MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY

INTERIM STATUTORY FINANCIAL STATEMENTS

As of June 30, 2025 and December 31, 2024 and
for the six months ended June 30, 2025 and 2024

Table of Contents

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY
INTERIM STATUTORY STATEMENTS OF FINANCIAL POSITION
(UNAUDITED)

	June 30, 2025	December 31, 2024
	(In Millions)	
Assets:		
Bonds	$ 167,185	$ 163,629
Preferred stocks	1,486	1,019
Common stocks – subsidiaries and affiliates	25,352	25,840
Common stocks – unaffiliated	1,180	1,198
Mortgage loans	24,204	23,692
Policy loans	18,227	17,658
Real estate	338	323
Partnerships and limited liability companies	16,274	14,747
Derivatives	21,983	24,220
Cash, cash equivalents and short-term investments	8,405	6,004
Other invested assets	4,351	3,515
Total invested assets	288,985	281,845
Investment income due and accrued	4,442	5,347
Federal income taxes	547	552
Net deferred income taxes	2,066	1,857
Other than invested assets	6,496	6,334
Total assets excluding separate accounts	302,536	295,935
Separate account assets	47,110	49,251
Total assets	$ 349,646	$ 345,186
Liabilities and Surplus:		
Policyholders' reserves	$ 181,398	$ 178,258
Liabilities for deposit-type contracts	23,097	21,228
Contract claims and other benefits	835	595
Policyholders' dividends	2,605	2,533
General expenses due or accrued	887	917
Asset valuation reserve	6,382	5,952
Repurchase agreements	3,384	3,408
Debt	250	250
Collateral	1,410	1,915
Derivatives	16,755	16,774
Funds held under coinsurance	30,417	29,625
Other liabilities	6,910	6,741
Total liabilities excluding separate accounts	274,330	268,196
Separate account liabilities	46,960	49,108
Total liabilities	321,290	317,304
Surplus	28,356	27,882
Total liabilities and surplus	$ 349,646	$ 345,186

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY
INTERIM STATUTORY STATEMENTS OF OPERATIONS
(UNAUDITED)

	Six Months Ended June 30,	
	2025	2024
	(In Millions)	
Revenue:		
Premium income	$ 9,343	$ 9,932
Net investment income	5,879	5,329
Fees and other income	591	604
Total revenue	15,813	15,865
Benefits, expenses and other deductions:		
Policyholders' benefits	9,571	7,920
Change in policyholders' reserves	1,842	4,203
General insurance expenses	1,189	1,166
Commissions	627	683
State taxes, licenses and fees	176	171
Other deductions	780	374
Total benefits and expenses	14,185	14,517
Net gain from operations before dividends and federal income taxes	1,628	1,348
Dividends to policyholders	1,192	1,012
Net gain from operations before federal income taxes	436	336
Federal income tax expense	119	132
Net gain from operations	317	204
Net realized capital losses	(434)	(273)
Net loss	$ (117)	$ (69)

See accompanying notes to interim statutory financial statements

INTERIM STATUTORY STATEMENTS OF CHANGE IN SURPLUS
(UNAUDITED)

	Six Months Ended June 30, 2025	Six Months Ended June 30, 2024
	(In Millions)	
Surplus, beginning of year	$ 27,882	$ 28,877
Net increase (decrease) due to:		
Net loss	(117)	(69)
Change in net unrealized capital (losses) gains, net of tax	(101)	389
Change in net unrealized foreign exchange capital gains (losses), net of tax	796	(126)
Change in other net deferred income taxes	27	243
Change in nonadmitted assets	440	10
Change in asset valuation reserve	(430)	(552)
Change in surplus notes	—	(50)
Change in minimum pension liability	1	3
Prior period adjustments	(57)	(125)
Other	(85)	(143)
Net increase (decrease)	474	(420)
Surplus, end of period	$ 28,356	$ 28,457

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY
INTERIM STATUTORY STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Six Months Ended June 30, 2025	Six Months Ended June 30, 2024
	(In Millions)	
Cash from operations:		
Premium and other income collected	$ 10,484	$ 10,731
Net investment income	6,857	6,046
Benefit payments	(9,497)	(7,890)
Net transfers from separate accounts	1,237	1,099
Commissions and other expenses	(2,802)	(2,540)
Dividends paid to policyholders	(1,127)	(957)
Federal and foreign income taxes paid	94	7
Net cash from operations	5,246	6,496
Cash from investments:		
Proceeds from investments sold, matured or repaid:		
Bonds	17,528	18,365
Preferred and common stocks – unaffiliated	25	93
Common stocks – affiliated	1,205	111
Mortgage loans	1,760	1,201
Real estate	5	(1)
Partnerships and limited liability companies	989	443
Derivatives	(482)	(258)
Other	(822)	(844)
Total investment proceeds	20,208	19,110
Cost of investments acquired:		
Bonds	(19,623)	(32,143)
Preferred and common stocks – unaffiliated	(263)	(420)
Common stocks – affiliated	(100)	(183)
Mortgage loans	(2,389)	(1,822)
Real estate	(3)	(1)
Partnerships and limited liability companies	(1,679)	(1,492)
Derivatives	58	124
Other	495	724
Total investments acquired	(23,504)	(35,213)
Net increase in policy loans	(569)	(770)
Net cash used in investing activities	(3,865)	(16,873)
Cash from financing and miscellaneous sources:		
Net deposits on deposit-type contracts	1,376	398
Change in surplus notes	—	(50)
Change in repurchase agreements	(25)	222
Change in collateral	(504)	(255)
Other cash provided	173	3,737
Net cash from financing and miscellaneous sources	1,020	4,052
Net change in cash, cash equivalents and short-term investments	2,401	(6,325)
Cash, cash equivalents and short-term investments:		
Beginning of year	6,004	11,134
End of period	$ 8,405	$ 4,809

See accompanying notes to interim statutory financial statements

1. Nature of operations

Massachusetts Mutual Life Insurance Company (MassMutual or the Company), a mutual life insurance company domiciled in the Commonwealth of Massachusetts, and its domestic life insurance subsidiaries provide individual and group life insurance, disability income insurance (DI), individual and group annuities and guaranteed interest contracts (GIC) to individual and institutional customers in all 50 states of the United States of America (U.S.), the District of Columbia and Puerto Rico. Products and services are offered primarily through the Company’s affiliated distribution channel, MassMutual Strategic Distributors (MMSD), Institutional Solutions (IS) and Worksite distribution channels.

The affiliated distribution channel is a sales force of financial professionals that operate in the U.S. The affiliated distribution channel sells life insurance, annuities, hybrid life and long term care insurance (LTC) and DI. The Company’s MMSD channel sells life insurance, DI, annuity, and hybrid life and LTC solutions through a network of third-party distribution partners. The Company’s IS distribution channel places group annuities, life insurance and GIC primarily through retirement advisory firms, actuarial consulting firms, investment banks, insurance benefit advisors and investment management companies. The Company’s Worksite channel works with advisors and employers across the country to provide American workers with voluntary and executive benefits such as group whole life insurance, group critical illness insurance, group accident insurance and DI, through the workplace.

2. Summary of significant accounting policies

a. Basis of presentation

The interim statutory financial statements have been prepared in conformity with the statutory accounting practices of the National Association of Insurance Commissioners (NAIC) and the accounting practices prescribed or permitted by the Commonwealth of Massachusetts Division of Insurance.

The interim statutory financial statements and notes as of June 30, 2025 and December 31, 2024 and for six months ended June 30, 2025 and 2024 are unaudited. The interim Statutory Statement of Financial Position as of December 31, 2024 has been derived from the audited consolidated financial statements at that date, but do not include all of the information and footnotes required by statutory accounting practices for complete financial statements. These interim statutory financial statements, in the opinion of management, reflect the fair presentation of the financial position, results of operations, changes in surplus and cash flows for the interim periods. These interim statutory financial statements and notes should be read in conjunction with the statutory financial statements and notes thereto included in the Company’s 2024 audited yearend financial statements as these interim statutory financial statements disclose only significant changes from yearend 2024. The results of operations for the interim periods should not be considered indicative of results to be expected for the full year.

For the full description of accounting policies, see Note 2. "*Summary of significant accounting policies*" of Notes to Interim Statutory Financial Statements included in the Company's 2024 audited yearend financial statements.

b. Corrections of errors and reclassifications

For the six months ended June 30, 2025, corrections of prior years' errors were recorded in surplus, net of tax:

	Increase (Decrease) to:		
	Prior Years' Net Income	Current Year Surplus	Asset or Liability Balances
	(In Millions)		
Bonds	$ (279)	$ (279)	$ (279)
Investment income due and accrued	(182)	(182)	(182)
Other than invested assets	(14)	(14)	(14)
Separate account assets	4	4	4
Other liabilities	418	418	(418)
Separate account liabilities	(4)	(4)	(4)
Total	$ (57)	$ (57)	

c. Bonds

Bonds are generally valued at amortized cost using the constant yield interest method with the exception of NAIC Category 6 bonds, which are in or near default, and certain residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS), which are rated by outside modelers, which are carried at the lower of amortized cost or fair value. NAIC ratings are applied to bonds and other investments. Categories 1 and 2 are considered investment grade, while Categories 3 through 6 are considered below investment grade. Bonds are recorded on a trade date basis, except for private placement bonds, which are recorded on the funding date.

For loan-backed and structured securities, such as asset-backed securities (ABS), mortgage-backed securities (MBS), including RMBS and CMBS, and structured securities, including collateralized debt obligations (CDOs), amortization or accretion is revalued quarterly based on the current estimated cash flows, using either the prospective or retrospective adjustment methodologies.

Fixed income securities with the highest ratings from a rating agency follow the retrospective method of accounting.

All other fixed income securities, such as floating rate bonds and interest only securities, including those that have been impaired, follow the prospective method of accounting.

The fair value of bonds is based on quoted market prices when available. If quoted market prices are not available, values provided by other third-party organizations are used. If values provided by other third-party organizations are unavailable, fair value is estimated using internal models by discounting expected future cash flows using observable current market rates applicable to yield, credit quality and maturity of the investment or using quoted market values for comparable investments. Internal inputs used in the determination of fair value include estimated prepayment speeds, default rates, discount rates and collateral values, among others. Structure characteristics and cash flow priority are also considered. Fair values resulting from internal models are those expected to be received in an orderly transaction between willing market participants.

d. Common stocks - subsidiaries and affiliates

Common stocks of unconsolidated subsidiaries, primarily MassMutual Holding LLC (MMHLLC), Glidepath Holdings Inc. (Glidepath) and MM Investment Holding (MMIH), are accounted for using the statutory equity method. The Company accounts for the value of MMHLLC at its underlying U.S. generally accepted accounting principals (GAAP) equity value less adjustments for the limited statutory basis of accounting related to foreign insurance subsidiaries and controlled affiliated entities as well as an adjustment of $458 million as of June 30, 2025 for a portion of its noncontrolling interests. Glidepath is valued on its underlying GAAP equity with adjustment to recognize its investment in MassMutual Ascend Life Insurance Company and other subsidiaries and affiliated entities (MM Ascend) based on MM Ascend's underlying statutory surplus, adjusted for any unamortized goodwill recognized under the statutory purchase method. Operating results, less dividends declared, for MMHLLC, Glidepath and MMIH are reflected as net unrealized capital gains in the Statutory Statements of Changes in Surplus. Dividends declared from MMHLLC, Glidepath and MMIH are recorded in net investment income when declared and are limited to MMHLLC, Glidepath and MMIH's U.S. GAAP retained earnings. The cost basis of common stocks – subsidiaries and affiliates is adjusted for impairments deemed to be other than temporary.

3. New accounting standards

Adoption of new accounting standards

Effective January 1, 2024, the NAIC adopted revisions to avoid allocating realized gains or losses from bond sales to the Interest Maintenance Reserve (IMR) when sold before a rating downgrade. Revisions were also made to avoid allocating realized gains or losses from mortgage loan sales when there is a credit loss allowance, where payments are not 90 days past due. Revisions were also made to update guidance on changes in credit ratings used to allocate credit or interest rate related gains or losses, requiring identification of realized losses from acute credit events to be allocated to asset valuation reserve. The modifications did not have a material effect on the Company's interim financial statements.

In March 2024, the NAIC adopted revisions to the requirements of audit and admissibility in SSAP No. 97 – Investments in Subsidiary, Controlled and Affiliated Entities (SCA), effective March 16, 2024, to better align with the guidance on the look-through methodology. The revisions allow for admitting audited investments in entities owned by unaudited downstream noninsurance holding company SCA entity. The modifications did not have a material effect on the Company's financial statements.

In August 2023, the NAIC adopted revisions to clarify and incorporate a new bond definition within disclosures SSAP No. 26 – Bonds, SSAP No. 43 – Asset-Backed Securities, and other related SSAPs, effective January 1, 2025. The revisions were issued in connection with its principle-based bond definition project, "the Bond Project".

The Bond Project began in October 2020 through the development of a principle-based bond definition to be used for all securities in determining whether they qualify for reporting on the statutory annual statement Schedule D. Within the new bond definition, bonds are classified as an "issuer credit obligation" or an "asset-backed security."

An issuer credit obligation is defined as a bond where repayment is supported by the general creditworthiness of an operating entity, and an asset-backed security is defined as a bond issued by an entity created for the primary purpose of raising capital through debt backed by financial assets. The revisions to SSAP No. 26 reflect the principle-based bond definition, and SSAP No. 43 provides accounting and reporting guidance for investments that qualify as asset-backed securities under the new bond definition. Upon adoption, investments that do not qualify as bonds will not be permitted to be reported as bonds on Schedule D, Part 1 thereafter as there will be no grandfathering for existing investments that do not qualify under the revised SSAPs. The Company has adopted this guidance, resulting in $499 million for all securities reclassed off Schedule D-1, which includes $331 million that resulted with a change in measurement basis. The adoption resulted in a decrease in change in Surplus of $33 million for MassMutual on January 1, 2025. Modifications of disclosures by asset categories are prospectively applied to *Note 5a. "Investments – Bonds*".

In March 2024, the NAIC adopted revisions to SSAP No. 21 - Other Admitted Assets, effective January 1, 2025, clarifying that residuals follow the effective yield approach with a cap and providing an election for the cost recovery method. The Company elected the effective yield method using the allowable earned yield, capped by the amount of cash distributions received. The modifications did not have a material effect on the Company's interim financial statements.

Effective January 1, 2025, revisions were made to short-term investments, which include excluding additional investment types from being reported as cash equivalents or short-term investments regardless of maturity date of the investment at the date of acquisition. Investments will be eliminated from being reported as cash equivalents or short-term investments unless they would qualify under SSAP No. 26 – Bonds as an issuer credit obligation. Such investments will then only qualify as a cash equivalent or short-term investment if they have a maturity date within 3-months (cash equivalents) or 12-months (short-term) from the date of acquisition or meet the specifics requirements for money market mutual funds or cash pooling arrangement. The modifications did not have a material effect on the Company's interim financial statements.

The NAIC adopted revisions to various SSAPs for investments in tax credits, acquired tax credits and updated annual statement reporting categories for tax credit investment risk-based capital. These revisions include broad criteria to scope in various tax credit programs, including solar programs and state specific programs. This adoption requires proportional amortization as the measurement approach, as with existing low-income housing tax credits, recording amortization of the investment in the partnership through net investment income and the use of the tax credits in the appropriate tax line. The adopted revisions were effective on January 1, 2025. The modifications were prospectively applied and did not have a material effect on the Company's interim financial statements.

In, March 2025, the NAIC adopted revisions to clarify how assets held under modified coinsurance (Modco) or funds withheld (FWH) agreements shall be reflected within the restricted asset disclosure in SSAP No. 1 - Accounting Policies, Risks & Uncertainties, and Other Disclosures and in the corresponding disclosures in *Note 5m. "Restricted assets"* of the statutory financial statements. It also proposes enhanced disclosures to fully identify the extent of restricted assets reported on balance sheet within a single disclosure as well as identify differences between the restricted asset annual statement disclosure and the amount reported in the annual statement general interrogatories, which is pulled directly into the risk-based capital formulas. The adopted revisions will be effective December 31, 2025. The modifications did not have a material effect on the Company's interim financial statements.

Future adoption of new accounting standards

In March 2024, the NAIC proposed expansion of the guidance in SSAP No. 56 - Separate Accounts to further address situations and provide consistent accounting guidelines for when assets are reported at a measurement method other than fair value. This is to address an increase in assets reported at book value within the separate investment account, which have been approved under state prescribed practices and/or interpretations that the reference for fund accumulation contracts captures pension risk transfer or registered indexed-linked annuities and other similar general-account type products. In August 2024, the NAIC exposed further revisions as to treatment of IMR for transfers between general investment account and separate investment account, with the broad concept that such transfers would have offset IMR impacts between the general investment account and the book value separate investment account with a zero net impact to surplus. In February 2025, the NAIC adopted final revisions to SSAP No. 56 - Separate Accounts. The revisions clarify the measurement method guidance as well as prescribe guidance for how transfers to/from the general investment account and separate investment account shall be recognized. The adopted revisions will be effective on January 1, 2026, with early adoption permitted. The Company is assessing the potential impact on the Company's interim financial statements.

4. *Fair value of financial instruments*

The following presents a summary of the carrying values and fair values of the Company's financial instruments:

	June 30, 2025				
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
	(In Millions)				
Financial assets:					
Bonds:					
Issuer credit obligations	$ 106,770	$ 98,702	$ 729	$ 50,371	$ 47,602
Asset-backed securities	60,415	59,879	—	30,562	29,317
Preferred stocks	1,486	1,961	487	51	1,423
Common stocks - subsidiaries and affiliates	152	152	63	—	89
Common stocks - unaffiliated	1,180	1,180	306	3	871
Mortgage loans	24,204	22,892	—	—	22,892
Derivatives	21,983	15,942	121	15,821	—
Cash, cash equivalents and short-term investments	8,405	8,405	623	7,782	—
Separate account assets	47,110	47,110	31,663	13,424	2,023
Financial liabilities:					
GICs	19,898	17,661	—	—	17,661
Group annuity contracts and other deposits	1,609	1,477	—	—	1,477
Individual annuity contracts	30,264	31,391	—	—	31,391
Supplementary contracts	825	826	—	—	826
Repurchase agreements	3,384	3,451	—	3,451	—
Debt	250	250	—	250	—
Derivatives	16,755	16,843	72	16,771	—

Common stocks - subsidiaries and affiliates do not include unconsolidated subsidiaries, which had statutory carrying values of $25,200 million.

	December 31, 2024				
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
	(In Millions)				
Financial assets:					
Bonds	$ 163,629	$ 153,893	$ 725	$ 79,633	$ 73,535
Preferred stocks	1,019	1,145	187	3	955
Common stocks - subsidiaries and affiliates	150	150	16	—	134
Common stocks - unaffiliated	1,198	1,198	292	—	906
Mortgage loans	23,692	22,145	—	—	22,145
Derivatives	24,220	18,021	128	17,893	—
Cash, cash equivalents and short-term investments	6,004	6,004	572	5,432	—
Separate account assets	49,251	49,251	33,240	14,194	1,817
Financial liabilities:					
GICs	17,955	17,249	—	—	17,249
Group annuity contracts and other deposits	1,714	1,570	—	—	1,570
Individual annuity contracts	29,402	30,328	—	—	30,328
Supplementary contracts	844	845	—	—	845
Repurchase agreements	3,408	3,420	—	3,420	—
Debt	250	250	—	250	—
Derivatives	16,774	17,240	75	17,165	—

Common stocks - subsidiaries and affiliates do not include unconsolidated subsidiaries, which had statutory carrying values of $25,690 million.

The following presents the Company's fair value hierarchy for assets and liabilities that are carried at fair value:

	June 30, 2025			
	Level 1	Level 2	Level 3	Total
	(In Millions)			
Financial assets:				
Bonds:				
Issuer credit obligations	$ 355	$ 24	$ 297	$ 677
Asset-backed securities	—	26	—	26
Preferred stocks	239	49	55	343
Common stocks - subsidiaries and affiliates	63	—	89	152
Common stocks - unaffiliated	306	3	871	1,180
Derivatives:				
Interest rate swaps	—	18,565	—	18,565
Options	104	496	—	600
Currency swaps	—	2,764	—	2,764
Forward contracts	—	25	—	25
Credit default swaps	—	—	—	—
Financial Futures	17	—	—	17
Separate account assets	31,662	13,424	2,023	47,109
Total financial assets carried at fair value	$ 32,746	$ 35,376	$ 3,335	$ 71,458

	June 30, 2025			
	Level 1	Level 2	Level 3	Total
	(In Millions)			
Financial liabilities:				
Derivatives:				
Interest rate swaps	$ —	$ 13,665	$ —	$ 13,665
Options	60	1	—	61
Currency swaps	—	556	—	556
Forward contracts	—	367	—	367
Credit default swaps	—	174	—	174
Financial futures	12	—	—	12
Total financial liabilities carried at fair value	$ 72	$ 14,763	$ —	$ 14,835

The Company does not have any financial instruments that were carried at net asset value as a practical expedient.

The following presents the Company's fair value hierarchy for assets and liabilities that are carried at fair value:

	December 31, 2024			
	Level 1	Level 2	Level 3	Total
	(In Millions)			
Financial assets:				
Bonds:				
Special revenue	$ —	$ 1	$ —	$ 1
Industrial and miscellaneous	725	111	265	1,101
Preferred stocks	44	—	46	90
Common stocks - subsidiaries and affiliates	16	—	134	150
Common stocks - unaffiliated	293	—	905	1,198
Derivatives:				
Interest rate swaps	—	20,508	—	20,508
Options	114	453	—	567
Currency swaps	—	2,631	—	2,631
Forward contracts	—	412	—	412
Credit default swaps	—	2	—	2
Financial Futures	15	—	—	15
Separate account assets	33,240	14,194	1,817	49,251
Total financial assets carried at fair value	$ 34,447	$ 38,312	$ 3,167	$ 75,926
Financial liabilities:				
Derivatives:				
Interest rate swaps	$ —	$ 15,665	$ —	$ 15,665
Options	63	—	—	63
Currency swaps	—	201	—	201
Forward contracts	—	67	—	67
Credit default swaps	—	175	—	175
Financial futures	12	—	—	12
Total financial liabilities carried at fair value	$ 75	$ 16,108	$ —	$ 16,183

The Company reviews the fair value hierarchy classifications each reporting period. Changes in the observability of the valuation attributes and the level of market activity may result in a reclassification of certain financial assets or liabilities between fair value hierarchy classifications. Such reclassifications are reported as transfers between levels in the beginning fair value for the reporting period in which the changes occur.

The following presents changes in the Company's Level 3 assets carried at fair value:

	Balance as of 01/01/25	Gains (Losses) in Net Income	Losses (Gains) in Surplus	Purchases	Issuances	Sales	Settlements	Transfers In	Transfers Out	Other	Balance as of 06/30/25
	(In Millions)										
Financial assets:											
Bonds:											
Issuer credit obligations	$ 265	$ 22	$ (5)	$ 7	$ 30	$ (23)	$ (41)	$ —	$ —	$ 42	$ 297
Preferred stocks	46	—	1	10	—	—	—	—	—	(2)	55
Common Stocks:											
Subsidiaries and affiliates	134	1	3	—	5	(54)	—	—	—	—	89
Unaffiliated	905	—	(53)	47	(3)	(2)	(23)	—	—	—	871
Separate account assets	1,817	73	—	223	—	(54)	(13)	—	(23)	—	2,023
Total financial assets	$ 3,167	$ 96	$ (54)	$ 287	$ 32	$ (133)	$ (77)	$ —	$ (23)	$ 40	$ 3,335

	Balance as of 01/01/24	Gains (Losses) in Net Income	Losses (Gains) in Surplus	Purchases	Issuances	Sales	Settlements	Transfers In	Transfers Out	Other	Balance as of 12/31/24
	(In Millions)										
Financial assets:											
Bonds:											
Industrial and miscellaneous	$ 172	$ (130)	$ 9	$ 7	$ 3	$ —	$ (10)	$ —	$ —	$ 214	$ 265
Preferred stocks	63	(9)	8	—	—	—	—	—	—	(16)	46
Common Stocks:											
Subsidiaries and affiliates	177	3	3	415	(259)	66	(346)	—	(156)	231	134
Unaffiliated	957	(6)	136	258	221	(12)	(674)	25	—	—	905
Separate account assets	1,914	83	—	21	—	(196)	(5)	—	—	—	1,817
Total financial assets	$ 3,283	$ (59)	$ 156	$ 701	$ (35)	$ (142)	$ (1,035)	$ 25	$(156)	$ 429	$ 3,167

Other transfers include assets that are either no longer carried at fair value or have just begun to be carried at fair value, such as assets with no level changes but a change in the lower of cost or market carrying basis. Industrial and miscellaneous bonds in other contain assets that are now carried at fair value due to ratings changes and assets are no longer carried at fair value where the fair value is now higher than the book value.

Level 3 transfers in are assets that are consistently carried at fair value but have had a level change. Common stocks unaffiliated assets were transferred from Level 2 to Level 3 due to a change in the observability of pricing inputs, at the beginning fair value for the reporting period.

5. *Investments*

The Company maintains a diversified investment portfolio. Investment policies limit concentration in any asset class, geographic region, industry group, economic characteristic, investment quality or individual investment.

a. Bonds

The carrying value and fair value of bonds were as follows:

	June 30, 2025			
	Carrying Value	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(In Millions)			
Issuer credit obligations:				
Corporate bonds	$ 81,673	$ 598	$ 7,544	$ 74,727
Bank loans	9,666	67	120	9,613
U.S. government obligation	4,876	30	617	4,289
Municipal bonds	2,122	25	143	2,004
Bond issued from SEC registered BDC/CEF/REIT	2,050	24	62	2,012
Single entity backed bonds	1,948	23	57	1,914
Other U.S. government securities	1,747	65	19	1,793
Non-U.S. sovereign jurisdiction securities	1,588	10	321	1,277
SVO - identified bond funds	729	—	—	729
Project finance bonds issued by operating entities	320	4	29	295
Other issuer credit obligations	51	—	2	49
Total issuer credit obligations	106,770	846	8,914	98,702
Asset-back securities:				
Non-agency - CLOs/CBOs/CDOs	17,339	55	10	17,384
Equity-backed securities	10,185	3	148	10,040
Non-agency residential mortgage-backed securities	3,962	75	27	4,010
Non-agency commercial mortgage-backed securities	2,704	15	275	2,444
Lease-backed securities	1,252	11	40	1,223
Agency residential mortgage-backed securities	217	—	3	214
Agency commercial mortgage-backed securities	28	—	2	26
Other financial asset-backed securities	24,728	95	285	24,538
Total asset-backed securities	$ 60,415	$ 254	$ 790	$ 59,879
Total bonds	$ 167,185	$ 1,100	$ 9,704	$ 158,581

The June 30, 2025 gross unrealized losses exclude $163 million of losses included in the carrying value. These losses include $163 million from NAIC Class 6 bonds and less than $1 million from RMBS and CMBS whose ratings were obtained from third-party modelers. These losses were primarily included in industrial and miscellaneous or parent, subsidiaries and affiliates.

	December 31, 2024			
	Carrying Value	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(In Millions)			
U.S. government and agencies	$ 5,604	$ 22	$ 658	$ 4,968
All other governments	979	6	176	809
States, territories and possessions	157	—	11	146
Political subdivisions	276	5	16	265
Special revenue	3,402	36	117	3,321
Industrial and miscellaneous	139,384	743	9,213	130,914
Hybrid securities	1,019	44	22	1,041
Parent, subsidiaries and affiliates	12,808	29	408	12,429
Total	$ 163,629	$ 885	$ 10,621	$ 153,893

The December 31, 2024 gross unrealized losses exclude $186 million of losses included in the carrying value. These losses include $183 million from NAIC Class 6 bonds and $3 million from RMBS and CMBS whose ratings were obtained from third-party modelers. These losses were primarily included in industrial and miscellaneous or parent, subsidiaries and affiliates.

As of June 30, 2025, investments in structured and loan-backed securities that had unrealized losses, which were not recognized in earnings, had a fair value of $11,524 million. Securities in an unrealized loss position for less than 12 months had a fair value of $5,182 million and unrealized losses of $46 million. Securities in an unrealized loss position for greater than 12 months had a fair value of $6,341 million and unrealized losses of $724 million. These securities were primarily categorized as industrial and miscellaneous or parent, subsidiaries and affiliates.

As of December 31, 2024, investments in structured and loan-backed securities that had unrealized losses, which were not recognized in earnings, had a fair value of $11,250 million. Securities in an unrealized loss position for less than 12 months had a fair value of $4,249 million and unrealized losses of $42 million. Securities in an unrealized loss position for greater than 12 months had a fair value of $7,001 million and unrealized losses of $887 million. These securities were primarily categorized as industrial and miscellaneous or parent, subsidiaries and affiliates.

In the course of the Company’s investment management activities, securities may be sold and reacquired within 30 days to enhance the Company’s yield on its investment portfolio. The Company did not sell any securities with the NAIC Designation 3 or below for the six months ended June 30, 2025 or 2024 that were reacquired within 30 days of the sale date.

Residential mortgage-backed exposure

Residential mortgage-backed securities (RMBS) are included in the U.S. government and agencies, special revenue and industrial and miscellaneous bond categories. The Alt-a category includes option adjustable-rate mortgages and the subprime category includes 'scratch and dent' or reperforming pools, high loan-to-value pools and pools where the borrowers have very impaired credit but the average loan-to-value is low, typically 70% or below. In identifying Alt-A and subprime exposure, management used a combination of qualitative and quantitative factors, including FICO scores and loan-to-value ratios.

As of June 30, 2025, RMBS had a total carrying value of $3,581 million and a fair value of $3,619 million of which approximately 2%, based on carrying value, was classified as Alt-A. Alt-A and subprime RMBS had a total carrying value of $2,057 million and a fair value of $2,089 million. As of December 31, 2024, RMBS had a total carrying value of $3,882 million and a fair value of $3,904 million of which approximately 2%, based on carrying value, was classified as Alt-A. Alt-A and subprime RMBS had a total carrying value of $2,246 million and a fair value of $2,268 million.

b. 5GI Securities

Securities owned by the Company with an NAIC designation of 5GI securities:

	June 30, 2025			December 31, 2024		
	Number of 5GI Securities	Carrying Value	Fair Value	Number of 5GI Securities	Carrying Value	Fair Value
	(In Millions)					
Investments:						
Bonds - amortized cost	$ 244	$ 1,182	$ 1,162	$ 242	$ 1,002	$ 987
Preferred stock - amortized cost	3	3	8	—	—	—
Preferred stock - fair value	2	1	1	2	1	1
Total	$ 249	$ 1,186	$ 1,171	$ 244	$ 1,003	$ 988

c. Preferred stocks

No significant changes.

d. Common stocks – subsidiaries and affiliates

MMHLLC paid $770 million in dividends to MassMutual for the six months ended June 30, 2025, $570 million of which were declared in 2024, and paid $785 million in dividends to MassMutual for the six months ended June 30, 2024, $630 million which was declared in 2023.

In May 2025, MMHLLC distributed a return of capital of $1,150 million to MassMutual as a result of Invesco repurchasing a portion of its outstanding MassMutual preferred shares. This transaction is expected to enhance MassMutual's financial flexibility and be earnings accretive for Invesco. MassMutual will retain approximately 18.2% ownership of Invesco's common shares.

MassMutual contributed capital of $36 million to MMHLLC through the period ended June 30, 2025.

On March 14, 2025, Barings LLC, a downstream wholly-owned subsidiary of MMHLLC, acquired Artemis Real Estate Partners, a U.S.-based real estate debt and equity investment manager with gross assets under management of approximately $11 billion. The total purchase price included an upfront payment of $396 million and a final payment of $255 million to be paid in 2030. The acquisition is expected to bolster Barings LLC’s position as a key player in the real estate asset management sector.

Subsidiaries of MMHLLC are involved in litigation and investigations arising in the ordinary course of their business, which seek compensatory damages, punitive damages and equitable remedies. Although the Company is not aware of any actions or allegations that reasonably could give rise to a material adverse impact to the Company’s financial position or liquidity, the outcome of litigation cannot be foreseen with certainty. It is the opinion of management that the ultimate resolution of these matters will not materially impact the Company’s financial position or liquidity. However, the outcome of a particular proceeding may be material to the Company’s Interim Statutory Statements of Changes in Surplus for a particular period depending upon, among other factors, the size of the loss and the level of the Company’s changes in surplus for the period.

e. Common stocks – unaffiliated

No significant changes.

f. Mortgage loans

Mortgage loans are comprised of commercial mortgage loans and residential mortgage loans. The Company's commercial mortgage loans primarily finance various types of real estate properties throughout the U.S., the United Kingdom and Canada. The Company holds commercial mortgage loans for which it is the primary lender or a participant or co-lender in a mortgage loan agreement and mezzanine loans that are subordinate to senior secured first liens. Residential mortgage loans are primarily seasoned pools of homogeneous residential mortgage loans, some of which are backed by Federal Housing Administration (FHA) and Veterans Administration (VA) guarantee.

The carrying value and fair value of the Company's mortgage loans were as follows:

	June 30, 2025		December 31, 2024	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	(In Millions)			
Commercial mortgage loans:				
Primary lender	$ 16,217	$ 14,985	$ 16,854	$ 15,477
Mezzanine loans	107	103	108	98
Total commercial mortgage loans	16,324	15,088	16,962	15,575
Residential mortgage loans:				
FHA insured and VA guaranteed	1,590	1,503	1,599	1,487
Other residential loans	6,290	6,301	5,131	5,083
Total residential mortgage loans	7,880	7,804	6,730	6,570
Total mortgage loans	$ 24,204	$ 22,892	$ 23,692	$ 22,145

The following presents a summary of the Company's impaired mortgage loans as of June 30, 2025 and December 31, 2024:

	June 30, 2025				
	Carrying Value	Average Carrying Value	Unpaid Principal Balance	Valuation Allowance	Interest Income
	(In Millions)				
With allowance recorded:					
Commercial mortgage loans:					
Primary lender	$ 102	$ 97	$ 103	$ (9)	$ 3
Total	102	97	103	(9)	3
With no allowance recorded:					
Commercial mortgage loans:					
Primary lender	$ 258	$ 243	$ 364	$ —	$ 1
Total	258	243	364	—	1
Total impaired commercial mortgage loans	$ 360	$ 340	$ 467	$ (9)	$ 4

	December 31, 2024				
	Carrying Value	Average Carrying Value	Unpaid Principal Balance	Valuation Allowance	Interest Income
	(In Millions)				
With allowance recorded:					
Commercial mortgage loans:					
Primary lender	$ 88	$ 102	$ 125	$ (35)	$ 4
Total	88	102	125	(35)	4
With no allowance recorded:					
Commercial mortgage loans:					
Primary lender	$ 399	$ 403	$ 552	$ —	$ 3
Total	399	403	552	—	3
Total impaired commercial mortgage loans	$ 487	$ 505	$ 677	$ (35)	$ 7

Allowance for credit losses:

	June 30, 2025	December 31, 2024
Balance at the beginning of year	$ (35)	$ (157)
Additions charged to operations	(14)	(94)
Direct write-downs charged against the allowances	38	—
Recoveries of amounts previously charged off	2	216
Balance at the end of the period	$ (9)	$ (35)

g. Real estate

No significant changes.

h. Partnerships and limited liability companies

No significant changes.

i. Derivatives

The Company uses derivative financial instruments in the normal course of business to manage risks, primarily to reduce currency, interest rate and duration imbalances determined in asset/liability analyses. The Company also uses a combination of derivatives and fixed income investments to create replicated synthetic investments. These replicated synthetic investments are created when they are economically more attractive than the actual instrument or when similar instruments are unavailable. Replicated synthetic investments are created either to hedge and reduce the Company's credit exposure or to create an investment in a particular asset. The Company held replicated synthetic investments with a notional amount of $35,239 million as of June 30, 2025 and $33,462 million as of December 31, 2024, as defined under statutory accounting practices as the result of pairing of a long derivative contract with cash instruments.

The Company’s derivative strategy employs a variety of derivative financial instruments, including: interest rate, currency, equity, bond, and credit default swaps; options; forward contracts and financial futures. Investment risk is assessed on a portfolio basis and individual derivative financial instruments are not generally designated in hedging relationships; therefore, as allowed by statutory accounting practices, the Company intentionally has not applied hedge accounting.

Interest rate swaps are primarily used to more closely match the cash flows of assets and liabilities. Interest rate swaps are also used to mitigate changes in the value of assets anticipated to be purchased and other anticipated transactions and commitments. The Company uses currency swaps for the purpose of managing currency exchange risks in its assets and liabilities.

The Company's principal derivative exposures to market risk are interest rate risk, which includes inflation and credit risk. Interest rate risk pertains to the change in fair value of the derivative instruments as a result of changes in market interest rates. The Company is exposed to credit-related losses in the event of nonperformance by counterparties to derivative financial instruments. The Company regularly monitors counterparty credit ratings, derivative positions, valuations and the value of collateral posted to ensure counterparties are credit-worthy and the concentration of exposure is minimized and monitors its derivative credit exposure as part of its overall risk management program.

The Company enters derivative transactions through bilateral derivative agreements with counterparties, or through over the counter cleared derivatives with a counterparty and the use of a clearinghouse. To minimize credit risk for bilateral transactions, the Company and its counterparties generally enter into master netting agreements based on agreed upon requirements that outline the framework for how collateral is to be posted in the amount owed under each transaction, subject to certain minimums. For over the counter cleared derivative transactions between the Company and a counterparty, the parties enter into a series of master netting and other agreements that govern, among other things, clearing and collateral requirements. These transactions are cleared through a clearinghouse and each derivative counterparty is only exposed to the default risk of the clearinghouse. Certain interest rate swaps and credit default swaps are considered cleared transactions. These cleared transactions require initial and daily variation margin collateral postings. These agreements allow for contracts in a positive position, in which amounts are due to the Company, to be offset by contracts in a negative position. This right of offset, combined with collateral obtained from counterparties, reduces the Company's credit exposure.

Net collateral pledged to the counterparties was $2,329 million as of June 30, 2025, and net collateral pledged by the counterparties was $441 million as of December 31, 2024. In the event of default, the full market value exposure at risk, net of offsets and collateral, was $120 million and $160 million as of June 30, 2025 and December 31, 2024, respectively. The statutory net amount at risk, defined as net collateral pledged and statement values excluding accrued interest, was $4,500 million and $5,170 million as of June 30, 2025 and December 31, 2024, respectively.

As of June 30, 2025, the company had the right to rehypothecate or repledge securities totaling $856 million, pledged by the counterparties, of the $2,329 million of the net collateral pledged to counterparties. As of December 31, 2024, the company had the right to rehypothecate or repledge securities totaling $1,489 million, pledged by the counterparties, of the $441 million of the net collateral pledged to counterparties. There were no securities rehypothecated to other counterparties as of June 30, 2025 or December 31, 2024.

The following summarizes the carrying values and notional amounts of the Company's derivative financial instruments:

	June 30, 2025				December 31, 2024			
	Assets		Liabilities		Assets		Liabilities	
	Carrying Value	Notional Amount	Carrying Value	Notional Amount	Carrying Value	Notional Amount	Carrying Value	Notional Amount
	(In Millions)							
Interest rate swaps	$ 18,570	$194,133	$ 13,665	$151,679	$ 20,513	$173,481	$ 15,665	$164,073
Options	600	21,819	61	11,201	567	11,002	63	242
Currency swaps	2,770	26,328	2,476	20,760	2,711	31,042	792	15,461
Forward contracts	25	2,239	367	16,576	412	12,503	67	5,519
Credit default swaps	1	140	174	7,924	2	162	175	7,903
Financial futures	17	521	12	524	15	567	12	506
Total	$ 21,983	$245,180	$ 16,755	$208,664	$ 24,220	$228,757	$ 16,774	$193,704

The average fair value of outstanding derivative assets was $22,541 and $23,433 million for the six months ended June 30, 2025 and 2024, respectively. The average fair value of outstanding derivative liabilities was $16,251 and $16,342 million for the six months ended June 30, 2025 and 2024, respectively.

The following summarizes the notional amounts of the Company's credit default swaps by contractual maturity:

	June 30, 2025	December 31, 2024
	(In Millions)	
Due after one year through five years	$ 8,064	$ 8,065
Total	$ 8,064	$ 8,065

The following summarizes the Company's net realized (losses) gains on closed contracts and change in net unrealized (losses) gains related to market fluctuations on open contracts by derivative type:

	Six Months Ended June 30,			
	2025		2024	
	Net Realized Gains (Losses) on Closed Contracts	Change in Net Unrealized (Losses) Gains on Open Contracts	Net Realized (Losses) Gains on Closed Contracts	Change in Net Unrealized (Losses) Gains on Open Contracts
	(In Millions)			
Interest rate swaps	$ (24)	$ 58	$ (125)	$ (460)
Currency swaps	(19)	(217)	27	(87)
Options	—	20	2	(1)
Credit default swaps	27	(34)	(64)	54
Forward contracts	(349)	(688)	(61)	278
Financial futures	(15)	1	(26)	(25)
Total	$ (380)	$ (860)	$ (247)	$ (241)

j. Repurchase agreements

The Company has entered into repurchase agreements whereby the Company sells securities and simultaneously agrees to repurchase the same or substantially the same securities. These repurchase agreements are accounted for as collateralized borrowings with the proceeds from the sale of the securities recorded as a liability and the underlying securities continue to be recorded as an investment by the Company. Earnings on these investments are recorded as investment income and the difference between the proceeds and the amount at which the securities will be subsequently reacquired is amortized as interest expense. Repurchase agreements are used as a tool for overall portfolio management to help ensure the Company maintains adequate assets in order to provide yield, spread and duration to support liabilities and other corporate needs.

The Company provides collateral, as dictated by the repurchase agreements, to the counterparty in exchange for a loan. If the fair value of the securities sold becomes less than the loan, the counterparty may require additional collateral.

The carrying value, which is at cost, reported in the Company's liabilities as repurchase agreements approximates the fair value.

The following table provides contractual maturity, maximum balance during the year, and ending balance for bilateral repurchase agreements:

	June 30,			
	2025		2024	
	Maximum Balance	Ending Balance	Maximum Balance	Ending Balance
	(In Millions)			
From 1 Week to 1 Month	$ —	$ —	$ 178	$ 178
Greater than 1 Month to 3 Months	6,461	3,384	2,711	2,537
Greater than 3 Months to 1 Year	—	—	2,712	722
Total	$ 6,461	$ 3,384	$ 5,601	$ 3,437

The company did not have any repurchase agreements where securities sold and/or acquired resulted in default as of June 30, 2025 and December 31, 2024.

The following table presents the fair value and amortized cost of securities sold under bilateral repurchase agreement transactions, which were all NAIC rating of 1, for the six months ended June 30, 2025 and 2024:

	Maximum Balance	Ending Balance
	(In Millions)	
March 31, 2025		
Fair Value	$ (3,524)	$ (3,497)
Carrying Value	$ —	$ (3,838)
June 30, 2025		
Fair Value	$ (3,559)	$ (3,451)
Carrying Value	$ —	$ (3,466)

	Maximum Balance	Ending Balance
	(In Millions)	
March 31, 2024		
Fair Value	$ 4,473	$ 3,466
Carrying Value	$ —	$ 3,466
June 30, 2024		
Fair Value	$ 3,532	$ 3,449
Carrying Value	$ —	$ 3,799

The following table presents the cash collateral and the fair value of security collateral, which were all NAIC rating of 1, received in the bilateral repurchase agreement transactions for the six months ended June 30, 2025 and 2024:

	Maximum Balance		Ending Balance	
	Cash	Securities	Cash	Securities
	(In Millions)			
March 31, 2025	$ 3,358	$ 10	$ 3,426	$ 5
June 30, 2025	$ 6,388	$ 4	$ 3,391	$ 3
March 31, 2024	$ 96	$ 3,530	$ 16	$ 3,487
June 30, 2024	$ 3,741	$ 14	$ 3,431	$ —

The following table presents collateral received, aggregate allocation of the collateral by the remaining contractual maturity of the repurchase agreements for the six months ended June 30, 2025 and 2024:

	Overnight and Continuous	30 Days or Less	31 to 90 Days	> 90days
	(In Millions)			
Maximum Balance				
March 31, 2025	$ —	$ —	$ 3,252	$ 145
June 30, 2025	$ —	$ —	$ 3,639	$ —
March 31, 2024	$ —	$ —	$ 1,626	$ 1,880
June 30, 2024	$ —	$ 14	$ 1,551	$ 1,927
Ending Balance				
March 31, 2025	$ —	$ —	$ 3,252	$ 145
June 30, 2025	$ —	$ —	$ 3,639	$ —
March 31, 2024	$ —	$ —	$ 1,626	$ 1,880
June 30, 2024	$ —	$ 14	$ 1,551	$ 1,927

The following table presents cash collateral received that has been reinvested, the total reinvested cash and the aggregate amortized cost and fair value of the invest asset acquired with the cash collateral for the six months ended June 30, 2025 and 2024:

	1 to 2 Years		2 to 3 Years		> 3 Years	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Maximum Balance						
March 31, 2025	$ —	$ —	$ 1,163	$ 1,192	$ 2,260	$ 1,947
June 30, 2025	$ —	$ —	$ 1,177	$ 1,206	$ 1,629	$ 1,422
March 31, 2024	$ —	$ —	$ —	$ —	$ —	$ —
June 30, 2024	$ —	$ —	$ 1,125	$ 1,139	$ 2,674	$ 2,310

	1 to 2 Years		2 to 3 Years		> 3 Years	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Ending Balance						
March 31, 2025	$ —	$ —	$ 1,163	$ 1,192	$ 2,260	$ 1,947
June 30, 2025	$ —	$ —	$ 1,177	$ 1,206	$ 1,629	$ 1,422
March 31, 2024	$ —	$ —	$ —	$ —	$ —	$ —
June 30, 2024	$ —	$ —	$ 1,125	$ 1,139	$ 2,674	$ 2,310

To help manage the mismatch of maturity dates between the security lending transactions and the related reinvestment of the collateral received, the Company invests in highly liquid assets.

The following table presents liability recognized to return cash collateral, and the liability recognized to return securities received as collateral as required pursuant to the terms of the secured borrowing transactions for the six months ended June 30, 2025 and 2024:

	Maximum Balance		Ending Balance	
	Cash	Securities	Cash	Securities
	(In Millions)			
March 31, 2025	$ 3,358	$ 10	$ 3,426	$ 5
June 30, 2025	$ 6,388	$ 4	$ 3,391	$ 3
March 31, 2024	$ 96	$ 3,530	$ 16	$ 3,487
June 30, 2024	$ 3,741	$ 14	$ 3,431	$ —

The company did not have any reverse repurchase transactions accounted for as secured borrowings as of June 30, 2025 and December 31, 2024.

The Company did not have any repurchase agreements or reverse repurchase agreements transactions accounted for as a sale as of June 30, 2025 and December 31, 2024.

k. Net investment income

Net investment income, including IMR amortization, comprised the following:

	Six Months Ended June 30, 2025	Six Months Ended June 30, 2024
	(In Millions)	
Bonds	$ 4,366	$ 3,972
Preferred stocks	20	12
Common stocks - subsidiaries and affiliates	201	155
Common stocks - unaffiliated	28	56
Mortgage loans	613	570
Policy loans	562	500
Real estate	39	39
Partnerships and limited liability companies	396	476
Derivatives	(29)	(236)
Cash, cash equivalents and short-term investments	131	203
Other	122	163
Subtotal investment income	6,449	5,910
Amortization of the IMR	(57)	(55)
Net gains from separate accounts	4	—
Investment expenses	(517)	(526)
Net investment income	$ 5,879	$ 5,329

l. Net realized capital losses

Net realized capital losses, which include other-than-temporary impairments (OTTI) and are net of deferral to the IMR, comprised the following:

	Six Months Ended June 30, 2025	Six Months Ended June 30, 2024
	(In Millions)	
Bonds	$ (53)	$ (253)
Preferred stocks	(43)	(6)
Common stocks - subsidiaries and affiliates	—	21
Common stocks - unaffiliated	(8)	19
Mortgage loans	(120)	(41)
Real estate	3	—
Partnerships and limited liability companies	(171)	(48)
Derivatives	(381)	(247)
Other	38	7
Net realized capital losses before federal and state taxes and deferral to the IMR	(735)	(548)
Net federal and state tax benefit	212	47
Net realized capital losses before deferral to the IMR	(523)	(501)
Net after tax capital losses deferred to the IMR	89	228
Net realized capital losses	$ (434)	$ (273)

OTTI, included in the net realized capital losses, consisted of the following:

	Six Months Ended June 30, 2025	Six Months Ended June 30, 2024
	(In Millions)	
Bonds	$ (71)	$ (102)
Common stocks - subsidiaries and affiliates	(4)	—
Preferred stock	(11)	—
Mortgage loans	(72)	—
Partnerships and limited liability companies	(103)	(45)
Total OTTI	$ (261)	$ (147)

The Company recognized OTTI of $12 million and $9 million for the six months ended June 30, 2025 and 2024, respectively, on structured and loan-backed securities, which are included in bonds, primarily due to the present value of expected cash flows being less than the amortized cost.

The Company utilized internally-developed models to determine less than 1% of the $71 million of bond OTTI for the six months ended June 30, 2025, and less than 1% of the $102 million of bond OTTI for the six months ended June 30, 2024. The remaining OTTI amounts were determined using external inputs such as publicly observable fair values and credit ratings. Refer to *Note 2dd. "Net realized capital losses including other-than-temporary impairments and unrealized capital gains (losses)"* for more information on assumptions and inputs used in the Company's OTTI models.

m. Restricted assets

No significant changes.

6. Federal income taxes

No significant changes.

7. Other than invested assets

a. Admitted negative (disallowed) IMR

As of June 30, 2025, the Company had $1,457 million of disallowed IMR in aggregate and in the general account.

As of June 30, 2025, the calculated adjusted general capital and surplus was $24,158 million.

As of June 30, 2025, the percentage of adjusted general capital and surplus for which the admitted disallowed IMR represents was 6%.

The following represents allocated gains (losses) to IMR from derivatives:

	June 30, 2025
	(In Millions)
Unamortized fair value derivative gain	$ 2,717
Unamortized fair value derivative losses	(3,936)
Total allocated net losses to IMR from derivatives	$ (1,219)

When the Company sells bonds and recognizes losses due to interest-rate related factors, and the realized losses are transferred to the IMR, the sales proceeds are generally used for reinvestment as governed by prudent asset liability management (ALM) policies and procedures. Such sales of bonds are intermittently used to meet liquidity needs and managed within the ALM framework.

IMR losses for fixed income related derivatives were in accordance with documented risk management procedures, as well as the Company's derivative use plans, and reflect the same historical treatment of derivative gains reversed to IMR and amortized rather than immediately recognized as realized gain upon termination.

As of June 30, 2025, the IMR asset admitted under the currently adopted statutory accounting interpretation includes approximately $119 million, net of tax, related to various FWH reinsurance treaties. Included in the FWH assets are reimbursements of capital losses on the invested assets to back the ceded reinsurance liabilities and are recorded as an adjustment to the income statement. Both the IMR and FWH assets are admitted under statutory accounting guidance.

8. Policyholders' liabilities

a. Liabilities for deposit-type contracts

Funding agreements are investment contracts sold to domestic and international institutional investors. Funding agreement liabilities are equal to the account value and are established by contract deposits, increased by interest credited and decreased by contract coupon payments and maturities. Contract holders do not have the right to terminate the contract prior to the contractually stated maturity date. The Company may retire funding agreements prior to the contractually-stated maturity date by repurchasing the agreement in the market or, in some cases, by calling the agreement. If this occurs, the difference in value is an adjustment to interest credited to liabilities for deposit-type contracts in the Consolidated Statutory Statements of Operations. Credited interest rates vary by contract and can be fixed or floating. Agreements do not have put provisions or ratings-based triggers. The liability of non-U.S. dollar denominated funding agreements may increase or decrease due to changes in foreign exchange rates. Currency swaps are employed to eliminate foreign exchange risk from all funding agreements issued to back non-U.S. dollar denominated notes.

Under the note program, MassMutual creates special purpose entities (SPEs), which are investment vehicles or trusts, for the purpose of issuing medium-term notes to investors. Proceeds from the sale of the medium-term notes issued by these SPEs are used to purchase funding agreements from MassMutual. The payment terms of any particular series of notes are matched by the payment terms of the funding agreement securing the series. Notes are currently issued from MassMutual's $22.0 billion Global Medium-Term Note Program, which increased from $16.0 billion in 2025.

On January 10, 2025, MassMutual issued a $600 million funding agreement with a 4.95% fixed rate and a 5-year maturity.

On March 27, 2025, MassMutual issued a $600 million funding agreement with a 4.45% fixed rate and a 3-year maturity.

On May 7, 2025, MassMutual issued a $800 million funding agreement with a 4.55% fixed rate and a 5-year maturity.

On June 11, 2025, MassMutual issued a €700 million funding agreement with a 3.25% fixed rate and a 7-year maturity.

b. Additional liability for annuity contracts

Certain variable annuity contracts include additional death or other insurance benefit features, such guaranteed minimum death benefits (GMDB), guaranteed minimum income benefits (GMIB), guaranteed minimum accumulation benefits (GMAB) and guaranteed lifetime withdrawal benefits (GLWB). In general, living benefit guarantees require the contract holder or policyholder to adhere to a company approved asset allocation strategy. Election of these benefit guarantees is generally only available at contract issue.

The following shows the changes in the liabilities for GMDB, GMIB, GMAB and GLWB (in millions):

Liability as of January 1, 2024	$	49
Incurred guarantee benefits		20
Paid guarantee benefits		(8)
Liability as of December 31, 2024		61
Incurred guarantee benefits		(8)
Paid guarantee benefits		(5)
Liability as of June 30, 2025	$	48

The following summarizes the account values, net amount at risk and weighted average attained age for variable annuity contracts with GMDB, GMIB, GMAB and GLWB classified as policyholders' reserves and separate account liabilities. The net amount at risk is defined as the minimum guarantee less the account value calculated on a policy-by-policy basis, but not less than zero.

	June 30, 2025			December 31, 2024		
	Account Value	Net Amount at Risk	Weighted Average Attained Age	Account Value	Net Amount at Risk	Weighted Average Attained Age
	($ In Millions)					
GMDB	$ 8,028	$ 78	68	$ 8,161	$ 80	68
GMIB Basic	386	2	74	412	3	73
GMIB Plus	1,196	404	70	1,200	429	69
GMAB	1,001	1	64	1,089	4	64
GLWB	74	11	77	82	13	76

As of June 30, 2025, the GMDB account value above consists of $792 million within the general account and $7,236 million within separate accounts that includes $3,866 million of Modco assumed. As of December 31, 2024, the GMDB account value above consists of $819 million within the general account and $7,342 million within separate accounts that includes $3,807 million of Modco assumed.

9. Reinsurance

No significant changes.

10. Withdrawal characteristics

No significant changes.

11. Debt

No significant changes.

12. Employee benefit plans

The Company sponsors multiple employee benefit plans, providing retirement, life, health and other benefits to employees, certain employees of unconsolidated subsidiaries, agents, general agents and retirees who meet plan eligibility requirements.

a-f. No significant changes.

g. Net periodic cost

The net periodic cost represents the annual accounting income or expense recognized by the Company and is included in general insurance expenses in the Interim Statutory Statements of Operations. The net periodic cost recognized is as follows:

	Six Months Ended June 30,			
	2025	2024	2025	2024
	Pension Benefits		Other Postretirement Benefits	
	(In Millions)			
Service cost	$ 4	$ 49	$ 4	$ 4
Interest cost	68	61	8	7
Expected return on plan assets	(84)	(85)	—	—
Amortization of unrecognized losses (gains)	7	10	(5)	(4)
Amortization of unrecognized prior service benefit	—	—	(2)	(2)
Total net periodic (benefit) expense	$ (5)	$ 35	$ 5	$ 5

13. Employee compensation plans

No significant changes.

14. Surplus notes

No significant changes.

15. Presentation of the Interim Statutory Statements of Cash Flows

The following table presents those transactions that have affected the Company's recognized assets or liabilities but have not resulted in cash receipts or payments during the six months ended June 30, 2025 and 2024. Accordingly, the Company has excluded these non-cash activities from the Statutory Statements of Cash Flows for the six months ended June 30, 2025 and 2024.

	Six Months Ended June 30,	
	2025	2024
	(In Millions)	
Transfer of bonds to partnerships and limited liability companies	$ 614	$ —
Bond conversions and refinancing	343	380
Transfer of bonds to preferred stock	286	—
Transfer of mortgage loans to partnerships and limited liability companies	279	135
Change in market value of corporate owned life insurance asset	122	111
Transfer of mortgage loans to real estate	28	—
Stock conversions	25	4,098
Net investment income payment-in-kind bonds	23	16
Transfer of partnerships and limited liability companies to partnerships and limited liability companies	6	76
Transfer of mortgage loans to bonds	1	85
Transfer of mortgage loans to mortgage loans	—	17

16. Business risks, commitments and contingencies

a. Risks and uncertainties

The Company operates in a business environment subject to various risks and uncertainties. The principal risks include insurance and underwriting risks, investment and interest rate risks, currency exchange risk and credit risk. The combined impact of these risks could have a material, adverse effect on the Company's financial statements or result in operating losses in future periods. The Company employs the use of reinsurance, portfolio diversification, asset/liability management processes and other risk management techniques to mitigate the impact of these risks. The interim risks and uncertainties disclosure should be read in conjunction with the statutory disclosure in the Company's 2024 audited year-end financial statements.

Insurance and underwriting risks

The Company prices its products based on estimated benefit payments reflecting assumptions with respect to mortality, morbidity, longevity, persistency, interest rates and other factors. If actual policy experience emerges that is significantly and adversely different from assumptions used in product pricing, the effect could be material to the profitability of the Company. For participating whole life products, the Company's dividends to policyholders primarily reflect the difference between actual investment, mortality, expense and persistency experience and the experience embedded in the whole life premiums and guaranteed elements. The Company also reinsures certain life insurance and other LTC insurance policies to mitigate the impact of its underwriting risk.

Investment and interest rate risks

The fair value, cash flows and earnings of investments can be influenced by a variety of factors including changes in interest rates, credit spreads, equity markets, portfolio asset allocation and general economic conditions. The Company employs a rigorous asset/liability management process to help mitigate the economic impacts of various investment risks, in particular, interest rate risk. By effectively matching the market sensitivity of assets with the liabilities they support, the impact of interest rate changes is addressed, on an economic basis, as the change in the value of the asset is offset by a corresponding change in the value of the supported liability. The Company uses derivatives, such as interest rate swaps and swaptions, as well as synthetic assets to reduce interest rate and duration imbalances determined in asset/liability analyses.

The levels of U.S. interest rates are influenced by U.S. monetary policies and by the relative attractiveness of U.S. markets to investors versus other global markets. As interest rates increase, certain debt securities may experience amortization or prepayment speeds that are slower than those assumed at purchase, impacting the expected maturity of these securities and the ability to reinvest the proceeds at the higher yields. Rising interest rates may also result in a decrease in the fair value of the investment portfolio. As interest rates decline, certain debt securities may experience accelerated amortization and prepayment speeds than what was assumed at purchase. During such periods, the Company is at risk of lower net investment income as it may not be able to reinvest the proceeds at comparable yields. Declining interest rates may also increase the fair value of the investment portfolio.

Interest rates also have an impact on the Company’s products with guaranteed minimum payouts and on interest credited to account holders. As interest rates decrease, investment spreads may contract as crediting rates approach minimum guarantees, resulting in an increased liability.

In periods of increasing interest rates, policy loans, surrenders and withdrawals may increase as policyholders seek investments with higher perceived returns. This could result in cash outflows requiring the Company to sell invested assets at a time when the prices of those assets are adversely affected by the increase in market interest rates, which could cause the Company to realize investment losses.

Currency exchange risk

The Company has currency risk due to its non-U.S. dollar denominated investments and medium-term notes along with its indirect international operations. The Company mitigates a portion of its currency risk through the use of cross-currency swaps and forward contracts. Cross-currency swaps are used to minimize currency risk for certain non-U.S. dollar assets and liabilities through a pre-specified exchange of interest and principal. Forward contracts are used to hedge movements in exchange rates.

Credit and other market risks

The Company manages its investments to limit credit and other market risks by diversifying its portfolio among various security types and industry sectors as well as purchasing credit default swaps to transfer some of the risk.

Stressed conditions, volatility and disruptions in global capital markets or in particular markets or financial asset classes can have an adverse effect on the Company, in part because the Company has a large investment portfolio and assets supporting the Company’s insurance liabilities are sensitive to changing market factors. Global market factors, including interest rates, credit spread, equity prices, real estate markets, foreign currency exchange rates, consumer spending, business investment, government spending, the volatility and strength of the capital markets, deflation and inflation, all affect the business and economic environment and, ultimately, the profitability of the Company’s business. Disruptions in one market or asset class can also spread to other markets or asset classes. Upheavals in the financial markets can also affect the Company’s business through their effects on general levels of economic activity, employment and customer behavior.

Asset-based fees calculated as a percentage of the separate account assets are a source of revenue to the Company. Gains and losses in the investment markets may result in corresponding increases and decreases in the Company's separate account assets and related revenue.

Political Uncertainties

Political events, domestically or internationally, may directly or indirectly trigger or exacerbate risks related to product offerings, profitability, or any of the risk factors described above. Whether those underlying risk factors are driven by geopolitics or not, the Company's dynamic approach to managing risks enables management to identify risks, internally and externally, develop mitigation plans, and respond to risks in an attempt to proactively reduce the potential impact of each underlying risk factor on the Company.

b. Leases

MassMutual engaged in a sale-leaseback transaction with Bank of America, PNC, and US Bank (collectively the Banks) on May 22, 2025. The sale-leaseback transaction covered $152 million of software assets (capitalized costs, primarily consisting of software externally purchased and internally developed and/or customized), which were non-admitted under statutory accounting guidance. In return for the assets, the Banks provided $172 million of cash to MassMutual. The initial portion of the transaction is treated as sale and resulted in a deferred gain of $19 million. The second portion of the agreement is treated as an operating lease, which has a five-year term.

c. Litigation and regulatory matters

In the normal course of business, the Company is involved in disputes, litigation and governmental or regulatory inquiries, administrative proceedings, examinations and investigations, both pending and threatened. These matters, if resolved adversely against the Company or settled, may result in monetary damages, fines and penalties or require changes in the Company's business practices. The resolution or settlement of these matters is inherently difficult to predict. Based upon the Company's assessment of these pending matters, the Company does not believe that the amount of any judgment, settlement or other action arising from any pending matter is likely to have a material adverse effect on the statement of financial position. However, an adverse outcome in certain matters could have a material adverse effect on the results of operations for the period in which such matter is resolved, or an accrual is determined to be required, on the interim financial statement financial position, or on our reputation.

The Company evaluates the need for accruals of loss contingencies for each matter. When a liability for a matter is probable and can be estimated, the Company accrues an estimate of the loss offset by related insurance recoveries or other contributions, if any. An accrual may be subject to subsequent adjustment as a result of additional information and other developments. The resolution of matters is inherently difficult to predict, especially in the early stages of matter. Even if a loss is probable, due to many complex factors, such as speed of discovery and the timing of court decisions or rulings, a loss or range of loss may not be reasonably estimated until the later stages of the matter. For matters where a loss is material and it is either probable or reasonably possible then it is disclosed. For matters where a loss may be reasonably possible, but not probable, or is probable but not reasonably estimated, no accrual is established, but the matter, if material, is disclosed.

17. Related party transactions

Capital Contributions from MassMutual

- $76 million to Counterpointe MM Mortgage Lending in the period ending June 2025
- $140 million to DPI Acres in the period ending June 2025
- $28 million to Counterpointe MM Mortgage Lending in the period ending March 2025
- $26 million to ITPS Holding LLC in the period ending March 2025

Return of Capital to MassMutual

- DPI Ares paid $300 million in the period ending June 2025
- ITPS Holding LLC paid $25 million (non-cash) in the period ending March 2025

Dividends paid to MassMutual

- MMLIA paid $10 million in the period ending March 2025

Invesco and Barings LLC, MassMutual's subsidiary, have formed a strategic partnership for U.S. Wealth channels. MassMutual plans to invest up to $650 million in seed capital to support new private credit products. This partnership aims to expand Barings' product and distribution opportunities.

18. Subsequent events

Management of the Company has evaluated subsequent events through August 13, 2025, the date the financial statements were available to be issued to state regulators and subsequently on the Company's website. No events have occurred subsequent to the date of the financial statements, except for:

On July 4th, 2025, "An Act to Provide for Reconciliation Pursuant to Title II of the H. Con. Res. 14" (the Act) was enacted. The Act provides for corporate tax changes including, but not limited to, restoring full expensing of domestic research and development costs, restoring immediate deductibility of certain capital expenditures, and changes in the computations of U.S. taxation on international earnings. At this time, the Company does not anticipate that the new provisions of the Act will have a significant impact on the 2025 statutory financial statements.

On July 8, 2025, MassMutual issued a CAD$750 million funding agreement with a 4.127% fixed rate and a 7-year maturity.

On August 1, 2025, MassMutual issued a $300 million funding agreement with a floating rate based on the Secured Overnight Financing Rate and a 3-year maturity.

19. Impairment listing for loan-backed and structured securities

The following are the total cumulative adjustments and impairments for loan-backed and structured securities since July 1, 2009:

Period Ended	Amortized Cost before Cumulative Adjustment	Cumulative Adjustment	Amortized Cost before OTTI	Projected Cash Flow	Recognized OTTI	Amortized Cost after OTTI	Fair Value
June 30, 2025	$ 4,240,593	$ —	$ 4,240,593	$ 3,970,364	$ (270,229)	$ 3,970,364	$ 3,852,115
March 31, 2025	39,862,354	—	39,862,354	28,301,166	(11,561,188)	28,301,166	27,669,096
December 31, 2024	22,493,605	—	22,493,605	15,603,907	(6,889,698)	15,603,907	14,525,080
September 30, 2024	9,854,964	—	9,854,964	8,633,308	(1,221,656)	8,633,308	8,589,373
June 30, 2024	54,957,279	—	54,957,279	49,033,522	(5,923,757)	49,033,522	36,231,196
March 31, 2024	36,924,401	—	36,924,401	33,979,195	(2,945,206)	33,979,195	33,244,880
December 31, 2023	53,672,524	—	53,672,524	51,118,891	(2,553,633)	51,118,891	42,903,097
September 30, 2023	24,928,010	—	24,928,010	24,065,666	(862,344)	24,065,666	21,743,474
June 30, 2023	16,432,523	—	16,432,523	15,955,963	(476,560)	15,955,963	15,431,923
March 31, 2023	56,797,193	—	56,797,193	45,999,577	(10,797,616)	45,999,577	39,477,567
December 31, 2022	47,152,655	—	47,152,655	42,630,344	(4,522,311)	42,630,344	35,962,545
September 30, 2022	23,315,048	—	23,315,048	22,016,070	(1,298,978)	22,016,070	19,284,696
June 30, 2022	17,306,639	—	17,306,639	15,826,391	(1,480,248)	15,826,391	13,534,918
March 31, 2022	30,135,997	—	30,135,997	23,857,778	(6,278,219)	23,857,778	23,674,371
December 31, 2021	6,658,614	—	6,658,614	6,490,508	(168,106)	6,490,508	6,369,198
September 30, 2021	4,061,382	—	4,061,382	3,955,723	(105,659)	3,955,723	3,595,213
June 30, 2021	11,352,643	—	11,352,643	10,386,581	(966,062)	10,386,581	11,323,900
March 31, 2021	11,247,256	—	11,247,256	5,074,493	(6,172,763)	5,074,493	5,237,174

December 31, 2020	16,071,907	—	16,071,907	14,674,300	(1,397,607)	14,674,300	15,473,517
September 30, 2020	21,375,383	—	21,375,383	19,160,250	(2,215,133)	19,160,250	18,862,027
June 30, 2020	10,180,123	—	10,180,123	8,992,610	(1,187,513)	8,992,610	9,249,851
March 31, 2020	24,799,788	—	24,799,788	20,197,344	(4,602,444)	20,197,344	24,683,947
December 31, 2019	3,992,400	—	3,992,400	3,539,281	(453,119)	3,539,281	3,439,138
September 30, 2019	16,909,029	—	16,909,029	15,191,932	(1,717,097)	15,191,932	14,639,756
June 30, 2019	6,980,030	—	6,980,030	6,187,029	(793,001)	6,187,029	7,133,620
March 31, 2019	7,791,000	—	7,791,000	7,634,637	(156,363)	7,634,637	7,683,021
December 31, 2018	4,550,173	—	4,550,173	3,815,559	(734,614)	3,815,559	4,014,514
September 30, 2018	4,320,826	—	4,320,826	3,663,181	(657,645)	3,663,181	3,687,297
June 30, 2018	634,235	—	634,235	279,221	(355,014)	279,221	386,752
March 31, 2018	645,690	—	645,690	488,181	(157,509)	488,181	448,494
December 31, 2017	3,949,513	—	3,949,513	1,958,759	(1,990,754)	1,958,759	2,023,952
September 30, 2017	4,436,542	—	4,436,542	876,942	(3,559,600)	876,942	4,647,683
June 30, 2017	40,538,551	—	40,538,551	39,808,956	(729,595)	39,808,956	60,990,732
March 31, 2017	41,788,380	—	41,788,380	41,391,889	(396,491)	41,391,889	56,156,936
December 31, 2016	42,175,938	—	42,175,938	42,045,721	(130,217)	42,045,721	54,619,477
September 30, 2016	44,266,478	—	44,266,478	41,890,535	(2,375,943)	41,890,535	61,300,066
June 30, 2016	49,097,217	—	49,097,217	48,202,703	(894,514)	48,202,703	63,207,410
March 31, 2016	57,985,071	—	57,985,071	55,783,979	(2,201,092)	55,783,979	70,578,397
December 31, 2015	4,881,394	—	4,881,394	4,783,194	(98,200)	4,783,194	4,728,736
September 30, 2015	50,531,382	—	50,531,382	45,665,859	(4,865,523)	45,665,859	58,523,652
June 30, 2015	66,924,927	—	66,924,927	65,240,585	(1,684,342)	65,240,585	72,953,475
March 31, 2015	17,856,447	—	17,856,447	17,681,510	(174,937)	17,681,510	17,553,999
December 31, 2014	69,225,743	—	69,225,743	68,301,291	(924,452)	68,301,291	79,410,553
September 30, 2014	645,721	—	645,721	604,437	(41,284)	604,437	627,381
June 30, 2014	57,012,606	—	57,012,606	55,422,168	(1,590,438)	55,422,168	75,253,388
March 31, 2014	91,702,041	—	91,702,041	80,744,074	(10,957,967)	80,744,074	97,672,071
December 31, 2013	113,707,951	—	113,707,951	108,815,640	(4,892,311)	108,815,640	111,783,052
September 30, 2013	81,945,730	—	81,945,730	80,589,482	(1,356,248)	80,589,482	77,049,314
June 30, 2013	147,215,936	—	147,215,936	142,140,572	(5,075,364)	142,140,572	130,973,023
March 31, 2013	194,772,025	—	194,772,025	188,372,089	(6,399,936)	188,372,089	176,678,910
December 31, 2012	378,096,660	—	378,096,660	366,323,110	(11,773,550)	366,323,110	333,086,073
September 30, 2012	816,573,456	—	816,573,456	788,350,823	(28,222,633)	788,350,823	697,683,289
June 30, 2012	912,025,937	—	912,025,937	890,494,221	(21,531,716)	890,494,221	708,872,106
March 31, 2012	1,095,018,529	—	1,095,018,529	1,058,132,041	(36,886,488)	1,058,132,041	841,095,013
December 31, 2011	1,090,904,993	—	1,090,904,993	1,056,761,288	(34,143,705)	1,056,761,288	754,310,838
September 30, 2011	762,320,632	—	762,320,632	738,510,048	(23,810,584)	738,510,048	546,494,232
June 30, 2011	1,130,732,656	—	1,130,732,656	1,078,535,670	(52,196,986)	1,078,535,670	839,143,290
March 31, 2011	1,097,705,351	—	1,097,705,351	1,068,852,204	(28,853,147)	1,068,852,204	816,688,348
December 31, 2010	968,742,508	—	968,742,508	950,111,417	(18,631,091)	950,111,417	708,895,637
September 30, 2010	915,728,030	—	915,728,030	889,896,058	(25,831,972)	889,896,058	673,462,493
June 30, 2010	1,362,887,892	—	1,362,887,892	1,335,628,212	(27,259,680)	1,335,628,212	975,241,506
March 31, 2010	1,471,905,696	—	1,471,905,696	1,391,337,543	(80,568,153)	1,391,337,543	1,015,645,802
December 31, 2009	1,349,124,214	—	1,349,124,214	1,290,817,168	(58,307,046)	1,290,817,168	852,088,739
September 30, 2009	2,953,442,689	(106,853,708)	2,846,588,981	2,700,948,264	(145,640,717)	2,700,948,264	1,692,409,640
Totals		$ (106,853,708)			$ (722,917,968)		

The following contains asset-backed and structured securities that recognized OTTI classified on the following bases for recognizing OTTI:

	(1) Amortized Cost Basis Before OTTI Impairment	(2) OTTI Recognized in Loss		(3) Fair Value 1-(2a+2b)
		(2a) Interest	(2b) Non-interest	
	(In Millions)			
OTTI recognized in the first quarter				
Intent to sell	$ —	$ —	$ —	$ —
Inability or lack of intent to retain the investment in the security for a period of time sufficient to recover the amortized cost basis	40	—	12	28
Total first quarter	$ 40	$ —	$ 12	$ 28
OTTI recognized in the second quarter				
Intent to sell	$ —	$ —	$ —	$ —
Inability or lack of intent to retain the investment in the security for a period of time sufficient to recover the amortized cost basis	4	—	—	4
Total second quarter	$ 4	$ —	$ —	$ 4
Annual aggregate total		$ —	$ 12	

All impairments were taken due to the present value of cash flows expected to be collected being less than the amortized cost basis.

The following is a CUSIP detail list of impaired structured securities where the present value of cash flows expected to be collected is less than the amortized cost basis.

1 CUSIP	2 Adjusted Carrying Value Amortized Cost before OTTI	3 Present Value of Projected Cash Flow	4 Recognized OTTI	5 Amortized Cost after OTTI	6 Fair Value at Time of OTTI	7 Date of Financial Instrument Where Reported
12591KAK1	$ 2,522,379	$ 146,877	$ 2,375,502	$ 146,877	$ 124,746	March 31, 2025
12624SAE9	248,748	110,461	138,287	110,461	98,365	March 31, 2025
36192RAL6	1,551,160	90,269	1,460,891	90,269	89,025	March 31, 2025
46639YAX5	4,586,035	556,702	4,029,333	556,702	485,515	March 31, 2025
040104TF8	34,691	32,812	1,879	32,812	32,430	March 31, 2025
04012XAC9	118,897	111,231	7,666	111,231	109,745	March 31, 2025
12479DAC2	1,401,484	1,191,041	210,443	1,191,041	1,197,453	March 31, 2025
1248MGAJ3	37,490	31,642	5,848	31,642	30,707	March 31, 2025
17311YAC7	1,141,895	1,011,829	130,066	1,011,829	1,005,185	March 31, 2025
30247DAD3	466,662	454,606	12,056	454,606	453,035	March 31, 2025
35729RAE6	3,352,329	3,071,627	280,702	3,071,627	2,989,992	March 31, 2025
40431KAE0	1,891,530	1,867,901	23,629	1,867,901	1,858,939	March 31, 2025
46629NAC7	30,472	26,243	4,229	26,243	26,040	March 31, 2025
46630KAA4	135,020	132,318	2,702	132,318	133,052	March 31, 2025
57643LMP8	589,786	563,237	26,549	563,237	559,730	March 31, 2025
617463AA2	7,401	7,391	10	7,391	6,264	March 31, 2025
61750MAB1	2,890	2,825	65	2,825	2,801	March 31, 2025
61757MAB4	1,725,577	1,519,928	205,649	1,519,928	1,357,104	March 31, 2025
86363HAB8	30,993	27,056	3,937	27,056	26,975	March 31, 2025
05535DAN4	415,847	372,365	43,482	372,365	395,389	March 31, 2025
12667GKG7	37,835	37,336	499	37,336	37,191	March 31, 2025
12669FKR3	29,890	28,642	1,248	28,642	28,822	March 31, 2025

18974BAA7	110,444	107,107	3,337	107,107	106,506	March 31, 2025
22541NUB3	128,939	23,799	105,140	23,799	33,947	March 31, 2025
22943HAD8	3,018,787	1,546,388	1,472,399	1,546,388	1,478,700	March 31, 2025
251510FB4	913,345	894,538	18,807	894,538	889,965	March 31, 2025
32053LAA0	14,933	14,019	914	14,019	13,988	March 31, 2025
45254TRX4	47,367	43,619	3,748	43,619	43,547	March 31, 2025
45660LYW3	623,135	561,324	61,811	561,324	565,004	March 31, 2025
466247XE8	591,715	419,365	172,350	419,365	414,726	March 31, 2025
65535VRK6	423,317	365,711	57,606	365,711	356,789	March 31, 2025
75115DAH8	2,809	2,522	287	2,522	2,507	March 31, 2025
761118FM5	1,263,358	1,249,033	14,325	1,249,033	1,187,830	March 31, 2025
761118RJ9	57,864	56,661	1,203	56,661	56,265	March 31, 2025
85554NAG5	42,648	39,744	2,904	39,744	39,702	March 31, 2025
86358HHX0	76,292	54,864	21,428	54,864	54,655	March 31, 2025
86359BLQ2	563,115	462,214	100,901	462,214	488,829	March 31, 2025
92978EAA2	72,298	62,785	9,513	62,785	61,254	March 31, 2025
93935PAH2	105,569	103,242	2,327	103,242	102,522	March 31, 2025
23332UCM4	14,705	14,499	206	14,499	14,471	March 31, 2025
41161PTP8	147,426	138,290	9,136	138,290	137,423	March 31, 2025
45660N5H4	930,508	891,303	39,205	891,303	887,231	March 31, 2025
45660NT88	12,754	12,017	737	12,017	11,543	March 31, 2025
86360UAF3	781,063	660,195	120,868	660,195	652,812	March 31, 2025
12669GTE1	3,216	3,132	84	3,132	3,392	March 31, 2025
32051DCJ9	15,503	15,444	59	15,444	15,423	March 31, 2025
362341VU0	1,141,358	1,083,000	58,358	1,083,000	1,052,829	March 31, 2025
36298XAA0	3,898,283	3,779,774	118,509	3,779,774	3,774,883	March 31, 2025
36298XAB8	3,874,410	3,684,784	189,626	3,684,784	3,679,498	March 31, 2025
576433NH5	255,668	247,477	8,191	247,477	123,743	March 31, 2025
5899292N7	22,441	22,348	93	22,348	22,324	March 31, 2025
589929N38	59,285	58,382	903	58,382	58,287	March 31, 2025
86359DME4	290,788	289,247	1,541	289,247	289,996	March 31, 2025
17311YAC7	1,013,708	1,013,177	531	1,013,177	980,490	June 30. 2025
05535DAN4	361,141	360,499	642	360,499	377,588	June 30. 2025
073879QF8	161,432	126,012	35,420	126,012	133,184	June 30. 2025
124860CB1	3,325	2,439	886	2,439	2,437	June 30. 2025
22541N5E5	88,816	71,950	16,866	71,950	62,343	June 30. 2025
45660LYW3	564,025	560,760	3,265	560,760	563,901	June 30. 2025
761118FM5	1,256,693	1,256,647	46	1,256,647	1,194,692	June 30. 2025
79548KXQ6	212,046	5,037	207,009	5,037	2,194	June 30. 2025
79549AYB9	4,228	1,281	2,947	1,281	1,061	June 30. 2025
86359BLQ2	471,481	468,869	2,612	468,869	431,758	June 30. 2025
93935PAH2	103,698	103,693	5	103,693	102,467	June 30. 2025
Totals	$ 44,102,947	$ 32,271,530	$ 11,831,417	$ 32,271,530	$ 31,521,211	XXX