

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

QUARTERLY STATEMENT

AS OF SEPTEMBER 30, 2022 OF THE CONDITION AND AFFAIRS OF THE

MANHATTAN NATIONAL LIFE INSURANCE COMPANY

NAIC	Group Code <u>0435</u> <u>0435</u>	NAIC Company Cod	de 67083 Employer's ID Nur	mber45-0252531			
Organized under the Laws of	(Current) (Prior) Ohio	,	State of Domicile or Port of Entry	ОН			
Country of Domicile		United States of	f America				
Licensed as business type:	Life, Acc	ident and Health [X] Fra	aternal Benefit Societies []				
Incorporated/Organized	12/20/1956		Commenced Business	01/04/1957			
Statutory Home Office	301 East Fourth Stre	et ,	Cinc	innati, OH, US 45202			
	(Street and Number)	(City or Town	, State, Country and Zip Code)			
Main Administrative Office		301 East Four					
(Cincinnati, OH, US 45202	(Street and N	lumber)	513-361-9000			
	own, State, Country and Zip Code)	· .	(Area Co	nde) (Telephone Number)			
Mail Address	Post Office Box 5420		Cinc	innati, OH, US 45201			
	(Street and Number or P.O. Bo	x)		, State, Country and Zip Code)			
Primary Location of Books and F	Records	301 East Fou	rth Street				
,	2''1'- OH-HO 45000	(Street and N	lumber)	540,004,0000			
	Cincinnati, OH, US 45202 own, State, Country and Zip Code)	· · ·	(Area Co	513-361-9000 ode) (Telephone Number)			
Internet Website Address	,	www.massmu	tual com	,, ,			
			tual.com				
Statutory Statement Contact _	Robert Mayhe (Name		513-361-9077 (Area Code) (Telephone Number)				
	rearle@mmascend.com	<i>-,</i> ,, , _	(7 11 0	513-345-9484			
	(E-mail Address)			(FAX Number)			
		OFFICE	RS				
	Mark Francis Mueth		Treasurer	Brian Patrick Sponaugle #			
Secretary	John Paul Grube	<u>r</u>	Appointed Actuary	Dominic Joseph Moster			
		OTHE					
Adrienne Sus	an Baglier	Michael Robe	rt Fanning				
Dominia Lua	een Dive	DIRECTORS OR		Cupan Maria Ciana			
Dominic Lus Geoffrey Jame		Elizabeth Ward Roger William		Susan Marie Cicco Michael Robert Fanning			
Paul Anthony		Mark Francis	<u> </u>	Michael James O'Connor			
Eric William	raillaii	Gareth Field	ing Ross	Arthur William Wallace III			
State of	Ohio						
County of	Hamilton	SS:					
all of the herein described asses tatement, together with related condition and affairs of the said in accordance with the NAIC Anrules or regulations require differespectively. Furthermore, the same	its were the absolute property of the exhibits, schedules and explanation reporting entity as of the reporting private private properties and private properties in reporting not related scope of this attestation by the des	e said reporting entity, fi is therein contained, ann- eriod stated above, and discounting Practices and discounting practices cribed officers also include	ree and clear from any liens or cla exed or referred to, is a full and true of its income and deductions theref Procedures manual except to the e and procedures, according to the des the related corresponding elec-	entity, and that on the reporting period stated above ims thereon, except as herein stated, and that this e statement of all the assets and liabilities and of the rom for the period ended, and have been completed extent that: (1) state law may differ; or, (2) that state be best of their information, knowledge and belief tronic filing with the NAIC, when required, that is are quested by various regulators in lieu of or in addition			
Mark Francis Mue President	·	John Paul (Secreta	ry a. Is this an original filing?	Brian Patrick Sponaugle Treasurer Yes [X] No []			
Subscribed and sworn to before day of _	me this November 20)22	b. If no, 1. State the amendment nu 2. Date filed				

ASSETS

			Current Statement Date		4
		1 Assets	2 Nonadmitted Assets	3 Net Admitted Assets (Cols. 1 - 2)	December 31 Prior Year Net Admitted Assets
1.	Bonds	112,686,722		112,686,722	106,415,914
	Stocks:			, ,	, ,
	2.1 Preferred stocks			0	
	2.2 Common stocks			0	
3.	Mortgage loans on real estate:			-	
	3.1 First liens			0	
	3.2 Other than first liens.			0	
4.	Real estate:			-	
••	4.1 Properties occupied by the company (less \$				
	encumbrances)			0	
	4.2 Properties held for the production of income (less			-	
	\$encumbrances)			0	
	4.3 Properties held for sale (less \$				
	encumbrances)			0	
5	Cash (\$2,350,735), cash equivalents				
J.					
	(\$4,225,046) and short-term	6 676 701		6 575 701	22 075 020
•	investments (\$				
6.	Contract loans (including \$ premium notes)			4,447,051	4,728,626
7.	Derivatives				
8.	Other invested assets				0
9.	Receivables for securities				
10.	Securities lending reinvested collateral assets				
11.	Aggregate write-ins for invested assets		0	0	0
12.	Subtotals, cash and invested assets (Lines 1 to 11)	126,980,051	0	126,980,051	134 , 120 , 460
13.	Title plants less \$ charged off (for Title insurers				
	only)				
14.	Investment income due and accrued	921,062		921,062	1,333,580
15.	Premiums and considerations:				
	15.1 Uncollected premiums and agents' balances in the course of collection	155 , 184	19,679	135,505	166,432
	15.2 Deferred premiums, agents' balances and installments booked but				
	deferred and not yet due (including \$				
	earned but unbilled premiums)	3, 180, 675	18,106	3, 162, 569	3,335,765
	15.3 Accrued retrospective premiums (\$				
	contracts subject to redetermination (\$			0	
16.	Reinsurance:				
	16.1 Amounts recoverable from reinsurers				563,707
	16.2 Funds held by or deposited with reinsured companies				
	16.3 Other amounts receivable under reinsurance contracts				
17.	Amounts receivable relating to uninsured plans				
18.1	Current federal and foreign income tax recoverable and interest thereon			0	133,454
18.2	Net deferred tax asset				1,295,289
19.	Guaranty funds receivable or on deposit	106 , 184		106, 184	117,668
20.	Electronic data processing equipment and software			0	
21.	Furniture and equipment, including health care delivery assets				
	(\$)				
22.	Net adjustment in assets and liabilities due to foreign exchange rates				
23.	Receivables from parent, subsidiaries and affiliates				183,358
24.	Health care (\$) and other amounts receivable				
25.	Aggregate write-ins for other than invested assets	54,717	0	54,717	22
26.	Total assets excluding Separate Accounts, Segregated Accounts and	404 000 700	1 001 1-0	400 700 011	444 040 707
	Protected Cell Accounts (Lines 12 to 25)	134,096,700	1,394,456	132,702,244	141,249,735
27.	From Separate Accounts, Segregated Accounts and Protected Cell Accounts			0	
28.	Total (Lines 26 and 27)	134,096,700	1,394,456		141,249,735
	DETAILS OF WRITE-INS	, , , ,	, , .		, , , , ,
1101.	DETAILS OF WINDLAND				
1101.					
1103.					
1198.	Summary of remaining write-ins for Line 11 from overflow page			0	0
1190.	Totals (Lines 1101 through 1103 plus 1198)(Line 11 above)	0	0	0	0
2501.	Miscellaneous receivable	-		54,717	
		ŕ			22
2502. 2503.					
	Summary of remaining write-ins for Line 25 from overflow page		0	.0	0
2598. 2599.	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	54,717	0	54,717	22
೭೨೮೮.	rotais (Lines 2001 timough 2000 plus 2090)(Line 20 above)	34,717		34,717	

LIABILITIES, SURPLUS AND OTHER FUNDS

	·	1 Current	2 December 31
1.	Aggregate reserve for life contracts \$	Statement Date	Prior Year
2.	(including \$	76,817	77,610
	Liability for deposit-type contracts (including \$ Modco Reserve) Contract claims:		
	4.1 Life 4.2 Accident and health		5,232,757
5.	Policyholders' dividends/refunds to members \$ and coupons \$ due and unpaid		
6.	Provision for policyholders' dividends, refunds to members and coupons payable in following calendar year - estimated amounts:		
	6.1 Policyholders' dividends and refunds to members apportioned for payment (including \$ Modco)	9,000	9,000
	6.2 Policyholders' dividends and refunds to members not yet apportioned (including \$		
7.	Amount provisionally held for deferred dividend policies not included in Line 6		
	Premiums and annuity considerations for life and accident and health contracts received in advance less \$	24,779	61,082
	9.1 Surrender values on canceled contracts 9.2 Provision for experience rating refunds, including the liability of \$ accident and health experience rating refunds of which \$ 0 is for medical loss ratio rebate per the Public Health		
	Service Act		
	ceded	61,081 3.027.055	41,462 3,287,534
10.	Commissions to agents due or accrued-life and annuity contracts \$, accident and health \$ and deposit-type contract funds \$		
11. 12.	Commissions and expense allowances payable on reinsurance assumed		
	Transfers to Separate Accounts due or accrued (net) (including \$ accrued for expense		
14.	allowances recognized in reserves, net of reinsured allowances)	296,058	306,481
	Current federal and foreign income taxes, including \$ on realized capital gains (losses)		
16.	Unearned investment income	30,121	43,598
	Amounts withheld or retained by reporting entity as agent or trustee	443,758	409,328
19. 20.	Remittances and items not allocated		
21.	Liability for benefits for employees and agents if not included above		
22. 23.	Borrowed money \$ and interest thereon \$		
24.	Miscellaneous liabilities: 24.01 Asset valuation reserve		
	24.02 Reinsurance in unauthorized and certified (\$		
	24.04 Payable to parent, subsidiaries and affiliates 24.05 Drafts outstanding		
	24.06 Liability for amounts held under uninsured plans		
	24.07 Funds held under coinsurance 24.08 Derivatives	0	
	24.09 Payable for securities 24.10 Payable for securities lending		
0.5	24.11 Capital notes \$ and interest thereon \$		
25. 26.	Aggregate write-ins for liabilities	421,414 120,521,446	546,717 128,157,077
27. 28.	From Separate Accounts Statement Total liabilities (Lines 26 and 27)		128,157,077
29.	Common capital stock		2,500,000
30. 31.	Preferred capital stock		0
32.	Surplus notes		
33. 34.	Gross paid in and contributed surplus	0	0
35. 36.	Unassigned funds (surplus) Less treasury stock, at cost: 36.1	(117,787,089)	
_	36.2 shares preferred (value included in Line 30 \$		
	Surplus (Total Lines 31+32+33+34+35-36) (including \$ in Separate Accounts Statement)	9,680,798 12,180,798	10,592,658 13,092,658
39.	Totals of Lines 28 and 38 (Page 2, Line 28, Col. 3)	132,702,244	141,249,735
2501. 2502.	DETAILS OF WRITE-INS Unclaimed funds	,	546,717
2503. 2598.	Summary of remaining write-ins for Line 25 from overflow page		
2599.	Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	421,414	546,717
3101. 3102.			
3103.			
3198. 3199.	Summary of remaining write-ins for Line 31 from overflow page	0	0
3401. 3402.			
3403.			
3498. 3499.	Summary of remaining write-ins for Line 34 from overflow page	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		4,244,178	5,514,834
2. 3.	Considerations for supplementary contracts with life contingencies. Net investment income		2.302.571	3,024,029
4.	Amortization of Interest Maintenance Reserve (IMR)		266,960	355,947
5.	Separate Accounts net gain from operations excluding unrealized gains or losses			
6. 7.	Commissions and expense allowances on reinsurance ceded		394,111	515,986
8.	Miscellaneous Income:			
	8.1 Income from fees associated with investment management, administration and contract			
	guarantees from Separate Accounts			
	8.3 Aggregate write-ins for miscellaneous income	0	0	0
9.	Totals (Lines 1 to 8.3)	6,731,277	7,207,820	9,410,796
10. 11.	Death benefits		6,167,466 10,887	8,522,279 12,647
12.	Annuity benefits			1,536,066
13.	Disability benefits and benefits under accident and health contracts			
14. 15.	Coupons, guaranteed annual pure endowments and similar benefits			1 3/1 822
16.	Group conversions			
17.	Interest and adjustments on contract or deposit-type contract funds		,	27,529
18. 19.	Payments on supplementary contracts with life contingencies	(3,676,465)	(2,712,783)	(3,313,378)
20.	Totals (Lines 10 to 19)		. , , ,	. , , ,
21.	Commissions on premiums, annuity considerations, and deposit-type contract funds (direct			
22.	business only)		173,372	230,382
23.	General insurance expenses and fraternal expenses			
24.	Insurance taxes, licenses and fees, excluding federal income taxes	291,447	241,505	379,457
25. 26.	Increase in loading on deferred and uncollected premiums Net transfers to or (from) Separate Accounts net of reinsurance			
20. 27.	Aggregate write-ins for deductions	376,837	332,225	488,859
28.	Totals (Lines 20 to 27)	7,471,595	8,180,666	10,842,171
29.	Net gain from operations before dividends to policyholders and federal income taxes (Line 9 minus Line 28)	(740.210)	(072 946)	(1,431,375)
30.	Dividends to policyholders and refunds to members	16,925	16,885	22,084
	Net gain from operations after dividends to policyholders, refunds to members and before federal	(=== 0.40)	(222 =24)	
32.	income taxes (Line 29 minus Line 30)	(757,243)	(989,731). (386,540)	(1,453,459) (542,921)
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)	(593, 161)	(603, 191)	(910,538)
34.	Net realized capital gains (losses) (excluding gains (losses) transferred to the IMR) less capital gains tax of \$(2,571) (excluding taxes of \$(509)			
	transferred to the IMR)	(9,123)	(19,248)	4,227
35.	Net income (Line 33 plus Line 34)	(602,284)	(622,439)	(906,311)
26	CAPITAL AND SURPLUS ACCOUNT	13,092,658	9,193,324	9,193,324
36. 37.	Capital and surplus, December 31, prior year	(602,284)	(622,439)	(906,311)
38.	Change in net unrealized capital gains (losses) less capital gains tax of \$9,835			
39.	Change in net unrealized foreign exchange capital gain (loss) Change in net deferred income tax			(119,709)
40. 41.	Change in nei delerred income tax Change in nonadmitted assets	(81.528)		
42.	Change in liability for reinsurance in unauthorized and certified companies			
43.	Change in reserve on account of change in valuation basis, (increase) or decrease			
44. 45.	Change in treasury stock			
46.	Surplus (contributed to) withdrawn from Separate Accounts during period			
47.	Other changes in surplus in Separate Accounts Statement			
48. 49.	Change in surplus notes			
50.	Capital changes:			
	50.1 Paid in			
	50.2 Transferred from surplus (Stock Dividend)			
51.	Surplus adjustment:			
	51.1 Paid in			
	51.2 Transferred to capital (Stock Dividend)			
	51.4 Change in surplus as a result of reinsurance			
52.	Dividends to stockholders			
53. 54.	Aggregate write-ins for gains and losses in surplus	0 (911,860)	0 4,291,428	3,899,334
55.	Capital and surplus, as of statement date (Lines 36 + 54)	12,180,798	13,484,752	13,092,658
00.05:	DETAILS OF WRITE-INS			
I				
	Summary of remaining write-ins for Line 8.3 from overflow page			0
08.399.	Totals (Lines 08.301 through 08.303 plus 08.398) (Line 8.3 above) Reinsurance administration agreement expense	376 837	332 225	0 488 859
	Heinsurance administration agreement expense			400,009
2703.				
	Summary of remaining write-ins for Line 27 from overflow page	376,837	0	0 488.859
	Totals (Lines 2701 through 2703 plus 2798)(Line 27 above)	,	,	,
5302.				
	Summary of remaining write ins for Line 53 from everflow page			
1	Summary of remaining write-ins for Line 53 from overflow page	0	0	0
	,	•	• 1	<u> </u>

	CASH FLOW	4	2	3
		Current Year To Date	Prior Year To Date	Prior Year Ended December 31
	Cash from Operations			
1.	Premiums collected net of reinsurance	3,735,911	4,372,976	5,699,502
2.	Net investment income	2,712,678	2,540,834	2,864,351
3.	Miscellaneous income	411,179	394,111	515,986
4.	Total (Lines 1 to 3)	6,859,768	7,307,921	9,079,839
5.	Benefit and loss related payments	9,458,018	6,749,250	9,640,439
6.	Net transfers to Separate Accounts, Segregated Accounts and Protected Cell Accounts	0	0	0
7.	Commissions, expenses paid and aggregate write-ins for deductions	1,923,699	2,319,950	2,750,315
8.	Dividends paid to policyholders	4,467	4,761	6,780
9.	Federal and foreign income taxes paid (recovered) net of \$(3,080) tax on capital			
	gains (losses)	(564,613)	(596,543)	(596,544
10.	Total (Lines 5 through 9)	10,821,571	8,477,418	11,800,991
11.	Net cash from operations (Line 4 minus Line 10)	(3,961,803)	(1,169,497)	(2,721,151
	Cash from Investments			
12.	Proceeds from investments sold, matured or repaid:			
	12.1 Bonds	7,932,055	3,517,697	3,737,659
	12.2 Stocks	0	0	0
	12.3 Mortgage loans	0	0	0
	12.4 Real estate			0
	12.5 Other invested assets			0
	12.6 Net gains or (losses) on cash, cash equivalents and short-term investments			0
	12.7 Miscellaneous proceeds	0	185,753	1,002,961
	12.8 Total investment proceeds (Lines 12.1 to 12.7)	7,932,055	3,703,450	4,740,620
13.	Cost of investments acquired (long-term only):			
	13.1 Bonds	14.016.959	0	1.000.330
	13.2 Stocks	0	0	0
	13.3 Mortgage loans		0	0
	13.4 Real estate	0	0	0
	13.5 Other invested assets	0	0	0
	13.6 Miscellaneous applications	4,273,458	125,000	0
	13.7 Total investments acquired (Lines 13.1 to 13.6)	18,290,417	125,000	1,000,330
14.	Net increase (or decrease) in contract loans and premium notes	(281,575)	(99,744)	(290,222
15.	Net cash from investments (Line 12.8 minus Line 13.7 and Line 14)	(10,076,787)	3,678,194	4,030,512
	Cash from Financing and Miscellaneous Sources			
16.	Cash provided (applied):			
	16.1 Surplus notes, capital notes	0	0	0
	16.2 Capital and paid in surplus, less treasury stock			5,000,000
	16.3 Borrowed funds			0
	16.4 Net deposits on deposit-type contracts and other insurance liabilities		(253,890)	(281,545
	16.5 Dividends to stockholders		0	0
	16.6 Other cash provided (applied)	(3,696,940)	(684,904)	(1,652,998
17.	Net cash from financing and miscellaneous sources (Line 16.1 through Line 16.4 minus Line 16.5 plus Line 16.6)	(2,361,549)	4,061,206	3,065,457
	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)	(16,400,139)	6,569,903	4,374,818
19.	Cash, cash equivalents and short-term investments (Line 11, plus Lines 15 and 17)	10, 700, 103)		7,014,010
137.	סמטה, סמטה פקעויימופהונט מווע אווטרנינפוווו ווועפטנווופוונט.			
	19.1 Beginning of year	22,975,920	18,601,102	18,601,102

Note: Supplemental disclosures of cash flow information for non-cash transactions:			
20.0001. Bond conversions and refinancing	238,116	0	0

EXHIBIT 1

DIRECT PREMIUMS AND DEPOSIT-TYPE CONTRACTS

	DIRECT PREMIUMS AND DEPOSIT-TYPE C	ONTRACTS		
		1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
1.	Industrial life			0
2.	Ordinary life insurance	8,540,720	9,557,156	12,451,554
3.	Ordinary individual annuities	116,696	113,811	121,111
4.	Credit life (group and individual)			0
5.	Group life insurance			0
6.	Group annuities			0
7.	A & H - group			0
8.	A & H - credit (group and individual)			0
9.	A & H - other	53,419	59,552	76,505
10.	Aggregate of all other lines of business	0	0	0
11.	Subtotal (Lines 1 through 10)	8,710,835	9,730,519	12,649,170
12.	Fraternal (Fraternal Benefit Societies Only)			
13.	Subtotal (Lines 11 through 12)			
14.	Deposit-type contracts	0	0	0
15.	Total (Lines 13 and 14)	8,710,835	9,730,519	12,649,170
	DETAILS OF WRITE-INS			
1001.				
1002.				
1003.			_	_
1098.	Summary of remaining write-ins for Line 10 from overflow page		0	L0
1099.	Totals (Lines 1001 through 1003 plus 1098)(Line 10 above)	0	0	0

Note 1 - Summary of Significant Accounting Policies

A. Accounting Practices

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

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

Net Income	Septe	ember 30, 2022	Dece	mber 31, 2021
(1) State basis	\$	(602,284)	(602,284) \$	
(2) State prescribed practices that increase/(decrease) NAIC SAP		=		=
(3) State permitted practices that increase/(decrease) NAIC SAP		=		
(4) NAIC SAP	\$	(602,284)	\$	(906,311)
Surplus				
(5) State basis	\$	12,180,798	\$	13,092,658
(6) State prescribed practices that increase/(decrease) NAIC SAP		-		-
(7) State permitted practices that increase/(decrease) NAIC SAP		-		-
(8) NAIC SAP	\$	12,180,798	\$	13,092,658

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 following table shows each security with a credit-related OTTI charge recognized during the period:

		Present Value	OTTI Charge			
	Amortized Cost	of Projected	Recognized in	Amortized Cost	Fair Value at	Date
CUSIP	Before OTTI	Cash Flows	Income Statement	After OTTI	Time of OTTI	Reported
126694LC0	117 522	105.828	11 694	105.828	70.840	0/30/2022

- (4) The following table shows all loan-backed securities with an unrealized loss:
 - a. The aggregate amount of unrealized losses:

1. Less than 12 months	\$125,984
2. 12 months or longer	34.988

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

1.	Less than 12 months	\$2,927,247
2.	12 months or longer	70,840

- (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 September 30, 2022. The Company has the intent to hold securities in an unrealized loss position until they recover in value or mature.
- E. Dollar Repurchase Agreements and/or Securities Lending Transactions Not applicable.
- F. Repurchase Agreements Transactions Accounted for as Secured Borrowing Not applicable.
- G. Reverse Repurchase Agreements Transactions Accounted for as Secured Borrowing Not applicable.
- H. Repurchase Agreements Transactions Accounted for as a Sale Not applicable.
- I. Reverse Repurchase Agreements Transactions Accounted for as a Sale Not applicable.

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

Note 6 - Joint Ventures, Partnerships and Limited Liability Companies

Not applicable.

Note 7 - Investment Income

No significant change.

Note 8 - Derivative Instruments

Not applicable.

Note 9 - Income Taxes

No significant change.

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

A..B. & C

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

During 2022 the Company paid (received) federal income tax payments in cash to (from) MMALIC:

04/11/2021 \$ (217,942) 09/15/2021 \$ (346,672)

- D. The Company reported \$139,687 due to the parent and affiliated companies. The terms of the agreement require that these amounts are settled within 90 days.
- E. Management or service contracts and all cost sharing arrangements including the Company:
 - (1) The Company has an agreement with Barings (an affiliate) which provides investment advisory services to the Company.
 - (2) Certain administrative, management, accounting, data processing, collection, and investment services are provided under agreements between the Company and affiliates at charges not unfavorable to the Company or the affiliate.
- F. The Company has no material guarantees or undertakings for the benefit of an affiliate.
- G. The Company's outstanding shares are 100% owned by MNH.
- H. The Company does not own shares of any upstream intermediate entity or its ultimate parent.
- I. The Company has no investment in a subsidiary.
- J. The Company did not recognize any impairment or write down for its investments in subsidiary, controlled or affiliated companies during the statement period.
- K. The Company has no investment in a foreign insurance subsidiary.
- L. The Company does not hold an investment in a downstream non-insurance holding company.
- M. Valuation of Subsidiary, Controlled and Affiliated Entities (excluding U.S. Insurance Entities) Not applicable.
- N. The Company has no investments in insurance subsidiary, controlled, or affiliated entities.
- O. Subsidiary, Controlled, and Affiliated Entities Loss Tracking Not applicable.

Note 11 - Debt

Not applicable.

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 \$32,521,276 as of September 30, 2022 and \$34,792,881 as of December 31, 2021. The Company matches a percentage of employee contributions to the qualified 401(k) thrift savings plan. The Company's total matching thrift savings contributions included in general insurance expenses were \$33,427 for the nine months ended September 30, 2022 and \$37,694 for the year ended December 31, 2021.

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

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

No significant change.

Note 14 - Contingencies

No significant change.

Note 15 - Leases

Not applicable

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

A.

(1) Fair Value Measurements at Reporting Date

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

	Lev	el 1	ı	Level 2	Lev	/el 3	Va	Asset alue (AV)	Total
Assets at fair value									
Bonds:									
Industrial and miscellaneous	\$	-	\$	70,840	\$	-	\$	-	\$ 70,840
Total bonds		-		70,840		-		-	70,840
Total assets accounted for at fair value/NAV	\$	_	\$	70,840	\$		\$		\$ 70,840

- (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 September 30, 2022.

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

Not

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

Type of Financial Instrument	Aggregate Admitted Fair Value Assets		Level 1	Level 1 Level 2		Net Asset Value (NAV)	Practicable (Carrying Value)	
Financial Assets:								
Bonds:								
U.S. government and agencies	\$ 2,328,596	\$ 1,602,101	\$ -	\$ 2,328,596	\$ -	\$ -	\$ -	
States, territories and possessions	3,203,370	2,638,473	-	3,203,370	-	-	-	
Special revenue	13,532,832	13,547,198	=	13,532,832	=	-	=	
Industrial and miscellaneous	86,519,430	94,122,447	-	86,519,430	-	-	-	
Hybrid securities	806,687	776,503	=	806,687	=	-	-	
Total bonds	\$106,390,915	\$112,686,722	\$ -	\$106,390,915	\$ -	\$ -	\$ -	
Cash and cash equivalents	6,575,781	6,575,781	6,575,781	-	-	-	-	
Policy loans	4,447,051	4,447,051	-	-	4,447,051	-	-	
Total financial assets	\$117,413,747	\$123,709,554	\$ 6,575,781	\$ 106,390,915	\$ 4,447,051	\$ -	\$ -	

- D. Not Practicable to Estimate Fair Value The Company has no financial instruments that fall under this classification.
- E. NAV Practical Expedient Investments The Company has no financial investments that fall under this classification.

Note 21 - Other Items

No significant change.

Note 22 - Events Subsequent/Other Items of Note

No significant change.

Note 23 - Reinsurance

No significant change.

Note 24 - Retrospectively Rated Contracts & Contracts Subject to Redetermination

Not applicable.

Note 25 - Change in Incurred Losses and Loss Adjustment Expenses

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

Note 26 - Intercompany Pooling Arrangements

Not applicable.

Note 27 - Structured Settlements

Not applicable.

Note 28 - Health Care Receivables

Not applicable.

Note 29 - Participating Policies

No significant change.

Note 30 - Premium Deficiency Reserves

Not applicable.

Note 31 - Reserves for Life Contracts and Annuity Contracts

No significant change.

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

No significant change.

Note 33 - Analysis of Life Actuarial Reserves by Withdrawal Characteristics

No significant change.

Note 34 - Premiums and Annuity Considerations Deferred and Uncollected

No significant change.

Note 35 - Separate Accounts

Not applicable.

Note 36 - Loss/Claim Adjustment Expenses

Not applicable.

GENERAL INTERROGATORIES

PART 1 - COMMON INTERROGATORIES

GENERAL

1.1	Did the reporting entity experience any material transactions requiring the filing of Disclosure of Material Transactions with the State of Domicile, as required by the Model Act?	Yes [] No [X]
1.2	If yes, has the report been filed with the domiciliary state?	Yes [] No []
2.1	Has any change been made during the year of this statement in the charter, by-laws, articles of incorporation, or deed of settlement of the reporting entity?	Yes [] No [X]
2.2	If yes, date of change:	
3.1	Is the reporting entity a member of an Insurance Holding Company System consisting of two or more affiliated persons, one or more of which is an insurer? If yes, complete Schedule Y, Parts 1 and 1A.	Yes [X] No []
3.2	Have there been any substantial changes in the organizational chart since the prior quarter end?	Yes [] No [X]
3.3	If the response to 3.2 is yes, provide a brief description of those changes.	
3.4	Is the reporting entity publicly traded or a member of a publicly traded group?	Yes [] No [X]
3.5	If the response to 3.4 is yes, provide the CIK (Central Index Key) code issued by the SEC for the entity/group.	
4.1	Has the reporting entity been a party to a merger or consolidation during the period covered by this statement?	Yes [] No [X]
4.2	If yes, provide the name of the entity, NAIC Company Code, and state of domicile (use two letter state abbreviation) for any entity that has ceased to exist as a result of the merger or consolidation.	
	1 2 3	
	Name of Entity NAIC Company Code State of Domicile	
5.	If the reporting entity is subject to a management agreement, including third-party administrator(s), managing general agent(s), attorney-in-fact, or similar agreement, have there been any significant changes regarding the terms of the agreement or principals involved?] No [X] N/A []
6.1	State as of what date the latest financial examination of the reporting entity was made or is being made.	12/31/2016
6.2	State the as of date that the latest financial examination report became available from either the state of domicile or the reporting entity. This date should be the date of the examined balance sheet and not the date the report was completed or released.	12/31/2016
6.3	State as of what date the latest financial examination report became available to other states or the public from either the state of domicile or the reporting entity. This is the release date or completion date of the examination report and not the date of the examination (balance sheet date).	01/11/2018
6.4	By what department or departments?	
6.5	Ohio Department of Insurance Have all financial statement adjustments within the latest financial examination report been accounted for in a subsequent financial statement filed with Departments? Yes [] No [] N/A [X]
6.6	Have all of the recommendations within the latest financial examination report been complied with?] No [] N/A [X]
7.1	Has this reporting entity had any Certificates of Authority, licenses or registrations (including corporate registration, if applicable) suspended or revoked by any governmental entity during the reporting period?	Yes [] No [X]
7.2	If yes, give full information:	
8.1	Is the company a subsidiary of a bank holding company regulated by the Federal Reserve Board?	Yes [] No [X]
8.2	If response to 8.1 is yes, please identify the name of the bank holding company.	
8.3	Is the company affiliated with one or more banks, thrifts or securities firms?	Yes [X] No []
8.4	If response to 8.3 is yes, please provide below the names and location (city and state of the main office) of any affiliates regulated by a federal regulatory services agency [i.e. the Federal Reserve Board (FRB), the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC) and the Securities Exchange Commission (SEC)] and identify the affiliate's primary federal regulator.	
	1 2 3 4 5	6

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

GENERAL INTERROGATORIES

9.1	similar functions) of the reporting entity subject to a code of ethics, which includes the following standards?			Yes [X] N	No []	
	(b) Full, fair, accurate, timely and understandable disclosure in the periodic reports required to be filed by the report	rting en	tity;				
	(c) Compliance with applicable governmental laws, rules and regulations;	•	•				
	(d) The prompt internal reporting of violations to an appropriate person or persons identified in the code; and						
	(e) Accountability for adherence to the code.						
9.11	If the response to 9.1 is No, please explain:						
9.2	Has the code of ethics for senior managers been amended?			Yes [] 1	No [X]	
9.21	If the response to 9.2 is Yes, provide information related to amendment(s).						
9.3	Have any provisions of the code of ethics been waived for any of the specified officers?			Yes [] 1	No [X]	
9.31	If the response to 9.3 is Yes, provide the nature of any waiver(s).						
	FINANCIAL						
10.1	Does the reporting entity report any amounts due from parent, subsidiaries or affiliates on Page 2 of this statement				-		
10.2	If yes, indicate any amounts receivable from parent included in the Page 2 amount:		\$				
	INVESTMENT						
11 1	Were any of the stocks, bonds, or other assets of the reporting entity loaned, placed under option agreement, or o'	thenwis	e made available for				
	use by another person? (Exclude securities under securities lending agreements.) If yes, give full and complete information relating thereto:			Yes [] N	No [X]	
12.	Amount of real estate and mortgages held in other invested assets in Schedule BA:		\$				
13.	Amount of real estate and mortgages held in short-term investments:						
14.1	Does the reporting entity have any investments in parent, subsidiaries and affiliates?						
14.2			1	.00 [•	2	
			Prior Year-End	С		Quarte	r
			Book/Adjusted			djusted	
1404	Bonds	Φ	Carrying Value			g Value	
14.21	Bonds Professed Charles	\$	0				
	Preferred Stock Common Stock						
	Short-Term Investments						
	Mortgage Loans on Real Estate						
14.20	All Other	¢	0				
	Total Investment in Parent, Subsidiaries and Affiliates (Subtotal Lines 14.21 to 14.26)						
15.1	Has the reporting entity entered into any hedging transactions reported on Schedule DB?			Yes [1 1	lo [X]	l
	If yes, has a comprehensive description of the hedging program been made available to the domiciliary state? If no, attach a description with this statement.						
16.	For the reporting entity's security lending program, state the amount of the following as of the current statement da						
	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,						
	16.3 Total payable for securities lending reported on the liability page		\$				0

GENERAL INTERROGATORIES

	Name of Cust	7.1 For all agreements that comply with the requirements of the NAIC Financial Condition Examiners Handbook, or							
	Name of Custodian(s) Bank of New York Mellon			et, New Yo	Custodian Address, NY 10286	ess			
For all agreements that location and a complete		vith the requirements of the NAIC	C Financial Cor	dition Exa	miners Handbook, pr	rovide the name,			
1 Name(s	•	2 Location(s)			3 Complete Explai	nation(s)			
			n(s) identified i	n 17.1 durii			Yes	[]	No [
1		2		3		4			
Old Custoo	dian	New Custodian	Date	of Chang	e	Reason			
make investment decis	ions on behalf of	the reporting entity. For assets	that are manag						
17.5097 For those firms	s/individuals liste	ed in the table for Question 17.5,	do any firms/in	dividuals u			Yes	[] No [
17.5098 For firms/indivi	iduals unaffiliate	d with the reporting entity (i.e. de	esignated with a	"U") listed	I in the table for Que	stion 17.5, does the	Yes	1] No [
For those firms or indivi	_			-				-	
1		2			3	4			5
Central Registration		Name of Firm or Individual		Logal E	ntity Identifier (LEI)	Pagistared With		Mana Agre	stment gemer ement
	ŭ			549300TU	4SU080RFDS31	SEC		DS	
Have all the filing requirely lf no, list exceptions:	rements of the P	urposes and Procedures Manua	l of the NAIC Ir	vestment A	Analysis Office been	followed?	Yes	[X]	No [
a. Documentation r security is not av b. Issuer or obligor c. The insurer has	necessary to per vailable. is current on all an actual expect	mit a full credit analysis of the se contracted interest and principal ation of ultimate payment of all o	ecurity does not payments. contracted inter	exist or ar	NAIC CRP credit ra	ating for an FE or PL	Yes	[]	No [
a. The security was b. The reporting ent c. The NAIC Design on a current priva d. The reporting ent	purchased prior tity is holding cap nation was derive ate letter rating h tity is not permitte	to January 1, 2018. bital commensurate with the NAI d from the credit rating assigned eld by the insurer and available ed to share this credit rating of the	C Designation d by an NAIC C for examination ne PL security v	eported for RP in its le by state in with the SV	r the security. gal capacity as a NF surance regulators. O.	RSRO which is shown	Van		l No [
By assigning FE to a Si FE fund: a. The shares were b. The reporting ent c. The security had January 1, 2019. d. The fund only or	chedule BA non- purchased prior ity is holding cap a public credit ra predominantly ho	registered private fund, the reporto January 1, 2019. bital commensurate with the NAI ting(s) with annual surveillance olds bonds in its portfolio.	orting entity is conting entity is continued or continued	ertifying the reported for NAIC CRF	r the security. P in its legal capacity	of each self-designated as an NRSRO prior to	ies		I IVO [
in its legal capaci	ity as an NRSRC).	· ·	•		gs by an in its ord			
	f yes, give full informat 1 Old Custor Investment manageme make investment decisesuch. ["that have accepted as a comment of the comment	Investment management – Identify all ir make investment decisions on behalf of such. ["that have access to the investment decisions on behalf of such. ["that have access to the investment decisions on behalf of such. ["that have access to the investment decisions on behalf of such. ["that have access to the investment designated with a "U") management for those firms/individuals unaffiliate total assets under management for those firms or individuals listed in that the lebelow. 1 Central Registration Depository Number 106006	f yes, give full information relating thereto: 1	f yes, give full information relating thereto: 1	f yes, give full information relating thereto: 1	f yes, give full information relating thereto: 1	1 New Custodian	f yes, give full information relating thereto: 1	f yes, give full information relating thereto: Old Custodian

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	0.000 %
	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?	
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?	
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	al Benefit Societies Only:	100 [] 110 []
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							

Showing All New Reinsurance	Treaties - Current Year to Date
Ollowing All New Reilisulation	Treaties - Ourient real to Date

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

				ated by States a		siness Only		
		1	Life Co	ontracts	4	5	6	7
			2	3	Accident and			
					Health Insurance			
		Active			Premiums,		Total	
		Status	Life Insurance	Annuity	Including Policy, Membership	Other	Columns	Deposit-Type
	States, Etc.	(a)	Premiums	Considerations	and Other Fees	Considerations	2 Through 5	Contracts
1.	AlabamaAL	L	39,564	0	0		39,564	
2.	Alaska AK	<u>-</u>	8,668	0	0		8,668	
3.	Arizona AZ	<u>-</u>	64,926	0	0		64,926	
	Arkansas AR	L	82,843	500	0		83,343	
5.	California CA	L	1,067,157	1,216	0		1,068,373	
6.	Colorado CO	L	110,763	0	0		110,763	
7.	Connecticut CT	L	70,767	0	0		70,767	
8.	Delaware DE	L	37,573	0	0		37,573	
9.	District of Columbia	L	5.036	0	0		5,036	
10.	FloridaFL	I	552,607	637	48,237		601,482	
11.	Georgia	I	241,778	1.700	553		244,031	
12.	Hawaii HI	I	44,671	0	0		44,671	
13.	Idaho	L	22,564	0	0		22,564	
14.	Illinois IL		245,490	5.421	0		250,912	
				,				
15.	IndianaIN	L	265,922	1,470	292		267,684	
16.	lowa IA	<u>-</u>	94,544	7,000	614		102 , 158	
17.	Kansas KS	L	109,051	4,629	0		113,680	
18.	Kentucky KY	L	96,031	0	0		96,031	
19.	Louisiana LA	ļL.	167,938	0	0		167,938	
20.	Maine ME	L	53,729	0	0		53,729	
21.	Maryland MD	L	290,784	0	0		290,784	
22.	Massachusetts MA	LL.	194, 117	0	0		194 , 117	
23.	Michigan MI	L		12.113	418		381,153	
24.	Minnesota MN	Ī	473,970	18,275	0		492.245	
25.	Mississippi MS	L	97,961	780	0		98,741	
26.	Missouri MO	l I	273,814	8.530	303		282,647	
27.	Montana MT	J	9, 193	0,530	00 0		9, 193	

28.	Nebraska NE		56,301	0	0		56,301	
29.	Nevada		64,280	0	0		64,280	
30.	New HampshireNH	L	46, 141	0	0		46, 141	
31.	New Jersey NJ	L	222,552	0	0		222,552	
32.	New MexicoNM	L	25,881	0	830		26,711	
33.	New York NY	N	74,204	0	0		74,204	
34.	North CarolinaNC	L	189,938	300	0		190,238	
35.	North DakotaND	L	72,622	0	0		72,622	
36.	Ohio OH	L	213,462	135	194		213,791	
37.	Oklahoma OK	L	73,060	0	0		73,060	
38.	Oregon OR	I		0	0		59,075	
39.	Pennsylvania PA		281,526	0	329		281.854	
40.	Rhode Island	I	8,535	0			8,535	
	• • •				• • • • • • • • • • • • • • • • • • • •			
41.	South Carolina SC		101,467	270	0		101,737	
42.	South Dakota	L	16,046	200	0		16,246	
43.	Tennessee TN	L	224, 196	0	525		224,721	
44.	Texas	L	553,227	450	269		553,946	
45.	Utah UT	L	41,521	142	0		41,663	
46.	Vermont VT	L	15,313	0	0		15,313	
47.	VirginiaVA	L	176,404	140	(1, 131)		175,413	
48.	Washington WA	L	84,430	0	0		84,430	
49.	West Virginia WV	Ī	17,207	0	0		17,207	
50.	Wisconsin WI	L			1,511		902.455	
51.	Wyoming WY	<u>-</u>	12,837	0	0		12,837	
52.	American Samoa AS	N			0		,	
							0	
53.	Guam	N	0	0	0		0	
54.	Puerto Rico PR	N	0	0	0		0	
55.	U.S. Virgin IslandsVI	N	0	0	0		0	
56.	Northern Mariana Islands MP	N	0	0	0		0	
57.	Canada CAN	N	819	0	0		819	
58.	Aggregate Other Aliens OT	XXX	869	0	0		869	0
59.	Subtotal	XXX	8,570,155	116,696	52,944	0	8,739,794	0
90.	Reporting entity contributions for employee benefits			,				
ĺ	plans	XXX					0	
91.	Dividends or refunds applied to purchase paid-up						_	
00	additions and annuities	XXX					0	
92.	Dividends or refunds applied to shorten endowment						_	
03	or premium paying period.	XXX					0	
93.	Premium or annuity considerations waived under disability or other contract provisions	YYY	157 , 146				157 , 146	
94.	Aggregate or other amounts not allocable by State	XXX					,	0
94. 95.	Totals (Direct Business)		0 8,727,300	0	0 52,944	0		0
95. 96.	,					0		0
	Plus Reinsurance Assumed	XXX		110,000	EO 044		0	
97	Totals (All Business)	XXX		116,696	52,944	0	8,896,940	0
98.	Less Reinsurance Ceded	XXX	5,041,996	52,513	52,817		5, 147, 326	
99.	Totals (All Business) less Reinsurance Ceded	XXX	3,685,305	64, 183	126	0	3,749,614	0
	DETAILS OF WRITE-INS							
	Other Alien	XXX	869				869	
58002.		XXX	<u> </u>	<u> </u>			<u> </u>	
58003.		XXX	L					
	Summary of remaining write-ins for Line 58 from							
	overflow page	XXX	0	0	0	0	0	0
58999.	Totals (Lines 58001 through 58003 plus						1	
	58998)(Line 58 above)	XXX	869	0	0	0	869	0
9401.		XXX						
9402.		XXX			,			
9403.		XXX						
	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							
<u> </u>	94 above)	XXX	0	0	0	0	0	0
(a) Active	e Status Counts:							

⁽a) Active Status Counts:
L - Licensed or Chartered - Licensed Insurance carrier or domiciled RRG....
E - Eligible - Reporting entities eligible or approved to write surplus lines in the state.....
N - None of the above - Not allowed to write business in the state..... .50 ...0

R - Registered - Non-domiciled RRGs......0
Q - Qualified - Qualified or accredited reinsurer......0

PART 1 – ORGANIZATIONAL CHART

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

	Federal Tax ID	NAIC Co Code	State of Domicile
MASSACHUSETTS MUTUAL LIFE INSURANCE COMPANY	04-1590850	65935	Massachusetts
Direct & Indirect Owned Subsidiaries:			
C.M. Life Insurance Company	06-1041383	93432	Connecticut
MML Bay State Life Insurance Company	43-0581430	70416	Connecticut
CML Mezzanine Investor III, LLC	06-1041383		Delaware
CML Special Situations Investor LLC	None		Delaware
CML Global Capabilities LLC	None		Delaware
MM Global Capabilities I LLC	None		Delaware
MassMutual Global Business Services India LLP	None		India
MM Global Capabilities (Netherlands) B.V.	None		Netherlands
MassMutual Global Business Services Romania S.R.L.	None		Romania
MM Global Capabilities I I LLC	None		Delaware
MM Global Capabilities I II LLC	None		Delaware
MM/Barings Multifamily TEBS 2020 LLC	None		Delaware
Berkshire Way LLC	04-1590850		Delaware
MML Special Situations Investor LLC	None		Delaware
MassMutual Ventures Europe/APAC I GP, 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
JFIN Parent LLC	None		Delaware
Jefferies Finance LLC	27-0105644		Delaware
JFIN GP Adviser LLC	None		Delaware
JFIN Fund III LLC	None		Delaware
Jefferies Credit Partners LLC	None		Delaware
APEX Credit Partners LLC	None		Delaware
Jefferies Credit Management LLC	None		Delaware

^{*}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
JCP Direct Lending CLO 2022 LLC	None	Delaware
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 II C Holdings LLC	None	Delaware
Jefferies Direct Lending Fund II C SPE LLC	None	Delaware
Jefferies Private Credit BDC Inc.	None	Maryland
Jefferies Senior Lending LLC	None	Delaware
Jefferies Credit Partners BDC Inc	None	Maryland
JFIN Revolver Holdings LLC	None	Delaware
JFIN Revolver Holdings II LLC	None	Delaware
JFIN Revolver Holdings IV LLC	None	Delaware
JFIN Co-Issuer Corporation	None	Delaware
JFIN Europe GP, S.a.r.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 High Yield Investments LLC	None	Delaware
JFIN LC Fund LLC	None	Delaware
JFIN Revolver CLO 2017 Ltd.	None	Cayman Islands
JFIN Revolver CLO 2017-II Ltd.	None	Cayman Islands
JFIN Revolver CLO 2017-III Ltd.	None	Cayman Islands
JFIN Revolver CLO 2018 Ltd.	None	Cayman Islands
JFIN Revolver CLO 2019 Ltd.	None	Cayman Islands
JFIN Revolver CLO 2019-II Ltd.	None	Cayman Islands
JFIN Revolver CLO 2020 Ltd.	None	Cayman Islands
JFIN Revolver CLO 2021-II Ltd.	None	Cayman Islands
JFIN Revolver CLO 2021-V Ltd.	None	Cayman Islands
JFIN Revolver CLO 2022-II Ltd.	None	Cayman Islands
JFIN Revolver CLO 2022-III Ltd.	None	Cayman Islands Delaware
JFIN Revolver Fund, L.P.	None None	Delaware Delaware
JFIN Revolver Funding 2021 Ltd.	None None	Delaware
JFIN Revolver Funding 2021-III Ltd. JFIN Revolver Funding 2021-IV Ltd.	None None	Delaware
JFIN Revolver Funding 2021-19 Ltd. JFIN Revolver Funding 2022-I Ltd.	None	Bermuda
JETA Kevolvei Funding 2022-1 Etti.	INOHE	Dellinuda

^{*}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 Revolver SPE1 2022 LLC	None		Delaware
JFIN Revolver SPE3 2022 LLC	None		Delaware
JFIN Revolver SPE4 2022 LLC	None		Delaware
SFL Parkway Funding 2022 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 2014 Ltd.	None		Cayman Islands
JFIN CLO 2014-II Ltd.	None		Cayman Islands
JFIN CLO 2015 Ltd.	None		Cayman Islands
JFIN CLO 2015-II Ltd.	None		Cayman Islands
JFIN CLO 2016 Ltd.	None		Cayman Islands
JFIN CLO 2017 Ltd.	None		Cayman Islands
JFIN CLO 2017 II Ltd.	None		Cayman Islands
Glidepath Holdings Inc.	86-2294635		Delaware
Great American Life Insurance Company	13-1935920	63312	Ohio
AAG Insurance Agency, LLC	31-1422717		Kentucky
Annuity Investors Life Insurance Company	31-1021738	93661	Ohio
Great American Advisors, LLC	31-1395344		Ohio
Manhattan National Holding, LLC	26-3260520		Ohio
Manhattan National Life Insurance Company	45-0252531	67083	Ohio
MassMutual Mortgage Lending LLC	None		Delaware
MM Copper Hill Road LLC	04-1590850		Delaware
MM Direct Private Investment Holding LLC	None		Delaware
MM Direct Private Investments UK Limited	None		United Kingdom
MM Investment Holding	None		Cayman Islands
MassMutual Asset Finance LLC*	26-0073611		Delaware
MMAF Equipment Finance LLC 2013-A	90-1005837		Delaware
MMAF Equipment Finance LLC 2014-A	36-4785301		Delaware
MMAF Equipment Finance LLC 2015-A	38-3969560		Delaware
MMAF Equipment Finance LLC 2016-A	32-0489588		Delaware
MMAF Equipment Finance LLC 2017-A	35-2590691		Delaware
MMAF Equipment Finance LLC 2017-B	32-0546197		Delaware
MMAF Equipment Finance LLC 2018-A	82-5335801		Delaware
MMAF Equipment Finance LLC 2019-A	83-3722640		Delaware
MMAF Equipment Finance LLC 2019-B	None		Delaware
MMAF Equipment Finance LLC 2021-A	None		Delaware
Rozier LLC	None		Delaware Magazahyaatta
MML Management Corporation	04-2443240		Massachusetts
MassMutual International Holding MSC, Inc.	04-3548444		Massachusetts

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	Federal Tax ID	NAIC Co Code	State of Domicile
MassMutual Holding MSC, Inc.	04-3341767		Massachusetts
MML CM LLC	None		Delaware
Blueprint Income LLC	None		New York
Flourish Digital Assets LLC	None		Delaware
Flourish Financial LLC	None		Delaware
Flourish Holding Company LLC	None		Delaware
Flourish Insurance Agency LLC	None		Delaware
Flourish Technologies LLC	None		Delaware
MML Distributors LLC*	04-3356880		Massachusetts
MML Investment Advisers, LLC	None		Delaware
MML Strategic Distributors, LLC	46-3238013		Delaware
The MassMutual Trust Company, FSB	06-1563535		Connecticut
MML Private Placement Investment Company I, LLC	04-1590850		Delaware
MML Private Equity Fund Investor LLC	04-1590850		Delaware
MM Private Equity Intercontinental LLC	04-1590850		Delaware
Pioneers Gate LLC	45-2738137		Delaware
MassMutual Holding LLC	04-2854319		Delaware
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
Aland Royalty Holdings LP	None		Delaware
GASL Holdings LLC	None		Delaware
Barings Asset-Based Income Fund (US) LP	None		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		Ireland
Barings North American Private Loan Fund LP	38-4010344		Delaware
MassMutual Assignment Company	06-1597528		North Carolina
MassMutual Capital Partners LLC	04-1590850		Delaware
MassMutual Ventures Holding LLC	None		Delaware
Athens Fund Management LLC	None		Delaware
Crane Venture Partners LLP	None		United Kingdom
MassMutual Ventures Management LLC	None		Delaware
MassMutual Ventures SEA Management Private Limited	None		Singapore
MassMutual Ventures Southeast Asia I LLC	None		Delaware
MassMutual Ventures Southeast Asia II LLC	None		Delaware
MassMutual Ventures Southeast Asia III LLC	None		Delaware
MMV Digital I LLC	None		Cayman Islands
MassMutual Ventures UK LLC	None		Delaware
MassMutual Ventures US I LLC	47-1296410		Delaware
MassMutual Ventures US II LLC	None		Delaware

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	Federal Tax ID NAIC Co Code	State of Domicile
MassMutual Ventures US III LLC	None	Delaware
MassMutual Ventures US IV LLC	None	Delaware
Open Alternatives LLC	None	Delaware
MM Catalyst Fund LLC	None	Delaware
MM Rothesay Holdco US LLC	04-1590850	Delaware
Rothesay Limited	None	United Kingdom
Rothesay 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 Finance Limited	None	United Kingdom
Rothesay Property Partnership 1 LLP	None	United Kingdom
Rothesay Foundation	None	United Kingdom
Rothesay Pensions Management Limited	None	United Kingdom
Rothesay Asset Management UK Limited	None	United Kingdom
Rothesay Asset Management Australia Pty Ltd	None	Australia
Rothesay Asset Management US LLC	None	Delaware
MML Investors Services, LLC	04-1590850	Massachusetts
MML Insurance Agency, LLC	04-1590850	Massachusetts
MMLISI Financial Alliances, LLC	41-2011634	Delaware
LifeScore Labs, LLC	47-1466022	Massachusetts
MM Asset Management Holding LLC	45-4000072	Delaware
Barings LLC	51-0504477	Delaware
Baring Asset Management (Asia) Holdings Limited	98-0524271	Hong Kong, Special Administrative Region of China
Baring International Fund Managers (Bermuda) Limited	98-0457465	Bermuda
Baring Asset Management (Asia) Limited	98-0457463	Hong Kong, Special Administrative Region of China
Baring Asset Management Korea Limited	None	Korea
Barings Investment Management (Shanghai) Limited	None	Hong Kong, Special Administrative Region of China
Barings Overseas Investment Fund Management (Shanghai) Limited	None	Hong Kong, Special Administrative Region of China
Baring SICE (Taiwan) Limited	98-0457707	Taiwan ROC
Barings Singapore Pte. Ltd.	None	Singapore
Barings Japan Limited	98-0236449	Japan
Barings Australia Real Estate Holdings Pty Ltd	None	Australia
Barings Australia Real Estate Pty Ltd	14-0045656	Australia
Altis Property Partners Holdings Pty Ltd	98-0457456	Australia
Barings Finance LLC	80-0875475	Delaware
BCF Europe Funding Limited	None	Ireland
BCF Senior Funding I LLC	None	Delaware
BCF Senior Funding I Designated Activity Company	None	Ireland
Barings Real Estate Acquisitions LLC	None	Delaware

^{*}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
Barings Securities LLC	04-3238351		Delaware
Barings Guernsey Limited	98-0437588		Guernsey
Barings Europe Limited	None		United Kingdom
Barings Asset Management Spain SL	None		Spain
Barings GmbH	None		Germany
Barings Italy S.r.l.	None		Italy
Barings Sweden AB	None		Sweden
Barings Netherlands B.V.	None		Netherlands
Barings Real Estate UK Holdings Limited	None		Delaware
Barings (U.K.) Limited	98-0432153		United Kingdom
Baring Asset Management Limited	98-0241935		United Kingdom
Barings European Direct Lending 1 GP LLP	None		United Kingdom
Barings Global Advisors Limited	98-1012393		United Kingdom
Baring International Investment Limited	98-0457328		United Kingdom
Baring International Investment Management Holdings	98-0457587		United Kingdom
Baring Asset Management UK Holdings Limited	98-0457576		United Kingdom
Baring International Fund Managers (Ireland) Limited	98-0524272		Ireland
Baring Asset Management Switzerland Sarl	None		Switzerland
Baring France SAS	98-0497550		France
Baring Fund Managers Limited	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 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.1.	None		Luxembourg
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.l	None		Luxembourg
PREIF Holdings Limited Partnership	None		United Kingdom
BMC Holdings DE LLC	None		Delaware
Barings Real Estate Advisers Inc.	04-3238351		Delaware
CRA Aircraft Holding LLC*	81-4258759		Delaware
Chassis Acquisition Holding LLC	81-2244465		Delaware
EIP Holdings I, LLC	None		Delaware
Intermodal Holding II LLC	46-2344300		Delaware
Milestone Acquisition Holding LLC	47-3055009		Delaware
Novation Companies, Inc.	None		Maryland
Red Lake Ventures, LLC	46-5460309		Delaware
Remington L & W Holdings LLC*	81-4065378		Connecticut
Tamiami Citrus, LLC	None		Delaware

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	Federal Tax ID	NAIC Co Code	State of Domicile
Teaktree Acquisition, LLC	None		Delaware
Techquity, LP	None		Delaware
Validus Holding Company LLC	46-0687392		Delaware
VGS Acquisition Holding, LLC	None		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
Barings Investment Series LLC	None		Delaware
Barings Emerging Generation Fund GP, LLC	None		Delaware
Barings Emerging Generation Fund GP II, LLC	None		Delaware
Barings ERS PE Emerging Manager III GP, LLC	None		Delaware
Barings Global Investment Funds (U.S.) Management LLC	04-1590850		Delaware
Barings CLO Investment Partners GP, LLC	None		Delaware
Barings Core Property Fund GP LLC	None		Delaware
Barings Direct Lending GP Ltd.	None		Cayman Islands
Barings Emerging Generation Fund LP	84-3784245		Delaware
Barings Global Energy Infrastructure Advisors, LLC	None		Delaware
Barings 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	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
BMT RE Debt Fund GP LLC	None		Delaware
Barings Small Business Fund LLC	84-5063008		Delaware
Benton Street Advisors, Inc.	98-0536233		Cayman Islands
BHOVI Incentive LLC	None		Delaware
BIG Real Estate Fund GP LLC	None		Delaware
BIG Real Estate Incentive I LLC	None		Delaware
BIG Real Estate Incentive II LLC	None		Delaware
BRECS VII GP LLC	None		Delaware
BREDIF GP LLC	None		Delaware
CREF X GP LLC	None		Delaware

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	Federal Tax ID	NAIC Co Code	State of Domicile
Great Lakes III GP, LLC	04-1590850		Delaware
Lake Jackson LLC	None		Delaware
Loan Strategies Management LLC	04-1590850		Delaware
Mezzco III LLC	41-2280126		Delaware
Mezzco IV LLC	80-0920285		Delaware
Mezzco Australia II LLC	None		Delaware
RECSA-NY GP LLC	None		Delaware
SBNP SIA II LLC	None		Delaware
SBNP SIA III LLC	None		Delaware
Somerset Special Opportunities Management LLC	04-1590850		Delaware
Amherst Long Term Holdings, LLC	None		Delaware
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
MassMutual Asia Limited (SPV)	None		Hong Kong
MML Mezzanine Investor II, LLC	04-1590850		Delaware
MML Mezzanine Investor III, LLC	04-1590850		Delaware
MassMutual External Benefits Group LLC	27-3576835		Delaware
Other Affiliates & Funds:			
100 w. 3 rd Street LLC	04-1590850		Delaware
300 South Tryon Hotel LLC	82-2432216		Delaware
2160 Grand Manager LLC	04-1590850		Delaware
300 South Tryon LLC	04-1590850		Delaware
Almack Mezzanine Fund II Unleveraged LP	None		United Kingdom
Barings Affordable Housing Mortgage Fund I LLC	82-3468147		Delaware
Barings Affordable Housing Mortgage Fund II LLC	61-1902329		Delaware
Barings Affordable Housing Mortgage Fund III LLC	85-3036663		Delaware
Barings Emerging Markets Corporate Bond Fund*	None		Ireland
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
Babson CLO Ltd. 2012-II	None		Cayman Islands
Babson CLO Ltd. 2013-I	None		Cayman Islands
SouthBabson CLO Ltd. 2015-I	None		Cayman Islands
Babson CLO Ltd. 2015-II	None		Cayman Islands
Babson CLO Ltd. 2016-I	None		Cayman Islands
Babson CLO Ltd. 2016-II	None		Cayman Islands
Barings CLO Ltd. 2017-I	None		Cayman Islands
Barings CLO 2018-III	None		Cayman Islands
Barings CLO 2018-IV	None		Cayman Islands
Barings CLO 2019-II	98-1473665		Cayman Islands

^{*}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
Barings CLO 2019-III	None		Cayman Islands
Barings CLO 2019-IV	None		Cayman Islands
Barings CLO 2020-I	None		Cayman Islands
Barings CLO 2020-II	None		Cayman Islands
Barings CLO 2020-III	None		Cayman Islands
Barings CLO 2020-IV	None		Cayman Islands
Barings CLO 2021-I	ZJX0JI.99999.SL.13	36	Cayman Islands
Barings CLO 2021-II	EPXAC4.99999.SL.	136 (GIIN)	Cayman Islands
Barings CLO 2021-III	None		Cayman Islands
Barings CLO 2022-I	98-1624360		Cayman Island
Barings CLO 2022-II	None		Cayman Island
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 Global Em. Markets Equity Fund	82-5330194		North Carolina
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	HU7DQ.00011.SF.3	72(GIIN)	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 RE Credit Strategies VII LP	98-1332384		Delaware
Barings Target Yield Infrastructure Debt Fund*	98-1567942		Luxembourg
Barings CLO Investment Partners LP	81-0841854		Delaware
Barings Euro Value Add II (BREEVA II)*	K15Q2K.99999.SL.	442	Luxembourg
Barings Real Estate European Value Add I SCSp*	None		United Kingdom
Barings Real Estate Debt Income Fund LP*	85-3449260		Delaware
Barings Transportation Fund LP*	87-1262754		Delaware
Braemar Energy Ventures I, L.P.*	None		Delaware
Barings European Core Property Fund SCSp	None		Luxembourg
Barings European Private Loan Fund III A	46-5001122		Luxembourg

^{*}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
Benchmark 2018-B2 Mortgage Trust	38-4059932	New York
Benchmark 2018-B4	None	New York
Benchmark 2018-B8	38-4096530	New York
Barings Core Property Fund LP	20-5578089	Delaware
Cornerstone Real Estate Fund X LP	46-5432619	Delaware
Gateway Mezzanine Partners II LP*	90-0991195	Delaware
Great Lakes III, L.P.	37-1708623	Delaware
GIA EU Holdings - Emerson JV Sarl	98-1607033	Luxembourg
JPMCC Commercial Mortgage Securities Trust 2017-JP7	38-4041011; 38-4041012	New York
JPMDB Commercial Mortgage Securities Trust 2017-C5	38-4032059	New York
KKR-MM Vector LP	82-1512591	Delaware
Marco Hotel LLC	46-4255307	Delaware
Martello Re	None	Bermuda
Miami Douglas One GP LLC*	04-1590850	Delaware
Miami Douglas Two GP LLC*	04-1590850	Delaware
Miami Douglas One LP*	04-1590850	Delaware
Miami Douglas Two LP*	04-1590850	Delaware
Miami Douglas Three MM LLC	04-1590850	Delaware
MM BIG Peninsula Co-Invest Member LLC	87-4021641	Delaware
MM Direct Private Investment Holding	04-1590850	Delaware
NYDIG Digital Assets Fund II LP	85-3886824	Delaware
HB Naples Golf Owner LLC	45-3623262	Delaware
MM CM Holding LLC	None	Delaware
MM Debt Participations LLC	81-3000420	Delaware
RB Apartments LLC	82-4411267	Delaware
Somerset Special Opportunities Fund L.P.*	20-8856877	Delaware
Ten Fan Pier Boulevard LLC	35-2553915	Delaware
Tower Square Capital Partners III, L.P.	41-2280127	Delaware
Tower Square Capital Partners IIIA, L.P.	41-2280129	Delaware
Trailside MM Member LLC*	04-1590850	Delaware
Washington Gateway Two LLC*	83-1325764	Delaware
Washington Gateway Three LLC*	32-0574045	Delaware
Barings Affiliates & Funds:		
Babson Capital Loan Strategies Master Fund LP	None	Cayman Islands
Barings China Aggregate Bond Private Securities Investment Fund	None	Peoples Republic of China
Barings European Growth Trust Fund	HU7DQI.00015.SF.826	United Kingdom
Barings Global High Yield Fund	47-3790192	Massachusetts
CCIC Fund	None	Peoples Republic of China
Great Lakes II LLC*	71-1018134	Delaware
Wood Creek Venture Fund LLC	04-1590850	Delaware
Barings Real Estate Affiliates & Funds:		
Barings California Mortgage Fund IV	None	California

^{*}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
Barings Umbrella Fund LUX SCSp SICAV RAIF*	None		Luxembourg
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	45-2632610		Massachusetts
Cornerstone Permanent Mortgage Fund II	61-1750537		Massachusetts
Cornerstone Permanent Mortgage Fund III	35-2531693		Massachusetts
Cornerstone Permanent Mortgage Fund IV	61-1793735		Massachusetts
CREA/PPC Venture LLC	20-0348173		Delaware
Danville Riverwalk Venture, LLC	82-2783393		Delaware
Euro Real Estate Holdings LLC	04-1590850		Delaware
Fan Pier Development LLC*	20-3347091		Delaware
GIA EU Holdings LLC	04-1590850		Delaware
Landmark Manchester Holdings LLC	81-5360103		Delaware
MM Brookhaven Member LLC	04-1590850		Delaware
MM East South Crossing Member LLC	04-1590850		Delaware
MM Horizon Savannah Member LLC*	04-1590850		Delaware
MM National Self-Storage Program Member LLC	04-1590850		Delaware
MM 1400 E 4th Street Member LLC	04-1590850		Delaware
One Harbor Shore LLC*	80-0948028		Delaware
PACO France Logistics LLC	04-1590850		Delaware
Portland 400 Sixth Manager LLC	82-3393166		Delaware
Salomon Brothers Commercial Mortgage Trust 2001-MM	None		Delaware
STOA Holding LLC	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* West 37th Street Hotel LLC*	45-5401109		Delaware
West 3/th Street Hotel LLC* MassMutual Premier Funds:	88-3861481		Delaware
MassMutual Premier Main Street Fund	51-0529328		Massachusetts
	26-3229251		Massachusetts
MassMutual Premier Strategic Emerging Markets Fund MassMutual Select Funds:	20-3229231		Massachuseus
MassMutual Select Fundamental Growth Fund	04-3512593		Massachusetts
MassMutual Select Fundamental Growth Fund	42-1710935		Massachusetts
MassMutual Select Mid-Cap Value Fund 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
Massivatian select 1. Nowe i fice remember 2003 runu	02-3341422		1v1assaciiuscus

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

	Federal Tax ID	NAIC Co Code	State of Domicile
MassMutual Select T. Rowe Price Retirement 2010 Fund	82-3355639		Massachusetts
MassMutual Select T. Rowe Price Retirement 2015 Fund	82-3382389		Massachusetts
MassMutual Select T. Rowe Price Retirement 2020 Fund	82-3396442		Massachusetts
MassMutual Select T. Rowe Price Retirement 2025 Fund	82-3417420		Massachusetts
MassMutual Select T. Rowe Price Retirement 2030 Fund	82-3430358		Massachusetts
MassMutual Select T. Rowe Price Retirement 2035 Fund	82-3439837		Massachusetts
MassMutual Select T. Rowe Price Retirement 2040 Fund	82-3451779		Massachusetts
MassMutual Select T. Rowe Price Retirement 2045 Fund	82-3472295		Massachusetts
MassMutual Select T. Rowe Price Retirement 2050 Fund	82-3481715		Massachusetts
MassMutual Select T. Rowe Price Retirement 2055 Fund	82-3502011		Massachusetts
MassMutual Select T. Rowe Price Retirement 2060 Fund	82-3525148		Massachusetts
MassMutual Select T. Rowe Price Retirement Balanced Fund	82-3533944		Massachusetts
MML Series Investment Funds:			
MML Series International Equity Fund	46-4257056		Massachusetts
MML Series Investment Funds II:			
MML Series II Asset Momentum Fund	47-3517233		Massachusetts
MML Series II Dynamic Bond Fund	47-3529636		Massachusetts
MML Series II Equity Rotation Fund	47-3544629		Massachusetts
MML Series II Special Situations Fund	47-3559064		Massachusetts
MassMutual RetireSMART Funds:			
MassMutual RetireSMART 2035 Fund	27-1933380		Massachusetts
MassMutual RetireSMART 2045 Fund	27-1932769		Massachusetts
MassMutual RetireSMART 2055 Fund	46-3289207		Massachusetts
MassMutual RetireSMART 2060 Fund	47-5326235		Massachusetts
MassMutual 20/80 Allocation Fund	45-1618155		Massachusetts
MassMutual 80/20 Allocation Fund	45-1618222		Massachusetts
MassMutual RetireSMART In Retirement Fund	03-0532464		Massachusetts
MassMutual 40/60 Allocation Fund	45-1618262		Massachusetts
MassMutual 60/40 Allocation Fund	45-1618046		Massachusetts

^{*}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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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 Company			Massachusetts Mutual Life Insurance					
0435	Massachusetts Mut Life Ins Co	65935	04-1590850	3848388			(MMLIC)	MA	UIP	Company	Owner ship.	100.000	MMLIC		
							(Massachusetts Mutual Life Insurance					
0435	. Massachusetts Mut Life Ins Co	93432	06-1041383				C.M. Life Insurance Company	CT	IΔ	Company	Ownership	100.000	MMLIC		
0435			43-0581430					CT					MMLIC		
	. Massachusetts Mut Life Ins Co	70416					MML Bay State Life Insurance Company		IA	C.M. Life Insurance Company	Ownership	100.000			
0000			06-1041383				CML Mezzanine Investor III, LLC	DE	DS	C.M. Life Insurance Company	Owner ship	100.000	MMLIC		
0000							CML Special Situations Investor LLC	DE	DS	C.M. Life Insurance Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000							CML Global Capabilities LLC	DE	DS	Company	Owner ship	100.000	MMLIC		
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0000			1		1	1	MM Global Capabilities LLC	DE	DS	Company	Ownership.	100.000	MMLIC		1
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0000							MM Global Capabilities (Netherlands) B.V	NLD	DS	MM Global Capabilities LLC	Ownership	100.000	MMLIC		
			1		1	1	MassMutual Global Business Services Romania						1		
0000							S.R.L.	ROU	DS	MM Global Capabilities (Netherlands) B.V.	Owner ship.	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
.0000							MM Global Capabilities II LLC	DE	DS.	Company	Ownership.	100.000	MMLIC		
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										Massachusetts Mutual Life Insurance					
0000							MM Global Capabilities III LLC	DE	DS	Company	Owner ship	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000							MM/Barings Multifamily TEBS 2020 LLC	DE	DS	Company	Ownership.	100.000	MMLIC		
							,			Massachusetts Mutual Life Insurance	·				
0000							MML Special Situations Investor LLC	DE	DS	Company	Ownership.	100.000	MMLIC		
0000							mmL Special Situations investor LLC	UL		Massachusetts Mutual Life Insurance	owner simp	100.000	. WWILTO		
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0000							MassMutual Ventures Europe/APAC GP, LLC	DE	DS	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			47-5322979				Timberland Forest Holding LLC	DE	DS	Company	Owner ship.	100.000	MMLIC		
0000			47-5322979				Timberland Forest Holding LLC	DE	DS	C.M. Life Insurance Company	Influence	0.000	MMLIC		
0000			47-5322979				Timberland Forest Holding LLC	DE	DS	Wood Creek Capital Management LLC	Management		MMLIC		
0000			11 0022010				Lyme Adirondack Forest Company, LLC	DE	DS	Timberland Forest Holding LLC	Ownership.	100.000	MMLIC		
0000							Lyme Adirended Timberlands IIC	DE					MMLIC		
	1						Lyme Adirondack Timberlands I, LLC	VE	DS	Lyme Adirondack Forest Company, LLC	Ownership	100.000			
0000							Lyme Adirondack Timberlands II, LLC	DE	DS	Lyme Adirondack Forest Company, LLC	Ownership	100.000	MMLIC		
0000							Lyme Adirondack Timber Sales, LLC	DE	DS	Lyme Adirondack Forest Company, LLC	Ownership	100.000	MMLIC		·
			1		1	1				Massachusetts Mutual Life Insurance			1		
0000			04-1590850				Berkshire Way LLC	DE	DS	Company	Owner ship	100.000	MMLIC		
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0000			04-1590850		1	1	MSP-SC, LLC	DE	DS	Company	Ownership	100.000	MMLIC		
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.0000							Insurance Road LLC	DE		Company	Ownership	100.000			
0000			04-1590850				MassMutual Trad Private Equity LLC	DE	NI A	Insurance Road LLC	Owner ship	100.000	MMLIC		·
.0000			04-1590850				MassMutual Intellectual Property LLC	DE	NIA	Insurance Road LLC	Owner ship	100.000	MMLIC		.
.0000							Trad Investments I LLC	DE	NIA	Insurance Road LLC	Owner ship	100.000	MMLIC		.1
										Massachusetts Mutual Life Insurance	1				
0000						1	ITPSHolding LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
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0000							ITIN D	DE	ALL A			400 000	188 10		
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
										Massachusetts Mutual Life Insurance		400.000			
.0000			86-2294635				Glidepath Holdings Inc.	DE	UIP	Company	Ownership	100.000	MMLIC		
.0435	Massachusetts Mut Life Ins Co	63312	13-1935920				Great American Life Insurance Company	OH	UIP	Glidepath Holdings Inc.	Ownership	100.000	MMLIC		
.0000			31-1422717				AAG Insurance Agency, LLC	KY	NIA	Great American Life Insurance Company	Ownership	100.000	MMLIC		
.0435	Massachusetts Mut Life Ins Co	93661	31-1021738				Annuity Investors Life Insurance Company	OH	IA	Great American Life Insurance Company	Ownership	100.000	MMLIC		
.0000			31-1395344				Great American Advisors, LLC	H	NIA	Great American Life Insurance Company	Ownership	100.000	MMLIC		
.0000			26-3260520				Manhattan National Holding, LLC	OH	UDP	Great American Life Insurance Company	Ownership	100.000	MMLIC		
.0435	Massachusetts Mut Life Ins Co	67083	45-0252531				Manhattan National Life Insurance Company	H	RE	Manhattan National Holding LLC	Ownership	100.000	MMLIC		
]		I			1		Massachusetts Mutual Life Insurance					
0000							MassMutual Mortgage Lending LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
.0000							Jefferies Private Credit BDC Inc	MD	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN GP Adviser LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Fund III 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							JCP Direct Lending CLO 2022 LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership.	9.900	MMLIC		
0000							JFAM GP LLC	DE	NIA	Jefferies Credit Partners LLC	Owner ship.	100.000	MMLIC		
0000							JFAM GP LP	DE	NIA	Jefferies Credit Partners LLC	Ownership.		MMLIC		
.0000							Jefferies Direct Lending Fund C LP	DE	NIA	JFAM GP LP	Ownership.	100.000	MMLIC		1
.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.		MMLIC		
0000							JDLF 11 GP LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	MMLIC		
0000							JDLF II GP LP	DE	NIA	JDLF 11 GP LLC	Ownership.		MMLIC		
0000							Jefferies Direct Lending Fund II C LP	DE	NIA	JDLF II GP LP	Ownership	100.000	MMLIC		
0000							Jefferies DLF II C Holdings LLC		NIA	Jefferies Direct Lending Fund II C LP	Ownership.	100.000	MMLIC		
0000							Jefferies Direct Lending Fund II C SPE LLC	DE	NIA	Jefferies DLF C Holdings LLC	Ownership.	100.000	MMLIC		
0000							Jefferies Senior Lending 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							Jefferies Credit Partners BDC Inc	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Revolver Holdings LLC						MMLIC		
.0000								DE	NIA NIA	Jefferies Finance LLC	Ownership	100.000			
							JFIN Revolver Holdings II LLC	DE		Jefferies Finance LLC	Ownership	100.000	MMLIC		
.0000							JFIN Revolver Holdings IV LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000			
.0000							JFIN Co-Issuer Corporation	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Europe GP, S.a.r.I.	LUX	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
.0000							Jefferies Finance Europe, S.L.P.	LUX	NIA	JFIN Europe GP, S.a.r.I.	Ownership	100.000	MMLIC		
0000							Jefferies Finance Europe, SCSp	LUX	NIA	JFIN Europe GP, S.a.r.I.	Ownership	100.000	MMLIC		
0000							Jefferies Finance Business Credit LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Business Credit Fund LLC	DE	NIA	Jefferies Finance Business Credit LLC	Ownership	100.000	MMLIC		
0000							JFIN Funding 2021 LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN High Yield Investments LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN LC Fund LLC	DE	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-II Ltd	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Revolver CLO 2017-III Ltd	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Revolver CLO 2018 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership.	100.000	MMLIC	[
0000							JFIN Revolver CLO 2019 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		
0000							JFIN Revolver CLO 2019-II Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MMLIC		1
0000							JFIN Revolver CLO 2020 Ltd.		NIA	Jefferies Finance LLC	Ownership.		MMLIC		1
0000							JFIN Revolver CLO 2021-II Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership.		MMLIC		1
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0000							JFIN Revolver CLO 2022-II Ltd	CYM	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 Fund, L.P.	DE	NIA	Jefferies Finance LLC	Ownership	90.000	MMLIC		
0000							JFIN Revolver Funding 2021 Ltd	DE	NIA	Jefferies Finance LLC	Owner ship	100.000	. MMLIC		
0000							JFIN Revolver Funding 2021 III Ltd	DE	NIA	Jefferies Finance LLC	Owner ship	100.000	MMLIC		
0000							JFIN Revolver Funding 2021 IV Ltd	DE	NIA	Jefferies Finance LLC	Owner ship	100.000	. MMLIC		
0000							JFIN Revolver Funding 2022-1 Ltd.	BMU	NIA	Jefferies Finance LLC	Owner ship	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	Owner ship.	100.000	MMLIC		
0000							JFIN Revolver SPE4 2022 LLC	DE	NIA	Jefferies Finance LLC	Ownership.	100.000	MMLIC	. []	l
							SFL Parkway Funding 2022 LLC	DE	NIA	Jefferies Finance LLC	Ownership.	100.000	MMLIC	. []	
0000							Apex Credit Holdings LLC	DE	NIA	JFIN Parent LLC	Ownership.	100.000	MMLIC		[
0000							JFIN CLO 2012 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership.	100.000	MMLIC		
0000							JFIN CLO 2013 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership.	100.000	MMLIC		[
							JFIN CLO 2014 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership.	100.000	MMLIC		1
0000							JFIN CLO 2014-11 Ltd.	CYM	NIA	Apex Credit Partners LLC	Owner ship.	100.000	MMLIC		1
0000							JFIN CLO 2015 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership.	100.000	MMLIC		
0000							JFIN CLO 2015-11 Ltd.	CYM	NIA	Apex Credit Partners LLC	Owner ship.	85.000	MMLIC		1
0000							JFIN CLO 2016 Ltd.	CYM	NIA	Apex Credit Partners LLC	Owner ship.	100.000	MMLIC		
0000							JFIN CLO 2017 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership.	100.000	MMLIC		
0000							JFIN CLO 2017 Ltd.	CYM	NIA	Apex Credit Partners LLC	Owner ship.	100.000	MMLIC		
							JFIN CLU 2017-11 Ltd	UTML	NIA	Massachusetts Mutual Life Insurance	Owner Strip	100.000	. INIVIL I C		·
0000			04-1590850				MM Co Hill Dood II C	DE	NIA		Ownership	100.000	MMLIC		1
0000			04-1590850				MM Copper Hill Road LLC	UE	NIA	Company	Ownership	100.000	. MWLIC		
0000							MID: 10: 110	DF	A11.A		0 1:	400 000	WW 10		1
0000							MM Direct Private Investments Holding LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
0000							MM Direct Private Investments UK Limited	GBR	NIA	MM Direct Private Investments Holding LLC .	Ownership	100.000	MMLIC		
0000								0)/11	A.I. A	Massachusetts Mutual Life Insurance	0 1:	400.000	WW 10		
0000							MM Investment Holding	CYM	NIA	Company	Ownership.	100.000	. MMLIC		
0000			26-0073611				MassMutual Asset Finance LLC	DE	NIA	MM Investment Holding	Owner ship	99.600	. MMLIC		
0000			26-0073611				MassMutual Asset Finance LLC	DE	NIA	C.M. Life Insurance Company	Ownership	0.400	MMLIC		
0000			90-1005837				MMAF Equipment Finance LLC 2013-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	. MMLIC		
0000			36-4785301				MMAF Equipment Finance LLC 2014-A	DE	NIA	MassMutual Asset Finance LLC	Owner ship	100.000	MMLIC		
0000			38-3969560				MMAF Equipment Finance LLC 2015-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	. MMLIC		
0000			32-0489588				MMAF Equipment Finance LLC 2016-A		NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
0000			35-2590691				MMAF Equipment Finance LLC 2017-A	DE	NIA	MassMutual Asset Finance LLC	Owner ship	100.000	. MMLIC		
0000			32-0546197				MMAF Equipment Finance LLC 2017-B	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
0000			82-5335801				MMAF Equipment Finance LLC 2018-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
0000			83-3722640				MMAF Equipment Finance LLC 2019-A	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC	. []	
0000							MMAF Equipment Finance LLC 2019-B	DE	NIA	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
0000							MMAF Equipment Finance LLC 2021-A	DE	NIA	MassMutual Asset Finance LLC	Owner ship	100.000	MMLIC	.	ļ
0000							Rozier LLC	DE	NIA	MassMutual Asset Finance LLC	Owner ship.	100.000	MMLIC		
.0000		l	04-2443240				MML Management Corporation	MA	NIA	MM Investment Holding	Ownership	100.000	MMLIC	. []	
0000			04-3548444				MassMutual International Holding MSC, Inc	MA	NIA	MML Management Corporation	Ownership.	100.000	MMLIC		
			04-3341767				MassMutual Holding MSC, Inc.	MA	NIA	MML Management Corporation	Ownership.	100.000	MMLIC		1
										Massachusetts Mutual Life Insurance	,				1
.0000		l			l		MML CM LLC	DE	NIA	Company	Ownership	100.000	MMLIC	. [1
0000		l					Blueprint Income LLC	NY	NIA	MML CM LLC	Ownership	100.000	MMLIC		1
							Flourish Digital Assets LLC	DE	NIA	MML CM LLC	Owner ship.	100.000	MMLIC		[
.0000							Flourish Financial LLC	DE	NIA	MML CM LLC	Owner ship	100.000	MMLIC		1
.0000							Flourish Holding Company LLC	DE	NIA	MML CM LLC	Ownership.	100.000	MMLIC		
0000							Flourish Insurance Agency LLC	DE	NIA	MML CM LLC	Owner ship	100.000	MMLIC		1
0000							Flourish Technologies LLC	DE	NIA	MML CM LLC	Ownership.	100.000	MMLIC		
							Trout for recommendates LLC			Massachusetts Mutual Life Insurance	omior onip	100.000			
0000			04-3356880				MML Distributors LLC	MA	NIA	Company	Ownership	99.000	MMLIC		1
טטטע.			U4-000088U				mmL DISTIBUTORS FFC	MA	NIA	vuiipaity	Owner Strip	JUU. ee	. IMMLIV		<u> </u>

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						No			D. L. C.						
						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	Group Name	Code		KOOD	CIK	international)								(165/110)	4
0000			. 04-3356880				MML Distributors LLC	MA	NIA	MassMutual Holding LLC	. Ownership.	1.000	MMLIC		
										Massachusetts Mutual Life Insurance					
.0000							MML Investment Advisers, LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
.0000			46-3238013				MML Strategic Distributors, LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			06-1563535	2881445			The MassMutual Trust Company, FSB	CT	NIA	Company	Ownership	100.000	MMLIC		
							MML Private Placement Investment Company I,			Massachusetts Mutual Life Insurance					
0000			04-1590850				IIC	DE	NIA	Company	Ownership	100.000	MML IC		
			. 04 1000000				LLU			Massachusetts Mutual Life Insurance	Office Strip.	100.000	mile 10		
0000			04-1590850				MML Private Equity Fund Investor LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
								UE				100.000			
0000			. 04-1590850				MML Private Equity Fund Investor LLC	DE	NIA	Baring Asset Management Limited	. Management		MMLIC		
										Massachusetts Mutual Life Insurance					
0000			. 04-1590850				MM Private Equity Intercontinental LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
										Massachusetts Mutual Life Insurance					
0000			45-2738137				Pioneers Gate LLC	DE	NIA	Company	Owner ship.	100.000	MMLIC		
										Massachusetts Mutual Life Insurance	·				
0000			45-2738137				Pioneers Gate LLC	DE	NIA	Company	Ownership.	100.000	MMLIC		
			. 10 2/00/07				Troncord date LEG			Massachusetts Mutual Life Insurance	Carrier dirip.		mm_IV		
0000			04-2854319	2392316			MassMutual Holding LLC	DE	NIA	Company	Ownership.	100.000	MMLIC		
0000			. 06-1597528	23923 10				NC		MassMutual Holding LLC			MMLIC		
							MassMutual Assignment Company		NIA		. Ownership	100.000			
0000			. 37-1732913				Fern Street LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000							Low Carbon Energy Holding	GBR	NI A	MassMutual Holding LLC	. Ownership	49.000	MMLIC		
0000							Sleeper Street LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000			. 46-2252944				Haven Life Insurance Agency, LLC	DE	NIA	MassMutual Holding LLC	Ownership.	100.000	MMLIC		
0000			04-1590850				MassMutual Capital Partners LLC	DE	NIA	MassMutual Holding LLC	Ownership	100.000	MMLIC		
0000							MassMutual Ventures Holding LLC	DE	NIA	MassMutual Holding LLC	Owner ship.	100.000	MMLIC		
0000							Athens Fund Management LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		1
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		
							MassMutual Ventures SEA Management Private	UE	NIA	massmutual ventures notating LLC	. Owner Strip	100.000	MINILIU		
0000								DE				400.000	188 10		
0000							Limited	DE	NIA	MassMutual Ventures Management LLC	Ownership	100.000	MMLIC		
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 Southeast Asia III LLC	DE	NI A	MassMutual Ventures Holding LLC	. Ownership	100.000	MMLIC		
		1							1	MassMutual Ventures Southeast Asia III LLC	:1		1		
0000					l		MMV Digital I LLC	CYM	NIA		Ownership.	100.000	MMLIC		
0000							MassMutual Ventures UK LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership.	100.000	MMLIC		
.0000		1	47-1296410				MassMutual Ventures US LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		1
0000		1					MassMutual Ventures US I LLC	DE	NIA	MassMutual Ventures Holding LLC	Ownership.	100.000	MMLIC		
.0000		-					MassMutual Ventures US III LLC		NIA		Ownership.	100.000	MMLIC		1
		-						DE		MassMutual Ventures Holding LLC					
.0000		-	·				MassMutual Ventures US IV LLC	DE	NI A	MassMutual Ventures Holding LLC	. Ownership	100.000	MMLIC		· · · · · · · · · · · · · · · · · · ·
.0000							Open Alternatives LLC	DE	NIA	MassMutual Ventures 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 Life Plc	GBR	NIA	Rothesay Limited	Ownership	100.000	MMLIC		
0000							Rothesay MA No.1 Limited	GBR	NIA	Rothesay Life PLC	Ownership.	100.000	MMLIC		
.0000							Rothesay Mortgages Limited	GBR	NIA	Rothesay Limited	Owner ship.	100.000	MMLIC		
.0000			1				Rothesay MA No.3 Limited	GBR	NIA	Rothesay Life PLC	Ownership.	100.000	MMLIC		1
0000							Rothesay MA No.4 Limited	GBR	NIA	Rothesay Life PLC		100.000	MMLIC		1
											Ownership		MMLIC		1
0000							LT Mortgage Finance Limited	GBR	NIA	Rothesay Life PLC	Ownership	100.000			
0000							Rothesay Property Partnership 1 LLP	GBR	NIA	Rothesay Life PLC	Ownership	100.000	MMLIC		
0000							Rothesay Foundation	GBR	NIA	Rothesay Limited	Ownership	100.000	MMLIC		
0000		1	1	1	ĺ		Rothesay Pensions Management Limited	GBR	NIA	Rothesav Limited	Owner ship	100.000	MML IC		1

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						Name of Securities			Relation-		Board,	Owner-		SCA	
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Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
Code	Group Name	Code	Number	RSSD	CIK	International)	Or Affiliates	tion	Entity	(Name of Entity/Person)	Other)	tage	Entity(ies)/Person(s)	(Yes/No)	*
0000							Rothesay Asset Management UK Limited	GBR	NIA	Rothesay Limited	Owner ship	100.000	MMLIC		
0000							Rothesay Asset Management Australia Pty Ltd .	AUS	NIA	Rothesay Asset Management UK Limited	Owner ship.	100.000	MMLIC		
0000							Rothesay Asset Management US LLC	DE	NIA	Rothesay Asset Management UK Limited	Owner ship.	100.000	MMLIC		
0000							MM Catalyst Fund LLC	DE	NI A	MassMutual Holding LLC	Owner ship.	100.000	MMLIC		
0000			47-1466022				LifeScore Labs, LLC	MA	NIA	MassMutual Holding LLC	Owner ship	100.000	MMLIC		
0000			45-4000072				MM Asset Management Holding LLC	MA	NIA	MassMutual Holding LLC	Owner ship.	100.000	MMLIC		
0000			45-4000072				Barings LLC	MA	NIA	MassMutual Holding LLC	Owner ship.	100.000	MMLIC		
0000			04-1590850				MML Investors Services, LLC	MA	NIA	MassMutual Holding LLC	Owner ship.	100.000	MMLIC		
0000			04-1590850				MML Insurance Agency, LLC	MA	NIA	MML Investors Services, LLC	Owner ship.	100.000	MMLIC	l	
0000			41-2011634				MMLISI Financial Alliances, LLC	DE	NIA	MML Investors Services, LLC	Ownership.	100.000	MMLIC		
0000			51-0504477				Barings LLC	DE	NIA	MassMutual Asset Management Holding LLC	Owner ship.	100.000	MMLIC		l
		1	1	"			Baring Asset Management (Asia) Holdings]					
0000			98-0524271				Limited	HKG	NIA	Barings LLC	Owner ship	100.000	MMLIC	1	
							Baring International Fund Managers (Bermuda)			Baring Asset Management (Asia) Holdings					
0000			98-0457465				Limited	BMU	NIA	Limited	Ownership	100.000	MMLIC		
										Baring Asset Management (Asia) Holdings					
0000			98-0457463				Baring Asset Management (Asia) Limited	HKG	NIA	Limited	Owner ship.	100.000	MMLIC		
0000							Baring Asset Management Korea Limited	KOR	NIA	Baring Asset Management (Asia) Limited	Owner ship.	100.000	MMLIC		
							Barings Investment Management (Shanghai)								
0000							Limited	HKG	NIA	Baring Asset Management (Asia) Limited	Ownership.	100.000	MMLIC		
							Barings Overseas Investment Fund Management			Barings Investment Management (Shanghai)					
0000							(Shanghai) Limited	HKG	NIA	Limited	Ownership.	100.000	MMLIC		
							(onangrar) zimi too	,		Baring Asset Management (Asia) Holdings					
0000			98-0457707				Baring SICE (Taiwan) Limited	TWN	NIA	Limited	Ownership	100.000	MMLIC		
										Baring Asset Management (Asia) Holdings					
0000							Barings Singapore Pte. Ltd.	SGP	NIA	Limited	Ownership.	100.000	MMLIC		
							Sai mgo omgaporo i to: 2ta:			Baring Asset Management (Asia) Holdings					
0000			98-0236449				Barings Japan Limited	JPN	NIA	Limited	Owner ship.	100.000	MMLIC		
			00 0200110				Barings Australia Real Estate Holdings Pty								
0000							I td	AUS	NIA	Barings LLC	Owner ship.	100.000	MMLIC		
										Barings Australia Real Estate Holdings Pty					
0000			14-0045656				Barings Australia Real Estate Pty Ltd	AUS	NIA	Ltd	Owner ship.	100.000	MMLIC		
0000			98-0457456				Altis Property Partners Holdings Pty Ltd	AUS	NIA	Barings Australia Real Estate Pty Ltd	Owner ship.	100.000	MMLIC		
0000			80-0875475				Barings Finance LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000							BCF Europe Funding Limited	IRL	NIA	Barings Finance LLC	Ownership.	100.000	MMLIC		I
0000							BCF Senior Funding LLC	DE	NIA	Barings Finance LLC	Ownership	100.000	MMLIC		
							BCF Senior Funding Designated Activity								l
0000		1					Company	IRL	NIA	Barings Finance LLC	Ownership	100.000	MM_IC		
0000							Barings Real Estate Acquisitions LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
0000			04-3238351				Barings Securities LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
0000			98-0437588				Barings Guernsey Limited	GGY	NIA	Barings LLC	Owner ship	100.000	MMLIC		1
0000							Barings Europe Limited		NIA	Barings Guernsey Limited	Ownership.	100.000	MMLIC		
0000							Barings Asset Management Spain SL	ESP	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
0000							Barings GmbH	DEU	NIA	Barings Europe Limited	Ownership.	100.000	MMLIC		
0000							Barings Italy S.r.I.	ITA	NIA	Barings Europe Limited	Ownership.	100.000	MMLIC		
0000							Barings Sweden AB	SWE	NIA	Barings Europe Limited	Ownership.		MMLIC		
0000							Barings Netherlands B.V.	NLD	NIA	Barings Europe Limited	Ownership	100.000	MMLIC		
0000							Barings Real Estate UK Holdings Limited	DE	NIA	Barings Europe Limited	Owner ship.	100.000	MMLIC		
0000			98-0432153				Barings (U.K.) Limited	GBR	NIA	Barings Europe Limited	Ownership.		MMLIC		
0000			98-0241935				Baring Asset Management Limited	GBR	NIA	Barings Europe Limited	Owner ship.	100.000	MMLIC		
0000			00 0241000				Barings European Direct Lending 1 GP LLP	GBR	NIA	Baring Asset Management Limited	Ownership		MMLIC		
0000			98-1012393				Barings Global Advisors Limited	GBR	NIA	Baring Asset Management Limited	Owner ship.		MMLIC		
0000			98-0457328				Baring International Investment Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
0000		1	00 0401020				Daring international investment Elimited		1117	Dar mg Abbet management Elimited	νιποι σπτρ	100.000			·

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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)	*
Ouc	Group Hame	Oodc	IVUITIDO	ROOD	Oil	internationary	Baring International Investment Management	tion	Littley	(Ivaile of Entity/i erson)	Other)	lage	Entity(ics)/i cracii(s)	(103/140)	+
0000			98-0457587				Holdings	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		'
										Baring International Investment Management					
0000			98-0457576				Baring Asset Management UK Holdings Limited .	GBR	NI A	Holdings	Ownership	100.000	MMLIC		
							Baring International Fund Managers (Ireland)			Baring Asset Management UK Holdings Limited	i .				'
0000			98-0524272				Limited	IRL	NI A	-	Ownership	100.000	MMLIC		
										Baring Asset Management UK Holdings Limited	t l				'
0000							Baring Asset Management Switzerland Sàrl	CHE	NIA		Owner ship	100.000	MMLIC		
										Baring Asset Management UK Holdings Limited	1				'
0000			98-0497550				Baring France SAS	FRA	NIA		Ownership.	100.000	MMLIC		
0000			98-0457586				Baring Fund Managers Limited	GBR	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		.
0000			00 0457570				BCGSS 2 GP LLP	GBR	NIA	Baring Fund Managers Limited	Owner ship	100.000	MMLIC		
0000			98-0457578				Baring Investment Services Limited Barings Core Fund Feeder GP S.à.r.l.	GBR	NIA NIA	Baring Asset Management Limited Baring Asset Management Limited	Ownership	100.000	MMLICMMLIC		
0000							Barings BME GP S.à.r.I.	GBR	NIA	Baring Asset Management Limited	Owner ship.	100.000	MMLIC		
0000							Barings GPC GP S.a. r. l .	LUX	NIA	Baring Asset Management Limited	Owner ship.	100.000	MMLIC		
0000							Barings European Core Property Fund GP Sàrl .	GBR	NIA	Baring Asset Management Limited	Owner ship.	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 Umbrella Fund (LUX) GP S.à.r.I.	LUX	NIA	Baring Asset Management Limited	Ownership.	100.000	MMLIC		
. 0000							GPLF4(S) GP S.à r.l	LUX	NIA	Baring Asset Management Limited	Ownership	100.000	MMLIC		
0000							PREIF Holdings Limited Partnership	GBR	NIA	Baring Asset Management Limited	Ownership.	100.000	MMLIC		
0000							BMC Holdings DE LLC	GBR DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
0000			04-3238351	3456895			Barings Real Estate Advisers Inc.	CA	NI A	Barings LLC	Ownership	100.000	MMLIC		'
										Massachusetts Mutual Life Insurance	•				'
0000			81-2244465				Chassis Acquisition Holding LLC	DE	NIA	Company	Ownership/Influence	30.000	. MMLIC		.
										Massachusetts Mutual Life Insurance					'
0000			81-4258759				CRA Aircraft Holding LLC	DE	NIA	Company	Ownership/Influence	40.000	. MMLIC		. '
0000			81-4258759				CRA Aircraft Holding LLC	DE	NIA	Barings LLC	Influence		MMLIC		. '
0000			83-0560183 83-0560183				Aland Royalty Holdings LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	26.700	MMLIC		
0000			82-2932156				Aland Royalty Holdings LP	DE	NIA NIA	Barings LLC	Management	11.300	MMLIC		
0000			82-2932156				GASL Holdings LLC	DE	NIA	Barings LLC	Board	11.300	MMLIC		
			02-2302 100				UNGL HOTHINGS ELC			Massachusetts Mutual Life Insurance	Doar u		WWL10		
0000			46-2344300				Intermodal Holdings II LLC	DE	NIA	Company	Ownership	18.000	MMLIC		'
0000			46-2344300				Intermodal Holdings II LLC	DE	NIA	Barings LLC	Management		MMLIC		
0000			47-3055009				Milestone Acquisition Holding, LLC.	DE	NIA	MassMutual Holding LLC	Ownership/Influence	19.800	MMLIC		
							, , , , , , , , , , , , , , , , , , , ,			Massachusetts Mutual Life Insurance					1
0000							Novation Companies, Inc.	MD	NIA	Company	Ownership	17 . 100	MMLIC		.
0000							Novation Companies, Inc.	MD	NIA	Barings LLC	Influence		MMLIC		.
										Massachusetts Mutual Life Insurance					1 '
0000			46-5460309				Red Lake Ventures, LLC	DE	NIA	Company	Ownership/Influence	31.500	MMLIC		. !
0000			46-5460309				Red Lake Ventures, LLC	DE	NIA	Barings LLC	Influence		MMLIC		. !
										Massachusetts Mutual Life Insurance			l		'
0000			81-4065378				Remington L & W Holdings LLC	DE	NIA	Company	Ownership/Influence	19.900	MMLIC		·
0000			81-4065378				Remington L & W Holdings LLC	DE	NIA	Barings LLC	Influence		MMLIC		ļ
0000							Tamiani Citava IIC	DE	NIA	Massachusetts Mutual Life Insurance	O	15.700	MMLIC		1 '
0000							Tamiami Citrus, LLC		NIA NIA	Company Barings LLC	Ownership	001.61			· · · · · · · · · · · · · · · · · · ·
0000							Teaktree Acquisition, LLC	DE	NIA	MassMutual Holding LLC	. Management/Board	14.700	MMLIC		1
0000							Teaktree Acquisition, LLC	DE	NIA	Barings LLC	Influence	14.700	MMLIC		
0000							TOURTH SE MOQUISITION, LLO	UE	NI M	Massachusetts Mutual Life Insurance	IIII IUGIICG		. INVIL. 1 U		1
0000							Techquity, LP	DE	NIA	Company	Ownership	15.600	MMLIC		'
0000							Techquity, LP	DE	NIA	Barings LLC	Influence		MMLIC		
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		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							EIP Holdings I, LLC	DE	NIA	Company	Ownership/Influence	29.000	. MMLIC		
0000			. 46-0687392				Validus Holding Company LLC	DE	NIA	Barings LLC	Ownership	40.400	MMLIC		
0000							VGS Acquisition Holding, LLC	DE	NIA	MassMutual Holding LLC	Ownership/Influence	33.300	. MMLIC		
0000							VGS Acquisition Holding, LLC	DE	NIA	Barings LLC	Management		. MMLIC		
0000							Aland Royalty GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000							Alaska Future Fund GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	. MMLIC		
0000							BAI GP, LLC	DE	NIA	Barings LLC	Ownership Ownership	100.000	MMLIC		
0000								DE	NIA			100.000	MMLIC		
0000							Baring Asset-Based Income Fund (US) GP, LLC. Barings CMS Fund GP, LLC.	DE	NIA NIA	Barings LLC	Ownership	100.000	MMLIC		
0000							Barings Infiniti Fund Management LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
0000							barings infiniti Fund management LLC	UE	NIA	Massachusetts Mutual Life Insurance	Owner snip		. INIVILITO		
0000							Barings Hotel Opportunity Venture I GP, LLC.	DE	NIA	Company	Ownership	100.000	MMLIC		
0000							Barings Investment Series LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
0000							Barings Emerging Generation Fund GP, LLC	DE	NIA	Barings LLC	Owner ship	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		
							Barings Global Investment Funds (U.S.)			Dai mga EEO	owner strip.		. WALL TO		
0000			04-1590850				Management LLC	DE	NIA	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 Direct Lending GP Ltd.	CYM	NIA	Barings LLC	Ownership.	100.000	MMLIC		
			1							Massachusetts Mutual Life Insurance					
0000			84-3784245				Barings Emerging Generation Fund LP	DE	NIA	Company	Ownership	39.300	MMLIC		
0000			84-3784245				Barings Emerging Generation Fund LP	DE	NIA	Barings LLC	Management		MMLIC		
							Barings Global Energy Infrastructure								
0000							Advisors, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
							Barings Centre Street CLO Equity Partnership								
0000							GP, LLC	DE	NIA	Barings LLC	Ownership	100.000	. MMLIC		
							Barings North American Private Loan Fund								
0000							Management, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
							Barings North American Private Loan Fund II								
0000							Management, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
l l							Barings North American Private Loan Fund III			L	L			- 1	
0000							Management, LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
							Barings Global Special Situations Credit Fund	25		l	l			1	
0000							4 GP (Delaware) LLC	DE	NIA	Barings LLC	Ownership	100.000	. MMLIC		·····
0000							Barings - MM Revolver Fund GP LLC	DE	NIA	Barings LLC	Ownership	100.000	. MMLIC		
0000			1				BMT RE Debt Fund GP LLC	DE	NIA	Barings LLC	Ownership	100.000	. MMLIC		
0000							Barings Global Real Assets Fund GP, LLC Barings GPSF	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
0000							Barings GPSF	UE	NIA	Massachusetts Mutual Life Insurance	Ownership	100.000	. MMLIC		
0000			84-5063008				Barings Small Business Fund LLC	DE	NIA		Ownership	33.600	MMLIC	- 1	
0000			. 84-5063008				Barings Small Business Fund LLC Barings Small Business Fund LLC	DE	NIA	Company	Management	DUO	MMLIC		1
0000			. 98-0536233				Benton Street Advisors, Inc.	CYM	NIA	Barings LLC	Ownership.	100.000	MMLIC	[
0000			. 30-0000200				BHOVI Incentive LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
0000			1				BIG Real Estate Fund GP LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		
0000			1				BIG Real Estate Incentive LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		1
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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	[I
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0000	Oloup Name	Code	Number	ROOD	CIIC	international)	Lake Jackson LLC							(163/140)	
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0000			. 04–1590850				Loan Strategies Management LLC	DE	NI A	Barings LLC	Ownership	100.000	. MMLIC		t
0000			41-2280126				Mezzco III LLC	DE	NIA	Barings LLC	Ownership	99.300	MMLIC		
0000			. 80-0920285				Mezzco IV LLC	DE	NI A	Barings LLC	Ownership	99.300	MMLIC		ļ
0000							Mezzco Australia II LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		l
0000						l	RECSA-NY GP LLC	DE	NIA	Barings LLC	Ownership.	100.000	MMLIC		1
0000			04-1590850				SBNP SIA II LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		i
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0000							Amherst Long Term Holdings, LLC	DE	NIA	Company	Ownership	24.500	. MMLIC	.	
										Massachusetts Mutual Life Insurance					i
0000			. 04-3313782				MassMutual International LLC	DE	NIA	Company	Ownership	100.000	MMLIC		
0000						l	MassMutual Solutions LLC	DE	NIA	MassMutual International LLC	Ownership	100.000	MMLIC	.	1
0000							Haven Technologies Asia Limited	HKG	NIA	MassMutual Solutions LLC	Owner ship.	100.000	MMLIC		i
0000							Yunfeng Financial Group Limited	HKG	NIA	MassMutual International LLC	Owner ship.	24.900	MMLIC		1
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										Massachusetts Mutual Life Insurance					i
0000			27-3576835				MassMutual External Benefits Group LLC	DE	NIA	Company	Ownership.	100.000	MMLIC		1
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										Massachusetts Mutual Life Insurance					i
0000			82-2432216				300 South Tryon Hotel LLC	DE	NIA	Company	Ownership	100.000	MMLIC		ļ
										Massachusetts Mutual Life Insurance					i
0000			04-1590850				300 South Tryon LLC	DE	NIA	Company	Ownership	100.000	MMLIC	. [l
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			1				Barings Affordable Housing Mortgage Fund III			Massachusetts Mutual Life Insurance					1
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0000			. 85-3036663				LLC	DE	NI A	Barings LLC	Management		. MMLIC	-	·····
0000			. 36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	11.200	MMLIC	.	
0000			. 36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NI A	C.M. Life Insurance Company	Ownership/Influence	1.100	MMLIC	.	ļ
.0000			. 36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	Barings LLC	Management		MMLIC	. [l
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Group		Company	ID	Federal		(U.S. or	Parent, Subsidiaries	Loca-	Reporting	Directly Controlled by	Influence,	Percen-	Ultimate Controlling	quired?	
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	•									Massachusetts Mutual Life Insurance					
0000							Barings Euro Value Add II (BREEVA II)	LUX	NIA	Company	Ownership/Influence	29.900	MMLIC		
0000							Barings Euro Value Add II (BREEVA II)	LUX	NIA	C.M. Life Insurance Company	Ownership.	2.600	MMLIC		
0000							Barings Euro Value Add II (BREEVA II)	LUX	NIA	Barings LLC	Management		MMLIC		
							Barings Real Estate European Value Add SCSp			Massachusetts Mutual Life Insurance					
0000								GBR	NIA	Company	Ownership/Influence	44.200	. MMLIC		
							Barings Real Estate European Value Add I SCSp								
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							Barings Real Estate European Value Add SCSp								
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										Massachusetts Mutual Life Insurance					
0000			85-3449260				Barings Real Estate Debt Income Fund LP	DE	NIA	Company	Ownership/Influence	82.800	MMLIC		
0000			85-3449260				Barings Real Estate Debt Income Fund LP	DE	NIA	C.M. Life Insurance Company	Influence		MMLIC		
0000			85-3449260				Barings Real Estate Debt Income Fund LP	DE	NIA	Barings LLC	Management		MMLIC		
0000			82-5330194				Barings Global Em. Markets Equity Fund	NC	NIA	Barings LLC	Management		MMLIC		
							Barings Global Energy Infrastructure Fund I			Massachusetts Mutual Life Insurance					
0000			98-1332384				LP	CYM	NIA	Company	Ownership/Influence	99.200	MMLIC		l
							Barings Global Energy Infrastructure Fund I			. ,	·				
0000			98-1332384				LP	CYM	NIA	Baring Asset Management Limited	Management		MMLIC		
0000							Barings Global Dividends Champion Fund	IRL	NIA	Barings LLC	Management		MMLIC		
0000							Barings LLC	IRL	NIA	Barings LLC			MMLIC		
0000			82-3867745				Barings Global Real Assets Fund LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	26.200	MMLIC		
0000			82-3867745				Barings Global Real Assets Fund LP	DE	NIA	C.M. Life Insurance Company	Ownership	7.000	MMLIC		
0000			82-3867745				Barings Global Real Assets Fund LP	DE	NIA	Barings LLC	Management		MMLIC		
							Barings Global Special Situations Credit Fund			Ů					
0000							3	IRL	NIA	MassMutual Holding LLC	Ownership/Influence	18.700	MMLIC		
							Barings Global Special Situations Credit 4			Massachusetts Mutual Life Insurance	·				
0000							Delaware	DE	NIA	Company	Ownership.	69.600	MMLIC		
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0000			87-0977058				Barings Hotel Opportunity Venture	CT	NIA	Company	Ownership/Influence	54.500	MMLIC		
0000		.	87-0977058	.			Barings Hotel Opportunity Venture	CT	NIA	Barings LLC	Management		MMLIC		ļl
							Barings Innovations & Growth Real Estate Fund			Massachusetts Mutual Life Insurance					
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							Barings Innovations & Growth Real Estate Fund	l							
000Q		.	86-3661023	.				DE	NIA	C.M. Life Insurance Company	Ownership	0.500	MMLIC		
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0000		.					Barings Middle Market CLO 2019-I	CYM	NIA	Barings LLC	Influence		MMLIC		
0000		.	98-1612604				Barings Middle Market CLO Ltd 2021-1	CYM	NIA	Barings LLC	Influence		MMLIC		
0000		.	38-4010344				Barings North American Private Loan Fund LP .	DE	NIA	MassMutual Holding LLC	Ownership/Influence	37.300	. MMLIC		
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0000			. 82-3307907				Cornbrook PRS Holdings LLC	DE	NIA	Company	Ownership.	100.000	MMLIC		
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Asterisk	Explanation
1	Massachusetts Mutual Life Insurance Company owns 14.23% of the affiliated debt of Jefferies Finance LLC
2	Debt investors own 9.6% and includes only Babson Capital Loan Strategies Fund, L.P.
3	Debt investors own .5% and includes only Great Lakes III, L.P.
	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

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

Bar Code:

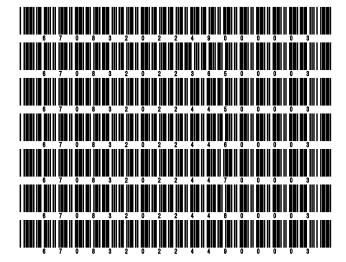
6.

Trusteed Surplus Statement [Document Identifier 490]

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

4. The data for this supplement is not required to be filed. 5. The data for this supplement is not required to be filed. The data for this supplement is not required to be filed.

- 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]
- 5. Reasonableness of Assumptions Certification for Implied Guaranteed Rate Method required by Actuarial Guideline XXXVI [Document Identifier 447]
- Reasonableness and Consistency of Assumptions Certification required by 6. Actuarial Guideline XXXVI [Document Identifier 448]
- Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Market Value) [Document Identifier 449]



Response

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 impailment 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

	Wortgage 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 parameters and smitmer less less less less less less less le		
9.	Total foreign exchange change in book value/recalled invention texts.		
10.	Deduct current year's other than temporary impairment recognized		
11.	Book value/recorded investment excluding accrued interest at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)		
12.	Total valuation allowance		
13.	Subtotal (Line 11 plus Line 12)		
14.	Deduct total nonadmitted amounts		
15.	Statement value at end of current period (Line 13 minus Line 14)		

SCHEDULE BA - VERIFICATION

Other Long-Term Invested Assets

		1	2
			Prior Year Ended
		Year to Date	December 31
1.	Book/adjusted carrying value, December 31 of prior year		
2.	Cost of acquired:		
	2.1 Actual cost at time of acquisition		
	2.2 Additional investment made after acquisition		
3.	Capitalized deferred interest and other		
4.	Accrual of discount		
5.	Unrealized valuation increase (decrease)		
6.	Total gain (loss) on disposals		
7.	Deduct amounts received on disposals		
8.	Deduct amortization of premium and depreciation		
9.	Total foreign exchange change in book/adjusted carrying value		
10.	Deduct current year's other than temporary impairment recognized		
11.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)		
12.	Deduct total nonadmitted amounts		
13.	Statement value at end of current period (Line 11 minus Line 12)		

SCHEDULE D - VERIFICATION

Bonds and Stocks

		1	2
		·	Prior Year Ended
		Year to Date	December 31
1.	Book/adjusted carrying value of bonds and stocks, December 31 of prior year	106,415,916	108,936,961
2.	Cost of bonds and stocks acquired		
3.	Accrual of discount	270,288	316,208
4.	Unrealized valuation increase (decrease)	1,916	(3,970)
5.	Total gain (loss) on disposals		734
6.	Deduct consideration for bonds and stocks disposed of	7,932,055	3,737,659
7.	Deduct amortization of premium		
8.	Total foreign exchange change in book/adjusted carrying value	0	
9.	Deduct current year's other than temporary impairment recognized	11,694	3,389
10.	Total investment income recognized as a result of prepayment penalties and/or acceleration fees	0	
11.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9+10)	112,686,725	106,415,916
12.	Deduct total nonadmitted amounts	0	
13.	Statement value at end of current period (Line 11 minus Line 12)	112,686,725	106,415,916

SCHEDULE D - PART 1B

Showing the Acquisitions, Dispositions and Non-Trading Activity
During the Current Quarter for all Bonds and Preferred Stock by NAIC Designation

Burning	the Current Quarter to	2	3	Designation	5	6	7	0
	1 Book/Adjusted	2	3	4	5 Book/Adjusted	ნ Book/Adjusted	/ Book/Adjusted	8 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)	64,326,464	1,000,000	6,488,973	65,494	58,866,252	64,326,464	58,902,985	57,234,465
2. NAIC 2 (a)	53,593,282	191,045	442,960	(5,652)	53,951,105	53,593,282	53,335,715	43,483,178
3. NAIC 3 (a)	853,359	0	4,071	33,043	1,423,677	853,359	882,331	1,930,840
4. NAIC 4 (a)	3,453,018	0	0	(1,978,382)	3,451,507	3,453,018	1,474,636	3,450,033
5. NAIC 5 (a)	329,623	0	0	1,986,480	323,112	329,623	2,316,103	317,401
6. NAIC 6 (a)	0	0	0	0	0	0	0	
7. Total Bonds	122,555,746	1,191,045	6,936,004	100,983	118,015,653	122,555,746	116,911,770	106,415,916
PREFERRED STOCK								
8. NAIC 1	0	0	0	0	0	0	0	
9. NAIC 2	0	0	0	0	0	0	0	
10. NAIC 3	0	0	0		0	0	0	
11. NAIC 4	0	0	0	0	0	0	0	
12. NAIC 5	0	0	0	0	0	0	0	
13. NAIC 6	. 0	0	0	0	0	0	0	
14. Total Preferred Stock	0	0	0	0	0	0	0	0
15. Total Bonds and Preferred Stock	122,555,746	1,191,045	6,936,004	100,983	118,015,653	122,555,746	116,911,770	106,415,916

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

Schedule DA - Part 1 - Short-Term Investments

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 **NONE**

Schedule DB-Part C-Section 2-Reconciliation of Replication (Synthetic Asset) Transactions Open **NONE**

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

NONE

SCHEDULE E - PART 2 - VERIFICATION

(Cash Equivalents)

	(Odon Equivalente)	1	2
		Year To Date	Prior Year Ended December 31
1.	Book/adjusted carrying value, December 31 of prior year	21,456,915	18,796,067
2.	Cost of cash equivalents acquired	99,028,862	66,416,863
3.	Accrual of discount	250	
4.	Unrealized valuation increase (decrease)	0	
5.	Total gain (loss) on disposals	(16)	
6.	Deduct consideration received on disposals	116,260,965	63,756,014
7.	Deduct amortization of premium	0	
8.	Total foreign exchange change in book/adjusted carrying value	0	
9.	Deduct current year's other than temporary impairment recognized	0	
10.	Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	4,225,046	21,456,915
11.	Deduct total nonadmitted amounts	0	
12.	Statement value at end of current period (Line 10 minus Line 11)	4,225,046	21,456,915

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

Schedule A - Part 3 - Real Estate Disposed

NONE

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

Schedule B - Part 3 - Mortgage Loans Disposed, Transferred or Repaid

NONE

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

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

ΕÓ

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

SCHEDULE D - PART 3

Show All Long-Term	Bonds and Stock	Acquired During	the Current Quarter
	i Donius anu Stock	Acquired During	ilie Gullelli Qualiel

1 2 3 4 5 6 7 8 9 10 NAIC Designation, NAIC Designation, Modifier
Designation, NAIC Designation
NAIC Designation
NAIC Designation
Designation Madifier
Medifier
I Woulder
and and
SVO
Number of Paid for Accrued Admini-
CUSIP Date Shares of Interest and strative
Identification Description Foreign Acquired Name of Vendor Stock Actual Cost Par Value Dividends Symbol
8817M-AL-1 Jackson Financial Inc-SENIOR UNSECURED
1109999999. Subtotal - Bonds - Industrial and Miscellaneous (Unaffiliated) 250,000 2,604 XXX
250999997. Total - Bonds - Part 3 250,000 2,604 XXX
2509999998. Total - Bonds - Part 5 XXX XXX XXX XXX XXX
2509999999. Total - Bonds 250,000 2,604 XXX
4509999997. Total - Preferred Stocks - Part 3 0 XXX 0 XXX
4509999998. Total - Preferred Stocks - Part 5 XXX XXX XXX XXX XXX
4509999999. Total - Preferred Stocks 0 XXX 0 XXX
5989999997. Total - Common Stocks - Part 3 0 XXX 0 XXX
598999998. Total - Common Stocks - Part 5 XXX XXX XXX XXX XXX
5989999999. Total - Common Stocks 0 XXX 0 XXX
5999999999. Total - Preferred and Common Stocks 0 XXX 0 XXX
000999999 - Totals

SCHEDULE D - PART 4

					Show All Lo	ng-Term Bo	onds and Sto	ck Sold, Red	deemed or (Otherwise [Disposed o	of During t	he Current Quarter							
1	2	3	4	5	6	7	8	9	10				Carrying Value	16	17	18	19	20	21	22
										11	12	13	14 15					-		NAIC
																				Desig-
																				nation,
																				NAIC
													Total Total							Desig-
												Current						Bond		nation
												Current	Change in Foreign	Dools!						
									Deisa Vasa			Year's	Book/ Exchange					Interest/	04-4	Modifier
									Prior Year			Other Than	, ,	Adjusted	Foreign			Stock	Stated	and
									Book/	Unrealized	Year's	Temporary	Carrying Book	Carrying	Exchange			Dividends	Con-	SVO
CUSIP		_			Number of				Adjusted	Valuation	(Amor-	Impairment	t Value /Adjusted	Value at	Gain	Gain	Total Gain	Received	tractual	Admini-
Ident-		For-	- Disposal	Name	Shares of	Consid-		Actual	Carrying	Increase/	tization)/	Recog-	(11 + 12 - Carrying	Disposal	(Loss) on	(Loss) on	(Loss) on	During	Maturity	strative
ification	Description	eigr	Date	of Purchaser	Stock	eration	Par Value	Cost	Value	(Decrease)	Accretion	nized	13) Value	Date	Disposal	Disposal	Disposal	Year	Date	Symbol
	Ginnie Mae Pool-POOL #432716		09/01/2022 .	. PAYDOWN		93	93	94	92	0	1	0	10	93	0	0	0	5	.06/01/2026 .	1.A
	Ginnie Mae I Pool-POOL #447236		09/01/2022 .	PAYDOWN		32	32	32	32	0	0	0	00	32	0	0	0	2	.06/01/2027 .	1.A
	United States Treasury N-UNSECURED		07/13/2022 .	MATURITY		3,200,000	0	0	0	0	0	0	00	3,200,000	0	0	0	Ω	.06/30/2027 .	. 1.A
	9. Subtotal - Bonds - U.S. Governme	ents				3,200,125	125	126	124	0	1	0	1 0	3,200,125	0	0	0	7	XXX	XXX
	Freddie Mac Gold Pool-FG C63727		09/01/2022 .	. PAYDOWN		82	82	81	76	0	6	0	60	82	0	0	0	3	.02/01/2032	. 1.A
	Freddie Mac Gold Pool-FG C67180			. PAYDOWN		86	86	87	83	0	3	0		86	0	0	0	3	.05/01/2032	. 1.A
31287S-FS-1	Freddie Mac Gold Pool-FG C66477		09/01/2022 .	PAYDOWN		118	118	119	112	F	6	ō		118	0	0	0	5	.04/01/2032	. 1.A
	Freddie Mac Gold Pool-FG C67402	-	09/01/2022 .	PAYDOWN		33 45	33	34	31	} ₀	2	ļ	20	33	ļ	ļō	ļ		.05/01/2032	. I.A
31287U-EQ-1 31288H-7A-2	Freddie Mac Gold Pool-FG C68243Freddie Mac Gold Pool-FG C78989	-	09/01/2022 .	PAYDOWN		45	43	45	343		29	0		45		0	0	2	.05/01/2032 .	. I.A
	Freddie Mac REMICS-FHR 1474 E		09/01/2022 .	PAYDOWN		190	190	187	189		90	0	1 0	434	0	0	0	۹	.02/01/2023	1 A
	Freddie Mac Gold Pool-FG C00860		09/01/2022 .	PAYDOWN		182	182	183	157	0	25	0	250	182	0	0	0	9	.09/01/2029	1.A
31292H-NH-3	Freddie Mac Gold Pool-FG C01292		09/01/2022	PAYDOWN		2.098	2.098	2,106	1.654	0	444	0	4440	2.098	0	0	0	81	.02/01/2032	1.A
31292H-QN-7	Freddie Mac Gold Pool-FG C01361		09/01/2022 .	PAYDOWN		176	176	177	165	0	11	0		176	0	0	0	7	.05/01/2032	1.A
	Freddie Mac REMICS-FHR 2333 UZ		09/01/2022 .	PAYDOWN		2,531	2,531	2,434	2,977	0	(446)	0	(446)0	2,531	0	0	0	110	.07/01/2031	1.A
3133TT-RX-1	Freddie Mac REMICS-FHR 2329 ZA	.	09/01/2022 .	PAYDOWN		4,701	4,701	4,466	5,339	0	(638)	0	(638)0	4,701	0	0	0	203	.06/01/2031	1.A
	Freddie Mac REMICS-FHR 2355 CE		09/01/2022 .	. PAYDOWN		635	635	628	628	0	7	0		635	0	0	0	29	.09/01/2031 .	1.A
313920-CW-8	Fannie Mae REMICS-FNR 2001-31 ZC			. PAYDOWN		4,490	4,490	4,507	4,950	0	(460)	0	(460)0	4,490	0	0	0	200	.07/01/2031 .	. 1.A
	United States Internatio-UNSECURED			. SINKING PAYMENT		67,819	67,819	67,819	67,831	0	(13)		(13)	67,819	0	0	0	3,011	.02/27/2027	. 1.A
	Sports & Exhibition Auth-REVENUE BONDS	-	07/01/2022 .	. CALL 100	-	100,000	100,000	107,110	103,734	0	(162)	0	(162)0	103,572	0	(3,572)	(3,572)		.07/01/2030	1.D
	Virginia Housing Develop-REVENUE BONDS		08/01/2022 .	. CALL 100		20,957	20,957	20,957	20,917			0		20,917		40	40	591	.12/25/2043	1.A FE
	9. Subtotal - Bonds - U.S. Special Re	evenu		I		204,577	204,577	211,386	209,202	0	(1,094)		(1,094) 0	208,109	0	(0,002)	(3,532)	12,200	XXX	XXX
	AMERICAN HOMES 4 RENT-SERIES 2014-SFR2 C		09/01/2022 .	. PAYDOWN		2,044	2,044	2, 101 10,507	2,060	0	(16)	0	(16)0	2,044	0	0	0	52	. 10/01/2036 .	1.A FE
	Banc of America Funding -BAFC 2006-1 1A2 Alternative Loan Trust 2-CWALT 2004-J2 3		08/01/2022 .	PAYDOWN PAYDOWN		10,744	10,744		10,635		109 25		109	10,744	0		0	360	.01/01/2036 .04/01/2034	1.A FM
	CHL Mortgage Pass-Throug-CWHL 2005-24 A3		09/01/2022 .	PAYDOWN		4,071	3,968	4,244	2,812	1,468	(313)		1, 155	4,071	0			236	.11/01/2035	5.B FM
16165Y-AV-4	ChaseFlex Trust Multi-CI-CFLX 2007-M1 2F		09/01/2022	PAYDOWN		9.396	9,660	8.384	6.455	0	3. 179	0	3. 179	9.396	0	0	0	265	.08/01/2037 .	1.D FM
	HSI Asset Loan Obligatio-HALO 2007-2 3A6		09/01/2022 .	PAYDOWN		1,374	5,899	5,076	2,519	0	2,749		2,7490	1,374	0	0	0		.09/01/2037	1.D FM
	JGWPT XXVIII LLC-HENDR 2013-1A A		09/15/2022	PAYDOWN		6,399	6,399	6,395	6,396	0	4	0	40	6,399	0	0	0	140	.04/15/2067	1.A FE
46817M-AK-3	Jackson Financial Inc-SENIOR UNSECURED	.	09/23/2022	EXCHANGE OFFER		192,960	250,000	237,503	0	0	614	0	6140	192,960	0	0	0	6,510	.11/23/2031	2.B FE
	New York University-UNSECURED		07/01/2022 .	. CALL 100		50,000	50,000	48,762	49,246	0	27	0	270	49,273	0	727	727	2,618	.07/01/2032 .	1.D FE
	Sprint Spectrum Co LLC /-FIRST LIEN		09/20/2022 .	. SINKING PAYMENT		250,000	250,000	250,000	250,000	0	0		00	250,000	0	0	0	7,420	.03/20/2025	2.A FE
110999999	9. Subtotal - Bonds - Industrial and N	Miscel	laneous (Un	affiliated)		531,302	593,028	577,045	334,412	1,468	6,378	0	7,846 0	530,575	0	727	727	17,983	XXX	XXX
250999999	7. Total - Bonds - Part 4					3,936,004	797,730	788,557	543,738	1,468	5,285	0	6,753 0	3,938,809	0	(2,805)	(2,805)	30,190	XXX	XXX
250999999	8. Total - Bonds - Part 5					XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
	9. Total - Bonds					3.936.004	797,730	788.557	543,738	1,468	5,285		6,753 0	3,938,809	0		(2,805)	30,190	XXX	XXX
	7. Total - Preferred Stocks - Part 4					0,300,004	XXX	700,337	0-10,700	1,400	0,200		0,730	0,300,003	0		(2,000)	00,100	XXX	XXX
						VVV		•	VVV	v	0	- U	VVV VVV	VVV	v	v	٠	VVV		
	8. Total - Preferred Stocks - Part 5					XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
	9. Total - Preferred Stocks					0	XXX	0	0	0	0		0 0	0	0	0	0	0	XXX	XXX
	7. Total - Common Stocks - Part 4					0	XXX	0		0	0		0 0	0	v		0	0	XXX	XXX
598999999	8. Total - Common Stocks - Part 5					XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
598999999	9. Total - Common Stocks	-				0	XXX	0	0	0	0	0	0 0	0	0	0	0	0	XXX	XXX
	9. Total - Preferred and Common Sto	ncks				n	XXX	0	n	0	0		0 0	n	0		0	n	XXX	XXX
600999999						3.936.004	XXX	788.557	543.738	1.468	5.285		6.753 0	3.938.809	·		·	30.190	XXX	XXX
000000000	i otais					ა, უან, 004	////	100,001	J4J, / J8	1,400	ე,28ე	U	0,700 0	3,930,809	U	(2,800)	(2,000)	აი, 190	////\	////

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

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

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

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

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

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

Schedule DB - Part E - Derivatives Hedging Variable Annuity Guarantees **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	Fnd	Depository	Ralances
IVIOLITI	LIIU		Dalalices

1	2	3	1	5	Pools Do	lance at End of Ead	ah Manth	9
1	-	3	4	5		lance at End of Ead uring Current Quart		9
			Amount of	Amount of	6	7	8	1
· · · · · · · · · · · · · · · · · · ·			Interest Received			'	0	
		Rate of		at Current				
Depository	Code	Interest	Quarter	Statement Date	First Month	Second Month	Third Month	*
Bank of New York Mellon New York, NY					542,080	674,297	2,340,765	XXX.
PNC Bank Pittsburgh, PA					(148,650)		(55,093)	XXX
Wells Fargo Winston Salem, NC					68,940			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	462,370	21,156	2,350,735	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	462,370	21,156	2,350,735	XXX
0499999. Cash in Company's Office	XXX	XXX	XXX	XXX				XXX
								_
		<u> </u>						<u> </u>
								
								L
	<u> </u>	<u> </u>						
0599999. Total - Cash	XXX	XXX	0	0	462,370	21,156	2,350,735	XXX

SCHEDULE E - PART 2 - CASH EQUIVALENTS

Cha	w Invoctment	Owned End	of Current Quarter	

	-						_
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
0109999999. Total - U.S. Government Bonds	Oouc	Date / toquired	rate of interest	Waterity Bate	Carrying value	Due and Accided	Burng rear
0309999999. Total - All Other Government Bonds					0	0	
					v	0	
0509999999. Total - U.S. States, Territories and Possessions Bonds					0	0	(
0709999999. Total - U.S. Political Subdivisions Bonds					0	0	(
090999999. Total - U.S. Special Revenues Bonds					0	0	(
1109999999. Total - Industrial and Miscellaneous (Unaffiliated) Bonds					0	0	(
1309999999. Total - Hybrid Securities					0	0	(
150999999. Total - Parent, Subsidiaries and Affiliates Bonds					0	0	(
1909999999. Subtotal - Unaffiliated Bank Loans					0	0	(
2419999999. Total - Issuer Obligations					0	0	(
2429999999. Total - Residential Mortgage-Backed Securities					0	0	(
2439999999. Total - Commercial Mortgage-Backed Securities					0	0	(
2449999999. Total - Other Loan-Backed and Structured Securities					0	0	(
2459999999. Total - SVO Identified Funds					0	0	(
246999999. Total - Affiliated Bank Loans					0	0	(
247999999. Total - Unaffiliated Bank Loans					0	0	
					•	,	· '
2509999999 Total Bonds					0	0	
2509999999. Total Bonds		05/17/2022	2 810		0 4 225 046	0	(
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA		05/17/2022	2.810		4,225,046	00	
		05/17/2022	2.810		0 4,225,046 4,225,046	0 0	(
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA		05/17/2022	2.810			0	(
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA		05/17/2022	2.810			00	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA		05/17/2022	2.810			00	(
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0	(
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA		.05/17/2022	2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	
09248U-71-8 BLACKROCK LIQUIDITY FUND-EXEMPT MONEY MA			2.810			0 0	