MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATUTORY FINANCIAL STATEMENTS

As of June 30, 2015 and December 31, 2014 and for the six months ended June 30, 2015 and 2014

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATUTORY FINANCIAL STATEMENTS
(UNAUDITED)

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MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATUTORY STATEMENTS OF FINANCIAL POSITION
(UNAUDITED)

	June 30, 2015	December 31, 2014	$ Change	% Change
	($ In Millions)			
Assets:				
Bonds	$ 81,125	$ 79,169	$ 1,956	2 %
Preferred stocks	645	554	91	16
Common stocks - subsidiaries and affiliates	6,833	6,642	191	3
Common stocks - unaffiliated	1,172	1,191	(19)	(2)
Mortgage loans	21,367	20,305	1,062	5
Policy loans	11,609	11,396	213	2
Real estate	867	800	67	8
Partnerships and limited liability companies	7,725	7,199	526	7
Derivatives	8,173	9,056	(883)	(10)
Cash, cash equivalents and short-term investments	2,289	2,196	93	4
Other invested assets	470	170	300	176
Total invested assets	142,275	138,678	3,597	3
Investment income due and accrued	2,111	1,810	301	17
Federal income taxes	206	-	206	NM
Deferred income taxes	1,179	1,000	179	18
Other than invested assets	1,023	1,086	(63)	(6)
Total assets excluding separate accounts	146,794	142,574	4,220	3
Separate account assets	67,299	66,522	777	1
Total assets	$ 214,093	$ 209,096	$ 4,997	2 %
Liabilities and Surplus:				
Policyholders' reserves	$ 101,739	$ 97,958	$ 3,781	4 %
Liabilities for deposit-type contracts	8,870	9,107	(237)	(3)
Contract claims and other benefits	421	412	9	2
Policyholders' dividends	1,609	1,579	30	2
General expenses due or accrued	740	904	(164)	(18)
Federal income taxes	-	184	(184)	(100)
Asset valuation reserve	2,956	2,704	252	9
Repurchase agreements	5,515	4,898	617	13
Commercial paper and other borrowed money	269	268	1	-
Collateral	1,393	1,461	(68)	(5)
Derivatives	5,403	5,893	(490)	(8)
Other liabilities	3,229	2,985	244	8
Total liabilities excluding separate accounts	132,144	128,353	3,791	3
Separate account liabilities	67,289	66,512	777	1
Total liabilities	199,433	194,865	4,568	2
Surplus	14,660	14,231	429	3
Total liabilities and surplus	$ 214,093	$ 209,096	$ 4,997	2 %

NM = not meaningful

See notes to condensed consolidated statutory financial statements

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATUTORY STATEMENTS OF OPERATIONS
(UNAUDITED)

	Six Months Ended June 30, 2015	Six Months Ended June 30, 2014	$ Change	% Change
	($ In Millions)			
Revenue:				
Premium income	$ 10,364	$ 8,913	$ 1,451	16 %
Net investment income	3,197	3,393	(196)	(6)
Fees and other income	475	470	5	1
Total revenue	14,036	12,776	1,260	10
Benefits and expenses:				
Policyholders' benefits	8,599	8,686	(87)	(1)
Change in policyholders' reserves	3,414	2,488	926	37
Change in reserves due to the RPG reinsurance agreement	(457)	(993)	536	54
General insurance expenses	884	881	3	-
Commissions	418	389	29	7
State taxes, licenses and fees	111	106	5	5
Total benefits and expenses	12,969	11,557	1,412	12
Net gain from operations before dividends and federal income taxes	1,067	1,219	(152)	(12)
Dividends to policyholders	758	717	41	6
Net gain from operations before federal income taxes	309	502	(193)	(38)
Federal income tax (benefit) expense	(83)	101	(184)	(182)
Net gain from operations	392	401	(9)	(2)
Net realized capital gains (losses)	9	(16)	25	156
Net income	$ 401	$ 385	$ 16	4 %

See notes to condensed consolidated statutory financial statements

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATUTORY STATEMENTS OF CHANGES IN SURPLUS
(UNAUDITED)

	Six Months Ended June 30, 2015	Six Months Ended June 30, 2014	$ Change	% Change
	($ In Millions)			
Surplus, beginning of year	$ 14,231	$ 12,524	$ 1,707	14 %
Increase (decrease) due to:				
Net income	401	385	16	4
Change in net unrealized capital gains (losses), net of tax	(134)	865	(999)	(115)
Change in net unrealized foreign exchange capital gains (losses), net of tax	(31)	34	(65)	(191)
Change in other net deferred income taxes	23	(48)	71	148
Change in nonadmitted assets	(85)	12	(97)	(808)
Change in asset valuation reserve	(252)	(230)	(22)	(10)
Change in surplus notes	491	-	491	NM
Cumulative effect of accounting changes	3	-	3	NM
Prior period adjustments	13	(13)	26	200
Other	-	36	(36)	(100)
Net increase	429	1,041	(612)	(59)
Surplus, end of period	$ 14,660	$ 13,565	$ 1,095	8 %

NM = not meaningful

MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATUTORY STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Six Months Ended June 30, 2015	Six Months Ended June 30, 2014	$ Change	% Change
	($ In Millions)			
Cash from operations:				
Premium and other income collected	$ 10,897	$ 9,363	$ 1,534	16 %
Net investment income	3,054	3,160	(106)	(3)
Benefit payments	(8,789)	(9,561)	772	8
Net transfers from (to) separate accounts	389	(57)	446	782
Net receipts from RPG reinsurance agreement	457	993	(536)	(54)
Commissions and other expenses	(1,596)	(1,548)	(48)	(3)
Dividends paid to policyholders	(728)	(675)	(53)	(8)
Federal and foreign income taxes (paid) recovered	(367)	237	(604)	(255)
Net cash from operations	3,317	1,912	1,405	73
Cash from investments:				
Proceeds from investments sold, matured or repaid:				
Bonds	7,868	7,741	127	2
Preferred and common stocks - unaffiliated	217	129	88	68
Common stocks - affiliated	477	293	184	63
Mortgage loans	956	896	60	7
Real estate	25	12	13	108
Partnerships and limited liability companies	440	899	(459)	(51)
Derivatives	85	244	(159)	(65)
Other	(387)	(223)	(164)	(74)
Total investment proceeds	9,681	9,991	(310)	(3)
Cost of investments acquired:				
Bonds	(9,696)	(10,730)	1,034	10
Preferred and common stocks - unaffiliated	(304)	(294)	(10)	(3)
Common stocks - affiliated	(480)	(493)	13	3
Mortgage loans	(2,015)	(2,059)	44	2
Real estate	(136)	(193)	57	30
Partnerships and limited liability companies	(982)	(623)	(359)	(58)
Derivatives	(198)	(151)	(47)	(31)
Other	166	81	85	105
Total investments acquired	(13,645)	(14,462)	817	6
Net increase in policy loans	(214)	(116)	(98)	(84)
Net cash from investing activities	(4,178)	(4,587)	409	9
Cash from financing and other sources:				
Net (withdrawals) deposits on deposit-type contracts	(5)	44	(49)	(111)
Cash provided by surplus note issuance	491	-	491	NM
Change in repurchase agreements	617	1,431	(814)	(57)
Change in collateral	(62)	280	(342)	(122)
Other cash used	(87)	(423)	336	79
Net cash from financing and other sources	954	1,332	(378)	(28)
Net change in cash, cash equivalents and short-term investments	93	(1,343)	$ 1,436	107 %
Cash, cash equivalents and short-term investments:				
Beginning of period	2,196	4,504		
End of period	$ 2,289	$ 3,161		

NM = not meaningful

See notes to condensed consolidated statutory financial statements

1. Nature of operations

Massachusetts Mutual Life Insurance Company (MassMutual) and its subsidiaries provide life insurance, disability income insurance, long-term care insurance, annuities, retirement products, investment management, mutual funds and trust services to individual and institutional customers. MassMutual is organized as a mutual life insurance company.

2. Summary of significant accounting policies

a. Basis of presentation

The condensed consolidated statutory financial statements include the accounts of MassMutual and its wholly-owned United States of America (U.S.) domiciled life insurance subsidiary, C.M. Life Insurance Company, and its wholly-owned subsidiary, MML Bay State Life Insurance Company (collectively, the Company). All intercompany transactions and balances for these consolidated entities have been eliminated. Other subsidiaries and affiliates are accounted for under the equity method in accordance with statutory accounting practices. Statutory financial statements filed with regulatory authorities are not presented on a consolidated basis.

The condensed consolidated 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 Division); and for the wholly-owned U.S. domiciled life insurance subsidiaries, the State of Connecticut Insurance Department.

The condensed consolidated statutory financial statements and notes as of June 30, 2015 and December 31, 2014, and for the six months ended June 30, 2015 and 2014, are unaudited. These condensed consolidated 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 condensed consolidated statutory financial statements and notes should be read in conjunction with the consolidated statutory financial statements and notes thereto included in the Company's 2014 audited year end financial statements as these condensed consolidated statutory financial statements disclose only significant changes from year end 2014. The results of operations for the interim periods should not be considered indicative of results to be expected for the full year. The Condensed Consolidated Statutory Statements of Financial Position as of December 31, 2014 have 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.

For the full description of accounting policies, see *Note 2. "Summary of significant accounting policies"* of Notes to Consolidated Statutory Financial Statements included in the Company's 2014 audited consolidated year end financial statements.

b. Corrections of errors and reclassifications

For the six months ended June 30, 2015, corrections of prior year errors were recorded in surplus:

	Increase (Decrease) to: Prior Year Net Income	Increase (Decrease) to: Current Year Surplus	Correction of Asset or Liability Balances
	(In Millions)		
Policyholders' reserves, net of tax	$ 11	$ 11	$ (11)
Policyholders' benefits, net of tax	4	4	(4)
Net investment income	(2)	(2)	(2)
Total	$ 13	$ 13	$ (17)

For the six months ended June 30, 2014, corrections of prior year errors were recorded in surplus on a pre-tax basis with any associated tax corrections reported through net income:

	Decrease to: Prior Year Net Income	Decrease to: Current Year Surplus	Correction of Asset or Liability Balances
	(In Millions)		
Policyholders' reserves	$ (13)	$ (13)	$ 13
Total	$ (13)	$ (13)	$ 13

Certain prior year amounts within these financial statements have been reclassified to conform to the current year presentation.

3. New accounting standards

Adoption of new accounting standards

In December 2014, the NAIC issued Statement of Statutory Accounting Principles (SSAP) No. 40 Revised, “Real Estate Investments” (SSAP No. 40R), which was effective January 1, 2015, and requires that single real estate property investments that are directly and wholly-owned through a limited liability company (LLC) be accounted for, and reported as, directly owned real estate provided that certain criteria are met. For investments meeting the criteria that were previously reported within SSAP No. 48, “Joint Ventures, Partnerships and Limited Liability Companies” (SSAP No. 48), and owned as of the effective date, this guidance required that the Company recognize a cumulative effect of a change in accounting principle as if the entity had followed the revisions of SSAP No. 40R since acquisition of the property. As a result of the adoption of this guidance, the Company transferred $24 million of a real estate asset held in a wholly-owned LLC from partnerships and LLCs to real estate and recorded a $3 million increase to surplus as a cumulative effect of an accounting change.

4. 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, 2015			
	Carrying Value	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(In Millions)			
U.S. government and agencies	$ 7,591	$ 687	$ 60	$ 8,218
All other governments	644	36	17	663
States, territories and possessions	804	56	8	852
Political subdivisions	536	35	4	567
Special revenue	5,713	708	25	6,396
Industrial and miscellaneous	60,160	2,549	763	61,946
Parent, subsidiaries and affiliates	5,677	259	20	5,916
Total	$ 81,125	$ 4,330	$ 897	$ 84,558

The June 30, 2015 gross unrealized losses exclude $22 million of losses embedded in the carrying value of NAIC Category 6 bonds.

	December 31, 2014			
	Carrying Value	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(In Millions)			
U.S. government and agencies	$ 7,672	$ 837	$ 3	$ 8,506
All other governments	527	43	9	561
States, territories and possessions	1,807	158	3	1,962
Political subdivisions	510	49	1	558
Special revenue	4,646	839	4	5,481
Industrial and miscellaneous	58,325	3,557	488	61,394
Parent, subsidiaries and affiliates	5,682	287	16	5,953
Total	$ 79,169	$ 5,770	$ 524	$ 84,415

The December 31, 2014 gross unrealized losses exclude $24 million of losses embedded in the carrying value. These losses include $23 million from NAIC Category 6 bonds and $1 million from residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS) whose ratings were obtained from outside modelers.

Sales proceeds and related gross realized capital gains (losses) from bonds were as follows:

	Six Months Ended June 30,	
	2015	2014
	(In Millions)	
Proceeds from sales	$ 2,386	$ 2,275
Gross realized capital gains from sales	151	151
Gross realized capital losses from sales	(83)	(23)

The following is a summary of the fair values and gross unrealized losses aggregated by bond category and length of time that the securities were in a continuous unrealized loss position:

	June 30, 2015					
	Less Than 12 Months			12 Months or Longer		
	Fair Value	Unrealized Losses	Number of Issuers	Fair Value	Unrealized Losses	Number of Issuers
	($ In Millions)					
U.S. government and agencies	$ 1,335	$ 57	6	$ 140	$ 3	3
All other governments	305	14	32	23	3	12
States, territories and possessions	90	6	7	54	2	2
Political subdivisions	205	4	14	-	-	-
Special revenue	733	22	120	52	5	140
Industrial and miscellaneous	18,135	598	1,429	4,003	169	501
Parent, subsidiaries and affiliates	606	22	17	289	14	15
Total	$ 21,409	$ 723	1,625	$ 4,561	$ 196	673

The June 30, 2015 unrealized losses include $22 million of losses embedded in the carrying value of NAIC Category 6 bonds.

	December 31, 2014					
	Less Than 12 Months			12 Months or Longer		
	Fair Value	Unrealized Losses	Number of Issuers	Fair Value	Unrealized Losses	Number of Issuers
	($ In Millions)					
U.S. government and agencies	$ -	$ -	-	$ 153	$ 2	4
All other governments	115	7	21	34	2	18
States, territories and possessions	40	1	2	96	2	7
Political subdivisions	-	-	-	3	1	1
Special revenue	-	-	-	113	4	167
Industrial and miscellaneous	11,185	302	1,158	5,467	195	640
Parent, subsidiaries and affiliates	480	17	8	158	15	6
Total	$ 11,820	$ 327	1,189	$ 6,024	$ 221	843

The December 31, 2014 unrealized losses include $24 million of losses embedded in the carrying value, which include $23 million from NAIC Category 6 bonds and $1 million from RMBS and CMBS whose ratings were obtained from outside modelers.

Based on the Company’s policies, as of June 30, 2015 and December 31, 2014, management has not deemed these unrealized losses to be other than temporary because the investment’s carrying value is expected to be realized and the Company has the ability and intent not to sell these investments until recovery, which may be at maturity.

As of June 30, 2015, investments in structured and loan-backed securities that had unrealized losses, which were not recognized in earnings, had a fair value of $7,432 million. Securities in an unrealized loss position for less than 12 months had a fair value of $4,792 million and unrealized losses of $55 million. Securities in an unrealized loss position for greater than 12 months had a fair value of $2,640 million and unrealized losses of $73 million. These securities were primarily categorized as industrial and miscellaneous or parent, subsidiaries and affiliates.

As of December 31, 2014, investments in structured and loan-backed securities that had unrealized losses, which were not recognized in earnings, had a fair value of $7,554 million. Securities in an unrealized loss position for less than 12 months had a fair value of $5,309 million and unrealized losses of $85 million. Securities in an unrealized loss position for greater than 12 months had a fair value of $2,244 million and unrealized losses of $78 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 of the sale date 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, 2015 or the year ended December 31, 2014, that were reacquired within 30 days of the sale date.

Residential mortgage-backed exposure

RMBS are included in the U.S. government, 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, 2015, RMBS had a total carrying value of $2,199 million and a fair value of $2,502 million, of which approximately 23%, based on carrying value, was classified as Alt-A. Alt-A and subprime RMBS had a total carrying value of $996 million and a fair value of $1,182 million.

As of December 31, 2014, RMBS had a total carrying value of $2,399 million and a fair value of $2,733 million, of which approximately 23%, based on carrying value, was classified as Alt-A. Alt-A and subprime RMBS had a total carrying value of $1,078 million and a fair value of $1,283 million.

b. Common stocks - subsidiaries and affiliates

Common stocks of unconsolidated subsidiaries, primarily MassMutual Holding LLC (MMHLLC), are accounted for using the statutory equity method. The Company accounts for the value of MMHLLC at its underlying U.S. generally accepted accounting principles equity value adjusted to remove certain nonadmitted and intangible assets, as well as a portion of its noncontrolling interests (NCI) and appropriated retained earnings, after consideration of MMHLLC's fair value and the Company's capital levels. The Commonwealth of Massachusetts Division of Insurance has affirmed the statutory recognition of the Company's application of the NCI guidelines in MMHLLC's statutory carrying value. However, the Company has limited this recognition to $2,525 million and $2,409 million as of June 30, 2015 and December 31, 2014, respectively. The current fair value of MMHLLC remains significantly greater than its statutory carrying value.

MassMutual received $150 million and $50 million of cash dividends, recorded in net investment income, from MMHLLC through the six months ended June 30, 2015 and 2014, respectively.

MassMutual contributed capital of $11 million to MMHLLC through the six months ended June 30, 2015. No capital contribution was made to MMHLLC through the six months ended June 30, 2014.

MMHLLC's subsidiaries are involved in litigation and investigations arising in the ordinary course of their business, which seek both compensatory and punitive damages and equitable remedies. Although the Company is not aware of any actions or allegations that reasonably should 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 Condensed Consolidated 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.

c. Mortgage loans

Mortgage loans comprised 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 and mezzanine loans that are subordinate to senior secured first liens. Residential mortgage loans are primarily seasoned pools of homogeneous residential mortgage loans substantially backed by Federal Housing Administration (FHA) and Veterans Administration (VA) guarantees.

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

	June 30, 2015		December 31, 2014	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	(In Millions)			
Commercial mortgage loans:				
Primary lender	$ 19,394	$ 19,965	$ 18,274	$ 18,918
Mezzanine loans	42	45	45	47
Total commercial mortgage loans	19,436	20,010	18,319	18,965
Residential mortgage loans:				
FHA insured and VA guaranteed	1,921	1,873	1,975	1,937
Other residential loans	10	10	11	12
Total residential mortgage loans	1,931	1,883	1,986	1,949
Total mortgage loans	$ 21,367	$ 21,893	$ 20,305	$ 20,914

As of June 30, 2015 and 2014, the Company had no impaired mortgage loans with or without a valuation allowance.

As of and for the six months ended June 30, 2015, the Company had no valuation allowance recorded for commercial mortgage loans.

The following presents changes in the valuation allowance recorded for the Company's commercial mortgage loans for the six months ended June 30, 2014:

	Primary Lender	Mezzanine	Total
	(In Millions)		
Beginning balance	$ (9)	$ -	$ (9)
Additions	(2)	-	(2)
Decreases	1	-	1
Write-downs	10	-	10
Ending balance	$ -	$ -	$ -

d. 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 synthetic investments. These synthetic investments are created opportunistically when they are economically more attractive than the actual instrument or when similar instruments are unavailable. Synthetic investments can be created either to hedge and reduce the Company's credit exposure or to create an investment in a particular asset. The Company held synthetic investments with a net notional amount of $9,289 million as of June 30, 2015 and $9,316 million as of December 31, 2014. Of this amount, $8,881 million as of June 30, 2015 and $8,367 million as of December 31, 2014, were considered replicated asset transactions as defined under statutory accounting practices as the result of pairing of a long derivative contract with cash instruments held.

The Company's principal derivative market risk exposures are interest rate risk, which includes the impact of inflation, and credit risk. Interest rate risk pertains to the change in fair value of the derivative instruments as market interest rates move. The Company is exposed to credit-related losses in the event of nonperformance by counterparties to derivative financial instruments. To minimize credit risk for bilateral transactions (individual contracts entered between the Company and a counterparty), the Company and its derivative counterparties generally enter into master netting agreements that allow the use of credit support annexes and require collateral to be posted in the amount owed under each transaction, subject to minimum transfer amounts. 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 of the clearinghouse. Certain interest rate swaps and credit default swaps that were entered into are considered cleared transactions. These cleared transactions require initial and daily variation margin collateral postings. These same agreements allow for contracts in a positive position, in which the Company is due amounts, to be offset by contracts in a negative position. This right of offset, combined with collateral obtained from counterparties, reduces the Company's exposure. Net collateral pledged by the counterparties was $1,812 million as of June 30, 2015 and $2,793 million as of December 31, 2014. In the event of default, the full market value exposure at risk in a net gain position, net of offsets and collateral, was $266 million as of June 30, 2015 and $139 million as of December 31, 2014. Statutory accounting practices define net amount at risk as net collateral pledged and statement values excluding accrued interest. The net amount at risk was $680 million as of June 30, 2015 and $574 million as of December 31, 2014. The Company regularly monitors counterparty credit ratings and exposures, derivative positions and valuations and the value of collateral posted to ensure counterparties are credit-worthy and the concentration of exposure is minimized. The Company monitors this exposure as part of its management of the Company's overall credit exposures.

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

	June 30, 2015			
	Assets		Liabilities	
	Carrying Value	Notional Amount	Carrying Value	Notional Amount
	(In Millions)			
Interest rate swaps	$ 7,204	$ 69,864	$ 5,243	$ 72,093
Options	579	7,996	4	61
Currency swaps	347	3,260	88	1,776
Forward contracts	20	1,652	60	1,286
Credit default swaps	23	1,270	8	723
Financial futures	-	2,568	-	-
Total	$ 8,173	$ 86,610	$ 5,403	$ 75,939

	December 31, 2014			
	Assets		Liabilities	
	Carrying Value	Notional Amount	Carrying Value	Notional Amount
	(In Millions)			
Interest rate swaps	$ 8,150	$ 64,814	$ 5,824	$ 66,277
Options	573	9,851	9	596
Currency swaps	244	2,843	49	1,077
Forward contracts	73	3,512	3	309
Credit default swaps	16	1,283	8	812
Financial futures	-	2,308	-	-
Total	$ 9,056	$ 84,611	$ 5,893	$ 69,071

In most cases, the notional amounts are not a measure of the Company's credit exposure. The exceptions to this are credit default swaps that are in the form of a replicated asset and mortgage-backed forwards. In the event of default, the Company is fully exposed to their notional amounts of $1,935 million as of June 30, 2015 and $2,461 million as of December 31, 2014. The collateral amounts exchanged are calculated on the basis of the notional amounts and the other terms of the instruments, which relate to interest rates, exchange rates, security prices or financial or other indices.

The average fair value of outstanding derivative assets was $9,538 million for the six months ended June 30, 2015 and $6,640 million for the six months ended June 30, 2014. The average fair value of outstanding derivative liabilities was $6,327 million for the six months ended June 30, 2015 and $4,719 million for the six months ended June 30, 2014.

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

	June 30, 2015	December 31, 2014
	(In Millions)	
Due in one year or less	$ 226	$ 376
Due after one year through five years	1,467	1,419
Due after five years through ten years	300	300
Total	$ 1,993	$ 2,095

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

	Six Months Ended June 30,			
	2015		2014	
	Net Realized Gains (Losses) on Closed Contracts	Change In Net Unrealized Gains (Losses) on Open Contracts	Net Realized Gains (Losses) on Closed Contracts	Change In Net Unrealized Gains (Losses) on Open Contracts
	(In Millions)			
Interest rate swaps	$ (91)	$ (365)	$ (61)	$ 356
Currency swaps	3	63	(4)	(36)
Options	(26)	(74)	(72)	30
Credit default swaps	8	-	10	1
Forward contracts	220	(109)	(5)	13
Financial futures	(155)	-	264	-
Total	$ (41)	$ (485)	$ 132	$ 364

The following summarizes gross and net information of derivative assets and liabilities, along with collateral posted in connection with master netting agreements:

	June 30, 2015			December 31, 2014		
	Derivative Assets	Derivative Liabilities	Net	Derivative Assets	Derivative Liabilities	Net
	(In Millions)					
Gross	$ 8,173	$ 5,403	$ 2,770	$ 9,056	$ 5,893	$ 3,163
Due and accrued	801	1,587	(786)	760	1,466	(706)
Gross amounts offset	(4,086)	(4,086)	-	(4,672)	(4,672)	-
Net asset	4,888	2,904	1,984	5,144	2,687	2,457
Collateral posted	(2,385)	(573)	(1,812)	(3,340)	(547)	(2,793)
Net	$ 2,503	$ 2,331	$ 172	$ 1,804	$ 2,140	$ (336)

e. Net investment income

Net investment income comprised the following:

	Six Months Ended June 30, 2015	Six Months Ended June 30, 2014
	(In Millions)	
Bonds	$ 1,797	$ 1,703
Preferred stocks	12	12
Common stocks - subsidiaries and affiliates	152	54
Common stocks - unaffiliated	23	30
Mortgage loans	504	436
Policy loans	353	339
Real estate	94	98
Partnerships and LLCs	268	756
Derivatives	193	134
Cash, cash equivalents and short-term investments	7	6
Other	5	2
Subtotal investment income	3,408	3,570
Amortization of the IMR	79	113
Investment expenses	(290)	(290)
Net investment income	$ 3,197	$ 3,393

During 2014, the Company received additional distributions from certain affiliated partnerships that generated net investment income. These distributions were related to the partnerships' leasing and sale of properties.

f. Net realized capital gains (losses)

Net realized capital gains (losses) including other-than-temporary impairment(s) (OTTI) comprised the following:

	Six Months Ended June 30,	
	2015	2014
	(In Millions)	
Bonds	$ 33	$ 107
Common stocks - subsidiaries and affiliates	4	8
Common stocks - unaffiliated	18	2
Mortgage loans	(5)	(10)
Real estate	(3)	(6)
Partnerships and LLCs	(24)	14
Derivatives	(41)	132
Other	(15)	(45)
Net realized capital (losses) gains before federal and state taxes and deferral to the IMR	(33)	202
Net federal and state tax (expense) benefit	(52)	47
Net realized capital (losses) gains before deferral to the IMR	(85)	249
Net after tax losses (gains) deferred to the IMR	94	(265)
Net realized capital gains (losses)	$ 9	$ (16)

The interest maintenance reserve (IMR) liability balance was $533 million as of June 30, 2015 and $713 million as of December 31, 2014 and was included in other liabilities on the Condensed Consolidated Statutory Statements of Financial Position.

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

	Six Months Ended June 30,	
	2015	2014
	(In Millions)	
Bonds	$ (36)	$ (21)
Preferred and common stocks	(1)	(3)
Mortgage loans	-	(10)
Partnerships and LLCs	(11)	(26)
Total OTTI	$ (48)	$ (60)

For the six months ended June 30, 2015 and 2014, the Company recognized $2 million and $14 million, respectively, of OTTI 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.

5. *Federal income taxes*

No significant changes.

6. *Deferred and uncollected life insurance premium*

No significant changes.

7. *Transferable state tax credits*

No significant changes.

8. *Fixed assets*

No significant changes.

9. *Policyholders' liabilities*

a. *Liabilities for deposit-type contracts*

On April 23, 2015 the Company entered into an agreement to assume liabilities associated with certain guaranteed interest contracts. The transaction closed on July 8, 2015 and resulted in an increase in the Company's invested assets and policyholder account balances of approximately $680 million, with no impact on surplus. The transaction will be reflected in the Company's financial statements for the period ending September 30, 2015.

b. *Additional liability for annuity contracts*

Certain variable annuity contracts include additional death or other insurance benefit features, such as guaranteed minimum death benefits (GMDBs), guaranteed minimum income benefits (GMIBs), guaranteed minimum accumulation benefits (GMABs) and guaranteed minimum withdrawal benefits (GMWBs). In general, these benefit guarantees require the contract holder or policyholder to adhere to a company-approved asset allocation strategy. Election of these benefits on certain annuity contracts is generally only available at contract issue.

The following shows the liabilities for GMDBs, GMIBs, GMABs and GMWBs (in millions):

Liability as of January 1, 2014	$ 277
Incurred guarantee benefits	219
Paid guarantee benefits	(3)
Liability as of December 31, 2014	493
Incurred guarantee benefits	(112)
Paid guarantee benefits	(2)
Liability as of June 30, 2015	$ 379

The Company held reserves in accordance with the stochastic scenarios as of June 30, 2015 and December 31, 2014. As of June 30, 2015 and December 31, 2014, the Company held additional reserves above those indicated based on the stochastic scenarios in order to maintain a prudent level of reserve adequacy.

The following summarizes the account values, net amount at risk and weighted average attained age for variable annuity contracts with GMDBs, GMIBs, GMABs and GMWBs 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, 2015			December 31, 2014		
	Account Value	Net Amount at Risk	Weighted Average Attained Age	Account Value	Net Amount at Risk	Weighted Average Attained Age
	($ In Millions)					
GMDB	$ 21,355	$ 81	63	$ 21,184	$ 80	63
GMIB Basic	1,077	60	66	1,136	64	65
GMIB Plus	3,332	349	65	3,373	300	64
GMAB	3,010	11	58	2,859	3	58
GMWB	226	7	68	232	4	68

As of June 30, 2015, the GMDB account value above consists of $4,155 million within the general account and $17,200 million within separate accounts that includes $4,964 million of modified coinsurance. As of December 31, 2014, the GMDB account value above consists of $4,107 million within the general account and $17,077 million within separate accounts that includes $4,956 million of modified coinsurance.

10. Reinsurance

No significant changes.

11. Withdrawal characteristics

No significant changes.

12. Debt

No significant changes.

13. Employee benefit plans

The Company provides multiple benefit plans including retirement plans and life and health benefits to employees, certain employees of unconsolidated subsidiaries, agents and retirees.

Net periodic cost

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

	Six Months Ended June 30,			
	2015	2014	2015	2014
	Pension Benefits		Other Postretirement/ Postemployment Benefits	
	(In Millions)			
Service cost	$ 36	$ 36	$ 6	$ 7
Interest cost	51	54	7	9
Expected return on plan assets	(78)	(72)	-	-
Amortization of unrecognized transition obligation	-	1	-	-
Amortization of unrecognized net actuarial and other losses	33	31	2	-
Amortization of unrecognized prior service cost	2	4	2	2
Total net periodic cost	$ 44	$ 54	$ 17	$ 18

14. Employee compensation plans

No significant changes.

15. Surplus notes

The following table summarizes the surplus notes issued and outstanding as of June 30, 2015:

Issue Date	Face Amount	Carrying Value	Interest Rate	Maturity Date
	($ In Millions)			
11/15/1993	$ 250	$ 250	7.625%	11/15/2023
03/01/1994	100	100	7.500%	03/01/2024
05/12/2003	250	249	5.625%	05/15/2033
06/01/2009	750	742	8.875%	06/01/2039
01/17/2012	400	399	5.375%	12/01/2041
04/15/2015	500	491	4.500%	04/15/2065
Total	$ 2,250	$ 2,231		

These notes are unsecured and subordinate to all present and future indebtedness of the Company, all policy claims and all prior claims against the Company as provided by the Massachusetts General Laws. The surplus notes are all held by bank custodians for unaffiliated investors. All issuances were approved by the Division. Surplus notes are included in surplus on the Condensed Consolidated Statutory Statements of Financial Position.

All payments of interest and principal are subject to the prior approval of the Division. Anticipated sinking fund payments are due for the notes issued in 1993 and 1994 as follows: $62 million in 2021, $88 million in 2022, $150 million in 2023 and $50 million in 2024. There are no sinking fund requirements for the notes issued in 2003, 2009, 2012 or 2015. Scheduled interest on the notes issued in 1993 and 2003 is payable on May 15 and November 15 of each year to holders of record on the preceding May 1 or November 1, respectively. Scheduled interest on the note issued in 1994 is payable on March 1 and September 1 of each year to holders of record on the preceding February 15 or August 15, respectively. Scheduled interest on the notes issued in 2009 and 2012 is payable on June 1 and December 1 of each year to holders of record on the preceding May 15 and November 15, respectively. Scheduled interest on the note issued in 2015 is payable on April 15 and October 15 of each year to holders of record on the preceding April 1 and October 1, respectively. Interest expense is not recorded until approval for payment is received from the Division. As of June 30, 2015, the unapproved interest was $19 million. Through June 30, 2015, the Company paid cumulative interest of $1,208 million on surplus notes. Interest of $64 million was approved and paid during the six months ended June 30, 2015.

16. Presentation of the Condensed Consolidated Statutory Statements of Cash Flows

The Company has included the following non-cash transactions in the Condensed Consolidated Statutory Statements of Cash Flows:

	Six Months Ended June 30, 2015	2014
	(In Millions)	
Bond conversions and refinancing	$ 891	$ 427
Premium recognized for a group annuity contract	816	-
Bonds received as consideration for a group annuity contract	(812)	-
Bank loan rollovers	93	79
Transfer from partnerships and LLCs to real estate in connection with a change in accounting principle	24	-
Stock conversions	24	21
Dividend reinvestment	13	23
Other	3	20

17. 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, 2015				
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
	(In Millions)				
Financial assets:					
Bonds:					
U. S. government and agencies	$ 7,591	$ 8,218	$ -	$ 8,212	$ 6
All other governments	644	663	-	592	71
States, territories and possessions	804	852	-	852	-
Political subdivisions	536	567	-	567	-
Special revenue	5,713	6,396	-	6,351	45
Industrial and miscellaneous	60,160	61,946	-	38,193	23,753
Parent, subsidiaries and affiliates	5,677	5,916	-	841	5,075
Preferred stocks	645	679	31	41	607
Common stocks - unaffiliated	1,172	1,172	563	441	168
Common stocks - subsidiaries and affiliates	727	727	525	113	89
Mortgage loans - commercial	19,436	20,010	-	-	20,010
Mortgage loans - residential	1,931	1,883	-	-	1,883
Cash, cash equivalents and short-term investments	2,289	2,289	238	2,051	-
Separate account assets	67,299	67,317	43,410	23,207	700
Derivatives:					
Interest rate swaps	7,204	7,426	-	7,426	-
Options	579	579	-	579	-
Currency swaps	347	347	-	347	-
Forward contracts	20	20	-	20	-
Credit default swaps	23	19	-	19	-
Financial liabilities:					
Commercial paper and other borrowed money	269	269	-	250	19
Repurchase agreements	5,515	5,515	-	5,515	-
Guaranteed interest contracts	4,208	4,239	-	-	4,239
Group annuity contracts and other deposits	17,244	18,567	-	-	18,567
Individual annuity contracts	9,441	10,498	-	-	10,498
Supplementary contracts	1,162	1,164	-	-	1,164
Derivatives:					
Interest rate swaps	5,243	5,423	-	5,423	-
Options	4	4	-	4	-
Currency swaps	88	88	-	88	-
Forward contracts	60	60	-	60	-
Credit default swaps	8	7	-	7	-

Common stocks - subsidiaries and affiliates do not include MMHLLC, which had a statutory carrying value of $5,731 million, MSC Holding Company, LLC, which had a statutory carrying value of $359 million and MassMutual Trust Company, which had a statutory carrying value of $16 million.

The use of different assumptions or valuation methodologies may have a material impact on the estimated fair value amounts.

	December 31, 2014				
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
	(In Millions)				
Financial assets:					
Bonds:					
U. S. government and agencies	$ 7,672	$ 8,506	$ -	$ 8,498	$ 8
All other governments	527	561	-	487	74
States, territories and possessions	1,807	1,962	-	1,946	16
Political subdivisions	510	558	-	534	24
Special revenue	4,646	5,481	-	5,362	119
Industrial and miscellaneous	58,325	61,394	-	38,821	22,573
Parent, subsidiaries and affiliates	5,682	5,953	-	564	5,389
Preferred stocks	554	562	15	15	532
Common stocks - unaffiliated	1,191	1,191	587	442	162
Common stocks - subsidiaries and affiliates	719	719	521	117	81
Mortgage loans - commercial	18,319	18,965	-	-	18,965
Mortgage loans - residential	1,986	1,949	-	-	1,949
Cash, cash equivalents and short-term investments	2,196	2,196	306	1,890	-
Separate account assets	66,522	66,552	42,938	22,993	621
Derivatives:					
Interest rate swaps	8,150	8,598	-	8,598	-
Options	573	573	-	573	-
Currency swaps	244	244	-	244	-
Forward contracts	73	73	-	73	-
Credit default swaps	16	18	-	18	-
Financial liabilities:					
Commercial paper and other borrowed money	268	268	-	250	18
Repurchase agreements	4,898	4,898	-	4,898	-
Guaranteed interest contracts	4,218	4,301	-	-	4,301
Group annuity contracts and other deposits	17,454	18,446	-	-	18,446
Individual annuity contracts	9,624	10,705	-	-	10,705
Supplementary contracts	1,091	1,092	-	-	1,092
Derivatives:					
Interest rate swaps	5,824	5,833	-	5,833	-
Options	9	9	-	9	-
Currency swaps	49	49	-	49	-
Forward contracts	3	3	-	3	-
Credit default swaps	8	7	-	7	-

Common stocks - subsidiaries and affiliates do not include MMHLLC, which had a statutory carrying value of $5,549 million, MSC Holding Company, LLC, which had a statutory carrying value of $359 million and MassMutual Trust Company, which had a statutory carrying value of $15 million.

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

	June 30, 2015			
	Level 1	Level 2	Level 3	Total
	(In Millions)			
Financial assets:				
Bonds:				
Special revenue	$ -	$ 2	$ -	$ 2
Industrial and miscellaneous	-	26	15	41
Parent, subsidiaries and affiliates	-	14	89	103
Preferred stocks	-	-	3	3
Common stocks - unaffiliated	563	441	168	1,172
Common stocks - subsidiaries and affiliates	525	113	89	727
Separate account assets	43,410	22,153	680	66,243
Derivatives:				
Interest rate swaps	-	7,204	-	7,204
Options	-	579	-	579
Currency swaps	-	347	-	347
Forward contracts	-	20	-	20
Credit default swaps	-	1	-	1
Total financial assets carried at fair value	$ 44,498	$ 30,900	$ 1,044	$ 76,442
Financial liabilities:				
Derivatives:				
Interest rate swaps	$ -	$ 5,243	$ -	$ 5,243
Options	-	4	-	4
Currency swaps	-	88	-	88
Forward contracts	-	60	-	60
Credit default swaps	-	4	-	4
Total financial liabilities carried at fair value	$ -	$ 5,399	$ -	$ 5,399

For the six months ended June 30, 2015, there were no significant transfers between Level 1 and Level 2.

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

	December 31, 2014			
	Level 1	Level 2	Level 3	Total
	(In Millions)			
Financial assets:				
Bonds:				
All other governments	$ -	$ 4	$ -	$ 4
Industrial and miscellaneous	-	33	133	166
Parent, subsidiaries and affiliates	-	10	66	76
Preferred stocks	-	-	4	4
Common stocks - unaffiliated	587	442	162	1,191
Common stocks - subsidiaries and affiliates	521	117	81	719
Separate account assets	42,938	21,927	600	65,465
Derivatives:				
Interest rate swaps	-	8,150	-	8,150
Options	-	573	-	573
Currency swaps	-	244	-	244
Forward contracts	-	73	-	73
Total financial assets carried at fair value	$ 44,046	$ 31,573	$ 1,046	$ 76,664
Financial liabilities:				
Derivatives:				
Interest rate swaps	$ -	$ 5,824	$ -	$ 5,824
Options	-	9	-	9
Currency swaps	-	49	-	49
Forward contracts	-	3	-	3
Credit default swaps	-	5	-	5
Total financial liabilities carried at fair value	$ -	$ 5,890	$ -	$ 5,890

For the year ended December 31, 2014, there were no significant transfers between Level 1 to Level 2.

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

	Six Months Ended June 30, 2015						
	Bonds						
	Industrial and Miscellaneous	Parent, Subsidiaries, and Affiliates	Preferred Stock	Common Stock Unaffiliated	Common Stock Affiliated	Separate Account Assets	Total Level 3 Financial Assets Carried at Fair Value
	(In Millions)						
Balance as of January 1, 2015	$ 133	$ 66	$ 4	$ 162	$ 81	$ 600	$ 1,046
Gains in net income	(6)		-	4	5	10	13
(Losses) gains in surplus	(1)	(5)	-	6	3	-	3
Purchases	-	22	-	7	460	116	605
Issuances	3	2	-	-	26	-	31
Sales	-		-	(6)	(464)	(46)	(516)
Settlements	(6)	(18)	-	-	(26)	-	(50)
Transfers out	-	-	-	(1)	-	-	(1)
Other transfers	(108)	22	(1)	(4)	4	-	(87)
Balance as of June 30, 2015	$ 15	$ 89	$ 3	$ 168	$ 89	$ 680	$ 1,044

Transfers out of Level 3 occur when quoted prices are received in markets that have not been previously active, and therefore the assets are moved to Level 2. Industrial and miscellaneous were transferred out of Level 3 into Level 2 due to a change in the observability of pricing inputs.

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 cost of market carrying basis.

	Year Ended December 31, 2014						
	Bonds						
	Industrial and Miscellaneous	Parent, Subsidiaries, and Affiliates	Preferred Stock	Common Stock Unaffiliated	Common Stock Affiliated	Separate Account Assets	Total Level 3 Financial Assets Carried at Fair Value
	(In Millions)						
Balance as of January 1, 2014	$ 25	$ -	$ 1	$ 186	$ 35	$ 490	$ 737
(Losses) gains in net income	(1)	-	-	(71)	(1)	82	9
(Losses) gains in surplus	(15)	(5)	-	40	(3)	-	17
Purchases	26	-	4	11	103	238	382
Issuances	120	106	-	4	2	-	232
Sales	-	-	-	(5)	(34)	(320)	(359)
Settlements	(8)	(94)	-	(6)	(21)	110	(19)
Transfers in	-	59	-	3	-	-	62
Other transfers	(14)	-	(1)	-	-	-	(15)
Balance as of December 31, 2014	$ 133	$ 66	$ 4	$ 162	$ 81	$ 600	$ 1,046

The fair value of real estate separate accounts is carried net of encumbrances on the Condensed Consolidated Statutory Statements of Financial Position and the change in encumbrances is included in the settlements within separate account assets.

Level 3 transfers in are assets that are consistently carried at fair value but have had a level change. The parent, subsidiaries, and affiliates were transferred in to Level 3 from Level 2 due to a change in the observability of pricing inputs.

18. Business risks, commitments and contingencies

a. Risks and uncertainties

The Company operates in a business environment subject to various risks and uncertainties. Such risks and uncertainties include, but are not limited to, currency exchange risk, interest rate risk and credit risk. Interest rate risk is the potential for interest rates to change, which can cause fluctuations in the value of investments and amounts due to policyholders. To the extent that fluctuations in interest rates cause the duration of assets and liabilities to differ, the Company mitigates its exposure to this risk by, among other things, asset/liability management techniques that account for the cash flow characteristics of the assets and liabilities. This condensed risks and uncertainties disclosure should be read in conjunction with the consolidated statutory disclosure in the Company's 2014 audited year end financial statements.

Currency exchange risk

The Company has currency risk due to its non-U.S. dollar investments and medium-term notes along with its indirect international operations. The Company mitigates 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 prespecified exchange of interest and principal. Forward contracts are used to hedge movements in exchange rates.

Investment and interest rate risks

Investment earnings can be influenced by a number 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.

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 slower amortization or prepayment speeds than 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.

Credit and other market risks

Credit risk is the risk that issuers of investments owned by the Company may default or that other parties may not be able to pay amounts due to the Company. The Company manages its investments to limit credit risk by diversifying its portfolio among various security types and industry sectors as well as purchasing credit default swaps to transfer some of the risk.

The Company has investments in European debt. Underlying concerns over the macro-economic outlook and debt burden of certain parts of the Eurozone, and other countries remain, but the Company does not have significant exposure to the debt of companies and governments in these countries. With a weaker economic outlook in certain parts of the world it may lead to an increase in reported default rates or contagion to stock or other markets around the world. These events could have impacts on the broader environment resulting in volatility in other world economies and financial markets.

b. Litigation

The Company is involved in litigation arising in the normal course of business, which seeks both compensatory and punitive damages and equitable remedies. Although the Company is not aware of any actions or allegations that reasonably should 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 results of operations for a particular period depending upon, among other factors, the size of the loss and the level of the Company's results of operations for the period.

In 2008, MassMutual and MMHLLC were named as defendants in several lawsuits filed in federal and state courts in Colorado, Massachusetts, New Mexico, New York and Washington by investors seeking to recover investments they allegedly lost as a result of the "Ponzi" scheme run by Bernard L. Madoff through his company, Bernard L. Madoff Investment Securities, LLC. Certain of these lawsuits also named Tremont Group Holdings, Inc. (Tremont) and certain of its affiliates, and certain of their respective current or former officers and directors, as defendants. The plaintiffs allege a variety of state law and federal security claims against the defendants. The cases are in various stages of litigation. MassMutual believes it has substantial defenses and will continue to vigorously defend itself in these actions. In March 2015, Tremont recorded a liability for the estimated probable amount of the loss it expected to incur in connection with certain of these lawsuits, which did not have a significant impact on MassMutual. No reasonable estimate can be made at this time regarding the potential liability, if any, or the amount or range of any loss that may result from the remaining suits.

In 2009, several lawsuits were filed as putative class actions and later consolidated before the U.S. District Court for the District of Colorado in connection with the investment performance of Oppenheimer Rochester California Municipal Fund (the California Fund Suit). This fund was advised by OppenheimerFunds, Inc. (OFI) and distributed by its subsidiary OppenheimerFunds Distributor, Inc. (OFDI). The plaintiffs in the California Fund Suit claim against MassMutual, OFI, OFDI and certain present and former trustees and officers of the fund under federal securities laws and allege, among other things, the disclosure documents of the fund contained misrepresentations and omissions, that the investment policies of the fund were not followed, and that the fund and the other defendants violated federal securities laws and regulations and certain state laws. Plaintiffs in the California Fund Suit filed an amended complaint and defendants filed a motion to dismiss. In 2011, the court issued an order that granted in part and denied in part the defendants' motion to dismiss. In 2012, plaintiffs filed a motion, which defendants opposed, to certify a class and appoint class representatives and class counsel. In March 2015, the court granted plaintiffs' class certification motion. In May 2015, the U.S. Court of Appeals for the Tenth Circuit issued an order vacating the district court's class certification order and remanded the matter to the district court for further proceedings. The district court subsequently scheduled an evidentiary hearing for July 21, 2015 to determine whether class certification is appropriate in the California Fund Suit. The defendants believe they have substantial defenses and will continue to vigorously defend themselves in this action. No reasonable estimate can be made at this time regarding the potential liability, if any, or the amount or range of any loss that may result from this suit.

In 2009, MassMutual was named as a defendant in a lawsuit related to certain losses in a bank owned life insurance (BOLI) policy issued by MassMutual. The plaintiff alleges, among other things, fraud, breach of contract and breach of fiduciary duty claims against MassMutual, and it seeks to recover losses arising from investments pursuant to the BOLI policy. The parties have completed discovery and are preparing for trial. In May 2015, the plaintiff voluntarily dismissed its complaint and refiled the case. MassMutual believes it has substantial defenses and will continue to vigorously defend itself in this action. No reasonable estimate can be made at this time regarding the potential liability, if any, or the amount or range of any loss that may result from this suit.

In 2010, Christina Chavez (Chavez) filed a putative class action complaint against MassMutual. Chavez alleges that MassMutual breached its obligations to its term life policyholders in California by not paying dividends on those policies. The parties are engaged in active discovery. In June 2014, the parties participated in a mediation of their dispute, which did not result in a settlement. The parties have filed briefs on the issue of class certification and hearings were held in March 2015 and June 2015. MassMutual believes it has substantial defenses and will continue to vigorously defend itself in this action. No reasonable estimate can be made at this time regarding the potential liability, if any, or the amount or range of any loss that may result from this claim.

In 2011, Golden Star, Inc. (Golden Star), plan administrator of the Golden Star Administrative Associates 401(k) Plan and Golden Star Bargaining Associates 401(k) Plan, filed a putative class action lawsuit in the U.S. District Court for the District of Massachusetts against MassMutual. Golden Star alleges, among other things, that MassMutual breached its alleged fiduciary duties while performing services to 401(k) plans and that certain of its actions constituted “Prohibited Transactions” under the Employee Retirement Income Security Act of 1974. In June 2014, MassMutual recorded a liability for the estimated probable amount of the loss it expected to incur in connection with this lawsuit, which did not have a significant impact on MassMutual. In October 2014, the parties filed a motion for preliminary approval of a settlement, which the court granted in December 2014.

In 2012, Karen Bacchi filed a putative class action complaint against MassMutual in federal court alleging that MassMutual breached its contracts by allegedly failing to distribute surplus in excess of the statutorily prescribed limit. The court denied MassMutual’s motion to dismiss and the parties are engaged in active discovery. MassMutual believes that it has substantial defenses and will continue to vigorously defend itself in this action. No reasonable estimate can be made at this time regarding the potential liability, if any, or the amount or range of any loss that may result from this claim.

In 2013, seven participants in the MassMutual Thrift Plan (the Plan) filed a putative class action complaint in the U.S. District Court for the District of Massachusetts. The complaint alleges, among other things, that MassMutual, the Investment Fiduciary Committee, the Plan Administrative Committee and individually named "fiduciaries" breached their duties by allowing the Plan to pay excessive fees and by engaging in self-dealing by limiting investment options primarily to MassMutual proprietary products. All defendants filed a joint motion to dismiss in January 2014, which the court denied without prejudice in March 2015 pending the outcome of a U.S. Supreme Court case which occurred in June 2015. All defendants are expected to file renewal motions to dismiss. MassMutual believes that it has substantial defenses and will continue to vigorously defend itself in this action. No reasonable estimate can be made at this time regarding the potential liability, if any, or the amount or range of any loss that may result from this claim.

c. Regulatory matters

The Company is subject to governmental and administrative proceedings and regulatory inquiries, examinations and investigations in the ordinary course of its business. In connection with regulatory inquiries, examinations and investigations, the Company has been contacted by various regulatory agencies including, among others, the Securities and Exchange Commission, the U.S. Department of Labor and various state insurance departments and state attorneys general. The Company has cooperated fully with these regulatory agencies with regard to their inquiries, examinations and investigations and has responded to information requests and comments.

Market volatility in the financial services industry over the last several years has contributed to increased scrutiny of the entire financial services industry. Therefore, the Company believes that it is reasonable to expect that proceedings, regulatory inquiries, examinations and investigations into the insurance and financial services industries will continue for the foreseeable future. Additionally, new industry-wide legislation, rules and regulations could significantly affect the insurance and financial services industries as a whole. It is the opinion of management that the ultimate resolution of these regulatory inquiries, examinations, investigations, legislative and regulatory changes of which we are aware will not materially impact the Company’s financial position or liquidity. However, the outcome of a particular matter may be material to the Company’s operating results for a particular period depending upon, among other factors, the financial impact of the matter and the level of the Company’s results of operations for the period.

d. Commitments

In the normal course of business, the Company enters into letter of credit arrangements. As of June 30, 2015 and December 31, 2014, the Company had approximately $161 million and $63 million, respectively, of outstanding letter of credit arrangements. As of June 30, 2015 and December 31, 2014, the Company did not have any funding requests attributable to these letter of credit arrangements.

19. Related party transactions

No significant changes.

20. Subsequent events

Management of the Company has evaluated subsequent events through August 11, 2015, the date the financial statements were available to be issued. Except as discussed in *Note 9. "Policyholders' liabilities"*, no events have occurred subsequent to the balance sheet date and before the date of evaluation that would require disclosure.