MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY
AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATUTORY FINANCIAL STATEMENTS

As of June 30, 2013 and December 31, 2012 and for the six months ended
June 30, 2013 and 2012 and for the year ended December 31, 2012

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, 2013	December 31, 2012	$ Change	% Change
	($ In Millions)			
Assets:				
Bonds	$ 71,246	$ 61,650	$ 9,596	16%
Preferred stocks	507	359	148	41%
Common stocks - subsidiaries and affiliates	5,129	4,814	315	7%
Common stocks - unaffiliated	804	840	(36)	(4)%
Mortgage loans	16,037	14,734	1,303	9%
Policy loans	10,487	10,296	191	2%
Real estate	1,165	1,162	3	- %
Partnerships and limited liability companies	6,618	6,762	(144)	(2)%
Derivatives	7,160	9,630	(2,470)	(26)%
Other invested assets	403	55	348	633%
Cash, cash equivalents and short-term investments	2,139	3,410	(1,271)	(37)%
Total invested assets	121,695	113,712	7,983	7%
Investment income due and accrued	1,772	1,483	289	19%
Federal income taxes	251	279	(28)	(10)%
Deferred income taxes	900	658	242	37%
Other than invested assets	953	855	98	11%
Total assets excluding separate accounts	125,571	116,987	8,584	7%
Separate account assets	61,278	58,124	3,154	5%
Total assets	$ 186,849	$ 175,111	$ 11,738	7%
Liabilities and Surplus:				
Policyholders' reserves	$ 86,638	$ 78,971	$ 7,667	10%
Liabilities for deposit-type contracts	9,024	5,388	3,636	67%
Contract claims and other benefits	382	345	37	11%
Policyholders' dividends	1,424	1,400	24	2%
General expenses due or accrued	827	981	(154)	(16)%
Asset valuation reserve	2,058	1,997	61	3%
Securities sold under agreements to repurchase	3,575	4,020	(445)	(11)%
Commercial paper	250	250	-	- %
Derivative collateral	1,072	1,477	(405)	(27)%
Derivatives	4,859	6,916	(2,057)	(30)%
Other liabilities	3,177	2,564	613	24%
Total liabilities excluding separate accounts	113,286	104,309	8,977	9%
Separate account liabilities	61,269	58,115	3,154	5%
Total liabilities	174,555	162,424	12,131	7%
Surplus	12,294	12,687	(393)	(3)%
Total liabilities and surplus	$ 186,849	$ 175,111	$ 11,738	7%

See notes to condensed consolidated statutory financial statements

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

	Six Months Ended June 30, 2013	Six Months Ended June 30, 2012	$ Change	% Change
	($ In Millions)			
Revenue:				
Premium income	$ 10,091	$ 10,132	$ (41)	- %
Net investment income	2,810	2,561	249	10%
Fees and other income	460	334	126	38%
Total revenue	13,361	13,027	334	3%
Benefits and expenses:				
Policyholders' benefits	8,865	5,675	3,190	56%
Change in policyholders' reserves	3,203	5,321	(2,118)	(40)%
Change in reserves due to reinsurance agreement	(1,113)	-	(1,113)	(100)%
General insurance expenses	793	700	93	13%
Ceding commission on reinsurance agreement	355	-	355	100%
Commissions	360	289	71	25%
State taxes, licenses and fees	98	92	6	7%
Total benefits and expenses	12,561	12,077	484	4%
Net gain from operations before dividends and federal income taxes	800	950	(150)	(16)%
Dividends to policyholders	664	626	38	6%
Net gain from operations before federal income taxes	136	324	(188)	(58)%
Federal income tax expense (benefit)	29	(140)	169	121%
Net gain from operations	107	464	(357)	(77)%
Net realized capital losses after tax and transfers to interest maintenance reserve	(193)	(111)	(82)	(74)%
Net (loss) income	$ (86)	$ 353	$ (439)	(124)%

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, 2013	Six Months Ended June 30, 2012	$ Change	% Change
	($ In Millions)			
Surplus, beginning of year	$ 12,687	$ 11,417	$ 1,270	11%
Increase (decrease) due to:				
Net (loss) income	(86)	353	(439)	(124)%
Change in net unrealized capital (losses) gains, net of tax	(301)	587	(888)	(151)%
Change in net unrealized foreign exchange capital losses, net of tax	(59)	(30)	(29)	(97)%
Change in other net deferred income taxes	59	(170)	229	135%
Change in nonadmitted assets	8	14	(6)	(43)%
Change in reserve valuation basis	(31)	-	(31)	(100)%
Change in asset valuation reserve	(61)	(80)	19	24%
Change in surplus notes	-	399	(399)	(100)%
Prior period adjustments	34	(18)	52	289%
Change in minimum pension liability	44	-	44	100%
Net (decrease) increase	(393)	1,055	(1,448)	(137)%
Surplus, end of period	$ 12,294	$ 12,472	$ (178)	(1)%

See notes to condensed consolidated statutory financial statements

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

	Six Months Ended June 30, 2013	Year Ended December 31, 2012
	(In Millions)	
Cash from operations:		
Premium and other income collected	$ 10,606	$ 21,403
Net investment income	2,645	5,143
Benefit payments	(8,705)	(11,565)
Net transfers to separate accounts	(808)	(5,466)
Commissions and other expenses	(659)	(2,119)
Dividends paid to policyholders	(640)	(1,313)
Federal and foreign income taxes recovered (paid)	24	(39)
Net cash from operations	2,463	6,044
Cash from investments:		
Proceeds from investments sold, matured or repaid:		
Bonds	10,018	18,661
Common stocks - unaffiliated	221	125
Mortgage loans	989	2,264
Real estate	-	103
Partnerships	722	1,046
Preferred and affiliated common stocks	157	662
Other	(828)	(74)
Total investment proceeds	11,279	22,787
Cost of investments acquired:		
Bonds	(19,647)	(21,325)
Common stocks - unaffiliated	(199)	(331)
Mortgage loans	(2,355)	(3,679)
Real estate	(52)	(126)
Partnerships	(638)	(1,555)
Preferred and affiliated common stocks	(569)	(482)
Other	264	(90)
Total investments acquired	(23,196)	(27,588)
Net increase in policy loans	(192)	(527)
Net cash used in investing activities	(12,109)	(5,328)
Cash from financing and other sources:		
Net (withdrawals) deposits on deposit-type contracts	(382)	617
Cash provided from surplus notes	-	399
Change in securities sold under agreements to repurchase	(445)	250
Change in derivative collateral	(555)	(298)
Change in policyholders' reserves	5,298	-
Change in liabilities for deposit-type contracts	3,885	-
Other cash applied	574	(62)
Net cash from financing and other sources	8,375	906
Net change in cash, cash equivalents and short-term investments	(1,271)	1,622
Cash, cash equivalents and short-term investments, beginning of year	3,410	1,788
Cash, cash equivalents and short-term investments, end of period	$ 2,139	$ 3,410

See notes to condensed consolidated statutory financial statements

1. *Nature of operations*

MassMutual Financial Group (MMFG) is a global, diversified financial services organization comprised of Massachusetts Mutual Life Insurance Company (MassMutual) and its subsidiaries. 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 entities comprising MMFG are accounted for under the equity method in accordance with statutory accounting principles. Statutory financial statements filed with regulatory authorities are not presented on a consolidated basis.

The condensed consolidated statutory financial statements and notes as of June 30, 2013, and for the six months ended June 30, 2013 and 2012, are unaudited. These condensed consolidated statutory financial statements reflect adjustments, consisting only of normal accruals, which are, in the opinion of management, necessary for the fair presentation of the financial position, results of operations 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 2012 audited year end financial statements as these condensed consolidated statutory financial statements disclose only significant changes from year end 2012. 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, 2012 and the Condensed Consolidated Statutory Statements of Cash Flows for the year ended December 31, 2012 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.

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 Department).

Statutory accounting practices are different in some respects from financial statements prepared in accordance with U.S. generally accepted accounting principles (GAAP). The more significant differences between statutory accounting principles and U.S. GAAP are as follows: (a) bonds are generally carried at amortized cost, whereas U.S. GAAP generally reports bonds at fair value; (b) changes in the fair value of derivative financial instruments are recorded as changes in surplus, whereas U.S. GAAP generally reports these changes as revenue unless deemed an effective hedge; (c) interest rate swap replications are carried at amortized cost, whereas U.S. GAAP would carry these at fair value; (d) embedded derivatives are recorded as part of the underlying contract, whereas U.S. GAAP would identify and bifurcate certain embedded derivatives from the underlying contract or security and account for them separately at fair value; (e) income recognition on partnerships and limited liability companies (LLCs), which are accounted for under the equity method, is limited to the amount of cash distribution, whereas U.S. GAAP does not have this limitation; (f) majority-owned noninsurance subsidiaries, variable interest entities where the Company is the primary beneficiary, and certain other controlled entities are accounted for using the equity method, whereas U.S. GAAP would consolidate these entities; (g) changes in the balances of deferred income taxes, which provide for book versus tax temporary differences, are subject to limitation and are recorded in surplus, whereas U.S. GAAP would generally include the change in deferred taxes in net income; (h) certain group annuity and variable universal life contracts, which do not pass-through all investment gains to contract holders, are maintained in the separate accounts and are presented on a single line in the statutory financial statements, whereas U.S. GAAP reports these contracts as general investments of the Company; (i) assets are reported at admitted asset value and assets designated as nonadmitted are excluded through a charge against surplus, whereas U.S. GAAP recognizes all assets, subject to valuation allowances; (j) statutory policy reserves are based upon prescribed methods, such as the Commissioners' Reserve Valuation Method, Commissioners' Annuity Reserve Valuation Method or net level premium method, and prescribed statutory mortality, morbidity and interest assumptions, whereas U.S. GAAP reserves would generally be based upon the net level premium method or the estimated gross margin method with estimates of future mortality, morbidity, persistency and interest; (k) policyholder reserves are presented net of reinsurance ceded, unearned ceded premium and unpaid ceded claims, whereas U.S. GAAP would report these reinsurance balances as an asset; (l) an asset valuation reserve (AVR) is reported as a contingency reserve to stabilize surplus against fluctuations in the statement value of common stocks, real estate investments, partnerships and LLCs as well as credit-related declines in the value of bonds, mortgage loans and certain derivatives to the extent AVR is greater than zero for the appropriate asset category, whereas U.S. GAAP does not record this reserve; (m) after-tax realized capital gains (losses) that result from changes in the overall level of interest rates for all types of fixed-income investments and interest-related hedging activities are deferred into the interest maintenance reserve (IMR) and amortized into revenue, whereas U.S. GAAP reports these gains and losses as revenue; (n) changes to the mortgage loan valuation allowance are recognized in net unrealized capital gains (losses), net of tax, in the Consolidated Statutory Statements of Changes in Surplus, whereas U.S. GAAP reports these changes in net realized capital gains (losses); (o) the overfunded status of pension and other postretirement plans which is the excess of the fair value of the plan assets over the projected benefit obligation is a nonadmitted asset for statutory accounting whereas U.S. GAAP recognizes the overfunded status as an asset. The underfunded status of pension and other postretirement plans, which is the excess of the projected benefit obligation over the fair value of the plan assets, is recognized as a liability for both statutory and U.S. GAAP accounting. However, unlike U.S. GAAP accounting, statutory accounting requires the underfunded liability at transition (net of any accrued benefit cost) to be recognized immediately or amortized over up to 10 years through unassigned surplus; (p) surplus notes are reported in surplus, whereas U.S. GAAP would report these notes as liabilities; (q) payments received for universal and variable life insurance products, certain variable and fixed deferred annuities and group annuity contracts are reported as premium income and corresponding change in reserves, whereas U.S. GAAP would treat these payments as deposits to policyholders' account balances; (r) certain acquisition costs, such as commissions and other variable costs, directly related to acquiring new business are charged to current operations as incurred, whereas U.S. GAAP would generally capitalize these expenses and amortize them based on profit emergence over the expected life of the policies or over the premium payment period; and (s) comprehensive income is not presented, whereas U.S. GAAP presents changes in unrealized capital gains (losses) and foreign currency translations as other comprehensive income.

The preparation of financial statements requires management to make estimates and assumptions that impact the reported amounts of assets and liabilities, the disclosure of assets and liabilities as of the date of the condensed consolidated statutory financial statements and the reported amounts of revenues and expenses during the reporting periods. The most significant estimates include those used in determining the carrying values of investments including the amount of mortgage loan investment valuation reserves, other-than-temporary impairment(s) (OTTI), the value of the investment in MassMutual Holding LLC (MMHLLC), the liabilities for policyholders' reserves, the determination of admissible deferred tax assets (DTAs), the liability for taxes and litigation contingencies. Future events including, but not limited to, changes in the level of mortality, morbidity, interest rates, persistency, asset valuations and defaults could cause results to differ from the estimates used in the condensed consolidated statutory financial statements. Although some variability is inherent in these estimates, management believes the amounts presented are appropriate.

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 2012 audited consolidated year end financial statements.

b. Corrections of errors and reclassifications

Under statutory accounting principles, corrections of prior year errors are recorded in current year surplus on a pretax basis with any associated tax impact reported through earnings.

The following summarizes corrections of prior year errors:

	Six Months Ended June 30, 2013		
	Increase (Decrease) to:		Correction
	Prior Year Income	Current Year Surplus	of Asset or Liability Balances
	(In Millions)		
Policyholders' reserves	$ 47	$ 47	$ (47)
Premium income (ceded)	(15)	(15)	15
Other invested assets	2	2	(2)
Total	$ 34	$ 34	$ (34)

	Six Months Ended June 30, 2012		
	Increase (Decrease) to:		Correction
	Prior Year Income	Current Year Surplus	of Asset or Liability Balances
	(In Millions)		
Policyholders' reserves	$ (16)	$ (16)	$ 16
General insurance expenses	(11)	(11)	11
Reinsurance	9	9	(9)
Partnership income	4	4	(4)
Other	(4)	(4)	4
Total	$ (18)	$ (18)	$ 18

Certain prior year amounts within these financial statements have been reclassified to conform to the current year presentation. In prior periods, certain derivative assets and liabilities were presented on a net basis pursuant to the terms of master netting agreements with particular counterparties. For the current period, all such assets and liabilities are reported on a gross basis in accordance with new NAIC guidance. Prior period amounts have been restated to conform to the gross presentation.

3. New accounting standards

a. Adoption of new accounting standards

In March 2012, the NAIC issued Statement of Statutory Accounting Principles (SSAP) No. 102 "Accounting for Pensions, Replacement of SSAP No. 89," which was effective on January 1, 2013. This SSAP primarily adopts U.S. GAAP accounting guidance for pensions by requiring entities to measure the pension liability at the projected benefit obligation and to recognize the funded status of the defined benefit pension plan on the statement of financial position. The projected benefit obligation includes amounts for both vested and non-vested participants and makes assumptions for future compensation increases. The adoption of this SSAP on January 1, 2013 created an additional pension liability of $43 million of which the Company immediately recorded $8 million as a decrease to surplus. The remaining $35 million transition liability has been deferred and will be amortized through 2022.

In March 2012, the NAIC issued SSAP No. 92, "Accounting for Postretirement Benefits Other Than Pensions, A Replacement of SSAP No. 14," which was effective January 1, 2013. Under this SSAP, participants not yet eligible to retire will also be included in the accumulated postretirement benefit obligation. The accumulated postretirement benefit obligation is already recorded on a U.S. GAAP basis on the books of MMHLLC, a subsidiary of the Company. The U.S. GAAP equity of this subsidiary is included in admitted assets of MassMutual for statutory purposes. Therefore, there was no impact from the adoption of this SSAP besides disclosure.

In March 2012, the NAIC issued SSAP No. 103, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities," which superseded SSAP No. 91R, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities." The change to SSAP No. 91R incorporates the U.S. GAAP guidance of the Financial Accounting Standards Board (FASB) Statement No. 166, "Accounting for Transfers and Servicing of Financial Assets, an amendment of FASB Statement No. 140," and Accounting Standards Update No. 2011-03, "Transfers and Servicing (Topic 860), Reconsideration of Effective Control for Repurchase Agreements," with modifications to conform the guidance to statutory accounting concepts. These modifications are primarily related to concepts that are not applicable or consistent with statutory accounting (e.g., rejection of U.S. GAAP consideration for consolidated affiliates, references to U.S. GAAP standards, methods, references and guidance not adopted for/applicable to statutory accounting). The Company adopted the guidance prospectively as of January 1, 2013. Adoption of this guidance did not have an impact on the Company's financial statements.

In August 2012, the NAIC issued new guidance pertaining to share-based payments. This new standard provides statutory accounting guidance on transactions in which an entity awards employees in share-based payments. It requires entities to measure share-based payments in the financial statements using a fair value-based measurement objective and recognize the compensation costs as employee services are consumed. It substantially adopts the stock compensation guidance in U.S. GAAP under Accounting Standards Codification Topic 718, Stock Compensation, which the Company has applied to its accounting for the phantom stock appreciation rights and phantom restricted stock since 2008. This guidance was issued as SSAP No. 104, "Share-Based Payments – Revised," which supersedes SSAP No. 13, "Stock Options and Stock Purchase Plans," and is effective prospectively for years beginning on January 1, 2013, although early adoption was permitted for the December 31, 2012 financial statements. The Company early adopted this statement as of December 31, 2012, and it did not have an impact on the Company's financial statements.

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, 2013			
	Carrying Value	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(In Millions)			
U.S. government and agencies	$ 7,123	$ 719	$ 26	$ 7,816
All other governments	211	29	8	232
States, territories and possessions	1,846	102	44	1,904
Special revenue	4,385	647	14	5,018
Industrial and miscellaneous	51,963	2,760	864	53,858
Parent, subsidiaries and affiliates	5,718	312	36	5,995
Total	$ 71,246	$ 4,569	$ 992	$ 74,823

Note: The unrealized losses exclude $59 million of losses embedded in the carrying value, all of which are from NAIC Category 6 bonds.

	December 31, 2012			
	Carrying Value	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(In Millions)			
U.S. government and agencies	$ 7,995	$ 1,199	$ 6	$ 9,188
All other governments	126	38	-	164
States, territories and possessions	1,541	204	-	1,745
Special revenue	4,111	987	2	5,096
Industrial and miscellaneous	42,266	4,371	243	46,394
Parent, subsidiaries and affiliates	5,611	344	123	5,832
Total	$ 61,650	$ 7,143	$ 374	$ 68,419

Note: The unrealized losses exclude $17 million of losses embedded in the carrying value, which include $12 million from NAIC Category 6 bonds and $5 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, 2013	Six Months Ended June 30, 2012
	(In Millions)	
Proceeds from sales	$ 4,053	$ 3,730
Gross realized capital gains from sales	107	169
Gross realized capital losses from sales	(119)	(15)

The following is an analysis 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, 2013					
	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	$ 1,152	$ 26	6	$ -	$ -	-
All other governments	81	7	37	-	-	-
States, territories and possessions	580	44	44	-	-	-
Special revenue	418	13	226	4	1	77
Industrial and miscellaneous	16,401	772	1,381	1,486	96	320
Parent, subsidiaries and affiliates	167	7	10	760	85	14
Total	$ 18,799	$ 869	1,704	$ 2,250	$ 182	411

Note: The unrealized losses include $59 million of losses embedded in the carrying value, all of which are from NAIC Category 6 bonds.

	December 31, 2012					
	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	$ 1,287	$ 6	2	$ -	$ -	-
States, territories and possessions	60	1	7	-	-	-
Special revenue	52	1	65	10	2	69
Industrial and miscellaneous	2,475	63	257	2,943	188	545
Parent, subsidiaries and affiliates	15	5	4	849	125	18
Total	$ 3,889	$ 76	335	$ 3,802	$ 315	632

Note: The unrealized losses include $17 million of losses embedded in the carrying value, which include $12 million from NAIC Category 6 bonds and $5 million from RMBS and CMBS whose ratings were obtained from outside modelers.

Based on the Company's policies, as of June 30, 2013 and December 31, 2012, the Company has not deemed these unrealized losses to be other than temporary because the investment carrying value is expected to be realized based on the Company's analysis of fair value or, for loan-backed and structured securities, based on present value of cash flows, and the Company has the ability and intent not to sell these investments until recovery, which may be maturity.

As of June 30, 2013, investments in structured and loan-backed securities that had unrealized losses, which were not recognized in earnings, had a fair value of $3,955 million. Securities in an unrealized loss position for less than 12 months had a fair value of $2,615 million and unrealized losses of $83 million. Securities in an unrealized loss position for greater than 12 months had a fair value of $1,340 million and unrealized losses of $106 million. These securities were primarily categorized as industrial and miscellaneous and 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, 2013 and year ended December 31, 2012 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, 2013 and December 31, 2012, RMBS had a total carrying value of $3,348 million and $3,198 million and a fair value of $3,672 million and $3,449 million, of which approximately 29% and 38%, based on carrying value, was classified as Alt-A, respectively. As of June 30, 2013 and December 31, 2012, Alt-A and subprime RMBS had a total carrying value of $1,628 million and $1,788 million and a fair value of $1,802 million and $1,840 million, respectively.

During the six months ended June 30, 2013, there were no significant credit downgrades for the securities held by the Company that were backed by residential mortgage pools.

b. Common stocks - subsidiaries and affiliates

Common stocks of unconsolidated subsidiaries, primarily MMHLLC, are accounted for using the statutory equity method. The Company accounts for the value of its investment in its subsidiary, MMHLLC, at its underlying U.S. GAAP net equity adjusted to remove certain nonadmitted and intangible assets, as well as a portion of its noncontrolling interests (NCI) and appropriated retained earnings (ARE), after consideration of MMHLLC's fair value and the Company's capital levels. The Division 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 $2,135 million and $2,165 million as of June 30, 2013 and December 31, 2012, respectively. The current fair value of MMHLLC remains significantly greater than its statutory carrying amount.

MassMutual contributed capital of $75 million to MSC Holding Company, LLC, an unconsolidated wholly owned subsidiary of MassMutual, in each of the six months ended June 30, 2013 and 2012.

On April 16, 2010, a lawsuit was filed in New York state court against OppenheimerFunds, Inc. (OFI), its subsidiary HarbourView Asset Management Corporation (HVAMC) and AAArdvark IV Funding Limited (AAArdvark IV) in connection with the investment made by TSL (USA) Inc., an affiliate of National Australia Bank Limited, in AAArdvark IV. The complaint alleges breach of contract, breach of the covenant of good faith and fair dealing, gross negligence, unjust enrichment and conversion. The complaint seeks compensatory and punitive damages, along with attorney fees. The court has dismissed certain equitable claims against OFI and HVAMC, leaving only the claims for breach of contract. Plaintiffs filed an amended complaint with additional contractual claims. In October 2011, defendants moved to dismiss the complaint to the extent it seeks damages in the form of a return of the plaintiffs' full principal investment. In December 2011, plaintiffs filed a motion for partial summary judgment. In January 2012, the court granted in part defendant's motion to dismiss and denied plaintiffs' motion for partial summary judgment. In April 2012, plaintiffs filed a motion for leave to file a third amended complaint, which added a fraud claim and additional allegations in support of plaintiffs' contract claims. In August 2012, plaintiffs and defendants separately filed motions for partial summary judgment. In April 2013, the court (i) denied plaintiffs' motion for summary judgment; (ii) granted defendants' motion of summary judgment, dismissing plaintiffs' fraud claim with prejudice and dismissing their contract claim without prejudice and (iii) granted plaintiffs' leave to replead to assert a cause of action for specific performance within 30 days. In May 2013, the plaintiffs filed a notice of appeal of the court's April 2013 order of dismissal. The parties have agreed to stay further proceedings pending the appeal. OFI believes it has substantial defenses to the remaining claims and will continue to vigorously defend itself in these actions. 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 these claims.

On July 15, 2011, a lawsuit was filed in New York State Supreme Court against OFI, HVAMC and AAArdvark I Funding Limited (AAArdvark I), in connection with investments made by TSL (USA) Inc. and other investors in AAArdvark I. The complaint alleges breach of contract against each of the defendants and seeks compensatory damages and costs and disbursements, including attorney fees. In October 2011, defendants moved to dismiss the complaint to the extent it seeks damages in the form of a return of the plaintiffs' full principal investment. In January 2012, the court granted in part defendant's motion to dismiss. In July 2012, the parties participated in a mediation of their dispute, which did not result in a settlement. In March 2013, plaintiffs filed an amended complaint, which added a fraud claim and alleged additional facts in support of plaintiffs' contract claim. The parties have agreed to stay proceedings pending the appeal of the AAArdvark IV dismissal order. OFI believes it has substantial defenses to the remaining claims and will continue to vigorously defend itself in these actions. 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 these claims.

On November 9, 2011, a lawsuit was filed in New York State Supreme Court against OFI, HVAMC and AAArdvark XS Funding Limited (AAArdvark XS) in connection with the investment made by Scaldis Capital Limited, predecessor in interest to plaintiff Royal Park Investments SA/NV, in AAArdvark XS. The complaint alleges breach of contract against the defendants and seeks compensatory damages and an award of attorney fees and litigation expenses. OFI believes it has substantial defenses and will vigorously defend itself in these actions. 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 these claims.

Beyond these matters, MMHLLC's subsidiaries are involved in litigation and investigations arising in the ordinary course of the subsidiaries' businesses. 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, because of the uncertainties involved with some of these matters, future revisions to the estimates of the potential liability could materially affect the Company's financial position.

c. 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 commercial real estate properties throughout the U.S. and Canada. The Company holds commercial mortgage loans for which it is the primary lender and mezzanine loans for which the Company is a secondary lender for commercial properties in development. Residential mortgage loans are 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, 2013		December 31, 2012	
	Carrying Value	Fair Value	Carrying Value	Fair Value
	(In Millions)			
Commercial mortgage loans:				
Primary lender	$ 13,828	$ 14,161	$ 12,298	$ 12,642
Mezzanine loans	62	66	36	36
Total commercial mortgage loans	13,890	14,227	12,334	12,678
Residential mortgage loans:				
FHA insured and VA guaranteed	2,131	2,089	2,382	2,401
Other residential loans	16	16	18	19
Total residential mortgage loans	2,147	2,105	2,400	2,420
Total mortgage loans	$ 16,037	$ 16,332	$ 14,734	$ 15,098

The following presents a summary of the Company's impaired mortgage loans:

	June 30, 2013				
	Carrying Value	Average Carrying Value	Unpaid Principal Balance	Valuation Allowance	Interest Income
	(In Millions)				
With allowance recorded:					
Commercial mortgage loans:					
Primary lender	$ 92	$ 103	$ 130	$ (28)	$ 3
Mezzanine loans	2	2	12	(10)	-
Total	94	105	142	(38)	3
With no allowance recorded:					
Commercial mortgage loans:					
Mezzanine loans	-	-	13	-	-
Total impaired commercial mortgage loans	$ 94	$ 105	$ 155	$ (38)	$ 3

	June 30, 2012				
	Carrying Value	Average Carrying Value	Unpaid Principal Balance	Valuation Allowance	Interest Income
	(In Millions)				
With allowance recorded:					
Commercial mortgage loans:					
Primary lender	$ 53	$ 53	$ 68	$ (15)	$ 2
Mezzanine loans	6	4	21	(15)	-
Total	59	57	89	(30)	2
With no allowance recorded:					
Commercial mortgage loans:					
Mezzanine loans	-	-	15	-	-
Total impaired commercial mortgage loans	$ 59	$ 57	$ 104	$ (30)	$ 2

The following presents changes in the valuation allowance recorded for the Company's mortgage loans:

	Six Months Ended June 30,					
	2013			2012		
	Commercial					
	Primary Lender	Mezzanine	Total	Primary Lender	Mezzanine	Total
	(In Millions)					
Beginning balance	$ (5)	$ (10)	$ (15)	$ (19)	$ (29)	$ (48)
Additions	(23)	-	(23)	-	-	-
Decreases	-	-	-	4	5	9
Write-downs	-	-	-	-	9	9
Ending balance	$ (28)	$ (10)	$ (38)	$ (15)	$ (15)	$ (30)

d. Net investment income

Net investment income was derived from the following sources:

	Six Months Ended June 30,	
	2013	2012
	(In Millions)	
Bonds	$ 1,685	$ 1,544
Preferred stocks	10	8
Common stocks - subsidiaries and affiliates	1	27
Common stocks - unaffiliated	11	15
Mortgage loans	403	379
Policy loans	337	341
Real estate	100	102
Partnerships and LLCs	311	185
Derivatives	95	121
Cash, cash equivalents and short-term investments	7	4
Other	5	3
Subtotal investment income	2,965	2,729
Amortization of the IMR	109	76
Investment expenses	(264)	(244)
Net investment income	$ 2,810	$ 2,561

e. Net realized capital gains (losses)

Net realized capital gains (losses) including OTTI were comprised of the following:

	Six Months Ended June 30, 2013	Six Months Ended June 30, 2012
	(In Millions)	
Bonds	$ (36)	$ 68
Preferred stocks	15	8
Common stocks - subsidiaries and affiliates	2	42
Common stocks - unaffiliated	34	4
Mortgage loans	3	16
Real estate	-	12
Partnerships and LLCs	(24)	(30)
Derivatives	(497)	158
Other	(35)	-
Net realized capital (losses) and gains before federal and state taxes and deferral to the IMR	(538)	278
Net federal and state tax benefit (expense)	26	(90)
Net realized capital (losses) and gains before deferral to the IMR	(512)	188
Net after tax losses (gains) deferred to the IMR	319	(299)
Net realized capital losses	$ (193)	$ (111)

The IMR liability balance was $710 million, including $328 million due to the reinsurance agreement related to The Hartford's Retirement Plans Group (RPG) business, as of June 30, 2013 and $793 million as of December 31, 2012.

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

	Six Months Ended June 30, 2013	Six Months Ended June 30, 2012
	(In Millions)	
Bonds	$ (24)	$ (86)
Common stocks	(2)	-
Mortgage loans	-	(9)
Partnerships and LLCs	(23)	(42)
Total OTTI	$ (49)	$ (137)

For the six months ended June 30, 2013 and 2012, the Company recognized $12 million and $63 million, respectively, of OTTI on structured and loan-backed securities primarily due to the present value of expected cash flows being less than the amortized cost.

f. Derivative financial instruments

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 investment positions. These combined investments are created opportunistically when they are economically more attractive than the actual instrument or when the simulated instruments are unavailable. Synthetic assets 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 assets with a net notional amount of $4,128 million as of June 30, 2013 and $2,861 million as of December 31, 2012. Of this amount, $2,568 million as of June 30, 2013 and $1,482 million as of December 31, 2012, were considered replicated asset transactions as defined under statutory accounting principles as the pairing of a long derivative contract with a cash instrument held. The Company's derivative strategy employs a variety of derivative financial instruments, including interest rate swaps, currency swaps, equity and credit default swaps, options, interest rate caps and floors, 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 accounting rules, the Company intentionally has not applied hedge accounting.

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, the Company and its derivative counterparties require collateral to be posted in the amount owed under each transaction, subject to threshold and minimum transfer amounts that are functions of the rating on the counterparty's long-term, unsecured, unsubordinated debt. Additionally, in many instances, the Company enters agreements with counterparties that 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. Collateral pledged by the counterparties was $1,496 million as of June 30, 2013 and $2,300 million as of December 31, 2012. In the event of default the full market value exposure at risk in a net gain position, net of offsets and collateral, was $93 million as of June 30, 2013 and $34 million as of December 31, 2012. The amount at risk using NAIC prescribed rules was $381 million as of June 30, 2013 and $115 million as of December 31, 2012. 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, 2013			
	Assets		Liabilities	
	Carrying Value	Notional Amount	Carrying Value	Notional Amount
	(In Millions)			
Interest rate swaps	$ 6,651	$ 62,781	$ 4,764	$ 69,107
Options	318	12,806	24	182
Currency swaps	115	1,238	48	698
Forward contracts	66	3,209	8	834
Credit default swaps	10	663	15	890
Financial futures - long positions	-	2,572	-	-
Financial futures - short positions	-	532	-	-
Total	$ 7,160	$ 83,801	$ 4,859	$ 71,711

	December 31, 2012			
	Assets		Liabilities	
	Carrying Value	Notional Amount	Carrying Value	Notional Amount
	(In Millions)			
Interest rate swaps	$ 8,991	$ 57,755	$ 6,746	$ 69,113
Options	405	11,610	33	100
Currency swaps	167	1,062	98	959
Forward contracts	45	1,942	30	1,688
Credit default swaps	22	1,216	9	58
Financial futures - long positions	-	2,872	-	-
Financial futures - short positions	-	352	-	-
Total	$ 9,630	$ 76,809	$ 6,916	$ 71,918

In most cases, the notional amounts are not a measure of the Company's credit exposure. The exceptions to this rule are mortgage-backed forwards and credit default swaps that are in the form of a replicated asset. In the event of default, the Company is fully exposed to the notional amounts of $2,298 million as of June 30, 2013 and $2,861 million as of December 31, 2012. Collateral is exchanged for all derivative types except mortgage-backed forwards. For all other contracts, the 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 weighted average fair value of outstanding derivative financial instrument assets was $8,429 million for the six months ended June 30, 2013 and was $9,458 million for the six months ended June 30, 2012. The weighted average fair value of outstanding derivative financial instrument liabilities was $5,932 million for the six months ended June 30, 2013 and was $6,467 million for the six months ended June 30, 2012.

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,			
	2013		2012	
	Net Realized Gains (Losses) Closed Contracts	Change In Net Unrealized Gains (Losses) Open Contracts	Net Realized Gains (Losses) Closed Contracts	Change In Net Unrealized Gains (Losses) Open Contracts
	(In Millions)			
Interest rate swaps	$ (80)	$ (359)	$ (20)	$ 260
Currency swaps	43	(2)	(22)	38
Options	(35)	(81)	59	(341)
Credit default swaps	(24)	9	2	(13)
Forward contracts	(9)	44	122	(28)
Financial futures - long positions	(318)	-	165	-
Financial futures - short positions	(74)	-	(147)	-
Total	$ (497)	$ (389)	$ 159	$ (84)

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

	June 30, 2013					
	Gross	Due & Accrued	Gross Amounts Offset	Net	Collateral Received/ Paid	Net Amount
	(In Millions)					
Derivative assets	$ 7,160	$ 616	$ (5,485)	$ 2,292	$ (2,345)	$ (53)
Derivative liabilities	4,859	1,156	(5,485)	531	(849)	(318)
Net	$ 2,301	$ (540)	$ -	$ 1,761	$ (1,496)	$ 265

	December 31, 2012					
	Gross	Due & Accrued	Gross Amounts Offset	Net	Collateral Received/ Paid	Net Amount
	(In Millions)					
Derivative assets	$ 9,630	$ 611	$ (7,118)	$ 3,123	$ (3,156)	$ (33)
Derivative liabilities	6,916	1,061	(7,118)	859	(856)	3
Net	$ 2,714	$ (450)	$ -	$ 2,264	$ (2,300)	$ (36)

5. *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, 2013				
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
	(In Millions)				
Financial assets:					
Bonds:					
U. S. government and agencies	$ 7,123	$ 7,816	$ -	$ 7,805	$ 11
All other governments	211	232	-	202	30
States, territories and possessions	1,846	1,904	-	1,894	10
Special revenue	4,385	5,018	-	5,018	-
Industrial and miscellaneous	51,963	53,858	-	35,756	18,102
Parent, subsidiaries and affiliates	5,718	5,995	-	1,688	4,307
Preferred stocks	507	522	13	89	420
Common stock - unaffiliated	804	804	338	304	162
Common stock - affiliated[(1)]	833	833	73	496	264
Mortgage loans - commercial	13,890	14,227	-	-	14,227
Mortgage loans - residential	2,147	2,105	-	-	2,105
Cash, cash equivalents and short-term investments	2,139	2,139	385	1,754	-
Separate account assets	61,278	61,298	39,238	21,568	492
Derivatives:					
Interest rate swaps	6,651	6,651	-	6,651	-
Options	318	318	-	318	-
Currency swaps	115	115	-	115	-
Forward contracts	66	66	-	66	-
Credit default swaps	10	10	-	10	-
Financial liabilities:					
Commercial paper	250	250	-	250	-
Securities sold under agreements to repurchase	3,575	3,575	-	3,575	-
Group annuity contracts and funding agreements	20,848	21,878	-	-	21,878
Individual annuity contracts	8,479	9,187	-	-	9,187
Supplementary contracts	1,082	1,083	-	-	1,083
Derivatives:					
Interest rate swaps	4,764	5,020	-	5,020	-
Options	24	24	-	24	-
Currency swaps	48	48	-	48	-
Forward contracts	8	8	-	8	-
Credit default swaps	15	15	-	15	-

[(1)]*Common stock - affiliated does not include MMHLLC, which had a statutory carrying value of $4,296 million as of June 30, 2013.*

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

	December 31, 2012				
	Carrying Value	Fair Value	Level 1	Level 2	Level 3
	(In Millions)				
Financial assets:					
Bonds:					
U. S. government and agencies	$ 7,995	$ 9,188	$ -	$ 9,174	$ 14
All other governments	126	164	-	133	31
States, territories and possessions	1,541	1,745	-	1,745	-
Special revenue	4,111	5,096	-	5,096	-
Industrial and miscellaneous	42,266	46,394	-	29,760	16,634
Parent, subsidiaries and affiliates	5,611	5,832	-	1,588	4,244
Preferred stocks	359	385	12	74	299
Common stock - unaffiliated	840	840	623	60	157
Common stock - affiliated[(1)]	543	543	-	363	180
Mortgage loans - commercial	12,334	12,678	-	-	12,678
Mortgage loans - residential	2,400	2,420	-	-	2,420
Cash, cash equivalents and short-term investments	3,410	3,410	753	2,657	-
Separate account assets	58,124	58,174	37,772	19,864	538
Derivatives:					
Interest rate swaps	8,991	8,991	-	8,991	-
Options	405	405	-	405	-
Currency swaps	167	167	-	167	-
Forward contracts	45	45	-	45	-
Credit default swaps	22	22	-	22	-
Financial liabilities:					
Commercial paper	250	250	-	250	-
Securities sold under agreements to repurchase	4,020	4,020	-	4,020	-
Group annuity contracts and funding agreements	11,660	12,937	-	-	12,937
Individual annuity investment contracts	8,562	9,890	-	-	9,890
Supplementary investment contracts	1,077	1,079	-	-	1,079
Derivatives:					
Interest rate swaps	6,746	6,769	-	6,769	-
Options	33	33	-	33	-
Currency swaps	98	98	-	98	-
Forward contracts	30	30	-	30	-
Credit default swaps	9	9	-	9	-

[(1)]*Common stock - affiliated does not include MMHLLC, which had a statutory carrying value of $4,271 million as of December 31, 2012.*

Fair value hierarchy

For the six months ended June 30, 2013, there were no significant changes to the Company's valuation techniques.

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

	June 30, 2013			
	Level 1	Level 2	Level 3	Total
	(In Millions)			
Financial assets:				
Bonds:				
All other governments	$ -	$ 1	$ -	$ 1
Industrial and miscellaneous	-	4	31	35
Parent, subsidiaries and affiliates	-	215	-	215
Preferred stocks	1	-	-	1
Common stock - unaffiliated	338	304	162	804
Common stock - affiliated(1)	73	496	264	833
Cash equivalents and short-term investments(2)	-	1,754	-	1,754
Separate account assets(3)	39,235	20,541	466	60,242
Derivatives:				
Interest rate swaps	-	6,651	-	6,651
Options	-	318	-	318
Currency swaps	-	115	-	115
Forward contracts	-	66	-	66
Credit default swaps	-	10	-	10
Total financial assets carried at fair value	$ 39,647	$ 30,475	$ 923	$ 71,045
Financial liabilities:				
Securities sold under agreement to repurchase	$ -	$ 3,575	$ -	$ 3,575
Derivatives:				
Interest rate swaps	-	4,764	-	4,764
Options	-	24	-	24
Currency swaps	-	48	-	48
Forward contracts	-	8	-	8
Credit default swaps	-	15	-	15
Total financial liabilities carried at fair value	$ -	$ 8,434	$ -	$ 8,434

(1)*Common stock – affiliated does not include MMHLLC, which had a statutory carrying value of $4,296 million.*
(2)*Does not include cash of $385 million.*
(3)*$1,036 million of book value separate account assets are not carried at fair value and, therefore, are not included in this table.*

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 at the beginning fair value for the reporting period in which the changes occur. During the six months ended, June 30, 2013, $177 million of equity securities were transferred between the Level 1 and Level 2 measurement categories.

	December 31, 2012			
	Level 1	Level 2	Level 3	Total
	(In Millions)			
Financial assets:				
Bonds:				
Industrial and miscellaneous	$ -	$ 14	$ 16	$ 30
Parent, subsidiaries and affiliates	-	3	-	3
Common stock - unaffiliated	623	60	157	840
Common stock - affiliated[(1)]	-	363	180	543
Cash equivalents and short-term investments[(2)]	-	2,657	-	2,657
Separate account assets[(3)]	37,771	18,817	510	57,098
Derivatives:				
Interest rate swaps	-	8,991	-	8,991
Options	-	405	-	405
Currency swaps	-	167	-	167
Forward contracts	-	45	-	45
Credit default swaps	-	22	-	22
Total financial assets carried at fair value	$ 38,394	$ 31,544	$ 863	$ 70,801
Financial liabilities:				
Securities sold under agreement to repurchase	$ -	$ 4,020	$ -	$ 4,020
Derivatives:				
Interest rate swaps	-	6,746	-	6,746
Options	-	33	-	33
Currency swaps	-	98	-	98
Forward contracts	-	30	-	30
Credit default swaps	-	9	-	9
Total financial liabilities carried at fair value	$ -	$ 10,936	$ -	$ 10,936

[(1)]*Common stock – affiliated does not include MMHLLC, which had a statutory carrying value of $4,271 million.*

[(2)]*Does not include cash of $753 million.*

[(3)]*$1,026 million of book value separate account assets are not carried at fair value and, therefore, are not included in this table.*

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

	Six Months Ended June 30, 2013				
	Bonds Industrial and Miscellaneous	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, 2013	$ 16	$ 157	$ 180	$ 510	$ 863
Gains (losses) in net income	(3)	(1)	-	73	69
Losses (gains) in surplus	1	(12)	(6)	-	(17)
Purchases	4	-	15	57	76
Issuances	1	19	75	-	95
Sales	-	-	-	(255)	(255)
Settlements[(1)]	(11)	(1)	-	81	69
Other transfers [(2)]	23	-	-	-	23
Balance as of June 30, 2013	$ 31	$ 162	$ 264	$ 466	$ 923

[(1)]*Real estate fair value 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.*

[(2)]*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 change in lower of cost or market carrying basis.*

	Year Ended December 31, 2012				
	Bonds Industrial and Miscellaneous	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, 2012	$ 20	$ 169	$ 305	$ 396	$ 890
Gains (losses) in net income	(18)	9	26	37	54
Gains (losses) in surplus	4	(11)	10	-	3
Purchases	8	-	144	69	221
Issuances	22	-	-	-	22
Sales	(3)	(7)	(305)	(175)	(490)
Settlements[(1)]	(34)	(3)	-	92	55
Transfers in[(2)]	1	-	-	91	92
Other transfers [(3)]	16	-	-	-	16
Balance as of December 31, 2012	$ 16	$ 157	$ 180	$ 510	$ 863

[(1)]*Real estate fair value is carried net of encumbrances on the Consolidated Statutory Statements of Financial Position and the change in encumbrances is included in the settlements within separate account assets.*

[(2)]*Transfers in include assets that are consistently carried at fair value but have had a level change. Generally transfers out of Level 3 occur when quoted prices are received in markets that have not been active, and therefore the assets are moved to Level 2. The separate account assets transferred into Level 3 were transferred from Level 2 due to a change in the pricing source.*

[(3)]*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 change in lower of cost or market carrying basis.*

6. *Fixed assets*

No significant changes.

7. Deferred and uncollected life insurance premium

No significant changes.

8. Surplus notes

No significant changes.

9. Related party transactions

MassMutual entered into a service agreement with MassMutual Retirement Services, LLC (MMRS) where MassMutual, for a fee, will furnish MMRS, as required, operating facilities, human resources, computer software development and managerial services. MMRS will pay MassMutual an annual administrative and support services fee equal to the actual costs and expenses, as reasonably determined, incurred with respect to such services, plus four percent of such actual costs and expenses. For the six months ended June 30, 2013, MassMutual recorded fees of $36 million related to this contract. The terms require the settlement of the fee quarterly.

The Company had two modified coinsurance (Modco) agreements with the Japanese subsidiary of MMHLLC, MassMutual Life Insurance Company, on certain life insurance products. Under these Modco agreements, the Company was the reinsurer and the Japanese subsidiary retains the reserve and associated assets on individual life insurance policies. The predominant contract types are whole life, endowments and term insurance. The Modco agreements allow the Japanese subsidiary to keep control of the investment and management of the assets supporting the reserves. The Modco adjustment is the mechanism by which the Company funds the reserve on the reinsured portion of the risk. It is needed to adjust for the financial effect of the Japanese subsidiary holding the reserves on the ceded coverage rather than the Company. These two Modco agreements were recaptured, effective May 31, 2013, resulting in a $8 million increase to income due to the recapture fee paid to MassMutual from the Japanese subsidiary. The net outstanding balances due from the Japanese subsidiary are due and payable within 90 days.

10. Reinsurance

On January 1, 2013, MassMutual entered into an indemnity reinsurance agreement to reinsure 100% of RPG. The reinsurance agreement contains coinsurance and modified coinsurance features. Under the agreement, MassMutual will indemnify The Hartford for $9.2 billion of policyholders’ reserves and liabilities for deposit-type contracts, using coinsurance, and $26.3 billion of separate account liabilities using modified coinsurance. In addition, MassMutual reinsured contracts written on The Hartford’s policy form by MassMutual’s Retirement Services Division during the post close period, which is expected to be 12 months. On execution of the coinsurance feature, MassMutual received invested assets with a fair value of $9.3 billion and $383 million of other assets, net of a ceding commission of $355 million, and assumed $5.3 billion of policyholders’ reserves and $3.9 billion of liabilities for deposit-type contracts and $868 million of other liabilities. Under the modified coinsurance feature, the separate account assets and related reserves were not transferred to or held by MassMutual. This transaction enables MassMutual to build its retirement business, add complementary markets and distribution capabilities, and nearly double the number of retirement plan participants it serves to approximately three million.

For the six months ended June 30, 2013, MassMutual has received $959 million of premium pursuant to the reinsurance agreement.

11. Policyholders' liabilities

As a result of the agreement to reinsure RPG, group annuities in the policyholders' reserves increased $5.3 billion with a range of interest rates of 3.0% - 9.5% and the liabilities for deposit-type contracts increased $4.0 billion with a range of interest rates of 3.0% - 9.5% as of June 30, 2013.

For additional information refer to *Note 10 "Reinsurance."*

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 or policyholder to adhere to a company-approved asset allocation strategy. Election of these benefits on 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, 2012	$ 827
Incurred guarantee benefits	(253)
Paid guarantee benefits	(7)
Liability as of December 31, 2012	567
Incurred guarantee benefits	(229)
Paid guarantee benefits	(2)
Liability as of June 30, 2013	$ 336

The Company held reserves in accordance with the stochastic scenarios as of June 30, 2013 and December 31, 2012. As of June 30, 2013 and December 31, 2012, 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, 2013			December 31, 2012		
	Account Value	Net Amount at Risk	Weighted Average Attained Age	Account Value	Net Amount at Risk	Weighted Average Attained Age
	($ In Millions)					
GMDB	$ 20,197	$ 129	57	$ 11,648	$ 139	62
GMIB	4,357	489	64	4,260	609	63
GMAB	2,134	8	57	1,925	10	57
GMWB	217	9	67	211	10	66

The GMDB account value above consists of $4,387 million within the general account and $15,810 million within separate accounts that includes $5,106 million of modified coinsurance.

12. Debt

No significant changes.

13. Employee benefit plans

Through June 30, 2013, the Company contributed $17 million to its qualified pension plan.

As discussed in *Note 3a. "Adoption of new accounting standards,"* the Company adopted SSAP No. 102 "Accounting for Pensions, Replacement of SSAP No. 89." Based on the new accounting standard, the Net Periodic Cost is required to be reported on an interim basis.

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 Income (Loss) is as follows:

	Six Months Ended June 30,			
	2013	2012	2013	2012
	Pension Benefits		Other Postretirement/ Postemployment Benefits	
	(In Millions)			
Service cost	$ 37	$ 30	$ 6	$ 4
Interest cost	47	46	8	7
Expected return on plan assets	(68)	(61)	-	-
Amortization of unrecognized transition obligation	-	-	-	2
Amortization of unrecognized net actuarial gains and losses	47	46	3	2
Amortization of unrecognized prior service cost	4	-	2	-
Total net periodic cost	$ 67	$ 61	$ 19	$ 15

14. Employee compensation plans

No significant changes.

15. Federal income taxes

For the six months ended June 30, 2013, the Company's net admitted DTA increased by $242 million from December 31, 2012.

16. Transferable state tax credits

No significant changes.

17. Business risks, commitments and contingencies

a. Risks and uncertainties

Investment and interest rate risks

As interest rates increase, certain securities may experience slower pay-down and prepayment speeds that can extend the expected maturity dates and potentially limit the Company's ability to reinvest the proceeds at a higher rate of interest. Rising interest rates may also decrease the fair value of the investment portfolio. As interest rates decline, certain securities may experience accelerated pay-down and prepayment speeds from 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

Housing market trends began to improve in May 2012 and nationally, house prices are up about 12% from their post-crisis lows as increased home demand, and slowing of foreclosure rates and delinquencies improved the supply/demand fundamentals. Significant regional differences in house price performance are likely to continue. The rates of foreclosure resolutions remain low but are improved from their post-crisis bottoms. Liquidity for bonds issued in 2008 and earlier has generally been good. From May 2012 through May 2013, prices improved sharply due to a lack of supply and improved housing market expectations. Profit taking began in mid-May 2013 as loss adjusted yields began to widen from very tight levels. Prices have begun to stabilize, although they are below their peaks from earlier this year.

The Company continues to monitor global, national and local market fundamentals in both its new mortgage origination and the portfolio management functions. First quarter economic growth was reasonably strong in light of slower global growth expectations and the drag from reduced federal spending, and our outlook for 2013 maintains accelerating growth in the latter half of the year as the nation's housing recovery accelerates. The full impact of sequestration will also likely become more evident in the latter half of the year, continuing to threaten consumer and business confidence in the near term. Headwinds from federal spending cuts, uncertainties regarding health care reform and overseas threats add to the air of economic uncertainty. Despite this fluid macro environment, private sector growth engines in housing and auto manufacturing have engaged and commercial property fundamentals are improving. Apartment and hotel markets are at or very close to full recovery in both pricing and fundamentals, with moderate supply forecasts. Most office, industrial and retail markets are clearly in the early stages of a recovery phase. While the overall economic environment remains fragile, commercial property market fundamentals appear positioned for a gradual recovery.

b. Litigation

The Company is involved in litigation arising in and out of the normal course of business, which seeks both compensatory and punitive damages. 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 operating results for a particular period depending upon, among other factors, the size of the loss or liability and the level of the Company's income for the period.

Since December 2008, MassMutual and MMHLLC have been named as defendants in a number of putative class action and individual lawsuits filed 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 (BLMIS). The plaintiffs allege a variety of state law and federal securities claims against MassMutual and/or MMHLLC, and certain of its subsidiaries, seeking to recover losses arising from their investments in several funds managed by Tremont Group Holdings, Inc. (Tremont) or Tremont Partners, Inc., including Rye Select Broad Market Prime Fund, L.P., Rye Select Broad Market Fund, L.P., American Masters Broad Market Prime Fund, L.P., American Masters Market Neutral Fund, L.P. and/or Tremont Market Neutral Fund, L.P. Tremont and its subsidiary, Tremont Partners, Inc., are indirect subsidiaries of MMHLLC. Certain of the lawsuits have been consolidated into three groups of suits pending in the U.S. District Court for the Southern District of New York. In February 2011, the parties in the consolidated federal litigation submitted to the court a proposed settlement agreement. In August 2011, the court entered an order and final judgment approving the settlement. Appeals have been filed and remain pending. The settlement, if affirmed on appeal, will not have a significant financial impact on MassMutual.

Additionally, a number of other lawsuits were filed in state courts in California, Colorado, Florida, Massachusetts, New Mexico, New York and Washington by investors in Tremont funds against Tremont, and in certain cases against MassMutual, MMHLLC and other defendants, raising claims similar to those in the consolidated federal litigation. Those cases are in various stages of litigation. MassMutual believes it has substantial defenses and will continue to vigorously defend itself in these actions. 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 these claims.

On October 19, 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. MassMutual believes that it has numerous substantial defenses to the claims and will vigorously defend itself. 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 action.

Christina Chavez (Chavez) filed a putative class action complaint against MassMutual in April 2010. 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. MassMutual believes it has substantial defenses and will continue to vigorously defend itself in these actions. 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 2009, numerous lawsuits (the Rochester Suits) were filed as putative class actions in connection with the investment performance of certain municipal bond funds advised by OFI and distributed by its subsidiary, OppenheimerFunds Distributor, Inc. The Rochester Suits raise claims under federal securities laws alleging that, among other things, the disclosure documents of the funds contained misrepresentations and omissions, that the investment policies of the funds were not followed and that the funds and other defendants violated federal securities laws and regulations and certain state laws. The Rochester Suits have been consolidated into seven groups, one for each of the funds, in the U.S. district court in Colorado. Amended complaints and motions to dismiss were filed. In October 2011, the court issued an order granting and denying in part defendants’ motion to dismiss the suits. In January 2012, the court granted a stipulated scheduling and discovery order in these actions. In September 2012, defendants opposed plaintiffs’ July 2012 motion for class certification and filed motions for partial summary judgment in several of the Rochester Suits. In March 2013, the court denied one of the defendants’ motions for partial summary judgment; defendants’ second motion, which seeks dismissal of plaintiffs’ “leverage ratio” claims, is still pending. In July 2013, the parties to six of the Rochester Suits reached an agreement in principle to settle those suits. The proposed settlement is subject to various contingencies, including execution of a memorandum of understanding between the parties, execution of stipulations of settlement in each of the six actions, approval by the boards of directors of Oppenheimer Acquisition Corp. and the board of trustees of the funds at issue in those lawsuits, and approval by the court. Approval of the proposed settlement also requires that a sufficient number of class members approve the settlement to induce defendants to proceed with it. Because of these remaining uncertainties, management believes that no reasonable estimate can be made as to the amount or range of any potential loss.

In May 2009, MassMutual was named as a defendant in a private action 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. 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 July 2012, Karen Bacchi filed a putative class action complaint against the Company in federal court alleging that MassMutual breached its contracts by allegedly failing to distribute surplus in excess of the statutorily prescribed limit. The matter is in the initial pleading stages. MassMutual believes that it has substantial defenses and will vigorously defend itself. 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 July 2012, members of the Keros family filed a putative class action complaint against the Company and its directors in federal court alleging breach of fiduciary duty related to an alleged violation of Massachusetts law concerning domestic mutual insurance company voting practices. The Company and directors' motions to dismiss were granted, in their entirety, on August 5, 2013. This decision remains subject to potential appeal.

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 income for the period.

18. Withdrawal characteristics

No significant changes.

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

As required by SSAP No. 69, "Statement of Cash Flows," the Company has included in the Condensed Consolidated Statutory Statements of Cash Flows non-cash transactions primarily related to the following:

	Six Months Ended June 30, 2013	Year Ended December 31, 2012
	(In Millions)	
Related to RPG reinsurance agreement:		
Bonds	$ 8,584	$ -
Change in policyholders' reserves	5,298	-
Change in liabilities for deposit-type contracts	3,885	-
Other liabilities	868	-
Mortgage loans	736	-
Other assets	383	-
Preferred stock	13	-
Bank loan rollovers	1,133	2,536
Stock conversions	287	1
Bond conversions and refinancing	268	585
Other	12	7
Other invested assets stock distributions	4	25
Mortgages converted to other invested assets	-	56

Refer to *Note 10. "Reinsurance"* for information about the Company's RPG reinsurance agreement.

The bank loan rollovers represent transactions processed as the result of rate resets on existing bank loans and are included in the proceeds from investments sold, matured or repaid on bonds and cost of investments acquired for bonds on the Condensed Consolidated Statutory Statements of Cash Flows.

20. Subsequent events

MassMutual has evaluated subsequent events through August 7, 2013, the date the financial statements were available to be issued, and no events have occurred subsequent to the balance sheet date and before the date of evaluation that would require disclosure.