

LI

	OF THE HATTAN NATIO roup Code 0435 0084 (Current) (Prior)	AS OF JUNE 30 CONDITION AND	AFFAIRS OF THE	
NAIC G Organized under the Laws of Country of Domicile	HATTAN NATIO           roup Code         0435 (Current)         0084 (Prior)		AFFAIRS OF THE	
NAIC G	HATTAN NATIO           roup Code         0435 (Current)         0084 (Prior)	NAL LIFE		
NAIC G Organized under the Laws of Country of Domicile	roup Code 0435 0084 (Current) (Prior)			
Organized under the Laws of	(Current) (Prior)			
Country of Domicile		NAIC Company Code	67083 Employer's ID N	umber45-0252531
	Ohio	Sta	ate of Domicile or Port of Entry	OH
icensed as business type:		United States of Ar	nerica	
	Life, Accident	and Health [X] Frate	rnal Benefit Societies []	
corporated/Organized	12/20/1956		Commenced Business	01/04/1957
tatutory Home Office	301 East Fourth Street		Cir	ncinnati, OH, US 45202
	(Street and Number)		(City or Tow	n, State, Country and Zip Code)
lain Administrative Office		301 East Fourth 5	Street	
		(Street and Num		
	icinnati, OH, US 45202			513-357-3300
(City or ⊺ow	n, State, Country and Zip Code)		(Area (	Code) (Telephone Number)
ail Address	Post Office Box 5420		Cir	ncinnati, OH, US 45201
	(Street and Number or P.O. Box)			n, State, Country and Zip Code)
rimary Location of Books and Red	cords	301 East Fourth	Street	
		(Street and Num		
Cir	cinnati, OH, US 45202		,	513-357-3300
(City or Tow	n, State, Country and Zip Code)		(Area (	Code) (Telephone Number)
ternet Website Address		www.massmutua	Lcom	
tatutory Statement Contact	Robert Mayhew Ea (Name)	arle II		513-412-1735
	rearle@gaig.com	15	(A	vrea Code) (Telephone Number) 513-412-1673
	(E-mail Address)			(FAX Number)
President	Mark Francis Muething	OFFICERS	Treasurer	Brian Patrick Sponaugle #
	John Paul Gruber		Appointed Actuary	
Advince Dura	Pastier	OTHER		
Adrienne Susan	Dayıldı	Michael Robert F	anning	
		DIRECTORS OR TR		
Dominic Lusea		Elizabeth Ward C		
Geoffrey James C Paul Anthony L		Roger William Ci Mark Francis Mu		Michael Robert Fanning
Eric William P		Gareth Fielding		Michael James O'Connor Arthur William Wallace III
tate of	Ohio			
County of	Hamilton SS	1		

statement, together with related exhibits, schedules and explanations therein contained, and have been completed condition and affairs of the said reporting perity as of the reporting period stated above, and of its income and deductions therefrom for the period ended, and have been completed in accordance with the NAIC Annual Statement Instructions and Accounting Practices and Procedures manual except to the extent that: (1) state law may differ; or, (2) that state in accordance with the NAIC Annual Statement Instructions and Accounting Practices and Procedures, according to the best of their information, knowledge and belief, respectively. Furthermore, the scope of this attestation by the described officers also includes the related corresponding electronic filing with the NAIC, when required, that is an exact copy (except for formatting differences due to electronic filing) of the enclosed statement. The electronic filing may be requested by various regulators in lieu of or in addition to the enclosed statement. 1 2 L ŝ. Mark ncis Mi ething John Paul Gruber Brian Patrick Sponaugle President Treasurer Secretary a. Is this an original filing? Yes[X]No[] ribed and sworn to before n day of Sub b. If no, guit August 2022 1. State the amendment number 1 2. Date filed N sher nu 3. Number of pages attached. NOTARY PUBLIC - OHIO COUNTY OF HAMILTON MY COMMISSION EXPIRES 07-19-25 # OFFICERS AND "Inthin and ATE OF ON

	AS	SETS			
			Current Statement Date		4
		1 Assets	2 Nonadmitted Assets	3 Net Admitted Assets (Cols. 1 - 2)	December 31 Prior Year Net Admitted Assets
1	Bonds				
Ζ.	Stocks:			0	
	2.1 Preferred stocks				
	2.2 Common stocks			0	
3.	Mortgage loans on real estate:				
	3.1 First liens				
	3.2 Other than first liens			0	
4.	Real estate:				
	4.1 Properties occupied by the company (less \$			0	
	4.2 Properties held for the production of income (less				
	\$			0	
	4.3 Properties held for sale (less \$				
	encumbrances)			0	
5.	Cash (\$963,646 ), cash equivalents				
	(\$6,225,045 ) and short-term				
	investments (\$0 )	7,188,692			22,975,920
6.	Contract loans (including \$ premium notes)			4,499,968	
	Derivatives			-	
7. 8.	Other invested assets				0
	Receivables for securities				
	Securities lending reinvested collateral assets				
	Aggregate write-ins for invested assets				
	Subtotals, cash and invested assets (Lines 1 to 11)		0		
	Title plants less \$ charged off (for Title insurers only)			0	
14.	Investment income due and accrued			1,386,631	
	Premiums and considerations:				
	15.1 Uncollected premiums and agents' balances in the course of collection	155 565	16 226		166 432
	15.2 Deferred premiums, agents' balances and installments booked but				
	deferred and not yet due (including \$				
		2 252 464	10 670		0 005 765
	earned but unbilled premiums)		10,070		
	15.3 Accrued retrospective premiums (\$				
	contracts subject to redetermination (\$ )			0	
	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			0	
17.	Amounts receivable relating to uninsured plans			0	
18.1	Current federal and foreign income tax recoverable and interest thereon				
	Net deferred tax asset				
	Guaranty funds receivable or on deposit				
20.	Electronic data processing equipment and software			0	
	Furniture and equipment, including health care delivery assets				
21.				0	
	(\$				
	Net adjustment in assets and liabilities due to foreign exchange rates			0	400.050
	Receivables from parent, subsidiaries and affiliates			0	
	Health care (\$				
25.	Aggregate write-ins for other than invested assets		0		
26.	Total assets excluding Separate Accounts, Segregated Accounts and Protected Cell Accounts (Lines 12 to 25)		1,305,796		
27.	From Separate Accounts, Segregated Accounts and Protected Cell Accounts			0	
28.	Total (Lines 26 and 27)	136,278,251	1,305,796	134,972,455	141,249,735
	DETAILS OF WRITE-INS				
1101.					
1102.					
1102.					
	Summary of remaining write-ins for Line 11 from overflow page				0
	Totals (Lines 1101 through 1103 plus 1198)(Line 11 above)	0		0	0
2501.	Miscellaneous receivable				
2502.					
2503.					
2598.	Summary of remaining write-ins for Line 25 from overflow page	0	0	0	0
2599.	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	37	0	37	22

# ASSETS

# LIABILITIES, SURPLUS AND OTHER FUNDS

1.	00.055 141	Current Statement Date	December 31 Prior Year
	Aggregate reserve for life contracts \$60,855,411 less \$       included in Line 6.3         (including \$       Modco Reserve)	60 855 411	62 687 26
2.	Aggregate reserve for accident and health contracts (including \$		
3.	Liability for deposit-type contracts (including \$		
4.	Contract claims:		
	4.1 Life		
	4.2 Accident and health		
5.			
	and unpaid		
6.	Provision for policyholders' dividends, refunds to members and coupons payable in following calendar year - estimated		
	amounts:		
	6.1 Policyholders' dividends and refunds to members apportioned for payment (including \$	0,000	0.00
	6.2 Policyholders' dividends and refunds to members not yet apportioned (including \$		
	6.3 Coupons and similar benefits (including \$		
7.	Amount provisionally held for deferred dividend policies not included in Line 6		
7. 8.	Premiums and annuity considerations for life and accident and health contracts received in advance less		
0.	discount; including      accident and reality considerations for the and accident and reality contracts received in advance ress     accident and health premiums	25.058	61.08
9.	Contract liabilities not included elsewhere:		
0.	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 \$0 is for medical loss ratio rebate per the Public Health		
	Service Act		
	9.3 Other amounts payable on reinsurance, including \$		
	ceded		
	9.4 Interest Maintenance Reserve		
10.			
	\$ and deposit-type contract funds \$		
11.	Commissions and expense allowances payable on reinsurance assumed		
12.	General expenses due or accrued		
13.	Transfers to Separate Accounts due or accrued (net) (including \$ accrued for expense		
	allowances recognized in reserves, net of reinsured allowances)		
14.	Taxes, licenses and fees due or accrued, excluding federal income taxes		
	Current federal and foreign income taxes, including \$ on realized capital gains (losses)		,
	Net deferred tax liability		
16.	Unearned investment income		
17.	Amounts withheld or retained by reporting entity as agent or trustee		
18.	Amounts held for agents' account, including \$		
19.	Remittances and items not allocated		
20.	Net adjustment in assets and liabilities due to foreign exchange rates		
21.	Liability for benefits for employees and agents if not included above		
22.	Borrowed money \$ and interest thereon \$		
23.	Dividends to stockholders declared and unpaid		
24.	Miscellaneous liabilities:		
	24.01 Asset valuation reserve	583,409	.547.48
	24.02 Reinsurance in unauthorized and certified (\$		,
	24.03 Funds held under reinsurance treaties with unauthorized and certified (\$ ) reinsurers		
	24.04 Payable to parent, subsidiaries and affiliates		
	24.05 Drafts outstanding		
	24.06 Liability for amounts held under uninsured plans		
	24.07 Funds held under coinsurance		
	24.08 Derivatives		
	24.09 Payable for securities		
	24.10 Payable for securities lending		
	24.11 Capital notes \$ and interest thereon \$		
25.	Aggregate write-ins for liabilities		546,7
26.	Total liabilities excluding Separate Accounts business (Lines 1 to 25)		128,157,0
27.	From Separate Accounts Statement		
28.	Total liabilities (Lines 26 and 27)		128,157,0
29.	Common capital stock	2,500.000	
30.	Preferred capital stock		
31.	Aggregate write-ins for other than special surplus funds		
32.	Surplus notes		
33.	Gross paid in and contributed surplus		
34.	Aggregate write-ins for special surplus funds		
35.	Unassigned funds (surplus)	(117,609,332)	(116,875.2
36.	Less treasury stock, at cost:		, , ,
	36.1		
	36.2 shares preferred (value included in Line 30 \$		
37.	Surplus (Total Lines 31+32+33+34+35-36) (including \$ in Separate Accounts Statement)		10,592,6
38.	Totals of Lines 29, 30 and 37	12,358,555	13,092,6
39.	Totals of Lines 28 and 38 (Page 2, Line 28, Col. 3)	134,972,455	141,249,7
	DETAILS OF WRITE-INS		,=,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
501.	Unclaimed funds		546 7
502.		,	,
502. 503.			
598.	Summary of remaining write-ins for Line 25 from overflow page		
599.	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	391,706	546,7
101.			- ,
102.			
	Summary of remaining write-ins for Line 31 from overflow page		
103.	Totals (Lines 3101 through 3103 plus 3198)(Line 31 above)		
103. 198.		v	
103. 198. 199.		1	
103. 198. <u>199.</u> 401.			
103. 198. <u>199.</u> 401. 402.			
103. 198. <u>199.</u> 401.			

# SUMMARY OF OPERATIONS

e         December 31           889,454        5,514,834           563,378         .3,024,029           177,934        555,947           260,193        515,986	1,563,378 177,934 	1,561,125 172,388 	Premiums and annuity considerations for life and accident and health contracts Considerations for supplementary contracts with life contingencies Net investment income Amortization of Interest Maintenance Reserve (IMR)
889,454       .5,514,834         563,378       .3,024,029         177,934       .355,947         260,193       .515,986         0       0         0       0         890,959       9,410,796         643,142       8,522,279         .5,995       .12,647         252,514       .1,3341,822        1,694       .27,529         212,352)       (3,313,378         468,908       .8,126,965         119,661       .230,382         896,435       .1,619,737	2,889,454 1,563,378 177,934 260,193 260,193 0 4,890,959 4,643,142 5,995 1,252,514 7777,915 1,694	2,474,222 1,561,125 .172,388 .269,808	Considerations for supplementary contracts with life contingencies Net investment income Amortization of Interest Maintenance Reserve (IMR)
563,378       3,024,029         177,934       .355,947         260,193       .515,986         0       0         890,959       9,410,796         643,142       8,522,279         .5,995       .12,647         252,514       .1,3341,822         .1,694       .27,529         212,352)       (3,313,378         468,908       .8,126,965         119,661       .230,382         896,435       .1,619,737	1,563,378 177,934 	1,561,125 172,388 	Considerations for supplementary contracts with life contingencies Net investment income Amortization of Interest Maintenance Reserve (IMR)
563,378	1,563,378 	1,561,125 	Net investment income Amortization of Interest Maintenance Reserve (IMR)
260, 193	0 4,890,959 4,643,142 5,995 1,252,514 777,915 1,694		Amortization of Interest Maintenance Reserve (IMR)
260,193	0 4,890,959 4,643,142 5,995 1,252,514 		
0 0 0 890,959 9,410,796 643,1428,522,279 5,9951,2647 252,5141,536,066 777,9151,341,822 1,69427,529 212,352) (3,313,378 468,9088,126,965 119,661230,382 896,4351,619,737	0 4,890,959 4,643,142 5,995 1,252,514 		Separate Accounts net gain from operations excluding unrealized gains or losses
890,959         9,410,796           643,142         8,522,279           5,995         12,647           252,514         1,536,066           777,915         1,341,822           1,694         27,529           212,352)         (3,313,378           468,908         .8,126,965           119,661         230,382           896,435         1,619,737	4,890,959 4,643,142 5,995 1,252,514 		Commissions and expense allowances on reinsurance ceded
890,959         9,410,796           643,142         8,522,279           5,995         12,647           252,514         1,536,066           777,915         1,341,822           1,694         27,529           212,352)         (3,313,378           468,908         .8,126,965           119,661         230,382           896,435         1,619,737	4,890,959 4,643,142 5,995 1,252,514 		Reserve adjustments on reinsurance ceded
890,959         9,410,796           643,142         8,522,279           5,995         12,647           252,514         1,536,066           777,915         1,341,822           1,694         27,529           212,352)         (3,313,378           468,908         .8,126,965           119,661         230,382           896,435         1,619,737	4,890,959 4,643,142 5,995 1,252,514 		Miscellaneous Income:
890,959         9,410,796           643,142         8,522,279           5,995         12,647           252,514         1,536,066           777,915         1,341,822           1,694         27,529           212,352)         (3,313,378           468,908         .8,126,965           119,661         230,382           896,435         1,619,737	4,890,959 4,643,142 5,995 1,252,514 		8.1 Income from fees associated with investment management, administration and contract
890,959         9,410,796           643,142         8,522,279           5,995         12,647           252,514         1,536,066           777,915         1,341,822           1,694         27,529           212,352)         (3,313,378           468,908         .8,126,965           119,661         230,382           896,435         1,619,737	4,890,959 4,643,142 5,995 1,252,514 		guarantees from Separate Accounts
643, 142         8, 522, 279           5,995         12, 647           252, 514         1, 536, 066           777, 915         1, 341, 822           1, 694         27, 529           212, 352)         (3, 313, 378           468, 908	4,643,142 5,995 1,252,514 	0	8.3 Aggregate write-ins for miscellaneous income
643, 142         8, 522, 279           5,995         12, 647           252, 514         1, 536, 066           777, 915         1, 341, 822           1, 694         27, 529           212, 352)         (3, 313, 378           468, 908	4,643,142 5,995 1,252,514 	4,477,543	Totals (Lines 1 to 8.3)
5,995 252,514 777,915 1,341,822 1,694 212,352) (3,313,378 468,908 8,126,965 119,661 230,382 896,435 1,619,737	5,995 1,252,514 		
252,514 1,536,066 777,915 1,341,822 1,694 27,529 212,352) (3,313,378 468,908 8,126,965 119,661 230,382 896,435 1,619,737			Matured endowments (excluding guaranteed annual pure endowments)
777,915			
777,915		· · · · · · · · · · · · · · · · · · ·	Disability benefits and benefits under accident and health contracts
1,694			Coupons, guaranteed annual pure endowments and similar benefits
1,694         27,529           212,352)         (3,313,378           468,908         8,126,965           119,661         230,382           896,435         1,619,737			Surrender benefits and withdrawals for life contracts
212,352)         (3,313,378           468,908	,		Group conversions
212,352)         (3,313,378           468,908			Interest and adjustments on contract or deposit-type contract funds
468,908			Payments on supplementary contracts with life contingencies
119,661	(2,212,352)	(1,832,314)	Increase in aggregate reserves for life and accident and health contracts
896,435	4,468,908	4, 112, 714	Totals (Lines 10 to 19)
896,435			Commissions on premiums, annuity considerations, and deposit-type contract funds (direct
896,4351,619,737			business only)
			Commissions and expense allowances on reinsurance assumed
	· · ·		General insurance expenses and fraternal expenses
	· · · · · ·		Insurance taxes, licenses and fees, excluding federal income taxes
			Increase in loading on deferred and uncollected premiums Net transfers to or (from) Separate Accounts net of reinsurance
	239,404	248,437	Aggregate write-ins for deductions
	5,883,202	5,366,810	Totals (Lines 20 to 27)
10,042,171	5,005,202	5,500,610	Net gain from operations before dividends to policyholders and federal income taxes (Line 9 minus
992,243)(1,431,375	(992,243)	(889,267)	
11,307 22,084		11,520	Dividends to policyholders and refunds to members
11,001	11,007	11,020	Net gain from operations after dividends to policyholders, refunds to members and before federal
003,550)(1,453,459	(1,003,550)	(900,787)	income taxes (Line 29 minus Line 30)
	(318,688)	(268,042)	Federal and foreign income taxes incurred (excluding tax on capital gains)
			Net gain from operations after dividends to policyholders, refunds to members and federal income
684,862)(910,538	(684,862)	(632,745)	taxes and before realized capital gains or (losses) (Line 31 minus Line 32)
			Net realized capital gains (losses) (excluding gains (losses) transferred to the IMR) less capital
			gains tax of \$
7,707 4,227		83	transferred to the IMR)
677,155) (906,311	(677,155)	(632,662)	Net income (Line 33 plus Line 34)
			CAPITAL AND SURPLUS ACCOUNT
	9,193,324	13,092,658	Capital and surplus, December 31, prior year
(4,299)(3,136			
		(04.507)	Change in net unrealized foreign exchange capital gain (loss)
		. , ,	Change in net deferred income tax
(33,070)187,653	. , ,	,	Change in nonadmitted assets
-			Change in liability for reinsurance in unauthorized and certified companies
			Change in reserve on account of change in valuation basis, (increase) or decrease Change in asset valuation reserve
			Change in treasury stock
			Surplus (contributed to) withdrawn from Separate Accounts during period
			Other changes in surplus in Separate Accounts Statement
			Change in surplus notes
			Cumulative effect of changes in accounting principles
			Capital changes:
			50.1 Paid in
			50.2 Transferred from surplus (Stock Dividend)
			50.3 Transferred to surplus
			Surplus adjustment:
000,0005,000,000		0	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
			Dividends to stockholders
0 0		0	Aggregate write-ins for gains and losses in surplus
	4,105,881	(734,103)	Net change in capital and surplus for the year (Lines 37 through 53)
299,205 13,092,658	13,299,205	12,358,555	Capital and surplus, as of statement date (Lines 36 + 54)
	T		DETAILS OF WRITE-INS
	-		I otals (Lines 08.301 through 08.303 plus 08.398) (Line 8.3 above)
0 0	,		
0 0 239,404488,859			
0 0 239,404488,859			
0 0 0 239,404			Summary of remaining write-ins for Line 27 from overflow page
0 0 239,404	0		Totals (Lines 2701 through 2703 plus 2798)(Line 27 above)
0 0 239,404 0 0 239,404 0 0 239,404 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.0 239,404	248,437	
0 0 239,404	0 239,404		
0 0 239,404	0 0 		
0 0 239,404	0 0 		Summary of remaining write-ins for Line 53 from overflow page
0 105,881 299,205	0 4,105,881 13,299,205 	0 (734,103) 12,358,555 0 0 0 248,437	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         Dividends to stockholders         Aggregate write-ins for gains and losses in surplus         Net change in capital and surplus for the year (Lines 37 through 53)         Capital and surplus, as of statement date (Lines 36 + 54)         DETAILS OF WRITE-INS         Summary of remaining write-ins for Line 8.3 from overflow page         Totals (Lines 08.301 through 08.303 plus 08.398) (Line 8.3 above)         Reinsurance administration agreement expense

# **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	2,588,133		
2.	Net investment income	1,368,108	1,473,207	2,864,351
3.	Miscellaneous income	269,808	260,193	515,986
4.	Total (Lines 1 to 3)	4,226,049	4,777,274	9,079,839
5.	Benefit and loss related payments	7,119,083	4,663,300	
6.	Net transfers to Separate Accounts, Segregated Accounts and Protected Cell Accounts	0	0	0
7.	Commissions, expenses paid and aggregate write-ins for deductions	1,296,618	1,688,834	2,750,315
8.	Dividends paid to policyholders			<u>6</u> ,780
9.	Federal and foreign income taxes paid (recovered) net of \$(3) tax on capital			
	gains (losses)	(217,861)	(472,229)	(596,544
10.	Total (Lines 5 through 9)	8,201,053	5,883,211	11,800,991
11.	Net cash from operations (Line 4 minus Line 10)	(3,975,004)	(1,105,937)	(2,721,151
	Cash from Investments			
12.	Proceeds from investments sold, matured or repaid:			
	12.1 Bonds		2,141,576	
	12.2 Stocks	0	0	0
	12.3 Mortgage loans		0	0
	12.4 Real estate	0	0	0
	12.5 Other invested assets		0	0
	12.6 Net gains or (losses) on cash, cash equivalents and short-term investments	0	0	0
	12.7 Miscellaneous proceeds	0	1,312	1,002,961
	12.8 Total investment proceeds (Lines 12.1 to 12.7)			
13.	Cost of investments acquired (long-term only):			
	13.1 Bonds		0	
	13.2 Stocks			0
	13.3 Mortgage loans		0	0
	13.4 Real estate		0	0
	13.5 Other invested assets	0	0	0
	13.6 Miscellaneous applications	851,419	0	0
	13.7 Total investments acquired (Lines 13.1 to 13.6)	14,630,261	0	1,000,330
14.	Net increase (or decrease) in contract loans and premium notes	(228,658)	(77,887)	(290,222
15.	Net cash from investments (Line 12.8 minus Line 13.7 and Line 14)	(10,452,624)	2,220,775	4,030,512
	Cash from Financing and Miscellaneous Sources			
16.	Cash provided (applied):			
	16.1 Surplus notes, capital notes	0	0	0
	16.2 Capital and paid in surplus, less treasury stock			
	16.3 Borrowed funds		0	0
	16.4 Net deposits on deposit-type contracts and other insurance liabilities		(132,232)	(281,545
	16.5 Dividends to stockholders			0
	16.6 Other cash provided (applied)	(2,030,811)	347,431	(1,652,998
17.	Net cash from financing and miscellaneous sources (Line 16.1 through Line 16.4 minus Line 16.5 plus Line 16.6)	(1,359,600)	5,215,199	3,065,457
10	RECONCILIATION OF CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS	(15 707 000)	6 000 007	4 074 010
18.	Net change in cash, cash equivalents and short-term investments (Line 11, plus Lines 15 and 17)	(15,787,228)		4,374,818
	Cash, cash equivalents and short-term investments: 19.1 Beginning of year	00.075.000	10 001 100	
19.	111 1 Hogipping of yoor			
19.	19.2 End of period (Line 18 plus Line 19.1)	7,188,692	24,931,139	22,975,920

# **EXHIBIT 1**

DIRECT PREMIUMS AND DEPOSIT-TYPE CONTRACTS

		1	2	3
		Current Year	Prior Year	Prior Year Ended
		To Date	To Date	December 31
1.	Industrial life			0
2.	Ordinary life insurance		6,351,918	
3.	Ordinary individual annuities			
4.	Credit life (group and individual)			0
5.	Group life insurance	0		0
6.	Group annuities	0		0
-		0		0
7.	A & H - group			U
0				0
8.	A & H - credit (group and individual)			0
0	A & H - other	25 256		76 505
9.				
10	Aggregate of all other lines of business	0	0	0
10.	Aggregate of all other lines of business	0		
11	Subtotal (Lines 1 through 10)	5 972 576	6 401 554	12 640 170
11.			0,491,004	12,049,170
12.	Fraternal (Fraternal Benefit Societies Only)	0		0
12.		0		0
12	Subtotal (Lines 11 through 12)	5 872 576	6 401 554	12 6/0 170
13.	Subtotal (Lines 11 through 12)		0,431,334	12,049,170
14.	Deposit-type contracts	0	0	0
14.			0	
15.	Total (Lines 13 and 14)	5,872,576	6,491,554	12,649,170
15.		5,012,010	0,401,004	12,040,170
	DETAILS OF WRITE-INS			
1001.				
1001.				
1002.				
1003.				
1098.	Summary of remaining write-ins for Line 10 from overflow page	0	0	0
1099.	Totals (Lines 1001 through 1003 plus 1098)(Line 10 above)	0	0	0
		0	0	0

#### Note 1 - Summary of Significant Accounting Policies

A. Accounting Practices

The financial statements of Manhattan National Life Insurance Company (the "Company") are presented on the basis of accounting practices prescribed or permitted by the Ohio Department of Insurance.

The Ohio Department of Insurance recognizes only statutory accounting practices prescribed or permitted by the State of Ohio for determining and reporting the financial condition and results of operations of an insurance company, for determining its solvency under the Ohio Insurance Law. The National Association of Insurance Commissioners' ("NAIC") Accounting Practices and Procedures manual has been adopted as a component of prescribed or permitted practices by the State of Ohio. The Company has no prescribed or permitted practices that would result in differences between NAIC Statutory Accounting Principles ("NAIC SAP") and the State of Ohio basis, as shown below:

Ju	ne 30, 2022	Dece	mber 31, 2021
\$	(632,662)	\$	(906,311)
	-		-
	-		-
\$	(632,662)	\$	(906,311)
\$	12,358,555	\$	13,092,658
	-		-
	-		-
\$	12,358,555	\$	13,092,658
	\$	\$ (632,662) \$ 12,358,555	\$ (632,662) \$ \$ (632,662) \$ \$ 12,358,555 \$

B, C & D - No significant changes.

#### Note 2 - Accounting Changes and Corrections of Errors

#### Not applicable.

#### Note 3 - Business Combinations and Goodwill

Not applicable.

#### Note 4 - Discontinued Operations

Not applicable.

### Note 5 - Investments

- A, B & C No significant changes.
- D. Loan-Backed Securities
  - (1) The Company uses dealer-modeled prepayment assumptions for mortgage-backed and asset-backed securities at the date of purchase to determine the effective yields; significant changes in estimated cash flows from the original purchase assumptions are accounted for on a prospective basis.
  - (2) The Company does not currently hold any aggregate loan-backed securities with a recognized other-than-temporary impairment ("OTTI") in which the Company has the intent to sell or the inability or lack of intent to retain the investment in the security for a period of time to recover the amortized cost basis.
  - (3) The Company has no loan-backed securities with a credit-related OTTI charge recognized during the period.
  - (4) The following table shows all loan-backed securities with an unrealized loss:

<ul> <li>The aggregate amount of unrealized losses:</li> </ul>	
1. Less than 12 months	\$59,514
2. 12 months or longer	48,455

b. The aggregate related fair value of securities with unrealized losses:
 1. Less than 12 months \$2,850,245

- 2. 12 months or longer 75,963
- (5) Based on cash flow projections received from independent sources (which reflect loan to collateral values, subordination, vintage and geographic concentration), implied cash flows inherent in security ratings and analysis of historical payment data, management believes that the Company will recover its cost basis in all securities with unrealized losses at June 30, 2022. The Company has the intent to hold securities in an unrealized loss position until they recover in value or mature.
- E. Dollar Repurchase Agreements and/or Securities Lending Transactions Not applicable.
- F. Repurchase Agreements Transactions Accounted for as Secured Borrowing Not applicable.
- G. Reverse Repurchase Agreements Transactions Accounted for as Secured Borrowing Not applicable.
- H. Repurchase Agreements Transactions Accounted for as a Sale Not applicable.
- I. Reverse Repurchase Agreements Transactions Accounted for as a Sale Not applicable.
- J. Real Estate Not applicable.
- K. Low Income Housing Tax Credits Not applicable.

- L. Restricted Assets No significant change.
- M. Working Capital Finance Investments Not applicable.
- N. Offsetting and Netting of Assets and Liabilities Not applicable.
- O. 5GI Securities Not applicable.
- P. Short Sales Not Applicable.
- Q. Prepayment Penalty and Acceleration Fees Not applicable.
- R. Share of Cash Pool by Asset Type Not applicable.

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

Not applicable.

### Note 7 - Investment Income

No significant change.

### Note 8 - Derivative Instruments

Not applicable.

#### Note 9 - Income Taxes

No significant change.

#### Note 10 - Information Concerning Parent, Subsidiaries, Affiliates and Other Related Parties

A.,B. & C.

The Company is an indirect subsidiary of Glidepath Holdings, Inc., which is a subsidiary of Massachusetts Mutual Life Insurance Company ("MMLIC"); 100% of the Company's outstanding common stock is directly owned by Manhattan National Holding, LLC ("MNH"). The Company's common stock was contributed to MNH on September 25, 2008, from Great American Life Insurance Company ("GALIC"). See Schedule Y, Part 1, Organizational Chart.

During the period, the Company received a \$217,942 federal income tax payment in cash from GALIC.

- D. The Company reported \$80,014 due to the parent and affiliated companies. The terms of the agreement require that these amounts are settled within 90 days.
- E. Management or service contracts and all cost sharing arrangements including the Company:
  - (1) The Company has an agreement with Barings (an affiliate) which provides investment advisory services to the Company.
  - (2) Certain administrative, management, accounting, data processing, collection, and investment services are provided under agreements between the Company and affiliates at charges not unfavorable to the Company or the affiliate.
- F. The Company has no material guarantees or undertakings for the benefit of an affiliate.
- G. The Company's outstanding shares are 100% owned by MNH.
- H. The Company does not own shares of any upstream intermediate entity or its ultimate parent.
- I. The Company has no investment in a subsidiary.
- J. The Company did not recognize any impairment or write down for its investments in subsidiary, controlled or affiliated companies during the statement period.
- K. The Company has no investment in a foreign insurance subsidiary.
- L. The Company does not hold an investment in a downstream non-insurance holding company.
- M. Valuation of Subsidiary, Controlled and Affiliated Entities (excluding U.S. Insurance Entities) Not applicable.
- N. The Company has no investments in insurance subsidiary, controlled, or affiliated entities.
- O. Subsidiary, Controlled, and Affiliated Entities Loss Tracking Not applicable.

#### Note 11 - Debt

Not applicable.

<u>Note 12 - Retirement Plans, Deferred Compensation, Postemployment Benefits and Compensated Absences and Other</u> <u>Postretirement Benefit Plans</u>

#### A., B., C. & D.

The Company did not participate in a defined benefit plan.

#### E. Defined Contribution Plan

The Company participates in the retirement plans of GALIC. GALIC sponsors funded (qualified 401(k) thrift savings) and unfunded (nonqualified deferred compensation thrift savings) defined contribution plans for its employees and retirees. The qualified 401(k) thrift savings plan's net assets available for benefits were \$32,265,454 as of June 30, 2022 and \$34,792,881 as of December 31, 2021. The Company matches a percentage of employee contributions to the qualified 401(k) thrift savings plan. The Company's total matching thrift savings contributions included in general insurance expenses were \$23,884 for the six months ended June 30, 2022 and \$37,694 for the year ended December 31, 2021.

- F. The Company did not participate in multiemployer plans.
- G. The Company did not participate in consolidated or holding company plans.
- H. The Company does not accrue for postemployment benefits and compensated absences.
- I. The Company does not apply for a subsidy under the Medicare Part D under the Medicare Modernization Act.

#### Note 13 - Capital and Surplus, Shareholders' Dividend Restrictions and Quasi-Reorganizations

No significant change.

### Note 14 - Contingencies

No significant change.

#### Note 15 - Leases

Not applicable.

#### <u>Note 16 - Information About Financial Instruments With Off-Balance Sheet Risk and Financial Instruments With Concentrations of</u> <u>Credit Risk</u>

Not applicable.

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

The Company has no reportable transactions.

### Note 18 - Gain or Loss to the Reporting Entity from Uninsured Plans and the Uninsured Portion of Partially Insured Plans

Not applicable.

### Note 19 - Direct Premium Written/Produced by Managing General Agents/Third Party Administrators

Not applicable.

### Note 20 - Fair Value

Α.

#### (1) Fair Value Measurements at Reporting Date

The Company has categorized its assets and liabilities measured at fair value or net asset value ("NAV") into the three-level fair value hierarchy as reflected in the following table. See item (4) below for a discussion of each of these three levels.

	Level 1		Level 2 Level 3			vel 3	Va	Asset alue AV)	Total		
Assets at fair value Bonds:											
Industrial and miscellaneous	\$	-	\$	75,963	\$	_	\$	-	\$	75,963	
Total bonds		-		75,963		-		-		75,963	
Total assets accounted for at fair value/NAV	\$		\$	75,963	\$		\$		\$	75,963	

(2) The Company does not have any Level 3 securities carried at fair value.

#### (3) Fair Value Recognition of Transfers between Levels

The Company recognizes and records the transfer of securities into and out of Level 3 due to changes in availability of market observable inputs. There were no Level 3 transfers during the reporting period.

(4) Inputs and Techniques Used in Estimating Fair Value

at June 30, 2022.

Level 1 - Quoted prices for identical assets or liabilities in active markets (markets in which transactions occur with sufficient frequency and volume to provide pricing information on an ongoing basis). The Company's Level 1 financial instruments consist primarily of publicly-traded equity securities for which quoted market prices in active markets are available.

Level 2 - Quoted prices for similar instruments in active markets; quoted prices for identical or similar assets or liabilities in inactive markets (markets in which there are few transactions, the prices are not current, price quotations vary substantially over time or among market makers, or in which little information is released publicly); and valuations based on other significant inputs that are observable in active markets. Level 2 inputs include benchmark yields, reported trades, corroborated broker/dealer quotes, issuer spreads and benchmark securities. When non-binding broker quotes can be corroborated by comparison to similar securities priced using observable inputs, they are classified as Level 2. Level 3 - Valuations derived from market valuation techniques generally consistent with those used to estimate the fair value of Level 2 financial instruments in which one or more significant inputs are unobservable or when the market for a security exhibits significantly less liquidity relative to markets supporting Level 2 fair value measurements. The unobservable inputs may include management's own assumptions about the assumptions market participants would use based on the best

information available in the circumstances. The Company does not have any Level 3 assets or liabilities carried at fair value

The Company's investment manager, Barings LLC ("Barings") is responsible for the valuation process and uses data from outside sources (including nationally recognized pricing services and broker/dealers) in establishing fair value. Valuation techniques utilized by pricing services and prices obtained from external sources are reviewed by Barings internal investment professionals who are familiar with the securities being priced and the markets in which they trade to ensure the fair value determination is representative of an exit price. To validate the appropriateness of the prices obtained, the investment manager considers widely published indices (as benchmarks), recent trades, changes in interest rates, general economic conditions and the credit quality of the specific issuers. In addition, Barings communicates directly with the pricing service regarding the methods and assumptions used in pricing, including verifying, on a test basis, the inputs used by the service to value specific securities.

Not

- (5) Derivative Assets and Liabilities Not applicable.
- B. The Company has no additional fair value disclosures.
- C. The Company has categorized all the financial assets in the financial statements into the three-level fair value hierarchy as reflected in the following table. See item (4) above for a discussion of each of these three levels.

Type of Financial Instrument	Aggregate Fair Value	Admitted Assets	Level 1	Level 2	Level 3	Net Asse Value (NA	t	Practica (Carryi Value	ing
Financial Assets:						_			
Bonds:									
U.S. government and agencies	\$ 5,552,008	\$ 5,604,919	\$ -	\$ 5,552,008	\$ -	\$	-	\$	-
States, territories and possessions	3,536,260	2,599,621	-	3,536,260	-		-		-
Special revenue	13,255,231	12,732,130	-	13,255,231	-		-		-
Industrial and miscellaneous	91,136,864	94,616,629	-	91,136,864	-		-		-
Hybrid securities	827,774	777,397	-	827,774	-		-		-
Total bonds	\$114,308,137	\$116,330,696	\$ -	\$ 114,308,137	\$ -	\$	-	\$	-
Cash and cash equivalents	7,188,692	7,188,692	7,188,692	-	-		-		-
Policy loans	4,499,968	4,499,968	-	-	4,499,968		-		-
Total financial assets	\$ 125,996,797	\$ 128,019,356	\$ 7,188,692	\$ 114,308,137	\$ 4,499,968	\$		\$	-

D. Not Practicable to Estimate Fair Value – The Company has no financial instruments that fall under this classification.

E. NAV Practical Expedient Investments – The Company has no financial investments that fall under this classification.

### Note 21 - Other Items

No significant change.

### Note 22 - Events Subsequent/Other Items of Note

No significant change.

### Note 23 - Reinsurance

No significant change.

### Note 24 - Retrospectively Rated Contracts & Contracts Subject to Redetermination

Not applicable.

#### Note 25 - Change in Incurred Losses and Loss Adjustment Expenses

The Company had no changes in the provision for incurred loss or loss adjustment expenses attributable to insured events of prior years.

### Note 26 - Intercompany Pooling Arrangements

Not applicable.

### Note 27 - Structured Settlements

Not applicable.

### Note 28 - Health Care Receivables

Not applicable.

#### Note 29 - Participating Policies

No significant change.

#### Note 30 - Premium Deficiency Reserves

Not applicable.

### Note 31 - Reserves for Life Contracts and Annuity Contracts

No significant change.

#### Note 32 - Analysis of Annuity Actuarial Reserves and Deposit-Type Liabilities by Withdrawal Characteristics

No significant change.

#### Note 33 - Analysis of Life Actuarial Reserves by Withdrawal Characteristics

No significant change.

## Note 34 - Premiums and Annuity Considerations Deferred and Uncollected

No significant change.

## Note 35 - Separate Accounts

Not applicable.

### Note 36 - Loss/Claim Adjustment Expenses

Not applicable.

# **GENERAL INTERROGATORIES**

## **PART 1 - COMMON INTERROGATORIES**

## GENERAL

1.1	Did the reporting entity experience any material transactions requiring the filing of Disclosure of Material Transactions with the State of 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 charter, by-laws, articles of incorporation, or deed of settlement of the reporting entity?	Yes [ ] No [ X ]
2.2	If yes, date of change:	
3.1	Is the reporting entity a member of an Insurance Holding Company System consisting of two or more affiliated persons, one or more of which is an insurer?	Yes [ X ] No [ ]
3.2	Have there been any substantial changes in the organizational chart since the prior quarter end?	Yes [ ] No [ X ]
3.3	If the response to 3.2 is yes, provide a brief description of those changes.	
3.4	Is the reporting entity publicly traded or a member of a publicly traded group?	Yes [ ] No [X]
3.5	If the response to 3.4 is yes, provide the CIK (Central Index Key) code issued by the SEC for the entity/group.	
4.1	Has the reporting entity been a party to a merger or consolidation during the period covered by this statement?	Yes [ ] No [ X ]
4.2	If yes, provide the name of the entity, NAIC Company Code, and state of domicile (use two letter state abbreviation) for any entity that has ceased to exist as a result of the merger or consolidation.	
	1 2 3 Name of Entity NAIC Company Code State of Domicile	
5.	If the reporting entity is subject to a management agreement, including third-party administrator(s), managing general agent(s), attorney- in-fact, or similar agreement, have there been any significant changes regarding the terms of the agreement or principals involved?	] No [ X ] N/A [ ]
6.1	State as of what date the latest financial examination of the reporting entity was made or is being made.	12/31/2016
6.2	State the as of date that the latest financial examination report became available from either the state of domicile or the reporting entity. This date should be the date of the examined balance sheet and not the date the report was completed or released.	12/31/2016
6.3	State as of what date the latest financial examination report became available to other states or the public from either the state of domicile or the reporting entity. This is the release date or completion date of the examination report and not the date of the examination (balance sheet date).	01/11/2018
6.4	By what department or departments?	
6.5	Ohio Department of Insurance Have all financial statement adjustments within the latest financial examination report been accounted for in a subsequent financial statement filed with Departments?	] No [ ] N/A [ X ]
6.6	Have all of the recommendations within the latest financial examination report been complied with?	] No [ ] N/A [ X ]
7.1	Has this reporting entity had any Certificates of Authority, licenses or registrations (including corporate registration, if applicable) suspended 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 the Federal Reserve Board?	Yes [ ] No [ X ]
8.2	If response to 8.1 is yes, please identify the name of the bank holding company.	
8.3	Is the company affiliated with one or more banks, thrifts or securities firms?	Yes [ X ] No [ ]
8.4	If response to 8.3 is yes, please provide below the names and location (city and state of the main office) of any affiliates regulated by a federal	

If response to 8.3 is yes, please provide below the names and location (city and state of the main office) of any affiliates regulated by a federal regulatory services agency [i.e. the Federal Reserve Board (FRB), the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC) and the Securities Exchange Commission (SEC)] and identify the affiliate's primary federal regulator.

1	2	3	4	5	6
Affiliate Name	Location (City, State)	FRB	000	FDIC	SEC
Barings LLC	Charlotte, NC	NO	NO	NO	YES
Great American Advisors	Cincinnati, OH	NO	NO	N0	YES
					l

# **GENERAL INTERROGATORIES**

	<ul> <li>(a) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;</li> <li>(b) Full, fair, accurate, timely and understandable disclosure in the periodic reports required to be filed by the reporting entity;</li> </ul>	
	(c) Compliance with applicable governmental laws, rules and regulations;	
	(d) The prompt internal reporting of violations to an appropriate person or persons identified in the code; and (e) Accountability for adherence to the code.	
9.11	If the response to 9.1 is No, please explain:	
0.2	Line the code of othics for conject monocore been emended?	
9.2 9.21	Has the code of ethics for senior managers been amended? If the response to 9.2 is Yes, provide information related to amendment(s).	Yes [ ] No [ X ]
0.21		
9.3	Have any provisions of the code of ethics been waived for any of the specified officers?	Yes [ ] No [X]
9.31	If the response to 9.3 is Yes, provide the nature of any waiver(s).	
	FINANCIAL	
10.1	Does the reporting entity report any amounts due from parent, subsidiaries or affiliates on Page 2 of this statement?	Vec [ ] No [ Y ]
10.2		
	INVESTMENT	
11.1		
11.2	use by another person? (Exclude securities under securities lending agreements.) If yes, give full and complete information relating thereto:	Yes [ ] No [ X ]
12.	Amount of real estate and mortgages held in other invested assets in Schedule BA:	
13. 14.1	Amount of real estate and mortgages held in short-term investments:	
14.1		Tes [ ] NO [ X ]
	1	2
	Prior Year-End	Current Quarter
	Book/Adjusted	Book/Adjusted
14.24	Bonds	Carrying Value
	Preferred Stock \$ 0	\$\$

11.1 11.2	use by another person? (Exclude securities under securities lending agreements.)					
12.	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 14.2	Does the reporting entity have any investments in parent, subsidiaries and affiliates? If yes, please complete the following:			Yes [	] No [ X ]	
			1		2	
			or Year-End		irrent Quartei	
			ok/Adjusted		ook/Adjusted	
1/ 21	Bonds	¢ Ca	arrying Value		arrying Value	
14 22	Preferred Stock	φ \$	0			
	Common Stock					
	Short-Term Investments					
	Mortgage Loans on Real Estate					
	All Other					
14.27	Total Investment in Parent, Subsidiaries and Affiliates (Subtotal Lines 14.21 to 14.26)	\$	0			
14.28	Total Investment in Parent included in Lines 14.21 to 14.26 above	\$		\$		
15.1	Has the reporting entity entered into any hedging transactions reported on Schedule DB?			Yes [	1 No [ X ]	
15.2			Yes [	] No	[ ] N/A [	X ]
16.	For the reporting entity's security lending program, state the amount of the following as of the current statement da	ate:				
	16.1 Total fair value of reinvested collateral assets reported on Schedule DL, Parts 1 and 2		\$			0
	16.2 Total book adjusted/carrying value of reinvested collateral assets reported on Schedule DL,					
	16.3 Total payable for securities lending reported on the liability page.					

# **GENERAL INTERROGATORIES**

17.1	offices, vaults or safet custodial agreement v Outsourcing of Critical	y deposit boxes, v vith a qualified ba I Functions, Custo	- Special Deposits, real estate, mo were all stocks, bonds and other se nk or trust company in accordance odial or Safekeeping Agreements of requirements of the NAIC Financia	ecurities, owno e with Section of the NAIC Fi	ed throughout t 1, III - General nancial Conditi	he current year Examination C on Examiners F	held pursuant to a onsiderations, F. landbook?	Yes	[X]	No [ ]
		1				2				
	Deals of New York Mol	Name of Cus	todian(s)	1 W-11 04		Custodian Addr				
	Bank of New York Mel	10n		I Wall Stree	et, New York, I	NY IU286				
17.2	For all agreements that do not comply with the requirements of the NAIC Financial Condition Examiners Handbook, provide the name, location and a complete explanation:									
	1 Name(	(s)	2 Location(s)		(	3 Complete Expla	nation(s)			
17.3 17.4	Have there been any of If yes, give full information		g name changes, in the custodian( eto:	s) identified ir	17.1 during th	e current quarte	r?	Yes	[]	No [ X ]
	1 Old Custo	odian	2 New Custodian	Date	3 of Change		4 Reason			
17.5	make investment deci	sions on behalf o	nvestment advisors, investment ma f the reporting entity. For assets that tment accounts"; "handle securi	at are manage ties"]	ed internally by					
			1 n or Individual		ation					
	17.5097 For those firm	ns/individuals liste	ed in the table for Question 17.5, do more than 10% of the reporting e	o any firms/ind	dividuals unaffi d assets?	liated with the re	eporting entity (i.e.	Yes	[]	No [ X ]
	17.5098 For firms/indi total assets u	viduals unaffiliate Inder managemer	d with the reporting entity (i.e. desi nt aggregate to more than 50% of t	gnated with a he reporting e	"U") listed in th entity's invested	ne table for Que d assets?	stion 17.5, does the	Yes	[]	No [ X ]
17.6	For those firms or indi table below.	viduals listed in th	ne table for 17.5 with an affiliation o	code of "A" (at	filiated) or "U"	(unaffiliated), pr	ovide the information for th	е		
	1		2			3	4		Inve	5 stment gement
	Central Registration									amant
			Name of Firm or Individual		Legal Entity	Identifier (I EI)	Registered With			ement
	Depository Number 106006	Barings LLC	Name of Firm or Individual			Identifier (LEI) SY1S07	Registered With		(IMA	) Filed
	Depository Number	Barings LLC				SY1S07			(IMA	) Filed
18.1 18.2	Depository Number 106006 Have all the filing requ				R6ZXK501NPHXS	SY1S07	SEC		(IMA DS	) Filed
	Depository Number 106006 Have all the filing requ If no, list exceptions: By self-designating 50 a. Documentation security is not a b. Issuer or obligo c. The insurer has	GI securities, the r n necessary to per available. or is current on all s an actual expect		of the NAIC In wing element urity does not ayments. ntracted intered	R6ZXK501NPHXS vestment Analy s for each self- exist or an NA	ysis Office been designated 5GI IC CRP credit ra	SEC	Yes	<u>(IMA</u> DS [ X ]	) Filed
18.2	Depository Number 106006 Have all the filing requ If no, list exceptions: By self-designating 50 a. Documentation security is not a b. Issuer or obligo c. The insurer has Has the reporting entil By self-designating PI a. The security wa b. The reporting er c. The NAIC Desig on a current priv d. The reporting er	GI securities, the r recessary to per available. or is current on all s an actual expect ty self-designated GI securities, the s purchased prior ntity is holding cap mation was derive vate letter rating h ntity is not permitt	urposes and Procedures Manual c eporting entity is certifying the follo mit a full credit analysis of the sec contracted interest and principal p tation of ultimate payment of all co	of the NAIC In wing element urity does not ayments. ntracted intere lowing eleme Designation r by an NAIC Cl examination PL security w	R6ZXK501NPHXS vestment Analy s for each self- exist or an NAI est and principa nts of each self eported for the RP in its legal of by state insura ith the SVO.	ysis Office been designated 5GI IC CRP credit ra al. f-designated PL security. capacity as a NF ince regulators.	SEC followed? security: tting for an FE or PL GI security: SRO which is shown	Yes	<u>(</u> IMA DS [ X ]	) Filed
18.2	Depository Number 106006 Have all the filing requ If no, list exceptions: By self-designating 5C a. Documentation security is not a b. Issuer or oblige c. The insurer has Has the reporting entit By self-designating PL a. The security wa b. The reporting er c. The NAIC Desig on a current priv d. The reporting entit By astigning FE to a S FE fund:	GI securities, the r necessary to per available. or is current on all s an actual expect ty self-designated LGI securities, the s purchased prior ntity is holding cap gnation was derive vate letter rating h ntity is not permitt ty self-designated Schedule BA non-	eporting entity is certifying the follo mit a full credit analysis of the secu contracted interest and principal p tation of ultimate payment of all con 5GI securities? reporting entity is certifying the fol to January 1, 2018. Dital commensurate with the NAIC ed from the credit rating assigned b eld by the insurer and available for ed to share this credit rating of the PLGI securities?	of the NAIC In wing element urity does not ayments. ntracted intere lowing eleme Designation r Designation r examination PL security w	R62XK501NPHXS vestment Analy s for each self- exist or an NAI est and principa nts of each self eported for the RP in its legal of by state insura ith the SVO.	ysis Office been designated 5GI IC CRP credit ra al. f-designated PL security. capacity as a NF nce regulators.	SEC followed? security: tting for an FE or PL GI security: SRO which is shown	Yes	<u>(</u> IMA DS [ X ]	) Filed
18.2 19. 20.	Depository Number 106006 Have all the filing requ If no, list exceptions: By self-designating 50 a. Documentation security is not a b. Issuer or obligo c. The insurer has Has the reporting entil By self-designating PL a. The security wa b. The reporting er c. The NAIC Desig on a current priv d. The reporting entil By assigning FE to a S FE fund: a. The shares wern b. The reporting er c. The shares wern b. The reporting er c. The scurity had January 1, 2019 d. The fund only on	GI securities, the r necessary to per available. or is current on all s an actual expect by self-designated CGI securities, the s purchased prior ntity is holding cap nation was derive vate letter rating h ntity is not permitt ty self-designated Schedule BA non- e purchased prior ntity is holding cap d a public credit ration	Purposes and Procedures Manual of eporting entity is certifying the follo mit a full credit analysis of the sect contracted interest and principal p tation of ultimate payment of all con 5GI securities? Preporting entity is certifying the fol to January 1, 2018. Dital commensurate with the NAIC ed from the credit rating assigned b eld by the insurer and available for ed to share this credit rating of the PLGI securities? PLGI securities? PLGI securities? PLGI securities? PLGI securities? PLGI securities? PLGI securities?	of the NAIC In wing element urity does not ayments. ntracted intere Designation r oy an NAIC CI PL security w mg entity is ce Designation r signed by an	R62XK501NPHXS vestment Analy s for each self- exist or an NAI est and principa nts of each self eported for the RP in its legal of by state insura ith the SVO. rtifying the follo eported for the NAIC CRP in it	ysis Office been designated 5GI IC CRP credit ra al. f-designated PL security. capacity as a NF ince regulators. owing elements security. ts legal capacity	SEC followed? security: ting for an FE or PL GI security: RSRO which is shown of each self-designated as an NRSRO prior to	Yes	<u>(</u> IMA DS [ X ]	) Filed
18.2 19. 20.	Depository Number 106006 Have all the filing requ If no, list exceptions: By self-designating 50 a. Documentation security is not a b. Issuer or obligo c. The insurer has Has the reporting entif By self-designating PL a. The security wa b. The reporting er c. The NAIC Desig on a current priv d. The reporting entif By assigning FE to a S FE fund: a. The shares wern b. The reporting er c. The shares wern b. The reporting er c. The security had January 1, 2019 d. The fund only or e. The current repr in its legal capa	GI securities, the r increments of the P available. or is current on all s an actual expect ty self-designated _GI securities, the s purchased prior ntity is holding cap gnation was derive vate letter rating h ntity is not permitt ty self-designated Schedule BA non- e purchased prior ntity is holding cap d a public credit ra , r predominantly h orted NAIC Desig city as an NRSRC	eporting entity is certifying the follo mit a full credit analysis of the sect contracted interest and principal p tation of ultimate payment of all cor 5GI securities?	of the NAIC In wing element urity does not ayments. ntracted intere lowing eleme Designation r by an NAIC CI examination PL security w ng entity is ce Designation r signed by an credit rating(s	R6ZXK501NPHXS vestment Analy s for each self- exist or an NAI est and principa nts of each self eported for the RP in its legal of by state insura ith the SVO. rtifying the follo eported for the NAIC CRP in its s) with annual s	ysis Office been designated 5GI IC CRP credit ra al. f-designated PL security. capacity as a NF ince regulators. owing elements security. ts legal capacity	SEC followed? security: ting for an FE or PL GI security: RSRO which is shown of each self-designated as an NRSRO prior to	Yes	<u>(</u> IMA DS [ X ]	) Filed

# **GENERAL INTERROGATORIES**

## PART 2 - LIFE AND ACCIDENT AND HEALTH COMPANIES/FRATERNAL BENEFIT SOCIETIES

Life and 1.	d Accident Health Companies/Fraternal Benefit Societies: 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	\$0
	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	\$0
	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	\$0
1.5	Total Mortgage Loans (Lines 1.14 + 1.21 + 1.34 + 1.44) (Page 2, Column 3, Lines 3.1 + 3.2)	\$ <u>     0  </u>
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	\$0
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	\$
4.	Is the reporting entity licensed or chartered, registered, qualified, eligible or writing business in at least two states?	Yes [X] No [ ]
4.1	If no, does the reporting entity assume reinsurance business that covers risks residing in at least one state other than the state of domicile of the reporting entity?	Yes [ ] No [ ]
Fratern 5.1	al Benefit Societies Only: In all cases where the reporting entity has assumed accident and health risks from another company, provisions should be made in this statement on account of such reinsurances for reserve equal to that which the original company would have been required to establish had it retained the risks. Has this been done?	Yes [ ] No [ ] N/A [ ]
5.2	If no, explain:	
6.1	Does the reporting entity have outstanding assessments in the form of liens against policy benefits that have increased surplus?	
6.2	If yes, what is the date(s) of the original lien and the total outstanding balance of liens that remain in surplus?	

Date	Outstanding Lien Amount

# **SCHEDULE S - CEDED REINSURANCE**

Showing All New Reinsurance Treaties - Current Year to Date

Showing All New Reinsurance Treaties - Current Year to Date           1         2         3         4         5         6         7         8         9         10										
1	2	3					8	9 Certified	10 Effective Date of	
NAIC Company Code	ID Number	Effective Date	Name of Reinsurer	Domiciliary	Type of Reinsurance Ceded	Type of Business Ceded	Type of Reinsurer	Reinsurer Rating (1 through 6)	Certified Reinsurer Rating	
Code	Number	Date	Name of Keinsuch	Jungalction	Cedeu	Cedeu		(T through 0)	rtaung	
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## STATEMENT AS OF JUNE 30, 2022 OF THE MANHATTAN NATIONAL LIFE INSURANCE COMPANY **SCHEDULE T - PREMIUMS AND ANNUITY CONSIDERATIONS**

		1	Life Co 2	ontracts 3	4 Accident and Health Insurance Premiums,	iness Only 5	6	7
	States, Etc.	Active Status (a)	Life Insurance Premiums	Annuity Considerations	Including Policy, Membership and Other Fees	Other Considerations	Total Columns 2 Through 5	Deposit-Ty Contracts
	AlabamaAlabaka	L						
	Alaska AK Arizona	L						
	, <del></del>	L						
	Arkansas AR							
	California CA	L					716,601	
	Colorado CO	L					73,327	
	Connecticut CT	L						
	DelawareDE	L						
	District of Columbia DC	L					3,357	
0.	Florida FL	L		547				
1.	Georgia	L		1, 100				
2.	Hawaii	L	29.079				29,079	
3.	Idaho ID	L	11,775				11,775	
	Illinois	L	180,959	4.839			185,798	
5.	Indiana	Ī	177,626	1.020	194		178.840	
6.	Iowa IA	<u>-</u>		7.000	530		73,035	
	Kansas KS			4.086				
	Kentucky	⊢ I						
	,	⊢ I						
	Louisiana LA							
	Maine	L						
	Maryland	L						
	Massachusetts MA	<u>L</u>						
	Michigan MI	L			279			
	Minnesota MN	L						
	Mississippi MS	L		720			65,247	
6.	Missouri MO	L						
7.	Montana MT	L						
8.	Nebraska NE	L					40,051	
9.	Nevada	L						
<b>)</b> .	New Hampshire	L	32,759					
	New Jersey	L	154,017					
	New Mexico	L	17,288		567			
	New York	N						
4.	North Carolina	1	127,604	300			.127,904	
	North Dakota	ــــــــــــــــــــــــــــــــ	51,611					
	Ohio OH			90	108			
	Oklahoma	⊢ I						
	Oregon	⊢ I						
	Pennsylvania	⊢ I			219			
	,	⊢ I	5.706				178,446	
	Rhode Island	⊢ I		201			,	
		L						
	South Dakota							
	Tennessee	Ļ						
	Texas	L						
	Utah UT	L		71				
	Vermont	L					9,569	
	VirginiaVA	L			(1,131)		114 , 127	
		L						
	West Virginia WV	L						
0.	Wisconsin WI	L		50,787				
	Wyoming	L						
	A	<u>P</u>					0	
	Guam	N		L			۰ ۱	
	Puerto Rico	N	[				0	
	U.S. Virgin Islands	N					0	
	•	N.					0	
	Canada	N	819					
	Aggregate Other Aliens OT	N		^	^	^		
				0 .103.618	0	0		
	Reporting entity contributions for employee benefits	XXX			35 , 148	0		
		XXX					0	
	Dividends or refunds applied to purchase paid-up additions and annuities						0	
2.	Dividends or refunds applied to shorten endowment	XXX	1				0	
3.	or premium paying period Premium or annuity considerations waived under						0	
	disability or other contract provisions	XXX					89.926	
1.	Aggregate or other amounts not allocable by State		· · · ·	0	0	٥		
	Totals (Direct Business)		5.847.721			0 N		
	Plus Reinsurance Assumed							
	Totals (All Business)		.5,847,721			0		
	Less Reinsurance Ceded		3,003,500					
	Totals (All Business) less Reinsurance Ceded		2,844,221	56,990		0	2,901,522	
	DETAILS OF WRITE-INS	~~~	2,044,221	50,330	511	0	2,001,022	
		~~~	546				E40	
	Other Alien	XXX						
)2. )2		XXX						
)3. 98.	Summary of remaining write-ins for Line 58 from	XXX						
	overflow page	XXX	0	0	0	0	0	
99.	Totals (Lines 58001 through 58003 plus							
	58998)(Line 58 above)	XXX	546	0	0	0	546	
1.		XXX						
)2.		XXX						
3.		XXX						
	Summary of remaining write-ins for Line 94 from							
	overflow page	XXX	0	0	0	0	0	
	Totals (Lines 9401 through 9403 plus 9498)(Line		0	0	0	0	0	
9.	94 above)	XXX						

L - Licensed or Chartered - Licensed Insurance carrier or domiciled RRG..... E - Eligible - Reporting entities eligible or approved to write surplus lines in the state..... N - None of the above - Not allowed to write business in the state.....

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

	<u>Federal Tax ID</u>	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 III, LLC	06-1041383		Delaware
CML Special Situations Investor LLC	None		Delaware
CML Global Capabilities LLC	None		Delaware
MM Global Capabilities I LLC	None		Delaware
MassMutual Global Business Services India LLP	None		India
MM Global Capabilities (Netherlands) B.V.	None		Netherlands
MassMutual Global Business Services Romania S.R.L.	None		Romania
MM Global Capabilities I I LLC	None		Delaware
MM Global Capabilities I II LLC	None		Delaware
MM/Barings Multifamily TEBS 2020 LLC	None		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 Timberlands I, LLC	None		Delaware
Lyme Adirondack Timberlands II, LLC	None		Delaware
Lyme Adirondack Timber Sales, LLC	None		Delaware
MSP-SC, LLC	04-1590850		Delaware
Insurance Road LLC	04-1590850		Delaware
MassMutual Trad Private Equity LLC	04-1590850		Delaware
MassMutual Intellectual Property LLC	04-1590850		Delaware
Trad Investments I LLC	None		Delaware
ITPS Holding LLC	None		Delaware
HITPS LLC	None		Delaware
EM Opportunities LLC	None		Delaware
MassMutual MCAM Insurance Company, Inc.	None		Vermont
JFIN Parent LLC	None		Delaware
Jefferies Finance LLC	27-0105644		Delaware
JFIN GP Adviser LLC	None		Delaware
JFIN Fund III LLC	None		Delaware
Jefferies Credit Partners LLC	None		Delaware
APEX Credit Partners LLC	None		Delaware
Jefferies Credit Management LLC	None		Delaware
JCP Direct Lending CLO 2022 LLC	None		Delaware
JFAM GP LLC	None		Delaware
JFAM GP LP	None		Delaware

	<u>Federal Tax ID</u>	NAIC Co Code	<u>State of Domicile</u>
Jefferies Direct Lending Fund C LP	None		Delaware
Jefferies DLF C Holdings LLC	None		Delaware
Jefferies Direct Lending Fund C SPE LLC	None		Delaware
JDLF II GP LLC	None		Delaware
JDLF II GP LP	None		Delaware
Jefferies Direct Lending Fund II C LP	None		Delaware
Jefferies DLF II C Holdings LLC	None		Delaware
Jefferies Direct Lending Fund II C SPE LLC	None		Delaware
Jefferies Private Credit BDC Inc.	None		Maryland
Jefferies Senior Lending LLC	None		Delaware
JFIN Revolver Holdings LLC	None		Delaware
JFIN Revolver Holdings II LLC	None		Delaware
JFIN Revolver Holdings IV LLC	None		Delaware
JFIN Co-Issuer Corporation	None		Delaware
JFIN Europe GP, S.a.r.I.	None		Luxembourg
Jefferies Finance Europe, S.L.P.	None		Luxembourg
Jefferies Finance Europe, SCSp	None		Luxembourg
Jefferies Finance Business Credit LLC	None		Delaware
JFIN Business Credit Fund I LLC	None		Delaware
JFIN Funding 2021 LLC	None		Delaware
JFIN High Yield Investments LLC	None		Delaware
JFIN LC Fund LLC	None		Delaware
JFIN Revolver CLO 2017 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2017-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2017-III Ltd.	None		Cayman Islands
JFIN Revolver CLO 2018 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2019 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2019-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2020 Ltd.	None		Cayman Islands
JFIN Revolver CLO 2021-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2021-V Ltd.	None		Cayman Islands
JFIN Revolver CLO 2022-II Ltd.	None		Cayman Islands
JFIN Revolver CLO 2022-III Ltd.	None		Cayman Islands
JFIN Revolver Fund, L.P.	None		Delaware
JFIN Revolver Funding 2021 Ltd.	None		Delaware
JFIN Revolver Funding 2021-III Ltd.	None		Delaware
JFIN Revolver Funding 2021-IV Ltd.	None		Delaware
JFIN Revolver Funding 2022-I Ltd.	None		Bermuda
JFIN Revolver SPE1 2022 LLC	None		Delaware
Apex Credit Holdings LLC	None		Delaware
JFIN CLO 2012 Ltd.	None		Cayman Islands

	<u>Federal Tax ID</u>	NAIC Co Code	<u>State of Domicile</u>
JFIN CLO 2013 Ltd.	None		Cayman Islands
JFIN CLO 2014 Ltd.	None		Cayman Islands
JFIN CLO 2014-II Ltd.	None		Cayman Islands
JFIN CLO 2015 Ltd.	None		Cayman Islands
JFIN CLO 2015-II Ltd.	None		Cayman Islands
JFIN CLO 2016 Ltd.	None		Cayman Islands
JFIN CLO 2017 Ltd.	None		Cayman Islands
JFIN CLO 2017 II Ltd.	None		Cayman Islands
Glidepath Holdings Inc.	86-2294635		Delaware
Great American Life Insurance Company	13-1935920	63312	Ohio
AAG Insurance Agency, LLC	31-1422717		Kentucky
Annuity Investors Life Insurance Company	31-1021738	93661	Ohio
Great American Advisors, LLC	31-1395344		Ohio
Manhattan National Holding, LLC	26-3260520		Ohio
Manhattan National Life Insurance Company	45-0252531	67083	Ohio
MassMutual Mortgage Lending LLC	None		Delaware
MM Copper Hill Road LLC	04-1590850		Delaware
MM Direct Private Investments Holding LLC	None		Delaware
MM Direct Private Investments UK Limited	None		United Kingdom
MM Investment Holding	None		Cayman Islands
MassMutual Asset Finance LLC*	26-0073611		Delaware
MMAF Equipment Finance LLC 2013-A	90-1005837		Delaware
MMAF Equipment Finance LLC 2014-A	36-4785301		Delaware
MMAF Equipment Finance LLC 2015-A	38-3969560		Delaware
MMAF Equipment Finance LLC 2016-A	32-0489588		Delaware
MMAF Equipment Finance LLC 2017-A	35-2590691		Delaware
MMAF Equipment Finance LLC 2017-B	32-0546197		Delaware
MMAF Equipment Finance LLC 2018-A	82-5335801		Delaware
MMAF Equipment Finance LLC 2019-A	83-3722640		Delaware
MMAF Equipment Finance LLC 2019-B	None		Delaware
MMAF Equipment Finance LLC 2021-A	None		Delaware
Rozier LLC	None		Delaware
MML Management Corporation	04-2443240		Massachusetts
MassMutual International Holding MSC, Inc.	04-3548444		Massachusetts
MassMutual Holding MSC, Inc.	04-3341767		Massachusetts
MML CM LLC	None		Delaware
Blueprint Income LLC	None		New York
Flourish Digital Assets LLC	None		Delaware
Flourish Financial LLC	None		Delaware
Flourish Holding Company LLC	None		Delaware

	<u>Federal Tax ID</u> <u>NAIC Co Co</u>	ode State of Domicile
Flourish Insurance Agency LLC	None	Delaware
Flourish Technologies LLC	None	Delaware
MML Distributors LLC*	04-3356880	Massachusetts
MML Investment Advisers, LLC	None	Delaware
MML Strategic Distributors, LLC	46-3238013	Delaware
The MassMutual Trust Company, FSB	06-1563535	Connecticut
MML Private Placement Investment Company I, LLC	04-1590850	Delaware
MML Private Equity Fund Investor LLC	04-1590850	Delaware
MM Private Equity Intercontinental LLC	04-1590850	Delaware
Pioneers Gate LLC	45-2738137	Delaware
MassMutual Holding LLC	04-2854319	Delaware
Fem Street LLC	37-1732913	Delaware
Low Carbon Energy Holding	None	United Kingdom
Sleeper Street LLC	None	Delaware
Haven Life Insurance Agency, LLC	46-2252944	Delaware
MassMutual Assignment Company	06-1597528	North Carolina
MassMutual Capital Partners LLC	04-1590850	Delaware
MassMutual Ventures Holding LLC	None	Delaware
Athens Fund Management LLC	None	Delaware
Crane Venture Partners LLP	None	United Kingdom
MassMutual Ventures Management LLC	None	Delaware
MassMutual Ventures SEA Management Private Limited	None	Singapore
MassMutual Ventures Southeast Asia I LLC	None	Delaware
MassMutual Ventures Southeast Asia II LLC	None	Delaware
MassMutual Ventures Southeast Asia III LLC	None	Delaware
MMV Digital I LLC	None	Cayman Islands
MassMutual Ventures UK LLC	None	Delaware
MassMutual Ventures US I LLC	47-1296410	Delaware
MassMutual Ventures US II LLC	None	Delaware
MassMutual Ventures US III LLC	None	Delaware
MassMutual Ventures US IV LLC	None	Delaware
Open Alternatives LLC	None	Delaware
MM Catalyst Fund LLC	None	Delaware
MM Rothesay Holdco US LLC	04-1590850	Delaware
Rothesay Limited	None	United Kingdom
Rothesay Life Plc	None	United Kingdom
Rothesay MA No.1 Limited	None	United Kingdom
Rothesay MA No.2 Limited	None	United Kingdom
Rothesay MA No.3 Limited	None	United Kingdom
Rothesay MA No.4 Limited	None	United Kingdom

	<u>Federal Tax ID</u> <u>NAIC Co Co</u>	de <u>State of Domicile</u>
LT Mortgage Finance Limited	None	United Kingdom
Rothesay Property Partnership 1 LLP	None	United Kingdom
Rothesay Foundation	None	United Kingdom
Rothesay Pensions Management Limited	None	United Kingdom
Rothesay Asset Management UK Limited	None	United Kingdom
Rothesay Asset Management Australia Pty Ltd	None	Australia
Rothesay Asset Management US LLC	None	Delaware
MML Investors Services, LLC	04-1590850	Massachusetts
MML Insurance Agency, LLC	04-1590850	Massachusetts
MMLISI Financial Alliances, LLC	41-2011634	Delaware
LifeScore Labs, LLC	47-1466022	Massachusetts
MM Asset Management Holding LLC	45-4000072	Delaware
Barings LLC	51-0504477	Delaware
Baring Asset Management (Asia) Holdings Limited	98-0524271	Hong Kong, Special Administrative Region of China
Baring International Fund Managers (Bermuda) Limited	98-0457465	Bermuda
Baring Asset Management (Asia) Limited	98-0457463	Hong Kong, Special Administrative Region of China
Baring Asset Management Korea Limited	None	Korea
Barings Investment Management (Shanghai) Limited	None	Hong Kong, Special Administrative Region of China
Barings Overseas Investment Fund Management (Shanghai) Limited	None	Hong Kong, Special Administrative Region of China
Baring SICE (Taiwan) Limited	98-0457707	Taiwan ROC
Barings Singapore Pte. Ltd.	None	Singapore
Barings Japan Limited	98-0236449	Japan
Barings Australia Holding Company Pty Ltd	None	Australia
Barings Australia Pty Ltd	98-0457456	Australia
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 Real Estate Acquisitions LLC	None	Delaware
Barings Securities LLC	04-3238351	Delaware
Barings Guernsey Limited	98-0437588	Guernsey
Barings Europe Limited	None	United Kingdom
Barings Asset Management Spain SL	None	Spain
Barings GmbH	None	Germany
Barings Italy S.r.l.	None	Italy
Barings Sweden AB	None	Sweden
Barings Netherlands B.V.	None	Netherlands
Barings Real Estate UK Holdings Limited	None	Delaware
Barings (U.K.) Limited	98-0432153	United Kingdom
Baring Asset Management Limited	98-0241935	United Kingdom
Barings European Direct Lending 1 GP LLP	None	United Kingdom
		0

		<u>Federal Tax ID</u>	NAIC Co Code	State of Domicile
BMC Holdings DE LLC Barings Real Estate Advisers In CRA Aircraft Holding LLC* Aland Royalty Holdings LP Chassis Acquisition Holding LI EIP Holdings I, LLC GASL Holdings I, LLC Intermodal Holding II LLC Milestone Acquisition Holding Novation Companies, Inc. Red Lake Ventures, LLC Remington L & W Holdings LI Tamiami Citrus, LLC Teaktree Acquisition, LLC Techquity, LP Validus Holding Company LLC VGS Acquisition Holding, LLC Alaska Future Fund GP, LLC	.C LLC .C*	Federal Tax ID 98-1012393 98-0457328 98-0457587 98-0457576 98-0524272 None 98-0457570 98-0457586 None 98-0457578 None None None None None None None None None None None None None None None None None None None None None 04-3238351 81-4258759 None 81-2244465 None 81-2244465 None 81-2244465 None 46-2344300 47-3055009 None 46-5360309 81-4065378 None None None None None None None None None None None None None None None 46-6687392 None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None None	NAIC Co Code	State of Domicile United Kingdom United Kingdom United Kingdom Ireland Switzerland France United Kingdom United Kingdom United Kingdom United Kingdom Luxembourg United Kingdom Luxembourg United Kingdom Luxembourg United Kingdom Delaware
BAI Funds SLP, LLC BAI GP, LLC Baring Asset-Based Income Fu Barings CMS Fund GP, LLC	nd (US) GP, LLC	None None None None		Delaware Delaware Delaware Delaware Delaware
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\*This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

	<u>Federal Tax ID</u>	NAIC Co Code	State of Domicile
Barings Hotel Opportunity Venture I GP, LLC	None		Delaware
Barings Investment Series LLC	None		Delaware
Barings Emerging Generation Fund GP, LLC	None		Delaware
Barings Emerging Generation Fund GP II, LLC	None		Delaware
Barings ERS PE Emerging Manager III GP, LLC	None		Delaware
Barings Global Investment Funds (U.S.) Management LLC	04-1590850		Delaware
Barings CLO Investment Partners GP, LLC	None		Delaware
Barings Core Property Fund GP LLC	None		Delaware
Barings Direct Lending GP Ltd.	None		Cayman Islands
Barings Emerging Generation Fund LP	84-3784245		Delaware
Barings Global Energy Infrastructure Advisors, LLC	None		Delaware
Barings Global Real Assets Fund GP, LLC	None		Delaware
Barings GPSF	None		Delaware
Barings North American Private Loan Fund Management, LLC	None		Delaware
Barings North American Private Loan Fund Management II, LLC	None		Delaware
Barings North American Private Loan Fund Management III, LLC	None		Delaware
Barings Small Business Fund LLC	84-5063008		Delaware
Benton Street Advisors, Inc.	98-0536233		Cayman Islands
BHOVI Incentive LLC	None		Delaware
BIG Real Estate Fund GP LLC	None		Delaware
BIG Real Estate Incentive I LLC	None		Delaware
BIG Real Estate Incentive II LLC	None		Delaware
BRECS VII GP LLC	None		Delaware
BREDIF GP LLC	None		Delaware
CREF X GP LLC	None		Delaware
Great Lakes III GP, LLC	04-1590850		Delaware
Lake Jackson LLC	None		Delaware
Loan Strategies Management LLC	04-1590850		Delaware
Mezzo III LLC Mezzo IV LLC	41-2280126 80-0920285		Delaware
Mezzo IV LLC Mezzo Australia II LLC	80-0920285 None		Delaware Delaware
RECSA-NY GP LLC	None		Delaware
SBNP SIA II LLC	None		Delaware
SBNP SIA III LLC	None		Delaware
Somerset Special Opportunities Management LLC	04-1590850		Delaware
Amherst Long Term Holdings, LLC	None		Delaware
Mansel Long Term Holdings, ELC MassMutual International LLC	04-3313782		Delaware
MassMutual International LLC MassMutual Solutions LLC	None		Delaware
Haven Technologies Asia Limited	None		Hong Kong
Yunfeng Financial Group Limited	None		Hong Kong
MassMutual Asia Limited (SPV)	None		Hong Kong
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	Federal Tax ID NAIC Co Code	State of Domicile
	04-1590850	
MML Mezzanine Investor II, LLC MML Mezzanine Investor III, LLC	04-1590850	Delaware Delaware
	27-3576835	Delaware
MassMutual External Benefits Group LLC Dther Affiliates & Funds:	27-3576835	Delaware
	04.1500050	
100 w. 3 <sup>rd</sup> Street LLC	04-1590850	Delaware
300 South Tryon Hotel LLC	82-2432216	Delaware
2160 Grand Manager LLC	04-1590850	Delaware
300 South Tryon LLC	04-1590850	Delaware
Almack Mezzanine Fund II Unleveraged LP	None	United Kingdom
Barings Affordable Housing Mortgage Fund I LLC	82-3468147	Delaware
Barings Affordable Housing Mortgage Fund II LLC	61-1902329	Delaware
Barings Affordable Housing Mortgage Fund III LLC	85-3036663	Delaware
Barings Asset-Based Income Fund (US) LP	36-4868350	Delaware
Barings Emerging Markets Corporate Bond Fund*	None	Ireland
Barings European Real Estate Debt Income Fund	None	Luxembourg
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
southBabson 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
Barings CLO Ltd. 2017-I	None	Cayman Islands
Barings CLO 2018-III	None	Cayman Islands
Barings CLO 2018-IV	None	Cayman Islands
Barings CLO 2019-II	98-1473665	Cayman Islands
Barings CLO 2019-III	None	Cayman Islands
Barings CLO 2019-IV	None	Cayman Islands
Barings CLO 2020-I	None	Cayman Islands
Barings CLO 2020-II	None	Cayman Islands
Barings CLO 2020-III	None	Cayman Islands
Barings CLO 2020-IV	None	Cayman Islands
Barings CLO 2021-I	ZJX0JI.99999.SL.136	Cayman Islands
Barings CLO 2021-II	EPXAC4.99999.SL.136 (GIIN)	Cayman Islands
Barings CLO 2021-III	None	Cayman Islands
Ballings CLO 2011-III Babson Euro CLO 2014-I BV	None	Netherlands
Babson Euro CLO 2014-II BV	None	Netherlands
Babson Euro CLO 2014-II BV Babson Euro CLO 2015-I BV	None	Netherlands

	Federal Tax ID NAIC Co Code	<u>State of Domicile</u>
Barings Euro CLO 2019-I	3603726ОН	Ireland
Barings Euro CLO 2019-II	None	Ireland
Barings Euro CLO 2020-I DAC	None	Ireland
Barings Euro CLO 2021-I DAC	3715576VH	Ireland
Barings Euro CLO 2021-II DAC	3750378QH	Ireland
Barings Euro CLO 2021-III DAC	None	Ireland
Barings Global Em. Markets Equity Fund	82-5330194	North Carolina
Barings Global Energy Infrastructure Fund I LP	98-1332384	Cayman Islands
Barings Global Inv. Grade Strat Fund	None	Ireland
Barings Global Real Assets Fund LP	82-3867745	Delaware
Barings Global Special Situations Credit Fund 3	None	Ireland
Barings Global Special Situations Credit 4 Delaware*	85-1465973	Delaware
Barings Global Special Situations Credit 4 LUX*	98-1570693	Luxembourg
Barings Global Technology Equity Fund	HU7DQ.00011.SF.372(GIIN)	Ireland
Barings Hotel Opportunity Venture	87-0977058	Connecticut
Barings Innovations & Growth Real Estate Fund*	86-3661023	Delaware
Barings Middle Market CLO 2017-I Ltd & LLC	None	Cayman Islands
Barings Middle Market CLO 2018-I	None	Cayman Islands
Barings Middle Market CLO 2019-I	None	Cayman Islands
Barings Middle Market CLO Ltd 2021-I	98-1612604	Cayman Islands
Barings North American Private Loan Fund LP	38-4010344	Delaware
Barings RE Credit Strategies VII LP	98-1332384	Delaware
Barings Target Yield Infrastructure Debt Fund*	98-1567942	Luxembourg
Barings CLO Investment Partners LP	81-0841854	Delaware
Barings Euro Value Add II (BREEVA II)*	K15Q2K.99999.SL.442	Luxembourg
Barings Real Estate European Value Add I SCSp*	None	United Kingdom
Barings Real Estate Debt Income Fund LP*	85-3449260	Delaware
Barings Transportation Fund LP*	87-1262754	Delaware
Braemar Energy Ventures I, L.P.*	None	Delaware
Barings European Core Property Fund SCSp	None	Luxembourg
Barings European Private Loan Fund III A	46-5001122	Luxembourg
Benchmark 2018-B2 Mortgage Trust	38-4059932	New York
Benchmark 2018-B4	None	New York
Benchmark 2018-B8	38-4096530	New York
Barings Core Property Fund LP	20-5578089	Delaware
Cornerstone Real Estate Fund X LP	46-5432619	Delaware
Gateway Mezzanine Partners II LP*	90-0991195	Delaware
Great Lakes III, L.P.	37-1708623	Delaware
GIA EU Holdings - Emerson JV Sarl	EIN 98-1607033	Luxembourg
JPMCC Commercial Mortgage Securities Trust 2017-JP7	38-4041011; 38-4041012	New York
JPMDB Commercial Mortgage Securities Trust 2017-C5	38-4032059	New York

	Federal Tax ID NAIC Co Co	le State of Domicile
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KKR-MM Vector LP	82-1512591	Delaware
Marco Hotel LLC	46-4255307	Delaware
Miami Douglas One GP LLC*	04-1590850	Delaware
Miami Douglas Two GP LLC*	04-1590850	Delaware
Miami Douglas One LP*	04-1590850	Delaware
Miami Douglas Two LP*	04-1590850	Delaware
Miami Douglas Three MM LLC	04-1590850	Delaware
MM BIG Peninsula Co-Invest Member LLC	87-4021641	Delaware
NYDIG Digital Assets Fund II LP	85-3886824	Delaware
HB Naples Golf Owner LLC	45-3623262	Delaware
MM CM Holding LLC	None	Delaware
MM Debt Participations LLC	81-3000420	Delaware
RB Apartments LLC	82-4411267	Delaware
Somerset Special Opportunities Fund L.P.*	20-8856877	Delaware
Ten Fan Pier Boulevard LLC	35-2553915	Delaware
Tower Square Capital Partners III, L.P.	41-2280127	Delaware
Tower Square Capital Partners IIIA, L.P.	41-2280129	Delaware
Trailside MM Member LLC*	04-1590850	Delaware
Washington Gateway Two LLC*	83-1325764	Delaware
Washington Gateway Three LLC*	32-0574045	Delaware
West 46 <sup>th</sup> Street Hotel LLC	05-1590850	Delaware
arings Affiliates & Funds:	03-1570850	Delaware
Babson Capital Loan Strategies Master Fund LP	None	Cayman Islands
Barings China Aggregate Bond Private Securities Investment Fund	None	Peoples Republic of China
Barings European Growth Trust Fund	HU7DQI.00015.SF.826	United Kingdom
Barings Global High Yield Fund	47-3790192	Massachusetts
CCIC Fund	None	Peoples Republic of China
Great Lakes II LLC*	71-1018134	Delaware
Wood Creek Venture Fund LLC	04-1590850	Delaware
arings Real Estate Affiliates & Funds:	04-1390830	Delawale
50 Liberty LLC*	36-4823011	Delaware
Barings California Mortgage Fund IV	None	California
Barings Umbrella Fund LUX SCSp SICAV RAIF*		
	None 82-2285211	Luxembourg Delaware
Calgary Railway Holding LLC*		
Combrook PRS Holdings LLC	82-3307907	Delaware California
Cornerstone California Mortgage Fund I LLC	95-4207717	
Correctione California Mortgage Fund II LLC	95-4207717	California
Cornerstone California Mortgage Fund III 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

	<u>Federal Tax ID</u>	NAIC Co Code	State of Domicile
Cornerstone Permanent Mortgage Fund III	35-2531693		Massachusetts
Comerstone Permanent Mortgage Fund IV	61-1793735		Massachusetts
CREA/PPC Venture LLC	20-0348173		Delaware
Danville Riverwalk Venture, LLC	82-2783393		Delaware
Euro Real Estate Holdings LLC	04-1590850		Delaware
Fan Pier Development LLC*	20-3347091		Delaware
GIA EU Holdings LLC	04-1590850		Delaware
Landmark Manchester Holdings LLC	81-5360103		Delaware
MM Brookhaven Member LLC	04-1590850		Delaware
MM East South Crossing Member LLC	04-1590850		Delaware
MM Horizon Savannah Member LLC*	04-1590850		Delaware
MM National Self-Storage Program Member LLC	04-1590850		Delaware
MM 1400 E 4th Street Member LLC	04-1590850		Delaware
One Harbor Shore LLC*	80-0948028		Delaware
PACO France Logistics LLC	04-1590850		Delaware
Portland 400 Sixth Manager LLC	82-3393166		Delaware
Salomon Brothers Commercial Mortgage Trust 2001-MM	None		Delaware
Sawgrass Village Shopping Center LLC*	27-2977720		Delaware
STOA Holding LLC	None		Delaware
Three PW Office Holding LLC	81-5273574		Delaware
Twenty Two Liberty LLC*	35-2484550		Massachusetts
Unna, Dortmund Holding LLC	82-3250684		Delaware
Washington Gateway Apartments Venture LLC*	45-5401109		Delaware
MassMutual Premier Funds:			
MassMutual Premier Main Street Fund	51-0529328		Massachusetts
MassMutual Premier Strategic Emerging Markets Fund	26-3229251		Massachusetts
MassMutual Select Funds:			
MassMutual Select Fundamental Growth Fund	04-3512593		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
MassMutual Select T. Rowe Price Retirement 2005 Fund	82-3347422		Massachusetts
MassMutual Select T. Rowe Price Retirement 2010 Fund	82-3355639		Massachusetts
MassMutual Select T. Rowe Price Retirement 2015 Fund	82-3382389		Massachusetts
MassMutual Select T. Rowe Price Retirement 2020 Fund	82-3396442		Massachusetts
MassMutual Select T. Rowe Price Retirement 2025 Fund	82-3417420		Massachusetts
MassMutual Select T. Rowe Price Retirement 2030 Fund	82-3430358		Massachusetts
MassMutual Select T. Rowe Price Retirement 2035 Fund	82-3439837		Massachusetts
MassMutual Select T. Rowe Price Retirement 2040 Fund	82-3451779		Massachusetts
MassMutual Select T. Rowe Price Retirement 2045 Fund	82-3472295		Massachusetts

	<u>Federal Tax ID</u>	<u>NAIC CoCode</u>	<u>State of Domicile</u>
MassMutual Select T. Rowe Price Retirement 2050 Fund	82-3481715		Massachusetts
MassMutual Select T. Rowe Price Retirement 2055 Fund	82-3502011		Massachusetts
MassMutual Select T. Rowe Price Retirement 2060 Fund	82-3525148		Massachusetts
MassMutual Select T. Rowe Price Retirement Balanced Fund	82-3533944		Massachusetts
MML Series Investment Funds:			
MML Series International Equity Fund	46-4257056		Massachusetts
MML Series Investment Funds II:			
MML Series II Asset Momentum Fund	47-3517233		Massachusetts
MML Series II Dynamic Bond Fund	47-3529636		Massachusetts
MML Series II Equity Rotation Fund	47-3544629		Massachusetts
MML Series II Special Situations Fund	47-3559064		Massachusetts
MassMutual RetireSMART Funds:			
MassMutual RetireSMART 2035 Fund	27-1933380		Massachusetts
MassMutual RetireSMART 2045 Fund	27-1932769		Massachusetts
MassMutual RetireSMART 2055 Fund	46-3289207		Massachusetts
MassMutual RetireSMART 2060 Fund	47-5326235		Massachusetts
MassMutual 20/80 Allocation Fund	45-1618155		Massachusetts
MassMutual 80/20 Allocation Fund	45-1618222		Massachusetts
MassMutual RetireSMART In Retirement Fund	03-0532464		Massachusetts
MassMutual 40/60 Allocation Fund	45-1618262		Massachusetts
MassMutual 60/40 Allocation Fund	45-1618046		Massachusetts

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						Name of Securities			Relation-		Board,	Owner-		SCA	
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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	Éntity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No	* ()
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0435	Massachusetts Mut Life Ins Co		04-1590850	3848388			(MLIC)	MA		Company	Ownership.	100.000	MMLIC		
	Massachusetts mut Life ins co		04-1090600	3040300			(MML10)	MA		Massachusetts Mutual Life Insurance	Owner ship		WWLIG		
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0435	Massachusetts Mut Life Ins Co	93432	06-1041383				C.M. Life Insurance Company	CT	IA	Company	Ownership		MMLIC		
0435	Massachusetts Mut Life Ins Co	70416	43-0581430				MML Bay State Life Insurance Company	CT	IA	C.M. Life Insurance Company	Ownership		MMLIC		
0000			06-1041383				CML Mezzanine Investor III, LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
0000							CML Special Situations Investor LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
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										Massachusetts Mutual Life Insurance					
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										Massachusetts Mutual Life Insurance					
0000							MM Global Capabilities III LLC	DE	NIA	Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000							MM/Barings Multifamily TEBS 2020 LLC	DE	NIA	Company	Ownership.		MMLIC		
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0000			47-5322979				Timberland Forest Holding LLC	DE	NIA	Company	Ownership		MMLIC		
			47-5322979				Timberland Forest Holding LLC	DE	NIA	C.M. Life Insurance Company	Influence		MMLIC		
0000			47-5322979				Timberland Forest Holding LLC	DE	NIA	Wood Creek Capital Management LLC	Management		MMLIC		
0000							Lyme Adirondack Forest Company, LLC	DE	NIA	Timberland Forest Holding LLC	Ownership		MMLIC		
0000							Lyme Adirondack Timberlands I, LLC	DE	NIA	Lyme Adirondack Forest Company, LLC	Ownership		MMLIC		
0000							Lyme Adirondack Timberlands II, LLC	DE	NIA	Lyme Adirondack Forest Company, LLC	Ownership		MMLIC		
							Lyme Adirondack Timber Sales, LLC	DE	NIA	Lyme Adirondack Forest Company, LLC	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance	·				
0000			04-1590850				Berkshire Way LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
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0000			04-1590850		1		MSP-SC, LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
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							MassMutual MCAM Insurance Company, Inc	VT	NIA	Company	Ownership		MMLIC	.	
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			04-1590850				Insurance Road LLC	DE	NIA	Company	Ownership		MMLIC	.	
			04-1590850				MassMutual Trad Private Equity LLC	DE	NIA	Insurance Road LLC	Ownership		MMLIC		
			04-1590850				MassMutual Intellectual Property LLC	DE	NIA	Insurance Road LLC	Ownership		MMLIC	.	
0000							Trad Investments   LLC	DE	NIA	Insurance Road LLC	Ownership.	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
.0000							ITPSHolding LLC	DE	NIA	Company	Ownership		MMLIC		
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			27-0105644				Jefferies Finance LLC	DE	NIA	JFIN Parent LLC	Ownership		MMLIC		
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0000			86-2294635 13-1935920				Glidepath Holdings Inc Great American Life Insurance Company	DE OH	UIP UIP	Glidepath Holdings Inc.	Ownership Ownership		MMLIC		

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Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	) *
0000			31-1422717				AAG Insurance Agency, LLC	KY	NIA	Great American Life Insurance Company	Ownership		MMLIC		
0000		93661	31-1021738				Annuity Investors Life Insurance Company	0H	IA	Great American Life Insurance Company	Ownership		MMLIC		
			31-1395344				Great American Advisors, LLC	0H	NIA	Great American Life Insurance Company	Ownership		MMLIC		
			26-3260520				Manhattan National Holding, LLC	0H	UDP	Great American Life Insurance Company	Ownership		MMLIC		
			45-0252531				Manhattan National Life Insurance Company	0H	RE	Manhattan National Holding LLC	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
							MassMutual Mortgage Lending LLC	DE	NIA	Company	Ownership		MMLIC		
							Jefferies Private Credit BDC Inc.	MD	NIA	Jefferies Finance LLC	Owner ship		MMLIC		
							JFIN GP Adviser LLC	DE	NIA	Jefferies Finance LLC	Ownership.		MMLIC		
							JFIN Fund III LLC	DE	NIA	Jefferies Finance LLC	Ownership.		MMLIC		
0000							Jefferies Credit Partners LLC	DE	NIA.	Jefferies Finance LLC	Ownership	100.000	MMLIC		
							Apex Credit Partners LLC		NIA	Jefferies Credit Partners LLC	Ownership	100.000	MALIC	[	
0000							Jefferies Credit Management LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership.	100.000	MMLIC		
							JCP Direct Lending CLO 2022 LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership.	9.900	MALIC		1
							JFAM GP LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership		MMLIC		
							JFAM GP LP	DE	NIA	Jefferies Credit Partners LLC	Ownership.	100.000	MMLIC		1
							Jefferies Direct Lending Fund C LP	DE	NIA	JFAM GP LP	Ownership.	100.000	WILIC		
							Jefferies DLF C Holdings LLC	DE	NIA	Jefferies Direct Lending Fund C LLC	Ownership.	100.000	MMLIC		
							Jefferies Direct Lending Fund C SPE LLC	DE	NIA	Jefferies DLF C Holdings LLC	Ownership		MMLIC		
							JDLF 11 GP LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	MMLIC		
0000							JDLF II GP LLC	DE	NIA NIA	JDLF II GP LLC	Ownership	100.000	MMLIC		
0000									NIA NIA	JDLF II GP LLC	Ownership	100.000	MMLIC		
							Jefferies Direct Lending Fund II C LP	DE					MMLIC		
0000							Jefferies DLF II C Holdings LLC	DE DE	NIA	Jefferies Direct Lending Fund II C LP	Ownership	100.000 100.000	MMLIC		
							Jefferies Direct Lending Fund II C SPE LLC	UE	NIA	Jefferies DLF II C Holdings LLC	Ownership				
							Jefferies Senior Lending LLC	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
0000							Jefferies Senior Lending LLC	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
0000							JFIN Revolver Holdings LLC	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
0000							JFIN Revolver Holdings II LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
							JFIN Revolver Holdings IV LLC	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
0000							JFIN Co-Issuer Corporation	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
0000							JFIN Europe GP, S.a.r.I.	LUX	NIA	Jefferies Finance LLC	Ownership		MMLIC		
0000							Jefferies Finance Europe, S.L.P.	LUX	NIA	JFIN Europe GP, S.a.r.I.	Ownership		MMLIC		
0000							Jefferies Finance Europe, SCSp	LUX	NIA	JFIN Europe GP, S.a.r.I.	Ownership		MMLIC		
0000							Jefferies Finance Business Credit LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
							JFIN Business Credit Fund I LLC	DE	NIA	Jefferies Finance Business Credit LLC	Ownership		MMLIC		
							JFIN Funding 2021 LLC	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
							JFIN High Yield Investments LLC	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
							JFIN LC Fund LLC	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
							JFIN Revolver CLO 2017 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership.		MMLIC		
							JFIN Revolver CLO 2017-II Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
							JFIN Revolver CLO 2017-III Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		1
							JFIN Revolver CLO 2018 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership.	100.000	MMLIC		
							JFIN Revolver CLO 2019 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership.	100.000	MMLIC		T
							JFIN Revolver CLO 2019-II Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership		MMLIC		
							JFIN Revolver CLO 2019-11 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MWLIC		1
							JFIN Revolver CLO 2020 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership		MMLIC		
							JFIN Revolver CLO 2021-11 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
							JFIN Revolver CLO 2021-V Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership		MMLIC		
							JFIN Revolver CLO 2022-11 Ltd JFIN Revolver CLO 2022-111 Ltd	CYM	NIA NIA			100.000	MMLIC		
										Jefferies Finance LLC	Ownership		MMLIC		
							JFIN Revolver Fund, L.P.	DE	NIA	Jefferies Finance LLC	Ownership				
							JFIN Revolver Funding 2021 Ltd.	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
							JFIN Revolver Funding 2021 III Ltd.	DE	NIA	Jefferies Finance LLC	Ownership		MMLIC		
0000							JFIN Revolver Funding 2021 IV Ltd.	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
							JFIN Revolver Funding 2022-1 Ltd	BMU	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		

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											(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-	
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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)	(Yes/No)	) *
0000							JFIN Revolver SPE1 2022 LLC	DE	NIA	Jefferies Finance LLC	Ownership.		MMLIC		
							Apex Credit Holdings LLC	DE	NIA	JFIN Parent LLC	Ownership		MMLIC		
0000							JFIN CLO 2012 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership	100.000	MALIC		
							JFIN CLO 2013 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership		MILIC		
0000							JFIN CLO 2014 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership	100.000	MILIC		
							JFIN CLO 2014-11 Ltd.	CYM	NIA	Apex Credit Partners LLC		100.000			
		••••••									Ownership				
0000							JFIN CLO 2015 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership		MMLIC		
0000							JFIN CLO 2015-11 Ltd	CYM	NIA	Apex Credit Partners LLC	Ownership		MMLIC		
0000							JFIN CLO 2016 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership	100.000	MMLIC		
0000							JFIN CLO 2017 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership		MMLIC		
0000							JFIN CLO 2017-II Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				MM Copper Hill Road LLC	DE	NIA	Company	Ownership		MMLIC		
			04-1090000				www.copper HITI hoad LLC			Massachusetts Mutual Life Insurance	owner simp				
													188.10		
0000							MM Direct Private Investments Holding LLC	DE	NIA	Company	Ownership		MMLIC		
0000							MM Direct Private Investments UK Limited	GBR	NIA	MM Direct Private Investments Holding LLC .	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
0000							MM Investment Holding	CYM	NIA	Company	Ownership.		MMLIC		
0000			26-0073611				MassMutual Asset Finance LLC	DE	NIA	MM Investment Holding	Ownership		MMLIC		
0000			26-0073611				MassMutual Asset Finance LLC		NIA	C.M. Life Insurance Company	Ownership	0.400	MMLIC		
			90-1005837				MMAF Equipment Finance LLC 2013-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
			36-4785301				MMAF Equipment Finance LLC 2013-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MILIC		
		••••••													
0000			38-3969560				MMAF Equipment Finance LLC 2015-A	DE	NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		
0000			32-0489588				MMAF Equipment Finance LLC 2016-A	DE	NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		
0000			35-2590691				MMAF Equipment Finance LLC 2017-A	DE	NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		
0000			32-0546197				MMAF Equipment Finance LLC 2017-B	DE	NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		
			82-5335801				MMAF Equipment Finance LLC 2018-A	DE	NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		
0000			83-3722640				MMAF Equipment Finance LLC 2019-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
							MMAF Equipment Finance LLC 2019-B	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
0000							MMAF Equipment Finance LLC 2021-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
0000							Rozier LLC	DE	NIA.	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
		•••••	04.0440040												
0000			04-2443240				MML Management Corporation	MA	NIA	MM Investment Holding	Ownership		MMLIC		
0000			04-3548444				MassMutual International Holding MSC, Inc	MA	NIA	MML Management Corporation	Ownership		MMLIC		
0000			04-3341767 .				MassMutual Holding MSC, Inc	MA	NIA	MML Management Corporation	Ownership		MMLIC		
								l		Massachusetts Mutual Life Insurance					
							MML CM LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
			I				Blueprint Income LLC	NY.	NIA	MAL CM LLC	Ownership.	100.000	MMLIC	l	
							Flourish Digital Assets LLC	DE	NIA	MML CM LLC	Ownership	100.000	MMLIC		
0000							Flourish Financial LLC	DE	NIA	MML CM LLC	Ownership.	100.000	MILIC		
0000							Flourish Holding Company LLC	DE	NIA NIA	MML CM LLC					
				·   ·····							Ownership				
0000							Flourish Insurance Agency LLC	DE	NIA	MML CM LLC	Ownership		MMLIC		
0000							Flourish Technologies LLC	DE	NIA	MML CM LLC	Ownership		MMLIC		
			1							Massachusetts Mutual Life Insurance	1			1	
			04-3356880				MML Distributors LLC	MA	NIA	Company	Ownership		MMLIC		
			04-3356880				MML Distributors LLC	MA	NIA	MassMutual Holding LLC	Ownership	1.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000							MML Investment Advisers, LLC	DE	NIA	Company	Ownership.		MMLIC		
							mine invotatont Auviorio, LEV			Massachusetts Mutual Life Insurance	owner on p.				
0000			46 0000040				MM Stratagia Distributors 110	DE	NIA		Ownership	100,000	MILIC		
0000			46-3238013				MML Strategic Distributors, LLC		NIA	Company	Ownership				
										Massachusetts Mutual Life Insurance	la sa			1	
0000			06-1563535	2881445			The MassMutual Trust Company, FSB	CT	NIA	Company	Ownership		MMLIC		
							MML Private Placement Investment Company I,	l		Massachusetts Mutual Life Insurance					
0000			04-1590850				LLC	DE	NIA	Company	Ownership		MMLIC		

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											(Ownership,	is		ls an	
						Name of Securities			Relation-		Board,	Owner-		SCA	
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						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.Ś. 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)	(Yes/No	
oouc	Cleap Name	oouc	Number	ROOD		international)	Of Athliates	uon	Linuty	Massachusetts Mutual Life Insurance	Otiler)	lage		(103/10	4
											a		188.10		
0000			04-1590850				MML Private Equity Fund Investor LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
0000			04-1590850				MML Private Equity Fund Investor LLC	DE	NIA	Baring Asset Management Limited	Management		. MMLIC		
										Massachusetts Mutual Life Insurance					
0000		(	04-1590850				MM Private Equity Intercontinental LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance	·				
0000		4	45-2738137				Pioneers Gate LLC	DE	NIA	Company	Ownership	100,000	MMLIC		
			10 2100101							Massachusetts Mutual Life Insurance					
0000			45-2738137				Pioneers Gate LLC	DE	NIA		Ownership		MMLIC		
		······································	40-2/00/0/				FIUNEERS OALE LLU	VE	NIA	Company	owner sinp				·
					1					Massachusetts Mutual Life Insurance				1	
0000			04-2854319	2392316			MassMutual Holding LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
			06-1597528				MassMutual Assignment Company	NC	NIA	MassMutual Holding LLC	Ownership	100.000	. MMLIC		
			37-1732913				Fern Street LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000							Low Carbon Energy Holding	GBR	NIA	MassMutual Holding LLC	Ownership.	49.000	MMLIC		
							Sleeper Street LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000		4	46-2252944				Haven Life Insurance Agency, LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		1
			04-1590850				MassMutual Capital Partners LLC	DE	NIA	MassMutual Holding LLC	Ownership.		MMLIC		
			04-1090000				MassMutual Ventures Holding LLC	DE	NIA	MassMutual Holding LLC	Ownership.		MIC C		
							Athens Fund Management LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	. MMLIC		
0000							Crane Venture Partners LLP	GBR		MassMutual Ventures Holding LLC	Ownership				
							MassMutual Ventures Management LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
							MassMutual Ventures SEA Management Private								
							Limited	DE	NIA	MassMutual Ventures Management LLC	Ownership	100.000	MMLIC		
0000							MassMutual Ventures Southeast Asia   LLC	DE DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
0000			•••••				MassMutual Ventures Southeast Asia II LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership.		MMLIC		
0000							MassMutual Ventures Southeast Asia III LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MIC		
							Massmutual ventures southeast Asta III LLC		NIA	Massmutual ventures Holding LLC	ownership	100.000			
								0.01		MassMutual Ventures Southeast Asia III LLC	a		188.10		
0000							MMV Digital I LLC	CYM	NIA		Ownership	100.000	. MMLIC		
0000							MassMutual Ventures UK LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	. MMLIC		
0000			47-1296410				MassMutual Ventures US   LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
0000							MassMutual Ventures US II LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership		MMLIC		
0000							MassMutual Ventures US III LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership		MMLIC		
							MassMutual Ventures US IV LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	WILIC		
0000							Open Alternatives LLC	DE		MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
			04-1590850				MM Rothesav Holdco US LLC	DE	NIA	MassMutual Holding LLC	Ownership		MMLIC		
0000		······································	04-100000				Rothesay Limited		NIA NIA	MARSSMUTUAL HOLDING LLC	Ownership Ownership	48.800	MMLIC		
															·
0000							Rothesay Life Plc	GBR		Rothesay Limited	Ownership	100.000	. MILIC		
							Rothesay MA No.1 Limited	GBR	NIA	Rothesay Life PLC	Ownership	100.000	. MMLIC		
0000							Rothesay MA No.2 Limited	GBR	NIA	Rothesay Life PLC	Ownership	100.000	. MMLIC		
							Rothesay MA No.3 Limited	GBR	NIA	Rothesay Life PLC	Ownership	100.000	MMLIC		
							Rothesay MA No.4 Limited	GBR	NIA	Rothesay Life PLC	Ownership.		MMLIC		
							LT Mortgage Finance Limited	GBR	NIA	Rothesay Life PLC	Ownership	100.000	MMLIC		
							Rothesay Property Partnership 1 LLP	GBR	NIA	Rothesay Life PLC	Ownership	100.000	MMLIC		1
							Rothesay Foundation	GBR	NIA	Rothesay Line PLC	Ownership		MIC		1
									NIA	Rothesay Limited	Ownership	100.000	MIC		
							Rothesay Pensions Management Limited	<u>G</u> BR							
							Rothesay Asset Management UK Limited	GBR	NIA	Rothesay Limited	Ownership	100.000	. MILIC		· · · · · · · · · · · · · · · · · · ·
0000							Rothesay Asset Management Australia Pty Ltd .	AUS	NIA	Rothesay Asset Management UK Limited	Ownership	100.000	. MMLIC		
0000							Rothesay Asset Management US LLC	DE		Rothesay Asset Management UK Limited	Ownership	100.000	. MMLIC		
							MM Catalyst Fund LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
			47-1466022				LifeScore Labs, LLC	MA	NIA	MassMutual Holding LLC	Ownership	100.000	WILIC	I	1
0000			45-4000072				MM Asset Management Holding LLC	MA	NIA	MassMutual Holding LLC	Ownership	100.000	MIC		1
			45-4000072				Barings LLC	MA	NIA	MassMutual Holding LLC	Ownership		MMLIC		1
			45-4000072 04-1590850				MML Investors Services. LLC	MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000			04-1590850					MA MA				100.000	MWLIC		· · · · · · · · · · · · · · · · · · ·
0000		(	04-1590850				MML Insurance Agency, LLC	MA	NIA	MML Investors Services, LLC	Ownership		. MMLIC		

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						Name of Securities			Relation-		Board,	Owner-		SCA	
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						Exchange		Domi-	ship		Management,	ship			
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Group	1	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)	(Yes/No	א (נ
0000			41-2011634		•		MMLISI Financial Alliances. LLC		NIA	MML Investors Services. LLC	Ownership		MMLIC	(	4
			51-0504477				Barings LLC	DE	NIA	MassMutual Asset Management Holding LLC	Ownership		MMLIC		
			51-0304477				Baring Asset Management (Asia) Holdings	DE	NIA	Massmutual Asset management Horunny LLC	owner simp		WWLIG		
0000			00.0504074					11/0		B : 110	a 1.:	400,000	100		
0000			98-0524271				Limited	HKG	NIA	Barings LLC	Ownership		MMLIC		
							Baring International Fund Managers (Bermuda)			Baring Asset Management (Asia) Holdings					
0000			98-0457465				Limited	BMU	NIA	Limited	Ownership		MMLIC		
										Baring Asset Management (Asia) Holdings					
0000			98-0457463				Baring Asset Management (Asia) Limited	HKG	NIA	Limited	Ownership		MMLIC		
							Baring Asset Management Korea Limited	KOR	NIA	Baring Asset Management (Asia) Limited	Ownership		MMLIC		
							Barings Investment Management (Shanghai)			-					1
0000							Limited	HKG	NIA	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC		
							Barings Overseas Investment Fund Management			Barings Investment Management (Shanghai)					
								HKG	NILA	Limited	Ownership		MMLIC		
0000							(Shanghai) Limited	лкu	NIA		Ownership		WWWLIG		
										Baring Asset Management (Asia) Holdings					
0000			98-0457707				Baring SICE (Taiwan) Limited	TWN	NIA	Limited	Ownership		MMLIC		
										Baring Asset Management (Asia) Holdings					
0000							Barings Singapore Pte. Ltd	SGP	NIA	Limited	Ownership		MMLIC		
										Baring Asset Management (Asia) Holdings					
			98-0236449				Barings Japan Limited	JPN	NIA	Limited	Ownership		MMLIC		
0000							Barings Australia Holding Company Pty Ltd	AUS	NIA	Barings LLC	Ownership	100.000	MMLIC		
			98-0457456				Barings Australia Pty Ltd	AUS	NIA	Baring Australia Holding Company Pty Ltd	Ownership		MIC		
			80-0875475				Barings Finance LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
		••••••	00-00/04/0				BCF Europe Funding Limited	IRL	NIA	Barings Finance LLC			MMLIC		
											Ownership				
0000							BCF Senior Funding I LLC	DE	NIA	Barings Finance LLC	Ownership		MMLIC		
							BCF Senior Funding I Designated Activity								
0000							Company	IRL	NIA	Barings Finance LLC	Ownership		MMLIC		
0000							Barings Real Estate Acquisitions LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
0000			04-3238351				Barings Securities LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
0000			98-0437588				Barings Guernsey Limited	GGY	NIA	Barings LLC	Ownership		MMLIC		
							Barings Europe Limited	GBR	NIA	Barings Guernsey Limited	Ownership	100.000	MMLIC		
0000							Barings Asset Management Spain SL	ESP	NIA	Barings Europe Limited	Ownership	100.000	MILIC		
							Barings GmbH	DEU	NIA.	Barings Europe Limited	Ownership	100.000	MMLIC		
							Barings Italy S.r.I.	ITA	NIA.	Barings Europe Limited	Ownership.	100.000	MMLIC		
0000							Barings Sweden AB		NIA	Barings Europe Limited			MMLIC		
	••										Ownership			[	
							Barings Netherlands B.V.	NLD	NIA	Barings Europe Limited	Ownership		MMLIC		
0000							Barings Real Estate UK Holdings Limited	DE	NIA	Barings Europe Limited	Ownership		MMLIC		
0000			98-0432153				Barings (U.K.) Limited	GBR	NIA	Barings Europe Limited	Ownership		MMLIC		
0000			98-0241935				Baring Asset Management Limited	GBR	NIA	Barings Europe Limited	Ownership		MMLIC		
0000							Barings European Direct Lending 1 GP LLP	GBR	NIA	Baring Asset Management Limited	Ownership		MMLIC		
			98-1012393				Barings Global Advisors Limited	GBR	NIA	Baring Asset Management Limited	Ownership		MMLIC		
. 0000			98-0457328				Baring International Investment Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MIC		
							Baring International Investment Management								
. 0000			98-0457587				Holdings	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		1
			JJ-U <del>4</del> J/JD/				101011190	uun	NIA		omici allip				
0000			00 0457570				Design Accel Mensenersk IIV II-1419	000	NUA	Baring International Investment Management	0	100,000	MMLIC		1
0000			98-0457576				Baring Asset Management UK Holdings Limited .	GBR	NIA	Holdings	Ownership		MMLIC		
							Baring International Fund Managers (Ireland)			Baring Asset Management UK Holdings Limited					1
0000			98-0524272				Limited	IRL	NIA		Ownership		MMLIC		
										Baring Asset Management UK Holdings Limited					1
							Baring Asset Management Switzerland Sàrl	CHE	NIA		Ownership		MMLIC		
										Baring Asset Management UK Holdings Limited					
			98-0497550				Baring France SAS	FRA	NIA	La	Ownership.		MMLIC		1
			98-0457586				Baring Fund Managers Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
0000			30-040/000				BCGSS 2 GP LLP	GBR	NIA	Baring Fund Managers Limited	Ownership		MMLIC		
			00.0457570										MMLIC		
			98-0457578				Baring Investment Services Limited	GBR	NIA	Baring Asset Management Limited	Ownership		MMLIC		

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000         83-9008         Alter Syst1 Weidings IP         E         NA.         Barrings LD         Massharts Hual Life Insurance         Mu.C         Mu.C           000         62-93076         938. Holdings LD         JE         M.A.         Graphic         Data         Mu.C         Mu.											Massachusetts Mutual Life Insurance					
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1000         62-20126         94.8. Holding LLC         ER         NRA         Barrig LLC				82-2932156				GASL Holdings LLC	DE	NIA	Company	Ownership		MMLIC		
000         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24400         4-24600         4-24400         4-24400         4-24400         4-24400         4-244000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000         4-246000	0000			82-2932156				GASL Holdings LLC		NIA	Barings II C	Board		MILIC		
000         46-23430         Internetial Holding II LC         02         NiA         Company         Converging         Downspant         Mulci           000         47-305509         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         44.00         <				02 2002 100				Chor Hordingo Leo				bour a				
.000         Af-305309         Milestore Acquisition Holding, LLC         DE         NiA         Musulturi Holding LLC         Derrich J/Influence         19.00         Mulc           .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .000         .0000         .000         .0000         .																
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D00     Add 540020	0000			47-3055009				Milestone Acquisition Holding IIC		NIA	MassMutual Holding LLC		19 800	MILIC		
D000         Most in Companies, Inc.         MQ         NNA         Company         Omerating LC         Influence         Influence         Influence         Influence         ML IC           0000         46-540339         Red Lake ventures, LC         LC         LE         NNA         Barrings LC         Influence         Influence         ML IC         ML IC           0000         66-540339         Red Lake ventures, LC         LE         NNA         Barrings LC         Influence         ML IC         ML IC           0000         81-4055378         Reinigten L & If Holdings LC         LE         NNA         Barrings LC         Influence         ML IC         ML IC           0000         81-4055378         Reinigten L & If Holdings LC         LE         NNA         Barrings LC         Influence         ML IC         ML IC           0000         Influence         19.500         ML IC         Influence         ML IC         ML IC         Influence         Influence         Influence         Influence         Influence         Influence         Influence								millestone Acquisition noranig, EEC.				owner simp/ initiacitie				
0000         Maxim Corpanies, Inc.         UD         NA         Barrings LLC         Influence         MLIC           0000         46-560309         Bet Lake Ventures, LLC         DE         MA         Graphy         Durrethip/Influence         31.500         MLIC         End           0000         66-560309         Bet Lake Ventures, LLC         DE         MA         Graphy         Durrethip/Influence         31.500         MLIC         End         MA           0000         68-560309         Bet Ingits LC         DE         MA         Graphy         Durrethip/Influence         31.500         MLIC         End         MA         Graphy         Durrethip/Influence         31.500         MLIC         End         MA         Barrings LLC         Influence         MLIC         End         MA         Barrings LLC         Influence         MLIC         End         MA         Barrings LLC         Influence         MLIC         End         MA         End         Massachust II Minut Life Insurance         MLIC         End         MA         Barrings LLC         Influence         MLIC         End         MA         Barrings LLC         Influence         MLIC         End         MLIC         End         MA         Barrings LLC         Influence																
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0000         46-560309         Red Lake Ventures, LLC         DE         NIA         Company         International Strain         MLIC         Strain           0000         46-560309         Red Lake Ventures, LLC         DE         NIA         Barrings LLC         International Strain         NuLC         Descriptional Strain         NuLC         Description         NuLC											Massachusetts Mutual Life Insurance					
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0000         81-4065378         MALC         Description         Influence         19.900         MALC           0000         81-4065378         B-4065378         B-4065378         Beington L & W Holdings LLC         DE         NNA         Bargary         Dimership/Influence         19.900         MALC           0000         Taniani Citrus, LLC         DE         NNA         Bargary         Dimership/Influence         19.900         MALC           0000         Taniani Citrus, LLC         DE         NNA         Bargary         Dimership/Influence         14.700         MALC           0000         Teaktree Acquisition, LLC         DE         NNA         Bargary         Dimership/Influence         14.700         MALC           0000         Teaktree Acquisition, LLC         DE         NNA         Bargschuzetts Mutual Life Insurance         Unership/Influence         14.700         MALC           0000         Techquity, LP         DE         NNA         Bargschuzetts Mutual Life Insurance         Unership/Influence         14.700         MALC           0000         Techquity, LP         DE         NNA         Bargs LLC         Influence         MALC         Influence         MALC         Influence         MALC         Influence         Influence	0000			46-5460309				Red Lake Ventures, LLC	DE	NIA		Influence		MMLIC		
.000       81-4065378       Image: Instruct LG       DE       NIA       Barrings LLC       Influence       MLLC       Influence       MLLC         .000       Image: Instruct LG       DE       NIA       Barrings LLC       Onership       15.700       MLLC       Influence       Influence       MLLC       Influence       MLLC       Influence       MLLC       Influence       Influence       Influence       MLLC       Influence       I											Massachusetts Mutual Life Insurance					
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0000						Barings Hotel Opportunity Venture I GP, LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
0000						Barings Investment Series LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
0000						Barings Emerging Generation Fund GP, LLC	DE	NIA	Barings LLC	Ownership		. MMLIC		
0000						Barings Emerging Generation Fund GP II, LLC .	DE	NIA	Barings LLC	Ownership		MMLIC		
0000						Barings ERS PE Emerging Manager III GP, LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
						Barings Global Investment Funds (U.S.)			Dai mga Leo	owner amp				
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0000			04-1590850			Management LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
0000						Barings CLO Investment Partners GP, LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
0000						Barings Core Property Fund GP LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
0000						Barings Direct Lending GP Ltd.	CYM	NIA	Barings LLC	Ownership	100.000	MMLIC		
						Sar mge street Lending of Ltd.			Massachusetts Mutual Life Insurance	on p			[	1
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0000			84-3784245			Barings Emerging Generation Fund LP	DE	NIA	Company	Ownership			[	
0000			84-3784245			Barings Emerging Generation Fund LP	DE	NIA	Barings LLC	Management		MMLIC		
						Barings Global Energy Infrastructure								
						Advisors, LLC	DE	NIA	Barings LLC	Ownership.		MMLIC		
						Barings North American Private Loan Fund			bui mgo LEo					
0000							05		D : 110	o	100,000	100		
0000						Management, LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
						Barings North American Private Loan Fund								
0000						Management II, LLC	DE	NIA	Barings LLC	Ownership.		MMLIC		
						Barings North American Private Loan Fund			•					
0000						Management III. LLC	DE	NIA	Barings LLC	Ownership.		MMLIC		
						Barings Global Real Assets Fund GP, LLC	DE DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000						Barings GPSF	DE	NIA	Barings LLC	Ownership		MMLIC		
									Massachusetts Mutual Life Insurance					
0000			84-5063008			Barings Small Business Fund LLC	DE	NIA	Company	Ownership		MMLIC		
0000			84-5063008			Barings Small Business Fund LLC	DE	NIA	Barings LLC	Management		MILIC		
0000			98-0536233			Benton Street Advisors, Inc.	CYM	NIA	Barings LLC	Ownership		MILIC		
			90-000200											
0000						BHOVI Incentive LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000						BIG Real Estate Fund GP LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
						BIG Real Estate Incentive   LLC	DE	NIA	Barings LLC	Ownership.		MMLIC		
0000						BIG Real Estate Incentive II LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
0000						BRECS VII GP LLC	DE	NIA.	Barings LLC	Ownership		MMLIC	[	1
0000						BREDIF GP LLC	DE	NIA	Barings LLC		100.000	MMLIC		
										Ownership				
0000						CREF X GP LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
0000			04-1590850			Great Lakes III GP, LLC	DE	NIA	Barings LLC	Ownership				
						Lake Jackson LLC	DE	NIA	Barings LLC	Ownership.		MMLIC		
			04-1590850			Loan Strategies Management LLC	DE	NIA	Barings LLC	Ownership	100.000	MLIC		T
0000			41-2280126			Mezzco III LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
			80-0920285			Mezzco IV LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
0000						Mezzco Australia II LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
						RECSA-NY GP LLC	DE	NIA	Barings LLC	Ownership				
0000			04-1590850			SBNP SIA II LLC	DE	NIA	Barings LLC	Ownership	100.000	MILIC		
						SBNP SIA III LLC	DE	NIA	Barings LLC	Ownership		MMLIC		1
								NIA	Dai mys LLU	owner annh			[	
						Somerset Special Opportunities Management LL							1	
			04-1590850				DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
									Massachusetts Mutual Life Insurance	1			1	
						Amherst Long Term Holdings, LLC	DE	NIA	Company	Ownership		MMLIC	1	
									Massachusetts Mutual Life Insurance	onnor on p.				1
0000			04 0040700				05				100.000	100		
			04-3313782			MassMutual International LLC	DE	NIA	Company	Ownership				
0000						MassMutual Solutions LLC	DE	NIA	MassMutual International LLC	Ownership		MMLIC		
0000						Haven Technologies Asia Limited	HKG	NIA	MassMutual Solutions LLC	Owner ship				
0000						Yunfeng Financial Group Limited	HKG	NIA	MassMutual International LLC	Ownership	24,900	MMLIC		
						MassMutual Asia Limited (SPV)	HKG	NIA	MassMutual International LLC	Ownership	100.000	MMLIC		1
							л\u	INTA	wassmutuar international LLC	uwiter stillp		[₩₩		

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						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)	(Yes/No)	
Coue	Gloup Name	Code	Number	ROOD	OIX	international)	Of Allillates	lion	Linuty	Massachusetts Mutual Life Insurance	Other)	lage		(163/100)	<i>''</i>
0000			04-1590850				MML Mezzanine Investor II, LLC	DE	NIA	Company	Ownership		MMLIC		
			04 1000000				mme mezzarrite rivestor ri, Leo			Massachusetts Mutual Life Insurance	owner simp				
			04-1590850				MML Mezzanine Investor III, LLC	DE	NIA	Company	Ownership		MMLIC		
							····· ··· ··· ··· ··· ··· ··· ··· ···			Massachusetts Mutual Life Insurance					
0000			27-3576835				MassMutual External Benefits Group LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				100 w. 3rd Street LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				2160 Grand Manager LLC	DE	NIA	Company	Ownership		. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			82-2432216				300 South Tryon Hotel LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
0000			04 4500050				200 South Town II C		N/2 4	Massachusetts Mutual Life Insurance	0	100,000			
0000			04-1590850				300 South Tryon LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
.0000							Almack Mezzanine Fund II Unleveraged LP	GBR	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence		MMLIC		
							Barings Affordable Housing Mortgage Fund I	udh	NIA	Massachusetts Mutual Life Insurance	owner ship/ initiaence				
							LLC	DE	NIA	Company	Ownership.		MIC		
							Barings Affordable Housing Mortgage Fund I			company	owner simp				
0000								DE	NIA	Barings LLC	Management		MMLIC		
							Barings Affordable Housing Mortgage Fund II			Massachusetts Mutual Life Insurance	ind agoinor t				
0000			61-1902329				LLC	DE	NIA	Company	Ownership		MMLIC		
							Barings Affordable Housing Mortgage Fund II								
0000			61-1902329				LLC	DE	NIA	Barings LLC	Management		. MMLIC		
							Barings Affordable Housing Mortgage Fund III			Massachusetts Mutual Life Insurance					
0000			85-3036663				ШС	DE	NIA	Company	Ownership	100.000	. MMLIC		
							Barings Affordable Housing Mortgage Fund III								
0000			85-3036663				LLC	DE	NIA	Barings LLC	Management		_ MMLIC		
0000			36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	Massachusetts Mutual Life Insurance	Ownership/Influence		MMLIC		
0000			36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	Company C.M. Life Insurance Company	Ownership/Influence	1.100	MWLIC		
0000			36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	Barings LLC	Management		MMLIC		
							Barings Emerging Markets Corporate Bond Fund			Massachusetts Mutual Life Insurance	managoment				
0000								IRL	NIA.	Company	Ownership/Influence		MMLIC		
							Barings Emerging Markets Corporate Bond Fund								
0000								IRL	NIA	Barings LLC	Ownership		MMLIC		
							Barings European Real Estate Debt Income Fund			Massachusetts Mutual Life Insurance					
0000								LUX	NIA	Company	Ownership/Influence	75.100			
							Barings European Real Estate Debt Income Fund								
0000								LUX	NIA	Barings LLC	Influence	+	. MMLIC		
			98-1206017				Babson Capital Global Special Situation Credit Fund 2		NIA	Massachusetts Mutual Life Insurance	Ownership (Influer-		MILIC		
			30-120001/				Babson Capital Global Special Situation	DE	NIA	Company	Ownership/Influence				
			98-1206017				Credit Fund 2	DE	NIA	C.M. Life Insurance Company	Ownership				
			30-1200017				Babson Capital Global Special Situation	VE		o.w. Lite Insulance company	omici sirip				
			98-1206017				Credit Fund 2	DE	NIA	Barings LLC	Management		MMLIC		
										Massachusetts Mutual Life Insurance					
			37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NIA	Company	Ownership/Influence		MMLIC		
0000			37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NIA	C.M. Life Insurance Company	Ownership.		MMLIC		
			37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NIA	Barings LLC	Management		. MMLIC		
										Massachusetts Mutual Life Insurance					
0000							Barings US High Yield Bond Fund	IRL	NIA	Company	Ownership/Influence				
0000							Barings US High Yield Bond Fund	IRL	NIA	Barings LLC	Management		. MMLIC		
							Babson CLO Ltd. 2013-1	CYM	NIA	Barings LLC	Influence		. MMLIC	<u></u>	2

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					Name of Secu	ities		Relation-		Board,	Owner-		SCA	
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		NAIC			if Publicly Tra		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 Internation		tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No	
	Croup Name	Code	Number	ROOD		Babson CL0 Ltd. 2015–1	CYM	NIA	Barings LLC	Influence.	lage	MLIC	(163/140	3
						Babson CL0 Ltd. 2015-11	CYM	NIA.	Barings LLC	Influence.		MMLIC		
						Babson CLO Ltd. 2016-1	CYM	NIA	Barings LLC	Influence		WILIC		
						Babson CLO Ltd. 2016-11	CYM	NIA	Barings LLC	Influence		MMLIC		
0000						Barings CLO Ltd. 2017-1	CYM	NIA	Barings LLC	Influence		MMLIC		
0000						Barings CLO 2018-III	CYM	NIA	Barings LLC	Influence		. MMLIC		
0000						Barings CLO 2018-IV	CYM	NIA	Barings LLC	Influence		. MMLIC		
0000			98-1473665			Barings CLO 2019-11	CYM	NIA	Barings LLC	Influence				
0000						Barings CLO 2019-111	CYM	NIA	Barings LLC	Influence				
0000						Barings CLO 2019-IV	CYM CYM	NIA NIA	Barings LLC Barings LLC	Influence		. MMLIC		
0000						Barings CLO 2020-1 Barings CLO 2020-11	CYM	NIA	Barings LLC Barings LLC	Influence	•	MMLIC		+
0000						Barings CLO 2020-11 Barings CLO 2020-111	CYM	NIA NIA	Barings LLC	Influence		MMLIC		
						Barings CLO 2020-IV	CYM	NIA	Barings LLC	Influence		MMLIC		
						Barings CL0 2021-1	CYM	NIA	Barings LLC	Influence		MMLIC		
						Barings CLO 2021-11	CYM	NIA.	Barings LLC	Influence		MMLIC		
							CYM	NIA	Barings LLC	Influence		MMLIC		
0000						Babson Euro CLO 2014-I BV	NLD	NIA	Barings LLC	. Influence		. MMLIC		
						Babson Euro CLO 2014-II BV	NLD	NIA	Barings LLC	. Influence		. MMLIC		
0000						Babson Euro CLO 2015-I BV	NLD	NIA	Barings LLC	Influence	·· <b>···</b> ·····	. MMLIC		
0000			36-037260H			Barings Euro CLO 2019-1 BV	IRL	NIA	Barings LLC	Influence				
0000						Barings Euro CLO 2019-II BV	IRL	NIA	Barings LLC	Influence	·· <b>···</b> ·····	. MMLIC		
0000			37-15576VH			Barings Euro CLO 2020-1 DAC Barings Euro CLO 2021-1 DAC	IRL	NIA	Barings LLC Barings LLC	Influence		MMLIC		
0000			3/-100/0VH			Barings Euro CLO 2021-1 DAC	IRL	NIA	Barings LLC	Influence		MMLIC		
						Barings Euro CLO 2021-111 DAC	IRL	NIA	Barings LLC	Influence		MMLIC		
									Massachusetts Mutual Life Insurance					
0000			81-0841854				DE	NIA	Company	Ownership/Influence		MMLIC		
			81-0841854			Barings CLO Investment Partners LP	DE	NIA	Barings LLC	Management		. MMLIC		
									Massachusetts Mutual Life Insurance					
0000						Barings Euro Value Add II (BREEVA II)	LUX	NIA	Company	Ownership/Influence				
0000						Barings Euro Value Add II (BREEVA II)	LUX	NIA	C.M. Life Insurance Company	Ownership	2.600	. MMLIC		
0000							LUX	NIA	Barings LLC Massachusetts Mutual Life Insurance	. Management		. MMLIC		
						barings Real Estate European value Adu i Sus	GBR	NIA	Company	Ownership/Influence	44.500	MMLIC		
						Barings Real Estate European Value Add I SCS			company	ownership/initidence				
0000							GBR	NIA	C.M. Life Insurance Company	Ownership.	4.900	WILIC		
						Barings Real Estate European Value Add   SCS	D							
0000							GBR	NIA	Barings LLC	Management		MMLIC		
									Massachusetts Mutual Life Insurance					
0000			85-3449260			Barings Real Estate Debt Income Fund LP	DE	NIA	Company	Ownership/Influence		MMLIC		
			85-3449260			Barings Real Estate Debt Income Fund LP	DE	NIA	C.M. Life Insurance Company	Influence		. MMLIC		
0000			85-3449260			Barings Real Estate Debt Income Fund LP	DE	NIA	Barings LLC	Management				
0000			82-5330194			Barings Global Em. Markets Equity Fund Barings Global Energy Infrastructure Fund I	NC	NIA	Barings LLC Massachusetts Mutual Life Insurance	. Management		MMLIC		
			98-1332384			LP	CYM	NIA		Ownership/Influence		MMLIC		
			30-1332304			Barings Global Energy Infrastructure Fund I		NIA	Company	owner simp/ initidence				
			98-1332384				CYM	NIA	Baring Asset Management Limited	Management		MMLIC		
0000						Barings Global Dividends Champion Fund	IRL	NIA	Baring Asset management Eninted	Management		WILIC		
0000						Barings Global Inv. Grade Strat Fund	IRL	NIA	Barings LLC	Management		MMLIC		
						, , , , , , , , , , , , , , , , , , ,			Massachusetts Mutual Life Insurance	Ū.				
0000			82-3867745			Barings Global Real Assets Fund LP	DE DE	NIA	Company	Ownership/Influence				
0000			82-3867745			Barings Global Real Assets Fund LP	DE	NIA	C.M. Life Insurance Company	Ownership	7.100	. MMLIC		
			82-3867745			Barings Global Real Assets Fund LP	DE	NIA	Barings LLC	Management		. MMLIC		<u></u>

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						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)	(Yes/No	
Coue	Gloup Name	Coue	Number	ROOD	OIN	international)		lion	Linuty		Other)	laye		(165/100	/
							Barings Global Special Situations Credit Fund	1		Massachusetts Mutual Life Insurance					
0000							3	IRL	NIA	Company	Ownership/Influence		MMLIC		
							Barings Global Special Situations Credit 4			Massachusetts Mutual Life Insurance					
0000							Delaware	DE	NIA	Company	Ownership		MMLIC		
							Barings Global Special Situations Credit 4								
							Delaware	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
							Barings Global Special Situations Credit 4								
							Delaware	DE	NIA	Barings LLC	Management		MMLIC		
		••••••					Barings Global Special Situations Credit 4	DL		Massachusetts Mutual Life Insurance	management				
0000								1.1.17			o	40.500	144.10		
0000								LUX	NIA	Company	Ownership		MMLIC		
							Barings Global Special Situations Credit 4				la su				
0000							LUX	LUX	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
							Barings Global Special Situations Credit 4								
0000							LUX	LUX	NIA	Barings LLC	Management.		MMLIC		
							Barings Global Special Situations Credit Fund	1		, , , , , , , , , , , , , , , , , , ,	÷				
.0000							3	IRL	NIA	Barings LLC	Management		MMLIC		
							Barings Global Technology Equity Fund	IRL		Barings LLC	Ownership/Influence		MILIC		
							bai ngs giobai recinorogy Equity Fund	InL		Massachusetts Mutual Life Insurance	ownership/inituence				
0000			07 0077050					OT				75 400	144.10		
			87-0977058				Barings Hotel Opportunity Venture	CT	NIA	Company	Ownership/Influence	75.400			
0000			87-0977058				Barings Hotel Opportunity Venture	CT	NIA	Barings LLC	Management		MMLIC		
							Barings Innovations & Growth Real Estate Fund			Massachusetts Mutual Life Insurance					
0000			86-3661023					DE	NIA	Company	Ownership		MMLIC		
							Barings Innovations & Growth Real Estate Fund	d							
0000			86-3661023				*	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
							Barings Middle Market CLO 2017-I Ltd & LLC	CYM	NIA	Barings LLC	Influence.		MMLIC		
0000							Barings Middle Market CLO 2018-1	CYM		Barings LLC	Influence		MILIC		
0000							Barings Middle Market CLO 2019-1	CYM	NIA	Barings LLC	Influence		MMLIC		
0000			98-1612604				Barings Middle Market CLO Ltd 2019-1	CYM		Barings LLC	Influence		MILIC		
			90-1012004				barings middle market GLU Ltd 2021-1		NIA		Ini Tuence				
										Massachusetts Mutual Life Insurance					
0000			38-4010344				Barings North American Private Loan Fund LP .	DE	NIA	Company	Ownership/Influence		MMLIC		
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		MMLIC		
0000			98-1332384				Barings RE Credit Strategies VII LP	DE	NIA	Baring Asset Management Limited	Management		MMLIC		
							Barings Target Yield Infrastructure Debt Fund			Massachusetts Mutual Life Insurance		1			
0000			98-1567942					LUX	NIA	Company	Ownership		MMLIC		
			00 1001042				Barings Target Yield Infrastructure Debt Fund			ounpurit	owner on p				
0000			00 4507040				barings larget field infrastructure bebt Fund	1		<b>D</b> · · · · · · · · · · · ·			144.10		
			98-1567942					LUX		Baring Asset Management Limited	Management				
0000			87-1262754				Barings Transportation Fund LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence		MMLIC		
1 1								1		Massachusetts Mutual Life Insurance	1				
0000			87-1262754				Barings Transportation Fund LP	DE	NIA	Company	Ownership		MMLIC		
1 1								1		Massachusetts Mutual Life Insurance	1				
0000							Braemar Energy Ventures I, L.P.	DE	NIA	Company	Ownership/Influence		MMLIC		
							Braemar Energy Ventures I, L.P.	DE	NIA	C.M. Life Insurance Company	Ownership.	1.300	MILIC		
							Braemar Energy Ventures I, L.P.	DE	NIA	Barings LLC	Management		MILIC		1
											Ownership/Influence	9.000	MMLIC		
							Barings European Core Property Fund SCSp	LUX	NIA	MassMutual Holding LLC					
0000							Barings European Core Property Fund SCSp	LUX		C.M. Life Insurance Company	Ownership	0.600			
0000							Barings European Core Property Fund SCSp	LUX	NIA	Barings Real Estate Advisers LLC	Management		MMLIC		
								1	1	Massachusetts Mutual Life Insurance	1				
			46-5001122				Barings European Private Loan Fund III A	LUX	NIA	Company	Ownership		MMLIC		
0000			38-4059932				Benchmark 2018-B2 Mortgage Trust	NY	NIA	Barings LLC	Influence		MMLIC		1
							Benchmark 2018-B4	NY	NIA	Barings LLC	Influence.	T	MILIC		1
0000			38-4096530				Benchmark 2018-B4	NY	NIA	Barings LLC	Influence		MILIC		1
			20-5578089				Barings Core Property Fund LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	22.300	MMLIC		
(888)			20-00/8088				Darings Core Property Fund LP	1VE	NIA	wasswuluai Moloing LLC	Uwrier Ship/Intiuence				

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						Exchange		Domi-	ship		Management,	ship		Filing	
		NIAIO					Number								
		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	Éntity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No	
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0000			20-5578089				Barings Core Property Fund LP	DE	NIA	Barings Real Estate Advisers LLC	Management		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			46-5432619				Cornerstone Real Estate Fund X LP	DE	NIA	Company	Ownership/Influence	27.400	MMLIC		
			46-5432619				Cornerstone Real Estate Fund X LP	DE	NIA	C.M. Life Insurance Company	Ownership	3.000	MMLIC		
0000			46-5432619				Cornerstone Real Estate Fund X LP	DE	NIA	Barings Real Estate Advisers LLC	Management		MILIC		
			40-0402019				Cornerstone Rear Estate Fund X LF	VE	NIA		management				
										Massachusetts Mutual Life Insurance					
0000			35-2531693				Cornerstone Permanent Mortgage Fund III LLC .	MA	NIA	Company	Ownership/Influence		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			61-1793735				Cornerstone Permanent Mortgage Fund IV LLC	MA	NIA	Company	Ownership	100,000	MMLIC		1
			01-1/93/30				connersione Fermanent Morigage Fund IV LLC	MA	NIA		owner strip				······
										Massachusetts Mutual Life Insurance					
			90-0991195		0001597511		Gateway Mezzanine Partners II LP	DE	NIA	Company	Ownership/Influence		MMLIC		
.0000			90-0991195		0001597511		Gateway Mezzanine Partners II LP	DE	NIA	C.M. Life Insurance Company	Ownership.	4.800	MIC		
			90-0991195		0001597511		Gateway Mezzanine Partners II LP	DE	NIA	Barings LLC	Management		MMLIC		
0000			an-naa i 1ao		000109/011		Galeway Mezzanine Fariners II LP	VE	INTA		management				······
										Massachusetts Mutual Life Insurance					
			37-1708623				Great Lakes III, L.P.	DE	NIA	Company	Ownership/Influence		MMLIC		
0000			37-1708623				Great Lakes III, L.P.	DE	NIA	Barings LLC	Management		MMLIC		
			0							Massachusetts Mutual Life Insurance	management				
0000								LUX				40,000	100 10		
0000							GIA EU Holdings - Emerson JV Sarl		NIA	Company	Ownership/Influence		MMLIC		
							GIA EU Holdings - Emerson JV Sarl	LUX	NIA	Barings LLC	Management				
							JPMCC Commercial Mortgage Securities Trust	1							1
			38-4041011	1	1	1	2017–JP7	NY	NIA	Barings LLC	Influence		MMLIC		1
			00 404 10 11							Dai 1190 LLV					
							JPMDB Commercial Mortgage Securities Trust				l				
0000			38-4032059				2017–C5	NY	NIA	Barings LLC	Influence		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			82-1512591				KKR-MM Vector LP	DE	NIA	Company	Ownership/Influence	100.000	MMLIC		1
										Massachusetts Mutual Life Insurance					
												100.00-			
0000			46-4255307				Marco Hotel LLC	DE	NIA	Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
			04-1590850				Miami Douglas One GP LLC	DE	NIA	Company	Influence	0.000	MMLIC		
0000			04-1590850				Miami Douglas One GP LLC		NIA	C.M. Life Insurance Company	Owner ship		MILIC		1
							miami Dougrad vite of ELU	···· <sup>UL</sup> ·····			omior antip				
										Massachusetts Mutual Life Insurance	l				
0000			04-1590850				Miami Douglas Two GP LLC	DE	NIA	Company	Influence	0.000	MMLIC		
			04-1590850				Miami Douglas Two GP LLC	DE	NIA	C.M. Life Insurance Company	Influence		MMLIC		
										Massachusetts Mutual Life Insurance					
			04-1590850				Miami Dauglas One LP	DE	NIA		Ownership	.90.000	MMLIC		1
							Miami Douglas One LP			Company					
0000			04-1590850				Miami Douglas One LP	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
			04-1590850				Miami Douglas Two LP	DE	NIA	Company	Ownership		MMLIC		
0000			04-1590850				Miami Douglas Two LP	DE	NIA	C.M. Life Insurance Company	Ownership	10.000	MILIC		1
			04-1000000				miami Douglas INU LF		NIA		Owner Sirip.				
										Massachusetts Mutual Life Insurance					
			04-1590850				Miami Douglas Three MM LLC	DE	NIA	Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
			87-4021641				MM BIG Peninsula Co-Invest Member LLC	DE	NIA	Company	Ownership		MMLIC		
0000			87-4021641				MM BIG Peninsula Co-Invest Member LLC	DE	NIA	C.M. Life Insurance Company	Ownership.		MMLIC		
			0/-4021641				www.biu Peninsula co-invest Member LLC	VE	NIA		uwrier snip				· · · · · · · · · · · · · · · · · · ·
										Massachusetts Mutual Life Insurance					
			85-3886824				NYDIG Digital Assets Fund II LP	DE	NIA	Company	Ownership		MMLIC		
							•			Massachusetts Mutual Life Insurance					1
			45-3623262	1	1	1	HB Naples Golf Owner LLC	DE	NIA		Ownership		MMLIC		1
0000			40-3023202				no maptes coll owner LLC	VE	INTA	Company	Ownership				
										Massachusetts Mutual Life Insurance					
0000							MM CM Holding LLC	DE	NIA	Company	Ownership		MMLIC		
							<b>,</b>			Massachusetts Mutual Life Insurance					
			81-3000420				WW Debt Portiginations U.C.	DE	NIA		Ownership/Influence	100.000	MMLIC		
							MM Debt Participations LLC			Company					
0000			81-3000420				MM Debt Participations LLC	DE	NIA	Barings LLC	Management		MMLIC		

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						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
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						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)	(Yes/No)	*
0000	Cleap Name	0000	Hambol	TROOP	OIIX	internationaly	Of / timidtoo	uon	Entry	Massachusetts Mutual Life Insurance	Othery	ugo		(100/110)	/
							<b></b>								
0000			82-4411267				RB Apartments LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			20-8856877				Somerset Special Opportunities Fund L.P	DE	NIA	Company	Ownership/Influence		MMLIC		
0000			20-8856877				Somerset Special Opportunities Fund L.P.	DE	NIA	C.M. Life Insurance Company	Owner ship	1.900	MILIC		
			20-0000011				Somerset opecial opportunities rund L.I				owner sinp				
										Massachusetts Mutual Life Insurance					
0000			35-2553915				Ten Fan Pier Boulevard LLC	DE	NIA	Company	Ownership		MMLIC		
0000			41-2280127				Tower Square Capital Partners III, L.P.	DE	NIA	Barings LLC	Management		MMLIC		
0000			41-2280127				Tower Square Capital Partners III, L.P.	DE	NIA	MassMutual Holding LLC	Ownership/Influence	17,700	MMLIC		
							· · · · · · · · · · · · · · · · · · ·			Massachusetts Mutual Life Insurance			1		[
0000			41 0000100				Tawar Causes Casital Destance 1114 1 D		NEA		Ownership (Influer-	06 000	MMLIC		1
0000			41-2280129				Tower Square Capital Partners IIIA, L.P	DE	NIA	Company	Ownership/Influence				+
0000			41-2280129				Tower Square Capital Partners IIIA, L.P	DE	NIA	Barings LLC	Management		MMLIC		
										Massachusetts Mutual Life Insurance		1			1
			04-1590850				Trailside MM Member LLC	DE	NIA	Company	Ownership.	59,600	MMLIC		1
0000			04-1590850				Trailside MM Member LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MILIC		
			04-1090000					VE	NIA		owner simp				
										Massachusetts Mutual Life Insurance					
			83-1325764				Washington Gateway Two LLC	DE	NIA	Company	Ownership		MMLIC		
. 0000			83-1325764				Washington Gateway Two LLC	DE	NIA	C.M. Life Insurance Company	Ownership	6.700	MMLIC		
							· · ·			Massachusetts Mutual Life Insurance					
.0000			32-0574045				Washington Gateway Three LLC	DE	NIA	Company	Ownership.	83,900	MMLIC		
0000			32-0574045				Washington Gateway Three LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
			04-1590850				West 46th Street Hotel LLC	DE	NIA	Company	Ownership		MMLIC		
							Babson Capital Loan Strategies Master Fund LP								
							Saboon oupriar zour otratogroo maotor rana zi	CYM	NIA	Barings LLC	Management		MMLIC		
							Designed Object Assessed to Designed Designed		NIA	Dal Higs LLC	Manayement.				
							Barings China Aggregate Bond Private								
0000							Securities Investment Fund	CHN	NIA	Barings LLC	Management		MMLIC		
							Barings European Growth Trust Fund	GBR	NIA	Barings LLC	Ownership/Influence				
			47-3790192				Barings Global High Yield Fund	MA	NIA	Barings LLC	Management		MMLIC		
0000							CCIC Fund	CHN	NIA	Barings LLC	Ownership/Influence	66.200	MILIC		
										Massachusetts Mutual Life Insurance					1
			71-1018134				Great Lakes II LLC	DE	NIA	Company	Ownership		MMLIC		
0000			71-1018134				Great Lakes II LLC	DE	NIA	C.M. Life Insurance Company	Ownership				
										Massachusetts Mutual Life Insurance					
			04-1590850				Wood Creek Venture Fund LLC	DE	NIA	Company	Ownership.		WILIC		1
							NOOU OF CON VOILUIE FUILU LLO		NIA	Massachusetts Mutual Life Insurance	omici allip				
												05 000			1
0000			36-4823011				50 Liberty LLC	DE	NIA	Company	Ownership		MMLIC		
			36-4823011				50 Liberty LLC	DE	NIA	C.M. Life Insurance Company	Ownership				
										Massachusetts Mutual Life Insurance					
							Barings California Mortgage Fund IV	CA	NIA	Company	Ownership		WILIC		1
							Dai niyo vali lulila wul tyaye runu 10	UM		Massachusetts Mutual Life Insurance	owner sinth				1
											L				1
0000							Barings Umbrella Fund LUX SCSp SICAV RAIF	LUX	NIA	Company	Ownership		MMLIC		
0000							Barings Umbrella Fund LUX SCSp SICAV RAIF	LUX	NIA	C.M. Life Insurance Company	Ownership				
										Massachusetts Mutual Life Insurance		1			
			82-2285211				Calgary Railway Holding LLC	DE	NIA	Company	Ownership		MMLIC		1
			82-2285211				Calgary Railway Holding LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance		1			1
			82-3307907				Cornbrook PRS Holdings LLC	DE	NIA	Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance		1			1
			0E 4007717				Corneratore California Nextman Fund 1110	CA	NILA		Ownership	100,000	MMLIC		1
0000			95-4207717				Cornerstone California Mortgage Fund   LLC	CA	NIA	Company	Ownership				
										Massachusetts Mutual Life Insurance		1			1
			95-4207717				Cornerstone California Mortgage Fund II LLC .	CA	NIA	Company	Ownership		MMLIC		
							Cornerstone California Mortgage Fund III LLC			Massachusetts Mutual Life Insurance		1			
0000			95-4207717				sector states our round a moregage rand fir ELO	CA	NIA		Ownership	100.000	MMLIC		1
			90-420//1/					UA	NIA	Company	uwrier snip				

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						e of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC			if Pu	ublicly 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		(ternational)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No	* (
0000	Croup Hamo	0000	Hambol	ROOD		liternationaly		uon	Entity	Massachusetts Mutual Life Insurance		lage		(100/110	/
			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NIA	Company	Ownership		MMLIC		
0000			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
			JU-2000032				connerstone rort rierce beveropment LLC			Massachusetts Mutual Life Insurance	owner sinp				
0000			45-2632610				Cornerstone Permanent Mortgage Fund	MA	NIA	Company	Ownership	100,000	MILIC		
0000			45-2632610				Cornerstone Permanent Mortgage Fund	MA		Barings LLC	Management.	100.000	MIC		
			45-2052010				cornerstone rermanent mortgage runu	MA		Massachusetts Mutual Life Insurance	management				
			61-1750537				Cornerstone Permanent Mortgage Fund II	MA	NIA	Company	Ownership		MMLIC		
0000			61-1750537				Cornerstone Permanent Mortgage Fund II	MA	NIA	Barings LLC	Management	100.000	MMLIC		
			01-1750557				Corrier Storie Fermanent mortgage Fund 11	MA		Massachusetts Mutual Life Insurance	management.				
0000			61-1793735				Cornerstone Permanent Mortgage Fund IV	МА	NIA	Massachusetts Mutual Life Insurance Company	Ownership.	100.000	MMLIC		1
			01-1180100				UNITED STOLE FEI MAHEITE MULLYAYE FUILU IV			Massachusetts Mutual Life Insurance					+
			20-0348173				CREA/PPC Venture LLC	DE	NIA		Ownership		MMLIC		
			20-0348173				CHEA/PPC Venture LLC	UE	NIA	Company Massachusetts Mutual Life Insurance	Ownership				
0000			00.0700000					05				0.4 400	144 10		
0000			82-2783393				Danville Riverwalk Venture, LLC	DE	NIA	Company	Ownership		. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				Euro Real Estate Holdings LLC	DE	NIA	Company	Ownership				
										Massachusetts Mutual Life Insurance					
			20-3347091				Fan Pier Development LLC	DE	NIA	Company	Ownership		. MMLIC		
0000			20-3347091				Fan Pier Development LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				GIA EU Holdings LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			81-5360103				Landmark Manchester Holdings LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				MM Brookhaven Member LLC	DE	NIA	Company	Ownership		. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				MM East South Crossing Member LLC	DE	NIA	Company	Ownership		. MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				MM Horizon Savannah Member LLC	DE	NIA	Company	Ownership		. MMLIC		
0000			04-1590850				MM Horizon Savannah Member LLC	DE DE	NIA	C.M. Life Insurance Company	Ownership	3.700			
0000			04-1590850				MM National Self-Storage Program Member LLC _		NIA	C.M. Life Insurance Company	Ownership		. MMLIC		
0000			04-1590850				MM 1400 E 4th Street Member LLC	DE	NIA	C.M. Life Insurance Company	Ownership		. MMLIC		
										Massachusetts Mutual Life Insurance		1			
0000			80-0948028				One Harbor Shore LLC	DE	NIA	Company	Ownership		. MMLIC		
0000			80-0948028				One Harbor Shore LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			04-1590850				PACO France Logistics LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance		1			
0000			82-3393166				Portland 400 Sixth Manager LLC	DE	NIA	Company	Ownership		MMLIC		
							Salomon Brothers Commercial Mortgage Trust	1			1				1
0000							2001-MM	DE	NIA	Barings Real Estate Advisers LLC	Influence		. MMLIC		
								1		Massachusetts Mutual Life Insurance	1				1
0000			27-2977720				Sawgrass Village Shopping Center LLC	DE DE	NIA	Company	Ownership		MMLIC		
0000			27-2977720				Sawgrass Village Shopping Center LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance	1				1
0000							STOA Holding LLC	DE	NIA	Company	Ownership		. MMLIC		
								1		Massachusetts Mutual Life Insurance	1				1
0000			81-5273574				Three PW Office Holding LLC	DE	NIA	Company	Ownership				
							-	1		Massachusetts Mutual Life Insurance	1				1
0000			35-2484550				Twenty Two Liberty LLC	MA	NIA	Company	Ownership				
			35-2484550				Twenty Two Liberty LLC	MA	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
			82-3250684				Unna, Dortmund Holding LLC	DE	NIA	Company	Ownership.		MMLIC		
			SE 0600007				I what is a church nor arring LEV			l company					

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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-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	auired?	
Code		Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	) *
					-					Massachusetts Mutual Life Insurance				( · · · · /	/
0000 .			45-5401109				Washington Gateway Apartments Venture LLC	DE	NIA	Company	Ownership		MMLIC		
0000 .			45-5401109				Washington Gateway Apartments Venture LLC	DE	NIA	C.M. Life Insurance Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
0000 .			51-0529328		0000927972	0Q	MassMutual Premier Main Street Fund	MA	NIA	Company	Ownership		. MMLIC		
							MassMutual Premier Strategic Emerging Markets			Massachusetts Mutual Life Insurance					
0000 .			26-3229251		0000927972	0Q	Fund	MA	NIA	Company	Ownership		MMLIC		
0000 .			04-3512593		0000916053	00	MassMutual Select Fundamental Growth Fund	MA	NIA	Massachusetts Mutual Life Insurance	Ownership	2 000	MMLIC		
			04-3312393		0000910053		wassmutual select Fundamental Growth Fund	MA	NIA	Company Massachusetts Mutual Life Insurance	ownership				
0000 .			42-1710935		0000916053	00	MassMutual Select Mid-Cap Value Fund	МА	NIA	Company	Ownership	24.700	MMLIC		
			42 17 10303		00000100000		MassMutual Select Small Capital Value Equity			Massachusetts Mutual Life Insurance	owner amp				
0000			02-0769954		0000916053	00	Fund	MA	NIA	Company	Influence	0.000	MIC		
						•••				Massachusetts Mutual Life Insurance					1
0000 .			04-3584140		0000916053	0Q	MassMutual Select Small Company Value Fund	MA	NIA	Company	Ownership		MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
0000 .			82-3347422		0000916053	0Q	2005 Fund	MA	NIA	Company	Ownership	5.700	MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
0000 .			82-3355639		0000916053	0Q	2010 Fund	MA	NIA	Company	Influence	Q.000	MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
0000 .			82-3382389		0000916053	0Q	2015 Fund	MA	NIA	Company	Influence	0.000	MMLIC		
0000			00.0000440		0000916053		MassMutual Select T. Rowe Price Retirement 2020 Fund		NIA	Massachusetts Mutual Life Insurance	Influence	0.000			
0000 .			82-3396442		0000916053	00	MassMutual Select T. Rowe Price Retirement	MA	NIA	Company Massachusetts Mutual Life Insurance	Influence	0.00			
0000 .			82-3417420		0000916053	00	2025 Fund	MA	NIA	Company	Influence	0.000	MMLIC		
			02-0417420		00003100000		MassMutual Select T. Rowe Price Retirement	m.		Massachusetts Mutual Life Insurance	IIII Iuence				
0000 .			82-3430358		0000916053	00	2030 Fund	MA	NIA	Company	Influence	0.000	MIC		
						•••	MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
0000 .			82-3439837		0000916053	0Q	2035 Fund	MA	NIA	Company	Influence		MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
0000 .			82-3451779		0000916053	0Q	2040 Fund	MA	NIA	Company	Influence	0.000	. MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
0000 .			82-3472295		0000916053	0Q	2045 Fund	MA	NIA	Company	Influence	0.000	MMLIC		
0000			00 0404745		0000040050		MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance		0.000			
0000 .			82-3481715		0000916053		2050 Fund MassMutual Select T. Rowe Price Retirement	MA	NIA	Company Massachusetts Mutual Life Insurance	Influence	0.000			
0000 .			82-3502011		0000916053	00	2055 Fund	MA	NIA	Company	Influence		MMLIC		
			02-0002011		0000910003		MassMutual Select T. Rowe Price Retirement	IWA		Massachusetts Mutual Life Insurance					
0000 .			82-3525148		0000916053	00	2060 Fund	MA	NIA.	Company	Influence.	0.000	MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
0000 .			82-3533944		0000916053	0Q	Balanced Fund	MA	NIA	Company	Influence				
										Massachusetts Mutual Life Insurance					
0000 .			46-4257056				MML Series International Equity Fund	MA	NIA	Company	Influence		MMLIC		
										Massachusetts Mutual Life Insurance					
0000 .			47-3517233				MML Series II Asset Momentum Fund	MA	NIA	Company	Ownership		. MMLIC		
			17.0500000							Massachusetts Mutual Life Insurance					
0000 .			47-3529636				MML Series II Dynamic Bond Fund	MA	NIA	Company	Influence	0.000	MMLIC		
0000			47-3544629				Mill Carina II Fauity Datation Fund		NUA	Massachusetts Mutual Life Insurance	Omenabia	0E 700			
0000 .			47-3044629				MML Series II Equity Rotation Fund	MA	NIA	Company	Ownership		. MMLIC		
0000 .			47-3559064				MML Series II Special Situations Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership.		MMLIC		
			41-0008004				mmi oerres it opecial situations fullu	IWA		Massachusetts Mutual Life Insurance					
0000 .			27-1933389		0000916053	00	MassMutual RetireSMART 2035 Fund	MA	NIA.	Company	Ownership		MMLIC		
		I	L/ 1000003			<u></u>	masomatuat not noonnin 2000 Fullu			oompuny	omior antip	6.000			

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						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
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Group		Company	ID	Federal		(U.S. or		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)	(Yes/No)	) *
										Massachusetts Mutual Life Insurance					
0000			27-1932769		0000916053	. OQ	MassMutual RetireSMART 2045 Fund	MA		Company	Ownership	6.200	MMLIC		
0000			46-3289207		0000916053	00	MassMutual RetireSMART 2055 Fund	MA		Massachusetts Mutual Life Insurance	Ownership.	23,600	MILIC		
			40-3289207		0000916053		Massmutual RetireSMARI 2000 Fund	MA		Company Massachusetts Mutual Life Insurance	Ownership		MMLIC		
0000			47-5326235		0000916053	00	MassMutual RetireSMART 2060 Fund	МА		Company	Ownership.	49.700	MMLIC		
			11 0020200							Massachusetts Mutual Life Insurance	owner omp.		mile i o		
0000			45-1618155		0000916053	0Q	MassMutual 20/80 Allocation Fund	MA	NIA	Company	Influence	0.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			45-1618222		0000916053	. OQ	MassMutual 80/20 Allocation Fund	MA		Company	Ownership		MMLIC		
						l				Massachusetts Mutual Life Insurance					
0000			03-0532464		0000916053	. OQ	MassMutual RetireSMART In Retirement Fund	MA		Company	Ownership	2.100	MMLIC		
			45-1618262		0000916053	00	MassMutual 40/60 Allocation Fund	MA		Massachusetts Mutual Life Insurance	Influence	0.000	MILIC		
			40-1018262		00009 16023		massmutual 40/60 Allocation Fund	MA		Company Massachusetts Mutual Life Insurance	Ini luence				
			45-1618046		0000916053	00	MassMutual 60/40 Allocation Fund	MA		Company	Ownership	86.500	MMLIC		
			10 10 10 10							company	owner omp				

Asterisk	Explanation
1 Massa	ssachusetts Mutual Life Insurance Company owns 14.23% of the affiliated debt of Jefferies Finance LLC
	ot investors own 9.6% and includes only Babson Capital Loan Strategies Fund, L.P.
3 Debt	ot investors own .5% and includes only Great Lakes III, L.P.
4 Debt	ot investors own .2% 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.

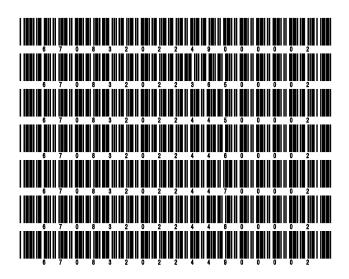
		Response
1.	Will the Trusteed Surplus Statement be filed with the state of domicile and the NAIC with this statement?	NO
2.	Will the Medicare Part D Coverage Supplement be filed with the state of domicile and the NAIC with this statement?	NO
3.	Will the Reasonableness of Assumptions Certification required by Actuarial Guideline XXXV be filed with the state of domicile and electronically with the NAIC?	NO
4.	Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXV be filed with the state of domicile and electronically with the NAIC?	NO
5.	Will the Reasonableness of Assumptions Certification for Implied Guaranteed Rate Method required by Actuarial Guideline XXXVI be filed with the state of domicile and electronically with the NAIC?	NO
6.	Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Average Market Value) be filed with the state of domicile and electronically with the NAIC?	NO
7.	Will the Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Market Value) be filed with the state of domicile and electronically with the NAIC?	NO
8.	Will the Life PBR Statement of Exemption be filed with the state of domicile by July 1st and electronically with the NAIC with the second quarterly filing per the Valuation Manual (by August 15)? (2nd Quarter Only) The response for 1st and 3rd quarters should be N/A. A NO response resulting with a bar code is only appropriate in the 2nd quarter.	YES
	AUGUST FILING	
9.	Will the regulator-only (non-public) Communication of Internal Control Related Matters Noted in Audit be filed with the state of domicile and electronically with the NAIC (as a regulator-only non-public document) by August 1? The response for 1st and 3rd quarters should be N/A. A NO response resulting with a bar code is only appropriate in the 2nd quarter.	YES

Explanation:

- 1. The data for this supplement is not required to be filed.
- 2. The data for this supplement is not required to be filed.
- 3. The data for this supplement is not required to be filed.
- 4. The data for this supplement is not required to be filed.
- 5. The data for this supplement is not required to be filed.
- 6. The data for this supplement is not required to be filed.
- 7. The data for this supplement is not required to be filed.

Bar Code:

- 1. Trusteed Surplus Statement [Document Identifier 490]
- 2. Medicare Part D Coverage Supplement [Document Identifier 365]
- 3. 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]
- 5. 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]





#### STATEMENT AS OF JUNE 30, 2022 OF THE MANHATTAN NATIONAL LIFE INSURANCE COMPANY

#### SCHEDULE A - VERIFICATION Real Estate

		1	2
		I	Prior Year Ended
		Verste Data	
		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 rying		
7.	Deduct current year's other than temporary impainment recognized		
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

		1	2
		March Date	Prior Year Ended
		Year to Date	December 31
1.	Book value/recorded investment excluding accrued interest, 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.	Capitalized deferred interest and other		
4.	Accrual of discount		
5.	Unrealized valuation increase (decrease)		
6.	Total gain (loss) on disposals		
7.	Deduct amounts received on disposals		
8.	Deduct amortization of premium and mortgage in test premand to mitme test and the mitme t		
9.	Total foreign exchange change in book value/recursed involution exchange accrued interest international internationa		
10.	Deduct current year's other than temporary impairment recognized		
11.	Book value/recorded investment excluding accrued interest at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)		
12.	Total valuation allowance		
13.	Subtotal (Line 11 plus Line 12)		
14.	Deduct total nonadmitted amounts		
15.	Statement value at end of current period (Line 13 minus Line 14)		

# 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		
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition		
	2.2 Additional investment made after acquisition		
3.	Capitalized deferred interest and other		
4.	Accrual of discount		
5.	Unrealized valuation increase (decrease)		
6.	Total gain (loss) on disposals		
7.	Deduct amounts received on disposals		
8.	Deduct amortization of premium and depreciation		
9.	Total foreign exchange change in book/adjusted carrying value		
10.	Deduct current year's other than temporary impairment recognized		
11.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)		
12.	Deduct total nonadmitted amounts		
13.	Statement value at end of current period (Line 11 minus Line 12)		

# **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		
2.	Cost of bonds and stocks acquired		1,000,330
3.	Accrual of discount		
4.	Unrealized valuation increase (decrease)	(48,455)	(3,970)
5.	Total gain (loss) on disposals		
6.	Deduct consideration for bonds and stocks disposed of	3,948,979	
7.	Deduct amortization of premium		
8.	Total foreign exchange change in book/adjusted carrying value	0	
9.	Deduct current year's other than temporary impairment recognized	0	
10.	Total investment income recognized as a result of prepayment penalties and/or acceleration fees		
11.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9+10)		
12.	Deduct total nonadmitted amounts	0	
13.	Statement value at end of current period (Line 11 minus Line 12)	116,330,700	106,415,916

#### **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

Dum	the Current Quarter to		3	4	5	6	7	8
	Book/Adjusted	_	-		Book/Adjusted	Book/Adjusted	Book/Adjusted	Book/Adjusted
	Carrying Value	Acquisitions	Dispositions	Non-Trading Activity	Carrying Value	Carrying Value	Carrying Value	Carrying Value
NAIC Designation	Beginning of Current Quarter	During Current Quarter	During Current Quarter	During Current Quarter	End of First Quarter	End of Second Quarter	End of Third Quarter	December 31 Prior Year
Nito Designation			ounchi Quarter					
BONDS								
1. NAIC 1 (a)				7.966.566			0	
2. NAIC 2 (a)		<u>2</u> 4,207,200		(357,823)			U	
3. NAIC 3 (a)	1,423,677	0	0				0	
4. NAIC 4 (a)		0	0				0	
5. NAIC 5 (a)		0	0	,		329.623	0	317.401
6. NAIC 6 (a)	0	0	0	,	0	0	0	
7. Total Bonds	118,015,653	24,237,295	26,743,649	7.046.447	118,015,653	122,555,746	0	106,415,916
	, -,	, , , ,	, , , ,	, ,	, , ,	, ,		, ,,,,
PREFERRED STOCK								
8. NAIC 1	0	0	0	0	0	0	0	
9. NAIC 2	0	0	0	0	0	0	0	
10. NAIC 3	0	0	0	0	0	0	0	
11. NAIC 4	0	0	0	0	0	0	0	
12. NAIC 5	0	0	0	0	0	0	0	
13. NAIC 6		0	0	0	0	0	0	
14. Total Preferred Stock	0	0	0	0	0	0	0	0
15. Total Bonds and Preferred Stock	118,015,653	24,237,295	26,743,649	7,046,447	118,015,653	122,555,746	0	106,415,916

(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

# ΝΟΝΕ

Schedule DA - Verification - Short-Term Investments

# NONE

Schedule DB - Part A - Verification - Options, Caps, Floors, Collars, Swaps and Forwards **NONE** 

Schedule DB - Part B - Verification - Futures Contracts

# NONE

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 **NONE** 

Schedule DB - Verification - Book/Adjusted Carrying Value, Fair Value and Potential Exposure of Derivatives

# NONE

#### STATEMENT AS OF JUNE 30, 2022 OF THE MANHATTAN NATIONAL LIFE INSURANCE COMPANY

# SCHEDULE E - PART 2 - VERIFICATION

	· · · · · · · · · · · · · · · · · · ·	1	2
		Year To Date	Prior Year Ended December 31
1.	Book/adjusted carrying value, December 31 of prior year		
2.	Cost of cash equivalents acquired		
3.	Accrual of discount	250	
4.	Unrealized valuation increase (decrease)	0	
5.	Total gain (loss) on disposals	(16)	
6.	Deduct consideration received on disposals		
7.	Deduct amortization of premium	0	
8.	Total foreign exchange change in book/adjusted carrying value	0	
9.	Deduct current year's other than temporary impairment recognized	0	
10.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	6,225,045	
11.	Deduct total nonadmitted amounts	0	
12.	Statement value at end of current period (Line 10 minus Line 11)	6,225,045	21,456,915

Schedule A - Part 2 - Real Estate Acquired and Additions Made

# ΝΟΝΕ

Schedule A - Part 3 - Real Estate Disposed **NONE** 

Schedule B - Part 2 - Mortgage Loans Acquired and Additions Made **NONE** 

Schedule B - Part 3 - Mortgage Loans Disposed, Transferred or Repaid **NONE** 

Schedule BA - Part 2 - Other Long-Term Invested Assets Acquired and Additions Made **NONE** 

Schedule BA - Part 3 - Other Long-Term Invested Assets Disposed, Transferred or Repaid **NONE** 

Schedule D - Part 3 - Long-Term Bonds and Stocks Acquired

NONE

## **SCHEDULE D - PART 4**

Show All Long-Term Bonds and Stock Sold, Redeemed or Otherwise Disposed of During the Current Quarter

	-	-		_				,				0				· · -					
1	2	3	4	5	6	1	8	9	10	CI	nange In Bo	ok/Adjusted	Carrying Va	lue	16	17	18	19	20	21	22
										11	12	13	14	15							NAIC
																					Desig-
																					nation,
																					NAIC
													Total	Total							Desig-
												Current	Change in	Foreign					Bond		nation
												Year's	Book/	Exchange	Book/				Interest/		Modifier
									Prior Year		Current	Other Than		Change in	Adjusted	Foreign			Stock	Stated	and
										Linne eliment						0	Dealized		Dividends	Con-	SVO
011015									Book/	Unrealized		Temporary		Book	Carrying	Exchange		<b>-</b>			
CUSIP					Number of				Adjusted	Valuation	(Amor-	Impairment	t Value	/Adjusted	Value at	Gain	Gain	Total Gain	Received	tractual	Admini-
Ident-		For-	Disposal	Name	Shares of	Consid-		Actual	Carrying	Increase/	tization)/	Recog-	(11 + 12 -	Carrying	Disposal	(Loss) on	(Loss) on	(Loss) on	During	Maturity	strative
ification	Description	eign	Date	of Purchaser	Stock	eration	Par Value	Cost	Value	(Decrease)	Accretion	nized	13)	Value	Date	Disposal	Disposal	Disposal	Year	Date	Symbol
36207H-VH-7	Ginnie Mae   Pool-POOL #432716	Ŭ	06/01/2022	PAYDOWN						0	1	0	1	0		. 0	. 0	0	3	06/01/2026 .	1.4
	Ginnie Mae I Pool-POOL #447236			PAYDOWN						0	0	0	0	0	31	0	0	0	1	06/01/2027	1.A
	99. Subtotal - Bonds - U.S. Governmer	nte				122	122	123	122	0	1	0	1	0	122	0	0	0	4	XXX	XXX
230563-AU-2	Cumberland County Improv-REVENUE BONDS	11.5	04/15/2022	MATURITY			2.400.000			0	(1.523)	0	(1,523)	0	2,400,000	0	0	0	63.528	04/15/2022 .	. 1.E FE
	Freddie Mac Gold Pool-FG C63727			MATURITY PAYDOWN		2,400,000	2,400,000	2,448,672 80		0	(1,523)		(1,523)	0	2,400,000 80					02/01/2032 .	.   I.E FE
	Freddie Mac Gold Pool-FG C63727 Freddie Mac Gold Pool-FG C67180		06/01/2022	PAYDOWN						0	b		b	0		0	0	0	2	05/01/2032 .	- 1.A
31287S-6H-3	Freddie Mac Gold Pool-FG C67180 Freddie Mac Gold Pool-FG C66477		06/01/2022	PAYDOWN				85 		0				0	85 114	0	0	0	2		- 1.A
312875-FS-1 31287T-GK-5			06/01/2022	PAYDOWN						0	b	0	b	0	114 33	0		0	3	04/01/2032 . 05/01/2032	- 1.A
	Freddie Mac Gold Pool-FG C67402		06/01/2022	PAYDOWN						0	2		2	0		0		0			. I.A
	Freddie Mac Gold Pool-FG C68243		06/01/2022	PAYDOWN						0		0		0	45 425	0	0	0			- 1.A
	Freddie Mac Gold Pool-FG C/8989 Freddie Mac REMICS-FHR 1474 E			PAYDOWN						0		0		0		0	0	0		05/01/2033 .	. I.A
	Freddie Mac Gold Pool-FG C00860		06/01/2022	PAYDOWN		521			448	0		0	73	0		0	0	0	ر 17	09/01/2023	1.A
312920-5V-4	Freddie Mac Gold Pool-FG C00800	•••••		PAYDOWN						0		0		0		0	0	0			. I.A
										0		0		0		0	0	0		02/01/2032 .	- 1.A
31292H-QN-7	Freddie Mac Gold Pool-FG C01361 Freddie Mac REMICS-FHR 2333 UZ		06/01/2022 06/01/2022	PAYDOWN		615 570	615 570	621 548		0		0		0	615 570	0	0	0	15 15	05/01/2032 .	. I.A
		•••••	06/01/2022	PAYDOWN						0	(100)	0	(100)	0		0	0	0		06/01/2031 .	. I.A
	Freddie Mac REMICS-FHR 2329 ZA	•••••		PAYDOWN						0		0		0		0	0	0		09/01/2031 .	. 1.8
	Freddie Mac REMICS-FHR 2355 CE						1,111 7,487			0		0		0		0	0	0			- 1.A
313920-CW-8	Fannie Mae REMICS-FNR 2001-31 ZC United States Internatio-UNSECURED		06/01/2022 06/30/2022	PAYDOWN SINKING PAYMENT				7,515	8,203	0	(766)	0	(766)	0		0	0	0	1.452	07/01/2031 .	. 1.8
		•••••	06/30/2022	CALL 100			0 			0		0	0	0	59.832	0			1,452	02/27/2027 .	. 1.D FE
	Regents of the Universit-REVENUE BONDS Virginia Housing Develop-REVENUE BONDS	•••••		CALL 100						0		0		0		0			1,937	12/25/2043 .	. 1.A FE
				CALL 100					,	0		0		0							
	99. Subtotal - Bonds - U.S. Special Re	venue				2,597,263	2,597,263	2,645,284	2,599,452	0	(2,583)		(2,583)	0	2,596,867	0	396	396	68,953	XXX	XXX
	AMERICAN HOMES 4 RENT-SERIES 2014-SFR2 C		06/01/2022	PAYDOWN		2, 170	2, 171	2,232	2, 188	0	(17)	0	(17)	0	2, 171	0	0	0		10/01/2036 .	. 1.A FE
	Banc of America Funding -BAFC 2006-1 1A2		05/01/2022	PAYDOWN						0	113	0	113	0		0	0	0		01/01/2036 .	. 1.A FM
	Alternative Loan Trust 2-CWALT 2004-J2 3		05/01/2022	PAYDOWN		1,560	1,560	1,534	1,551	0	9	0	9	0	1,560	0	0	0		04/01/2034 .	. 1.A FM
126694-LC-0	CHL Mortgage Pass-Throug-CWHL 2005-24 A3		05/01/2022	PAYDOWN			5,611	5,760	3,976	2,076	(464)	0	1,612	0	5,492	0	0	0	L0	11/01/2035 .	. 1.D FM
	ChaseFlex Trust Multi-CI-CFLX 2007-M1 2F		06/01/2022	PAYDOWN		9,840	9,333		6,236	0	3, 174	0	3, 174	0	9,840	0	0	0		08/01/2037 .	. 1.D FM
	HSI Asset Loan Obligatio-HALO 2007-2 3A6		04/01/2022	PAYDOWN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	09/01/2037 .	. 1.D FM
	JGWPT XXVIII LLC-HENDR 2013-1A A		06/15/2022	PAYDOWN		6,753	6,753	6,748	6,749	0	4	0	4	0	6,753	0	0	0		04/15/2067 .	. 1.A FE
	Sprint Spectrum Co LLC /-FIRST LIEN		05/31/2022	SINKING PAYMENT		0	0	0	0	0	0	·····0	0	0	0	0	0	0	1,497	03/20/2025 .	. 2. FE
	Union Pacific Railroad C-FIRST LIEN		04/30/2022	SINKING PAYMENT						0	(176)	0	(176)	0		0	0	0	2,952	07/02/2025 .	. 1.D FE
	99. Subtotal - Bonds - Industrial and M	iscella	aneous (Una	attiliated)		146,263	145,876	144,576	141,211	2,076	2,643	0	4,719	0	146,264	0		0	5,035	XXX	XXX
250999999	97. Total - Bonds - Part 4					2,743,648	2,743,261	2,789,983	2,740,785	2,076	61	0	2, 137	0	2,743,253	0	396	396	73,992	XXX	XXX
250999999	98. Total - Bonds - Part 5					XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
	99. Total - Bonds					2.743.648	2.743.261	2,789,983	2.740.785	2.076	61		2, 137	0	2,743,253	0		396	73.992	XXX	XXX
						1 - 1	7 . 7		1 1 1					v		-					
	97. Total - Preferred Stocks - Part 4					0	XXX	0	0	0	0	-	0	0	0	0	-	0	-	XXX	XXX
450999999	98. Total - Preferred Stocks - Part 5					XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
450999999	9. Total - Preferred Stocks					0	XXX	0	0	0	0	0	0	0	0	0	0	0	0	XXX	XXX
	97. Total - Common Stocks - Part 4					۰ ۱	XXX	0	0	0	0		0	0	0	0		0	0	XXX	XXX
						V//				-			Ŷ	v	•			-	-		
	98. Total - Common Stocks - Part 5					XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
598999999	99. Total - Common Stocks					0	XXX	0	0	0	0	0	0	0	0	0	0	0	0	XXX	XXX
599999999	9. Total - Preferred and Common Sto	cks				0	XXX	0	0	0	0	0	0	0	0	0	0	0	0	XXX	XXX
600999999		-				2.743.648	XXX	2.789.983	2.740.785	2.076	61		2,137	0	2.743.253	0		396	73.992	XXX	XXX
000333333						2,140,040	////	2,103,900	2,140,100	2,070	01	U	2, 10/	U	2,140,200	0	090	390	10,992	////	7777

Schedule DB - Part A - Section 1 - Options, Caps, Floors, Collars, Swaps and Forwards Open **NONE** 

> Schedule DB - Part B - Section 1 - Futures Contracts Open **NONE**

Schedule DB - Part B - Section 1B - Brokers with whom cash deposits have been made **NONE** 

Schedule DB - Part D - Section 1 - Counterparty Exposure for Derivative Instruments Open **NONE** 

Schedule DB - Part D-Section 2 - Collateral for Derivative Instruments Open - Pledged By **NONE** 

Schedule DB - Part D-Section 2 - Collateral for Derivative Instruments Open - Pledged To **NONE** 

Schedule DB - Part E - Derivatives Hedging Variable Annuity Guarantees **NONE** 

Schedule DL - Part 1 - Reinvested Collateral Assets Owned **NONE** 

Schedule DL - Part 2 - Reinvested Collateral Assets Owned **NONE** 

#### STATEMENT AS OF JUNE 30, 2022 OF THE MANHATTAN NATIONAL LIFE INSURANCE COMPANY SCHEDULE E - PART 1 - CASH

		Month	End Depository	Balances				
1	2	3	4	5		ance at End of Eac uring Current Quarte		9
		Rate of	Amount of Interest Received During Current	Amount of Interest Accrued at Current	6	7	8	
Depository	Code	Interest		Statement Date	First Month	Second Month	Third Month	*
Bank of New York Mellon New York, NY							1,065,521	XXX
PNC Bank Pittsburgh, PA					(1,549,511)	(742,867).	(176,455)	XXX
Vells Fargo Winston Salem, NC								XXX
0199998. Deposits in depositories that do not exceed the allowable limit in any one depository (See instructions) - Open Depositories	xxx	xxx						xxx
0199999. Totals - Open Depositories	XXX	XXX	0	0	(130,133)	680,339	963,646	XXX
0299998. Deposits in depositories that do not exceed the allowable limit in any one depository (See instructions) - Suspended Depositories	xxx	xxx						xxx
0299999. Totals - Suspended Depositories	XXX	XXX	0	0	0	0	0	XXX
0399999. Total Cash on Deposit	XXX	XXX	0	0	(130,133)	680,339	963,646	XXX
0499999. Cash in Company's Office	XXX	XXX	XXX	XXX				XX
0599999. Total - Cash	XXX	XXX	0	0	(130,133)	680.339	963.646	XXX

STATEMENT AS OF JUNE 30, 2022 OF THE MANHATTAN NATIONAL LIFE INSURANCE COMPANY

## SCHEDULE E - PART 2 - CASH EQUIVALENTS

Show Investments Owned End of Current Quarter

	2	Show investmen	3	4	5	6	7	8	9
							Book/Adjusted	Amount of Interest	Amount Received
CUSIP	Description	(	Code	Date Acquired	Rate of Interest	Maturity Date	Carrying Value	Due and Accrued	During Year
0109999999. Total - U.S. Government Bon							0	0	
03099999999. Total - All Other Government							0	0	
0509999999. Total - U.S. States, Territorie							0	0	
0709999999. Total - U.S. Political Subdivis							0	0	
0909999999. Total - U.S. Special Revenue							0	0	
1109999999. Total - Industrial and Miscella	aneous (Unaffiliated) Bonds						0	0	
1309999999. Total - Hybrid Securities							0	0	
1509999999. Total - Parent, Subsidiaries a	and Affiliates Bonds						0	0	
1909999999. Subtotal - Unaffiliated Bank L	Loans						0	0	
2419999999. Total - Issuer Obligations							0	0	
24299999999. Total - Residential Mortgage-	-Backed Securities						0	0	
24399999999. Total - Commercial Mortgage							0	0	
24499999999. Total - Other Loan-Backed and							0	0	
2459999999. Total - SVO Identified Funds							0	0	
2469999999. Total - Affiliated Bank Loans							0	0	
24799999999. Total - Unaffiliated Bank Loan	ns						0	0	
25099999999. Total Bonds							0	0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MO					1.340			0	
82099999999. Subtotal - Exempt Money Ma	arket Mutual Funds - as Identified by the SVO						6,225,045	0	
				•••••					
8609999999 - Total Cash Equivalents									