

LIFE, ACCIDENT AND HEALTH COMPANIES/FRATERNAL BENEFIT SOCIETIES - ASSOCIATION EDITION

QUARTERLY STATEMENT

AS OF MARCH 31, 2024
OF THE CONDITION AND AFFAIRS OF THE

MANHATTAN NATIONAL LIFE INSURANCE COMPANY

NAI	C Group Code	0435	0435	NAIC Compa	ny Code	67083	Employer's ID	Number	45-0252531
Organized under the Laws of	-	(Current)	(Prior) Ohio		, Si	tate of Domi	icile or Port of Ent	ry	OH
Country of Domicile				United St	ates of A	тепса			
Licensed as business type:			Life, Accide	nt and Health [X] Frate	ernal Benefit	Societies []		
Incorporated/Organized		12/20/195	6			Commence	ed Business		01/04/1957
Statutory Home Office		191 Rosa Pa	arks Street		- 1				OH, US 45202
		(Street and	Number)				(City or To	own, State	, Country and Zip Code)
Main Administrative Office			_						
	Cincinnati, OH	115 45202		(Street	and Nu	mber)		513-3	861-9000
(City or	Town, State, Co						(Area		elephone Number)
Mail Address	Pos	t Office Box	5420					Cincinnati	OH, US 45201
IVIAII Address		d Number of							, Country and Zip Code)
Dinanda and Danks and	I Danasaka			101 Da	on Darke	s Street			
Primary Location of Books and	recolds		_		t and Nu				
	Cincinnati, OH			`					361-9000
(City or	Town, State, Co	ountry and Zi	ip Code)				(Area	a Code) (T	elephone Number)
Internet Website Address				www.mass	mutuala	scend.com			
Statutory Statement Contact		Poher	rt Mayhew	Forte II					513-361-9077
Statutory Statement Contact		Robe	(Name)	Lanc II					de) (Telephone Number)
	rearle@mma				—) —			_	345-9484
	(E-mail Ad	ddress)						(FAX	Number)
				OI	FFICER	s			
			cis Muething				Treasurer		Brian Patrick Sponaugle
Secretary		John Pa	aul Gruber			Appoin	nted Actuary		
					OTHER				
Dominic L	usean Blue				a Marie				Michael Harrison Haney
				DIRECTOR	e op 1	DUCTEE	•		
Dominic L	usean Blue					Chicares	,		Susan Marie Cicco
Geoffrey Jar	nes Craddock					Crandall			Paul Anthony LaPiana
	drew Merritt am Partlan					luething Vallace III			Michael James O'Connor
2.70 17111									
State of	Ohio								
County of	Hamilton		8	SS:					
The officers of this reporting e	ntity being duly	sworn, each	depose and	say that they a	re the de	escribed offic	cers of said report	ing entity.	and that on the reporting period stated above,
all of the herein described as	sets were the a	bsolute prop	perty of the	said reporting e	entity, fre	e and clear	from any liens of	r claims th	nereon, except as herein stated, and that this
condition and affairs of the sa	id reporting entit	v as of the re	eporting peri	iod stated abov	e, and of	its income a	and deductions th	erefrom fo	ment of all the assets and liabilities and of the or the period ended, and have been completed
in accordance with the NAIC	Annual Stateme	nt Instructio	ns and Acco	ounting Practice	s and P	rocedures m	nanual except to t	he extent	that: (1) state law may differ; or, (2) that state
rules or regulations require	differences in r	eporting not	related to	accounting pro	actices a	and procedu	res, according to	the best	of their information, knowledge and belief, filing with the NAIC, when required, that is an
exact copy (except for format	ing differences	due to electr	onic filing) o	f the enclosed	statemer	nt. The elect	ronic filing may be	e requeste	d by various regulators in lieu of or in addition
to the enclosed statement	1			171		11-	0		12-12
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			-					V -	
Mark Francis M					n Paul Gi Secretan				Brian Patrick Sponaugle Treasurer
Presider	ıı			,	ocu cidi)	y			ridasaror
							an original filing?		
Subscribed and sworn to before	re me this		May 2024			b. If no,	te the amendmen	t numbo-	
day of	2 101.	i.	May 2024			•	te the amendmen te filed		
Alle	Silver						mber of pages atta		



Kelly Buller Notary Public, State of Ohio My Commission Expires: October 14, 2028

ASSETS

•	AS	SETS			
		1	Current Statement Date	3	4 December 31
		•		Net Admitted Assets	Prior Year Net
	Position 1	Assets	Nonadmitted Assets	(Cols. 1 - 2)	Admitted Assets
	Bonds	111,350,053	0	111,350,053	111,926,519
2.	Stocks:	0			•
	2.1 Preferred stocks			0	0
	2.2 Common stocks	0	0	0	0
3.	Mortgage loans on real estate:	0			•
	3.1 First liens			0	0
	3.2 Other than first liens.	0	0	0	0
4.	Real estate:				
	4.1 Properties occupied by the company (less \$	0	0	0	0
	4.2 Properties held for the production of income (less	0	0	0	U
	\$	0	0	0	0
		0	0	0	
	4.3 Properties held for sale (less \$0	0		0	0
	encumbrances)	0	0	0	0
5.	Cash (\$2, 105, 617), cash equivalents				
	(\$8,045,430) and short-term				
	investments (\$0)				
	Contract loans (including \$ premium notes)				
	Derivatives				0
8.	Other invested assets			0	
9.	Receivables for securities			0	
10.	Securities lending reinvested collateral assets			0	_
11.	Aggregate write-ins for invested assets				0
	Subtotals, cash and invested assets (Lines 1 to 11)	123,633,684	3,8/8	125,629,806	126, 597, 354
13.	Title plants less \$0 charged off (for Title insurers	0	0	0	
44	only)			1,040,678	
		1,042,571	1,093	1,040,078	1,431,311
15.	Premiums and considerations: 15.1 Uncollected premiums and agents' balances in the course of collection.	107 160	26 764	160, 209	115 210
	15.1 Uncollected premiums and agents balances in the course of collection 15.2 Deferred premiums, agents' balances and installments booked but	107 , 102	20,704	100,380	113,210
	deferred and not yet due (including \$0				
	earned but unbilled premiums)	3 046 883	16 275	3,030,608	2 087 8/2
	15.3 Accrued retrospective premiums (\$		10,275		2,907,042
	contracts subject to redetermination (\$	0	0	0	0
16.	Reinsurance:				
10.	16.1 Amounts recoverable from reinsurers	488 894	0	488,894	585 667
	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
	Current federal and foreign income tax recoverable and interest thereon			316,718	
	Net deferred tax asset			0	
19.	Guaranty funds receivable or on deposit			87,685	
20.	Electronic data processing equipment and software			0	
21.	Furniture and equipment, including health care delivery assets				
	(\$	0	0	0	0
22.	Net adjustment in assets and liabilities due to foreign exchange rates			0	0
23.	Receivables from parent, subsidiaries and affiliates	0	0	0	0
24.	Health care (\$	0	0	0	0
25.	Aggregate write-ins for other than invested assets	791	0	791	0
26.	Total assets excluding Separate Accounts, Segregated Accounts and				
	Protected Cell Accounts (Lines 12 to 25)	130,804,388	48,810	130,755,578	132,078,054
27.	From Separate Accounts, Segregated Accounts and Protected Cell Accounts	0	0	0	0
28.	Total (Lines 26 and 27)	130,804,388	48,810	130,755,578	132,078,054
20.	DETAILS OF WRITE-INS	100,001,000	10,010	100,700,070	102,010,001
1101.	DETAILS OF WRITE-INS				
1101.					
1102.					
1103.	Summary of remaining write-ins for Line 11 from overflow page			0	0
1198. 1199.	T. I. (1) 1404 (1) 14400 (1) 1400 (1) 14	0		0	00
	Totals (Lines 1101 through 1103 plus 1198)(Line 11 above) Miscellaneous receivable			791	
2501.					0
2502.					
2503.	0				
2598.	Summary of remaining write-ins for Line 25 from overflow page				0
2599.	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	791	0	791	0

LIABILITIES, SURPLUS AND OTHER FUNDS

	·	1 Current	2 December 31
1	Aggregate reserve for life contracts \$	Statement Date	Prior Year
	(including \$ 0 Modco Reserve)	56,686,321	57,089,689
2.	Aggregate reserve for accident and health contracts (including \$	53,019	53,012
	Contract claims:	2,400,090	2,515,090
	4.1 Life		
5	4.2 Accident and health	0	
J.	and unpaid	0	
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		
	Modco)		
	6.2 Policyholders' dividends and refunds to members not yet apportioned (including \$0 Modco) 6.3 Coupons and similar benefits (including \$		
	Amount provisionally held for deferred dividend policies not included in Line 6	0	
8.	Premiums and annuity considerations for life and accident and health contracts received in advance less \$0 discount; including \$	32 354	54 063
9.	Contract liabilities not included elsewhere:		
	9.1 Surrender values on canceled contracts	0	
	9.2 Provision for experience rating refunds, including the liability of \$		
	Service Act	0	
	9.3 Other amounts payable on reinsurance, including \$	20 102	45 70 <i>4</i>
	9.4 Interest Maintenance Reserve		
10.	Commissions to agents due or accrued life and appuity contracts \$		
11.	\$	0 n	0
12.	General expenses due or accrued	76,967	79,824
13.	Transfers to Separate Accounts due or accrued (net) (including \$0 accrued for expense		
14.	allowances recognized in reserves, net of reinsured allowances)		
15.1	Current federal and foreign income taxes, including \$0 on realized capital gains (losses)	0	0
	Net deferred tax liability		
16. 17.	Unearned investment income	8,281	19,685
	Amounts held for agents' account, including \$	466,062	450,380
19. 20.	Remittances and items not allocated		
21.	Liability for benefits for employees and agents if not included above	0	
22.	Borrowed money \$	0	
23. 24.	Dividends to stockholders declared and unpaid		
	24.01 Asset valuation reserve	874,584	670,786
	24.02 Reinsurance in unauthorized and certified (\$		
	24.04 Payable to parent, subsidiaries and affiliates	139 , 130	
	24.05 Drafts outstanding	0	
	24.06 Liability for amounts held under uninsured plans		
	24.08 Derivatives	0	
	24.09 Payable for securities	0	0
	24.11 Capital notes \$0 and interest thereon \$	0	
25.	Aggregate write-ins for liabilities	447,041	426, 183
26. 27.	Total liabilities excluding Separate Accounts business (Lines 1 to 25)	114,095,839	115,268,064
28.	Total liabilities (Lines 26 and 27)	114,095,839	115,268,064
29.	Common capital stock	2,500,000	
30. 31.	Preferred capital stock	0	0 0
32.	Surplus notes	0	
33.	Gross paid in and contributed surplus	132,467,887	132,467,887
34. 35.	Aggregate write-ins for special surplus funds	(118,308,148)	(118,157,897)
	Less treasury stock, at cost:		
	36.1	0 n	0
37.	Surplus (Total Lines 31+32+33+34+35-36) (including \$	14,159,739	14,309,990
38.	Totals of Lines 29, 30 and 37	16,659,739	16,809,990
39.	Totals of Lines 28 and 38 (Page 2, Line 28, Col. 3) DETAILS OF WRITE-INS	130,755,578	132,078,054
2501.	Unclaimed funds	,	
2502.			
2503. 2598.	Summary of remaining write-ins for Line 25 from overflow page		
2599.	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	447,041	426, 183
3101.			
3102. 3103.			
3198.	Summary of remaining write-ins for Line 31 from overflow page	0	0
3199. 3401.	Totals (Lines 3101 through 3103 plus 3198)(Line 31 above)	0	0
3401.			
3403.	Company of remaining with the fact line 24 from profiles page		
3498. 3499.	Summary of remaining write-ins for Line 34 from overflow page	0 n	0 0
U 100.	Table (2es 5 for all orgin of the pide of total all of above)	0	0

SUMMARY OF OPERATIONS

		1 Current Year	2 Prior Year	3 Prior Year Ended
		To Date	To Date	December 31
1.	Premiums and annuity considerations for life and accident and health contracts	1,240,907		4,545,144
2. 3.	Considerations for supplementary contracts with life contingencies		839 013	3,607,960
4.	Amortization of Interest Maintenance Reserve (IMR)	70,168	82,245	
5.	Separate Accounts net gain from operations excluding unrealized gains or losses	0		
6.	Commissions and expense allowances on reinsurance ceded	115,039	122,775	
7. 8.	Miscellaneous Income:			
0.	8.1 Income from fees associated with investment management, administration and contract			
	guarantees from Separate Accounts	0		
	8.2 Charges and fees for deposit-type contracts 8.3 Aggregate write-ins for miscellaneous income	0		
9.	Totals (Lines 1 to 8.3)	2.249.274	2,245,749	8,890,708
10.	Death benefits			5,289,232
11.	Matured endowments (excluding guaranteed annual pure endowments)	(68)	660	4,400
12.	Annuity benefits		403,591	491,214
13. 14.	Coupons, guaranteed annual pure endowments and similar benefits			
15.	Surrender benefits and withdrawals for life contracts	373,836	388,567	
16.	Group conversions	0		
17. 18.	Interest and adjustments on contract or deposit-type contract funds	8, 169	8,585	33,817
19.	Increase in aggregate reserves for life and accident and health contracts		(651,610)	(1,643,586)
20.	Totals (Lines 10 to 19)		1,920,643	
21.	Commissions on premiums, annuity considerations, and deposit-type contract funds (direct	C4 C04	FF 000	000 045
22.	business only)	51,534	55,903	200,215
23.	General insurance expenses and fraternal expenses	363,619		1,165,780
24.	Insurance taxes, licenses and fees, excluding federal income taxes	84,914	80,697	207, 162
25.	Increase in loading on deferred and uncollected premiums	(501)	(1,704)	
26. 27.	Net transfers to or (from) Separate Accounts net of reinsurance		0	0 748,500
28.	Totals (Lines 20 to 27)	2,248,244	2,368,244	7,967,744
29.	Net gain from operations before dividends to policyholders and federal income taxes (Line 9 minus			
20	Line 28)		(122,495)	
30. 31.	Dividends to policyholders and refunds to members	5,709	3,000	21,285
01.	income taxes (Line 29 minus Line 30)	(4,679)		
32.	Federal and foreign income taxes incurred (excluding tax on capital gains)	(51,667)	(83,908)	(51,586)
33.	Net gain from operations after dividends to policyholders, refunds to members and federal income taxes and before realized capital gains or (losses) (Line 31 minus Line 32)	46 988	(44 247)	953 265
34.	Net realized capital gains (losses) (excluding gains (losses) transferred to the IMR) less capital	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , ,	,
	gains tax of \$		(404 707)	(400, 070)
25	transferred to the IMR)	46,992	(481,707) (525.954)	(490,076) 463.189
35.	Net income (Line 33 plus Line 34)	40,992	(525,954)	403, 109
36.	Capital and surplus, December 31, prior year	16,809,990	16,111,994	16,111,994
37.	Net income (Line 35)	46,992		463, 189
38.	Change in net unrealized capital gains (losses) less capital gains tax of \$			
39. 40.	Change in net unrealized foreign exchange capital gain (loss)	0	(1)	0
	Change in nonadmitted assets	6,554	5,108	13,958
42.	Change in liability for reinsurance in unauthorized and certified companies	0		
	Change in reserve on account of change in valuation basis, (increase) or decrease	0	222 272	220 040
44. 45.	Change in asset valuation reserve			
	Surplus (contributed to) withdrawn from Separate Accounts during period			
47.	Other changes in surplus in Separate Accounts Statement	0		
48.	Change in surplus notes	0		0
	Capital changes:			
-2.	50.1 Paid in			0
	50.2 Transferred from surplus (Stock Dividend)			
51.	50.3 Transferred to surplus	0		
31.	51.1 Paid in	0	0	0
	51.2 Transferred to capital (Stock Dividend)	0		
1	51.3 Transferred from capital	0		
52.	51.4 Change in surplus as a result of reinsurance	0		0
	Aggregate write-ins for gains and losses in surplus	0	0	0
	Net change in capital and surplus for the year (Lines 37 through 53)	(150,251)	(297,475)	
55.	Capital and surplus, as of statement date (Lines 36 + 54)	16,659,739	15,814,519	16,809,990
08 301	DETAILS OF WRITE-INS			
	Summary of remaining write-ins for Line 8.3 from overflow page	<u>0</u>		_
08.399.	Totals (Lines 08.301 through 08.303 plus 08.398) (Line 8.3 above) Reinsurance administration agreement expense	0	0	748 500
	Heinsurance administration agreement expense		0	748,500
2798.	Summary of remaining write-ins for Line 27 from overflow page	0		0
	Totals (Lines 2701 through 2703 plus 2798)(Line 27 above)	46,458	0	748,500
	Summary of remaining write-ins for Line 53 from overflow page	0	0	0
5399.	Totals (Lines 5301 through 5303 plus 5398)(Line 53 above)	0	0	0

CASH FLOW			
	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
Cash from Operations			
Premiums collected net of reinsurance	1,114,783	1,258,246	4,772,297
2. Net investment income	1,132,800	1,227,305	3,299,824
3. Miscellaneous income	115,039	122,775	440,663
4. Total (Lines 1 to 3)	2,362,622	2,608,326	8,512,784
Benefit and loss related payments	2,256,319	3,425,915	8,884,620
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	590 , 139	490 , 182	2,476,405
8. Dividends paid to policyholders	1,698	1,791	6,032
9. Federal and foreign income taxes paid (recovered) net of \$ tax on capital			
gains (losses)	0	0	165,228
10. Total (Lines 5 through 9)	2,848,156	3,917,888	11,532,285
11. Net cash from operations (Line 4 minus Line 10)	(485,534)	(1,309,562)	(3,019,501)
ν,	(1,11 /	() /	(2) 2)2 /
Cash from Investments			
12. Proceeds from investments sold, matured or repaid:			
12.1 Bonds	652,406	5,830,541	16,416,997
12.2 Stocks	0	0	0
12.3 Mortgage loans	0	0	0
12.4 Real estate	0	0	0
12.5 Other invested assets	0	0	0
12.6 Net gains or (losses) on cash, cash equivalents and short-term investments	0	0	450
12.7 Miscellaneous proceeds	0	22,784	0
12.8 Total investment proceeds (Lines 12.1 to 12.7)	652,406	5,853,325	16,417,447
13. Cost of investments acquired (long-term only):			
13.1 Bonds	0	3,884,480	16,875,068
13.2 Stocks	0	0	0
13.3 Mortgage loans	0	0	0
13.4 Real estate	0	0	0
13.5 Other invested assets	0	0	0
13.6 Miscellaneous applications	(25,428)	0	(4,982)
13.7 Total investments acquired (Lines 13.1 to 13.6)	(25,428)	3,884,480	16,870,086
14. Net increase (or decrease) in contract loans and premium notes	(118,036)	(49, 147)	(161,775)
15. Net cash from investments (Line 12.8 minus Line 13.7 and Line 14)	795,870	2,017,992	(290,864)
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			
16.4 Net deposits on deposit-type contracts and other insurance liabilities			
16.5 Dividends to stockholders			
16.6 Other cash provided (applied)	(524,396)	(392,714)	(515, 127)
17. Net cash from financing and miscellaneous sources (Line 16.1 through Line 16.4 minus Line 16.5			
plus Line 16.6)	(583,382)	(473,081)	(800,439)
RECONCILIATION OF CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS			
18. Net change in cash, cash equivalents and short-term investments (Line 11, plus Lines 15 and 17) .	(273,046)	235,349	(4,110,804)
19. Cash, cash equivalents and short-term investments:			
19.1 Beginning of year	10,424,093	14,534,897	14,534,897
19.2 End of period (Line 18 plus Line 19.1)	10,151,047	14,770,246	10,424,093

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

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.	Individual life	2,735,609	2,779,324	10,769,304
2.	Group life			0
3.	Individual annuities	53,142	41,531	85,367
4.	Group annuities			0
5.	Accident & health	16,298	16,808	65,369
6.	Fraternal			0
7.	Other lines of business		0	0
8.	Subtotal (Lines 1 through 7)	2,805,049	2,837,663	10,920,040
9.	Deposit-type contracts	0	0	0
10.	Total (Lines 8 and 9)	2,805,049	2,837,663	10,920,040

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:

Net Income	Mar	ch 31, 2024	Dece	mber 31, 2023
(1) State basis	\$	46,992	\$	463,189
(2) State prescribed practices that increase/(decrease) NAIC SAP(3) State permitted practices that increase/(decrease) NAIC SAP		-		-
(4) NAIC SAP	\$	46.992	\$	463.189
	<u> </u>			
Surplus				
(5) State basis	\$	16,659,739	\$	16,809,990
(6) State prescribed practices that increase/(decrease) NAIC SAP		-		-
(7) State permitted practices that increase/(decrease) NAIC SAP		-		-
(8) NAIC SAP	\$	16,659,739	\$	16,809,990

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:
 - a. The aggregate amount of unrealized losses:

Less than 12 months \$985
 12 months or longer 96,176

b. The aggregate related fair value of securities with unrealized losses:

 1. Less than 12 months
 \$103,316

 2. 12 months or longer
 371,810

- (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 March 31, 2024. 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 a wholly-owned subsidiary of Manhattan National Holding, LLC ("MNH"). 100% of the Company's outstanding common stock is directly owned by MNH. The Company's common stock was contributed to MNH on September 25, 2008, from MassMutual Ascend Life Insurance Company ("MMALIC"). MNH is a wholly-owned subsidiary of MMALIC. MMALIC is wholly-owned subsidiary of Glidepath Holdings, Inc., a financial services holding company wholly-owned by Massachusetts Mutual Life Insurance Company. See Schedule Y, Part 1, Organizational Chart.

The Company did not pay or receive federal income tax payments in cash to or from MMALIC.

- D. The Company reported \$0 due from and \$139,130 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.
- 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.

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

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 MMALIC. MMALIC 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 \$65,314,423 as of March 31, 2024 and \$58,683,564 as of December 31, 2023. 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 \$8,376 for the three months ended March 31, 2024 and \$33,474 for the year ended December 31, 2023.

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.

Note 16 - Information About Financial Instruments With Off-Balance Sheet Risk and Financial Instruments With Concentrations of Credit Risk

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) The Company does not have any assets or liabilities measured at fair value or net asset value ("NAV").
- (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

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 at March 31, 2024.

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.

- (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 Asset Value (NAV)	Practicable (Carrying Value)
Financial Assets:	_						
Bonds:							
U.S. government and agencies	\$ 1,627,015	\$ 1,705,423	\$ -	\$ 1,627,015	\$ -	\$ -	\$ -
States, territories and possessions	3,954,500	2,884,098	-	3,954,500	-	-	-
Special revenue	9,513,836	9,338,763	-	9,513,836	-	-	-
Industrial and miscellaneous	93,988,978	97,421,769	-	93,988,978	-	-	-
Total bonds	\$109,084,329	\$ 111,350,053	\$ -	\$ 109,084,329	\$ -	\$ -	\$ -
Cash and cash equivalents	10,151,047	10,151,047	10,151,047	-	-	-	-
Policy loans	4,128,706	4,128,706	-	-	4,128,706	-	-
Total financial assets	\$123,364,082	\$125,629,806	\$ 10,151,047	\$ 109,084,329	\$ 4,128,706	\$ -	\$ -

- 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 requirir Domicile, as required by the Model Act?					Yes [] No [X]
1.2	If yes, has the report been filed with the domiciliary state?					Yes [] No []
2.1	Has any change been made during the year of this statement in the reporting entity?					Yes [] No [X]
2.2	If yes, date of change:				······································		
3.1	Is the reporting entity a member of an Insurance Holding Company sis an insurer?					Yes [X] No []
3.2	Have there been any substantial changes in the organizational chart	t since the prior qu	uarter end?			Yes [] No [X]
3.3	If the response to 3.2 is yes, provide a brief description of those cha	-					
3.4	Is the reporting entity publicly traded or a member of a publicly trade	ed group?				Yes [] No [X]
3.5	If the response to 3.4 is yes, provide the CIK (Central Index Key) co	de issued by the S	SEC for the entity/group.		······································		
4.1	Has the reporting entity been a party to a merger or consolidation du	uring the period co	vered by this statement	?		Yes [] No [X]
4.2	If yes, provide the name of the entity, NAIC Company Code, and staceased to exist as a result of the merger or consolidation.	ate of domicile (us	e two letter state abbrev	riation) for any entity	that has		
	1 Name of Entity		2 NAIC Company Code	3 State of Domicile			
5.	If the reporting entity is subject to a management agreement, includ in-fact, or similar agreement, have there been any significant change If yes, attach an explanation.	es regarding the to	erms of the agreement of	or principals involved	? Yes	[] No [X] N/A []
6.1	State as of what date the latest financial examination of the reporting					12/3	31/2021
6.2	State the as of date that the latest financial examination report beca date should be the date of the examined balance sheet and not the					12/3	31/2021
6.3	State as of what date the latest financial examination report became the reporting entity. This is the release date or completion date of the	e available to othe	r states or the public fro	m either the state of	domicile or		
	date).				······.	05/	23/2023
6.4	By what department or departments? Ohio Department of Insurance						
6.5	Have all financial statement adjustments within the latest financial e statement filed with Departments?					[] No [] N/A [X]
6.6	Have all of the recommendations within the latest financial examina	ition report been c	omplied with?		Yes	[] No [] N/A [X]
7.1	Has this reporting entity had any Certificates of Authority, licenses o 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 b	y the Federal Res	erve Board?			Yes [] No [X]
8.2	If response to 8.1 is yes, please identify the name of the bank holdin						
8.3	Is the company affiliated with one or more banks, thrifts or securities					Yes [X] No []
8.4	If response to 8.3 is yes, please provide below the names and locati regulatory services agency [i.e. the Federal Reserve Board (FRB), the Insurance Corporation (FDIC) and the Securities Exchange Commission (FDIC) and the Securities (FDIC)	he Office of the Co	omptroller of the Curren	cy (OCC), the Feder	al Deposit		
	1 Affiliate Name	L	2 ocation (City, State)	3 FRB	4 5 OCC FD	IC SEC	
	Barings LLC Baring International Investment Limited				NONO	_	
	Barings Securities LLC	Charlotte, NC .		N0	NONO	YES	
	MM Ascend Life Investor Services LLC					_	
	MML Distributors LLC		١			YES	
	MML Investment Advisors LLC		\\			YES YES	
	MML Strategic Distributors LLC		\			YES	
	The MassMutual Trust Company OCC					NO	
	Eleurich Eineneie LIIC	Now Vork NV		NO	NO NO		Ī

GENERAL INTERROGATORIES

9.1	 (a) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between per relationships; (b) Full, fair, accurate, timely and understandable disclosure in the periodic reports required to be filed by the report (c) Compliance with applicable governmental laws, rules and regulations; (d) The prompt internal reporting of violations to an appropriate person or persons identified in the code; and 	sonal and professional	Yes [X] No []
9.11	(e) Accountability for adherence to the code. If the response to 9.1 is No, please explain:			
9.2 9.21	Has the code of ethics for senior managers been amended?		_] No [X]
9.3 9.31	Have any provisions of the code of ethics been waived for any of the specified officers?		Yes [] No [X]
	FINANCIAL			
10.1 10.2	Does the reporting entity report any amounts due from parent, subsidiaries or affiliates on Page 2 of this statement? If yes, indicate any amounts receivable from parent included in the Page 2 amount:			
	INVESTMENT			
	Were any of the stocks, bonds, or other assets of the reporting entity loaned, placed under option agreement, or oth 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:		S	
13. 14.1	Amount of real estate and mortgages held in short-term investments:			
14.2		1		2
		Prior Year-End Book/Adjusted Carrying Value	E	Current Quarter Book/Adjusted Carrying Value
	Bonds			
	Common Stock			
	Short-Term Investments			
	Mortgage Loans on Real Estate			
14.27	Total Investment in Parent, Subsidiaries and Affiliates (Subtotal Lines 14.21 to 14.26)	\$0		0
14.28	Total Investment in Parent included in Lines 14.21 to 14.26 above	\$	\$	
15.1 15.2	Has the reporting entity entered into any hedging transactions reported on Schedule DB?	Yes	[] No] No [X] [] N/A [X]
16.	For the reporting entity's security lending program, state the amount of the following as of the current statement date	e:		_
	 16.1 Total fair value of reinvested collateral assets reported on Schedule DL, Parts 1 and 2 16.2 Total book/adjusted carrying value of reinvested collateral assets reported on Schedule DL, P 			
	16.3 Total payable for securities lending reported on the liability page.			_

GENERAL INTERROGATORIES

		dial or Safekeeping Agreements of requirements of the NAIC Finance			e the following:	Yes [
Bank of New York Me			1 Wall Street, New				
For all agreements the location and a complete		with the requirements of the NAIC	Financial Condition	Examiners Handbook, pi	rovide the name,		
1 Name	(a)	2		3 Complete Evale	nation(a)		
Name	(5)	Location(s)		Complete Expla	nation(s)		
Have there been any of the search of the sea		name changes, in the custodiand to:	(s) identified in 17.1	during the current quarte	r?	Yes [] No []
1 Old Custo	odian	2 New Custodian	3 Date of Ch	ange	4 Reason		
Old Gusti	odian	New Gustodian	Date of on	unge	reason		
make investment dec	isions on behalf of access to the invest		nat are managed inte rities"]				
Barings LLC	Name of Firm	or Individual	Affiliation	_			
17.5097 For those firr	ms/individuals liste	d in the table for Question 17.5, d more than 10% of the reporting e	do any firms/individua	= als unaffiliated with the re		Yes [] No [
17.5098 For firms/ind total assets ເ	ividuals unaffiliated under managemen	d with the reporting entity (i.e. des t aggregate to more than 50% of	signated with a "U") li the reporting entity's	sted in the table for Que invested assets?	stion 17.5, does the	Yes [] No [
For those firms or inditable below.	ividuals listed in th	e table for 17.5 with an affiliation	code of "A" (affiliated	d) or "U" (unaffiliated), pr	ovide the information for	he	
1		2		3	4	M	5 Investment lanagemen
Central Registration Depository Number		Name of Firm or Individual		al Entity Identifier (LEI)	Registered With	N	Investment Ianagemen Agreement (IMA) Filed
Central Registration Depository Number	Barings LLC		54930	al Entity Identifier (LEI) 00G36F1EZS4MQM37		DS	Investment Ianagemen Agreement
Central Registration Depository Number 106006	Barings LLC	Name of Firm or Individual	54930	al Entity Identifier (LEI) 00G36F1EZS4MQM37	Registered With	DS	Investment Ianagemen Agreement (IMA) Filed
Central Registration Depository Number 106006	Bar ings LLC uirements of the Putal Securities, the ren necessary to peravailable. or is current on all is an actual expect.	Name of Firm or Individual	of the NAIC Investments for ecurity does not exist opayments.	al Entity Identifier (LEI) 00G36F1EZS4MQM37 ent Analysis Office been ach self-designated 5GI or an NAIC CRP credit ra	Registered With SEC followed? security: sting for an FE or PL	M	Investment lanagemen Agreement (IMA) Filed S
Central Registration Depository Number 106006 Have all the filing requ If no, list exceptions: By self-designating 50 a. Documentation security is not b. Issuer or oblige c. The insurer ha Has the reporting enti By self-designating Pl a. The security wa b. The reporting e c. The NAIC Desig on a current pri	Bar ings LLC Bar ings LLC Bar ings LLC GI securities, the ren necessary to pernavailable. or is current on all is an actual expectity self-designated LGI securities, the ren necessary to pernavailable. The securities is necessary to pernavailable. The securities is necessary to pernavailable. The securities is necessary to pernavailable.	Name of Firm or Individual urposes and Procedures Manual of the second and a full credit analysis of the second contracted interest and principal pation of ultimate payment of all co	of the NAIC Investments for ecurity does not exist of payments. Collowing elements of the collow	al Entity Identifier (LEI) 10636F1EZS4MQM37 ent Analysis Office been 10cach self-designated 5GI 10cach ran NAIC CRP credit ran 10cach self-designated PLi 10cach self-designated	Registered With SEC followed?security: sting for an FE or PL GI security:	M	Investment Ianagemen Agreement (IMA) Filed
Central Registration Depository Number 106006 Have all the filing required from the filing from the filing from the filing required from the filing from the	Bar ings LLC uirements of the Pour available. or is current on all as an actual expectity self-designated LGI securities, the as purchased prior nitity is holding cap gnation was derive vate letter rating hontity is not permitte ity self-designated	Name of Firm or Individual urposes and Procedures Manual of the porting entity is certifying the followit a full credit analysis of the secontracted interest and principal pation of ultimate payment of all costs of the securities? reporting entity is certifying the forto January 1, 2018. Ital commensurate with the NAIC defrom the credit rating assigned led by the insurer and available for the share this credit rating of the PLGI securities?	of the NAIC Investments for ecurity does not exist of payments. Collowing elements of the collow	al Entity Identifier (LEI) 10636F1EZS4MQM37 ent Analysis Office been each self-designated 5GI or an NAIC CRP credit ra d principal. each self-designated PLi d for the security. Its legal capacity as a NF te insurance regulators. SVO.	Registered With SEC followed? security: security: sting for an FE or PL GI security:	Yes [Investment lanagemen Agreement (IMA) Filed S
Central Registration Depository Number 106006 Have all the filing required froed in the filing required in the fi	Bar ings LLC	Name of Firm or Individual urposes and Procedures Manual of the second and principal pation of ultimate payment of all costs (SGI securities?	of the NAIC Investment of the NAIC Investment of the curity does not exist of payments. Ontracted interest and of the contracted interest and of the contra	al Entity Identifier (LEI) 00G36F1EZS4MQM37 ent Analysis Office been each self-designated 5GI or an NAIC CRP credit ra d principal. each self-designated PLi d for the security. tts legal capacity as a NR te insurance regulators. e SVO.	Registered With SEC followed? security: security: sting for an FE or PL GI security:	Yes [Investment Ianagemen Agreement (IMA) Filed S X] No [
Central Registration Depository Number 106006 Have all the filing required from the filing f	Bar ings LLC uirements of the Pour available. or is current on all as an actual expectity self-designated LGI securities, the as purchased prior nitity is holding cap gnation was derive vate letter rating hentity is not permitte ity self-designated Schedule BA non-re purchased prior nitity is holding cap d a public credit rage.	Name of Firm or Individual urposes and Procedures Manual of the porting entity is certifying the following a full credit analysis of the secontracted interest and principal pation of ultimate payment of all conformations of the payment of all conformations of the payment of all conformations of the porting entity is certifying the forton January 1, 2018. Ital commensurate with the NAIC of from the credit rating assigned all by the insurer and available forton to share this credit rating of the PLGI securities? Tregistered private fund, the report to January 1, 2019.	of the NAIC Investment of the NAIC Investment of the NAIC Investment of the curity does not exist of the payments. Ontracted interest and of the NAIC CRP in its prevamination by state PL security with the other control of the NAIC CRP in its prevamination by state PL security with the other control of the NAIC CRP in its prevamination by state PL security with the other control of the NAIC CRP in its prevamination by state PL security with the other control of the NAIC CRP in its prevamination by state PL security with the other control of the NAIC Investment of the N	al Entity Identifier (LEI) 10636F1EZS4MQM37 ent Analysis Office been 10 ach self-designated 5GI or an NAIC CRP credit rance and principal. 11 deach self-designated PLie of for the security. 12 ts legal capacity as a NF te insurance regulators. 13 SVO. 14 g the following elements 15 d for the security.	Registered With SEC	Yes [Investment Ianagemen Agreement (IMA) Filed S X] No [
Central Registration Depository Number 106006 Have all the filing requisition, list exceptions: By self-designating 50 a. Documentation security is not b. Issuer or obligo. c. The insurer has the reporting enti By self-designating Pla. The security wab. The reporting ec. The NAIC Designation on a current prid. The reporting enti By assigning FE to a FE fund: a. The shares werb. The reporting ec. The security had January 1, 2015 d. The fund only one. The current repin its legal capal	Bar ings LLC	Name of Firm or Individual urposes and Procedures Manual of the porting entity is certifying the following a full credit analysis of the secontracted interest and principal pation of ultimate payment of all costs of securities? reporting entity is certifying the following entity is certifying the following entity is certifying the following entity is certifying the NAIC difform the credit rating assigned leld by the insurer and available following entity is credit rating of the PLGI securities? registered private fund, the report to January 1, 2019. ital commensurate with the NAIC ting(s) with annual surveillance as olds bonds in its portfolio. nation was derived from the publication was derived from the publication was derived from the publication.	of the NAIC Investment of the NAIC Investment of the NAIC Investment of the curity does not exist of the payments. Ontracted interest and only on the contracted interest and	al Entity Identifier (LEI) 10636F1EZS4MQM37 ent Analysis Office been 10 ach self-designated 5GI or an NAIC CRP credit rance and principal. 11 deach self-designated PLie of for the security. 12 ts legal capacity as a NF te insurance regulators. 13 SVO. 14 g the following elements 15 d for the security. 16 credit rance assistance assist	Registered With SEC	Yes [Investment lanagemer Agreement (IMA) Filed SX] No [

GENERAL INTERROGATORIES

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

Life and	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
	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)	\$0
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	0.862 %
	2.2 A&H cost containment percent	%
	2.3 A&H expense percent excluding cost containment expenses	0.000 %
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	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	Trootioe (Current V	oar to Dato

Showing All New Reinsurance Treaties - Current Year to Date									
1 NAIC	2	3	4	5	6 Type of Reinsurance	7	8	9 Certified Reinsurer	10 Effective Date of Certified
Company Code	ID Number	Effective Date	Name of Reinsurer	Domiciliary Jurisdiction	Reinsurance Ceded	Business Ceded	Type of Reinsurer	Rating (1 through 6)	Reinsurer Rating
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SCHEDULE T - PREMIUMS AND ANNUITY CONSIDERATIONS Current Year To Date - Allocated by States and Territories

		Jurrent Year	To Date - Alloca	ated by States a		siness Only		
		1		ontracts	4	5	6	7
			2	3	Accident and Health Insurance			
					Premiums,			
		Active Status	Life Insurance	Annuity	Including Policy, Membership	Other	Total Columns	Deposit-Type
	States, Etc.	(a)	Premiums	Considerations	and Other Fees	Considerations	2 Through 5	Contracts
1.	Alabama AL	L	8,815	0	0		8,815	
2. 3.	Alaska	L	1,759	0	0		1,759 13.701	
3. 4.	Arkansas AR	L	21.950	0	0		21.950	
5.	California	L	306, 168	355	0		306,524	
6.	Colorado	L	37,507	0	0		37,507	
7.	Connecticut CT	L	19,420	0	0		19,420	
8.	Delaware DE	L	13,353	0	0		13,353	
9.	District of Columbia DC	L	828	0	0		828	
10.	Florida FL	L	106,581	411 700	14,475		121,466	
11. 12.	Georgia GA Hawaii HI	L	72,424	0	203		73,328 8.019	
13.	Idaho ID	l	6.937	0	0		6.937	
14.	Illinois IL	L	70.593	3,732	0		74,325	
15.	Indiana IN	L	90,468	470	108		91,046	
16.	Iowa IA	L	31,390	0	84		31,474	
17.	Kansas KS	L	42,394	543	0		42,937	
18.	Kentucky KY	L	20,506	0	0		20,506	
19.	Louisiana LA Maine ME	L	44,662	0	0		44,662	
20. 21.	Maryland MD	L		0	0			
21.	Massachusetts MA	L	59,852	0	0		59.852	
23.	Michigan MI	L	105,913	2,321	146		108,381	
24.	Minnesota MN	L	155,410	13,400	0		168,810	
25.	Mississippi MS	L	35,750	360	0		36, 110	
26.	Missouri MO	L	73,410	7,207	0		80,617	
27.	Montana MT	L	3,863	0	0		3,863	
28.	Nebraska	L	11,559	0	0 0		11,559 24,125	
29. 30.	New Hampshire	L	24, 125	0 0	0		24 , 125 14 , 475	
31.	New Jersey	L	66.007	0	0		66.007	
32.	New Mexico	L	4.905	0	263		5, 168	
33.	New York NY	N	15,626	0	0		15,626	
34.	North Carolina NC	L	54,215	0	0		54,215	
35.	North Dakota ND	L	28,019	0	0		28,019	
36.	Ohio OH	L	65,729	45	65		65,839	
37.	Oklahoma OK	L		0	0		19,549 25,404	
38. 39.	Oregon OR Pennsylvania PA	L		0	110		93.848	
39. 40.	Rhode Island	L	2.968	0	0		2,968	
41.	South Carolina	L		390	0		36,680	
42.	South Dakota	L	5,366	0	0		5,366	
43.	Tennessee TN	L	69, 179	0	216		69,394	
44.	Texas TX	L	204,528	150	135		204,813	
45.	Utah UT	L	10,540	71	0		10,611	
46.	Vermont	L	7,948	0	0		7,948	
47. 48.	Virginia VA Washington WA	L	,	50 0	0 0			
49.	West Virginia WV	L		0	0			
50.	Wisconsin WI	L		22,937	494		286,430	
51.	Wyoming WY	L	_ '	0	0		5,880	
52.	American Samoa AS	N		0	0		0	
53.	Guam GU	N	0	0	0		0	
54.	Puerto Rico PR	N		0	0		0	
55. 56	U.S. Virgin Islands	NN		0	0		0	
56. 57.	Northern Mariana Islands MP Canada CAN			0 0			0 0	
57. 58.	Aggregate Other Aliens OT	XXX		0	0	0	348	n
59.	Subtotal	XXX		53 , 142	16,298	0	2,642,407	0
90.	Reporting entity contributions for employee benefit	s	, , , ,				, ,	
	plans						0	
91.	Dividends or refunds applied to purchase paid-up	vvv					0	
92.	additions and annuities Dividends or refunds applied to shorten endowmer			·····			u	
9∠.	or premium paying period						0	
93.	Premium or annuity considerations waived under							[
	disability or other contract provisions						36,517	<u>-</u>
94.	Aggregate or other amounts not allocable by State Totals (Direct Business)		2 600 484	53, 142		0		0
95. 96.	Plus Reinsurance Assumed			53 , 142	16,298	0	0	0
	Totals (All Business)			53 , 142		0	2,678,924	0
98.	Less Reinsurance Ceded	XXX	1,502,581	23,914	15,486		1,541,981	
99.	Totals (All Business) less Reinsurance Ceded	XXX	1,106,903	29,228	812	0		0
	DETAILS OF WRITE-INS							
	Other Alien						348	
58002.								
	Summany of ramaining write ine for Line 59 from	XXX						
58998.	Summary of remaining write-ins for Line 58 from overflow page	XXX		0	0	0	0	n
58999.	Totals (Lines 58001 through 58003 plus							
	58998)(Line 58 above)	XXX	348	0		0		0
9401.								
9402.								
9403.	Commence of consistence with the fact time 0.4 from	XXX		····				
9498.	Summary of remaining write-ins for Line 94 from overflow page	XXX	0	0	0	0	0	0
9499.	Totals (Lines 9401 through 9403 plus 9498)(Line	^//						
	94 above)	XXX	0	0	0	0	0	0
	Status Counts:		_			ur accredited reinsuu		

PART 1 – ORGANIZATIONAL CHART

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

	Federal Tax ID	NAIC Co Code	State of Domicile
MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY	04-1590850	65935	Massachusetts
Direct & Indirect Owned Subsidiaries:			
C.M. Life Insurance Company	06-1041383	93432	Connecticut
MML Bay State Life Insurance Company	43-0581430	70416	Connecticut
CML Special Situations Investor LLC	None		Delaware
CM Life Mortgage Lending LLC	None		Delaware
CML Mezzanine Investor III, 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 II LLC	None		Delaware
MM Global Capabilities III 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
MassMutual Ventures US IV GP, LLC*	None		Delaware
MassMutual Ventures US IV, L.P.	None		Delaware
MassMutual Ventures US IV, LLC	None		Delaware
MassMutual Ventures Europe/APAC I GP, LLC	None		Delaware
MassMutual Ventures Europe/APAC I GP, L.P.	None		Cayman Islands
MassMutual Ventures Europe/APAC I L.P.	None		Cayman Islands
MassMutual Ventures Southeast Asia III LLC	None		Delaware
MMV Digital I LLC	None		Cayman Islands

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

	Federal Tax ID NAIC Co Code	State of Domicile
	1	
Counterpointe Sustainable Advisors LLC	None	Delaware
CSA Intermediate Holdco LLC	None	Delaware
Counterpointe Trust Services LLC	None	Delaware
CP PACE LLC	None	Delaware
CSA Employee Services Company LLC	None	Delaware
Counterpointe Sustainable Real Estate II LLC	None	Delaware
Counterpointe Energy Solutions II LLC	None	Delaware
Counterpointe Energy Solutions (CA) II LLC	27-0105644	Delaware
Counterpointe Energy Solutions (FL) II LLC	None	Delaware
Counterpointe Energy Solutions (IL) LLC	None	Delaware
Loop-Counterpointe PACE LLC	None	Delaware
Counterpointe Energy Services LLC	None	Delaware
JFIN Parent LLC	None	Delaware
Jefferies Finance LLC	27-0105644	Delaware
JFIN GP Adviser LLC	None	Delaware
Jefferies MM Lending LLC	None	Delaware
Jefferies Credit Partners LLC	None	Delaware
Apex Credit Partners LLC	None	Delaware
Jefferies Credit Management LLC	None	Delaware
JCM GP I LLC	None	Delaware
JCP Direct Lending CLO 2022 LLC	None	Delaware
Jefferies Direct Lending Europe SCSp SICAV-RAIF	None	Luxembourg
Jefferies Credit Management Holdings LLC	None	Delaware
JDLF GP (Europe) S.a.r.l	None	Luxembourg
JFAM GP LLC	None	Delaware
JFAM GP LP	None	Delaware
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 2 C Holdings LLC	None	Delaware
Jefferies Direct Lending Fund II C SPE LLC JDLF III GP LLC*	None	Delaware
	None	Delaware
JDLF III GP LP* Jeffenies Direct Londing Fund III C LP	None None	Delaware Delaware
Jefferies Direct Lending Fund III C LP	None None	Delaware Delaware
JCP Direct Lending CLO 2023-1 LLC JCP Direct Lending CLO 2023 Ltd.	None None	Jersey Channel Islands
JCP Direct Lending CLO 2023 Etd. JCP GP I LLC	None	Delaware
Jefferies Private Credit BDC Inc.	None	
		Maryland Delaware
JCP Funding 2024 LLC	None	Delaware

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

	Federal Tax ID NAIC Co C	de State of Domicile
Jefferies Senior Lending LLC	None	Delaware
JFIN Revolver Holdings LLC	None	Delaware
JFIN Revolver Holdings II LLC	None	Delaware
JFIN Co-Issuer Corporation	None	Delaware
JFIN Europe GP, S.a.r.l.	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 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 CLO 2022-IV Ltd.	None	Cayman Islands
JFIN Revolver CLO 2022-IV LLC	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 2022-1 Ltd.	None	Bermuda
JFIN Revolver SPE1 2022 LLC	None	Delaware
JFIN Revolver SPE3 2022 LLC	None	Delaware
JFIN Revolver SPE4 2022 LLC	None	Delaware
JFIN Revolver SPE4 2022 Ltd.	None	Delaware
JCP Private Loan Management GP LLC	None	Delaware
JCP Private Loan Management LP	None	Delaware
Beauty Brands Acquisition Holdings LLC	None	Delaware
Beauty Brands Acquisition LLC	None	Delaware
Beauty Brands Acquisition Intermediate LLC	None	Delaware
Forma Brands, LLC	None	Delaware
Apex Credit Holdings LLC	None	Delaware
JFIN CLO 2012 Ltd.	None	Cayman Islands
JFIN CLO 2013 Ltd.	None	Cayman Islands
JFIN CLO 2013 Etd. JFIN CLO 2014 Ltd.	None	Cayman Islands
JI'IN CLO 2014 Ett.	TYONG	Cayman islands

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

	Federal Tax ID	NAIC Co Code	State of Domicile
JFIN CLO 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
Tomorrow Parent, LLC	None		Delaware
Custom Ecology Holdco, LLC	None		Delaware
Glidepath Holdings Inc.	86-2294635		Delaware
MassMutual Ascend Life Insurance Company	13-1935920	63312	Ohio
AAG Insurance Agency, LLC	31-1422717		Kentucky
Annuity Investors Life Insurance Company	31-1021738	93661	Ohio
MM Ascend Life Investor Services, LLC	31-1395344		Ohio
MM Ascend Mortgage Lending LLC	None		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
MMV CTF I GP LLC	None		Delaware
MassMutual Ventures Climate Technology Fund I LP	None		Delaware
MM Direct Private Investments Holding LLC	None		Delaware
MM Direct Private Investments UK Limited	None		England & Wales
DPI-ACRES Capital LLC	None		Delaware
DPI-ARES Mortgage Lending LLC	None		Delaware
MM Investment Holding	None		Cayman Islands
MMIH Bond Holdings LLC	None		Delaware
MassMutual Asset Finance LLC*	26-0073611		Delaware
MMAF Equipment Finance LLC 2017-B	32-0546197		Delaware
MMAF Equipment Finance LLC 2019-A	83-3722640		Delaware
MMAF Equipment Finance LLC 2019-B	None		Delaware
MMAF Equipment Finance LLC 2020–A	None		Delaware
MMAF Equipment Finance LLC 2020–B	None		Delaware
MMAF Equipment Finance LLC 2021-A	None		Delaware
MMAF Equipment Finance LLC 2022–A	None		Delaware
MMAF Equipment Finance LLC 2022–B	None		Delaware
MMAF Equipment Finance LLC 2023-A	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 Holding Company LLC	None		Delaware

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

	Federal Tax ID NAIC Co Code	State of Domicile
Flourish Digital Assets LLC	None	Delaware
Flourish Financial 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
Fern 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
GASL Holdings LLC	None	Delaware
Barings Asset-Based Income Fund (US) LP*	None	Delaware
Barings Perpetual European Direct Lending Fund	None	Luxembourg
Barings Emerging Generation Fund II	88-0916548	Delaware
Babson Capital Global Special Situation Credit Fund 2*	98-1206017	Delaware
Barings Global Real Assets Fund LP*	82-3867745	Delaware
Barings Global Special Situations Credit Fund 3	None	Luxembourg
Barings North American Private Loan Fund LP	38-4010344	Delaware
MassMutual Assignment Company	06-1597528	North Carolina
MassMutual Capital Partners LLC	04-1590850	Delaware
Marco Hotel LLC	46-4255307	Delaware
HB Naples Golf Owner LLC	45-3623262	Delaware
RB Apartments LLC	82-4411267	Delaware
Intermodal Holding II LLC	None	Delaware
MassMutual Ventures Holding LLC	None	Delaware
Crane Venture Partners LLP	None	United Kingdom
MassMutual Ventures Management LLC	None	Delaware
MassMutual Ventures SEA Management Private Limited	None	Singapore
MMV UK/SEA Limited	None	England & Wales
MassMutual Ventures India Private Limited	None	India
MassMutual Ventures Southeast Asia I LLC	None	Delaware
MassMutual Ventures Southeast Asia II LLC	None	Delaware
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

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

	Federal Tax ID NAIC Co Code	State of Domicile
	TCUCIAL LAX ID NAIC CO COUC	State of Domittie
MM Catalyst Fund LLC	None	Delaware
MM Catalyst Fund II LLC	None	Delaware
MM Rothesay Holdco US LLC	04-1590850	Delaware
Rothesay Limited	None	United Kingdom
Rothesay Mortgages Limited	None	United Kingdom
Rothesay Life Plc	None	United Kingdom
Rothesay MA No.1 Limited	None	United Kingdom
Rothesay MA No.3 Limited	None	United Kingdom
Rothesay MA No.4 Limited	None	United Kingdom
LT Mortgage Financing 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 North America 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	None	Australia
Barings Australia Real Estate Holdings Pty Ltd	None	Australia
Barings Australia Real Estate Pty Ltd	14-0045656	Australia
Barings Australia Property Partners Holdings Pty Ltd	98-0457456	Australia
Barings Australia Asset Management Pty Ltd	None	Australia
Barings Australia Property Partners Pty Ltd	None	Australia
Barings Australia Structured Finance Holdings Pty Ltd	None	Australia
Barings Australia Structured Finance Pty Ltd	None	Australia
Gryphon Capital Partners Pty Ltd	None	Australia
Gryphon Capital Management Pty Ltd	None	Australia
Gryphon Capital Investments Pty Ltd	None	Australia

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

PART 1 – ORGANIZATIONAL CHART

	Federal Tax ID NAIC Co Code	State of Domicile
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 Guernsey Elimited Barings Europe Limited	None	United Kingdom
Barings Asset Management Spain SL	None	Spain
Baring France SAS	None	France
Baring International Fund Managers (Ireland) Limited	None	Ireland
Barings GmbH	None	Germany
Barings Union Barings Italy S.r.l.	None	Italy
Barings Sweden AB	None	Sweden
Barings Netherlands B.V.	None	Netherlands
Barings (U.K.) Limited	98-0432153	United Kingdom
Barings Switzerland Sàrl	None	Switzerland
Baring Switzerland Sari	98-0241935	United Kingdom
Baring Asset Management Eminted Barings European Direct Lending 1 GP LLP	None	United Kingdom United Kingdom
Baring International Investment Limited	98-0457328	United Kingdom
Baring Fund Managers Limited	98-0457586 98-0457586	United Kingdom
BCGSS 2 GP LLP	None	United Kingdom
Baring Investment Services Limited	98-0457578	United Kingdom
Barings Core Fund Feeder I GP S.à.r.l.	None	Luxembourg
Barings Core Pulle Peeter FOT 3.a.t.t. Barings Investment Fund (LUX) GP S.à r.l.	None	Luxembourg
Barings BME GP S.à.r.l.	None	United Kingdom
Barings GPC GP S.à.r.l.	None	Luxembourg
Barings Gre Gr 3.a.r.i. Barings European Core Property Fund GP Sà.r.l	None	United Kingdom
Barings Umbrella Fund (LUX) GP S.à.r.l.	None	Luxembourg
GPLF4(S) GP S.à r. 1	None	Luxembourg
PREIF Holdings Limited Partnership	None	United Kingdom
BMC Holdings DE LLC	None	Delaware
Barings Real Estate Advisers Inc.	04-3238351	Delaware
Remington L & W Holdings LLC	81-4065378	Delaware
Aland Royalty GP, LLC	None	Delaware
Alaska Future Fund GP, LLC	None	Delaware
BAI Funds SLP, LLC	None	Delaware
BAI GP, LLC	None	Delaware
Baring Asset-Based Income Fund (US) GP, LLC	None	Delaware
Barings CMS Fund GP, LLC	None	Delaware
Barings Infiniti Fund Management LLC	None	Delaware
Barings Hotel Opportunity Venture I GP, LLC	None	Delaware
Darings from Opportunity Contains 1 Of, DDC	Tione	Detarrate

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

	Federal Tax ID NAIC Co Code	State of Domicile
Baring 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 DAPPLF1 Rated Feeder, G.P.	None	Delaware
Barings Direct Lending GP Ltd.	None	Cayman Islands
Barings Global Energy Infrastructure Advisors, LLC	None	Delaware
Barings Centre Street CLO Equity Partnership GP, LLC	None	Delaware
Barings Centre Street CLO Equity Partnership LP	None	Delaware
Barings Global Real Assets Fund GP, LLC	None	Delaware
Barings GPSF LLC	None	Delaware
Barings North American Private Loan Fund Management, LLC	None	Delaware
Barings North American Private Loan Fund II Management, LLC	None	Delaware
Barings North American Private Loan Fund III Management, LLC	None	Delaware
Barings Global Special Situations Credit Fund 4 GP (Delaware) LLC	None	Delaware
Barings - MM Revolver Fund GP LLC	None	Delaware
Barings Real Estate European Value Add Fund II Feeder LLC	None	Cayman Islands
BMT RE Debt Fund GP LLC	None	Delaware
Barings Small Business Fund LLC	84-5063008	Delaware
Barings TYIDF2 Rated Feeder GP LLC	None	Delaware
Barings Active Passive Equity Direct EAFE LLC	None	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
Barings Emerging Markets Blended Fund I GP, LLC	None	Delaware
Barings EPLF4 Rated Feeder GP LLC	None	Delaware
Mezzco III LLC	41-2280126	Delaware
Mezzco IV LLC	80-0920285	Delaware
Mezzco IV ELC Mezzco Australia II LLC	80-0920283 None	Delaware
RECSA-NY GP LLC	None	Delaware
Barings CLO 2022-I	98-1624360	Cayman Island
	98-1624360 None	Cayman Island Cayman Island
Barings CLO 2022-II	None None	Cayman Island Delaware
Amherst Long Term Holdings, LLC	None	Delaware

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

	Federal Tax ID NAIC Co Code	State of Domicile
Enroll Confidently, Inc.	None	Delaware
MassMutual International LLC	04-3313782	Delaware
MassMutual Solutions LLC	None	Delaware
Haven Technologies Asia Limited	None	Hong Kong
Yunfeng Financial Group Limited	None	Hong Kong
	27-3576835	Delaware
MassMutual External Benefits Group LLC		
5301 Wisconsin Avenue Associates, LLC	None	District of Columbia
5301 Wisconsin Avenue GP, LLC	None	Delaware
Other Affiliates & Funds:	04.1500050	7.1
100 w. 3rd Street LLC	04-1590850	Delaware
300 South Tryon Hotel LLC	82-2432216	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 Construction Lending Fund LP	None	Delaware
Barings Emerging Generation Fund II LP	None	Delaware
Barings Emerging Generation Fund, LP	84-3784245	Delaware
Barings Emerging Markets Corporate Bond Fund	None	Ireland
Barings Hotel Opportunity Venture I LP	None	Delaware
Barings Real Estate Debt Income Fund LP	85-3449260	Delaware
Barings Real Estate European Value Add I SCSp	None	Luxembourg
Barings Small Business Fund, L.P.	None	Delaware
Barings-MM Revolver Fund LP*	None	Delaware
Barings U.S. High Yield Fund	None	Delaware
Cornerstone Permanent Mortgage Fund LLC	45-2632610	Massachusetts
CREA Ridge Apartments, LLC	None	Delaware
London Office JV Holdings LLC	None	Delaware
Riverwalk MM Member, LLC	None	Delaware
Aland Royalty Holdings LP	None	Delaware
Chassis Acquisition Holding LLC	81-2244465	Delaware
CRA Aircraft Holding LLC	81-4258759	Delaware
EIP Holdings I, LLC	None	Delaware
Red Lake Ventures, LLC	46-5460309	Delaware
Validus Holding Company LLC	46-0687392	Delaware
SBNP SIA II LLC	04-1590850	Delaware
SBNP SIA III LLC	None	Delaware
Barings European Real Estate Debt Income Fund	None	Luxembourg
Babson Capital Loan Strategies Fund, L.P.*	37-1506417	Delaware
Barings US High Yield Bond Fund	None	Ireland
Barings US Fight Yield Bond Fund Babson CLO Ltd. 2015-I	None	Cayman Islands
Babson CLO Ltd. 2015-1 Babson CLO Ltd. 2015-II	None None	Cayman Islands Cayman Islands
Dauson CLO Ltt. 2015-11	INOHE	Cayman Islanus

^{*}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.

	Fodougl Tow ID NAIC Co. Co. 1	State of Damiella
	Federal Tax ID NAIC Co Code	State of Domicile
Babson CLO Ltd. 2016-I	None	Cayman Islands
Babson CLO Ltd. 2016-II	None	Cayman Islands 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 2020-1	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	None	Cayman Islands
Barings CLO 2021-II	None	Cayman Islands
Barings CLO 2021-III	None	Cayman Islands
Babson Euro CLO 2014-I BV	None	Netherlands
Babson Euro CLO 2014-II BV	None	Netherlands
Babson Euro CLO 2015-I BV	None	Netherlands
Barings Euro CLO 2019-I	3603726OH	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 Euro CLO 2023-II DAC	None	Ireland
Barings Global Energy Infrastructure Fund I LP	98-1332384	Cayman Islands
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	None	Ireland
Barings Global Dividends Champion Fund	None	Ireland
Barings Europe Select Fund	None	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 Middle Market CLO Ltd 2023-I	None	Bermuda
Barings Middle Market CLO Ltd 2023-II	None	Bermuda
Barings RE Credit Strategies VII LP	98-1332384	Delaware
Barings Target Yield Infrastructure Debt Fund	98-1567942 81-0841854	Luxembourg
Barings CLO Investment Partners LP	81-0841854 Name	Delaware
Barings Euro Value Add II (BREEVA II)*	None	Luxembourg

^{*}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.

Barings Transportation Famil 1P* Bincome Encryt Vortine L. E. P*		Federal Tax ID NAIC Co Code	State of Domicile
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Benchmark 2018-82 Mortgage Trust			E
Benchmark 2018-B4 Section New York Service Ser			
Benchmark 2018-18 Barniang Core Property Fund LP			
Barings Core Property Fund LIP Del Navers Capital SPV LIC Del-NARES Mortgage Lending SPV LIC Del-Naver Del-Nave			
DPI Acres Capital SPV LLC			
DPI-AKES Mortague Lending BYN, LLC Oel-aware E2FA Rifordable Housing Debr Fund LLC None Delaware Great Lakes III, L.P. 37-108623 Delaware GIA EU Holdings - Emerson IV Satl 38-607033 Lucembourg JPMCC Commercial Mortague Securities Trast 2017-C5 38-4010113-46440102 New York Marrello Re Limited None Bermad Marrello Re Limited None Bermad MM Bill Perminant Co-levea Member LLC* None Delaware MM Differ Private Investment Holding 04-159059 Delaware MM Object Private Investment Holding 04-159059 Delaware MM Object Private Investment Holding 04-159059 Delaware MM Debr Participations LLC None Delaware MM Debr Participations LLC 04-159059 Delaware MM VID Station Member LLC* 04-159059 Delaware MM NEED District Landeo Member LLC None Delaware MM Station Member LLC 04-159059 Delaware Washington Cate way There LLC 04-159059 Delaware Washington Cate way			
F2E Affordable Ilousing Debit Pural LLC Great Lakes III, L.P. 37.108623 Delaware GIA EU Holdings - Emerson IV Surl 99.1607033 Lucemburg JPMCC Commercial Mortgage Securities Trust 2017-DP7 38.401011; 38.401011; New York JPMDB Commercial Mortgage Securities Trust 2017-CS 38.402059 New York Martillo Re Limited None Bermuda Minni Douglas Three MM, LLC None Bermuda Minni Douglas Three MM, LLC None Delaware MM Direct Private Investment Holding New York MM Direct Holding Hol			
Great Lakes III, L.P. 37-1708-633 Delaware GIA EU Holdings - Emerson JV Sarl See Horio 1981 See			
GIA EU Holdings - Emeson N Surl New York PMCC Commercial Mortgage Securities Trust 2017-LP7 PMDR Commercial Mortgage Securities Trust 2017-C5 38-40410112 38-4041012 New York PMDR Commercial Mortgage Securities Trust 2017-C5 New York			
PMCC Commercial Mortgage Securities Trust 2017-P7 PMDR Commercial Mortgage Securities Trust 2017-P7 Martello Re Limited None Bermuda B			
PMDB Commercial Mortgage Securities Trust 2017-C5			
Martello Re Limited			
Mismi Douglas Three MM, LLC		38-4032059	New York
MM BIG Peninsula Co-Invest Member LLC* 87-402164 Delaware MM Driest Private Investment Holding 04-1590850 Delaware MM CM Holding LLC None Delaware MM Debt Participations LLC 81-3000420 Delaware MM MDI Station Member LLC* 04-1590850 Delaware MM WC Clarion Member LLC* 04-1590850 Delaware MM VC Climate Technology Fund GP* 04-1590850 Delaware MM Subline Borrower LLC None Delaware MM Subline Borrower LLC 04-1590850 Delaware Washington Pine LLC 04-1590850 Delaware Tower Square Capital Partners III, L.P. 04-1590850 Delaware Tower Square Capital Partners III, L.P. 41-2280127 Delaware Tower Square Capital Partners III, L.P. 41-2280129 Delaware Washington Gateway Three LLC 04-1590850 Delaware Washington Gateway Three LLC 32-26974045 Delaware Washington Gateway Three LLC 3-1000000000000000000000000000000000000			
MM Direct Private Investment Holding MM CM Holding LLC			
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MM Debt Participations LLC 81-3000420 Delaware MM MDI Station Member LLC* 04-1590850 Delaware MM MDI Station Member LLC* 04-1590850 Delaware MM VC Limate Technology Fund GP* 04-1590850 Delaware MM MW EED District Landoo Member LLC None Delaware MM Subline Borrower LLC None Delaware Mashington Fine LLC 35-2553915 Delaware Ten Fan Pier Boalevard LLC 35-2553915 Delaware Tower Square Capital Partners III, L.P. 41-2280127 Delaware Tower Square Capital Partners III, L.P. 41-2280127 Delaware Tower Square Capital Partners III, L.P. 41-2280127 Delaware Washington Gateway Three LLC 41-280129 Delaware Washington Gateway Two LLC* 83-1325764 Delaware Washington Gateway Two LLC* None Delaware Washington Gateway Two LLC None Delaware Barings Capital Loan Strategies Master Fund LP None Cayman Islands Barings Global High Yield Fund None Peopels Republic of China </td <td>MM Direct Private Investment Holding</td> <td>04-1590850</td> <td></td>	MM Direct Private Investment Holding	04-1590850	
MM MD1 Station Member LLC*	MM CM Holding LLC		
MM MD2 Station Member LLC* 04.1590850 Delaware MM REED District Landco Member LLC None Delaware MM Subline Borrower LLC 04.1590850 Delaware MM Subline Borrower LLC 04.1590850 Delaware Washington Fine LLC 04.1590850 Delaware Ten Fan Pier Boulevard LLC 04.1590850 Delaware Tower Square Capital Partners III, L.P. 0.1590850 Delaware Tower Square Capital Partners III, L.P. 41.2280127 Delaware Toward Square Capital Partners III, L.P. 41.2280129 Delaware Washington Gateway Three LLC 04.1590850 Delaware Washington Gateway Two LLC* 83.1325764 Delaware Washington Gateway Two LLC* 83.1325764 Delaware MALLC Debt Participations LLC 83.1325764 Delaware Barings Affiliates & Funds: None Cayman Islands Barings Global High Yield Fund None Peoples Republic of China Barings Global High Yield Fund 71-101814 Delaware Wood Creek Venture Fund LLC 47-3790192 Massachusetts <	MM Debt Participations LLC		
MMV Climate Technology Fund GP* 04-1590850 Delaware MM RED District Landeo Member LLC None Delaware Washington Pine LLC 04-1590850 Delaware Washington Pine LLC 04-1590850 Delaware Ten Fan Pier Boulevard LLC 35-2553915 Delaware Tower Square Capital Partners III, L.P. 41-2280127 Delaware Tower Square Capital Partners III, L.P. 41-2280129 Delaware Tarilside MM Member LLC* 04-1590850 Delaware Washington Gateway Three LLC 04-1590850 Delaware Washington Gateway Three LLC 32-0574045 Delaware Washington Gateway Two LLC* 83-1325764 Delaware Washington Gateway Two LLC* None Delaware Barings Affiliates & Funds: None Delaware Barings Lilc Sunday Three LLC None Cayman Islands Barings Global High Yield Fund None Peoples Republic of China Barings Global High Yield Fund Ti-1018134 Delaware Wood Creek Venture Fund LLC 04-1590850 Delaware	MM MD1 Station Member LLC*	04-1590850	Delaware
MM REED District Lance Member LLC None Delaware	MM MD2 Station Member LLC*	04-1590850	Delaware
MM Subline Borrower LLC 04-1590850 Delaware Washington Pine LLC 04-1590850 Delaware Ten Fan Pier Bei Boulevard LLC 04-1590850 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 Three LLC 04-1590850 Delaware Washington Gateway Two LLC* 83-1325764 Delaware MALIC Debt Participations LLC None Delaware MALIC Debt Participations LLC None Delaware Barings Affiliates & Funds: Barings China Aggregate Bond Private Securities Investment Fund None Cayman Islands Barings Global High Yield Fund None Peoples Republic of China Barings Global High Yield Fund 47-3790192 Massachusetts Wood Creek Venture Fund LLC 04-1590850 Delaware Barings Relates Affiliates & Funds: Barings China Aggregate Bond Private Securities Investment Fund Delaware	MMV Climate Technology Fund GP*	04-1590850	Delaware
Washington Pine LLC 04-1590850 Delaware Ten Fan Pier Boulevard LLC 35-2553915 Delaware Tower Square Capital Partners III, L.P. 41-2280127 Delaware Tower Square Capital Partners III, L.P. 41-2280129 Delaware Trailside MM Member LLC* 04-1590850 Delaware Washington Gateway Three LLC 04-1590850 Delaware Washington Gateway Two LLC* 83-1325764 Delaware Washington Gateway Two LLC* 83-1325764 Delaware MALIC Debt Participations LLC None Delaware Barings Affiliates & Funds: None Cayman Islands Barings China Aggregate Bond Private Securities Investment Fund None Peoples Republic of China Barings Global High Yield Fund 47-3790192 Massachusetts Great Lakes II LLC* 71-1018134 Delaware Wood Creek Venture Fund LLC 04-1590850 Delaware Barings California Mortgage Fund IV None California	MM REED District Landco Member LLC	None	Delaware
Ten Fan Pier Boulevard LLC 35-2553915 Delaware	MM Subline Borrower LLC	04-1590850	Delaware
Tower Square Capital Partners III, L.P.	Washington Pine LLC		Delaware
Tower Square Capital Partners IIIA, L.P. Trailside MM Member LLC* Washington Gateway Three LLC Washington Gateway Two LLC* Washington Gateway Two LLC* Washington Gateway Two LLC* None MALIC Debt Participations LLC None Barings Affiliates & Funds: Babson Capital Loan Strategies Master Fund LP Barings China Aggregate Bond Private Securities Investment Fund Barings Global High Yield Fund Great Lakes II LLC* Wood Creek Venture Fund LLC Barings Rall Estate Affiliates & Funds: Barings California Mortgage Fund IV None Cayman Islands Peoples Republic of China Pe	Ten Fan Pier Boulevard LLC	35-2553915	Delaware
Trailside MM Member LLC* Washington Gateway Three LLC Washington Gateway Three LLC Washington Gateway Two LLC* What It Compare the	Tower Square Capital Partners III, L.P.	41-2280127	Delaware
Washington Gateway Three LLC Washington Gateway Two LLC* Washington Gateway Two LLC* MALIC Debt Participations LLC Barings Affiliates & Funds: Babson Capital Loan Strategies Master Fund LP Barings China Aggregate Bond Private Securities Investment Fund Barings Global High Yield Fund Great Lakes II LLC* Wood Creek Venture Fund LLC Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None Barings Global High Sield Fund Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None Cayman Islands Cayman Islands Ansachusetts Affiliates Delaware Delaware Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV	Tower Square Capital Partners IIIA, L.P.	41-2280129	Delaware
Washington Gateway Two LLC* MALIC Debt Participations LLC None Barings Affiliates & Funds: Babson Capital Loan Strategies Master Fund LP Barings Cloina Aggregate Bond Private Securities Investment Fund Barings Global High Yield Fund Great Lakes II LLC* Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None 83-1325764 None Delaware Cayman Islands Cayman Islands Peoples Republic of China Massachusetts Delaware 1-1018134 Delaware Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV	Trailside MM Member LLC*		
MALIC Debt Participations LLC Barings Affiliates & Funds: Babson Capital Loan Strategies Master Fund LP Barings China Aggregate Bond Private Securities Investment Fund Barings Global High Yield Fund Great Lakes II LLC* Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None Delaware Avone Cayman Islands Peoples Republic of China Massachusetts Affiliates Affiliates & Funds: Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV	Washington Gateway Three LLC	32-0574045	Delaware
Barings Affiliates & Funds: Babson Capital Loan Strategies Master Fund LP Barings China Aggregate Bond Private Securities Investment Fund Barings Global High Yield Fund Barings Global High Yield Fund Great Lakes II LLC* Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None Cayman Islands Peoples Republic of China Massachusetts Plantage (118134) Delaware Dela	Washington Gateway Two LLC*	83-1325764	Delaware
Babson Capital Loan Strategies Master Fund LP Barings China Aggregate Bond Private Securities Investment Fund Barings Global High Yield Fund Great Lakes II LLC* Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None Cayman Islands Peoples Republic of China Massachusetts Plantage China Aggregate Bond Private Securities Investment Fund A7-3790192 Massachusetts Delaware Delaware Delaware Cayman Islands Peoples Republic of China Massachusetts Delaware Delaware Cayman Islands Peoples Republic of China Massachusetts Delaware Delaware Cayman Islands Affiliates Massachusetts Delaware Delaware California	MALIC Debt Participations LLC	None	Delaware
Barings China Aggregate Bond Private Securities Investment Fund Barings Global High Yield Fund Great Lakes II LLC* Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None Peoples Republic of China Massachusetts Delaware 04-1590850 Delaware None California			
Barings China Aggregate Bond Private Securities Investment Fund Barings Global High Yield Fund Great Lakes II LLC* Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None Peoples Republic of China Massachusetts Delaware 04-1590850 Delaware None California	Babson Capital Loan Strategies Master Fund LP	None	
Great Lakes II LLC* Wood Creek Venture Fund LLC Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None Delaware 04-1590850 Delaware California		None	Peoples Republic of China
Wood Creek Venture Fund LLC Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None California	Barings Global High Yield Fund	47-3790192	
Barings Real Estate Affiliates & Funds: Barings California Mortgage Fund IV None California	Great Lakes II LLČ*	71-1018134	Delaware
Barings California Mortgage Fund IV None California	Wood Creek Venture Fund LLC	04-1590850	Delaware
	Barings Real Estate Affiliates & Funds:		
	Barings California Mortgage Fund IV	None	California
	Barings Umbrella Fund LÜX SCSp SICAV RAIF*	None	Luxembourg

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

	Federal Tax ID NAIC Co Code	State of Domicile
Calgary Railway Holding LLC	82-2285211	Delaware
Combrook PRS Holdings LLC	82-3307907	Delaware
Cornerstone California Mortgage Fund I LLC	95-4207717	California
Cornerstone 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 II LLC	61-1750537	Massachusetts
Cornerstone Permanent Mortgage Fund III LLC	35-2531693	Massachusetts
Cornerstone Permanent Mortgage Fund IV LLC	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 - Avalon Spain	04-1590850	Delaware
GIA EU Holdings LLC	04-1590850	Delaware
Landmark Manchester Holdings LLC	81-5360103	Delaware
MMLIC Debt Participations LLC	13-1935920	Delaware
MM Brookhaven Member LLC	04-1590850	Delaware
MM Ascend Mtg. Lending LLC	04-1590850	Delaware
MM Kannapolis Industrial Member LLC*	04-1590850	Delaware
MM East South Crossing Member LLC	04-1590850	Delaware
MM Horizon Savannah Member LLC*	04-1590850	Delaware
MM Horizon Savannah Member II 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
Salomon Brothers Commercial Mortgage Trust 2001-MM	None	Delaware
Three PW Office Holding LLC	81-5273574	Delaware
Trailside MM Member II LLC	04-1590850	Delaware
Unna, Dortmund Holding LLC	82-3250684	Delaware
Washington Gateway Apartments Venture LLC*	45-5401109	Delaware
West 37th Street Hotel LLC*	88-3861481	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
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^{*}This entity is owned by another or multiple entities in the group. Please refer to Sch Y Part 1A for the ownership and percentage information.

	Federal Tax ID NAIC Co Code	State of Domicile
	TWING CO COUC	ome of Domesie
MassMutual Select T. Rowe Price Retirement 2015 Fund	82-3382389	Massachusetts
	82-3396442	Massachusetts
MassMutual Select T. Rowe Price Retirement 2025 Fund	82-3417420	Massachusetts
	82-3430358	Massachusetts
	82-3439837	Massachusetts
	82-3451779	Massachusetts
	82-3472295	Massachusetts
	82-3481715	Massachusetts
	82-3502011	Massachusetts
	82-3525148	Massachusetts
MassMutual Select T. Rowe Price Retirement Balanced Fund	82-3533944	Massachusetts
MML Series Investment Funds:		
1 7	46-4257056	Massachusetts
MML Series Investment Funds II:		
•	47-3529636	Massachusetts
	47-3544629	Massachusetts
MassMutual RetireSMART Funds:		
	27-1933380	Massachusetts
	27-1932769	Massachusetts
	46-3289207	Massachusetts
	47-5326235	Massachusetts
	45-1618155	Massachusetts
	45-1618222	Massachusetts
	03-0532464	Massachusetts
	45-1618262	Massachusetts
	45-1618046	Massachusetts
	45-1618046	Massachusetts
	04-3212054	Massachusetts
	04-3556992	Massachusetts
	04-3277549	Massachusetts
1	04-3539084	Massachusetts
	04-3539083	Massachusetts
	01-0821120	Massachusetts
	04-3512590	Massachusetts
11	04-3512589	Massachusetts
	03-0532475	Massachusetts
	04-3512596	Massachusetts
	04-3464165	Massachusetts
	92-1441036	Massachusetts
	45-1618222	Massachusetts
	04-3584138	Massachusetts
	04-3557000	Massachusetts
MassMutual Select T Rowe Price Retirement 2065 Fund	92-1427882	Massachusetts

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

	Federal Tax ID NAIC Co Code	State of Domicile
MassMutual Small Cap Growth Equity Fund	04-3464205	Massachusetts
MassMutual Small Cap Opportunities Fund	04-3424705	Massachusetts
MassMutual Small Cap Value Equity Fund	02-0769954	Massachusetts
MassMutual Strategic Bond Fund	26-0099965	Massachusetts
MassMutual Clinton Municipal Credit Opportunities Fund	93-4168848	Massachusetts
MassMutual Clinton Municipal Fund	93-4190918	Massachusetts
MassMutual Clinton Short-Term Municipal Fund	93-4193313	Massachusetts

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

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. 0000	. 0000							HITPS LLC	DE	NI A		Ownership		MMLIC	. [
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. 0000	. 0000							EM Opportunities LLC	DE	NI A	Company	Ownership	100.000	MMLIC	. [
. 0000			I						1	1					1	
. 0000 MassMutual Ventures US IV GP, LLC DE NIA Company	. 0000							MassMutual MCAM Insurance Company, Inc	VT	NIA		Ownership	100.000	MMLIC	. [
	1		I						1	1					1	
. 0000 MassAMutual Ventures US IV GP, LLC DE NIA Massachusetts Mutual Ascend Ownership											1				. [
	. 0000		<u></u>	<u> </u>	<u> </u>			MassMutual Ventures US IV GP, LLC	DE	NIA	Massachusetts Mutual Ascend	Ownership	1.000	MMLIC		

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											Type	If			-
											of Control	Control			
											(Ownership,	is		Is an	
						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	auired?	
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	'					,	MassMutual Ventures US IV. L.P.	DE	NIA	MassMutual Ventures US IV GP. LLC	Ownership	100.000	MMLIC		
. 0000		l					MassMutual Ventures US IV LLC	DE	NIA	MassMutual Ventures US IV. L.P	Ownership	100.000	. MMLIC		
										Massachusetts Mutual Life Insurance	·				
. 0000							MassMutual Ventures Europe/APAC I GP, LLC	DE	NI A	Company	Ownership	100.000	. MMLIC		
. 0000							MassMutual Ventures Europe/APAC GP, L.P	CYM	NIA	MassMutual Ventures Europe/APAC I GP, LLC	Ownership	100.000	. MMLIC		
										MassMutual Ventures Europe/APAC I GP, L.P.					
. 0000							MassMutual Ventures Europe/APAC I L.P	CYM	NIA		Ownership	100.000	. MMLIC		
. 0000							MassMutual Ventures Southeast Asia III LLC .	DE	NIA	MassMutual Ventures Europe/APAC I L.P	Ownership	100.000	. MMLIC		
							100 C	0.01		MassMutual Ventures Southeast Asia III LLC		400.000			
. 0000							MMV Digital I LLC	CYM	NIA		Ownership	100.000	MMLIC		
. 0000							Counterpointe Sustainable Advisors LLC	DE	NIA	Massachusetts Mutual Life Insurance	Ownership	100.000	MAR IC		
. 0000							CSA Intermediate Holdco LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
. 0000							Counterpointe Trust Services LLC	DE	NIA	CSA Intermediate Holdco LLC	Ownership	100.000	MMI IC		
. 0000							CP PACE LLC	DE	NIA	CSA Intermediate Holdco LLC	Ownership	100.000	MMLIC		
. 0000							CSA Employee Services Company LLC	DE	NIA	CSA Intermediate Holdco LLC	Ownership	100.000	MMLIC		
. 0000							Counterpointe Sustainable Real Estate II LLC	DE	NIA	CSA TITTETINEUTATE HOTICO LLC	owner strip	100.000	. MINIETO		
. 0000							Counterpointe oustamable hear Estate 11 EEC	DE	NIA	CSA Intermediate Holdco LLC	Ownership	100.000	MMLIC		
. 0000							Counterpointe Energy Solutions II LLC	DE	NIA	CSA Intermediate Holdco LLC	Ownership	100.000	MM IC		
. 0000							Counterpointe Energy Solutions (CA) II LLC .	DE	NIA	Counterpointe Energy Solutions II LLC	Ownership	100.000	MMLIC		
. 0000							Counterpointe Energy Solutions (FL) II LLC .	DE	NIA	Counterpointe Energy Solutions II LLC	Ownership	100.000	MMLIC		
. 0000							Counterpointe Energy Solutions (IL) ILC	DE	NIA	Counterpointe Energy Solutions II LLC	Ownership.	100.000	MMLIC		
. 0000							Loop-Counterpointe PACE LLC	DE	NIA	Counterpointe Energy Solutions (IL) LLC	Ownership	100.000	MMI IC		
. 0000							Counterpointe Energy Services LLC	DE	NIA	CSA Intermediate Holdco LLC	Ownership.	100.000	MMLIC		
. 0000							Southerpoints Energy convisce LES			Massachusetts Mutual Life Insurance	omici dirip.		· · · · · · · · · · · · · · · · · · ·		
. 0000							JFIN Parent LLC	DE	NIA	Company	Ownership	100.000	. MMLIC		
. 0000			27-0105644				Jefferies Finance LLC	DE	NIA	JFIN Parent LLC	Ownership	50.000	. MMLIC		1
. 0000							JFIN GP Adviser LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	. MMLIC		
. 0000							Jefferies MM Lending LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	. MMLIC		
. 0000							Jefferies Credit Partners LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	. MMLIC		
. 0000							Apex Credit Partners LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	. MMLIC		
. 0000							Jefferies Credit Management LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	. MMLIC		
. 0000							JCM GP I LLC	DE	NIA	Jefferies Credit Management LLC	Ownership	100.000	. MMLIC		
. 0000							JCP Direct Lending CLO 2022 LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	9.900	MMLIC		
							Jefferies Direct Lending Europe SCSp SICAV-			l	<u></u>				
. 0000							RAIF	LUX	NIA	Jefferies Credit Partners LLC	Ownership	9.900	MMLIC		
. 0000							Jefferies Credit Management Holdings LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	9.900	MMLIC		
. 0000							JDLF GP (Europe) S.a.r.l	LUX	NI A	Jefferies Credit Partners LLC	Ownership	100.000	. MMLIC		
. 0000							JFAM GP LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	. MMLIC		
. 0000							JFAM GP LP	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	. MMLIC		
. 0000							Jefferies Direct Lending Fund C LP	DE	NIA	JFAM GP LP	Ownership	100.000	. MMLIC		
. 0000							Jefferies DLF C Holdings LLC	DE	NIA	Jefferies Direct Lending Fund C LLC	Ownership	100.000	. MMLIC		
. 0000							Jefferies Direct Lending Fund C SPE LLC	DE	NIA	Jefferies DLF C Holdings LLC	Ownership	100.000	. MMLIC		
. 0000							JDLF II GP LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	. MMLIC		
. 0000							JDLF II GP LP	DE	NIA	JDLF II GP LLC	Ownership	100.000	MMLIC		
. 0000							Jefferies Direct Lending Fund II C LP	DE	NIA	JDLF II GP LP	Ownership	100.000	. MMLIC		
. 0000							Jefferies DLF 2 C Holdings LLC	DE	NIA NIA	Jefferies Direct Lending Fund II C LP Jefferies DLF 2 C Holdings LLC	Ownership	100.000	MMLIC		
							Jefferies Direct Lending Fund II C SPE LLC				0 m 10 1 0 m 1 p 1				
. 0000							JDLF III GP LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	. MMLIC		
. 0000							JDLF III GP LP	DE	NIA	JDLF III GP LLC	Ownership	100.000	. MMLIC		

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						Name of Securities		D	Relation-		Board,	Owner-		SCA	'
		NAIC				Exchange	Names of	Domi-	ship to		Management,	ship		Filing	'
Group		Company	ID	Federal		if Publicly Traded (U.S. or	Names of Parent, Subsidiaries	ciliary Loca-	Reporting	Directly Controlled by	Attorney-in-Fact, Influence,	Provide Percen-	Ultimate Controlling	Re- guired?	
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	Croup Hanne						Jefferies Direct Lending Fund III C LP	DE	NIA	JDLF III GP LP	Ownership	100.000	MMLIC		
. 0000							JCP Direct Lending CLO 2023-1 LLC	DE	NI A	Jefferies Credit Partners LLC	Ownership	100.000	MMLIC		
. 0000							JCP Direct Lending CLO 2023 Ltd	JEY	NI A	JCP Direct Lending CLO 2023 Ltd	Ownership	100.000	MMLIC		. !
. 0000							JCP GP I LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	MMLIC		. !
. 0000							Jefferies Private Credit BDC Inc	MD	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		. !
. 0000							JCP Funding 2024 LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							Jefferies Senior Lending LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver Holdings II LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Co-Issuer Corporation	DE	NIA	Jefferies Finance LLC	Owner Ship	100.000	MMLIC		
. 0000		l					JFIN Europe GP, S.a.r.I.	LUX	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							Jefferies Finance Europe, S.L.P.	LUX	NI A	JFIN Europe GP, S.a.r.I.	Ownership	100.000	MMLIC		
. 0000							Jefferies Finance Europe, SCSp	LUX	NI A	JFIN Europe GP, S.a.r.I.	Ownership	100.000	MMLIC		. '
. 0000							Jefferies Finance Business Credit LLC	DE	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		!
. 0000							JFIN Business Credit Fund I LLC	DE	NIA	Jefferies Finance Business Credit LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Funding 2021 LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN LC Fund LLC JFIN Revolver CLO 2017 Ltd	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver CLO 2017 Ltd	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver CLO 2017-11 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver CLO 2018 Ltd.	CYM	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver CLO 2019 Ltd.	CYM	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver CLO 2019-II Ltd	CYM	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		. !
. 0000							JFIN Revolver CLO 2020 Ltd	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		. !
. 0000							JFIN Revolver CLO 2021-II Ltd	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		. !
. 0000							JFIN Revolver CLO 2021-V Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver CLO 2022-II Ltd	CYM	NIA NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver CLO 2022-III Ltd	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver CLO 2022-IV LLC	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver Fund, L.P.	DE	NI A	Jefferies Finance LLC	Ownership	90.000	MMLIC		,
. 0000							JFIN Revolver Funding 2021 Ltd	DE	NI A	Jefferies Finance LLC	Ownership	100.000	MMLIC		. '
. 0000							JFIN Revolver Funding 2021 III Ltd	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		. '
. 0000							JFIN Revolver Funding 2021 IV Ltd	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver Funding 2022-1 Ltd	BMU	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000		······					JFIN Revolver SPE1 2022 LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver SPE3 2022 LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JFIN Revolver SPE4 2022 Ltd.	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JCP Private Loan Management GP LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							JCP Private Loan Management LP	DE	NIA	JCP Private Loan Management GP LLC	Ownership	100.000	MMLIC		
. 0000							Beauty Brands Acquisition Holdings LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
. 0000							Beauty Brands Acquisition LLC	DE	NIA	Beauty Brands Acquisition Holdings LLC	Ownership	100.000	MMLIC		. '
. 0000							Beauty Brands Acquisition Intermediate LLC .	DE	NIA	Beauty Brands Acquisition LLC	Ownership	100.000	MMLIC		
0005		ĺ						DE		Beauty Brands Acquisition Intermediate LLC		40			'
. 0000							Forma Brands, LLC	DE	NIA	IFIN December 11.0	Ownership	100.000	MMLIC		
. 0000							Apex Credit Holdings LLC	DE	NIA	JFIN Parent LLC	Ownership	100.000	MMLIC		
. 0000		l					JFIN CLO 2012 Ltd	CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
. 5000							VI III VEV EVIO ETU		1817	TAPON OF OUT E HOTUINGS LLO	ooh		mm=1V		1

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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	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 CLO 2014 Ltd	CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
. 0000							JFIN CLO 2014-II Ltd	CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
. 0000							JFIN CLO 2015 Ltd	CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
. 0000							JFIN CLO 2015-II Ltd	CYM	NIA	Apex Credit Holdings LLC	Ownership	85.000	MMLIC		
. 0000							JFIN CLO 2016 Ltd	CYM	NIA	Apex Credit Holdings LLC	Ownership	100.000	MMLIC		
. 0000							JFIN CLO 2017 Ltd	CYM	NI A	Apex Credit Holdings LLC	Ownership		MMLIC		
. 0000							JFIN CLO 2017-II Ltd	CYM	NI A	Apex Credit Holdings LLC	Ownership		MMLIC		
. 0000							Tomorrow Parent, LLC	DE	NI A	JFIN Parent LLC	Ownership		MMLIC		
. 0000							Custom Ecology Holdco, LLC	DE	NI A	JFIN Parent LLC	Ownership	100.000	MMLIC		
0000			86-2294635		1		Olida ada Haldiana Inc	DE	UIP	Massachusetts Mutual Life Insurance	Ownership		MMLIC		
. 0000		63312					Glidepath Holdings Inc.			Company	Ownership		MMLIC		
. 0435	Massachusetts Mut Life Ins Co	63312	13-1935920				MassMutual Ascend Life Insurance Company	0H	UIP	Glidepath Holdings Inc.	•				
. 0000	Massachusetts Mut Life Ins Co	93661	31-1422717				AAG Insurance Agency, LLC	KY	NI A	MassMutual Ascend Life Insurance Company .	Ownership	100.000	MMLIC		
. 0435	Massachusetts Mut Life Ins Co	93661	31-1021738 31-1395344				Annuity Investors Life Insurance Company	0H	IA	MassMutual Ascend Life Insurance Company .	Ownership	100.000	MMLIC		
. 0000			31-1395344				MM Ascend Life Investor Services, LLC	0H	NI A	MassMutual Ascend Life Insurance Company .	Ownership		MMLIC		
. 0000			26-3260520				MM Ascend Mortgage Lending LLC	0H	UDP	MassMutual Ascend Life Insurance Company . MassMutual Ascend Life Insurance Company .	Ownership	100.000	MMLIC		
	W	67083	45-0252531								Ownership		MMLIC		
. 0435	Massachusetts Mut Life Ins Co	6/083	45-0252531				Manhattan National Life Insurance Company	0H	RE	Manhattan National Holding LLC Massachusetts Mutual Life Insurance	Uwnersnip	100.000	MWLIC		
. 0000							MassMutual Mortgage Lending LLC	DE	NI A	Company	Ownership		MMLIC		
. 0000							massmataar mortgage Estrating EES			Massachusetts Mutual Life Insurance	owner our p				
. 0000			04-1590850				MM Copper Hill Road LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000							MMV CTF I GP LLC	DE	NI A	Company	Ownership		MMLIC		
							MassMutual Ventures Climate Technology Fund	I							
. 0000							LP	DE	NI A	MMV CTF I GP LLC	Ownership	100.000	MMLIC		
. 0000							MM Direct Private Investments Holding LLC	DE	NI A	Massachusetts Mutual Life Insurance Company	Ownership		MMLIC		
. 0000							MM Direct Private Investments UK Limited	GBR	NIA	MM Direct Private Investments Holding LLC	Ownership		MMI IC		
. 0000							min birect i i ivate i iivestilients uk Liilitteu	ubi1		Massachusetts Mutual Life Insurance	Owner Sirrp		WINIE TO		
. 0000		l					DPI-ACRES Capital LLC	DE	NI A	Company	Ownership		MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000							DPI-ARES Mortgage Lending LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000							MM Investment Holding	CYM	NI A	Company	Ownership	100.000	MMLIC		
. 0000							MMIH Bond Holdings LLC	DE	NI A	MM Investment Holding	Ownership	99.610	MMLIC		
. 0000			26-0073611				MassMutual Asset Finance LLC	DE	NI A	C.M. Life Insurance Company	Ownership	0.400	MMLIC		
. 0000			26-0073611				MassMutual Asset Finance LLC	DE	NI A	MM Investment Holding	Ownership	99.600	MMLIC		
. 0000			32-0546197				MMAF Equipment Finance LLC 2017-B	DE	NI A	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
. 0000			83-3722640				MMAF Equipment Finance LLC 2019-A	DE	NI A	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
. 0000							MMAF Equipment Finance LLC 2019-B	DE	NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		
							MMAF Equipment Finance LLC 2020-A	DE		MassMutual Asset Finance LLC			IMMLIC		
. 0000							MMAF Equipment Finance LLC 2020-B		NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		
. 0000							MMAF Equipment Finance LLC 2021-A MMAF Equipment Finance LLC 2022-A	DE	NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		
. 0000							MMAF Equipment Finance LLC 2022-A	DE	NIA	MassMutual Asset Finance LLC	Ownership		MMLIC		l
. 0000							MMAF Equipment Finance LLC 2022-B	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
. 0000			04-2443240				MML Management Corporation	DE	NIA	MM Investment Holding	Ownership		MMLIC	YES	
. 0000			04-2443240				MassMutual International Holding MSC, Inc	MA	NIA	MML Management Corporation	Owner ship		MMLIC	IE0	
. 0000			04-3548444				MassMutual Holding MSC, Inc	MA	NIA	MML Management Corporation	Ownership		MMLIC		
. 0000			U4-3341/U/				massmutuar fiurumy moo, mic		IVI A	mmi manayement corporation	OMIGI SITP		WWWLIV		

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											Type	If			
											of Control	Control			
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						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Dami	ship					Filing	
								Domi-	- 1		Management,	ship			
_		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)	/ *
										Massachusetts Mutual Life Insurance					
. 0000							MML CM LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
. 0000							Blueprint Income LLC	NY	NI A	MML CM LLC	Ownership	100.000	MMLIC		
. 0000							Flourish Holding Company LLC	DE	NI A	MML CM LLC	Ownership	100.000	MMLIC		
. 0000							Flourish Insurance Agency LLC	DE	NIA	Flourish Holding Company LLC	Ownership	100.000	MMLIC		
. 0000		l	.				Flourish Digital Assets LLC	DE	NIA	Flourish Holding Company LLC	Ownership	100.000	MMLIC	.	
. 0000							Flourish Financial LLC	DE	NIA	Flourish Holding Company LLC	Ownership	100.000	MMLIC		
. 0000							Flourish Technologies LLC	DE	NIA	Flourish Holding Company LLC	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			. 04–3356880				MML Distributors LLC	MA	NIA	Company	Ownership	99.000	MMLIC	.	[l
. 0000			. 04-3356880				MML Distributors LLC	MA	NIA	MassMutual Holding LLC	Ownership	1.000	MM_IC		
. 5550							S.Sti ibutoio ELO			Massachusetts Mutual Life Insurance					
. 0000							MML Investment Advisers, LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
. 0000						***************************************	THINE THROUGHOTT NAVIOUTO, LEO	DL		Massachusetts Mutual Life Insurance	omici dirip				
. 0000			. 46-3238013				MML Strategic Distributors, LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
							Time of a cogress of the coron, and the coron of the coro	52		Massachusetts Mutual Life Insurance					
. 0000			. 06-1563535	2881445			The MassMutual Trust Company, FSB	CT	NIA	Company	Ownership	100.000	MMLIC	YES	
			1				MML Private Placement Investment Company I.			Massachusetts Mutual Life Insurance					
. 0000		l	. 04-1590850				LLC	DE	NIA	Company	Ownership	100.000	MMLIC	.	
										Massachusetts Mutual Life Insurance					
. 0000			. 04-1590850				MML Private Equity Fund Investor LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
. 0000			. 04-1590850				MML Private Equity Fund Investor LLC	DE	NIA	Baring Asset Management Limited	Management	0.000	MMLIC		
							Time Tittato Equity Fana Tittotor EED Titting	52		Massachusetts Mutual Life Insurance					
. 0000			04-1590850				MM Private Equity Intercontinental LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
			1							Massachusetts Mutual Life Insurance					
. 0000			. 45-2738137				Pioneers Gate LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			. 04-2854319	2392316			MassMutual Holding LLC	DE	NI A	Company	Ownership	100.000	MMLIC	YES	
. 0000			. 37-1732913				Fern Street LLC	DE	NI A	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000							Low Carbon Energy Holding	GBR	NIA	MassMutual Holding LLC	Ownership	49.000	MMLIC		
. 0000							Sleeper Street LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000		l	46-2252944				Haven Life Insurance Agency, LLC	DE	NIA	MassMutual Holding LLC	Ownership.	100.000	MMLIC	.	
. 0000			82-2932156			***************************************	GASL Holdings LLC	DE	NIA	MassMutual Holding LLC	Ownership	11.300	MM_IC		
. 0000			. 82-2932156				GASL Holdings LLC	DE	NIA	Barings LLC	Board	0.000	MMI IC		
. 0000			. 36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	10.500	MMLIC		
. 0000			. 36-4868350				Barings Asset-Based Income Fund (US) LP Barings Asset-Based Income Fund (US) LP	DE	NIA	C.M. Life Insurance Company	Ownership/Influence	1.030	MMLIC		
											• •				
. 0000			. 36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	Barings LLC	Management	0.000	MMLIC		
0000							Barings Perpetual European Direct Lending	1.110/		Massachusetts Mutual Life Insurance		400 000	188.10		
. 0000			·				Fund	LUX	NI A	Company	Ownership/Influence	100.000	MMLIC	· [
. 0000							Barings Perpetual European Direct Lending	LUX	NIA	Barings LLC	Influence	0.000	MML IC		
. 0000							Fund	LUX	NIA	Massachusetts Mutual Life Insurance	Influence	0.000	MMLIC		
0000			. 88-0916548				Desires Francisc Consulting Frank II	DE	NIA		Ownership/Influence	71.000	MMLIC		
. 0000							Barings Emerging Generation Fund II			Company					
. 0000			. 88-0916548				Barings Emerging Generation Fund II	DE	NIA	Barings LLC	Influence	0.000	MMLIC		
0000			. 98-1206017				Babson Capital Global Special Situation Credit Fund 2	DE	NIA	MassMutual Holding LLC	Ownership/Influence	29.300	MMLIC		
. 0000			. 38-120601/					UE	NI A	massmutual molding LLC	Ownership/influence	29.300	MWLIC		
. 0000			. 98-1206017				Babson Capital Global Special Situation Credit Fund 2	DE	NIA	C.M. Life Insurance Company	Ownership	1.900	MMLIC		
. 0000			. 30-120001/				Babson Capital Global Special Situation	VE	NIA	o.w. Life insurance company	Owner SITIP	1.900	WWLIG	.	
. 0000			. 98-1206017				Credit Fund 2	DE	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000			. 82-3867745				Barings Global Real Assets Fund LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	38.100	MMLIC	.	
			. 82-3867745 . 82-3867745					DE			Ownership	6.600	MMLIC	.	
. 0000			. 82-386/745				Barings Global Real Assets Fund LP	VE	NIA	C.M. Life Insurance Company	Uwnership	6.600	MWLIC		

13.5

SCHEDULE Y

	PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM														
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											Туре	If			1
											of Control	Control			1
											(Ownership,	is		Is an	1
						Name of Securities			Relation-		Board,	Owner-		SCA	1
						Exchange		Domi-	ship		Management,	ship		Filing	1
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	1
Group		Company	, ID	Federal	0114	(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)	<u> </u>
. 0000			. 82–3867745				Barings Global Real Assets Fund LPBarings Global Special Situations Credit Fund	DE	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000							3	LUX	NIA	MassMutual Holding LLC	Ownership/Influence	16.800	MMLIC		1
							Barings Global Special Situations Credit Fund			• • • • • • • • • • • • • • • • • • • •					
. 0000							3	LUX	NIA	Barings LLC	Management	0.000	MMLIC		'
. 0000			. 38-4010344				Barings North American Private Loan Fund LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	13.800	MMLIC		
. 0000			. 38–4010344				Barings North American Private Loan Fund LP	DE	NI A	Baring Asset Management Limited	Management	0.000	MMLIC		
. 0000			. 06-1597528				MassMutual Assignment Company	NC	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		'
. 0000			. 04-1590850				MassMutual Capital Partners LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000			. 46-4255307				Marco Hotel LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000			. 45-3623262 . 82-4411267				HB Naples Golf Owner LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000			. 82-4411267				Intermodal Holding II LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000							MassMutual Ventures Holding LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000							Crane Venture Partners LLP	GBR	NIA	MassMutual Ventures Holding LLC	Ownership	33.000	MMLIC		
. 0000							MassMutual Ventures Management LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
. 0000							MassMutual Ventures SEA Management Private	02		macomataar voitares noraring LES					
. 0000							Limited	DE	NI A	MassMutual Ventures Management LLC	Ownership	100.000	MMLIC		
										MassMutual Ventures SEA Management Private					1
. 0000							MMV UK/SEA Limited	GBR	NIA	Limited	Ownership	100.000	MMLIC		
. 0000							MassMutual Ventures India Private Limited	IND	NIA	MassMutual Ventures SEA Management Private Limited	Ownership	100.000	MMLIC		1
. 0000							MassMutual Ventures Southeast Asia I LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
. 0000							MassMutual Ventures Southeast Asia II LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
. 0000							MassMutual Ventures UK LLC	DE	NI A	MassMutual Ventures Holding LLC	Ownership.		MM IC		
. 0000			47-1296410				MassMutual Ventures US I LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership		MMLIC		
. 0000							MassMutual Ventures US II LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
. 0000							MassMutual Ventures US III LLC	DE	NI A	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		. '
. 0000							MM Catalyst Fund LLC	DE	NI A	MassMutual Holding LLC	Ownership	100.000	MMLIC		'
. 0000							MM Catalyst Fund II LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000			. 04–1590850				MM Rothesay Holdco US LLC	DE	NI A	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000							Rothesay Limited	GBR	NIA	MM Rothesay Holdco US LLC	Ownership	48.800	MMLIC		'
. 0000							Rothesay Mortgages Limited	GBR	NIA	Rothesay Limited	Ownership	100.000	MMLIC		
. 0000							Rothesay Life Plc	GBR	NIA	Rothesay Limited	Ownership	100.000	MMLIC		
. 0000							Rothesay MA No.1 Limited	GBR	NIA NIA	Rothesay Life PLC	Ownership	100.000	MMLIC		
. 0000							Rothesay MA No.4 Limited	GBR	NIA	Rothesay Life PLC	Ownership	100.000	MMLIC		
. 0000							LT Mortgage Financing Limited	GBR	NIA	Rothesay Life PLC	Ownership	100.000	MMLIC		
. 0000							Rothesay Property Partnership 1 LLP	GBR	NIA	Rothesay Life PLC	Ownership.		MMLIC		
. 0000							Rothesay Foundation	GBR	NIA	Rothesay Limited	Ownership		MMLIC		
. 0000							Rothesay Pensions Management Limited	GBR	NIA	Rothesay Limited	Ownership	100.000	MMLIC		
. 0000							Rothesay Asset Management UK Limited	GBR	NIA	Rothesay Limited	Ownership	100.000	MMLIC		
. 0000							Rothesay Asset Management Australia Pty Ltd	AUS	NIA	Rothesay Asset Management UK Limited	Ownership	100.000	MMLIC		. '
. 0000							Rothesay Asset Management North America LLC	DE	NIA	Rothesay Asset Management UK Limited	Ownership	100.000	MMLIC		. '
. 0000			. 04-1590850				MML Investors Services, LLC	MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
. 0000			. 04-1590850				MML Insurance Agency, LLC	MA	NIA	MML Investors Services, LLC	Ownership	100.000	MMLIC		· · · · · · · · · · · · · · · · · · ·
. 0000			. 41–2011634				MMLISI Financial Alliances, LLC	DE	NIA	MML Investors Services, LLC	Ownership	100.000	MMLIC		
. 0000			. 47-1466022				LifeScore Labs, LLC	MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		····· '
. 0000			. 45-4000072				MM Asset Management Holding LLC	MA	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		<u> </u>

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											Type	If			
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											(Ownership,	is		Is an	
						Name of Securities			Relation-		Board.	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NIAIO					N 6		- 1						
		NAIC				if Publicly Traded	Names of	ciliary	to	5: " 6 . " 11	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			. 51-0504477				Barings LLC	MA	NI A	MassMutual Holding LLC	Ownership		. MMLIC		
							Baring Asset Management (Asia) Holdings								
. 0000			. 98-0524271				Limited	HKG	NI A	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	100.000	MMLIC		
. 0000							Baring Asset Management Korea Limited	K0R	NIA	Baring Asset Management (Asia) Limited	Ownership		MMLIC		
1			1				Barings Investment Management (Shanghai)				L				
. 0000							Limited	HKG	NIA	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC		
			1				Barings Overseas Investment Fund Management			Barings Investment Management (Shanghai)		46			
. 0000			-				(Shanghai) Limited	HKG	NIA	Limited	Ownership	100.000	MMLIC		
							D	T110.1		Baring Asset Management (Asia) Holdings		400.000	188 10		
. 0000			. 98-0457707				Baring SICE (Taiwan) Limited	TWN	NIA	Limited	Ownership		MMLIC		
0000							D : 0: Dt 141	000	A11.4	Baring Asset Management (Asia) Holdings		400 000	188 10		
. 0000							Barings Singapore Pte. Ltd	SGP	NI A	Limited	Ownership	100.000	MMLIC		
0000			00 0000440				D	IDAI	A11.4	Baring Asset Management (Asia) Holdings		400 000	188 10		
. 0000			. 98-0236449				Barings Japan Limited	JPN	NI A	Limited	Ownership	100.000	MMLIC		
0000							B : A A I: IIII: 0 B. IAI	AUS	A11.4	Baring Asset Management (Asia) Holdings		100.000	MM-IC		
. 0000							Barings Australia Holding Company Pty Ltd		NI A	Limited	Ownership				
. 0000							Barings Australia Pty Ltd	AUS	NIA	Barings Australia Holding Company Pty Ltd	Ownership	100.000	MMLIC		
0000							Barings Australia Real Estate Holdings Pty	4110	A11.4	D : 110		400 000	MM-IC		
. 0000							LTG	AUS	NI A	Barings LLC	Ownership	100.000	. MMLIC		
0000			44 0045050				D :	4110	A11.4	Barings Australia Real Estate Holdings Pty		400 000	188 10		
. 0000			. 14-0045656				Barings Australia Real Estate Pty Ltd	AUS	NIA	Ltd	Ownership	100.000	MMLIC		
0000			. 98-0457456				Barings Australia Property Partners Holdings	4110	A11.4	D : 4 4 1: D 15 4 D 141			MM-IC		
. 0000			. 98-045/456				Pty Ltd	AUS	NI A	Barings Australia Real Estate Pty Ltd Barings Australia Property Partners	Ownership	100.000	. MMLIC		
0000							Davings Australia Assat Management Dtv Ltd	AUS	NIA		Ownership		MMLIC		
. 0000							Barings Australia Asset Management Pty Ltd .	AUS	NIA	Holdings Pty Ltd Barings Australia Property Partners	Ownersnip	100.000	. MINILIU		
. 0000							Barings Australia Property Partners Pty Ltd	AUS	NI A	Holdings Pty Ltd	Ownership		MMLIC		
. 0000							Barings Australia Structured Finance Holdings		NIA	nordings Pty Ltd	owner snip		. MIVILIO		
. 0000							Pty Ltd	AUS	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Australia Structured Finance Pty Ltd			Barings Australia Structured Finance	Owner strip		WWLTO		
. 0000			1				Daringo hastraria otructurcu i malice i ty Ltu	AUS	NIA	Holdings Pty Ltd	Ownership		MMLIC		
. 0000			1						NIA	Barings Australia Structured Finance Pty	owner strip		WWILTO		
. 0000			1				Gryphon Capital Partners Pty Ltd	AUS	NIA	Ltd	Ownership		MMLIC		
. 0000			1				Gryphon Capital Management Pty Ltd	AUS	NIA	Gryphon Capital Partners Pty Ltd	Owner Ship		MMLIC		
1			1						NIA		Ownership	100.000	MMLIC		
. 0000							Gryphon Capital Investments Pty Ltd	AUS		Gryphon Capital Partners Pty Ltd					
. 0000			. 80-0875475				Barings Finance LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000			-				BCF Europe Funding Limited	IRL	NI A	Barings Finance LLC	Ownership	100.000	. MMLIC		
. 0000							BCF Senior Funding LLC	DE	NI A	Barings Finance LLC	Ownership	100.000	MMLIC		
			1				BCF Senior Funding Designated Activity			la		46			
. 0000			-				Company	IRL	NIA	Barings Finance LLC	Ownership	100.000	. MMLIC		
. 0000							Barings Real Estate Acquisitions LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
. 0000			. 04-3238351				Barings Securities LLC	DE	NI A	Barings LLC	Ownership		MMLIC		
. 0000			. 98-0437588				Barings Guernsey Limited	GGY	NIA	Barings LLC	Ownership		MMLIC		
. 0000							Barings Europe Limited	GBR	NIA	Barings Guernsey Limited	Ownership		MMLIC		
. 0000			.				Barings Asset Management Spain SL	ESP	NI A	Barings Europe Limited	Ownership		MMLIC		
. 0000			.				Baring France SAS	FRA	NIA	Barings Europe Limited	Ownership		MMLIC		
			1	1			Baring International Fund Managers (Ireland)	1							
. 0000			.				Limited	IRL	NIA	Barings Europe Limited	Ownership		MMLIC		

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											Туре	If			
											of Control	Control			
											(Ownership,	is		ls an	
						Name of Securities		l	Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
0		NAIC	ID.			if Publicly Traded	Names of Parent, Subsidiaries	ciliary	to	Discotto Controllo diber	Attorney-in-Fact,	Provide	I liking at a Compton liin a	Re-	
Group Code	Group Name	Company Code	ID Number	Federal RSSD	CIK	(U.S. or International)	Or Affiliates	Loca- tion	Reporting Entity	Directly Controlled by (Name of Entity/Person)	Influence, Other)	Percen- tage	Ultimate Controlling Entity(ies)/Person(s)	quired? (Yes/No)	*
. 0000	Gloup Name	Code	Number	KOOD	CIR	international)	Barings GmbH	DEU	NIA	Barings Europe Limited	Ownership	100.000	MMLIC	(165/110)	
. 0000							Barings Italy S.r.I.	ITA	NIA	Barings Europe Limited	Ownership	100.000	MM_IC		
. 0000							Barings Sweden AB	SWE	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
. 0000							Barings Netherlands B.V.	NLD	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
. 0000			98-0432153				Barings (U.K.) Limited	GBR	NIA	Barings Europe Limited	Ownership	100.000	MMI IC		
. 0000							Barings Switzerland Sàrl	CHE	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
. 0000			98-0241935				Baring Asset Management Limited	GBR	NI A	Barings Europe Limited	Ownership	100.000	MMLIC		
. 0000							Barings European Direct Lending 1 GP LLP	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000			98-0457328				Baring International Investment Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000			98-0457586				Baring Fund Managers Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000							BCGSS 2 GP LLP	GBR	NI A	Baring Fund Managers Limited	Ownership	100.000	MMLIC		
. 0000			98-0457578				Baring Investment Services Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000							Barings Core Fund Feeder GP S.à.r.l	LUX	NI A	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000							Barings Investment Fund (LUX) GP S.à. r.I .	LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000							Barings BME GP S.à.r.I.	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000							Barings GPC GP S.à. r.l	LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000							Barings European Core Property Fund GP Sàrl	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	. MMLIC		
. 0000							Barings Umbrella Fund (LUX) GP S.à.r.l	LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000							GPLF4(S) GP S.à r. I	LUX	NIA NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000							PREIF Holdings Limited Partnership BMC Holdings DE LLC	DE	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
. 0000			04-3238351	3456895			Barings Real Estate Advisers Inc.	CA	NIA	Barings LLC	Ownership		MMLIC		
. 0000			04-0200001	0400030			Dailings hear Estate Advisers inc	Un		Massachusetts Mutual Life Insurance	Owner Sirrp		I WWILL TO		
. 0000			81-4065378				Remington L & W Holdings LLC	DE	NI A	Company	Ownership/Influence	19.900	. MMLIC		
. 0000			81-4065378				Remington L & W Holdings LLC	DE	NI A	Barings LLC	Influence	0.000	MMLIC		
. 0000							Aland Royalty GP, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Alaska Future Fund GP, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BAI Funds SLP, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BAI GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Baring Asset-Based Income Fund (US) GP, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings CMS Fund GP, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Infiniti Fund Management LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Hotal Opportunity Venture LCB LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
. 0000							Barings Hotel Opportunity Venture I GP, LLC Baring Investment Series LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Emerging Generation Fund GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Emerging Generation Fund GP II, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings ERS PE Emerging Manager III GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Global Investment Funds (U.S.)			Duringo LEO	owner on p		WHE TO		
. 0000			04-1590850				Management LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings CLO Investment Partners GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Core Property Fund GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings DAPPLF1 Rated Feeder, G.P	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Direct Lending GP Ltd	CYM	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000							Barings Global Energy Infrastructure	D=		.		400 000	IIII 10		
. 0000							Advisors, LLC	DE	NIA	Barings LLC	Ownership	100.000	. MMLIC		
. 0000							GP IIC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
							VI , LLV	UL	NI /\	Dai mgo LLV	νπιιοι σιΠμ		mmL1V		

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1	2	3	4	5	6	7	8	9	10	11	12 Type of Control	13 If Control	14	15	16
											(Ownership,	is		Is an	1
						Name of Securities			Relation-		Board,	Owner-		SCA	1
						Exchange		Domi-	ship		Management,	ship		Filing	1
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	1
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	1
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	*
0000			88-3792609				Barings Centre Street CLO Equity Partnership	DE	NIA	Massachusetts Mutual Life Insurance		00.400	188 10		1
. 0000			88-3/92609				Barings Centre Street CLO Equity Partnership	DE	NIA	Company	Ownership/Influence	22.100	MMLIC		
. 0000			88-3792609				IP	DE	NIA	Barings LLC	Management	0.000	MML IC		1
. 0000							Barings Global Real Assets Fund GP, LLC	DE	NIA	Barings LLC	Ownership		MMLIC		l
. 0000							Barings GPSF LLC	DE	NIA	Barings LLC	Ownership		MMLIC		
							Barings North American Private Loan Fund								
. 0000							Management, LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
							Barings North American Private Loan Fund II								1
. 0000							Management, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000							Barings North American Private Loan Fund III	DE	NIA	Barings LLC	Ownership		MMLIC		1
. 0000							Management, LLC	DE	NIA	Barings LLC	Uwnersnip		MMLIC		
. 0000							4 GP (Delaware) LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		1
. 0000							Barings - MM Revolver Fund GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Real Estate European Value Add Fund			Dut mgo LLo	owner on p				
. 0000							II Feeder LLC		NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BMT RE Debt Fund GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					1
. 0000			84-5063008				Barings Small Business Fund LLC	DE	NIA	Company	Ownership	36.980	MMLIC		
. 0000			84-5063008				Barings Small Business Fund LLC	DE	NI A	Barings LLC	Management	0.000	MMLIC		
. 0000							Barings TYIDF2 Rated Feeder GP LLC	DE	NI A	Barings LLC	Ownership		MMLIC		
. 0000			98-0536233				Benton Street Advisors, Inc	CYM	NIA	Barings LLC	Ownership		MMLIC		
							Barings Active Passive Equity Direct EAFE								1
. 0000							LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BHOVI Incentive LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BIG Real Estate Fund GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BIG Real Estate Incentive I LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BIG Real Estate Incentive II LLC	DE	NI A	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BRECS VII GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							BREDIF GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							CREF X GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000			04-1590850				Great Lakes III GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Lake Jackson LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings Emerging Markets Blended Fund I GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		1 '
. 0000							Barings EPLF4 Rated Feeder GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		1
. 0000			41–2280126				Mezzco III LLC	DE	NIA	Barings LLC	Ownership	99.300	MMLIC		
. 0000			80-0920285				Mezzco IV LLC	DE	NIA	Barings LLC	Ownership	99.300	MMLIC		1
. 0000			00-0320200				Mezzco Australia II LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							RECSA-NY GP LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000			98-1624360				Barings CLO 2022-1	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		1
. 0000			30-1024000				Barings CL0 2022-1	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		1
. 0000							Dai ingo 020 2022 11			Massachusetts Mutual Life Insurance	THI TOOLOG				
. 0000					l		Amherst Long Term Holdings, LLC	DE	NI A	Company	Ownership	24.500	MMLIC		l '
				1	1		g			Massachusetts Mutual Life Insurance	,				"
. 0000							Enroll Confidently, Inc.	DE	NI A	Company	Ownership	25.000	MMLIC		
		1			I					Massachusetts Mutual Life Insurance					1 '
. 0000			04-3313782				MassMutual International LLC	DE	NIA	Company	Ownership	100.000	MMLIC	YES	
. 0000							MassMutual Solutions LLC	DE	NIA	MassMutual International LLC	Ownership	100.000	MMLIC		
. 0000							Haven Technologies Asia Limited	HKG	NIA	MassMutual Solutions LLC	Ownership	100.000	MMLIC		['

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Comparison Com	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Name of Securities Packet												Type	If			
NAME Company Factor Company													Control			
Name of Securings Name Company Name of Securings Exchange Prince Substitute Name of Prince Name of Prince Substitute Name of Prince Name o															ls an	
March Code Congress Code Congress Code							Name of Conurition			Dolotion						
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													Percen-			
100	Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	*
27-50/085 Substitute Security Securi	. 0000							Yunfeng Financial Group Limited	HKG	NIA	MassMutual International LLC	Ownership	24.900	MMLIC		
SST 1 section in Perturn Associated by March Street Section SST 1 section in Perturn Associated SST											Massachusetts Mutual Life Insurance					
SST National Name & Local Color SST Name	. 0000			27-3576835				MassMutual External Benefits Group LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
1000 2000								·			Massachusetts Mutual Life Insurance					
SSN 1.500000	. 0000							5301 Wisconsin Avenue Associates, LLC	DC	NI A	Company	Ownership	99.000	MMLIC		
000 04-59889 05 3-36 Street LLC											Massachusetts Mutual Life Insurance					
100 0 150,000 100 7 20 Street List List C. 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	. 0000							5301 Wisconsin Avenue GP, LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
Color											Massachusetts Mutual Life Insurance					
200	. 0000			04-1590850				100 w. 3rd Street LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
1000 1000											Massachusetts Mutual Life Insurance					
000 01-99995 03 South Trans L CE NA 00-000 04-0000 04-00000 04-00000 04-00000 04-000000 04-000000 04-000000 04-000000 04-0000000 04-0000000 04-0000000 04-0000000 04-0000000000	. 0000			82-2432216				300 South Tryon Hotel LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
Anna											Massachusetts Mutual Life Insurance					
March Retarnine Fuel II followerspall	. 0000			04-1590850				300 South Tryon LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
											Massachusetts Mutual Life Insurance					
Description	. 0000							Almack Mezzanine Fund II Unleveraged LP	GBR	NIA		Ownership/Influence	72.900	MMLIC		
Barrings Affordable Nation (Northage Ford 1 1.0								Barings Affordable Housing Mortgage Fund I			Massachusetts Mutual Life Insurance					
U.C. Barings Affordable Receing Nortgage Fuel 11 U.C. Ni.A. Startings LC Contravir Contr	. 0000							LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
Barrings Affordable Passing Nortrage Find Life Massedwests Mutal Life Insurance								Barings Affordable Housing Mortgage Fund I								
Decomposition Decompositio	. 0000								DE	NI A		Management	0.000	MMLIC		
Description								Barings Affordable Housing Mortgage Fund II			Massachusetts Mutual Life Insurance					
DOC	. 0000			61-1902329				LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
Description								Barings Affordable Housing Mortgage Fund II								
DOC B5-00586S BLC	. 0000			61-1902329					DE	NI A		Management	0.000	MMLIC		
Description								Barings Affordable Housing Mortgage Fund III			Massachusetts Mutual Life Insurance					
DOD SF-3056683	. 0000			85-3036663					DE	NI A	Company	Ownership	100.000	MMLIC		
Barings Construction Lending Fund LP								Barings Affordable Housing Mortgage Fund III								
Barings Construction Lending Fund LP	. 0000			85-3036663				LLC	DE	NI A		Management	0.000	MMLIC		
Barings Energing Generation Fund I P DE NIA Massachusetts Mutual Life Insurance Ownership Sp. 70 ML C																
Dood Bar ings Energing Generation Fund I P DE NIA Company Connership Sar ings Energing Generation Fund I P DE NIA Company Connership Sar ings Energing Generation Fund DE NIA Company	. 0000							Barings Construction Lending Fund LP	DE	NI A		Ownership	75.000	MMLIC		
Massachusetts Mutual Life Insurance Massachusetts Mutual Life Insu																
December	. 0000							Barings Emerging Generation Fund II LP	DE	NI A		Ownership	39.700	MMLIC		
December																
Barings Emerging Markets Corporate Bond Fund IRL NIA. Company Ownership/Influence 0.000 MMLIC										NI A						
Description	. 0000			84-3784245				Barings Emerging Generation Fund, LP	DE	NI A	Barings LLC	Management	0.000	MMLIC		
Barings Emerging Markets Corporate Bond Fund IRL NIA Barings LLC Massachusetts Mutual Life Insurance Massachusetts Matual Life Insurance Massachusetts M								Barings Emerging Markets Corporate Bond Fund	1		Massachusetts Mutual Life Insurance					
	. 0000								IRL	NI A	Company	Ownership/Influence	0.000	MMLIC		
0000								Barings Emerging Markets Corporate Bond Fund								
0000 0000	. 0000								IRL	NI A	Barings LLC	Ownership	45.900	MMLIC		
0000 Barings Hotel Opportunity Venture LP DE. NIA Barings LLC Management 0.000 MMLIC Massachusetts Mutual Life Insurance 0.000 MMLIC Massachusetts Mutual Life Insurance 0.000 MMLIC 0.000 M											Massachusetts Mutual Life Insurance					
0000 85-3449260 Barings Real Estate Debt Income Fund LP DE NIA Company Ownership/Influence 72.530 MM_IC Ownership/Influence	. 0000							Barings Hotel Opportunity Venture I LP	DE	NI A	Company	Ownership/Influence	65.000	MMLIC		
0000 85-3449260 Barings Real Estate Debt Income Fund LP DE NIA Company Ownership/Influence 72.530 MM_IC Ownership/Influence	. 0000							Barings Hotel Opportunity Venture I LP	DE	NIA	Barings LLC	Management	0.000	MMLIC		
0000 0000														·		
. 0000	. 0000			85-3449260				Barings Real Estate Debt Income Fund LP	DE	NI A		Ownership/Influence	72.530	MMLIC		
. 0000										NI A				MMLIC		
Barings Real Estate European Value Add I SCSp .0000 Barings Real Estate European Value Add I SCSp Barings Real Estate European Value Add I SCSp								I								
0000 0000	. 0000			00-0440200						ΝΙ Λ		managoniciit	0.000	INVILIO		
Barings Real Estate European Value Add SCSp	0000]	Ì	l			Daringo noar Estato European varue nuu 1 300k		NIA		Ownership /Influence	42 000	MM IC		
.0000	. 0000		l				•••••	Barings Doal Estata European Value Add 1 900-		NIA	Ouiiipariy	owner Sirry/ IIII ruerice	42.900	IVIIVIL I U		
Barings Real Estate European Value Add SCSp	0000]	Ì	l			Dailingo near Estate European value Aud 1 505p		NIIA	0 H Life	0	4 000	100		
	. 0000							Devines Deal Catata Commun. Value Add 1 000	GBH	NI A	U.W. LITE Insurance Company	Uwnership	4.800	MINILIU		
	0000]	Ì	l			parings hear Estate European value Add I SCSp	000			l., .	0.000	188 10		
UVVV NIA Barings LLC Management UVVV MMLIC MANAgement UVVV MMLIC MANAgement UVVV MMLIC MANAgement UVVV MMLIC MANAgement UVVV MMLIC MANAgement UVVV MMLIC UVVV MMLIC UVVV MMLIC UVVV MMLIC UVVV MMLIC UVVV MMLIC UVVV UVVV	. 0000								GBR	NIA	Barings LLC	Management	0.000	MMLIC		

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											Type	If			
											of Control	Control			
											(Ownership,	is		Is an	
						Name of Securities			Relation-		Board.	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	*
Code	Group Name	Code	Nullibel	NOOD	CIK	international)	Of Allillates	tion	Littly	Massachusetts Mutual Life Insurance	Other)	lage	Littity(les)/Ferson(s)	(165/110)	
. 0000							Barings Small Business Fund, L.P	DE	NIA	Company	Ownership	33.600	MMLIC		
. 0000							Dai mgs smarr business runu, c.r	UL	NIA	Massachusetts Mutual Life Insurance	owner strip		INNETO		
. 0000							Barings U.S. High Yield Fund	DE	NIA	Company	Ownership	30.090	MMLIC		
							Sar rigo oro: rigit rrora rana ri			Massachusetts Mutual Life Insurance					
. 0000		l	l				Barings-MM Revolver Fund LP	DE	NIA	Company	Ownership/Influence		MMLIC		
. 0000		l	l				Barings-MM Revolver Fund LP	DE	NIA	MM Ascend	Ownership/Influence	14.000	MMLIC		
							. J			Massachusetts Mutual Life Insurance					
. 0000			45-2632610				Cornerstone Permanent Mortgage Fund LLC	MA	NI A	Company	Ownership	100.000	MMLIC		
. 0000			45-2632610				Cornerstone Permanent Mortgage Fund LLC	MA	NI A	Barings LLC	Management	0.000	MMLIC		
							0 0			Massachusetts Mutual Life Insurance					
. 0000							CREA Ridge Apartments, LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000							London Office JV Holdings LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000							Riverwalk MM Member, LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
. 0000			83-0560183				Aland Royalty Holdings LP	DE	NI A	MassMutual Holding LLC	Ownership/Influence	26.690	MMLIC		
. 0000			83-0560183				Aland Royalty Holdings LP	DE	NI A	Barings LLC	Management	0.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			81-2244465				Chassis Acquisition Holding LLC	DE	NI A	Company	Ownership/Influence	30.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			81-4258759				CRA Aircraft Holding LLC	DE	NI A	Company	Ownership/Influence	40.000	MMLIC		
. 0000			81-4258759				CRA Aircraft Holding LLC	DE	NI A	Barings LLC	Influence	0.000	MMLIC		
0000							FID II-14: I II O	DE	NII A	Massachusetts Mutual Life Insurance	Ownership/Influence	29.000	MMLIC		
. 0000							EIP Holdings I, LLC	DE	NI A	Company Massachusetts Mutual Life Insurance	Ownership/influence	29.000	MMLIG		
. 0000			46-5460309				Red Lake Ventures. LLC	DE	NI A	Company	Ownership/Influence	31.520	MMLIC		
. 0000			46-5460309				Red Lake Ventures, LLC	DE	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000			46-0687392				Validus Holding Company LLC	DE	NIA	Barings LLC	Ownership	40.440	MMLIC		
. 0000			04-1590850				SBNP SIA II LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000			04-1590850				SBNP SIA III LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
. 0000							Barings European Real Estate Debt Income Fund	DE	NIA		Uwnersnip	100.000	MWLIC		
0000							Barings European Heai Estate Debt Income Fund	LUX	NI A	Massachusetts Mutual Life Insurance	Ownership/Influence	54.900	MMLIC		
. 0000							Barings European Real Estate Debt Income Fund	LUX	NIA	Company	Owner Ship/Intiluence	54.900	MINIL I U		
. 0000					1		Dailings European Real Estate Debt Income Fund	LUX	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000								LUX	NIA	Massachusetts Mutual Life Insurance	ini ruence	0.000	MINICIO		
. 0000			37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NI A	Company	Ownership/Influence	76 .630	MMLIC		
. 0000			37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NIA	C.M. Life Insurance Company	Ownership.	3.800	MMLIC		
. 0000			37-1506417				Babson Capital Loan Strategies Fund, L.P	DE	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000			37-1300417				Danson Capital Loan Strategies rung, L.P	UĽ	NI A	Massachusetts Mutual Life Insurance	manayement	0.000	INIVIL I U		
. 0000							Barings US High Yield Bond Fund	IRL	NI A	Company	Ownership/Influence	0.000	MMLIC		
. 0000							Barings US High Yield Bond Fund	IRL	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000							Babson CLO Ltd. 2015-I	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		2
. 0000							Babson CLO Ltd. 2015-11	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		3
. 0000							Babson CLO Ltd. 2016-11	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		I J
. 0000							Babson CLO Ltd. 2016-1	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		
								CYM		Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings CLO Ltd. 2017-1		NIA		Influence				
. 0000							Barings CLO 2018-III	CYM	NIA	Barings LLC		0.000	MMLIC		
. 0000							Barings CLO 2018-IV	CYM	NI A	Barings LLC	Influence	0.000	MMLIC		
. 0000			98-1473665				Barings CLO 2019-II	CYM	NI A	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings CLO 2019-III	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		

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											Type	lf			1
											of Control	Control			1
											(Ownership,	is		Is an	1
						Name of Securities			Relation-		Board,	Owner-		SCA	1
						Exchange		Domi-	ship		Management,	ship		Filing	1
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	1
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	1
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	*
. 0000	Group Name	Code	Number	NOOD	OIIX	international)	Barings CLO 2019-IV	CYM	NIA	Barings LLC	Influence	0.000	MMLIC	(163/140)	
. 0000							Barings CLO 2020-1	CYM	NIA	Barings LLC	Influence	0.000	MMI IC		
. 0000							Barings CLO 2020-II	CYM	NI A	Barings LLC	Influence	0.000	MAN IC		
. 0000							Barings CLO 2020-111	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings CLO 2020-IV	CYM	NIA	Barings LLC	Influence	0.000	MM_1C		
. 0000							Barings CLO 2020-1V	CYM	NIA	Barings LLC	Influence	0.000	MM_1C		
. 0000							Barings CLO 2021-1	CYM	NIA	Barings LLC	Influence	0.000	MM_IC		
. 0000							Barings CLO 2021-11	CYM	NIA	Barings LLC	Influence	0.000	MM_IC		
. 0000							Babson Euro CLO 2014-1 BV	NLD	NIA	Barings LLC	Influence	0.000	MM_IC		
. 0000							Babson Euro CLO 2014-1 BV	NLD	NIA	Barings LLC	Influence	0.000	MMLIC		
							Babson Euro CLO 2014-11 BV	NLD	NIA		Influence	0.000	MMLIC		
. 0000										Barings LLC					
. 0000			36-037260H				Barings Euro CLO 2019-I BV	IRL	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings Euro CLO 2019-II BV	IRL	NI A	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings Euro CLO 2020-I DAC	IRL	NI A	Barings LLC	Influence	0.000	MMLIC		
. 0000			37-15576VH				Barings Euro CLO 2021-I DAC	IRL	NI A	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings Euro CLO 2021-II DAC	IRL	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings Euro CLO 2021-III DAC	IRL	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings Euro CLO 2023-II DAC	IRL	NIA	Barings LLC	Influence	0.000	MMLIC		
							Barings Global Energy Infrastructure Fund I			Massachusetts Mutual Life Insurance					1
. 0000			98-1332384				LP	CYM	NI A	Company	Ownership/Influence	91.220	MMLIC		
							Barings Global Special Situations Credit 4			Massachusetts Mutual Life Insurance		07.500			1
. 0000							Delaware	DE	NI A	Company	Ownership	67.500	MMLIC		
. 0000							Barings Global Special Situations Credit 4	DE	NIA	C.M. Life Insurance Company	Ownership.	3.540	MMLIC		1
. 0000							Delaware	DE	NIA	C.M. Life insurance company	Uwnersnip	3.540	MMLIC		
. 0000							Delaware	DE	NI A	Barings LLC	Management	0.000	MMLIC		1
. 0000							Barings Global Special Situations Credit 4	DL	NIA	Massachusetts Mutual Life Insurance	management	0.000	WWILIC		
. 0000							IIIX	LUX	NI A	Company	Ownership	12.500	MMLIC		1
							Barings Global Special Situations Credit 4								
. 0000							LUX	LUX	NIA	C.M. Life Insurance Company	Ownership	0.700	MMLIC		
							Barings Global Special Situations Credit 4								1
. 0000							LUX	LUX	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000							Barings Global Technology Equity Fund	IRL	NI A	Barings LLC	Ownership/Influence	70.780	MMLIC		
. 0000							Barings Global Dividends Champion Fund	IRL	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000							Barings Europe Select Fund	IRL	NI A	Barings LLC	Management	0.000	MMLIC		[]
										Massachusetts Mutual Life Insurance					1
. 0000			87-0977058				Barings Hotel Opportunity Venture	CT	NI A	Company	Ownership/Influence	51.030	MMLIC		[
. 0000			87-0977058				Barings Hotel Opportunity Venture	CT	NI A	Barings LLC	Management	0.000	MMLIC		
							Barings Innovations & Growth Real Estate Fund			Massachusetts Mutual Life Insurance					1
. 0000			86-3661023					DE	NI A	Company	Ownership	29.700	MMLIC		
							Barings Innovations & Growth Real Estate Fund								1
. 0000			86-3661023					DE	NI A	C.M. Life Insurance Company	Ownership	0.400	MMLIC		[]
. 0000							Barings Middle Market CLO 2017-I Ltd & LLC .	CYM	NI A	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings Middle Market CLO 2018-1	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings Middle Market CLO 2019-1	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000			98-1612604				Barings Middle Market CLO Ltd 2021-1	CYM	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000							Barings Middle Market CLO Ltd 2023-1	BMU	NI A	Barings LLC	Influence	0.000	MMLIC		[
. 0000							Barings Middle Market CLO Ltd 2023-II	BMU	NI A	Barings LLC	Influence	0.000	MMLIC		
1 1		1								Massachusetts Mutual Life Insurance	1		1		1 1
. 0000			98-1332384				Barings RE Credit Strategies VII LP	DE	NI A	Company	Ownership/Influence	34.570	MMLIC		

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											of Control	Control			
														lo on	
						N			D. L. C.		(Ownership,	is		ls an	
						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	*
. 0000			98-1332384				Barings RE Credit Strategies VII LP	DE	NI A	Baring Asset Management Limited	Management	0.000	MMLIC		
							Barings Target Yield Infrastructure Debt Fund			Massachusetts Mutual Life Insurance					
. 0000			98-1567942					LUX	NI A	Company	Ownership	18.470	MMLIC		
							Barings Target Yield Infrastructure Debt Fund								
. 0000			98-1567942					LUX	NI A	Baring Asset Management Limited	Management	0.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			81-0841854				Barings CLO Investment Partners LP	DE	NI A	Company	Ownership/Influence	94.370	MMLIC		
. 0000			81-0841854				Barings CLO Investment Partners LP	DE	NI A	Barings LLC	Management	0.000	MMLIC		
							B			Massachusetts Mutual Life Insurance					
. 0000							Barings Euro Value Add II (BREEVA II)	LUX	NI A	Company	Ownership/Influence	29.000	MMLIC		
. 0000							Barings Euro Value Add II (BREEVA II)	LUX	NI A	C.M. Life Insurance Company	Ownership	2.500	MMLIC		
. 0000							Barings Euro Value Add II (BREEVA II)	LUX	NI A	Barings LLC	Management	0.000	MMLIC		
. 0000			87-1262754				Barings Transportation Fund LP	DE	NI A	MassMutual Holding LLC	Ownership/Influence	10.700	MMLIC		
0000			87-1262754				2	DE	NII 4	Massachusetts Mutual Life Insurance		7 000	MMLIC		
. 0000			87-1262754				Barings Transportation Fund LP	DE	NI A	Company	Ownership	7.900	MMLIC		
. 0000							Braemar Energy Ventures I, L.P	DE	NI A	Company	Ownership/Influence	63.600	MMLIC		
. 0000							Braemar Energy Ventures I, L.P.	DE	NIA	C.M. Life Insurance Company	Ownership	1.000	MMLIC		
. 0000							Braemar Energy Ventures I, L.P.	DE	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000							Barings European Core Property Fund SCSp	LUX	NIA	MassMutual Holding LLC	Ownership/Influence	12.590	MMLIC		
. 0000							Barings European Core Property Fund SCSp	LUX	NIA	C.M. Life Insurance Company	Ownership	0.800	MMLIC		
. 0000							Barings European Core Property Fund SCSp	LUX	NIA	Barings Real Estate Advisers LLC	Management	0.000	MMI IC		
. 0000							barrings European core Property Fund 303p	LUX	NIA	Massachusetts Mutual Life Insurance	management	0.000	MWLIC		
. 0000			46-5001122		l		Barings European Private Loan Fund III A	LUX	NIA	Company	Ownership	45 . 150	MM_IC		
. 0000			38-4059932				Benchmark 2018-B2 Mortgage Trust	NY	NIA	Barings LLC	Influence	0.000	MMLIC		
. 0000			2000002				Benchmark 2018-B4	NY	NI A	Barings LLC	Influence	0.000	MMI IC		
. 0000			38-4096530				Benchmark 2018-B8	NY	NI A	Barings LLC	Influence	0.000	MMI IC		
. 0000			20-5578089			•••••	Barings Core Property Fund LP	DE	NI A	MassMutual Holding LLC	Ownership/Influence	24 . 180	MMLIC		
. 0000			20-5578089			•••••	Barings Core Property Fund LP	DE	NI A	Barings Real Estate Advisers LLC	Management	0.000	MMLIC		
. 0000			20 00/0000				Darringo core rroporty rand Li	02		Massachusetts Mutual Life Insurance	mariagomorit				
. 0000			04-1590850		l		DPI Acres Capital SPV LLC	DE	NI A	Company	Ownership	100.000	MMLIC	. [
										Massachusetts Mutual Life Insurance					
. 0000			04-1590850				DPI-ARES Mortgage Lending SPV, LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000							E2E Affordable Housing Debt Fund LLC	DE	NI A	Company	Ownership/Influence	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			37-1708623				Great Lakes III, L.P.	DE	NIA	Company	Ownership/Influence	41.570	MMLIC		
. 0000			37-1708623				Great Lakes III, L.P.	DE	NI A	Barings LLC	Management	0.000	MMLIC		
. 0000			98-1607033				OLA FILLISIAS - Francis IV Cont	LUX	NI A	Massachusetts Mutual Life Insurance	Ownership/Influence	70.000	MMLIC		
							GIA EU Holdings - Emerson JV Sarl	-		Company					
. 0000			98-1607033				GIA EU Holdings - Emerson JV Sarl JPMCC Commercial Mortgage Securities Trust	LUX	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000			38-4041011				2017-JP7	NY	NI A	Barings LLC	Influence	0.000	MMLIC		
. 0000			00 4041011			•••••	JPMDB Commercial Mortgage Securities Trust	141		Dai mgs LEO	TITT delice.		MMLIO		
. 0000			38-4032059		l		2017-C5	NY	NIA	Barings LLC	Influence	0.000	MMLIC	. [
			1]]]		Massachusetts Mutual Life Insurance	1				
. 0000							Martello Re Limited	BMU	NI A	Company	Ownership/Influence	27.450	MMLIC		
			I		[Massachusetts Mutual Life Insurance					
. 0000			04-1590850				Miami Douglas Three MM, LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
0000			07 4004044		[IN DIO Designante On to the AM I I I I I	DE	MI A	Massachusetts Mutual Life Insurance	Ownership	07.000	188 10		
. 0000			87-4021641				MM BIG Peninsula Co-Invest Member LLC	DE	NI A	Company	Uwnersnip	27.000	MMLIC		

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						Name of Securities			Relation-		Board.	Owner-		SCA	ı
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		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	i
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	i l
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	Croup Hame	0000	87-4021641	TROOP	Unit	intomationaly	MM BIG Peninsula Co-Invest Member LLC	DE	NIA	C.M. Life Insurance Company	Ownership	0.800	MM IC	(100/110)	<i></i>
. 0000			07 4021041				min bid reimisura od myest member ELO	DL		Massachusetts Mutual Life Insurance	Owner Strip	0.000	mwL10		
. 0000			04-1590850				MM Direct Private Invetment Holding	DE	NIA	Company	Ownership		MMLIC		i
										Massachusetts Mutual Life Insurance					1
. 0000							MM CM Holding LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					i
. 0000			81-3000420				MM Debt Participations LLC	DE	NIA	Company	Ownership/Influence	100.000	MMLIC		
. 0000			81-3000420				MM Debt Participations LLC	DE	NIA	Barings LLC	Management	0.000	MMLIC		
										Massachusetts Mutual Life Insurance					i
. 0000			04-1590850				MM MD1 Station Member LLC	DE	NIA	Company	Ownership	47.000	MMLIC		
. 0000			04-1590850				MM MD1 Station Member LLC	DE	NIA	C.M. Life Insurance Company	Ownership	3.100	MMLIC		
								DE		Massachusetts Mutual Life Insurance		47.000			ı l
. 0000			04-1590850				MM MD2 Station Member LLC		NIA	Company	Ownership	47.000	MMLIC		
. 0000			04-1590850				MM MD2 Station Member LLC	DE	NI A	C.M. Life Insurance Company	Ownership	3.100	MMLIC		ı · · · · · · · ·
0000			04-1590850				MM/ OL: 4 T 1 5 10D	DE	A.I. A	Massachusetts Mutual Life Insurance	Ownership	99.000	MMLIC		ı l
. 0000			04-1590850				MMV Climate Technology Fund GP	DE	NIA	Company	Ownership	1.000	MMLIC		
. 0000			04-1590850				MMV Climate Technology Fund GP	DE	NIA	Massachusetts Mutual Life Insurance	Ownership	1.000	MMLIC		
. 0000							MM REED District Landco Member LLC	DE	NI A	Company	Ownership	100.000	MM_IC		ı l
. 0000							MM NEED DISTITCT Latingto Melliber LLC	DE	NIA	Massachusetts Mutual Life Insurance	Owner Sirrp	100.000	WWLIG		
. 0000			04-1590850				MM Subline Borrower LLC	DE	NIA	Company	Ownership		MMLIC		ı l
							3001110 50110101 220 11111111111111111111			Massachusetts Mutual Life Insurance					
. 0000			04-1590850				Washington Pine LLC	DE	NIA	Company	Ownership	100.000	MMLIC		i
										Massachusetts Mutual Life Insurance					ı l
. 0000			35-2553915				Ten Fan Pier Boulevard LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
. 0000			41-2280127				Tower Square Capital Partners III, L.P	DE	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000			41-2280127				Tower Square Capital Partners III, L.P	DE	NIA	MassMutual Holding LLC	Ownership/Influence	18.210	MMLIC		
										Massachusetts Mutual Life Insurance					i
. 0000			41-2280129				Tower Square Capital Partners IIIA, L.P	DE	NIA	Company	Ownership/Influence	100.000	MMLIC		
. 0000			41-2280129				Tower Square Capital Partners IIIA, L.P	DE	NIA	Barings LLC	Management	0.000	MMLIC		
										Massachusetts Mutual Life Insurance					i
. 0000			04-1590850				Trailside MM Member LLC	DE	NIA	Company	Ownership	66.970	MMLIC		
. 0000			04-1590850				Trailside MM Member LLC	DE	NI A	C.M. Life Insurance Company	Ownership	7.380	MMLIC		,
0000		1	00 4005704				West-instan Outroop T v 110	D-	AU A	Massachusetts Mutual Life Insurance	0	05.000	MMLIC		,
. 0000		·····	83-1325764				Washington Gateway Two LLC	DE	NIA	Company	Ownership	95.800			,
. 0000			83-1325764				Washington Gateway Two LLC	DE	NIA	C.M. Life Insurance Company	Ownership	4.200	MMLIC	[,
. 0000		1	32-0574045				Washington Gateway Three LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	95.230	MML IC		ı
. 0000			32-05/4045				washington Galeway inree LLC	DE	NIA	Massachusetts Mutual Life Insurance	Ownersnip	95.230	MMLIC		ı · · · · · · · ·
. 0000							MALIC Debt Participations LLC	DE	NIA	Company	Ownership	100.000	MM_IC		i
. 0000							Babson Capital Loan Strategies Master Fund LF			Company	Owner Sirrp		IWWILTO		
. 0000							bubbon bupitur Ebun otrutogreb mubtor rund Er	CYM	NIA	Barings LLC	Management	0.000	MMLIC		i
. 0000							Barings China Aggregate Bond Private			Dui ingo LEO	managoriont		III III		
. 0000		l		I			Securities Investment Fund	CHN	NIA	Barings LLC	Management	0.000	MMLIC		i
. 0000			47-3790192				Barings Global High Yield Fund	MA		Barings LLC	Management	0.000	MMLIC		
							J			Massachusetts Mutual Life Insurance					
. 0000			71-1018134				Great Lakes II LLC	DE	NIA	Company	Ownership	10.600	MMLIC		,
. 0000		[71-1018134				Great Lakes II LLC	DE	NIA	C.M. Life Insurance Company	Ownership	0.980	MMLIC		
		1								Massachusetts Mutual Life Insurance	· ·				ı
. 0000			04-1590850				Wood Creek Venture Fund LLC	DE	NIA	Company	Ownership	40.000	MMLIC		
										· · · · · · · · · · · · · · · · · · ·					

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						Name of Securities			Relation-		Board,	Owner-		SCA	1
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Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	1
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	*
Code	Gloup Name	Code	Number	ROOD	OIIX	international)	Of Allillates	tion	Littly	Massachusetts Mutual Life Insurance	Other)	lage	Littly(les)/i erson(s)	(163/140)	1 '
. 0000							Barings California Mortgage Fund IV	CA	NIA	Company	Ownership	100.000	MML IC		1
. 0000							barrings carriorina wortgage runu iv	0	NIA	Massachusetts Mutual Life Insurance	owner strip	100.000	MWLTO		
. 0000							Barings Umbrella Fund LUX SCSp SICAV RAIF	LUX	NIA	Company	Ownership	24.960	MMLIC		1
. 0000							Barings Umbrella Fund LUX SCSp SICAV RAIF	LUX	NIA	C.M. Life Insurance Company	Ownership.	2.300	MM IC		
. 0000							barrings dilibrerra rund Lox 303p 310AV IIATI	LUX	NIA	Massachusetts Mutual Life Insurance	owner strip	2.300	MWLTO		
. 0000			82-2285211				Calgary Railway Holding LLC	DE	NIA	Company	Ownership	90.000	MMLIC		1
. 0000			02 2200211				bargary marriary noruming LES	DL		Massachusetts Mutual Life Insurance	owner strip		INVELO		
. 0000			82-3307907				Cornbrook PRS Holdings LLC	DE	NIA	Company	Ownership	100.000	MML IC		1
. 0000			02 0001001			***************************************	Corner con The Herdrige LLC			Massachusetts Mutual Life Insurance	omior orrip		mile 10		
. 0000			95-4207717		1		Cornerstone California Mortgage Fund LLC	CA	NIA	Company	Ownership	100.000	MML IC		1
. 3000							SSS. Stone out i forma mor tgago runa 1 LLO	0/1		Massachusetts Mutual Life Insurance		100.000			
. 0000		l	95-4207717		I		Cornerstone California Mortgage Fund II LLC	CA	NIA	Company	Ownership	100.000	MMLIC	1	.1 '
							Cornerstone California Mortgage Fund III LLC			Massachusetts Mutual Life Insurance					
. 0000			95-4207717		I		The state of the s	CA	NIA	Company	Ownership	100 .000	MML IC		1
. 0000			33 4201111					on		Massachusetts Mutual Life Insurance	owner strip		INVELO		
. 0000			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NIA	Company	Ownership	90.000	MMLIC		1
. 0000			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NIA	C.M. Life Insurance Company	Ownership.	5.900	MMLIC		
. 0000			30-2030392				Corner Stone For t Frence Development LLC	UE	NIA	Massachusetts Mutual Life Insurance	Owner Strip	5.900	MWILTO		
. 0000			61-1750537				Cornerstone Permanent Mortgage Fund II	MA	NIA	Company	Ownership	100.000	MMLIC		1
. 0000			61-1750537				Cornerstone Permanent Mortgage Fund II	MA	NIA	Barings LLC	Management	0.000	MMLIC		
. 0000			01-1/3033/				Corner Stone Fermanent mortgage Fund 11	MA	NIA	Massachusetts Mutual Life Insurance	management	0.000	MWILTO		
. 0000							Cornerstone Permanent Mortgage Fund III LLC	MA	NIA	Company	Ownership	100.000	MMLIC		1
. 0000							Corner Storie Fermanent mortgage Fund 111 LLC	MA	NIA	Massachusetts Mutual Life Insurance	Owner Strip	100.000	MWILTO		
. 0000			61-1793735				Cornerstone Permanent Mortgage Fund IV	MA	NIA	Company	Ownership	100.000	MML IC		1
. 0000			01-1/30/00				Corner stone refinalient mortgage rund iv	IMA	NIA	Massachusetts Mutual Life Insurance	owner strip	100.000	MWLTO		
. 0000			20-0348173				CREA/PPC Venture LLC	DE	NIA	Company	Ownership	28.520	MML IC		1
. 0000			20 0040170				OILATTO VOITUIC LLO	DL		Massachusetts Mutual Life Insurance	owner strip	20.020	INVELO		
. 0000			82-2783393				Danville Riverwalk Venture, LLC	DE	NIA	Company	Ownership	94.400	MMLIC		1
. 0000			02-2700000				Danville inverwalk venture, LLC	DL	NIA	Massachusetts Mutual Life Insurance	owner strip	34.400	MWLTO		
. 0000			04-1590850				Euro Real Estate Holdings LLC	DE	NIA	Company	Ownership	50.000	MML IC		1
. 0000			04 1000000				Laro ficar Estate fioralligs LEO	DL		Massachusetts Mutual Life Insurance	owner strip		INVELO		
. 0000			20-3347091				Fan Pier Development LLC	DE	NIA	Company	Ownership	65.000	MML IC		1
. 0000			20-3347091				Fan Pier Development LLC	DE	NIA	C.M. Life Insurance Company	Ownership.	5.850	MMI IC		
. 0000			20-0041031				Tall Flor Development LLO	UL	NIA	Massachusetts Mutual Life Insurance	omioi sirip	0.000	INVILIO		I
. 0000			04-1590850		1		GIA EU Holdings LLC - Avalon Spain	DE	NIA	Company	Ownership	100.000	MML IC		1
							Avaion opain			Massachusetts Mutual Life Insurance	σπιοι σπιρ	100.000	mana_1 V		
. 0000			04-1590850		I		GIA EU Holdings LLC	DE	NIA	Company	Ownership	100.000	MML IC		1
. 3000							a 25 Horaringo EEO			Massachusetts Mutual Life Insurance		100.000			
. 0000			81-5360103		1		Landmark Manchester Holdings LLC	DE	NIA	Company	Ownership	100.000	MMLIC		1
. 0000			13-1935920				MMLIC Debt Participations LLC	DE	NIA	Massachusetts Mutual Ascend	Ownership.	100.000	MMI IC		
			10-1300320				minuto bobt l'alticipations LLC	UL	NIA	Massachusetts Mutual Life Insurance	omioi sirip	100.000	INVILIO		I
. 0000			04-1590850		1		MM Brookhaven Member LLC	DE	NIA	Company	Ownership	95.000	MML IC		1
. 5500							I DI COMINAVOII MONDOI ELO			Massachusetts Mutual Life Insurance	σπιοι σπιρ		mana_1 V		
. 0000			04-1590850		1		MM Ascend Mtg. Lending LLC	DE	NIA	Company	Ownership	100.000	MML IC		1
. 3000										Massachusetts Mutual Life Insurance		100.000			
. 0000		l	04-1590850		I		MM Kannapolis Industrial Member LLC	DE	NIA	Company	Ownership	82.720	MMLIC	1	.1 '
. 0000			04-1590850				MM Kannapolis Industrial Member LLC	DE	NIA	Massachusetts Mutual Ascend	Ownership.	12.280	MMI IC		
. 3000										Massachusetts Mutual Life Insurance					
. 0000		l	04-1590850		I		MM East South Crossing Member LLC	DE	NIA	Company	Ownership	95.000	MMLIC	1	.1 '
			. 1000000							Massachusetts Mutual Life Insurance					
. 0000		1	04-1590850		I		MM Horizon Savannah Member LLC	DE	NIA	Company	Ownership	95.000	MM_IC	1	.1 '
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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			04-1590850				MM Horizon Savannah Member LLC	DE	NI A	C.M. Life Insurance Company	Ownership	3.700	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			04-1590850				MM Horizon Savannah Member II LLC	DE	NI A	Company	Ownership	4.430	MMLIC		
. 0000			04-1590850				MM Horizon Savannah Member II LLC	DE	NI A	C.M. Life Insurance Company	Ownership	0.180	MMLIC		
. 0000			04-1590850				MM Horizon Savannah Member II LLC	DE	NI A	Massachusetts Mutual Ascend	Ownership	0.380	MMLIC		
. 0000			04-1590850				MM National Self-Storage Program Member LLC	DE	NI A	C.M. Life Insurance Company	Ownership	98.000	MMLIC		
. 0000			04-1590850				MM 1400 E 4th Street Member LLC	DE	NI A	C.M. Life Insurance Company	Ownership	96.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			80-0948028				One Harbor Shore LLC	DE	NI A	Company	Ownership	94.990	MMLIC		
. 0000			80-0948028				One Harbor Shore LLC	DE	NI A	C.M. Life Insurance Company	Ownership	5.010	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			04-1590850				Paco France Logistics LLC	DE	NI A	Company	Ownership	100.000	MMLIC		
							Salomon Brothers Commercial Mortgage Trust				l		188.10		
. 0000							2001-MM	DE	NIA	Barings Real Estate Advisers LLC	Influence	0.000	MMLIC		
. 0000			81-5273574				There DW Office Helding HO	DE	ALL A		Ownership	95 . 100	MMLIC		
. 0000			81-52/35/4				Three PW Office Holding LLC	DE	NIA	Company	Ownership	95.100	IMMLIC		
. 0000			04-1590850				Trailside MM Member II LLC	DE	NIA	Company	Ownership	47 . 100	MMLIC		
. 0000			04-1090000				Trainside www wender in LLC	UE	NIA	Massachusetts Mutual Life Insurance	Owner Simp	47 . 100	NINILIO		
. 0000			82-3250684				Unna, Dortmund Holding LLC	DE	NI A	Company	Ownership		MMLIC		
. 0000			02 0200004				office, bot tillula florating LEO	DL		Massachusetts Mutual Life Insurance	Owner Strip		mmL10		
. 0000			45-5401109				Washington Gateway Apartments Venture LLC	DE	NI A	Company	Ownership	95.440	MMLIC		
. 0000			45-5401109				Washington Gateway Apartments Venture LLC	DE	NI A	C.M. Life Insurance Company	Ownership	4.560	MMLIC		
							naomigram datona) npartmonto rontaro 220 m			Massachusetts Mutual Life Insurance					
. 0000			88-3861481				West 37th Street Hotel LLC	DE	NI A	Company	Ownership	93.800	MMLIC		
. 0000			88-3861481			l	West 37th Street Hotel LLC	DE	NI A	C.M. Life Insurance Company	Ownership	6.200	MMLIC	l	
			-							Massachusetts Mutual Life Insurance					
. 0000			51-0529328		0000927972	00	MassMutual Premier Main Street Fund	MA	NI A	Company	Ownership	90.220	MMLIC		
							MassMutual Premier Strategic Emerging Markets			Massachusetts Mutual Life Insurance					
. 0000			26-3229251		0000927972	00	Fund	MA	NI A	Company	Ownership	59.500	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			04-3512593		0000916053	00	MassMutual Select Fundamental Growth Fund	MA	NI A	Company	Ownership	5.330	MMLIC		
										Massachusetts Mutual Life Insurance			188 10		
. 0000			42-1710935		0000916053	00	MassMutual Select Mid-Cap Value Fund MassMutual Select Small Capital Value Equity	MA	NIA	Company	Ownership	29.020	MMLIC		
. 0000			02-0769954		0000916053	00	Fund	MA	NIA	Company	Influence	0.000	MMLIC		
. 0000			02-0709934		0000910055	00	runa	MA	NI A	Massachusetts Mutual Life Insurance	Initiaence	0.000	INVILIC		
. 0000			04-3584140		0000916053	00	MassMutual Select Small Company Value Fund .	MA	NI A	Company	Ownership	18.060	MMLIC		
. 0000			04 0004140		0000010000	ou	MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance	Owner Strip		mmL10		
. 0000			82-3347422		0000916053	00	2005 Fund	MA	NI A	Company	Ownership	10.810	MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
. 0000			82-3355639		0000916053	0Q	2010 Fund	MA	NI A	Company	Influence	0.000	MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
. 0000			82-3382389		0000916053	0Q	2015 Fund	MA	NI A	Company	Influence	0.000	MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
. 0000			82-3396442		0000916053	00	2020 Fund	MA	NI A	Company	Influence	0.000	MMLIC		
0000			00 0447400		0000040050	00	MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance	l	0.000	LINE 10		
. 0000			82-3417420		0000916053	UQ	2025 Fund	MA	NIA	Company	Influence	0.000	MMLIC		
. 0000			82-3430358		0000916053	00	MassMutual Select T. Rowe Price Retirement 2030 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Influence	0.000	MMLIC		
. 0000			02-3430338		0000910003	UV	MassMutual Select T. Rowe Price Retirement	MA	NIA	Massachusetts Mutual Life Insurance	initruence	0.000	INVILIO		
. 0000			82-3439837		0000916053	00	2035 Fund	МΔ	NIA	Company	Influence	0.000	MMLIC		
. 0000			UL-U4U3001		66000 60000	ν ν	2000 i uliu	m/\	NIM	oompany	IIII I UCIICO	0.000	ITITIL I ∨	1	

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											Type	If			
											of Control	Control			
											(Ownership,	is		Is an	
						Name of Securities			Relation-		Board,	Owner-		SCA	
						Exchange		Domi-	ship		Management,	ship		Filing	
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,			Re-	
Craun			ID	Federal			Parent. Subsidiaries			Directly Controlled by		Provide	Liltimata Cantrallina		
Group	Onesia Negre	Company		RSSD	OUZ	(U.S. or	Or Affiliates	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)		tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	
0000			82-3451779		0000916053	00	MassMutual Select T. Rowe Price Retirement	MA	NIA	Massachusetts Mutual Life Insurance	lath	0.000	MM_IC		
. 0000			82-3451779		0000916053	00	MassMutual Select T. Rowe Price Retirement	MA	NIA	Company	Influence	0.000	MMLIC		
. 0000			82-3472295		0000916053	00	2045 Fund	MA	NIA	Company	Influence	0.000	MMLIC		
. 0000			02-04/2230		0000310055	04	MassMutual Select T. Rowe Price Retirement	ma	NIA	Massachusetts Mutual Life Insurance	IIII Tuerice	0.000	WWILTO		
. 0000			82-3481715		0000916053	00	2050 Fund	MA	NI A	Company	Influence	0.000	MMLIC		
			02 0101110			04	MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance	THI GOING		mmL10		
. 0000			82-3502011		0000916053	00	2055 Fund	MA	NIA	Company	Influence	0.000	MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
. 0000			82-3525148		0000916053	0Q	2060 Fund	MA	NI A	Company	Influence	0.000	MMLIC		
							MassMutual Select T. Rowe Price Retirement			Massachusetts Mutual Life Insurance					
. 0000			82-3533944		0000916053	0Q	Balanced Fund	MA	NI A	Company	Influence	0.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			46-4257056				MML Series International Equity Fund	MA	NI A	Company	Influence	100.000	MMLIC		
0000			47 0500000						NII 4	Massachusetts Mutual Life Insurance		0.000	188 10		
. 0000			47-3529636				MML Series II Dynamic Bond Fund	MA	NIA	Company	Influence	0.000	MMLIC		
. 0000			47-3544629				MML Series II Equity Rotation Fund	MA	NI A	Massachusetts Mutual Life Insurance Company	Ownership	97.160	MMLIC		
. 0000			47-3344029				MML Series II Equity notation rund	MA	NIA	Massachusetts Mutual Life Insurance	Owner Strip	97 . 100	. INVILITO		
. 0000			27-1933389		0000916053	00	MassMutual RetireSMART 2035 Fund	MA	NI A	Company	Ownership	3.250	MMLIC		
. 0000			27 1000000		00000100000	ou	massimutuat fictificomatti 2000 fullu			Massachusetts Mutual Life Insurance	Owner strip.	0.200	WWL 10		
. 0000		l	27-1932769		0000916053	00	MassMutual RetireSMART 2045 Fund	MA	NIA	Company	Ownership.	7.380	MMLIC		l l
										Massachusetts Mutual Life Insurance					
. 0000			46-3289207		0000916053	0Q	MassMutual RetireSMART 2055 Fund	MA	NI A	Company	Ownership	20.180	. MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			47-5326235		0000916053	0Q	MassMutual RetireSMART 2060 Fund	MA	NI A	Company	Ownership	36.540	. MMLIC		
										Massachusetts Mutual Life Insurance	l				
. 0000			45-1618155		0000916053	00	MassMutual 20/80 Allocation Fund	MA	NI A	Company	Influence	100.000	MMLIC		
. 0000			45-1618222		0000916053	00	MassMutual 80/20 Allocation Fund	MA	NIA	Massachusetts Mutual Life Insurance	Ownership	00 000	MMLIC		
. 0000			45-1010222		0000916055	00	massmutual 60/20 Allocation Fund	MA	NIA	Company	owner snrp	39.030	. MMLTC		
. 0000			03-0532464		0000916053	00	MassMutual RetireSMART In Retirement Fund	MA	NIA	Company	Ownership	8.500	MMLIC		
. 0000			00 0002404		00000100000	ou	massmatual netheoment in nethement rand			Massachusetts Mutual Life Insurance	Owner Strip.	0.000	WWL 10		
. 0000			45-1618262		0000916053	00	MassMutual 40/60 Allocation Fund	MA	NI A	Company	Influence	100.000	MMLIC		
1			1	1				1		Massachusetts Mutual Life Insurance					
. 0000			45-1618046		0000916053	00	MassMutual 60/40 Allocation Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
			1							Massachusetts Mutual Life Insurance					
. 0000			45-1618046		0000916053	0Q	MassMutual ishares 60/40 Allocation Fund	MA	NI A	Company	Ownership	63.350	. MMLIC		
										Massachusetts Mutual Life Insurance		100			
. 0000			04-3212054		0000916053	0Q	MassMutual Balanced Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
. 0000			04-3556992		0000916053	00	MassMutual Blue Chip Growth Fund	MA	NIA	Massachusetts Mutual Life Insurance	Ownership	100.000	MMLIC		
. 0000			04-3000992		86001 60000	UQ	massmutuai biue onip Growin Fund	MA	NIA	Company	owner snrp	100.000	WWILTU		
. 0000			04-3277549		0000916053	00	MassMutual Core Bond Fund	MA	NI A	Company	Ownership	100.000	MM_IC		
. 0000			0. 02//040			V4	macomataar oore bond runa			Massachusetts Mutual Life Insurance	0 milet 611/p.	100.000			
. 0000			04-3539084		0000916053	0Q	MassMutual Disciplined Growth Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
. 0000			04-3539083		0000916053	00	MassMutual Disciplined Value Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
			1							Massachusetts Mutual Life Insurance					
. 0000			01-0821120		0000916053	0Q	MassMutual Diversified Value Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
0000			04 0540500		0000040050	00			N: *	Massachusetts Mutual Life Insurance		400 000	188 10		
. 0000			04-3512590		0000916053	UQ	MassMutual Equity Opportunities Fund	MA	NIA	Company	Ownership	100.000	MMLIC		

SCHEDULE Y

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	-	Ŭ	·	Ŭ		'		"			Type	If			
											of Control	Control			
											(Ownership,	is		Is an	
						Name of Securities			Relation-		Board.	Owner-		SCA	
								Domi-	ship		Management,			Filing	
						Exchange			- 1			ship			
		NAIC				if Publicly Traded	Names of	ciliary	to		Attorney-in-Fact,	Provide		Re-	
Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-		Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
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			04-3512589		0000916053	00	MassMutual Growth Opportunities Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
							MassMutual Inflation-Protected and Income	l		Massachusetts Mutual Life Insurance					
. 0000			03-0532475		0000916053	00	Fund	MA	NI A	Company	Ownership	99.790	MMLIC		
0000			04 0540500		0000040050	00	W W + 1 W 10 0 W 5 1	l		Massachusetts Mutual Life Insurance		400 000	188 10		
. 0000			04-3512596		0000916053	00	MassMutual Mid Cap Growth Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
0000			04-3464165		0000916053	00			NII 4	Massachusetts Mutual Life Insurance	Ownership	100.000	188.10		
. 0000			04-3464165		0000916053	0Q	MassMutual Premier Diversified Bond Fund MassMutual RetireSMART by JPMorgan 2065 Fund	MA	NI A	Company	Uwnersnip	100.000	MMLIG		
							Massmutual HetireSMAHI by JPMorgan 2065 Fund			Massachusetts Mutual Life Insurance		400 000			
. 0000			92-1441036		0000916053	00		MA	NI A	Company	Ownership	100.000	MMLIC		
. 0000			45-1618222		0000916053	00	W W A L O L A 00/00 AU A: F	MA	NIA	Massachusetts Mutual Life Insurance	Ownership	400 000	188.10		
. 0000			45-1618222		0000916053	0Q	MassMutual Select 80/20 Allocation Fund	MA	NI A	Company	Uwnersnip	100.000	MMLIC		
0000			04-3584138		0000916053	00	MassMutual Select Fundamental Value Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
. 0000			04-3364136		0000910055	0Q	massmutual Select Fundamental value Fund	MA	NIA	Massachusetts Mutual Life Insurance	owner snrp	100.000	MWLTC		
. 0000			04-3557000		0000916053	00	MassMutual Select Overseas Fund	MA	NIA	Company	Ownership	100.000	MALLO		
. 0000			04-3337000		0000910055	04	MassMutual Select T Rowe Price Retirement	MA	NI A	Massachusetts Mutual Life Insurance	owner strip	100.000	MWLIC		
. 0000			92-1427882		0000916053	00	2065 Fund	MA	NI A	Company	Ownership	20 410	MMLIC		
. 0000			JZ 142700Z		0000010000	04	2000 1 unu			Massachusetts Mutual Life Insurance	Owner Strip.	20.410	INVELO		
. 0000			04-3464205		0000916053	00	MassMutual Small Cap Growth Equity Fund	MA	NI A	Company	Ownership	61 320	MMLIC		
. 0000			01 0101200			04	massimataati siiatti sap arsiitti Equity Fana			Massachusetts Mutual Life Insurance	Owner dirip				
. 0000			04-3424705		0000916053	00	MassMutual Small Cap Opportunities Fund	MA	NIA	Company	Ownership	100 .000	MMLIC		
							The second secon			Massachusetts Mutual Life Insurance					
. 0000			02-0769954	l	0000916053	00	MassMutual Small Cap Value Equity Fund	MA	NIA	Company	Ownership	100 .000	MMLIC	l	
										Massachusetts Mutual Life Insurance	•				
. 0000			26-0099965		0000916053	0Q	MassMutual Strategic Bond Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
							MassMutual Clinton Municipal Credit	1		Massachusetts Mutual Life Insurance					
. 0000			93-4168848		0000916053	00	Opportunities Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
								1		Massachusetts Mutual Life Insurance					
. 0000			93-4190918		0000916053	OQ	MassMutual Clinton Municipal Fund	MA	NI A	Company	Ownership	100.000	MMLIC		
							MassMutual Clinton Short-Term Municipal Fund	1		Massachusetts Mutual Life Insurance					
. 0000			93-4193313		0000916053	00		MA	NI A	Company	Ownership	100.000	MMLIC		
								L						<u> </u>	<u> </u>

Asterisk	Explanation
1 Massachusetts Mutual Life Insurance Company owns 14.23% of the affiliated d	ebt of Jefferies Finance LLC
2 Debt investors own .5% and includes only Great Lakes III, L.P	
3 Debt investors own .2% and includes only Great Lakes III, L.P	
3 Debt investors own .2% and includes only Great Lakes III, L.P	

SUPPLEMENTAL EXHIBITS AND SCHEDULES INTERROGATORIES

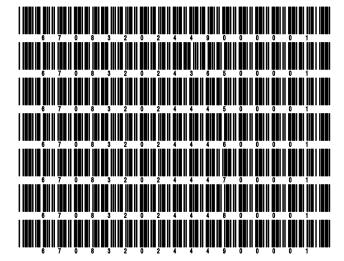
The following supplemental reports are required to be filed as part of your statement filing. However, in the event that your company does not transact the type of business for which the special report must be filed, your response of NO to the specific interrogatory will be accepted in lieu of filing 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. In the case of an ongoing statement of exemption, enter "SEE EXPLANATION" and provide as an explanation that the company is utilizing an ongoing statement of exemption	N/A
	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.	N/A
	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.	

- The data for this supplement is not required to be filed.
 Bar Code:
- Trusteed Surplus Statement [Document Identifier 490]

The data for this supplement is not required to be filed.
 The data for this supplement is not required to be filed.
 The data for this supplement is not required to be filed.
 The data for this supplement is not required to be filed.

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



NONE

SCHEDULE A - VERIFICATION

Real Estate

		1	2
			Prior Year Ended
		Year to Date	December 31
1.	Book/adjusted carrying value, December 31 of prior year		
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition		
	2.2 Additional investment made after acquisition		
3.	Current year change in encumbrances		
4.	Total gain (loss) on disposals		
5.	Deduct amounts received on disposals		
6.	Total foreign exchange change in book/adjusted rying		
7.	Deduct current year's other than temporary impairment 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

Mortgage Loans

	Mortgage Loans		1
		1	2
			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 lest parameter and less mitting less less less less less less less les		
9.	Total foreign exchange change in book value/rectated investment executed attreest the second attreest the		
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

	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	111,926,521	111,899,875
2.	Cost of bonds and stocks acquired		
3.	Accrual of discount	77 , 126	445,982
4.	Unrealized valuation increase/(decrease)		
5.	Total gain (loss) on disposals	21	(725,488)
6.	Deduct consideration for bonds and stocks disposed of	652,406	17,351,705
7.	Deduct amortization of premium	1,208	151,920
8.	Total foreign exchange change in book/adjusted carrying value		
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)	111,350,053	111,926,521
12.	Deduct total nonadmitted amounts	0	
13.	Statement value at end of current period (Line 11 minus Line 12)	111,350,053	111,926,521

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

Barring to	1 Quarter 10	r all Bonds and Prefe	o olock by NAIC	Designation	5	6	7	8
	Book/Adjusted		3	4	Book/Adjusted	Book/Adjusted	Book/Adjusted	o Book/Adjusted
	Carrying Value	Acquisitions	Dispositions	Non-Trading Activity	Carrying Value	Carrying Value	Carrying Value	Carrying Value
	Beginning	During	During	During	End of	End of	End of	December 31
NAIC Designation	of Current Quarter	Current Quarter	Current Quarter	Current Quarter	First Quarter	Second Quarter	Third Quarter	Prior Year
BONDS								
1. NAIC 1 (a)	56,984,661	18,776,664	19,652,641	3,347,489	59,456,173	0	0	56,984,661
2. NAIC 2 (a)	57,844,195	61,933,756	62,000,000	60,550	57,838,501	0	0	57,844,195
3. NAIC 3 (a)	0	0	0	0	0	0	0	0
\ '		0		(2,616)			0	
4. NAIC 4 (a)				, , ,	, ,	0	0	
5. NAIC 5 (a)	468,747	0	(235)	7,755	476,737	0	0	468,747
6. NAIC 6 (a)	0	0		0	0	0	0	
7. Total Bonds	116,924,290	80,710,420	81,652,406	3,413,178	119,395,482	0	0	116,924,290
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	
12. NAIC 5		0	0	0	0	0	0	
13. NAIC 6	0	0	0	0	0	0	0	
14. Total Preferred Stock	0	0	0	0	0	0	0	0
15. Total Bonds and Preferred Stock	116,924,290	80,710,420	81,652,406	3,413,178	119,395,482	0	0	116,924,290

(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

NONE

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 **N O N E**

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

SCHEDULE E - PART 2 - VERIFICATION

(Cash Equivalents)

	(Odon Equivalento)	1	2
		Year To Date	Prior Year Ended December 31
1.	Book/adjusted carrying value, December 31 of prior year	8,267,946	12,521,902
2.	Cost of cash equivalents acquired		
3.	Accrual of discount		
4.	Unrealized valuation increase/(decrease)		0
5.	Total gain (loss) on disposals		450
6.	Deduct consideration received on disposals	81,000,000	172,088,188
7.	Deduct amortization of premium		0
8.	Total foreign exchange change in book/adjusted carrying value	0	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)	8,045,430	8,267,946
11.	Deduct total nonadmitted amounts		0
12.	Statement value at end of current period (Line 10 minus Line 11)	8,045,430	8,267,946

Schedule A - Part 2 - Real Estate Acquired and Additions Made **NONE**

Schedule A - Part 3 - Real Estate Disposed **N O N E**

ortgage Loans Acquired and Additions Made

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 Lo	ng-Term Bo	onds and Stoo	k Sold, Red	deemed or C	Otherwise I	Disposed o	of During t	he Current	Quarter							
1	2	3	4	5	6	7	8	9	10				Carrying Va		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/		Modifie
									Prior Year		Current	Other Than	Adjusted	Change in	Adjusted	Foreign			Stock	Stated	and
									Book/	Unrealized	Year's	Temporary	,	Book	Carrying	Exchange	Realized		Dividends	Con-	SVO
CUSIP					Number of				Adjusted	Valuation	(Amor-	Impairmen		/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	eian	Date	of Purchaser	Stock	eration	Par Value	Cost	Value	(Decrease)	Accretion	nized	13)	Value	Date	Disposal	Disposal	Disposal	Year	Date	Symbo
	Ginnie Mae Pool-POOL #432716	- 5	. 03/01/2024 .	PAYDOWN		105	105	106	105	0	0	0	0	0	105	0	0	0	1	. 06/01/2026	. 1.A
	Ginnie Mae Pool-Pool #447236		. 03/01/2024 .	PAYDOWN		36	36	36		0	0	0	0	0	36	0	0	0	0	. 06/01/2027	1 4
	9. Subtotal - Bonds - U.S. Governme	nte	. 00/01/2024 .	TATIONIN		141	141	142	141	0	0		0	0	141	0	0	0	1	XXX	XXX
	Freddie Mac Gold Pool-FG C63727	1110	. 03/01/2024 .	PAYDOWN		90	90	89	85	0	5	0		0	90	0	0	0	1	. 02/01/2032	
			. 03/01/2024 .	PAYDOWN			-				5	0	5			J0	0		1		1.4
	Freddie Mac Gold Pool-FG C67180					95	95 .	96	93	0	2		2	0	95	0	0		1	. 05/01/2032 .	. I.A
	Freddie Mac Gold Pool-FG C66477		. 03/01/2024 .	PAYDOWN		128	128	129	123	0	5	0	5	0	128	0	0		1	. 04/01/2032 .	. I.A
	Freddie Mac Gold Pool-FG C67402		. 03/01/2024 .	PAYDOWN		37	37	37	35	0	2	0	2	0	37	0 	0	···········	0	. 05/01/2032 .	. I.A
	Freddie Mac Gold Pool-FG C68243		. 03/01/2024 .	PAYDOWN		50	50	51	27	J0	24	0	24	0	50	J0	0	0	1	. 06/01/2032	. 1.A
	Freddie Mac Gold Pool-FG C78989		. 03/01/2024 .	PAYDOWN		412	412 .	422	344	J0	68	0	68	0	412	J0	0	ļ	4	. 05/01/2033 .	. 1.A
	Freddie Mac Gold Pool-FG C00860		. 03/01/2024 .	PAYDOWN		178	178	179	158	0	20	0	20	0	178	J0	0	0	2	. 09/01/2029 .	. 1.A
	Freddie Mac Gold Pool-FG C01292		. 03/01/2024 .	PAYDOWN		585	585	587	466	0	119	0	119	0	585	0	0	0	6	. 02/01/2032 .	. 1.A
	Freddie Mac Gold Pool-FG C01361		. 03/01/2024 .	PAYDOWN		359	359	362	339	0	20	0	20	0	359	0	0	0	3	. 05/01/2032 .	. 1.A
	Freddie Mac REMICS-FHR 2333 UZ		. 03/01/2024 .	PAYDOWN		542	542	521	613	0	(71)	0	(71)	0	542	0	0	0	6	. 07/01/2031	. 1.A
	Freddie Mac REMICS-FHR 2329 ZA		. 03/01/2024 .	PAYDOWN		4,680	4,680	4,446	5, 114	0	(434)	0	(434)	0	4,680	0	0	0	52	. 06/01/2031	. 1.A
	Freddie Mac REMICS-FHR 2355 CE		. 03/01/2024 .	PAYDOWN		805	805	796	798	0	6	0	6	0	805	0	0	0	9	. 09/01/2031	. 1.A
	Fannie Mae REMICS-FNR 2001-31 ZC		. 03/01/2024 .	PAYDOWN		3,569		3,583		0	(288)	0	(288)	0	3,569	0	0	0	46	. 07/01/2031	. 1.A
	United States Internatio-UNSECURED		. 02/27/2024 .	SINKING PAYMENT		75,592	75,592	75,592	75,594	0	(2)	0	(2)	0	75,592	0	0	0	1,678	. 02/27/2027 .	. 1.A
92812U-Q3-5	Virginia Housing Develop-REVENUE BONDS		. 03/25/2024 .	CALL 100		11,340	11,340	11,340	11,319	0	0	0	0	0	11,319	0	21	21	72	. 12/25/2043 .	. 1.A FE
	Subtotal - Bonds - U.S. Special Re	evenue		1		98,462	98,462	98,230	98,966	0	(524)	0	(524)	0	98,441	0	21	21	1,882	XXX	XXX
023135-00-7	Amazon.com Inc-SENIOR UNSECURED		. 03/01/2024 .	TORONTO DOMINION SEC		0	0	0	0	0	2,418	0	2,418	0	0	0	0	0	(41,850)	. 12/01/2029 .	
	AMERICAN HOMES 4 RENT-SERIES 2014-SFR2 C		. 03/01/2024 .	PAYDOWN		417,598	417,598	429,375	418,554	0	(956)	0	(956)	0	417,598	0	0	0		. 10/01/2036	. 1.A FE
	Banc of America Funding -BAFC 2006-1 1A2		. 03/01/2024 .	PAYDOWN		1,846	1,846	1,805		0	20	0	20	0	1,846	0	0	0	13	. 01/01/2036	
	CNH Industrial Capital L-SENIOR UNSECURE		. 03/01/2024 .	JANE		0	0	0	0	0	(631)	0	(631)	0	0	0	0	0	(22,750)	. 04/10/2028	
	Alternative Loan Trust 2-CWALT 2004-J2 3		. 03/01/2024 .	PAYDOWN		1,799	1,799	1,770		0	6	0	6	0	1,799	0	0	0	16	. 04/01/2034 .	
	CHL Mortgage Pass-Throug-CWHL 2005-24 A3		. 03/01/2024 .	PAYDOWN		(235)	131	121	16	0	169	0	169	0	(235)	0	0	0	0	. 11/01/2035	. 5.B FM
15189Y-AG-1	CenterPoint Energy Resou-SENIOR UNSECURE \dots		. 03/01/2024 .	WELLS FARGO		0	0 .	0	0	0	4,864	0	4,864	0	0	0	0	0	(27,417)	. 03/01/2028	. 1.G FE
16165Y-AV-4	ChaseFlex Trust Multi-CI-CFLX 2007-M1 2F		. 02/01/2024 .	PAYDOWN		2,595	2,732	2,371	1,799	0	1,144	0	1, 144	0	2,595	0	0	0	1	. 08/01/2037	. 1.A FM
19828A-AB-3	CPGX 6.042 08/15/28-SENIOR UNSECURED		. 03/01/2024 .	BARCLAYS CAPITAL INC		0	0 .	0	0	0	(99)	0	(99)	0	0	0	0	0	0	. 08/15/2028	. 2.B FE
22822V-BB-6	Crown Castle Inc-SENIOR UNSECURED		. 03/01/2024 .	WELLS FARGO		0	0	0	0	0	888	0	888	0	0	0	0	0	(16,667)	. 09/01/2028	. 2.B FE
40432B-AZ-2	HSI Asset Loan Obligatio-HALO 2007-2 3A6		. 03/01/2024 .	PAYDOWN		0	20,204	17,387	7,917	0	9,676	0	9,676	0	0	0	0	0	152	. 09/01/2037	. 4.C FM
46617F-AA-2	JGWPT XXVIII LLC-HENDR 2013-1A A		. 03/15/2024 .	PAYDOWN		5,200	5,203	5,200	5, 197	0	6	0	6	0	5,200	0	0	0	30	. 04/15/2067	. 1.A FE
49271V-AP-5	Keurig Dr Pepper Inc-SENIOR UNSECURED		. 03/01/2024 .	KEY CAPITAL MARKETS		0	0	0	0	0	(1,889)	0	(1,889)	0	0	0	0	0	(9,875)	. 04/15/2029	. 2.B FE
571676-AT-2	Mars Inc-SENIOR UNSECURED		. 03/01/2024 .	MITSUBISHI UFJ SEC I		0	0 .	0	0	0	2, 182	0	2, 182	0	0	0	0	0	(22,750)	. 04/20/2028	
69354W-AC-0	PNMAC GMSR ISSUER TRUST -PNMSR 2018-GT1		. 03/01/2024 .	PAYDOWN		0	l 0 l.	0	0	0	0	0	0	0	0	0	0	0	11,376	. 02/25/2025 .	. 2.B Z
	Penske Truck Leasing Co -SENIOR UNSECURE	ļ	. 03/01/2024 .	MARKETAXESS FINANCIA		0	o l	0	0	0	(233)	0	(233)	0	0	0	0	0	0	. 08/01/2028	
	Republic Services Inc-SENIOR UNSECURED	ļ	. 03/01/2024 .	JP MORGAN SECURITIES		0		0	0	0	2,972	0	2.972	0		0	0	0	(24,781)	. 04/01/2029	
	Sprint Spectrum Co LLC /-FIRST LIEN	l	. 03/20/2024 .	SINKING PAYMENT		125,000	125,000	125,000	125,000		0		0	0	125,000				1,481	. 03/20/2025	
	Starbucks Corp-SENIOR UNSECURED		. 03/01/2024 .	JP MORGAN SECURITIES		0		n		n	(3.186)	n	(3. 186)	n	n	n	n	n	(17,750)	. 08/15/2029	
	Take-Two Interactive Sof-SENIOR UNSECURE	1	. 03/01/2024 .	JANE			0	n		n	1,675	n	1,675		n	n	n	n	(22,550)	. 03/28/2028	
	Waste Management Inc-SENIOR UNSECURED		. 03/01/2024 .	MARKETAXESS FINANCIA		n	n	n	٥	n	(602)	n	(602)	0	n	n	n	n	0	. 02/15/2029	
	Workday Inc-SENIOR UNSECURED		. 03/01/2024 .	MILLENNIUM ADVISORS		n	n		۰	n	(2,380)	n	(2,380)		n	n	n	n	(9,250)	. 04/01/2029 .	
	9. Subtotal - Bonds - Industrial and M	liscell			h	553.803	574.513	583.029	562.102	0	16.044		16.044		553.803	0	0	0	(198,626)	XXX	XXX
	9. Subtotal - Borids - Industrial and IV 7. Total - Bonds - Part 4	1130CII	arieous (OII	annateu)		652,406	673.116	583,029 681.401	661,209	0	15,520	0	15,520	0	652.385	0		21	(198,626)	XXX	XXX
	8. Total - Bonds - Part 5					XXX XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX XXX	XXX	XXX	XXX	XXX XXX	XXX	XXX
	9. Total - Bonds					652,406	673.116	681.401		0	15.520		15.520			^^^	+			XXX	XXX
∠50999999	a. Toldi - Bolius					652,406	6/3,116	681,401	661,209	0	15,520	0	15,520	0	652,385	0	21	21	(196,743)	$\lambda\lambda\lambda$	XXX

SCHEDULE D - PART 4

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

1	2	3	4	5	6	7	8	9	10	Ch	ange 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						Bond		nation
											_	Year's	Book/	Exchange	Book/				Interest/		Modifier
									Prior Year		Current	Other Than	,	Change in	Adjusted	Foreign			Stock	Stated	and
OL LOUD									Book/	Unrealized	Year's	Temporary		Book	Carrying	Exchange			Dividends	Con-	SVO
CUSIP			D:	Maria	Number of	0			Adjusted	Valuation	(Amor-	Impairment		/Adjusted	Value at	Gain	Gain	Total Gain	Received	tractual	Admini-
Ident-	5	For-		Name	Shares of	Consid-	5	Actual	Carrying	Increase/	tization)/	Recog-	(11 + 12 -	- , ,	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
	al - Preferred Stocks - Part 4					0	XXX	0	0	0	0	0	0	0	0	0	0	0	0	XXX	XXX
4509999998. Tot	al - Preferred Stocks - Part 5					XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
	al - Preferred Stocks					0	XXX	0	0	0	0	0	0	0	0	0	0	0	0	XXX	XXX
5989999997. Tot	al - Common Stocks - Part 4					0	XXX	0	0	0	0	0	0	0	0	0	0	0	0	XXX	XXX
5989999998. Tot	al - Common Stocks - Part 5					XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
5989999999. Tot	al - Common Stocks					0	XXX	0	0	0	0	0	0	0	0	0	0	0	0	XXX	XXX
5999999999. Tot	al - Preferred and Common St	ocks				0	XXX	0	0	0	0	0	0	0	0	0	0	0	0	XXX	XXX
6009999999 - To	tals				•	652,406	XXX	681,401	661,209	0	15,520	0	15,520	0	652,385	0	21	21	(196,743)	XXX	XXX

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 **N O N E**

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

Schedule DB - Part E - Derivatives Hedging Variable Annuity Guarantees **N O N E**

Schedule DL - Part 1 - Reinvested Collateral Assets Owned NONE

Schedule DL - Part 2 - Reinvested Collateral Assets Owned NONE

SCHEDULE E - PART 1 - CASH

Month End Depository Balances

1	2	3	4	5		lance at End of Eacuring Current Quart		9
			Amount of	Amount of	6	7	8	
			Interest Received	Interest Accrued				
		Rate of	During Current	at Current				
Depository		Interest	Quarter	Statement Date	First Month	Second Month	Third Month	*
Bank of New York Mellon New York, NY						1,369,675		XXX.
PNC Bank Pittsburgh, PA					542,981	(739,414)	151,361	XXX.
Wells Fargo Winston Salem, NC					59,889	60,062	59,459	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	2,237,374	690,323	2,105,617	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	2,237,374	690,323	2,105,617	XXX
0499999. Cash in Company's Office	XXX	XXX	XXX	XXX				XXX
	·····					•••••		
	·····							
						•••••	•••••	
0599999. Total - Cash	XXX	XXX	0	0	2,237,374	690,323	2,105,617	XXX

SCHEDULE E - PART 2 - CASH EQUIVALENTS

Show Investments Owned End of Current Quarter

		HILS OV	med End of Current					
1	2	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
	otal - U.S. Government Bonds					0	0	
	otal - All Other Government Bonds					0	0	
	otal - U.S. States, Territories and Possessions Bonds					0	0	0
	otal - U.S. Political Subdivisions Bonds					0	0	
	otal - U.S. Special Revenues Bonds					0	0	
	Alierican Electric Poier co inc comercia		02/14/2024	0.000	04/16/2024	997.662	0	
	EVERGY KANSAS CENTRAL INC COMMERCIAL PAP				04/16/2024	1.000.000		
	NISURCE INC COMMERCIAL PAPER		03/27/2024 03/21/2024	0.000	04/01/2024			
	NISCODICE INC COMMERCIAL PAPER		03/21/2024	0.000	04/10/2024	998,813		
1010000000	ubtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) - Issuer Obligations		03/25/2024	0.000	04/ 13/2024	3.994.118	0	10.777
	otal - Industrial and Miscellaneous (Unaffiliated) Bonds					*,***,***	0	
	otal - Industrial and Miscellaneous (Orianillated) Bonds otal - Hybrid Securities					3,994,118	0	10,777
						0	0	0
	otal - Parent, Subsidiaries and Affiliates Bonds					0	0	0
	ubtotal - Unaffiliated Bank Loans					0	0	0
	otal - Issuer Obligations					3,994,118	0	10,777
	otal - Residential Mortgage-Backed Securities					0	0	0
	otal - Commercial Mortgage-Backed Securities					0	0	0
	otal - Other Loan-Backed and Structured Securities					0	0	0
	otal - SVO Identified Funds					0	0	0
24699999999. 7	otal - Affiliated Bank Loans					0	0	0
2479999999.	otal - Unaffiliated Bank Loans					0	0	0
2509999999.	otal Bonds					3,994,118	0	10,777
09248U-71-8	BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA		03/28/2024	0.000		4,051,312	0	29,901
8209999999.	ubtotal - Exempt Money Market Mutual Funds - as Identified by the SVO	•				4,051,312	0	29,901
8609999999 -	Total Cash Equivalents			•		8,045,430	0	40,678
	·					,		