.27**	$ 2.21	**$ (1.51)**	$ 7.60
Earnings available for distribution per average common share *	**$ 0.72**	$ 1.22	**$ 1.52**	$ 2.33
Annualized GAAP return (loss) on average equity	**5.42 %**	30.60 %	**(11.57 %)**	48.44 %
Annualized EAD return on average equity *	**13.22 %**	17.49 %	**14.06 %**	15.52 %

* Represents a non-GAAP financial measure. Refer to the disclosure within this section above for additional information on non-GAAP financial measures.

(1) Includes a write-down which is reported in Other, net in the Company's Consolidated Statement of Comprehensive Income (Loss).

(2) The adjustment to add back Net (gains) losses on derivatives does not include the net interest component of interest rate swaps which is reflected in earnings available for distribution. The net interest component of interest rate swaps totaled $425.3 million and $1.0 million for the three months ended June 30, 2023 and 2022, respectively and $811.0 million and ($61.5) million for the six months ended June 30, 2023 and 2022, respectively.

(3) Includes $0.0 million and ($2.5) million for the three months ended June 30, 2023 and 2022, respectively, and $0.0 million and ($2.3) million for the six months ended June 30, 2023 and 2022, respectively, of loss provision (reversal) on unfunded loan commitments which is reported in Other, net in the Consolidated Statements of Comprehensive Income (Loss).

(4) Represents unrealized (gains) losses allocated to equity interests in a portfolio of MSR, which is a component of Other, net in the Consolidated Statements of Comprehensive Income (Loss).

(5) Represents costs incurred in connection with securitizations of residential whole loans.

(6) TBA dollar roll income and CMBX coupon income each represent a component of Net gains (losses) on derivatives in the Consolidated Statements of Comprehensive Income (Loss). CMBX coupon income totaled $0.5 million and $1.1 million for the three months ended June 30, 2023 and 2022, respectively and $1.5 million and $2.1 million for the six months ended June 30, 2023 and 2022, respectively.

(7) MSR amortization utilizes purchase date cash flow assumptions and actual unpaid principal balances and is calculated as the difference between projected MSR yield income and net servicing income for the period.

From time to time, we enter into TBA forward contracts as an alternate means of investing in and financing Agency MBS. A TBA contract is an agreement to purchase or sell, for future delivery, an Agency MBS with a specified issuer, term and coupon. A TBA dollar roll represents a transaction where TBA contracts with the same terms but different settlement dates are simultaneously bought and sold. The TBA contract settling in the later month typically prices at a discount to the earlier month contract with the difference in price commonly referred to as the "drop". The drop is a reflection of the expected net interest income from an investment in similar Agency MBS, net of an implied financing cost, that would be foregone as a result of settling the contract in the later month rather than in the earlier month. The drop between the current settlement month price and the forward settlement month price occurs because in the TBA dollar roll market, the party providing the financing is the party that would retain all principal and interest payments accrued during the financing period. Accordingly, TBA dollar roll income generally represents the economic equivalent of the net interest income earned on the underlying Agency MBS less an implied financing cost.

TBA dollar roll transactions are accounted for under GAAP as a series of derivatives transactions. The fair value of TBA derivatives is based on methods similar to those used to value Agency MBS. We record TBA derivatives at fair value on our Consolidated Statements of Financial Condition and recognize periodic changes in fair value in Net gains (losses) on derivatives in our Consolidated Statements of Comprehensive Income (Loss), which includes both unrealized and realized gains and losses on derivatives (excluding interest rate swaps).

TBA dollar roll income is calculated as the difference in price between two TBA contracts with the same terms but different settlement dates multiplied by the notional amount of the TBA contract. Although accounted for as derivatives, TBA dollar rolls capture the economic equivalent of net interest income, or carry, on the underlying Agency MBS (interest income less an implied cost of financing). TBA dollar roll income is reported as a component of Net gains (losses) on derivatives in the Consolidated Statements of Comprehensive Income (Loss).

The CMBX index is a synthetic tradable index referencing a basket of 25 commercial mortgage-backed securities of a particular rating and vintage. The CMBX index allows investors to take a long position (referred to as selling protection) or short position (referred to as purchasing protection) on the respective basket of commercial mortgage-backed securities and is structured as a "pay-as-you-go" contract whereby the protection seller receives and the protection buyer pays a standardized running coupon on the contracted notional amount. Additionally, the protection seller is obligated to pay to the protection buyer the amount of principal losses and/or coupon shortfalls on the underlying commercial mortgage-backed securities as they occur. We report income (expense) on CMBX positions in Net gains (losses) on derivatives in the Consolidated Statements of Comprehensive Income (Loss). The coupon payments received or paid on CMBX positions is equivalent to interest income (expense) and therefore included in earnings available for distribution.

Premium Amortization Expense

In accordance with GAAP, we amortize or accrete premiums or discounts into interest income for our Agency MBS, excluding interest-only securities, multifamily and reverse mortgages, taking into account estimates of future principal prepayments in the calculation of the effective yield. We recalculate the effective yield as differences between anticipated and actual prepayments occur. Using third party model and market information to project future cash flows and expected remaining lives of securities, the effective interest rate determined for each security is applied as if it had been in place from the date of the security's acquisition. The amortized cost of the security is then adjusted to the amount that would have existed had the new effective yield been applied since the acquisition date. The adjustment to amortized cost is offset with a charge or credit to interest income. Changes in interest rates and other market factors will impact prepayment speed projections and the amount of premium amortization recognized in any given period.

Our GAAP metrics include the unadjusted impact of amortization and accretion associated with this method. Certain of our non-GAAP metrics exclude the effect of the PAA, which quantifies the component of premium amortization representing the cumulative impact on prior periods, but not the current period, of quarter-over-quarter changes in estimated long-term Constant Prepayment Rate ("CPR").

The following table illustrates the impact of the PAA on premium amortization expense for our Residential Securities portfolio for the periods presented:

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2023	2022	2023	2022
	(dollars in thousands)			
Premium amortization expense	**$ 33,105**	$ (4,869)	**$ 89,639**	$ (30,222)
Less: PAA cost (benefit)	**(11,923)**	(127,521)	**(11,432)**	(307,037)
Premium amortization expense (excluding PAA)	**$ 45,028**	$ 122,652	**$ 101,071**	$ 276,815

Economic Leverage and Economic Capital Ratios

We use capital coupled with borrowed funds to invest primarily in real estate related investments, earning the spread between the yield on our assets and the cost of our borrowings and hedging activities. Our capital structure is designed to offer an efficient complement of funding sources to generate positive risk-adjusted returns for our stockholders while maintaining appropriate liquidity to support our business and meet our financial obligations under periods of market stress. To maintain our desired capital profile, we utilize a mix of debt and equity funding. Debt funding may include the use of repurchase agreements, loans, securitizations, participations issued, lines of credit, asset backed lending facilities, corporate bond issuance, convertible bonds or other liabilities. Equity capital primarily consists of common and preferred stock.

Our economic leverage ratio is computed as the sum of recourse debt, cost basis of TBA and CMBX derivatives outstanding, and net forward purchases (sales) of investments divided by total equity. Recourse debt consists of repurchase agreements and other secured financing. Debt issued by securitization vehicles and participations issued are non-recourse to us and are excluded from economic leverage.

The following table presents a reconciliation of GAAP debt to economic debt for purposes of calculating our economic leverage ratio for the periods presented:

	As of	
	June 30, 2023	June 30, 2022
Economic leverage ratio reconciliation	(dollars in thousands)	
Repurchase agreements	$ 61,637,600	$ 51,364,097
Other secured financing	500,000	—
Debt issued by securitization vehicles	9,789,282	7,502,483
Participations issued	492,307	696,944
Total GAAP debt	$ 72,419,189	$ 59,563,524
Less Non-Recourse Debt:		
Debt issued by securitization vehicles	$ (9,789,282)	$ (7,502,483)
Participations issued	(492,307)	(696,944)
Total recourse debt	$ 62,137,600	$ 51,364,097
Plus / (Less):		
Cost basis of TBA and CMBX derivatives	3,625,443	19,723,326
Payable for unsettled trades	4,331,315	1,995,960
Receivable for unsettled trades	(787,442)	(434,227)
Economic debt *	$ 69,306,916	$ 72,649,156
Total equity	$ 11,887,345	$ 11,089,900
Economic leverage ratio *	5.8:1	6.6:1

* Represents a non-GAAP financial measure. Refer to the disclosure within this section above for additional information on non-GAAP financial measures.

The following table presents a reconciliation of GAAP total assets to economic total assets for purposes of calculating our economic capital ratio for the periods presented:

	As of	
	June 30, 2023	June 30, 2022
Economic capital ratio reconciliation	(dollars in thousands)	
Total GAAP assets	$ 89,330,477	$ 73,637,249
Less:		
Gross unrealized gains on TBA derivatives (1)	(21,460)	(60,661)
Debt issued by securitization vehicles	(9,789,282)	(7,502,483)
Plus:		
Implied market value of TBA derivatives	3,627,716	19,282,979
Total economic assets *	$ 83,147,451	$ 85,357,084
Total equity	$ 11,887,345	$ 11,089,900
Economic capital ratio (2) *	14.3%	13.0%

* Represents a non-GAAP financial measure. Refer to the disclosure within this section above for additional information on non-GAAP financial measures.

(1) Included in Derivative assets in the Consolidated Statements of Financial Condition.

(2) Economic capital ratio is computed as total equity divided by total economic assets.

Interest Income (excluding PAA), Economic Interest Expense and Economic Net Interest Income (excluding PAA)

Interest income (excluding PAA) represents interest income excluding the effect of the premium amortization adjustment, and serves as the basis for deriving average yield on interest earning assets (excluding PAA), net interest spread (excluding PAA) and net interest margin (excluding PAA), which are discussed below. We believe this measure provides management and investors with additional detail to enhance their understanding of our operating results and trends by excluding the component of premium amortization expense representing the cumulative effect of quarter-over-quarter changes in estimated long-term prepayment speeds related to our Agency MBS (other than interest-only securities, multifamily and reverse mortgages), which can obscure underlying trends in the performance of the portfolio.

Economic interest expense is comprised of GAAP interest expense and the net interest component of interest rate swaps. We use interest rate swaps to manage our exposure to changing interest rates on repurchase agreements by economically hedging cash flows associated with these borrowings. Accordingly, adding the net interest component of interest rate swaps to interest expense, as computed in accordance with GAAP, reflects the total contractual interest expense and thus, provides investors with additional information about the cost of our financing strategy. We may use market agreed coupon ("MAC") interest rate swaps in which we may receive or make a payment at the time of entering into such interest rate swap to compensate for the off-market nature of such interest rate swap. In accordance with GAAP, upfront payments associated with MAC interest rate swaps are not reflected in the net interest component of interest rate swaps, which is presented in Net gains (losses) on derivatives in the Consolidated Statements of Comprehensive Income (Loss).

Similarly, economic net interest income (excluding PAA), as computed below, provides investors with additional information to enhance their understanding of the net economics of our primary business operations.

The following tables present a reconciliation of GAAP interest income and GAAP interest expense to non-GAAP interest income (excluding PAA), economic interest expense and economic net interest income (excluding PAA), respectively, for the periods presented:

Interest Income (excluding PAA)

	GAAP Interest Income	PAA Cost (Benefit)	Interest Income (excluding PAA) *
For the three months ended		(dollars in thousands)	
June 30, 2023	**$ 921,494**	**$ (11,923)**	**$ 909,571**
June 30, 2022	$ 645,615	$ (127,521)	$ 518,094
For the six months ended			
June 30, 2023	**$ 1,739,744**	**$ (11,432)**	**$ 1,728,312**
June 30, 2022	$ 1,301,465	$ (307,037)	$ 994,428

* Represents a non-GAAP financial measure. Refer to disclosures within this section above for additional information on non-GAAP financial measures.

Economic Interest Expense and Economic Net Interest Income (excluding PAA)

	GAAP Interest Expense	Add: Net Interest Component of Interest Rate Swaps	Economic Interest Expense *	GAAP Net Interest Income	Less: Net Interest Component of Interest Rate Swaps	Economic Net Interest Income *	Add: PAA Cost (Benefit)	Economic Net Interest Income (excluding PAA)
For the three months ended					(dollars in thousands)			
June 30, 2023	**$ 953,457**	**$ (425,293)**	**$ 528,164**	**$ (31,963)**	**$ (425,293)**	**$ 393,330**	**$ (11,923)**	**$ 381,407**
June 30, 2022	$ 170,475	$ (992)	$ 169,483	$ 475,140	$ (992)	$ 476,132	$ (127,521)	$ 348,611
For the six months ended								
June 30, 2023	**$ 1,752,244**	**$ (810,999)**	**$ 941,245**	**$ (12,500)**	**$ (810,999)**	**$ 798,499**	**$ (11,432)**	**$ 787,067**
June 30, 2022	$ 245,397	$ 61,549	$ 306,946	$ 1,056,068	$ 61,549	$ 994,519	$ (307,037)	$ 687,482

* Represents a non-GAAP financial measure. Refer to disclosures within this section above for additional information on non-GAAP financial measures.

Experienced and Projected Long-Term CPR

Prepayment speeds, as reflected by the CPR and interest rates vary according to the type of investment, conditions in financial markets, competition and other factors, none of which can be predicted with any certainty. In general, as prepayment speeds and expectations of prepayment speeds on our Agency MBS portfolio increase, related purchase premium amortization increases, thereby reducing the yield on such assets. The following table presents the weighted average experienced CPR and weighted average projected long-term CPR on our Agency MBS portfolio as of and for the periods presented.

	Experienced CPR (1)	Projected Long-term CPR (2)
For the three months ended		
June 30, 2023	**7.0 %**	**8.6 %**
June 30, 2022	14.9 %	7.7 %
For the six months ended		
June 30, 2023	**6.3 %**	**8.6 %**
June 30, 2022	15.8 %	7.7 %

(1) For the three and six months ended June 30, 2023 and 2022, respectively.
(2) At June 30, 2023 and 2022, respectively.

Average Yield on Interest Earning Assets (excluding PAA), Net Interest Spread (excluding PAA), Net Interest Margin (excluding PAA) and Average Economic Cost of Interest Bearing Liabilities

Net interest spread (excluding PAA), which is the difference between the average yield on interest earning assets (excluding PAA) and the average economic cost of interest bearing liabilities, which represents annualized economic interest expense divided by average interest bearing liabilities, and net interest margin (excluding PAA), which is calculated as the sum of interest income (excluding PAA) plus TBA dollar roll income and CMBX coupon income less interest expense and the net interest component of interest rate swaps divided by the sum of average interest earning assets plus average TBA contract and CMBX balances, provide management with additional measures of our profitability that management relies upon in monitoring the performance of the business.

Disclosure of these measures, which are presented below, provides investors with additional detail regarding how management evaluates our performance.

Net Interest Spread (excluding PAA)

	Average Interest Earning Assets (1)	Interest Income (excluding PAA) *	Average Yield on Interest Earning Assets (excluding PAA) *	Average Interest Bearing Liabilities (2)	Economic Interest Expense * (2)	Average Economic Cost of Interest Bearing Liabilities * (2)	Economic Net Interest Income (excluding PAA) *	Net Interest Spread (excluding PAA) *
For the three months ended				**(dollars in thousands)**				
June 30, 2023	**$ 86,254,955**	**$ 909,571**	**4.22 %**	**$ 75,424,564**	**$ 528,164**	**2.77 %**	**381,407**	**1.45 %**
June 30, 2022	$ 72,123,055	$ 518,094	2.87 %	$ 60,446,528	169,483	1.11 %	348,611	1.76 %
For the six months ended								
June 30, 2023	**$ 84,449,977**	**$ 1,728,312**	**4.09 %**	**$ 73,030,098**	**$ 941,245**	**2.56 %**	**787,067**	**1.53 %**
June 30, 2022	$ 72,356,966	$ 994,428	2.75 %	$ 61,155,910	$ 306,946	1.00 %	687,482	1.75 %

* Represents a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures" section for additional information.

(1) Based on amortized cost.

(2) Average interest bearing liabilities reflects the average balances during the period. Economic interest expense is comprised of GAAP interest expense and the net interest component of interest rate swaps. Average economic cost of interest bearing liabilities represents annualized economic interest expense divided by average interest bearing liabilities.

Net Interest Margin (excluding PAA)

	Interest Income (excluding PAA) *	TBA Dollar Roll and CMBX Coupon Income (1)	Economic Interest Expense *	Subtotal	Average Interest Earnings Assets	Average TBA Contract and CMBX Balances	Subtotal	Net Interest Margin (excluding PAA) *
For the three months ended					**(dollars in thousands)**			
June 30, 2023	**$ 909,571**	**1,734**	**(528,164)**	**$ 383,141**	**$ 86,254,955**	**6,303,202**	**$ 92,558,157**	**1.66 %**
June 30, 2022	$ 518,094	161,673	(169,483)	$ 510,284	$ 72,123,055	20,566,553	$ 92,689,608	2.20 %
For the six months ended								
June 30, 2023	**$ 1,728,312**	**19,917**	**(941,245)**	**$ 806,984**	**$ 84,449,977**	**10,126,544**	**$ 94,576,521**	**1.71 %**
June 30, 2022	$ 994,428	291,165	(306,946)	$ 978,647	$ 72,356,966	19,898,046	$ 92,255,012	2.12 %

* Represents a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures" section for additional information.

(1) TBA dollar roll income and CMBX coupon income each represent a component of Net gains (losses) on derivatives. CMBX coupon income totaled $0.5 million and $1.1 million for the three months ended June 30, 2023 and 2022, respectively and $1.5 million and $2.1 million for the nine months ended June 30, 2023 and 2022, respectively.

Economic Interest Expense and Average Economic Cost of Interest Bearing Liabilities

Typically, our largest expense is the cost of interest bearing liabilities and the net interest component of interest rate swaps. The table below shows our average interest bearing liabilities and average economic cost of interest bearing liabilities as compared to average one-month and average six-month SOFR for the periods presented.

Average Economic Cost of Interest Bearing Liabilities

	Average Interest Bearing Liabilities	Interest Bearing Liabilities at Period End	Economic Interest Expense * (1)	Average Economic Cost of Interest Bearing Liabilities *	Average One-Month Term SOFR	Average Six-Month Term SOFR	Average One-Month Term SOFR Relative to Average Six-Month Term SOFR	Average Economic Cost of Interest Bearing Liabilities Relative to Average One-Month Term SOFR	Average Economic Cost of Interest Bearing Liabilities Relative to Average Six-Month Term SOFR
For the three months ended									
June 30, 2023	**$ 75,424,564**	**$ 71,919,189**	**$ 528,164**	**2.77 %**	**5.04 %**	**5.13 %**	**(0.09 %)**	**(2.27 %)**	**(2.36 %)**
June 30, 2022	$ 60,446,528	$ 59,563,524	$ 169,483	1.11 %	0.92 %	1.75 %	(0.83 %)	0.19 %	(0.64 %)
For the six months ended									
June 30, 2023	**$ 73,030,098**	**$ 71,919,189**	**$ 941,245**	**2.56 %**	**4.83 %**	**5.03 %**	**(0.20 %)**	**(2.27 %)**	**(2.47 %)**
June 30, 2022	$ 61,155,910	$ 59,563,524	$ 306,946	1.00 %	0.54 %	1.17 %	(0.63 %)	0.46 %	(0.17 %)

* Represents a non-GAAP financial measure. Refer to the "Non-GAAP Financial Measures" section for additional information.
(1) Economic interest expense is comprised of GAAP interest expense and the net interest component of interest rate swaps.

Economic interest expense increased by $358.7 million for the three months ended June 30, 2023 compared to the same period in 2022, primarily due to higher interest expense on repurchase agreements reflecting higher borrowing rates and higher average interest bearing liabilities, partially offset by the change in the net interest component of interest rate swaps, which was $425.3 million for the three months ended June 30, 2023 compared to $1.0 million for the same period in 2022.

Economic interest expense increased by $634.3 million for the six months ended June 30, 2023 compared to the same period in 2022, primarily due to higher interest expense on repurchase agreements reflecting higher borrowing rates and higher average interest bearing liabilities, partially offset by the change in the net interest component of interest rate swaps, which was $811.0 million for the six months ended June 30, 2023 compared to ($61.5) million for the same period in 2022.

We do not manage our portfolio to have a pre-designated amount of borrowings at quarter or year end. Our borrowings at period end are a snapshot of our borrowings as of a date, and this number may differ from average borrowings over the period for a number of reasons. The mortgage-backed securities we own pay principal and interest towards the end of each month and the mortgage-backed securities we purchase are typically settled during the beginning of the month. As a result, depending on the amount of mortgage-backed securities we have committed to purchase, we may retain the principal and interest we receive in the prior month, or we may use it to pay down our borrowings. Moreover, we generally use interest rate swaps, swaptions and other derivative instruments to hedge our portfolio, and as we pledge or receive collateral under these agreements, our borrowings on any given day may be increased or decreased. Our average borrowings during a quarter may differ from period end borrowings as we implement our portfolio management strategies and risk management strategies over changing market conditions by increasing or decreasing leverage. Additionally, these numbers may differ during periods when we conduct equity capital raises, as in certain instances we may purchase additional assets and increase leverage in anticipation of an equity capital raise. Since our average borrowings and period end borrowings can be expected to differ, we believe our average borrowings during a period provide a more accurate representation of our exposure to the risks associated with leverage than our period end borrowings.

At June 30, 2023 and December 31, 2022, the majority of our debt represented repurchase agreements and other secured financing arrangements collateralized by a pledge of our Residential Securities, residential mortgage loans, and MSR. All of our Residential Securities are currently accepted as collateral for these borrowings. However, we limit our borrowings, and thus our potential asset growth, in order to maintain unused borrowing capacity and maintain the liquidity and strength of our balance sheet.

Other Income (Loss)

For the Three Months Ended June 30, 2023 and 2022

Net Gains (Losses) on Investments and Other

Net gains (losses) on disposal of investments was ($610.4) million for the three months ended June 30, 2023 compared to ($646.2) million for the same period in 2022. For the three months ended June 30, 2023, we disposed of Residential Securities with a carrying value of $8.4 billion for an aggregate net gain (loss) of ($599.2) million. For the same period in 2022, we disposed of Residential Securities, with a carrying value of $6.6 billion for an aggregate net gain (loss) of ($657.3) million.

Net unrealized gains (losses) on instruments measured at fair value through earnings was ($698.6) million for the three months ended June 30, 2023 compared to $31.0 million for the same period in 2022, primarily due to an unfavorable changes in unrealized gains (losses) on Agency MBS of ($738.9) million, securitized debt of consolidated VIEs of ($281.7) million, partially offset by favorable changes on securitized residential whole loans of consolidated VIEs of $148.7 million and residential credit securities of $124.2 million and commercial securities of $17.9 million.

Net Gains (Losses) on Derivatives

Net gains (losses) on interest rate swaps for the three months ended June 30, 2023 was $1.3 billion compared to $898.5 million for the same period in 2022, primarily attributable to the change in the net interest component of interest rate swaps and realized gains (losses) on termination of interest rate swaps, partially offset by the change in unrealized gains (losses) on interest rate swaps. Net interest component on interest rate swaps was $425.3 million for the three months ended June 30, 2023 compared to $1.0 million for the same period in 2022. Realized gains (losses) on termination of interest rate swaps was $48.1 million for the three months ended June 30, 2023 compared to $0.0 million for 2022, which reflected our termination of fixed-rate payer interest rate swaps with a notional amount of $820.8 million, compared to $3.1 billion for the same period in 2022. Unrealized gains (losses) on interest rate swaps was $841.7 million for the three months ended June 30, 2023 compared to $897.5 million for the same period in 2022, which reflected a less steep rise in forward interest rates compared to the prior period.

Net gains (losses) on other derivatives was $160.2 million for the three months ended June 30, 2023 compared to $117.1 million for the same period in 2022. The change in net gains (losses) on other derivatives was primarily due to favorable changes in net gains (losses) on TBA derivatives, which was ($61.5) million for the three months ended June 30, 2023 compared to ($783.3) million for the same period in 2022, partially offset by an unfavorable change in net gains (losses) on futures, which was $171.2 million for the three months ended June 30, 2023 compared to $787.1 million for the same period in 2022, and net gains (losses) on interest rate swaptions, which was $53.4 million for the three months ended June 30, 2023 compared to $119.4 million for the same period in 2022.

Other, Net

Other, net includes brokerage and commission fees, due diligence costs, securitization expenses, and interest on custodial balances. We also report in Other, net items whose amounts, either individually or in the aggregate, would not, in the opinion of management, be meaningful to readers of the financial statements. Given the nature of certain components of this line item, balances may fluctuate from period to period. Other, net for the three months ended June 30, 2023 was $9.1 million compared to ($5.5) million for the same period in 2022, primarily attributable to an increase in interest on custodial balances, partially offset by an increase in MSR financing expenses, a write-down and a decrease in earnings from joint ventures.

For the Six Months Ended June 30, 2023 and 2022

Net Gains (Losses) on Investments and Other

Net gains (losses) on disposal of investments and other was ($1.1) billion for the six months ended June 30, 2023 compared to ($790.4) million for the same period in 2022. For the six months ended June 30, 2023, we disposed of Residential Securities with a carrying value of $13.6 billion for an aggregate net gain (loss) of ($1.1) billion. For the same period in 2022, we disposed of Residential Securities with a carrying value of $9.4 billion for an aggregate net gain (loss) of ($801.8) million.

Net unrealized gains (losses) on instruments measured at fair value through earnings was ($175.2) million for the six months ended June 30, 2023 compared to $15.4 million for the same period in 2022, primarily due to unfavorable changes in unrealized gains (losses) on securitized debt of consolidated VIEs of ($827.8) million, Agency MBS of ($271.9) million, MSR and

Interests in MSR of ($150.0) million, and participations issued of ($60.4) million, partially offset by favorable changes on securitized residential whole loans of consolidated VIEs of $709.7 million, residential credit securities of $264.2 million, and residential whole loans of $122.7 million.

Net Gains (Losses) on Derivatives

Net gains (losses) on interest rate swaps for the six months ended June 30, 2023 was $598.8 million compared to $2.2 billion for the same period in 2022, attributable to unfavorable changes in unrealized gains (losses) on interest rate swaps and realized gains (losses) on termination of interest rate swaps, partially offset by the change in the net interest component of interest rate swaps. Unrealized gains (losses) on interest rate swaps was ($114.6) million for the six months ended June 30, 2023 compared to $2.2 billion for the same period in 2022, reflecting a sharper rise in forward interest rates during the prior period. Realized gains (losses) on termination of interest rate swaps was ($97.7) million for the six months ended June 30, 2023 compared to $0.0 million for the same period in 2022, which reflected our termination of fixed-rate payer and receiver interest rate swaps with notional amounts of $3.1 billion and $6.3 billion, respectively, compared to $3.1 billion notional amount of fixed-rate payer interest rate swaps for the same period in 2022. Net interest component on interest rate swaps was $811.0 million for the six months ended June 30, 2023 compared to ($61.5) million for the same period in 2022.

Net gains (losses) on other derivatives was ($24.2) million for the six months ended June 30, 2023 compared to $498.3 million for the same period in 2022. The change in net gains (losses) on other derivatives was primarily due to unfavorable changes in net gains (losses) on futures derivatives, which was ($25.3) million for the six months ended June 30, 2023 compared to $2.2 billion for the same period in 2022, and net gains (losses) on interest rate swaptions, which was $9.7 million for the six months ended June 30, 2023 compared to $227.6 million for the same period in 2022, partially offset by a favorable change in TBA derivatives, which was $0.0 million for the six months ended June 30, 2023 compared to ($1.9) billion for the same period in 2022.

Loan Loss (Provision) Reversal

For the six months ended June 30, 2023 and 2022, net loan loss reversals of $0.2 million and $26.3 million on corporate loans, respectively. Refer to the "Loans" Note located within Item 1 for additional information related to these loan loss provisions.

Business Divestiture-Related Gains (Losses)

For the six months ended June 30, 2023, the majority of business divestiture-related gains (losses) were associated with the sale of our corporate loan interests. Refer to the "Sale of Middle Market Lending Portfolio" Note for additional information on the transaction. For the six months ended June 30, 2022, business divestiture-related gains (losses) were associated with the sale of our commercial real estate business.

General and Administrative Expenses

General and administrative ("G&A") expenses consist of compensation and other expenses. The following table shows our total G&A expenses as compared to average total assets and average equity for the periods presented.

G&A Expenses and Operating Expense Ratios

	Total G&A Expenses	Total G&A Expenses/Average Assets	Total G&A Expenses/Average Equity
For the three months ended		(dollars in thousands)	
June 30, 2023	**$ 42,915**	**0.19 %**	**1.44 %**
June 30, 2022	$ 36,038	0.19 %	1.28 %
For the six months ended			
June 30, 2023	**$ 83,743**	**0.19 %**	**1.43 %**
June 30, 2022	$ 81,802	0.22 %	1.37 %

G&A expenses were $42.9 million for the three months ended June 30, 2023, an increase of $6.9 million compared to the same period in 2022.

G&A expenses were $83.7 million for the six months ended June 30, 2023, an increase of $1.9 million compared to the same period in 2022.

The change in each period was primarily due to an increase in compensation, partially offset by lower expenses resulting from the divestiture of our MML assets, which was announced in the second quarter of 2022. Refer to the "Sale of Middle Market Lending Portfolio" Note for additional information on the transaction.

Return on Average Equity

The following table shows the components of our annualized return on average equity for the periods presented.

Components of Annualized Return on Average Equity

	Economic Net Interest Income/ Average Equity [1]	Net Servicing Income/Average Equity	Other Income (Loss)/Average Equity [2]	G&A Expenses/ Average Equity	Income Taxes/ Average Equity	Return on Average Equity
For the three months ended						
June 30, 2023	**13.22 %**	**2.52 %**	**(8.40 %)**	**(1.44 %)**	**(0.48 %)**	**5.42 %**
June 30, 2022	16.88 %	1.76 %	14.07 %	(1.28 %)	(0.83 %)	30.60 %
For the six months ended						
June 30, 2023	**13.62 %**	**2.58 %**	**(25.91) %**	**(1.43 %)**	**(0.43 %)**	**(11.57 %)**
June 30, 2022	16.68 %	1.35 %	32.62 %	(1.37 %)	(0.84 %)	48.44 %

[1] Economic net interest income includes the net interest component of interest rate swaps.
[2] Other income (loss) excludes the net interest component of interest rate swaps.

Unrealized Gains and Losses - Available-for-Sale Investments

The unrealized fluctuations in market values of our available-for-sale Agency MBS, for which the fair value option is not elected, do not impact our GAAP net income (loss) but rather are reflected on our balance sheet by changing the carrying value of the asset and stockholders' equity under accumulated other comprehensive income (loss). As a result of this fair value accounting treatment, our book value and book value per share are likely to fluctuate far more than if we used amortized cost accounting. As a result, comparisons with companies that use amortized cost accounting for some or all of their balance sheet may not be meaningful.

The table below shows cumulative unrealized gains and losses on our available-for-sale investments reflected in the Consolidated Statements of Financial Condition.

	June 30, 2023	December 31, 2022
	(dollars in thousands)	
Unrealized gain	**$ 4,911**	$ 5,910
Unrealized loss	**(2,387,442)**	(3,714,806)
Accumulated other comprehensive income (loss)	**$ (2,382,531)**	$ (3,708,896)

Unrealized changes in the estimated fair value of available-for-sale investments may have a direct effect on our potential earnings and dividends: positive changes will increase our equity base and allow us to increase our borrowing capacity while negative changes tend to reduce borrowing capacity. A very large negative change in the net fair value of our available-for-sale Residential Securities might impair our liquidity position, requiring us to sell assets with the potential result of realized losses upon sale.

The fair value of these securities being less than amortized cost at June 30, 2023 is solely due to market conditions and not the quality of the assets. Substantially all of the Agency MBS have an actual or implied credit rating that is the same as that of the U.S. government. The investments do not require an allowance for credit losses because we currently have the ability and intent to hold the investments to maturity or for a period of time sufficient for a forecasted market price recovery up to or beyond the cost of the investments, and it is not more likely than not that we will be required to sell the investments before recovery of the amortized cost bases, which may be maturity. Also, we are guaranteed payment of the principal and interest amounts of the securities by the respective issuing Agency.

Financial Condition

Total assets were $89.3 billion and $81.9 billion at June 30, 2023 and December 31, 2022, respectively. The change was primarily due to increases in Agency MBS of $5.5 billion, securitized residential whole loans of consolidated VIEs of $2.2 billion, principal and interest receivable of $307.2 million, receivable for unsettled trades of $212.4 million and derivative assets of $115.1 million. Our portfolio composition, net equity allocation and debt-to-net equity ratio by asset class were as follows at June 30, 2023:

	Agency MBS	MSR	Residential Credit (1)	Commercial	Total
Assets			(dollars in thousands)		
Fair value	$ 67,764,264	$ 2,018,896	$ 15,545,246	$ 365,690	$ 85,694,096
Implied market value of derivatives (2)	3,627,716	—	—	—	3,627,716
Debt					
Repurchase agreements	57,918,976	—	3,394,312	324,312	61,637,600
Implied cost basis of derivatives (2)	3,625,443	—	—	—	3,625,443
Other secured financing	—	500,000	—	—	500,000
Debt issued by securitization vehicles	—	—	9,789,282	—	9,789,282
Participations issued	—	—	492,307	—	492,307
Net forward purchases	3,513,508	35,345	(4,847)	(133)	3,543,873
Other					
Net other assets / liabilities	1,724,672	297,200	77,141	55,025	2,154,038
Net equity allocated	$ 8,058,725	$ 1,780,751	$ 1,951,333	$ 96,536	$ 11,887,345
Net equity allocated (%)	68 %	15 %	16 %	1 %	100 %
Debt/net equity ratio (3)	7.2:1	0.3:1	7.0:1	3.4:1	6.1:1

(1) Fair value includes residential loans held for sale, and assets and liabilities associated with non-controlling interests.
(2) Derivatives include TBA contracts under Agency MBS.
(3) Represents the debt/net equity ratio as determined using amounts on the Consolidated Statements of Financial Condition.

Residential Securities

Substantially all of our Agency MBS at June 30, 2023 and December 31, 2022 were backed by single-family residential mortgage loans and were secured with a first lien position on the underlying single-family properties. Our mortgage-backed securities were largely Fannie Mae, Freddie Mac, or Ginnie Mae pass through certificates or CMOs, which have an actual or implied credit rating that is the same as that of the U.S. government. We carry all of our Agency MBS at fair value on the Consolidated Statements of Financial Condition.

We accrete discount balances as an increase to interest income over the expected life of the related interest earning assets and we amortize premium balances as a decrease to interest income over the expected life of the related interest earning assets. At June 30, 2023 and December 31, 2022, we had on our Consolidated Statements of Financial Condition a total of $1.3 billion and $1.1 billion, respectively, of unamortized discount (which is the difference between the remaining principal value and current amortized cost of our Residential Securities acquired at a price below principal value) and a total of $2.8 billion and $2.9 billion, respectively, of unamortized premium (which is the difference between the remaining principal value and the current amortized cost of our Residential Securities acquired at a price above principal value).

The weighted average experienced prepayment speed on our Agency MBS portfolio for the three months ended June 30, 2023 and 2022 was 7.0% and 14.9%, respectively. The weighted average projected long-term prepayment speed on our Agency MBS portfolio as of June 30, 2023 and 2022 was 8.6% and 7.7%, respectively.

Given our current portfolio composition, if mortgage principal prepayment rates were to increase over the life of our mortgage-backed securities, all other factors being equal, our net interest income would decrease during the life of these mortgage-backed securities as we would be required to amortize our net premium balance into income over a shorter time period. Similarly, if mortgage principal prepayment rates were to decrease over the life of our mortgage-backed securities, all other factors being equal, our net interest income would increase during the life of these mortgage-backed securities as we would amortize our net premium balance over a longer time period.

The following table presents our Residential Securities that were carried at fair value at June 30, 2023 and December 31, 2022.

	June 30, 2023	December 31, 2022
	Estimated Fair Value	
Agency		
Fixed-rate pass-through	$ 65,348,798	$ 60,029,758
Adjustable-rate pass-through	211,550	234,387
CMO	85,502	89,610
Interest-only	293,519	218,077
Multifamily	1,797,123	1,674,165
Reverse mortgages	27,772	28,898
Total agency securities	$ 67,764,264	$ 62,274,895
Residential credit		
Credit risk transfer	$ 1,064,401	$ 997,557
Alt-A	119,215	91,216
Prime	196,613	197,870
Subprime	180,886	156,313
NPL/RPL	1,193,350	1,317,154
Prime jumbo (>= 2010 vintage)	318,042	228,593
Total residential credit securities	$ 3,072,507	$ 2,988,703
Total Residential Securities	$ 70,836,771	$ 65,263,598

The following table summarizes certain characteristics of our Residential Securities (excluding interest-only mortgage-backed securities) and interest-only mortgage-backed securities at June 30, 2023 and December 31, 2022.

	June 30, 2023	December 31, 2022
Residential Securities (1)	(dollars in thousands)	
Principal amount	$ 73,146,443	$ 68,290,976
Net premium	575,769	1,049,253
Amortized cost	73,722,212	69,340,229
Amortized cost / principal amount	100.79 %	101.54 %
Carrying value	70,174,405	64,736,220
Carrying value / principal amount	95.94 %	94.79 %
Weighted average coupon rate	4.37 %	4.03 %
Weighted average yield	4.21 %	3.76 %
Adjustable-rate Residential Securities (1)		
Principal amount	$ 1,356,739	$ 1,407,295
Weighted average coupon rate	8.33 %	7.16 %
Weighted average yield	7.87 %	7.01 %
Weighted average term to next adjustment (2)	7 Months	9 Months
Weighted average lifetime cap (3)	9.32 %	9.30 %
Principal amount at period end as % of total residential securities	1.85 %	2.06 %
Fixed-rate Residential Securities (1)		
Principal amount	$ 71,789,703	$ 66,883,681
Weighted average coupon rate	4.29 %	3.96 %
Weighted average yield	4.14 %	3.70 %
Principal amount at period end as % of total residential securities	98.15 %	97.94 %
Interest-only Residential Securities		
Notional amount	$ 20,929,905	$ 17,346,307
Net premium	890,067	785,532
Amortized cost	890,067	785,532
Amortized cost / notional amount	4.25 %	4.53 %
Carrying value	662,366	527,378
Carrying value / notional amount	3.16 %	3.04 %
Weighted average coupon rate	0.59 %	0.56 %
Weighted average yield	NM	NM

(1) Excludes interest-only MBS.
(2) Excludes non-Agency MBS and CRT securities.
(3) Excludes non-Agency MBS and CRT securities as this attribute is not applicable to these asset classes.
NM Not meaningful.

The following tables summarize certain characteristics of our Residential Credit portfolio at June 30, 2023.

		Payment Structure		Investment Characteristics (1)			
Product	**Estimated Fair Value**	**Senior**	**Subordinate**	**Coupon**	**Credit Enhancement**	**60+ Delinquencies**	**3M VPR (2)**
	(dollars in thousands)						
Credit risk transfer	$ 1,064,401	$ —	$ 1,064,401	9.32 %	1.92 %	0.80 %	5.24 %
Alt-A	119,215	59,219	59,996	4.91 %	14.63 %	1.98 %	7.94 %
Prime	196,613	42,858	153,755	3.43 %	8.02 %	0.35 %	4.91 %
Subprime	180,886	68,503	112,383	6.33 %	23.18 %	9.07 %	7.65 %
Re-performing loan securitizations	759,938	396,586	363,352	4.41 %	27.61 %	23.10 %	5.51 %
Non-performing loan securitizations	433,412	406,441	26,971	3.57 %	40.40 %	60.40 %	10.10 %
Prime jumbo (>=2010 vintage)	318,042	83,926	234,116	4.08 %	3.13 %	0.35 %	4.62 %
Total/weighted average	$ 3,072,507	$ 1,057,533	$ 2,014,974	5.90 %	16.34 %	15.28 %	6.20 %

(1) Investment characteristics exclude the impact of interest-only securities.
(2) Represents the 3 month voluntary prepayment rate ("VPR").

	Bond Coupon				
Product	**ARM**	**Fixed**	**Floater**	**Interest-Only**	**Estimated Fair Value**
	(dollars in thousands)				
Credit risk transfer	$ —	$ —	$ 1,064,401	$ —	$ 1,064,401
Alt-A	3,278	115,856	81	—	119,215
Prime	—	192,356	—	4,257	196,613
Subprime	—	157,436	23,339	111	180,886
Re-performing loan securitizations	—	759,938	—	—	759,938
Non-performing loan securitizations	—	433,412	—	—	433,412
Prime jumbo (>=2010 vintage)	—	227,004	31,230	59,808	318,042
Total	$ 3,278	$ 1,886,002	$ 1,119,051	$ 64,176	$ 3,072,507

Contractual Obligations

The following table summarizes the effect on our liquidity and cash flows from contractual obligations at June 30, 2023. The table does not include the effect of net interest rate payments on our interest rate swap agreements. The net swap payments will fluctuate based on monthly changes in the receive rate. At June 30, 2023, the interest rate swaps had a net fair value of ($66.6) million.

	Within One Year	**One to Three Years**	**Three to Five Years**	**More than Five Years**	**Total**
			(dollars in thousands)		
Repurchase agreements	$ 61,637,600	$ —	$ —	$ —	$ 61,637,600
Interest expense on repurchase agreements (1)	406,701	—	—	—	406,701
Other secured financing	250,000	250,000	—	—	500,000
Interest expense on other secured financing (1)	40,136	11,831	—	—	51,967
Debt issued by securitization vehicles (principal)	—	—	—	11,041,032	11,041,032
Interest expense on debt issued by securitization vehicles	437,784	875,568	875,568	12,836,518	15,025,438
Participations issued (principal)	—	—	—	511,379	511,379
Interest expense on participations issued	33,939	67,877	67,877	843,364	1,013,057
Long-term operating lease obligations	4,104	5,332	422	—	9,858
Total	$ 62,810,264	$ 1,210,608	$ 943,867	$ 25,232,293	$ 90,197,032

(1) Interest expense on repurchase agreements and other secured financing calculated based on rates at June 30, 2023.

In the coming periods, we expect to continue to finance our Residential Securities in a manner that is largely consistent with our current operations via repurchase agreements. We may use securitization structures, credit facilities, or other term financing structures to finance certain of our assets. During the six months ended June 30, 2023, we received $3.0 billion from principal repayments and $12.5 billion in cash from disposal of Securities. During the six months ended June 30, 2022, we received $5.7 billion from principal repayments and $8.4 billion in cash from disposal of Securities.

Commitments and Contractual Obligations with Unconsolidated Entities

We do not have any commitments or contractual obligations arising from arrangements with unconsolidated entities that have or are reasonably likely to have a material effect on our financial condition, revenues or expenses, results of operations, liquidity, cash requirements or capital resources.

Capital Management

Maintaining a strong balance sheet that can support the business even in times of economic stress and market volatility is of critical importance to our business strategy. A strong and robust capital position is essential to executing our investment strategy. Our capital strategy is predicated on a strong capital position, which enables us to execute our investment strategy regardless of the market environment. Our capital policy defines the parameters and principles supporting a comprehensive capital management practice.

The major risks impacting capital are capital, liquidity and funding risk, investment/market risk, credit risk, counterparty risk, operational risk and compliance, regulatory and legal risk. For further discussion of the risks we are subject to, please see Part I, Item 1A. "Risk Factors" in our most recent Annual Report on Form 10-K and in Part II, Item 1A. "Risk Factors" in this Quarterly Report on Form 10-Q.

Capital requirements are based on maintaining levels above approved thresholds, ensuring the quality of our capital appropriately reflects our asset mix, market and funding structure. In the event we fall short of our internal thresholds, we will consider appropriate actions which may include asset sales, changes in asset mix, reductions in asset purchases or originations, issuance of capital or other capital enhancing or risk reduction strategies.

Stockholders' Equity

The following table provides a summary of total stockholders' equity at June 30, 2023 and December 31, 2022:

	June 30, 2023	December 31, 2022
Stockholders' equity	(dollars in thousands)	
6.95% Series F fixed-to-floating rate cumulative redeemable preferred stock	**696,910**	696,910
6.50% Series G fixed-to-floating rate cumulative redeemable preferred stock	**411,335**	411,335
6.75% Series I fixed-to-floating rate cumulative redeemable preferred stock	**428,324**	428,324
Common stock	**4,939**	4,683
Additional paid-in capital	**23,550,346**	22,981,320
Accumulated other comprehensive income (loss)	**(2,382,531)**	(3,708,896)
Accumulated deficit	**(10,933,044)**	(9,543,233)
Total stockholders' equity	**$ 11,776,279**	$ 11,270,443

Capital Stock

Common Stock

In December 2020, we announced that our Board authorized the repurchase of up to $1.5 billion of our outstanding common shares, which expired on December 31, 2021 (the "Prior Share Repurchase Program"). In January 2022, we announced that our Board authorized the repurchase of up to $1.5 billion of our outstanding shares of common stock through December 31, 2024 (the "Current Share Repurchase Program"). The Current Share Repurchase Program replaced the Prior Share Repurchase Program. During the three and six months ended June 30, 2023 and 2022, no shares were purchased under the Current Share Repurchase Program or Prior Share Repurchase Program.

During the three months ended June 30, 2022, we closed the public offering of an original issuance of 25 million shares of common stock for proceeds of $645.0 million before deducting offering expenses. In connection with the offering, we granted the underwriters a thirty-day option to purchase up to an additional 3.75 million shares of common stock, which the underwriters exercised in full resulting in an additional $96.8 million in proceeds before deducting offering expenses. The 2022 share amounts have been retroactively adjusted to reflect the effects of the Reverse Stock Split.

On August 6, 2020, we entered into separate Amended and Restated Distribution Agency Agreements (as amended by Amendment No. 1 to the Amended and Restated Distribution Agency Agreements on August 6, 2021, and Amendment No. 2 to the Amended and Restated Distribution Agency Agreements on November 3, 2022, collectively, the "Sales Agreements") with each of Barclays Capital Inc., BofA Securities, Inc., Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC, Goldman Sachs & Co. LLC, Keefe, Bruyette & Woods, Inc., J.P. Morgan Securities LLC, RBC Capital Markets, LLC, UBS Securities LLC and Wells Fargo Securities, LLC (collectively, the "Sales Agents"). Pursuant to the Sales Agreements, we may offer and sell shares of common stock, having an aggregate offering price of up to $1.5 billion, from time to time through any of the Sales Agents (the "at-the-market sales program").

During the six months ended June 30, 2023, under the at-the-market sales program, we issued 25.3 million shares for proceeds of $562.7 million, net of commissions and fees. During the three and six months ended June 30, 2022, under the at-the-market sales program, we issued 8.3 million shares and 8.4 million shares, as retroactively adjusted to reflect the effects of the Reverse Stock Split, for proceeds of $214.9 million and $221.1 million, respectively, each, net of commissions and fees. Refer to the "Capital Stock" Note located within Item 1 for additional information related to the at-the-market sales program.

Preferred Stock

On November 3, 2022, our Board approved a repurchase plan for all of our existing outstanding Preferred Stock (as defined below, the "Preferred Stock Repurchase Program"). Under the terms of the plan, we are authorized to repurchase up to an aggregate of 63,500,000 shares of Preferred Stock, comprised of up to (i) 28,800,000 shares of our 6.95% Series F Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value $0.01 per share (the "Series F Preferred Stock"), (ii) 17,000,000 shares of our 6.50% Series G Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value $0.01 per share (the "Series G Preferred Stock"), and (iii) 17,700,000 shares of our 6.75% Series I Fixed-to-Floating Rate Cumulative Redeemable Preferred Stock, par value $0.01 per share (the "Series I Preferred Stock", and together with Series F Preferred Stock and Series G Preferred Stock, the "Preferred Stock"). The aggregate liquidation value of the Preferred Stock that may be repurchased by us pursuant to the Preferred Stock Repurchase Program, as of November 3, 2022, was approximately $1.6 billion. The Preferred Stock Repurchase Program became effective on November 3, 2022, and shall expire on December 31, 2024. No shares were repurchased with respect to the Preferred Stock Repurchase Program during the three and six months ended June 30, 2023.

Purchases made pursuant to the Preferred Stock Repurchase Program will be made in either the open market or in privately negotiated transactions from time to time as permitted by securities laws and other legal requirements. The timing, manner, price and amount of any repurchases will be determined by us in our discretion and will be subject to economic and market conditions, stock price, applicable legal requirements and other factors. The authorization does not obligate us to acquire any particular amount of Preferred Stock and the program may be suspended or discontinued at our discretion without prior notice.

Leverage and Capital

We believe that it is prudent to maintain conservative GAAP leverage ratios and economic leverage ratios as there may be continued volatility in the mortgage and credit markets. Our capital policy governs our capital and leverage position including setting limits. Based on the guidelines, we generally expect to maintain an economic leverage ratio of less than 10:1. Our actual economic leverage ratio varies from time to time based upon various factors, including our management's opinion of the level of risk of our assets and liabilities, our liquidity position, our level of unused borrowing capacity, the availability of credit, over-collateralization levels required by lenders when we pledge assets to secure borrowings and our assessment of domestic and international market conditions.

Our GAAP leverage ratio at June 30, 2023 and December 31, 2022 was 6.1:1 and 6.0:1, respectively. Our economic leverage ratio, which is computed as the sum of Recourse Debt, cost basis of TBA and CMBX derivatives outstanding, and net forward purchases (sales) of investments divided by total equity was 5.8:1 and 6.3:1, at June 30, 2023 and December 31, 2022, respectively. Our GAAP capital ratio at June 30, 2023 and December 31, 2022 was 13.3% and 13.9%, respectively. Our economic capital ratio, which represents our ratio of stockholders' equity to total economic assets (inclusive of the implied market value of TBA derivatives and net of debt issued by securitization vehicles), was 14.3% and 13.4% at June 30, 2023 and December 31, 2022, respectively. Economic leverage ratio and economic capital ratio are non-GAAP financial measures. Refer to the "Non-GAAP Financial Measures" section for additional information, including reconciliations to their most directly comparable GAAP results.

Risk Management

We are subject to a variety of risks in the ordinary conduct of our business. The effective management of these risks is of critical importance to the overall success of Annaly. The objective of our risk management framework is to identify, measure and monitor these risks.

Our risk management framework is intended to facilitate a holistic, enterprise wide view of risk. We believe we have built a strong and collaborative risk management culture throughout Annaly focused on awareness which supports appropriate understanding and management of our key risks. Each employee is accountable for identifying, monitoring and managing risk within their area of responsibility.

Risk Appetite

We maintain a firm-wide risk appetite statement which defines the types and levels of risk we are willing to take in order to achieve our business objectives, and reflects our risk management philosophy. We engage in risk activities based on our core expertise that aim to enhance value for our stockholders. Our activities focus on income generation and capital preservation through proactive portfolio management, supported by a conservative liquidity and leverage posture.

The risk appetite statement asserts the following key risk parameters to guide our investment management activities:

Risk Parameter	Description
Portfolio Composition	We will maintain a portfolio comprised of target assets approved by our Board and in accordance with our capital allocation policy.
Leverage	We generally expect to maintain an economic leverage ratio no greater than 10:1 considerate of our overall capital allocation framework.
Liquidity Risk	We will seek to maintain an unencumbered asset portfolio sufficient to meet our liquidity needs under adverse market conditions.
Interest Rate Risk	We will seek to manage interest rate risk to protect the portfolio from adverse rate movements utilizing derivative instruments targeting both income and capital preservation.
Credit Risk	We will seek to manage credit risk by making investments which conform within our specific investment policy parameters and optimize risk-adjusted returns.
Capital Preservation	We will seek to protect our capital base through disciplined risk management practices.
Operational Risk	We will seek to limit impacts to our business through disciplined operational risk management practices addressing areas including but not limited to, management of key third party relationships (i.e. originators, sub-servicers), human capital management, cybersecurity and technology related matters, business continuity and financial reporting risk.
Compliance, Regulatory and Legal	We will seek to comply with regulatory requirements needed to maintain our REIT status and our exemption from registration under the Investment Company Act and the licenses and approvals of our regulated and licensed subsidiaries.

Governance

Risk management begins with our Board, through the review and oversight of the risk management framework, and executive management, through the ongoing formulation of risk management practices and related execution in managing risk. The Board exercises its oversight of risk management primarily through the Risk Committee and Audit Committee with support from the other Board Committees. The Risk Committee is responsible for oversight of our risk governance structure, risk management (operational and market risk) and risk assessment guidelines and policies and our risk appetite. The Audit Committee is responsible for oversight of the quality and integrity of our accounting, internal controls and financial reporting practices, including independent auditor selection, evaluation and review, and oversight of the internal audit function. The Risk Committee and the Audit Committee jointly oversee practices and policies related to cybersecurity and receive regular reports from management throughout the year on cybersecurity and related risks. The Management Development and Compensation Committee is responsible for oversight of risk related to our compensation policies and practices and other human capital matters such as succession and culture. The Nominating/Corporate Governance Committee assists the Board in its oversight of our corporate governance framework and the annual self-evaluation of the Board, and the Corporate Responsibility Committee assists the Board in its oversight of any matters that may present reputational or ESG risk to us. The Corporate Responsibility Committee shares oversight of specific ESG-related matters with other Board Committees and meets jointly with the Management Development and Compensation Committee on the Company's human capital management and culture and with the Risk Committee on ESG-related regulatory and policy risks.

Risk assessment and risk management are the responsibility of our management. A series of management committees has oversight or decision-making responsibilities for risk management activities. Membership of these committees is reviewed regularly to ensure the appropriate personnel are engaged in the risk management process. Three primary management committees have been established to provide a comprehensive framework for risk management. The management committees responsible for our risk management include the Enterprise Risk Committee ("ERC"), Asset / Liability Committee ("ALCO") and the Financial Reporting and Disclosure Committee ("FRDC"). Each of these committees reports to our management Operating Committee which is responsible for oversight and management of our operations, including oversight and approval authority over all aspects of our enterprise risk management.

Audit Services is an independent function with reporting lines to the Audit Committee. Audit Services is responsible for performing our internal audit activities, which includes independently assessing and validating key controls within the risk management framework.

Our compliance group is responsible for oversight of our regulatory compliance. Our Chief Compliance Officer has reporting lines to the Audit Committee.

Description of Risks

We are subject to a variety of risks due to the business we operate. Risk categories are an important component of a robust enterprise wide risk management framework.

We have identified the following primary categories that we utilize to identify, assess, measure and monitor risk.

Risk	Description
Capital, Liquidity and Funding Risk	Risk to earnings, capital or business resulting from our inability to meet our obligations when they come due without incurring unacceptable losses because of inability to liquidate assets or obtain adequate funding.
Investment/Market Risk	Risk to earnings, capital or business resulting in the decline in value of our assets or an increase in the costs of financing caused by changes in market variables, such as interest rates, which affect the values of investment securities and other investment instruments.
Credit Risk	Risk to earnings, capital or business resulting from an obligor's failure to meet the terms of any contract or otherwise failure to perform as agreed. This risk is present in lending and investing activities.
Counterparty Risk	Risk to earnings, capital or business resulting from a counterparty's failure to meet the terms of any contract or otherwise failure to perform as agreed. This risk is present in funding, hedging and investing activities.
Operational Risk	Risk to earnings, capital, reputation or business arising from inadequate or failed internal processes or systems (including business continuity planning), human factors or external events. This risk also applies to our use of proprietary and third party models, software vendors and data providers, and oversight of third-party service providers such as sub-servicers, due diligence firms etc.
Compliance, Regulatory and Legal Risk	Risk to earnings, capital, reputation or conduct of business arising from violations of, or nonconformance with internal and external applicable rules and regulations, losses resulting from lawsuits or adverse judgments, or from changes in the regulatory environment that may impact our business model.

Capital, Liquidity and Funding Risk Management

Our capital, liquidity and funding risk management strategy is designed to ensure the availability of sufficient resources to support our business and meet our financial obligations under both normal and adverse market and business environments. Our capital, liquidity and funding risk management practices consist of the following primary elements:

Element	Description
Funding	Availability of diverse and stable sources of funds.
Excess Liquidity	Excess liquidity primarily in the form of unencumbered assets and cash.
Maturity Profile	Diversity and tenor of liabilities and modest use of leverage.
Stress Testing	Scenario modeling to measure the resiliency of our liquidity position.
Liquidity Management Policies	Comprehensive policies including monitoring, risk limits and an escalation protocol.

Funding

Our primary financing sources are repurchase agreements provided through counterparty arrangements and through our wholly-owned subsidiary, Arcola Securities, Inc. ("Arcola"), other secured financing, debt issued by securitization vehicles, mortgages, credit facilities, note sales and various forms of equity. We maintain excess liquidity by holding unencumbered liquid assets that could be either used to collateralize additional borrowings or sold.

We seek to conservatively manage our repurchase agreement funding position through a variety of methods including diversity, breadth and depth of counterparties and maintaining a staggered maturity profile.

Arcola provides direct access to third party funding as a FINRA member broker-dealer. Arcola borrows funds through the General Collateral Finance Repo service offered by the FICC, with FICC acting as the central counterparty. In addition, Arcola may borrow funds through direct repurchase agreements.

To reduce our liquidity risk we maintain a laddered approach to our repurchase agreements. At June 30, 2023 and December 31, 2022, the weighted average days to maturity was 44 days and 27 days, respectively.

Our repurchase agreements generally provide that in the event of a margin call we must provide additional securities or cash on the same business day that a margin call is made. Should prepayment speeds on the mortgages underlying our Agency and Residential mortgage-backed securities and/or market interest rates or other factors move suddenly and cause declines in the market value of assets posted as collateral, resulting margin calls may cause an adverse change in our liquidity position.

At June 30, 2023, we had total financial assets and cash pledged against existing liabilities of $64.7 billion. The weighted average haircut was approximately 3% on repurchase agreements. The quality and character of the Residential Securities that we pledge as collateral under the repurchase agreements and interest rate swaps did not materially change at June 30, 2023 compared to the same period in 2022, and our counterparties did not materially alter any requirements, including required haircuts, related to the collateral we pledge under repurchase agreements and interest rate swaps during the three months ended June 30, 2023.

The following table presents our quarterly average and quarter-end repurchase agreement and reverse repurchase agreement balances outstanding for the periods presented:

	Repurchase Agreements		Reverse Repurchase Agreements	
	Average Daily Amount Outstanding	Ending Amount Outstanding	Average Daily Amount Outstanding	Ending Amount Outstanding
For the three months ended	(dollars in thousands)			
June 30, 2023	**$ 64,591,463**	**$ 61,637,600**	**$ 600,968**	**$ —**
March 31, 2023	60,477,833	60,993,018	371,429	—
December 31, 2022	59,946,810	59,512,597	102,025	—
September 30, 2022	56,354,310	54,160,731	139,991	—
June 30, 2022	51,606,720	51,364,097	117,903	—
March 31, 2022	53,961,689	52,626,503	39,535	—
December 31, 2021	56,977,019	54,769,643	39,247	—
September 30, 2021	57,504,986	55,475,420	44,964	—
June 30, 2021	62,440,803	60,221,067	42,581	—

The following table provides information on our repurchase agreements and other secured financing by maturity date at June 30, 2023. The weighted average remaining maturity on our repurchase agreements and other secured financing was 48 days at June 30, 2023:

	June 30, 2023		
	Principal Balance	Weighted Average Rate	% of Total
	(dollars in thousands)		
1 day	**$ —**	**— %**	**— %**
2 to 29 days	**40,322,735**	**5.24 %**	**64.9 %**
30 to 59 days	**13,179,036**	**5.35 %**	**21.2 %**
60 to 89 days	**1,264,196**	**5.78 %**	**2.0 %**
90 to 119 days	**991,084**	**5.51 %**	**1.6 %**
Over 120 days [1]	**6,380,549**	**5.56 %**	**10.3 %**
Total	**$ 62,137,600**	**5.31 %**	**100.0 %**

[1] Less than 1% of the total repurchase agreements and other secured financing had a remaining maturity over 1 year.

We also finance our investments in residential mortgage loans through the issuance of securitization transactions sponsored by our wholly-owned subsidiary Onslow Bay Financial LLC ("Onslow Bay") under the Onslow Bay private-label securitization program.

The table below presents our outstanding debt balances and associated weighted average rates and days to maturity at June 30, 2023:

	Principal Balance	Weighted Average Rate		Weighted Average Days to Maturity [1]
		As of Period End	For the Quarter	
	(dollars in thousands)			
Repurchase agreements	$ 61,637,600	5.29 %	5.15 %	44
Other secured financing	500,000	7.92 %	7.81 %	473
Debt issued by securitization vehicles [2]	11,041,032	3.97 %	3.96 %	12,356
Participations issued [2]	511,379	6.64 %	6.26 %	10,895
Total indebtedness	$ 73,690,011			

[1] Determined based on estimated weighted-average lives of the underlying debt instruments.
[2] Non-recourse to Annaly.

Excess Liquidity

Our primary source of liquidity is the availability of unencumbered assets which may be provided as collateral to support additional funding needs. We target minimum thresholds of available, unencumbered assets to maintain excess liquidity. The following table illustrates our asset portfolio available to support potential collateral obligations and funding needs.

Assets are considered encumbered if pledged as collateral against an existing liability, and therefore are no longer available to support additional funding. An asset is considered unencumbered if it has not been pledged or securitized. The following table also provides the carrying amount of our encumbered and unencumbered financial assets at June 30, 2023:

	Encumbered Assets	Unencumbered Assets	Total
Financial assets		(dollars in thousands)	
Cash and cash equivalents	$ 1,060,005	$ 176,867	$ 1,236,872
Investments, at carrying value [1]			
Agency mortgage-backed securities	60,114,396	4,180,070	64,294,466
Credit risk transfer securities	810,490	253,911	1,064,401
Non-agency mortgage-backed securities	1,730,531	282,431	2,012,962
Commercial mortgage-backed securities	365,690	—	365,690
Residential mortgage loans [2]	12,292,655	180,084	12,472,739
MSR	1,128,460	890,436	2,018,896
Other assets [3]	—	75,680	75,680
Total financial assets	$ 77,502,227	$ 6,039,479	$ 83,541,706

[1] The amounts reflected in the table above are on a settlement date basis and may differ from the total positions reported on the Consolidated Statements of Financial Condition.
[2] Includes assets transferred or pledged to securitization vehicles.
[3] Includes commercial real estate investments and interests in certain joint ventures.

We maintain liquid assets in order to satisfy our current and future obligations in normal and stressed operating environments. These are held as the primary means of liquidity risk mitigation. The composition of our liquid assets is also considered and is subject to certain parameters. The composition is monitored for concentration risk, including in respect of our deposits of our cash and cash equivalents, and asset type. We believe the assets we consider liquid can be readily converted into cash, through liquidation or by being used as collateral in financing arrangements (including as additional collateral to support existing financial arrangements). Our balance sheet also generates liquidity on an on-going basis through mortgage principal and interest repayments and net earnings held prior to payment of dividends. The following table presents our liquid assets as a percentage of total assets at June 30, 2023:

Liquid assets		Carrying Value [1] (dollars in thousands)
Cash and cash equivalents	$	1,236,872
Residential Securities [2]		67,371,718
Commercial mortgage-backed securities		365,690
Residential mortgage loans [3]		1,154,320
Total liquid assets	$	**70,128,600**
Percentage of liquid assets to carrying amount of encumbered and unencumbered financial assets [4]		**97.13 %**

(1) Carrying value approximates the market value of assets. The assets listed in this table include $64.7 billion of assets that have been pledged as collateral against existing liabilities at June 30, 2023. Please refer to the Encumbered and Unencumbered Assets table for related information.

(2) The amounts reflected in the table above are on a settlement date basis and may differ from the total positions reported on the Consolidated Statements of Financial Condition.

(3) Excludes securitized residential mortgage loans transferred or pledged to consolidated VIEs carried at fair value of $11.3 billion.

(4) Denominator is computed based on the carrying amount of encumbered and unencumbered financial assets, excluding assets transferred or pledged to securitization vehicles, of $11.3 billion.

Maturity Profile

We consider the profile of our assets, liabilities and derivatives when managing both liquidity risk as well as investment/market risk employing a measurement of both the maturity gap and interest rate sensitivity gap. We determine the amount of liquid assets that are required to be held by monitoring several liquidity metrics. We utilize several modeling techniques to analyze our current and potential obligations including the expected cash flows from our assets, liabilities and derivatives. The following table illustrates the expected final maturities and cash flows of our assets, liabilities and derivatives. The table is based on a static portfolio and assumes no reinvestment of asset cash flows and no future liabilities are entered into. In assessing the maturity of our assets, liabilities and off balance sheet obligations, we use the stated maturities, or our prepayment expectations for assets and liabilities that exhibit prepayment characteristics. Cash and cash equivalents are included in the 'Less than 3 Months' maturity bucket, as they are typically held for a short period of time.

With respect to each maturity bucket, our maturity gap is considered negative when the amount of maturing liabilities exceeds the amount of maturing assets. A negative gap increases our liquidity risk as we must enter into future liabilities.

Our interest rate sensitivity gap is the difference between interest earning assets and interest bearing liabilities maturing or re-pricing within a given time period. Unlike the calculation of maturity gap, interest rate sensitivity gap includes the effect of our interest rate swaps. A gap is considered positive when the amount of interest-rate sensitive assets exceeds the amount of interest-rate sensitive liabilities. A gap is considered negative when the amount of interest-rate sensitive liabilities exceeds interest-rate sensitive assets. During a period of rising interest rates, a negative gap would tend to adversely affect net interest income, while a positive gap would tend to result in an increase in net interest income. During a period of falling interest rates, a negative gap would tend to result in an increase in net interest income, while a positive gap would tend to affect net interest income adversely. Because different types of assets and liabilities with the same or similar maturities may react differently to changes in overall market rates or conditions, changes in interest rates may affect net interest income positively or negatively even if assets and liabilities were perfectly matched in each maturity category. The amount of assets and liabilities utilized to compute our interest rate sensitivity gap was determined in accordance with the contractual terms of the assets and liabilities, except that adjustable-rate loans and securities are included in the period in which their interest rates are first scheduled to adjust and not in the period in which they mature. The effects of interest rate swaps, whereby we generally pay a fixed rate and receive a floating rate and effectively lock in our financing costs for a longer term, are also reflected in our interest rate sensitivity gap.

The interest rate sensitivity of our assets and liabilities in the following table at June 30, 2023 could vary substantially based on actual prepayment experience.

	Less than 3 Months	3-12 Months	More than 1 Year to 3 Years	3 Years and Over	Total
Financial assets			(dollars in thousands)		
Cash and cash equivalents	$ 1,236,872	$ —	$ —	$ —	$ 1,236,872
Agency mortgage-backed securities (principal)	65	1,488	426,696	69,459,947	69,888,196
Residential credit risk transfer securities (principal)	1,243	—	44,356	992,086	1,037,685
Non-agency mortgage-backed securities (principal)	176,886	35,523	952,612	1,055,541	2,220,562
Commercial mortgage-backed securities (principal)	—	85,122	290,242	—	375,364
Total securities	178,194	122,133	1,713,906	71,507,574	73,521,807
Residential mortgage loans (principal)	—	—	—	1,189,804	1,189,804
Total loans	—	—	—	1,189,804	1,189,804
Assets transferred or pledged to securitization vehicles (principal)	—	—	—	12,553,809	12,553,809
Total financial assets - maturity	1,415,066	122,133	1,713,906	85,251,187	88,502,292
Effect of utilizing reset dates [1]	13,957,987	269,252	(111,177)	(14,116,062)	—
Total financial assets - interest rate sensitive	$ 15,373,053	$ 391,385	$ 1,602,729	$ 71,135,125	$ 88,502,292
Financial liabilities					
Repurchase agreements	$ 54,765,967	$ 6,871,633	$ —	$ —	$ 61,637,600
Other secured financing	—	250,000	250,000	—	500,000
Debt issued by securitization vehicles (principal)	—	—	—	11,041,032	11,041,032
Participations issued (principal)	—	—	—	511,379	511,379
Total financial liabilities - maturity	54,765,967	7,121,633	250,000	11,552,411	73,690,011
Effect of utilizing reset dates [1][2]	(49,960,459)	6,303,922	7,107,358	36,549,179	—
Total financial liabilities - interest rate sensitive	$ 4,805,508	$ 13,425,555	$ 7,357,358	$ 48,101,590	$ 73,690,011
Maturity gap	$ (53,350,901)	$ (6,999,500)	$ 1,463,906	$ 73,698,776	$ 14,812,281
Cumulative maturity gap	$ (53,350,901)	$ (60,350,401)	$ (58,886,495)	$ 14,812,281	
Interest rate sensitivity gap	$ 10,567,545	$ (13,034,170)	$ (5,754,629)	$ 23,033,535	$ 14,812,281
Cumulative rate sensitivity gap	$ 10,567,545	$ (2,466,625)	$ (8,221,254)	$ 14,812,281	

[1] Maturity gap utilizes stated maturities, or prepayment expectations for assets that exhibit prepayment characteristics, while interest rate sensitivity gap utilizes reset dates, if applicable.
[2] Includes effect of interest rate swaps.

The methodologies we employ for evaluating interest rate risk include an analysis of our interest rate "gap," measurement of the duration and convexity of our portfolio and sensitivities to interest rates and spreads.

Stress Testing

We utilize liquidity stress testing to ensure we have sufficient liquidity under a variety of scenarios and stresses. These stress tests assist with the management of our pool of liquid assets and influence our current and future funding plans. The stresses applied include market-wide and firm-specific stresses.

Liquidity Management Policies

We utilize a comprehensive liquidity policy structure to inform our liquidity risk management practices including monitoring and measurement, along with well-defined key risk indicators. Both quantitative and qualitative targets are utilized to measure the ongoing stability and condition of the liquidity position, and include the level and composition of unencumbered assets, as well as the sustainability of the funding composition under stress conditions.

We also monitor early warning metrics designed to measure the quality and depth of liquidity sources based upon both company-specific and market conditions. The metrics assist in assessing our liquidity conditions and are integrated into our escalation protocol.

Investment/Market Risk Management

One of the primary risks we are subject to is investment/market risk. Changes in the level of interest rates can affect our net interest income, which is the difference between the income we earn on our interest earning assets and the interest expense incurred from interest bearing liabilities and derivatives. Changes in the level of interest rates and spreads can also affect the value of our assets and potential realization of gains or losses from the sale of these assets. We may utilize a variety of financial instruments, including interest rate swaps, swaptions, options, futures and other hedges, in order to limit the adverse effects of interest rates on our results. In the case of interest rate swaps, we utilize contracts linked to LIBOR but may also enter into interest rate swaps where the floating leg is linked to SOFR, the overnight index swap rate or another index. In addition, we may use MAC interest rate swaps in which we may receive or make a payment at the time of entering such interest rate swap to compensate for the off-market nature of such interest rate swap. MAC interest rate swaps offer price transparency, flexibility and more efficient portfolio administration through compression which is the process of reducing the number of unique interest rate swap contracts and replacing them with fewer contracts containing market defined terms. Our portfolio and the value of our portfolio, including derivatives, may be adversely affected as a result of changing interest rates and spreads.

We simulate a wide variety of interest rate scenarios in evaluating our risk. Scenarios are run to capture our sensitivity to changes in interest rates, spreads and the shape of the yield curve. We also consider the assumptions affecting our analysis such as those related to prepayments. In addition to predefined interest rate scenarios, we utilize Value-at-Risk measures to estimate potential losses in the portfolio over various time horizons utilizing various confidence levels. The following tables estimate the potential changes in economic net interest income over a twelve month period and the immediate effect on our portfolio market value (inclusive of derivative instruments), should interest rates instantaneously increase or decrease by 25, 50 or 75 basis points, and the effect of portfolio market value if mortgage option-adjusted spreads instantaneously increase or decrease by 5, 15 or 25 basis points (assuming shocks are parallel and instantaneous). All changes to income and portfolio market value are measured as percentage changes from the projected net interest income and portfolio value at the base interest rate scenario. The net interest income simulations incorporate the interest expense effect of rate resets on liabilities and derivatives as well as the amortization expense and reinvestment of principal based on the prepayments on our securities, which varies based on the level of rates. The results assume no management actions in response to the rate or spread changes. The following table presents estimates at June 30, 2023. Actual results could differ materially from these estimates.

Change in Interest Rate [1]	Estimated Percentage Change in Portfolio Value [2]	Estimated Change as a % on NAV [2][3]	Projected Percentage Change in Economic Net Interest Income [4]
-75 Basis points	**0.1%**	**0.6%**	**3.9%**
-50 Basis points	**0.1%**	**1.0%**	**2.6%**
-25 Basis points	**0.1%**	**0.7%**	**1.3%**
+25 Basis points	**(0.2%)**	**(1.2%)**	**(1.5%)**
+50 Basis points	**(0.4%)**	**(2.9%)**	**(3.1%)**
+75 Basis points	**(0.6%)**	**(5.0%)**	**(4.7%)**

MBS Spread Shock [1]	Estimated Change in Portfolio Market Value [2]	Estimated Change as a % on NAV [2][3]
-25 Basis points	**1.4%**	**10.6%**
-15 Basis points	**0.8%**	**6.3%**
-5 Basis points	**0.3%**	**2.1%**
+5 Basis points	**(0.3%)**	**(2.1%)**
+15 Basis points	**(0.8%)**	**(6.2%)**
+25 Basis points	**(1.3%)**	**(10.4%)**

[1] Interest rate and MBS spread sensitivity are based on results from third party models in conjunction with inputs from our internal investment professionals. Actual results could differ materially from these estimates.
[2] Scenarios include securities, residential mortgage loans, MSR and derivative instruments.
[3] NAV represents book value of equity.
[4] Scenarios include securities, residential mortgage loans, repurchase agreements, other secured financing and interest rate swaps. Economic net interest income includes the net interest component of interest rate swaps.

Credit Risk Management

Key risk parameters have been established to specify our credit risk appetite. We seek to manage credit risk by making investments which conform to the firm's specific investment policy parameters and optimize risk-return attributes.

While we do not expect to encounter credit risk in our Agency mortgage-backed securities, we face credit risk on the non-Agency mortgage-backed securities and CRT securities in our portfolio. In addition, we are also exposed to credit risk on residential mortgage loans and commercial real estate investments. MSR values may also be impacted through reduced servicing fees and higher costs to service the underlying mortgage loans due to borrower performance. Generally, we are subject to risk of loss if an issuer or borrower fails to perform its contractual obligations. We have established policies and procedures for mitigating credit risk, including establishing and reviewing limits for credit exposure. In the case of residential mortgage loans and MSR, we may engage a third party to perform due diligence on a sample of loans that we believe sufficiently represents the entire pool. Once an investment is made, our ongoing surveillance process includes regular reviews, analysis and oversight of investments by our investment personnel and appropriate committee. We review credit and other risks of loss associated with each investment. Our management monitors the overall portfolio risk and determines estimates of provision for loss. Additionally, ALCO has oversight of our credit risk exposure.

Our portfolio composition, based on balance sheet values, at June 30, 2023 and December 31, 2022 was as follows:

	June 30, 2023	December 31, 2022
Category		
Agency mortgage-backed securities	**79.1 %**	79.4 %
Credit risk transfer securities	**1.2 %**	1.3 %
Non-agency mortgage-backed securities	**2.3 %**	2.5 %
Residential mortgage loans [1]	**14.6 %**	13.9 %
Mortgage servicing rights	**2.4 %**	2.2 %
Commercial real estate	**0.4 %**	0.7 %

[1] Includes assets transferred or pledged to securitization vehicles.

Counterparty Risk Management

Our use of repurchase and derivative agreements and trading activities create exposure to counterparty risk relating to potential losses that could be recognized if the counterparties to these agreements fail to perform their obligations under the contracts. In the event of default by a counterparty, we could have difficulty obtaining our assets pledged as collateral. A significant portion of our investments are financed with repurchase agreements by pledging our Residential Securities as collateral to the applicable lender. The collateral we pledge generally exceeds the amount of the borrowings under each agreement. If the counterparty to the repurchase agreement defaults on its obligations and we are not able to recover our pledged asset, we are at risk of losing the over-collateralization or haircut. The amount of this exposure is the difference between the amount loaned to us plus interest due to the counterparty and the fair value of the collateral pledged by us to the lender including accrued interest receivable on such collateral.

We also use interest rate swaps and other derivatives to manage interest rate risk. Under these agreements, we pledge securities and cash as collateral or settle variation margin payments as part of a margin arrangement.

If a counterparty were to default on its obligations, we would be exposed to a loss to a derivative counterparty to the extent that the amount of our securities or cash pledged exceeded the unrealized loss on the associated derivative and we were not able to recover the excess collateral. Additionally, we would be exposed to a loss to a derivative counterparty to the extent that our unrealized gains on derivative instruments exceeded the amount of the counterparty's securities or cash pledged to us.

We monitor our exposure to counterparties across several dimensions including by type of arrangement, collateral type, counterparty type, ratings and geography. Additionally, ALCO has oversight of our counterparty exposure. The following table summarizes our exposure to counterparties by geography at June 30, 2023:

	Number of Counterparties	Secured Financing [1]	Interest Rate Swaps at Fair Value	Exposure [2]
Geography		(dollars in thousands)		
North America	**23**	**$ 45,967,772**	**$ (23,797)**	**$ 3,276,353**
Europe	**10**	**11,145,302**	**(42,795)**	**847,458**
Asia (non-Japan)	**1**	**741,302**	**—**	**26,969**
Japan	**4**	**4,283,224**	**—**	**265,101**
Total	**38**	**$ 62,137,600**	**$ (66,592)**	**$ 4,415,881**

[1] Includes repurchase agreements and other secured financing.

[2] Represents the amount of cash and/or securities pledged as collateral to each counterparty less the aggregate of repurchase agreement and other secured financing and derivatives for each counterparty.

Operational Risk Management

We are subject to operational risk in each of our business and support functions. Operational risk may arise from internal or external sources including human error, fraud, systems issues, process change, vendors, business interruptions and other external events. We manage operational risk through a variety of tools including policies and procedures that cover topics such as business continuity, personal conduct, cybersecurity and vendor management. Other tools include Risk and Control Self Assessment (“RCSA”) testing, including disaster recovery/testing; systems controls, including access controls; training, including phishing exercises and cybersecurity awareness training; and monitoring, which includes the use of key risk indicators. Our Operational Risk Management team conducts a disaster recovery exercise on an annual basis. Cyber security-related threats are addressed in tabletop exercises managed by the Cybersecurity Committee and business disruption events are addressed in tabletop exercises managed by the Operational Risk Management team. The results of these tabletop exercises are reported to management. Employee-level lines of defense against operational risk include proper segregation of incompatible duties, activity-level internal controls over financial reporting, the empowerment of business units to identify and mitigate operational risk sources, testing by our internal audit staff, and our overall governance framework.

Operational Risk Management responsibilities are overseen by the ERC. The ERC is responsible for supporting the Operating Committee in the implementation, ongoing monitoring, and evaluation of the effectiveness of the enterprise-wide risk management framework. This oversight authority includes review of the strategies, policies, and practices established by management to identify, assess, measure, and manage enterprise-wide risk.

Members of the Operational Risk Management team participate in the Cybersecurity Committee established to help mitigate cybersecurity risks. The role of the committee is to oversee cyber risk assessments, monitor applicable key risk indicators, review cybersecurity training procedures, oversee our Cybersecurity Incident Response Plan and engage third parties to conduct periodic penetration testing. The Head of Information Technology Infrastructure is responsible for continuously reporting to the Cybersecurity Committee throughout the year regarding cybersecurity and related risks. Our Chief Technology Officer and Head of Information Technology Infrastructure are members of multiple industry associations that discuss industry threats, challenges and solutions to cybersecurity issues. Our cybersecurity risk assessment includes an evaluation of cyber risk related to sensitive data held by third parties on their systems. The Cybersecurity Committee periodically reports to the ERC and the relevant Board committees. Our internal audit department determines whether our cybersecurity program and information security practices align with relevant portions of the National Institute of Standards and Technology (“NIST”) framework. There is no assurance that our efforts will effectively mitigate cybersecurity risk and mitigation efforts are not an assurance that no cybersecurity incidents will occur. We currently maintain cybersecurity insurance, however, there is no assurance that our current policy will cover all cybersecurity breaches or our related losses, or that we will be able to continue to maintain cybersecurity insurance in the future.

We depend on third party service providers to perform various business processes related to our operations, including mortgage loan servicers and sub-servicers. Our vendor management policy establishes procedures for engaging, onboarding and monitoring the performance of third party vendors. For mortgage loan servicers and sub-servicers, these procedures include assessing a vendor’s financial health as well as oversight of its compliance with applicable laws and regulations, cybersecurity and business continuity programs and security of personally identifiable information.

Compliance, Regulatory and Legal Risk Management

Our business is organized as a REIT, and we seek to continue to meet the requirements for taxation as a REIT. The determination that we are a REIT requires an analysis of various factual matters and circumstances. Accordingly, we closely monitor our REIT status within our risk management program. We also regularly assess our risk management in respect of our regulated and licensed subsidiaries, which include our registered broker-dealer subsidiary Arcola, our subsidiary that is registered with the SEC as an investment adviser under the Investment Advisers Act and our subsidiary that operates as a licensed mortgage aggregator and master servicer.

The financial services industry is highly regulated and receives significant attention from regulators, which may impact both our company and our business strategy. Our investments in residential whole loans and MSR require us to comply with applicable state and federal laws and regulations and maintain appropriate governmental licenses, approvals and exemptions. We proactively monitor the potential impact regulation may have both directly and indirectly on us. We maintain a process to actively monitor both actual and potential legal action that may affect us. Our risk management framework is designed to identify, measure and monitor these risks under the oversight of the ERC.

We currently rely on the exemption from registration provided by Section 3(c)(5)(C) of the Investment Company Act, and we seek to continue to meet the requirements for this exemption from registration. The determination that we qualify for this exemption from registration depends on various factual matters and circumstances. Accordingly, in conjunction with our legal department, we closely monitor our compliance with Section 3(c)(5)(C) within our risk management program. Compliance with Section 3(c)(5)(C) is monitored by the FRDC under oversight of the ERC.

As a result of the Dodd-Frank Act, the U.S. Commodity Futures Trading Commission ("CFTC") gained jurisdiction over the regulation of interest rate swaps. The CFTC has asserted that this causes the operators of mortgage real estate investment trusts that use swaps as part of their business model to fall within the statutory definition of Commodity Pool Operator ("CPO"), and, absent relief from the Division of Swap Dealer and Intermediary Oversight or the CFTC, to register as CPOs. On December 7, 2012, as a result of numerous requests for no-action relief from the CPO registration requirement for operators of mortgage real estate investment trusts, the Division of Swap Dealer and Intermediary Oversight of the CFTC issued no-action relief entitled "No-Action Relief from the Commodity Pool Operator Registration Requirement for Commodity Pool Operators of Certain Pooled Investment Vehicles Organized as Mortgage Real Estate Investment Trusts" that permits a CPO to receive relief by filing a claim to perfect the use of the relief. A claim submitted by a CPO will be effective upon filing, so long as the claim is materially complete. The conditions that must be met relate to initial margin and premiums requirements, net income derived annually from commodity interest positions that are not qualifying hedging transactions, marketing of interests in the mortgage real estate investment trust to the public, and identification of the entity as a mortgage real estate investment trust in its federal tax filings with the Internal Revenue Service. While we disagree with the CFTC's position that mortgage REITs that use swaps as part of their business model fall within the statutory definition of a CPO, we have submitted a claim for the relief set forth in the no-action relief entitled "No-Action Relief from the Commodity Pool Operator Registration Requirement for Commodity Pool Operators of Certain Pooled Investment Vehicles Organized as Mortgage Real Estate Investment Trusts" and believe we meet the criteria for such relief set forth therein.

Critical Accounting Estimates

The preparation of our consolidated financial statement in accordance with generally accepted accounting principles in the United States requires us to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Actual results may differ materially from these estimates and changes in assumptions could have a significant effect on the consolidated financial statements. Our critical accounting policies that require us to make significant judgments or estimates are described below. For more information on these critical accounting policies and other significant accounting policies, refer to the Note titled "Significant Accounting Policies" in the Notes to the Consolidated Financial Statements included in Item 1. "Financial Statements."

Valuation of Financial Instruments

Residential Securities

Description: We carry residential securities at estimated fair value. There is an active market for our Agency mortgage-backed securities, CRT securities and non-Agency mortgage-backed securities.

Judgments and Uncertainties: Since we primarily invest in securities that can be valued using quoted prices for actively traded assets, there is a high degree of observable inputs and less subjectivity in measuring fair value. Internal fair values are determined using quoted prices from the TBA securities market, the Treasury curve and the underlying characteristics of the individual securities, which may include coupon, periodic and life caps, reset dates and the expected life of the security. While prepayment rates may be difficult to predict and require estimation and judgment in the valuation of Agency mortgage-backed securities, we use several third party models to validate prepayment speeds used in fair value measurements of residential securities. All internal fair values are compared to external pricing sources and/or dealer quotes to determine reasonableness. Additionally, securities used as collateral for repurchase agreements are priced daily by counterparties to ensure sufficient collateralization, providing additional verification of our internal pricing.

Sensitivity of Estimates to Change: Changes in underlying assumptions used in estimating fair value impact the carrying value of the residential securities as well as their yield. For example, an increase in CPR would decrease the carrying value and yield of our Agency mortgage-backed securities. Our valuations are most sensitive to changes in interest rate, which also impacts prepayment speeds. Refer to the Experienced and Projected Long-Term CPR, Financial Condition – Residential Securities and the interest rate sensitivity and interest rate and MBS spread shock analysis and discussions within this Item 2. for further information.

Residential Mortgage Loans

Description: We elected to account for Residential Mortgage Loans at fair value. There is an active market for the residential whole loans in which we invest.

Judgments and Uncertainties: Since we primarily invest in residential loans that can be valued using actively quoted prices for similar assets, there are observable inputs in measuring fair value. Internal fair values are determined using quoted prices for similar market transactions, the swap curve and the underlying characteristics of the individual loans, which may include loan term, coupon, and reset dates. While prepayment rates may be difficult to predict and are a significant estimate requiring judgment in the valuation of residential whole loans, we validate prepayment speeds against those provided by independent pricing analytic providers specializing in residential mortgage loans. Internal fair values are generally compared to external pricing sources to determine reasonableness.

Sensitivity of Estimates to Change: Changes to model assumptions, including prepayment speeds may significantly impact the fair value estimate of residential mortgage loans as well as unrealized gains and losses and yield on these assets. Our valuations are most sensitive to changes in interest rate, which also impacts prepayment speeds. Refer to the interest rate sensitivity and interest rate shock analysis and discussions within this Item 2. for further information.

MSR

Description: We elected to account for MSR at fair value. The market for MSR is considered less active and transparent compared to securities. As such fair value estimates for our investment in MSR are obtained from models, which use significant unobservable inputs in their valuations.

Judgments and Uncertainties: These valuations primarily utilize discounted cash flow models that incorporate unobservable market data inputs including prepayment rates, delinquency levels, costs to service and discount rates. Model valuations are then compared to valuations obtained from third party pricing providers. Management reviews the valuations received from third party pricing providers and uses them as a point of comparison to modeled values. The valuation of MSR requires significant judgment by management and the third party pricing providers.

Sensitivity of Estimates to Change: Changes in the underlying assumptions used to estimate the fair value of MSR impact the carrying value as well as the related unrealized gains and losses recognized. For further discussion of the sensitivity of the model inputs refer to the Note titled “Fair Value Measurements” in the Notes to the Consolidated Financial Statements included in Item 1. “Financial Statements.”

Interest Rate Swaps

Description: We are required to account for derivative assets and liabilities at fair value, which may or may not be cleared through a derivative clearing organization. We value our cleared interest rate swaps using the prices provided by the derivatives clearing organization. We value uncleared derivatives using internal models with prices compared to counterparty marks.

Judgments and Uncertainties: We use the overnight indexed swap (“OIS”) curve, the SOFR curve, or SOFR forward rates as an input to value substantially all of our uncleared interest rate swaps. Consistent with market practice, we exchange collateral (also called margin) based on the fair values of our interest rate swaps. Through this margining process, we may be able to compare our recorded fair value with the fair value calculated by the counterparty or derivatives clearing organization, providing additional verification of our recorded fair value of the uncleared interest rate swaps.

Sensitivity of Estimates to Change: Changes in the OIS curve will impact the carrying value of our interest rate swap assets and liabilities. Our valuations are most sensitive to changes in interest rate, which also impacts prepayment speeds. Refer to the interest rate sensitivity and interest rate shock analysis and discussions within this Item 2 for further information.

Revenue Recognition

Description: Interest income from coupon payments is accrued based on the outstanding principal amounts of the Residential Securities and their contractual terms. Premiums and discounts associated with the purchase of the Residential Securities are amortized or accreted into interest income over the projected lives of the securities using the interest method. Gains or losses on sales of Residential Securities are recorded on trade date based on the specific identification method.

Judgments and Uncertainties: To aid in determining projected lives of the securities, we use third party model and market information to project prepayment speeds. Our prepayment speed projections incorporate underlying loan characteristics (i.e., coupon, term, original loan size, original loan-to-value ratio, etc.) and market data, including interest rate and home price index forecasts and expert judgment. Prepayment speeds vary according to the type of investment, conditions in the financial markets and other factors and cannot be predicted with any certainty.

Sensitivity of Estimates to Change: Changes to model assumptions, including interest rates and other market data, as well as periodic revisions to the model will cause changes in the results. Adjustments are made for actual prepayment activity as it relates to calculating the effective yield. The sensitivity of changes in interest rates to our economic net interest income is included in the interest rate shock analysis and discussions within this Item 2 for further information.

Consolidation of Variable Interest Entities

Description: We are required to determine if it is required to consolidate entities in which it holds a variable interest.

Judgments and Uncertainties: Determining whether an entity has a controlling financial interest in a VIE requires significant judgment related to assessing the purpose and design of the VIE and determination of the activities that most significantly impact its economic performance. We must also identify explicit and implicit variable interests in the entity and consider our involvement in both the design of the VIE and its ongoing activities. To determine whether consolidation of the VIE is required, we must apply judgment to assess whether we have the power to direct the most significant activities of the VIE and whether we have either the rights to receive benefits or the obligation to absorb losses that could be potentially significant to the VIE.

Use of Estimates

The use of 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 financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates.

Glossary of Terms

A

Adjustable-Rate Loan / Security
A loan / security on which interest rates are adjusted at regular intervals according to predetermined criteria. The adjustable interest rate is tied to an objective, published interest rate index.

Agency
Refers to a federally chartered corporation, such as the Federal National Mortgage Association, or the Federal Home Loan Mortgage Corporation, or an agency of the U.S. Government, such as the Government National Mortgage Association.

Agency Mortgage-Backed Securities
Refers to residential mortgage-backed securities that are issued or guaranteed by an Agency.

Amortization
Liquidation of a debt through installment payments. Amortization also refers to the process of systematically reducing a recognized asset or liability (e.g., a purchase premium or discount for a debt security) with an offset to earnings.

Average GAAP Cost of Interest Bearing Liabilities and Average Economic Cost of Interest Bearing Liabilities
Average GAAP cost of interest bearing liabilities represents annualized interest expense divided by average interest bearing liabilities. Average interest bearing liabilities is a non-GAAP financial measure that reflects the average balances during the period. Average economic cost of interest bearing liabilities represents annualized economic interest expense divided by average interest bearing liabilities.

Average Life
On a mortgage-backed security, the average time to receipt of each dollar of principal, weighted by the amount of each principal prepayment, based on prepayment assumptions.

Average Yield on Interest Earnings Assets and Average Yield on Interest Earnings Assets (excluding PAA)
Average yield on interest earning assets represents annualized interest income divided by average interest earning assets. Average interest earning assets reflects the average amortized cost of our investments during the period. Average yield on interest earning assets (excluding PAA) is a non-GAAP financial measure that is calculated using annualized interest income (excluding PAA).

B

Basis Point ("bp" or "bps")
One hundredth of one percent, used in expressing differences in interest rates. One basis point is 0.01% of yield. For example, a bond's yield that changed from 3.00% to 3.50% would be said to have moved 50 basis points.

Benchmark
A bond or an index referencing a basket of bonds whose terms are used for comparison with other bonds of similar maturity. The global financial market typically looks to U.S. Treasury securities as benchmarks.

Beneficial Owner
One who benefits from owning a security, even if the security's title of ownership is in the name of a broker or bank.

Board
Refers to the board of directors of Annaly.

Bond
The written evidence of debt, bearing a stated rate or stated rates of interest, or stating a formula for determining that rate, and maturing on a date certain, on which date and upon presentation a fixed sum of money plus interest (usually represented by interest coupons attached to the bond) is payable to the holder or owner. Bonds are long-term securities with an original maturity of greater than one year.

Book Value Per Share
Calculated by summing common stock, additional paid-in capital, accumulated other comprehensive income (loss) and accumulated deficit and dividing that number by the total common shares outstanding.

Broker
Generic name for a securities firm engaged in both buying and selling securities on behalf of customers or its own account.

C

Capital Buffer
Includes unencumbered financial assets which can be either sold or utilized as collateral to meet liquidity needs.

Capital Ratio (GAAP Capital Ratio)
Calculated as total stockholders' equity divided by total assets.

Carry
The amount an asset earns over its hedging and financing costs. A positive carry happens when the rate on the securities being financed is greater than the rate on the funds borrowed. A negative carry is when the rate on the funds borrowed is greater than the rate on the securities that are being financed.

CMBX
The CMBX index is a synthetic tradable index referencing a basket of 25 CMBS of a particular rating and vintage. The CMBX index allows investors to take a long position (referred to as selling protection) or short position (referred to as purchasing protection) on the respective basket of CMBS securities and is structured as a "pay-as-you-go" contract whereby the protection seller receives and the protection buyer pays a standardized running coupon on the contracted notional amount. Additionally, the protection seller is obligated to pay to the protection buyer the amount of principal losses and/or coupon shortfalls on the underlying CMBS securities as they occur.

Collateral
Securities, cash or property pledged by a borrower or party to a derivative contract to secure payment of a loan or derivative. If the borrower fails to repay the loan or defaults under the derivative contract, the secured party may take ownership of the collateral.

Collateralized Loan Obligation ("CLO")
A securitization collateralized by loans and other debt instruments.

Collateralized Mortgage Obligation ("CMO")
A multiclass bond backed by a pool of mortgage pass-through securities or mortgage loans.

Commodity Futures Trading Commission ("CFTC")
An independent U.S. federal agency established by the Commodity Futures Trading Commission Act of 1974. The CFTC regulates the swaps, commodity futures and options markets. Its goals include the promotion of competitive and efficient futures markets and the protection of investors against manipulation, abusive trade practices and fraud.

Commercial Mortgage-Backed Security ("CMBS" or "Commercial Securities")
Securities collateralized by a pool of mortgages on commercial real estate in which all principal and interest from the mortgages flow to certificate holders in a defined sequence or manner.

Constant Prepayment Rate ("CPR")
The percentage of outstanding mortgage loan principal that prepays in one year, based on the annualization of the Single Monthly Mortality, which reflects the outstanding mortgage loan principal that prepays in one month.

Convexity
A measure of the change in a security's duration with respect to changes in interest rates. The more convex a security is, the more its duration will change with interest rate changes.

Corporate Debt
Non-government debt instruments issued by corporations. Long-term corporate debt can be issued as bonds or loans.

Counterparty
One of two entities in a transaction. For example, in the bond market a counterparty can be a state or local government, a broker-dealer or a corporation.

Coupon
The interest rate on a bond that is used to compute the amount of interest due on a periodic basis.

Credit and Counterparty Risk
Risk to earnings, capital or business, resulting from an obligor's or counterparty's failure to meet the terms of any contract or otherwise failure to perform as agreed. Credit and counterparty risk is present in lending, investing, funding and hedging activities.

Credit Derivatives
Derivative instruments that have one or more underlyings related to the credit risk of a specified entity (or group of entities) or an index that exposes the seller to potential loss from specified credit-risk related events. An example is credit derivatives referencing the commercial mortgage-backed securities index.

Credit Risk Transfer ("CRT") Securities
Credit Risk Transfer securities are risk sharing transactions issued by Fannie Mae and Freddie Mac and similarly structured transactions arranged by third party market participants. The securities issued in the CRT sector are designed to synthetically transfer mortgage credit risk from Fannie Mae, Freddie Mac and/or third parties to private investors.

Current Face
The current remaining monthly principal on a mortgage security. Current face is computed by multiplying the original face value of the security by the current principal balance factor.

D

Dealer
Person or organization that underwrites, trades and sells securities, e.g., a principal market-maker in securities.

Default Risk
Possibility that a bond issuer will fail to pay principal or interest when due.

Derivative
A financial product that derives its value from the price, price fluctuations and price expectations of an underlying instrument, index or reference pool (e.g. futures contracts, options, interest rate swaps, interest rate swaptions and certain to-be-announced securities).

Discount Price
When the dollar price is below face value, it is said to be selling at a discount.

Duration
The weighted maturity of a fixed-income investment's cash flows, used in the estimation of the price sensitivity of fixed-income securities for a given change in interest rates.

E

Earnings available for distribution ("EAD") and Earnings available for distribution Per Average Common Share
Non-GAAP financial measure defined as the sum of (a) economic net interest income, (b) TBA dollar roll income and CMBX coupon income, (c) net servicing income less realized amortization of MSR, (d) other income (loss) (excluding amortization of intangibles, non-EAD income allocated to equity method investments and other non-EAD components of other income (loss)), (e) general and administrative expenses (excluding transaction expenses and non-recurring items), and (f) income taxes (excluding the income tax effect of non-EAD income (loss) items) and excludes (g) the premium amortization adjustment representing the cumulative impact on prior periods, but not the current period, of quarter-over-quarter changes in estimated long-term prepayment speeds related to our Agency mortgage-backed securities. Earnings available for distribution per average common share is a non-GAAP financial measure calculated by dividing earnings available for distribution by average basic common shares for the period.

This metric was previously labeled Core Earnings (excluding PAA) and Core Earnings (excluding PAA) Per Average Common Share). The definition of EAD is identical to the definition of Core Earnings (excluding PAA) from prior reporting periods.

Economic Capital
A measure of the risk a firm is subject to. It is the amount of capital a firm needs as a buffer to protect against risk. It is a probabilistic measure of potential future losses at a given confidence level over a given time horizon.

Economic Capital Ratio
Non-GAAP financial measure that is calculated as total stockholders' equity divided by total economic assets. Total economic assets includes the implied market value of TBA derivatives and are net of debt issued by securitization vehicles.

Economic Interest Expense
Non-GAAP financial measure that is comprised of GAAP interest expense and the net interest component of interest rate swaps.

Economic Leverage Ratio (Economic Debt-to-Equity Ratio)
Non-GAAP financial measure that is calculated as the sum of recourse debt, cost basis of TBA and CMBX derivatives outstanding and net forward purchases (sales) of investments divided by total equity. Recourse debt consists of repurchase agreements and other secured financing. Debt issued by securitization vehicles and participations issued are non-recourse to us and are excluded from this measure.

Economic Net Interest Income
Non-GAAP financial measure that is composed of GAAP net interest income less Economic Interest Expense.

Economic Return
Refers to the Company's change in book value plus dividends declared divided by the prior period's book value.

Encumbered Assets
Assets on the company's balance sheet which have been pledged as collateral against a liability.

F

Face Amount
The par value (i.e., principal or maturity value) of a security appearing on the face of the instrument.

Factor
A decimal value reflecting the proportion of the outstanding principal balance of a mortgage security, which changes over time, in relation to its original principal value.

Fannie Mae
Federal National Mortgage Association.

Federal Deposit Insurance Corporation ("FDIC")
An independent agency created by the U.S. Congress to maintain stability and public confidence in the nation's financial system by insuring deposits, examining and supervising financial institutions for safety and soundness and consumer protection, and managing receiverships.

Federal Funds Rate
The interest rate charged by banks on overnight loans of their excess reserve funds to other banks.

Federal Housing Financing Agency ("FHFA")
The FHFA is an independent regulatory agency that oversees vital components of the secondary mortgage market including Fannie Mae, Freddie Mac and the Federal Home Loan Banks.

Financial Industry Regulatory Authority, Inc. ("FINRA")
FINRA is a non-governmental organization tasked with regulating all business dealings conducted between dealers, brokers and all public investors.

Fixed-Rate Mortgage
A mortgage featuring level monthly payments, determined at the outset, which remain constant over the life of the mortgage.

Fixed Income Clearing Corporation ("FICC")
The FICC is an agency that deals with the confirmation, settlement and delivery of fixed-income assets in the U.S. The agency ensures the systematic and efficient settlement of U.S. Government securities and mortgage-backed security transactions in the market.

Floating Rate Bond
A bond for which the interest rate is adjusted periodically according to a predetermined formula, usually linked to an index.

Floating Rate CMO
A CMO tranche which pays an adjustable rate of interest tied to a representative interest rate index such as the SOFR, the Constant Maturity Treasury or the Cost of Funds Index.

Freddie Mac
Federal Home Loan Mortgage Corporation.

Futures Contract
A legally binding agreement to buy or sell a commodity or financial instrument in a designated future month at a price agreed upon at the initiation of the contract by the buyer and seller. Futures contracts are standardized according to the quality, quantity, and delivery time and location for each commodity. A futures contract differs from an option in that an option gives one of the counterparties a right and the other an obligation to buy or sell, while a futures contract represents an obligation of both counterparties, one to deliver and the other to accept delivery. A futures contract is part of a class of financial instruments called derivatives.

G

GAAP
U.S. generally accepted accounting principles.

Ginnie Mae
Government National Mortgage Association.

H

Hedge
An investment made with the intention of minimizing the impact of adverse movements in interest rates or securities prices.

I

In-the-Money
Description for an option that has intrinsic value and can be sold or exercised for a profit; a call option is in-the-money when the strike price (execution price) is below the market price of the underlying security.

Interest Bearing Liabilities
Refers to repurchase agreements, debt issued by securitization vehicles and credit facilities. Average interest bearing liabilities is based on daily balances.

Interest Earning Assets
Refers to Residential Securities, U.S. Treasury securities, reverse repurchase agreements, commercial real estate debt and preferred equity interests, residential mortgage loans and corporate debt. Average interest earning assets is based on daily balances.

Interest-Only (IO) Bond
The interest portion of mortgage, Treasury or bond payments, which is separated and sold individually from the principal portion of those same payments.

Interests in MSR
Represents agreements to purchase all, or a component of, net servicing cash flows.

Interest Rate Risk
The risk that an investment's value will change due to a change in the absolute level of interest rates, in the spread between two rates, in the shape of the yield curve or in any other interest rate relationship. As market interest rates rise, the value of current fixed income investment holdings declines. Diversifying, deleveraging and hedging techniques are utilized to mitigate this risk. Interest rate risk is a form of market risk.

Interest Rate Swap
A binding agreement between counterparties to exchange periodic interest payments on some predetermined dollar principal, which is called the notional principal amount. For example, one party will pay fixed and receive a variable rate.

Interest Rate Swaption
Options on interest rate swaps. The buyer of a swaption has the right to enter into an interest rate swap agreement at some specified date in the future. The swaption agreement will specify whether the buyer of the swaption will be a fixed-rate receiver or a fixed-rate payer.

International Swaps and Derivatives Association ("ISDA") Master Agreement
Standardized contract developed by ISDA used as an umbrella under which bilateral derivatives contracts are entered into.

Inverse IO Bond
An interest-only bond whose coupon is determined by a formula expressing an inverse relationship to a benchmark rate, such as SOFR. As the benchmark rate changes, the IO coupon adjusts in the opposite direction. When the benchmark rate is relatively low, the IO pays a relatively high coupon payment, and vice versa.

Investment/Market Risk
Risk to earnings, capital or business resulting in the decline in value of our assets caused from changes in market variables, such as interest rates, which affect the values of Residential Securities and other investment instruments.

Investment Advisers Act
Refers to the Investment Advisers Act of 1940, as amended.

Investment Company Act
Refers to the Investment Company Act of 1940, as amended.

L

Leverage
The use of borrowed money to increase investing power and economic returns.

Leverage Ratio (GAAP Leverage Ratio or Debt-to-Equity Ratio)
Calculated as total debt to total stockholders' equity. For purposes of calculating this ratio total debt includes repurchase agreements, other secured financing, debt issued by securitization vehicles, and participations issued. Debt issued by securitization vehicles and participations issued are non-recourse to us.

LIBOR (London Interbank Offered Rate)
A rate previously used as a benchmark for financial transactions. All tenors of LIBOR relevant to us are either no longer published or are no longer representative.

Liquidity Risk
Risk to earnings, capital or business arising from our inability to meet our obligations when they come due without incurring unacceptable losses because of inability to liquidate assets or obtain adequate funding.

Long-Term CPR
Our projected prepayment speeds for certain Agency mortgage-backed securities using third party model and market information. Our prepayment speed projections incorporate underlying loan characteristics (e.g., coupon, term, original loan size, original loan-to-value ratio, etc.) and market data, including interest rate and home price index forecasts. Changes to model assumptions, including interest rates and other market data, as well as periodic revisions to the model will cause changes in the results.

Long-Term Debt
Debt which matures in more than one year.

M

Market Agreed Coupon ("MAC") Interest Rate Swap
An interest rate swap contract structure with pre-defined, market agreed terms, developed by SIFMA and ISDA with the purpose of promoting liquidity and simplified administration.

Monetary Policy
Action taken by the Federal Open Market Committee of the Federal Reserve System to influence the money supply or interest rates.

Mortgage-Backed Security ("MBS")
A security representing a direct interest in a pool of mortgage loans. The pass-through issuer or servicer collects the payments on the loans in the pool and "passes through" the principal and interest to the security holders on a pro rata basis.

Mortgage Loan
A mortgage loan granted by a bank, thrift or other financial institution that is based solely on real estate as security and is not insured or guaranteed by a government agency.

Mortgage Servicing Rights ("MSR")
Contractual agreements constituting the right to service an existing mortgage where the holder receives the benefits and bears the costs and risks of servicing the mortgage.

N

NAV
Net asset value.

Net Interest Income
Represents interest income earned on our portfolio investments, less interest expense paid for borrowings.

Net Interest Margin and Net Interest Margin (excluding PAA)
Net interest margin represents our interest income less interest expense divided by average interest earning assets. Net interest margin (excluding PAA) is a non-GAAP financial measure that represents the sum of our interest income (excluding PAA) plus TBA dollar roll income and CMBX coupon income less interest expense and the net interest component of interest rate swaps divided by the sum of average interest earning assets plus average outstanding TBA contract and CMBX balances.

Net Interest Spread and Net Interest Spread (excluding PAA)
Net interest spread represents the average yield on interest earning assets less the average GAAP cost of interest bearing liabilities. Net interest spread (excluding PAA) is a non-GAAP financial measure that represents the average yield on interest earning assets (excluding PAA) less the average economic cost of interest bearing liabilities.

Non-Performing Loan ("NPL")
A loan that is close to defaulting or is in default.

Notional Amount
A stated principal amount in a derivative contract on which the contract is based.

O

Operational Risk
Risk to earnings, capital, reputation or business arising from inadequate or failed internal processes or systems, human factors or external events.

Option Contract
A contract in which the buyer has the right, but not the obligation, to buy or sell an asset at a set price on or before a given date. Buyers of call options bet that a security will be worth more than the price set by the option (the strike price), plus the price they pay for the option itself. Buyers of put options bet that the security's price will drop below the price set by the option. An option is part of a class of financial instruments called derivatives, which means these financial instruments derive their value from the worth of an underlying investment.

Original Face
The face value or original principal amount of a security on its issue date.

Out-of-the-Money
Description for an option that has no intrinsic value and would be worthless if it expired today; for a call option, this situation occurs when the strike price is higher than the market price of the underlying security; for a put option, this situation occurs when the strike price is less than the market price of the underlying security.

Overnight Index Swaps ("OIS")
An interest rate swap in which a fixed rate is exchanged for an overnight floating rate.

Over-The-Counter ("OTC") Market
A securities market that is conducted by dealers throughout the country through negotiation of price rather than through the use of an auction system as represented by a stock exchange.

P

Par
Price equal to the face amount of a security; 100%.

Par Amount
The principal amount of a bond or note due at maturity. Also known as par value.

Pass-Through Security
A securitization structure where a GSE or other entity "passes" the amount collected from the borrowers every month to the investor, after deducting fees and expenses.

Pool
A collection of mortgage loans assembled by an originator or master servicer as the basis for a security. In the case of Ginnie Mae, Fannie Mae, or Freddie Mac mortgage pass-through securities, pools are identified by a number assigned by the issuing agency.

Premium
The amount by which the price of a security exceeds its principal amount. When the dollar price of a bond is above its face value, it is said to be selling at a premium.

Premium Amortization Adjustment ("PAA")
The cumulative impact on prior periods, but not the current period, of quarter-over-quarter changes in estimated long-term prepayment speeds related to our Agency mortgage-backed securities.

Prepayment
The unscheduled partial or complete payment of the principal amount outstanding on a mortgage loan or other debt before it is due.

Prepayment Risk
The risk that falling interest rates will lead to increased prepayments of mortgage or other loans, forcing the investor to reinvest at lower prevailing rates.

Prepayment Speed
The estimated rate at which mortgage borrowers will pay off the mortgages that underlie an MBS.

Primary Market
Market for offers or sales of new bonds by the issuer.

Prime Rate
The indicative interest rate on loans that banks quote to their best commercial customers.

Principal and Interest
The term used to refer to regularly scheduled payments or prepayments of principal and payments of interest on a mortgage or other security.

R

Rate Reset
The adjustment of the interest rate on a floating-rate security according to a prescribed formula.

Real Estate Investment Trust ("REIT")
A special purpose investment vehicle that provides investors with the ability to participate directly in the ownership or financing of real-estate related assets by pooling their capital to purchase and manage mortgage loans and/or income property.

Recourse Debt
Debt on which the economic borrower is obligated to repay the entire balance regardless of the value of the pledged collateral. By contrast, the economic borrower's obligation to repay non-recourse debt is limited to the value of the pledged collateral. Recourse debt consists of repurchase agreements and other secured financing. Debt issued by securitization vehicles and participations issued are non-recourse to us and are excluded from this measure.

Reinvestment Risk
The risk that interest income or principal repayments will have to be reinvested at lower rates in a declining rate environment.

Re-Performing Loan ("RPL")
A type of loan in which payments were previously delinquent by at least 90 days but have resumed.

Repurchase Agreement
The sale of securities to investors with the agreement to buy them back at a higher price after a specified time period; a form of short-term borrowing. For the party on the other end of the transaction (buying the security and agreeing to sell in the future) it is a reverse repurchase agreement.

Residential Credit Securities
Refers to CRT securities and non-Agency mortgage-backed securities.

Residential Securities
Refers to Agency mortgage-backed securities, CRT securities and non-Agency mortgage-backed securities.

Residual
In securitizations, the residual is the tranche that collects any cash flow from the collateral that remains after obligations to the other tranches have been met.

Return on Average Equity
Calculated by taking earnings divided by average stockholders' equity.

Reverse Repurchase Agreement
Refer to Repurchase Agreement. The buyer of securities effectively provides a collateralized loan to the seller.

Risk Appetite Statement
Defines the types and levels of risk we are willing to take in order to achieve our business objectives, and reflects our risk management philosophy.

S

Secondary Market
Ongoing market for bonds previously offered or sold in the primary market.

Secured Overnight Financing Rate ("SOFR")
Broad measure of the cost of borrowing cash overnight collateralized by Treasury securities and was chosen by the Alternative Reference Rate Committee as the preferred benchmark rate to replace dollar LIBOR.

Settlement Date
The date securities must be delivered and paid for to complete a transaction.

Short-Term Debt
Generally, debt which matures in one year or less. However, certain securities that mature in up to three years may be considered short-term debt.

Spread
When buying or selling a bond through a brokerage firm, investors will be charged a commission or spread, which is the difference between the market price and cost of purchase, and sometimes a service fee. Spreads differ based on several factors including liquidity.

T

Target Assets
Includes Agency mortgage-backed securities, to-be-announced forward contracts, CRT securities, MSR, non-Agency mortgage-backed securities, residential mortgage loans, and commercial real estate investments.

Tangible Economic Return
Refers to the Company's change in tangible book value (calculated by summing common stock, additional paid-in capital, accumulated other comprehensive income (loss) and accumulated deficit less intangible assets) plus dividends declared divided by the prior period's tangible book value.

Taxable REIT Subsidiary ("TRS")
An entity that is owned directly or indirectly by a REIT and has jointly elected with the REIT to be treated as a TRS for tax purposes. Annaly and certain of its direct and indirect subsidiaries have made separate joint elections to treat these subsidiaries as TRSs.

To-Be-Announced ("TBA") Securities
A contract for the purchase or sale of a mortgage-backed security to be delivered at a predetermined price, face amount, issuer, coupon and stated maturity on an agreed-upon future date but does not include a specified pool number and number of pools.

TBA Dollar Roll Income
TBA dollar roll income is defined as the difference in price between two TBA contracts with the same terms but different settlement dates. The TBA contract settling in the later month typically prices at a discount to the earlier month contract with the difference in price commonly referred to as the "drop". TBA dollar roll income represents the equivalent of interest income on the underlying security less an implied cost of financing.

Total Return
Investment performance measure over a stated time period which includes coupon interest, interest on interest, and any realized and unrealized gains or losses.

Total Return Swap
A derivative instrument where one party makes payments at a predetermined rate (either fixed or variable) while receiving a return on a specific asset (generally an equity index, loan or bond) held by the counterparty.

U

Unencumbered Assets
Assets on our balance sheet which have not been pledged as collateral against an existing liability.

U.S. Government-Sponsored Enterprise ("GSE") Obligations
Obligations of Agencies originally established or chartered by the U.S. government to serve public purposes as specified by the U.S. Congress, such as Fannie Mae and Freddie Mac; these obligations are not explicitly guaranteed as to the timely payment of principal and interest by the full faith and credit of the U.S. government.

V

Value-at-Risk ("VaR")
A statistical technique which measures the potential loss in value of an asset or portfolio over a defined period for a given confidence interval.

Variable Interest Entity ("VIE")
An entity in which equity investors (i) do not have the characteristics of a controlling financial interest, and/or (ii) do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties.

Variation Margin
Cash or securities provided by a party to collateralize its obligations under a transaction as a result of a change in value of such transaction since the trade was executed or the last time collateral was provided.

Volatility
A statistical measure of the variance of price or yield over time. Volatility is low if the price does not change very much over a short period of time, and high if there is a greater change.

Voting Interest Entity ("VOE")
An entity that has sufficient equity to finance its activities without additional subordinated financial support from other parties and in which equity investors have a controlling financial interest.

W

Warehouse Lending
A line of credit extended to a loan originator to fund mortgages extended by the loan originators to property purchasers. The loan typically lasts from the time the mortgage is originated to when the mortgage is sold into the secondary market, whether directly or through a securitization. Warehouse lending can provide liquidity to the loan origination market.

Weighted Average Coupon
The weighted average interest rate of the underlying mortgage loans or pools that serve as collateral for a security, weighted by the size of the principal loan balances.

Weighted Average Life (“WAL”)
The assumed weighted average amount of time that will elapse from the date of a security’s issuance until each dollar of principal is repaid to the investor. The WAL will change as the security ages and depending on the actual realized rate at which principal, scheduled and unscheduled, is paid on the loans underlying the MBS.

Y

Yield-to-Maturity
The expected rate of return of a bond if it is held to its maturity date; calculated by taking into account the current market price, stated redemption value, coupon payments and time to maturity and assuming all coupons are reinvested at the same rate; equivalent to the internal rate of return.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Quantitative and qualitative disclosures about market risk are contained within the section titled “Risk Management” of Item 2. “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

ITEM 4. CONTROLS AND PROCEDURES

Our management, including our Chief Executive Officer (the CEO) and Chief Financial Officer (the CFO), reviewed and evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) of the Securities Exchange Act) as of the end of the period covered by this report. Based on that review and evaluation, the CEO and CFO have concluded that our current disclosure controls and procedures, as designed, (1) were effective in ensuring that information required to be disclosed by the Company in reports it files or submits under the Securities Exchange Act is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure and (2) were effective in ensuring that information required to be disclosed by the Company in reports it files or submits under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified by the SEC’s rules and forms.

There have been no changes in our internal controls over financial reporting that occurred during the three months ended June 30, 2023 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

From time to time, we are involved in various claims and legal actions arising in the ordinary course of business. As of June 30, 2023, we were not party to any pending material legal proceedings.

ITEM 1A. RISK FACTORS

There have been no material changes to the risk factors disclosed in Item 1A. “Risk Factors” of our most recent annual report on Form 10-K. The materialization of any risks and uncertainties identified in our Special Note Regarding Forward-Looking Statements contained in this report together with those previously disclosed in our most recent annual report on Form 10-K or those that are presently unforeseen could result in significant adverse effects on our financial condition, results of operations and cash flows. See Item 2. “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Special Note Regarding Forward-Looking Statements” in this quarterly report or our most recent annual report on Form 10-K.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

In January 2022, we announced that our Board authorized the repurchase of up to $1.5 billion of our outstanding common shares through December 31, 2024. No shares were repurchased with respect to this share repurchase program during the quarter ended June 30, 2023. As of June 30, 2023, the maximum dollar value of shares that may yet be purchased under this program was $1.5 billion.

ITEM 5. OTHER INFORMATION

During the quarter ended June 30, 2023, no director or officer of the Company adopted or terminated any Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement, each as defined in Item 408 of Regulation S-K.

ITEM 6. EXHIBITS

Exhibits:

The exhibits required by this item are set forth on the Exhibit Index attached hereto.

Exhibit Number	Exhibit Description
3.1	Articles of Amendment of the Articles of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed May 19, 2023)
31.1	Certification of David L. Finkelstein, Chief Executive Officer and Chief Investment Officer (Principal Executive Officer) of the Registrant, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. †
31.2	Certification of Serena Wolfe, Chief Financial Officer (Principal Financial Officer) of the Registrant, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. †
32.1	Certification of David L. Finkelstein, Chief Executive Officer and Chief Investment Officer (Principal Executive Officer) of the Registrant, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. †
32.2	Certification of Serena Wolfe, Chief Financial Officer (Principal Financial Officer) of the Registrant, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. †
101.INS XBRL	The instance document does not appear in the interactive data file because its Extensible Business Reporting Language (XBRL) tags are embedded within the Inline XBRL document. The following documents are formatted in Inline XBRL: (i) Consolidated Statements of Financial Condition at June 30, 2023 (Unaudited) and December 31, 2022 (Derived from the audited Consolidated Statement of Financial Condition at December 31, 2022); (ii) Consolidated Statements of Comprehensive Income (Loss) (Unaudited) for the three and six months ended June 30, 2023 and 2022; (iii) Consolidated Statements of Stockholders' Equity (Unaudited) for the three and six months ended June 30, 2023 and 2022; (iv) Consolidated Statements of Cash Flows (Unaudited) for the six months ended June 30, 2023 and 2022; and (v) Notes to Consolidated Financial Statements (Unaudited).
101.SCH XBRL	Taxonomy Extension Schema Document †
101.CAL XBRL	Taxonomy Extension Calculation Linkbase Document †
101.DEF XBRL	Additional Taxonomy Extension Definition Linkbase Document Created †
101.LAB XBRL	Taxonomy Extension Label Linkbase Document †
101.PRE XBRL	Taxonomy Extension Presentation Linkbase Document †
104	The cover page for the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023 (formatted in Inline XBRL and contained in Exhibit 101).

† Submitted electronically herewith.

SIGNATURES

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

		ANNALY CAPITAL MANAGEMENT, INC.
Dated:	August 3, 2023	By: /s/ David L. Finkelstein David L. Finkelstein Chief Executive Officer, Chief Investment Officer and Director (Principal Executive Officer)
Dated:	August 3, 2023	By: /s/ Serena Wolfe Serena Wolfe Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

Exhibit 31.1

CERTIFICATIONS

I, David L. Finkelstein, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Annaly Capital Management, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 3, 2023

/s/ David L. Finkelstein

Chief Executive Officer and Chief Investment Officer (Principal Executive Officer)

Exhibit 31.2

CERTIFICATIONS

I, Serena Wolfe, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Annaly Capital Management, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 3, 2023

/s/ Serena Wolfe
Chief Financial Officer (Principal Financial Officer)

Exhibit 32.1

ANNALY CAPITAL MANAGEMENT, INC.
1211 AVENUE OF THE AMERICAS
NEW YORK, NEW YORK 10036

CERTIFICATION
PURSUANT TO SECTION 906 OF THE
SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350

In connection with the quarterly report on Form 10-Q of Annaly Capital Management, Inc. (the "Company") for the quarter ended June 30, 2023 to be filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, David L. Finkelstein, Chief Executive Officer and Chief Investment Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates of, and for the periods covered by, the Report.

It is not intended that this statement be deemed to be filed for purposes of the Securities Exchange Act of 1934.

/s/ David L. Finkelstein
David L. Finkelstein
Chief Executive Officer and Chief Investment Officer (Principal Executive Officer)
August 3, 2023

Exhibit 32.2

ANNALY CAPITAL MANAGEMENT, INC.
1211 AVENUE OF THE AMERICAS
NEW YORK, NEW YORK 10036

CERTIFICATION
PURSUANT TO SECTION 906 OF THE
SARBANES-OXLEY ACT OF 2002, 18 U.S.C. SECTION 1350

In connection with the quarterly report on Form 10-Q of Annaly Capital Management, Inc. (the “Company”) for the quarter ended June 30, 2023 to be filed with the Securities and Exchange Commission on or about the date hereof (the “Report”), I, Serena Wolfe, Chief Financial Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates of, and for the periods covered by, the Report.

It is not intended that this statement be deemed to be filed for purposes of the Securities Exchange Act of 1934.

/s/ Serena Wolfe
Serena Wolfe
Chief Financial Officer (Principal Financial Officer)
August 3, 2023