QUARTERLY STATEMENT

OF THE

C.M. Life Insurance Company

TO THE

Insurance Department

OF THE

STATE OF

FOR THE QUARTER ENDED JUNE 30, 2017

LIFE AND ACCIDENT AND HEALTH

2017



LIFE AND ACCIDENT AND HEALTH COMPANIES - ASSOCIATION EDITION

QUARTERLY STATEMENT

AS OF JUNE 30, 2017 OF THE CONDITION AND AFFAIRS OF THE

	C.M. L	ife Insura	ance Compa	ny	
NAIC	Group Code <u>0435</u> <u>0435</u>			s ID Number	06-1041383
Organized under the Laws of	(Current) (Prior) Connecticut		, State of Domicile or Port of	Entry	СТ
Country of Domicile		United States	of America		
Incorporated/Organized	04/25/1980		Commenced Business		05/12/1981
Statutory Home Office	100 Bright Meadow Boule	vard		Enfield , CT,	US 06082
	(Street and Number)	_	(City o	or Town, State, Co	ountry and Zip Code)
Main Administrative Office		1295 Stat			
S	pringfield , MA, US 01111	(Street and	d Number)	413-788-	8411
	own, State, Country and Zip Code)	·	(.	Area Code) (Teler	
Mail Address	1295 State Street			Springfield , MA	A. US 01111
	(Street and Number or P.O. Box)	(City o		ountry and Zip Code)
Primary Location of Books and F	Records	1295 Sta	ate Street		
		(Street and	d Number)	440.700	0444
	pringfield , MA, US 01111 bwn, State, Country and Zip Code)	,		413-788- Area Code) (Teler	
Internet Website Address	, , , , , , , , , , , , , , , , , , ,	www.massi	,		,
			nataa.som		
Statutory Statement Contact _	Sean G. McC (Name)		·		-744-3193 Telephone Number)
sn	occallen@massmutual.com	· 		413-226-	•
	(E-mail Address)			(FAX Nu	mber)
		OFFIC	CERS		
President and Chief	D 14/11/1 0 1		_		T 110 "P11
Executive Officer	Roger William Crand Pia Denise Flanaga		I reasurer _ Appointed Actuary		Todd Garett Picken Douglas Wright Taylor
Secretary	r la Dellise i lallaga	···	Appointed Actuary _		Douglas Wright Faylor
Elizabeth Ward Chicares, Exe	outive Vice President and	ОТН	IER		
Chief Financi		hael Robert Fanning,	Executive Vice President	Melvin Timo	othy Corbett, Executive Vice President
		DIRECTORS C	D TRUSTEES		
Roger William Crar			bert Fanning		Elizabeth Ward Chicares
Michael James	O'Connor #				
0					
State of County of	Massachusetts Hampden	SS:			
	· iaiipuu.				
all of the herein described asses tatement, together with related condition and affairs of the said in accordance with the NAIC An rules or regulations require diffrespectively. Furthermore, the said in the conditions of the conditions of the conditions require diffrespectively.	is were the absolute property of the exhibits, schedules and explanations reporting entity as of the reporting pe nual Statement Instructions and Acc rerences in reporting not related to accope of this attestation by the description.	e said reporting entity therein contained, a priod stated above, ar counting Practices an accounting practice ribed officers also inc	, free and clear from any lien nnexed or referred to, is a full id of its income and deduction d Procedures manual except as and procedures, accordin- cludes the related correspondi	and true statements there and true statements therefrom for the to the extent that g to the best of ling electronic filing	that on the reporting period stated above, on, except as herein stated, and that this it of all the assets and liabilities and of the period ended, and have been completed (1) state law may differ; or, (2) that state their information, knowledge and belief, with the NAIC, when required, that is an avarious regulators in lieu of or in addition
Roger William Cra		Pia Denise Secre	-		Todd Garett Picken Treasurer
Subscribed and sworn to before day of _	me this		a. Is this an original filir b. If no, 1. State the amendn 2. Date filed		

3. Number of pages attached......

ASSETS

	AS	SETS				
	-	Current Statement Date 1 2 3				
		·	2	Net Admitted Assets	December 31 Prior Year Net	
		Assets	Nonadmitted Assets	(Cols. 1 - 2)	Admitted Assets	
	Bonds	4, 149, 374, 456		4, 149, 374, 456	4,077,217,996	
2.	Stocks:	05 000 000		05 000 000	05 440 045	
	2.1 Preferred stocks			25,890,368 313,128,832		
	2.2 Common stocks			313,128,832	311,699,638	
3.	Mortgage loans on real estate: 3.1 First liens	074 160 604		974,169,604	066 656 414	
	3.2 Other than first liens	, ,		, ,	, ,	
4.	Real estate:					
4.	4.1 Properties occupied by the company (less \$					
	encumbrances)					
	4.2 Properties held for the production of income (less					
	\$encumbrances)					
	4.3 Properties held for sale (less \$					
	encumbrances)					
5	Cash (\$4,897,473), cash equivalents					
J.	(\$					
	investments (\$16,221,818)	252 022 206		252,923,396	161,298,905	
6.	Contract loans (including \$ premium notes)				143,876,200	
7.	Derivatives				508,857,982	
7. 8.	Other invested assets				200,388,085	
9.	Receivables for securities				207,318,099	
10.	Securities lending reinvested collateral assets					
11.	Aggregate write-ins for invested assets					
12.	Subtotals, cash and invested assets (Lines 1 to 11)			6,740,829,397		
	Title plants less \$ charged off (for Title insurers	, ,,,,,	,	, , , , ,	, , , ,	
	only)					
14.	Investment income due and accrued	104,862,909	363,367	104,499,542	95,388,468	
15.	Premiums and considerations:					
	15.1 Uncollected premiums and agents' balances in the course of collection			88,982	124,575	
	15.2 Deferred premiums, agents' balances and installments booked but					
	deferred and not yet due (including \$					
	earned but unbilled premiums)	(14,306,252)		(14,306,252)	(25,502,651)	
	15.3 Accrued retrospective premiums (\$					
	contracts subject to redetermination (\$)					
16.	Reinsurance:					
	16.1 Amounts recoverable from reinsurers					
	16.2 Funds held by or deposited with reinsured companies					
	16.3 Other amounts receivable under reinsurance contracts			5,430,179	, ,, ,, ,, ,,	
	Amounts receivable relating to uninsured plans					
	Current federal and foreign income tax recoverable and interest thereon			1,227,863		
	Net deferred tax asset			47,200,953		
19.	Guaranty funds receivable or on deposit			947,913		
20.	Electronic data processing equipment and software					
21.	Furniture and equipment, including health care delivery assets					
22.	(\$					
23.	Receivables from parent, subsidiaries and affiliates			285,633		
24.	Health care (\$			•	270,200	
25.	Aggregate write-ins for other than invested assets				61,242	
26.	Total assets excluding Separate Accounts, Segregated Accounts and					
	Protected Cell Accounts (Lines 12 to 25)	7,019,109,276	106, 199, 668	6,912,909,608	6,744,260,890	
27.	From Separate Accounts, Segregated Accounts and Protected Cell Accounts	1 901 569 679		1,801,568,678	1 717 071 //65	
28.	Total (Lines 26 and 27)	8,820,677,954	106,199,668	8,714,478,286	8,462,232,355	
20.	DETAILS OF WRITE-INS	0,020,077,954	100, 193,000	0,714,470,200	0,402,202,000	
1101						
1101. 1102.						
1102.						
1198.	Summary of remaining write-ins for Line 11 from overflow page					
1198.	Totals (Lines 1101 through 1103 plus 1198)(Line 11 above)					
	Miscellaneous other assets	67 343	2 944	64,399	61 242	
2501.	Cash advanced to agents					
2502. 2503.	casii auvanceu to agents					
2598.	Summary of remaining write-ins for Line 25 from overflow page					
2599.	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	2,951,487			61,242	
	, 2000 p.00 2000/(20 20 0000)	=,55.,.51	_,=,:::,:30	5.,550	0.,212	

LIABILITIES, SURPLUS AND OTHER FUNDS

	LIADILITIES, SOITI EOS AND OTTIETT O	1 Current Statement Date	2 December 31 Prior Year
1.	Aggregate reserve for life contracts \$3,988,935,683 less \$	3,988,935,683	4,029,719,301
2. 3.	Aggregate reserve for accident and health contracts (including \$ Modco Reserve)		
	Contract claims: 4.1 Life		
	4.2 Accident and health		
	Policyholders' dividends \$		
0.	6.1 Dividends apportioned for payment (including \$		
	6.2 Dividends not yet apportioned (including \$ Modco)		
	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	2,834	4,548
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		
	ceded	181,727 54 625 199	22,721 36 885 767
10.	Commissions to agents due or accrued-life and annuity contracts \$, accident and health		
11.	\$ and deposit-type contract funds \$		
12.	General expenses due or accrued		
13.	Transfers to Separate Accounts due or accrued (net) (including \$	(6,377,651)	(5,948,356)
	Taxes, licenses and fees due or accrued, excluding federal income taxes	838 , 175	1,344,045
	Net deferred tax liability		
16. 17.	Unearned investment income	(488 904)	(583, 456)
18.	Amounts held for agents' account, including \$ agents' credit balances		
19. 20.	Remittances and items not allocated		
21.	Liability for benefits for employees and agents if not included above		
22. 23.	Borrowed money \$ and interest thereon \$		
24.	Miscellaneous liabilities: 24.01 Asset valuation reserve	90 066 696	81 224 093
	24.02 Reinsurance in unauthorized and certified (\$		
	24.03 Funds held under reinsurance treaties with unauthorized and certified (\$		
	24.05 Drafts outstanding		
	24.06 Liability for amounts held under uninsured plans		
	24.08 Derivatives		
	24.10 Payable for securities lending		
25.	24.11 Capital notes \$	424,650,559	421,571,924
26.	Total liabilities excluding Separate Accounts business (Lines 1 to 25)	5,321,891,200	5,197,587,095
27. 28.	From Separate Accounts Statement Total liabilities (Lines 26 and 27)	7,123,459,878	1,717,971,465 6,915,558,560
29.	Common capital stock		2,500,000
30. 31.	Preferred capital stock		
32. 33.	Surplus notes Gross paid in and contributed surplus		
34.	Aggregate write-ins for special surplus funds		
35. 36.	Unassigned funds (surplus) Less treasury stock, at cost:	1,138,242,200	1,093,897,587
	36.1 shares common (value included in Line 29 \$		
37.	36.2 shares preferred (value included in Line 30 \$	1,588,518,408	1,544,173,795
38. 39.	Totals of Lines 29, 30 and 37	1,591,018,408 8,714,478,286	1,546,673,795 8,462,232,355
	DETAILS OF WRITE-INS		
2501. 2502.	Repurchase agreements		237,307,712 96,192,412
2503.	Derivative collateral	92,242,344	85,521,623
2598. 2599.	Summary of remaining write-ins for Line 25 from overflow page	2,853,102 [424,650,559	2,550,177 421,571,924
3101. 3102.			
3103.			
3198. 3199.	Summary of remaining write-ins for Line 31 from overflow page		
3401.			
3402. 3403.			
3498.	Summary of remaining write-ins for Line 34 from overflow page		
3499.	Totals (Lines 3401 through 3403 plus 3498)(Line 34 above)		

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		154,207,837	(79,937,671)
2. 3.	Considerations for supplementary contracts with life contingencies			850,099 299,047,027
3. 4.	Amortization of Interest Maintenance Reserve (IMR)	6 263 630		13.124.666
5.	Separate Accounts net gain from operations excluding unrealized gains or losses			10, 121,000
6.	Commissions and expense allowances on reinsurance ceded	9,562,523	9,618,403	105,200,132
7.	Reserve adjustments on reinsurance ceded			
8.	Miscellaneous Income:			
	8.1 Income from fees associated with investment management, administration and contract			
	guarantees from Separate Accounts.		19,073,631	38,301,429
	8.2 Charges and fees for deposit-type contracts			
_	8.3 Aggregate write-ins for miscellaneous income		1,119,225	2,175,902
	Totals (Lines 1 to 8.3)	328,711,280	340,740,143	378,761,584
10.	Death benefits		45,673,413	105,310,788
11.	Matured endowments (excluding guaranteed annual pure endowments)		40 70E 00E	100 100 610
12.	Annuity benefits	241 120	49,705,035 304,321	102, 128, 619
13.			304,321	467,971
14. 15.	Coupons, guaranteed annual pure endowments and similar benefits	108 0/0 505		385,325,513
16.	Group conversions			
17.	Interest and adjustments on contract or deposit-type contract funds		3 348 515	2.564.585
18.	Payments on supplementary contracts with life contingencies	582 751	492,976	967,425
19.	Increase in aggregate reserves for life and accident and health contracts		(13,954,664)	(407,371,221)
20.	Totals (Lines 10 to 19)		274.621.484	189,413,680
21.	Commissions on premiums, annuity considerations, and deposit-type contract funds (direct	200, 100,000		
	business only)	12,409,840	37,563,478	64,129,687
22.	Commissions and expense allowances on reinsurance assumed			
23.	General insurance expenses	37,314,628	15,204,172	46,273,949
24.	Insurance taxes, licenses and fees, excluding federal income taxes	5,930,503	5,528,183	8,692,466
25.	Increase in loading on deferred and uncollected premiums	(1,141,187)	5,090,198	5,046,298
26.	Net transfers to or (from) Separate Accounts net of reinsurance	(65,861,412)	(45,711,813)	(101, 153, 377)
27.	Aggregate write-ins for deductions		250,547	76,525,952
28.	Totals (Lines 20 to 27)	272,201,851	292,546,248	288,928,655
29.	Net gain from operations before dividends to policyholders and federal income taxes (Line 9 minus			
	Line 28)	56,509,429	48 , 193 , 895	89,832,929
30.	Dividends to policyholders			
31.	Net gain from operations after dividends to policyholders and before federal income taxes (Line 29	56,509,429	48, 193,895	89,832,929
32.	minus Line 30)	56,509,429 [13,711,331	11,768,163	23,469,815
_	Federal and foreign income taxes incurred (excluding tax on capital gains)	13,711,331	11,700,103	23,409,013
33.	realized capital gains or (losses) (Line 31 minus Line 32)	42,798,098	36,425,732	66,363,114
34.	Net realized capital gains (losses) (excluding gains (losses) transferred to the IMR) less capital			
0	gains tax of \$			
	transferred to the IMR)	(4,378,692)	(11, 111, 454)	(4,642,416)
35.	Net income (Line 33 plus Line 34)	38,419,406	25.314.278	61.720.698
	CAPITAL AND SURPLUS ACCOUNT	, ,	, ,	· · ·
36.	Capital and surplus, December 31, prior year	1,546,673,795	1,395,991,896	1,395,991,896
37.			25,314,278	61,720,698
38.	Change in net unrealized capital gains (losses) less capital gains tax of \$(6, 160, 999)			
39.	Change in net unrealized foreign exchange capital gain (loss)	21,586,212	(8,897,402)	(23,588,824)
40.	Change in net deferred income tax	(5,816,544)	(27,226,018)	9,079,359
41.	Change in nonadmitted assets			
42.	Change in liability for reinsurance in unauthorized and certified companies			
43.	Change in reserve on account of change in valuation basis, (increase) or decrease			
44.	Change in asset valuation reserve	(8,842,603)	(2,724,538)	(4,528,370)
45.	Change in treasury stock			
46.	Surplus (contributed to) withdrawn from Separate Accounts during period			
47.	Other changes in surplus in Separate Accounts Statement			
48.	Change in surplus notes			
49.	Cumulative effect of changes in accounting principles			
50.	Capital changes:			
	50.1 Paid in			
	50.2 Transferred from surplus (Stock Dividend)			
E4	50.3 Transferred to surplus	 		
51.	Surplus adjustment:			
	51.1 Paid in			
	51.2 Transferred to capital (Stock Dividend) 51.3 Transferred from capital			
	51.4 Change in surplus as a result of reinsurance			
52.	Dividends to stockholders			
53.	Aggregate write-ins for gains and losses in surplus		(5,021,738)	76,237,328
	Net change in capital and surplus for the year (Lines 37 through 53)		126,218,253	150,681,899
55.	Capital and surplus, as of statement date (Lines 36 + 54)	1,591,018,408	1,522,210,149	1,546,673,795
- 55.	DETAILS OF WRITE-INS	.,001,010,700	.,022,210,170	7,010,010,100
08.301	Revenue sharing	1 073 746	1 114 775	2,164,741
	Miscellaneous			11,161
		, , , , , , , , , , , , , , , , , , ,	,	
	Summary of remaining write-ins for Line 8.3 from overflow page			
08.399.	Totals (Lines 08.301 through 08.303 plus 08.398) (Line 8.3 above)	1,084,489	1,119,225	2,175,902
2701.	Reinsurance ceded adjustment	(3,364,015)		80,997,397
2702.	Miscellaneous charges to operations	760,431	250,547	(4,471,445)
2703.				
2798.	Summary of remaining write-ins for Line 27 from overflow page			
2799.	Totals (Lines 2701 through 2703 plus 2798)(Line 27 above)	(2,603,584)	250,547	76,525,952
	Reinsurance ceded adjustment			78,099,538
5303.				
	0 () 1 () 1 () 1 () 50 () (1		
	Summary of remaining write-ins for Line 53 from overflow page	(8,080,717)	(5,021,738)	76,237,328

CASH FLOW

		1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
	Cash from Operations			
1.	Premiums collected net of reinsurance	134,243,685	138,177,636	(83,809,319)
2.	Net investment income	140 , 151 , 105	146,681,806	303,620,327
3.	Miscellaneous income	15,408,281	25,172,080	155,427,406
4.	Total (Lines 1 to 3)	289,803,071	310,031,522	375,238,414
5.	Benefit and loss related payments	328,679,995	284,114,284	600,771,349
6.	Net transfers to Separate Accounts, Segregated Accounts and Protected Cell Accounts	(65, 432, 117)	(44,513,663)	(101,583,290)
7.	Commissions, expenses paid and aggregate write-ins for deductions	40,604,174	41,288,132	99,061,993
8.	Dividends paid to policyholders			
9.	Federal and foreign income taxes paid (recovered) net of \$417,606 tax on capital			
	gains (losses)	14,248,121	27,296,515	36,006,306
10.	Total (Lines 5 through 9)	318, 100, 173	308, 185, 268	634,256,358
11.	Net cash from operations (Line 4 minus Line 10)	(28,297,102)	1,846,254	(259,017,944)
	Cash from Investments			
12.	Proceeds from investments sold, matured or repaid:			
	12.1 Bonds	628,312,644	373,756,418	881,884,688
	12.2 Stocks	5,048,210	7,487,868	15,312,374
	12.3 Mortgage loans	43,503,172	49,887,613	133,341,871
	12.4 Real estate			, ,
				53, 113, 131
	12.6 Net gains or (losses) on cash, cash equivalents and short-term investments			
	12.7 Miscellaneous proceeds	22,807,995	8,443,209	5,094,588
	12.8 Total investment proceeds (Lines 12.1 to 12.7)			1,086,831,281
10	, ,		407,041,001	1,000,031,201
13.	Cost of investments acquired (long-term only):	074 504 004	504 040 040	770 007 004
	13.1 Bonds		584,648,346	
	13.2 Stocks			9,461,733
	13.3 Mortgage loans	46,717,184	74,082,840	123,326,082
	13.4 Real estate			
	13.5 Other invested assets	14,238,213	24,084,358	37,524,167
	13.6 Miscellaneous applications	(67,705,484)	(4,499,035)	1,960,941
	13.7 Total investments acquired (Lines 13.1 to 13.6)	665,325,306	686,543,047	952,269,947
14.	Net increase (or decrease) in contract loans and premium notes	1,262,647	(2,007,774)	(9,653,575)
15.	Net cash from investments (Line 12.8 minus Line 13.7 and Line 14)	69,373,523	(226,993,742)	144,214,909
	Cash from Financing and Miscellaneous Sources			
16.	Cash provided (applied):			
	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	(4, 144, 727)	7,432,676	11,608,541
	16.5 Dividends to stockholders			
	16.6 Other cash provided (applied)	54,692,797	72,330,176	(49,399,219)
17.	Net cash from financing and miscellaneous sources (Line 16.1 through Line 16.4 minus Line 16.5 plus Line 16.6)	50,548,070	79,762,852	(37,790,678)
	plus Line 10.0)	30,040,070	70,702,002	(01,100,010)
	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)	91,624,491	(145,384,636)	(152,593,713)
19.	Cash, cash equivalents and short-term investments:			
	19.1 Beginning of year	161,298,905	313,892,618	313,892,618
	19.2 End of period (Line 18 plus Line 19.1)	252,923,396	168,507,982	161,298,905
	upplemental disclosures of cash flow information for non-cash transactions:	40.000 =:-	۱ ۱ م	0.000 = 1
	D1. Bond conversions and refinancing	' '	' '	21,303,729 849,213
20.000	O3. Interest capitalization for long-term debt		40,842	84,894
	04. Net investment income payment in-kind bonds		188,977	446,220
20.000	06. Dividend reinvestment		93,099	134,636
	07. Other invested assets to stock 08. Transfer of mortgage loan to other than invested assets			13,835,566 1,357,792
	19. Other invested assets to bonds			345,365

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

Troto: Cappionional alcolocarco di cacii noti inicimatic	in tot more dadir trandaditorior		
20.0010. Stock conversions to other invested asset	ets	 	55,852

EXHIBIT 1

DIRECT PREMIUMS AND DEPOSIT-TYPE CONTRACTS

	DIRECT PREMIUMS AND DEPOSIT-TYPE (CONTRACTS	2	3
		Current Year	Prior Year	Prior Year Ended
		To Date	To Date	December 31
1.	Industrial life			
2.	Ordinary life insurance	110,099,958	115,796,277	228,947,613
3.	Ordinary individual annuities	105,295,756	113,059,118	218, 167, 919
4.	Credit life (group and individual)			
5.	Group life insurance	37,205	4,060	650,373
6.	Group annuities			
7.	A & H - group			
8.	A & H - credit (group and individual)			
9.	A & H - other			
10.	Aggregate of all other lines of business			
11.	Subtotal	215,432,919	228,859,455	447,765,905
12.	Deposit-type contracts			
13.	Total	215,432,919	228,859,455	447,765,905
	DETAILS OF WRITE-INS			
1001.				
1002.				
1003.				
1098.	Summary of remaining write-ins for Line 10 from overflow page			
1099.	Totals (Lines 1001 through 1003 plus 1098)(Line 10 above)			

TABLE OF CONTENTS

- Note 1 Summary of Significant Accounting Policies and Going Concern
- Note 2 Accounting Changes and Corrections of Errors
- Note 3 Business Combinations and Goodwill
- Note 4 Discontinued Operations
- Note 5 Investments
- Note 6 Joint Ventures, Partnerships and Limited Liability Companies
- Note 7 Investment Income
- Note 8 Derivative Instruments
- Note 9 Income Taxes
- Note 10 Information Concerning Parent, Subsidiaries and Affiliates
- Note 11 Debt
- 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
- Note 15 Leases
- Note 16 Information About Financial Instruments With Off-Balance Sheet Risk and Financial Instruments With Concentrations of Credit Risk
- Note 17 Sale, Transfer and Servicing of Financial Assets and Extinguishments of Liabilities
- Note 18 Gain or Loss to the Reporting Entity from Uninsured Plans and the Uninsured Portion of Partially Insured
- Note 19 Direct Premium Written/Produced By Managing General Agents/Third Party Administrators
- Note 20 Fair Value Measurements
- Note 21 Other Items
- Note 22 Events Subsequent
- Note 23 Reinsurance
- Note 24 Retrospectively Rated Contracts and Contracts Subject to Redetermination
- Note 25 Change in Incurred Losses and Loss Adjustment Expenses
- Note 26 Intercompany Pooling Arrangements
- 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 Type Liabilities by Withdrawal Characteristics
- Note 33 Premium and Annuity Considerations Deferred and Uncollected
- Note 34 Separate Accounts
- Note 35 Loss/Claim Adjustment Expenses

Note 1 - Summary of Significant Accounting Policies and Going Concern

a. 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:

		F/S	F/S			
	SSAP#	Page	Line #		2017	2016
NET INCOME						
(1) State basis (Page 4, Line 35, Columns 1 & 3)	XXX	XXX	XXX	\$	38,419,406	\$ 61,720,698
(2) State prescribed practices that increase/(decrease) NAIC SAP:	; N/A	N/A	N/A		-	-
(3) State permitted practices that increase/(decrease) NAIC SAP:	N/A	N/A	N/A			<u> </u>
(4) NAIC SAP (1-2-3=4)	XXX	XXX	XXX	\$	38,419,406	\$ 61,720,698
SURPLUS						
(5) State basis (Page 3, Line 38, Columns 1 & 2)	XXX	XXX	XXX	\$	1,591,018,408	\$ 1,546,673,795
(6) State prescribed practices that increase/(decrease) NAIC SAP:	; N/A	N/A	N/A		-	-
(7) State permitted practices that increase/(decrease) NAIC SAP:	N/A	N/A	N/A	-	<u>-</u>	<u>-</u>
(8) NAIC SAP (5-6-7=8)	XXX	XXX	XXX	\$	1,591,018,408	\$ 1,546,673,795

- b. Use of estimates in the preparation of the financial statements No change
- c. Accounting policy:
 - (1-5) No change
 - (6) For loan-backed and structured securities, 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.

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

d. Going concern - No change

Note 2 - Accounting Changes and Corrections of Errors

a. For the six months ended June 30, 2017, corrections of prior year errors were recorded in shareholder's equity:

	Increase (D		Correction		
Prior Current		or Current			of Asset
	Years		Year		or Liability
	Net Income		Surplus		Balances
\$	-	\$	(227,387)	\$	(227,387)
	(447,929)		(447,929)		(447,929)
	(2,921,931)		(2,921,931)		(2,921,931)
\$	(3,369,860)	\$	(3,597,247)	\$	(3,597,247)
		Prior Years Net Income \$ - (447,929) (2,921,931)	Prior Years Net Income \$ - \$ (447,929) (2,921,931)	Years Year Net Income Surplus \$ - \$ (227,387) (447,929) (447,929) (2,921,931) (2,921,931)	Prior Years Current Year Net Income Surplus \$ (227,387) \$ (447,929) (2,921,931) (2,921,931)

Of the \$3,597,247 decrease to surplus for prior year errors, \$3,369,860 was recorded as prior period adjustments and \$227,387 was recorded, net of tax, as a change in nonadmitted assets in the Statutory Statements of Changes in Surplus.

For the six months ended June 30, 2016, corrections of prior year errors were recorded in shareholder's equity, net of tax:

	Increase (D		Correction		
	 Prior		Current		of Asset
	Year		Year	or Liability	
	 Net Income		Surplus		Balances
Federal income tax receivable	\$ (3,572,808)	\$	(3,572,808)	\$	3,572,808
Total	\$ (3,572,808)	\$	(3,572,808)	\$	3,572,808

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

b. Adoption of new accounting standards

In June 2016, the NAIC adopted modifications to SSAP No. 26, Bonds, Excluding Loan-backed and Structured Securities, and SSAP No. 43R, Loan-backed and Structured Securities, which were effective January 1, 2017 and should be prospectively applied. These modifications clarified that the amount of prepayment penalties or acceleration fees reported as investment income should equal the total proceeds received less the par value of the investment; and any difference between the carrying value and the par value at the time of disposal will be reported as realized capital gains and losses. These modifications also added specific disclosures related to securities sold, redeemed or otherwise disposed of as a result of a callable feature. These modifications did not have a significant impact on the Company's financial statements.

In June 2016, the NAIC adopted substantive revisions to SSAP No. 51, *Life Contracts*, to incorporate references to the Valuation Manual (VM) and to facilitate the implementation of PBR, which were effective on January 1, 2017. The adoption of PBR only applies to new life insurance policies issued after January 1, 2017, however the Company plans to adopt these revisions to SSAP No.51 using the 3-year phased in approach by no later than January 1, 2020. The Company currently uses formulas and assumptions to determine reserves as prescribed by state laws and regulations. Under PBR, the Company will be required to hold the higher of (a) the reserve using prescribed factors and (b) the PBR reserve which considers a wide range of future economic conditions, computed using justified company experience factors, such as mortality, policyholder behavior and expenses. The Company is currently assessing the impact of these modifications on the Company's financial statements.

In August 2016, the NAIC adopted modifications to SSAP No. 51, *Life Contracts*, which were effective January 1, 2017. These modifications clarified that annual assumption changes from reserving methods used in principles-based reserving (PBR) would not qualify as a change in valuation basis. Changes in valuation basis are recorded directly to surplus instead of through income. These modifications were made to accommodate PBR which became effective January 1, 2017. These modifications did not have an impact on the Company's financial statements.

In June 2017, the NAIC adopted modifications to SSAP No. 30, Investment in Common Stock, SSAP No. 48, Joint Ventures, Partnerships and Limited Liability Method of Accounting, and SSAP No. 97, Investments in Subsidiary Controlled and Affiliated Entities as they relate to ASU 2016-07, Simplifying the Transition to the Equity Method of Accounting which were effective January 1, 2017. These modifications included the definition of control and provided guidance as to when an investment qualified (or no longer qualifies) for the equity method of accounting. These modifications further specified that when the level of investment in a subsidiary, controlled or affiliated (SCA) entity fell below the level of control, defined as the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of the investee in SSAP No. 97, the reporting entity should discontinue the use of the equity method of accounting. When an entity becomes qualified to use the equity method of accounting, the entity should add the cost of acquiring the additional interest in the investee to the current basis of the previously held interest and apply the equity method of accounting, prospectively. The Company has adopted these modifications.

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
- c. Reverse mortgages No change

- d. Loan-backed and structured securities:
 - 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 OTTI classified on the following bases for recognizing OTTI:

			(1)			(2)			(3)
			At'		_	OTTI	1		
			Amortized			cogniz			
			Cost Basis	(0.		in Loss			Fain Makes
			Before	(28		(2t	,		Fair Value
		L	OTTI	Inter	est	Nor	n-interest		1-(2a+2b)
ОТТ	I recognized in the first quarter								
a.	Intent to sell	\$	_	\$	_	\$	_	\$	_
b.	Inability or lack of intent to retain the investment	Ψ		Ψ		Ψ		Ψ	
	in the security for a period of time sufficient to								
	recover the amortized cost basis		4,815,924		-		31,502		4,784,422
C.	Total first quarter	\$	4,815,924	\$	-	\$	31,502	\$	4,784,422
	•	=				<u> </u>		=	
OTT	I 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	_	4,452,491		-		74,160		4,378,331
f.	Total second quarter	\$	4,452,491	\$		\$	74,160	\$	4,378,331
	I recognized in the third quarter								
g.	Intent to sell	\$	-	\$	-	\$	-	\$	-
h.	Inability or lack of intent to retain the investment								
	in the security for a period of time sufficient to								
	recover the amortized cost basis	_		Ф.				<u></u>	
i.	Total third quarter	\$	-	\$		\$		\$	
ОТТ	I recognized in the fourth quarter								
j.	Intent to sell	\$	_	\$	_	\$	_	\$	_
k.	Inability or lack of intent to retain the investment	Ψ		Ψ		Ψ		Ψ	
•••	in the security for a period of time sufficient to								
	recover the amortized cost basis		_		_		_		-
I.	Total fourth quarter	\$	_	\$	_	\$		\$	_
	•	<u>-</u>						-	
m.	Annual aggregate total			\$	-	\$	105,662		

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
22541QJR4	\$ 3,126.29	\$ 15.01	\$ (3,111.28)	\$ 15.01	\$ 1,926.23	March 31, 2017
45660LYW3	130,210.18	121,919.75	(8,290.43)	121,919.75	118,232.29	March 31, 2017
86358RA23	224,855.80	212,420.66	(12,435.14)	212,420.66	218,429.62	March 31, 2017
88157QAL2	39,747.30	36,415.86	(3,331.44)	36,415.86	89,960.46	March 31, 2017
77277LAF4	2,504,112.68	2,501,621.14	(2,491.54)	2,501,621.14	3,522,211.89	March 31, 2017
77277LAH0	126,242.42	126,120.88	(121.54)	126,120.88	295,836.23	March 31, 2017
77277LAJ6	1,787,629.01	1,785,908.32	(1,720.69)	1,785,908.32	2,216,416.26	March 31, 2017
76110H4M8	1,297.98	684.22	(613.76)	684.22	1,198.02	June 30, 2017
86358RLG0	244.55	190.61	(53.94)	190.61	2,119.63	June 30, 2017
88157QAL2	37,298.26	30,851.62	(6,446.64)	30,851.62	88,941.72	June 30, 2017
77277LAF4	2,501,621.14	2,463,054.83	(38,566.31)	2,463,054.83	3,813,186.02	June 30, 2017
77277LAH0	126,120.88	124,239.83	(1,881.05)	124,239.83	304,270.58	June 30, 2017
77277LAJ6	1,785,908.32	1,759,309.67	(26,598.65)	1,759,309.67	2,399,517.05	June 30, 2017
Totals	\$ 9,268,414.81	\$ 9,162,752.40	\$ (105,662.41)	\$ 9,162,752.40	\$ 13,072,246.00	

- (4) As of June 30, 2017, 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:
 - a. The aggregate amount of unrealized losses:

Less than 12 months
 12 months or longer
 (2,476,075)
 (2,476,075)

The aggregate related fair value of securities with unrealized losses:

Less than 12 months
 12 months or longer
 182,755,957
 114,982,678

- (5) No change
- e. Repurchase agreements:
 - (1-2) No change
 - (3) The Company does not have any securities lending transactions administered by an affiliated agent.
 - (4-6) No change
- f. Real estate No change
- g. Low income housing tax credit properties No change
- h. Restricted assets No change
- i. Working capital finance investments: The Company did not invest in working capital finance investments.
- j. Offsetting and netting of assets and liabilities: The Company reports derivative and repurchase agreement assets and liabilities as gross in the financial statements without offsetting.
- k. Structured notes:

A structured note is a direct debt issuance by a corporation, municipality, or government entity, ranking pari-passu with the issuer's other debt issuance of equal seniority where either: (a) the coupon and/or principal payments are linked, in whole or in part, to prices or payment streams from index or indices, or assets deriving their value from other than the issuer's credit quality, or (b) the coupon and/or principal payments are leveraged by a formula that is different from either a fixed coupon, or a non-leveraged floating rate coupon linked to an interest rate index, including but not limited to the London Interbank Offered Rate (LIBOR) or the prime rate. As structured notes are issuer obligations without a trust, they are within the scope of SSAP No. 26, "Bonds, Excluding Loan-backed and Structured Securities" (SSAP No. 26). Structured notes are different than the asset backed structured securities, which are accounted for under SSAP No. 43R, "Revised - Loan-Backed and Structured Securities" (SSAP No. 43R), as they lack either a trust or assets backing them. The disclosure below allows regulators to assess the volume of activity in structured notes and to determine whether additional accounting or reporting revisions, such as valuation and risk-based capital, are needed. To satisfy this request, the Company is required to separately identify structured notes, on a CUSIP basis and provide information by CUSIP for actual cost, fair value, book/adjusted carrying value, and whether the structured note is a mortgage-referenced security. The following sets forth the actual cost, fair value and carrying value of structured notes as of June 30, 2017:

CUSIP Identification	Actual Cost	Fair Value	Book / Adjusted Carrying Value	Mortgage- Referenced Security (YES/NO)
30711XBE3	\$ 90,811	\$ 90,995	\$ 90,811	YES
3137G0EQ8	186,830	187,078	186,830	YES
3137G0HQ5	234,758	235,811	234,758	YES
391164AF7	444,402	437,932	435,735	NO
Total	\$ 956,801	\$ 951,816	\$ 948,134	XXX

I. 5* Securities

	Investment	Number of 5*	Securities	Aggregate	BACV	Aggregate Fair Value			
		Current Year	Prior Year	Current Year	Prior Year	Current Year	Prior Year		
(1)	Bonds - AC	18	15	\$15,369,419	\$15,324,549	\$15,585,790	\$15,481,310		
(2)	Bonds - FV	-	-	-	-	-	-		
(3)	LB&SS - AC	-	-	-	-	-	-		
(4)	LB&SS - FV	-	-	-	-	-	-		
(5)	Preferred Stock - AC	2	2	2,058,000	2,058,000	2,290,484	2,226,717		
(6)	Preferred Stock - FV	-	-	-	-	-	-		
(7)	Total (1+2+3+4+5+6)	20	17	\$17,427,419	\$17,382,549	\$17,876,274	\$17,708,027		

AC - Amortized Cost FV - Fair Value

Note 6 – Joint Ventures, Partnerships and Limited Liability Companies - 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

a-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

- 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 compensatory damages, 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
- Transfer and Servicing of Financial Assets:
 - (1) No change
 - (2) The Company did not have any servicing assets or liabilities in 2017 or 2016.
 - (3) No change
 - (4) The Company did not have interests that continue to be held by a transferor in securitized financial assets in 2017 or 2016.
 - (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 to enhance the Company's yield on its investment portfolio.
 - (2) The Company did not sell any securities with the NAIC Designation 3 or below through the first quarter ended June 30, 2017 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 the 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 maintains 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.

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

	June 30, 2017								
	Level 1		Level 2		Level 3		Total		
Financial assets:									
Bonds:									
Industrial and miscellaneous	\$ -	\$	-	\$	792,795	\$	792,795		
Parent, subsidiaries and affiliates	-		-		6,379,643		6,379,643		
Preferred stocks	-		-		314,416		314,416		
Common stock - subsidiary and affiliate	16,709,720		-		-		16,709,720		
Common stock - unaffiliated	368,241		-		2,675,126		3,043,367		
Derivatives:									
Interest rate swaps	-		424,210,381		-		424,210,381		
Options	-		26,006,240		-		26,006,240		
Currency swaps	-		34,851,038		-		34,851,038		
Forward contracts	-		255,695		-		255,695		
Separate account assets	1,801,567,181		1,497		-		1,801,568,678		
Total financial assets carried									
at fair value	\$ 1,818,645,142	\$	485,324,851	\$	10,161,980	\$	2,314,131,973		
Financial liabilities:									
Derivatives:									
Interest rate swaps	\$ -	\$	493,360,036	\$	-	\$	493,360,036		
Currency swaps	-		4,791,912		-		4,791,912		
Forward contracts	-		3,600,815		-		3,600,815		
Credit default swaps			36,544		-		36,544		
Total financial liabilities carried									
at fair value	\$ -	\$	501,789,307	\$		\$	501,789,307		

For the period ended June 30, 2017, there were no significant transfers between Level 1 and Level 2.

	December 31, 2016									
	Level 1	Level 2	Level 3	Total						
Financial assets:										
Bonds:										
Industrial and miscellaneous	\$ -	\$ 220,000	\$ 759,384	\$ 979,384						
Parent, subsidiaries and affiliates	-	1,481,879	5,773,679	7,255,558						
Preferred stocks	1,230,851	-	357,219	1,588,070						
Common stock - subsidiary and affiliate	20,771,586	-	-	20,771,586						
Common stock - unaffiliated	398,181	-	2,235,432	2,633,613						
Derivatives:										
Interest rate swaps	-	426,368,022	-	426,368,022						
Options	-	26,052,843	-	26,052,843						
Currency swaps	-	54,642,404	-	54,642,404						
Forward contracts	-	1,794,714	-	1,794,714						
Separate account assets	1,717,971,424	41	-	1,717,971,465						
Total financial assets carried										
at fair value	\$ 1,740,372,042	\$ 510,559,903	\$ 9,125,714	\$ 2,260,057,659						
Financial liabilities:										
Derivatives:										
Interest rate swaps	\$ -	\$ 497,544,408	\$ -	\$ 497,544,408						
Currency swaps	-	814,610	-	814,610						
Forward contracts	-	2,696,585	-	2,696,585						
Credit default swaps	-	59,862	-	59,862						
Total financial liabilities carried										
at fair value	\$ -	\$ 501,115,465	\$ -	\$ 501,115,465						

For the year ended December 31, 2016, there were no significant transfers between Level 1 and Level 2.

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

	Balance													Balance
	as of	Tran	nsfers ⁽¹⁾	Gains in	Gains in									as of
	 01/01/2017	In	Out	Net Income	Surplus	F	Purchases	ŀ	ssuances	Sales	5	Settlements	(06/30/2017
Financial assets:														
Bonds:														
Industrial and miscellaneous	\$ 759,384	\$ 716,165	\$ (1,085,673)	\$ 67	\$ 491,800	\$	20,397	\$	-	\$ (96,944)	\$	(12,401)	\$	792,795
Parent, subsidiaries and affiliates	5,773,679	-	-	-	605,964		-		-	-		-		6,379,643
Preferred stocks	357,219	314,416	(357,219)	-	-		-		-	-		-		314,416
Common stocks - unaffiliated	 2,235,432	153,497	(137,516)	-	285,908		200,705		-	-		(62,900)		2,675,126
Total financial assets	\$ 9,125,714	\$ 1,184,078	\$ (1,580,408)	\$ 67	\$ 1,383,672	\$	221,102	\$	-	\$ (96,944)	\$	(75,301)	\$	10,161,980

⁽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.

	Balance as of 01/01/2016	Transfer	S ⁽¹⁾ Out	(Losses) Gains in Net Income	Gains (Losses) in Surplus	Purchases	Issuances	Sales	Settlements	Balance as of 12/31/2016
Financial assets:										
Bonds:										
Industrial and miscellaneous	\$ 173,966	\$ 1,392,338	-	\$ 39,420	\$ (815,360)	\$ 4,848	\$ 76,462	\$ (4,667)	\$ (107,623)	\$ 759,384
Parent, subsidiaries and affiliates	4,998,577	-	-	(1,515)	775,102	217,005	217,005	-	(432,495)	5,773,679
Preferred stock	270,437	-	(173,897)	-	(10,271)	270,950	-	-	-	357,219
Common stock - unaffiliated	2,209,554	-	-	(69,722)	106,882	307,898		(171,914)	(147,266)	2,235,432
Total financial assets	\$ 7,652,534	\$ 1,392,338	(173,897)	\$ (31,817)	\$ 56,353	\$ 800,701	\$ 293,467	\$ (176,581)	\$ (687,384)	\$ 9,125,714

⁽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.

- 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:

Separate account assets - These assets primarily include bonds (industrial and miscellaneous; U.S. government and agencies) and derivatives. Their fair values are determined as follows:

Bonds (Industrial and miscellaneous) - These securities are principally valued using the market or the income approaches. Level 2 valuations are based primarily on quoted prices in markets that are not active, broker quotes, matrix pricing or other similar techniques that use standard market observable inputs such as benchmark yields, spreads versus benchmark yields, new issuances, issuer ratings, duration, and trades of identical or comparable securities. Privately placed securities are valued using discounted cash flow models using standard market observable inputs, and inputs derived from, or corroborated by, market observable data including market yield curve, duration, call provisions, observable prices and spreads for similar publicly traded or privately traded issuances that incorporate the credit quality and industry sector of the issuer. This level also includes securities priced by independent pricing services that use observable inputs. Valuations based on matrix pricing or other similar techniques that utilize significant unobservable inputs or inputs that cannot be derived principally from, or corroborated by, observable market data, including adjustments for illiquidity, delta spread adjustments or spreads to reflect industry trends or specific credit-related issues are classified as Level 3. In addition, inputs including quoted prices for identical or similar securities that are less liquid and based on lower levels of trading activity than securities classified in Level 2 are classified as Level 3.

Bonds (U.S. government and agencies) - These securities are principally valued using the market approach. Level 2 valuations are based primarily on quoted prices in markets that are not active, or using matrix pricing or other similar techniques using standard market observable inputs such as the benchmark U.S. Treasury yield curve, the spreads versus the U.S. Treasury yield curve for the identical security and comparable securities that are actively traded.

Derivative assets and liabilities - These financial instruments are primarily valued using the market approach. The estimated fair value of derivatives is based primarily on 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 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.

- 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 Note 21. "Other Items".

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

June 30, 2017

	Aggregate Fair Value	Admitted Assets	Level 1	Level 2	Level 3	Not Practicable (Carrying Value)
Financial assets:						
Bonds:						
U. S. government and agencies	\$ 284,923,223	\$ 273,653,830	\$ -	\$ 284,923,223	\$ -	\$ -
All other governments	1,394,811	1,408,973	-	1,394,811	-	-
States, territories and possessions	34,615,716	31,131,319	-	34,615,716	-	-
Political subdivisions	17,179,256	15,721,923	-	17,179,256	-	-
Special revenue	137,437,867	123,696,535	-	137,437,867	-	-
Industrial and miscellaneous	3,639,525,712	3,463,420,684	-	1,921,665,448	1,717,860,264	-
Parent, subsidiaries and affiliates	247,956,632	240,341,192	-	33,532,004	214,424,628	-
Preferred stocks	27,015,261	25,890,368	18,093,925	-	8,921,336	-
Common stock - subsidiary and affiliate ⁽¹⁾	16,709,720	16,709,720	16,709,720	-	-	-
Common stock - unaffiliated	3,043,367	3,043,367	368,241	-	2,675,126	-
Mortgage loans - commercial	862,676,161	836,113,857	-	-	862,676,161	-
Mortgage loans - residential	134,294,758	138,055,747	-	-	134,294,758	-
Cash, cash equivalents and						
short-term investments	252,923,396	252,923,396	4,897,473	248,025,923	-	-
Derivatives:						
Interest rate swaps	424,210,381	424,210,382	-	424,210,381	-	-
Options	26,006,240	26,006,240	-	26,006,240	-	-
Currency swaps	34,851,038	34,851,038	-	34,851,038	-	-
Forward contracts	255,695	255,695	-	255,695	-	-
Separate account assets	1,801,568,678	1,801,568,678	1,801,567,181	1,497	-	-
Financial liabilities:						
Repurchase agreements	230,927,941	230,927,941	-	230,927,941	-	-
Individual annuity contracts	3,597,767,065	3,049,713,535	-	-	3,597,767,065	-
Supplementary contracts	62,518,856	61,899,858	-	-	62,518,856	-
Derivatives:						
Interest rate swaps	493,360,036	493,360,036	-	493,360,036	-	-
Currency swaps	4,791,912	4,791,912	-	4,791,912	-	-
Forward contracts	3,600,815	3,600,815	-	3,600,815	-	-
Credit default swaps	36,544	36,544	-	36,544	-	-

⁽¹⁾Common stocks - affiliates do not include MML Bay State, which had a statutory carrying value of \$293,375,745.

December 31, 2016 Not Practicable Admitted Aggregate (Carrying Fair Value Level 2 Assets Level 1 Level 3 Value) Financial assets: Bonds 286,239,873 \$ 271,782,823 \$ \$ 286,239,873 \$ \$ U. S. government and agencies All other governments 1.375.579 1.424.435 1.375.579 States, territories and possessions 36,138,133 32,845,567 36,138,133 15.255.335 Political subdivisions 16.330.724 16.330.724 Special revenue 137.597.172 126.129.789 137.292.072 305 100 Industrial and miscellaneous 3,495,414,794 3,360,947,164 1,850,041,065 1,645,373,729 Parent, subsidiaries and affiliates 275.213.009 268.832.883 35.476.429 239.736.580 Preferred stocks 25,078,956 25,449,045 15.943.224 9,135,732 Common stock - subsidiary and affiliate-1 20.771.586 20.771.585 20.771.586 Common stock - unaffiliated 2.235.432 2.633.613 2.633.613 398.181 Mortgage loans - commercial 839,408,170 816,137,821 839,408,170 146.402.827 150.518.593 146.402.827 Mortgage loans - residential Cash, cash equivalents and short-term investments 161,298,905 161,298,905 11,826,118 149,472,787 Derivatives: 426.368.022 Interest rate swaps 426.368.021 426.368.022 26,052,843 26,052,843 Options 26,052,843 54.642.404 54,642,404 54,642,404 Currency swaps Forward contracts 1 794 714 1 794 714 1,794,714 Separate account assets 1,717,971,465 1,717,971,465 1,717,971,424 41 Financial liabilities: Repurchase agreements 236 963 235 236 963 235 236.963.235 3,635,969,026 Individual annuity contracts 3,635,969,026 3,089,363,030 65,978,799 65,978,799 65,325,544 Supplementary contracts Derivatives: Interest rate swaps 497,544,408 497,544,408 497,544,408 814.610 814.610 814.610 Currency swaps Forward contracts 2.696.585 2.696.585 2.696.585 Credit default swaps 59,862 59,862 59,862

d. As of June 30, 2017 and December 31, 2016, the Company had no investments where it was not practicable to estimate fair value.

Note 21 - Other Items

- a. Unusual or infrequent 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. The principal risks include insurance and underwriting risks, investment and interest rate risks, currency exchange risk and credit risk. The combined impact of these risks could have a material, adverse effect on the Company's financial statements or result in operating losses in future periods. The Company employs the use of reinsurance, portfolio diversification, asset/liability management processes and other risk management techniques to mitigate the impact of these risks. This condensed risks and uncertainties disclosure should be read in conjunction with the disclosure in the Company's 2015 Annual Statement.

Insurance and underwriting risks

The Company prices its products based on estimated benefit payments reflecting assumptions with respect to mortality, morbidity, longevity, persistency, interest rates and other factors. If actual policy experience emerges that is significantly and adversely different from assumptions used in product pricing, the effect could be material to the profitability of the Company. The Company reinsures certain life insurance policies to mitigate the impact of its underwriting risk.

Investment and interest rate risks

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

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

⁽¹⁾ Common stocks - affiliates do not include MML Bay State, which had a statutory carrying value of \$288,294,439.

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

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

Currency exchange risk

The Company has currency risk due to its non-U.S. dollar 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 pre-specified exchange of interest and principal. Forward contracts are used to hedge movements in exchange rates.

Credit and other market risks

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

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

Significant volatility in the financial markets, and government actions taken in response, may exacerbate some of the risks the Company faces. The Company holds investments in energy and certain other commodity sectors, which have experienced similar overall market volatility and declines. 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 exposed to these sectors. In addition, concerns over the solvency of certain countries and sovereignties and the entities that have significant exposure to their debt have created market volatility. This volatility may continue to affect the performance of various asset classes until there is an ultimate resolution of the sovereign debt related concerns.

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

Political Uncertainties

Political events, such as the ongoing volatility with respect to the European Union, may trigger or exacerbate the risk factors described above. Whether those underlying risk factors are driven by politics or not, the Company's dynamic approach to managing risks enables us to utilize the mitigating actions described above to attempt to reduce the potential impact of each underlying risk factor on the Company.

- d. 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:

_			Months Ended une 30, 2017		
	Actual	Carrying	Fair		
Alt-A:	Cost	Value	Value		OTTI
a. Residential mortgage-backed securities \$	20,926,330	\$ 22,252,968	\$ 26,535,034	\$	12,015
b. Commercial mortgage-backed securities	-	-	-		-
c. Collateralized debt obligations	-	-	-		-
d. Structured securities	-	-	-		-
e. Equity investments in SCAs *	1,128,496	1,162,734	1,416,517		7,000
f. Other assets	-	-	-		
g. Total	22,054,826	\$ 23,415,702	\$ 27,951,551	\$	19,015

_		J		Six Months Ended June 30, 2017			
	Actual		Carrying		Fair		
Subprime:	Cost		Value		Value		OTTI
a. Residential mortgage-backed securities \$	10,543,799	\$	11,322,776	\$	12,349,157	\$	9,778
b. Commercial mortgage-backed securities	-		=		-		-
 Collateralized debt obligations 	-		-		-		-
d. Structured securities	-		-		-		-
e. Equity investments in SCAs *	1,355,072		1,694,106		2,105,160		-
f. Other assets	-		-		-		-
g. Total \$	11,898,871	\$	13,016,882	\$	14,454,317	\$	9,778

^{*} 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.

						Year Ended
		Dec	December 31, 2016			
	Actual		Carrying	Fair		
Alt-A:	Cost		Value	Value		OTTI
a. Residential mortgage-backed securities \$	33,327,210	\$	23,689,332	\$ 28,469,080	\$	3,053
b. Commercial mortgage-backed securities	-		-	-		-
c. Collateralized debt obligations	-		-	-		-
d. Structured securities	-		-	-		-
e. Equity investments in SCAs *	2,025,204		1,322,448	1,746,541		19
f. Other assets	-		-	-		
g. Total \$	35,352,414	\$	25,011,780	\$ 30,215,621	\$	3,072
						_

							Y	ear Ende	d
_			Dece		Dece	2016			
	Ad	ctual		Carrying		Fair			
Subprime:	С	ost		Value		Value		OTTI	
a. Residential mortgage-backed securities S	\$ 17	,695,407	\$	13,922,234	\$	14,902,278	\$		5,497
b. Commercial mortgage-backed securities		-		-		-			-
c. Collateralized debt obligations		-		-		-			-
d. Structured securities		-		-		-			-
e. Equity investments in SCAs *	3	,193,121		1,803,842		2,235,591			6,452
f. Other assets		-		-		-			
g. Total	\$ 20	,888,528	\$	15,726,076	\$	17,137,869	\$		11,949

^{*} 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.

g. Retained asset accounts - No change

Note 22 - Events Subsequent

Management of the Company has evaluated subsequent events through August 10, 2017, the date the financial statements were available to be issued. No events have occurred subsequent to the date of the statement of financial position and before the date of evaluation that would require disclosure.

Note 23 - Reinsurance - No change

Note 24 - Retrospectively Rated Contracts and Contracts Subject to Redetermination

a – d. No change

e. The Company does not write any accident and health insurance premium that is subject to the Affordable Care Act risk-sharing provisions.

Note 25 - Change in Incurred Losses and Loss Adjustment Expenses - No change

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 Type Liabilities by Withdrawal Characteristics - No change

⁽²⁾ The Company has no underwriting exposure to subprime mortgage risk through Mortgage Guaranty or Financial Guaranty insurance coverage.

 $\underline{\textbf{Note 33 - Premium and Annuity Considerations Deferred and Uncollected}} \text{ - No change}$

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 requiring 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 S is an insurer? If yes, complete Schedule Y, Parts 1 and 1A.		g of two or more affiliated				Yes [X]	No []
3.2	Have there been any substantial changes in the organizational chart	t 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 char	nges.						
4.1	Has the reporting entity been a party to a merger or consolidation de	luring the period o	overed by this statemen	t?		'	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	iation) for any entity the	nat has			
	1 Name of Entity		2 NAIC Company Code					
5.	If the reporting entity is subject to a management agreement, includi in-fact, or similar agreement, have there been any significant changes of the second significant changes o					s [] No [)	X] N/A []
6.1	State as of what date the latest financial examination of the reporting	g entity was made	e or is being made				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 the						12/3	1/2014
6.3	State as of what date the latest financial examination report became the reporting entity. This is the release date or completion date of the date).	the examination re	eport and not the date of	the examination (bala	ance shee	t	05/3	1/2016
6.4 6.5	By what department or departments? State of Connecticut Insurance Department Have all financial statement adjustments within the latest financial extatement filed with Departments?					s [] No [] N/A [X]
6.6	Have all of the recommendations within the latest financial examinat	tion report been c	omplied with?		Ye	s [X] No [] N/A []
7.1	Has this reporting entity had any Certificates of Authority, licenses or revoked by any governmental entity during the reporting period?						Yes []] No [X]
7.2	If yes, give full information:							
8.1	Is the company a subsidiary of a bank holding company regulated by	y 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	ng company.						
8.3	Is the company affiliated with one or more banks, thrifts or securities	s firms?				'	Yes [X]] No []
8.4	If response to 8.3 is yes, please provide below the names and locati regulatory services agency [i.e. the Federal Reserve Board (FRB), Insurance Corporation (FDIC) and the Securities Exchange Commit	the Office of the	Comptroller of the Curre	ncy (OCC), the Feder	al Deposi			
	1 Affiliate Name	L	2 Location (City, State)	3 FRB	4 OCC F	5 DIC	6 SEC	
	Baring International Investment Limited	London, UK					YES YES	
	MML Distributors, LLC						YES	
	MML Investment Advisers, LLC	. Enfield, CT					YES	
	MML Investors Services, LLC		A				YES	
	MML Strategic Distributors, LLC		Α				YES	
	MMLISI Financial Alliances, LLC		A				YES	
	The MassMutual Trust Company, FSB				YES		IEO	

GENERAL INTERROGATORIES

9.1	Are the senior officers (principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions) of the reporting entity subject to a code of ethics, which includes the following standards?	Yes [X] No []
9.11	If the response to 9.1 is No, please explain:	
9.2 9.21	Has the code of ethics for senior managers been amended?	Yes [] No [X]
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?	
	INVESTMENT	
	Were any of the stocks, bonds, or other assets of the reporting entity loaned, placed under option agreement, or otherwise made available use by another person? (Exclude securities under securities lending agreements.) If yes, give full and complete information relating thereto: Repurchase agreements. Letter stock or securities restricted as to sale - excluding FHLB Capital Stock. On deposit with states and Pledge	Yes [X] No []
12.	as collateral - excluding collateral pledged to an FHLB. Amount of real estate and mortgages held in other invested assets in Schedule BA:	
13.	Amount of real estate and mortgages held in short-term investments:	
14.1	Does the reporting entity have any investments in parent, subsidiaries and affiliates?	Yes [X] No []
14.2	If yes, please complete the following:	
	1 Prior Year-End Book/Adjusted Carrying Value	Book/Adjusted
14.21	Bonds	37 \$232,617,681
	Preferred Stock\$	
14.23	Common Stock \$	9 \$293,375,745
14.24	Short-Term Investments\$ Mortgage Loans on Real Estate\$	
	Mortgage Loans on Heal Estate	
14.20	Total Investment in Parent, Subsidiaries and Affiliates (Subtotal Lines 14.21 to 14.26) \$654,669,29	2 \$604,805,046
	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] No []
15.2	If yes, has a comprehensive description of the hedging program been made available to the domiciliary state?	Yes [X] No []

GENERAL INTERROGATORIES

F	For the reporting entity's secu	y	rogram, state the amount of						
			nvested collateral assets rep						
			carrying value of reinvested of						
	16.3 Total pa	ayable for sec	curities lending reported on th	ne liability page.				\$	
Excluding items in Schedule E - Part 3 - Special Deposits, real estate, mortgage loans and investments held physically in the reporting ent 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?						eld pursuant to ansiderations, F. ndbook?		[X] No	
	.,	1				_			
-	Citibank N.A	me of Custoo	lian(s)	222 Wast 24	Cus	stodian Address	i		
	otate officer diobal ocivic			001 1 0111391	vairia Avenue, nane	sas orty, wo o-	100		
	For all agreements that do no location and a complete exp		the requirements of the NAI	IC Financial Con	ndition Examiners H	Handbook, prov	de the name,		
	1		2			3			
-	Name(s)		Location(s)		Com	nplete Explanat	ion(s)		
		s including n	ame changes, in the custodia	an(s) identified in	n 17.1 during the cu	urrent quarter?		Yes] No [
	Have there been any change fyes, give full information re								
	f yes, give full information re		2		3		4		
If In	f yes, give full information rei Old Custodian nvestment management – Ic make investment decisions	ating thereto:	2 New Custodian estment advisors, investment he reporting entity. For asset	managers, brok	e of Change er/dealers, includin		Reason at have the authori		
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In B I	f yes, give full information rei Old Custodian nvestment management – Ic make investment decisions such. ["that have access Na Barings LLC IFM Investors Pty Ltd 17.5097 For those firms/individuals designated with a "U 17.5098 For firms/individuals total assets under m For those firms or individuals table below.	lentify all inve on behalf of to the investr 1 une of Firm o	New Custodian estment advisors, investment the reporting entity. For asset ment accounts"; "handle seem Individual In the table for Question 17.5 ore than 10% of the reporting with the reporting entity (i.e. diaggregate to more than 50% table for 17.5 with an affiliation	managers, brok ts that are mana ecurities"] Affili A. U. i, do any firms/in g entity's assets' lesignated with a of the reporting of	e of Change er/dealers, includinged internally by er ation dividuals unaffiliate? "U") listed in the taentity's assets?	ed with the repo	at have the authori reporting entity, no rting entity (i.e. on 17.5, does the	ite as Yes Yes	[] No
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If In B I 1 1 F	f yes, give full information rei 1 Old Custodian nvestment management – Ic make investment decisions such. ["that have access Na Barings LLC IFM Investors Pty Ltd	lentify all inve on behalf of to the investr to the Firm o	New Custodian estment advisors, investment the reporting entity. For assetment accounts"; "handle setment accounts account account accounts account accounts account account accounts account account accounts account acc	managers, brok is that are mana scurities"] Affilia I, do any firms/in g entity's assets' lesignated with a of the reporting on code of "A" (a	e of Change er/dealers, includinged internally by er ation dividuals unaffiliate? ""U") listed in the taentity's assets? ffiliated) or "U" (una	affiliated), provi	at have the authori reporting entity, no rting entity (i.e. on 17.5, does the de the information f	Yes Yes Yes	5 Investme Managem Agreeme
If In 19 In	f yes, give full information rei Old Custodian nvestment management – Ic make investment decisions such. ["that have access Na Bar ings LLC IFM Investors Pty Ltd	lentify all inve on behalf of to the investr 1 me of Firm o riduals listed i "") manage m unaffiliated v anagement a listed in the to	New Custodian In the table for Question 17.5 ore than 10% of the reporting entity (i.e. daggregate to more than 50% table for 17.5 with an affiliation 2	managers, brok ts that are mana ecurities"] Affili J. J. J. J. J. J. J. J. J. J	e of Change er/dealers, includinged internally by er ation dividuals unaffiliate? a "U") listed in the taentity's assets?	addition and the report of the	Reason at have the authorist reporting entity, not reporting entity (i.e. on 17.5, does the de the information of the following	Yes Yes or the	5 Investme Managem Agreeme (IMA) Fili
If In 1	f yes, give full information rei Old Custodian nvestment management – Ic make investment decisions such. ["that have access Na Bar ings LLC	lentify all inve on behalf of to the investr to the investr iduals listed in manage munaffiliated vanagement at listed in the to the investrict in the total in t	New Custodian estment advisors, investment the reporting entity. For assetment accounts"; "handle setment accounts account account accounts account accounts account account accounts account account accounts account acc	managers, brok ts that are mana ecurities"] Affili A	e of Change er/dealers, includinged internally by er ation dividuals unaffiliate? a "U") listed in the taentity's assets? ffiliated) or "U" (una 3 Entity Identifier (LE OMXYENC8A2G084	affiliated), provi	Reason at have the authorist reporting entity, not reporting entity (i.e. on 17.5, does the de the information of the following	Yes Yes or the	5 Investme Managem Agreeme (IMA) File

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 \$45,556,957.18 or 1.02% 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	\$
	1.13 Commercial Mortgages	\$
	1.14 Total Mortgages in Good Standing	\$ 974,169,604
	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)	\$974,169,604
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

			ડા	lowing All Ivew	v Reinsuran	ce rrealie	es - Curr	eni reario	Date		
1	2	3	4			5		6	7	8	9
			_			_					Effective
										Certified	Date of
NAIC							Τ,	of		Reinsurer	Certified
NAIC Company Code	ID.	F" "					. ' 3	OI			
Company	עו	Effective				L IC.	y tein			Rating	Reinsurer
Code	Number	Date	Name of Reinsurer			Ji dick	C	ed	Type of Reinsurer	(1 through 6)	Rating

SCHEDULE T - PREMIUMS AND ANNUITY CONSIDERATIONS

Current Year To Date - Allocated by States and Territories

1		Junein rear	TO Date Alloce	ated by States a		iness Only		
		1	Life Co	ontracts	4	5	6	7
			2	3	Accident and			
					Health Insurance Premiums,			
					Including Policy.		Total	
		Active	Life Insurance	Annuity	Including Policy, Membership	Other	Columns	Deposit-Type
<u> </u>	States, Etc.	Status	Premiums	Considerations	and Other Fees	Considerations	2 Through 5	Contracts
1.	AlabamaAL	L	1,466,348	879,556			2,345,904	
2.	Alaska	L	33,929	4,200			38,129	
3.	ArizonaAZ	LL	1,660,832	246,396			1,907,228	
4.	Arkansas AR	L	316,622	63,795			380,417	
5.	California CA	L	12, 194, 865	7, 168, 959			19,363,824	
6.	ColoradoCO	L	1,216,261	1,290,644			2,506,905	
7.	Connecticut CT	L	4,222,018	2,832,566			7,054,584	
8.	Delaware DE	L	148,530	72,049			220,579	
9.	District of Columbia DC	L	997,841	9,436			1,007,277	
10.	FloridaFL	Ĺ	11.765.621	12.247.413			24,013,034	
11.	GeorgiaGA	L	2.866.627	463.717			3,330,344	
12.	Hawaii	L	1,241,507	431, 166			1,672,673	
13.	IdahoID	I	240,565	356,025			596.590	
-	IllinoisIL		3,435,391				6,655,678	
14.		<u>L</u>						
15.	IndianaIN	ļ	1,475,113	2,311,362			3,786,475	
16.	lowaIA	LL	841,095	86,013			927 , 108	
17.	Kansas KS	L	733,676	573,006			1,306,682	
18.	Kentucky KY	L	637,233	345,936			983 , 169	
19.	Louisiana LA	L	876,609	4, 122, 445			4,999,054	
20.	Maine ME	L	286,670	114,270			400,940	
21.	Maryland MD	L	3,739,544	2,160,699			5,900,243	<u> </u>
22.	Massachusetts MA	L	2,851,933	10,903,386			13,755,319	
23.	Michigan MI	LL	2,619,835	7, 105, 574			9,725,409	
24.	Minnesota MN	Ĺ	2,231,619	2,692,783			4,924,402	
25.	Mississippi MS	I	1,409,807	111,520			1,521,327	
26.	Missouri MO	L	1,571,062	3,426,739			4,997,801	
26. 27.	Montana	l I	183.333	407,051			4,997,801	
27.	Nebraska		1,021,385				1.341.278	
		L					, ,	
29.	Nevada	L	719,447	561,592			1,281,039	
30.	New Hampshire NH	<u>-</u>	642,933	689,267			1,332,200	
31.	New JerseyNJ	L	5,629,990	5, 124, 622			10,754,612	
32.	New Mexico NM	L	273,880	89,606			363,486	
33.	New York NY	N	3,230,240	135,582			3,365,822	
34.	North CarolinaNC	L	4,659,817	1,422,950			6,082,767	
35.	North DakotaND	L	16,974				16,974	
36.	Ohio OH	L	2,850,639	6,653,038			9,503,677	
37.	Oklahoma OK	L	1,081,840	388,480			1,470,320	
38.	Oregon OR	Ĺ	560,731	336,942			897,673	
39.	Pennsylvania PA	I	4,531,039	8,503,027			13,034,066	
40.	Rhode Island	L	531,927	1,431,588			1.963.515	
41.	South Carolina			1.042.267			3, 163, 483	
41.	South Dakota			1,042,267			, ,	
l l		L						
43.	Tennessee	L	2,549,356	1,810,106			4,359,462	
44.	Texas	ļ	6,860,766	5,747,974			12,608,740	
45.	Utah UT	ļL	1, 111, 769	892,355	 		2,004,124	
46.	Vermont VT	L	350,583	709, 170	ļ		1,059,753	
47.	VirginiaVA	L	4,288,508	1,786,495			6,075,003	
48.	Washington WA	L	1,485,966	771,395			2,257,361	
49.	West Virginia WV	LL	353,486	159,083			512,569	
50.	Wisconsin WI	L	928,341	2,580,315			3,508,656	
51.	WyomingWY	L	84,907	212,515			297,422	
52.	American Samoa AS	N					201, 122	
53.	Guam	N	120				120	
54.	Puerto Rico PR	I	2,158,830	169.303			2,328,133	
I	U.S. Virgin IslandsVI		1,424					
55. 56.	Northern Mariana Islands MP	NN.	1,424	<u> </u>			1,424	
l l			44 040				11 010	
57.	Canada	N	11,813	<u> </u>	·····		11,813	
58.	Aggregate Other Aliens OT	XXX	99,872				99,872	
59.	Subtotal	(a)51	109,476,304	105,295,756			214,772,060	
90.	Reporting entity contributions for employee benefit							
	plans	XXX						
91.	Dividends or refunds applied to purchase paid-up	1000						
	additions and annuities	XXX	}	}	}			
92.	Dividends or refunds applied to shorten endowmer							
	or premium paying period	XXX						
93.	Premium or annuity considerations waived under	1001	0:0 00:]		0.10.00	
	disability or other contract provisions	XXX	612,394				612,394	
94.	Aggregate or other amounts not allocable by State	XXX		,	 			
95.	Totals (Direct Business)	XXX	110,088,698	105,295,756	 		215,384,454	
96.	Plus Reinsurance Assumed	XXX	ļ	ļ	ļ			
97	Totals (All Business)	XXX	110,088,698	105,295,756			215,384,454	
98.	Less Reinsurance Ceded	XXX	81,140,769	ļ			81,140,769	
99.	Totals (All Business) less Reinsurance Ceded	XXX	28,947,929	105,295,756]		134,243,685	
	DETAILS OF WRITE-INS		, , , , , , , , , , , , , , , , , , , ,	, .,,			, ,,,	
58001	ZZZ Other Alien	xxx	99.872				99.872	
		XXX						
l l		XXX		T				
	Summary of remaining write-ins for Line 58 from	^	l	<u> </u>			<u> </u>	
58998.	, ,	XXX						
E0000	overflow page	^						
J0999.	Totals (Lines 58001 through 58003 plus 58998)(Line 58 above)	XXX	99,872]		99,872	
0404			99,872				99,872	
9401.		XXX						
9402.		XXX						
9403.		XXX						
9498.	Summary of remaining write-ins for Line 94 from	100:	İ]		İ	
	overflow page	XXX						
9499.	Totals (Lines 9401 through 9403 plus 9498)(Line							
	94 above)	XXX	<u> </u>		<u> </u>		<u> </u>	
(I) Licons	sed or Chartered - Licensed Insurance Carrier or Do	miciled BBG: (F	R) Registered - Non	-domiciled BRGs: (O) Qualified - Quali 	fied or Accredited I	Boinguror: (E) Eligik	alo Doportina

⁽a) Insert the number of L responses except for Canada and Other Alien.

PART 1 – ORGANIZATIONAL CHART

The following entities are general partner level or above of Massachusetts Mutual Life Insurance Company (Parent)

	Federal Tax ID	NAIC Co Code	State of Domicile
MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY	04-1590850	65935	Massachusetts
Direct & Indirect Owned Subsidiaries:			
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		Delaware
CML Mezzanine Investor L, LLC	06-1041383		Delaware
CML Mezzanine Investor III, 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
Timberland Forest Holding LLC	47-5322979		Delaware
Lyme Adirondack Forest Company, LLC	None		Delaware
Lyme Adirondack Timber Sales, Inc.	20-5305426		New York
Lyme Adirondack Timberlands I, LLC	None		Delaware
Lyme Adirondack Timberlands II, LLC	None		Delaware
WP-SC, LLC*	26-4441097		Delaware
MSP-SC, LLC	04-1590850		Delaware
Country Club Office Plaza LLC*	27-1435692		Delaware
Insurance Road LLC	04-1590850		Delaware
MassMutual Trad Private Equity LLC	04-1590850		Delaware
MassMutual Intellectual Property LLC	04-1590850		Delaware
Invicta Advisors LLC	56-2574604		Delaware
Jefferies Finance LLC*	27-0105644		Delaware
Apex Credit Partners LLC	None		Delaware
JFIN Fund V 2017 LLC	None		Delaware
JFIN Fund III LLC	None		Delaware
JFIN Asset Management LLC	None		Delaware
JFAM GP LLC	None		Delaware
JFAM GP LP	None		Delaware
JFAM Loan Fund, LP	None		Delaware
JFIN Co-Issuer Corporation	None		Delaware
JFIN Europe GP, S.a.r.l.	None		Luxembourg
Jefferies Finance Europe, SCSp	None		Luxembourg
Jefferies Finance Business Credit LLC	None		Delaware
JFIN Business Credit Fund I LLC	None		Delaware
JFIN High Yield Investments LLC	None		Delaware
JFIN LC Fund LLC	None		Delaware
JFIN Revolver CLO Holdings LLC	None		Delaware
JFIN CLO 2007 Ltd.	None		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
JFIN CLO 2012 Ltd.	None		Cayman Islands
JFIN CLO 2013 Ltd.	None		Cayman Islands
JFIN CLO 2014 Ltd.	None		Cayman Islands
JFIN CLO 2014-II Ltd.	None		Cayman Islands
JFIN MM CLO 2014 Ltd.*	None		Cayman Islands
JFIN CLO 2015 Ltd.*	None		Cayman Islands
JFIN CLO 2015-II Ltd.*	None		Cayman Islands
JFIN Revolver CLO Ltd.	None		Cayman Islands
JFIN Revolver CLO 2014 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2015 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2015-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2017 Ltd.	None		Cayman Islands
JFIN CLO 2016 Ltd.	None		Cayman Islands
JFIN CLO 2017 Ltd	None		Cayman Islands
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
MML Private Equity Fund Investor LLC	04-1590850		Delaware
MM Private Equity Intercontinental LLC Pioneers Gate LLC	04-1590850 45-2738137		Delaware Delaware
	45-4376777		Delaware Delaware
MSC Holding Company, LLC MassMutual Holding MSC, Inc.	04-3341767		Massachusetts
MassMutual Holding LLC	04-2854319		Delaware
Fern Street LLC	37-1732913		Delaware
First Mercantile Trust Company	62-0951563		Tennessee
Haven Life Insurance Agency, LLC	46-2252944		Delaware
MassMutual Assignment Company	06-1597528		North Carolina
MassMutual Capital Partners LLC	04-1590850		Delaware
MassMutual Ventures LLC	47-1296410		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
	2011031		20.011010

^{*}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
Society of Grownups, LLC	47-1466022		Massachusetts
MM Asset Management Holding LLC	45-4000072		Delaware
Barings LLC	51-0504477		Delaware
Barings Finance LLC	80-0875475		Delaware
BCF Europe Funding Limited	None		Ireland
BCF Senior Funding I LLC	None		Delaware
BCF Senior Funding I Designated Activity Company	None		Ireland
Barings Securities LLC	04-3238351		Delaware
Barings Guernsey Limited	98-0437588		Guernsey
Barings Europe Limited	None		United Kingdom
Barings (U.K.) Limited	98-0432153		United Kingdom
Barings 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
Barings Global Advisors Limited	98-1012393		United Kingdom
BCGSS 2 GP LLP	None		United Kingdom
Babson European Direct Lending 1 GP LLP	None		United Kingdom
Barings Advisers (Japan) KK	None		Japan
Barings Multifamily Capital Holdings LLC	None		Delaware
Barings Multifamily Capital LLC	None		Michigan
Barings Multifamily Capital Corporation	None		Delaware
Barings Real Estate Advisers Inc.	04-3238351		California
Barings Real Estate Advisers Japan KK	None		Japan
Barings Real Estate UK Holdings Limited	None		Delaware
BREAE AIFM LLP	None		United Kingdom
Barings Real Estate Advisers (Continental Europe) Limited	98-0654401		United Kingdom
Barings Real Estate Advisers Europe LLP	98-0654388		United Kingdom
Barings Real Estate Advisers Europe Finance LLP	98-0654412		United Kingdom
Barings Real Estate Advisers GmbH	98-1194368		Germany
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

^{*}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.

Baring Asset Management (Asia) Limited Baring Asset Management Korea Limited Baring Asset Management Korea Limited Baring SICE (Taiwan) Limited Baring Asset Management (Apan) Limited Baring Asset Management (Apan) Limited Baring Asset Management (Apan) Limited Baring Asset Management (Australia) Pty Limited Baring Asset Management (Australia) Pty Limited Baring Asset Management (Australia) Pty Limited Baring Asset Management (Australia) Pty Limited Baring Asset Management (Australia) Pty Limited Baring Fance SAS Baring France SAS Baring Fund Managers Limited Baring France SAS Baring Pension Trustees Limited Baring Pension Trustees Limited Baring Investment Services Limited Baring Investment Services Limited Barings Australia Holding Company Pty Ltd Barings Australia Pty Ltd Barings Australia Pty Ltd Barings Australia Pty Ltd Barings Australia Pty Ltd Barings Investment Advisers (Hong Kong) Limited Barings Investment Advisers (Hong Kong) Limited Barings Investment Investment Advisers (Hong Kong) Limited Barings Investment Investment Advisers (Hong Kong) Limited Barings Investment Inve
Baring SICE (Tawan) Limited 98-0457707 Taiwan ROC Baring Asset Management (Japan) Limited 98-0236449 Japan Baring Asset Management (Japan) Limited 98-02547456 Australia Baring International Fund Managers (Ireland) Limited 98-0524272 Ireland Baring Asset Management Switzerland Sairl None Switzerland Baring France SAS 98-0497550 France Baring Fund Managers Limited 98-0457586 United Kingdom Baring Pension Trustees Limited 98-0457586 United Kingdom Baring Pension Trustees Limited 98-0457578 United Kingdom Barings Australia Holding Company Pty Ltd 98-0457578 United Kingdom Barings Australia Pty Ltd 98-045756 Australia Barings Investment Advisers (Hong Kong) Limited 98-0457456 Australia Barings Investment Advisers (Hong Kong) Limited 47-2642354 Delaware Chassis Acquisition Holding LLC* 81-2244465 Delaware CRA Aircraft Holding LLC* 81-2244465 Delaware CRA Aircraft Holding LLC* 47-3055009 Delaware Remington L & W Holdings LLC* 60-60-60-60-60-60-60-60-60-60-60-60-60-6
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Milestone Acquisition Holding, LLC. Red Lake Ventures, LLC Remington L & W Holdings LLC* A 47-3055009 Delaware Delaware Delaware Connecticut
Red Lake Ventures, LLC Remington L & W Holdings LLC* 46-5460309 Belaware Connecticut
Remington L & W Holdings LLC* 81-4065378 Connecticut
Solar Acquisition Holding 1132
Sweet Tree Holdings 1, LLC 46-3123110 Delaware
Tamiami Citrus, LLC None Delaware None Delaware Delaware
U.S. Buyer Broadcasting, LLC U.S. WIG Holdings, LP 47-1855920 Delaware Delaware
U.S. Pharmaceuticals Holdings II, LLC 47-5436800 Delaware
VGS Acquisition Holding, LLC None Delaware
WC Aircraft Holdings US II, LLC WC Aircraft Holdings US II, LLC 46-3378584 Delaware
Wood Creek Aircraft Holding I, LP None Cayman Islands
Baring Asset-Based Income Fund (US) GP, LLC None Delaware
Babson Capital Floating Rate Income Fund Management, LLC 04-1590850 Delaware
Babson Global Loan Feeder Management, LLC None Delaware
Barings CLO Investment Partners GP, LLC None Delaware
Barings Global Energy Infrastructure Advisors, LLC None Delaware
Barings North American Private Loan Fund Management, LLC None Delaware
Barings TeRO Management LLC None Delaware
Benton Street Advisors, Inc. 98-0536233 Cayman Islands
Great Lakes III GP, LLC 04-1590850 Delaware
Lake Jackson LLC None Delaware
Loan Strategies Management LLC 04-1590850 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
Mezzco LLC	04-1590850		Delaware
Mezzo II LLC	02-0767001		Delaware
Mezzo III LLC	41-2280126		Delaware
Mezzo IV LLC	80-0920285		Delaware
Mezzoo 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
HarbourView Asset Management Corporation	22-2697140		New York
OFI Global Trust Company	13-3459790		New York
OFI International, Ltd.	None		United Kingdom
SNW Asset Management Corporation	None		Delaware
Seattle Northwest Asset Management LLC	None		Washington
Trinity Investment Management Corporation	25-1951632		Pennsylvania
OFI SteelPath, Inc.	84-1128397		Delaware
Shareholder Services, Inc.	84-1066811		Colorado
VTL Associates, LLC	None		Pennsylvania
Index Management Solutions, LLC	None		Pennsylvania
OFI Global Asset Management, Inc.	84-0765063		Delaware
OFI Private Investments Inc.	91-2036414		New York
Tremont Group Holdings, LLC	62-1210532		New York
Tremont Partners, LLC	06-1121864		Connecticut
Tremont GP, LLC	20-8215352		Delaware
Settlement Agent LLC	90-0874510		Delaware
Tremont (Bermuda) Limited	None		Bermuda
MassMutual International LLC	04-3313782		Delaware
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
MML Management Corporation	04-2443240		Massachusetts
MassMutual International Holding MSC, Inc.	04-3548444		Massachusetts

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	Federal Tax ID	NAIC Co Code	State of Domicile
MML Mezzanine Investor II, LLC	04-1590850		Delaware
MML Mezzanine Investor III. LLC	04-1590850		Delaware
MassMutual External Benefits Group LLC	27-3576835		Delaware
Cornerstone Global REIT Corporation	20-8730751		Delaware
Other Affiliates & Funds:	20 0/30/01		D of a fraid
100 w. 3 rd Street LLC	04-1590850		Delaware
300 South Tryon Hotel LLC	04-1590850		Delaware
300 South Tryon LLC	04-1590850		Delaware
54 West Capital LLC	20-3887968		Delaware
Alexandria Towers Investors LLC	16-1720387		Delaware
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
Barings Emerging Markets Corporate Bond Fund	None		Ireland
Barings Emerging Markets Local Debt Fund	None		Ireland
Barings Global Special Situations Credit Fund 1	None		Ireland
Babson Capital Global Special Situation Credit Fund 2*	98-1206017		Delaware
Babson Capital Loan Strategies Fund, L.P.*	37-1506417		Delaware
Barings US High Yield Bond Fund*	None		Ireland
Babson CLO Ltd. 2012-II	None		Cayman Islands
Babson CLO Ltd. 2013-I	None		Cayman Islands
Babson CLO Ltd. 2013-II	98-1128827		Cayman Islands
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 CLO Ltd. 2016-I	None		Cayman Islands
Babson CLO Ltd. 2016-II	None		Cayman Islands
Babson Euro CLO 2014-I BV	None		Netherlands
Babson Euro CLO 2014-II BV	None		Netherlands
Babson Euro CLO 2015-I BV	None		Netherlands
Babson Euro CLO 2016-I BV	None		Netherlands
Baring Focused EAFE Equity Fund	11-3789446		Delaware
Baring Global Dynamic Asset Allocation Fund	30-0607379		Delaware
Barings Global Energy Infrastructure Fund 1 LP	98-1332384		Cayman Islands
Barings Global Private Loan Fund	None		Luxembourg
Barings North American Private Loan Fund LP	38-4010344		Delaware
Barings RE Credit Strategies VII LP	98-1332384		Delaware

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	Federal Tax ID	NAIC Co Code	State of Domicile
Baring International Small Cap Equity Fund	26-4142796		Delaware
Barings CLO Investment Partners LP	81-0841854		Delaware
Barings Real Estate European Value Add I SCSp*	None		United Kingdom
Benton Street Partners I, L.P.*	98-0536233		Cayman Islands
Benton Street Partners II, L.P.*	98-0536199		Cayman Islands
Braemar Energy Ventures I, L.P. *	None		Delaware
Cambridge Hotel, LLC	06-1614196		Delaware
Cheyenne Mountain Resort LLC	04-1590850		Delaware
Barings European Core Property Fund SCSp	None		Luxembourg
Cornerstone Core Mortgage Venture I LP	27-1701622		Delaware
Cornerstone Enhanced Mortgage Fund I LP	45-3751572		Delaware
Cornerstone Global Real Estate LP*	20-8730751		Delaware
Cornerstone High Yield Venture LP	36-4770946		Delaware
Barings/LAZ Parking Fund LP	46-5437441		Delaware
Barings Core Property Fund LP	20-5578089		Delaware
Cornerstone Real Estate Fund VIII LP	27-0547156		Delaware
Cornerstone Real Estate Fund X LP	46-5432619		Delaware
Duchess VI CLO B.V.	None		United Kingdom
Duchess VII CLO B.V.	None		United Kingdom
E-Wise Land Venture LLC	20-3887968		Delaware
Gateway Mezzanine Partners I, L.P.*	80-0691253		Delaware
Gateway Mezzanine Partners II LP*	90-0991195		Delaware
Great Lakes III, L.P.	37-1708623		Delaware
JPMDB Commercial Mortgage Securities Trust 2017-C5	38-4032059		New York
Kazwell Realty Partners LLC	20-3887968		Delaware
Marco Hotel LLC	46-4255307		Delaware
MM Debt Participations LLC	81-3000420		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 Rockall CLO B.V.	30-0713071		Delaware
	None 54-2055778		United Kingdom
Rockville Town Center LLC Seattle 1415 Hotel Owner LLC	46-5491311		Virginia Delaware
Sedona TFMP Land LLC	04-1590850		Delaware
Somerset Special Opportunities Fund L.P.*	20-8856877		Delaware
South Myrtle Monrovia MM LLC	04-1590850		Delaware Delaware
South Pasco Properties LLC	20-3887968		Delaware Delaware
	04-3722906		Delaware
Tower Square Capital Partners, L.P.*	30-0336246		
Tower Square Capital Partners II, L.P.*	30-0330240		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.

PART 1 – ORGANIZATIONAL CHART

	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 IIIA, L.P.	41-2280129		Delaware
Tower Square Capital Partners IV-A, L.P.	80-0920367		Delaware
West 46 th Street Hotel LLC	05-1590850		Delaware
Barings Affiliates & Funds:			
Barings Emerging Markets Debt Blended Total Return Fund	None		Ireland
Barings Emerging Markets Debt Short Duration Fund	None		Ireland
Barings Emerging Markets Sovereign Debt Fund	None		Ireland
Babson Capital Floating Rate Income Fund, L.P.	27-3330830		Delaware
Barings Global Investment Grade Corporate Plus Fund	None		Ireland
Babson Capital Loan Strategies Master Fund LP	None		Cayman Islands
Barings Emerging Markets Debt Blended Total Return Fund	47-3758432		Massachusetts
Barings Emerging Markets Local Currency Debt Fund	47-3774453		Massachusetts
Barings Global High Yield Fund	47-3790192		Massachusetts
Baring Greater China Equity Fund	None		Hong Kong
Barings Total Return Bond Fund	47-3734770		Massachusetts
Barings U.S. High Yield Fund	47-3801860		Massachusetts
Gateway Mezzanine Partners I Trust	None		Australia
Great Lakes II LLC*	71-1018134		Delaware
Great Lakes LLC*	56-2505390		Delaware
Intermodal Holding II LLC*	46-2344300		Delaware
Somerset Special Opportunities Master Fund LP	None		Cayman Islands
Wood Creek Venture Fund LLC	04-1590850		Delaware
Barings Real Estate Affiliates & Funds:			
12-18 West 55th Street Predevelopment, LLC*	20-2548283		Delaware
50 Liberty LLC*	36-4823011		Delaware
One Harbor Shore LLC*	80-0948028		Delaware
Budapester Strasse LLC	81-4382111		Delaware
CHC/RFP VI Core LLC	04-1590850		Delaware
Cornerstone California Mortgage Fund I LLC	95-4207717		California
Cornerstone California Mortgage Fund II LLC	95-4207717		California
Cornerstone Fort Pierce Development LLC*	56-2630592		Delaware
Cornerstone Permanent Mortgage Fund	45-2632610		Massachusetts
Cornerstone Permanent Mortgage Fund II	61-1750537		Massachusetts
Cornerstone Permanent Mortgage Fund III	35-2531693		Massachusetts
Cornerstone Permanent Mortgage Fund IV	61-1793735		Massachusetts
CREA 330 Third LLC*	46-5001122		Delaware
CREA FMF Nashville LLC	46-4367364		Delaware
CREA/LYON West Gateway, LLC*	26-2399532		Delaware
CREA Madison Member LLC	81-0890084		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP

PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID	NAIC Co Code	State of Domicile
CREA/PPC Venture LLC*	20-0348173		Delaware
CCB Montford Park LLC*	82-1563809		Delaware
Fallon Cornerstone One MPD LLC*	26-1611591		Delaware
Fan Pier Development LLC*	20-3347091		Delaware
Farringdon London Holdings LLC*	46-3880526		Delaware
Infinity SCD Ltd.	None		United Kingdom
Johnston Groves LLC	20-4819358		Delaware
Landmark Manchester Holdings LLC	81-5360103		Delaware
MM Chatham Office LLC*	81-2871333		Delaware
Salomon Brothers Commercial Mortgage Trust 2001-MM	None		Delaware
Sawgrass Village Shopping Center LLC*	27-2977720		Delaware
Ten Fan Pier Boulevard LLC*	None		Delaware
Three PW Office Holding LLC	81-5273574		Delaware
Twenty Two Liberty LLC*	35-2484550		Massachusetts
UK LÍW Manager LLC	45-4606547		Delaware
UK LIW Member LLC	45-4606547		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
Willowwood Lakeside Master LLC	81-1552222		Delaware
Ygnatio Valley Funding	20-5481477		Delaware
MassMutual Premier Funds:			
MassMutual Barings Dynamic Allocation Fund	45-3168892		Massachusetts
MassMutual Premier Focused International Fund	02-0754273		Massachusetts
MassMutual Premier Main Street Fund	51-0529328		Massachusetts
MassMutual Premier Strategic Emerging Markets Fund	26-3229251		Massachusetts
MassMutual Premier Value Fund	04-3277550		Massachusetts
MassMutual Select Funds:			
MassMutual Select Diversified International Fund	14-1980900		Massachusetts
MassMutual Select Diversified Value Fund	01-0821120		Massachusetts
MassMutual Select Fundamental Growth Fund	04-3512593		Massachusetts
MassMutual Select Large Cap Value Fund	04-3513019		Massachusetts
MassMutual Select Mid-Cap Value Fund	42-1710935		Massachusetts
MassMutual Select Small Capital Value Equity Fund	02-0769954		Massachusetts
MassMutual Select Small Company Value Fund	04-3584140		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

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP

PART 1 – ORGANIZATIONAL CHART

		Federal Tax ID	NAIC Co Code	State of Domicile
	MML Series II Equity Rotation Fund	47-3544629		Massachusetts
	MML Series II Special Situations Fund	47-3559064		Massachusetts
M	assMutual RetireSMART Funds:			
	MassMutual RetireSMART 2055 Fund	46-3289207		Massachusetts
	MassMutual RetireSMART 2060 Fund	47-5326235		Massachusetts
	MassMutual RetireSMART Conservative Fund	45-1618155		Massachusetts
	MassMutual RetireSMART Growth Fund	45-1618222		Massachusetts
	MassMutual RetireSMART Moderate Fund	45-1618262		Massachusetts
	MassMutual RetireSMART Moderate Growth Fund	45-1618046		Massachusetts
O	ppenheimer Funds:			
	Oppenheimer Developing Markets Fund	93-6305075		Delaware
	Oppenheimer Developing Markets Equity UCITS	None		Ireland
	Oppenheimer Emerging Markets Innovators UCITS	None		Ireland
	Oppenheimer ESG Revenue ETF	81-3492794		Delaware
	Oppenheimer Global ESG Revenue ETF	81-3480754		Delaware
	Oppenheimer Global Equity UCITS	None		Ireland
	Oppenheimer Global Multi-Asset Growth Fund	47-3676235		Delaware
	Oppenheimer Global Multi-Asset Income Fund	47-1714929		Delaware
	Oppenheimer Global Value Equity UCITS	None		Ireland
	Oppenhemier International Growth & Income Fund	81-3136071		Delaware
	Oppenheimer Macquarie Global Infrastructure Fund	81-1080638		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.

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0435	Massachusetts Mut Life Ins Co	65935	. 04-1590850	3848388	0000225602		(MMLIC)	MA	UDP	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					i l
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	DS	C.M. Life Insurance Company	Ownership	100.000	MMLIC		
0000			06-1041383				CML Mezzanine Investor, LLC	DE	DS	C.M. Life Insurance Company	Ownership	100.000	MMLIC		
0000			06-1041383				CML Mezzanine Investor L, LLC	DE	DS	C.M. Life Insurance Company	Ownership	100.000	MMLIC		i
0000			06-1041383				CML Mezzanine Investor III. LLC	DE	DS	C.M. Life Insurance Company	Ownership	100.000	MMLIC		i l
0000							CML Special Situations Investor LLC	DE	DS	C.M. Life Insurance Company	Ownership	_100.000	MMLIC		
										Massachusetts Mutual Life Insurance					1
0000			04-1590850				MML Mezzanine Investor L, LLC	DE	NIA	Company	Ownership	100,000	MMLIC		i l
			01 1000000				mme mozzanino nivottoi e, eeo			Massachusetts Mutual Life Insurance	omici di i p		mmE10		
0000							MML Special Situations Investor LLC	DE	NIA	Company	Ownership	100.000	MMLIC		1
0000							WINE Special Situations investor LLC	UE	NI A	Massachusetts Mutual Life Insurance	Owner Sirrp	100.000	MMLTC		
0000			47 5000070				T: 1 1 15 1111: 110	DE			0 1:	400 000	188.10		i l
0000			47-5322979				Timberland Forest Holding LLC		NI A	Company	Ownership	100.000	MMLIC		
0000			47-5322979				Timberland Forest Holding LLC	DE	NI A	C.M. Life Insurance Company	Ownership	0.000	MMLIC		
0000			47-5322979				Timberland Forest Holding LLC	DE	NI A	Wood Creek Capital Management LLC	Management		MMLIC		
0000							Lyme Adirondack Forest Company, LLC	DE	NI A	Timberland Forest Holding LLC	Ownership	100.000	MMLIC		
0000			20-5305426				Lyme Adirondack Timber Sales, Inc	NY	NI A	Timberland Forest Holding LLC	Ownership	100.000	MMLIC		
0000							Lyme Adirondack Timberlands I, LLC	DE	NIA	Timberland Forest Holding LLC	Ownership	100.000	MMLIC		
0000							Lyme Adirondack Timberlands II, LLC	DE	NI A	Timberland Forest Holding LLC	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					1
0000			04-1590850				Berkshire Way LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
							•			Massachusetts Mutual Life Insurance	·				1
0000			26-4441097				WP-SC. LLC	DE	NI A	Company	Ownership	81.400	MMLIC		ll
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		i l
										Massachusetts Mutual Life Insurance	o				
0000			27-1435692				Country Club Office Plaza LLC	DE	NIA	Company	Ownership	88.100	MMLIC		1
0000			27-1435692				Country Club Office Plaza LLC	DE	NIA	C.M. Life Insurance Company	Ownership	11.900	MMLIC		
0000			. 21-1400032				Country Club Office Fraza LLC	UL		Massachusetts Mutual Life Insurance	Owner Sirrp	11.300	MINILIO		
0000			56-2574604				Invicta Advisors LLC	DE	NIA	Company	Ownership	100.000	MMLIC		i l
0000			. 30-23/4004				INVICTA AUVISORS LLC	UE	NIA	Massachusetts Mutual Life Insurance	owner snip	100.000	MMLIC		
0000			04 4500050				Laconson Deed II O	DE	NI A		0	100.000	MMLIC		1
0000			. 04-1590850 04-1590850				Insurance Road LLC	DE		Company	Ownership	100.000	MMLIC		
							MassMutual Trad Private Equity LLC		NI A	Insurance Road LLC					
0000			. 04-1590850				MassMutual Intellectual Property LLC	DE	NI A	Insurance Road LLC	Ownership	100.000	MMLIC		
				1						Massachusetts Mutual Life Insurance	l	50.005			1
0000			27-0105644				Jefferies Finance LLC	DE	NI A	Company	Ownership	50.000	MMLIC		1
0000							Apex Credit Partners LLC	DE	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Fund V 2017 LLC	DE	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Fund III LLC	DE	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		ļl
0000							JFIN Asset Management LLC	DE	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFAM GP LLC	DE	NI A	JFIN Asset Management, LLC	Ownership	100.000	MMLIC		ļl
0000							JFAM GP LP	DE	NI A	JFIN Asset Management, LLC	Ownership	100.000	MMLIC		l
0000							JFAM Loan Fund, LP	DE	NI A	JFIN Asset Management, LLC	Ownership	100.000	MMLIC		ļl
0000							JFIN Co-Issuer Corporation	DE	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		ll
0000		l		1			JFIN Europe GP, S.a.r.I.	LUX	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		11
0000							Jefferies Finance Europe, SCSp	LUX	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							Jefferies Finance Business Credit LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		[
0000							JFIN Business Credit Fund LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		[
0000							JFIN High Yield Investments LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		[
0000							JFIN LC Fund LLC	DE	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		[
0000							JFIN Revolver CLO Holdings LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000		1					O III HOTO IVOI OLO HOTUINGO LLO	I	L	OCTION TO A THREE COLORS	United Ottl P		IIIIII		

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
											Type	If			
											of Control	Control			
											(Ownership,	is		ls an	
						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Y/N)	*
0000	Group Marrie	Code	Number	nood	OIK	international)	JFIN CLO 2007 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC	(1/11)	
0000							JFIN CLO 2012 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN CLO 2013 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN CLO 2014 Ltd.	CYM	NI A	Jefferies Finance LLC	Ownership	70.000	MMLIC		
0000							JFIN CLO 2014 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership	30.000	MMLIC		
0000							JFIN CLO 2014-II Ltd	CYM	NI A	Jefferies Finance LLC	Ownership.	100.000	MMLIC		
0000							JFIN MM CLO 2014 Ltd	CYM	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN CLO 2015 Ltd	CYM	NI A	Jefferies Finance LLC	Ownership	44.000	MMLIC		
0000							JFIN CLO 2015 Ltd	CYM	NIA	Apex Credit Partners LLC	Ownership	56.000	MMLIC		
0000							JFIN CLO 2015-II Ltd	CYM	NI A	Jefferies Finance LLC	Ownership	33.000	MMLIC		
0000							JFIN CLO 2015-II Ltd.	CYM	NI A	Apex Credit Partners LLC	Ownership	53.000			
0000							JFIN Revolver CLO Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Revolver CLO 2014 Ltd.	CYM	NIA NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
							JFIN Revolver CLO 2015 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Revolver CLO 2015-II Ltd	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN CLO 2016 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN CLO 2017 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
							of itt ded both bed.			Massachusetts Mutual Life Insurance	owner errip.				
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	NI A	Company	Ownership	99.000	MMLIC		
0000			04-3356880		0000943903		MML Distributors LLC	MA	NI A	MassMutual Holding LLC	Ownership	1.000	. MMLIC		
										Massachusetts Mutual Life Insurance					
0000							MML Investment Advisers, LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				MML Mezzanine Investor, LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
0000			46-3238013				MM Otantania Diataibutana 110	DE	NIA	Massachusetts Mutual Life Insurance	Ownership	100.000	MMLIC		
0000			46-3238013				MML Strategic Distributors, LLC	VE	NI A	Company Massachusetts Mutual Life Insurance	Uwnersnip	100.000	MMLIC		
0000			06-1563535	2881445	0001103653		The MassMutual Trust Company, FSB	CT	NI A	Company	Ownership	100.000	MMLIC	v	
0000			00 1000000	2001440	0001100000		The massmatuar frust company, rob	01		Massachusetts Mutual Life Insurance	owner strip		- MINICIO		
0000			04-1590850				MMC Equipment Finance LLC	DE	NI A	Company	Ownership	100.000	MMLIC		l
0000			26-0073611				MassMutual Asset Finance LLC	DE	NI A	MMC Equipment Finance LLC	Ownership	99.600	MMLIC		
0000			26-0073611				MassMutual Asset Finance LLC	DE	NI A	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	MMLIC		
0000			45-2589019				MMAF Equipment Finance LLC 2011-A	DE	NI A	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
			04 456				MML Private Placement Investment Company I,			Massachusetts Mutual Life Insurance	l	40			
0000			04-1590850				LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
0000			04 4500050		0000007400		M# D : 4 5 :4 5 11 4 110	DE		Massachusetts Mutual Life Insurance	0 1:	400 000	MNLIC		
0000			04-1590850 04-1590850		0000067160		MML Private Equity Fund Investor LLC	DE	NIA NIA	Company	Ownership	100.000	MMLIC		
0000			04-1590850				MM Private Equity Intercontinental LLC	VE	NIA	MML Private Equity Fund Investor LLC Massachusetts Mutual Life Insurance	_ Uwnersnip	100.000	- MMLIC		
0000			45-2738137				Pioneers Gate LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
			40 2/00/07				Troncers date LLC			Massachusetts Mutual Life Insurance	owner strip	100.000	- MINICIO		
0000			45-4376777				MSC Holding Company, LLC	DE	NI A	Company	Ownership	100.000	MMLIC	γ	
0000			04-3341767				MassMutual Holding MSC, Inc.	MA	NI A	MSC Holding Company, LLC	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance	·				
0000			04-2854319	2392316			MassMutual Holding LLC	DE	NI A	Company	Ownership	100.000	MMLIC	Y	
0000			06-1597528				MassMutual Assignment Company	NC	NI A	MassMutual Holding LLC	. Ownership	100.000	MMLIC		
0000			37-1732913				Fern Street LLC	DE	NI A	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000			62-0951563	. 1160004	0001259664		First Mercantile Trust Company	TN	NI A	MassMutual Holding LLC	. Ownership	100.000	MMLIC		
0000			46-2252944				Haven Life Insurance Agency, LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000			04-1590850		0001399869		MassMutual Capital Partners LLC	DE	NI A	MassMutual Holding LLC	Ownership	100.000	MMLIC		

				PA	KH I	A - DE I AI	L OF INSURANC	ᄼᆫᆝ	JOLL	JING COMPANY	SYSIEW				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
											Type	If			
											of Control	Control			
											(Ownership,	is		Is an	
						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence.	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Y/N)	*
0000	Group Name	Oode	47-1296410	TIGGD	Oil	international)	MassMutual Ventures LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC	(1/14)	
0000			04-1590850				MM Rothesay Holdco US LLC	DE	NI A	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000			47-1466022				Society of Grownups, LLC	MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000			04-1590850		0000701059		MML Investors Services, LLC	MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000			04-1590850				MML Insurance Agency, LLC	MA	NI A	MML Investors Services, LLC	Ownership	100.000	MMLIC		
0000			41-2011634		0001456663		MMLISI Financial Alliances, LLC	DE	NI A	MML Investors Services, LLC	Ownership	100.000	MMLIC		
0000			45-4000072				MM Asset Management Holding LLC	DE	NI A	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000			51-0504477		0000009015		Barings LLC	DE	NI A	MassMutual Asset Management Holding LLC	Ownership	100.000	MMLIC		
0000			80-0875475				Barings Finance LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
0000							BCF Europe Funding Limited	IRL	NI A	Barings Finance LLC	Ownership	100.000	MMLIC		
0000		-					BCF Senior Funding LLC	DE	NI A	Barings Finance LLC	Ownership	100.000	MMLIC		ļ
0000							BCF Senior Funding I Designated Activity	LDI.		D : 5: 110		400.000			
0000			04-3238351		0000930012		Company	IRL DE	NI A	Barings Finance LLCBarings LLC	Ownership	100.000	MMLIC		
0000			98-0437588		0000930012		Barings Securities LLC		NI A NI A	Barings LLC	Ownership	100.000	MMLIC		
0000			98-0432153				Barings (U.K.) Limited	GBR	NIA	Barings Guernsey Limited	Ownership	100.000	MMLIC		
0000			30-0402100				Barings Europe Limited	GBR	NIA	Barings Guernsey Limited	Ownership	100.000	MMLIC		
0000							Barings GPC GP S.à. r.l .	LUX	NIA	Barings (U.K.) Limitled	Ownership	100.000	MMLIC		
0000							Almack Mezzanine GP III Limited	GBR	NI A	Barings (U.K.) Limitied	Ownership	100.000	MMLIC		
0000							Almack Holding Partnership GP Limited	GBR	NI A	Barings (U.K.) Limitied	Ownership.	100.000	MMLIC		
0000							Almack Mezzanine Fund Limited	GBR	NI A	Barings (U.K.) Limitied	Ownership	100.000	MMLIC		
0000							Almack Mezzanine Fund II Limited	GBR	NI A	Barings (U.K.) Limitied	Ownership	100.000	MMLIC		
0000			98-1012393				Barings Global Advisors Limited		NI A	Barings (U.K.) Limitied	Ownership	100.000	MMLIC		
0000							BCGSS 2 GP LLP	GBR	NI A	Barings (U.K.) Limitied	Ownership	100.000	MMLIC		
0000							Babson European Direct Lending 1 GP LLP		NI A	Barings (U.K.) Limitied	Ownership	100.000	MMLIC		
0000							Barings Advisers (Japan) KK	JPN	NI A	Barings LLC	Ownership	100.000	MMLIC		
0000							Barings Multifamily Capital Holdings LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
							Barings Multifamily Capital LLC	MI	NI A	Barings LLC	Ownership		MMLIC		
0000			04-3238351	3456895	0001011148		Barings Multifamily Capital Corporation Barings Real Estate Advisers Inc	CA	NI A NI A	Barings LLCBarings Real Estate Advisers LLC	Ownership	100.000	MMLIC		
0000			04-3230331	3430093	0001011146		Barings Real Estate Advisers Japan KK	JPN	NIA	Barings Real Estate Advisers LLC	Ownership	100.000	MMLIC		
0000							Barings Real Estate UK Holdings Limited	. DE	NIA	Barings Real Estate Advisers LLC	Ownership	100.000	MMLIC		
0000							BREAE AIFM LLP	GBR	NI A	Barings Real Estate Advisers LLC	Ownership.	100.000	MMLIC		
							Barings Real Estate Advisers (Continental			Darringo rioar Estato riarrosi o EES					
0000			98-0654401				Europe) Limited		NI A	Barings Real Estate UK Holdings Limited	Ownership	100.000	MMLIC		
0000			98-0654388				Barings Real Estate Advisers Europe LLP	GBR	NI A	Barings Real Estate UK Holdings Limited	Ownership	100.000	MMLIC		ļ
							Barings Real Estate Advisers Europe Finance								
0000			98-0654412				LLP	GBR	NI A	Barings Real Estate UK Holdings Limited	Ownership	100.000	MMLIC		ļ
0000			98-1194368				Barings Real Estate Advisers GmbH	DEU	NI A	Barings Real Estate UK Holdings Limited	Ownership	100.000	MMLIC		
0000		-	04-1590850				MassMutual Baring Holding LLC	DE	NI A	MassMutual Asset Management Holding LLC	Ownership	100.000	- MMLIC		ļ
0000			98-0241935	2363071	0000932463		Baring North America LLC	MA	NI A	MassMutual Baring Holding LLC	Ownership	100.000	MMLIC		
0000		-	98-0241935				MassMutual Holdings (Bermuda) Limited Baring Asset Management Limited	BMU	NI A NI A	MassMutual Baring Holding LLC MassMutual Holdings (Bermuda) Limited	Ownership	100.000	MMLIC		·····
0000			98-0241935		0001568131		Baring International Investment Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
			30-043/320		000 1000 101		Baring International Investment Limited	ndr		Dai my Asset management Limited	owner strip	100.000	. mmL10		
0000			98-0457587				Holdings	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MML1C		
			00 040/00/				Thoratingo			Baring International Investment Management	σπιοι σπιρ				
0000			98-0457576				Baring Asset Management UK Holdings Limited	GBR	NIA	Holdings	Ownership	100.000	MMLIC		
										Baring Asset Management UK Holdings Limited	1				
0000			98-0465031				Baring Asset Management GmbH	DEU	NI A		Ownership	100.000	MMLIC		l
			1				Baring Asset Management (Asia) Holdings			Baring Asset Management UK Holdings Limited	i				
0000			98-0524271				Limited	HKG	NI A		Ownership	100.000	MMLIC		
							Baring International Fund Managers (Bermuda)			Baring Asset Management (Asia) Holdings					
0000			98-0457465				Limited	BMU	NI A	Limited	Ownership	100.000	MMLIC		l

1 2 3 4 5 6 7 Name of Sec Exchang if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec Exchange if Publicly Tr (U.S. or Internation Sec	ded Names of Parent, Subsidiaries	Domiciliary Location	Relation- ship to Reporting Entity	11 Directly Controlled by (Name of Entity/Person)	12 Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence,	13 If Control is Owner- ship Provide Percen-	14	Is an SCA Filing Re-	16
Code Group Name Code NalC Company Code Group Name Code Number RSSD CIK Internation Internati	ded Names of Parent, Subsidiaries Or Affiliates Baring Asset Management (Asia) Limited	ciliary Loca- tion	ship to Reporting		(Ownership, Board, Management, Attorney-in-Fact, Influence,	is Owner- ship Provide		SCA Filing	
NAIC Company ID Federal RSSD CIK Internation ID Internation ID Internation ID ID ID ID ID ID ID I	ded Names of Parent, Subsidiaries Or Affiliates Baring Asset Management (Asia) Limited	ciliary Loca- tion	ship to Reporting		Board, Management, Attorney-in-Fact, Influence,	Owner- ship Provide		SCA Filing	
NAIC Company ID Federal RSSD CIK Internation ID Internation ID Internation ID ID ID ID ID ID ID I	ded Names of Parent, Subsidiaries Or Affiliates Baring Asset Management (Asia) Limited	ciliary Loca- tion	ship to Reporting		Management, Attorney-in-Fact, Influence,	ship Provide		Filing	ļ ,
Group Code Group Name Code Number RSSD CIK Internation	ded Names of Parent, Subsidiaries Or Affiliates Baring Asset Management (Asia) Limited	ciliary Loca- tion	to Reporting		Attorney-in-Fact, Influence,	Provide			
Group Code Group Name Company Code ID Number Federal RSSD CIK Internation .0000	Parent, Subsidiaries Or Affiliates Baring Asset Management (Asia) Limited Baring Asset Management Korea Limited	Loca- tion	Reporting		Influence,			l Re-	, ,
Code Group Name Code Number RSSD CIK Internation 000	Al) Or Affiliates Baring Asset Management (Asia) Limited Baring Asset Management Korea Limited	tion				Percen-		_	1 '
	Baring Asset Management (Asia) Limited	HKG	Entity				Ultimate Controlling	quired?	'
	Baring Asset Management Korea Limited				Other)	tage	Entity(ies)/Person(s)	(Y/N)	<u> </u>
	Baring Asset Management Korea Limited		NIA	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		1 '
		KOR	NIA	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC		[
98-0457707	Baring SICE (Taiwan) Limited			Baring Asset Management (Asia) Enlinted	owner strip				ſ
		TWN	NIA	Limited	Ownership	100.000	MMLIC		1 '
				Baring Asset Management (Asia) Holdings					1
0000 98-0236449	Baring Asset Management (Japan) Limited	JPN	NI A	Limited	Ownership	100.000	MMLIC		l'
	Baring Asset Management (Australia) Pty			Baring Asset Management (Asia) Holdings					1 '
	Limited	AUS	NI A	Limited	Ownership	100.000	MMLIC		ļ'
	Baring International Fund Managers (Ireland)			Baring Asset Management UK Holdings Limited					1 '
	Limited	IRL	NI A		Ownership	100.000	MMLIC		t'
				Baring Asset Management UK Holdings Limited		400.000			1 '
	Baring Asset Management Switzerland Sàrl	CHE	NI A	Danian Anna Managana IV II-laina I inited	Ownership	100.000	MMLIC		i
98-0497550	Daning France 040	FRA	NIA	Baring Asset Management UK Holdings Limited	0	100.000	MMLIC		1 '
	Baring France SAS	FHA	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		······
0000	Baring Pension Trustees Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		[
0000 99-0457578	Baring Investment Services Limited		NIA	Baring Asset Management Limited	Ownership.	100.000	MMLIC		í
0000	Barings Australia Holding Company Pty Ltd	AUS	NI A	Barings LLC	Ownership	100.000	MMLIC		
0000 98-0457456	Barings Australia Pty Ltd	AUS	NI A	Baring Australia Holding Company Pty Ltd.	Ownership.	100.000	MMLIC		i
	Barings Investment Advisors (Hong Kong)			Sarring reservation in terming company (1) Etc.					
	Limited	HKG	NI A	Barings LLC	Ownership	100.000	MMLIC		l'
	Alchemy Copyrights, LLC.	DE	NI A	MassMutual Holding LLC	Ownership/Influence	15.100	MMLIC		l'
				Massachusetts Mutual Life Insurance					1 '
	Alchemy Copyrights, LLC	DE	NI A	Company	Ownership	0.100	MMLIC		ļ'
0000	Alchemy Copyrights, LLC.	DE	NI A	Barings LLC	Influence	 	MMLIC		[']
				Massachusetts Mutual Life Insurance					1 '
	Chassis Acquisition Holding LLC	DE	NI A	Company	Ownership/Influence	30.000	MMLIC		t'
	Chassis Acquisition Holding LLC	UE	NI A	Barings LLC	Influence		MMLIC		I
81–4258759	CRA Aircraft Holding LLC	DE	NI A	Company	Ownership/Influence	40.900	MMLIC		1 '
0000 81-4258759	CRA Aircraft Holding LLC	DE	NIA	Barings LLC	Influence	40.300	MMLIC		· · · · · · · · · · · · · · · · · · ·
0000 47-3055009	Milestone Acquisition Holding, LLC.	DE	NIA	MassMutual Holding LLC	Ownership/Influence	18.300	MMLIC		i
	g, ELD:			Massachusetts Mutual Life Insurance					
	Milestone Acquisition Holding, LLC	DE	NI A	Company	Ownership.	0.000	MMLIC		l'
	Milestone Acquisition Holding, LLC.	DE	NIA	Barings LLC	Influence		MMLIC		ļ
				Massachusetts Mutual Life Insurance					' '
46-5460309	Red Lake Ventures, LLC	DE	NI A	Company	Ownership/Influence	15.800	MMLIC		ļ'
	Red Lake Ventures, LLC	DE	NI A	Barings LLC	Influence		MMLIC		t'
				Massachusetts Mutual Life Insurance			I		'
	Remington L & W Holdings LLC	DE	NI A	Company	Ownership/Influence	66.300	MMLIC		t'
81-4065378	Remington L & W Holdings LLC	DE	NI A	Barings LLC	Influence	 -	MMLIC		i
46-3123110	O. and Tour Holdings 4, 110	DE	NI A	Massachusetts Mutual Life Insurance Company	Ownership/Influence	25.600	MMLIC		1 '
0000	Sweet Tree Holdings 1, LLC	DE	NI A	Barings LLC	Influence	∠5.600	MMLIC		/
	Oneet free fiordings 1, LLC	UE		Massachusetts Mutual Life Insurance	iiii iudilod		. IIIIIL I V		i
	Tamiami Citurus. LLC	DE	NI A	Company	Ownership.	15.700	MMLIC		'
	Teaktree Acquisition, LLC	DE	NI A	MassMutual Holding LLC	Ownership/Influence	14.700	MMLIC		I
	Teaktree Acquisition, LLC	DE	NI A	Barings LLC	Influence		MMLIC		l
	, , , , , , , , , , , , , , , , , , ,			Massachusetts Mutual Life Insurance					1
	U.S. Buyer Broadcasting, LLC	DE	NI A	Company	Ownership/Influence	12.700	MMLIC		ļ'
	U.S. Buyer Broadcasting, LLC	DE	NI A	Barings LLC	Influence		MMLIC		ļ'
	U.S. WIG Holdings, LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	11.700	MMLIC		ļ'
0000 46-1500495	U.S. WIG Holdings, LP	DE	NIA	Barings LLC	Influence		MMLIC		<u> </u>

13.4

				PART 1	A - DETAI	L OF INSURANC	JE I	HOLD	ING COMPANY	SYSTEM				
1	2	3	4	5 6	7	8	9	10	11	12	13	14	15	16
										Type	If			
										of Control	Control			
										(Ownership,	is		ls an	
					Name of Securities			Relation-		Board,	Owner-		SCA	
					Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC			if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal	(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	1
Code	Group Name	Code	Number	RSSD CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Y/N)	*
									Massachusetts Mutual Life Insurance			1 37 (= 2)		
			20-2970495			US Pharmaceutical Holdings II, LLC	DE	NI A	Company	Ownership/Influence	42.600	. MMLIC		
0000			20-2970495			US Pharmaceutical Holdings II, LLC	DE	NI A	Barings LLC	Influence	-	MMLIC		
									Massachusetts Mutual Life Insurance					
0000						Solar Acquisition Holding, LLC	DE	NI A	Company	Ownership/Influence	39.200	MMLIC		
0000						Solar Acquisition Holding, LLC	DE	NI A	Barings LLC	Management		MMLIC		
0000						VGS Acquisition Holding, LLC	DE	NIA	MassMutual Holding LLC	Ownership/Influence	33.300	MMLIC	-	
0000						VGS Acquisition Holding, LLC	DE	NI A	Barings LLC	Management		MMLIC		
0000			46-3378584			WC Aircraft Holdings US II, LLC	DE	NI A	Company	Ownership/Influence	18.000	MMLIC		
0000			46-3378584			WC Aircraft Holdings US II, LLC	DE	NIA	Wood Creek Capital Management LLC	Management	10.000	MMLIC		
			140 00/0004			NO ATTOTATE HOTATINGS GO TT, LLC	DL		Massachusetts Mutual Life Insurance	management		I IIIIL I O	-	
0000						Wood Creek Aircraft Holding L. LP	CYM	NIA	Company	Ownership	12.100	MMLIC		
0000						Wood Creek Aircraft Holding I, LP	CYM	NI A	Wood Creek Capital Management LLC	Management		MMLIC		
0000						Baring Asset-Based Income Fund (US) GP, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
						Babson Capital Floating Rate Income Fund								
0000			04-1590850	0001501011 .		Management, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC	.	
0000						Babson Global Loan Feeder Management, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
0000						Barings CLO Investment Partners GP, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
						Barings Global Energy Infrastructure				1				
0000						Advisors, LLC	DE	NI A	Barings LLC	Ownership	100.000	- MMLIC		
0000						Barings North American Private Loan Fund Management, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000						Barings TERO Management LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000			98-0536233			Benton Street Advisors. Inc.	CYM	NIA	Barings LLC	Ownership	100.000	MMLIC		
			04-1590850			Great Lakes III GP. LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC	-	
0000						Lake Jackson LLC	DE	NI A	Barings LLC	Ownership.	100.000	MMLIC		
0000			04-1590850			Loan Strategies Management LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
0000			04-1590850			Mezzco LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
0000			02-0767001			Mezzco II LLC	DE	NI A	Barings LLC	Ownership	98.400	MMLIC		
0000			41-2280126			Mezzco III LLC	DE	NI A	Barings LLC	Ownership	99.300	MMLIC		
0000			80-0920285			Mezzco IV LLC	DE	NI A	Barings LLC	Ownership	99.300	MMLIC	-	
0000			90-0666326			Mezzco Australia LLC	DE	NI A NI A	Barings LLC	Ownership	72.000	. MMLIC		
0000						Mezzco Australia II LLCSomerset Special Opportunities Management LL(DE	INI A	Barings LLC	Ownership	100.000	_ MIMLIU	-	
0000		1	04-1590850			Johnstoet opecial opportunities management LL	DE	NIA	Barings LLC	Ownership	100.000	MMLIC	1	1
0000			84-1149206	2897101		Oppenheimer Acquisition Corp.	DE	NIA	MassMutual Asset Management Holding LLC	Ownership	97.000	MMLIC		1
0000			13-2527171	2679183 0000820031		OppenheimerFunds. Inc.	CO	NI A	Oppenheimer Acquisition Corp.	Ownership	100.000	MMLIC		
0000			13-2953455	0000276541		OppenheimerFunds Distributor, Inc.	NY	NI A	OppenheimerFunds, Inc.	Ownership.	100.000	MMLIC		
0000			84-1106295	.		Oppenheimer Real Asset Management, Inc.	DE	NI A	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	.	
0000			13-4160541	. 3458125 0001179479 .		OFI Global Institutional, Inc.	NY	NI A	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC		
0000			22-2697140			HarbourView Asset Management Corporation	NY	NI A	OFI Institutional Asset Management, Inc	Ownership	100.000	MMLIC		
0000			13-3459790	2914875		OFI Global Trust Company	NY	NI A	OFI Institutional Asset Management, Inc.	Ownership	100.000	MILIC		
0000						OFI International, Ltd.	GBR	NI A	OFI Institutional Asset Management, Inc	Ownership	100.000	- MMLIC	-	
			00.0000700			SNW Asset Management Corporation	DE	NI A	OFI Institutional Asset Management, Inc.	Ownership	100.000	MMLIC	-	
			60-2233720 25-1951632	0000099782		Seattle Northwest Asset Management LLC Trinity Investment Management Corporation	WA	NI A NI A	OFI Institutional Asset Management, Inc OFI Institutional Asset Management, Inc	Ownership	100.000	- MMLIC	-	
.0000			84-1128397	0000099782		OFI SteelPath, Inc.	PA DE	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	-	
			84-1128397	0000276398	-	Shareholder Services, Inc.	CO	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	-	
.0000			OT 1000011		-	VTL Associates , LLC	PA	NIA	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC	-	1
0000						Index Management Solutions, LLC	PA	NIA	OppenheimerFunds, Inc.	Ownership.	100.000	MMLIC		1
			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	NI A	OppenheimerFunds, Inc.	Ownership	100.000	MMLIC		
0000		1	62-1210532			Tremont Group Holdings, LLC	NY	NI A	Oppenheimer Acquisition Corp.	Ownership	100.000	MMLIC		1

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											Type	If			
											of Control	Control			
											(Ownership,	is		ls an	
						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Y/N)	*
0000			06-1121864		0000764139		Tremont Partners, LLC	CT	NI A	Tremont Group Holdings, Inc.	Ownership	100.000	_ MMLIC		
0000			20-8215352				Tremont GP, LLC	DE	NI A	Tremont Group Holdings, Inc.	Ownership	100.000	. MMLIC		
0000			90-0874510				Settlement Agent LLC	DE	NIA	Tremont GP Tremont Group Holdings, Inc	Ownership	100.000	MMLIC		
							Tremont (bermuda) Limited	DIVIU	NI A	Massachusetts Mutual Life Insurance	Ownership		. MMLIC		
0000			04-3313782				MassMutual International LLC	DE	NI A	Company	Ownership	100.000	MMLIC	γ	
0000			01 0010702				MassMutual Asia Limited	_HKG	IA	MassMutual International LLC	Ownership	100.000	MMLIC		
0000							MassMutual Asia Investors Ltd	HKG	NI A	MassMutual Asia Limited	Ownership	100.000	MMLIC		
0000							MassMutual Guardian Limited	HKG	NIA	MassMutual Asia Limited	Ownership	100.000	. MMLIC		
0000							MassMutual Insurance Consultants Limited	HKG	NI A	MassMutual Asia Limited	Ownership	100.000	. MMLIC		
0000							MassMutual Services Limited	HKG	NIA	MassMutual Asia Limited	Ownership	100.000	MMLIC		·
0000			98-0610331				MassMutual Trustees Limited Protective Capital (International) Limited	HKG	NIA NIA	MassMutual Asia Limited	Ownership	80.000	MMLIC		
0000			98-1033127				MassMutual Internacional (Chile) SpA	CHL	NIA	MassMutual International LLC	Ownership	100.000	MMLIC		
0000			30 1000127				MassMutual Life Insurance Company	JPN	IIA	MassMutual International LLC	Ownership	100.000	MMLIC		
							massimutan Erro misaranso sampany			Massachusetts Mutual Life Insurance					
0000			04-2443240				MML Management Corporation	MA	NI A	Company	Ownership	100.000	MMLIC	Y	
0000			04-3548444				MassMutual International Holding MSC, Inc	MA	NIA	MML Management Corporation	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				MML Mezzanine Investor II, LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
0000			04-1590850				MML Mezzanine Investor III, LLC	DE	NI A	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
0000			. 04-1390630				www. wezzaiiiie iiivestoi iii, LLC	UE	NIA	Massachusetts Mutual Life Insurance	Owner Sirrp	100.000	. MINILIO		
0000			27-3576835				MassMutual External Benefits Group LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			20-8730751				Cornerstone Global REIT Corporation	DE	NI A	Company	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				100 w. 3rd Street LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
0000			04-1590850				300 South Tryon Hotel LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
0000			. 04-1090000				300 30utii Tryon noter LLC	UE	NIA	Massachusetts Mutual Life Insurance	Owner Sirrp	100.000	_ MMLTO		
0000			04-1590850				300 South Tryon LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			20-3887968				54 West Capital LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
l							l <u>.</u>			Massachusetts Mutual Life Insurance	I				
0000		-	16-1720387				Alexandria Towers Investors LLC	DE	NIA	Company	Ownership	100.000	MMLIC		·
0000							Almack Mezzanine Fund LP	GBR	NIA	Massachusetts Mutual Life Insurance	Ownership/Influence	41.800	MMLIC		
0000							Almack Mezzanine Fund I LP	GBR	NIA	Company	Ownership	41.800	MMLIC		1
0000							Almack Mezzanine Fund I LP	GBR	NIA	Barings (U.K.) Limitied	Management		- MMLIC		1
							more and the		I	Massachusetts Mutual Life Insurance					1
0000							Almack Mezzanine Fund II Unleveraged LP	GBR	NI A	Company	Ownership/Influence	73.100			
0000							Almack Mezzanine Fund II Unleveraged LP	GBR	NIA	Barings (U.K.) Limitied	Management		MMLIC		
										Massachusetts Mutual Life Insurance		04.005			
0000							Almack Mezzanine Fund III LP	GBR	NIA	Company	Ownership/Influence	34.300	MMLIC		·
0000							Almack Mezzanine Fund III LP	GBR	NIA	C.M. Life Insurance Company Barings (U.K.) Limitied	Ownership	۵۵۸ د	MMLIC		†
							Barings Emerging Markets Corporate Bond Fund			Massachusetts Mutual Life Insurance	managonent				1
0000			l				Sago Sand gring marrieto odiporate bona i ana	IRL	NI A	Company	Ownership/Influence	97.000	MMLIC		<u> </u>
							Barings Emerging Markets Corporate Bond Fund			, ,	,				
0000								IRL	NIA	Barings LLC	_ Management		MMLIC		ļ
l									l	Massachusetts Mutual Life Insurance	I				
0000							Barings Emerging Markets Local Debt Fund	IRL	NIA	Company	Ownership/Influence	24.400	MMLIC		·
0000							Barings Emerging Markets Local Debt Fund	IRL	NI A	Barings LLC	_ Management		_ MMLIC		

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1	2	3	4	5	6	7	8	9	10	11	12 Type of Control	13 If Control	14	15	16
											(Ownership,	is		ls an	
						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Y/N)	*
							Barings Global Special Situations Credit Fund			Massachusetts Mutual Life Insurance					
0000							1	IRL	NI A	Company	Ownership/Influence	100.000	MMLIC		
0000							Barings Global Special Situations Credit Fund	IRL	NIA	Barings LLC	Management		MMLIC		
0000							Babson Capital Global Special Situation	INL	NI A	Massachusetts Mutual Life Insurance	management				
0000			98-1206017				Credit Fund 2	DE	NI A	Company	Ownership/Influence	23.900	MMLIC		
							Babson Capital Global Special Situation								
0000			98-1206017				Credit Fund 2	DE	NI A	C.M. Life Insurance Company	Ownership	1.500	MMLIC		
							Babson Capital Global Special Situation								
0000			. 98-1206017				Credit Fund 2	DE	NI A	Barings LLC	Management		MMLIC		
0000			37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NI A	Massachusetts Mutual Life Insurance	Ownership/Influence	79.100	MMLIC		
0000			. 37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NIA	Company	Ownership	3.800	MMLIC		
0000			37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NI A	Barings LLC	Management		MMLIC		
			1000111				Dabbon oup tur Louis ottatogrob runu, L.i.			Massachusetts Mutual Life Insurance	- managomori c				
0000							Barings US High Yield Bond Fund	IRL	NI A	Company	Ownership/Influence	43.000	MMLIC		
0000							Barings US High Yield Bond Fund	IRL	NI A	C.M. Life Insurance Company	Ownership	5.700			
0000							Barings US High Yield Bond Fund	IRL	NI A	Barings LLC	Management		MMLIC		
0000							Babson CLO Ltd. 2012-II	CYM	NI A	Barings LLC	Influence	·····	MMLIC		
0000			98-1128827				Babson CLO Ltd. 2013-I	CYM	NI A	Barings LLC	Influence	-	MMLIC		4
0000			98-1128827				Babson CLO Ltd. 2013-II	CYM	NIA	Barings LLC	Influence	·	MMLIC		5 2
0000							Babson CLO Ltd. 2014-1	CYM	NIA	Barings LLC	Influence	·····	MMLIC		6
0000							Babson CLO Ltd. 2014-111	CYM	NIA	Barings LLC	Influence		MMLIC		
0000							Babson CLO Ltd. 2015-I	CYM	NI A	Barings LLC	Influence		MMLIC		7
0000							Babson CLO Ltd. 2015-II	CYM	NIA	Barings LLC	Influence		MMLIC		8
0000							Babson CLO Ltd. 2016-I	CYM	NI A	Barings LLC	Influence		MMLIC		
0000							Babson CLO Ltd. 2016-II	CYM	NI A	Barings LLC	Influence	·····	MMLIC		
0000							Babson Euro CLO 2014-I BV	NLD	NI A	Barings LLC	Influence	· -	MMLIC		
0000							Babson Euro CLO 2014-II BV	NLD	NIA	Barings LLC	Influence.	· 	MMLIC		
0000							Babson Euro CLO 2016-1 BV	NLD	NIA	Barings LLC	Influence	·	MMLIC		
							545501 2410 020 2010 1 D1	,		Massachusetts Mutual Life Insurance					
0000			81-0841854				Barings CLO Investment Partners LP	DE	NI A	Company	Ownership/Influence	99.400	MMLIC		
0000			81-0841854				Barings CLO Investment Partners LP	DE	NI A	Barings LLC	Management	-	MMLIC		
							Barings Real Estate European Value Add I SCSp			Massachusetts Mutual Life Insurance	L		l		
0000			-				D : D E E	GBR	NI A	Company	Ownership/Influence	90.000	MMLIC		
0000							Barings Real Estate European Value Add I SCSp	GBR	NI A	C.M. Life Insurance Company	Ownership	10.000	MNLIC		
0000							Barings Real Estate European Value Add I SCSc	nun	INI A	O.W. LITE INSULANCE COMPANY	- Owner Strip	10.000	mmLIV		
0000							Dai ingo noa i Estate European varue Auu i 300).	GBR	NI A	Barings LLC	Management		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			. 11-3789446				Baring Focused EAFE Equity Fund	DE	NI A	Company	Ownership/Influence	43.200	MMLIC		
0000			11-3789446				Baring Focused EAFE Equity Fund	DE	NI A	Baring Asset Management Limited	Management		MMLIC		ļ
0000			. 30-0607379		0001497049		Baring Global Dynamic Asset Allocation Fund	DE	NI A	Baring Asset Management Limited	Management		MMLIC		
0000			00 1000004				Barings Global Energy Infrastructure Fund I	0/4	NII A	Massachusetts Mutual Life Insurance	O-manahi - /Infli	00.000	100 10		
0000			98-1332384				Barings Global Energy Infrastructure Fund I	CYM	NI A	Company	Ownership/Influence	99.200	MMLIC		
0000			98-1332384				IP	CYM	NIA	Baring Asset Management Limited	Management		MMLIC		
			1002004					m		Massachusetts Mutual Life Insurance					
0000							Barings Global Private Loan Fund	LUX	NI A	Company	Ownership/Influence	18.600	MMLIC		
0000							Barings Global Private Loan Fund	_LUX	NI A	Barings LLC	Management		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			. 38-4010344				Barings North American Private Loan Fund LP .	DE	NI A	Company	Ownership/Influence	82.000	MMLIC		

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										Type	If			
										of Control	Control			
										(Ownership,	is		ls an	
					Name of Constitution			Daladaa						
					Name of Securities			Relation-		Board,	Owner-		SCA	
					Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC			if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal	(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	/
Code	Group Name	Code	Number	RSSD CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Y/N)	*
0000			38-4010344			Barings North American Private Loan Fund LP	DE	NIA	Baring Asset Management Limited	Management		MMLIC		
						,			Massachusetts Mutual Life Insurance					
0000			98-1332384			Barings RE Credit Strategies VII LP	DE	NIA	Company	Ownership/Influence	28.800	MMLIC		
0000			98-1332384			Barings RE Credit Strategies VII LP	DE	NIA	Baring Asset Management Limited	Management		MMLIC		1
						Dan mgo na oroant otratogree m a			Massachusetts Mutual Life Insurance	- Indiagonor territoria				
0000			26-4142796			Baring International Small Cap Equity Fund	DE	NIA	Company	Ownership/Influence	64.300	MMLIC		
0000			26-4142796			Baring International Small Cap Equity Fund	DE	NIA	Baring Asset Management Limited	Management		MMLIC		
0000			98-0536233			Benton Street Partners I, L.P.	CYM	NI A	MassMutual Capital Partners LLC	Ownership/Influence	99.100	MMLIC		1
0000			98-0536233			Benton Street Partners I, L.P.	CYM	NIA	Barings LLC	Management		MMLIC		
0000			98-0536233			Benton Street Partners I, L.P.	CYM	NIA	C.M. Life Insurance Company	Ownership.	0.100	MMLIC		
0000			30 0300200			Donton otrect rai thers 1, E.i.	TWC		Massachusetts Mutual Life Insurance	- Owner Sirrp.		, mmL10		
0000			98-0536233			Benton Street Partners I. L.P.	CYM	NIA	Company	Ownership	0.400	MMLIC		
0000			90-0000200			Denton Street Farthers 1, L.F.	DIMC	NI A	Massachusetts Mutual Life Insurance	. Towner Sirrp		. MMLIG		
0000			98-0536199			Benton Street Partners II. L.P.	CYM	NIA		Ownership/Influence	28.600	MMLIC		2
						Benton Street Partners II, L.P.			Company		28.600	MMLIC		د
0000			98-0536199				CYM	NI A NI A	MassMutual Capital Partners LLC	Ownership	10.400	MMLIC		
0000			98-0536199			Benton Street Partners II, L.P.	UYML	NI A	Barings LLC	Management		MMLIC		
0000						5 7 4 1 1 5	DE		Massachusetts Mutual Life Insurance		04 000	188 10		
0000						Braemar Energy Ventures I, L.P.	DE	NIA	Company	Ownership/Influence	91.300	MMLIC		
0000						Braemar Energy Ventures I, L.P.	DE	NI A	C.M. Life Insurance Company	Ownership	1.400	MMLIC		
0000						Braemar Energy Ventures I, L.P.	DE	NI A	Barings LLC	Management		MMLIC		
									Massachusetts Mutual Life Insurance					
0000			06-1614196			Cambridge Hotel, LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
									Massachusetts Mutual Life Insurance					
0000			04-1590850			Cheyenne Mountain Resort LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
0000						Barings European Core Property Fund SCSCp	LUX	NI A	MassMutual Holding LLC	Ownership/Influence	45.300	MMLIC		
0000						Barings European Core Property Fund SCSCp	LUX	NI A	C.M. Life Insurance Company	Ownership	2.900	MMLIC		
0000						Barings European Core Property Fund SCSCp	LUX	NI A	Barings Real Estate Advisers LLC	Management		MMLIC		
0000			27-1701622	0001481752		Cornerstone Core Mortgage Venture LP	DE	NI A	MassMutual Holding LLC	Ownership/Influence	50.000	MMLIC		
0000			27-1701622	0001481752		Cornerstone Core Mortgage Venture LP	DE	NI A	Barings Real Estate Advisers LLC	Management		MMLIC		
									Massachusetts Mutual Life Insurance					
0000			45-3751572	0001534877		Cornerstone Enhanced Mortgage Fund I LP	DE	NI A	Company	Ownership/Influence	15.500	MMLIC		
0000			45-3751572	0001534877		Cornerstone Enhanced Mortgage Fund I LP	DE	NI A	Barings Real Estate Advisers LLC	Management		MMLIC		
									Massachusetts Mutual Life Insurance					
0000			20-8730751			Cornerstone Global Real Estate LP	DE	NI A	Company	Ownership/Influence	92.300	MMLIC		
0000			20-8730751			Cornerstone Global Real Estate LP	DE	NI A	C.M. Life Insurance Company	Ownership	7.600	MMLIC		
0000			20-8730751			Cornerstone Global Real Estate LP	DE	NI A	Barings Real Estate Advisers LLC	Management		MMLIC		
				1					Massachusetts Mutual Life Insurance					1
0000			36-4770946			Cornerstone High Yield Venture LP	DE	NI A	Company	Ownership/Influence	50.000	MMLIC		
0000			36-4770946			Cornerstone High Yield Venture LP	DE	NI A	Barings Real Estate Advisers LLC	Management		MMLIC		
0000			20-5578089	l		Barings Core Property Fund LP	DE	NI A	MassMutual Holding LLC	Ownership/Influence	10.400	MMLIC		
0000			20-5578089			Barings Core Property Fund LP	DE	NI A	Barings Real Estate Advisers LLC	Management		MMLIC		
									Massachusetts Mutual Life Insurance					
0000		l	27-0547156			Cornerstone Real Estate Fund VIII LP	DE	NI A	Company	Ownership/Influence	6.800	MMLIC	[
0000			27-0547156			Cornerstone Real Estate Fund VIII LP	DE	NIA	Barings Real Estate Advisers LLC	Management		MMLIC		1
						The state of the s			Massachusetts Mutual Life Insurance					T
0000			46-5432619	[Cornerstone Real Estate Fund X LP	DE	NIA	Company	Ownership/Influence	24.700	MMLIC		1
0000			46-5432619			Cornerstone Real Estate Fund X LP	DE	NIA	C.M. Life Insurance Company	Ownership	2.800	MMLIC		
0000			46-5432619			Cornerstone Real Estate Fund X LP	DE	NIA	Barings Real Estate Advisers LLC	Management		MMLIC		
0000			40-0402018			OUTHER STORE REAL ESTATE FULL V FL	VE	NI A	Massachusetts Mutual Life Insurance	Imariayellerit		. MINIL I V		1
0000			46-5437441	1		Barings/LAZ Parking Fund LP	DE	NIA	Company	Ownership/Influence	99.100	MMLIC		1
0000			46-5437441			Barings/LAZ Parking Fund LP Barings/LAZ Parking Fund LP	DE	NIA		Management	99.100	MMLIC		
			40-043/441	0001041			UE	NIA	Barings Real Estate Advisers LLC					
0000				3981641		Duchess VI CLO B.V.			Barings LLC	Influence	 -	MMLIC		
0000				4007502		Duchess VII CLO B.V.	GBR	NI A	Barings LLC	Influence		MMLIC		

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Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	1
	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)		Entity(ies)/Person(s)	(Y/N)	*
Code	Group Name	Code	Number	กออบ	CIK	international)	Of Affiliates	lion	⊏⊓uty		Other)	tage	Entity(les)/Ferson(s)	(1/14)	↓ '
										Massachusetts Mutual Life Insurance					1
0000			20-3887968				E-Wise Land Venture LLC	DE	NI A	Company	Ownership	100.000	MMLIC		'
										Massachusetts Mutual Life Insurance					1
0000			80-0691253		1517196		Gateway Mezzanine Partners I, L.P.	DE	NI A	Company	Ownership/Influence	72.500	MMLIC		
0000			80-0691253		1517196		Gateway Mezzanine Partners I, L.P.	DE	NI A	C.M. Life Insurance Company	Ownership	7.700	MMLIC		
0000			80-0691253		1517196		Gateway Mezzanine Partners I, L.P.	DE	NI A	Barings LLC	Management		MMLIC		
										Massachusetts Mutual Life Insurance					1
0000			90-0991195		1597511		Gateway Mezzanine Partners II LP	DE	NI A	Company	Ownership/Influence	43.600	MMLIC		
0000			90-0991195	000	1597511		Gateway Mezzanine Partners II LP	DE	NI A	C.M. Life Insurance Company	Ownership	5.400	MMLIC		.1'
0000			90-0991195	000	1597511		Gateway Mezzanine Partners II LP	DE	NI A	Barings LLC	Management		MMLIC		'
							,			Massachusetts Mutual Life Insurance	•				
0000		1	37-1708623	000-	1565779		Great Lakes III, L.P.	DE	NI A	Company	Ownership/Influence	35.700	MMLIC		1
0000			37-1708623		1565779		Great Lakes III, L.P.	DE	NI A	Barings LLC	Management		MMLIC		
0000			37-1700023		1000119		JPMDB Commercial Mortgage Securities Trust	UL	NI /	Dai mgs LLC	management		MMLIO		
0000			38-4032059				2017-C5	NY	NIA	Barings LLC	Management		MMLIC		1
0000			30-4032039				2017-65	_ IN1	NI A	Massachusetts Mutual Life Insurance	management		MMLIU	-	
0000			00 0007000				V 11 D 11 D 1 110	DE	NII A		0 1:	400,000	188 10		1
0000			20-3887968				Kazwell Realty Partners LLC	DE	NI A	Company	Ownership	100.000	MMLIC	-	'
										Massachusetts Mutual Life Insurance					1
0000			46-4255307				Marco Hotel LLC	DE	NI A	Company	Ownership	100.000	MMLIC	-	'
										Massachusetts Mutual Life Insurance					1
0000			81-3000420				MM Debt Participations LLC	DE	NI A	Company	Ownership/Influence	100.000	MMLIC		
0000			81-3000420				MM Debt Participations LLC	DE	NI A	Barings LLC	Management		MMLIC		
										Massachusetts Mutual Life Insurance					1
0000			26-3799762				MML O'Hare Hotel LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					1
0000			20-3887968				Oakley Grove Development LLC	DE	NI A	Company	Ownership	100.000	MMLIC		.1'
							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Massachusetts Mutual Life Insurance					
0000			20-3887968				Old Pasco Properties LLC	DE	NIA	Company	Ownership	100.000	MMLIC		1
										Massachusetts Mutual Life Insurance					
0000			75-2901061				Reston Arboretum LLC	DE	NIA	Company	Ownership	100.000	MMLIC		1
			70 200 100 1				TICOTON ANDOTOTUM EEO			Massachusetts Mutual Life Insurance	owner entry		mile 10		
0000			30-0713071				Riva Portland LLC	DE	NIA	Company	Ownership	100.000	MMLIC		1
0000			00 07 1007 1				Rockall CLO B.V.	GBR	NIA	Barings LLC	Influence.		MMLIC		
0000							HOCKATT OLO D.V.	UDI1	NI /	Massachusetts Mutual Life Insurance	IIII luciloe		mmL10		
0000		1	54-2055778				Rockville Town Center LLC	VA	NIA		Ownership	100.000	MMLIC		1
0000			J4-2UJ5//8				nockville lowii center LLC	VA	NI A	Company	owner strip	100.000	MINILI U	-	
0000		1	40 5404044				0	DE	NI A	Massachusetts Mutual Life Insurance	0	100 000	144 10	1	
0000			46-5491311				Seattle 1415 Hotel Owner LLC	DE	NI A	Company	Ownership	100.000	MMLIC	-	
		1							l	Massachusetts Mutual Life Insurance	l	400.00-		1	
0000			04-1590850				Sedona TFMP Land LLC	DE	NI A	Company	Ownership	100.000	MMLIC	-	
		1	l							Massachusetts Mutual Life Insurance				1	
0000			20-8856877		1409910		Somerset Special Opportunities Fund L.P	DE	NI A	Company	Ownership/Influence	64.800	MMLIC		
0000			20-8856877		1409910		Somerset Special Opportunities Fund L.P	DE	NI A	C.M. Life Insurance Company	Ownership	3.000	MMLIC	.	
0000			20-8856877	000	1409910		Somerset Special Opportunities Fund L.P	DE	NI A	Barings LLC	Management		MMLIC	.	
		1								Massachusetts Mutual Life Insurance					1
0000			04-1590850				South Myrtle Monrovia MM LLC	DE	NI A	Company	Ownership	100.000	MMLIC	.	
		1								Massachusetts Mutual Life Insurance					1
0000			20-3887968	ll			South Pasco Properties LLC	DE	NI A	Company	Ownership	100.000	MMLIC	.	
										Massachusetts Mutual Life Insurance		T			
0000		1	30-0336246	000-	1345379		Tower Square Capital Partners II, L.P.	DE	NIA	Company	Ownership/Influence	28.300	MMLIC		1
0000			30-0336246		1345379		Tower Square Capital Partners II, L.P.	DE	NIA	C.M. Life Insurance Company	Ownership	4.000	MMLIC		
0000			30-0336246		1345379		Tower Square Capital Partners II, L.P.	DE	NIA	Barings LLC	Management		MMLIC	-	
0000			00-0000240		1070018		TOWER OQUALE CAPITAL LALLIES II, L.F.	UL		Massachusetts Mutual Life Insurance	manayanant			-	
0000		1	32-0160190				Tower Square Capital Partners II-A, L.P	DE	NIA	Company	Ownership/Influence	85.000	MMLIC		1
			32-0160190					DE		C.M. Life Insurance Company			MMLIC	-	
0000			3Z-U16U19U				Tower Square Capital Partners II-A, L.P	. UE	NI A	U.M. LITE Insurance Company	Ownership	15.000			

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	0000			41-2280127		0001447547		Tower Square Capital Partners III, L.P	DE	NI A		Management	-	MMLIC		
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Company																
March Marc											Massachusetts Mutual Life Insurance					
March Marc	0000			04-3722906		0001228752		Tower Square Capital Partners, L.P.	DE	NI A		Ownership/Influence	35.800	MMLIC		
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Refurn First Service	0000			. 04–1590850					DE	NI A	Company	Ownership	100.000	MMLIC		
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Sarings Energing Markets Sovereign Debt, Fund JRL NIA Sarings LLC Management MALC																
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D000	0000			47-3758432					MA	NI A	Barings LLC	Management		MMLIC		
								Barings Emerging Markets Local Currency Debt								
D000	0000							Fund		NI A		Management		MMLIC		
DOOD 47-734770 Barings Total Return Bond Fund MA NIA Barings LLC Management ML C DOOD MAID Management ML C DOOD MAID Management MAID MAID Management MAID MAID Management MAID MA				47-3790192												
DOOD A7-3801860 Barings U.S. High Yield Fund MM. NIA. Barings LLC Management. MM. IC MM. IC									HKG							
Gateway Mezzanine Partners Trust																
Decoration Dec				. 47–3801860									-			
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D000 D6-2505390 Great Lakes LLC DE NIA Company Ownership A 4.400 MMLIC				1-1018134				ureal Lakes II LLU	UE	NI A	Magazahuratta Mutual I if I I I I I I I I I I I I I I I I I		1.000	. MMLIC		
Dec Dec	0000			E6 3E0E300	1			Great Lakes II C	DE	NI A		Ownership	4 400	MAIL LC		
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Somerset Special Opportunities Master Fund LP													0.500			
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	0000				1			LP	CYM	NIA	Barings LLC	Management		MMLIC		
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	0000			04-1590850	.]			Wood Creek Venture Fund LLC	DE	NI A		Ownership	40.000	MMLIC		<u> </u>
												,				
	0000							12-18 West 55th Street Predevelopment, LLC	DE	NI A	Company	Ownership	89.200			ļl
Massachusetts Mutual Life Insurance	0000			20-2548283	.				DE	NI A		Ownership	7.800	MMLIC		
.0000 36-4823011 50 Liberty LLCDE NIA CompanyOwnership 46.100 MMLIC																
	0000			36-4823011				50 Liberty LLC	DE	NI A	Company	Ownership	46.100	MMLIC		J

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		NIAIO					N	Domi-			Management,	ship			
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Group		Company	. ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Y/N)	*
0000			36-4823011				50 Liberty LLC	DE	NI A	C.M. Life Insurance Company	Ownership	4.600	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			80-0948028				One Harbor Shore LLC	DE	NI A	Company	Ownership	32.300	. MMLIC		
0000			80-0948028				One Harbor Shore LLC	DE	NI A	C.M. Life Insurance Company	Ownership	3.200	MMLIC		
										Massachusetts Mutual Life İnsurance					
0000			81-4382111				Budapester Strasse LLC	DE	NI A	Company	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				CHC/RFP VI Core LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			95-4207717				Cornerstone California Mortgage Fund LLC	CA	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			95-4207717				Cornerstone California Mortgage Fund II LLC .	CA	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NI A	Company	Ownership	84.400	MMLIC		
0000			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NI A	C.M. Life Insurance Company	Ownership	5.600	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			45-2632610				Cornerstone Permanent Mortgage Fund	MA	NI A	Company	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			61-1750537				Cornerstone Permanent Mortgage Fund II	MA	NI A	Company	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			35-2531693				Cornerstone Permanent Mortgage Fund III	MA	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			61-1793735				Cornerstone Permanent Mortgage Fund IV	MA	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			46-5001122				CREA 330 Third LLC	DE	NI A	Company	Ownership	0.900			
0000			46-5001122				CREA 330 Third LLC	DE	NI A	C.M. Life Insurance Company	Ownership	0.100	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			46-4367364				CREA FMF Nashville LLC	DE	NI A	Company	Ownership	100.000	_ MMLIC		
										Massachusetts Mutual Life Insurance					
0000			26-2399532				CREA/LYON West Gateway, LLC	DE	NI A	Company	Ownership	54.000	MMLIC		
0000			26-2399532				CREA/LYON West Gateway, LLC	DE	NI A	C.M. Life Insurance Company	Ownership	6.000	MMLIC		
0000			81-0890084				CREA Madison Member LLC	DE	NI A	C.M. Life Insurance Company	Ownership	100.000	MMLIC		-
										Massachusetts Mutual Life Insurance					
0000			20-0348173	-			CREA/PPC Venture LLC	DE	NI A	Company	Ownership	93.400	MMLIC		-
0000			20-0348173				CREA/PPC Venture LLC	DE	NI A	C.M. Life Insurance Company	Ownership	6.600	MMLIC		
		I		1						Massachusetts Mutual Life Insurance	l	75.005		1	
0000			82-1563809				CCB Montford Park LLC	DE	NI A	Company	Ownership	75.200	. MMLIC		
0000			82-1563809	-			CCB Montford Park LLC	DE	NI A	C.M. Life Insurance Company	Ownership	4.800	MMLIC		-
		I					- II - 0 - I			Massachusetts Mutual Life Insurance	l	07.406		1	
0000			26-1611591	3956836			Fallon Cornerstone One MPD LLC	DE	NI A	Company	Ownership	67.100	- MMLIC		-
0000			26-1611591	3956836			Fallon Cornerstone One MPD LLC	DE	NI A	C.M. Life Insurance Company	Ownership	6.600	MMLIC		·
0000		I	00.0047004	1			5 D' D I 110	DE		Massachusetts Mutual Life Insurance		50 500	IIII 10	1	
0000			20-3347091				Fan Pier Development LLC	DE	NIA	Company	Ownership	58.500	MMLIC		·
0000		I	20-3347091	-			Fan Pier Development LLC	DE	NI A	C.M. Life Insurance Company	Ownership	5.800	MMLIC	[t
0000			40.0000500	1			F	DE		Massachusetts Mutual Life Insurance		04 500		1	
0000		I	46-3880526	-			Farringdon London Holdings LLC	DE	NI A	Company	Ownership	94.500	- MMLIC	[t
0000			46-3880526				Farringdon London Holdings LLC	DE	NIA	C.M. Life Insurance Company	Ownership	5.500			
0000		1		1			1-4:-:4: 000 144	000	NI A	Massachusetts Mutual Life Insurance	0	4 000	188 10	1	
0000							Infinity SCD Ltd	GBR	NIA	Company	Ownership	4.200	MMLIC		·
0000		I	00 4040050	1			Librard on Consumer LL Co	DE	NIA	Massachusetts Mutual Life Insurance	0	F7 000	188 10	1	
0000			20-4819358				Johnston Groves LLC	DE	NI A	Company	Ownership	57.200	MMLIC		·
0000		1	04 5000400	1			London de Marchardon III. L.C.	D=	NI A	Massachusetts Mutual Life Insurance	0	100 000	188 10	1	
0000			81-5360103				Landmark Manchester Holdings LLC	DE	NI A	Company	Ownership	100.000	_ MMLIC		

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					Name of Securities			Relation-		Board,	Owner-		SCA	
					Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC			if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal	(U.S. or	Parent, Subsidiaries	Loca-		Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
	Group Name	Code	Number	RSSD CIK	International)	Or Affiliates	tion	Reporting Entity		Other)		Entity(ies)/Person(s)	(Y/N)	*
Code	Group Name	Code	Number	NOOD CIK	international)	Of Affiliates	lion	Entity	(Name of Entity/Person) Massachusetts Mutual Life Insurance	Other)	tage	Entity(les)/Ferson(s)	(1/N)	
0000			81-2871333			MM Chatham Office LLC	DE	NIA	Company	Ownership	83.400	MMLIC		
0000			01-20/1000			www onatham office LLC	UE	NI A	Massachusetts Mutual Life Insurance	Owner Sirrp		MINILIO		
0000			81-2871333			MM Chatham Office LLC	DE	NIA	Company	Ownership	16.600	MMLIC		
0000			207 1000			Salomon Brothers Commercial Mortgage Trust	UL		Company	Owner Strip.		minL10		
0000						2001-MM	DE	NIA	Barings Real Estate Advisers LLC	Influence		MMLIC		
									Massachusetts Mutual Life Insurance				-	
0000			27-2977720			Sawgrass Village Shopping Center LLC	DE	NI A	Company	Ownership	84.200	MMLIC		
0000			27-2977720			Sawgrass Village Shopping Center LLC	DE	NI A	C.M. Life Insurance Company	Ownership	15.800	MMLIC		
									Massachusetts Mutual Life Insurance					
0000						Ten Fan Pier Boulevard LLC	DE	NI A	Company	Ownership	91.000	MMLIC		
0000						Ten Fan Pier Boulevard LLC	DE	NI A	C.M. Life Insurance Company	Ownership	9.000			
									Massachusetts Mutual Life Insurance					
0000			81-5273574			Three PW Office Holding LLC	DE	NI A	Company	Ownership	95.000	MMLIC		
									Massachusetts Mutual Life Insurance					
0000			35-2484550			Twenty Two Liberty LLC	MA	NI A	Company	Ownership	59.200	MMLIC		
0000			35-2484550			Twenty Two Liberty LLC	MA	NI A	C.M. Life Insurance Company	Ownership	5.900	MMLIC		
			45 4000547						Massachusetts Mutual Life Insurance		4 000			
0000			45-4606547			UK LIW Manager LLC	DE	NI A	Company	Ownership	1.000	MMLIC	-	·
0000			45-4606547			IIV I IW Marchard II O	DE	ALL A	Massachusetts Mutual Life Insurance	0h:	00 000	100		
0000			45-4606547			UK LIW Member LLC	UE	NI A	Company Massachusetts Mutual Life Insurance	Ownership	99.000		-	
0000			45-5401109			Washington Cataway Apartments Venture IIC	DE	NI A	Company	Ownership	92.000	MMLIC		
0000			45-5401109			Washington Gateway Apartments Venture LLC Washington Gateway Apartments Venture LLC	DE	NI A	C.M. Life Insurance Company	Ownership	4.800	MMLIC	-	
0000			45-5401103			masimigton dateway Apartments venture LLC	UL		Massachusetts Mutual Life Insurance	Owner strip	4.000	LIG		
0000			20-2970495			Waterford Development Associates	DE	NI A	Company	Ownership	90.000	MMLIC		
			20 20 0 100 111			materiora pereropinont necessates			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	NI A	Company	Ownership	77.400	MMLIC	_	
0000			46-3122029			WeHo Domain LLC	DE	NI A	C.M. Life Insurance Company	Ownership	12.600	MMLIC		
									Massachusetts Mutual Life Insurance					
0000			81-1552222			Willowwood Lakeside Master LLC	DE	NI A	Company	Ownership	50.000	MMLIC		
1			L			l <u>-</u>			Massachusetts Mutual Life Insurance	1				
0000			20-5481477			Ygnatio Valley Funding	DE	NI A	Company	Ownership	90.000	MMLIC	-	
0000			45 0400000		00				Massachusetts Mutual Life Insurance	l	0.000	IIII 10		
0000			45-3168892		. UQ	MassMutual Barings Dynamic Allocation Fund	MA	NI A	Company	Ownership	0.000	MMLIC	-	
0000			51-0529328	0000927972	00	Manahutual Bramiar Main Street Fund	MA	NI A	Massachusetts Mutual Life Insurance	Ownership	0.000	MMLIC		
0000			0 1-0029328		UV	MassMutual Premier Main Street Fund MassMutual Premier Strategic Emerging Markets		NI A	Company	Ownership	v.000	MINIL I C	-	
0000			26-3229251	0000927972	00	Fund	MA	NI A	Company	Ownership	0.000	MMLIC		
0000			20-0229201	0000927972		Tuliu			Massachusetts Mutual Life Insurance	Owner strip	9.000	LIG		
0000			04-3277550	0000927972	00	MassMutual Premier Value Fund	MA	NIA	Company	Ownership.	96.400	MMLIC		
					~~	MassMutual Select Diversified International			Massachusetts Mutual Life Insurance				-	
0000			14-1980900	0000916053	00	Fund	MA	NI A	Company	Ownership	0.000	MMLIC		
			1						Massachusetts Mutual Life Insurance					
0000			01-0821120		0Q	MassMutual Select Diversified Value Fund	MA	NI A	Company	Ownership	0.000	MMLIC		
								1	Massachusetts Mutual Life Insurance		1			
0000			04-3512593		0Q	MassMutual Select Fundamental Growth Fund	MA	NI A	Company	Ownership	0.000	MMLIC		ļ
			1						Massachusetts Mutual Life Insurance					
0000			04-3513019		0Q	MassMutual Select Large Cap Value Fund	MA	NI A	Company	Ownership	18.000	MMLIC		
1					L.				Massachusetts Mutual Life Insurance	1				
0000			42-1710935		0Q	MassMutual Select Mid-Cap Value Fund	MA	NI A	Company	Ownership	79.700	MMLIC		

SCHEDULE Y

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
											Туре	If			1 1
											of Control	Control			1
											(Ownership,	is		ls an	1
						Name of Securities			Relation-		Board.	Owner-		SCA	1
						Exchange		Domi-	ship		Management.	ship		Filina	1
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	1
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence.	Percen-	Ultimate Controlling	quired?	1
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Y/N)	*
Code	Gloup Name	Oode	Number	HOOD	Oil	international)	MassMutual Select Small Capital Value Equity	tion	Littly	Massachusetts Mutual Life Insurance	Other)	lage	Littity(les)/i eison(s)	(1/14)	$\overline{}$
			02-0769954		0000916053	00	Fund	MA	NIA	Company	Ownership	12.400	MML IC		1
			02-0709934		0000910055	00	ruiiu	MA	NI A	Massachusetts Mutual Life Insurance	Owner Sirrp	12.400	. MINILIO		1
0000			04-3584140		0000916053	00	MassMutual Select Small Company Value Fund	MA	NIA	Company	Ownership	17.700	MML IC		1
			04-0004140		0000310033	04	massmutual select small company value fund		NI /	Massachusetts Mutual Life Insurance	Owner Sirip		_ mmL10		
0000			46-4257056		0000067160		MML Series International Equity Fund	MA	NI A	Company	Ownership	0.000	MMLIC		1
			140 4207000		0000007100		mine deries international equity rand			Massachusetts Mutual Life Insurance	Owner Sirip		, mmL10		i
0000			47-3517233		0001317146		MML Series II Asset Momentum Fund	MA	NIA	Company	Ownership	100.000	MMLIC		
			001/200		070 10 17 170		Minima dollido II Addet montelitum Fund			Massachusetts Mutual Life Insurance	οπιοι σπτρ		. mmL1V		
0000			47-3529636		0001317146		MML Series II Dynamic Bond Fund	MA	NIA	Company	Ownership	0.000	MMLIC		1
					070 10 17 170		Dona Tana			Massachusetts Mutual Life Insurance	οπιοι σπτρ		, mmL10		
0000			47-3544629		0001317146		MML Series II Equity Rotation Fund	MA	NIA	Company	Ownership.	97.400	MMLIC		1
			17 0011020		0001017140		mine derices in equity notation rund			Massachusetts Mutual Life Insurance	owner strip.		. minLTO		i
0000			47-3559064		0001317146		MML Series II Special Situations Fund	MA	NIA	Company	Ownership	98.200	MMLIC		1
			47 0000004		0001017140		mine derices in opecial ortuations runu			Massachusetts Mutual Life Insurance	owner strip.		. minLTO		
0000			46-3289207		0000916053		MassMutual RetireSMART 2055 Fund	MA	NI A	Company	Ownership	24.700	MMLIC		1
			40 0200201		0000010000		massmatuar netricomani 2000 rana			Massachusetts Mutual Life Insurance	owner strip.		. minL10		
0000			47-5326235		0000916053		MassMutual RetireSMART 2060 Fund	MA	NIA	Company	Ownership.	95.400	MMLIC		1
			47 3020203		0000010000		massmatuar netricomani 2000 rana			Massachusetts Mutual Life Insurance	owner strip.		. minL10		
0000			45-1618155		0000916053		MassMutual RetireSMART Conservative Fund	MA	NIA	Company	Ownership.	0.000	MML IC		1
			10 10 10 100		0000010000		massmatual netheroman conscivative rand			Massachusetts Mutual Life Insurance	owner simp				
0000			45-1618222		0000916053		MassMutual RetireSMART Growth Fund	MA	NIA	Company	Ownership	0.000	MMLIC		1
			10 10 1010222		0000010000		madomataat notificamiin arantii fana			Massachusetts Mutual Life Insurance	omor on p				
0000			45-1618262		0000916053		MassMutual RetireSMART Moderate Fund	MA	NIA	Company	Ownership	0.000	MMLIC		1
			10 1010202		0000010000		maddinataar rictir commit moderate rana			Massachusetts Mutual Life Insurance	omor on p				i
0000			45-1618046		0000916053		MassMutual RetireSMART Moderate Growth Fund	MA	NIA	Company	Ownership	0.000	MMLIC		1
			10 1010010		0000010000		madomataat fictificamiiti modorate drontii rana .			Massachusetts Mutual Life Insurance	omor on p				
0000			93-6305075				Oppenheimer Developing Markets Fund	DE	NIA	Company	Ownership	0.000	MMLIC		1
							opposition and according married and a			Massachusetts Mutual Life Insurance					
0000							Oppenheimer Developing Markets Equity UCITS	IRL	NIA	Company	Ownership	32.700	MMLIC		1
							Oppenheimer Developing Markets Equity UCITS.	IRL	NI A	OppenheimerFunds. Inc.	Management		MMLIC		
							Oppenheimer Emerging Markets Innovators UCITS								
0000								IRL	NI A	OppenheimerFunds, Inc.	Management		MMLIC		L
			81-3492794				Oppenheimer ESG Revenue ETF	DE	NI A	OppenheimerFunds, Inc.	Management_		MMLIC		1
0000							Oppenheimer Global Equity UCITS	IRL	NI A	OppenheimerFunds, Inc.	Management		MMLIC		L
0000			81-3480754				Oppenheimer Global ESG Revenue ETF	DE	NI A	OppenheimerFunds, Inc.	Management		MMLIC		
0000			47-3676235				Oppenheimer Global Multi-Asset Growth Fund	DE	NI A	OppenheimerFunds, Inc.	Management		MMLIC		
0000			47-1714929				Oppenheimer Global Multi-Asset Income Fund	DE	NI A	OppenheimerFunds, Inc.	Management		MMLIC		
0000							Oppenheimer Global Value Equity UCITS	IRL	NI A	OppenheimerFunds, Inc.	Management		MMLIC		
							Oppenheimer International Growth & Income				-				1
0000			81-3136071				Fund	DE	NI A	OppenheimerFunds, Inc.	Management		MMLIC		L
							Oppenheimer Macquarie Global Infrastructure								1 7
0000			81-1080638				Fund	DE	NI A	OppenheimerFunds, Inc.	Management		MMLIC		ll
			[1											1 7
		•													

Asterisk	Explanation
1	Massachusetts Mutual Life Insurance Company owns .52% of the affiliated debt of Jefferies Finance LLC
2	Debt investors own 3.6% and includes only Great Lakes III, L.P.
3	Partnership investors own 99% and include Babson Capital Loan Strategies Fund, L.P.
4	Debt investors own 8.7% and includes only Babson Capital Loan Strategies Fund, L.P.
5	Debt investors own 4.3% and includes only Great Lakes III, L.P.

Asterisk	k Explanation
6	Debt investors own 5.8% and includes only Great Lakes III, L.P.
7	Debt investors own 2.0% and includes only Great Lakes III, L.P.
8	Debt investors own 4.3% and includes only Great 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.

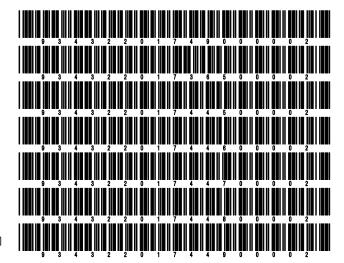
1. Will the Trusteed Surplus Statement be filed with the state of domicile and the NAIC with this statement?	se
2. Will the Medicare Part D Coverage Supplement be filed with the state of domicile and the NAIC with this statement? NO 3. Will the Reasonableness of Assumptions Certification required by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

Explanation:

- 1. Not required.
- 2. This line of business is not written by the Company.
- 3. Not required.
- 4. Not required.
- 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

		1	2
		Current	December 31
		Statement Date	Prior Year
2504.	Funds awaiting escheat and other miscellaneous	2,853,102	2,550,177
2597.	Summary of remaining write-ins for Line 25 from overflow page	2,853,102	2,550,177

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		
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition		
	2.2 Additional investment made after acquisition		
3.	Current year change in encumbrances		
4.	Total gain (loss) on disposals		
5.	Deduct amounts received on disposals		
6.	Total foreign exchange change in book/adjusted yill vayill ya		
7.	Deduct current year's other than temporary impalment recommendation and the second sec		
8.	Deduct current year's depreciation		
9.	Book/adjusted carrying value at the end of current period (Lines 1+2+3+4-5+6-7-8)		
10.	Deduct total nonadmitted amounts		
11.	Statement value at end of current period (Line 9 minus Line 10)		

SCHEDULE B - VERIFICATION

Mortgage Loans

,		1	2
			Prior Year Ended
		Year to Date	December 31
1.	Book value/recorded investment excluding accrued interest, December 31 of prior year	966,906,414	985,850,414
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition	42,887,217	113,485,456
	2.2 Additional investment made after acquisition	3,829,967	9,840,626
3.	2.1 Actual cost at time of acquisition 2.2 Additional investment made after acquisition Capitalized deferred interest and other	678,636	943,848
4.	Accrual of discount	116,571	163,368
5.	Unrealized valuation increase (decrease) Total gain (loss) on disposals Deduct amounts received on disposals		
6.	Total gain (loss) on disposals	(554,960)	(333,041)
7.	Deduct amounts received on disposals	43,409,253	134,699,663
8.	Deduct amortization of premium and mortgage interest points and commitment fees	73,566	371,826
9.	Total foreign exchange change in book value/recorded investment excluding accrued interest	3,788,578	(6,645,575)
10.	Deduct current year's other than temporary impairment recognized		1,327,193
11.	Book value/recorded investment excluding accrued interest at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	974, 169, 604	966,906,414
12.	Total valuation allowance		(250,000)
13.	Subtotal (Line 11 plus Line 12)	974, 169, 604	966,656,414
14.	Deduct total nonadmitted amounts		
15.	Statement value at end of current period (Line 13 minus Line 14)	974, 169, 604	966,656,414

SCHEDULE BA - VERIFICATION

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	201,480,523	234, 145, 696
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition	2,982,249	4,827,054
	2.2 Additional investment made after acquisition	11,255,964	34,110,758
3.	Capitalized deferred interest and other		
4.	Accrual of discount		
5.	Unrealized valuation increase (decrease)	20,452,915	9,488,856
6.	Total gain (loss) on disposals	(1,003,112)	(520, 100)
7.	Deduct amounts received on disposals	54,550,745	80,096,623
8.	Deduct amortization of premium and depreciation	5,242	9,911
9.	Total foreign exchange change in book/adjusted carrying value	834,605	(465,207)
10.	Deduct current year's other than temporary impairment recognized	354,698	
11.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	181,092,459	201,480,523
12.	Deduct total nonadmitted amounts		
13.	Statement value at end of current period (Line 11 minus Line 12)	180,588,236	200,388,085

SCHEDULE D - VERIFICATION

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	4,414,366,679	4,470,816,857
2.	Cost of bonds and stocks acquired		820,379,361
3.	Accrual of discount	4,898,893	11,719,920
4.	Unrealized valuation increase (decrease)	6,674,505	58,754,679
5.	Total gain (loss) on disposals		
6.	Deduct consideration for bonds and stocks disposed of		
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)		
11.	Deduct total nonadmitted amounts		
12.	Statement value at end of current period (Line 10 minus Line 11)	4,488,393,656	4,414,366,679

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

	During the Current Quarter for	2	3	Designation 4	5	6	7	8
	Book/Adjusted	_	· ·		Book/Adjusted	Book/Adjusted	Book/Adjusted	Book/Adjusted
	Carrying Value Beginning	Acquisitions During	Dispositions During	Non-Trading Activity During	Carrying Value End of	Carrying Value End of	Carrying Value End of	Carrying Value December 31
NAIC Designation	of Current Quarter	Current Quarter	Current Quarter	Current Quarter	First Quarter	Second Quarter	Third Quarter	Prior Year
<u> </u>								
DONDO								
BONDS								
	4 004 005 000	040 004 540	400 000 774	(44.040.005)	1 004 005 000	4 704 005 005		0 000 000 000
1. NAIC 1 (a)		242,094,548	489,936,771	(14,848,065)	1,984,685,293	1,721,995,005		2,089,666,290
2. NAIC 2 (a)		1,756,405,524	1,486,182,894	19,894,803	1,835,871,308	2,125,988,741		1,622,094,328
3. NAIC 3 (a)		14,504,647	14,141,594	3, 129, 670	224,750,194	228,242,917		224,266,261
4. NAIC 4 (a)	197,806,855	106,917,280	86,578,261	7,700,275	197,806,855	225,846,149		191, 196, 352
5. NAIC 5 (a)	75,049,843	2,623,493	5,073,569	3,922,790	75,049,843	76,522,557		75,932,484
6. NAIC 6 (a)	20,462,531	76,186	2,718,529	984,822	20,462,531	18,805,010		23,535,069
7. Total Bonds	4,338,626,024	2,122,621,678	2,084,631,618	20,784,295	4,338,626,024	4,397,400,379		4,226,690,784
PREFERRED STOCK								
8. NAIC 1	4,200,000				4,200,000	4,200,000		4,200,000
9. NAIC 2	, ,				8.682.584	8.682.584		8,513,029
10. NAIC 3	, , ,	300.000		720,421	7,916,202	8,936,623		8,300,119
11. NAIC 4	· · ·			(729,915)	2,103,836	1.373.921		1,751,966
	, ,			6.716	2.633.549	2.640.265		2.623.367
12. NAIC 5	, , , , ,			, ,	, , , , ,	, ,		, ,,
13. NAIC 6	,			(100)	57,075	56,975		60,565
14. Total Preferred Stock	25,593,246	300,000		(2,878)	25,593,246	25,890,368		25,449,046
15. Total Bonds and Preferred Stock	4,364,219,270	2,122,921,678	2,084,631,618	20,781,417	4,364,219,270	4,423,290,747		4,252,139,830

(a) Book/Adjusted Carrying Value column for the end of the current reporting period includes the following amount of short-term and cash equivalent bonds by NAIC designation:

SCHEDULE DA - PART 1

Short-Term Investments

	1	2	3	4	5 Paid for
	Book/Adjusted Carrying Value	Par Value	Actual Cost	Interest Collected Year-to-Date	Accrued Interest Year-to-Date
9199999 Totals	16,221,818	XXX	16,158,722		

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	17,482,743	
2.	Cost of short-term investments acquired		
3.	Accrual of discount	80,323	172,324
4.	Unrealized valuation increase (decrease)		
5.	Total gain (loss) on disposals	7	1, 171
6.	Deduct consideration received on disposals	17,499,977	26,997,524
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)	16,221,818	17,482,743
11.	Deduct total nonadmitted amounts		
12.	Statement value at end of current period (Line 10 minus Line 11)	16,221,818	17,482,743

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)	7,742,517
2.	Cost Paid/(Consideration Received) on additions	
3.	Unrealized Valuation increase/(decrease)	(24, 112, 617)
4.	Total gain (loss) on termination recognized	1,076,731
5.	Considerations received/(paid) on terminations	1,172,583
6.	Amortization	
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)	(16,465,952)
10.	Deduct nonadmitted assets	
11.	Statement value at end of current period (Line 9 minus Line 10)	(16,465,952)

	SCHEDULE DB - PART Futures Cor		RIFICATIO	N	
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 - Cu	mulative Cash Char	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	6,737,288			
	3.14 Section 1, Column 18, prior year	(5,999,031)	12,736,319	12,736,319	
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	6,737,288			
	3.24 Section 1, Column 19, prior year	(5,999,031)	12,736,319	12,736,319	
3.3	Subtotal (Line 3.1 minus Line 3.2)				
4.1	Cumulative variation margin on terminated contracts during the year		14,829,741		
4.2	Less:				
	4.21 Amount used to adjust basis of hedged item				
	4.22 Amount recognized	20,828,772	20,828,772		
4.3	Subtotal (Line 4.1 minus Line 4.2)				(5,999,031)
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 \ldots				5,999,031
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 (RSATs) Open **NONE**

Schedule DB-Part C-Section 2-Reconciliation of Replication (Synthetic Asset) Transactions Open ${f N} \ {f O} \ {f N} \ {f E}$

SCHEDULE DB - VERIFICATION

Verification of Book/Adjusted Carrying Value, Fair Value and Potential Exposure of all Open Derivative Contracts

		Book/Adjusted Carrying	Value Check
1.	Part A, Section 1, Column 14.	(16,465,952)	
2.	Part B, Section 1, Column 15 plus Part B, Section 1 Footnote - Total Ending Cash Balance		
3.	Total (Line 1 plus Line 2)		(16,465,952)
4.	Part D, Section 1, Column 5	485 , 323 , 355	
5.	Part D, Section 1, Column 6	(501,789,307)	
6.	Total (Line 3 minus Line 4 minus Line 5)		
		Fair Value Che	eck
7.	Part A, Section 1, Column 16	(16,465,952)	
8.	Part B, Section 1, Column 13		
9.	Total (Line 7 plus Line 8)		(16,465,952)
10.	Part D, Section 1, Column 8	485,323,355	
11.	Part D, Section 1, Column 9	(501,789,307)	
12	Total (Line 9 minus Line 10 minus Line 11)		
		Potential Exposure	Check
13.	Part A, Section 1, Column 21	204, 167, 578	
14.	Part B, Section 1, Column 20	10,557,500	
15.	Part D, Section 1, Column 11	214,725,078	
16.	Total (Line 13 plus Line 14 minus Line 15)		

SCHEDULE E - VERIFICATION

(Cash Equivalents)

	, , ,	1	2
		Year To Date	Prior Year Ended December 31
1.	Book/adjusted carrying value, December 31 of prior year	131,990,044	290,288,161
2.	Cost of cash equivalents acquired	3,872,373,062	6,008,682,102
3.	Accrual of discount	1,569,431	1,828,052
4.	Unrealized valuation increase (decrease)		
5.	Total gain (loss) on disposals	756	5,352
6.	Deduct consideration received on disposals	3,774,129,188	6,168,813,623
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)	231,804,105	131,990,044
11.	Deduct total nonadmitted amounts		
12.	Statement value at end of current period (Line 10 minus Line 11)	231,804,105	131,990,044