QUARTERLY STATEMENT

OF THE

C.M. Life Insurance Company

TO THE

Insurance Department

OF THE

STATE OF

FOR THE QUARTER ENDED SEPTEMBER 30, 2015

LIFE AND ACCIDENT AND HEALTH

2015



LIFE AND ACCIDENT AND HEALTH COMPANIES - ASSOCIATION EDITION

QUARTERLY STATEMENT

AS OF SEPTEMBER 30, 2015 OF THE CONDITION AND AFFAIRS OF THE

NAIC Group Code 0435 0435 NAIC Company Code 93432 Employer's ID Number 06-1041383

Organized under the La	ws of (Current) Con	(Prior) necticut ,	State of Domicile or Port of B	Entry Connecticut
Country of Domicile		United States of	America	
Incorporated/Organized	04/25/1980)	Commenced Business	05/12/1981
Statutory Home Office	100 Bright Meado			Enfield , CT, US 06082
	(Street and I	Number)	(City or	Town, State, Country and Zip Code)
Main Administrative Offi	ce	1295 State 3		
	Springfield , MA, US 01111	(Street and N	/	413-788-8411
(0	City or Town, State, Country and Zip			rea Code) (Telephone Number)
Mail Address	1295 State Stre	et .		Springfield , MA, US 01111
	(Street and Number or		(City or	Town, State, Country and Zip Code)
Primary Location of Boo	ks and Records	1295 State	Street	
Timaly Location of Boo		(Street and N		
	Springfield , MA, US 01111	, .	(4	413-788-8411
(1	City or Town, State, Country and Zip	Code)	(A	rea Code) (Telephone Number)
Internet Website Address	ss	www.massmu	tual.com	
Statutory Statement Cor	ntact Tamn	ny A. Peatman	,	413-744-6327
·		(Name)		(Area Code) (Telephone Number)
	tpeatman@massmutual.com (E-mail Address)			413-226-4086 (FAX Number)
	(E mail Address)			(i / i / i / i / i / i / i / i / i / i /
		OFFICE	RS	
President and C		am Crandall	Treasurer	Todd Garett Picken
		e Flanagan	Apointed Actuary	
Chie	ings Executive Vice President and financial Officer orbett Executive Vice President	General C	eutive Vice President and ounsel	Michael Robert Fanning Executive Vice President
	iam Crandall - Chairman k Douglas Roellig	DIRECTORS OR TRUSTEES Michael Robert Fanning		Michael Thomas Rollings
State of	Massachusetts Hampden	SS:		
all of the herein describ statement, together with condition and affairs of t in accordance with the rules or regulations re- respectively. Furthermo exact copy (except for fit to the enclosed stateme	ped assets were the absolute proper related exhibits, schedules and expethe said reporting entity as of the repNAIC Annual Statement Instructions quire differences in reporting not one, the scope of this attestation by permatting differences due to electron	rty of the said reporting entity, folanations therein contained, ann oorting period stated above, and sand Accounting Practices and related to accounting practices the described officers also include the control of t	ree and clear from any liens exed or referred to, is a full a of its income and deductions Procedures manual except to and procedures, according des the related correspondinent. The electronic filing may anagan	orting entity, and that on the reporting period stated above, sor claims thereon, except as herein stated, and that this and true statement of all the assets and liabilities and of the therefrom for the period ended, and have been completed to the extent that: (1) state law may differ; or, (2) that state to the best of their information, knowledge and belief, go electronic filing with the NAIC, when required, that is an or be requested by various regulators in lieu of or in addition Todd Garett Picken Treasurer Yes [X] No []
Subscribed and sworn to			b. If no, 1. State the amendment of the control of the control of pages and the control of pages are control of p	ent number

ASSETS

		<u> </u>	Current Statement Date	<u> </u>	4
		1	2	3 Net Admitted Assets	December 31 Prior Year Net
		Assets	Nonadmitted Assets	(Cols. 1 - 2)	Admitted Assets
	Bonds	4,255,035,959		4,255,035,959	4,305,354,053
	Stocks: 2.1 Preferred stocks	21 002 462		21 002 462	20 070 272
	2.1 Preferred stocks 2.2 Common stocks	, ,		31,002,463	
		231,301,023		237,301,023	221,341,409
_	Mortgage loans on real estate: 3.1 First liens	081 101 600		981, 101, 600	944 390 174
				901,101,000	944,390,174
4.	3.2 Other than first liens				
	4.1 Properties occupied by the company (less \$				
	encumbrances)				
	4.2 Properties held for the production of income (less				
	\$ encumbrances)				24 171 011
					24, 17 1,011
	4.3 Properties held for sale (less \$				
	encumbrances)				
5.	Cash (\$32,001,304), cash equivalents				
	(\$195,262,636) and short-term				
	investments (\$21,086,965)				205,121,412
	Contract loans (including \$ premium notes)			153,650,620	147,445,931
	Derivatives			659,783,285	
8.	Other invested assets		1 1	249, 183,938	
9.	Receivables for securities			237,824,125	165,833,019
10.	Securities lending reinvested collateral assets				
11.	Aggregate write-ins for invested assets				
	Subtotals, cash and invested assets (Lines 1 to 11)	7,056,729,734	3,415,216	7,053,314,518	6,797,120,880
13.	Title plants less \$ charged off (for Title insurers				
	only)				
14.	Investment income due and accrued	97,758,101	124,636	97,633,465	94,827,363
	Premiums and considerations:				
	15.1 Uncollected premiums and agents' balances in the course of collection	153,826	2,137	151,689	764 , 444
	15.2 Deferred premiums, agents' balances and installments booked but				
	deferred and not yet due (including \$				
	earned but unbilled premiums)			(18,882,980)	(28,342,570)
	15.3 Accrued retrospective premiums				
	Reinsurance:				
	16.1 Amounts recoverable from reinsurers			16,307,335	13,700,007
	16.2 Funds held by or deposited with reinsured companies			0.005.044	
	16.3 Other amounts receivable under reinsurance contracts			8,335,941	
	Amounts receivable relating to uninsured plans				
	Current federal and foreign income tax recoverable and interest thereon			2,609,140	
	Net deferred tax asset			41,786,681	
	Guaranty funds receivable or on deposit			1,338,144	1,437,793
20.	Electronic data processing equipment and software				
21.	Furniture and equipment, including health care delivery assets				
	(\$)				
	Net adjustment in assets and liabilities due to foreign exchange rates				
	Receivables from parent, subsidiaries and affiliates			305,977	292,878
	Health care (\$) and other amounts receivable				
	Aggregate write-ins for other than invested assets	10,274,269	422,295	9,851,974	3, 133, 239
26.	Total assets excluding Separate Accounts, Segregated Accounts and Protected Cell Accounts (Lines 12 to 25)	7,291,101,865	78,349,981	7,212,751,884	6,929,649,680
27	From Separate Accounts, Segregated Accounts and Protected Cell	7,201,101,000	70,010,001	7,212,701,001	0,020,010,000
21.	Accounts	1,698,793,185		1,698,793,185	1,862,814,903
28.	Total (Lines 26 and 27)	8,989,895,050	78,349,981	8,911,545,069	8,792,464,583
	DETAILS OF WRITE-INS				
1101.					
1102.					
1103.					
	Summary of remaining write-ins for Line 11 from overflow page				
1199.	Totals (Lines 1101 through 1103 plus 1198)(Line 11 above)				
	Miscellaneous	9,854,935	2,961	9,851,974	3,121,732
	Cash advanced to agents				
2503.	Real estate notes receivable				
	Summary of remaining write-ins for Line 25 from overflow page				*
	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	10,274,269			
೭೮೮೮.	rotato (Litteo 2001 tittough 2000 pluo 2000)(Litte 20 dbuve)	10,214,209	422,293	3,031,374	J, 133,239

LIABILITIES, SURPLUS AND OTHER FUNDS

	LIABILITIES, SURPLUS AND OTHER PO	1100	
		1 Current	2 December 31
		Statement Date	Prior Year
1.	Aggregate reserve for life contracts \$	4 470 070 077	4 505 000 000
2.	(including \$ Modco Reserve)		
	Liability for deposit-type contracts (including \$ Modco Reserve)		
	Contract claims:		
	4.1 Life		
_	4.2 Accident and health		
I	Provision for policyholders' dividends and coupons payable in following calendar year - estimated amounts:		
6.	6.1 Dividends apportioned for payment (including \$ Modco)		
	6.2 Dividends not yet apportioned (including \$ Modco)		
	6.3 Coupons and similar benefits (including \$ Modco)		
7.	Amount provisionally held for deferred dividend policies not included in Line 6		
8.	Premiums and annuity considerations for life and accident and health contracts received in advance less		
	\$ discount; including \$ accident and health premiums	7,934	8,146
9.	Contract liabilities not included elsewhere: 9.1 Surrender values on canceled contracts		
	9.2 Provision for experience rating refunds, including the liability of \$ accident and health		
	experience rating refunds of which \$ is for medical loss ratio rebate per the Public Health		
	Service Act		
	9.3 Other amounts payable on reinsurance, including \$ assumed and \$		
	ceded		
10	9.4 Interest Maintenance Reserve	/1,523,836	84,353,592
10.	Commissions to agents due or accrued-life and annuity contracts \$, accident and health \$, and deposit-type contract funds \$		
11.	Commissions and expense allowances payable on reinsurance assumed		
12.	General expenses due or accrued		
	Transfers to Separate Accounts due or accrued (net) (including \$(6,591,280) accrued for expense		
	allowances recognized in reserves, net of reinsured allowances)		
	Taxes, licenses and fees due or accrued, excluding federal income taxes		
	Current federal and foreign income taxes, including \$(18,726,738) on realized capital gains (losses)		
	Net deferred tax liability		
	Amounts withheld or retained by company as agent or trustee		
	Amounts held for agents' account, including \$ agents' credit balances		
	Remittances and items not allocated	17,603,866	(6,967,532)
20.	Net adjustment in assets and liabilities due to foreign exchange rates	959	2,507
21.	Liability for benefits for employees and agents if not included above		
I	Borrowed money \$ and interest thereon \$		
23.	Dividends to stockholders declared and unpaid	-	
24.	Miscellaneous liabilities: 24.01 Asset valuation reserve	82 976 970	78 976 384
	24.02 Reinsurance in unauthorized and certified (\$		
	24.03 Funds held under reinsurance treaties with unauthorized and certified (\$) reinsurers		
	24.04 Payable to parent, subsidiaries and affiliates	2,546,112	11,912,338
	24.05 Drafts outstanding		
	24.06 Liability for amounts held under uninsured plans		
	24.07 Funds held under coinsurance 24.08 Derivatives		
	24.09 Payable for securities		
	24.10 Payable for securities lending		
	24.11 Capital notes \$		
25.	Aggregate write-ins for liabilities		371,095,059
	Total liabilities excluding Separate Accounts business (Lines 1 to 25)		5,624,895,772
	From Separate Accounts Statement		
28.	Total liabilities (Lines 26 and 27)	7,509,262,271	7,487,710,675
	Common capital stock		2,500,000
30. 31.	Preferred capital stock		
32.	Surplus notes		
	Gross paid in and contributed surplus		
34.	Aggregate write-ins for special surplus funds		
	Unassigned funds (surplus)	949,506,590	851,977,700
36.	Less treasury stock, at cost:		
	36.1 shares common (value included in Line 29 \$)		
37.	Surplus (Total Lines 31+32+33+34+35-36) (including \$ in Separate Accounts Statement)		1,302,253,908
38.	Totals of Lines 29, 30 and 37		1,304,753,908
I	Totals of Lines 28 and 38 (Page 2, Line 28, Col. 3)	8,911,545,069	8,792,464,583
	DETAILS OF WRITE-INS	, , ,	
I	Repurchase agreements and interest expense		
2502.	Derivative collateral	' '	55,293,457
2503.	Derivative interest expense		
2598. 2599.	Summary of remaining write-ins for Line 25 from overflow page	1,759,151 [484.099.079	1,335,841
3101.	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	,,	, ,
3101.			
3103.			
3198.	Summary of remaining write-ins for Line 31 from overflow page		
3199.	Totals (Lines 3101 through 3103 plus 3198)(Line 31 above)		
3401.			
3402.			
3403.	Cummany of rampining write ine for Line 24 from everflow page		
3498. 3499.	Summary of remaining write-ins for Line 34 from overflow page	-	
৩433.	ו טומוים לבווופים טידיט ו וווויטעוןוו טידיטי אוווים טידיסטן/בווופי טיד מטטייפין		

SUMMARY OF OPERATIONS

		1	2	3
		Current Year	Prior Year	Prior Year Ended
		To Date	To Date	December 31
1.	Premiums and annuity considerations for life and accident and health contracts	228,895,107	245,737,500	316,082,443
2. 3.	Considerations for supplementary contracts with life contingencies	228.907.781		1,880,791 327,135,452
	Net investment income			21,422,220
5.	Separate Accounts net gain from operations excluding unrealized gains or losses			
	Commissions and expense allowances on reinsurance ceded	14,560,566	8,517,529	13,374,096
7.	Reserve adjustments on reinsurance ceded			
8.	Miscellaneous Income:			
	8.1 Income from fees associated with investment management, administration and contract	00 000 044	04 000 540	44 454 440
	guarantees from Separate Accounts		31,306,542	41,451,146
	8.2 Charges and fees for deposit-type contracts 8.3 Aggregate write-ins for miscellaneous income	1,796,051	1.709.550	4,494,870
9.	Totals (Lines 1 to 8.3)	518,784,561	547.359.475	725,841,018
	Death benefits		74,672,198	87,500,975
11.	Matured endowments (excluding guaranteed annual pure endowments)			
12.	Annuity benefits			91,658,344
13.	Disability benefits and benefits under accident and health contracts	351,890		445,739
14.	Coupons, guaranteed annual pure endowments and similar benefits			
15.	Surrender benefits and withdrawals for life contracts	327,765,475	413,442,705	535,341,987
16.	Group conversions	0.750.400	0 540 054	0.000.000
17.	Interest and adjustments on contract or deposit-type contract funds	2,756,126	2,546,951	2,800,633
18.	Payments on supplementary contracts with life contingencies	(65, 107, 416)	584,389	794,788 (154,857,265)
19. 20.	Totals (Lines 10 to 19)		439,617,291	E00 00E 004
21.	Commissions on premiums, annuity considerations, and deposit-type contract funds (direct	437,769,300	439,017,291	563,685,201
-1.	business only)	16,247,237	16,877,900	22,403,882
22.	Commissions and expense allowances on reinsurance assumed			
23.	General insurance expenses	18,998,188	25,663,001	34,687,003
24.	Insurance taxes, licenses and fees, excluding federal income taxes	7,481,893	6,778,915	9,400,671
25.	Increase in loading on deferred and uncollected premiums	232,820	(51,982)	(42,541)
26.	Net transfers to or (from) Separate Accounts net of reinsurance		(82,866,603)	(111,403,697)
27.	Aggregate write-ins for deductions	2,650,013	20,586,631	21,321,721
28.	Totals (Lines 20 to 27)	406, 154, 156	426,605,153	540,052,240
29.	Net gain from operations before dividends to policyholders and federal income taxes (Line 9 minus Line 28)	112,630,405	120,754,322	185,788,778
30.	Dividends to policyholders.	112,000,400	120,704,022	
31.	Net gain from operations after dividends to policyholders and before federal income taxes (Line 29			
	minus Line 30)		120,754,322	185,788,778
32.	Federal and foreign income taxes incurred (excluding tax on capital gains)	29,092,499	27,082,720	23,309,418
33.	Net gain from operations after dividends to policyholders and federal income taxes and before	00 507 000	00 074 000	100 170 000
0.4	realized capital gains or (losses) (Line 31 minus Line 32)	83,537,906	93,671,602	162,479,360
34.	Net realized capital gains (losses) (excluding gains (losses) transferred to the IMR) less capital gains tax of \$10,918,217 (excluding taxes of \$1,650,095			
	transferred to the IMR)	(243,456)	(9,341,803)	(2,058,187)
35.	Net income (Line 33 plus Line 34)	83,294,450	84.329.799	160.421.173
00.	CAPITAL AND SURPLUS ACCOUNT	20,201,100	0.,020,.00	,
36.	Capital and surplus, December 31, prior year	1,304,753,908	1,071,204,195	1,071,204,195
37.	Net income (Line 35)		84,329,799	160,421,173
38.		23,764,012		48,857,786
39.	Change in net unrealized foreign exchange capital gain (loss)	(8,680,680)	(8,685,953)	(15,686,578)
40.	Change in net deferred income tax			
41.	Change in nonadmitted assets			
	Change in liability for reinsurance in unauthorized and certified companies			
43.	Change in reserve on account of change in valuation basis, (increase) or decrease	(4 000 E0C)	(10 001 000)	(11 174 000)
44.	Change in asset valuation reserve			
45. 46.	Change in treasury stock			
47.	Other changes in surplus in Separate Accounts Statement			
48.	Change in surplus notes			
49.	Cumulative effect of changes in accounting principles			
	Capital changes:			
	50.1 Paid in			
	50.2 Transferred from surplus (Stock Dividend)			
	50.3 Transferred to surplus			
51.	Surplus adjustment:			
	51.1 Paid in			
	51.2 Transferred to capital (Stock Dividend)			
	51.4 Change in surplus as a result of reinsurance			
52.	Dividends to stockholders			
	Aggregate write-ins for gains and losses in surplus	(2,292,235)	41, 155, 122	40,275,351
	Net change in capital and surplus for the year (Lines 37 through 53)	97,528,890	125,802,344	233,549,713
55.	Capital and surplus, as of statement date (Lines 36 + 54)	1,402,282,798	1,197,006,539	1,304,753,908
	DETAILS OF WRITE-INS			•
08.301.	Administrative fee and other income		1,709,550	4,494,870
	, , ,		1 700 FEO	4 404 070
	Totals (Lines 08.301 through 08.303 plus 08.398) (Line 8.3 above)	1,796,051	1,709,550	4,494,870
	Modco recaptured loss			21,321,721
	Miscerianeous charges to operations			
	Summary of remaining write-ins for Line 27 from overflow page			
	Totals (Lines 2701 through 2703 plus 2798)(Line 27 above)	2,650,013	20,586,631	21,321,721
		(2,292,235)		40,275,351
	ottor startgee in our proc	, , , , , , , , , , , , , , , , , , , ,	,,	
5303.				
	Summary of remaining write-ins for Line 53 from overflow page	,		
	Totals (Lines 5301 through 5303 plus 5398)(Line 53 above)	(2,292,235)	41,155,122	40,275,351
			·	

		1 Current Year	2 Prior Year	3 Prior Year Ended
	Cash from Operations	To Date	To Date	December 31
1.	·	219,867,469	243,912,139	320 , 131 , 466
2.	Net investment income		245,370,941	319,272,12
3.	Miscellaneous income	45,825,440	42,054,726	57,140,660
4.	Total (Lines 1 to 3)	501,539,170	531,337,806	696,544,252
5.	Benefit and loss related payments		579,471,787	732,591,56
6.	Net transfers to Separate Accounts, Segregated Accounts and Protected Cell Accounts			
7.	Commissions, expenses paid and aggregate write-ins for deductions			90,490,90
8.	Dividends paid to policyholders			
9.	Federal and foreign income taxes paid (recovered) net of \$6,455,529 tax on capital			
	gains (losses)	57, 191,533	23,204,512	53,929,30
10.	Total (Lines 5 through 9)	521,262,704	590,630,006	764,373,84
11.	Net cash from operations (Line 4 minus Line 10)	(19,723,534)	(59,292,200)	(67,829,59
	Cash from Investments			
12.	Proceeds from investments sold, matured or repaid:	FE7 060 0F6	1 105 000 560	1 506 064 60
	12.1 Bonds		1, 185,890,563	
	12.3 Mortgage loans		74,909,033	
	12.4 Real estate		1,865,803	
	12.5 Other invested assets		41,475,988	
	12.6 Net gains or (losses) on cash, cash equivalents and short-term investments		110,102	
	12.7 Miscellaneous proceeds	(57,923,599)	39,612,877	64,163,75
	12.8 Total investment proceeds (Lines 12.1 to 12.7)		1,345,596,369	
13.	Cost of investments acquired (long-term only):	310,000,000	1,010,000,000	
	13.1 Bonds	510 152 368	725 974 230	1 164 898 10
	13.2 Stocks			
	13.3 Mortgage loans		140,832,080	206,717,38
	13.4 Real estate		2,819,429	3,041,98
	13.5 Other invested assets		23,167,018	36,770,26
	13.6 Miscellaneous applications	3,647,221	16,710,695	14,788,26
	13.7 Total investments acquired (Lines 13.1 to 13.6)	704,314,731	912,530,644	1,433,694,97
14.	Net increase (or decrease) in contract loans and premium notes	6,796,857	(35,632,705)	(31,655,92
15.	Net cash from investments (Line 12.8 minus Line 13.7 and Line 14)	(61,608,528)	468,698,430	441,277,67
16.	Cash from Financing and Miscellaneous Sources Cash provided (applied):			
10.	16.1 Surplus notes, capital notes			
	16.2 Capital and paid in surplus, less treasury stock			
	16.3 Borrowed funds			
	16.4 Net deposits on deposit-type contracts and other insurance liabilities			240 , 10
	16.5 Dividends to stockholders			
	16.6 Other cash provided (applied)	117,738,217	(365,635,553)	(383,237,00
17.		124,561,555	(361,897,169)	(382,996,90
	plus Line 16.6)	124,001,000	(001,007,100)	(002,000,000
	RECONCILIATION OF CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS			
18.	Net change in cash, cash equivalents and short-term investments (Line 11, plus Lines 15 and 17)	43,229,493	47,509,061	(9,548,82
19.	Cash, cash equivalents and short-term investments:			
	19.1 Beginning of year	205,121,412	214,670,238	214,670,23
	19.2 End of period (Line 18 plus Line 19.1)	248,350,905	262,179,299	205,121,41
e: Sı	upplemental disclosures of cash flow information for non-cash transactions:			
0.000	D1. Bank loan rollovers	, ,. ,	7,020,233	49,452,32
	D2. Bond conversions and refinancing		30,976,766	24,428,08
0.000	04. Dividend reinvestment	275,249	86,352	113,46
0.000	D5. Net investment income payment in-kind bonds	4,067	187,423	197 , 12
	07. Policyholders' reserves transferred for reinsurance agreement		362,870,960	362,870,96 304,271,09
	DB. Bonds transferred for reinsurance agreement DB. Policy loans transferred for reinsurance agreement			304,271,08
	10. Other invested assets transferred for reinsurance agreement		13 221 825	13 221 8

Note: Supplemental disclosures of cash flow information for non-cash transactions:

reter cappromental discrete or each new information for more sach transactions.		
20.0011. Other liabilities transferred for reinsurance agreement	 2,621,318	2,621,318

EXHIBIT 1

DIRECT PREMIUMS AND DEPOSIT-TYPE CONTRACTS

	DIRECT PREMIUMS AND DEPOSIT-1	TPE CONTRACTS	2	,
		Current Year	2 Prior Year	3 Prior Year Ended
		To Date	To Date	December 31
		10 24.0		2000111201 01
1.	Industrial life			
1.	ilidustriai ilie			
	Ordinary life insurance	162 602 044	170 127 260	227 662 020
2.	Ordinary life insurance	162,602,944	170, 137,309	221,002,020
_		404 704 500	105 000 077	040 774 000
3.	Ordinary individual annuities	181,/34,563	185,993,3//	246,774,280
4.	Credit life (group and individual)			
5.	Group life insurance	(19,723)	37,573	898,256
6.	Group annuities			
7.	A & H - group			
8.	A & H - credit (group and individual)			
0.	That is also the state of the s			
9.	A & H - other			
3.	A & IT - OLITE			
40	A new parts of all others live and business			
10.	Aggregate of all other lines of business			
		044 047 704	050 400 040	475 005 004
11.	Subtotal	344,317,784	356, 168,319	475,335,364
12.	Deposit-type contracts			
13.	Total	344,317,784	356,168,319	475,335,364
	DETAILS OF WRITE-INS			
1001.				
1002.				
1003.				
1000.				
1000	Cummany of complining write ing fay I ing 10 from a conflavor			
1098.	Summary of remaining write-ins for Line 10 from overflow page			
1000	T (1)			
1099.	Totals (Lines 1001 through 1003 plus 1098)(Line 10 above)			

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- Note 2 Accounting Changes and Corrections of Errors
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- Note 4 Discontinued Operations
- Note 5 Investments
- Note 6 Joint Ventures, Partnerships and LLCs
- Note 7 Investment Income
- Note 8 Derivative Instruments
- Note 9 Income Taxes
- Note 10 Information Concerning Parent, Subsidiaries and Affiliates
- Note 11 Deht
- Note 12 Retirement Plans, Deferred Compensation, Postemployment Benefits and Compensated Absences and Other Postretirement Benefit Plans
- Note 13 Capital and Surplus, Shareholders' Dividend Restrictions and Quasi-Reorganizations
- Note 14 Liabilities, Contingencies and Assessments
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- Note 27 Structured Settlements
- Note 28 Health Care Receivables
- Note 29 Participating Policies
- Note 30 Premium Deficiency Reserves
- Note 31 Reserves for Life Contracts and Annuity Contracts
- Note 32 Analysis of Annuity Actuarial Reserves and Deposit Liabilities by Withdrawal Characteristics
- Note 33 Premium and Annuity Considerations Deferred and Uncollected
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- Note 35 Loss/Claim Adjustment Expenses

Note 1 - Summary of Significant Accounting Policies

Accounting practices:

The accompanying financial statements of C.M. Life Insurance Company (the Company) have been prepared in conformity with the Statutory Accounting Practices (SAP) of the National Association of Insurance Commissioners (NAIC) and the accounting practices prescribed or permitted by the State of Connecticut Insurance Department (the Department).

A reconciliation of the Company's net income and capital and surplus between NAIC SAP and practices prescribed and permitted by the State of Connecticut is shown below:

2014
_
_
160
-
<u>-</u>
160
1,305
-
1,305

- b. Use of estimates in the preparation of the financial statements No change
- Accounting policy:

(1-5) No change

(6) For fixed income securities that do not have a fixed schedule of payments, such as asset-backed securities, mortgage-backed securities, including residential mortgage-backed securities and commercial mortgage-backed securities, and structured securities, including collateralized debt obligations, amortization or accretion is revalued quarterly based on the current estimated cash flows, using either the prospective or retrospective adjustment methodologies for each type of security.

Certain fixed income securities with the highest ratings from a rating agency follow the retrospective method of accounting. Under the retrospective method, the recalculated effective yield equates the present value of the actual and anticipated cash flows, including new prepayment assumptions, to the original cost of the investment. Prepayment assumptions are based on borrower constraints and economic incentives such as the original term, age and coupon of the loan as affected by the interest rate environment. The current carrying value is then increased or decreased to the amount that would have resulted had the revised yield been applied since inception, and investment income is correspondingly decreased or increased.

All other fixed income securities, such as floating rate bonds and interest only securities, including those that have been impaired, follow the prospective method of accounting. Under the prospective method, the recalculated future effective yield equates the carrying value of the investment to the present value of the anticipated future cash flows

(7-14) No change

Note 2 - Accounting Changes and Corrections of Errors

For the nine months ended September 30, 2015, the Company did not record any corrections of prior year errors. For the nine months ended September 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:

	I	Increase (Decrease) to:				Correction		
	P	Prior Year Net Income		irrent	of Asset or Liability Balances			
	Y			'ear				
	Net I			rplus				
			(In M	fillions)				
Other liabilities	\$	11	\$	11	\$	(11)		
Policyholders' reserves		(3)		(3)		3		
Total	\$	8	\$	8	\$	(8)		

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

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. The adoption of this guidance did not have a significant impact on the Company's valuation of its assets.

Note 3 - Business Combinations and Goodwill - No change

Note 4 - Discontinued Operations - No change

- Note 5 Investments

 a. Mortgage loans, including mezzanine real estate loans No change
 - b. Debt restructuring No change
 - Reverse mortgages No change C.
 - Loan-backed and structured securities:
 - (1) Prepayment assumptions for loan-backed and structured securities are based on various assumptions and inputs obtained from external industry sources along with internal analysis and actual experience.
 - (2) The following contains loan-backed and structured securities that recognized other-than-temporary impairments (OTTI) classified on the following bases for recognizing OTTI:

		(1)		(2)	((3)
		Amortized		OTTI ognized		
		Cost Basis		Loss		
		Before	(2a)	(2b)	Fair	Value
		OTTI	Interest	Non-interest	1-(2	a+2b)
			(In I	Millions)		
	I recognized in the first quarter					
a.	Intent to sell	\$ -	\$ -	\$ -	\$	-
b.	Inability or lack of intent to retain the investment					
	in the security for a period of time sufficient to recover the amortized cost basis	4	_	_		1
C.	Total first quarter	\$ 4	\$ -	\$ -	\$	4
٠.		* .	*	*	<u> </u>	
OT	ΓI recognized in the second quarter					
d.	Intent to sell	\$ -	\$ -	\$ -	\$	-
e.	Inability or lack of intent to retain the investment					
	in the security for a period of time sufficient to					
,	recover the amortized cost basis	8		-		8
f.	Total second quarter	\$ 8	<u>\$ -</u>	\$ -	\$	8
O.T.	Flore a control to the other decides					
	II recognized in the third quarter Intent to sell	\$ -	\$ -	c	\$	
g. h.	Inability or lack of intent to retain the investment	•	φ -	Φ -	φ	-
11.	in the security for a period of time sufficient to					
	recover the amortized cost basis	6	_	1		5
i.	Total third quarter	\$ 6	\$ -	\$ 1	\$	5
					-	
OT	ΓI recognized in the fourth quarter					
j.	Intent to sell	\$ -	\$ -	\$ -	\$	-
k.	Inability or lack of intent to retain the investment					
	in the security for a period of time sufficient to					
	recover the amortized cost basis	<u>r</u>	<u> </u>	<u> </u>	<u> </u>	
I.	Total fourth quarter	<u>\$ -</u>	Φ -	Ф -	<u> </u>	
m.	Annual Aggregate Total		\$ -	\$ 1		
••••			-	·		

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

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

CUSIP	Amortized Cost before OTTI	Projected Cash Flow	Recognized OTTI	Amortized Cost after OTTI	Fair Value at Time of OTTI	Date of Financial Instrument Where Reported
125435AA5	\$ 130,949.95	\$ 130,826.56	\$ (123.39)	\$ 130,826.56	\$ 130,199.04	March 31, 2015
17307GKZ0	28,426.86	28,392.44	(34.42)	28,392.44	27,903.33	March 31, 2015
589929N38	109,153.79	108,655.62	(498.17)	108,655.62	105,605.47	March 31, 2015
61750MAB1	744.86	675.83	(69.03)	675.83	736.96	March 31, 2015
81744FDK0	503,407.76	498,444.36	(4,963.40)	498,444.36	489,646.60	March 31, 2015
86359DMC8	2,562,280.17	2,543,017.82	(19,262.35)	2,543,017.82	2,530,463.99	March 31, 2015
885220FS7	553,016.84	541,787.54	(11,229.30)	541,787.54	545,060.88	March 31, 2015
939336KZ5	246,235.31	245,240.70	(994.61)	245,240.70	232,443.69	March 31, 2015
125435AA5	124,256.61	123,204.14	(1,052.47)	123,204.14	123,549.99	June 30, 2015
17307GKZ0	18,659.77	18,598.94	(60.83)	18,598.94	18,267.28	June 30, 2015
77277LAF4	3,227,859.75	3,136,314.75	(91,545.00)	3,136,314.75	3,703,911.30	June 30, 2015
77277LAH0	161,547.14	157,081.53	(4,465.61)	157,081.53	356,896.00	June 30, 2015
77277LAJ6	2,287,463.65	2,224,240.71	(63,222.94)	2,224,240.71	2,330,753.94	June 30, 2015
86359DMC8	2,480,358.96	2,436,584.23	(43,774.73)	2,436,584.23	2,457,930.74	June 30, 2015
17307GKZ0	18,386.02	18,329.87	(56.15)	18,329.87	18,034.44	September 30, 2015
77277LAF4	3,136,314.75	2,827,410.80	(308,903.95)	2,827,410.80	3,713,542.20	September 30, 2015
77277LAH0	157,081.53	142,013.06	(15,068.47)	142,013.06	357,824.00	September 30, 2015
77277LAJ6	2,224,240.71	2,010,905.24	(213,335.47)	2,010,905.24	2,336,814.36	September 30, 2015
79549ASM2	67,743.31	65,771.49	(1,971.82)	65,771.49	65,570.52	September 30, 2015
Totals	\$ 18,038,127.74	\$ 17,257,495.63	\$ (780,632.11)	\$ 17,257,495.63	\$ 19,545,154.73	

- (4) As of September 30, 2015, the gross unrealized losses and fair values for investments in structured and loan-backed securities for which an OTTI has not been recognized in earnings follow (in millions):
 - The aggregate amount of unrealized losses:

1.	Less than 12 months	\$	(4)
2.	12 months or longer	\$	(7)
The	e aggregate related fair value of securities with unrealized lo	sses:	

1. Less than 12 months \$

230 2. 12 months or longer 226

- (5) No additional information
- Repurchase agreements:

b.

- (1-2) No change
- (3) The Company does not have any securities lending transactions administered by an affiliated agent.
- (4-6) No change
- Real estate:

Effective January 1, 2015, the Company sold its participation interests in eight real estate properties to Massachusetts Mutual Life Insurance Company, the Company's sole shareholder, for \$25 million of cash, the fair value of the participation interests.

Refer to Note 10a-c. "Information Concerning Parent, Subsidiaries and Affiliates" for additional information.

- Low income housing tax credit properties No change g.
- h. Restricted assets - No change
- Working capital finance investments The Company did not invest in working capital finance investments. i.
- Offsetting and netting of assets and liabilities The Company reports assets and liabilities as gross in the financial statements without offsetting.
- Structured notes No change

Note 6 - Joint Ventures, Partnerships and LLCs - No change

Note 7 - Investment Income - No change

Note 8 - Derivative Instruments - No change

Note 9 - Income Taxes - No change

Note 10 - Information Concerning Parent, Subsidiaries and Affiliates

- No change
- b-c. Effective January 1, 2015, the Company sold its participation interests in eight real estate properties to Massachusetts Mutual Life Insurance Company, the Company's sole shareholder, for \$25 million of cash, the fair value of the participation interests. The carrying value of the real estate investments at the time of sale was \$24 million, which was net of encumbrances of \$9 million that were assumed by MassMutual. Upon sale of the real estate investments, the Company recognized a net gain of \$1 million, which was recorded through net realized capital gains (losses).

d-I. No change

Note 11 - Debt

- a. No change
- b. The Company is not a member of the Federal Home Loan Bank (FHLB) therefore it has no FHLB funding agreements.

Note 12 – Retirement Plans, Deferred Compensation, Postemployment Benefits and Compensated Absences and Other Postretirement Benefit Plans

- a. Defined Benefit Plan
 - (1-3) No change
 - (4) The company did not have any defined benefit pension plans for which the reporting entity is directly liable.
 - (5-21) No change
- b-j. No change

Note 13 - Capital and Surplus, Shareholders' Dividend Restrictions and Quasi-Reorganizations - No change

Note 14 - Liabilities, Contingencies and Assessments

- a. Contingent commitments No change
- b. Assessments No change
- c. Gain contingencies No change
- d. Claims related to extra contractual obligations No change
- e. All other contingencies:

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.

f. 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.

Note 15 - Leases - No change

Note 16 – Information About Financial Instruments With Off-Balance Sheet Risk and Financial Instruments With Concentrations of Credit Risk - No change

Note 17 - Sale, Transfer and Servicing of Financial Assets and Extinguishments of Liabilities

- a. Transfers of receivables reported as sales No change
- b. Transfer and Servicing of Financial Assets:
 - (1) No change
 - (2) The Company did not have any servicing assets or liabilities in 2015 or 2014.
 - (3) No change
 - (4) The Company did not have interests that continue to be held by a transferor in securitized financial assets in 2015 or 2014.
 - (5-7) No change

c. Wash sales:

- (1) In the course of the Company's investment management activities, securities may be sold and reacquired within 30 days of the sale date.
- (2) The Company did not sell any securities with the NAIC Designation 3 or below through the third quarter ended September 30, 2015 that were reacquired within 30 days of the sale date.

Note 18 – Gain or Loss to the Reporting Entity from Uninsured Plans and the Uninsured Portion of Partially Insured Plans – No change

Note 19 - Direct Premium Written/Produced By Managing General Agents/Third Party Administrators - No change

Note 20 - Fair Value Measurements

- a. Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The authoritative guidance around fair value establishes a measurement framework that includes a hierarchy used to classify the inputs used in measuring fair value. The hierarchy prioritizes the inputs to valuation techniques into three levels. Each level reflects a unique description of the inputs that are significant to the fair value measurements. The levels of the fair value hierarchy are as follows:
 - Level 1 Observable inputs in the form of quoted prices for identical instruments in active markets.
 - Level 2 Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be derived from observable market data for substantially the full term of the assets or liabilities.

Level 3 – One or more unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using internal models, as well as instruments for which the determination of fair value requires significant management judgment or estimation.

When available, the Company generally uses unadjusted quoted market prices from independent sources to determine the fair value of investments, and classifies such items within Level 1 of the fair value hierarchy. If quoted prices are not available, prices are derived from observable market data for similar assets in an active market or obtained directly from brokers for identical assets traded in inactive markets. Investments that are priced using these inputs are classified within Level 2 of the fair value hierarchy. When some of the necessary observable inputs are unavailable, fair value is based upon internally developed models. These models use inputs not directly observable or correlated with observable market data. Typical inputs, which are integrated in the Company's internal discounted cash flow models and discounted earnings models include, but are not limited to, issuer spreads derived from internal credit ratings and benchmark yields such as LIBOR, cash flow estimates and earnings before interest, taxes, depreciation and amortization estimates. Investments that are priced with such unobservable inputs are classified within Level 3 of the fair value hierarchy.

The Company has established and maintained policies and guidelines that govern its valuation methodologies and their consistent application. These policies and guidelines address the use of inputs, price source hierarchies and provide controls around the valuation processes. These controls include appropriate review and analysis of prices against market activity or indicators for reasonableness, approval of price source changes, price overrides, methodology changes and classification of fair value hierarchy levels. The valuation policies and guidelines are reviewed and updated as appropriate.

Annually, the Company reviews the primary pricing vendor to validate that the inputs used in that vendor's pricing process are deemed to be market observable as defined above. While the Company was not provided access to proprietary models of the vendor, the reviews have included on-site walk-throughs of the pricing process, methodologies and control procedures for each asset class and level for which prices are provided. The review also included an examination of the underlying inputs and assumptions for a sample of individual securities across asset classes. In addition, the Company and its pricing vendors have an established challenge process in place for all security valuations, which facilitates identification and resolution of prices that fall outside expected ranges. The Company believes that the prices received from the pricing vendors are representative of prices that would be received to sell the assets at the applicable measurement date (exit prices) and are classified appropriately in the hierarchy.

The fair value of individual annuity and supplementary contracts is determined using one of several methods based on the specific contract type. For short-term contracts, generally less than 30 days, the fair value is assumed to be the book value. For investment-type contracts, the fair value is determined by calculating the present value of future cash flows discounted at current market interest rates, the risk-free rate or a current pricing yield curve based on pricing assumptions using assets of a comparable corporate bond quality. Annuities are valued using cash flow projections from the Company's asset-liability management analysis.

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

			Se	ptembe	r 30,	2015	
	L	evel 1	Le	vel 2	Le	vel 3	Total
				(In Mi	llions)	
Financial assets:							
Bonds:							
Industrial and miscellaneous	\$	-	\$	1	\$	-	\$ 1
Parent, subsidiaries and affiliates		-		4		5	9
Preferred stocks		1		-		-	1
Common stock - subsidiary and affiliate		7		-		-	7
Common stock - unaffiliated		-		-		3	3
Separate account assets		1,699		-		-	1,699
Derivatives:							
Interest rate swaps		-		581		-	581
Options		-		50		-	50
Currency swaps		-		27		-	27
Forward contracts		-		2		-	2
Credit default swaps		-		-		-	
Total financial assets carried							
at fair value	\$	1,707	\$	665	\$	8	\$ 2,380
Financial liabilities:							
Derivatives:							
Interest rate swaps	\$	-	\$	595	\$	-	\$ 595
Currency swaps		-		1		-	1
Credit default swaps		-		-		-	
Total financial liabilities carried							
at fair value	\$	-	\$	596	\$	-	\$ 596

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

	December 31, 2014								
	<u>L</u>	evel 1	Le	vel 2	Lev	/el 3		Total	
	_			(In Mi	llions)				
Financial assets:									
Bonds:									
Industrial and miscellaneous	\$	-	\$	-	\$	3	\$	3	
Parent, subsidiaries and affiliates		-		-		9		9	
Common stock - subsidiary and affiliate		7		-		-		7	
Common stock - unaffiliated		-		-		3		3	
Separate account assets		1,863		-		-		1,863	
Derivatives:									
Interest rate swaps		-		462		-		462	
Options		-		49		-		49	
Currency swaps		-		11		-		11	
Forward contracts		-		3		-		3	
Credit default swaps		-		-		-		-	
Total financial assets carried									
at fair value	\$	1,870	\$	525	\$	15	\$	2,410	
Financial liabilities:									
Derivatives:									
Interest rate swaps	\$	-	\$	465	\$	-	\$	465	
Currency swaps	•	_	•	4	•	_	•	4	
Credit default swaps		_		_		-		_	
Total financial liabilities carried	_								
at fair value	\$	-	\$	469	\$	-	\$	469	
	_								

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

2. The following presents changes in the Company's Level 3 financial instruments that are carried at fair value:

	Bala	nce														Balar	nce
	as	of	Trai	nsfers ⁽¹⁾	Gains	in	Losses ir	ı								as o	of
	01/01/	2015	In	Out	Net Inc	ome	Surplus	F	urcha	ases	Issuan	ces	Sa	les	Settlements	09/30/2	2015
_							(In M	illions)							
Financial assets:																	
Bonds:																	
Industrial and miscellaneous	\$	3	\$ -	\$ (2)	\$	(1)	\$	-	\$	-	\$	-	\$	-	\$ -	\$	-
Parent, subsidiaries and affiliates		9	-	(4)		-		-		-		-		-	-		5
Preferred stocks		-	-	-		-		-		-		-		-	-		-
Common stocks - unaffiliated		3	-	-		-		-		1		-		(1)	-		3
Total financial assets	\$	15	\$ -	\$ (6)	\$	(1)	\$	-	\$	1	\$	-	\$	(1)	\$ -	\$	8

⁽¹⁾ 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.

	Balan as o		Tran	nsfers ⁽¹⁾	Losses	s in	Gains	in							Bala as	
	01/01/2	014	In	Out	Net Income		Surplu	JS	Purch	ases	Issua	nces	Sales	Settlements	12/31/	2014
							((In Mil								
Financial assets:																
Bonds:																
Industrial and miscellaneous	\$	1	\$ -	\$ (1)	\$	-	\$	-	\$	-	\$	3	\$ -	\$ -	\$	3
Parent, subsidiaries and affiliates		-	5	-		-		(1)		3		11	-	(9)		9
Preferred stock		-	-	-		-		-		-		-	-	-		-
Common stock - unaffiliated		2	-	-		1		-		1			(1)	-		3
Total financial assets	\$	3	\$ 5	\$ (1)	\$	1	\$	(1)	\$	4	\$	14	\$ (1)	\$ (9)	\$	15

⁽¹⁾ 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. The parent, subsidiaries and affiliates were transferred in to Level 3 from Level 2 due to a change in the observability of pricing inputs.

3. The Company reviews the fair value hierarchy classifications at each reporting period. Overall, reclassifications between levels occur when there are changes in the observability of inputs and market activity used in the valuation of a financial asset or liability. Such reclassifications are reported as transfers between levels at the beginning fair value for the reporting period in which the changes occur. Given the types of assets classified as Level 1 (primarily equity securities and mutual fund investments), transfers between Level 1 and Level 2 measurement categories are expected to be infrequent. Transfers into and out of Level 3 are summarized in the schedule of changes in Level 3 assets and liabilities.

4. Valuation Techniques and Inputs

The Company determines the fair value of its investments using primarily the market approach or the income approach. The use of quoted prices for identical assets and matrix pricing or other similar techniques are examples of market approaches, while the use of discounted cash flow methodologies is an example of the income approach. The Company attempts to maximize the use of observable inputs and minimize the use of unobservable inputs in selecting whether the market or the income approach is used.

A description of the significant valuation techniques and inputs to the determination of estimated fair value for the more significant asset and liability classes measured at fair value on a recurring basis and categorized within Level 2 and Level 3 of the fair value hierarchy is as follows:

Derivative assets and liabilities - These financial instruments are primarily valued using the market approach. The estimated fair value of derivatives is based primarily upon quotations obtained from counterparties and independent sources, such as quoted market values received from brokers. These quotations are compared to internally derived prices and a price challenge is lodged with the counterparties and an independent source when a significant difference cannot be explained by appropriate adjustments to the internal model. When quoted market values are not reliable or available, the value is based upon an internal valuation process using market observable inputs that other market participants would use. Significant inputs to the valuation of derivative financial instruments include overnight index swaps (OIS) and LIBOR basis curves, interest rate volatility, swap yield curve, currency spot rates, cross currency basis curves and dividend yields. Due to the observability of the significant inputs to these fair value measurements, they are classified as Level 2.

The use of different assumptions or valuation methodologies may have a material impact on the estimated fair value amounts. For the periods presented, there were no significant changes to the Company's valuation techniques.

- 5. Derivative assets and liabilities fair value disclosures on a gross basis are included in paragraph 1 above. Since there are no derivative assets or liabilities classified in Level 3, the reconciliation disclosures required under paragraphs 2 through 4 are not applicable.
- b. The Company provides additional fair value information in Notes 1, 5, 8, 21, 32 and 34.

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

			S	eptembe	er 30	, 2015				
	 gregate r Value	dmitted	L	evel 1	L	evel 2	L	evel 3	Prad (Ca	Not cticable arrying alue)
				(In M	illion	s)				
Financial assets:				,		,				
Bonds:										
U. S. government and agencies	\$ 296	\$ 272	\$	-	\$	296	\$	-	\$	-
All other governments	1	1		-		1		-		-
States, territories and possessions	38	34		-		38		-		-
Political subdivisions	16	15		-		16		-		-
Special revenue	144	130		-		142		2		-
Industrial and miscellaneous	3,605	3,488		-		2,041		1,564		-
Parent, subsidiaries and affiliates	330	315		-		55		275		-
Preferred stocks	32	31		15		-		17		-
Common stock - subsidiary and affiliate ⁽¹⁾	7	7		7		-		-		-
Common stock - unaffiliated	3	3		-		-		3		-
Mortgage loans - commercial	819	788		-		-		819		-
Mortgage loans - residential	191	193		-		-		191		-
Cash, cash equivalents and										
short-term investments	248	248		32		216		-		-
Separate account assets	1,699	1,699		1,699		-		-		-
Derivatives:										
Interest rate swaps	581	581		-		581		-		-
Options	50	50		-		50		-		-
Currency swaps	27	27		-		27		-		-
Forward contracts	2	2		-		2		-		-
Credit default swaps	-	-		-		-		-		-
Financial liabilities:										
Repurchase agreements	240	240		-		240		-		-
Individual annuity contracts	3,628	3,173		-		-		3,628		-
Supplementary contracts	52	52		-		-		52		-
Derivatives:										
Interest rate swaps	595	595		-		595		-		-
Currency swaps	1	1		-		1		-		-
Forward contracts	-	-		-		-		-		-
Credit default swaps	-	-		-		-		-		-

⁽¹⁾Common stocks - affiliates do not include Bay State Life, which had a statutory carrying value of \$227 million.

			L	Decembe	r 31	, 2014				
	 gregate r Value	Imitted	L	evel 1	L	evel 2	L	evel 3	No Practio (Carr Valu	cable ying
				(In M	illior	ns)				
Financial assets:				, ···		,				
Bonds:										
U. S. government and agencies	\$ 296	\$ 273	\$	-	\$	295	\$	1	\$	-
All other governments	1	1		-		1		-		-
States, territories and possessions	79	72		-		79		-		-
Political subdivisions	18	16		-		17		1		-
Special revenue	97	83		-		95		2		-
Industrial and miscellaneous	3,772	3,554		-		2,245		1,527		-
Parent, subsidiaries and affiliates	325	306		-		46		279		-
Preferred stocks	31	29		15		-		16		-
Common stock - subsidiary and affiliate ⁽¹⁾	7	7		7		-		-		-
Common stock - unaffiliated	3	3		-		-		3		-
Mortgage loans - commercial	761	734		-		-		761		-
Mortgage loans - residential	206	210		-		-		206		-
Cash, cash equivalents and										
short-term investments	205	205		5		200		-		-
Separate account assets	1,863	1,863		1,863		-		-		-
Derivatives:										
Interest rate swaps	462	462		-		462		-		-
Options	49	49		-		49		-		-
Currency swaps	11	11		-		11		-		-
Forward contracts	3	3		-		3		-		-
Financial liabilities:										
Repurchase agreements	240	240		-		240		-		-
Individual annuity contracts	3,338	3,227		-		-		3,338		-
Supplementary contracts	45	45		-		-		45		-
Derivatives:										
Interest rate swaps	465	465		-		465		-		-
Currency swaps	4	4		-		4		-		-
Forward contracts	-	-		-		-		-		-

December 31 2014

d. For the nine months ended September 30, 2015, the Company had no investments where it was not practicable to estimate fair value.

Note 21 - Other Items

- a. Extraordinary items No change
- b. Troubled debt restructuring No change
- c. Other disclosures and unusual items

Business risks

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 quarterly risks and uncertainties disclosure should be read in conjunction with the statutory disclosure in the Company's 2014 annual financial statements.

Currency exchange risk

The Company has currency risk due to its non-U.S. dollar investments. 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

⁽¹⁾ Common stocks - affiliates do not include Bay State Life, which had a statutory carrying value of \$211 million.

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.

The Company has investment exposure to energy and certain other commodity sectors. With the continued weaker economic outlook in these sectors, there may be an increase in reported default rates or potential downgrades to the ratings of companies or sovereignties exposed to these sectors. The Company monitors its investments in these sectors and assesses the liquidity and financial viability of its investments. If the Company chooses to sell the investment prior to maturity or market recovery, these investments may yield a return that is less than the Company otherwise would have been able to realize.

- Business interruption insurance recoveries No change
- e. State transferrable tax credits No change
- f. Subprime mortgage related risk exposure:
 - (1) No change
 - (2) No change
 - (3) The actual cost reduced by paydowns, carrying value, fair value and related gross realized losses from OTTI of the Company's investments with significant Alt-A and subprime exposure were as follows:

		Se	ptembe	er 30, 20	015		Nine Months End September 30 2015	
	A	ctual	Carry	/ing	F	air		
Alt-A:	C	Cost	Valu	ue	V	alue	OTTI	
				(Ir	n Millic	ns)		
a. Residential mortgage-backed securities	\$	45	\$	32	\$	38	\$	-
b. Commercial mortgage-backed securities		-		-		-		-
c. Collateralized debt obligations		-		-		-		-
d. Structured securities		-		-		-		-
e. Equity investments in SCAs *		4		3		4		-
f. Other assets		-		-		-		
g. Total	\$	49	\$	35	\$	42	\$	-

							September 3	
		Se	eptemb		2015			
	Ad	ctual	Carry					
Subprime:	С	ost	Value		Value		OTTI	
				(lı	n Millio	ons)		
a. Residential mortgage-backed securities	\$	24	\$	20	\$	21	\$	-
b. Commercial mortgage-backed securities		-		-		-		-
c. Collateralized debt obligations		-		-		-		-
d. Structured securities		-		-		-		-
e. Equity investments in SCAs *		4		2		3		-
f. Other assets		-		-		-		
g. Total	\$	28	\$	22	\$	24	\$	

^{*} The Company's SCA, MML Bay State, has investments in Alt-A and subprime mortgages. These investments comprise less than 1% of the Company's invested assets.

		D	December 2014	31,				
	Ac	tual	Carry	ring	F	air		
Alt-A:	C	ost	Valu	ıe	V	alue	OTTI	
				(In N	/lillions)		
a. Residential mortgage-backed securities	\$	51	\$	35	\$	43	\$	-
b. Commercial mortgage-backed securities		-		-		-		-
c. Collateralized debt obligations		-		-		-		-
d. Structured securities		-		-		-		-
e. Equity investments in SCAs *		4		3		4		-
f. Other assets		-		-		-		
g. Total	\$	55	\$	38	\$	47	\$	

Year Ended

		C	Year Ende December 2014					
	Ad	ctual						
Subprime:	C	ost	Valu	ie	V	alue	OTTI	
				(In M	(lillions			
a. Residential mortgage-backed securities	\$	27	\$	22	\$	23	\$	-
b. Commercial mortgage-backed securities		-		-		-		-
c. Collateralized debt obligations		-		-		-		-
d. Structured securities		-		-		-		-
e. Equity investments in SCAs *		4		2		3		-
f. Other assets		-		-		-		
g. Total	\$	31	\$	24	\$	26	\$	

^{*} The Company's SCA, MML Bay State, has investments in Alt-A and subprime mortgages. These investments comprise less than 1% of the Company's invested assets.

- (4) The Company has no underwriting exposure to subprime mortgage risk through Mortgage Guaranty or Financial Guaranty insurance coverage.
- g. Retained asset accounts No change

Note 22 - Events Subsequent

Management of the Company has evaluated subsequent events through November 11, 2015, the date the financial statements were available to be issued. No events have occurred subsequent to the balance sheet date and before the date of evaluation that would require disclosure.

Note 23 - Reinsurance

- Ceded Reinsurance Report:
 - Section 1 General Interrogatories No change
 - Section 2 Ceded Reinsurance Report Part A No change
 - Section 3 Ceded Reinsurance Report Part B No change
- b-d. No change

Note 24 – Retrospectively Rated Contracts and Contracts Subject to Redetermination

The Company does not issue group health insurance and therefore did not issue retrospectively rated contracts or contracts subject to redetermination.

Note 25 - Change in Incurred Losses and Loss Adjustment Expenses

There was no increase to reserves in 2015 for incurred losses and loss adjustment expenses attributable to insured events of prior years, which were considered corrections of prior year errors.

Note 26 - Intercompany Pooling Arrangements - No change

- Note 27 Structured Settlements No change
- Note 28 Health Care Receivables No change
- Note 29 Participating Policies No change
- Note 30 Premium Deficiency Reserves No change
- Note 31 Reserves for Life Contracts and Annuity Contracts No change
- Note 32 Analysis of Annuity Actuarial Reserves and Deposit Liabilities by Withdrawal Characteristics No change
- Note 33 Premium and Annuity Considerations Deferred and Uncollected No change
- Note 34 Separate Accounts No change
- Note 35 Loss/Claim Adjustment Expenses No change

GENERAL INTERROGATORIES

PART 1 - COMMON INTERROGATORIES

GENERAL

1.1	Did the reporting entity experience any material transactions requiri Domicile, as required by the Model Act?						Yes [] No [X]
1.2	If yes, has the report been filed with the domiciliary state?			Yes [] No []			
2.1	Has any change been made during the year of this statement in the reporting entity?						Yes [] No [X]
2.2	If yes, date of change:					<u>-</u>			
3.1	Is the reporting entity a member of an Insurance Holding Company is an insurer?						Yes [X] No []
3.2	Have there been any substantial changes in the organizational char	rt since the prior q	uarter end?				Yes [] No [X]
3.3	If the response to 3.2 is yes, provide a brief description of those cha	anges.							
4.1	Has the reporting entity been a party to a merger or consolidation of	during the period c	overed by this statemen	nt?			Yes [] No [X]
4.2	If yes, provide the name of the entity, NAIC Company Code, and staceased to exist as a result of the merger or consolidation.	ate of domicile (us	e two letter state abbrev	viation) for any entity t	hat has				
	1 Name of Entity		2 NAIC Company Code	3 State of Domicile					
5.	If the reporting entity is subject to a management agreement, inclucin-fact, or similar agreement, have there been any significant chan If yes, attach an explanation.	ding third-party adr nges regarding the	ministrator(s), managing terms of the agreement	general agent(s), atte t or principals involved	orney- d? Y	es [] No [X] N/A	[]
6.1	State as of what date the latest financial examination of the reporting	ng entity was made	e or is being made			<u> </u>	12/3	1/2014	
6.2	State the as of date that the latest financial examination report beca date should be the date of the examined balance sheet and not th						12/3	1/2009	
6.3	State as of what date the latest financial examination report becam the reporting entity. This is the release date or completion date of date).	the examination re	eport and not the date of	f the examination (bal	ance she	eet	12/2	0/2010	
6.4 6.5	By what department or departments? State of Connecticut Insurance Department Have all financial statement adjustments within the latest financial statement filed with Departments?	examination report	been accounted for in a	a subsequent financia	I Y	es [X	.] No [] N/A	[]
6.6	Have all of the recommendations within the latest financial examina	ation report been c	omplied with?		Y	es [X] No [] N/A	[]
7.1	Has this reporting entity had any Certificates of Authority, licenses of revoked by any governmental entity during the reporting period?	or registrations (inc	cluding corporate registr	ation, if applicable) su	spended	d or	Yes [] No [X]
7.2	If yes, give full information:								
8.1	Is the company a subsidiary of a bank holding company regulated b	by the Federal Res	erve Board?				Yes [] No [X]
8.2	If response to 8.1 is yes, please identify the name of the bank holding	ing company.							
8.3	Is the company affiliated with one or more banks, thrifts or securitie	es firms?					Yes [X] No []
8.4	If response to 8.3 is yes, please provide below the names and local regulatory services agency [i.e. the Federal Reserve Board (FRB), Insurance Corporation (FDIC) and the Securities Exchange Communication (FDIC)	, the Office of the 0	Comptroller of the Curre	ncy (OCC), the Feder	al Depos	eral sit			
	1		2	3 FRB	4 OCC	5 FDIC	6 SEC		
	Affiliate Name Babson Capital Securities, LLC	Boston, MA	ocation (City, State)			טוט ו	YES		
	Baring Asset Management (Asia) Limited	Hong Kong					YES		
	Baring International Investment Limited						YES		
	MML Investment Advisers, LLC	Enfield CT					YES		
	MML Investors Services, LLC	Springfield. M	A			····	YES		
	MML Strategic Distributors, LLC	Springfield, M	A			-	YES		
	MMLISI Financial Alliances, LLC	Springfield, M	A				YES		
	OppenheimerFunds Distributor, Inc.	New York, NY	Δ				YES		
	Society of Grownups, LLC	Springfield, M	Α		VE0		YES		
	The MassMutual Trust Company, FSB	⊑ni ieia, Ui			1⊑∂		+		

GENERAL INTERROGATORIES

9.1	Are the senior officers (principal executive officer, principal financial officer, principal accounting officer or controll similar functions) of the reporting entity subject to a code of ethics, which includes the following standards? (a) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between p relationships; (b) Full, fair, accurate, timely and understandable disclosure in the periodic reports required to be filed by the report (c) Compliance with applicable governmental laws, rules and regulations;	ersona	ll and professional	Yes [Х]	No []
	(d) The prompt internal reporting of violations to an appropriate person or persons identified in the code; and(e) Accountability for adherence to the code.						
9.11	If the response to 9.1 is No, please explain:						
9.2	Has the code of ethics for senior managers been amended?			Yes []	No [X]
9.21	If the response to 9.2 is Yes, provide information related to amendment(s).						
9.3 9.31	Have any provisions of the code of ethics been waived for any of the specified officers?			Yes []	No [X]
	FINANCIAL						
10.1 10.2	Does the reporting entity report any amounts due from parent, subsidiaries or affiliates on Page 2 of this statement from parent included in the Page 2 amount:	nt?	\$	Yes [Х]	No [] 0
	INVESTMENT						
	Were any of the stocks, bonds, or other assets of the reporting entity loaned, placed under option agreement, or ouse by another person? (Exclude securities under securities lending agreements.)			Yes [Х]	No []
12.	as collateral - excluding collateral pledged to an FHLB. Amount of real estate and mortgages held in other invested assets in Schedule BA:		•		10	000	160
13.	Amount of real estate and mortgages held in short-term investments:		Ψ. \$			00,009,	400
14.1	Does the reporting entity have any investments in parent, subsidiaries and affiliates?		Ψ.	Yes [X 1	No [1
14.2	If yes, please complete the following:				,		
			1			2	
			Prior Year-End			t Quarte	
			Book/Adjusted Carrying Value			Adjusted ng Value	
14.21	Bonds	\$	305 524 375			314,580	
14.22	Preferred Stock	\$					
	Common Stock					227,453	
14.24	Short-Term Investments	\$		\$			
	Mortgage Loans on Real Estate			\$			
14.26	All Other	\$	149,402,335	\$	1	156,014	, 100
14.27	Total Investment in Parent, Subsidiaries and Affiliates (Subtotal Lines 14.21 to 14.26)	\$	666,620,408	\$	6	98,048	,793
14.28	Total Investment in Parent included in Lines 14.21 to 14.26 above	\$		\$			
15.1	Has the reporting entity entered into any hedging transactions reported on Schedule DB?			Yes [X 1	No I	1
	If yes, has a comprehensive description of the hedging program been made available to the domiciliary state? If no, attach a description with this statement.						
	· · · · · · · · · · · · · · · · · · ·						

GENERAL INTERROGATORIES

16.1 Total fair value of reinvested collateral assets reported on Schedule DL, Parts 1 and 2. \$ 16.2 Total book adjusted/carrying value of reinvested collateral assets reported on Schedule DL, Parts 1 and 2. \$ 16.3 Total payable for securities lending reported on the liability page. \$ 17. Excluding items in Schedule E - Part 3 - Special Deposits, real estate, mortgage loans and investments held physically in the reporting entity's offices, vaults or safety deposit boxes, were all stocks, bonds and other securities, owned throughout the current year held pursuant to a custodial agreement with a qualified bank or trust company in accordance with Section 1, III - General Examination Considerations, F. Outsourcing of Critical Functions, Custodial or Safekeeping Agreements of the NAIC Financial Condition Examiners Handbook? Yes [X] No [
17. Excluding items in Schedule E - Part 3 - Special Deposits, real estate, mortgage loans and investments held physically in the reporting entity's offices, vaults or safety deposit boxes, were all stocks, bonds and other securities, owned throughout the current year held pursuant to a custodial agreement with a qualified bank or trust company in accordance with Section 1, III - General Examination Considerations, F. Outsourcing of Critical Functions, Custodial or Safekeeping Agreements of the NAIC Financial Condition Examiners Handbook, complete the following: 1		16.1 Total fair valu	e of reinvested collateral assets report	ted on Schedu	le DL, Parts 1	and 2	\$		
17. Excluding items in Schedule E - Part 3 - Special Deposits, real estate, mortgage loans and investments held physically in the reporting entity's offices, vaults or safety deposit boxes, were all stocks, bonds and other securities, owned throughout the current year held pursuant to a custodial agreement with a qualified bank or trust company in accordance with Section 1, III - General Examination Considerations, F. Outsourcing of Critical Functions, Custodial or Safekeeping Agreements of the NAIC Financial Condition Examiners Handbook, complete the following: 1		16.2 Total book ad	justed/carrying value of reinvested col	lateral assets	reported on Sc	hedule DL, Parts 1 and 2	.\$		
17. Excluding items in Schedule E - Part 3 - Special Deposits, real estate, mortgage loans and investments held physically in the reporting entity's offices, vaults or safety deposit boxes, were all stocks, bonds and other securities, owned throughout the current year held pursuant to a custodial agreement with a qualified bank or trust company in accordance with Section 1, III - General Examination Considerations, F. Outsourcing of Critical Functions, Custodial or Safekeeping Agreements of the NAIC Financial Condition Examiners Handbook, Complete the following: 1									
Citibank, N.A		offices, vaults or safety deposit bo custodial agreement with a qualifie Outsourcing of Critical Functions,	xes, were all stocks, bonds and other ed bank or trust company in accordan Custodial or Safekeeping Agreements	securities, own ce with Sections of the NAIC F	ned throughout n 1, III - Genera inancial Condi	the current year held pursuant to a all Examination Considerations, F. tion Examiners Handbook?	Yes	[X] No []
Citibank, N.A			1			2			
JP Chase Manhattan Bank 1 Chase Manhattan Plaza, 19th Floor, New York, NY 10005 801 Pennsylvania Avenue, Kansas City, M0 64105 17.2 For all agreements that do not comply with the requirements of the NAIC Financial Condition Examiners Handbook, provide the name, location and a complete explanation: 1 2 3 3				000 # 1 04					
State Street Global Services					,				
17.2 For all agreements that do not comply with the requirements of the NAIC Financial Condition Examiners Handbook, provide the name, location and a complete explanation: 1 2 3 Name(s) Location(s) Complete Explanation(s) 17.3 Have there been any changes, including name changes, in the custodian(s) identified in 17.1 during the current quarter?									
location and a complete explanation: 1 2 3 Name(s) Location(s) Complete Explanation(s) 17.3 Have there been any changes, including name changes, in the custodian(s) identified in 17.1 during the current quarter?		State Street Global Services		801 Pennsyl	anta Avenue, r	Nansas City, MO 64105			
Name(s) Location(s) Complete Explanation(s) 17.3 Have there been any changes, including name changes, in the custodian(s) identified in 17.1 during the current quarter?	17.2		on:	Financial Con	dition Examine				
17.3 Have there been any changes, including name changes, in the custodian(s) identified in 17.1 during the current quarter? Yes [] No [X		1	<u> </u>			· ·			
		ivame(s)	Location(s)			Complete Explanation(s)			
	_	, ,	9	(s) identified ir	17.1 during th	e current quarter?	Yes [] No [X]
1 2 3 4		1	<u> </u>			-			
Old Custodian New Custodian Date of Change Reason		Old Custodian	New Custodian	Date	of Change	Reason			
17.5 Identify all investment advisors, brokers/dealers or individuals acting on behalf of broker/dealers that have access to the investment accounts, handle securities and have authority to make investments on behalf of the reporting entity:	17.5					ave access to the investment accounts,			
1 2 3		1	_			<u> </u>			
Central Registration Depository Name(s) Address		Central Registration Depository			4500 H : 01				
106006 Babson Capital Management, LLC 1500 Main Street, Springfield, MA 01115 Local 20 Consolder 2 Local de Street Melhours VIC		106006	Babson Capital Management, LLC						
Level 29 Casselden, 2 Lonsdale Street, Melbourne, VIC 162754		160754	JEM Investors Btv I td						
102734		102704	IFW THIVESTORS PTY LTG		3000				
18.1 Have all the filing requirements of the Purposes and Procedures Manual of the NAIC Securities Valuation Office been followed? Ves. [] No. []	10.1	Have all the filing requires	as Duwassa and Drasaduras Marriel	of the NIAIC C	auritiaa Valuus	tion Office been followed?	V-	[] N. []	/ 1

At 9/30/2015, 30 issues for 21 issuers did not meet the filing requirements of the Purpose and Procedures Manual. The majority of these issues currently lack one or more of the following: Valid cusip/PPN, audited financials and/or executed legal documentation. Exceptions totaled \$11,410,571 or .25% of all assets.

GENERAL INTERROGATORIES

PART 2 - LIFE & HEALTH

1.	Report the statement value of mortgage loans at the end of this reporting period for the following categories:	1 Amount
	1.1 Long-Term Mortgages In Good Standing	Amount
	1.11 Farm Mortgages	\$
	1.12 Residential Mortgages	\$193,025,973
	1.13 Commercial Mortgages	\$788,075,627
	1.14 Total Mortgages in Good Standing	\$ 981,101,600
	1.2 Long-Term Mortgages In Good Standing with Restructured Terms	
	1.21 Total Mortgages in Good Standing with Restructured Terms	\$
	1.3 Long-Term Mortgage Loans Upon which Interest is Overdue more than Three Months	
	1.31 Farm Mortgages	\$
	1.32 Residential Mortgages	\$
	1.33 Commercial Mortgages	\$
	1.34 Total Mortgages with Interest Overdue more than Three Months	\$
	1.4 Long-Term Mortgage Loans in Process of Foreclosure	
	1.41 Farm Mortgages	\$
	1.42 Residential Mortgages	\$
	1.43 Commercial Mortgages	\$
	1.44 Total Mortgages in Process of Foreclosure	\$
1.5	Total Mortgage Loans (Lines 1.14 + 1.21 + 1.34 + 1.44) (Page 2, Column 3, Lines 3.1 + 3.2)	\$ 981,101,600
1.6	Long-Term Mortgages Foreclosed, Properties Transferred to Real Estate in Current Quarter	
	1.61 Farm Mortgages	\$
	1.62 Residential Mortgages	\$
	1.63 Commercial Mortgages	\$
	1.64 Total Mortgages Foreclosed and Transferred to Real Estate	\$
2.	Operating Percentages:	
	2.1 A&H loss percent	%
	2.2 A&H cost containment percent	%
	2.3 A&H expense percent excluding cost containment expenses	%
3.1	Do you act as a custodian for health savings accounts?	Yes [] No [X]
3.2	If yes, please provide the amount of custodial funds held as of the reporting date	\$
3.3	Do you act as an administrator for health savings accounts?	Yes [] No [X]

3.4 If yes, please provide the balance of the funds administered as of the reporting date ______\$

SCHEDULE S - CEDED REINSURANCE

Showing All New Reinsurance Treaties - Current Year to Date

1	2	3	4	5	6	7	8	9
NAIC					Type of		Certified Reinsurer	Effective Date of Certified
Company	ID	Effective		Domiciliary	Reinsurance		Rating	Reinsurer
Code	Number	Date	Name of Reinsurer	Jurisdiction	Ceded	Type of Reinsurer	(1 through 6)	Rating
82627	06-0839705	06/29/2015	Swiss Re Life & Health America Inc. (SRR1)	MO	YRT/I	Author i zed		

SCHEDULE T - PREMIUMS AND ANNUITY CONSIDERATIONS Current Year To Date - Allocated by States and Territories Direct Bus Life Contracts Accident and Health Insurance Premiums, Including Policy, Membership Total Deposit-Type Contracts Active Life Insurance Annuity Other Columns Premiums1,288,788 States, Etc Considerations and Other Fees Considerations Alabama AL 3.397.803 .2.109.015 Alaska .6,800 3,067.684 3. Arizona ΑZ 2.379.612 .688.072 4. AR .300.528 .76.231 376.759 Arkansas 20,982,403 16,030,229 37,012,632 California 6. Colorado CO 2 163 503 1 851 466 4 014 969 5.835.526 5.583.074 11.418.600 Connecticut CT 8. Delaware DE 313.019 491.771 804.790 9 District of Columbia DC 1.318.320 .81.759 1.400.079 10. Florida FL 19.977.871 .14.338.913 34.316.784 GΑ 4,015,073 2.349.491 ..6,364,564 11. Georgia 1, 182,067 12. Hawaii н 1,708,248 2.890.315 13. Idaho. ID ..319.999 .175.073 495.072 4,874,682 5,589,458 10,464,140 14. Illinois IL 1,682,140 Indiana 1,733,315 15 INI 3.415.455 16. lowa. IΑ 1.172.745 .421.335 .1.594.080 17. KS 1,107,814 2,443,700 3,551,514 Kansas 18. Kentucky ΚY 772.199 449.411 1.221.610 956 912 19. Louisiana LA 6 942 541 7 899 453 ME 435,482 .446,096 .881,578 20. Maine. 21. MD 5,803,344 1,551,450 7,354,794 Maryland 22 Massachusetts MA 4 319 048 15 521 564 19 840 612 MI .9,758,098 13,470,917 23. Michigan 3,712,819 MN 2,430,006 24 Minnesota .4,921,224 .7,351,230 25. Mississippi MS 1 734 853 361 013 2 095 866 МО 6.488.937 8.579.733 26. Missouri. 2.090.796 МТ 27 .236,835 .748,588 .985,423 28. Nebraska NE 2 059 754 853 221 2 912 975 NV ...917.327 .114.275 1.031.602 29. Nevada. New Hampshire NH .972, 151 4,139,348 5,111,499 New Jersey 31. NJ 8 286 147 5.055.229 13.341.376 32. New Mexico NM ...752.529 .521.787 .1.274.316 NY 4.380.373 4,726,520 34 North Carolina NC 5.568.488 4.318.420 9.886.908 35. North Dakota ND .. 15.223 .510.839 ..526.062 ОН 3.874.298 5.840.456 9.714.754 1,593 947 37. Oklahoma ΟK 1.909.714 3.503.661 OR 38. Oregon. ..833.845 2.435.779 3.269.624 Pennsylvania 39. PΑ 7,695,176 15,487,206 .23, 182, 382 2,807,352 40. Rhode Island RI 840 647 3 647 999 2.844.696 41. South Carolina SC .778.103 3.622.799 42 South Dakota SD .214,747 267,491 482,238 43. Tennessee ΤN 3.499.353 3.872.695 7.372.048 44. Texas. TX 9.978.282 13 766 406 23.744.688 1,629,411 45. UT 1,949,503 3,578,914 Utah .. 46. VT 317.942 1.486.261 1,804,203 Vermont Virginia 3 554 580 47. VA 6 207 848 9 762 428 48. Washington WA 1,887,388 504, 180 .2,391,568 49. West Virginia wv .515,409 .908,980 1,424,389 50. Wisconsin WΙ 1 205 734 5 842 384 7 048 118 481,523 WY ..150,718 ..632,241 51. Wyoming AS 52 American Samoa 53. Guam GU N 180 180 .3,759,027 1,618,642 .5,377,669 Puerto Rico PR

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U.S. Virgin Islands

Canada.

Subtotal

Northern Mariana Islands

Aggregate Other Aliens ...

additions and annuities

Totals (Direct Business)...

Less Reinsurance Ceded

DETAILS OF WRITE-INS ZZZ Other Alien

Totals (All Business)

overflow page .

overflow page

58998)(Line 58 above)

Plus Reinsurance Assumed

or premium paying period....

Reporting entity contributions for employee benefits

Dividends or refunds applied to purchase paid-up

Dividends or refunds applied to shorten endowment

Premium or annuity considerations waived under disability or other contract provisions.....

Totals (All Business) less Reinsurance Ceded

Summary of remaining write-ins for Line 58 from

Summary of remaining write-ins for Line 94 from

Totals (Lines 9401 through 9403 plus 9498)(Line

Totals (Lines 58001 through 58003 plus

Aggregate or other amounts not allocable by State

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⁹⁴ above) XXX (L) Licensed or Chartered - Licensed Insurance Carrier or Domiciled RRG; (R) Registered - Non-domiciled RRGs; (Q) Qualified - Qualified or Accredited Reinsurer; (E) Eligible - Reporting Entities eligible or approved to write Surplus Lines in the state; (N) None of the above - Not allowed to write business in the state (a) Insert the number of L responses except for Canada and Other Alien.

PART 1 – ORGANIZATIONAL CHART

04-3313782

Delaware

	Federal Tax ID	NAIC Co Code	State of Domicile
MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY	04-1590850	65935	Massachusetts
Direct & Indirect Owned Subsidiaries:	04 1370030	03733	Widssachusetts
C.M. Life Insurance Company	06-1041383	93432	Connecticut
MML Bay State Life Insurance Company	43-0581430	70416	Connecticut
CML Mezzanine Investor, LLC	06-1041383	70410	Delaware
CML Mezzanine Investor L, LLC	06-1041383		Delaware
CML Mezzanine Investor III, LLC	06-1041383		Delaware
CML Re Finance LLC	06-1041383		Delaware
CML Special Situations Investor LLC	None		Delaware
MML Mezzanine Investor L, LLC	04-1590850		Delaware
Berkshire Way LLC	04-1590850		Delaware
MML Special Situations Investor LLC	None		Delaware
WP-SC, LLC*	26-4441097		Delaware
MSP-SC, LLC	04-1590850		Delaware
Country Club Office Plaza LLC*	27-1435692		Delaware
Fern Street LLC	37-1732913		Delaware
MassMutual Retirement Services, LLC	04-1590850		Delaware
MML Distributors LLC*	04-3356880		Massachusetts
MML Investment Advisers. LLC	None		Delaware
MML Mezzanine Investor, LLC	04-1590850		Delaware
MML Strategic Distributors, LLC	46-3238013		Delaware
The MassMutual Trust Company, FSB	06-1563535		Connecticut
MMC Equipment Finance LLC	04-1590850		Delaware
MassMutual Asset Finance LLC*	26-0073611		Delaware
MMAF Equipment Finance LLC 2009-A	27-1379258		Delaware
MMAF Equipment Finance LLC 2011-A	45-2589019		Delaware
MML Private Placement Investment Company I, LLC	04-1590850		Delaware
Pioneers Gate LLC	45-2738137		Delaware
MSC Holding Company, LLC	45-4376777		Delaware
MassMutual Holding MSC, Inc.	04-3341767		Massachusetts
MassMutual Holding LLC	04-2854319		Delaware
MassMutual Assignment Company	06-1597528		North Carolina
MassMutual Capital Partners LLC	04-1590850		Delaware
MassMutual Ventures LLC	47-1296410		Delaware
MM Caerulus Holdco US LLC	None		Delaware
MM Rothesay Holdco US LLC	04-1590850		Delaware
MML Investors Services, LLC	04-1590850		Massachusetts
MML Insurance Agency, LLC	04-1590850		Massachusetts
MMLISI Financial Alliances, LLC	41-2011634		Delaware
M. M. H. C. HIC	04 2212702		D. I.

MassMutual International LLC

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

	Federal Tax ID	NAIC Co Code	State of Domicile
MassMutual Asia Limited	None		Hong Kong, Special Administrative Region of China
MassMutual Asia Investors Ltd.	None		Hong Kong, Special Administrative Region of China
MassMutual Guardian Limited	None		Hong Kong, Special Administrative Region of China
MassMutual Insurance Consultants Limited	None		Hong Kong, Special Administrative Region of China
MassMutual Services Limited	None		Hong Kong, Special Administrative Region of China
MassMutual Trustees Limited	None		Hong Kong, Special Administrative Region of China
Protective Capital (International) Limited	98-0610331		Hong Kong, Special Administrative Region of China
MassMutual Life Insurance Company	None		Japan
MassMutual Internacional (Chile) SpA	98-1033127		Chile
MM Asset Management Holding LLC	45-4000072		Delaware
Babson Capital Management LLC	51-0504477		Delaware
Babson Capital Finance LLC	80-0875475		Delaware
BCF Europe Funding Limited	None		Ireland
BCF Senior Funding I LLC	None		Delaware
Babson Capital Securities LLC	04-3238351		Delaware
Babson Capital Guernsey Limited	98-0437588		Guernsey
Babson Capital Management (UK) Limited	98-0432153		United Kingdom
Babson GPC GP S.à.r.l.	None		Luxembourg
Almack Mezzanine GP III Limited	None		United Kingdom
Almack Holding Partnership GP Limited	None		United Kingdom
Almack Mezzanine Fund Limited	None		United Kingdom
Almack Mezzanine Fund II Limited	None		United Kingdom
Babson Capital Global Advisors Limited	98-1012393		United Kingdom
BCGSS 2 GP LLP	None		United Kingdom
Babson European Direct Lending 1 GP LLP	None		United Kingdom
Babson Capital Management (Japan) KK	None		Japan
Cornerstone Real Estate Advisers LLC	55-0878489		Delaware
Cornerstone Real Estate Advisers Inc.	04-3238351		California
Cornerstone Real Estate Advisers Japan K.K.	None		Japan
Cornerstone Real Estate UK Holdings Limited	None		Delaware
CREAE AIFM LLP	None		United Kingdom
Cornerstone Real Estate UK (No. 2) Limited	98-0654401		United Kingdom
Cornerstone Real Estate Advisers Europe LLP	98-0654388		United Kingdom
Cornerstone Real Estate Advisers Europe Finance LLP	98-0654412		United Kingdom
Cornerstone Real Estate Advisers GmbH	98-1194368		Germany
Babson Capital Management (Australia) Holding Company Pty Ltd.	None 98-0457456		Australia Australia
Babson Capital Management (Australia) Pty Ltd.			
Babson Capital Cornerstone Asia Limited Wood Creek Capital Management LLC	None 04-1590850		Hong Kong, Special Administrative Region of China Delaware
	26-3115362		Delaware
Wood Creek Index Company, LLC Milestone Acquisition Holding, LLC.	47-3055009		Delaware Delaware
Milestone Acquisition fiolding, LLC.	4/-3033009		Delawale

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

	Federal Tax ID	NAIC Co Code	State of Domicile
Alchemy Copyrights, LLC.	47-2642354		Delaware
Red Lake Ventures, LLC	46-5460309		Delaware
Teaktree Acquisition, LLC	None		Delaware
Tamiami Citrus, LLC	None		Delaware
Sweet Tree Holdings 1, LLC	46-3123110		Delaware
U.S. Trailer Holdings II LLC	46-2104352		Delaware
U.S. WIG Holdings, LP	46-1500495		Delaware
WC Aircraft Holdings US II, LLC	46-3378584		Delaware
Wood Creek Aircraft Holding I, LP	None		Cayman Islands
Babson Capital Floating Rate Income Fund Management, LLC	04-1590850		Delaware
Babson Capital Core Fixed Income Management LLC	27-3523916		Delaware
Babson Capital Total Return Management LLC	27-3524203		Delaware
Babson TERO Management LLC	None		Delaware
Babson Investment Grade CLO Debt Management LLC	None		Delaware
Benton Street Advisors, Inc.	98-0536233		Cayman Islands
SDCOS Management LLC	04-1590850		Delaware
Great Lakes III GP, LLC	04-1590850		Delaware
Loan Strategies Management LLC	04-1590850		Delaware
Mezzco LLC	04-1590850		Delaware
Mezzco II LLC	02-0767001		Delaware
Mezzco III LLC	41-2280126		Delaware
Mezzco IV LLC	80-0920285		Delaware
Mezzco Australia LLC	90-0666326		Delaware
Mezzco Australia II LLC	None		Delaware
Somerset Special Opportunities Management LLC	04-1590850		Delaware
Oppenheimer Acquisition Corp.	84-1149206		Delaware
OppenheimerFunds, Inc.	13-2527171		Colorado
OppenheimerFunds Distributor, Inc.	13-2953455		New York
Oppenheimer Real Asset Management, Inc.	84-1106295		Delaware
OFI Global Institutional, Inc.	13-4160541		New York
OFI Global Trust Company	13-3459790		New York
HarbourView Asset Management Corporation	22-2697140		New York
Trinity Investment Management Corporation	25-1951632		Pennsylvania
OFI SteelPath, Inc.	84-1128397		Delaware
Shareholder Services, Inc.	84-1066811		Colorado
OFI Global Asset Management, Inc.	84-0765063		Delaware
OFI Private Investments Inc.	91-2036414		New York New York
Tremont Group Holdings, Inc. Tremont Partners, Inc.	62-1210532 06-1121864		New York Connecticut
,			Ireland
Tremont Capital Management (Ireland) Limited Tremont GP, Inc.	None 20-8215352		Delaware
Hemont Gr, inc.	20-0213332		Delaware

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

	Federal Tax ID	NAIC Co Code	State of Domicile
Settlement Agent LLC	90-0874510		Delaware
Tremont (Bermuda) Limited	None		Bermuda
MassMutual Baring Holding LLC	04-1590850		Delaware
Baring North America LLC	98-0241935		Massachusetts
MassMutual Holdings (Bermuda) Limited	None		Bermuda
Baring Asset Management Limited	98-0241935		United Kingdom
Baring International Investment Limited	98-0457328		United Kingdom
Baring International Investment Management Holdings	98-0457587		United Kingdom
Baring Asset Management UK Holdings Limited	98-0457576		United Kingdom
Baring Asset Management GmbH	98-0465031		Germany
Baring Asset Management (Asia) Holdings Limited	98-0524271		Hong Kong, Special Administrative Region of China
Baring International Fund Managers (Bermuda) Limited	98-0457465		Bermuda
Baring Asset Management (Asia) Limited	98-0457463		Hong Kong, Special Administrative Region of China
Baring Asset Management Korea Limited	None		Korea
Baring Asset Management (Japan) Limited	98-0236449		Japan
Baring Asset Management (Australia) Pty Limited	98-0457456		Australia
Baring International Fund Managers (Ireland) Limited	98-0524272		Ireland
Baring Asset Management Switzerland Sarl	None		Switzerland
Baring SICE (Taiwan) Limited	98-0457707		Taiwan ROC
Baring France SAS	98-0497550		France
Baring Fund Managers Limited	98-0457586		United Kingdom
Baring Pension Trustees Limited	98-0457574		United Kingdom
Baring Investment Services Limited	98-0457578		United Kingdom
Baring Investments (UK) Limited	None		United Kingdom
First Mercantile Trust Company	62-0951563		Tennessee
Haven Life Insurance Agency, LLC	46-2252944		Delaware
MML Management Corporation	04-2443240		Massachusetts
MassMutual International Holding MSC, Inc.	04-3548444		Massachusetts
Society of Grownups, LLC	47-1466022		Massachusetts
MML Mezzanine Investor II, LLC	04-1590850		Delaware
MML Mezzanine Investor III, LLC	04-1590850		Delaware
MassMutual External Benefits Group LLC MML Re Finance LLC	27-3576835 04-1590850		Delaware Delaware
Other Affiliates:	04-1390830		Delaware
Invicta Advisors LLC	56-2574604		Delaware
Jefferies Finance LLC*	27-0105644		Delaware
MML Private Equity Fund Investor LLC	04-1590850		Delaware
MM Private Equity Intercontinental LLC	04-1590850		Delaware
100 w. 3 rd Street LLC	04-1590850		Delaware
300 South Tryon Hotel LLC	04-1590850		Delaware
300 South Tryon LLC	04-1590850		Delaware
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^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

		Federal Tax ID	NAIC Co Code	State of Domicile
	54 West Capital LLC	20-3887968		Delaware
	Alexandria Towers Investors LLC	16-1720387		Delaware
	Cambridge Hotel, LLC	06-1614196		Delaware
	Cheyenne Mountain Resort LLC	04-1590850		Delaware
	Cornerstone Partners IV LLC	71-0908077		Delaware
	E-Wise Land Venture LLC	20-3887968		Delaware
	Kazwell Realty Partners LLC	20-3887968		Delaware
	King Alexander LLC	45-3754085		Delaware
	Marco Hotel LLC	46-4255307		Delaware
	MMI/BDI Riverside Mt. Vernon LLC	26-2704765		Delaware
	MML O'Hare Hotel LLC	26-3799762		Delaware
	Oakley Grove Development LLC	20-3887968		Delaware
	Old Pasco Properties LLC	20-3887968		Delaware
	Reston Arboretum LLC	75-2901061		Delaware
	Riva Portland LLC	30-0713071		Delaware
	Rockville Town Center LLC	54-2055778		Virginia
	Seattle 1415 Hotel Owner LLC	46-5491311		Delaware
	Sedona TFMP Land LLC	04-1590850		Delaware
	South Myrtle Monrovia MM LLC	04-1590850		Delaware
	South Pasco Properties LLC	20-3887968		Delaware
	West 46 th Street Hotel LLC	05-1590850		Delaware
Babson A	ffiliates & Funds:			
	Almack Mezzanine Fund I LP*	None		United Kingdom
	Almack Mezzanine Fund II Unleveraged LP	None		United Kingdom
	Almack Mezzanine Fund III LP*	None		United Kingdom
	Babson Active Short Duration Bond Fund	47-3722434		Massachusetts
	Babson Capital High Yield LLC*	55-0886109		Delaware
	Babson Capital Floating Rate Income Fund, L.P.	27-3330830		Delaware
	Babson Capital Global Special Situation Credit Fund 2*	98-1206017		Delaware
	Babson Capital Global Investment Funds plc	None		Ireland
	Babson Capital Global Investment Fund 2 plc	None		Ireland
	Babson Capital Global Umbrella Fund plc	None		Ireland
	Babson Capital Loan Strategies Fund, L.P.*	37-1506417		Delaware
	Babson CLO Ltd. 2005-III	None		Cayman Islands
	Babson CLO Ltd. 2006-II	None		Cayman Islands
	Babson CLO Ltd. 2007-I	None		Cayman Islands
	Babson CLO Ltd. 2011-I	None		Cayman Islands
	Babson CLO Ltd. 2012-I Babson CLO Ltd. 2012-II	None None		Cayman Islands
				Cayman Islands
	Babson CLO Ltd. 2013-I	None		Cayman Islands
	Babson CLO Ltd. 2013-II	98-1128827		Cayman Islands

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

	Federal Tax ID	NAIC Co Code	State of Domicile
Babson CLO Ltd. 2014-I	None		Cayman Islands
Babson CLO Ltd. 2014-II	None		Cayman Islands
Babson CLO Ltd. 2014-III	None		Cayman Islands
Babson CLO Ltd. 2015-I	None		Cayman Islands
Babson CLO Ltd. 2015-II	None		Cayman Islands
Babson Euro CLO 2014-I BV	None		Netherlands
Babson Euro CLO 2014-II BV	None		Netherlands
Babson Global Floating Rate Fund	46-3133952		Massachusetts
Babson Global Income Opportunities Credit Fund	46-3119764		Massachusetts
Babson Investment Grade CLO Debt Fund LP	47-3971963		Delaware
Babson Mid-Market CLO Ltd. 2007-II	None		Cayman Islands
Babson Total Return Bond Fund	47-3734770		Massachusetts
Benton Street Partners I, L.P.*	98-0536233		Cayman Islands
Benton Street Partners II, L.P.*	98-0536199		Cayman Islands
Clear Lake CLO, Ltd.	None		Cayman Islands
Connecticut Valley Structured Credit CDO II, Ltd.	None		Cayman Islands
Connecticut Valley Structured Credit CDO III, Ltd.	None		Cayman Islands
Diamond Lake CLO, Ltd.	None		Cayman Islands
Duchess I CDO S.A.	None		United Kingdom
Duchess III CDO S.A.	None		United Kingdom
Duchess IV CDO S.A.	None		United Kingdom
Duchess V CDO S.A.	None		United Kingdom
Duchess VI CLO B.V.	None		United Kingdom
Duchess VII CLO B.V.	None		United Kingdom
Fugu CLO B.V.	None		United Kingdom
Fugu Credit Plc	None		United Kingdom
Gateway Mezzanine Partners I, L.P.*	80-0691253		Delaware
Gateway Mezzanine Partners I Trust	None		Cayman Islands
Gateway Mezzanine Partners II LP*	90-0991195		Delaware
Great Lakes II LLC*	71-1018134		Delaware
Great Lakes III, L.P.	37-1708623		Delaware
Great Lakes LLC*	56-2505390 46-2344300		Delaware Delaware
Intermodal Holding II LLC	None		
Malin CLO B.V. Rockall CLO B.V.	None		United Kingdom United Kingdom
Saint James River CDO, Ltd.	None		Cayman Islands
Samt James River CDO, Etd. Sapphire Valley CDO I, Ltd.	None		Cayman Islands
SDCOS L.P.	74-3182902		Delaware
Somerset Special Opportunities Fund L.P.*	20-8856877		Delaware
Tower Square Capital Partners, L.P.*	04-3722906		Delaware
Tower Square Capital Partners II, L.P.*	30-0336246		Delaware
Town Square Capital Fatalists II, L.I.	30-03302 -1 0		Donaware

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

	Federal Tax ID	NAIC Co Code	State of Domicile
Tower Square Capital Partners II-A, L.P.*	32-0160190		Delaware
Tower Square Capital Partners III, L.P.*	41-2280127		Delaware
Tower Square Capital Partners III.A, L.P.	41-2280129		Delaware
Tower Square Capital Partners IV, L.P.	80-0920340		Delaware
Tower Square Capital Partners IV-A, L.P.	80-0920367		Delaware
Whately CDO, Ltd.	None		Cayman Islands
Wood Creek Multi Asset Fund, L.P.	20-4981369		Delaware
Wood Creek Venture Fund LLC	04-1590850		Delaware
Baring Affiliates & Funds:			
Baring Emerging Market Corp Debt Fund	None		Ireland
Baring Focused EAFE Equity Fund	11-3789446		Delaware
Baring Focused International Equity Fund	01-0850479		Delaware
Baring Global Dynamic Asset Allocation Fund	30-0607379		Delaware
Baring International Equity Fund	39-2059577		Delaware
Baring International Small Cap Equity Fund	26-4142796		Delaware
Baring World Equity Fund	46-1197222		Delaware
Multi-Employer Global Aggregate Diversified Portfolio	26-1896226		Delaware
Cornerstone Affiliates & Funds:			
12-18 West 55th Street Predevelopment, LLC*	20-2548283		Delaware
2 Harbor Shore Member LLC*	46-4803557		Delaware
21 West 86 LLC*	45-5257904		Delaware
Ygnatio Valley Funding	20-5481477		Delaware
AT Mid-Atlantic Office Portfolio LLC*	45-2779931		Delaware
Babson Mezzanine Realty Investors I*	20-4570515		Delaware
Babson Mezzanine Realty Investors II	24-1446970		Delaware
CHC/RFP VI Core LLC	04-1590850		Delaware
Cornerstone Core Mortgage Fund I LP	27-1701733		Delaware
Cornerstone Core Mortgage Venture I LP	27-1701622		Delaware
Cornerstone Enhanced Mortgage Fund I LP	45-3751572		Delaware
Cornerstone Fort Pierce Development LLC*	56-2630592		Delaware
Cornerstone Global Real Estate LP*	20-8730751		Delaware
Cornerstone High Yield Venture LP	36-4770946		Delaware
Cornerstone Hotel Income and Equity Fund II LP	26-1828760		Delaware
Cornerstone Patriot Fund LP	20-5578089		Delaware
Cornerstone Real Estate Fund VIII LP	27-0547156		Delaware
Cornerstone Permanent Mortgage Fund	45-2632610		Delaware
Cornerstone Real Estate Fund X LP	46-5432619		Delaware
CREA 330 Third LLC*	46-5001122		Delaware
CREA FMF Nashville LLC	46-4367364		Delaware
CREA/LYON West Gateway, LLC*	26-2399532		Delaware
CREA/PPC Venture LLC*	20-0348173		Delaware

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

Federal Tax ID NAIC Co Code State of Domicile

	rederar rax ID	MAIC CO COUC	State of Domicie
Fallon Cornerstone One MPD LLC*	26-1611591		Delaware
Farringdon London Holdings LLC*	46-3880526		Delaware
Fan Pier Development LLC*	20-3347091		Delaware
Gracechurch London Holdings LLC*	46-1586427		Delaware
Infinity SCD Ltd.	None		United Kingdom
Johnston Groves LLC	20-4819358		Delaware
Metropolitan At Lorton*	20-5984759		Delaware
MM Greenhill Office LLC*	46-3317841		Delaware
MMI/Hines Harrison LLC*	46-5347643		Delaware
MM Woodfield Martingale LLC*	46-4077059		Delaware
Salomon Brothers Commercial Mortgage Trust 2001-MM	None		Delaware
Sawgrass Village Shopping Center LLC*	27-2977720		Delaware
SBNP SIA LLC	46-3465271		Delaware
Twenty Two Liberty LLC*	35-2484550		Massachusetts
UK LIW Manager LLC	45-4606547		Delaware
UK LIW Member LLC	45-4606547		Delaware
U.S. Buyer Broadcasting LLC	47-1855920		Delaware
Washington Gateway Apartments Venture LLC*	45-5401109		Delaware
Waterford Development Associates	20-2970495		Delaware
Waterloo London Holdings LLC	47-1993493		Delaware
WeHo Domain LLC*	46-3122029		Delaware
MassMutual Premier Funds:			
MassMutual Barings Dynamic Allocation Fund	45-3168892		Massachusetts
MassMutual Premier Balanced Fund	04-3212054		Massachusetts
MassMutual Premier Core Bond Fund	04-3277549		Massachusetts
MassMutual Premier Disciplined Growth Fund	04-3539084		Massachusetts
MassMutual Premier Disciplined Value Fund	04-3539083		Massachusetts
MassMutual Premier Diversified Bond Fund	04-3464165		Massachusetts
MassMutual Premier Focused International Fund	02-0754273		Massachusetts
MassMutual Premier Global Fund	51-0529334		Massachusetts
MassMutual Premier High Yield Fund	04-3520009		Massachusetts
MassMutual Premier Inflation-Protected and Income Fund	03-0532475		Massachusetts
MassMutual Premier International Equity Fund	04-3212044		Massachusetts
MassMutual Premier Main Street Fund	51-0529328		Massachusetts
MassMutual Premier Short-Duration Bond Fund	04-3212057		Massachusetts
MassMutual Premier Small/Mid Cap Opportunities Fund	04-3424705		Massachusetts
MassMutual Premier Strategic Emerging Markets Fund	26-3229251		Massachusetts
MassMutual Premier Value Fund	04-3277550		Massachusetts
MassMutual Select Funds:			
MassMutual Select Blackrock Global Allocation Fund	27-1028263		Massachusetts
MassMutual Select Blue Chip Growth Fund	04-3556992		Massachusetts

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

	Federal Tax ID	NAIC Co Code	State of Domicile
MassMutual Select Diversified International Fund	14-1980900		Massachusetts
MassMutual Select Diversified Value Fund	01-0821120		Massachusetts
MassMutual Select Focused Value Fund	04-3512590		Massachusetts
MassMutual Select Fundamental Growth Fund	04-3512593		Massachusetts
MassMutual Select Fundamental Value Fund	04-3584138		Massachusetts
MassMutual Select Growth Opportunities Fund	04-3512589		Massachusetts
MassMutual Select Large Cap Value Fund	04-3513019		Massachusetts
MassMutual Select Mid Cap Growth Equity II Fund	04-3512596		Massachusetts
MassMutual Select Mid-Cap Value Fund	42-1710935		Massachusetts
MassMutual Select MSCI EAFE International Index Fund	45-5357167		Massachusetts
MassMutual Select Overseas Fund	04-3557000		Massachusetts
MassMutual Select PIMCO Total Return Fund	27-2377446		Massachusetts
MassMutual Select Russell 2000 Small Cap Index Fund	45-5366542		Massachusetts
MassMutual Select S&P 500 Index Fund	04-3410047		Massachusetts
MassMutual Select Small Cap Growth Equity Fund	04-3464205		Massachusetts
MassMutual Select Small Capital Value Equity Fund	02-0769954		Massachusetts
MassMutual Select Small Company Value Fund	04-3584140		Massachusetts
MassMutual Select S&P Mid Cap Index Fund	45-5349772		Massachusetts
MassMutual Select Strategic Bond Fund	26-0099965		Massachusetts
MML Series Investment Funds:			
MML Series International Equity Fund	46-4257056		Massachusetts
MML Series Investment Funds II:			
MML Series II Asset Momentum Fund	47-3517233		Massachusetts
MML Series II Dynamic Bond Fund	47-3529636		Massachusetts
MML Series II Equity Rotation Fund	47-3544629		Massachusetts
MML Series II Special Situations Fund	47-3559064		Massachusetts
MassMutual RetireSMART Funds:			
MassMutual RetireSMART 2010 Fund	03-0532456		Massachusetts
MassMutual RetireSMART 2015 Fund	27-1933828		Massachusetts
MassMutual RetireSMART 2020 Fund	03-0532467		Massachusetts
MassMutual RetireSMART 2025 Fund	27-1933753		Massachusetts
MassMutual RetireSMART 2035 Fund	27-1933389		Massachusetts
MassMutual RetireSMART 2040 Fund	03-0532471		Massachusetts
MassMutual RetireSMART 2045 Fund	27-1932769		Massachusetts
MassMutual RetireSMART 2050 Fund	26-1345332		Massachusetts
MassMutual RetireSMART 2055 Fund	46-3289207		Massachusetts
MassMutual RetireSMART Conservative Fund	45-1618155		Massachusetts
MassMutual RetireSMART Growth Fund	45-1618222		Massachusetts
MassMutual RetireSMART In Retirement Fund	03-0532464		Massachusetts
MassMutual RetireSMART Moderate Fund	45-1618262		Massachusetts
MassMutual RetireSMART Moderate Growth Fund	45-1618046		Massachusetts

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

PART 1 – ORGANIZATIONAL CHART

HarbourView CLO 2006-1 Limited

HarbourView CLO VII, Ltd.

Oppenheimer Global High Yield Fund

Oppenheimer Global Multi-Asset Growth Fund Oppenheimer Global Multi-Asset Income Fund

Oppenheimer Global Real Estate Fund*

Oppenheimer International Growth Fund

Oppenheimer Main Street Fund Oppenheimer Real Estate Fund

Federal Tax ID	NAIC Co Code	State of Domicile
None		Cayman Islands
None		Cayman Islands
45-3417590		Delaware
47-36786235		Delaware
47-1714929		Delaware
46-1604428		Delaware
13-3867060		Massachusetts
84-1073463		Massachusetts
22-3849391		Massachusetts

^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

SCHEDULE Y

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						Exchange		Domi-	ship		Management,	ship		
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Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
						,	Massachusetts Mutual Life Insurance			Massachusetts Mutual Life Insurance				
0435	Massachusetts Mut Life Ins Co	65935	04-1590850 .	3848388	0000225602		Company (MMLIC)	MA	UDP	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance	•			
0435	CM Life Ins Co	93432	06-1041383 .				C.M. Life Insurance Company	CT	RE	Company	Ownership.	100.000	MMLIC	
0435	MML Baystate Life Ins Co	70416	43-0581430		0000924777		MML Bay State Life Insurance Company	CT	NIA	C.M. Life Insurance Company	Ownership	.100.000	MMLIC	
0000			06-1041383				CML Mezzanine Investor, LLC	DE	NIA	C.M. Life Insurance Company	Ownership	100.000	MMLIC	
0000			06-1041383				CML Mezzanine Investor L, LLC	DE	NIA	C.M. Life Insurance Company	Ownership	100.000	MMLIC	
0000			06-1041383				CML Mezzanine Investor III, LLC	DE	NIA	C.M. Life Insurance Company	Ownership	100.000	MMLIC	
0000]		06-1041383				CML Re Finance LLC	DE	NIA	C.M. Life Insurance Company	Ownership	100.000	MMLIC	
0000				l			CML Special Situations Investor LLC	DE	NIA	C.M. Life Insurance Company	Ownership	100.000	MML1C	
l										Massachusetts Mutual Life Insurance				
0000			04-1590850 .				MML Mezzanine Investor L, LLC	DE	NIA	Company	Ownership	100.000	MML IC	
· · ·							,			Massachusetts Mutual Life Insurance				
0000							MML Special Situations Investor LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance	,	-		
0000			04-1590850				Berkshire Way LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
							,			Massachusetts Mutual Life Insurance		-		
0000			26-4441097				WP-SC, LLC	DE	NIA	Company	Ownership	81.400	MMLIC	
0000			26-4441097				WP-SC. LLC	DE	NIA	C.M. Life Insurance Company	Ownership	18.600	MMLIC	
							,			Massachusetts Mutual Life Insurance				
0000			04-1590850 .				MSP-SC. LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance	,			
0000			27-1435692				Country Club Office Plaza LLC	DE	NIA	Company	Ownership	88. 100	MMLIC	
0000			27-1435692				Country Club Office Plaza LLC	DE	NIA	C.M. Life Insurance Company	Ownership	11.900	MMLIC	
							,			Massachusetts Mutual Life İnsurance	·			
0000			37-1732913				Fern Street LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance	·			
0000			04-1590850 .				MassMutual Retirement Services, LLC	DE	NI A	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance	·			
0000			04-3356880 .		0000943903		MML Distributors LLC	MA	NIA	Company	Ownership	99.000		
0000			04-3356880 .		0000943903		MML Distributors LLC	MA	NIA	MassMutual Holding LLC	Ownership	1.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000							MML Investment Advisers, LLC	DE	NIA	Company	Ownership	100.000		
										Massachusetts Mutual Life Insurance				
0000			04-1590850 .				MML Mezzanine Investor, LLC	DE	NIA	Company	Ownership	100.000		
										Massachusetts Mutual Life Insurance				
0000			46-3238013 .				MML Strategic Distributors, LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 06-1563535 .	2881445	. 0001103653		The MassMutual Trust Company, FSB	CT	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			04-1590850				MMC Equipment Finance LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
0000			26-0073611				MassMutual Asset Finance LLC	DE	NIA	MMC Equipment Finance LLC	Ownership	99.600	MMLIC	
0000			26-0073611 .				MassMutual Asset Finance LLC	DE	NIA	C.M. Life Insurance Company	Ownership	0.400	MMLIC	
0000			27-1379258 .				MMAF Equipment Finance LLC 2009-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000		
0000			45-2589019 .				MMAF Equipment Finance LLC 2011-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC	
							MML Private Placement Investment Company I,			Massachusetts Mutual Life Insurance				
0000			. 04-1590850 .				LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			45-2738137				Pioneers Gate LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000	 		45-4376777	.			MSC Holding Company, LLC	DE	NI A	Company	Ownership	100.000	MMLIC	

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1985 1985	0000			04-3341/6/				Massmutual Holding MSC, Inc.	MA	NIA		Ownersnip	100.000	- MMLIC	
1997 1997	0000			04 0054040	0000040				DE			0	400 000	188 10	l l
1965 1965					. 2392316										
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				04-3313782											
	0000							MassMutual Asia Limited				Ownership			
	0000							MassMutual Asia Investors Ltd		NIA		Ownership			
	0000							MassMutual Guardian Limited		NIA	MassMutual Asia Limited	Ownership			
	0000							MassMutual Insurance Consultants Limited	HKG	NIA	MassMutual Asia Limited	Ownership	100.000	MMLIC	
Protective Capital (Informational) Limited NRC MAA MassMutual Asia Limited Omership 100 00 MLIC	0000							MassMutual Services Limited	HKG	NIA	MassMutual Asia Limited	Ownership	100.000	MMLIC	
	0000							MassMutual Trustees Limited	HKG	NIA	MassMutual Asia Limited	Ownership	80.000	MMLIC	
								Protective Capital (International) Limited							l l
MassAutual Inferrational LLC	0000			98-0610331				, , , , , , , , , , , , , , , , , , , ,	HKG	NIA	MassMutual Asia Limited	Ownership	100.000	MMLIC	J
Massitutial International LUC								MassMutual Life Insurance Company		IA				MMLIC	
March Marc				98-1033127						NIA				MML IC	
St-004477 000000015 Babson Capital Hanagement LLC DE NIA Babson Capital Hanagement LLC Description 100 000 MIL C Description 100 000 M												- · · · · · · · · · · · · · · · · · · ·			
Babson Capital Finance LLC DE NA Babson Capital Management LLC Ownership 100,000 MAI C						0000009015								MML IC	
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Babson Capital Management (Japan) KK															
0000 55-0878489 3456895 0001379495 Cornerstone Real Estate Advisers LLC DE NIA Babson Capital Management LLC Ownership 100.000 MMLIC												- · · · · · · · · · · · · · · · · · · ·			
.0000 04-3238351 3456895 0001011148 Cornerstone Real Estate Advisers Inc. CA NIA Cornerstone Real Estate Advisers LLC Ownership 100.000 MMLIC				EE 0070400	0456005	0001070105									
Cornerstone Real Estate Advisers Japan K.K. Cornerstone Real Estate Advisers LLC Ownership. Ownersh															
.0000 K.K.	0000			04-3238351	3456895	. 0001011148			CA	NIA	Cornerstone Heal Estate Advisers LLC	Ownership	100.000	_MMLIC	
Cornerstone Real Estate UK Holdings Limited CREAE AIFM LLP CORNESTONE Real Estate Advisers LLC CORNESTONE Real Estate Advisers LLC CORNESTONE Real Estate Advisers LLC CORNESTONE Real Estate UK Holdings DE NIA CORNESTONE Real Estate Advisers LLC CORNESTONE Real Estate UK Holdings DE NIA CORNESTONE Real Estate Advisers LLC CORNESTONE Real Estate UK Holdings DE NIA CORNESTONE Real Estate UK Holdings CORNESTONE Real Estate UK Holdings DE NIA CORNESTONE Real Estate UK Holdings CORNESTONE Real Estate UK Holdings DE NIA D				1											
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Cornerstone Real Estate UK (No. 2) Limited GBR NIA Cornerstone Real Estate UK Holdings Limited Cornerstone Real Estate UK Holdings Cornerstone Real Estate UK Holdings															
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Cornerstone Real Estate Advisers Europe Cornerstone Real Estate UK Holdings				1	1			Cornerstone Real Estate UK (No. 2) Limited							
	0000			98-0654401					GBR	NIA		Ownership	100.000		
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	0000			98-0654388	.				GBR	NIA	Limited	Ownership	_100.000	MMLIC	

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Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
							Cornerstone Real Estate Advisers Europe			Cornerstone Real Estate UK Holdings				
0000			98-0654412 .				Finance LLP	GBR	NIA	Limited	Ownership	100.000	MMLIC	
										Cornerstone Real Estate UK Holdings				
0000			. 98-1194368				Cornerstone Real Estate Advisers GmbH	DEU	NIA	Limited	Ownership	100.000	MMLIC	
							Babson Capital Management (Australia)							
0000							Holding Company Pty Ltd.	AUS	NIA	Babson Capital Management LLC	Ownership	100.000	MMLIC	
							Babson Capital Management (Australia) Pty			Babson Capital Australia Holding Company				
0000			98-0457456				Ltd.	AUS	NIA	Pty Ltd.	Ownership	100.000	MMLIC	
0000							Babson Capital Cornerstone Asia Limited	HKG	NIA	Babson Capital Management LLC	Ownership	. 100.000	MMLIC	
0000		-	04-1590850				Wood Creek Capital Management LLC	DE	NIA	Babson Capital Management LLC	Ownership	100.000	MML IC	
0000		-	26-3115362				Wood Creek Index Company, LLC	DE	NIA	Wood Creek Capital Management LLC	Ownership	100.000	MMLIC	
0000		-	47-2642354				Alchemy Copyrights, LLC.	DE	NIA	. Wood Creek Capital Management LLC	Ownership	13. 100	MMLIC	
0000			47-3055009			***************************************	Milestone Acquisition Holding, LLC.	DE	NIA	Wood Creek Capital Management LLC	Ownership.	19.400	MMLIC	
0000			47-3033009 .				witestone Acquisition notating, LLC.			Massachusetts Mutual Life Insurance	Owner Sirrp	19.400	WWILTO	
0000			46-5460309				Red Lake Ventures, LLC	DE	NIA	Company	Ownership.	31.500	MMLIC	
0000			46-5460309				Red Lake Ventures, LLC	DE	NIA	Wood Creek Capital Management LLC	Influence	31.300	IMMLIC	
0000			40-3400309 .				Hed Lake Ventures, LLC	E	NIA		Intruence		MMLIC	
0000			40 0400440				0 17 11111 4 110	DE .		Massachusetts Mutual Life Insurance		40 400	188 10	
0000		-	46-3123110				Sweet Tree Holdings 1, LLC	DE	NIA	Company	Ownership	16. 100	MMLIC	
0000			. 46-3123110				Sweet Tree Holdings 1, LLC	DE	NIA	. Wood Creek Capital Management LLC	Influence		MMLIC	
										Massachusetts Mutual Life Insurance				
0000							Tamiami Citurus, LLC	DE	NIA	Company	Ownership	15.700	MMLIC	
										Massachusetts Mutual Life Insurance				
0000							Teaktree Acquisition, LLC	DE	NIA	Company	Ownership	14.700	MMLIC	
0000							Teaktree Acquisition, LLC	DE	NIA	Wood Creek Capital Management LLC	Influence		MMLIC	
0000			. 46-1500495				U.S. WIG Holdings, LP	DE	NIA	Wood Creek Capital Management LLC	Ownership	11.700	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			46-3378584				WC Aircraft Holdings US II, LLC	DE	NIA	Company	Ownership	17.900	MMLIC	
0000			. 46-3378584 .				WC Aircraft Holdings US II, LLC	DE	NIA	. Wood Creek Capital Management LLC	Management		MMLIC	
										Massachusetts Mutual Life Insurance				
0000							Wood Creek Aircraft Holding I, LP	CYM	NIA	Company	Ownership	12. 100	MMLIC	
0000							Wood Creek Aircraft Holding I, LP	CYM	NIA	Wood Creek Capital Management LLC	Management		MMLIC	
0000			. 46-2104352				U.S. Trailer Holdings II LLC	DE	NIA	Wood Creek Capital Management LLC	Influence		MMLIC	
							Babson Capital Floating Rate Income Fund							
0000			04-1590850		0001501011		Management, LLC	DE	NIA	Babson Capital Management LLC	Ownership	100.000	MMLIC	
							Babson Capital Core Fixed Income			. ,				
0000			27-3523916		0001503878		Management LLC	DE	NIA	Babson Capital Management LLC	Ownership	100.000	MMLIC	
							Babson Capital Total Return Management LLC				- 1			
0000			27-3524203		0001503879		Substitution in the management 225	DE	NIA	Babson Capital Management LLC	Ownership	100.000	MMLIC	
0000							Babson TERO Management LLC		NIA	Babson Capital Management LLC	Ownership.	100.000	MMLIC	
							Babson Investment Grade CLO Debt Management			- Daboon dap tal management 220				
0000		1					LLC	DE	NIA	Babson Capital Management LLC	Ownership	100.000	MMLIC	
0000			98-0536233				Benton Street Advisors, Inc.	CYM	NIA	Babson Capital Management LLC	Ownership.	100.000	MMLIC	
0000			. 04-1590850				SDCOS Management LLC	DE	NIA	Babson Capital Management LLC	Ownership	100.000	MMI IC	
0000		-	04-1590850				Great Lakes III GP, LLC	DE	NIA	Babson Capital Management LLC	Ownership	100.000	MMLIC	
0000		-	04-1590850 .				Loan Strategies Management LLC	DE	NIA NIA	Babson Capital Management LLC	Ownership	100.000	IMMLIC	
0000		-	04-1590850 .				Mezzco LLC	DE	NIA NIA	Babson Capital Management LLCBabson Capital Management LLC	Ownership.	100.000	MMLIC	
0000		-	02-0767001 .				Mezzco II LLC	DE	NIA NIA	Babson Capital Management LLCBabson Capital Management LLC	Ownership.	98.400	MMLIC	
0000		-					Mezzco III LLC	DE			Ownership	98.400	MMLIC	
			41-2280126						NIA	Babson Capital Management LLC			MMLIC	
0000		-	. 80-0920285				Mezzco IV LLC	DE	NIA	Babson Capital Management LLC	Ownership	99.300	MMLIC	
0000		-	90-0666326				Mezzco Australia LLC	DE	NIA	Babson Capital Management LLC	Ownership	72.000		
0000		.					Mezzco Australia II LLC	DE	NIA	Babson Capital Management LLC	Ownership	100 . 000	MMLIC	

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Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
	·						Somerset Special Opportunities Management							
0000			04-1590850				LLC	DE	NIA	Babson Capital Management LLC	Ownership	100.000	MMLIC	
0000			84-1149206	. 2897101			Oppenheimer Acquisition Corp.	DE	NIA	. MassMutual Asset Management Holding LLC .	Ownership	95.800	.MMLIC	
0000			13-2527171	. 2679183	. 0000820031		OppenheimerFunds, Inc.	CO	NIA	Oppenheimer Acquisition Corp.	Ownership	100.000	MMLIC	
0000			13-2953455		. 0000276541		OppenheimerFunds Distributor, Inc.	NY	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	
0000			84-1106295				Oppenheimer Real Asset Management, Inc	DE	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	
0000			13-4160541	3458125	0001179479		OFI Global Institutional, Inc.	NY	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	
										OFI Institutional Asset Management, Inc.				
0000		.	13-3459790	2914875			OFI Global Trust Company	NY	NIA		Ownership	100.000	MMLIC	
										OFI Institutional Asset Management, Inc.				
0000			. 22-2697140 .	.			HarbourView Asset Management Corporation	NY	NIA	-	Ownership	100.000	MMLIC	
										OFI Institutional Asset Management, Inc.				
0000			25-1951632		. 0000099782		Trinity Investment Management Corporation .	PA	NIA		Ownership	100.000	MMLIC	
0000			84-1128397		. 0000857468		OFI SteelPath, Inc.	DE	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	
0000			84-1066811		. 0000276398		Shareholder Services, Inc.	CO	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	
0000			84-0765063		. 0001041674		OFI Global Asset Management, Inc.	DE	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	
0000			91-2036414		. 0001179480		OFI Private Investments Inc.	NY	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	
0000			62-1210532				Tremont Group Holdings, Inc.	NY	NIA	Oppenheimer Acquisition Corp	Ownership	100.000	MMLIC	
0000			. 06-1121864 .	-	. 0000764139		Tremont Partners, Inc.	CT	NI A	Tremont Group Holdings, Inc.	Ownership	100.000	MMLIC	
0000							Tremont Capital Management (Ireland)	LDI		T	0 1:	100 000		
0000			00 0045050				Limited	IRL	NIA	Tremont Group Holdings, Inc.	Ownership	100.000	MMLIC	
0000			20-8215352 .				Tremont GP, Inc.	DE	NIA	Tremont Group Holdings, Inc.	Ownership	100.000	MMLIC	
0000			90-0874510				Settlement Agent LLC	DE BMU	NIA NIA	Tremont Group Holdings, Inc.	Ownership	100.000	MMLIC	
0000			04-1590850				MassMutual Baring Holding LLC	DE	NIA NIA	MassMutual Asset Management Holding LLC	Ownership	100.000	MMLIC	
0000			98-0241935	2363071	0000932463		Baring North America LLC	MA MA	NIA	- MassMutual Baring Holding LLC	Ownership	100.000	IMMLIC	
0000			. 30-024 1333 .	. 2303071	. 0000332403		MassMutual Holdings (Bermuda) Limited	BMU	NIA	MassMutual Baring Holding LLC	Ownership.	100.000	MMLIC	
0000			98-0241935				Baring Asset Management Limited	GBR	NIA	. MassMutual Holdings (Bermuda) Limited	Ownership.	100.000	MMLIC	
0000			98-0457328		0001568131		Baring International Investment Limited	GBR	NIA	Baring Asset Management Limited	Ownership.	100.000	MMLIC	
0000			. 50 0457020 .		. 000 1000 101		Baring International Investment Management			. Darring Asset management Emirred	owner strip.		WILLIO	
0000			98-0457587				Holdings	GBR	NIA	Baring Asset Management Limited	Ownership.	100.000	MMLIC	
0000							Baring Asset Management UK Holdings			Baring International Investment	owner on p			
0000			98-0457576				Limited	GBR	NIA	Management Holdings	Ownership	_100.000	MMLIC	
]	1				1		Baring Asset Management UK Holdings]	
0000			98-0465031				Baring Asset Management GmbH	DEU	NIA	Limited	Ownership	100.000	MMLIC	
							Baring Asset Management (Asia) Holdings			Baring Asset Management UK Holdings	,			
0000			98-0524271 .				Limited	HKG	NIA	Limited	Ownership	100.000	MMLIC	
							Baring International Fund Managers			Baring Asset Management (Asia) Holdings				
0000			98-0457465 .				(Bermuda) Limited	BMU	NIA	Limited	Ownership	100.000	MMLIC	
										Baring Asset Management (Asia) Holdings				
0000			98-0457463				Baring Asset Management (Asia) Limited	HKG	NIA	Limited	Ownership	100.000	MMLIC	
0000		.					Baring Asset Management Korea Limited	K0R	NIA	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC	
										Baring Asset Management (Asia) Holdings				
0000			98-0236449				Baring Asset Management (Japan) Limited	JPN	NIA	Limited	Ownership	100.000	MMLIC	
							Baring Asset Management (Australia) Pty	1		Baring Asset Management (Asia) Holdings				
0000			. 98-0457456 .				Limited	AUS	NIA	Limited	Ownership	100.000	MMLIC	
							Baring International Fund Managers	l		Baring Asset Management UK Holdings			l	
0000			. 98-0524272	-			(Ireland) Limited	JRL	NIA	Limited	Ownership	100.000	MMLIC	
0000								01:-		Baring Asset Management UK Holdings		400 000	1,44,10	
0000		.			.	1	Baring Asset Management Switzerland Sarl	CHE	NIA	Limited	Ownership	100.000	MMLIC	

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1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership,	13 If Control is	14	15
						Name of Securities			Relation-		Board,	Owner-		
						Exchange		Domi-	ship		Management,	ship		
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting		Influence,	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
										Baring Asset Management UK Holdings				
0000			. 98-0457707 .				Baring SICE (Taiwan) Limited	TWN	NIA	Limited	Ownership	100.000	MMLIC	
										Baring Asset Management UK Holdings				
0000			. 98-0497550 .				Baring France SAS	FRA	NIA	Limited	Ownership	100.000		
0000			. 98-0457586 .				Baring Fund Managers Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000		
0000			. 98-0457574 .				Baring Pension Trustees Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC	
0000			98-0457578				Baring Investment Services Limited	GBR	NIA NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC	
0000			00 0051500	1100004	0001050664		Baring Investments (UK) Limited	TN	NIA	Baring Asset Management Limited			MMLIC	
0000		-	. 62-0951563 . . 46-2252944 .	1160004	0001259664		First Mercantile Trust Company Haven Life Insurance Agency, LLC		NIA NIA	MassMutual Holding LLC	Ownership	100.000		
0000		-	04-2443240				MML Management Corporation	MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC	
0000		-	. 07 2740240 .				MassMutual International Holding MSC, Inc.	mA	NIM	massifutuar rioruring LLV	omici sitip			
0000			. 04-3548444 .				masswatuar international norumg woo, me.	MA	NIA	MML Management Corporation	Ownership.	100.000		
0000			47-1466022				Society of Grownups, LLC	MA	NIA	MassMutual Holding LLC	Ownership.	100.000	MMLIC	
0000			. 47 1400022				doctory of drownups, ELO			Massachusetts Mutual Life Insurance	owner strip.		- INNETO	
0000			04-1590850				MML Mezzanine Investor II, LLC	DE	NIA.	Company	Ownership	100.000	MMLIC	
0000			101 1000000 1				IIII IIIOZZANINO NIVOGEON III, EEO			Massachusetts Mutual Life Insurance	0 mor on p			
0000			04-1590850				MML Mezzanine Investor III, LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
		-	101 1000000 1				mine mozzanino mivotto im, teo			Massachusetts Mutual Life Insurance	011101 0111 p			
0000			27-3576835				MassMutual External Benefits Group LLC	DE	NIA	Company	Ownership	100.000	JMMLIC	
			1							Massachusetts Mutual Life Insurance				
0000			04-1590850				MML Re Finance LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			56-2574604				Invicta Advisors LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance	·			
0000			27-0105644				Jefferies Finance LLC	DE	NIA	Company	Ownership	45.000	MMLIC	11
0000			27-0105644				Jefferies Finance LLC	DE	NIA	Babson Capital Management LLC	Ownership	5.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 04-1590850 .		0000067160		MML Private Equity Fund Investor LLC	DE	NIA	Company	Ownership	100.000		
0000			. 04-1590850 .				MM Private Equity Intercontinental LLC	DE	NIA	MML Private Equity Fund Investor LLC	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 04-1590850 .				100 w. 3rd Street LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000		-	. 04-1590850 .				300 South Tryon Hotel LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
0000			04 4500050				000 0 11 7 110	DE.		Massachusetts Mutual Life Insurance	0 1:	100 000	188 10	
0000			. 04-1590850 .				300 South Tryon LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
0000			00 0007000				54 W + O ; + 1 11 0	DE	MILA	Massachusetts Mutual Life Insurance	0	100,000	188 10	
0000			. 20-3887968 .				54 West Capital LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
0000			10 1700007				Alexandria Tamana Invastana II.C	DE	MIA	Massachusetts Mutual Life Insurance	O	100,000	MMLIC	
0000			. 16-1720387 .				Alexandria Towers Investors LLC	DE	NIA	Company	Ownership	100.000	MMLIU	
0000			06-1614196				Cambridge Hotel, LLC	DE	NIA.	Company	Ownership	.100.000	MMLIC	
0000		-	. 00-1014180 .		-		Vallist ruge rioter, LLO	DE	NIM	Massachusetts Mutual Life Insurance	Omnet Strip		WITHLE TO	
0000			. 04-1590850 .				Chevenne Mountain Resort LLC	DE	NIA	Company	Ownership	100.000		
		-	. 04-1080000 .		-		oneyenne mountain neson t LLO		IN I M	Massachusetts Mutual Life Insurance	υπισι σπιρ			
0000			71-0908077				Cornerstone Partners IV LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
0000		-	. 1 1 0 0 0 0 1 1 .				OUTHOR STORE FAITHERS TV LLU	UE	NIM	Massachusetts Mutual Life Insurance	οπισι οπιρ			
0000			20-3887968				E-Wise Land Venture LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
5000		-					L 1100 Luiu Foituro LLO			Massachusetts Mutual Life Insurance	oo. op.			
0000			20-3887968				Kazwell Realty Partners LLC	DE	NIA	Company	Ownership	100.000	MMLIC	

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1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership.	13 If Control is	14	15
		NAIC				Name of Securities Exchange if Publicly Traded	Names of	Domi-	Relation- ship to		Board, Management, Attorney-in-Fact,	Owner- ship Provide		
Group Code	Group Name	Company	ID Number	Federal RSSD	CIK	(U.S. or International)	Parent, Subsidiaries Or Affiliates	Loca- tion	Reporting Entity	Directly Controlled by (Name of Entity/Person)	Influence, Other)	Percen- tage	Ultimate Controlling Entity(ies)/Person(s)	*
					-				,	Massachusetts Mutual Life Insurance				
0000			. 45–3754085 .				King Alexander LLC	DE	NIA	CompanyMassachusetts Mutual Life Insurance	Ownership	100.000	- MMLIC	
0000			. 46-4255307 .				Marco Hotel LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
0000			26-2704765				MMI/BDI Riverside Mt. Vernon LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000		
0000			26-3799762				MML O'Hare Hotel LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 20-3887968 .				Oakley Grove Development LLC	DE	NIA	CompanyMassachusetts Mutual Life Insurance	Ownership	100.000	_MMLIC	
0000			. 20-3887968 .				Old Pasco Properties LLC	DE	NIA	Company	Ownership	100.000	MMLIC	
0000			. 75-2901061 .				Reston Arboretum LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC	
0000			30-0713071				Riva Portland LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000		-	. 54-2055778 .				Rockville Town Center LLC	VA	NIA	CompanyMassachusetts Mutual Life Insurance	Ownership	100.000	_MMLIC	
0000			. 46-5491311 .				Seattle 1415 Hotel Owner LLC	DE	NI A	Company	Ownership	100.000	MMLIC	
0000			. 04-1590850 .				Sedona TFMP Land LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000		
0000			04-1590850				South Myrtle Monrovia MM LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC	
							,			Massachusetts Mutual Life Insurance	·			
0000			20-3887968				South Pasco Properties LLC	DE	NIA	CompanyMassachusetts Mutual Life Insurance	Ownership	100.000	- MMLIC	
0000			. 04-1590850 .				West 46th Street Hotel LLC	DE	NIA	CompanyMassachusetts Mutual Life Insurance	Ownership	100.000	MMLIC	
0000							Almack Mezzanine Fund I LP	GBR	NIA	Company	Ownership	34.900	MMLIC	
0000							Almack Mezzanine Fund I LP	GBR	NIA	C.M. Life Insurance Company	Ownership	3.900	MMLIC	
0000							Almack Mezzanine Fund I LP	GBR	NIA	Babson Capital Europe Limited	Management		MMLIC	
0000							Almack Mezzanine Fund II Unleveraged LP	GBR	NIA	Company	Ownership	71.500	MMLIC	
0000							Almack Mezzanine Fund II Unleveraged LP	GBR	NIA	Babson Capital Europe Limited	Management		- MMLIC	
0000							Almack Mezzanine Fund III LP	GBR	NIA	Company	Ownership	33.100	MMLIC	
0000							Almack Mezzanine Fund III LP	GBR	NIA	C.M. Life Insurance Company	Ownership	4.100	MMLIC	
0000							Almack Mezzanine Fund III LP	GBR	NIA	Babson Capital Europe Limited Massachusetts Mutual Life Insurance	. Management		MMLIC	
0000			47-3722434 47-3722434				Babson Active Short Duration Bond Fund Babson Active Short Duration Bond Fund	MA MA	NIA NIA	CompanyBabson Capital Management LLC	Ownership	90.000	MMLIC	
					0004004000					Massachusetts Mutual Life Insurance		00.000		
0000		-	. 55-0886109 .		0001321302		Babson Capital High Yield LLC	DE	NIA	Company	Ownership	88.200	MMLIC	
0000			. 55-0886109 . . 55-0886109 .		0001321302 0001321302		Babson Capital High Yield LLC	DE DE	NIA NIA	C.M. Life Insurance Company	Ownership	11.800	MMLIC	
							Babson Capital High Yield LLC Babson Capital Floating Rate Income Fund,				. Management			
0000			. 27-3330830 .		0001521404		L.PBabson Capital Floating Rate Income Fund,	DE	NIA	MassMutual Holding LLC	Ownership	7.900	. MMLIC	
0000			27-3330830		0001521404		L.P.	DE	NIA	Babson Capital Management LLC	Management		MMLIC	

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											Туре	If		
											of Control	Control		
											(Ownership,	is		
						Name of Securities			Relation-		Board,	Owner-		
						Exchange		Domi-	ship		Management,	ship		
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
			_				Babson Capital Global Special Situation			Massachusetts Mutual Life Insurance				
0000			98-1206017 .				Credit Fund 2	DE	NIA	Company	Ownership	23.900	MMLIC	
0000			00 1000017				Babson Capital Global Special Situation	DE.		0 11 11 1		4 500	188 10	
0000			. 98–1206017 .				Credit Fund 2	DE	NIA	C.M. Life Insurance Company	Ownership	1.500	MMLIC	
0000			98-1206017				Babson Capital Global Special Situation Credit Fund 2	DE	NIA	Dibina On Hall Management 110	M		MMLIC	
0000			98-1206017				Babson Capital Global Investment Funds plc	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000					0001502146		Babson Capital Global Investment Funds pic	JRL	NILA		O	0.400	MMLIC	
0000					000 1002 140		Babson Capital Global Investment Fund 2	I NL	NIA	Company Massachusetts Mutual Life Insurance	Ownership		INIMIL I U	
0000					0001582591		pauson capital Global Investment Fund 2	JRL	NIA	Company Life Insurance	Ownership	0.000	MMLIC	
0000					0001082091		Babson Capital Global Investment Fund 2	J NL	IN I A	Ouiiipaily	- Owner Strip		WML 10	
0000					0001582591		babson capital diobal investment runu 2	JRL	NIA	Babson Capital Management LLC	Management		MMLIC	
0000					0001302391		ριο	nL	IN 1 M	Massachusetts Mutual Life Insurance	manayement			
0000					0001515694		Babson Capital Global Umbrella Fund plc	JRL	NIA	Company	Ownership	61.700	MMLIC	
0000					0001515694		Babson Capital Global Umbrella Fund plc	IRL	NIA	Babson Capital Europe Ltd	Management		MMLIC	
0000					0001010004		Dabson capital diobal completia land pic			Massachusetts Mutual Life Insurance	management			
0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	DE	NIA	Company	Ownership	78.600	MMLIC	
0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	DE	NIA	C.M. Life Insurance Company	Ownership.	3.900	MMLIC	
0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000							Babson CLO Ltd. 2005-III	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	3
0000							Babson CLO Ltd. 2006-II	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	7
0000							Babson CLO Ltd. 2007-I	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	8
0000							Babson CLO Ltd. 2011-I	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000							Babson CLO Ltd. 2012-I	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000							Babson CLO Ltd. 2012-II	CYM	NIA	Babson Capital Management LLC	Influence			
0000							Babson CLO Ltd. 2013-I	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	11
0000			. 98-1128827 .				Babson CLO Ltd. 2013-II	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	12
0000							Babson CLO Ltd. 2014-I	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	4
0000							Babson CLO Ltd. 2014-II	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	13
0000							Babson CLO Ltd. 2014-III	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000							Babson CLO Ltd. 2015-I	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	14
0000							Babson CLO Ltd. 2015-II	CYM	NIA	Babson Capital Management LLC	Influence			15
0000							Babson Euro CLO 2014-I BV	NLD	NIA	Babson Capital Management LLC	Influence			
0000			46-3133952				Babson Euro CLO 2014-II BV	NLD	NIA	Babson Capital Management LLC	Influence	.	MMLIC	
0000			. 46-3 133952 .				Babson Global Floating Rate Fund	MA	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			46-3133952				Babson Global Floating Rate Fund	MA	NIA	Massachusetts Mutual Life Insurance	Ownership	29.400	MMLIC	
0000			. 40-3 133952 .				Babson Global Income Opportunities Credit	MA	N1A	Company	_ Uwnersnip	29.400	MMLIC	
0000			46-3119764				Fund	MA	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			0-0118/04 .				Babson Global Income Opportunities Credit	m.	IN I A	Massachusetts Mutual Life Insurance	manayement			
0000			46-3119764				Fund	MA	NIA	Company	Ownership	60.000	MMLIC	
0000			. 70 0118/04 .				I unu	mrt	IVIA	Massachusetts Mutual Life Insurance	omidi sirip			
0000			47-3971963				Babson Investment Grade CLO Debt Fund LP	DE	NIA	Company	Ownership	100.000	MMLIC	
0000			47-3971963 .				Babson Investment Grade CLO Debt Fund LF	DE	NIA	Babson Capital Management LLC	Management			
0000							Babson Mid-Market CLO Ltd. 2007-11	CYM	NIA	Babson Capital Management LLC	Influence.		MMLIC	2
0000			47-3734770				Babson Total Return Bond Fund	MA	NIA	Babson Capital Management LLC	Influence.	-	MMLIC	
0000			98-0536233				Benton Street Partners I, L.P.	CYM	NIA	MassMutual Capital Partners LLC	Ownership.	99.100	MMLIC	
0000			98-0536233				Benton Street Partners I, L.P.	CYM	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			98-0536233				Benton Street Partners I, L.P.	CYM	NIA	C.M. Life Insurance Company	Ownership	0.100	MMLIC	
										Massachusetts Mutual Life Insurance				
0000		l	98-0536233	l	1		Benton Street Partners I, L.P.	CYM	NIA	Company	Ownership	0.800	MMLIC	
		1			,						- - · · · · · · · · · · · · · · · · ·			

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	-										Type	If		
											of Control	Control		
											(Ownership,	is		
						Name of Securities			Relation	1-	Board,	Owner-		
						Exchange		Domi-	ship		Management,	ship		
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reportir		Influence,	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity		Other)	tage	Entity(ies)/Person(s)	*
										Massachusetts Mutual Life Insurance				
0000			98-0536199		-		Benton Street Partners II, L.P.	CYM	NIA	Company	Ownership	87.300	. MMLIC	5
0000			98-0536199				Benton Street Partners II, L.P.	CYM	NIA	MassMutual Capital Partners LLC	Ownership	12.700	MMLIC	
0000			98-0536199				Benton Street Partners II, L.P.	CYM	NIA	Babson Capital Management LLC	Management		MMLIC	
0000							Clear Lake CLO, Ltd.	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000							Connecticut Valley Structured Credit CDO	CYM	ALL A	Dibinio On Stall Management 110	Inf luence		MMLIC	9
0000							II, Ltd.	VYM	NIA	Babson Capital Management LLC	Influence		- MMLIC	9
0000							Connecticut Valley Structured Credit CDO	CYM	NIA	Debase Consider Management LLC	Inf Luence		MMLIC	
0000				1	-		Diamond Lake CLO, Ltd.	. L.CYM	NIA NIA	Babson Capital Management LLCBabson Capital Management LLC	Influence	-	MMLIC	
0000				4007418	-		Duchess I CDO S.A	GBR	NIA NIA	Babson Capital Management LLCBabson Capital Management LLC	Influence	-	MMLIC	
0000				. 4007418	-		Duchess II CDO S.A.	GBR	NIA NIA	Babson Capital Management LLCBabson Capital Management LLC	Influence		MMLIC	
0000				400/443	-		Duchess IV CDO S.A.	GBR	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000							Duchess V CDO S.A.	GBR	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000				3981641			Duchess VI CLO B.V.	GBR	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000				4007502			Duchess VII CLO B.V.	GBR	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000				1 4007 302			Fugu CLO B.V.	GBR	NIA.	Babson Capital Management LLC	Influence		MMLIC	6
0000							Fugu Credit Plc	GBR	NIA	Babson Capital Management LLC	Influence		MMLIC	6
										Massachusetts Mutual Life Insurance	IIII Idelice		MINETO	
0000			80-0691253		0001517196		Gateway Mezzanine Partners I, L.P.	DE	NIA	Company	Ownership	74.200	MMLIC	
0000			80-0691253		. 0001517196		Gateway Mezzanine Partners I, L.P.	DE	NIA	C.M. Life Insurance Company	Ownership	9.200	MMLIC	
0000			80-0691253		0001517196		Gateway Mezzanine Partners I, L.P.	DE	NIA	MassMutual Holding LLC	Ownership	10.700	MMLIC	
0000			80-0691253		0001517196		Gateway Mezzanine Partners I, L.P.	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000							Gateway Mezzanine Partners I Trust	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	
							•			Massachusetts Mutual Life Insurance				
0000			90-0991195		. 0001597511		Gateway Mezzanine Partners II LP	DE	NIA	Company	Ownership	36.300		
0000			90-0991195		. 0001597511		Gateway Mezzanine Partners II LP	DE	NIA	C.M. Life Insurance Company	Ownership	5.400	MMLIC	
0000			90-0991195		. 0001597511		Gateway Mezzanine Partners II LP	DE	NIA	MassMutual Holding LLC	Ownership	5.200	MMLIC	
0000			90-0991195		. 0001597511		Gateway Mezzanine Partners II LP	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
							·			Massachusetts Mutual Life Insurance				
0000			71–1018134				Great Lakes II LLC	DE	NIA	Company	Ownership	11.200	MMLIC	
0000			71–1018134				Great Lakes II LLC	DE	NIA	C.M. Life Insurance Company	Ownership	1.000	. MMLIC	
										Massachusetts Mutual Life Insurance				
0000			37-1708623		. 0001565779		Great Lakes III, L.P	DE	NIA	Company	Ownership	35.700	MMLIC	
0000			37-1708623		. 0001565779		Great Lakes III, L.P.	DE	NIA	Babson Capital Management LLC	Management		. MMLIC	
										Massachusetts Mutual Life Insurance				
0000			56-2505390 .				Great Lakes LLC	DE	NIA	Company	Ownership	4.400	MMLIC	
0000			56-2505390 .		-		Great Lakes LLC	DE	NIA	C.M. Life Insurance Company	Ownership	0.500	MMLIC	
0000			46–2344300 .		-		Intermodal Holdings II LLC	DE GBR	NIA	Wood Creek Capital Management LLC	Influence		MMLIC	
0000					-		Malin CLO B.V.	GBR	NIA	Babson Capital Management LLC	Influence		MMLIC	
<u>0</u> 0000					-		Rockall CLO B.V	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000					-			CYM	NIA	Babson Capital Management LLC	Influence	-	MMLIC	10
0000					-		Sapphire Valley CDO I, Ltd	ــــــــNN بلا۔۔۔۔	NIA	Babson Capital Management LLC	Inituence	-	- MML I C	10
0000			74–3182902				SDCOS L.P.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC	
0000			74-3182902 74-3182902		-		SDCOS L.P.	DE	NIA NIA	Company Babson Capital Management LLC	Uwnership		MMLIC	
0000			14-3 182902		-		ουυο L.r	. VE	NIA	Massachusetts Mutual Life Insurance	management		INMILIO	
0000			20-8856877		. 0001409910		Somerset Special Opportunities Fund L.P	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	60.700	MMLIC	
0000			20-8856877		0001409910		Somerset Special Opportunities Fund L.P	DE	NIA	C.M. Life Insurance Company	Ownership	2.800	MMLIC	
0000			20-8856877		0001409910		Somerset Special Opportunities Fund L.P	DE	NIA NIA	Babson Capital Management LLC	Management		MMLIC	
0000					. 1000 14099 10		Journal Set Opecial Opportunities rund L.P	. VE	IN I A\	Danson Capital Management LLC	manayement	-	INMIL I U	

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											(Ownership,	is		
						Name of Securities			Relation-		Board,	Owner-		
						Exchange		Domi-	ship		Management,	ship		
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		
Group		Company	ID.	Federal		(U.Ś. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
	•					,				Massachusetts Mutual Life Insurance	,	Ŭ	1 ' '	
0000			. 04-3722906 .		0001228752		Tower Square Capital Partners, L.P.	DE	NIA	Company	Ownership	55.500	MML1C	
0000			04-3722906		0001228752		Tower Square Capital Partners, L.P.	DE	NIA	C.M. Life Insurance Company	Ownership.	0.900	MMLIC	
0000			04-3722906		0001228752		Tower Square Capital Partners, L.P.	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			04-3722906		0001228752		Tower Square Capital Partners, L.P.	DE	NIA	MassMutual Holding LLC	Ownership	5.200	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			30-0336246		0001345379		Tower Square Capital Partners II, L.P.	DE	NIA	Company	Ownership	25.800	MMLIC	
0000			30-0336246		0001345379		Tower Square Capital Partners II, L.P.	DE	NIA	C.M. Life Insurance Company	Ownership	1.900	MMLIC	
0000			30-0336246		0001345379		Tower Square Capital Partners II, L.P.	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			30-0336246		0001345379		Tower Square Capital Partners II. L.P.	DE	NIA	MassMutual Holding LLC	Ownership	4.600	MMLIC	
			35 55002 10 .				Square capital faithfuld if, E.I			Massachusetts Mutual Life Insurance				
0000			. 32-0160190 .		1		Tower Square Capital Partners II-A, L.P	DE	NIA	Company	Ownership	76.800	MMLIC	
0000			32-0160190				Tower Square Capital Partners II-A, L.P	DE	NIA	C.M. Life Insurance Company	Ownership.	13.600	MMLIC	
0000			32-0160190				Tower Square Capital Partners II-A, L.P	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			41-2280127		0001447547		Tower Square Capital Partners III, L.P	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			41-2280127		0001447547		Tower Square Capital Partners III, L.P.	DE	NIA	MassMutual Holding LLC	Ownership	3.100	MMLIC	
			111 2200127				Town oquato supreur furthers fir, E.F.			Massachusetts Mutual Life Insurance	Owner on P.			
0000			41-2280127		0001447547		Tower Square Capital Partners III, L.P	DE	NIA	Company	Ownership	19. 100	MMLIC	
0000			141 2200127		. 10001447047		Tower oquare oupreur rareners irr, E.r.			Massachusetts Mutual Life Insurance	Office Strip		- INNETO	
0000			41-2280129		0001447548		Tower Square Capital Partners IIIA, L.P	DE	NIA	Company	Ownership	86.400	MML1C	
0000			41-2280129		0001447548		Tower Square Capital Partners IIIA, L.P	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			80-0920340		0001597019		Tower Square Capital Partners IV, L.P.	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			80-0920367		0001598727		Tower Square Capital Partners IV-A, L.P	DE	NIA	MassMutual Holding LLC	Ownership	21.600	MMLIC	
0000			80-0920367		0001598727		Tower Square Capital Partners IV-A, L.P	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			00 0020007				Whately CDO, Ltd.	CYM	NIA	Babson Capital Management LLC	Influence		MMLIC	
0000							milatory obo, Eta.			Massachusetts Mutual Life Insurance	Titi Tuciloc		INNETO	
0000			. 20-4981369 .		0001371601		Wood Creek Multi Asset Fund, L.P.	DE	NIA	Company	Ownership	100.000	MML1C	
0000			20-4981369		0001371601		Wood Creek Multi Asset Fund, L.P.	DE	NIA	Babson Capital Management LLC	Management		MMLIC	
0000			20 4301003 .		0001071001		mood oreck marti Asset rund, E.i.			Massachusetts Mutual Life Insurance	management		WINE TO	
0000			04-1590850				Wood Creek Venture Fund LLC	DE	NIA	Company	Ownership	40.000	MMLIC	
0000			. 04 1000000 .				THOOL OF COR VEHICLE I WING LEG			Massachusetts Mutual Life Insurance	Office Strip.		WINE TO	
0000					1		Baring Emerging Market Corp Debt Fund	JRL	NIA	Company	Ownership	83.600	MMLIC	
0000							Baring Emerging Market Corp Debt Fund	IRL	NIA	Baring Asset Management Limited	Management		MMLIC	
										Massachusetts Mutual Life Insurance				
0000			11-3789446		1		Baring Focused EAFE Equity Fund	DE	NIA	Company	Ownership	43.500	MMLIC	
0000			. 11–3789446 .				Baring Focused EAFE Equity Fund	DE	NIA	Baring Asset Management Limited	Management		MMLIC	
0000			. 01-0850479		0001443715		Baring Focused International Equity Fund	DE	NIA	Baring Asset Management Limited	Management		MMLIC	
5000					01 107-10		Baring Global Dynamic Asset Allocation			Massachusetts Mutual Life Insurance	- managomont			
0000			30-0607379		0001497049		Fund	DE	NIA	Company	Ownership.	89.900	MMLIC	
							Baring Global Dynamic Asset Allocation							
0000			30-0607379		0001497049		Fund	DE	NIA	Baring Asset Management Limited	Management		MMLIC	
0000			39-2059577		0001491482		Baring International Equity Fund	DE	NIA	Baring Asset Management Limited	Management		MMLIC	
			2000077				Baring International Small Cap Equity Fund			Massachusetts Mutual Life Insurance				
0000			26-4142796		1		Daring international onali oup Equity Fund	DE	NIA	Company	Ownership	100.000	MML1C	
000							Baring International Small Cap Equity Fund			- Compatty	νπιοι 3πτρ			
0000			26-4142796		1		Daring international omail oap Equity Fund	DE	NIA	Baring Asset Management Limited	Management		MMLIC	
0000			46-1197222				Baring World Equity Fund	DE	NIA	Baring Asset Management Limited	Influence		MMLIC	
0000			. 10 110122				Multi-Employer Global Aggregate				- IIII ruolioo			
0000			26-1896226		1		Diversified Portfolio	DE	NIA	Baring Asset Management Limited	Management		MMLIC	
0000							12-18 West 55th Street Predevelopment, LLC			Massachusetts Mutual Life Insurance	management			
0000			20-2548283		1		12 10 1001 OUT OUT OUT OF THE TENEVETOPHICITE, LEO	DF	NIA	Company	Ownership	89.000	MMLIC	
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						Name of Securities			Relation-		Board,	Owner-		
						Exchange		Domi-	ship		Management,	ship		
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		
Group		Company	ID	Federal		(U.S. or	Parent. Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
Oode	Gloup Name	Oode	Number	TIOOD	Olix	international)	12-18 West 55th Street Predevelopment, LLC	tion	Littly	(Name of Emily/Ferson)	Other)	lage	Littity(les)/i erson(s)	-
0000			. 20-2548283 .				12-18 West Soin Street Predevelopment, LLC	DE	NIA	0 H 1 if . I	0h.;	7 700	188 10	
0000			. 20-2548283 .					VE	NIA	C.M. Life Insurance Company	Ownership	7.700	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 46-4803557 .				2 Harbor Shore Member LLC	DE	NIA	Company	Ownership	62.800	MMLIC	
0000			. 46-4803557 .				2 Harbor Shore Member LLC	DE	NIA	C.M. Life Insurance Company	Ownership	6.200	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			45-5257904 .				21 West 86 LLC	DE	NIA	Company	Ownership	91.300	MMLIC	
0000			45-5257904				21 West 86 LLC	DE	NIA	C.M. Life Insurance Company	Ownership	4.800	MMLIC	
										Massachusetts Mutual Life Insurance		1		
0000			45-2779931				AT Mid-Atlantic Office Portfolio LLC	DE	NIA	Company	Ownership	90.000	MMLIC	
0000			45-2779931				AT Mid-Atlantic Office Portfolio LLC	DE	NIA	C.M. Life Insurance Company	Ownership	10.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			20-4570515 .		0001362970		Babson Mezzanine Realty Investors I	DE	NIA	Company	Ownership	36.000	MMLIC	
0000			20-4570515		0001362970		Babson Mezzanine Realty Investors I	DE	NIA	C.M. Life Insurance Company	Ownership	1.900	MMLIC	
0000			20-4570515		0001362970		Babson Mezzanine Realty Investors I	DE	NIA	Cornerstone Real Estate Advisers LLC	Management_	1.000	MMLIC	
0000			20-43/0313 .		0001302970		Dabson Wezzainne hearty investors i	UE	NIA	Massachusetts Mutual Life Insurance	management			
0000			24-1446970		0001362970		Babson Mezzanine Realty Investors II	DE	NILA		O	0.000	MMLIC	
									NIA	Company	Ownership	0.000		
0000			24-1446970		0001362970		Babson Mezzanine Realty Investors II	DE	NIA	Cornerstone Real Estate Advisers LLC	Management		MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 04-1590850 .				CHC/RFP VI Core LLC	DE	NI A	Company	Ownership	100.000	MMLIC	
0000			. 27-1701733 .		0001481753		Cornerstone Core Mortgage Fund I LP	DE	NIA	Cornerstone Real Estate Advisers LLC	Management		MMLIC	
										Massachusetts Mutual Life Insurance				
0000			27-1701622 .		0001481752		Cornerstone Core Mortgage Venture LP	DE	NIA	Company	Ownership	50.000	MMLIC	
0000			27-1701622		0001481752		Cornerstone Core Mortgage Venture LP	DE	NIA	Cornerstone Real Estate Advisers LLC	Management		MMLIC	
0000			45-3751572		0001534877		Cornerstone Enhanced Mortgage Fund LP	DE	NIAN	Cornerstone Real Estate Advisers LLC	Ownership	15.500	MMLIC	
										Massachusetts Mutual Life Insurance	·			
0000			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NIA	Company	Ownership	84.400		
0000			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NIA	C.M. Life Insurance Company	Ownership	5.600	MMLIC	
							Control of the first of Bottorophicite 220			Massachusetts Mutual Life Insurance				
0000			20-8730751 .				Cornerstone Global Real Estate LP	DE	NIA	Company	Ownership.	92.300	MMLIC	
0000			20-8730751				Cornerstone Global Real Estate LP	DE	NIA	C.M. Life Insurance Company	Ownership	7.600	MMLIC	
0000			20-8730751				Cornerstone Global Real Estate LP	DE	NIA	Cornerstone Real Estate Advisers LLC	Management	7 .000	MMLIC	
			. 20-0/30/31 .				OUTHER STUHE GIODAL NEAL ESTATE LF	- ^{UE}	N1A	Massachusetts Mutual Life Insurance	manayement.		WINIL I V	
0000			00 4770040		0004500040		Commented High Vield Venter ID	חר	NIZ A		O	E0 000	1841.10	
0000			. 36-4770946 .		0001590049		Cornerstone High Yield Venture LP	DE	NIA	Company	Ownership	50.000		
0000		-	. 36-4770946 .		0001590049		Cornerstone High Yield Venture LP	DE	NIA	Cornerstone Real Estate Advisers LLC	Management		MMLIC	
l l			I		1		Cornerstone Hotel Income & Equity Fund II	1		Massachusetts Mutual Life Insurance		1		
0000			. 26-1828760 .		0001423638		LP	DE	NIA	Company	Ownership	16.900	MMLIC	
										Massachusetts Mutual Life Insurance		1		
0000			20-5578089 .				Cornerstone Patriot Fund LP	DE	NIA	Company	Ownership	10.200	MMLIC	
0000			27-0547156 .				Cornerstone Real Estate Fund VIII LP	DE	NIA	Cornerstone Real Estate Advisers LLC	Ownership	12.700	MMLIC	
										Massachusetts Mutual Life Insurance		1		
0000		.	45-2632610				Cornerstone Permanent Mortgage Fund	DE	NIA	Company	Ownership	100.000	MMLIC	
			1			1		1		Massachusetts Mutual Life Insurance		1		
0000		.1	46-5432619	l	l	l	Cornerstone Real Estate Fund X LP	DE	NIA	Company	Ownership	9.000	MMLIC	
0000			46-5432619				Cornerstone Real Estate Fund X LP	DE		C.M. Life Insurance Company	Ownership.	1.000	MMLIC	
							Control of the Foundation of the Control of the Con			Massachusetts Mutual Life Insurance				
0000			46-5001122				CREA 330 Third LLC	DE	NIA	Company	Ownership.	92.000	MMLIC	
0000			. 46-5001122 . . 46-5001122 .				CREA 330 Third LLC	. DE		C.M. Life Insurance Company	Ownership.	8.000	MMLIC	
			. 40-3001122 .				UNEA 330 IIIII a LLC	- ^{DE}	NIA	Massachusetts Mutual Life Insurance	owner SITP	0.000		
0000			46-4367364				CREA FMF Nashville LLC	DF	NIA	Company	O	100 000	MMLIC	
UUUU		.	_ 40-430/304 _				UNEA FMF NASHVIIIE LLU		N I A	Louiipafiy	Ownership	100.000		

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						Exchange		Domi-	ship		Management,	ship		
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
										Massachusetts Mutual Life Insurance				
0000			26-2399532	-			CREA/LYON West Gateway, LLC	DE	NIA	Company	Ownership	54.000		
0000			26-2399532				CREA/LYON West Gateway, LLC	DE	NIA	C.M. Life Insurance Company	Ownership	6.000	MMLIC	
0000			20-0348173				ODEA/DDO V t II O	DE	NILA	Massachusetts Mutual Life Insurance	0	93.400	MILIC	
0000			20-0348173			•••••	CREA/PPC Venture LLC	DE	NIA NIA	Company	Ownership	6.600	MMLIC	
0000			20-0348173	-			CHEA/PPC Venture LLC	UE	NIA	Massachusetts Mutual Life Insurance	Ownership	0.000	MINILI C	
0000			26-1611591	3956836			Fallon Cornerstone One MPD LLC	DE	NIA	Company	Ownership	61.400	MMLIC	
0000			26-1611591	3956836			Fallon Cornerstone One MPD LLC	DE	NIA	C.M. Life Insurance Company	Ownership	6. 100	MMLIC	
000			20-1011091				TATION CONNECTS LONG ONE WILD LLC			Massachusetts Mutual Life Insurance	σπισι σπιρ			
0000			20-3347091				Fan Pier Development LLC	DE	NIA	Company	Ownership	60.000	MML1C	
0000			20-3347091				Fan Pier Development LLC	DE	NIA	C.M. Life Insurance Company	Ownership.	5.900	MMLIC	
,			1							Massachusetts Mutual Life Insurance			-	
0000			46-3880526				Farringdon London Holdings LLC	DE	NIA	Company	Ownership	94.500	MMLIC	
0000			46-3880526				Farringdon London Holdings LLC	DE	NIA	C.M. Life Insurance Company	Ownership	5.500	MMLIC	
1					1					Massachusetts Mutual Life Insurance				
0000			46-1586427				Gracechurch London Holdings LLC	DE	NIA	Company	Ownership	96.000	MMLIC	
0000			46-1586427				Gracechurch London Holdings LLC	DE	NIA	C.M. Life Insurance Company	Ownership	4.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000							Infinity SCD Ltd	GBR	NIA	Company	Ownership	4.200	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			20-4819358				Johnston Groves LLC	DE	NIA	Company	Ownership	57.200	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			20-5984759				Metropolitan At Lorton	DE	NIA	Company	Ownership	93.500		
0000			20-5984759				Metropolitan At Lorton	DE	NIA	C.M. Life Insurance Company	Ownership	6.500	MMLIC	
0000			10 0017011				MI 0 1:11 0((; 110	DE.		Massachusetts Mutual Life Insurance		04 000		
0000			46-3317841				MM Greenhill Office LLC	DE	NIA	Company	Ownership	81.000	MMLIC	
0000			. 46–3317841				MM Greenhill Office LLC	UE	NIA		Ownership	19.000	WINL I C	
0000			46-5347643				MMI/Hines Harrison LLC	DE	NIA	Company	Ownership	82.800	MMLIC	
0000			46-5347643				MMI/Hines Harrison LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC	
5500										Massachusetts Mutual Life Insurance				
0000			46-4077059				MM Woodfield Martingale LLC	DE	NIA	Company	Ownership	80.400	MMLIC	
0000			46-4077059				MM Woodfield Martingale LLC	DE	NIA	C.M. Life Insurance Company	Ownership.	19.600	MMLIC	
							Salomon Brothers Commercial Mortgage Trust							
0000							2001-MM	DE	NIA	Cornerstone Real Estate Advisers LLC	Influence		MMLIC	
					1					Massachusetts Mutual Life Insurance				
0000			27-2977720				Sawgrass Village Shopping Center LLC	DE	NIA	Company	Ownership	84.200	MMLIC	
0000			27-2977720				Sawgrass Village Shopping Center LLC	DE	NIA	C.M. Life Insurance Company	Ownership	15.800	MMLIC	
0000			46-3465271	-			SBNP SIA LLC	DE	NIA	Cornerstone Real Estate Advisers LLC	Influence		MMLIC	
1										Massachusetts Mutual Life Insurance			l	
0000			35-2484550				Twenty Two Liberty LLC	MA	NIA	Company	Ownership	72.900	MMLIC	
0000			35-2484550	-			Twenty Two Liberty LLC	MA	NIA	C.M. Life Insurance Company	Ownership	7.200	MMLIC	
0000			45 400051-				111/2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DE.		Massachusetts Mutual Life Insurance				
0000			45-4606547	-			UK LIW Manager LLC	DE	NIA	Company	Ownership	1.000	MMLIC	
0000			45 4000547				III I III Neede ee II O	DE	NILA	Massachusetts Mutual Life Insurance	0	00 000	100	
0000			45-4606547	-			UK LIW Member LLC	DE	NIA	Company	Ownership	99.000	MMLIC	
0000			47-1855920		1		II C. Buyar Brandonating II C	DE	MILA	Massachusetts Mutual Life Insurance	Ownership	12.700	MMLIC	
0000			_ 47-1000920				U.S. Buyer Broadcasting LLC	UE	NIA	CompanyMassachusetts Mutual Life Insurance	Ownership	. 12./00	WWLIG	
0000			45-5401109				Weekington Cotowey Apartments Verture 110	DE	NIA	Company	Ownership	91.000	MMLIC	
		.	_ 40-0401109 .	-			Washington Gateway Apartments Venture LLC .	VE	NIA		Ownership	. ७١.000		

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						Name of Securities			Relation-		Board,	Owner-		
						Exchange		Domi-	ship		Management,	ship		
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
0000			. 45-5401109 .				Washington Gateway Apartments Venture LLC .	DE	NI A	C.M. Life Insurance Company	Ownership	4.800	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 20-2970495 .				Waterford Development Associates	DE	NI A	Company	Ownership	90.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 47-1993493 .				Waterloo London Holdings LLC	DE	NI A	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 46-3122029 .				WeHo Domain LLC	DE	NIA	Company	Ownership	77.400		
0000			46-3122029				WeHo Domain LLC	DE	NIA	C.M. Life Insurance Company	Ownership	12.600	MMLIC	
0000			00 5404477				V 1: VII 5 !:	DE		Massachusetts Mutual Life Insurance		00 000	188 10	
0000			. 20-5481477 .				Ygnatio Valley Funding	DE	NIA	Company	Ownership	90.000	MMLIC	
0000			45 0400000			00	MassMutual Barings Dynamic Allocation Fund		NII A	Massachusetts Mutual Life Insurance	0	100,000	184 10	
0000			. 45–3168892 .			0Q		MA	NIA	Company	Ownership	100.000	MMLIC	
0000			04 2010054		0000927972	00	Manakhatarah Danmian Bahamand Fund	MA	NIA	Massachusetts Mutual Life Insurance	O	7 500	MI 10	
0000			. 04-3212054 .		0000927972	. UQ	MassMutual Premier Balanced Fund	MA	NIA	Company Massachusetts Mutual Life Insurance	Ownership	7.500	MMLIC	
0000			04-3277549		0000927972	00	MassMutual Premier Core Bond Fund	MA	NIA	Company	Ownership	2.100	MMLIC	
0000			. 04-32//349 .		0000927972	. UV	Massmutual Flemmer Core Bond Fund	MA	NIA	Massachusetts Mutual Life Insurance	Ownership	2. 100	MWLTC	
0000			. 04-3539083 .		0000927972	00	ManaMutual Bramiar Dissiplined Value Fund	MA	NIA	Company	Ownership	8.500	MML1C	
0000			. 04-3339063 .		0000927972	. UV	MassMutual Premier Disciplined Value Fund MassMutual Premier Disciplined Growth Fund	WA	N I A	Massachusetts Mutual Life Insurance	Owner Strip	0.300		
0000			. 04-3539084 .		0000927972	00	massmutual Flemier Disciplined Glowth Fund	MA	NIA	Company	Ownership	2.200	MML1C	
0000			. 04-3333004 .		0000321312			WA	NI /\	Massachusetts Mutual Life Insurance	owner strip	2.200	WWLTO	
0000			04-3464165 .		0000927972	00	MassMutual Premier Diversified Bond Fund	MA	NIA	Company	Ownership	6. 100	MMLIC	
0000			. 04 3404 103 .		0000321312		MassMutual Premier Focused International	W/\		Massachusetts Mutual Life Insurance	owner strip	0. 100		
0000			02-0754273		0000927972	00	Fund	MA	NIA	Company	Ownership	0.000	MMLIC	
			02 0/0/2/0 :		0000027072		T GITG			Massachusetts Mutual Life Insurance	0#1101 0111p			
0000			51-0529334 .		0000927972	00	MassMutual Premier Global Fund	MA	NIA	Company	Ownership	11.200	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			. 04-3520009 .		0000927972	00	MassMutual Premier High Yield Fund	MA	NIA	Company	Ownership	13.600	MMLIC	
							MassMutual Premier Inflation-Protected and			Massachusetts Mutual Life Insurance				
0000			. 03-0532475 .		0000927972	0Q	Income Fund	MA	NIA	Company	Ownership	8.900	MMLIC	
							MassMutual Premier International Equity			Massachusetts Mutual Life Insurance	·			
0000			04-3212044		0000927972	0Q	Fund	MA	NIA	Company	Ownership	5.200	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			51-0529328		0000927972	00	MassMutual Premier Main Street Fund	MA	NI A	Company	Ownership	55.500	MMLIC	
							MassMutual Premier Short-Duration Bond			Massachusetts Mutual Life Insurance				
0000			. 04-3212057 .		0000927972	. QQ	Fund	MA	NI A	Company	Ownership	1.700	MMLIC	
							MassMutual Premier Small/Mid Cap			Massachusetts Mutual Life Insurance				
0000			. 04-3224705 .		0000927972	00	Opportunities Fund	MA	NIA	Company	Ownership	10.700	MMLIC	
							MassMutual Premier Strategic Emerging			Massachusetts Mutual Life Insurance				
0000			. 26-3229251 .		0000927972	0Q	Markets Fund	MA	NIA	Company	Ownership	34.200	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			04-3277550		0000927972	00	MassMutual Premier Value Fund	MA	NIA	Company	Ownership	98. 100		
2000		1	07. 4000000		0000040050	00	MassMutual Select Blackrock Global			Massachusetts Mutual Life Insurance		0.000		
0000		·	. 27-1028263 .		0000916053	0Q	Allocation Fund	MA	NIA	Company	Ownership	3.600	MMLIC	
0000		1	04 0550000		0000040050	00	Marshirtual Calast Div. Obi Co. 45 E.	144	NII A	Massachusetts Mutual Life Insurance	Ownership	6 400	18/1/10	
0000		·	. 04-3556992 .		0000916053	UU	MassMutual Select Blue Chip Growth Fund	MA	NIA	Company	Ownership	6.100	MMLIC	.
0000		1	14-1980900		0000916053	00	MassMutual Select Diversified International Fund	MA	NIA	Massachusetts Mutual Life Insurance	Ownership	91.800	MMLIC	
0000			. 14-1980900 .		56001 60000	UV	mitemational runu	NA	NIA	Company Massachusetts Mutual Life Insurance	Ownership	000		
0000		1	01-0821120		0000916053	m	MassMutual Select Diversified Value Fund	MA	NIA	Company	Ownership	35.700	MMLIC	1 1
		1	_ 0 1 7 0 0 2 1 1 2 0 _	1	66001 60000	UV	Imassimulual select pivelsilled value Fund	IVI/1		OUIIIPAITY	OMINGLOHID	. 00 . / 00		- 1

13.12

SCHEDULE Y

	PART IA - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM													
1	2	3	4	5	6	7	8	9	10	11	12 Type of Control (Ownership,	13 If Control	14	15
						Name of Securities			Relation-		Board,	Owner-		
						Exchange		Domi-	ship		Management,	ship		
0		NAIC	ID	F		if Publicly Traded	Names of	ciliary	to	Discrete Occasional and have	Attorney-in-Fact,	Provide	I liting at a Compton library	
Group Code	Group Name	Company Code	ID Number	Federal RSSD	CIK	(U.S. or International)	Parent, Subsidiaries Or Affiliates	Loca- tion	Reporting Entity	Directly Controlled by (Name of Entity/Person)	Influence, Other)	Percen- tage	Ultimate Controlling Entity(ies)/Person(s)	*
Oode	Group Name	Oode	Number	HOOD	Oil	international)	Of Affiliates	tion	Littly	Massachusetts Mutual Life Insurance	Other)	lage	Littly(les)/1 erson(s)	-
0000			. 04-3512590 .		0000916053	0Q	MassMutual Select Focused Value Fund	MA	NIA	Company	Ownership	3.600		
										Massachusetts Mutual Life Insurance				
0000			. 04-3512593 .		0000916053	0Q	MassMutual Select Fundamental Growth Fund .	MA	NIA	Company	Ownership	55.700	. MMLIC	
0000			04 0504400		0000040050					Massachusetts Mutual Life Insurance		4 400	188 10	
0000			. 04-3584138 .		0000916053	OQ	MassMutual Select Fundamental Value Fund MassMutual Select Growth Opportunities	MA	NIA	Company Massachusetts Mutual Life Insurance	Ownership	4.100	. MMLIC	
0000			04-3512589		0000916053	00	Fund	MA	NIA	Company	Ownership	5.000	MMLIC	
			01 0012000 1				1 414			Massachusetts Mutual Life Insurance				
0000			. 04-3513019 .		0000916053	0Q	MassMutual Select Large Cap Value Fund	MA	NIA	Company	Ownership	99.900	MMLIC	
							MassMutual Select Mid Cap Growth Equity II			Massachusetts Mutual Life Insurance				
0000			. 04-3512596 .		0000916053	00	Fund	MA	NIA	Company	Ownership	1.700	MMLIC	
0000			40 4740005		0000040000	00	March Arm I Colored Hild Co. Walnut Front	144	MILA	Massachusetts Mutual Life Insurance	0	00.000	188 10	
0000			. 42-1710935 .		0000916053	00	MassMutual Select Mid-Cap Value Fund MassMutual Select MSCI EAFE International	MA	NIA	Company Massachusetts Mutual Life Insurance	Ownership	99.800		
0000			45-5357167		0000916053	00	Index Fund	MA	NIA	Company	Ownership	3.000	MMLIC	
			10 0007 107 1				Thoras and			Massachusetts Mutual Life Insurance				
0000			. 04-3557000 .		0000916053	0Q	MassMutual Select Overseas Fund	MA	NIA	Company	Ownership	2.500		
										Massachusetts Mutual Life Insurance				
0000			. 27-2377446 .		0000916053	00	MassMutual Select PIMCO Total Return Fund	MA	NIA	Company	Ownership	5.200	. MMLIC	
0000			45 5000540		0000040000	00	MassMutual Select Russell 2000 Small Cap	MA	MILA	Massachusetts Mutual Life Insurance	0	4 000	188 10	
0000			. 45-5366542 .		0000916053	00	Index Fund	MA	NIA	Company Massachusetts Mutual Life Insurance	Ownership	4.900	. MMLIC	
0000			04-3410047		0000916053	00	MassMutual Select S&P 500 Index Fund	MA	NIA	Company	Ownership	5.300	MMLIC	
			1				MassMutual Select Small Cap Growth Equity			Massachusetts Mutual Life Insurance				
0000			. 04-3464205 .		0000916053	00	Fund	MA	NIA	Company	Ownership	6.300	MMLIC	
							MassMutual Select Small Capital Value			Massachusetts Mutual Life Insurance				
0000			. 02-0769954 .		0000916053	0Q	Equity Fund	MA	NIA	Company	Ownership	25.400	. MMLIC	
0000			. 04-3584140 .		0000010050	00	MassMutual Select Small Company Value Fund	144	NIIA	Massachusetts Mutual Life Insurance	0	0.000	MMLIC	
0000			. 04-3384 140 .		0000916053			MA	NIA	Company Massachusetts Mutual Life Insurance	Ownership	2.300	. MMLIC	
0000			45-5349772		0000916053	00	MassMutual Select S&P Mid Cap Index Fund	MA	NIA	Company	Ownership	3.500	MMLIC	
							and out man and			Massachusetts Mutual Life Insurance			-	
0000			26-0099965		0000916053	00	MassMutual Select Strategic Bond Fund	MA	NIA	Company	Ownership	0.700		
										Massachusetts Mutual Life Insurance				
0000			. 46-4257056 .		0000067160 .		MML Series International Equity Fund	MA	NIA	Company	Ownership	7.300	. MMLIC	
0000			. 47-3517233 .		0001317146		MML Series II Asset Momentum Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership.	100.000	MMLIC	
0000			. 71-0011200 .		0001017140		MININE COLLEGE IT ASSET MUMBERTUM FUND	mn	NIA	Massachusetts Mutual Life Insurance	σπισι οπτρ			
0000			47-3529636		0001317146		MML Series II Dynamic Bond Fund	MA	NIA	Company	Ownership	100.000	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			47-3544629		0001317146		MML Series II Equity Rotation Fund	MA	NIA	Company	Ownership	100.000		
0000			47 055000		0004047440		MM Occident II Occide City III 5		NII 4	Massachusetts Mutual Life Insurance	0	400.000	100	
0000			. 47–3559064 .		0001317146		MML Series II Special Situations Fund	MA	NIA	Company Massachusetts Mutual Life Insurance	Ownership	100.000	MMLIC	
0000			. 03-0532456 .		0000916053		MassMutual RetireSMART 2010 Fund	MA	NIA	Company	Ownership.	5.200	MMLIC	
0000			. 00-0002400 .				massmataar Hetireomnii 2010 Falia			Massachusetts Mutual Life Insurance	σπιστ σιττρ		INTILL I C	
0000			27-1933828 .		0000916053		MassMutual RetireSMART 2015 Fund	MA	NIA	Company	Ownership	6.200		
										Massachusetts Mutual Life Insurance				
0000			03-0532467		0000916053		MassMutual RetireSMART 2020 Fund	MA	NIA	Company	Ownership	0.000	MMLIC	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
								_			Type	If		
											of Control	Control		
											(Ownership,	is		
						Name of Securities			Relation-		Board,	Owner-		
						Exchange		Domi-	ship		Management,	ship		
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence.	Percen-	Ultimate Controlling	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	*
										Massachusetts Mutual Life Insurance			3()	
0000			27-1933753 .		0000916053		MassMutual RetireSMART 2025 Fund	MA	NIA	Company	Ownership	2.300	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			27-1933389		0000916053		MassMutual RetireSMART 2035 Fund	MA	NIA	Company	Ownership.	2.700	_MMLIC	
										Massachusetts Mutual Life Insurance				
0000			03-0532471		0000916053		MassMutual RetireSMART 2040 Fund	MA	NIA	Company	Ownership	3.400	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			27-1932769		0000916053		MassMutual RetireSMART 2045 Fund	MA	NIA	Company	Ownership	11.300	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			26-1345332		0000916053		MassMutual RetireSMART 2050 Fund	MA	NIA	Company	Ownership	9.500		
										Massachusetts Mutual Life Insurance				
0000			46-3289207		0000916053		MassMutual RetireSMART 2055 Fund	MA	NIA	Company	Ownership	17.300		
										Massachusetts Mutual Life Insurance				
0000			45-1618155 .		0000916053		MassMutual RetireSMART Conservative Fund	MA	NIA	Company	Ownership	9.900	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			45-1618222		0000916053		MassMutual RetireSMART Growth Fund	MA	NIA	Company	Ownership	6.700	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			03-0532464		0000916053		MassMutual RetireSMART In Retirement Fund	MA	NIA	Company	Ownership	0.000		
										Massachusetts Mutual Life Insurance				
0000			45-1618262 .		0000916053		MassMutual RetireSMART Moderate Fund	MA	NIA	Company	Ownership	3.800	. MMLIC	
							MassMutual RetireSMART Moderate Growth			Massachusetts Mutual Life Insurance				
0000			45-1618046 .		0000916053		Fund	MA	NIA	Company	Ownership	5.000	MMLIC	
0000							HarbourView CLO 2006-1 Limited	CYM	NIA	OppenheimerFunds, Inc.	Influence		MMLIC	
0000							HarbourView CLO VII, Ltd	CYM	NIA	OppenheimerFunds, Inc.	Influence		MMLIC	
0000			45-3417590		0001530245		Oppenheimer Global High Yield Fund	DE	NIA	OppenheimerFunds, Inc.	Ownership	74.300	MMLIC	
										Massachusetts Mutual Life Insurance				
0000			46-1604428 .		0001562689		Oppenheimer Global Real Estate Fund	DE	NIA	Company	Ownership	43.700	. MMLIC	
0000			46-1604428 .		0001562689		Oppenheimer Global Real Estate Fund	DE	NIA	C.M. Life Insurance Company	Ownership	3.600	. MMLIC	
0000			46-1604428 .		0001562689		Oppenheimer Global Real Estate Fund	DE	NIA	OppenheimerFunds, Inc.	Management		MMLIC	
										Massachusetts Mutual Life Insurance				
0000			13-3867060 .		0001005728		Oppenheimer International Growth Fund	MA	NIA	Company	Ownership	0.000	. MMLIC	
										Massachusetts Mutual Life Insurance				
0000			84-1073463		0001116894		Oppenheimer Main Street Fund	MA	NIA	Company	Ownership	0.000	. MMLIC	
					1		Oppenheimer Global Multi-Asset Growth Fund			Massachusetts Mutual Life Insurance				
0000			47-3676235 .					DE	NIA	Company	Ownership	99.900	. MMLIC	
					1		Oppenheimer Global Multi-Asset Income Fund			Massachusetts Mutual Life Insurance				
0000			47-1714929 .					DE	NIA	Company	Ownership	97.600	. MMLIC	
					1	1				Massachusetts Mutual Life Insurance				
0000			22-3849391 .		0001163166		Oppenheimer Real Estate Fund	MA	NIA	Company	Ownership	2.000	. MMLIC	
					1									

Asterisk	Explanation
1	Massachusetts Mutual Life Insurance Company owns .63% of the affiliated debt of Jefferies Finance LLC
2	Debt investors own 19.7% and include Babson CLO Ltd. 2006-II, Babson CLO Ltd. 2007-I, Babson Capital Loan Strategies Fund, L.P., and Sapphire Valley CDO I, Ltd.
3	Debt investors own 29.4% and includes only Babson Capital Loan Strategies Fund, L.P.
4	Debt investors own 4.7% and includes only Great Lakes III, L.P.
5	Partnership investors own 99% and include Babson Loan Strategies Fund, L.P.
6	Fugu Credit Plc owns 100% of the Fugu CLO B.V. assets
7	Debt investors own 16.7% and include Sapphire Valley, Babson Capital Loan Strategies Fund, L.P., Babson CLO Ltd. 2007-1, and Babson Mid-Market CLO Ltd. 2007-11

Asterisk	Explanation
8 Debt investors own 9.4% and includes only Ba	bson Capital Loan Strategies Fund, L.P.
9 Debt investors own 84.6% and includes only (onnecticut Valley Structured Credit CDO III, Ltd.
10 Debt investors own 54.6% and includes only E	
11 Debt investors own 5.0% and includes only Ba	bson Capital Loan Strategies Fund, L.P.
12 Debt investors own 5.6% and includes only Gr	eat Lakes III, L.P.
13 Debt investors own 7.1% and includes only Gr	eat Lakes III, L.P.
14 Debt investors own 3.1% and includes only Gr	eat Lakes III, L.P.
15 Debt investors own 4.1% and includes only Gr	eat Lakes III, L.P.
·	

SUPPLEMENTAL EXHIBITS AND SCHEDULES INTERROGATORIES

The following supplemental reports are required to be filed as part of your statement filing. However, in the event that your company does not transact the type of business for which the special report must be filed, your response of NO to the specific interrogatory will be accepted in lieu of filing a "NONE" report and a bar code will be printed below. If the supplement is required of your company but is not being filed for whatever reason enter SEE EXPLANATION and provide an explanation following the interrogatory questions.

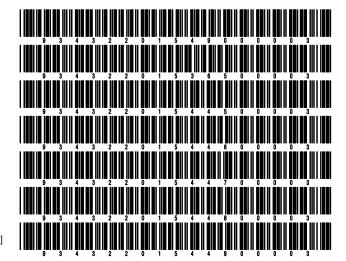
		Response
1.	Will the Trusteed Surplus Statement be filed with the state of domicile and the NAIC with this statement?	NO
2.	Will the Medicare Part D Coverage Supplement be filed with the state of domicile and the NAIC with this statement?	NO
3.	Will the Reasonableness of Assumptions Certification required by Actuarial Guideline XXXV be filed with the state of domicile and electronically with the NAIC?	NO
4.	Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXV be filed with the state of domicile and electronically with the NAIC?	NO
5.	Will the Reasonableness of Assumptions Certification for Implied Guaranteed Rate Method required by Actuarial Guideline XXXVI be filed with the state of domicile and electronically with the NAIC?	NO
6.	Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Average Market Value) be filed with the state of domicile and electronically with the NAIC?	NO
7.	Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Market Value) be filed with the state of domicile and electronically with the NAIC?	NO

Explanation:

- 1. Not Required
- 2. This line of business is not written by the Company.
- 3. Not Required
- 4. Not Required
- 5. Not Required
- 6. Not Required
- 7. Not Required

Bar Code:

- 1. Trusteed Surplus Statement [Document Identifier 490]
- 2. Medicare Part D Coverage Supplement [Document Identifier 365]
- Reasonableness of Assumptions Certification required by Actuarial Guideline XXXV [Document Identifier 445]
- Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXV [Document Identifier 446]
- Reasonableness of Assumptions Certification for Implied Guaranteed Rate Method required by Actuarial Guideline XXXVI [Document Identifier 447]
- Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI [Document Identifier 448]
- Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Market Value) [Document Identifier 449]



OVERFLOW PAGE FOR WRITE-INS

Additional Write-ins for Liabilities Line 25

Addition	ai write-ins for Liabilities Line 25		
		1	2
		Current	December 31
		Statement Date	Prior Year
2504.	Funds awaiting escheat	1,612,857	1,304,462
2505.	Miscellaneous liabilities	146,294	31,379
2597.	Summary of remaining write-ins for Line 25 from overflow page	1,759,151	1,335,841

SCHEDULE A - VERIFICATION

Real Estate

		1	2
			Prior Year Ended
		Year to Date	December 31
1.	Book/adjusted carrying value, December 31 of prior year	24, 171,011	26,991,662
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition		5,417,187
	2.2 Additional investment made after acquisition		615,985
3.	Current year change in encumbrances		(2,991,186)
4.	Total gain (loss) on disposals	1,283,641	(226,098)
5.	Deduct amounts received on disposals		
6.	Total foreign exchange change in book/adjusted carrying value		
7.	Deduct current year's other than temporary impairment recognized		
8.	Deduct current year's depreciation		1,080,441
9.	Book/adjusted carrying value at the end of current period (Lines 1+2+3+4-5+6-7-8)		24, 171, 011
10.	Deduct total nonadmitted amounts		
11.	Statement value at end of current period (Line 9 minus Line 10)		24,171,011

SCHEDULE B - VERIFICATION

Mortgage Loans

		1	2
		Vt- D-t-	Prior Year Ended
		Year to Date	December 31
1.	Book value/recorded investment excluding accrued interest, December 31 of prior year	944,390,174	861,172,071
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition	129,492,144	194,507,772
	2.2 Additional investment made after acquisition	10,592,966	12,209,609
3.	2.1 Actual cost at time of acquisition 2.2 Additional investment made after acquisition Capitalized deferred interest and other	939,659	297,920
4.	Accrual of discount	106,706	158,890
5.	Unrealized valuation increase (decrease)		
6.	Total gain (loss) on disposals Deduct amounts received on disposals	72,800	70,262
7.	Deduct amounts received on disposals	99,802,017	118,820,599
8.	Deduct amortization of premium and mortgage interest points and commitment fees	456,030	342,773
9.	Total foreign exchange change in book value/recorded investment excluding accrued interest	(4,234,802)	(4,862,978)
10.	Deduct current year's other than temporary impairment recognized		
11.	Book value/recorded investment excluding accrued interest at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	981,101,600	944,390,174
12.	Total valuation allowance		
13.	Subtotal (Line 11 plus Line 12)	981, 101, 600	944,390,174
14.	Deduct total nonadmitted amounts		
15.	Statement value at end of current period (Line 13 minus Line 14)	981,101,600	944,390,174

SCHEDULE BA - VERIFICATION

Other Long-Term Invested Assets

	Other Long-Term Invested Assets		
		1	2
			Prior Year Ended
		Year to Date	December 31
1.	Book/adjusted carrying value, December 31 of prior year	232,592,855	256,538,483
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition	23,661,548	3,200,321
	2.1 Actual cost at time of acquisition	23,656,958	33,569,945
3.	Capitalized deferred interest and other		
4.	Accrual of discount		
5.	Unrealized valuation increase (decrease)	5,745,118	24,782,334
6.	Total gain (loss) on disposals	370	1,890,471
7.	Total gain (loss) on disposals	32,255,477	86,277,298
8.	Deduct amortization of premium and depreciation	6,729	L8,844
9.	Total foreign exchange change in book/adjusted carrying value	(591,632)	(1, 102, 557
10.	Deduct current year's other than temporary impairment recognized	210.688	
11.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	252,592,323	232,592,855
12.	Deduct total nonadmitted amounts	3,408,385	3,699,144
13.	Statement value at end of current period (Line 11 minus Line 12)	249, 183, 938	

SCHEDULE D - VERIFICATION

Bonds and Stocks

	Bonds and Stocks		
		1	2
			Prior Year Ended
		Year to Date	December 31
1.	Book/adjusted carrying value of bonds and stocks, December 31 of prior year	4,555,765,734	4,925,869,944
2.	Cost of bonds and stocks acquired	513,263,894	1, 172, 377, 078
3.	Accrual of discount	12,335,522	20, 127, 851
4.	Unrealized valuation increase (decrease)	15,500,243	18,670,476
5.	Total gain (loss) on disposals	7,710,381	47,474,883
6.	Deduct consideration for bonds and stocks disposed of	558,779,090	1,602,353,160
7.	Deduct amortization of premium	3,729,604	4,845,615
8.	Total foreign exchange change in book/adjusted carrying value	(8,507,597)	(18,263,356)
9.	Deduct current year's other than temporary impairment recognized	10,139,438	3,292,367
10.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	4,523,420,045	4,555,765,734
11.	Deduct total nonadmitted amounts		
12.	Statement value at end of current period (Line 10 minus Line 11)	4.523.420.045	4.555.765.734

SCHEDULE D - PART 1B

Showing the Acquisitions, Dispositions and Non-Trading Activity

During the Current Quarter for all Bonds and Preferred Stock by NAIC Designation Book/Adjusted Book/Adjusted Book/Adjusted Book/Adjusted Book/Adjusted Dispositions Carrying Value Acquisitions Non-Trading Activity Carrying Value Carrying Value Carrying Value Carrying Value Beginning During During During End of End of End of December 31 NAIC Designation of Current Quarter Current Quarter Current Quarter Current Quarter First Quarter Second Quarter Third Quarter Prior Year **BONDS** ...2,170,895,792 ..57,657,628 ..83,653,188 .12,614,863 ...2, 198, 560, 919 ...2, 170, 895, 792 ...2, 157, 515, 095 ...2, 134, 344, 078 1. NAIC 1 (a)1.886.836.817 ..1.823.265.392 ...1,685,467,790 1.645.794.643 (20.607.243) .1.823.265.392 ..1.842.331.296 ..1.892.500.588 2. NAIC 2 (a)227,553,423 ...4,638,8327,255,505 9.589.174 ...215,870,363 ...227,553,423 ..234,525,924 ..204,257,500 .222,783,371 ..189, 145, 408 ..24,426,106 ..14,604,594 ..(8,842,033) ...223,581,157 .189, 145, 408 ..190, 124, 887 4. NAIC 4 (a) 29.108.512 ..(1.773.362) ...29.222.373 5. NAIC 5 (a)3.656.820 1.769.597 28.742.445 ...29.108.512 ..28,947,750 21,342,155 2,754,408 (910,513) 23,238,570 21,342,155 17,665,986 22,458,778 (11,248)6. NAIC 6 (a) .. 7. Total Bonds 4.461.310.681 1,775,835,928 1,755,831,935 (9.929.114) 4,576,830,270 4,461,310,681 4,471,385,560 4,505,292,064 PREFERRED STOCK 8. NAIC 114.752.286 ...(1.702.286) .14.752.286 .14.752.286 13.050.000 .13,457,319 ..6,945,350 ..1,702,286 ..6,847,586 ..6,945,350 ..8,647,636 .6,091,213 9. NAIC 26.871.807 ..6.752.882 .6.871.807 ..6.871.807 .6.834.006 10. NAIC 3 2.095.880 2.090.138 2.498.079 322.203 (157.955) ..2,095,880 2.260.128 11. NAIC 4.. ...34,397 ..138,495 ..190,678 ...34,397 ...172,892 .189,656 12. NAIC 5. 36,479 36.479 13. NAIC 6 30.699.720 322.203 36.479 17.019 30.633.570 30.699.720 31.002.463 29.070.273 Total Preferred Stock 4.492.010.401 1.776.158.131 1.755.868.414 (9.912.095) 4.607.463.840 4.492.010.401 4.502.388.023 4,534,362,337 15. Total Bonds and Preferred Stock

NAIC 4 \$; NAIC 5 \$......; NAIC 6 \$.....

SCHEDULE DA - PART 1

Short-Term Investments

	1 Book/Adjusted Carrying Value	2 Par Value	3 Actual Cost	4 Interest Collected Year-to-Date	5 Paid for Accrued Interest Year-to-Date
9199999 Totals	21,086,965	XXX	21,061,861		

SCHEDULE DA - VERIFICATION

Short-Term Investments

		1	2
		Year To Date	Prior Year Ended December 31
1.	Book/adjusted carrying value, December 31 of prior year	26,472,927	80,957,223
2.	Cost of short-term investments acquired	47,025,310	88,866,175
3.	Accrual of discount	86,035	146 , 171
4.	Unrealized valuation increase (decrease)		
5.	Total gain (loss) on disposals	661	793
6.	Deduct consideration received on disposals	52,497,968	143,497,435
7.	Deduct amortization of premium		
8.	Total foreign exchange change in book/adjusted carrying value		
9.	Deduct current year's other than temporary impairment recognized		
10.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	21,086,965	26,472,927
11.	Deduct total nonadmitted amounts		
12.	Statement value at end of current period (Line 10 minus Line 11)	21,086,965	26,472,927

SCHEDULE DB - PART A - VERIFICATION

Options, Caps, Floors, Collars, Swaps and Forwards

1.	Book/Adjusted Carrying Value, December 31, prior year (Line 9, prior year)	56, 169, 109
2.	Cost Paid/(Consideration Received) on additions	13,255
3.	Unrealized Valuation increase/(decrease)	13,165,656
4.	Total gain (loss) on termination recognized	4,357,499
5.	Considerations received/(paid) on terminations	9,459,041
6.	Amortization	3,333
7.	Adjustment to the Book/Adjusted Carrying Value of hedged item	
8.	Total foreign exchange change in Book/Adjusted Carrying Value	
9.	Book/Adjusted Carrying Value at End of Current Period (Lines 1+2+3+4-5+6+7+8)	64,249,811
10.	Deduct nonadmitted assets	
11.	Statement value at end of current period (Line 9 minus Line 10)	64,249,811

SCHEDULE DB - PART B - VERIFICATION

	Futures Co.	ntracts			
1.	Book/Adjusted carrying value, December 31 of prior year (Line 6, prior year)				
2.	Cumulative cash change (Section 1, Broker Name/Net Cash Deposits Footnote - Co	umulative Cash Cha	nge column)		
3.1	Add:				
	Change in variation margin on open contracts - Highly Effective Hedges				
	3.11 Section 1, Column 15, current year to date minus				
	3.12 Section 1, Column 15, prior year				
	Change in variation margin on open contracts - All Other				
	3.13 Section 1, Column 18, current year to date minus	2,832,632			
	3.14 Section 1, Column 18, prior year	23,692,351	(20,859,719)	(20,859,719)	
3.2	Add:				
	Change in adjustment to basis of hedged item				
	3.21 Section 1, Column 17, current year to date minus				
	3.22 Section 1, Column 17, prior year				
	Change in amount recognized				
	3.23 Section 1, Column 19, current year to date minus	2,832,632			
	3.24 Section 1, Column 19, prior year	23,692,351	(20,859,719)	(20,859,719)	
3.3	Subtotal (Line 3.1 minus Line 3.2)				
4.1	Cumulative variation margin on terminated contracts during the year		21, 134, 587		
4.2	Less:				
	4.21 Amount used to adjust basis of hedged item				
	4.22 Amount recognized	(2,557,764)	(2,557,764)		
4.3	Subtotal (Line 4.1 minus Line 4.2)				23,692,351
5.	Dispositions gains (losses) on contracts terminated in prior year:				
	5.1 Total gain (loss) recognized for terminations in prior year				
	5.2 Total gain (loss) adjusted into the hedged item(s) for terminations in prior year				(23,692,351)
6.	Book/Adjusted carrying value at end of current period (Lines 1+2+3.3-4.3-5.1-5.2)				
7.	Deduct total nonadmitted amounts				
8.	Statement value at end of current period (Line 6 minus Line 7)				

SCHEDULE DB - PART C - SECTION 1

Replication (Synthetic Asset) Transactions Open as of Current Statement Date

		D = == 1! = == 1 (O: ===	U4! - A4\ T			- (-)	,	Ι				-4 4k - D!!-	-+: (O:+!+: - A+) T			-
Replication (Synthetic Asset) Transactions							Components of the Replication (Synthetic Asset) Transactions									
1	2	3	4	5	6	7_		Derivative Instrument(s) Open			Cash Instrument(s) Held					
		NAIC Designation or Other	Notional	Book/Adjusted Carrying		E lect e	Maturity	9		10 Baok/Adjusted Carrying	11	12	13	14 NAIC Designation or Other	15 Book/Adjusted Carrying	16
Number	Description	Description	Amount	Value	Fair Value	7	Date	Des i on		Value	Fair Value	CUSIP	Description	Description	Value	Fair Value
9999999 - Totals		•				XXX	XXX	XXX	1			XXX	XXX	XXX		

SCHEDULE DB - PART C - SECTION 2

Replication (Synthetic Asset) Transactions Open

			1100	Syntholio 71000tij Trai						
	First Quarter		Second	Quarter	Third (Quarter	Fourth Quarter		Year To Date	
	1	2	3	4	5	6	7	8	9	10
	Number	Total Replication (Synthetic Asset) Transactions	Number of	Total Replication (Synthetic Asset) Transactions	Number of	Total Replication (Synthetic Asset) Transactions	Number of	Total Replication (Synthetic Asset) Transactions	Number of	Total Replication (Synthetic Asset) Transactions
	Positions	Statement Value	Positions	Statement Value	Positions	Statement Value	Positions	Statement Value	Positions	Statement Value
Beginning Inventory	9	13,450,000	9	13,450,000					9	13,450,000
Add: Opened or Acquired Transactions										
Add: Increases in Replication (Synthetic Asset) Transactions Statement Value	XXX		XXX		XXX		XXX		XXX	
Less: Closed or Disposed of Transactions			9	13,450,000					9	13,450,000
Less: Positions Disposed of for Failing Effectiveness Criteria										
Less: Decreases in Replication (Synthetic Asset) Transactions Statement Value	XXX		XXX		XXX		XXX		xxx	
7. Ending Inventory	9	13,450,000								