



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

QUARTERLY STATEMENT

AS OF MARCH 31, 2021

OF THE CONDITION AND AFFAIRS OF THE

Massachusetts Mutual Life Insurance Company

NAIC Group Code 0435 (Current) 0435 (Prior) NAIC Company Code 65935 Employer's ID Number 04-1590850

Organized under the Laws of Massachusetts, State of Domicile or Port of Entry MA

Country of Domicile United States of America

Licensed as business type: Life, Accident and Health [X] Fraternal Benefit Societies []

Incorporated/Organized 05/15/1851 Commenced Business 08/01/1851

Statutory Home Office 1295 State Street Springfield, MA, US 01111 (Street and Number) (City or Town, State, Country and Zip Code)

Main Administrative Office 1295 State Street Springfield, MA, US 01111 (Street and Number) (City or Town, State, Country and Zip Code) 413-788-8411 (Area Code) (Telephone Number)

Mail Address 1295 State Street Springfield, MA, US 01111 (Street and Number or P.O. Box) (City or Town, State, Country and Zip Code)

Primary Location of Books and Records 1295 State Street Springfield, MA, US 01111 (Street and Number) (City or Town, State, Country and Zip Code) 413-788-8411 (Area Code) (Telephone Number)

Internet Website Address www.massmutual.com

Statutory Statement Contact Trevor Wade Gordon 617-695-4321 (Name) (Area Code) (Telephone Number) tgordon@MassMutual.com 413-226-4086 (E-mail Address) (FAX Number)

OFFICERS

President and Chief Executive Officer Roger William Crandall Treasurer Todd Garrett Picken Secretary Akintokunbo Akinbajo Appointed Actuary Vy Quoc Ho

OTHER

Elizabeth Ward Chicares, Chief Financial Officer Michael Robert Fanning, Head of MassMutual U.S. Melvin Timothy Corbett, Chief Investment Officer Adnan Omar Ahmed, Head of MassMutual International Geoffrey James Craddock, Chief Risk Officer Pia Denise Flanagan, Head of Operations, CEO Action for Racial Equity Susan Marie Cicco, Head of Human Resources & Employee Experience Michael James O'Connor, General Counsel Gareth Fielding Ross, Head of Enterprise Technology & Experience

DIRECTORS OR TRUSTEES

Roger William Crandall - Chairman Karen Hall Bechtel Mark Thomas Bertolini Kathleen Ann Corbet James Henry DeGraffenreid, Jr. Isabella Davidov Goren Jeffrey Marc Leiden Laura Jeanne Sen William Taylor Spitz Howard Todd Stitzer - Lead Director Shelley Beth Leibowitz

State of Massachusetts SS: County of Hampden

The officers of this reporting entity being duly sworn, each depose and say that they are the described officers of said reporting entity, and that on the reporting period stated above, all of the herein described assets were the absolute property of the said reporting entity, free and clear from any liens or claims thereon, except as herein stated, and that this statement, together with related exhibits, schedules and explanations therein contained, annexed or referred to, is a full and true statement of all the assets and liabilities and of the condition and affairs of the said reporting entity as of the reporting period stated above, and of its income and deductions therefrom for the period ended, and have been completed in accordance with the NAIC Annual Statement Instructions and Accounting Practices and Procedures manual except to the extent that: (1) state law may differ; or, (2) that state rules or regulations require differences in reporting not related to accounting practices and procedures, according to the best of their information, knowledge and belief, respectively. Furthermore, the scope of this attestation by the described officers also includes the related corresponding electronic filing with the NAIC, when required, that is an exact copy (except for formatting differences due to electronic filing) of the enclosed statement. The electronic filing may be requested by various regulators in lieu of or in addition to the enclosed statement.

Roger William Crandall President and Chief Executive Officer

Akintokunbo Akinbajo Secretary

Todd Garrett Picken Treasurer

Subscribed and sworn to before me this day of

- a. Is this an original filing? Yes [X] No []
b. If no,
1. State the amendment number.....
2. Date filed
3. Number of pages attached.....

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

ASSETS

	Current Statement Date			4 December 31 Prior Year Net Admitted Assets
	1 Assets	2 Nonadmitted Assets	3 Net Admitted Assets (Cols. 1 - 2)	
1. Bonds	113,190,063,772		113,190,063,772	114,683,944,351
2. Stocks:				
2.1 Preferred stocks	469,629,635		469,629,635	470,256,327
2.2 Common stocks	21,123,444,962	189,047	21,123,255,915	21,086,999,910
3. Mortgage loans on real estate:				
3.1 First liens	26,491,431,376		26,491,431,376	26,078,333,015
3.2 Other than first liens.....				
4. Real estate:				
4.1 Properties occupied by the company (less \$ encumbrances)	304,091,980		304,091,980	265,025,127
4.2 Properties held for the production of income (less \$ 950,327,045 encumbrances)	92,395,657		92,395,657	97,346,026
4.3 Properties held for sale (less \$ encumbrances)				
5. Cash (\$ 504,251,672), cash equivalents (\$ 4,253,255,332) and short-term investments (\$ 1,698,435,184)	6,455,942,187		6,455,942,187	5,738,239,031
6. Contract loans (including \$ premium notes)	15,621,120,729	148,071	15,620,972,658	15,597,185,099
7. Derivatives	15,227,019,133		15,227,019,133	21,076,411,762
8. Other invested assets	10,168,532,131	60,041,236	10,108,490,895	9,533,622,734
9. Receivables for securities	2,293,113,333		2,293,113,333	1,501,252,903
10. Securities lending reinvested collateral assets				
11. Aggregate write-ins for invested assets				
12. Subtotals, cash and invested assets (Lines 1 to 11)	211,436,784,897	60,378,354	211,376,406,543	216,128,616,284
13. Title plants less \$ charged off (for Title insurers only)				
14. Investment income due and accrued	2,847,171,166	1,429,183	2,845,741,983	3,859,484,460
15. Premiums and considerations:				
15.1 Uncollected premiums and agents' balances in the course of collection	118,177,855	2,908,054	115,269,802	161,871,466
15.2 Deferred premiums, agents' balances and installments booked but deferred and not yet due (including \$ earned but unbilled premiums)	893,166,335		893,166,335	917,323,458
15.3 Accrued retrospective premiums (\$) and contracts subject to redetermination (\$)				
16. Reinsurance:				
16.1 Amounts recoverable from reinsurers	130,068,301	910,224	129,158,077	67,472,255
16.2 Funds held by or deposited with reinsured companies				
16.3 Other amounts receivable under reinsurance contracts	73,206,390		73,206,390	254,150,151
17. Amounts receivable relating to uninsured plans				
18.1 Current federal and foreign income tax recoverable and interest thereon				
18.2 Net deferred tax asset	875,195,739		875,195,739	508,589,555
19. Guaranty funds receivable or on deposit	11,466,347		11,466,347	11,751,145
20. Electronic data processing equipment and software	256,619,421	237,768,698	18,850,722	21,068,444
21. Furniture and equipment, including health care delivery assets (\$)	49,835,869	49,835,869		
22. Net adjustment in assets and liabilities due to foreign exchange rates				
23. Receivables from parent, subsidiaries and affiliates	50,444,675		50,444,675	54,499,315
24. Health care (\$) and other amounts receivable				
25. Aggregate write-ins for other than invested assets	3,746,708,852	1,067,214,814	2,679,494,039	2,508,581,328
26. Total assets excluding Separate Accounts, Segregated Accounts and Protected Cell Accounts (Lines 12 to 25)	220,488,845,848	1,420,445,196	219,068,400,652	224,493,407,863
27. From Separate Accounts, Segregated Accounts and Protected Cell Accounts	75,714,859,241		75,714,859,241	75,965,585,904
28. Total (Lines 26 and 27)	296,203,705,089	1,420,445,196	294,783,259,892	300,458,993,767
DETAILS OF WRITE-INS				
1101.				
1102.				
1103.				
1198. Summary of remaining write-ins for Line 11 from overflow page				
1199. Totals (Lines 1101 through 1103 plus 1198)(Line 11 above)				
2501. Corporate owned life insurance	2,478,169,843		2,478,169,843	2,421,839,515
2502. Pension plan asset	608,823,712	608,823,712		
2503. Cash advances to agents	238,415,327	238,415,327		
2598. Summary of remaining write-ins for Line 25 from overflow page	421,299,970	219,975,774	201,324,196	86,741,813
2599. Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	3,746,708,852	1,067,214,814	2,679,494,039	2,508,581,328

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

LIABILITIES, SURPLUS AND OTHER FUNDS

	1 Current Statement Date	2 December 31 Prior Year
1. Aggregate reserve for life contracts \$ 123,681,464,906 less \$ included in Line 6.3 (including \$ 133,642,045 Modco Reserve)	123,681,464,906	121,992,059,903
2. Aggregate reserve for accident and health contracts (including \$ 0 Modco Reserve)	3,233,246,000	3,174,986,915
3. Liability for deposit-type contracts (including \$ Modco Reserve)	15,397,204,509	14,579,842,257
4. Contract claims:		
4.1 Life	664,598,802	655,286,279
4.2 Accident and health	29,339,046	26,818,663
5. Policyholders' dividends/refunds to members \$ 125,676 and coupons \$ due and unpaid	125,676	2,456,410
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)	1,727,125,902	1,705,119,894
6.2 Policyholders' dividends and refunds to members not yet apportioned (including \$ Modco)		
6.3 Coupons and similar benefits (including \$ Modco)		
7. Amount provisionally held for deferred dividend policies not included in Line 6		
8. Premiums and annuity considerations for life and accident and health contracts received in advance less \$ discount; including \$ 11,062,178 accident and health premiums	59,737,943	35,658,349
9. Contract liabilities not included elsewhere:		
9.1 Surrender values on canceled contracts		
9.2 Provision for experience rating refunds, including the liability of \$ accident and health experience rating refunds of which \$ is for medical loss ratio rebate per the Public Health Service Act	11,254,074	8,718,381
9.3 Other amounts payable on reinsurance, including \$ 21,789,970 assumed and \$ 93,643,066 ceded	115,433,036	89,276,918
9.4 Interest Maintenance Reserve	1,722,148,521	2,084,357,421
10. Commissions to agents due or accrued-life and annuity contracts \$ 26,610,948 , accident and health \$ 389,446 and deposit-type contract funds \$ 12,499,624	39,500,017	324,181
11. Commissions and expense allowances payable on reinsurance assumed	3,442,518	3,502,906
12. General expenses due or accrued	987,842,145	1,253,249,792
13. Transfers to Separate Accounts due or accrued (net) (including \$ (98,548,741) accrued for expense allowances recognized in reserves, net of reinsured allowances)	(115,210,507)	(103,546,435)
14. Taxes, licenses and fees due or accrued, excluding federal income taxes	51,119,491	56,442,035
15.1 Current federal and foreign income taxes, including \$ (40,029,200) on realized capital gains (losses)	789,168,395	670,233,140
15.2 Net deferred tax liability		
16. Unearned investment income	150,924,337	213,380,280
17. Amounts withheld or retained by reporting entity as agent or trustee	27,838,578	7,520,225
18. Amounts held for agents' account, including \$ agents' credit balances	410,597,159	414,032,550
19. Remittances and items not allocated	1,396,696,965	803,137,296
20. Net adjustment in assets and liabilities due to foreign exchange rates		
21. Liability for benefits for employees and agents if not included above	211,600,149	216,512,515
22. Borrowed money \$ 249,992,632 and interest thereon \$	249,992,632	249,989,854
23. Dividends to stockholders declared and unpaid		
24. Miscellaneous liabilities:		
24.01 Asset valuation reserve	5,436,916,912	5,205,048,230
24.02 Reinsurance in unauthorized and certified (\$) companies	131,968	135,677
24.03 Funds held under reinsurance treaties with unauthorized and certified (\$) reinsurers	6,536,363,909	6,450,994,969
24.04 Payable to parent, subsidiaries and affiliates	18,036,706	7,539,161
24.05 Drafts outstanding		
24.06 Liability for amounts held under uninsured plans		
24.07 Funds held under coinsurance	11,500,608,961	11,478,407,953
24.08 Derivatives	11,639,309,250	17,348,756,669
24.09 Payable for securities	695,518,499	76,943,917
24.10 Payable for securities lending		
24.11 Capital notes \$ and interest thereon \$		
25. Aggregate write-ins for liabilities	8,269,338,133	11,458,808,225
26. Total liabilities excluding Separate Accounts business (Lines 1 to 25)	194,941,414,631	200,165,994,528
27. From Separate Accounts Statement	75,714,859,241	75,965,585,904
28. Total liabilities (Lines 26 and 27)	270,656,273,872	276,131,580,432
29. Common capital stock		
30. Preferred capital stock		
31. Aggregate write-ins for other than special surplus funds		
32. Surplus notes	4,005,786,600	3,772,729,993
33. Gross paid in and contributed surplus		
34. Aggregate write-ins for special surplus funds	3,250,000	3,250,000
35. Unassigned funds (surplus)	20,117,949,420	20,551,433,342
36. Less treasury stock, at cost:		
36.1 shares common (value included in Line 29 \$)		
36.2 shares preferred (value included in Line 30 \$)		
37. Surplus (Total Lines 31+32+33+34+35-36) (including \$ 0 in Separate Accounts Statement)	24,126,986,020	24,327,413,335
38. Totals of Lines 29, 30 and 37	24,126,986,020	24,327,413,335
39. Totals of Lines 28 and 38 (Page 2, Line 28, Col. 3)	294,783,259,892	300,458,993,767
DETAILS OF WRITE-INS		
2501. Derivative collateral	3,240,269,141	5,550,937,332
2502. Repurchase agreements	3,070,954,240	4,007,031,628
2503. Derivative accrued interest	1,762,111,730	1,606,535,499
2598. Summary of remaining write-ins for Line 25 from overflow page	196,003,022	294,303,766
2599. Totals (Lines 2501 through 2503 plus 2598)(Line 25 above)	8,269,338,133	11,458,808,225
3101.		
3102.		
3103.		
3198. Summary of remaining write-ins for Line 31 from overflow page		
3199. Totals (Lines 3101 through 3103 plus 3198)(Line 31 above)		
3401. Designated surplus for group annuities	2,500,000	2,500,000
3402. Designated surplus for separate account business	750,000	750,000
3403. Miscellaneous		
3498. Summary of remaining write-ins for Line 34 from overflow page		
3499. Totals (Lines 3401 through 3403 plus 3498)(Line 34 above)	3,250,000	3,250,000

SUMMARY OF OPERATIONS

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
1. Premiums and annuity considerations for life and accident and health contracts	4,136,958,579	7,342,766,212	10,275,043,994
2. Considerations for supplementary contracts with life contingencies	8,796,169	11,493,674	48,128,890
3. Net investment income	1,677,103,337	1,702,413,158	8,641,485,659
4. Amortization of Interest Maintenance Reserve (IMR)	30,271,947	17,153,847	110,580,552
5. Separate Accounts net gain from operations excluding unrealized gains or losses			
6. Commissions and expense allowances on reinsurance ceded	96,526,911	63,264,309	2,693,100,880
7. Reserve adjustments on reinsurance ceded	(3,734,603)	(2,918,497)	(23,655,168)
8. Miscellaneous Income:			
8.1 Income from fees associated with investment management, administration and contract guarantees from Separate Accounts	54,335,321	98,670,220	405,531,185
8.2 Charges and fees for deposit-type contracts			
8.3 Aggregate write-ins for miscellaneous income	124,223,269	58,783,987	650,513,146
9. Totals (Lines 1 to 8.3)	6,124,480,928	9,291,626,910	22,800,729,137
10. Death benefits	692,779,123	525,525,128	2,238,051,114
11. Matured endowments (excluding guaranteed annual pure endowments)	3,102,306	2,883,825	16,545,466
12. Annuity benefits	546,456,173	593,246,394	2,390,934,737
13. Disability benefits and benefits under accident and health contracts	93,715,080	96,046,375	382,243,868
14. Coupons, guaranteed annual pure endowments and similar benefits			
15. Surrender benefits and withdrawals for life contracts	1,854,177,272	5,218,702,270	19,247,330,548
16. Group conversions			
17. Interest and adjustments on contract or deposit-type contract funds	86,609,283	128,150,559	474,210,694
18. Payments on supplementary contracts with life contingencies	5,524,276	5,536,270	21,356,381
19. Increase in aggregate reserves for life and accident and health contracts	1,721,160,234	3,387,453,523	(5,319,239,250)
20. Totals (Lines 10 to 19)	5,003,523,748	9,957,526,344	19,451,433,559
21. Commissions on premiums, annuity considerations, and deposit-type contract funds (direct business only)	252,452,192	245,613,790	1,032,336,037
22. Commissions and expense allowances on reinsurance assumed	15,170,034	15,643,529	58,805,725
23. General insurance expenses and fraternal expenses	416,084,027	505,152,526	2,394,386,534
24. Insurance taxes, licenses and fees, excluding federal income taxes	92,813,561	78,134,145	275,117,451
25. Increase in loading on deferred and uncollected premiums	12,763,595	45,221,233	13,197,693
26. Net transfers to or (from) Separate Accounts net of reinsurance	(228,743,901)	76,426,038	(3,646,073,474)
27. Aggregate write-ins for deductions	180,291,884	(334,580,247)	587,266,846
28. Totals (Lines 20 to 27)	5,744,355,141	10,589,137,358	20,166,470,372
29. Net gain from operations before dividends to policyholders and federal income taxes (Line 9 minus Line 28)	380,125,788	(1,297,510,448)	2,634,258,766
30. Dividends to policyholders and refunds to members	393,423,463	383,430,158	1,697,380,641
31. Net gain from operations after dividends to policyholders, refunds to members and before federal income taxes (Line 29 minus Line 30)	(13,297,676)	(1,680,940,606)	936,878,125
32. Federal and foreign income taxes incurred (excluding tax on capital gains)	72,542,568	(438,757,071)	134,792,230
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)	(85,840,244)	(1,242,183,535)	802,085,895
34. Net realized capital gains (losses) (excluding gains (losses) transferred to the IMR) less capital gains tax of \$ 9,760,168 (excluding taxes of \$ 10,897,483) transferred to the IMR	(477,995,050)	110,057,242	(586,175,280)
35. Net income (Line 33 plus Line 34)	(563,835,293)	(1,132,126,293)	215,910,615
CAPITAL AND SURPLUS ACCOUNT			
36. Capital and surplus, December 31, prior year	24,327,413,335	18,892,910,171	18,892,910,171
37. Net income (Line 35)	(563,835,293)	(1,132,126,293)	215,910,615
38. Change in net unrealized capital gains (losses) less capital gains tax of \$ 11,788,003	306,188,582	4,964,272,557	1,421,779,174
39. Change in net unrealized foreign exchange capital gain (loss)	(222,503,176)	(774,512,999)	1,009,504,915
40. Change in net deferred income tax	295,990,943	(10,496,377)	(22,692,987)
41. Change in nonadmitted assets	4,759,139	1,731,687	50,501,209
42. Change in liability for reinsurance in unauthorized and certified companies	3,709	(2,353,382)	26,694
43. Change in reserve on account of change in valuation basis, (increase) or decrease		12,700,000	(48,425,000)
44. Change in asset valuation reserve	(231,868,683)	48,190,215	(534,863,914)
45. Change in treasury stock			
46. Surplus (contributed to) withdrawn from Separate Accounts during period			
47. Other changes in surplus in Separate Accounts Statement			
48. Change in surplus notes	233,056,607		1,537,330,284
49. Cumulative effect of changes in accounting principles			
50. Capital changes:			
50.1 Paid in			
50.2 Transferred from surplus (Stock Dividend)			
50.3 Transferred to surplus			
51. Surplus adjustment:			
51.1 Paid in			
51.2 Transferred to capital (Stock Dividend)			
51.3 Transferred from capital			
51.4 Change in surplus as a result of reinsurance			
52. Dividends to stockholders			
53. Aggregate write-ins for gains and losses in surplus	(22,219,143)	(9,830,710)	1,805,432,173
54. Net change in capital and surplus for the year (Lines 37 through 53)	(200,427,314)	3,097,574,697	5,434,503,164
55. Capital and surplus, as of statement date (Lines 36 + 54)	24,126,986,020	21,990,484,868	24,327,413,335
DETAILS OF WRITE-INS			
08.301. Change in corporate owned life insurance	60,058,938	(71,392,826)	139,549,407
08.302. Experience refunds on reinsurance contracts	21,660,873	28,894,003	99,624,913
08.303. Management and administrative fees	18,127,582	74,930,947	304,959,901
08.398. Summary of remaining write-ins for Line 8.3 from overflow page	24,375,876	26,351,863	106,378,925
08.399. Totals (Lines 08.301 through 08.303 plus 08.398) (Line 8.3 above)	124,223,269	58,783,987	650,513,146
2701. Reinsurance ceded adjustment	(22,667,248)	(3,461,937)	1,664,926,416
2702. Ceded income on funds withheld	140,079,319	52,018,414	343,564,217
2703. Miscellaneous charges to operations	34,657,768	3,171,921	56,689,210
2798. Summary of remaining write-ins for Line 27 from overflow page	28,222,045	(386,308,645)	451,107,293
2799. Totals (Lines 2701 through 2703 plus 2798)(Line 27 above)	180,291,884	(334,580,247)	587,266,846
5301. Reinsurance ceded adjustment	(22,667,248)	(3,461,937)	
5302. Other changes in surplus	448,106	(6,369,556)	32,129,727
5303. Deferred gain on reinsurance ceded			1,662,259,416
5398. Summary of remaining write-ins for Line 53 from overflow page		783	111,043,030
5399. Totals (Lines 5301 through 5303 plus 5398)(Line 53 above)	(22,219,143)	(9,830,710)	1,805,432,173

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

CASH FLOW

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
Cash from Operations			
1. Premiums collected net of reinsurance	4,220,392,942	7,231,052,668	16,109,561,276
2. Net investment income	2,828,754,603	1,997,495,702	7,281,442,469
3. Miscellaneous income	311,894,203	266,739,239	3,641,620,813
4. Total (Lines 1 to 3)	7,361,041,748	9,495,287,609	27,032,624,558
5. Benefit and loss related payments	3,308,832,998	6,557,056,687	24,242,706,403
6. Net transfers to Separate Accounts, Segregated Accounts and Protected Cell Accounts	(152,942,256)	(282,088,658)	(4,019,907,451)
7. Commissions, expenses paid and aggregate write-ins for deductions	1,560,218,711	872,710,026	2,872,667,317
8. Dividends paid to policyholders	376,817,375	372,529,690	1,673,553,297
9. Federal and foreign income taxes paid (recovered) net of \$ tax on capital gains (losses)	(32,722,554)	14,311	(141,754,982)
10. Total (Lines 5 through 9)	5,060,204,274	7,520,222,056	24,627,264,584
11. Net cash from operations (Line 4 minus Line 10)	2,300,837,474	1,975,065,553	2,405,359,974
Cash from Investments			
12. Proceeds from investments sold, matured or repaid:			
12.1 Bonds	9,978,963,534	5,841,576,446	23,127,707,516
12.2 Stocks	125,477,690	132,553,616	554,149,210
12.3 Mortgage loans	671,272,018	881,607,051	4,097,828,233
12.4 Real estate			952,949
12.5 Other invested assets	109,228,843	208,596,156	1,051,109,632
12.6 Net gains or (losses) on cash, cash equivalents and short-term investments	17,888,146	(17,046,526)	(8,170,597)
12.7 Miscellaneous proceeds	(1,502,391,388)	2,989,485,064	2,405,853,395
12.8 Total investment proceeds (Lines 12.1 to 12.7)	9,400,438,843	10,036,771,807	31,229,430,338
13. Cost of investments acquired (long-term only):			
13.1 Bonds	8,564,500,263	9,190,376,093	38,209,254,973
13.2 Stocks	145,986,562	75,368,572	2,323,583,342
13.3 Mortgage loans	1,100,500,555	1,543,800,748	4,293,148,419
13.4 Real estate	56,606,887	9,965,559	120,079,851
13.5 Other invested assets	414,410,525	401,132,584	1,847,429,323
13.6 Miscellaneous applications	(603,159,726)	(143,844,520)	351,422,238
13.7 Total investments acquired (Lines 13.1 to 13.6)	9,678,845,066	11,076,799,036	47,144,918,146
14. Net increase (or decrease) in contract loans and premium notes	23,454,494	206,268,867	872,006,901
15. Net cash from investments (Line 12.8 minus Line 13.7 and Line 14)	(301,860,717)	(1,246,296,096)	(16,787,494,709)
Cash from Financing and Miscellaneous Sources			
16. Cash provided (applied):			
16.1 Surplus notes, capital notes			697,116,000
16.2 Capital and paid in surplus, less treasury stock			
16.3 Borrowed funds	5,187	122,155	363,785
16.4 Net deposits on deposit-type contracts and other insurance liabilities	773,172,429	1,228,515,057	(1,030,569,145)
16.5 Dividends to stockholders			
16.6 Other cash provided (applied)	(2,054,451,217)	6,343,538,577	16,660,364,128
17. Net cash from financing and miscellaneous sources (Line 16.1 through Line 16.4 minus Line 16.5 plus Line 16.6)	(1,281,273,601)	7,572,175,789	16,327,274,768
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)	717,703,156	8,300,945,246	1,945,140,033
19. Cash, cash equivalents and short-term investments:			
19.1 Beginning of year	5,738,239,031	3,793,098,998	3,793,098,998
19.2 End of period (Line 18 plus Line 19.1)	6,455,942,187	12,094,044,244	5,738,239,031

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

20.0001. Surplus notes issued in exchange for bonds	233,056,607		837,205,167
20.0002. Bonds received as consideration for surplus notes	233,056,607		837,205,167
20.0003. Bond conversions and refinancing	167,866,768	89,958,630	4,922,572,255
20.0004. Change in market value of COLI	60,205,783	71,258,534	140,088,455
20.0005. Premium income recognized for a group annuity contracts	54,034,227	197,473,459	1,250,093,997
20.0006. Bonds received as consideration for group annuity contract	52,505,487	197,473,459	1,250,093,997
20.0007. Exchange of mortgage loans for other assets	18,380,541		
20.0008. Transfer of mortgage loans to partnerships and LLCs	11,331,264		353,344,560
20.0009. Net investment income payment in-kind bonds	6,932,551	2,765,166	12,217,692
20.0010. Common stock received as consideration for group annuity contracts	1,528,740		

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

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

20.0011. Stock conversion	18,512	10,098,365	78,887,581
20.0012. Premium ceded in exchange for invested assets			11,197,128,818
20.0013. Bonds transferred in exchange for premium ceded			9,378,808,608
20.0014. Premium income recognized for individual annuity contracts			3,720,969,355
20.0015. Bonds received as consideration for individual annuity contracts			3,720,041,355
20.0016. Mortgage loans transferred in exchange for premium ceded			1,725,451,598
20.0017. Preferred stock transferred in exchange for premium ceded			92,868,611
20.0018. Assets received in-kind for bond maturity			56,730,564
20.0019. Preferred stock received as consideration for individual annuity contracts			928,000
20.0020. Dividend reinvestment			93,790

EXHIBIT 1**DIRECT PREMIUMS AND DEPOSIT-TYPE CONTRACTS**

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
1. Industrial life			
2. Ordinary life insurance	2,496,854,338	2,026,620,909	9,193,180,933
3. Ordinary individual annuities	419,353,964	937,346,125	5,872,548,713
4. Credit life (group and individual)			
5. Group life insurance	33,005,533	29,377,049	112,681,859
6. Group annuities	2,896,746,546	4,690,425,977	16,096,920,854
7. A & H - group	105,619	104,508	558,705
8. A & H - credit (group and individual)			
9. A & H - other	192,334,617	192,037,850	764,616,396
10. Aggregate of all other lines of business			
11. Subtotal (Lines 1 through 10)	6,038,400,616	7,875,912,418	32,040,507,460
12. Fraternal (Fraternal Benefit Societies Only)			
13. Subtotal (Lines 11 through 12)	6,038,400,616	7,875,912,418	32,040,507,460
14. Deposit-type contracts	1,670,535,842	2,023,647,434	7,674,813,749
15. Total (Lines 13 and 14)	7,708,936,458	9,899,559,852	39,715,321,209
DETAILS OF WRITE-INS			
1001.			
1002.			
1003.			
1098. Summary of remaining write-ins for Line 10 from overflow page			
1099. Totals (Lines 1001 through 1003 plus 1098)(Line 10 above)			

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NOTES TO FINANCIAL STATEMENTS

Note 1 – Summary of Significant Accounting Policies and Going Concern

a. Accounting practices:

The accompanying financial statements of Massachusetts Mutual Life Insurance Company (the Company) have been prepared in conformity with the Statutory Accounting Practices (SAP) of the National Association of Insurance Commissioners (NAIC) and the accounting practices prescribed or permitted by the Commonwealth of Massachusetts Division of Insurance (the Division).

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

	SSAP #	F/S Page	F/S Line #	2021	2020
NET INCOME					
(1) State basis (Page 4, Line 35, Columns 1 & 3)	XXX	XXX	XXX	\$ (563,835,293)	\$ 215,910,615
(2) State prescribed practices that increase/(decrease) NAIC	N/A	N/A	N/A	-	-
(3) State permitted practices that increase/(decrease) NAIC	N/A	N/A	N/A	-	-
(4) NAIC SAP (1-2-3=4)	XXX	XXX	XXX	<u>\$ (563,835,293)</u>	<u>\$ 215,910,615</u>
SURPLUS					
(5) State basis (Page 3, Line 38, Columns 1 & 2)	XXX	XXX	XXX	\$ 24,126,986,020	\$ 24,327,413,335
(6) State prescribed practices that increase/(decrease) NAIC	N/A	N/A	N/A	-	-
(7) State permitted practices that increase/(decrease) NAIC	N/A	N/A	N/A	-	-
(8) NAIC SAP (5-6-7=8)	XXX	XXX	XXX	<u>\$ 24,126,986,020</u>	<u>\$ 24,327,413,335</u>

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

c. Accounting policy:

(1) No change

(2) Bonds are generally valued at amortized cost using the constant yield interest method with the exception of NAIC Category 6 bonds, which are in or near default, and certain residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS), which are rated by outside modelers, which are carried at the lower of amortized cost or fair value. NAIC ratings are applied to bonds and other securities. Categories 1 and 2 are considered investment grade, while Categories 3 through 6 are considered below investment grade. Bond transactions are recorded on a trade date basis, except for private placement bonds, which are recorded on the funding date.

The fair value of bonds is based on quoted market prices when available. If quoted market prices are not available, values provided by other third-party organizations are used. If values provided by other third-party organizations are unavailable, fair value is estimated using internal models by discounting expected future cash flows using observable current market rates applicable to yield, credit quality and maturity of the investment or using quoted market values for comparable investments. Internal inputs used in the determination of fair value include estimated prepayment speeds, default rates, discount rates and collateral values, among others. Structure characteristics and cash flow priority are also considered. Fair values resulting from internal models are those expected to be received in an orderly transaction between willing market participants.

(3-5) No change

(6) For loan-backed and structured securities, such as asset-backed securities, mortgage-backed securities, including RMBS and CMBS, and structured securities, including collateralized debt obligations, amortization or accretion is revalued quarterly based on the current estimated cash flows, using either the prospective or retrospective adjustment methodologies.

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

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

(7-14) No change

d. Going concern:

There is not substantial doubt regarding the Company's ability to continue as a going concern.

NOTES TO FINANCIAL STATEMENTS

Note 2 – Accounting Changes and Corrections of Errors

- a. For the three months ended March 31, 2021, corrections of prior years' errors were recorded in surplus, net of tax:

	Increase (Decrease) to:		
	Prior Years' Net Income	Current Year Surplus	Asset or Liability Balances
Liabilities for deposit-type contracts	\$ 26,149,000	\$ 26,149,000	\$ (26,149,000)
Policyholders' reserves	(26,499,797)	(26,499,797)	26,499,797
Common stocks - subsidiaries and affiliates	-	(1,500,000)	(1,500,000)
Net deferred income taxes	-	330,000	330,000
Total	\$ (350,797)	\$ (1,520,797)	

Of the \$1,520,797 decrease to surplus for prior years' errors, \$350,797 was recorded as prior period adjustments, net of taxes.

For the three months ended March 31, 2020, corrections of prior years' errors were recorded in surplus, net of tax:

	Increase (Decrease) to:		
	Prior Years' Net Income	Current Year Surplus	Asset or Liability Balances
Policyholders' reserves	(6,369,556)	(6,369,556)	6,369,556
Total	\$ (6,369,556)	\$ (6,369,556)	

Of the \$6,369,556 decrease to surplus for prior years' errors, \$6,369,556 was recorded as prior period adjustments, net of taxes.

- b. Adoption of new accounting standards:

In July 2020, the NAIC adopted modifications to Statements of Statutory Accounting Principles (SSAP) No. 26R, Bonds, effective January 1, 2021. The modifications apply similar reporting for gains or losses due to a tender offer as previously adopted for calls. The difference between consideration and par is recognized as net investment income, while any difference between book value and par is recognized as realized gain or loss. The modifications did not have a material effect on the Company's financial statements.

In July 2020, the NAIC adopted modifications to SSAP No. 32, Preferred Stock, effective January 1, 2021. The modifications define carrying value of redeemable preferred stock as amortized cost for NAIC 1-3 designations, the lower of amortized cost or fair value for NAIC 4-6 designations, and new fair value measurement for perpetual and mandatorily convertible preferred stock. They clarify when failure to meet certain dividends or redemption payments could trigger an impairment assessment that preferred shares issued by joint ventures are included in the scope of this guidance, and clarifies scope related to sinking fund schedules, mandatory conversions, and various other features. They also clarify fair value would be capped by any currently effective call price. The revisions impacted the Company's current unaffiliated and affiliated perpetual preferred stock investments. The modifications did not have a material effect on the Company's financial statements.

In March 2021, the NAIC adopted modifications to SSAP No. 26R, Bonds, effective January 1, 2021. The modifications expand the called bond disclosures to also include bonds terminated early through a tender offer. The modifications did not have a material effect on the Company's financial statements.

In March 2021, the NAIC adopted modifications to SSAP No. 26R, Bonds, effective January 1, 2021. The modifications clarify that perpetual bonds are within scope. Perpetual bonds shall be reported at fair value regardless of NAIC designation, not to exceed any current effective call price. For perpetual bonds with an effective call option, any applicable premium shall be amortized to the next effective call date. For perpetual bonds purchased at a discount, any applicable discount shall be accreted utilizing the yield-to-worst concept. The modifications did not have a material effect on the Company's financial statements.

NOTES TO FINANCIAL STATEMENTS

Note 3 – Business Combinations and Goodwill - No change

Note 4 – Discontinued Operations - No change

Note 5 – Investments

a. Mortgage loans, including mezzanine real estate loans

(1-4) No change

(5) Investment in impaired loans with or without allowance for credit losses and impaired loans subject to a participant or co-lender mortgage loan agreement for which the reporting entity is restricted from unilaterally foreclosing on the mortgage loan:

	Farm	Residential		Commercial		Mezzanine	Total
		Insured	All Other	Insured	All Other		
a. 2021							
1. With allowance for credit losses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2. No allowance for credit losses	-	-	-	-	57,725,191	-	57,725,191
3. Total (1+2)	-	-	-	-	57,725,191	-	57,725,191
4. Subject to a participant or co-lender mortgage loan agreement for which the reporting entity is restricted from unilaterally foreclosing on the mortgage loan	-	-	-	-	-	-	-
b. 2020							
1. With allowance for credit losses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2. No allowance for credit losses	-	-	-	-	-	-	-
3. Total (1+2)	-	-	-	-	-	-	-
4. Subject to a participant or co-lender mortgage loan agreement for which the reporting entity is restricted from unilaterally foreclosing on the mortgage loan	-	-	-	-	-	-	-

(6) Investment in impaired loans - average recorded investment, interest income recognized, recorded investment on nonaccrual status and amount of interest income recognized using a cash-basis method of accounting:

	Farm	Residential		Commercial		Mezzanine	Total
		Insured	All Other	Insured	All Other		
a. 2021							
1. Average recorded investment	\$ -	\$ -	\$ -	\$ -	55,747,460	\$ -	55,747,460
2. Interest income recognized	-	-	-	-	476,200	-	476,200
3. Recorded investment on nonaccrual status	-	-	-	-	57,725,191	-	57,725,191
4. Amount of interest income recognized using a cash-basis method of accounting	-	-	-	-	476,200	-	476,200
b. 2020							
1. Average recorded investment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2. Interest income recognized	-	-	-	-	-	-	-
3. Recorded investment on nonaccrual status	-	-	-	-	-	-	-
4. Amount of interest income recognized using a cash-basis method of accounting	-	-	-	-	-	-	-

(7) Allowance for credit losses - No change

(8) As of , the Company did not have any mortgage loans derecognized as a result of foreclosure.

b. Debt restructuring - No change

c. Reverse mortgages - No change

d. Loan-backed securities:

(1) Prepayment assumptions for loan-backed and structured securities are based on various assumptions and inputs obtained from external industry sources along with internal analysis and actual experience.

NOTES TO FINANCIAL STATEMENTS

- (2) The following contains loan-backed and structured securities that recognized other-than-temporary impairments (OTTI) classified on the following bases for recognizing OTTI:

(1) Amortized Cost Basis Before OTTI	(2) OTTI Recognized in Loss		(3) Fair Value 1-(2a+2b)
	(2a) Interest	(2b) Non-interest	

OTTI recognized in the first quarter

a. Intent to sell	\$	-	\$	-	\$	-
b. Inability or lack of intent to retain the investment in the security for a period of time sufficient to recover the amortized cost basis		11,247,256		-	6,172,765	5,074,491
c. Total first quarter	\$	<u>11,247,256</u>	\$	<u>-</u>	\$	<u>6,172,765</u>
			\$	<u>-</u>		<u>5,074,491</u>

OTTI recognized in the second quarter

d. Intent to sell	\$	-	\$	-	\$	-
e. Inability or lack of intent to retain the investment in the security for a period of time sufficient to recover the amortized cost basis		-		-	-	-
f. Total second quarter	\$	<u>-</u>	\$	<u>-</u>	\$	<u>-</u>

OTTI recognized in the third quarter

g. Intent to sell	\$	-	\$	-	\$	-
h. Inability or lack of intent to retain the investment in the security for a period of time sufficient to recover the amortized cost basis		-		-	-	-
i. Total third quarter	\$	<u>-</u>	\$	<u>-</u>	\$	<u>-</u>

OTTI recognized in the fourth quarter

j. Intent to sell	\$	-	\$	-	\$	-
k. Inability or lack of intent to retain the investment in the security for a period of time sufficient to recover the amortized cost basis		-		-	-	-
l. Total fourth quarter	\$	<u>-</u>	\$	<u>-</u>	\$	<u>-</u>

m. Annual aggregate total

\$ - \$ 6,172,765

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

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

CUSIP	Amortized Cost before OTTI	Projected Cash Flow	Recognized OTTI	Amortized Cost after OTTI	Fair Value at Time of OTTI	Date of Financial Instrument Where Reported
36828QQJ8	\$ 5,796,000	\$ -	\$ (5,796,000)	\$ -	\$ -	March 31, 2021
05535DCF9	2,560,946	2,505,562	(55,385)	2,505,562	2,647,762	March 31, 2021
61750FAE0	582,728	558,079	(24,649)	558,079	500,569	March 31, 2021
18974BAA7	203,962	193,231	(10,731)	193,231	197,038	March 31, 2021
22540V3F7	124,724	11,082	(113,642)	11,082	3,496	March 31, 2021
92978EAA2	123,118	119,363	(3,755)	119,363	115,107	March 31, 2021
41161PWB5	1,183,481	1,153,338	(30,143)	1,153,338	1,017,022	March 31, 2021
12669GXW6	153,925	20,285	(133,639)	20,285	173,435	March 31, 2021
55274SAM3	38,192	33,418	(4,774)	33,418	84,650	March 31, 2021
86359DME4	480,180	480,133	(47)	480,133	498,095	March 31, 2021
Totals	\$ 11,247,256	\$ 5,074,491	\$ (6,172,765)	\$ 5,074,491	\$ 5,237,174	

- (4) As of March 31, 2021, the gross unrealized losses and fair values for investments in structured and loan-backed securities for which an OTTI has not been recognized in earnings follow:

a. The aggregate amount of unrealized losses:	
1. Less than 12 months	\$ (50,810,418)
2. 12 months or longer	\$ (135,775,587)
b. The aggregate related fair value of securities with unrealized losses:	
1. Less than 12 months	\$ 2,411,544,987
2. 12 months or longer	\$ 2,442,800,727

- (5) No change

NOTES TO FINANCIAL STATEMENTS

e. Dollar repurchase agreements and/or securities lending transactions: The Company did not have any dollar repurchase agreements and/or securities lending transactions as of March 31, 2021.

f. Repurchase agreements transactions accounted for as secured borrowing:

- (1) The Company has entered into repurchase agreements whereby the Company sells securities and simultaneously agrees to repurchase the same or substantially the same securities. These repurchase agreements are accounted for as collateralized borrowings with the proceeds from the sale of the securities recorded as a liability and the underlying securities continue to be recorded as an investment by the Company. Earnings on these investments are recorded as investment income and the difference between the proceeds and the amount at which the securities will be subsequently reacquired is amortized as interest expense. Repurchase agreements are used as a tool for overall portfolio management to help ensure the Company maintains adequate assets in order to provide yield, spread and duration to support liabilities and other corporate needs.

The Company provides collateral, as dictated by the repurchase agreements, to the counterparty in exchange for a loan. If the fair value of the securities sold becomes less than the loan, the counterparty may require additional collateral.

The carrying value, which is at cost, reported in the Company's liabilities as repurchase agreements approximates the fair value.

(2) Type of Repo Trades Used

	1 FIRST QUARTER	2 SECOND QUARTER	3 THIRD QUARTER	4 FOURTH QUARTER
a. Bilateral (YES/NO)	YES	-	-	-
b. Tri-Party (YES/NO)	NO	-	-	-

(3) Original (Flow) & Residual Maturity

	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
a. Maximum Amount				
1. Open – No Maturity	-	-	-	-
2. Overnight	-	-	-	-
3. 2 Days to 1 Week	-	-	-	-
4. > 1 Week to 1 Month	198,412,500	-	-	-
5. > 1 Month to 3 Months	\$ 1,262,864,938	\$ -	\$ -	\$ -
6. > 3 Months to 1 Year	\$ 3,009,913,800	\$ -	\$ -	\$ -
7. > 1 Year	-	-	-	-

	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
b. Ending Balance				
1. Open – No Maturity	-	-	-	-
2. Overnight	-	-	-	-
3. 2 Days to 1 Week	-	-	-	-
4. > 1 Week to 1 Month	-	-	-	-
5. > 1 Month to 3 Months	\$ 331,985,294	\$ -	\$ -	\$ -
6. > 3 Months to 1 Year	\$ 2,738,467,600	\$ -	\$ -	\$ -
7. > 1 Year	-	-	-	-

(4) The company did not have any repurchase agreements where securities sold and/or acquired resulted in default as of March 31, 2021.

(5) Securities "Sold" Under Repo – Secured Borrowing

	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
a. Maximum Amount				
1. BACV	XXX	XXX	XXX	XXX
2. BACV Nonadmitted - Subset of	XXX	XXX	XXX	XXX
3. Fair Value	\$ 4,104,194,534	\$ -	\$ -	\$ -

	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
b. Ending Balance				
1. BACV	\$ 3,070,452,895	\$ -	\$ -	\$ -
2. BACV Nonadmitted - Subset of	-	-	-	-
3. Fair Value	\$ 3,070,452,895	\$ -	\$ -	\$ -

(6) Securities Sold Under Repo – Secured Borrowing by NAIC Designation

ENDING BALANCE		1 NONE	2 NAIC 1	3 NAIC 2	4 NAIC 3
a.	Bonds - BACV	\$ -	\$ 3,070,452,895	\$ -	\$ -
b.	Bonds - FV	\$ -	\$ 3,070,452,895	\$ -	\$ -
c.	LB & SS - BACV	-	-	-	-
d.	LB & SS - FV	-	-	-	-
e.	Preferred Stock - BACV	-	-	-	-
f.	Preferred Stock - FV	-	-	-	-
g.	Common Stock	-	-	-	-
h.	Mortgage Loans - BACV	-	-	-	-
i.	Mortgage Loans - FV	-	-	-	-
j.	Real Estate - BACV	-	-	-	-
k.	Real Estate - FV	-	-	-	-
l.	Derivatives - BACV	-	-	-	-
m.	Derivatives - FV	-	-	-	-
n.	Other Invested Assets - BACV	-	-	-	-
o.	Other Invested Assets - FV	-	-	-	-
p.	Total Assets - BACV	\$ -	\$ 3,070,452,895	\$ -	\$ -
q.	Total Assets - FV	\$ -	\$ 3,070,452,895	\$ -	\$ -

NOTES TO FINANCIAL STATEMENTS

ENDING BALANCE		5	6	7	8
		NAIC 4	NAIC 5	NAIC 6	NON-ADMITTED
a.	Bonds - BACV	-	-	-	-
b.	Bonds - FV	-	-	-	-
c.	LB & SS - BACV	-	-	-	-
d.	LB & SS - FV	-	-	-	-
e.	Preferred Stock - BACV	-	-	-	-
f.	Preferred Stock - FV	-	-	-	-
g.	Common Stock	-	-	-	-
h.	Mortgage Loans - BACV	-	-	-	-
i.	Mortgage Loans - FV	-	-	-	-
j.	Real Estate - BACV	-	-	-	-
k.	Real Estate - FV	-	-	-	-
l.	Derivatives - BACV	-	-	-	-
m.	Derivatives - FV	-	-	-	-
n.	Other Invested Assets - BACV	-	-	-	-
o.	Other Invested Assets - FV	-	-	-	-
p.	Total Assets - BACV	-	-	-	-
q.	Total Assets - FV	-	-	-	-

p=a+c+e+g+h+j+l+n
q=b+d+f+g+i+k+m+o

(7) Collateral Received - Secured Borrowing

	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
a. Maximum Amount				
1. Cash	\$ 81,843,000	\$ -	\$ -	\$ -
2. Securities (FV)	\$ 3,977,468,678	\$ -	\$ -	\$ -

b. Ending Balance				
1. Cash	\$ 81,843,000	\$ -	\$ -	\$ -
2. Securities (FV)	\$ 3,071,634,071	\$ -	\$ -	\$ -

(8) Cash & Non-Cash Collateral Received – Secured Borrowing by NAIC Designation

ENDING BALANCE		1	2	3	4
		NONE	NAIC 1	NAIC 2	NAIC 3
a.	Cash	\$ 81,843,000	\$ -	\$ -	\$ -
b.	Bonds - FV	-	3,071,634,071	-	-
c.	LB & SS - FV	-	-	-	-
d.	Preferred Stock - FV	-	-	-	-
e.	Common Stock	-	-	-	-
f.	Mortgage Loans - FV	-	-	-	-
g.	Real Estate - FV	-	-	-	-
h.	Derivatives - FV	-	-	-	-
i.	Other Invested Assets - FV	-	-	-	-
j.	Total Collateral Assets - FV (Sum of a through i)	\$ 81,843,000	\$ 3,071,634,071	\$ -	\$ -

ENDING BALANCE		5	6	7	8
		NAIC 4	NAIC 5	NAIC 6	DOES NOT QUALIFY AS ADMITTED
a.	Cash	\$ -	\$ -	\$ -	\$ -
b.	Bonds - FV	-	-	-	-
c.	LB & SS - FV	-	-	-	-
d.	Preferred Stock - FV	-	-	-	-
e.	Common Stock	-	-	-	-
f.	Mortgage Loans - FV	-	-	-	-
g.	Real Estate - FV	-	-	-	-
h.	Derivatives - FV	-	-	-	-
i.	Other Invested Assets - FV	-	-	-	-
j.	Total Collateral Assets - FV (Sum of a through i)	\$ -	\$ -	\$ -	\$ -

(9) Allocation of Aggregate Collateral by Remaining Contractual Maturity

	FAIR VALUE	
a.	Overnight and Continuous	\$ -
b.	30 Days or Less	\$ 6,040,288,419
c.	31 to 90 Days	\$ 3,171,070,265
d.	> 90 Days	\$ -

(10) The company did not have any repurchase agreements where cash collateral received was reinvested as of March 31, 2020.

(11) Liability to Return Collateral – Secured Borrowing (Total)

	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
a. Maximum Amount				
1. Cash (Collateral – All)	\$ 81,843,000	\$ -	\$ -	\$ -
2. Securities Collateral (FV)	\$ 3,977,468,678	\$ -	\$ -	\$ -
b. Ending Balance				
1. Cash (Collateral – All)	\$ 81,843,000	\$ -	\$ -	\$ -
2. Securities Collateral (FV)	\$ 3,071,634,071	\$ -	\$ -	\$ -

g. Reverse repurchase agreements transactions accounted for as secured borrowing: The Company did not have any reverse repurchase agreements transactions accounted for as secured borrowing as of March 31, 2021.

h. Repurchase agreements transactions accounted for as a sale: The Company did not have any repurchase agreements transactions accounted for as a sale as of March 31, 2021.

NOTES TO FINANCIAL STATEMENTS

- i. Reverse repurchase agreements transactions accounted for as a sale: The Company did not have any reverse repurchase agreements transactions accounted for as a sale as of March 31, 2021.
- j. Real estate - No change
- k. Low-Income Housing Tax Credit - No change
- l. Restricted Assets - No change
- m. Working capital finance investments: The Company did not invest in working capital finance investments as of March 31, 2021.
- n. Offsetting and netting of assets and liabilities: The Company reports derivative and repurchase agreement assets and liabilities as gross in the financial statements without offsetting as of March 31, 2021.
- o. 5GI Securities:

Investment	Number of 5GI Securities		Aggregate BACV		Aggregate Fair Value	
	Current Year	Prior Year	Current Year	Prior Year	Current Year	Prior Year
(1) Bonds - AC	112	114	\$991,292,551	\$1,066,119,748	\$1,010,459,066	\$1,087,886,203
(2) LB&SS - AC	3	3	10,695,293	11,206,673	9,739,026	10,203,119
(3) Preferred Stock - AC	5	5	12,976,008	12,976,008	24,066,550	23,345,940
(4) Preferred Stock - FV	1	-	6,276,526	-	6,276,526	-
(5) Total (1+2+3+4)	121	122	\$1,021,240,378	\$1,090,302,429	\$1,050,541,168	\$1,121,435,262

AC - Amortized Cost FV - Fair Value

- p. Short sales - The Company does not engage in short sale transactions.

- q. Prepayment penalty and acceleration fees:

	Three Months Ended March 31, 2021	
	General Account	Separate Account
1. Number of CUSIPS	11	9
2. Aggregate amount of investment income	\$ 1,532,483	\$ 417,698

- r. Reporting entity's share of cash pool by asset type:

Asset Type	Percent Share
(1) Cash	6 %
(2) Cash equivalents	59 %
(3) Short-term investment	35 %
(4) Total	100 %

Note 6 – Joint Ventures, Partnerships and Limited Liability Companies - No change

Note 7 – Investment Income – No change

Note 8 – Derivative Instruments

- a. The Company did not have any deferred derivative premium payments under SSAP No. 86.
- b. The Company did not account for any derivatives under SSAP No. 108.

Note 9 – Income Taxes – No change

Note 10 – Information Concerning Parent, Subsidiaries and Affiliates

- a-c. MassMutual Holding LLC (MMHLLC) paid \$1,000,000,000 in dividends to MassMutual for the three months ended March 31, 2021, which were declared in 2020, and paid \$200,000,000 in dividends for the three months ended March 31, 2020, which were declared in 2019.

MassMutual contributed capital of \$22,336,948 to MMHLLC for the three months ended March 31, 2021 and \$13,505,107 for the three months ended March 31, 2020.

- d-f. No change

- g. Subsidiaries of MMHLLC are involved in litigation and investigations arising in the ordinary course of their business, which seek compensatory damages, punitive damages and equitable remedies. Although the Company is not aware of any actions or allegations that reasonably could give rise to a material adverse impact to the Company's financial position or liquidity, the outcome of litigation cannot be foreseen with certainty. It is the opinion of management that the ultimate resolution of these matters will not materially impact the Company's financial position or liquidity. However, the outcome of a particular proceeding may be material to the Company's surplus for a particular period depending upon, among other factors, the size of the loss and the level of the Company's changes in surplus for the period.

The Company has no parent.

- h-o. No change

NOTES TO FINANCIAL STATEMENTS

Note 11 – Debt

a. No change

b. Federal Home Loan Bank agreements:

(1) The Company is a member of the Federal Home Loan Bank of Boston (FHLB Boston). Through its membership, the Company has conducted business activity (borrowings) with the FHLB Boston. The Company uses these funding agreements with the FHLB Boston in an investment spread strategy, consistent with its other investment spread operations. The Company has determined the actual maximum borrowing capacity as \$6,000,000,000. The Company's unused capacity was \$3,892,213,056 as of March 31, 2021.

(2) FHLB Boston capital stock

a. Aggregate totals:

		March 31, 2021		
		1 Total 2+3	2 General Account	3 Separate Account
1. Current Year:				
(a) Membership stock - Class A	\$	-	\$	-
(b) Membership stock - Class B		10,000,000	10,000,000	-
(c) Activity Stock		84,000,000	84,000,000	-
(d) Excess Stock		3,720,000	3,720,000	-
(e) Aggregate Total		\$ 97,720,000	\$ 97,720,000	\$ -
(f) Actual or Estimated Borrowing Capacity as Determined by the Insurer	\$	6,000,000,000	\$ 6,000,000,000	\$ -
2. Prior Year-end:				
(a) Membership stock - Class A	\$	-	\$	-
(b) Membership stock - Class B		10,000,000	10,000,000	-
(c) Activity Stock		67,200,000	67,200,000	-
(d) Excess Stock		3,900,000	3,900,000	-
(e) Aggregate Total		\$ 81,100,000	\$ 81,100,000	\$ -
(f) Actual or Estimated Borrowing Capacity as determined by the Insurer	\$	6,000,000,000	\$ 6,000,000,000	\$ -

b. Membership Stock (Class A and B) Eligible and Not Eligible for Redemption:

		Three Months Ended March 31, 2021				
Membership Stock	1 Current Year Total	2 Not Eligible for Redemption	Eligible for Redemption			
			3 Less Than 6 Months	4 6 Months to Less Than 1 Year	5 1 to Less Than 3 Years	6 3 to 5 Years
1. Class A	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2. Class B	10,000,000	10,000,000	-	-	-	-

NOTES TO FINANCIAL STATEMENTS

(3) Collateral pledged to FHLB:

a. Amount pledged as of March 31, 2021:

1. Current year total general and separate accounts:

	Fair Value	Carrying Value	Aggregate Total Borrowing
Total collateral pledged	\$ 3,176,392,863	\$ 2,325,936,311	\$ 2,107,786,944

2. Current year general account:

	Fair Value	Carrying Value	Aggregate Total Borrowing
Total collateral pledged	\$ 3,176,392,863	\$ 2,325,936,311	\$ 2,107,786,944

3. Current year separate accounts:

	Fair Value	Carrying Value	Aggregate Total Borrowing
Total collateral pledged	\$ -	\$ -	\$ -

4. Prior year-end total general and separate accounts:

	Fair Value	Carrying Value	Aggregate Total Borrowing
Total collateral pledged	\$ 2,603,811,840	\$ 1,904,359,463	\$ 1,685,795,478

b. Maximum amount pledged for the three months ended March 31, 2021:

1. Current year total general and separate accounts:

	Fair Value	Carrying Value	Amount Borrowed at Time of Maximum Collateral
Maximum collateral pledged	\$ 3,275,861,953	\$ 2,381,327,172	\$ 2,108,832,269

2. Current year general account:

	Fair Value	Carrying Value	Amount Borrowed at Time of Maximum Collateral
Maximum collateral pledged	\$ 3,275,861,953	\$ 2,381,327,172	\$ 2,108,832,269

3. Current year separate accounts:

	Fair Value	Carrying Value	Amount Borrowed at Time of Maximum Collateral
Maximum collateral pledged	\$ -	\$ -	\$ -

4. Prior year-end total general and separate accounts:

	Fair Value	Carrying Value	Amount Borrowed at Time of Maximum Collateral
Maximum collateral pledged	\$ 2,849,293,454	\$ 2,123,611,333	\$ 1,690,030,792

NOTES TO FINANCIAL STATEMENTS

(4) Borrowing from FHLB:

a. Amount:

1. Current year:

	March 31, 2021			
	1 Total 2+3	2 General Account	3 Separate Account	4 Funding Agreements Reserves Established
(a) Debt	\$ -	\$ -	\$ -	\$ -
(b) Funding agreements	2,107,786,944	2,107,786,944	-	2,107,786,944
(c) Other	-	-	-	-
(d) Aggregate total	<u>\$ 2,107,786,944</u>	<u>\$ 2,107,786,944</u>	<u>\$ -</u>	<u>\$ 2,107,786,944</u>

2. Prior Year-end:

	December 31, 2020			
	1 Total 2+3	2 General Account	3 Separate Account	4 Funding Agreements Reserves Established
(a) Debt	\$ -	\$ -	\$ -	\$ -
(b) Funding agreements	1,685,795,478	1,685,795,478	-	1,685,795,478
(c) Other	-	-	-	-
(d) Aggregate total	<u>\$ 1,685,795,478</u>	<u>\$ 1,685,795,478</u>	<u>\$ -</u>	<u>\$ 1,685,795,478</u>

b. Maximum Amount:

	Three Months Ended March 31, 2021		
	1 Total 2+3	2 General Account	3 Separate Account
1. Debt	\$ -	\$ -	\$ -
2. Funding	2,108,832,269	2,108,832,269	-
3. Other	-	-	-
4. Aggregate	<u>\$ 2,108,832,269</u>	<u>\$ 2,108,832,269</u>	<u>\$ -</u>

c. FHLB - Prepayment Obligations:

Does the company have prepayment obligations under the following arrangements (YES/NO)?

- | | |
|-----------------------|-----|
| 1. Debt | N/A |
| 2. Funding agreements | NO |
| 3. Other | N/A |

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

a. Defined Benefit Plan:

- (1) The Company sponsors multiple employee benefit plans, providing retirement, life, health and other benefits to employees, certain employees of unconsolidated subsidiaries, agents, general agents and retirees who meet plan eligibility requirements.

(2-3) No change

(4) Components of net periodic benefit cost

	Three Months Ended March 31,					
	2021	2020	2021	2020	2021	2020
	Pension Benefits		Postretirement Benefits		Special or Contractual Benefits per SSAP No 11	
a. Service cost	\$ 27,456,680	\$ 28,573,592	\$ 2,575,000	\$ 3,725,000	\$ -	\$ -
b. Interest cost	19,291,677	24,388,746	2,325,000	2,850,000	-	-
c. Expected return on plan assets	(45,719,606)	(44,166,300)	-	-	-	-
d. Transition asset or obligation	-	-	-	-	-	-
e. Gains and losses	9,655,354	13,048,317	250,000	625,000	-	-
f. Prior service cost or (credit)	-	-	(1,375,000)	(1,375,000)	-	-
h. Total net periodic benefit cost	<u>\$ 10,684,105</u>	<u>\$ 21,844,355</u>	<u>\$ 3,775,000</u>	<u>\$ 5,825,000</u>	<u>\$ -</u>	<u>\$ -</u>

Note 13 – Capital and Surplus, Dividend Restrictions and Quasi-Reorganizations

(A-C) No change

D. The Company is a mutual company, and as such does not pay stockholders' dividends.

(E-J) No change

NOTES TO FINANCIAL STATEMENTS

K. On June 26, 2020, MassMutual executed a drawdown of \$600,000,000 from its pre-capitalized surplus notes (P-Caps) facility and received \$837,205,167 in market value proceeds, and on March 1, 2021, MassMutual executed the remaining capacity of \$200,000,000 from its P-Caps facility and received \$233,056,607 in market value proceeds, at a fixed 5.077% coupon rate, maturing in 2069 and callable beginning in 2049.

On April 16, 2020, MassMutual issued \$700,000,000 of surplus notes at a fixed 3.375% coupon rate maturing in 2050.

The following table summarizes the surplus notes issued and outstanding as of March 31, 2021:

1	2	3	4	5	6	7	8
Item Number	Date Issued	Interest Rate	Original Issue Amount of Note	Is Surplus Note Holder a Related Party (Y/N)	Carrying Value of Note Prior Year	Carrying Value of Note Current Year*	Unapproved Interest And/Or Principal
1	11/15/1993	7.625%	\$ 250,000,000	N	\$ 250,000,000	\$ 250,000,000	\$ 7,201,389
2	03/01/1994	7.500%	100,000,000	N	100,000,000	100,000,000	625,000
3	05/12/2003	5.625%	193,184,000	N	192,809,937	192,809,937	4,105,160
4	06/01/2009	8.875%	129,597,000	N	128,561,412	128,561,412	3,833,911
5	01/17/2012	5.375%	263,369,000	N	262,747,526	262,747,526	4,718,695
6	04/15/2015	4.500%	258,212,000	N	254,019,058	254,065,907	-
7	03/23/2017	4.900%	475,000,000	N	470,978,008	471,013,654	-
8	10/11/2019	3.729%	838,475,000	N	581,731,012	584,350,849	-
9	04/16/2020	3.375%	700,000,000	N	697,164,067	697,212,133	-
10	06/26/2020	5.077%	600,000,000	N	834,718,973	831,968,576	3,892,367
11	03/01/2021	5.077%	200,000,000	N	-	233,056,606	1,297,455
Total	XXX	XXX	\$ 4,007,837,000	XXX	\$ 3,772,729,993	\$ 4,005,786,600	\$ 25,673,977

* Total should agree with Page 3, Line 32.

1	9	10	11	12	13	14
Item Number	Current Year Interest Expense Recognized	Life-To-Date Interest Expense Recognized	Current Year Interest Offset Percentage (not including amounts paid to a 3rd party liquidity provider)	Current Year Principal Paid	Life-To-Date Principal Paid	Date of Maturity
1	\$ -	\$ 514,687,500	N	\$ -	-	11/15/2023
2	3,750,000	202,500,000	N	-	-	03/01/2024
3	-	241,417,088	N	-	-	05/15/2033
4	-	597,509,960	N	-	-	06/01/2039
5	-	179,736,904	N	-	-	12/01/2041
6	5,357,899	107,429,310	N	-	-	04/15/2065
7	11,637,500	81,979,722	N	-	-	04/01/2077
8	14,417,438	46,663,227	N	-	-	10/15/2070
9	10,893,750	11,746,875	N	-	-	04/15/2050
10	15,231,000	30,462,000	N	-	-	02/15/2069
11	-	-	N	-	-	02/15/2069
Total	\$ 61,287,587	\$ 2,014,132,586	XXX	\$ -	\$ -	XXX

NOTES TO FINANCIAL STATEMENTS

1	15	16	17	18	19
Item Number	Are Surplus Note Payments Contractually Linked? (Y/N)	Surplus Note Payments Subject to Administrative Offsetting Provisions? (Y/N)	Were Surplus Note Proceeds Used to Purchase an Asset Directly From the Holder of the Surplus Note? (Y/N)	Is Asset Issuer a Related Party (Y/N)	Type of Assets Received Upon Issuance
1	Y	N	N	N	Cash
2	Y	N	N	N	Cash
3	Y	N	N	N	Cash
4	Y	N	N	N	Cash
5	Y	N	N	N	Cash
6	Y	N	N	N	Cash
7	Y	N	N	N	Cash
8	Y	N	N	N	Cash
9	Y	N	N	N	Cash
10	Y	N	N	N	Treasury Notes
11	Y	N	N	N	Treasury Notes
Total	XXX	XXX	XXX	XXX	

1	20	21	22
Item Number	Principal Amount of Assets Received Upon Issuance	Book/Adjusted Carry Value of Assets	Is Liquidity Source a Related Party to the Surplus note issuer? (Y/N)
1	\$ 250,000,000	\$ -	N
2	99,562,000	-	N
3	192,295,354	-	N
4	127,925,199	-	N
5	262,491,981	-	N
6	253,522,870	-	N
7	470,720,250	-	N
8	608,203,596	-	N
9	697,116,000	-	N
10	837,205,167	-	N
11	233,056,607	-	N
Total	\$ 4,032,099,024	\$ -	XXX

These notes are unsecured and subordinate to all present and future indebtedness of the Company, all policy claims and all prior claims against the Company as provided by the Massachusetts General Laws. The surplus notes are all held by bank custodians for unaffiliated investors. All issuances were approved by the Division.

All payments of interest and principal are subject to the prior approval of the Division. Anticipated sinking fund payments are due for the notes issued in 1993 and 1994 as follows: \$62,500,000 in 2021, \$87,500,000 in 2022, \$150,000,000 in 2023 and \$50,000,000 in 2024. There are no sinking fund requirements for the notes issued in 2003, 2009, 2012 or 2015. Scheduled interest on the notes issued in 1993 and 2003 is payable on May 15 and November 15 of each year to holders of record on the preceding May 1 or November 1, respectively. Scheduled interest on the note issued in 1994 is payable on March 1 and September 1 of each year to holders of record on the preceding February 15 or August 15, respectively. Scheduled interest on the notes issued in 2009 and 2012 is payable on June 1 and December 1 of each year to holders of record on the preceding May 15 and November 15, respectively. Scheduled interest on the note issued in 2015 is payable on April 15 and October 15 of each year to holders of record on the preceding April 1 and October 1, respectively. Interest expense is not recorded until approval for payment is received from the Division. As of March 31, 2021, the unapproved interest was \$25,673,977. Through March 31, 2021, the Company paid cumulative interest of \$2,014,132,586 on surplus notes. Interest of \$18,981,000 was approved and paid during the three months ended March 31, 2021. Interest of \$156,573,472 was approved and paid during the twelve months ended December 31, 2020.

(L-M) No change

Note 14 – Liabilities, Contingencies and Assessments

- Contingent commitments - No change
- Assessments - No change
- Gain contingencies - No change
- Claims related to extra contractual obligations - No change
- Joint and several liabilities - No change

NOTES TO FINANCIAL STATEMENTS

f. All other contingencies:

In the normal course of business, the Company is involved in disputes, litigation and governmental or regulatory inquiries, administrative proceedings, examinations and investigations, both pending and threatened. These matters, if resolved adversely against the Company or settled, may result in monetary damages, fines and penalties or require changes in the Company's business practices. The resolution or settlement of these matters is inherently difficult to predict. Based upon the Company's assessment of these pending matters, the Company does not believe that the amount of any judgment, settlement or other action arising from any pending matter is likely to have a material adverse effect on the statement of financial position. However, an adverse outcome in certain matters could have a material adverse effect on the results of operations for the period in which such matter is resolved, or an accrual is determined to be required, on the financial statement financial position, or on our reputation.

The Company evaluates the need for accruals of loss contingencies for each matter. When a liability for a matter is probable and can be estimated, the Company accrues an estimate of the loss and any related insurance recoveries, if any. An accrual is subject to subsequent adjustment as a result of additional information and other developments. The resolution of matters are inherently difficult to predict, especially in the early stages of matter. Even if a loss is probable, due to many complex factors, such as speed of discovery and the timing of court decisions or rulings, a loss or range of loss may not be reasonably estimated until the later stages of the matter. For matters where a loss is material and it is either probable or reasonably possible then it is disclosed. For matters where a loss may be reasonably possible, but not probable, or is probable but not reasonably estimated, no accrual is established, but the matter, if material, is disclosed.

In connection with the May 24, 2019 sale of Oppenheimer Acquisition Corp. (OAC) to Invesco, Invesco has identified an accounting matter related to four Master Limited Partnership funds managed by a subsidiary of OAC prior to the sale that Invesco has stated may result in an indemnification claim against MassMutual under the terms of the acquisition agreement. Under the terms of the agreement, MassMutual may be liable to Invesco under the acquisition agreement for a portion of any actual losses incurred by Invesco in excess of \$173,000,000 and up to a cap of \$575,000,000. There are currently considerable uncertainties as to the nature, scope and amount of the potential losses for which Invesco may seek indemnity. In addition to the \$173,000,000 deductible, it is uncertain whether the indemnification obligations set forth in the acquisition agreement would apply to this situation and MassMutual believes it has a number of defenses available that may mitigate its exposure to any losses claimed by Invesco should such obligations apply. However, the outcome of any indemnification dispute (including any resulting litigation), should Invesco assert such a claim, and its potential impact on MassMutual's financial position cannot be foreseen with certainty at this time.

Note 15 – Leases - No change**Note 16 – Information About Financial Instruments With Off-Balance Sheet Risk and Financial Instruments With Concentrations of Credit Risk** - No change**Note 17 – Sale, Transfer and Servicing of Financial Assets and Extinguishments of Liabilities**

a. Transfers of receivables reported as sales - No change

b. Transfer and servicing of financial assets:

(1) No change

(2) The Company did not have any servicing assets or liabilities in 2021 or 2020.

(3) No change

(4) The Company did not have interests that continue to be held by a transferor in securitized financial assets in 2021 or 2020.

(5-7) No change

c. Wash sales:

(1) In the course of the Company's investment management activities, securities may be sold and reacquired within 30 days to enhance the Company's yield on its investment portfolio.

(2) The Company did not sell any securities with the NAIC Designation 3 or below, or unrated, through the three months ended March 31, 2021 that were reacquired within 30 days of the sale date.

Note 18 – Gain or Loss to the Reporting Entity from Uninsured Plans and the Uninsured Portion of Partially Insured Plans - No change**Note 19 – Direct Premium Written/Produced By Managing General Agents/Third Party Administrators** - No change**Note 20 – Fair Value Measurements**

a. Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The authoritative guidance around fair value establishes a measurement framework that includes a hierarchy used to classify the inputs used in measuring fair value. The hierarchy prioritizes the inputs to valuation techniques into three levels. Each level reflects a unique description of the inputs that are significant to the fair value measurements. The levels of the fair value hierarchy are as follows:

Level 1 – Observable inputs in the form of quoted prices for identical instruments in active markets.

Level 2 – Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be derived from observable market data for substantially the full term of the assets or liabilities.

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

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

NOTES TO FINANCIAL STATEMENTS

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

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

The fair value of group annuity contracts and other deposits is determined by multiplying the book value of the contract by an average market value adjustment factor. The market value adjustment factor is directly related to the difference between the book value of client liabilities and the present value of installment payments discounted at current market value yields. The market value yield is measured by the Bloomberg Barclays Global-Aggregate Total Return Index, subject to certain adjustments, and the installment period is equivalent to the duration of the Company's invested asset portfolio.

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

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

	March 31, 2021				
	Level 1	Level 2	Level 3	Net Asset Value (NAV)	Total
Financial assets:					
Bonds:					
Special revenue	\$ -	\$ 1,786,557	\$ -	\$ -	\$ 1,786,557
Industrial and miscellaneous	208,573,581	204,789,644	100,785,596	-	514,148,821
Preferred stocks	-	-	15,429,593	-	15,429,593
Common stock - subsidiaries and affiliates	166,327,405	-	225,242,235	-	391,569,640
Common stock - unaffiliated	724,252,083	-	496,811,018	-	1,221,063,101
Derivatives:					
Interest rate swaps	-	14,213,446,094	-	-	14,213,446,094
Options	35,404,950	380,597,115	29,732,991	-	445,735,056
Currency swaps	-	420,400,364	-	-	420,400,364
Forward contracts	-	134,111,760	-	-	134,111,760
Financial futures	13,062,528	-	-	-	13,062,528
Separate account assets	51,555,391,382	22,316,907,598	1,842,560,261	-	75,714,859,241
Total financial assets carried at fair value	\$ 52,703,011,929	\$ 37,672,039,132	\$ 2,710,561,694	\$ -	\$ 93,085,612,755
Financial liabilities:					
Interest rate swaps	\$ -	\$ 10,696,810,105	\$ -	\$ -	\$ 10,696,810,105
Options	5,203,900	-	-	-	5,203,900
Currency swaps	-	733,666,926	-	-	733,666,926
Forward contracts	-	28,836,210	-	-	28,836,210
Financial futures	174,004,740	-	-	-	174,004,740
Total financial liabilities carried at fair value	\$ 179,208,640	\$ 11,459,313,241	\$ -	\$ -	\$ 11,638,521,881

The Company reviews the fair value hierarchy classifications each reporting period. Changes in the observability of the valuation attributes and the level of market activity may result in a reclassification of certain financial assets or liabilities between fair value hierarchy classifications. Such reclassifications are reported as transfers between levels at the beginning fair value for the reporting period in which the changes occur. For the period ended March 31, 2021, there were derivative transfers between Level 2 and Level 1 for options and futures are priced using quoted marks. The Company does not have any financial instruments that were carried at NAV as a practical expedient.

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	December 31, 2020				
	Level 1	Level 2	Level 3	Net Asset Value (NAV)	Total
Financial assets:					
Bonds:					
Special revenue	\$ -	\$ 1,737,732	\$ -	\$ -	\$ 1,737,73
Industrial and miscellaneous	109,647,889	220,495,017	112,271,674	-	442,414,58
Preferred stocks	-	-	18,459,995	-	18,459,99
Common stock - subsidiaries and affiliates	174,082,420	-	186,455,490	-	360,537,91
Common stock - unaffiliated	780,341,178	-	411,934,164	-	1,192,275,34
Derivatives:					
Interest rate swaps	-	20,081,615,245	-	-	20,081,615,24
Options	64,248,621	347,003,631	-	-	411,252,25
Currency swaps	-	517,010,255	-	-	517,010,25
Forward contracts	-	61,493,112	-	-	61,493,11
Credit default swaps	-	874,008	-	-	874,00
Financial futures	4,986,092	-	-	-	4,986,09
Separate account assets	51,280,265,899	22,851,413,939	1,833,906,064	-	75,965,585,90
Total financial assets carried at fair value	\$ 52,413,572,099	\$ 44,081,642,939	\$ 2,563,027,387	\$ -	\$ 99,058,242,42
Financial liabilities:					
Derivatives:					
Interest rate swaps	\$ -	\$ 16,133,753,161	\$ -	\$ -	\$ 16,133,753,16
Options	8,390,200	-	-	-	8,390,20
Currency swaps	-	863,969,652	-	-	863,969,65
Forward contracts	-	278,715,228	-	-	278,715,22
Credit default swaps	-	874,008	-	-	874,00
Financial futures	62,809,430	-	-	-	62,809,43
Total financial liabilities carried at fair value	\$ 71,199,630	\$ 17,277,312,049	\$ -	\$ -	\$ 17,348,511,67

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

	Balance as of 01/01/2021	Transfers ⁽¹⁾		Gains (Losses) in Net Income	Gains (Losses) in Surplus	Purchases	Issuances	Sales	Settlements	Balance as of 3/31/2021
Financial assets:										
Bonds:										
Industrial and miscellaneous	\$ 112,271,674	\$ -	\$ (8,699,966)	\$ 109,047	\$ (2,963,980)	\$ 419,054	\$ 1,015,055	\$ -	\$ (1,365,288)	\$ 100,785,596
Preferred stock	18,459,994	-	-	-	(3,030,401)	-	-	-	-	15,429,593
Common stock - subsidiaries and affiliates	186,455,491	64,750,510	(60,788,174)	-	(22,251,761)	26,260,716	31,771,582	-	(956,129)	225,242,235
Common stock - unaffiliated	411,934,164	4,484	-	3,674,533	17,665,376	69,339,629	12,780	(3,454,562)	(2,365,386)	496,811,018
Derivatives:										
Options	-	23,958,707	-	-	(3,976,975)	9,751,259	-	-	-	29,732,991
Separate account assets	1,833,906,063	-	-	(3,566,525)	-	24,606,038	-	(12,385,315)	-	1,842,560,261
Total financial assets	\$ 2,563,027,386	\$ 88,713,701	\$ (69,488,140)	\$ 217,055	\$ (14,557,741)	\$ 130,376,696	\$ 32,799,417	\$ (15,839,877)	\$ (4,686,803)	\$ 2,710,561,694

⁽¹⁾Level 3 transfers include assets that are consistently carried at fair value but have had a level change, are no longer carried at fair value, or have just begun to be carried at fair value, such as assets with no level changes but a change in the lower of cost or market carrying basis. Industrial and miscellaneous bonds in other transfers are assets that are no longer carried at fair value.

	Balance as of 01/01/2020	Transfers ⁽¹⁾		Gains (Losses) in Net Income	Gains (Losses) in Surplus	Purchases	Issuances	Sales	Settlements	Balance as of 12/31/2020
Financial assets:										
Bonds:										
Industrial and miscellaneous	\$ 110,728,451	\$ 33,090,610	\$ (28,026,870)	\$ (1,589,789)	\$ (14,691,555)	\$ 4,207,826	\$ 11,002,631	\$ -	\$ (2,449,630)	\$ 112,271,674
Preferred Stock	12,738,793	8,801,990	-	-	(12,060,420)	7,233,916	1,745,716	-	-	18,459,995
Common stock - subsidiaries and affiliates	119,810,156	-	(1,464,670)	-	16,706,248	40,478,272	14,750,000	-	(3,824,516)	186,455,491
Common stock - unaffiliated	267,976,515	1,423,659	-	17,874,402	17,995,711	118,334,500	30,421,432	(6,339,575)	(35,752,480)	411,934,164
Separate account assets	966,991,734	-	-	49,491,835	405,442	836,057,101	-	(18,846,429)	(193,620)	1,833,906,063
Total financial assets	\$ 1,478,245,649	\$ 43,316,259	\$ (29,491,540)	\$ 65,776,448	\$ 8,355,426	\$ 1,006,311,61	\$ 57,919,779	\$ (25,186,004)	\$ (42,220,246)	\$ 2,563,027,387

⁽¹⁾Level 3 transfers include assets that are consistently carried at fair value but have had a level change, are no longer carried at fair value, or have just begun to be carried at fair value, such as assets with no level changes but a change in the lower of cost or market carrying basis. The common stock unaffiliated assets were transferred from Level 2 to Level 3 due to a change in the observability of pricing inputs.

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

(4) *Valuation Techniques and Inputs*

The Company determines the fair value of its investments using primarily the market approach or the income approach. The use of quoted prices for identical assets and matrix pricing or other similar techniques are examples of market approaches,

NOTES TO FINANCIAL STATEMENTS

while the use of discounted cash flow methodologies is an example of the income approach. The Company attempts to maximize the use of observable inputs and minimize the use of unobservable inputs in selecting whether the market or the income approach is used.

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

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

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

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

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

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

- (5) Derivative assets and liabilities fair value disclosures on a gross basis are included in paragraph 1 above. Since there are no derivative assets or liabilities classified in Level 3, the reconciliation disclosures required under paragraphs 2 through 4 are not applicable.

- b. The Company provides additional fair value information in Note 21. "Other Items".

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

	March 31, 2021					Net	Not
	Aggregate	Admitted				Asset	Practicable
	Fair Value	Assets	Level 1	Level 2	Level 3	Value	(Carrying
						(NAV)	Value)
Financial assets:							
Bonds:							
U. S. government and agencies	\$ 4,207,240,796	\$ 3,659,060,644	-	\$ 4,207,091,313	\$ 149,483	-	-
All other governments	1,901,428,048	1,763,909,066	-	1,839,492,150	61,935,898	-	-
States, territories and possessions	476,420,532	418,583,137	-	476,420,532	-	-	-
Political subdivisions	485,680,458	428,718,308	-	485,680,458	-	-	-
Special revenue	5,828,857,823	5,043,632,049	-	5,818,949,069	9,908,754	-	-
Industrial and miscellaneous	100,115,381,925	95,177,757,027	208,573,581	53,825,759,521	46,081,048,823	-	-
Parent, subsidiaries and affiliates	6,774,280,547	6,698,403,541	-	10,000,000	6,764,280,547	-	-
Preferred stocks	542,679,654	469,629,635	4,980,000	-	537,699,654	-	-
Common stocks - subsidiaries							
and affiliates ⁽¹⁾	391,569,640	391,569,640	166,327,405	-	225,242,235	-	-
Common stocks - unaffiliated	1,221,063,101	1,221,063,101	724,252,084	-	496,811,017	-	-
Mortgage loans - commercial	22,949,924,782	22,175,843,392	-	-	22,949,924,782	-	-
Mortgage loans - residential	4,306,262,643	4,315,587,984	-	-	4,306,262,643	-	-
Cash, cash equivalents and							
short-term investments	6,359,508,226	6,359,508,226	407,817,711	5,951,690,515	-	-	-
Derivatives:							
Interest rate swaps	14,934,662,559	14,213,446,094	-	14,934,662,559	-	-	-
Options	445,735,056	445,735,056	35,404,950	380,597,115	29,732,991	-	-
Currency swaps	420,400,364	420,400,364	-	420,400,364	-	-	-
Forward contracts	134,111,760	134,111,760	-	134,111,760	-	-	-
Credit default swaps	255,605	263,326	-	255,605	-	-	-
Financial futures	13,062,528	13,062,528	13,062,528	-	-	-	-
Separate account assets	75,714,859,241	75,714,859,241	51,555,391,382	22,316,907,598	1,842,560,261	-	-
Financial liabilities:							
Repurchase agreements	3,070,452,895	3,070,452,895	-	3,070,452,895	-	-	-
Commercial paper	249,992,632	249,992,632	-	249,992,632	-	-	-
Guaranteed interest contracts	12,336,717,541	12,287,034,182	-	-	12,336,717,541	-	-
Group annuity contracts and							
other deposits	1,740,803,433	1,663,791,949	-	-	1,740,803,433	-	-
Individual annuity contracts	11,411,146,064	9,577,057,753	-	-	11,411,146,064	-	-
Supplementary contracts	1,132,782,582	1,131,619,991	-	-	1,132,782,582	-	-
Derivatives:							
Interest rate swaps	12,086,360,971	10,696,810,105	-	12,086,360,971	-	-	-
Options	5,203,900	5,203,900	5,203,900	-	-	-	-
Currency swaps	733,666,926	733,666,926	-	733,666,926	-	-	-
Forward contracts	28,836,210	28,836,210	-	28,836,210	-	-	-
Credit default swaps	920,070	787,369	-	920,070	-	-	-
Financial futures	174,004,740	174,004,740	174,004,740	-	-	-	-

⁽¹⁾Common stocks - subsidiaries and affiliates do not include unconsolidated subsidiaries, which had a statutory carrying value of \$19,510,623,172.78.

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December 31, 2020

	Aggregate	Admitted				Net	Not
	Fair Value	Assets	Level 1	Level 2	Level 3	Asset	Practicable
						Value	(Carrying
						(NAV)	Value)
Financial assets:							
Bonds:							
U. S. government and agencies	\$ 5,351,481,986	\$ 4,437,978,459	\$ -	\$ 5,351,314,765	\$ 167,221	\$ -	\$ -
All other governments	2,121,468,986	1,847,182,971	-	2,034,115,382	87,353,604	-	-
States, territories and possessions	498,167,235	424,423,367	-	498,167,235	-	-	-
Political subdivisions	506,883,735	431,274,479	-	506,883,735	-	-	-
Special revenue	7,257,048,724	6,241,194,972	-	7,246,988,330	10,060,394	-	-
Industrial and miscellaneous	103,560,451,963	94,990,056,159	109,647,889	57,948,053,197	45,502,750,877	-	-
Parent, subsidiaries and affiliates	6,408,646,484	6,311,833,945	-	-	6,408,646,484	-	-
Preferred stocks	516,444,688	470,256,327	548,386	-	515,896,302	-	-
Common stock - subsidiaries and affiliates ⁽¹⁾	360,537,910	360,537,910	174,082,420	-	186,455,490	-	-
Common stock - unaffiliated	1,192,275,342	1,192,275,342	780,341,178	-	411,934,164	-	-
Mortgage loans - commercial	23,149,887,738	22,215,882,948	-	-	23,149,887,738	-	-
Mortgage loans - residential	3,885,048,634	3,862,450,067	-	-	3,885,048,634	-	-
Cash, cash equivalents and short-term investments	5,738,239,031	5,738,239,031	272,277,771	5,465,961,260	-	-	-
Derivatives:							
Interest rate swaps	22,591,275,428	20,081,615,245	-	22,591,275,428	-	-	-
Options	411,252,252	411,252,252	64,248,621	347,003,631	-	-	-
Currency swaps	517,010,255	517,010,255	-	517,010,255	-	-	-
Forward contracts	61,493,112	61,493,112	-	61,493,112	-	-	-
Credit default swaps	1,981,119	54,804	-	1,981,119	-	-	-
Financial futures	4,986,092	4,986,092	4,986,092	-	-	-	-
Separate account assets	75,965,585,902	75,965,585,902	51,280,265,899	22,851,413,939	1,833,906,064	-	-
Financial liabilities:							
Repurchase agreements	4,006,040,410	4,006,040,410	-	4,006,040,410	-	-	-
Commercial paper	249,989,854	249,989,854	-	249,989,854	-	-	-
Guaranteed investment contracts	11,807,079,270	11,463,626,661	-	-	11,807,079,270	-	-
Group annuity contracts and other deposits	1,892,408,874	1,735,624,138	-	-	1,892,408,874	-	-
Individual annuity contracts	12,473,365,512	9,764,165,642	-	-	12,473,365,512	-	-
Supplementary contracts	1,130,042,029	1,128,903,768	-	-	1,130,042,029	-	-
Derivatives:							
Interest rate swaps	16,842,698,715	16,133,753,161	-	16,842,698,715	-	-	-
Options	8,390,200	8,390,200	8,390,200	-	-	-	-
Currency swaps	863,969,652	863,969,652	-	863,969,652	-	-	-
Forward contracts	278,715,228	278,715,228	-	278,715,228	-	-	-
Credit default swaps	974,183	1,118,997	-	974,183	-	-	-
Financial futures	62,809,430	62,809,430	62,809,430	-	-	-	-

⁽¹⁾Common stocks - subsidiaries and affiliates do not include unconsolidated subsidiaries, which had statutory carrying values of \$19,534,186,658.

d. As of March 31, 2021 and December 31, 2020, the Company had no investments where it was not practicable to estimate fair value.

Note 21 – Other Items

- Unusual or infrequent items - No change
- Troubled debt restructuring - No change
- Other disclosures and unusual items:

Business risks

The Company operates in a business environment subject to various risks and uncertainties. The principal risks include insurance and underwriting risks, investment and interest rate risks, currency exchange risk and credit risk. The combined impact of these risks could have a material, adverse effect on the Company's financial statements or result in operating losses in future periods. The Company employs the use of reinsurance, portfolio diversification, asset/liability management processes and other risk management techniques to mitigate the impact of these risks. This condensed risks and uncertainties disclosure should be read in conjunction with the disclosure in the Company's 2020 Annual Statement.

Insurance and underwriting risks

The Company prices its products based on estimated benefit payments reflecting assumptions with respect to mortality, morbidity, longevity, persistency, interest rates and other factors. If actual policy experience emerges that is significantly and adversely different from assumptions used in product pricing, the effect could be material to the profitability of the Company. For participating whole life products, the Company's dividends to policyholders primarily reflect the difference between actual investment, mortality, expense and persistency experience and the experience embedded in the whole life premiums and guaranteed elements. The Company also reinsures certain life insurance and other long-term care insurance policies to mitigate the impact of its underwriting risk.

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Investment and interest rate risks

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

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

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

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

Currency exchange risk

The Company has currency risk due to its non-U.S. dollar denominated investments and medium-term notes along with its indirect international operations. The Company mitigates a portion of its currency risk through the use of cross-currency swaps and forward contracts. Cross-currency swaps are used to minimize currency risk for certain non-U.S. dollar assets and liabilities through a pre-specified exchange of interest and principal. Forward contracts are used to hedge movements in exchange rates.

Credit and other market risks

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

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

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

The spread of the coronavirus, causing increased cases of COVID-19, around the world in 2020 has caused significant volatility in U.S. and international markets. There is significant uncertainty around the breadth and duration of business disruptions related to COVID-19, as well as its impact on the U.S. and international economies. At this time, the Company is not able to reliably estimate the length and severity of the COVID-19 public health crises and, as such, cannot quantify its impact on the financial results, liquidity and capital resources and its operations in future periods.

Political Uncertainties

Political events, domestically or internationally, may directly or indirectly trigger or exacerbate risks related to product offerings, profitability, or any of the risk factors described above. Whether those underlying risk factors are driven by politics or not, the Company's dynamic approach to managing risks enables management to identify risks, internally and externally, develop mitigation plans, and respond to risks in an attempt to proactively reduce the potential impact of each underlying risk factor on the Company.

- d. Business interruption insurance recoveries - No change
- e. State transferrable tax credits - No change
- f. Subprime mortgage related risk exposure:
 - (1) No change
 - (2) No change

NOTES TO FINANCIAL STATEMENTS

(3) Direct exposure through other investments.

Alt-A:	March 31, 2021			Three Months Ended March 31, 2021
	Actual Cost	Carrying Value	Fair Value	OTTI
a. Residential mortgage-backed securities	\$ 262,485,849	\$ 292,883,705	\$ 320,907,865	\$ 158,271
b. Commercial mortgage-backed securities	-	-	-	-
c. Collateralized debt obligations	-	-	-	-
d. Structured securities	-	-	-	-
e. Equity investments in SCAs *	\$ 13,413,832	\$ 15,505,021	\$ 16,576,537	\$ 30,778
f. Other assets	-	-	-	-
g. Total	\$ 275,899,681	\$ 308,388,726	\$ 337,484,402	\$ 189,049

*The Company's SCA, C.M. Life, has investments in Alt-A and subprime mortgages, as does C.M. Life's SCA, MML Bay State. These investments comprise less than 1% of the Company's invested assets.

Alt-A:	December 31, 2020			Year Ended December 31, 2020
	Actual Cost	Carrying Value	Fair Value	OTTI
a. Residential mortgage-backed securities	\$ 262,056,682	\$ 292,017,548	\$ 318,963,049	\$ 733,360
b. Commercial mortgage-backed securities	-	-	-	-
c. Collateralized debt obligations	-	-	-	-
d. Structured securities	-	-	-	-
e. Equity investments in SCAs *	13,964,682	16,122,513	17,177,674	59,717
f. Other assets	-	-	-	-
g. Total	\$ 276,021,364	\$ 308,140,061	\$ 336,140,723	\$ 793,077

*The Company's Subsidiaries and Controlled Affiliates (SCA), C.M. Life Insurance Company (C.M. Life), has investments in Alt-A and subprime mortgages, as does C.M. Life's SCA, MML Bay State Insurance Company (MML Bay State). These investments comprise less than 1% of the Company's invested assets.

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

g. Retained asset accounts - No change

Note 22 – Events Subsequent

Management of the Company has evaluated subsequent events through May 14, 2021, the date the financial statements were available to be issued to state regulators and subsequently on the Company's website. No events have occurred subsequent to the date of the financial statements, except for:

On April 13, 2021, MassMutual issued a \$400,000,000 funding agreement with a 0.60% fixed-rate and a 3-year maturity.

On April 13, 2021, MassMutual issued a \$600,000,000 funding agreement with a floating rate based on the Secured Overnight Financing Rate (SOFR) plus 0.36% and a 3-year maturity.

Note 23 – Reinsurance - No change**Note 24 – Retrospectively Rated Contracts and Contracts Subject to Redetermination**

a – d. No change

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

Note 25 – Change in Incurred Losses and Loss Adjustment Expenses

There was no increase to reserves in 2021 for incurred losses and loss adjustment expenses attributable to insured events of prior years, which considered corrections of prior year errors.

Note 26 – Intercompany Pooling Arrangements - No change**Note 27 – Structured Settlements** - No change**Note 28 – Health Care Receivables** - No change**Note 29 – Participating Policies** - No change**Note 30 – Premium Deficiency Reserves** - No change**Note 31 – Reserves for Life Contracts and Annuity Contracts** - No change**Note 32 – Analysis of Annuity Actuarial Reserves and Deposit Type Liabilities by Withdrawal Characteristics** - No change**Note 33 – Analysis of Life Actuarial Reserves by Withdrawal Characteristics** - No change**Note 34 – Premium and Annuity Considerations Deferred and Uncollected** - No change

NOTES TO FINANCIAL STATEMENTS

Note 35 – Separate Accounts - No change

Note 36 – Loss/Claim Adjustment Expenses - No change

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
- 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
- 2.2 If yes, date of change:
- 3.1 Is the reporting entity a member of an Insurance Holding Company System consisting of two or more affiliated persons, one or more of which is an insurer? Yes No
If yes, complete Schedule Y, Parts 1 and 1A.
- 3.2 Have there been any substantial changes in the organizational chart since the prior quarter end? Yes No
- 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
- 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
If yes, complete and file the merger history data file with the NAIC.
- 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 Name of Entity	2 NAIC Company Code	3 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? Yes No N/A
If yes, attach an explanation.
- 6.1 State as of what date the latest financial examination of the reporting entity was made or is being made. 12/31/2019
- 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. 12/31/2014
- 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). 06/30/2016
- 6.4 By what department or departments?
Commonwealth of Massachusetts Division of Insurance
- 6.5 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
- 6.6 Have all of the recommendations within the latest financial examination report been complied with? Yes No N/A
- 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
- 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
- 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 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 Affiliate Name	2 Location (City, State)	3 FRB	4 OCC	5 FDIC	6 SEC
Barings LLC	Charlotte, NC				YES
Baring International Investment Limited	London, UK				YES
Barings Securities LLC	Charlotte, NC				YES
MML Distributors, LLC	Springfield, MA				YES
MML Investment Advisers, LLC	Enfield, CT				YES
MML Investors Services, LLC	Springfield, MA				YES
MML Strategic Distributors, LLC	Springfield, MA				YES
The MassMutual Trust Company, OCC	Enfield, CT		YES		
Flourish Financial LLC	New York, NY				YES

GENERAL INTERROGATORIES

- 9.1 Are the senior officers (principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions) of the reporting entity subject to a code of ethics, which includes the following standards? Yes [X] No []
 (a) Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
 (b) Full, fair, accurate, timely and understandable disclosure in the periodic reports required to be filed by the reporting entity;
 (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 [] 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 [] 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? Yes [X] No []
- 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 otherwise made available for use by another person? (Exclude securities under securities lending agreements.) Yes [X] No []
- 11.2 If yes, give full and complete information relating thereto:
12. Amount of real estate and mortgages held in other invested assets in Schedule BA: \$ 1,508,603,730
13. Amount of real estate and mortgages held in short-term investments: \$
- 14.1 Does the reporting entity have any investments in parent, subsidiaries and affiliates? Yes [X] No []
- 14.2 If yes, please complete the following:
- | | 1
Prior Year-End
Book/Adjusted
Carrying Value | 2
Current Quarter
Book/Adjusted
Carrying Value |
|---|--|---|
| 14.21 Bonds | \$ 6,311,833,947 | \$ 6,698,403,541 |
| 14.22 Preferred Stock | \$ | \$ |
| 14.23 Common Stock | \$ 19,571,821,118 | \$ 19,898,230,477 |
| 14.24 Short-Term Investments | \$ | \$ |
| 14.25 Mortgage Loans on Real Estate | \$ | \$ |
| 14.26 All Other | \$ 5,396,362,729 | \$ 5,742,263,358 |
| 14.27 Total Investment in Parent, Subsidiaries and Affiliates (Subtotal Lines 14.21 to 14.26) | \$ 31,280,017,794 | \$ 32,338,897,376 |
| 14.28 Total Investment in Parent included in Lines 14.21 to 14.26 above | \$ | \$ |
- 15.1 Has the reporting entity entered into any hedging transactions reported on Schedule DB? Yes [X] No []
- 15.2 If yes, has a comprehensive description of the hedging program been made available to the domiciliary state? Yes [X] No [] N/A []
 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 date:
- 16.1 Total fair value of reinvested collateral assets reported on Schedule DL, Parts 1 and 2 \$
- 16.2 Total book adjusted/carrying value of reinvested collateral assets reported on Schedule DL, Parts 1 and 2 \$
- 16.3 Total payable for securities lending reported on the liability page. \$

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

GENERAL INTERROGATORIES

17. Excluding items in Schedule E - Part 3 - Special Deposits, real estate, mortgage loans and investments held physically in the reporting entity's offices, vaults or safety deposit boxes, were all stocks, bonds and other securities, owned throughout the current year held pursuant to a custodial agreement with a qualified bank or trust company in accordance with Section 1, III - General Examination Considerations, F. Outsourcing of Critical Functions, Custodial or Safekeeping Agreements of the NAIC Financial Condition Examiners Handbook? Yes [X] No []
- 17.1 For all agreements that comply with the requirements of the NAIC Financial Condition Examiners Handbook, complete the following:

1 Name of Custodian(s)	2 Custodian Address
Citibank, N.A.	333 West 34th Street, New York, NY 10001
JP Morgan Chase Bank N.A.	1 Chase Manhattan Plaza, 19th Floor, New York, NY 10005
Northern Trust	50 South LaSalle Street, Chicago, IL 60603
State Street Global Services	801 Pennsylvania Avenue, Kansas City, MO 64105
Citibank, N.A.	2 Park Street Sydney, NSW 2000

- 17.2 For all agreements that do not comply with the requirements of the NAIC Financial Condition Examiners Handbook, provide the name, location and a complete explanation:

1 Name(s)	2 Location(s)	3 Complete Explanation(s)

- 17.3 Have there been any changes, including name changes, in the custodian(s) identified in 17.1 during the current quarter? Yes [] No [X]

- 17.4 If yes, give full information relating thereto:

1 Old Custodian	2 New Custodian	3 Date of Change	4 Reason

- 17.5 Investment management – Identify all investment advisors, investment managers, broker/dealers, including individuals that have the authority to make investment decisions on behalf of the reporting entity. For assets that are managed internally by employees of the reporting entity, note as such. ["...that have access to the investment accounts"; "...handle securities"]

1 Name of Firm or Individual	2 Affiliation
Carlyle Aviation Group Capital Markets LLC	U
Invesco Investment Management Company	U
Barings LLC	A
Franklin Advisers, Inc.	U
Tortoise Capital Advisors, L.L.C.	U
PIMCO- Pacific Investment Management Company LLC	U
IFM Investors Pty Ltd	U
Ashmore Investment Management Limited	U
Jefferies Finance LLC	A
20 Gates Management, LLC	U
Apollo Insurance Solutions Group LP	U
Great-West Capital Management LLC	U

- 17.5097 For those firms/individuals listed in the table for Question 17.5, do any firms/individuals unaffiliated with the reporting entity (i.e. designated with a "U") manage more than 10% of the reporting entity's invested assets? Yes [] No [X]

- 17.5098 For firms/individuals unaffiliated with the reporting entity (i.e. designated with a "U") listed in the table for Question 17.5, does the total assets under management aggregate to more than 50% of the reporting entity's invested assets? Yes [] No [X]

- 17.6 For those firms or individuals listed in the table for 17.5 with an affiliation code of "A" (affiliated) or "U" (unaffiliated), provide the information for the table below.

1 Central Registration Depository Number	2 Name of Firm or Individual	3 Legal Entity Identifier (LEI)	4 Registered With	5 Investment Management Agreement (IMA) Filed
168456	Carlyle Aviation Group Capital Markets LLC	R6ZXX5P01NP6HXS1S07	SEC	NO
110363	Invesco Investment Management Company	R6ZXX5P01NP6HXS1S07	SEC	DS
106006	Barings LLC	R6ZXX5P01NP6HXS1S07	SEC	DS
104517	Franklin Advisers, Inc.	R6ZXX5P01NP6HXS1S07	SEC	NO
123711	Tortoise Capital Advisors, L.L.C.	R6ZXX5P01NP6HXS1S07	SEC	NO
104559	PIMCO- Pacific Investment Management Company LLC	R6ZXX5P01NP6HXS1S07	SEC	NO
162754	IFM Investors Pty Ltd	R6ZXX5P01NP6HXS1S07	SEC	NO
185402	Ashmore Investment Management Limited	R6ZXX5P01NP6HXS1S07	SEC	NO
162264	Jefferies Finance LLC	R6ZXX5P01NP6HXS1S07	SEC	DS
155480	20 Gates Management, LLC	R6ZXX5P01NP6HXS1S07	SEC	NO
143161	Apollo Insurance Solutions Group LP	R6ZXX5P01NP6HXS1S07	SEC	NO
107272	Great-West Capital Management LLC	R6ZXX5P01NP6HXS1S07	SEC	NO

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

18.1 Have all the filing requirements of the Purposes and Procedures Manual of the NAIC Investment Analysis Office been followed? Yes [] No [X]

18.2 If no, list exceptions:
 At 3/31/2021, 51 issues for 43 issuers did not meet the filing requirements of the Purposes and Procedures Manual. The majority of these issues currently lack one or more of the following: Valid cusip/PPN, audited financials and/or executed legal documentation.

Exceptions Totaled \$4,007,794,483 or 2.97% of all assets

19. By self-designating 5GI securities, the reporting entity is certifying the following elements for each self-designated 5GI security:
 a. Documentation necessary to permit a full credit analysis of the security does not exist or an NAIC CRP credit rating for an FE or PL security is not available.
 b. Issuer or obligor is current on all contracted interest and principal payments.
 c. The insurer has an actual expectation of ultimate payment of all contracted interest and principal.
 Has the reporting entity self-designated 5GI securities? Yes [X] No []

20. By self-designating PLGI securities, the reporting entity is certifying the following elements of each self-designated PLGI security:
 a. The security was purchased prior to January 1, 2018.
 b. The reporting entity is holding capital commensurate with the NAIC Designation reported for the security.
 c. The NAIC Designation was derived from the credit rating assigned by an NAIC CRP in its legal capacity as a NRSRO which is shown on a current private letter rating held by the insurer and available for examination by state insurance regulators.
 d. The reporting entity is not permitted to share this credit rating of the PL security with the SVO.
 Has the reporting entity self-designated PLGI securities? Yes [] No [X]

21. By assigning FE to a Schedule BA non-registered private fund, the reporting entity is certifying the following elements of each self-designated FE fund:
 a. The shares were purchased prior to January 1, 2019.
 b. The reporting entity is holding capital commensurate with the NAIC Designation reported for the security.
 c. The security had a public credit rating(s) with annual surveillance assigned by an NAIC CRP in its legal capacity as an NRSRO prior to January 1, 2019.
 d. The fund only or predominantly holds bonds in its portfolio.
 e. The current reported NAIC Designation was derived from the public credit rating(s) with annual surveillance assigned by an NAIC CRP in its legal capacity as an NRSRO.
 f. The public credit rating(s) with annual surveillance assigned by an NAIC CRP has not lapsed.
 Has the reporting entity assigned FE to Schedule BA non-registered private funds that complied with the above criteria? Yes [] No [X]

GENERAL INTERROGATORIES

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

Life and Accident Health Companies/Fraternal Benefit Societies:

1. Report the statement value of mortgage loans at the end of this reporting period for the following categories: 1
Amount
- 1.1 Long-Term Mortgages In Good Standing
- 1.11 Farm Mortgages \$
- 1.12 Residential Mortgages \$ 4,315,587,984
- 1.13 Commercial Mortgages \$ 22,175,843,392
- 1.14 Total Mortgages in Good Standing \$ 26,491,431,376
- 1.2 Long-Term Mortgages In Good Standing with Restructured Terms
- 1.21 Total Mortgages in Good Standing with Restructured Terms \$
- 1.3 Long-Term Mortgage Loans Upon which Interest is Overdue more than Three Months
- 1.31 Farm Mortgages \$
- 1.32 Residential Mortgages \$
- 1.33 Commercial Mortgages \$
- 1.34 Total Mortgages with Interest Overdue more than Three Months \$
- 1.4 Long-Term Mortgage Loans in Process of Foreclosure
- 1.41 Farm Mortgages \$
- 1.42 Residential Mortgages \$
- 1.43 Commercial Mortgages \$
- 1.44 Total Mortgages in Process of Foreclosure \$
- 1.5 Total Mortgage Loans (Lines 1.14 + 1.21 + 1.34 + 1.44) (Page 2, Column 3, Lines 3.1 + 3.2) \$ 26,491,431,376
- 1.6 Long-Term Mortgages Foreclosed, Properties Transferred to Real Estate in Current Quarter
- 1.61 Farm Mortgages \$
- 1.62 Residential Mortgages \$
- 1.63 Commercial Mortgages \$
- 1.64 Total Mortgages Foreclosed and Transferred to Real Estate \$
2. Operating Percentages:
- 2.1 A&H loss percent %
- 2.2 A&H cost containment percent %
- 2.3 A&H expense percent excluding cost containment expenses %
- 3.1 Do you act as a custodian for health savings accounts? Yes [] No [X]
- 3.2 If yes, please provide the amount of custodial funds held as of the reporting date \$
- 3.3 Do you act as an administrator for health savings accounts? Yes [] No [X]
- 3.4 If yes, please provide the balance of the funds administered as of the reporting date \$
4. Is the reporting entity licensed or chartered, registered, qualified, eligible or writing business in at least two states? Yes [X] No []
- 4.1 If no, does the reporting entity assume reinsurance business that covers risks residing in at least one state other than the state of domicile of the reporting entity? Yes [] No []

Fraternal Benefit Societies Only:

- 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? Yes [] No []
- 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
.....

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE S - CEDED REINSURANCE

Showing All New Reinsurance Treaties - Current Year to Date

1 NAIC Company Code	2 ID Number	3 Effective Date	4 Name of Reinsurer	5 Domiciliary Jurisdiction	6 Type of Reinsurance Ceded	7 Type of Business Ceded	8 Type of Reinsurer	9 Certified Reinsurer Rating (1 through 6)	10 Effective Date of Certified Reinsurer Rating
82627	06-0839705	06/30/2020	Swiss Re Life & Health America (SPS5)	MO	YRT/G	OL	Authorized		

SCHEDULE Y - INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 - ORGANIZATIONAL CHART

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

PART 1 – ORGANIZATIONAL CHART

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

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
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
Barings Ascend LLC	None		Delaware
Berkshire Way LLC	04-1590850		Delaware
MML Special Situations Investor LLC	None		Delaware
Timberland Forest Holding LLC	47-5322979		Delaware
Lyme Adirondack Forest Company, LLC	None		Delaware
Lyme Adirondack Timberlands I, LLC	None		Delaware
Lyme Adirondack Timberlands II, LLC	None		Delaware
MSP-SC, LLC	04-1590850		Delaware
Insurance Road LLC	04-1590850		Delaware
MassMutual Trad Private Equity LLC	04-1590850		Delaware
MassMutual Private Equity Funds LLC	04-1590850		Delaware
MassMutual Intellectual Property LLC	04-1590850		Delaware
Trad Investments I LLC	None		Delaware
EM Opportunities LLC	None		Delaware
MassMutual MCAM Insurance Company, Inc.	None		Vermont
Jefferies Finance LLC	27-0105644		Delaware
APEX Credit Partners LLC	None		Delaware
Jefferies Credit Partners LLC	None		Delaware
Jefferies Credit Management LLC	None		Delaware
Jefferies Private Credit GP LLC	None		Maryland
Jefferies Private Credit Fund LP	None		Delaware
Jefferies Private Credit BDC Inc.	None		Delaware
JFIN GP Adviser LLC	None		Delaware
JFIN Fund III LLC	None		Delaware
JFIN Fund VI LLC	None		Delaware
JFIN Asset 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.

12.1

SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

12.2

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
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
JFIN Revolver Holdings LLC	None		Delaware
JFIN Revolver Holdings II LLC	None		Delaware
JFIN Co-Issuer Corporation	None		Delaware
JFIN Europe GP, S.a.r.l.	None		Luxembourg
Jefferies Finance Europe, S.L.P.	None		Luxembourg
Jefferies Finance Europe, SCSp	None		Luxembourg
Jefferies Finance Business Credit LLC	None		Delaware
JFIN Business Credit Fund I LLC	None		Delaware
JFIN High Yield Investments LLC	None		Delaware
JFIN LC Fund 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 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 Fund, L.P.	None		Delaware
JFIN Revolver Funding 2021 Ltd.	None		Delaware
Apex Credit CLO 2015-II Ltd.*	None		Cayman Islands
Apex Credit CLO 2016 Ltd.	None		Cayman Islands
Apex Credit CLO 2017 Ltd.	None		Cayman Islands
Apex Credit CLO 2017-II Ltd.	None		Cayman Islands
Glidepath Holdings Inc.	None		Delaware
MassMutual Mortgage Lending LLC	None		Delaware
MM Copper Hill Road LLC	04-1590850		Delaware
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

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

SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
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
Rozier LLC	None		Delaware
MML Management Corporation	04-2443240		Massachusetts
MassMutual International Holding MSC, Inc.	04-3548444		Massachusetts
MassMutual Holding MSC, Inc.	04-3341767		Massachusetts
MML CM LLC	None		Delaware
Blueprint Income LLC	None		New York
Flourish Financial 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
Sleeper Street LLC	None		Delaware
Haven Life Insurance Agency, LLC	46-2252944		Delaware
MassMutual Assignment Company	06-1597528		North Carolina
MassMutual Capital Partners LLC	04-1590850		Delaware
MassMutual Ventures Holding LLC	None		Delaware
Athens Fund Management LLC	None		Delaware
Crane Venture Partners LLP	None		United Kingdom
MassMutual Ventures Management LLC	None		Delaware
MassMutual Ventures SEA Management Private Limited	None		Singapore
MassMutual Ventures Southeast Asia I LLC	None		Delaware
MassMutual Ventures Southeast Asia II LLC	None		Delaware
MassMutual Ventures UK LLC	None		Delaware
MassMutual Ventures US I LLC	47-1296410		Delaware
MassMutual Ventures US II LLC	None		Delaware
MassMutual Ventures US III LLC	None		Delaware
Open Alternatives LLC	None		Delaware
MM Catalyst Fund LLC	None		Delaware
MM Rothesay Holdco US LLC	04-1590850		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
Rothesay Limited	None		United Kingdom
Rothesay Life Plc	None		United Kingdom
Rothesay Assurance Limited	None		United Kingdom
Rothesay MA No.1 Limited	None		United Kingdom
Rothesay MA No.2 Limited	None		United Kingdom
Rothesay MA No.3 Limited	None		United Kingdom
Rothesay MA No.4 Limited	None		United Kingdom
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 US LLC	None		Delaware
MML Investors Services, LLC	04-1590850		Massachusetts
MML Insurance Agency, LLC	04-1590850		Massachusetts
MMLISI Financial Alliances, LLC	41-2011634		Delaware
LifeScore Labs, LLC	47-1466022		Massachusetts
MM Asset Management Holding LLC	45-4000072		Delaware
Barings LLC	51-0504477		Delaware
Baring Asset Management (Asia) Holdings Limited	98-0524271		Hong Kong, Special Administrative Region of China
Baring International Fund Managers (Bermuda) Limited	98-0457465		Bermuda
Baring Asset Management (Asia) Limited	98-0457463		Hong Kong, Special Administrative Region of China
Baring Asset Management Korea Limited	None		Korea
Barings Investment Management (Shanghai) Limited	None		Hong Kong, Special Administrative Region of China
Barings Overseas Investment Fund Management (Shanghai) Limited	None		Hong Kong, Special Administrative Region of China
Baring SICE (Taiwan) Limited	98-0457707		Taiwan ROC
Barings Singapore Pte. Ltd.	None		Singapore
Barings Japan Limited	98-0236449		Japan
Barings Australia Holding Company Pty Ltd	None		Australia
Barings Australia Pty Ltd	98-0457456		Australia
Barings Finance LLC	80-0875475		Delaware
BCF Europe Funding Limited	None		Ireland
BCF Senior Funding I LLC	None		Delaware
BCF Senior Funding I Designated Activity Company	None		Ireland
Barings 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 Italy S.r.l.	None		Italy
Barings Sweden AB	None		Sweden
Barings Finland Oy	None		Finland

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
Barings Netherlands B.V.	None		Netherlands
Barings Real Estate UK Holdings Limited	None		Delaware
BREAE AIFM LLP	None		United Kingdom
Barings Real Estate Advisers (Continental Europe) Limited	98-0654401		United Kingdom
Barings Real Estate Advisers Europe LLP	98-0654388		United Kingdom
Barings Real Estate Advisers Europe Finance LLP	98-0654412		United Kingdom
Barings Real Estate GmbH	98-1194368		Germany
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 Asset Management GmbH	98-0465031		Germany
Baring International Fund Managers (Ireland) Limited	98-0524272		Ireland
Baring Asset Management Switzerland Sàrl	None		Switzerland
Baring France SAS	98-0497550		France
Baring Fund Managers Limited	98-0457586		United Kingdom
BCGSS 2 GP LLP	None		United Kingdom
Baring Pension Trustees Limited	98-0457574		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.l.	None		Luxembourg
Barings European Core Property Fund GP S.à.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
Almack Holding Partnership GP Limited	None		United Kingdom
Almack Mezzanine Fund Limited	None		United Kingdom
Almack Mezzanine Fund II Limited	None		United Kingdom
Barings (U.K.) Limited	98-0432153		United Kingdom
Barings Multifamily Capital Holdings LLC	None		Delaware
Barings Multifamily Capital LLC	None		Michigan
Barings Multifamily Capital Corporation	None		Delaware
Barings Real Estate Advisers Inc.	04-3238351		California
Chassis Acquisition Holding LLC	81-2244465		Delaware
CRA Aircraft Holding LLC*	81-4258759		Delaware
Aland Royalty Holdings LP	None		Delaware
ASM SIP, LP	None		Cayman Islands

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
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
Teaktree Acquisition, LLC	None		Delaware
Techquity, LP	None		Delaware
Validus Holding Company LLC	46-0687392		Delaware
Validus Pharmaceuticals LLC	None		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
Barings Alternative Investments SLP, LLC	None		Delaware
Baring Asset-Based Income Fund (US) GP, LLC	None		Delaware
Barings Investment Series LLC	None		Delaware
Barings Capital Investment LLC	None		Maryland
Barings Emerging Generation Fund GP, LLC	None		Delaware
Barings Global Investment Funds (U.S.) Management LLC	04-1590850		Delaware
Barings ABIF SLP, LLC	None		Delaware
Barings CLO Investment Partners GP, LLC	None		Delaware
Barings Core Property Fund GP LLC	None		Delaware
Barings Direct Lending GP Ltd.	None		Cayman Islands
Barings Emerging Generation Fund LP	84-3784245		Delaware
Barings Global Energy Infrastructure Advisors, LLC	None		Delaware
Barings Global Real Assets Fund GP, LLC	None		Delaware
Barings GPSF	None		Delaware
Barings North American Private Loan Fund Management, LLC	None		Delaware
Barings North American Private Loan Fund Management II, LLC	None		Delaware
Barings/LAZ Parking Fund GP LLC	None		Delaware
Barings Small Business Fund LLC	84-5063008		Delaware
Benton Street Advisors, Inc.	98-0536233		Cayman Islands
BRECS VII GP LLC	None		Delaware
CCM Fund I REIT Manager LLC	None		Delaware
CEMF I GP LLC	None		Delaware
CHY Venture GP LLC	None		Delaware
CREF X GP LLC	None		Delaware
Great Lakes III GP, LLC	04-1590850		Delaware
Lake Jackson LLC	None		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
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 I LP*	None		United Kingdom
Almack Mezzanine Fund II Unleveraged LP	None		United Kingdom
Barings Affordable Housing Mortgage Fund I LLC	82-3468147		Delaware
Barings Affordable Housing Mortgage Fund II LLC	61-1902329		Delaware
Barings Affordable Housing Mortgage Fund III LLC	85-3036663		Delaware
Barings Asset-Based Income Fund (US) LP	36-4868350		Delaware
Barings Emerging Markets Corporate Bond Fund	None		Ireland
Barings European Real Estate Debt Income Fund	None		Luxembourg
Babson Capital Global Special Situation Credit Fund 2*	98-1206017		Delaware
Babson Capital Loan Strategies Fund, L.P.*	37-1506417		Delaware
Barings US High Yield Bond Fund*	None		Ireland
Babson CLO Ltd. 2012-II	None		Cayman Islands
Babson CLO Ltd. 2013-I	None		Cayman Islands
Babson CLO Ltd. 2014-I	None		Cayman Islands
Babson CLO Ltd. 2015-I	None		Cayman Islands
Babson CLO Ltd. 2015-II	None		Cayman Islands
Babson CLO Ltd. 2016-I	None		Cayman Islands
Babson CLO Ltd. 2016-II	None		Cayman Islands
Barings CLO Ltd. 2017-I	None		Cayman Islands

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
Barings CLO 2018-III	None		Cayman Islands
Barings CLO 2018-IV	None		Cayman Islands
Barings CLO 2019-II	98-1473665		Cayman Islands
Barings CLO 2019-III	None		Cayman Islands
Barings CLO 2019-IV	None		Cayman Islands
Barings CLO 2020-I	None		Cayman Islands
Barings CLO 2020-II	None		Cayman Islands
Barings CLO 2020-III	None		Cayman Islands
Barings CLO 2020-IV	None		Cayman Islands
Babson Euro CLO 2014-I BV	None		Netherlands
Babson Euro CLO 2014-II BV	None		Netherlands
Babson Euro CLO 2015-I BV	None		Netherlands
Babson Euro CLO 2016-I BV	None		Netherlands
Barings Euro CLO 2019-I	36037260H		Ireland
Barings Euro CLO 2019-II	None		Ireland
Barings Euro CLO 2020-I DAC	None		Ireland
Barings Global Em. Markets Equity Fund	82-5330194		North Carolina
Barings Global Energy Infrastructure Fund I LP	98-1332384		Cayman Islands
Barings Global Inv. Grade Strat Fund	None		Ireland
Barings Global Private Loan Fund	None		Luxembourg
Barings Global Real Assets Fund LP	82-3867745		Delaware
Barings Global Special Situations Credit Fund 3	None		Ireland
Barings Global Special Situations Credit 4 Delaware*	85-1465973		Delaware
Barings Global Special Situations Credit 4 LUX*	98-1570693		Luxembourg
Barings MiddleMarket CLO 2017-I Ltd & LLC	None		Cayman Islands
Barings MiddleMarket CLO 2018-I	None		Cayman Islands
Barings MiddleMarket CLO 2019-I	None		Cayman Islands
Barings North American Private Loan Fund LP	38-4010344		Delaware
Barings RE Credit Strategies VII LP	98-1332384		Delaware
Barings CLO Investment Partners LP	81-0841854		Delaware
Barings Real Estate European Value Add I SCSp*	None		United Kingdom
Braemar Energy Ventures I, L.P. *	None		Delaware
Barings European Core Property Fund SCSp	None		Luxembourg
Benchmark 2018-B2 Mortgage Trust	38-4059932		New York
Benchmark 2018-B4	None		New York
Benchmark 2018-B8	38-4096530		New York
Braselton Point LLC	04-1590850		Delaware
Barings Core Property Fund LP	20-5578089		Delaware
Comerstone Real Estate Fund VIII LP	27-0547156		Delaware
Comerstone Real Estate Fund X LP	46-5432619		Delaware
Comerstone Permanent Mortgage Fund III LLC	35-2531693		Massachusetts

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
Cornerstone Permanent Mortgage Fund IV LLC	61-1793735		Massachusetts
GASL Holdings, LLC	82-2932156		Delaware
Gateway Mezzanine Partners II LP*	90-0991195		Delaware
Great Lakes III, L.P.	37-1708623		Delaware
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
Miami Douglas One GP LLC*	04-1590850		Delaware
Miami Douglas Two GP LLC*	04-1590850		Delaware
Miami Douglas Two LP*	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
Reston Arboretum LLC	75-2901061		Delaware
Rockville Town Center LLC	54-2055778		Virginia
Somerset Special Opportunities Fund L.P.*	20-8856877		Delaware
SouthPointe Industrial LLC	04-1590850		Delaware
Ten Fan Pier Boulevard LLC	35-2553915		Delaware
Tower Square Capital Partners III, L.P.	41-2280127		Delaware
Tower Square Capital Partners IIIA, L.P.	41-2280129		Delaware
Tower Square Capital Partners IV-A, L.P.	80-0920367		Delaware
Trailside MM Member LLC*	04-1590850		Delaware
Washington Gateway Two LLC*	83-1325764		Delaware
Washington Gateway Three LLC*	32-0574045		Delaware
West 46 th Street Hotel LLC	05-1590850		Delaware
Barings Affiliates & Funds:			
Barings Emerging Markets Debt Short Duration Fund	None		Ireland
Babson Capital Loan Strategies Master Fund LP	None		Cayman Islands
Barings China Aggregate Bond Private Securities Investment Fund	None		Peoples Republic of China
Barings Global High Yield Fund	47-3790192		Massachusetts
Barings Total Return Bond Fund	47-3734770		Massachusetts
Great Lakes II LLC*	71-1018134		Delaware
Wood Creek Venture Fund LLC	04-1590850		Delaware
Barings Real Estate Affiliates & Funds:			
50 Liberty LLC*	36-4823011		Delaware
Barings California Mortgage Fund IV	None		California
Barings Umbrella Fund LUX SCSp SICAV RAIF*	None		Luxembourg
Calgary Railway Holding LLC*	82-2285211		Delaware

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
Combrook PRS Holdings LLC	82-3307907		Delaware
Comerstone California Mortgage Fund I LLC	95-4207717		California
Comerstone California Mortgage Fund II LLC	95-4207717		California
Comerstone California Mortgage Fund III LLC	95-4207717		California
Comerstone Fort Pierce Development LLC*	56-2630592		Delaware
Comerstone Permanent Mortgage Fund	45-2632610		Massachusetts
Comerstone Permanent Mortgage Fund II	61-1750537		Massachusetts
Comerstone Permanent Mortgage Fund III	35-2531693		Massachusetts
Comerstone Permanent Mortgage Fund IV	61-1793735		Massachusetts
CREA Madison Member LLC	81-0890084		Delaware
Danville Riverwalk Venture, LLC	82-2783393		Delaware
Fan Pier Development LLC*	20-3347091		Delaware
Landmark Manchester Holdings LLC	81-5360103		Delaware
MM Island Member LLC	04-1590850		Delaware
NoHo West Venture LLC	83-0881588		Delaware
One Harbor Shore LLC*	80-0948028		Delaware
PACO France Logistics 2 LLC	04-1590850		Delaware
Portland 400 Sixth Manager LLC	82-3393166		Delaware
Raleigh Crossing Phase I Holdings LLC	None		Delaware
Salomon Brothers Commercial Mortgage Trust 2001-MM	None		Delaware
Sawgrass Village Shopping Center LLC*	27-2977720		Delaware
STOA Holding LLC	None		Delaware
Three PW Office Holding LLC	81-5273574		Delaware
Twenty Two Liberty LLC*	35-2484550		Massachusetts
Unna, Dortmund Holding LLC	82-3250684		Delaware
Washington Gateway Apartments Venture LLC*	45-5401109		Delaware
MassMutual Premier Funds:			
MassMutual Barings Dynamic Allocation Fund	45-3168892		Massachusetts
MassMutual Premier Focused International Fund	02-0754273		Massachusetts
MassMutual Premier Main Street Fund	51-0529328		Massachusetts
MassMutual Premier Strategic Emerging Markets Fund	26-3229251		Massachusetts
MassMutual Premier Value Fund	04-3277550		Massachusetts
MassMutual Select Funds:			
MassMutual Select Diversified International Fund	14-1980900		Massachusetts
MassMutual Select Diversified Value Fund	01-0821120		Massachusetts
MassMutual Select Fundamental Growth Fund	04-3512593		Massachusetts
MassMutual Select Large Cap Value Fund	04-3513019		Massachusetts
MassMutual Select Mid-Cap Value Fund	42-1710935		Massachusetts
MassMutual Select Small Capital Value Equity Fund	02-0769954		Massachusetts
MassMutual Select Small Company Value Fund	04-3584140		Massachusetts
MassMutual Select T. Rowe Price Retirement 2005 Fund	82-3347422		Massachusetts

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SCHEDULE Y – INFORMATION CONCERNING ACTIVITIES OF INSURER MEMBERS OF A HOLDING COMPANY GROUP
PART 1 – ORGANIZATIONAL CHART

	<u>Federal Tax ID</u>	<u>NAIC Co Code</u>	<u>State of Domicile</u>
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 2015 Fund	27-1933828		Massachusetts
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 RetireSMART Conservative Fund	45-1618155		Massachusetts
MassMutual RetireSMART Growth Fund	45-1618222		Massachusetts
MassMutual RetireSMART In Retirement Fund	03-0532464		Massachusetts
MassMutual RetireSMART Moderate Fund	45-1618262		Massachusetts
MassMutual RetireSMART Moderate Growth Fund	45-1618046		Massachusetts

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

PART 1 – ORGANIZATIONAL CHART

12.12

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE Y

PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domiciliary Location	Relationship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percentage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Required? (Y/N)	*
.0435	Massachusetts Mut Life Ins Co	65935	04-1590850	3848388			Massachusetts Mutual Life Insurance Company (MMLIC)	CT	RE	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0435	GM Life Ins Co	93432	06-1041383				C.M. Life Insurance Company	CT	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0435	MML Baystate Life Ins Co	70416	43-0581430				MML Bay State Life Insurance Company	DE	DS	C.M. Life Insurance Company	Ownership	100.000	MMLIC		
.0000			06-1041383				CML Mezzanine Investor III, LLC	DE	DS	C.M. Life Insurance Company	Ownership	100.000	MMLIC		
.0000							CML Special Situations Investor LLC	DE	DS	C.M. Life Insurance Company	Ownership	100.000	MMLIC		
.0000							CML Global Capabilities LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM Global Capabilities I LLC	IND	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MassMutual Global Business Services India LLP	NLD	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM Global Capabilities (Netherlands) B.V.	ROU	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MassMutual Global Business Services Romania S.R.L.	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM Global Capabilities II LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM Global Capabilities III LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM/Barings Multifamily TEBS 2020 LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MML Special Situations Investor LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			47-5322979				Timberland Forest Holding LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			47-5322979				Timberland Forest Holding LLC	DE	DS	C.M. Life Insurance Company	Ownership	0.000	MMLIC		
.0000			47-5322979				Timberland Forest Holding LLC	DE	DS	Wood Creek Capital Management LLC	Management		MMLIC		
.0000							Lyme Adirondack Forest Company, LLC	DE	DS	Timberland Forest Holding LLC	Ownership	100.000	MMLIC		
.0000							Lyme Adirondack Timberlands I, LLC	DE	DS	Timberland Forest Holding LLC	Ownership	100.000	MMLIC		
.0000							Lyme Adirondack Timberlands II, LLC	DE	DS	Timberland Forest Holding LLC	Ownership	100.000	MMLIC		
.0000							Barings Ascend LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				Berkshire Way LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				MSP-SC, LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							EM Opportunities LLC	VT	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MassMutual MCAM Insurance Company, Inc.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				Insurance Road LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				MassMutual Trad Private Equity LLC	DE	NIA	Insurance Road LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				MassMutual Private Equity Funds LLC	DE	NIA	MassMutual Trad Private Equity LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				MassMutual Intellectual Property LLC	DE	NIA	Insurance Road LLC	Ownership	100.000	MMLIC		
.0000							Trad Investments I LLC	DE	NIA	Insurance Road LLC	Ownership	100.000	MMLIC		
.0000			27-0105644				Jefferies Finance LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	50.000	MMLIC		1
.0000							Glidepath Holdings Inc.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MassMutual Mortgage Lending LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE Y

PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domiciliary Location	Relationship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percentage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Required? (Y/N)	*
.0000							Apex Credit Partners LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							Jefferies Credit Partners LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							Jefferies Credit Management LLC	DE	NIA	Jefferies Credit Partners LLC	Ownership	100.000	MLLIC		
.0000							Jefferies Private Credit GP LLC	DE	NIA	Jefferies Credit Management LLC	Ownership	100.000	MLLIC		
.0000							Jefferies Private Credit Fund LP	MD	NIA	Jefferies Private Credit GP LLC	Ownership	100.000	MLLIC		
.0000							Jefferies Private Credit BDC Inc.	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN GP Adviser LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Fund III LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Fund VI LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Asset Management LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFAM GP LLC	DE	NIA	JFIN Asset Management, LLC	Ownership	100.000	MLLIC		
.0000							JFAM GP LP	DE	NIA	JFIN Asset Management, LLC	Ownership	100.000	MLLIC		
.0000							Jefferies Direct Lending Fund C LP	DE	NIA	JFIN Asset Management, LLC	Ownership	100.000	MLLIC		
.0000							Jefferies DLF C Holdings LLC	DE	NIA	Jefferies Direct Lending Fund C LLC	Ownership	100.000	MLLIC		
.0000							Jefferies Direct Lending Fund C SPE LLC	DE	NIA	Jefferies DLF C Holdings LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver Holdings LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver Holdings II LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Co-Issuer Corporation	LUX	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Europe GP, S.a.r.l.	LUX	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							Jefferies Finance Europe, S.L.P.	LUX	NIA	JFIN Europe GP, S.a.r.l.	Ownership	100.000	MLLIC		
.0000							Jefferies Finance Europe, SCSp	DE	NIA	JFIN Europe GP, S.a.r.l.	Ownership	100.000	MLLIC		
.0000							Jefferies Finance Business Credit LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Business Credit Fund I LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN High Yield Investments LLC	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN LC Fund LLC	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN CLO 2012 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN CLO 2013 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN CLO 2014-II Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN CLO 2015 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	44.000	MLLIC		
.0000							JFIN CLO 2015 Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership	56.000	MLLIC		
.0000							JFIN Revolver CLO 2014 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver CLO 2017 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver CLO 2017-II Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver CLO 2017-III Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver CLO 2018 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver CLO 2019 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver CLO 2019-II Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver CLO 2020 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver CLO 2021-II Ltd.	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							JFIN Revolver Fund, L.P.	DE	NIA	Jefferies Finance LLC	Ownership	90.000	MLLIC		
.0000							JFIN Revolver Funding 2021 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							Apex Credit CLO 2015-II Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	33.000	MLLIC		
.0000							Apex Credit CLO 2015-III Ltd.	CYM	NIA	Apex Credit Partners LLC	Ownership	53.000	MLLIC		
.0000							Apex Credit CLO 2016 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							Apex Credit CLO 2017 Ltd.	CYM	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000							Apex Credit CLO 2017-II Ltd.	DE	NIA	Jefferies Finance LLC	Ownership	100.000	MLLIC		
.0000			04-1590850				MM Copper Hill Road LLC	CYM	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MLLIC		
.0000							MM Investment Holding	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MLLIC		
.0000			26-0073611				MassMutual Asset Finance LLC	DE	DS	MM Investment Holding	Ownership	99.600	MLLIC		
.0000			26-0073611				MassMutual Asset Finance LLC	DE	DS	C.M. Life Insurance Company	Ownership	0.400	MLLIC		
.0000			90-1005837				MMAF Equipment Finance LLC 2013-A	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MLLIC		
.0000			36-4785301				MMAF Equipment Finance LLC 2014-A	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MLLIC		

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PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

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.0000			38-3969560				MMAF Equipment Finance LLC 2015-A	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			32-0489588				MMAF Equipment Finance LLC 2016-A	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			35-2590691				MMAF Equipment Finance LLC 2017-A	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			32-0546197				MMAF Equipment Finance LLC 2017-B	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			82-5335801				MMAF Equipment Finance LLC 2018-A	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			83-3722640				MMAF Equipment Finance LLC 2019-A	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							MMAF Equipment Finance LLC 2019-B	DE	DS	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000							Rozier LLC	MA	DS	MassMutual Asset Finance LLC	Ownership	100.000	MMLIC		
.0000			04-2443240				MML Management Corporation	MA	DS	MML Investment Holding	Ownership	100.000	MMLIC	Y	
.0000			04-3548444				MassMutual International Holding MSC, Inc.	MA	DS	MML Management Corporation	Ownership	100.000	MMLIC		
.0000			04-3341767				MassMutual Holding MSC, Inc.	DE	DS	MML Management Corporation	Ownership	100.000	MMLIC		
.0000							Massachusetts Mutual Life Insurance Company								
.0000							MML CM LLC	NY	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							Blueprint Income LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							Flourish Financial LLC	MA	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-3356880				MML Distributors LLC	MA	DS	Massachusetts Mutual Life Insurance Company	Ownership	99.000	MMLIC		
.0000			04-3356880				MML Distributors LLC	DE	DS	MassMutual Holding LLC	Ownership	1.000	MMLIC		
.0000							MML Investment Advisers, LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			46-3238013				MML Strategic Distributors, LLC	CT	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			06-1563535	2881445			The MassMutual Trust Company, FSB	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC	Y	
.0000			04-1590850				MML Private Placement Investment Company I, LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				MML Private Equity Fund Investor LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				MML Private Equity Fund Investor LLC	DE	NIA	Baring Asset Management Limited	Management		MMLIC		
.0000			04-1590850				MM Private Equity Intercontinental LLC	DE	NIA	MML Private Equity Fund Investor LLC	Ownership	100.000	MMLIC		
.0000			45-2738137				Pioneers Gate LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-2854319	2392316			MassMutual Holding LLC	NC	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC	Y	
.0000			06-1597528				MassMutual Assignment Company	DE	DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			37-1732913				Fern Street LLC	DE	DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000							Steeper Street LLC	DE	DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			46-2252944				Haven Life Insurance Agency, LLC	DE	DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				MassMutual Capital Partners LLC	DE	DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000							MassMutual Ventures Holding LLC	DE	DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000							Athens Fund Management LLC	GBR	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000							Crane Venture Partners LLP	DE	DS	MassMutual Ventures Holding LLC	Ownership	33.000	MMLIC		
.0000							MassMutual Ventures Management LLC	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000							MassMutual Ventures SEA Management Private Limited	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000							MassMutual Ventures Southeast Asia I LLC	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000							MassMutual Ventures Southeast Asia II LLC	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000							MassMutual Ventures UK LLC	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000			47-1296410				MassMutual Ventures US I LLC	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000							MassMutual Ventures US II LLC	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000							MassMutual Ventures US III LLC	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		
.0000							Open Alternatives LLC	DE	DS	MassMutual Ventures Holding LLC	Ownership	100.000	MMLIC		

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PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

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Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Location	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percentage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Y/N)	*
.0000			04-1590850				MM Rothesay Holdco US LLC	.GBR	.DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							Rothesay Limited	.GBR	.DS	MM Rothesay Holdco US LLC	Ownership	100.000	MMLIC		
.0000							Rothesay Life Plc	.GBR	.DS	Rothesay Limited	Ownership	100.000	MMLIC		
.0000							Rothesay Assurance Limited	.GBR	.DS	Rothesay Life PLC	Ownership	100.000	MMLIC		
.0000							Rothesay MA No.1 Limited	.GBR	.DS	Rothesay Life PLC	Ownership	100.000	MMLIC		
.0000							Rothesay MA No.2 Limited	.GBR	.DS	Rothesay Life PLC	Ownership	100.000	MMLIC		
.0000							Rothesay MA No.3 Limited	.GBR	.DS	Rothesay Life PLC	Ownership	100.000	MMLIC		
.0000							Rothesay MA No.4 Limited	.GBR	.DS	Rothesay Life PLC	Ownership	100.000	MMLIC		
.0000							LT Mortgage Finance Limited	.GBR	.DS	Rothesay Limited	Ownership	100.000	MMLIC		
.0000							Rothesay Property Partnership 1 LLP	.GBR	.DS	Rothesay Limited	Ownership	100.000	MMLIC		
.0000							Rothesay Foundation	.GBR	.DS	Rothesay Limited	Ownership	100.000	MMLIC		
.0000							Rothesay Pensions Management Limited	.GBR	.DS	Rothesay Limited	Ownership	100.000	MMLIC		
.0000							Rothesay Asset Management UK Limited	.DE	.DS	Rothesay Limited	Ownership	100.000	MMLIC		
.0000							Rothesay Asset Management US LLC	.DE	.DS	Rothesay Asset Management UK Limited	Ownership	100.000	MMLIC		
.0000							MM Catalyst Fund LLC	.MA	.DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			47-1466022				LifeScore Labs, LLC	.MA	.DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				MML Investors Services, LLC	.MA	.DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				MML Insurance Agency, LLC	.DE	.DS	MML Investors Services, LLC	Ownership	100.000	MMLIC		
.0000			41-2011634				MMLISI Financial Alliances, LLC	.DE	.DS	MML Investors Services, LLC	Ownership	100.000	MMLIC		
.0000			45-4000072				MM Asset Management Holding LLC	.DE	.DS	MassMutual Holding LLC	Ownership	100.000	MMLIC		
.0000			51-0504477				Barings LLC	.HKG	.DS	MassMutual Asset Management Holding LLC	Ownership	100.000	MMLIC		
.0000			98-0524271				Baring Asset Management (Asia) Holdings Limited	.BMU	.DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			98-0457465				Baring International Fund Managers (Bermuda) Limited	.HKG	.DS	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000			98-0457463				Baring Asset Management (Asia) Limited	.KOR	.DS	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000							Baring Asset Management Korea Limited	.HKG	.DS	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC		
.0000							Barings Investment Management (Shanghai) Limited	.HKG	.DS	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC		
.0000							Barings Overseas Investment Fund Management (Shanghai) Limited	.TWN	.DS	Baring Asset Management (Asia) Limited	Ownership	100.000	MMLIC		
.0000			98-0457707				Baring SICE (Taiwan) Limited	.SGP	.DS	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000							Barings Singapore Pte. Ltd.	.JPN	.DS	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000			98-0236449				Barings Japan Limited	.AUS	.DS	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000							Barings Australia Holding Company Pty Ltd	.AUS	.DS	Baring Asset Management (Asia) Holdings Limited	Ownership	100.000	MMLIC		
.0000			98-0457456				Barings Australia Pty Ltd	.DE	.DS	Baring Australia Holding Company Pty Ltd.	Ownership	100.000	MMLIC		
.0000			80-0875475				Barings Finance LLC	.IRL	.DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							BCF Europe Funding Limited	.DE	.DS	Barings Finance LLC	Ownership	100.000	MMLIC		
.0000							BCF Senior Funding I LLC	.IRL	.DS	Barings Finance LLC	Ownership	100.000	MMLIC		
.0000							BCF Senior Funding I Designated Activity Company	.DE	.DS	Barings Finance LLC	Ownership	100.000	MMLIC		
.0000			04-3238351				Barings Securities LLC	.GGY	.DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			98-0437588				Barings Guernsey Limited	.GBR	.DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Europe Limited	.ESP	.DS	Barings Guernsey Limited	Ownership	100.000	MMLIC		
.0000							Barings Asset Management Spain SL	.ITA	.DS	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000							Barings Italy S.r.l.	.SWE	.DS	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000							Barings Sweden AB	.FIN	.DS	Barings Europe Limited	Ownership	100.000	MMLIC		
.0000							Barings Finland Oy	.NLD	.DS	Barings Europe Limited	Ownership	100.000	MMLIC		

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PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

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.0000							Barings Netherlands B.V.	DE	DS	Barings Europe Limited	Ownership	100.000	MLLIC		
.0000							Barings Real Estate UK Holdings Limited	GBR	DS	Barings Europe Limited	Ownership	100.000	MLLIC		
.0000							BREAIE AIFM LLP	GBR	DS	Barings Real Estate UK Holdings Limited	Ownership	100.000	MLLIC		
.0000			98-0654401				Barings Real Estate Advisers (Continental Europe) Limited	GBR	DS	Barings Real Estate UK Holdings Limited	Ownership	100.000	MLLIC		
.0000			98-0654388				Barings Real Estate Advisers Europe LLP	GBR	DS	Barings Real Estate UK Holdings Limited	Ownership	100.000	MLLIC		
.0000			98-0654412				Barings Real Estate Advisers Europe Finance LLP	DEU	DS	Barings Real Estate UK Holdings Limited	Ownership	100.000	MLLIC		
.0000			98-1194368				Barings Real Estate GmbH	GBR	DS	Barings Real Estate UK Holdings Limited	Ownership	100.000	MLLIC		
.0000			98-0241935				Baring Asset Management Limited	GBR	DS	MassMutual Holdings (Bermuda) Limited	Ownership	100.000	MLLIC		
.0000							Barings European Direct Lending 1 GP LLP	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000			98-1012393				Barings Global Advisors Limited	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000			98-0457328				Baring International Investment Limited	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000			98-0457587				Baring International Investment Management Holdings	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000			98-0457576				Baring Asset Management UK Holdings Limited	DEU	DS	Baring International Investment Management Holdings	Ownership	100.000	MLLIC		
.0000			98-0465031				Baring Asset Management GmbH	IRL	DS	Baring Asset Management UK Holdings Limited	Ownership	100.000	MLLIC		
.0000			98-0524272				Baring International Fund Managers (Ireland) Limited	CHE	DS	Baring Asset Management UK Holdings Limited	Ownership	100.000	MLLIC		
.0000							Baring Asset Management Switzerland Sarl	FRA	DS	Baring Asset Management UK Holdings Limited	Ownership	100.000	MLLIC		
.0000			98-0497550				Baring France SAS	GBR	DS	Baring Asset Management UK Holdings Limited	Ownership	100.000	MLLIC		
.0000			98-0457586				Baring Fund Managers Limited	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							BOGSS 2 GP LLP	GBR	DS	Baring Fund Managers Limited	Ownership	100.000	MLLIC		
.0000			98-0457574				Baring Pension Trustees Limited	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000			98-0457578				Baring Investment Services Limited	LUX	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							Barings Core Fund Feeder 1 GP S.a.r.l.	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							Barings BME GP S.a.r.l.	LUX	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							Barings GPC GP S.a. r.l	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							Barings European Core Property Fund GP Sarl	LUX	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							Barings Investment Fund (LUX) GP S.a. r.l	LUX	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							Barings Umbrella Fund (LUX) GP S.a.r.l.	LUX	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							GPLF4(S) GP S.a r.l	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							PREIF Holdings Limited Partnership	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000							Almack Mezzanine Fund II Limited	GBR	DS	Baring Asset Management Limited	Ownership	100.000	MLLIC		
.0000			98-0432153				Barings (U.K.) Limited	DE	DS	Barings Guernsey Limited	Ownership	100.000	MLLIC		
.0000							Barings Multifamily Capital Holdings LLC	MI	DS	Barings LLC	Ownership	100.000	MLLIC		
.0000							Barings Multifamily Capital LLC	DE	DS	Barings LLC	Ownership	100.000	MLLIC		
.0000							Barings Multifamily Capital Corporation	CA	DS	Barings LLC	Ownership	100.000	MLLIC		
.0000			04-3238351	3456895			Barings Real Estate Advisers Inc.	DE	DS	Barings Real Estate Advisers LLC	Ownership	100.000	MLLIC		
.0000			81-2244465				Chassis Acquisition Holding LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	30.000	MLLIC		
.0000			81-2244465				Chassis Acquisition Holding LLC	DE	NIA	Barings LLC	Influence		MLLIC		
.0000			81-4258759				CRA Aircraft Holding LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	40.000	MLLIC		
.0000			81-4258759				CRA Aircraft Holding LLC	DE	NIA	Barings LLC	Influence		MLLIC		
.0000			83-0560183				Aland Royalty Holdings LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	26.700	MLLIC		
.0000			83-0560183				Aland Royalty Holdings LP	CYM	NIA	Barings LLC	Management		MLLIC		
.0000							ASM SIP, LP	CYM	NIA	Massachusetts Mutual Life Insurance Company	Ownership	13.200	MLLIC		

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PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

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Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domiciliary Location	Relationship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percentage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Required? (Y/N)	*
.0000							ASM SIP, LP	DE	NIA	Barings LLC	Influence		MMLIC		
.0000			46-2344300				Intermodal Holdings II LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	18.000	MMLIC		
.0000			47-3055009				Milestone Acquisition Holding, LLC	DE	NIA	MassMutual Holding LLC	Ownership/Influence	19.700	MMLIC		
.0000			47-3055009				Milestone Acquisition Holding, LLC	MD	NIA	Barings LLC	Influence		MMLIC		
.0000							Novation Companies, Inc.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	17.100	MMLIC		
.0000			46-5460309				Red Lake Ventures, LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	31.500	MMLIC		
.0000			46-5460309				Red Lake Ventures, LLC	CT	NIA	Barings LLC	Influence		MMLIC		
.0000			81-4065378				Remington L & W Holdings LLC	CT	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	66.300	MMLIC		
.0000			81-4065378				Remington L & W Holdings LLC	DE	NIA	Barings LLC	Influence		MMLIC		
.0000							Tamiami Citrus, LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	15.700	MMLIC		
.0000							Teaktree Acquisition, LLC	DE	NIA	MassMutual Holding LLC	Ownership/Influence	14.700	MMLIC		
.0000							Teaktree Acquisition, LLC	DE	NIA	Barings LLC	Influence		MMLIC		
.0000							Techquity, LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	15.600	MMLIC		
.0000							Techquity, LP	DE	NIA	Barings LLC	Influence		MMLIC		
.0000			46-0687392				Validus Holdings Company LLC	DE	NIA	Barings LLC	Ownership	40.400	MMLIC		
.0000							Validus Pharmaceuticals LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	70.000	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	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Alaska Future Fund GP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							BAI GP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							BAI Funds SLP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Baring Asset-Based Income Fund (US) GP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Investment Series LLC	MD	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Capital Investment LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Emerging Generation Fund GP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Global Investment Funds (U.S.) Management LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				Barings ABIF SLP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings QLO Investment Partners GP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Core Property Fund GP LLC	CYM	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Direct Lending GP Ltd.	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			84-3784245				Barings Emerging Generation Fund LP	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			84-3784245				Barings Emerging Generation Fund LP	DE	DS	Barings LLC	Management		MMLIC		
.0000							Barings Global Energy Infrastructure Advisors, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings North American Private Loan Fund Management, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings North American Private Loan Fund Management II, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings Global Real Assets Fund GP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings GPSF	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Barings/LAZ Parking Fund GP LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			84-5063008				Barings Small Business Fund LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	42.300	MMLIC		
.0000			84-5063008				Barings Small Business Fund LLC	CYM	DS	Barings LLC	Management		MMLIC		

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.0000			98-0536233				Benton Street Advisors, Inc.	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							BRECS VII GP LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							CCM Fund I REIT Manager LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							CHY Venture GP LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							CREX X GP LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				Great Lakes III GP, LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Lake Jackson LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				Loan Strategies Management LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			41-2280126				Mezzco III LLC	DE	DS	Barings LLC	Ownership	99.300	MMLIC		
.0000			80-0920285				Mezzco IV LLC	DE	DS	Barings LLC	Ownership	99.300	MMLIC		
.0000							Mezzco Australia II LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							RECSA-NY GP LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				SBNP SIA II LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							SBNP SIA III LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				Somerset Special Opportunities Management LLC	DE	DS	Barings LLC	Ownership	100.000	MMLIC		
.0000							Amherst Long Term Holdings, LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	24.500	MMLIC		
.0000			04-3313782				MassMutual International LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC	Y	
.0000							MassMutual Solutions LLC	HKG	DS	MassMutual International LLC	Ownership	100.000	MMLIC		
.0000							Haven Technologies Asia Limited	HKG	DS	MassMutual International LLC	Ownership	100.000	MMLIC		
.0000							Yunfeng Financial Group Limited	HKG	DS	MassMutual International LLC	Ownership	24.900	MMLIC		
.0000							MassMutual Asia Limited (SPV)	DE	DS	MassMutual International LLC	Ownership	100.000	MMLIC		
.0000			04-1590850				MML Mezzanine Investor II, LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				MML Mezzanine Investor III, LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	11.100	MMLIC		
.0000			27-3576835				MassMutual External Benefits Group LLC	DE	DS	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				100 w. 3rd Street LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				2160 Grand Manager LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	98.100	MMLIC		
.0000			82-2432216				300 South Tryon Hotel LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				300 South Tryon LLC	GBR	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							Almack Mezzanine Fund I LP	GBR	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	41.400	MMLIC		
.0000							Almack Mezzanine Fund I LP	GBR	NIA	C.M. Life Insurance Company	Ownership	4.600	MMLIC		
.0000							Almack Mezzanine Fund II Unleveraged LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	72.900	MMLIC		
.0000							Barings Affordable Housing Mortgage Fund I LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							Barings Affordable Housing Mortgage Fund I LLC	DE	NIA	Barings LLC	Management		MMLIC		
.0000			61-1902329				Barings Affordable Housing Mortgage Fund II LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			61-1902329				Barings Affordable Housing Mortgage Fund II LLC	DE	NIA	Barings LLC	Management		MMLIC		
.0000			85-3036663				Barings Affordable Housing Mortgage Fund III LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		

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.0000			85-3036663				Barings Affordable Housing Mortgage Fund III LLC	DE	NIA	Barings LLC Massachusetts Mutual Life Insurance Company	Management		MLLIC		
.0000			36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	Company	Ownership/Influence	12.700	MLLIC		
.0000			36-4868350				Barings Asset-Based Income Fund (US) LP	DE	NIA	C.M. Life Insurance Company	Ownership/Influence	1.300	MLLIC		
.0000			36-4868350				Barings Asset-Based Income Fund (US) LP	IRL	NIA	Barings LLC	Management		MLLIC		
.0000							Barings Emerging Markets Corporate Bond Fund			Massachusetts Mutual Life Insurance Company	Ownership/Influence	90.300	MLLIC		
.0000							Barings Emerging Markets Corporate Bond Fund	IRL	NIA	Company	Ownership/Influence		MLLIC		
.0000							Barings European Real Estate Debt Income Fund	LUX	NIA	Barings LLC Massachusetts Mutual Life Insurance Company	Management		MLLIC		
.0000							Barings European Real Estate Debt Income Fund	LUX	NIA	Company	Ownership/Influence	100.000	MLLIC		
.0000							Barings European Real Estate Debt Income Fund	DE	NIA	Barings LLC Massachusetts Mutual Life Insurance Company	Influence		MLLIC		
.0000			98-1206017				Babson Capital Global Special Situation Credit Fund 2	DE	NIA	Company	Ownership/Influence	23.800	MLLIC		
.0000			98-1206017				Babson Capital Global Special Situation Credit Fund 2	DE	NIA	C.M. Life Insurance Company	Ownership	1.500	MLLIC		
.0000			98-1206017				Babson Capital Global Special Situation Credit Fund 2	DE	NIA	Barings LLC Massachusetts Mutual Life Insurance Company	Management		MLLIC		
.0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	DE	NIA	Company	Ownership/Influence	75.700	MLLIC		
.0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	DE	NIA	C.M. Life Insurance Company	Ownership	3.800	MLLIC		
.0000			37-1506417				Babson Capital Loan Strategies Fund, L.P.	IRL	NIA	Barings LLC Massachusetts Mutual Life Insurance Company	Management		MLLIC		
.0000							Barings US High Yield Bond Fund	IRL	NIA	Company	Ownership/Influence	57.200	MLLIC		
.0000							Barings US High Yield Bond Fund	CYM	NIA	Barings LLC	Management		MLLIC		
.0000							Babson CLO Ltd. 2013-I	CYM	NIA	Barings LLC	Influence		MLLIC		3
.0000							Babson CLO Ltd. 2014-I	CYM	NIA	Barings LLC	Influence		MLLIC		2
.0000							Babson CLO Ltd. 2015-I	CYM	NIA	Barings LLC	Influence		MLLIC		4
.0000							Babson CLO Ltd. 2015-II	CYM	NIA	Barings LLC	Influence		MLLIC		5
.0000							Babson CLO Ltd. 2016-I	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Babson CLO Ltd. 2016-II	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO Ltd. 2017-I	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO 2018-III	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO 2018-IV	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000			98-1473665				Barings CLO 2019-II	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO 2019-III	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO 2019-IV	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO 2020-I	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO 2020-II	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO 2020-III	CYM	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings CLO 2020-IV	NLD	NIA	Barings LLC	Influence		MLLIC		
.0000							Babson Euro CLO 2014-I BV	NLD	NIA	Barings LLC	Influence		MLLIC		
.0000							Babson Euro CLO 2014-II BV	NLD	NIA	Barings LLC	Influence		MLLIC		
.0000							Babson Euro CLO 2015-I BV	NLD	NIA	Barings LLC	Influence		MLLIC		
.0000							Babson Euro CLO 2016-I BV	IRL	NIA	Barings LLC	Influence		MLLIC		
.0000			36-037260H				Barings Euro CLO 2019-I BV	IRL	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings Euro CLO 2019-II BV	IRL	NIA	Barings LLC	Influence		MLLIC		
.0000							Barings Euro CLO 2020-I DAC	DE	NIA	Barings LLC Massachusetts Mutual Life Insurance Company	Influence		MLLIC		
.0000			81-0841854				Barings CLO Investment Partners LP	DE	NIA	Company	Ownership/Influence	99.300	MLLIC		
.0000			81-0841854				Barings CLO Investment Partners LP	GBR	NIA	Barings LLC	Management		MLLIC		

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.0000							Barings Real Estate European Value Add I SCSp	.GBR	.NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	44.700	MLLIC		
.0000							Barings Real Estate European Value Add I SCSp	.GBR	.NIA	C.M. Life Insurance Company	Ownership	5.000	MLLIC		
.0000							Barings Real Estate European Value Add I SCSp	.NC	.NIA	Barings LLC	Management		MLLIC		
.0000			82-5330194				Barings Global Em. Markets Equity Fund	.CYM	.NIA	Barings LLC	Management		MLLIC		
.0000			98-1332384				Barings Global Energy Infrastructure Fund I LP	.CYM	.NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	99.200	MLLIC		
.0000			98-1332384				Barings Global Energy Infrastructure Fund I LP	.IRL	.NIA	Barings Asset Management Limited	Management		MLLIC		
.0000							Barings Global Dividends Champion Fund	.IRL	.NIA	Barings LLC	Management		MLLIC		
.0000							Barings Global Inv. Grade Strat Fund	.LUX	.NIA	Barings LLC	Management		MLLIC		
.0000							Barings Global Private Loan Fund	.LUX	.NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	10.400	MLLIC		
.0000							Barings Global Private Loan Fund	.DE	.NIA	Barings LLC	Management		MLLIC		
.0000			82-3867745				Barings Global Real Assets Fund LP	.DE	.NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	46.400	MLLIC		
.0000			82-3867745				Barings Global Real Assets Fund LP	.DE	.NIA	C.M. Life Insurance Company	Ownership	8.200	MLLIC		
.0000			82-3867745				Barings Global Real Assets Fund LP	.IRL	.NIA	Barings LLC	Management		MLLIC		
.0000							Barings Global Special Situations Credit Fund 3	.DE	.NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	18.600	MLLIC		
.0000							Barings Global Special Situations Credit 4 Delaware	.DE	.NIA	Massachusetts Mutual Life Insurance Company	Ownership	76.500	MLLIC		
.0000							Barings Global Special Situations Credit 4 Delaware	.DE	.NIA	C.M. Life Insurance Company	Ownership	3.800	MLLIC		
.0000							Barings Global Special Situations Credit 4 Delaware	.LUX	.NIA	Barings LLC	Management		MLLIC		
.0000							Barings Global Special Situations Credit 4 LUX	.LUX	.NIA	Massachusetts Mutual Life Insurance Company	Ownership	28.500	MLLIC		
.0000							Barings Global Special Situations Credit 4 LUX	.LUX	.NIA	C.M. Life Insurance Company	Ownership	1.500	MLLIC		
.0000							Barings Global Special Situations Credit 4 LUX	.IRL	.NIA	Barings LLC	Management		MLLIC		
.0000							Barings Global Special Situations Credit Fund 3	.CYM	.NIA	Barings LLC	Management		MLLIC		
.0000							Barings Middle Market CLO 2017-I Ltd & LLC	.CYM	.NIA	Barings LLC	Influence		MLLIC		
.0000							Barings Middle Market CLO 2018-I	.CYM	.NIA	Barings LLC	Influence		MLLIC		
.0000							Barings Middle Market CLO 2019-I	.DE	.NIA	Barings LLC	Influence		MLLIC		
.0000			38-4010344				Barings North American Private Loan Fund LP	.DE	.NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	44.500	MLLIC		
.0000			38-4010344				Barings North American Private Loan Fund LP	.DE	.NIA	Barings Asset Management Limited	Management		MLLIC		
.0000			98-1332384				Barings RE Credit Strategies VII LP	.DE	.NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	34.100	MLLIC		
.0000			98-1332384				Barings RE Credit Strategies VII LP	.DE	.NIA	Barings Asset Management Limited	Management		MLLIC		
.0000							Braemar Energy Ventures I, L.P.	.DE	.NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	90.100	MLLIC		
.0000							Braemar Energy Ventures I, L.P.	.DE	.NIA	C.M. Life Insurance Company	Ownership	1.400	MLLIC		
.0000							Braemar Energy Ventures I, L.P.	.LUX	.NIA	Barings LLC	Management		MLLIC		
.0000							Barings European Core Property Fund SCSp	.LUX	.NIA	MassMutual Holding LLC	Ownership/Influence	10.400	MLLIC		
.0000							Barings European Core Property Fund SCSp	.LUX	.NIA	C.M. Life Insurance Company	Ownership	0.700	MLLIC		
.0000							Barings European Core Property Fund SCSp	.NY	.NIA	Barings Real Estate Advisers LLC	Management		MLLIC		
.0000			38-4059932				Benchmark 2018-B2 Mortgage Trust	.NY	.NIA	Barings LLC	Influence		MLLIC		
.0000							Benchmark 2018-B4	.NY	.NIA	Barings LLC	Influence		MLLIC		

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.0000			38-4096530				Benchmark 2018-B8	DE	NIA	Barings LLC	Influence		MMLIC		
.0000			04-1590850				Braselton Point LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			20-5578089				Barings Core Property Fund LP	DE	NIA	MassMutual Holding LLC	Ownership/Influence	17.800	MMLIC		
.0000			20-5578089				Barings Core Property Fund LP	DE	NIA	Barings Real Estate Advisers LLC	Management		MMLIC		
.0000			46-5432619				Cornerstone Real Estate Fund X LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	25.300	MMLIC		
.0000			46-5432619				Cornerstone Real Estate Fund X LP	DE	NIA	C.M. Life Insurance Company	Ownership	2.800	MMLIC		
.0000			46-5432619				Cornerstone Real Estate Fund X LP	MA	NIA	Barings Real Estate Advisers LLC	Management		MMLIC		
.0000			35-2531693				Cornerstone Permanent Mortgage Fund III LLC	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	95.800	MMLIC		
.0000			61-1793735				Cornerstone Permanent Mortgage Fund IV LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			90-0991195		0001597511		Gateway Mezzanine Partners II LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	33.500	MMLIC		
.0000			90-0991195		0001597511		Gateway Mezzanine Partners II LP	DE	NIA	C.M. Life Insurance Company	Ownership	5.000	MMLIC		
.0000			82-2932156				GASL Holdings, LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	11.300	MMLIC		
.0000			90-0991195		0001597511		Gateway Mezzanine Partners II LP	DE	NIA	Barings LLC	Management		MMLIC		
.0000			37-1708623				Great Lakes III, L.P.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	41.200	MMLIC		
.0000			37-1708623				Great Lakes III, L.P.	NY	NIA	Barings LLC	Management		MMLIC		
.0000			38-4041011				JPIMCC Commercial Mortgage Securities Trust 2017-JP7	NY	NIA	Barings LLC	Influence		MMLIC		
.0000			38-4032059				JPIMDB Commercial Mortgage Securities Trust 2017-C5	DE	NIA	Barings LLC	Influence		MMLIC		
.0000			82-1512591				KKR-MM Vector LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	77.700	MMLIC		
.0000			46-4255307				Marco Hotel LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				Miami Douglas One GP LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			04-1590850				Miami Douglas One GP LLC	DE	NIA	C.M. Life Insurance Company	Ownership	5.500	MMLIC		
.0000			04-1590850				Miami Douglas Two GP LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	84.100	MMLIC		
.0000			04-1590850				Miami Douglas Two GP LLC	DE	NIA	C.M. Life Insurance Company	Ownership	0.000	MMLIC		
.0000			04-1590850				Miami Douglas Two LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	90.000	MMLIC		
.0000			85-3886824				NYDIG Digital Assets Fund II LP	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				Miami Douglas Two LP	DE	NIA	C.M. Life Insurance Company	Ownership	0.000	MMLIC		
.0000			45-3623262				HB Naples Golf Owner LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							MM CM Holding LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			81-3000420				MM Debt Participations LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	100.000	MMLIC		
.0000			81-3000420				MM Debt Participations LLC	DE	NIA	Barings LLC	Management		MMLIC		
.0000			82-4411267				RB Apartments LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			75-2901061				Reston Arboretum LLC	VA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			54-2055778				Rockville Town Center LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE Y

PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Location	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percentage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Y/N)	*
.0000			20-8856877				Somerset Special Opportunities Fund L.P.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	40.100	MMLIC		
.0000			20-8856877				Somerset Special Opportunities Fund L.P.	DE	NIA	C.M. Life Insurance Company	Ownership	1.900	MMLIC		
.0000			04-1590850				SouthPointe Industrial LLC	DE	NIA	Barings LLC	Ownership	100.000	MMLIC		
.0000			35-2553915				Ten Fan Pier Boulevard LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			41-2280127				Tower Square Capital Partners III, L.P.	DE	NIA	Barings LLC	Management		MMLIC		
.0000			41-2280127				Tower Square Capital Partners III, L.P.	DE	NIA	MassMutual Holding LLC	Ownership/Influence	16.900	MMLIC		
.0000			41-2280129				Tower Square Capital Partners IIIA, L.P.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	90.400	MMLIC		
.0000			41-2280129				Tower Square Capital Partners IIIA, L.P.	DE	NIA	Barings LLC	Management		MMLIC		
.0000			80-0920367				Tower Square Capital Partners IV-A, L.P.	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership/Influence	21.300	MMLIC		
.0000			04-1590850				Trailside MM Member LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	59.600	MMLIC		
.0000			04-1590850				Trailside MM Member LLC	DE	NIA	C.M. Life Insurance Company	Ownership	7.400	MMLIC		
.0000			83-1325764				Washington Gateway Two LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	95.400	MMLIC		
.0000			83-1325764				Washington Gateway Two LLC	DE	NIA	C.M. Life Insurance Company	Ownership	6.700	MMLIC		
.0000			32-0574045				Washington Gateway Three LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	95.100	MMLIC		
.0000			32-0574045				Washington Gateway Three LLC	DE	NIA	C.M. Life Insurance Company	Ownership	11.400	MMLIC		
.0000			04-1590850				West 46th Street Hotel LLC	IRL	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							Barings Emerging Markets Debt Short Duration Fund	CYM	NIA	Barings LLC	Management		MMLIC		
.0000							Babson Capital Loan Strategies Master Fund LP	CHN	NIA	Barings LLC	Management		MMLIC		
.0000							Barings China Aggregate Bond Private Securities Investment Fund	MA	NIA	Barings LLC	Management		MMLIC		
.0000			47-3790192				Barings Global High Yield Fund	MA	NIA	Barings LLC	Management		MMLIC		
.0000			47-3734770				Barings Total Return Bond Fund	DE	NIA	Barings LLC	Management		MMLIC		
.0000			71-1018134				Great Lakes II LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	11.200	MMLIC		
.0000			71-1018134				Great Lakes II LLC	DE	NIA	C.M. Life Insurance Company	Ownership	1.000	MMLIC		
.0000			04-1590850				Wood Creek Venture Fund LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	40.000	MMLIC		
.0000			36-4823011				50 Liberty LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	65.000	MMLIC		
.0000			36-4823011				50 Liberty LLC	CA	NIA	C.M. Life Insurance Company	Ownership	5.800	MMLIC		
.0000							Barings California Mortgage Fund IV	LUX	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000							Barings Umbrella Fund LUX SCSp SICAV RAIF	LUX	NIA	Massachusetts Mutual Life Insurance Company	Ownership	26.100	MMLIC		
.0000							Barings Umbrella Fund LUX SCSp SICAV RAIF	DE	NIA	C.M. Life Insurance Company	Ownership	2.300	MMLIC		
.0000			82-2285211				Calgary Railway Holding LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	90.000	MMLIC		
.0000			82-2285211				Calgary Railway Holding LLC	DE	NIA	C.M. Life Insurance Company	Ownership	10.000	MMLIC		
.0000			82-3307907				Cornbrook PRS Holdings LLC	CA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			95-4207717				Cornerstone California Mortgage Fund I LLC	CA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			95-4207717				Cornerstone California Mortgage Fund II LLC	CA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE Y

PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Location	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percentage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Y/N)	*
.0000			95-4207717				Cornerstone California Mortgage Fund III LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			56-2630592				Cornerstone Fort Pierce Development LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	90.000	MMLIC		
.0000			56-2630592				Cornerstone Fort Pierce Development LLC	MA	NIA	C.M. Life Insurance Company	Ownership	5.900	MMLIC		
.0000			45-2632610				Cornerstone Permanent Mortgage Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			45-2632610				Cornerstone Permanent Mortgage Fund	MA	NIA	Barings LLC	Management		MMLIC		
.0000			61-1750537				Cornerstone Permanent Mortgage Fund II	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			61-1750537				Cornerstone Permanent Mortgage Fund II	MA	NIA	Barings LLC	Management		MMLIC		
.0000			61-1793735				Cornerstone Permanent Mortgage Fund IV	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			81-0890084				CREA Madison Member LLC	DE	NIA	C.M. Life Insurance Company	Ownership	100.000	MMLIC		
.0000			82-2783393				Danville Riverwalk Venture, LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	94.400	MMLIC		
.0000			20-3347091				Fan Pier Development LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	66.200	MMLIC		
.0000			20-3347091				Fan Pier Development LLC	DE	NIA	C.M. Life Insurance Company	Ownership	5.900	MMLIC		
.0000			81-5360103				Landmark Manchester Holdings LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			04-1590850				MM Island Member LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	49.000	MMLIC		
.0000			83-0881588				NoHo West Venture LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	94.800	MMLIC		
.0000			80-0948028				One Harbor Shore LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	76.000	MMLIC		
.0000			80-0948028				One Harbor Shore LLC	DE	NIA	C.M. Life Insurance Company	Ownership	6.000	MMLIC		
.0000			04-1590850				PACO France Logistics 2 LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			82-3393166				Portland 400 Sixth Manager LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	95.000	MMLIC		
.0000							Raleigh Crossing Phase I Holdings LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	90.000	MMLIC		
.0000							Salomon Brothers Commercial Mortgage Trust 2001-MM	DE	NIA	Barings Real Estate Advisers LLC	Influence		MMLIC		
.0000			27-2977720				Savgrass Village Shopping Center LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	84.200	MMLIC		
.0000			27-2977720				Savgrass Village Shopping Center LLC	DE	NIA	C.M. Life Insurance Company	Ownership	15.800	MMLIC		
.0000							STOA Holding LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	50.000	MMLIC		
.0000			81-5273574				Three PW Office Holding LLC	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	95.100	MMLIC		
.0000			35-2484550				Twenty Two Liberty LLC	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	65.000	MMLIC		
.0000			35-2484550				Twenty Two Liberty LLC	DE	NIA	C.M. Life Insurance Company	Ownership	35.000	MMLIC		
.0000			82-3250684				Unna, Dortmund Holding LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			45-5401109				Washington Gateway Apartments Venture LLC	DE	NIA	Massachusetts Mutual Life Insurance Company	Ownership	95.400	MMLIC		
.0000			45-5401109				Washington Gateway Apartments Venture LLC	MA	NIA	C.M. Life Insurance Company	Ownership	3.700	MMLIC		
.0000			45-3168892				MassMutual Barings Dynamic Allocation Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE Y

PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Location	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percentage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Y/N)	*
.0000			51-0529328		0000927972	QO	MassMutual Premier Main Street Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	91.900	MMLIC		
.0000			26-3229251		0000927972	QO	MassMutual Premier Strategic Emerging Markets Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	3.400	MMLIC		
.0000			04-3277550		0000927972	QO	MassMutual Premier Value Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			14-1980900		0000916053	QO	MassMutual Select Diversified International Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			01-0821120		0000916053	QO	MassMutual Select Diversified Value Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.700	MMLIC		
.0000			04-3512593		0000916053	QO	MassMutual Select Fundamental Growth Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	2.800	MMLIC		
.0000			04-3513019		0000916053	QO	MassMutual Select Large Cap Value Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			42-1710935		0000916053	QO	MassMutual Select Mid-Cap Value Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	16.300	MMLIC		
.0000			02-0769954		0000916053	QO	MassMutual Select Small Capital Value Equity Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			04-3584140		0000916053	QO	MassMutual Select Small Company Value Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	4.400	MMLIC		
.0000			82-3347422		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2005 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	8.600	MMLIC		
.0000			82-3355639		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2010 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3382389		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2015 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3396442		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2020 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3417420		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2025 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3430358		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2030 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3439837		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2035 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3451779		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2040 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3472295		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2045 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3481715		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2050 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3502011		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2055 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3525148		0000916053	QO	MassMutual Select T. Rowe Price Retirement 2060 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			82-3533944		0000916053	QO	MassMutual Select T. Rowe Price Retirement Balanced Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			46-4257056				MML Series International Equity Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			47-3517233				MML Series II Asset Momentum Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	100.000	MMLIC		
.0000			47-3529636				MML Series II Dynamic Bond Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			47-3544629				MML Series II Equity Rotation Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	95.000	MMLIC		

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE Y

PART 1A - DETAIL OF INSURANCE HOLDING COMPANY SYSTEM

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Group Code	Group Name	NAIC Company Code	ID Number	Federal RSSD	CIK	Name of Securities Exchange if Publicly Traded (U.S. or International)	Names of Parent, Subsidiaries Or Affiliates	Domi-ciliary Loca-tion	Relation-ship to Reporting Entity	Directly Controlled by (Name of Entity/Person)	Type of Control (Ownership, Board, Management, Attorney-in-Fact, Influence, Other)	If Control is Ownership Provide Percentage	Ultimate Controlling Entity(ies)/Person(s)	Is an SCA Filing Re-quired? (Y/N)	*
.0000			47-3559064				MML Series II Special Situations Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	97.400	MMLIC		
.0000			27-1933828		0000916053	QQ	MassMutual RetireSMART 2015 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			27-1933389		0000916053	QQ	MassMutual RetireSMART 2035 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	3.100	MMLIC		
.0000			27-1932769		0000916053	QQ	MassMutual RetireSMART 2045 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	8.700	MMLIC		
.0000			46-3289207		0000916053	QQ	MassMutual RetireSMART 2055 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	25.500	MMLIC		
.0000			47-5326235		0000916053	QQ	MassMutual RetireSMART 2060 Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	55.500	MMLIC		
.0000			45-1618155		0000916053	QQ	MassMutual RetireSMART Conservative Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			45-1618222		0000916053	QQ	MassMutual RetireSMART Growth Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			03-0532464		0000916053	QQ	MassMutual RetireSMART In Retirement Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	1.700	MMLIC		
.0000			45-1618262		0000916053	QQ	MassMutual RetireSMART Moderate Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		
.0000			45-1618046		0000916053	QQ	MassMutual RetireSMART Moderate Growth Fund	MA	NIA	Massachusetts Mutual Life Insurance Company	Ownership	0.000	MMLIC		

Asterisk	Explanation
1	Massachusetts Mutual Life Insurance Company owns 14.23% of the affiliated debt of Jefferies Finance LLC
2	Debt investors own .6% and includes only Great Lakes III, L.P.
3	Debt investors own 9.6% and includes only Babson Capital Loan Strategies Fund, L.P.
4	Debt investors own .5% and includes only Great Lakes III, L.P.
5	Debt investors own .2% and includes only Great Lakes III, L.P.

SUPPLEMENTAL EXHIBITS AND SCHEDULES INTERROGATORIES

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

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

Explanation:

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

Bar Code:

1. Trusteed Surplus Statement [Document Identifier 490]
2. Medicare Part D Coverage Supplement [Document Identifier 365]
3. Reasonableness of Assumptions Certification required by Actuarial Guideline XXXV [Document Identifier 445]
4. 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]
6. Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI [Document Identifier 448]
7. Reasonableness and Consistency of Assumptions Certification required by Actuarial Guideline XXXVI (Updated Market Value) [Document Identifier 449]



STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

OVERFLOW PAGE FOR WRITE-INS

Additional Write-ins for Assets Line 25

	Current Statement Date			4 December 31 Prior Year Net Admitted Assets
	1 Assets	2 Nonadmitted Assets	3 Net Admitted Assets (Cols. 1 - 2)	
2504. Fully refundable deposits, prepayments and miscellaneous assets	188,125,801	54,490,932	133,634,869	19,008,699
2505. Commissions and expenses on long-term lease	102,718,243	102,718,243		
2506. Intangible assets	62,717,168	62,717,168		
2507. Employee insurance plan advances	41,295,177	6,269	41,288,907	41,149,716
2508. Investment in trust	26,400,419		26,400,419	26,583,398
2509. Bills receivable	43,161	43,161		
2597. Summary of remaining write-ins for Line 25 from overflow page	421,299,970	219,975,774	201,324,196	86,741,813

Additional Write-ins for Liabilities Line 25

	1 Current Statement Date	2 December 31 Prior Year
2504. Funds awaiting escheat and other miscellaneous liabilities	183,190,836	281,280,933
2505. Deferred income liability	12,812,186	13,022,833
2597. Summary of remaining write-ins for Line 25 from overflow page	196,003,022	294,303,766

Additional Write-ins for Summary of Operations Line 8.3

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
08.304. Miscellaneous income	12,190,090	10,003,058	49,271,319
08.305. Revenue sharing	12,185,786	16,348,805	57,107,606
08.397. Summary of remaining write-ins for Line 8.3 from overflow page	24,375,876	26,351,863	106,378,925

Additional Write-ins for Summary of Operations Line 27

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
2704. Change in liability for employee/agent benefit plans	16,645,571	(72,157,334)	50,853,866
2705. Change in reserves due to reinsurance agreement	11,576,475	(306,252,905)	(1,038,280,566)
2706. Market value adjustment transfer		(7,898,406)	(490,486,297)
2797. Summary of remaining write-ins for Line 27 from overflow page	28,222,045	(386,308,645)	451,107,293

Additional Write-ins for Summary of Operations Line 53

	1 Current Year To Date	2 Prior Year To Date	3 Prior Year Ended December 31
5304. Change in minimum pension liability			111,043,030
5305. Miscellaneous changes in surplus		783	
5397. Summary of remaining write-ins for Line 53 from overflow page		783	111,043,030

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE A - VERIFICATION

Real Estate

	1 Year to Date	2 Prior Year Ended December 31
1. Book/adjusted carrying value, December 31 of prior year	362,371,153	358,212,616
2. Cost of acquired:		
2.1 Actual cost at time of acquisition		
2.2 Additional investment made after acquisition	56,318,887	146,027,851
3. Current year change in encumbrances	288,000	(25,948,000)
4. Total gain (loss) on disposals		952,949
5. Deduct amounts received on disposals		952,949
6. Total foreign exchange change in book/adjusted carrying value		
7. Deduct current year's other than temporary impairment recognized		30,462,722
8. Deduct current year's depreciation	22,490,403	85,458,592
9. Book/adjusted carrying value at the end of current period (Lines 1+2+3+4-5+6-7-8)	396,487,637	362,371,153
10. Deduct total nonadmitted amounts		
11. Statement value at end of current period (Line 9 minus Line 10)	396,487,637	362,371,153

SCHEDULE B - VERIFICATION

Mortgage Loans

	1 Year to Date	2 Prior Year Ended December 31
1. Book value/recorded investment excluding accrued interest, December 31 of prior year	26,078,333,015	27,472,894,866
2. Cost of acquired:		
2.1 Actual cost at time of acquisition	1,045,787,009	4,318,539,633
2.2 Additional investment made after acquisition	54,713,546	265,281,198
3. Capitalized deferred interest and other	14,120,598	75,170,409
4. Accrual of discount	(1,673,147)	18,998,719
5. Unrealized valuation increase (decrease)		
6. Total gain (loss) on disposals	1,862,658	(31,922,612)
7. Deduct amounts received on disposals	700,983,823	6,176,624,391
8. Deduct amortization of premium and mortgage interest points and commitment fees	(291,044)	(1,050,093)
9. Total foreign exchange change in book value/recorded investment excluding accrued interest	2,834,301	174,765,303
10. Deduct current year's other than temporary impairment recognized	3,853,825	39,820,203
11. Book value/recorded investment excluding accrued interest at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	26,491,431,376	26,078,333,015
12. Total valuation allowance		
13. Subtotal (Line 11 plus Line 12)	26,491,431,376	26,078,333,015
14. Deduct total nonadmitted amounts		
15. Statement value at end of current period (Line 13 minus Line 14)	26,491,431,376	26,078,333,015

SCHEDULE BA - VERIFICATION

Other Long-Term Invested Assets

	1 Year to Date	2 Prior Year Ended December 31
1. Book/adjusted carrying value, December 31 of prior year	9,586,349,814	9,072,179,122
2. Cost of acquired:		
2.1 Actual cost at time of acquisition	166,728,319	1,112,323,617
2.2 Additional investment made after acquisition	259,013,470	1,104,875,862
3. Capitalized deferred interest and other		
4. Accrual of discount		
5. Unrealized valuation increase (decrease)	426,465,692	(24,102,844)
6. Total gain (loss) on disposals	(1,406,564)	15,332,137
7. Deduct amounts received on disposals	235,893,639	1,726,753,615
8. Deduct amortization of premium and depreciation	326,420	1,140,736
9. Total foreign exchange change in book/adjusted carrying value	(32,385,020)	37,244,153
10. Deduct current year's other than temporary impairment recognized	13,521	3,607,881
11. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5+6-7-8+9-10)	10,168,532,131	9,586,349,814
12. Deduct total nonadmitted amounts	60,041,236	52,727,080
13. Statement value at end of current period (Line 11 minus Line 12)	10,108,490,895	9,533,622,734

SCHEDULE D - VERIFICATION

Bonds and Stocks

	1 Year to Date	2 Prior Year Ended December 31
1. Book/adjusted carrying value of bonds and stocks, December 31 of prior year	136,241,389,634	120,811,328,057
2. Cost of bonds and stocks acquired	9,007,958,458	51,891,280,245
3. Accrual of discount	82,124,140	288,607,285
4. Unrealized valuation increase (decrease)	11,743,134	861,379,934
5. Total gain (loss) on disposals	121,528,613	1,142,789,426
6. Deduct consideration for bonds and stocks disposed of	10,351,277,734	39,545,387,271
7. Deduct amortization of premium	44,260,587	134,315,971
8. Total foreign exchange change in book/adjusted carrying value	(250,492,489)	1,080,113,708
9. Deduct current year's other than temporary impairment recognized	37,107,283	220,518,142
10. Total investment income recognized as a result of prepayment penalties and/or acceleration fees	1,532,483	66,112,363
11. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9+10)	134,783,138,369	136,241,389,634
12. Deduct total nonadmitted amounts	189,047	189,047
13. Statement value at end of current period (Line 11 minus Line 12)	134,782,949,322	136,241,200,587

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

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

NAIC Designation	1 Book/Adjusted Carrying Value Beginning of Current Quarter	2 Acquisitions During Current Quarter	3 Dispositions During Current Quarter	4 Non-Trading Activity During Current Quarter	5 Book/Adjusted Carrying Value End of First Quarter	6 Book/Adjusted Carrying Value End of Second Quarter	7 Book/Adjusted Carrying Value End of Third Quarter	8 Book/Adjusted Carrying Value December 31 Prior Year
BONDS								
1. NAIC 1 (a)	60,640,333,123	7,794,822,734	11,014,904,044	(162,458,524)	57,257,793,289			60,640,333,123
2. NAIC 2 (a)	47,685,654,402	24,544,854,715	22,445,936,003	(12,169,354)	49,772,403,760			47,685,654,402
3. NAIC 3 (a)	4,816,985,775	1,083,050,449	1,318,105,487	672,266,008	5,254,196,745			4,816,985,775
4. NAIC 4 (a)	3,102,194,871	1,469,955,353	667,877,390	(793,329,704)	3,110,943,130			3,102,194,871
5. NAIC 5 (a)	2,557,549,449	71,695,424	223,618,153	95,385,550	2,501,012,270			2,557,549,449
6. NAIC 6 (a)	517,651,531	20,441,572	16,889,959	3,004,379	524,207,523			517,651,531
7. Total Bonds	119,320,369,151	34,984,820,247	35,687,331,036	(197,301,645)	118,420,556,717			119,320,369,151
PREFERRED STOCK								
8. NAIC 1	273,895,397			8,788,172	282,683,569			273,895,397
9. NAIC 2	11,405,364	5,000,000	1,000,000	(10,405,364)	5,000,000			11,405,364
10. NAIC 3	141,021,927				141,021,927			141,021,927
11. NAIC 4	7,695,774			(195,774)	7,500,000			7,695,774
12. NAIC 5	20,533,581			187,499	20,721,080			20,533,581
13. NAIC 6	15,707,262			(3,004,202)	12,703,060			15,707,262
14. Total Preferred Stock	470,259,305	5,000,000	1,000,000	(4,629,669)	469,629,636			470,259,305
15. Total Bonds and Preferred Stock	119,790,628,456	34,989,820,247	35,688,331,036	(201,931,314)	118,890,186,353			119,790,628,456

(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:

NAIC 1 \$ 1,369,585,787 ; NAIC 2 \$ 3,811,834,444 ; NAIC 3 \$; NAIC 4 \$ 48,605,708 ; NAIC 5 \$; NAIC 6 \$ 467,007

SCHEDULE DA - PART 1

Short-Term Investments

	1 Book/Adjusted Carrying Value	2 Par Value	3 Actual Cost	4 Interest Collected Year-to-Date	5 Paid for Accrued Interest Year-to-Date
9199999 Totals	1,698,435,184	xxx	1,696,575,052	1,821,758	7,910

SCHEDULE DA - VERIFICATION

Short-Term Investments

	1 Year To Date	2 Prior Year Ended December 31
1. Book/adjusted carrying value, December 31 of prior year	2,213,051,262	1,159,172,265
2. Cost of short-term investments acquired	788,086,579	15,767,063,927
3. Accrual of discount	1,837,513	29,882,742
4. Unrealized valuation increase (decrease)		
5. Total gain (loss) on disposals	215,397	909,995
6. Deduct consideration received on disposals	1,304,755,568	14,743,977,667
7. Deduct amortization of premium		
8. Total foreign exchange change in book/adjusted carrying value		
9. Deduct current year's other than temporary impairment recognized		
10. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	1,698,435,184	2,213,051,262
11. Deduct total nonadmitted amounts		
12. Statement value at end of current period (Line 10 minus Line 11)	1,698,435,184	2,213,051,262

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART A - VERIFICATION

Options, Caps, Floors, Collars, Swaps and Forwards

1. Book/Adjusted Carrying Value, December 31, prior year (Line 10, prior year)	3,785,478,430
2. Cost Paid/(Consideration Received) on additions	15,414,856
3. Unrealized Valuation increase/(decrease)	63,911,929
4. SSAP No. 108 adjustments	
5. Total gain (loss) on termination recognized	(353,720,644)
6. Considerations received/(paid) on terminations	(237,495,064)
7. Amortization	72,552
8. Adjustment to the Book/Adjusted Carrying Value of hedged item	
9. Total foreign exchange change in Book/Adjusted Carrying Value	
10. Book/Adjusted Carrying Value at End of Current Period (Lines 1+2+3+4+5-6+7+8+9)	3,748,652,186
11. Deduct nonadmitted assets	
12. Statement value at end of current period (Line 10 minus Line 11)	3,748,652,186

SCHEDULE DB - PART B - VERIFICATION

Futures Contracts

1. Book/Adjusted carrying value, December 31 of prior year (Line 6, prior year)	(57,823,336)
2. Cumulative cash change (Section 1, Broker Name/Net Cash Deposits Footnote - Cumulative Cash Change column)	
3.1 Add:	
Change in variation margin on open contracts - Highly Effective Hedges	
3.11 Section 1, Column 15, current year to date minus	
3.12 Section 1, Column 15, prior year	
Change in variation margin on open contracts - All Other	
3.13 Section 1, Column 18, current year to date minus	(160,942,210)
3.14 Section 1, Column 18, prior year	(57,823,336) (103,118,873) (103,118,873)
3.2 Add:	
Change in adjustment to basis of hedged item	
3.21 Section 1, Column 17, current year to date minus	
3.22 Section 1, Column 17, prior year	
Change in amount recognized	
3.23 Section 1, Column 19, current year to date minus	(160,942,210)
3.24 Section 1, Column 19, prior year plus	(57,823,336)
3.25 SSAP No. 108 adjustments	(103,118,873) (103,118,873)
3.3 Subtotal (Line 3.1 minus Line 3.2)	
4.1 Cumulative variation margin on terminated contracts during the year	(400,078,061)
4.2 Less:	
4.21 Amount used to adjust basis of hedged item	
4.22 Amount recognized	(342,254,725)
4.23 SSAP No. 108 adjustments	(342,254,725)
4.3 Subtotal (Line 4.1 minus Line 4.2)	(57,823,336)
5. Dispositions gains (losses) on contracts terminated in prior year:	
5.1 Total gain (loss) recognized for terminations in prior year	
5.2 Total gain (loss) adjusted into the hedged item(s) for terminations in prior year	160,942,210
6. Book/Adjusted carrying value at end of current period (Lines 1+2+3.3-4.3-5.1-5.2)	(160,942,210)
7. Deduct total nonadmitted amounts	
8. Statement value at end of current period (Line 6 minus Line 7)	(160,942,210)

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*AA9	Evergreen Basket of Long Fixed Rate Corp Inv Grade Equiv Bonds	1	50,000,000	13,068,610	16,524,784	10/01/2012	10/01/2042	Interest Rate Swap		3,453,565	42086P-AC-7	Kingsland Ltd-SERIES 18-8A CLASS A	1	13,068,610	13,071,219
57629*AA9	Evergreen Basket of Long Fixed Rate Corp Inv Grade Equiv Bonds	1		11,817,615	12,285,000	10/01/2012	10/01/2042	Interest Rate Swap			32080B-AD-0	FIRST MARYLAND CAP I-LIMITED GUARANTEE NOTE	2	11,817,615	12,285,000
57629*AA9	Evergreen Basket of Long Fixed Rate Corp Inv Grade Equiv Bonds	1		17,924,260	18,041,966	10/01/2012	10/01/2042	Interest Rate Swap			38136M-AC-2	Goldentree Loan Management US Clo 2 Ltd	1	17,924,260	18,041,966
57629*AA9	Evergreen Basket of Long Fixed Rate Corp Inv Grade Equiv Bonds	1		10,000,000	10,000,960	10/01/2012	10/01/2042	Interest Rate Swap			09629L-AE-5	BLUEMOUNTAIN CLO XXIII L-BLUEM 2018-23A B	1	10,000,000	10,000,960
57629*AA9	Evergreen Basket of Long Fixed Rate Corp Inv Grade Equiv Bonds	1		6,195,029	6,175,119	10/01/2012	10/01/2042	Interest Rate Swap			03328Y-AG-9	Anchorage Capital CLO Lt-ANCHC 2018-1RA C	1	6,195,029	6,175,119
57629*AB7	Evergreen Basket of Long Fixed Rate Bank Loans B- or Above	1	50,000,000	5,200,009	8,682,705	10/01/2012	10/01/2042	Interest Rate Swap		3,399,977	13876L-AC-1	CANVC 2020-1A-B FLOATING COUP	1	5,200,009	5,282,728
57629*AB7	Evergreen Basket of Long Fixed Rate Bank Loans B- or Above	1		2,433,803	2,504,729	10/01/2012	10/01/2042	Interest Rate Swap			83149E-AG-2	SLM STUDENT LN TR 2006-5-NOTE CL B	1	2,433,803	2,504,729
57629*AB7	Evergreen Basket of Long Fixed Rate Bank Loans B- or Above	1		4,650,000	4,650,014	10/01/2012	10/01/2042	Interest Rate Swap			48661A-AL-0	KAYNE CLO I Ltd-KAYNE 2018-1A BR ROCKFORD TOWER CLO 2018-ROCKT	1	4,650,000	4,650,014
57629*AB7	Evergreen Basket of Long Fixed Rate Bank Loans B- or Above	1		6,430,000	6,430,231	10/01/2012	10/01/2042	Interest Rate Swap			77342K-AA-8	2018-2A A BlueMountain Fuji US Clo-SERIES	1	6,430,000	6,430,231
57629*AB7	Evergreen Basket of Long Fixed Rate Bank Loans B- or Above	1		8,000,000	7,957,904	10/01/2012	10/01/2042	Interest Rate Swap			09628F-AE-9	2017-3A CLASS B Canyon Capital CLO Ltd-CANVC 2012-	1	8,000,000	7,957,904
57629*AB7	Evergreen Basket of Long Fixed Rate Bank Loans B- or Above	1		4,000,000	4,000,368	10/01/2012	10/01/2042	Interest Rate Swap			13876J-AE-2	1RA B Wind River CLO Ltd-SERIES 18-3A	1	4,000,000	4,000,368
57629*AB7	Evergreen Basket of Long Fixed Rate Bank Loans B- or Above	1		15,000,000	15,001,530	10/01/2012	10/01/2042	Interest Rate Swap			88432U-AC-0	CLASS A2	1	15,000,000	15,001,530
57629*AB7	Evergreen Basket of Long Fixed Rate Bank Loans B- or Above	1		6,800,000	6,800,082	10/01/2012	10/01/2042	Interest Rate Swap			03762Y-AH-0	Apidos Clo XXV-APID 2016-25A A2R	1	6,800,000	6,800,082
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	264,000,000	19,161,658	36,346,455	11/29/2012	11/29/2042	Interest Rate Swap		17,207,791	14316R-ZZ-6	Carlyle US CLO 2017-5 Re Term Loan	1	19,161,658	19,138,664
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,320,395	4,409,923	11/29/2012	11/29/2042	Interest Rate Swap			83149F-AD-6	SLM Student Loan Trust 2006-6	1	4,320,395	4,409,923
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,642,230	23,000,621	11/29/2012	11/29/2042	Interest Rate Swap			375415-AA-4	GILBERT PARK CLO LTD-SERIES 17-1A CLASS A	1	22,642,230	23,000,621
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,500,000	13,389,125	11/29/2012	11/29/2042	Interest Rate Swap			14310D-AY-3	CARLYLE GLOBAL MKT STRATEGIES CLO 2013-2 LTD MEZZ SEC DEF NT	1	13,500,000	13,389,125
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,100,000	13,100,131	11/29/2012	11/29/2042	Interest Rate Swap			67097Q-AC-9	COP CLO 2017-14 Ltd-SERIES 17-14A CLASS A1B	1	13,100,000	13,100,131
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	7,988,328	11/29/2012	11/29/2042	Interest Rate Swap			38137H-BW-7	Goldentree Loan Opportun-SERIES 2015-11A CLASS BR2	1	8,000,000	7,988,328
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,017,727	9,925,770	11/29/2012	11/29/2042	Interest Rate Swap			56845N-AE-0	Signal Peak CLO 8 Ltd-SPEAK 2020-8A C	1	10,017,727	9,925,770
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,001,030	11/29/2012	11/29/2042	Interest Rate Swap			33833V-AE-5	522 Funding CLO 2019-5 L-MORGN 2021-7A B	1	10,000,000	10,001,030
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,525,000	5,525,326	11/29/2012	11/29/2042	Interest Rate Swap			01748R-AE-5	ALLEGRO CLO V LTD-SERIES 17-1A CLASS MEZ, FLT	1	5,525,000	5,525,326
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,001,530	11/29/2012	11/29/2042	Interest Rate Swap			38137M-AK-3	Goldentree Loan Opportun-GLD12 2016-12A AJR	1	15,000,000	15,001,530
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,500,000	4,491,680	11/29/2012	11/29/2042	Interest Rate Swap			03767M-AJ-7	Apidos CLO-APID 2018-29A B	1	4,500,000	4,491,680
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,600,000	19,600,568	11/29/2012	11/29/2042	Interest Rate Swap			17181T-AA-9	CIFC Funding 2018-IV Ltd-SERIES 18-4A CLASS A1	1	19,600,000	19,600,568
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,000,000	12,001,344	11/29/2012	11/29/2042	Interest Rate Swap			04017J-AE-1	ARES CLO Ltd-ARES 2018-49A B	1	12,000,000	12,001,344
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,700,000	8,720,776	11/29/2012	11/29/2042	Interest Rate Swap			05875P-AE-5	Ballyrock Ltd	1	8,700,000	8,720,776
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		39,400,000	39,541,643	11/29/2012	11/29/2042	Interest Rate Swap			00119V-AA-7	AGL CLO Ltd-AGL 2020-6A A1	1	39,400,000	39,541,643
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,250,000	23,293,943	11/29/2012	11/29/2042	Interest Rate Swap			13876N-AA-1	Canyon CLO 2020-2 Ltd-CANVC 2020-2A A	1	23,250,000	23,293,943
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,049,320	11/29/2012	11/29/2042	Interest Rate Swap			00851K-AA-3	AGL CLO Ltd-AGL 2020-8A A1	1	20,000,000	20,049,320
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,600,000	3,611,480	11/29/2012	11/29/2042	Interest Rate Swap			05683E-AC-6	Bain Capital Credit CLO-BCC 2020-2A B1	1	3,600,000	3,611,480

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,000,000	9,037,773	11/29/2012	11/29/2042	Interest Rate Swap			12547L-AE-8	CIFC Funding Ltd-CIFC 2020-2A B	1	9,000,000	9,037,773
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,425,000	1,410,777	11/29/2012	11/29/2042	Interest Rate Swap			06760E-AG-1	Babson CLO Ltd 2013-I-SERIES 2013-IA CLASS DR	2	1,425,000	1,410,777
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,220,000	1,177,515	11/29/2012	11/29/2042	Interest Rate Swap			056162-AU-4	Babson CLO Ltd 2015-I-SERIES 2015-IA CLASS DR	2	1,220,000	1,177,515
57629*AC5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		196,970	196,974	11/29/2012	11/29/2042	Interest Rate Swap			06759F-AE-6	BABSON CLO LTD 2015-II-SERIES 15-2A CLASS C1R	1	196,970	196,974
57629*AE1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	100,000,000	12,000,000	21,853,195	12/27/2012	12/27/2042	Interest Rate Swap		9,851,647	67112K-AC-3	'00P CLO Ltd-SEREIS 18-15A CLASS A3	1	12,000,000	12,001,548
57629*AE1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,000,000	4,000,476	12/27/2012	12/27/2042	Interest Rate Swap			83600R-AE-1	SOUND POINT CLO LTD-SNDPT 2017-1A C	1	4,000,000	4,000,476
57629*AE1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,663,755	22,663,755	12/27/2012	12/27/2042	Interest Rate Swap			14315J-YY-9	Carlyle US CLO 2017-3 Ri Term Loan	1	22,663,755	22,663,755
57629*AE1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,200,000	3,199,987	12/27/2012	12/27/2042	Interest Rate Swap			03330A-AC-6	Anchorage Capital CLO 3--ANCHC 2014-3RA B	1	3,200,000	3,199,987
57629*AE1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		50,000,000	49,981,250	12/27/2012	12/27/2042	Interest Rate Swap			87271L-AJ-1	TIAA CLO I Ltd-TIA 2016-1A AR	1	50,000,000	49,981,250
57629*AE1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,800,000	8,777,314	12/27/2012	12/27/2042	Interest Rate Swap			14310D-AW-7	Carlyle Global Market St-SERIES 2013-2A CLASS BR	1	8,800,000	8,777,314
57629*AE1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,963,367	5,001,080	12/27/2012	12/27/2042	Interest Rate Swap			12551J-AG-1	CIFC Funding 2017-IV Ltd-SERIES 17-4A CLASS B	1	4,963,367	5,001,080
57629*AD3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	100,000,000	8,939,321	18,323,444	12/27/2012	12/27/2042	Interest Rate Swap		9,851,647	92977H-AG-3	WACHOVIA STUDENT LOAN TR--WSLT 2005-1 B	1	8,939,321	8,471,797
57629*AD3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,053,652	19,992,920	12/27/2012	12/27/2042	Interest Rate Swap			94950G-AN-7	Wellfleet CLO 2017-1 Ltd-WELF 2017-1A A2R	1	20,053,652	19,992,920
57629*AD3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	30,021,600	12/27/2012	12/27/2042	Interest Rate Swap			83004L-AC-9	610 Funding CLO-SIX10 2021-2RA A1R2	1	30,000,000	30,021,600
57629*AD3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,000,000	22,999,931	12/27/2012	12/27/2042	Interest Rate Swap			06760P-AE-1	Babson CLO Ltd/Cayman Is-BABSN 2018-3A A2	1	23,000,000	22,999,931
57629*AD3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,500,000	9,500,361	12/27/2012	12/27/2042	Interest Rate Swap			55821A-AE-8	Madison Park Funding Ltd-SERIES 18-28A CLASS B	1	9,500,000	9,500,361
57629*AD3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,000,000	3,976,284	12/27/2012	12/27/2042	Interest Rate Swap			28622J-AB-3	ARROWMARK COLORADO HOLDI-SERIES 17-7A CLASS B	1	4,000,000	3,976,284
57629*AD3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,750,000	4,764,929	12/27/2012	12/27/2042	Interest Rate Swap			55954W-AC-3	Magnetite XXIV Ltd-SERIES 2019-24A CLASS B	1	4,750,000	4,764,929
57629*AD3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,049,659	1,947,039	12/27/2012	12/27/2042	Interest Rate Swap			784424-AE-3	SLO STUDENT LOAN TRUST 2-SERIES 07-1 CLASS B	1	2,049,659	1,947,039
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	100,000,000	6,000,000	16,537,421	12/28/2012	12/28/2042	Interest Rate Swap		10,537,241	38138B-AG-5	Goldentree Loan Managem-GLM 2018-3A B1	1	6,000,000	6,000,180
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,048,096	20,031,640	12/28/2012	12/28/2042	Interest Rate Swap			56845N-AC-4	Signal Peak CLO 8 Ltd-SPEAK 2020-8A B	1	20,048,096	20,031,640
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,750,000	13,751,485	12/28/2012	12/28/2042	Interest Rate Swap			55954K-AN-5	Magnetite XIX Ltd-SERIES 2017-19A CLASS B1R	1	13,750,000	13,751,485
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,521	8,004,120	12/28/2012	12/28/2042	Interest Rate Swap			55818X-BA-0	MADISON PARK FUNDING LTD-SERIES 2015-16A CLASS BR	1	8,000,521	8,004,120
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,050,000	11,050,188	12/28/2012	12/28/2042	Interest Rate Swap			88432M-AC-8	WIND RIVER CLO LTD-WINDR 2017-1A B	1	11,050,000	11,050,188
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,975,085	22,976,785	12/28/2012	12/28/2042	Interest Rate Swap			22615M-AL-6	Crestline Denali CLO XIV-SERIES16-1A CLASS A1R	1	22,975,085	22,976,785
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	8,000,216	12/28/2012	12/28/2042	Interest Rate Swap			89852T-AN-8	Tryon Park CLO Ltd-TPCLO 2013-1A A1JR	1	8,000,000	8,000,216
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,000,000	3,000,306	12/28/2012	12/28/2042	Interest Rate Swap			87248K-AS-3	TICP CLO VI 2016-5 LTD-TICP 2016-5A A2R	1	3,000,000	3,000,306
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,000,000	1,000,146	12/28/2012	12/28/2042	Interest Rate Swap			94950J-AA-9	Wellfleet CLO Ltd-SERIES 18-1A CLASS A	1	1,000,000	1,000,146
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,000,000	4,000,324	12/28/2012	12/28/2042	Interest Rate Swap			40437L-AE-2	HPS LOAN MANAGEMENT 13-2-HLM 13A-18 A2	1	4,000,000	4,000,324
57629*AF8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,060,000	5,016,256	12/28/2012	12/28/2042	Interest Rate Swap			92917A-AE-6	Voya CLO Ltd-SERIES 18-1A CLASS B	1	5,060,000	5,016,256
57629*AH4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	100,000,000	59,000,000	69,545,855	12/28/2012	12/28/2042	Interest Rate Swap		10,537,241	94950J-AA-9	Wellfleet CLO Ltd-SERIES 18-1A CLASS A	1	59,000,000	59,008,614

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*AH4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,200,000	14,200,284	12/28/2012	12/28/2042	Interest Rate Swap				06759F-AB-2	BABSON CLO LTD 2015-11-SERIES 15-2A CLASS AR	1	14,200,000	14,200,284
57629*AH4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,004,400	12/28/2012	12/28/2042	Interest Rate Swap				04017T-AE-9	Ares XXXIR CLO Ltd-SERIES 14-31RA CLASS B	1	20,000,000	20,004,400
57629*AH4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,599,998	1,600,154	12/28/2012	12/28/2042	Interest Rate Swap				87246M-AW-2	TICOP CLO VI 2016-2 Ltd-TICOP 2016-6A CR2	1	1,599,998	1,600,154
57629*AH4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,200,000	4,200,315	12/28/2012	12/28/2042	Interest Rate Swap				12551R-AE-8	CIFC Funding 2018-1 Ltd-SERIES 18-1A CLASS C	1	4,200,000	4,200,315
57629*AH4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,100,000	1,100,100	12/28/2012	12/28/2042	Interest Rate Swap				08179M-AC-3	Benefit Street Partners -BSP 2018-15A A2A	1	1,100,000	1,100,100
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	100,000,000	20,000,000	30,537,521	12/28/2012	12/28/2042	Interest Rate Swap		10,537,241		09628N-AQ-5	BlueMountain CLO 2015-4 -SERIES 15-4A CLASS A2R	1	20,000,000	20,000,280
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,050,000	12,079,072	12/28/2012	12/28/2042	Interest Rate Swap				64031D-AB-6	NetNet Student Loan Trus-SERIES 19-3A CLASS B	1	12,050,000	12,079,072
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,673,998	3,469,284	12/28/2012	12/28/2042	Interest Rate Swap				63939F-AC-4	Navient Student Loan Tru-SERIES 15-1 CLASS B	1	3,673,998	3,469,284
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,515	12/28/2012	12/28/2042	Interest Rate Swap				12550G-AE-3	CIFC Funding Ltd-CIFC 2018-5A B	1	5,000,000	5,000,515
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,900,000	8,901,086	12/28/2012	12/28/2042	Interest Rate Swap				55820T-AC-2	MADISON PARK FUNDING LTD-SERIES 2017-23A CLASS B	1	8,900,000	8,901,086
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		34,026,908	34,690,433	12/28/2012	12/28/2042	Interest Rate Swap				72403Z-NQ-3	PIONEERS GATE LLC 2020-1 USAUT	1	34,026,908	34,690,433
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,200,000	3,200,176	12/28/2012	12/28/2042	Interest Rate Swap				48250R-BN-5	KKR CLO 12 Ltd-KKR 12 BR2	1	3,200,000	3,200,176
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,250,000	4,250,247	12/28/2012	12/28/2042	Interest Rate Swap				09626U-AQ-1	BLUEMOUNTAIN CLO LTD-BLUEM 2013-1A BR	1	4,250,000	4,250,247
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,250,000	4,250,803	12/28/2012	12/28/2042	Interest Rate Swap				75888M-AG-5	Regatta XIV Funding Ltd-SERIES 18-3A CLASS B	1	4,250,000	4,250,803
57629*AG6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,200,000	5,200,993	12/28/2012	12/28/2042	Interest Rate Swap				41154X-AG-0	Harbor Park CLO, Ltd-HAR-HARB 2018-1A B1	1	5,200,000	5,200,993
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	9,550,000	14,819,863	12/28/2012	12/28/2042	Interest Rate Swap		5,268,621		04965F-AG-6	Atrium XV-SERIES 15A CLASS B	1	9,550,000	9,551,242
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,090	12/28/2012	12/28/2042	Interest Rate Swap				55819B-AL-4	MADISON PARK FUNDING XVI-SERIES 15-18A CLASS A1R	1	10,000,000	10,000,090
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,564,101	6,389,131	12/28/2012	12/28/2042	Interest Rate Swap				63940A-AD-0	NAVIENT STUDENT LOAN TRU-SERIES 17-4A CLASS B	1	6,564,101	6,389,131
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,200,000	9,211,500	12/28/2012	12/28/2042	Interest Rate Swap				03328W-AN-8	Anchorage Capital CLO 9 -SERIES 16-9A CLASS CR	1	9,200,000	9,211,500
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,000,000	2,000,344	12/28/2012	12/28/2042	Interest Rate Swap				04019L-AG-9	ARES 2019-51A C	1	2,000,000	2,000,344
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,100,000	1,100,100	12/28/2012	12/28/2042	Interest Rate Swap				08179M-AC-3	Benefit Street Partners -BSP 2018-15A A2A	1	1,100,000	1,100,100
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,500,000	2,500,230	12/28/2012	12/28/2042	Interest Rate Swap				13876J-AE-2	Canyon Capital CLO Ltd-CANYC 2012-18A B	1	2,500,000	2,500,230
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,400,000	6,400,506	12/28/2012	12/28/2042	Interest Rate Swap				77342K-AC-4	Rockford Tower CLO 2018-2 Ltd	1	6,400,000	6,400,506
57629*AJ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,900,000	5,900,124	12/28/2012	12/28/2042	Interest Rate Swap				06760G-AC-5	Barings CLO Ltd 2018-1-SERIES 18-1A CLASS B	1	5,900,000	5,900,124
57629*AK7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	10,000,000	15,271,981	12/28/2012	12/28/2042	Interest Rate Swap		5,268,621		24380L-AE-3	DEER CREEK CLO LTD 2017--SERIES 17-1A CLASS B	1	10,000,000	10,003,360
57629*AK7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	30,001,080	12/28/2012	12/28/2042	Interest Rate Swap				04624W-AC-1	ASSURANT CLO III LTD-SERIES 2018-2A CLASS A	1	30,000,000	30,001,080
57629*AK7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,570,000	13,571,031	12/28/2012	12/28/2042	Interest Rate Swap				48249V-AQ-4	KKR FINANCIAL CLO LTD-SERIES 13-1A CLASS A2R	1	13,570,000	13,571,031
57629*AK7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,850,000	4,850,267	12/28/2012	12/28/2042	Interest Rate Swap				08179H-AB-6	BENEFIT STREET PARTNERS -SERIES 2017-12A CLASS A2	1	4,850,000	4,850,267
57629*AL5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	36,848,896	42,158,051	12/28/2012	12/28/2042	Interest Rate Swap		5,268,621		72403Z-NJ-9	PIONEERS GATE LLC 2019-4 FORT Note	1	36,848,896	36,889,430
57629*AL5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,062,281	4,044,069	12/28/2012	12/28/2042	Interest Rate Swap				784170-ZZ-8	SFR FTTH SAS Term Loan	3	4,062,281	4,044,069
57629*AL5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,750,000	8,751,076	12/28/2012	12/28/2042	Interest Rate Swap				48252R-AE-4	KKR 24 B	1	8,750,000	8,751,076

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*AL5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,100,000	1,100,100	12/28/2012	12/28/2042	Interest Rate Swap			08179M-AC-3	Benefit Street Partners -BSP 2018-15A A2A	1	1,100,000	1,100,100
57629*AL5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,600,000	4,600,101	12/28/2012	12/28/2042	Interest Rate Swap			05875H-AE-3	Ballyrock CLO 2018-1 Ltd-SERIES 2018-1A CLASS B	1	4,600,000	4,600,101
57629*AM3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		500,000	5,400,000	12/28/2012	12/28/2042	Interest Rate Swap		5,268,621	12548J-AE-2	ALM XIV Ltd-SERIES 14-14A CLASS A2	1	5,400,000	5,400,637
57629*AM3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,900,000	11,853,638	12/28/2012	12/28/2042	Interest Rate Swap			74988L-AC-8	A2R2	1	11,900,000	11,853,638
57629*AM3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,642,617	5,652,051	12/28/2012	12/28/2042	Interest Rate Swap			29001L-AG-6	Elmwood CLO II Ltd-ELMM2 2019-2A C	1	5,642,617	5,652,051
57629*AM3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,500,000	4,500,005	12/28/2012	12/28/2042	Interest Rate Swap			50184K-AW-8	LOM LTD PARTNERSHIP-SERIES 13A CLASS CR	1	4,500,000	4,500,005
57629*AM3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,200,000	4,200,008	12/28/2012	12/28/2042	Interest Rate Swap			39808P-AN-6	A2R	1	4,200,000	4,200,008
57629*AM3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,200,000	11,201,008	12/28/2012	12/28/2042	Interest Rate Swap			08181B-AS-8	Benefit Street Partners -SERIES 16-9A CLASS BR	1	11,200,000	11,201,008
57629*AM3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	8,001,080	12/28/2012	12/28/2042	Interest Rate Swap			94951D-AC-7	Wellfleet CLO 2018-3 Ltd-SERIES 18-3A CLASS A1B	1	8,000,000	8,001,080
57629*AN1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		500,000	20,000,000	12/31/2012	12/31/2042	Interest Rate Swap		4,598,584	36248M-AJ-6	GT Loan Financing I Ltd -SERIES 2013-1A CLASS AR	1	20,000,000	20,000,260
57629*AN1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,815,064	20,804,656	12/31/2012	12/31/2042	Interest Rate Swap			14315J-MM-8	Carlyle US CLO 2013-2 Re Term Loan	1	20,815,064	20,804,656
57629*AN1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,350,000	4,350,513	12/31/2012	12/31/2042	Interest Rate Swap			88433C-AG-0	WINDR 2019-1A C	1	4,350,000	4,350,513
57629*AN1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,850,000	5,850,445	12/31/2012	12/31/2042	Interest Rate Swap			64131Q-AC-4	NEUBERGER BERMAN LOAN AD-SERIES 2017-26A CLASS B	1	5,850,000	5,850,445
57629*AP6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		500,000	9,900,000	12/31/2012	12/31/2042	Interest Rate Swap		4,598,584	67707C-AE-8	Oak Hill Credit Partners-OAKC 2014-10RA A2A	1	9,900,000	9,901,396
57629*AP6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,000,000	25,007,750	12/31/2012	12/31/2042	Interest Rate Swap			67104L-AF-4	OHA Loan Funding 2013-2 -OHALF 2013-2A BR	1	25,000,000	25,007,750
57629*AP6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,850,000	13,852,410	12/31/2012	12/31/2042	Interest Rate Swap			38137P-AU-4	Goldentree Loan Opportun-SERIES 2015-10A CLASS BR	1	13,850,000	13,852,410
57629*AP6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,000,000	1,000,000	12/31/2012	12/31/2042	Interest Rate Swap			941848-D8-9	Waters Corporation Gtd Senior Note Series H	2	1,000,000	1,000,000
57629*AP6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,800,000	3,789,398	12/31/2012	12/31/2042	Interest Rate Swap			74988L-AJ-3	ALM XIV Ltd-SERIES 14-14A CLASS BR2	1	3,800,000	3,789,398
57629*A04	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		500,000	25,000,000	12/31/2012	12/31/2042	Interest Rate Swap		4,598,584	500798-MC-4	KREF Lending VII 2018-3 Term Loan	1	25,000,000	25,000,000
57629*A04	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,000,630	12/31/2012	12/31/2042	Interest Rate Swap			48250W-AJ-4	KKR CLO 14 Ltd-KKR 14 BR	1	15,000,000	15,000,630
57629*A04	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,510	12/31/2012	12/31/2042	Interest Rate Swap			87248K-AS-3	TICP CLO VI 2016-5 LTD-TICP 2016-5A A2R	1	5,000,000	5,000,510
57629*A04	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,020,555	963,690	12/31/2012	12/31/2042	Interest Rate Swap			63939F-AC-4	Navient Student Loan Tru-SERIES 15-1 CLASS B	1	1,020,555	963,690
57629*A04	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,800,000	7,808,206	12/31/2012	12/31/2042	Interest Rate Swap			05875J-AB-5	Ballyrock CLO 2019-1 Ltd-BALLY 2019-1A A2	1	7,800,000	7,808,206
57629*A04	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,000,000	3,976,284	12/31/2012	12/31/2042	Interest Rate Swap			28622J-AB-3	ARROWMARK COLORADO HOLDI-SERIES 17-7A CLASS B	1	4,000,000	3,976,284
57629*AR2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		500,000	8,800,000	12/31/2012	12/31/2042	Interest Rate Swap		4,598,584	38137P-AS-9	Goldentree Loan Opportun-SERIES 2015-10A CLASS AJR	1	8,800,000	8,801,100
57629*AR2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,400,000	7,332,630	12/31/2012	12/31/2042	Interest Rate Swap			92916M-AC-5	VOYA CLO LTD-VOYA 2017-1A B	1	7,400,000	7,332,630
57629*AR2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,450,000	5,443,444	12/31/2012	12/31/2042	Interest Rate Swap			55819M-AE-6	Madison Park Funding Ltd-MDPK 2019-35A B	1	5,450,000	5,443,444
57629*AR2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,500,000	7,499,955	12/31/2012	12/31/2042	Interest Rate Swap			55819T-AU-5	Madison Park Funding XX -SERIES 2016-20A CLASS CR	1	7,500,000	7,499,955
57629*AR2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,900,000	13,900,014	12/31/2012	12/31/2042	Interest Rate Swap			03328Y-AE-4	Anchorage Capital CLO Lt-ANCHC 2018-1RA B	1	13,900,000	13,900,014
57629*AR2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,458,342	7,371,960	12/31/2012	12/31/2042	Interest Rate Swap			64034C-AB-5	Nelnet Student Loan Trus-NSLT 2019-1A B	1	7,458,342	7,371,960
57629*ASO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		500,000	8,300,000	12/31/2012	12/31/2042	Interest Rate Swap		4,598,584	05684D-AG-8	Bain Capital Credit CLO-BCC 2020-1A B FLOATING	1	8,300,000	8,327,058

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*AS0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	7,939,064	12/31/2012	12/31/2042	Interest Rate Swap			83608G-AQ-9	Sound Point CLO II Ltd-SNDPT 2013-1A A2R	1	8,000,000	7,939,064
57629*AS0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,000,030	12/31/2012	12/31/2042	Interest Rate Swap			05682V-AC-9	Bain Capital Credit CLO -SERIES 18-2A CLASS A2	1	15,000,000	15,000,030
57629*AS0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,910,000	6,911,133	12/31/2012	12/31/2042	Interest Rate Swap			50188Q-AE-1	LCM XIX LTD PARTNERSHIP DEF MEZZ NT CL C	1	6,910,000	6,911,133
57629*AS0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,300,000	8,301,004	12/31/2012	12/31/2042	Interest Rate Swap			00900P-AE-5	AIMCO CLO Series 2018-B-SERIES 18-BA CLASS B	1	8,300,000	8,301,004
57629*AS0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,100,000	1,100,100	12/31/2012	12/31/2042	Interest Rate Swap			08179M-AC-3	Benefit Street Partners -BSP 2018-15A A2A	1	1,100,000	1,100,100
57629*AS0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,700,000	2,669,485	12/31/2012	12/31/2042	Interest Rate Swap			01749B-AC-3	Allegro CLO VI Ltd-ALLEG 2017-2A C	1	2,700,000	2,669,485
57629*AT8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	10,000,000	14,599,874	12/31/2012	12/31/2042	Interest Rate Swap		4,598,584	87248W-AC-2	TICP CLO VIII LTD-SERIES 2017-8A CLASS A2	1	10,000,000	10,001,290
57629*AT8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,800,000	5,800,603	12/31/2012	12/31/2042	Interest Rate Swap			67570Q-AP-6	OCF CLO 2019-16 Ltd-SERIES 19-16A CLASS CR	1	5,800,000	5,800,603
57629*AT8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,000,000	11,967,204	12/31/2012	12/31/2042	Interest Rate Swap			92917J-AE-7	Voya CLO 2018-2 Ltd-VOYA 2018-2A B1	1	12,000,000	11,967,204
57629*AT8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,650,000	22,647,735	12/31/2012	12/31/2042	Interest Rate Swap			14315C-ZZ-0	Carlyle US CLO 2017-4 Ri Term Loan	1	22,650,000	22,647,735
57629*AI1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		55,000,000	7,400,000	04/09/2013	04/09/2043	Interest Rate Swap		6,500,857	55954H-AE-2	Magnetite CLO Ltd-SERIES 19-22A CLASS B	1	7,400,000	7,400,992
57629*AI1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,600,000	5,600,896	04/09/2013	04/09/2043	Interest Rate Swap			12550Y-AG-9	CIFC FUNDING LTD-CIFC 2017-2A C	1	5,600,000	5,600,896
57629*AI1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,400,000	6,399,974	04/09/2013	04/09/2043	Interest Rate Swap			01749B-AB-5	Allegro CLO VI Ltd-ALLEG 2017-2A B	1	6,400,000	6,399,974
57629*AI1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,108,818	3,551,022	04/09/2013	04/09/2043	Interest Rate Swap			12481X-AS-9	CBAM 2018-6 Ltd-CBAM 2018-6A B1R	1	3,108,818	3,551,022
57629*AI1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,934,781	20,102,171	04/09/2013	04/09/2043	Interest Rate Swap			12553D-AA-5	CIFC Funding 2019-1 Ltd-CIFC 2019-1A A	1	19,934,781	20,102,171
57629*AI1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,500,000	7,484,415	04/09/2013	04/09/2043	Interest Rate Swap			77342J-AC-7	Rockford Tower CLO 2018--SERIES 18-1A CLASS B	1	7,500,000	7,484,415
57629*AI1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,900,000	6,900,800	04/09/2013	04/09/2043	Interest Rate Swap			65023T-AK-8	Newark BSL CLO 1 Ltd-NBCLO 2016-1A A2R	1	6,900,000	6,900,800
57629*AV3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	60,000,000	28,112,668	35,078,485	04/09/2013	04/09/2043	Interest Rate Swap		7,091,845	784170-ZZ-8	SFR FTTH SAS Term Loan	3	28,112,668	27,986,640
57629*AV3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,500,000	18,456,951	04/09/2013	04/09/2043	Interest Rate Swap			50188G-AX-1	LCM XVIII LP-LCM 18A A2R	1	18,500,000	18,456,951
57629*AV3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,500,000	7,483,853	04/09/2013	04/09/2043	Interest Rate Swap			33882G-AG-3	Flatiron CLO 17 Ltd-FLAT 2017-1A BR	1	7,500,000	7,483,853
57629*AV3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,700,000	4,700,498	04/09/2013	04/09/2043	Interest Rate Swap			67707C-AU-2	Oak Hill Credit Partners-OAKC 2014-10RA CR	1	4,700,000	4,700,498
57629*AV3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,000,000	2,000,204	04/09/2013	04/09/2043	Interest Rate Swap			62848F-AC-6	MYERS PARK CLO LTD-MYERS 2018-1A A2	1	2,000,000	2,000,204
57629*AX9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		55,000,000	26,000,000	04/09/2013	04/09/2043	Interest Rate Swap		5,991,510	83609Y-AC-0	Sounds Point CLO IV-R LT-SERIES 13-3RA CLASS A	1	26,000,000	25,963,184
57629*AX9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,470,583	3,307,234	04/09/2013	04/09/2043	Interest Rate Swap			78442G-OA-7	SLM STUDENT LOAN TRUST-SERIES 2005-6 CLASS B	1	3,470,583	3,307,234
57629*AX9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,500,000	8,533,847	04/09/2013	04/09/2043	Interest Rate Swap			29002G-AB-7	Elmwood CLO IV Ltd-ELMW4 2020-1A A	1	8,500,000	8,533,847
57629*AX9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,180,065	15,092,021	04/09/2013	04/09/2043	Interest Rate Swap			14315J-RR-2	Carlyle US CLO 2013-4 Re Term Loan	1	15,180,065	15,092,021
57629*AX9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,000,000	3,006,102	04/09/2013	04/09/2043	Interest Rate Swap			05684A-AG-4	Bain Capital Credit CLO-BCC 2019-4A C	1	3,000,000	3,006,102
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		55,000,000	4,450,000	04/09/2013	04/09/2043	Interest Rate Swap		5,991,510	55820R-AG-7	MADISON PARK FUNDING LTD-SERIES 17-25A CLASS C	2	4,450,000	4,450,000
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,950,000	1,950,503	04/09/2013	04/09/2043	Interest Rate Swap			55954K-AE-5	MAGNETITE CLO LTD-SERIES 2017-19A CLASS C	1	1,950,000	1,950,503
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,738,054	22,739,873	04/09/2013	04/09/2043	Interest Rate Swap			14311C-RR-1	Carlyle US CLO 2017-1 Ri Term Loan	1	22,738,054	22,739,873
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	9,985,240	04/09/2013	04/09/2043	Interest Rate Swap			03329Z-AS-2	ANCHORAGE CAPITAL CLO 20-SERIES 13-1A CLASS A2R	1	10,000,000	9,985,240

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,400,000	6,407,046	04/09/2013	04/09/2043	Interest Rate Swap				67112R-AG-9	QHA Credit Funding 3 LTD-OAKC 2019-3A B1	1	6,400,000	6,407,046
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,800,000	4,805,472	04/09/2013	04/09/2043	Interest Rate Swap				09627F-AE-0	BlueMountain CLO Ltd-SERIES 2019-25A CLASS B	1	4,800,000	4,805,472
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,300,000	3,300,647	04/09/2013	04/09/2043	Interest Rate Swap				06761C-AC-3	Babson CLO Ltd 2016-II-BABSN 2016-2A BR	1	3,300,000	3,300,647
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,000,000	1,000,027	04/09/2013	04/09/2043	Interest Rate Swap				89852T-AN-8	Tryon Park CLO Ltd-TPCLO 2013-1A A1JR	1	1,000,000	1,000,027
57629*AY7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,000,000	1,000,092	04/09/2013	04/09/2043	Interest Rate Swap				13876J-AE-2	Canyon Capital CLO Ltd-CANVC 2012-1RA B	1	1,000,000	1,000,092
57629*AU5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	55,000,000	10,530,000	16,257,425	04/09/2013	04/09/2043	Interest Rate Swap		5,727,425		500798-MM-8	KREF Lending VII 2018-1 Term Loan, Newark BSL CLO 1 Ltd-NBCLO 2016-1A A1R	1	10,530,000	10,530,000
57629*AU5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,569,270	27,479,513	04/09/2013	04/09/2043	Interest Rate Swap				65023T-AJ-1	BALLYROCK CLO 2018-1 LTD-SERIES 2018-1A CLASS A2	1	25,569,270	27,479,513
57629*AU5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,615,704	13,900,792	04/09/2013	04/09/2043	Interest Rate Swap				05875H-AC-7	MYERS PARK CLO LTD-MYERS 2018-1A A2	1	13,615,704	13,900,792
57629*AU5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,000,000	1,000,102	04/09/2013	04/09/2043	Interest Rate Swap				62848F-AC-6		1	1,000,000	1,000,102
57629*AU5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,500,000	5,527,660	04/09/2013	04/09/2043	Interest Rate Swap				48661N-AE-8	KAYNE CLO-SERIES 19-6A CLASS B1 Marble Point CLO XI Ltd-IP11 2017-2A A	1	5,500,000	5,527,660
57629*BA8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	60,000,000	21,900,000	28,150,487	04/09/2013	04/09/2043	Interest Rate Swap		6,248,100		56607F-AA-3	NORTHSTAR EDUCATION FINA-SERIES 04-2 CLASS B	1	21,900,000	21,902,387
57629*BA8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,525,601	10,919,421	04/09/2013	04/09/2043	Interest Rate Swap				66704J-BD-9	NORTHSTAR EDUCATION FINA-SERIES 05-1 CLASS B	1	12,525,601	10,919,421
57629*BA8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,908,198	10,021,752	04/09/2013	04/09/2043	Interest Rate Swap				66704J-BK-3	Wellfleet CLO Ltd-SERIES 18-1A CLASS B	1	10,908,198	10,021,752
57629*BA8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,500,000	3,500,116	04/09/2013	04/09/2043	Interest Rate Swap				94950J-AC-5	Crestline Denali CLO Ltd-SERIES 2018-1A CLASS C	1	3,500,000	3,500,116
57629*BA8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,200,000	3,107,434	04/09/2013	04/09/2043	Interest Rate Swap				22615E-AE-0	MYERS PARK CLO LTD-MYERS 2018-1A A2	1	3,200,000	3,107,434
57629*BA8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,000,000	2,000,204	04/09/2013	04/09/2043	Interest Rate Swap				62848F-AC-6	Highbridge Loan Manageme-SERIES 4A-2014 CLASS A2R	1	2,000,000	2,000,204
57629*BA8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,100,000	6,064,181	04/09/2013	04/09/2043	Interest Rate Swap				44330G-AE-3	Allegro CLO VII Ltd-ALLEG 2018-1A A	1	6,100,000	6,064,181
57629*BB6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	34,500,000	39,676,504	04/09/2013	04/09/2043	Interest Rate Swap		5,214,937		01750C-AA-1	KKR CLO 14 Ltd-KKR 14 AR	1	34,500,000	34,461,567
57629*BB6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,000,000	999,279	04/09/2013	04/09/2043	Interest Rate Swap				48250W-AG-0	Waters Corporation Gtd Senior Note Series H	2	1,000,000	999,279
57629*BB6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,100,000	7,100,000	04/09/2013	04/09/2043	Interest Rate Swap				941848-D8-9	Carlyle Global Market S1-CGMS 2014-2RA A2	1	7,100,000	7,100,000
57629*BB6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,275	04/09/2013	04/09/2043	Interest Rate Swap				14314L-AE-5	Nelnet Student Loan Trus-NSLT 2020-5A B	1	5,000,000	5,000,275
57629*BB6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,487,785	2,482,031	04/09/2013	04/09/2043	Interest Rate Swap				64032V-AB-5	MADISON PARK FUNDING XXI-HDPK 2018-29A A2	1	2,487,785	2,482,031
57629*AZ4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	14,000,000	19,217,037	04/09/2013	04/09/2043	Interest Rate Swap		5,214,937		55820C-AE-5	DRYDEN 64 CLO LTD-DRSLF 2018-64A A	1	14,000,000	14,002,100
57629*AZ4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,850,000	22,829,709	04/09/2013	04/09/2043	Interest Rate Swap				26251L-AC-8	Babson CLO Ltd 2016-II-BABSN 2016-2A BR	1	22,850,000	22,829,709
57629*AZ4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,700,000	6,701,313	04/09/2013	04/09/2043	Interest Rate Swap				06761C-AC-3	Wellfleet CLO Ltd-WELF 2021-1A CLASS A1B	1	6,700,000	6,701,313
57629*AZ4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	6,999,965	04/09/2013	04/09/2043	Interest Rate Swap				94950C-AG-1	VOYA CLO LTD-SERIES 2017-3A CLASS A1B	1	7,000,000	6,999,965
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	100,000,000	6,800,000	23,567,399	03/05/2014	03/05/2034	Interest Rate Swap		16,767,419		929150-AE-3	THL CREDIT WIND RIVER 20-SERIES 2017-3A CLASS B	1	6,800,000	6,799,980
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,780,000	6,780,285	03/05/2014	03/05/2034	Interest Rate Swap				88434G-AC-9	KKR FINANCIAL CLO LTD-SERIES 13-1A CLASS BR	1	6,780,000	6,780,285
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,920,000	4,920,069	03/05/2014	03/05/2034	Interest Rate Swap				48249V-AS-0	KKR FINANCIAL CLO LTD-SERIES 13-1A CLASS A1R	1	4,920,000	4,920,069
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,015,000	21,016,261	03/05/2014	03/05/2034	Interest Rate Swap				48249V-AN-1	CRESTLINE DENALI CLO XV -SERIES 17-1A CLASS A	1	21,015,000	21,016,261
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,800,000	20,801,435	03/05/2014	03/05/2034	Interest Rate Swap				22616C-AA-1		1	20,800,000	20,801,435

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	6,994,953	03/05/2014	03/05/2034	Interest Rate Swap			48250W-AG-0	KKR CLO 14 Ltd-KKR 14 AR	1	7,000,000	6,994,953
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,200,000	12,205,014	03/05/2014	03/05/2034	Interest Rate Swap			55818P-AS-9	MADISON PARK FUNDING LTD-MDPK 2014-12A CR	1	12,200,000	12,205,014
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,500,000	9,526,942	03/05/2014	03/05/2034	Interest Rate Swap			13876N-AC-7	Canyon CLO 2020-2 Ltd-CANYC 2020-2A B1	1	9,500,000	9,526,942
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,525,000	9,551,613	03/05/2014	03/05/2034	Interest Rate Swap			38136N-AC-0	Goldentree Loan Management-GLM 2020-8A B1	1	9,525,000	9,551,613
57629*BD2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,650,000	1,575,318	03/05/2014	03/05/2034	Interest Rate Swap			06760G-AD-3	Barings CLO Ltd 2018-I-SERIES 18-1A CLASS C	2	1,650,000	1,575,318
57629*BC4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	100,000,000	20,759,367	36,041,096	03/05/2014	03/05/2034	Interest Rate Swap		16,791,096	346845-AC-4	FORT BENNING FAM-UNSECURED	1	20,759,367	19,250,000
57629*BC4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,040,710	03/05/2014	03/05/2034	Interest Rate Swap			05682L-AC-1	Bain Capital Credit CLO -BCC 2019-2A B	1	15,000,000	15,040,710
57629*BC4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,004,470	03/05/2014	03/05/2034	Interest Rate Swap			38137Y-AG-6	Goldentree Loan Management-GLM 2019-4A B	1	15,000,000	15,004,470
57629*BC4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,200,000	4,204,603	03/05/2014	03/05/2034	Interest Rate Swap			05682L-AE-7	Bain Capital Credit CLO -BCC 2019-2A C	1	4,200,000	4,204,603
57629*BC4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,600,000	5,599,955	03/05/2014	03/05/2034	Interest Rate Swap			12563E-AC-7	CIFC Funding 2021-I Ltd-CIFC 2021-1A B	1	5,600,000	5,599,955
57629*BC4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,500,000	5,496,772	03/05/2014	03/05/2034	Interest Rate Swap			48661A-AN-6	KAYNE CLO I Ltd-KAYNE 2018-1A CR	1	5,500,000	5,496,772
57629*BC4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,631,701	15,018,465	03/05/2014	03/05/2034	Interest Rate Swap			87250C-AA-5	TICOP CLO Ltd	1	14,631,701	15,018,465
57629*BC4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,042,700	03/05/2014	03/05/2034	Interest Rate Swap			44932V-AA-0	ICG US CLO Ltd-SERIES 19-1A CLASS A1A	1	20,000,000	20,042,700
57629*BF7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	55,877,869	73,731,511	05/19/2014	05/19/2034	Interest Rate Swap		17,571,638	77342J-AA-1	Rockford Tower CLO 2018--SERIES 18-1A CLASS A	1	55,877,869	56,159,873
57629*BF7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	7,000,441	05/19/2014	05/19/2034	Interest Rate Swap			64130P-AE-3	Neuberger Berman CLO Ltd-NEUB 2018-28A B	1	7,000,000	7,000,441
57629*BF7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,001,620	05/19/2014	05/19/2034	Interest Rate Swap			13877E-AE-2	Canyon Capital CLO Ltd-CANYC 2021-1A B	1	15,000,000	15,001,620
57629*BF7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,900,000	19,900,657	05/19/2014	05/19/2034	Interest Rate Swap			39808P-AL-0	Greywolf CLO V Ltd-GWOLF 2015-1A A1R	1	19,900,000	19,900,657
57629*BF7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,000,000	9,000,675	05/19/2014	05/19/2034	Interest Rate Swap			04017Q-AE-5	ARES CLO Ltd-SERIES 18-28RA CLASS B	1	9,000,000	9,000,675
57629*BF7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,900,000	6,924,329	05/19/2014	05/19/2034	Interest Rate Swap			670881-AC-5	OCP CLO Ltd-SERIES 20-19A CLASS B	1	6,900,000	6,924,329
57629*BF7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	7,022,071	05/19/2014	05/19/2034	Interest Rate Swap			27830C-AE-8	Eaton Vance CDO Ltd-EATON 2020-1A C	1	7,000,000	7,022,071
57629*BF7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,749,978	4,778,467	05/19/2014	05/19/2034	Interest Rate Swap			48661Y-AA-2	Kayne CLO 4 Ltd-SERIES 19-4A CLASS B1	1	4,749,978	4,778,467
57629*BP5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	85,000,000	19,000,000	32,063,816	05/09/2014	05/09/2034	Interest Rate Swap		13,052,815	78434T-AA-6	SCFF 2020-1A A1-FLOATING COUP MATURITY 203104	1	19,000,000	19,011,001
57629*BP5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,001,155	05/09/2014	05/09/2034	Interest Rate Swap			03765W-BC-1	Apollo Credit Funding IV-SERIES 4A CLASS A1BR	1	15,000,000	15,001,155
57629*BP5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,570,000	13,571,086	05/09/2014	05/09/2034	Interest Rate Swap			04016P-AC-2	ARES CLO LTD-SERIES 17-43A CLASS B	1	13,570,000	13,571,086
57629*BP5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,570,000	13,570,326	05/09/2014	05/09/2034	Interest Rate Swap			22616C-AC-7	CRESTLINE DENALI CLO XV -SERIES 17-1A CLASS B	1	13,570,000	13,570,326
57629*BP5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,570,000	13,570,489	05/09/2014	05/09/2034	Interest Rate Swap			77342K-AA-8	ROCKFORD TOWER CLO 2018--ROCKT 2018-2A A	1	13,570,000	13,570,489
57629*BP5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,900,000	3,870,797	05/09/2014	05/09/2034	Interest Rate Swap			05683L-AG-1	Bain Capital Credit CLO -SERIES 1A CLASS C	1	3,900,000	3,870,797
57629*BP5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,085,077	9,044,349	05/09/2014	05/09/2034	Interest Rate Swap			784170-ZZ-8	SFR FTTH SAS Term Loan	3	9,085,077	9,044,349
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	13,100,000	38,180,284	07/22/2014	07/22/2044	Interest Rate Swap		25,158,242	67707B-AB-6	OHA Credit Partners XV L-SERIES 17-15A CLASS B	1	13,100,000	13,022,042
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,300,000	13,301,011	07/22/2014	07/22/2044	Interest Rate Swap			75888F-AE-5	Regatta XIII Funding LLC-SERIES 18-2A CLASS A2	1	13,300,000	13,301,011
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	8,000,720	07/22/2014	07/22/2044	Interest Rate Swap			67115W-AG-5	OHA Credit Funding 1 LTD-SERIES 18-1A CLASS B	1	8,000,000	8,000,720

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,001,020	07/22/2014	07/22/2044	Interest Rate Swap				17180W-AC-9	CIFC Funding 2018-11 Ltd-CIFC 2018-2A A2	1	15,000,000	15,001,020
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,500,000	13,501,148	07/22/2014	07/22/2044	Interest Rate Swap				03329A-AE-5	Anchorage Capital CLO Lt-SERIES 2014-SRA CLASS B	1	13,500,000	13,501,148
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,747,017	5,747,666	07/22/2014	07/22/2044	Interest Rate Swap				817176-AN-0	SENECA PARK CLO LTD-SPARK 2014-1A B1R	1	5,747,017	5,747,666
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		35,000,000	35,001,470	07/22/2014	07/22/2044	Interest Rate Swap				14315J-AL-3	CARLYLE GLOBAL MARKET ST-SERIES 17-2A CLASS A1B	1	35,000,000	35,001,470
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,900,000	5,849,974	07/22/2014	07/22/2044	Interest Rate Swap				40436X-AG-2	HIGHBRIDGE LOAN MANAGEMEN-SERIES 2014 CLASS BR	1	5,900,000	5,849,974
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,500,000	14,501,088	07/22/2014	07/22/2044	Interest Rate Swap				553205-AC-9	MP CLO III LTD-IMP3 2013-1A AR	1	14,500,000	14,501,088
57629*BR1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,450,000	4,450,463	07/22/2014	07/22/2044	Interest Rate Swap				04018E-AE-1	Ares LIX CLO Ltd-ARES 2021-59A C1	1	4,450,000	4,450,463
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	20,000,000	45,170,450	07/22/2014	07/22/2044	Interest Rate Swap		25,170,190		36248M-AJ-6	GT Loan Financing I Ltd -SERIES 2013-1A CLASS AR	1	20,000,000	20,000,260
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,001,455	07/22/2014	07/22/2044	Interest Rate Swap				48251M-AS-5	KKR CLO 15 Ltd-KKR 15 A2R	1	15,000,000	15,001,455
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,500,000	19,500,527	07/22/2014	07/22/2044	Interest Rate Swap				04016P-AA-6	ARES CLO LTD-ARES 2017-43A A CEDAR FUNDING LTD-SERIES 13-1A CLASS BR	1	19,500,000	19,500,527
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,500,000	8,508,211	07/22/2014	07/22/2044	Interest Rate Swap				15032T-AH-6	CIFC FUNDING LTD-SERIES 17-4A CLASS A2	1	8,500,000	8,508,211
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	8,001,408	07/22/2014	07/22/2044	Interest Rate Swap				12551J-AE-6	BABSON CLO LTD-SERIES 17-1A CLASS C	1	8,000,000	8,001,408
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,100,000	5,101,311	07/22/2014	07/22/2044	Interest Rate Swap				06760B-AJ-1	MARBLE POINT CLO X LTD-SERIES 2017-1A CLASS B	1	5,100,000	5,101,311
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,100,000	5,100,000	07/22/2014	07/22/2044	Interest Rate Swap				566061-AE-7	Allegro CLO Ltd-ALLEG 2019-1A B	1	5,100,000	5,100,000
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,585,431	5,601,187	07/22/2014	07/22/2044	Interest Rate Swap				01750F-AC-0	Allegro CLO Ltd-ALLEG 2019-1A B	1	5,585,431	5,601,187
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,903,622	20,903,622	07/22/2014	07/22/2044	Interest Rate Swap				500798-MQ-9	KREF Lending VII 2018-5 Term Loan Harbor Park CLO, Ltd-HARB 2018-1A C	1	20,903,622	20,903,622
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,000,000	4,000,600	07/22/2014	07/22/2044	Interest Rate Swap				41154X-AL-9	Bain Capital Credit CLO -BCC 2020-3A B	1	4,000,000	4,000,600
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,500,000	6,517,466	07/22/2014	07/22/2044	Interest Rate Swap				05684C-AC-9	Bain Capital Credit CLO -BCC 2020-4A B	1	6,500,000	6,517,466
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,400,000	6,450,688	07/22/2014	07/22/2044	Interest Rate Swap				05684K-AN-7	Ballyrock CDO Ltd-BALLY 2020-14A A2	1	6,400,000	6,450,688
57629*BT7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,000,000	4,009,284	07/22/2014	07/22/2044	Interest Rate Swap				05874X-AC-3	Ballyrock CDO Ltd-BALLY 2020-14A A2	1	4,000,000	4,009,284
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	8,019,416	33,191,105	07/22/2014	07/22/2044	Interest Rate Swap		25,170,190		04014W-AL-9	ARES CLO LTD-ARES 2014-1A A2R	1	8,019,416	8,020,915
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,973,622	15,970,288	07/22/2014	07/22/2044	Interest Rate Swap				85816L-AA-6	Steele Creek CLO 2018-2 -SERIES 2018-2A CLASS A	1	15,973,622	15,970,288
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,381,643	22,388,358	07/22/2014	07/22/2044	Interest Rate Swap				14315J-SS-9	Carlyle US CLO 2013-1 Re Term Loan	1	22,381,643	22,388,358
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,718,440	15,722,134	07/22/2014	07/22/2044	Interest Rate Swap				55818P-AN-0	MADISON PARK FUNDING LTD-MDPK 2014-12A B1R	1	15,718,440	15,722,134
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,288,813	4,300,912	07/22/2014	07/22/2044	Interest Rate Swap				01750F-AC-0	Allegro CLO Ltd-ALLEG 2019-1A B	1	4,288,813	4,300,912
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,960	07/22/2014	07/22/2044	Interest Rate Swap				87248M-AU-6	TICP CLO VI 2016-2 Ltd-TICP 2016-6A BR2	1	10,000,000	10,000,960
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,700,000	3,702,250	07/22/2014	07/22/2044	Interest Rate Swap				05875J-AC-3	Ballyrock CLO 2019-1 Ltd	1	3,700,000	3,702,250
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,400,000	6,400,730	07/22/2014	07/22/2044	Interest Rate Swap				00164B-BE-6	ALM VII R-2 Ltd-ALM 2013-7R2A A1B2	1	6,400,000	6,400,730
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,650,000	5,650,322	07/22/2014	07/22/2044	Interest Rate Swap				50184N-AN-2	LOW LTD PARTNERSHIP-SERIES 15A CLASS BR	1	5,650,000	5,650,322
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,000,000	22,049,226	07/22/2014	07/22/2044	Interest Rate Swap				G7332F-AG-8	FRPF Engine Leasing Ltd Senior Secured	2	23,000,000	22,049,226
57629*BU4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,001,030	07/22/2014	07/22/2044	Interest Rate Swap				12563Y-AC-3	CIFC Funding 2021-11-CIFC 2021-2A B	1	10,000,000	10,001,030

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*BV2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	7,000,000	32,122,921	07/22/2014	07/22/2044	Interest Rate Swap		25,122,396	04017Q-AE-5	ARES CLO Ltd-SERIES 18-28RA CLASS B	1	7,000,000	7,000,525
57629*BV2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,600,000	7,601,056	07/22/2014	07/22/2044	Interest Rate Swap			75888K-AC-8	REGATTA VIII FUNDING LTD-SERIES 2017-1A CLASS B	1	7,600,000	7,601,056
57629*BV2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,460,000	7,460,000	07/22/2014	07/22/2044	Interest Rate Swap			00900C-AA-2	AIMCO-AIMCO 2017-AA A	1	7,460,000	7,460,000
57629*BV2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		28,400,000	28,401,164	07/22/2014	07/22/2044	Interest Rate Swap			04017T-AC-3	ARES XXXIR CLO Ltd-SERIES 14-31RA CLASS A2	1	28,400,000	28,401,164
57629*BV2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,800,000	11,800,826	07/22/2014	07/22/2044	Interest Rate Swap			26244Q-AB-9	DRYDEN SENIOR LOAN FUND-SERIES 17-49A CLASS B	1	11,800,000	11,800,826
57629*BV2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		41,899,362	41,907,726	07/22/2014	07/22/2044	Interest Rate Swap			42086P-AC-7	Kingsland Ltd-SERIES 18-8A CLASS A	1	41,899,362	41,907,726
57629*BV2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,474,464	12,475,599	07/22/2014	07/22/2044	Interest Rate Swap			05683H-AC-9	BAIN CAPITAL CREDIT CLO -SERIES 2017-2A CLASS AR	1	12,474,464	12,475,599
57629*BV2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,500,000	9,500,960	07/22/2014	07/22/2044	Interest Rate Swap			88432U-AE-6	Wind River CLO Ltd-SERIES 18-3A CLASS B	1	9,500,000	9,500,960
57629*BZ3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	7,503,592	16,255,651	08/27/2014	08/27/2044	Interest Rate Swap		9,145,158	78443G-AJ-4	SLM STUDENT LOAN TRUST 2-SERIES 06-7 CLASS B	1	7,503,592	7,110,493
57629*BZ3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,900,000	7,899,976	08/27/2014	08/27/2044	Interest Rate Swap			92916Q-AC-6	VOYA CLO 2017-4 LTD-SERIES 17-4A CLASS B	1	7,900,000	7,899,976
57629*BZ3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		26,639,315	26,954,019	08/27/2014	08/27/2044	Interest Rate Swap			33883G-AA-5	Flatiron CLO 18 Ltd-FLAT 2018-1A A	1	26,639,315	26,954,019
57629*BZ3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,014,090	08/27/2014	08/27/2044	Interest Rate Swap			13876R-AE-4	Canyon CLO 2020-3 Ltd-CANYC 2020-3A B	1	10,000,000	10,014,090
57629*CA7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	7,830,000	16,995,758	08/27/2014	08/27/2044	Interest Rate Swap		9,164,341	150323-AQ-6	CEDAR FUNDING LTD-SERIES 14-4A CLASS BR	1	7,830,000	7,831,417
57629*CA7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,000,000	25,000,000	08/27/2014	08/27/2044	Interest Rate Swap			50079E-MI-8	KREF Lending VII 2018-1 Term Loan	1	25,000,000	25,000,000
57629*CA7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,251,130	15,500,775	08/27/2014	08/27/2044	Interest Rate Swap			12550A-AT-3	CIFC Funding 2014-V Ltd-CIFC 2014-5A A1R2	1	15,251,130	15,500,775
57629*CA7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,995,000	1,989,893	08/27/2014	08/27/2044	Interest Rate Swap			06760E-AC-0	Babson CLO Ltd 2013-1-SERIES 2013-1S CLASS BR	1	1,995,000	1,989,893
57629*CC3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	50,000,000	22,424,274	31,584,006	08/27/2014	08/27/2044	Interest Rate Swap		9,082,813	94949J-AA-3	Wellfleet CLO 2018-2 Ltd-WELF 2018-2A A1	1	22,424,274	22,501,193
57629*CC3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,900,000	15,884,768	08/27/2014	08/27/2044	Interest Rate Swap			74988L-AA-2	ALM XIV Ltd-SERIES 14-14A CLASS A1R2	1	15,900,000	15,884,768
57629*CC3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,475,000	16,405,953	08/27/2014	08/27/2044	Interest Rate Swap			06760G-AA-9	Barings CLO Ltd 2018-I-SERIES 18-1A CLASS A1	1	16,475,000	16,405,953
57629*CG4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	55,000,000	9,853,339	16,763,821	10/06/2014	10/06/2034	Interest Rate Swap		6,762,931	55819B-AN-0	Madison Park Funding XVI-MDPK 2015-18A BR	1	9,853,339	10,000,890
57629*CG4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,100,000	19,981,631	10/06/2014	10/06/2034	Interest Rate Swap			06760G-AB-7	Barings CLO Ltd 2018-I-SERIES 18-1A CLASS A2	1	20,100,000	19,981,631
57629*CG4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,759,747	23,105,844	10/06/2014	10/06/2034	Interest Rate Swap			77341D-AA-5	Rockford Tower CLO 2017-ROOKT 2017-3A A	1	22,759,747	23,105,844
57629*CG4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,001,665	10/06/2014	10/06/2034	Interest Rate Swap			81717E-AS-9	SENECA PARK CLO LTD-SPARK 2014-1A CR	1	5,000,000	5,001,665
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	100,000,000	11,555,933	29,084,934	10/06/2014	10/06/2044	Interest Rate Swap		17,673,375	28108R-AA-0	Edline Student Loan Fund-ESLFT 2017-A A	1	11,555,933	11,411,559
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,039,344	12,039,571	10/06/2014	10/06/2044	Interest Rate Swap			87289B-AA-2	TCP DLF VIII 2018 CLO, LLC - Class A	1	12,039,344	12,039,571
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,900,000	4,900,833	10/06/2014	10/06/2044	Interest Rate Swap			12481K-AC-2	CBAM 2017-2 LTD-SERIES 17-2A CLASS B1	1	4,900,000	4,900,833
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,000	10/06/2014	10/06/2044	Interest Rate Swap			28001L-AQ-4	Elmwood CLO II Ltd-ELMW2 2019-2A CR	1	5,000,000	5,000,000
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,002,120	10/06/2014	10/06/2044	Interest Rate Swap			67707C-AS-7	Oak Hill Credit Partners-OAKC 2014-10RA BR	1	20,000,000	20,002,120
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,000,900	10/06/2014	10/06/2044	Interest Rate Swap			55952Y-AR-8	Magnetite VIII Ltd-MAGNE 2014-8A BR2	1	15,000,000	15,000,900
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,400,000	4,400,224	10/06/2014	10/06/2044	Interest Rate Swap			88434H-AE-3	THL Credit Wind River 20-SERIES 18-2A CLASS A2	1	4,400,000	4,400,224
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,600,000	3,600,785	10/06/2014	10/06/2044	Interest Rate Swap			87249C-AE-1	TICP CLO X LTD-SERIES 18-10A CLASS C	1	3,600,000	3,600,785

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,700,000	3,701,236	10/06/2014	10/06/2044	Interest Rate Swap				04009G-AE-7	ARES L CLO Ltd-SERIES 19-53A CLASS B	1	3,700,000	3,701,236
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,007,605	10/06/2014	10/06/2044	Interest Rate Swap				03328W-AL-2	Anchorage Capital CLO 9 -SERIES 16-9A CLASS BR	1	5,000,000	5,007,605
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,500,000	10,677,603	10/06/2014	10/06/2044	Interest Rate Swap				64034W-AD-7	Navient Student Loan Tru-NSLT 2019-7A B	1	10,500,000	10,677,603
57629*CH2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,400,000	5,400,832	10/06/2014	10/06/2044	Interest Rate Swap				48252U-AC-1	KKR 25 B1	1	5,400,000	5,400,832
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	13,378,939	33,326,408	05/04/2017	11/04/2044	Interest Rate Swap		20,514,254		66776M-ZZ-9	ORANGE GROVE ENERGY, L.P DELAYED DRAW TE	2	13,378,939	12,812,154
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,926,766	1,931,596	05/04/2017	11/04/2044	Interest Rate Swap				247358-BB-9	EAIV Delta MSN 15153	1	1,926,766	1,931,596
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,846,437	1,851,299	05/04/2017	11/04/2044	Interest Rate Swap				247358-DD-3	EAIV Delta MSN 15161	1	1,846,437	1,851,299
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,934,577	1,939,338	05/04/2017	11/04/2044	Interest Rate Swap				247358-PP-3	Delta Air Lines Inc. - MSN 15147	1	1,934,577	1,939,338
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,934,673	1,942,248	05/04/2017	11/04/2044	Interest Rate Swap				247358-RR-7	EAIV 2017 Delta MSN 15146	1	1,934,673	1,942,248
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,846,437	1,851,299	05/04/2017	11/04/2044	Interest Rate Swap				247358-RW-6	EAIV Delta MSN 15162	1	1,846,437	1,851,299
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,500,000	20,502,563	05/04/2017	11/04/2044	Interest Rate Swap				01750F-AA-4	Allegro CLO Ltd-ALLEG 2019-1A A	1	20,500,000	20,502,563
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		17,241,966	17,405,759	05/04/2017	11/04/2044	Interest Rate Swap				12482N-AA-9	CBAM Ltd-CBAM 2019-10A A1A Symphony CLO XXI Ltd-SYMP 2019-21A	1	17,241,966	17,405,759
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,500,000	8,508,441	05/04/2017	11/04/2044	Interest Rate Swap				87166R-AE-7	B	1	8,500,000	8,508,441
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,500,000	23,977,913	05/04/2017	11/04/2044	Interest Rate Swap				61093*-AA-7	BIF II SAFE HARBOR HOLDINGS LLC	2	22,500,000	23,977,913
57629*CN9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		40,000,000	40,000,000	05/04/2017	11/04/2044	Interest Rate Swap				500798-MO-4	KREF Lending VII 2018-3 Term Loan	1	40,000,000	40,000,000
57629*CP4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	10,000,000	30,599,456	05/04/2017	11/04/2044	Interest Rate Swap		20,586,606		48253H-AE-5	KKR CLO 26 LLC-SERIES 26 CLASS B1 BAIN CAPITAL CREDIT CLO -SERIES 18-2A CLASS A1	1	10,000,000	10,012,850
57629*CP4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		28,265,465	28,500,399	05/04/2017	11/04/2044	Interest Rate Swap				05682V-AA-3	KREF Lending VII - Term Loan Series 2019-6	1	28,265,465	28,500,399
57629*CP4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		60,000,000	60,000,000	05/04/2017	11/04/2044	Interest Rate Swap				500798-MR-7	Goldentree Loan Management-GLM 2019-5A C	1	60,000,000	60,000,000
57629*CP4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,300,000	11,326,408	05/04/2017	11/04/2044	Interest Rate Swap				38138D-AJ-5	Anchorage Capital CLO 11-ANCHC 2019-11A B	1	11,300,000	11,326,408
57629*CP4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,017,440	05/04/2017	11/04/2044	Interest Rate Swap				03330N-AC-8	Palmer Square CLO 2019-1-SERIES 19-1A CLASS A2	1	10,000,000	10,017,440
57629*CP4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,020,150	05/04/2017	11/04/2044	Interest Rate Swap				69700G-AC-6	JFIN CLO LTD-SERIES 14-2A CLASS AIAR	1	10,000,000	10,020,150
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	4,446,681	25,178,205	05/04/2017	11/04/2044	Interest Rate Swap		20,731,311		46617N-AQ-0	Anchorage Capital CLO 11-ANCHC 2019-11A C	1	4,446,681	4,446,894
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,700,000	4,707,125	05/04/2017	11/04/2044	Interest Rate Swap				03330N-AE-4	HPS Loan Management 13-2-HLM 13A-18	1	4,700,000	4,707,125
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,490,000	10,492,811	05/04/2017	11/04/2044	Interest Rate Swap				40437L-AG-7	B HPS Loan Management 9-20-HLM 9A-	1	10,490,000	10,492,811
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,870	05/04/2017	11/04/2044	Interest Rate Swap				40436Q-AL-6	2016 A1BR	1	10,000,000	10,000,870
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,500,000	7,495,643	05/04/2017	11/04/2044	Interest Rate Swap				64132D-AL-2	Neuberger Berman Loan Ad-NEUB 2019-32A BR	1	7,500,000	7,495,643
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,800,000	4,761,293	05/04/2017	11/04/2044	Interest Rate Swap				64131J-AQ-9	Neuberger Berman Loan Ad-SERIES 17-25A CLASS CR	1	4,800,000	4,761,293
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,500,000	3,501,110	05/04/2017	11/04/2044	Interest Rate Swap				12482N-AG-6	CBAM 2019-10 Ltd	1	3,500,000	3,501,110
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,021,280	05/04/2017	11/04/2044	Interest Rate Swap				44932V-AE-2	ICG US CLO 2019-1 LTD	1	10,000,000	10,021,280
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,017,700	05/04/2017	11/04/2044	Interest Rate Swap				92918F-AB-0	Voya CLO 2019-3 Ltd	1	10,000,000	10,017,700
57629*C02	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,038,130	05/04/2017	11/04/2044	Interest Rate Swap				67098D-AG-8	OHA Credit Funding 4 Ltd	1	15,000,000	15,038,130

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*CO2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,000,000	6,014,838	05/04/2017	11/04/2044	Interest Rate Swap			67098D-AJ-2	OHA Credit Funding 4 Ltd	1	6,000,000	6,014,838
57629*CO2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		35,000,000	35,000,000	05/04/2017	11/04/2044	Interest Rate Swap			500798-MQ-9	KREF Lending VII LLC	1	35,000,000	35,000,000
57629*CO2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,867,926	4,106,950	05/04/2017	11/04/2044	Interest Rate Swap			55819P-AA-7	Madison Park Funding XXXVI Ltd	1	3,867,926	4,106,950
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	16,600,000	37,299,491	05/04/2017	11/04/2044	Interest Rate Swap		20,707,193	92915P-AK-1	Voya CLO 2014-1 Ltd-INGIM 2014-1A	1	16,600,000	16,592,298
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,660,000	13,665,423	05/04/2017	11/04/2044	Interest Rate Swap			05363U-AW-3	VERY POINT IV CLO LTD-SERIES 14-1A CLASS CR	1	13,660,000	13,665,423
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,975,569	4,964,063	05/04/2017	11/04/2044	Interest Rate Swap			64032V-AB-5	Nelnet Student Loan Trus-NSLT 2020-5A B	1	4,975,569	4,964,063
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,000,000	12,233,676	05/04/2017	11/04/2044	Interest Rate Swap			67332F-AH-6	RRPF Engine Leasing Ltd Senior Secured	2	13,000,000	12,233,676
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,100	05/04/2017	11/04/2044	Interest Rate Swap			04941Y-AJ-8	Atlas Senior Loan Fund X-ATOLO 2018-11A B	1	10,000,000	10,000,100
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		17,000,000	17,010,931	05/04/2017	11/04/2044	Interest Rate Swap			03328W-AJ-7	Anchorage Capital CLO 9-SERIES 16-9A CLASS AR	1	17,000,000	17,010,931
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,500,000	12,505,950	05/04/2017	11/04/2044	Interest Rate Swap			26252N-AE-9	Dryden Senior Loan Fund-DRSLF 2019-72A B	1	12,500,000	12,505,950
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,001,060	05/04/2017	11/04/2044	Interest Rate Swap			12550Y-AC-8	CIFC FUNDING LTD-CIFC 2017-2A A	1	20,000,000	20,001,060
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,500,000	7,501,088	05/04/2017	11/04/2044	Interest Rate Swap			94951D-AJ-2	Wellfleet CLO 2018-3 Ltd-SERIES 18-3A CLASS A2	1	7,500,000	7,501,088
57629*CR0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,030,030	05/04/2017	11/04/2044	Interest Rate Swap			29002H-AE-9	Elmwood CLO III Ltd-ELMW3 2019-3A B	1	10,000,000	10,030,030
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	12,740,000	33,500,333	05/04/2017	11/04/2044	Interest Rate Swap		20,755,428	55818X-AJ-9	MADISON PARK FUNDING LTD-SERIES 2015-16A CLASS A2R	1	12,740,000	12,744,905
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,100,000	7,100,149	05/04/2017	11/04/2044	Interest Rate Swap			03767V-AD-0	Apidos CLO-APID 2019-31A B	1	7,100,000	7,100,149
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,400,000	4,400,642	05/04/2017	11/04/2044	Interest Rate Swap			67576P-AE-7	Octagon Investment Partn-SERIES 19-3A CLASS B1	1	4,400,000	4,400,642
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,240,000	12,241,958	05/04/2017	11/04/2044	Interest Rate Swap			03766G-AE-2	APIDOS CLO-SERIES 17-26A CLASS A2	1	12,240,000	12,241,958
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,980,000	11,982,085	05/04/2017	11/04/2044	Interest Rate Swap			149420-AE-1	CATSKILL PARK CLO LTD-SERIES 17-1A CLASS A2	1	11,980,000	11,982,085
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,255	05/04/2017	11/04/2044	Interest Rate Swap			88434H-AE-3	THL Credit Wind River 20-SERIES 18-2A CLASS A2	1	5,000,000	5,000,255
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,988,055	20,988,705	05/04/2017	11/04/2044	Interest Rate Swap			48250L-AL-3	KKR FINANCIAL CLO LTD-SERIES 9 CLASS AR	1	20,988,055	20,988,705
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,069,941	22,998,171	05/04/2017	11/04/2044	Interest Rate Swap			24824T-AQ-3	Denali Capital Clo XII L-DEN12 2016-1A A1R	1	23,069,941	22,998,171
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,250,000	10,225,328	05/04/2017	11/04/2044	Interest Rate Swap			44330Q-AB-7	Highbridge Loan Managem-SERIES 12A-18 CLASS A1B	1	10,250,000	10,225,328
57629*CS8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	19,961,520	05/04/2017	11/04/2044	Interest Rate Swap			77340E-AN-6	Rockford Tower CLO 2017-SERIES 17-1A CLASS BR	1	20,000,000	19,961,520
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	150,000,000	10,429,665	26,014,843	12/16/2014	12/16/2044	Interest Rate Swap		15,372,328	39808C-A8-4	GRIDIRON FDG LLC Term Facility	1	10,429,665	10,642,515
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,100,501	15,592,766	12/16/2014	12/16/2044	Interest Rate Swap			66704J-CB-2	NORTHSTAR EDUCATION FINA-SERIES 07-1 CLASS B	1	18,100,501	15,592,766
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		17,357,303	17,538,347	12/16/2014	12/16/2044	Interest Rate Swap			55955A-AA-4	Magnetite XX Ltd-MAGNE 2018-20A A	1	17,357,303	17,538,347
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,002,200	12/16/2014	12/16/2044	Interest Rate Swap			03331J-AA-0	Anchorage Capital CLO Lt-ANCHC 2018-10A A1A	1	20,000,000	20,002,200
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,200,000	16,199,968	12/16/2014	12/16/2044	Interest Rate Swap			06760J-AE-5	Barings CLO Ltd 2018-II-SERIES 2018-2A CLAS A1B	1	16,200,000	16,199,968
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,700,000	6,700,154	12/16/2014	12/16/2044	Interest Rate Swap			06760B-AC-6	BARSON CLO LTD-SERIES 17-1A CLASS A2	1	6,700,000	6,700,154
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,960,000	4,961,032	12/16/2014	12/16/2044	Interest Rate Swap			55820R-AE-2	MADISON PARK FUNDING LTD-SERIES 17-25A CLASS B	1	4,960,000	4,961,032
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,575,000	2,564,927	12/16/2014	12/16/2044	Interest Rate Swap			08179H-AC-4	Benefit Street Partners -BSP 2017-12A B	1	2,575,000	2,564,927

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,052,631	15,218,210	12/16/2014	12/16/2044	Interest Rate Swap				72403Z-NQ-8	PIONEERS GATE LLC 2019-10 DTA07-B	2	15,052,631	15,218,210
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,475,000	4,475,819	12/16/2014	12/16/2044	Interest Rate Swap				033291-AC-9	ANCHC 2019-13A B	1	4,475,000	4,475,819
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,425,000	6,409,786	12/16/2014	12/16/2044	Interest Rate Swap				08180X-AQ-5	Benefit Street Partners -BSP 2015-8A A1BR	1	6,425,000	6,409,786
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,000,000	6,006,660	12/16/2014	12/16/2044	Interest Rate Swap				08182B-AE-8	Benefit Street Partners CLO L	1	6,000,000	6,006,660
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,350,000	2,350,437	12/16/2014	12/16/2044	Interest Rate Swap				05683H-AG-0	BAIN CAPITAL CREDIT CLO -SERIES 2017-2A CLASS CR	1	2,350,000	2,350,437
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,300,000	1,301,790	12/16/2014	12/16/2044	Interest Rate Swap				33883J-AD-3	Flatiron CLO Ltd-SERIES 19-1A CLASS C	1	1,300,000	1,301,790
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,450,000	8,451,529	12/16/2014	12/16/2044	Interest Rate Swap				150323-AQ-6	CEDAR FUNDING LTD-SERIES 14-4A CLASS BR	1	8,450,000	8,451,529
57629*CX7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,100,000	13,100,092	12/16/2014	12/16/2044	Interest Rate Swap				75884B-AC-2	Regatta X Funding Ltd-SERIES 2017-3A CLASS B	1	13,100,000	13,100,092
57629*CT6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	150,000,000	25,000,000	40,081,832	12/16/2014	12/16/2044	Interest Rate Swap		15,081,832		50079B-MQ-4	KREF Lending VII 2018-3 Term Loan	1	25,000,000	25,000,000
57629*CT6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,470,000	14,470,029	12/16/2014	12/16/2044	Interest Rate Swap				55820R-AC-6	MADISON PARK FUNDING LTD-SERIES 17-25A CLASS A2	1	14,470,000	14,470,029
57629*CT6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		34,876,480	34,936,125	12/16/2014	12/16/2044	Interest Rate Swap				04941Y-AC-3	Atlas Senior Loan Fund X-SERIES 18-11A CLASS A1L	1	34,876,480	34,936,125
57629*CT6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		65,000,000	65,002,340	12/16/2014	12/16/2044	Interest Rate Swap				04624W-AC-1	ASSURANT CLO III LTD-SERIES 2018-2A CLASS A	1	65,000,000	65,002,340
57629*CT6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,439,434	9,494,775	12/16/2014	12/16/2044	Interest Rate Swap				48252W-AC-7	KKR CLO LTD 22-SERIES 22A CLASS B	1	9,439,434	9,494,775
57629*CT6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	7,002,765	12/16/2014	12/16/2044	Interest Rate Swap				05618D-AN-4	BABSON CLO LTD-BABSON 2014-1A BR	1	7,000,000	7,002,765
57629*CT6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,045,000	2,029,501	12/16/2014	12/16/2044	Interest Rate Swap				056162-AQ-3	Babson CLO Ltd 2015-1-BABSON 2015-1A BR	1	2,045,000	2,029,501
57629*CT6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,900,000	3,865,813	12/16/2014	12/16/2044	Interest Rate Swap				69703P-AE-9	Palmer Square CLO 2018-1-PLMRS 2018-1A B	1	3,900,000	3,865,813
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	36,000,000	64,717,794	12/16/2014	12/16/2044	Interest Rate Swap		25,765,794		39808C-AA-3	Gridiron Fdg LLC Sr Secd Nt	2	36,000,000	38,952,000
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,900,000	25,900,130	12/16/2014	12/16/2044	Interest Rate Swap				14307P-AE-5	Carlyle Global Market St-SERIES C17A CLASS A1BR	1	25,900,000	25,900,130
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,347,518	13,350,000	12/16/2014	12/16/2044	Interest Rate Swap				05618D-AL-8	BABSON CLO LTD-BABSON 2014-1A A2R	1	13,347,518	13,350,000
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	14,968,665	12/16/2014	12/16/2044	Interest Rate Swap				05875M-AQ-5	Ballyrock CLO 2019-2 Ltd-SERIES 19-2A CLASS A2R	1	15,000,000	14,968,665
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		73,000,000	73,000,000	12/16/2014	12/16/2044	Interest Rate Swap				50079B-MQ-9	KREF Lending VII 2018-5 Term Loan	1	73,000,000	73,000,000
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,812,772	13,990,396	12/16/2014	12/16/2044	Interest Rate Swap				92917A-AA-4	VOYA 2018-1A A1	1	13,812,772	13,990,396
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,002,440	12/16/2014	12/16/2044	Interest Rate Swap				58806P-AC-2	MERCER FIELD CLO LP-MERCL 2017-1A A2	1	20,000,000	20,002,440
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	4,917,094	12/16/2014	12/16/2044	Interest Rate Swap				64034B-AB-7	Nelnet Student Loan Trus-NSLT 2018-5A B	1	5,000,000	4,917,094
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,424,274	22,501,193	12/16/2014	12/16/2044	Interest Rate Swap				94949J-AA-3	Wellfleet CLO 2018-2 Ltd-WELF 2018-2A A1	1	22,424,274	22,501,193
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,125,000	6,131,229	12/16/2014	12/16/2044	Interest Rate Swap				94950C-AE-6	Wellfleet CLO Ltd-WELF 2021-1A B	1	6,125,000	6,131,229
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,488,785	8,501,011	12/16/2014	12/16/2044	Interest Rate Swap				03328Q-AN-1	ANCHORAGE CAPITAL CLO LT-SERIES 2015-6A CLASS AR	1	8,488,785	8,501,011
57629*CIW9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,100,000	11,100,144	12/16/2014	12/16/2044	Interest Rate Swap				12481Q-AE-5	Cam 2018-5 Ltd-SERIES 18-5A CLASS B1	1	11,100,000	11,100,144
57629*CU3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	251,000,000	275,845,891	12/16/2014	12/16/2044	Interest Rate Swap		24,845,891		57542Z-A7-2	MM Investment Holding Revolver Floating Line	2	251,000,000	251,000,000
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	200,000,000	23,308,206	42,831,162	12/16/2014	12/16/2044	Interest Rate Swap		19,489,385		03328Q-AN-1	ANCHORAGE CAPITAL CLO LT-SERIES 2015-6A CLASS AR	1	23,308,206	23,341,777
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,165	12/16/2014	12/16/2044	Interest Rate Swap				94950J-AC-5	Wellfleet CLO Ltd-SERIES 18-1A CLASS B	1	5,000,000	5,000,165

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,150,000	10,151,076	12/16/2014	12/16/2044	Interest Rate Swap				48662N-AC-1	KAYNE CLO-KAYNE 2021-11A B	1	10,150,000	10,151,076
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,750,000	9,751,151	12/16/2014	12/16/2044	Interest Rate Swap				36361U-AC-4	GALLATIN CLO LTD-SERIES 17-1A CLASS B	1	9,750,000	9,751,151
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,400,000	10,400,832	12/16/2014	12/16/2044	Interest Rate Swap				67115W-AE-0	OH Credit Funding 1 LTD-SERIES 18-1A CLASS A2	1	10,400,000	10,400,832
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,716,285	21,943,988	12/16/2014	12/16/2044	Interest Rate Swap				26245R-AA-8	Dryden 58 Clo Ltd-DRSLF 2018-58A A1	1	21,716,285	21,943,988
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,675,000	9,677,690	12/16/2014	12/16/2044	Interest Rate Swap				08179H-AA-8	BENEFIT STREET PARTNERS -SERIES 2017-12A CLASS A1	1	9,675,000	9,677,690
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,500,000	8,500,969	12/16/2014	12/16/2044	Interest Rate Swap				78109Q-AE-8	RR 2 LTD-SERIES 17-2A CLASS A2	1	8,500,000	8,500,969
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		65,000,000	65,351,195	12/16/2014	12/16/2044	Interest Rate Swap				48661W-AA-6	KAYNE CLO-SERIES 19-3A CLASS A	1	65,000,000	65,351,195
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,983,719	18,955,243	12/16/2014	12/16/2044	Interest Rate Swap				14315J-NN-5	Carlyle US CLO 2013-3 Re Term Loan	1	18,983,719	18,955,243
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	9,980,980	12/16/2014	12/16/2044	Interest Rate Swap				55817A-AU-8	Madison Park Funding XXX-HDPK 2018-32A CR	1	10,000,000	9,980,980
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,750,000	2,725,418	12/16/2014	12/16/2044	Interest Rate Swap				04015U-AK-4	Ares XXXVIII CLO Ltd-SERIES 2015-38A CLASS CR	1	2,750,000	2,725,418
57629*CV1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,400,000	6,399,981	12/16/2014	12/16/2044	Interest Rate Swap				00900L-AH-7	AIMCO CLO Series 2015-A-SERIES 15-AA CLASS BR	1	6,400,000	6,399,981
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	4,963,367	6,893,104	02/06/2017	02/05/2045	Interest Rate Swap		1,892,024		12551J-AG-1	CIFC Funding 2017-IV Ltd-SERIES 17-4A CLASS B	1	4,963,367	5,001,080
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,028,740	02/06/2017	02/05/2045	Interest Rate Swap				77341E-AC-9	Rockford Tower CLO 2020-ROCKT 2020-1A B	1	15,000,000	15,028,740
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,002,190	02/06/2017	02/05/2045	Interest Rate Swap				67707C-AJ-7	Oak Hill Credit Partners-OAKC 2014-10RA B	1	15,000,000	15,002,190
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,500,000	13,502,727	02/06/2017	02/05/2045	Interest Rate Swap				06760B-AE-2	BABSON CLO LTD-SERIES 17-1A CLASS B1	1	13,500,000	13,502,727
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,600,000	9,599,981	02/06/2017	02/05/2045	Interest Rate Swap				63941R-AC-4	NAVSL 2019-2A B	1	9,600,000	9,599,981
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,700,000	12,664,516	02/06/2017	02/05/2045	Interest Rate Swap				40436X-AE-7	HIGHBRIDGE LOAN MANAGEME-SERIES 2014 CLAS A2R	1	12,700,000	12,664,516
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,200,000	11,201,714	02/06/2017	02/05/2045	Interest Rate Swap				05682Q-AC-0	BAIN CAPITAL CREDIT CLO -SERIES 17-1A CLASS A1	1	11,200,000	11,201,714
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,900,000	13,841,690	02/06/2017	02/05/2045	Interest Rate Swap				09628J-AN-1	BlueMountain CLO 2015-3 -BLUEM 2015-3A A2R	1	13,900,000	13,841,690
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,595,791	9,552,773	02/06/2017	02/05/2045	Interest Rate Swap				784170-ZZ-8	SFR FTTH SAS Term Loan	3	9,595,791	9,552,773
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,400,000	7,326,888	02/06/2017	02/05/2045	Interest Rate Swap				55821T-AC-1	Madison Park Funding Ltd-SERIES 18-30A CLASS B	1	7,400,000	7,326,888
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,085,000	1,085,029	02/06/2017	02/05/2045	Interest Rate Swap				89852T-AN-8	Tryon Park CLO Ltd-TPCLO 2013-1A A1JR	1	1,085,000	1,085,029
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,551,870	12,750,319	02/06/2017	02/05/2045	Interest Rate Swap				67706X-AG-8	OH Credit Partners XIV -OAKC 2017-14A B FLOATING COUP	1	12,551,870	12,750,319
57629*CV5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,000,000	2,002,754	02/06/2017	02/05/2045	Interest Rate Swap				33883J-AD-3	Flatiron CLO Ltd-SERIES 19-1A CLASS C	1	2,000,000	2,002,754
57629*C22	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	5,280,000	6,952,652	02/06/2017	02/05/2045	Interest Rate Swap		1,696,148		00900C-AE-4	AIMCO-AIMCO 2017-AA C	1	5,280,000	5,256,504
57629*C22	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,180,328	3,180,388	02/06/2017	02/05/2045	Interest Rate Swap				87289B-AA-2	TCF DLF VIII 2018 CLO, LLC - Class A	1	3,180,328	3,180,388
57629*C22	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		32,100,000	32,110,079	02/06/2017	02/05/2045	Interest Rate Swap				05363U-AU-7	EVERY POINT IV CLO LTD-SERIES 14-1A CLASS BR	1	32,100,000	32,110,079
57629*C22	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,604,345	15,197,225	02/06/2017	02/05/2045	Interest Rate Swap				66704J-AY-4	NORTHSTAR EDUCATION FINA-SERIES 2004-1 CLASS B1	1	16,604,345	15,197,225
57629*C22	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		27,000,000	26,934,228	02/06/2017	02/05/2045	Interest Rate Swap				75887X-AA-5	Regatta Funding Ltd.-REG11 2018-1A A	1	27,000,000	26,934,228
57629*C22	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,900,000	11,862,206	02/06/2017	02/05/2045	Interest Rate Swap				449258-AA-0	1CG US CLO 2018-1 LTD-SERIES 2018-1A CLASS A1	1	11,900,000	11,862,206
57629*C22	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,000,000	1,977,306	02/06/2017	02/05/2045	Interest Rate Swap				63942N-AC-2	Navient Student Loan Tru-NAVSL 2021-1A B	1	2,000,000	1,977,306

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*CZ2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,200,000	11,201,378	02/06/2017	02/05/2045	Interest Rate Swap				17181T-AC-5	CIFC Funding 2018-IV Ltd-SERIES 18-4A CLASS A2	1	11,200,000	11,201,378
57629*CZ2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,200,000	16,200,373	02/06/2017	02/05/2045	Interest Rate Swap				16409T-AC-3	CHENANGO PARK CLO LTD-SERIES 18-1A CLASS A1B	1	16,200,000	16,200,373
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	4,198,158	6,048,408	02/06/2017	02/05/2045	Interest Rate Swap		1,869,070		784170-ZZ-8	SFR FTTH SAS Term Loan	3	4,198,158	4,179,338
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,001,485	02/06/2017	02/05/2045	Interest Rate Swap				55818R-BA-3	Madison Park Funding XIV-MDPK 2014-14A BRR	1	15,000,000	15,001,485
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,700,000	4,658,852	02/06/2017	02/05/2045	Interest Rate Swap				04942J-AE-1	Atlas Senior Loan Fund X-ATCLO 2018-10A B	1	4,700,000	4,658,852
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,200,628	23,488,198	02/06/2017	02/05/2045	Interest Rate Swap				12551R-AA-6	CIFC Funding 2018-I Ltd-CIFC 2018-1A A	1	23,200,628	23,488,198
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,900,000	25,710,205	02/06/2017	02/05/2045	Interest Rate Swap				04016V-AC-9	ARES XLVII CLO Ltd-SERIES 18-47A CLASS A2	1	25,900,000	25,710,205
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,400,000	11,399,943	02/06/2017	02/05/2045	Interest Rate Swap				67097Q-AE-5	OCF CLO 2017-14 Ltd-SERIES 17-14A CLASS A2	1	11,400,000	11,399,943
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,400,000	13,308,076	02/06/2017	02/05/2045	Interest Rate Swap				08179L-AC-5	Benefit Street Partners -SERIES 18-14A CLASS A2	1	13,400,000	13,308,076
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,165	02/06/2017	02/05/2045	Interest Rate Swap				94950J-AC-5	Wellfleet CLO Ltd-SERIES 18-1A CLASS B	1	5,000,000	5,000,165
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	7,001,407	02/06/2017	02/05/2045	Interest Rate Swap				14315R-AE-1	Carlyle Global Market St-SERIES 18-4A CLASS A2	1	7,000,000	7,001,407
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,100,000	3,068,780	02/06/2017	02/05/2045	Interest Rate Swap				04943A-AG-4	ATLAS SENIOR LOAN FUND L-SERIES 17-8A CLASS C	1	3,100,000	3,068,780
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,500,000	7,516,598	02/06/2017	02/05/2045	Interest Rate Swap				33883J-AC-5	Flatiron CLO Ltd-SERIES 19-1A CLASS B	1	7,500,000	7,516,598
57629*DA6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,500,000	6,507,378	02/06/2017	02/05/2045	Interest Rate Swap				13887W-AE-0	CANYC 2019-2A C	1	6,500,000	6,507,378
57629*DB4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	45,000,000	46,555,719	02/05/2015	02/05/2045	Interest Rate Swap		1,551,624		05683H-AC-9	BAIN CAPITAL CREDIT CLO -SERIES 2017-2A CLASS AR	1	45,000,000	45,004,095
57629*DB4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,325,000	7,325,938	02/05/2015	02/05/2045	Interest Rate Swap				55954K-AC-9	MAGNETITE CLO LTD-SERIES 17-19A CLASS B	1	7,325,000	7,325,938
57629*DB4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,200,000	7,186,637	02/05/2015	02/05/2045	Interest Rate Swap				92915Q-AG-8	VOYA CLO LTD-SERIES 2017-3A CLASS A2	1	7,200,000	7,186,637
57629*DB4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,750,000	12,751,428	02/05/2015	02/05/2045	Interest Rate Swap				40436Q-AN-2	HPS Loan Management 9-20-HLM 9A-2016 A2R	1	12,750,000	12,751,428
57629*DB4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,000,000	25,001,050	02/05/2015	02/05/2045	Interest Rate Swap				87249Q-AA-8	TICOP CLO Ltd-TicOP 2018-11A A	1	25,000,000	25,001,050
57629*DB4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,387,005	18,413,339	02/05/2015	02/05/2045	Interest Rate Swap				06760E-AA-4	Babson CLO Ltd 2013-I-SERIES 2013-1A CLASS AR	1	18,387,005	18,413,339
57629*DB4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,300,000	11,301,322	02/05/2015	02/05/2045	Interest Rate Swap				87248K-AL-8	TICOP CLO VI 2016-5 Ltd-TicOP 2016-5A BR	1	11,300,000	11,301,322
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	12,230,274	22,506,852	12/05/2016	12/05/2046	Interest Rate Swap		10,148,467		78449F-AC-5	SMB PRIVATE ED LN TR 2016-A NT PRIVATE ED LN TR 2016-A NT	1	12,230,274	12,358,385
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,420,000	23,306,207	12/05/2016	12/05/2046	Interest Rate Swap				63940F-AC-1	NAVIENT STUDENT LOAN TRU-SERIES 16-2 CLASS A3	1	22,420,000	23,306,207
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,238,881	2,302,531	12/05/2016	12/05/2046	Interest Rate Swap				26827X-AA-1	EMC GROUP STUDENT LOAN -SERIES 2016-1A CLASS A	1	2,238,881	2,302,531
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,351,950	23,369,978	12/05/2016	12/05/2046	Interest Rate Swap				04941T-AS-9	Atlas Senior Loan Fund V-SERIES 16-7A CLASS A1R	1	23,351,950	23,369,978
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,500,000	11,500,805	12/05/2016	12/05/2046	Interest Rate Swap				92916M-AB-7	VOYA CLO LTD-VOYA 2017-1A A2	1	11,500,000	11,500,805
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,350	12/05/2016	12/05/2046	Interest Rate Swap				67109Y-AN-4	Oak Hill Credit Partners-SERIES 15-12A CLASS A2R	1	10,000,000	10,000,350
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,200,000	4,173,540	12/05/2016	12/05/2046	Interest Rate Swap				08180X-AU-6	Benefit Street Partners -BSP 2015-8A BR	1	4,200,000	4,173,540
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,380,000	6,359,648	12/05/2016	12/05/2046	Interest Rate Swap				22616C-AE-3	CRESTLINE DENALI CLO XV -SERIES 17-1A CLASS C	1	6,380,000	6,359,648
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,420	12/05/2016	12/05/2046	Interest Rate Swap				04965L-AE-8	TRIUMPH XIV LLC-ATRM 14A A2A	1	10,000,000	10,000,420
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,007,605	12/05/2016	12/05/2046	Interest Rate Swap				03328W-AL-2	Anchorage Capital CLO 9 -SERIES 16-9A CLASS BR	1	5,000,000	5,007,605

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
								9	10	11	12	13	14	15	16
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,400,000	9,421,018	12/05/2016	12/05/2046	Interest Rate Swap			08186P-AC-7	Benefit Street Partners CLO X	1	9,400,000	9,421,018
57629*DK4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,050,000	9,030,488	12/05/2016	12/05/2046	Interest Rate Swap			06760E-AE-6	Babson CLO Ltd 2013-I-SERIES 2013-IA CLASS CR	1	9,050,000	9,030,488
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	26,375,000	36,549,168	12/05/2016	12/05/2046	Interest Rate Swap		10,174,168	70163F-AA-0	Parliament Funding I LLC-Variable Funding Notes	2	26,375,000	26,375,000
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,600,000	5,517,890	12/05/2016	12/05/2046	Interest Rate Swap			64034N-AB-1	NSLT 2019-2A B	1	5,600,000	5,517,890
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	30,000,000	12/05/2016	12/05/2046	Interest Rate Swap			500798-MN-6	KREF Lending VII 2018-2 Term Loan	1	30,000,000	30,000,000
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,847,827	11,963,248	12/05/2016	12/05/2046	Interest Rate Swap			78448Q-AD-0	SMB PRIVATE EDUCATION LO-SMB 2015-B A3	1	11,847,827	11,963,248
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,497,653	2,504,088	12/05/2016	12/05/2046	Interest Rate Swap			10620N-AX-6	BRAZOS HIGHER EDUCATION -SER 2006-2 STUDENT LN REV NT	1	2,497,653	2,504,088
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,000,000	13,000,702	12/05/2016	12/05/2046	Interest Rate Swap			75887X-AC-1	Regatta Funding Ltd.-REG11 2018-1A B	1	13,000,000	13,000,702
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,368,683	7,404,766	12/05/2016	12/05/2046	Interest Rate Swap			38138L-AC-2	Goldentree Loan Managem-SERIES 20-7A CLASS B	1	7,368,683	7,404,766
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,350,000	7,350,015	12/05/2016	12/05/2046	Interest Rate Swap			12551R-AC-2	CIFC Funding 2018-I Ltd-SERIES 18-1A CLASS B	1	7,350,000	7,350,015
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,255	12/05/2016	12/05/2046	Interest Rate Swap			88434H-AE-3	THL Credit Wind River 20-SERIES 18-2A CLASS A2	1	5,000,000	5,000,255
57629*DJK	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,333,333	21,090,603	12/05/2016	12/05/2046	Interest Rate Swap			87289B-AJ-3	TCF DLF VIII 2018 CLO Combo Note	2	21,333,333	21,090,603
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	7,467,374	17,012,559	12/05/2016	12/05/2046	Interest Rate Swap		9,837,481	MXP001-TT-1	AEROVIAS DE MEXICO SA USD TERM LN NAVIENT STUDENT LOAN TRU-SERIES 2016-6A CLASS A3	1	7,467,374	7,175,078
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,000,000	25,700,610	12/05/2016	12/05/2046	Interest Rate Swap			63940L-AC-8	Goldentree Loan Managem-GLM 2019-4A AJ	1	25,000,000	25,700,610
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,000,000	24,007,512	12/05/2016	12/05/2046	Interest Rate Swap			38137Y-AE-1	TCI-Flatiron Clo 2018-1 -TFLAT 2018-1A BR	1	24,000,000	24,007,512
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,420	12/05/2016	12/05/2046	Interest Rate Swap			04965L-AE-8	Rockford Tower CLO 2019-SERIES 2019-1A CLASS B1R	1	10,000,000	10,000,420
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,970	12/05/2016	12/05/2046	Interest Rate Swap			87232A-AN-4	HIGHER EDUCATION FUNDING-SERIES 2004-1 CLASS A10	1	10,000,000	10,000,970
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,990	12/05/2016	12/05/2046	Interest Rate Swap			77342M-AQ-9	HIGHER EDUCATION FUNDING-SERIES 2004-1 CLASS A14	1	10,000,000	10,000,990
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,623,356	1,690,500	12/05/2016	12/05/2046	Interest Rate Swap			429827-AK-4	HIGHER EDUCATION FUNDING-SERIES 2004-1 CLASS A2	1	1,623,356	1,690,500
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,211,833	1,274,000	12/05/2016	12/05/2046	Interest Rate Swap			429827-AP-3	SOUTH CAROLINA STUDENT L-SR UNSECURED	1	1,211,833	1,274,000
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,140,078	1,171,100	12/05/2016	12/05/2046	Interest Rate Swap			429827-AB-4	NELNET STUDENT LOAN TRUS-SERIES 2015-2A CLASS B	1	1,140,078	1,171,100
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,733,981	1,747,442	12/05/2016	12/05/2046	Interest Rate Swap			83715A-AJ-8	PENNSYLVANIA ST HGR EDU -SERIES 2006 CL B	1	1,733,981	1,747,442
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,745,410	1,850,990	12/05/2016	12/05/2046	Interest Rate Swap			64033Q-AC-3	CIT EDUCATION LOAN TRUST-SERIES 2007-1 CLASS B	1	1,745,410	1,850,990
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		619,822	622,377	12/05/2016	12/05/2046	Interest Rate Swap			709163-GJ-2	Babson CLO Ltd 2015-I-BABSN 2015-IA CR	1	619,822	622,377
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		925,615	860,900	12/05/2016	12/05/2046	Interest Rate Swap			17284L-AB-0	CULLEN/FROST CAP TR II-SUBORDINATED NOTE	2	925,615	860,900
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,275,000	8,205,316	12/05/2016	12/05/2046	Interest Rate Swap			056162-AS-9	Babson CLO Ltd 2015-I-BABSN 2015-IA CR	1	8,275,000	8,205,316
57629*DH1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,183,118	23,719,500	12/05/2016	12/05/2046	Interest Rate Swap			230000-AB-7	CULLEN/FROST CAP TR II-SUBORDINATED NOTE	2	22,183,118	23,719,500
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	13,651,047	22,956,753	12/05/2016	12/05/2046	Interest Rate Swap		9,840,051	MXP001-TT-1	AEROVIAS DE MEXICO SA USD TERM LN SMB PRIVATE ED LN TR 2015-C LN BCK NT QL A-3	1	13,651,047	13,116,702
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,832,443	1,870,504	12/05/2016	12/05/2046	Interest Rate Swap			78448R-AD-8	SMB PRIVATE ED LOAN TR 2015-A LN BACKED NT A-3	1	1,832,443	1,870,504
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,553,621	5,653,988	12/05/2016	12/05/2046	Interest Rate Swap			78448P-AD-2	KREF Lending VII 2018-2 Term Loan	1	5,553,621	5,653,988
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		31,052,260	31,052,260	12/05/2016	12/05/2046	Interest Rate Swap			500798-MN-6	KREF Lending VII 2018-2 Term Loan	1	31,052,260	31,052,260

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,600,000	11,600,394	12/05/2016	12/05/2046	Interest Rate Swap			08179C-AQ-4	Benefit Street Partners -BSP 2017-11A A2R FLOATING	1	11,600,000	11,600,394
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,870,858	2,894,651	12/05/2016	12/05/2046	Interest Rate Swap			00432C-CW-9	ACCESS GROUP INC-SERIES 2005-B CLASS A3	1	2,870,858	2,894,651
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,813,468	9,198,624	12/05/2016	12/05/2046	Interest Rate Swap			28148W-AC-7	EDUCATIONAL FUNDING OF T-SERIES 2011-1 CLASS B	1	8,813,468	9,198,624
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		562,236	542,557	12/05/2016	12/05/2046	Interest Rate Swap			46259Z-AD-8	IOVA STUDENT LOAN LIQUID-SERIES 2005-1 CLASS B	1	562,236	542,557
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,050,173	4,812,478	12/05/2016	12/05/2046	Interest Rate Swap			78442G-OA-7	SLM STUDENT LOAN TRUST-SERIES 2005-6 CLASS B	1	5,050,173	4,812,478
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,688,973	1,786,941	12/05/2016	12/05/2046	Interest Rate Swap			38021F-AB-7	GOAL CAPITAL FUNDING TRU-SERIES 2015-1 CLASS B	2	1,688,973	1,786,941
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,705,092	1,738,432	12/05/2016	12/05/2046	Interest Rate Swap			28138J-AB-0	EDUCATIONAL SERVICES OF -SERIES 15-2 CLASS B	1	1,705,092	1,738,432
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,900,576	1,835,621	12/05/2016	12/05/2046	Interest Rate Swap			78442G-GM-2	SLM STUDENT LOAN TRUST 2003-4 LN BKD CTF CL B	2	1,900,576	1,835,621
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,372,544	1,428,360	12/05/2016	12/05/2046	Interest Rate Swap			28090A-AB-5	EDUCATIONAL SERVICES OF -2014-4 SERIES B	1	1,372,544	1,428,360
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,200,000	7,200,238	12/05/2016	12/05/2046	Interest Rate Swap			03767M-AE-8	Apidos CLO-SERIES 18-29A CLASS A1B	1	7,200,000	7,200,238
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,800,000	8,800,194	12/05/2016	12/05/2046	Interest Rate Swap			39729R-AC-2	Greenwood Park CLO Ltd-SERIES 18-1A CLASS B	1	8,800,000	8,800,194
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,000,460	12/05/2016	12/05/2046	Interest Rate Swap			13876J-AE-2	Canyon Capital CLO Ltd-CANVC 2012-1RA B	1	5,000,000	5,000,460
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,018,260	12/05/2016	12/05/2046	Interest Rate Swap			03768R-AG-1	Apidos CLO Series 19-32A-APID 2019-32A B1	1	5,000,000	5,018,260
57629*DG3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,750,000	11,790,690	12/05/2016	12/05/2046	Interest Rate Swap			92918B-AE-3	Voya CLO 2019-4 Ltd-VOYA 2019-4A B FLOATING COUPO	1	11,750,000	11,790,690
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	7,576,288	15,857,838	12/06/2016	12/06/2046	Interest Rate Swap		8,560,002	281397-AP-4	EDUCATION LOAN ASSET-BAC-SERIES 2003-2 CLASS 2A1	1	7,576,288	7,297,836
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,913,641	11,447,304	12/06/2016	12/06/2046	Interest Rate Swap			MXP001-TT-1	AEROVIAS DE MEXICO SA USD TERM LN NORTHSTAR EDUCATION FINA-NEF 2016-1	1	11,913,641	11,447,304
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		387,835	397,274	12/06/2016	12/06/2046	Interest Rate Swap			66705R-AA-7	A EDUCATION LOAN ASSET-BAC-SERIES	1	387,835	397,274
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,294,763	4,149,750	12/06/2016	12/06/2046	Interest Rate Swap			281397-AB-5	2003-1 CLASS A2	1	4,294,763	4,149,750
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,796,016	3,938,421	12/06/2016	12/06/2046	Interest Rate Swap			640310-OK-5	NELNET STUDENT LOAN TRUS-SERIES 2005-4 CLASS A4R1	2	3,796,016	3,938,421
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,279,389	4,672,226	12/06/2016	12/06/2046	Interest Rate Swap			10623B-LJ-5	BRAZOS TX HGR EDU AUTH REVENUE BOND	1	4,279,389	4,672,226
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,275,565	5,428,304	12/06/2016	12/06/2046	Interest Rate Swap			28108Q-AB-0	EDLINC STUDENT LOAN FUND-SERIES 2012-1 CLASS B	1	5,275,565	5,428,304
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,950,000	2,814,198	12/06/2016	12/06/2046	Interest Rate Swap			281397-AQ-2	EDUCATION LOAN ASSET-BAC-SERIES 2003-2 CLASS 2A2	1	2,950,000	2,814,198
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,715,678	1,715,593	12/06/2016	12/06/2046	Interest Rate Swap			38021E-AA-2	GOAL CAPITAL FUNDING TR 2010-1 STUDENT LN BKD NT	1	1,715,678	1,715,593
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,472,349	2,991,206	12/06/2016	12/06/2046	Interest Rate Swap			640310-CW-1	NELNET STUDENT LOAN TRUS-SERIES 2005-4 CLASS A4R2	2	2,472,349	2,991,206
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,633,943	7,856,412	12/06/2016	12/06/2046	Interest Rate Swap			83149E-AG-2	SLM STUDENT LN TR 2006-5-NOTE CL B	1	7,633,943	7,856,412
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,900,000	13,863,360	12/06/2016	12/06/2046	Interest Rate Swap			26251L-AE-4	Dryden 64 CLO Ltd-DRSLF 2018-64A B	1	13,900,000	13,863,360
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,076,635	1,085,446	12/06/2016	12/06/2046	Interest Rate Swap			23341K-AA-3	DRB PRIME STUDENT LOAN T-SERIES 2015-0 CLASS A1	1	1,076,635	1,085,446
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,451,866	6,314,482	12/06/2016	12/06/2046	Interest Rate Swap			64031C-AB-8	NELNET STUDENT LOAN TRUS-SERIES 2012-2A CLASS B	1	6,451,866	6,314,482
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,611,016	4,583,520	12/06/2016	12/06/2046	Interest Rate Swap			78442G-PS-9	SLM STUDENT LOAN TRUST-SERIES 2005-5 CLASS B	1	4,611,016	4,583,520
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,275,000	16,218,493	12/06/2016	12/06/2046	Interest Rate Swap			04623T-AA-3	ASSURANT CLO I LTD-ASRNT 2018-1A A	1	16,275,000	16,218,493
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,000,000	3,000,081	12/06/2016	12/06/2046	Interest Rate Swap			89852T-AN-8	Tryon Park CLO Ltd-TPCLO 2013-1A A1JR	1	3,000,000	3,000,081

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,006,995	12/06/2016	12/06/2046	Interest Rate Swap			06744N-AG-2	BARDOT CLO, LTD	1	5,000,000	5,006,995
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,000,000	12,913,680	12/06/2016	12/06/2046	Interest Rate Swap			21623P-AC-1	COOK PARK CLO LTD-COOK 2018-1A A2 Navient Student Loan Tru-NAVSL	1	13,000,000	12,913,680
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,000,000	1,977,306	12/06/2016	12/06/2046	Interest Rate Swap			63942N-AC-2	2021-1A B	1	2,000,000	1,977,306
57629*DF5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,400,000	8,401,084	12/06/2016	12/06/2046	Interest Rate Swap			48252Y-AE-9	KKR CLO 23 Ltd-KKR 23 B	1	8,400,000	8,401,084
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	10,920,838	19,336,102	12/06/2016	12/06/2046	Interest Rate Swap		8,842,740	MXP001-TT-1	AEROVIAS DE MEXICO SA USD TERM LN SOUTH CAROLINA STUDENT L-SERIES 2014-1 CLASS B	1	10,920,838	10,493,362
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,620,350	12,077,361	12/06/2016	12/06/2046	Interest Rate Swap			83715R-AG-7	SLC STUDENT LOAN TRUST-SERIES 2005-1 CLASS B	1	12,620,350	12,077,361
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,204,461	5,368,906	12/06/2016	12/06/2046	Interest Rate Swap			784420-AE-1	SLM STUDENT LOAN TRUST-SERIES 2005-8 CLASS B	1	5,204,461	5,368,906
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,307,878	3,267,621	12/06/2016	12/06/2046	Interest Rate Swap			78442G-QT-6	Cedar Funding IX CLO Ltd-SERIES 18-9A CLASS A2	1	3,307,878	3,267,621
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,300,000	19,219,423	12/06/2016	12/06/2046	Interest Rate Swap			15033E-AC-2	KEYCORP STUDENT LOAN TRU-SERIES 1999-B CLASS CTFS	1	19,300,000	19,219,423
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		318,171	315,336	12/06/2016	12/06/2046	Interest Rate Swap			493268-AU-0	NAVIENT STUDENT LOAN TRU-SERIES 2014-1 CLASS B	1	318,171	315,336
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,645,000	2,555,209	12/06/2016	12/06/2046	Interest Rate Swap			63938E-AE-4	NELNET STUDENT LOAN TRU-SERIES 2006-3 CLASS B	1	2,645,000	2,555,209
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,314,922	2,252,461	12/06/2016	12/06/2046	Interest Rate Swap			64031A-AJ-5	NAVIENT STUDENT LOAN TRU-SERIES 2015-3 CLASS B	1	2,314,922	2,252,461
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,282,174	6,542,047	12/06/2016	12/06/2046	Interest Rate Swap			63939L-AC-1	NELNET STUDENT LOAN TRU-SERIES 2014-1A CLASS B	1	6,282,174	6,542,047
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,326,939	3,439,634	12/06/2016	12/06/2046	Interest Rate Swap			64033J-AB-1	COLLEGE LOAN CORPORATION-SERIES 2005-2 CLASS B	1	3,326,939	3,439,634
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,692,796	2,522,140	12/06/2016	12/06/2046	Interest Rate Swap			194266-AE-2	NELNET STUDENT LOAN TRU-SERIES 2014-5A CLASS B	1	2,692,796	2,522,140
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,178,723	3,328,823	12/06/2016	12/06/2046	Interest Rate Swap			64033N-AB-2	SLM STUDENT LOAN TRUST-SERIES 2004-3 CLASS B	1	3,178,723	3,328,823
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,999,170	2,004,031	12/06/2016	12/06/2046	Interest Rate Swap			78442G-LJ-3	NELNET STUDENT LOAN TRU-SERIES 2012-1A CLASS B	1	1,999,170	2,004,031
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,250,000	3,056,199	12/06/2016	12/06/2046	Interest Rate Swap			64032A-AB-1	NELNET STUDENT LOAN TRU-SERIES 2007-2A CLASS A4A2	1	3,250,000	3,056,199
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		977,710	983,527	12/06/2016	12/06/2046	Interest Rate Swap			64032F-AH-7	NELNET STUDENT LOAN TRU-SERIES 2014-2A CLASS B	1	977,710	983,527
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,986,271	3,056,166	12/06/2016	12/06/2046	Interest Rate Swap			64033L-AD-2	NELNET STUDENT LOAN TRU-SERIES 2014-3A CLASS B	1	2,986,271	3,056,166
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,240,000	3,229,168	12/06/2016	12/06/2046	Interest Rate Swap			64033K-AB-8	2014-3A CLASS B	1	3,240,000	3,229,168
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,750,000	14,750,472	12/06/2016	12/06/2046	Interest Rate Swap			03767M-AG-3	Apidos CLO-SERIES 18-29A CLASS A2 Magnetite VIII Ltd-MAGNE 2014-8A	1	14,750,000	14,750,472
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,500,000	4,481,064	12/06/2016	12/06/2046	Interest Rate Swap			55952Y-AT-4	CR2 Ares XXXVIII CLO Ltd-SERIES 15-38A CLASS BR	1	4,500,000	4,481,064
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,700,000	6,663,210	12/06/2016	12/06/2046	Interest Rate Swap			04015U-AJ-7	KKR CLO 12 Ltd-KKR 12 BR2	1	6,700,000	6,663,210
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,000,000	3,000,165	12/06/2016	12/06/2046	Interest Rate Swap			48250R-BN-5	QCP CLO Ltd-SERIES 18-15A CLASS A2	1	3,000,000	3,000,165
57629*DE8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,250,000	14,249,957	12/06/2016	12/06/2046	Interest Rate Swap			67112K-AB-5	KKR CLO 16 Ltd-SERIES 16 CLASS A1R	1	14,250,000	14,249,957
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	15,000,000	23,472,335	12/06/2016	12/06/2046	Interest Rate Swap		8,470,040	48251B-AL-4	Elmwood CLO II Ltd-ELMW2 2019-2A B	1	15,000,000	15,002,295
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,300,000	11,304,091	12/06/2016	12/06/2046	Interest Rate Swap			29001L-AC-5	AEROVIAS DE MEXICO SA USD TERM LN	1	11,300,000	11,304,091
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		992,803	953,942	12/06/2016	12/06/2046	Interest Rate Swap			MXP001-TT-1	VOYA 2018-1A A1 Canyon Capital CLO Ltd-CANYC 2012-1RA B	1	992,803	953,942
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,866,266	9,993,140	12/06/2016	12/06/2046	Interest Rate Swap			92917A-AA-4		1	9,866,266	9,993,140
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,500,000	1,500,138	12/06/2016	12/06/2046	Interest Rate Swap			13876J-AE-2		1	1,500,000	1,500,138

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,050,000	11,051,713	12/06/2016	12/06/2046	Interest Rate Swap				03331J-AJ-1	2018-10A B	1	11,050,000	11,051,713
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,575,000	12,576,723	12/06/2016	12/06/2046	Interest Rate Swap				056162-AN-0	Babson CLO Ltd 2015-I-BABSN 2015-IA AR	1	12,575,000	12,576,723
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,250,000	7,257,221	12/06/2016	12/06/2046	Interest Rate Swap				40439D-AE-8	Highbridge Loan Managem-HLM 15A-19 B	1	7,250,000	7,257,221
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,900,000	5,914,957	12/06/2016	12/06/2046	Interest Rate Swap				87250R-AB-0	TICP CLO XV Ltd-TICP 2020-15A B	1	5,900,000	5,914,957
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,400,000	5,410,557	12/06/2016	12/06/2046	Interest Rate Swap				87250C-AE-7	TICP CLO Ltd	1	5,400,000	5,410,557
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,174,538	1,043,141	12/06/2016	12/06/2046	Interest Rate Swap				483268-BW-5	KEYCORP STUDENT LOAN TRU-SERIES 2004-A CLASS 1B	1	1,174,538	1,043,141
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,953,111	1,687,271	12/06/2016	12/06/2046	Interest Rate Swap				429827-AR-9	HIGHER EDUCATION FUNDING-SERIES 2004-1 CLASS B1	1	1,953,111	1,687,271
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,948,310	3,856,593	12/06/2016	12/06/2046	Interest Rate Swap				429827-AS-7	HIGHER EDUCATION FUNDING-SERIES 2004-1 CLASS B2	1	3,948,310	3,856,593
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,986,944	2,144,680	12/06/2016	12/06/2046	Interest Rate Swap				64033T-AB-9	MELNET STUDENT LOAN TRU-SERIES 2015-3A CLASS B	1	1,986,944	2,144,680
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,116,851	981,714	12/06/2016	12/06/2046	Interest Rate Swap				19458L-BD-1	COLLEGIATE FUNDING SERVI-SERIES 2005-A CLASS B	1	1,116,851	981,714
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,912,095	1,939,091	12/06/2016	12/06/2046	Interest Rate Swap				00435T-AB-7	ACCESS GROUP INC-SERIES 2015-1 CLASS B	1	1,912,095	1,939,091
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,390,942	2,239,327	12/06/2016	12/06/2046	Interest Rate Swap				78442G-RY-4	SLM STUDENT LOAN TRUST-SERIES 2006-2 CLASS B	1	2,390,942	2,239,327
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,947,927	3,171,175	12/06/2016	12/06/2046	Interest Rate Swap				194267-AM-2	COLLEGE LOAN CORPORATION-SERIES 2007-1 CLASS B2	1	2,947,927	3,171,175
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		395,943	366,005	12/06/2016	12/06/2046	Interest Rate Swap				92978J-AH-6	WACHOVIA STUDENT LOAN TR-SERIES 2006-1 CLASS B	1	395,943	366,005
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,253,126	1,276,775	12/06/2016	12/06/2046	Interest Rate Swap				83715R-AH-5	SOUTH CAROLINA STUDENT L-SERIES 15-A CLASS A	1	1,253,126	1,276,775
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,317,951	2,317,687	12/06/2016	12/06/2046	Interest Rate Swap				28137T-AB-9	EDUCATIONAL SERVICES OF -SERIES 2014-2 CLASS B	1	2,317,951	2,317,687
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,181,270	2,316,800	12/06/2016	12/06/2046	Interest Rate Swap				28137B-AB-5	EDUCATIONAL SERVICES OF -SERIES 2015-1 CLASS B	1	2,181,270	2,316,800
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		514,041	536,738	12/06/2016	12/06/2046	Interest Rate Swap				00432C-AR-2	ACCESS GROUP-STUDENT LN REVENUE NT	1	514,041	536,738
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,990,013	11,001,947	12/06/2016	12/06/2046	Interest Rate Swap				55818R-BC-9	Madison Park Funding XIV-MDPK 2014-14A CR	1	10,990,013	11,001,947
57629*DD0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,900,000	9,890,140	12/06/2016	12/06/2046	Interest Rate Swap				69688X-AU-5	Palmer Square CLO 2014-1-SERIES 2014-1A CLASS A2RR	1	9,900,000	9,890,140
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	23,500,000	31,975,463	12/06/2016	12/06/2046	Interest Rate Swap		8,475,181		92558V-AC-8	Vibrant CLO Ltd-SERIES 18-9A CLASS A2	1	23,500,000	23,500,282
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,800,000	10,801,091	12/06/2016	12/06/2046	Interest Rate Swap				94949J-AC-9	Wellfleet CLO 2018-2 Ltd-WELF 2018-2A A2	1	10,800,000	10,801,091
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,590,452	13,590,393	12/06/2016	12/06/2046	Interest Rate Swap				04017E-AE-2	ARES XXXIIR CLO LTD-SERIES 14-32RA CLASS A1B	1	13,590,452	13,590,393
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,790,000	8,724,128	12/06/2016	12/06/2046	Interest Rate Swap				55951P-BC-0	Magnetite VII Ltd-MAGNE 2012-7A A2R2	1	8,790,000	8,724,128
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,818,546	7,528,897	12/06/2016	12/06/2046	Interest Rate Swap				78442G-PL-4	SLM STUDENT LOAN TRUST-SERIES 2005-4 CLASS B	1	7,818,546	7,528,897
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,000,000	12/06/2016	12/06/2046	Interest Rate Swap				29001L-AN-1	Elmwood CLO II Ltd-ELMW2 2019-2A BR	1	15,000,000	15,000,000
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,350,000	8,350,885	12/06/2016	12/06/2046	Interest Rate Swap				97315T-AG-7	THL Credit Wind River 20-WINDR 2017-1A CR	1	8,350,000	8,350,885
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,500,000	2,486,965	12/06/2016	12/06/2046	Interest Rate Swap				50189P-AN-2	LCM LTD PARTNERSHIP-SERIES 25A CLASS C2	1	2,500,000	2,486,965
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,086,960	20,086,960	12/06/2016	12/06/2046	Interest Rate Swap				24702H-ZZ-3	Del Conduit Funding-B L.L.C. - Revolver	2	20,086,960	20,086,960
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,864,562	5,885,022	12/06/2016	12/06/2046	Interest Rate Swap				66704J-AJ-7	Northstar Education Fina-REVENUE BONDS	1	5,864,562	5,885,022
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,750,000	6,750,236	12/06/2016	12/06/2046	Interest Rate Swap				77341D-AE-7	Rockford Tower CLO 2017--SERIES 17-3A CLASS B	1	6,750,000	6,750,236

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*DC2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,175,038	3,229,814	12/06/2016	12/06/2046	Interest Rate Swap				40638T-AE-2	Halsey Point CLO Ltd-SERIES 20-2A CLASS B	1	3,175,038	3,229,814
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	7,632,323	19,768,918	09/15/2017	09/15/2047	Interest Rate Swap		11,555,869		03073E-AM-7	AmerisourceBergen Corp-SENIOR UNSECURED	2	7,632,323	8,213,049
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		17,647,063	19,090,318	09/15/2017	09/15/2047	Interest Rate Swap				28364N-AS-7	ENTERGY MISSISSIPPI INC-SECURED NOTE	1	17,647,063	19,090,318
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,815,000	9,816,001	09/15/2017	09/15/2047	Interest Rate Swap				05684L-AG-0	Bain Capital Credit CLO-BCC 2021-1A C	1	9,815,000	9,816,001
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		26,919,301	29,151,527	09/15/2017	09/15/2047	Interest Rate Swap				75972Y-AA-9	RENAISSANCE FINANCE-SR UNSECURED	1	26,919,301	29,151,527
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,500,000	9,490,700	09/15/2017	09/15/2047	Interest Rate Swap				33882G-AJ-7	Flatiron Clo 17 Ltd-FLAT 2017-1A CR	1	9,500,000	9,490,700
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,200,000	3,107,434	09/15/2017	09/15/2047	Interest Rate Swap				22615E-AE-0	Crestline Denali CLO Ltd-SERIES 2018-1A CLASS C	1	3,200,000	3,107,434
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	8,006,304	09/15/2017	09/15/2047	Interest Rate Swap				67104L-AG-2	OH Loan Funding 2013-2 -OHALF 2013-2A CR	1	8,000,000	8,006,304
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,000,000	14,001,652	09/15/2017	09/15/2047	Interest Rate Swap				38862E-AB-0	GRIFFEN PARK CLO LTD-SERIES 17-1A CLASS B	1	14,000,000	14,001,652
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		52,951,816	52,951,816	09/15/2017	09/15/2047	Interest Rate Swap				500798-MO-4	KREF Lending VII 2018-3 Term Loan	1	52,951,816	52,951,816
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		28,137,527	29,353,125	09/15/2017	09/15/2047	Interest Rate Swap				629394-AA-5	NTC CAPITAL I-UNSECURED BOND	2	28,137,527	29,353,125
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,400,000	5,400,826	09/15/2017	09/15/2047	Interest Rate Swap				64130H-AQ-4	Neuberger Berman Loan Ad-SERIES 2017-24A CLASS CR	1	5,400,000	5,400,826
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,309,638	11,788,714	09/15/2017	09/15/2047	Interest Rate Swap				00206R-GL-0	AT&T Inc-SENIOR UNSECURED	2	10,309,638	11,788,714
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,991,696	22,410,995	09/15/2017	09/15/2047	Interest Rate Swap				00928Q-AQ-4	AIRCATTLE LTD-SENIOR UNSECURED	2	20,991,696	22,410,995
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,659,562	23,284,979	09/15/2017	09/15/2047	Interest Rate Swap				29365T-AF-1	Entergy Texas Inc-SECURED	2	21,659,562	23,284,979
57629*DMO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,574,717	16,287,169	09/15/2017	09/15/2047	Interest Rate Swap				90933J-AA-9	UNITED AIRLINES 2016-2 C-FIRST LIEN	3	16,574,717	16,287,169
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2	250,000,000	1,498,574	13,605,682	09/15/2017	09/15/2047	Interest Rate Swap		11,950,024		031162-CJ-7	AMGEN INC-SENIOR UNSECURED	2	1,498,574	1,655,658
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		176,131	188,859	09/15/2017	09/15/2047	Interest Rate Swap				445658-CD-7	UB HUNT TRANSPRT SVCS-SENIOR UNSECURED NOTE	2	176,131	188,859
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		22,226,040	25,402,254	09/15/2017	09/15/2047	Interest Rate Swap				456866-AM-4	INGERSOLL-RAND CO-DEBENTURE	2	22,226,040	25,402,254
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		16,361,031	16,450,178	09/15/2017	09/15/2047	Interest Rate Swap				664397-AK-2	EVERSOURCE ENERGY-UNSECURED NOTE Kingsland Ltd-SERIES 18-8A CLASS A	2	16,361,031	16,450,178
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		164,504,875	164,537,715	09/15/2017	09/15/2047	Interest Rate Swap				42086P-AC-7	INGERSOLL-RAND CO-DEBENTURE	1	164,504,875	164,537,715
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		5,900,000	5,867,007	09/15/2017	09/15/2047	Interest Rate Swap				05875M-AS-1	Ballyrock CLO 2019-2 Ltd-SERIES 19-2A CLASS BR	1	5,900,000	5,867,007
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		17,845,506	20,256,765	09/15/2017	09/15/2047	Interest Rate Swap				25389J-AQ-9	DIGITAL REALTY TRUST LP-SENIOR UNSECURED	2	17,845,506	20,256,765
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		1,821,883	2,027,682	09/15/2017	09/15/2047	Interest Rate Swap				465077-AK-1	ISRAEL ELECTRIC CORP LTD-SECURED NOTE	2	1,821,883	2,027,682
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		6,465,571	7,053,492	09/15/2017	09/15/2047	Interest Rate Swap				919794-AB-3	VALLEY NATIONAL BANCORP-SUBORDINATED NOTE	2	6,465,571	7,053,492
57629*DL2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		13,947,201	16,673,141	09/15/2017	09/15/2047	Interest Rate Swap				042735-AK-6	Arrow Electronics Inc-DEBENTURE	2	13,947,201	16,673,141
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2	250,000,000	7,392,738	19,833,338	09/15/2017	09/15/2047	Interest Rate Swap		12,160,240		00287Y-AL-3	AbbVie Inc-SENIOR UNSECURED NOTE	2	7,392,738	7,673,098
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		3,405,129	3,395,167	09/15/2017	09/15/2047	Interest Rate Swap				04352E-AA-3	Ascension Health-SENIOR UNSECURED	1	3,405,129	3,395,167
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		5,172,990	5,648,942	09/15/2017	09/15/2047	Interest Rate Swap				195869-AP-7	COLONIAL PIPELINE CO-SR UNSECURED	1	5,172,990	5,648,942
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		47,661,065	53,457,556	09/15/2017	09/15/2047	Interest Rate Swap				254709-AM-0	DISCOVER FINANCIAL SVS-SENIOR UNSECURED	2	47,661,065	53,457,556
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		9,519,819	9,900,051	09/15/2017	09/15/2047	Interest Rate Swap				444859-BA-9	Humana Inc-SENIOR UNSECURED NOTE	2	9,519,819	9,900,051

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		8,961,845	9,039,112	09/15/2017	09/15/2047	Interest Rate Swap			61945C-AA-1	MOSAIC CO/THE-SENIOR UNSECURED NOTE	2	8,961,845	9,039,112
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		5,324,262	5,490,819	09/15/2017	09/15/2047	Interest Rate Swap			09247X-AJ-0	BlackRock Inc-SENIOR UNSECURED NOTE	1	5,324,262	5,490,819
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		66,300,000	65,894,576	09/15/2017	09/15/2047	Interest Rate Swap			858102-AX-4	Steele Creek CLO 2016-1--SERIES 2016-1A CLASS AR	1	66,300,000	65,894,576
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		43,035,657	49,121,178	09/15/2017	09/15/2047	Interest Rate Swap			341081-FG-7	FLORIDA POWER & LIGHT CO-SECURED BOND	1	43,035,657	49,121,178
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		8,800,000	8,756,062	09/15/2017	09/15/2047	Interest Rate Swap			05683L-AC-0	Bain Capital Credit CLO -BCC 2018-1A A2	1	8,800,000	8,756,062
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		11,645,917	12,584,587	09/15/2017	09/15/2047	Interest Rate Swap			224044-CG-0	COX COMMUNICATIONS INC-SENIOR UNSECURED	2	11,645,917	12,584,587
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		15,267,845	16,762,593	09/15/2017	09/15/2047	Interest Rate Swap			709599-AZ-7	Penske Truck Leasing Co -SENIOR UNSECURED	2	15,267,845	16,762,593
57629*DP3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		20,356,437	22,800,286	09/15/2017	09/15/2047	Interest Rate Swap			98389B-AV-2	Xcel Energy Inc-SENIOR UNSECURED	2	20,356,437	22,800,286
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2	250,000,000	16,891,639	29,381,332	09/15/2017	09/15/2047	Interest Rate Swap		11,687,254	00774M-AB-1	AERCAP IRELAND CAPITAL D-SENIOR UNSECURED	2	16,891,639	17,694,078
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		18,408,678	20,125,066	09/15/2017	09/15/2047	Interest Rate Swap			378272-AL-2	GLENORE FUNDING LLC-SR UNSECURED	2	18,408,678	20,125,066
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		50,417,543	46,396,909	09/15/2017	09/15/2047	Interest Rate Swap			191216-CY-4	Coca-Cola Co/The-SENIOR UNSECURED	1	50,417,543	46,396,909
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		16,499,250	17,480,520	09/15/2017	09/15/2047	Interest Rate Swap			09778P-AA-3	Bon Secours Mercy Health-SECURED	1	16,499,250	17,480,520
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		18,579,518	20,427,203	09/15/2017	09/15/2047	Interest Rate Swap			67103H-AF-4	O'REILLY AUTOMOTIVE INC-SENIOR UNSECURED	2	18,579,518	20,427,203
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		14,435,120	15,530,850	09/15/2017	09/15/2047	Interest Rate Swap			92343V-BR-4	Verizon Communications I-SENIOR UNSECURED NOTE	2	14,435,120	15,530,850
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		1,617,450	1,794,197	09/15/2017	09/15/2047	Interest Rate Swap			806851-AG-6	SCHLUMBERGER HLDGS CORP-SR UNSECURED	2	1,617,450	1,794,197
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		5,428,489	5,921,041	09/15/2017	09/15/2047	Interest Rate Swap			756250-AD-1	Reckitt Benckiser Treasu-SENIOR UNSECURED	1	5,428,489	5,921,041
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		23,077,188	25,683,974	09/15/2017	09/15/2047	Interest Rate Swap			465077-AK-1	ISRAEL ELECTRIC CORP LTD-SECURED NOTE	2	23,077,188	25,683,974
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		15,654,526	17,060,297	09/15/2017	09/15/2047	Interest Rate Swap			23338V-AE-6	DTE Electric Co-SECURED	1	15,654,526	17,060,297
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		52,537,595	60,987,860	09/15/2017	09/15/2047	Interest Rate Swap			458140-AK-6	INTEL CORP-SENIOR UNSECURED NOTE	1	52,537,595	60,987,860
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		4,662,916	4,841,164	09/15/2017	09/15/2047	Interest Rate Swap			437076-AZ-5	Home Depot Inc/The-SENIOR UNSECURED	1	4,662,916	4,841,164
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		4,999,118	5,019,997	09/15/2017	09/15/2047	Interest Rate Swap			751277-AN-4	NESTLE PURINA PETCARE CO-DEBTURE	1	4,999,118	5,019,997
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		3,448,178	3,907,095	09/15/2017	09/15/2047	Interest Rate Swap			11271L-AC-6	Brookfield Finance Inc-SENIOR UNSECURED	1	3,448,178	3,907,095
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		2,644,816	2,657,991	09/15/2017	09/15/2047	Interest Rate Swap			20162R-AB-8	Marine Corps Community S-UNSECURED BOND	1	2,644,816	2,657,991
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		682,150	811,924	09/15/2017	09/15/2047	Interest Rate Swap			40728T-AA-1	HAMILTON COLLEGE-UNSECURED	1	682,150	811,924
57629*DN8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		1,905,799	2,143,605	09/15/2017	09/15/2047	Interest Rate Swap			756250-AE-9	Reckitt Benckiser Treasu-SENIOR UNSECURED	1	1,905,799	2,143,605
Awaiting PPN	Sovereign Bond of Brazil	3Z	5,000,000	10,714,659	10,864,811	12/21/2020	06/20/2026	5 Yr Credit Default Swap	(265,599)	(298,470)	912810-RP-5	US TREAS N/B-NOTE	1	10,980,258	11,163,281
Awaiting PPN	Sovereign Bond of Mexico	2Z	20,000,000	23,571,700	25,789,670	12/21/2020	06/20/2026	5 Yr Credit Default Swap	(132,655)	(129,990)	912833-LL-2	US TREASURY-STRIP COUPON RECEIPT	1	23,704,355	25,919,660
Awaiting PPN	Sovereign Bond of Peru	2Z	5,000,000	20,036,297	22,429,872	12/21/2020	06/20/2026	5 Yr Credit Default Swap	47,603	45,496	912810-RV-2	US TREASURY N/B-UNSECURED	1	19,988,694	22,384,376
Awaiting PPN	Sovereign Bond of Columbia	2Z	30,000,000	34,591,099	38,681,047	12/21/2020	06/20/2026	5 Yr Credit Default Swap	(389,116)	(491,611)	912810-RV-2	US TREASURY N/B-UNSECURED	1	34,980,215	39,172,658
Awaiting PPN	Sovereign Bond of India	2Z	40,000,000	31,198,200	34,905,893	12/21/2020	06/20/2026	5 Yr Credit Default Swap	215,724	210,110	912810-RV-2	US TREASURY N/B-UNSECURED	1	30,982,476	34,695,783
Awaiting PPN	Sovereign Bond of India	2Z		14,890,729	16,396,875	12/21/2020	06/20/2026	5 Yr Credit Default Swap			912810-RU-4	US TREASURY N/B-UNSECURED	1	14,890,729	16,396,875
57629*DX6	Evergreen Basket of Floating Rate Corporate Bonds	1	200,000,000	55,735,965	15,051,650	11/07/2018	11/07/2048	Interest Rate Swap		(49,268,331)	882508-BD-5	Texas Instruments Inc-SENIOR UNSECURED	1	55,735,965	64,319,981
57629*DX6	Evergreen Basket of Floating Rate Corporate Bonds	1		48,897,215	55,659,125	11/07/2018	11/07/2048	Interest Rate Swap			745332-CG-9	PUGET SOUND ENERGY INC-SECURED	1	48,897,215	55,659,125
57629*DX6	Evergreen Basket of Floating Rate Corporate Bonds	1		48,660,266	54,450,326	11/07/2018	11/07/2048	Interest Rate Swap			81373P-AA-1	Securian Financial Group-SENIOR UNSECURED	1	48,660,266	54,450,326

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held				
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value
57629*DX6	Evergreen Basket of Floating Rate Corporate Bonds	1		54,150,141	60,825,427	11/07/2018	11/07/2048	Interest Rate Swap			92826C-AF-9	VISA INC-SR UNSECURED	1	54,150,141	60,825,427
57629*DX6	Evergreen Basket of Floating Rate Corporate Bonds	1		37,315,517	47,270,007	11/07/2018	11/07/2048	Interest Rate Swap			670346-AH-8	NUCOR CORP-SENIOR UNSECURED NOTE	2	37,315,517	47,270,007
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1	300,000,000	57,240,885	(4,302,559)	11/08/2018	11/08/2048	Interest Rate Swap		(72,992,506)	12572Q-AH-8	QME Group Inc-SENIOR UNSECURED	1	57,240,885	68,689,947
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1		58,235,305	64,332,841	11/08/2018	11/08/2048	Interest Rate Swap			00440E-AW-7	ACE INA HOLDINGS-SR UNSECURED	1	58,235,305	64,332,841
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1		800,000	880,650	11/08/2018	11/08/2048	Interest Rate Swap			30231G-AW-2	EXXON MOBIL CORPORATION-SR UNSECURED	1	800,000	880,650
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1		57,878,152	65,978,748	11/08/2018	11/08/2048	Interest Rate Swap			037833-BX-7	APPLE INC-SENIOR UNSECURED	1	57,878,152	65,978,748
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1		56,397,493	61,665,571	11/08/2018	11/08/2048	Interest Rate Swap			91324P-CR-1	UNITEDHEALTH GROUP INC-SR UNSECURED	1	56,397,493	61,665,571
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1		76,884,727	82,964,579	11/08/2018	11/08/2048	Interest Rate Swap			023135-AQ-9	AMAZON.COM INC-SR UNSECURED	1	76,884,727	82,964,579
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1		11,320,136	12,773,179	11/08/2018	11/08/2048	Interest Rate Swap			438516-BS-4	Honeywell International -SENIOR UNSECURED	1	11,320,136	12,773,179
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1		10,000,000	10,055,770	11/08/2018	11/08/2048	Interest Rate Swap			12511A-AC-8	CBAM Ltd-CBAM 2020-13A B1	1	10,000,000	10,055,770
57629*DIW8	Evergreen Basket of Floating Rate Corporate Bonds	1		6,700,000	6,716,181	11/08/2018	11/08/2048	Interest Rate Swap			09630Q-AC-5	BluelMountain CLO XXX Ltd-SERIES 20-30A CLASS B	1	6,700,000	6,716,181
57629*DQ1	Evergreen Basket of Floating Rate Corporate Bonds	1	160,000,000	37,913,096	1,140,575	11/08/2018	11/08/2048	Interest Rate Swap		(39,137,507)	575634-AT-7	MASSACHUSETTS ELECTRIC-SENIOR UNSECURED	2	37,913,096	40,278,082
57629*DQ1	Evergreen Basket of Floating Rate Corporate Bonds	1		35,393,570	38,244,765	11/08/2018	11/08/2048	Interest Rate Swap			45138L-BD-4	IDAHO POWER CORP-SECURED NOTE	1	35,393,570	38,244,765
57629*DQ1	Evergreen Basket of Floating Rate Corporate Bonds	1		29,321,476	34,325,509	11/08/2018	11/08/2048	Interest Rate Swap			29246Q-AB-1	Empresa de Transporte de-SENIOR UNSECURED	1	29,321,476	34,325,509
57629*DQ1	Evergreen Basket of Floating Rate Corporate Bonds	1		27,753,488	33,123,010	11/08/2018	11/08/2048	Interest Rate Swap			771196-BH-4	ROCHE HOLDING INC-SENIOR UNSECURED NOTE	1	27,753,488	33,123,010
57629*DQ1	Evergreen Basket of Floating Rate Corporate Bonds	1		30,350,699	34,220,740	11/08/2018	11/08/2048	Interest Rate Swap			437076-BH-4	Home Depot Inc/The-SENIOR UNSECURED	1	30,350,699	34,220,740
57629*DQ1	Evergreen Basket of Floating Rate Corporate Bonds	1		24,642,222	29,334,330	11/08/2018	11/08/2048	Interest Rate Swap			578454-AD-2	MAYO CLINIC-UNSECURED	1	24,642,222	29,334,330
57629*DQ1	Evergreen Basket of Floating Rate Corporate Bonds	1		17,607,848	17,629,821	11/08/2018	11/08/2048	Interest Rate Swap			571676-AH-8	Mars Inc-SENIOR UNSECURED	1	17,607,848	17,629,821
57629*DU2	Evergreen Basket of Floating Rate Corporate Bonds	1	160,000,000	36,896,789	12,467,871	12/10/2018	12/10/2048	Interest Rate Swap		(27,855,399)	828807-CZ-8	SIMON PROPERTY GROUP LP-SENIOR UNSECURED	1	36,896,789	40,323,270
57629*DU2	Evergreen Basket of Floating Rate Corporate Bonds	1		32,882,943	37,648,688	12/10/2018	12/10/2048	Interest Rate Swap			12189L-BB-6	BURLINGTON NORTH SANTA FE-SENIOR UNSECURED	1	32,882,943	37,648,688
57629*DU2	Evergreen Basket of Floating Rate Corporate Bonds	1		33,994,159	38,294,427	12/10/2018	12/10/2048	Interest Rate Swap			391382-AB-4	GREAT-WEST LIFECO FINANC-SENIOR UNSECURED	1	33,994,159	38,294,427
57629*DU2	Evergreen Basket of Floating Rate Corporate Bonds	1		30,531,643	33,063,312	12/10/2018	12/10/2048	Interest Rate Swap			455434-BR-0	INDIANAPOLIS PWR & LIGHT-SECURED BOND	1	30,531,643	33,063,312
57629*DU2	Evergreen Basket of Floating Rate Corporate Bonds	1		53,384,338	63,385,280	12/10/2018	12/10/2048	Interest Rate Swap			002824-BH-2	ABBOTT LABORATORIES-SENIOR UNSECURED	1	53,384,338	63,385,280
57629*EP2	Evergreen Basket of Floating Rate Corporate Bonds	1	165,000,000	59,982,221	44,379,541	02/04/2019	02/04/2049	Interest Rate Swap		(23,193,003)	68389X-AM-7	ORACLE CORP-SENIOR UNSECURED NOTE	2	59,982,221	67,572,544
57629*EP2	Evergreen Basket of Floating Rate Corporate Bonds	1		63,290,022	71,584,863	02/04/2019	02/04/2049	Interest Rate Swap			149123-CB-5	Caterpillar Inc-SENIOR UNSECURED BOND	1	63,290,022	71,584,863
57629*EP2	Evergreen Basket of Floating Rate Corporate Bonds	1		68,170,107	82,567,570	02/04/2019	02/04/2049	Interest Rate Swap			377372-AE-7	GLAXOSMITHKLINE CAP INC-SR UNSECURED	1	68,170,107	82,567,570
57629*EP2	Evergreen Basket of Floating Rate Corporate Bonds	1		21,559,155	25,304,019	02/04/2019	02/04/2049	Interest Rate Swap			983024-AN-0	Wyeth LLC-NOTE	1	21,559,155	25,304,019
57629*FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	302,882,965	57,044,805	(1,892,221)	07/29/2020	07/29/2021	TRS Bond Index		(74,039,198)	539830-AW-9	Lockheed Martin Corp-SENIOR UNSECURED NOTE	1	57,044,805	72,146,977
57629*FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		88,947,369	89,641,158	07/29/2020	07/29/2021	TRS Bond Index			72403Z-NP-5	PIONEERS GATE LLC 2019-9 DTAOT-A Total Capital Internatio-SENIOR UNSECURED NOTE	1	88,947,369	89,641,158
57629*FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,070,350	1,072,724	07/29/2020	07/29/2021	TRS Bond Index			89153V-AB-5	UNSECURED NOTE	1	1,070,350	1,072,724
57629*FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,491,350	1,566,468	07/29/2020	07/29/2021	TRS Bond Index			485134-BN-9	KANSAS CITY POWER & LT-SENIOR UNSECURED NOTE	1	1,491,350	1,566,468

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,987,508	15,951,306	07/29/2020	07/29/2021	TRS Bond Index			521070-AJ-4	Lazard Group LLC-SENIOR UNSECURED	2	13,987,508	15,951,306
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,590,000	13,680,155	07/29/2020	07/29/2021	TRS Bond Index			784030-AL-4	SBA TOWER TRUST-FIRST LIEN	1	13,590,000	13,680,155
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,731,674	16,569,090	07/29/2020	07/29/2021	TRS Bond Index			767201-AD-8	RIO TINTO FIN USA LTD-SENIOR UNSECURED NOTE	1	13,731,674	16,569,090
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,377,198	1,588,557	07/29/2020	07/29/2021	TRS Bond Index			12189L-AW-1	BURLINGTN NORTH SANTA FE-SENIOR UNSECURED	1	1,377,198	1,588,557
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		898,867	959,328	07/29/2020	07/29/2021	TRS Bond Index			278265-AD-5	Eaton Vance Corp-SENIOR UNSECURED NOTE	2	898,867	959,328
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,681,388	16,442,448	07/29/2020	07/29/2021	TRS Bond Index			03076C-AH-9	Ameriprise Financial Inc-SENIOR UNSECURED	1	15,681,388	16,442,448
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,466,370	14,143,633	07/29/2020	07/29/2021	TRS Bond Index			92928Q-AE-8	WEA Finance LLC-SENIOR UNSECURED GEORGIA-PACIFIC LLC-SENIOR	2	13,466,370	14,143,633
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,097,685	9,895,172	07/29/2020	07/29/2021	TRS Bond Index			373298-CF-3	UNSECURED NOTE	1	9,097,685	9,895,172
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,280,846	8,882,056	07/29/2020	07/29/2021	TRS Bond Index			45866F-AA-2	INTERCONTINENTAL EXCHANGE-SENIOR UNSECURED NOTE	2	8,280,846	8,882,056
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,981,231	13,154,676	07/29/2020	07/29/2021	TRS Bond Index			908906-AC-4	MJFG AMERICAS HLDGS CORP-SENIOR UNSECURED NOTE	1	12,981,231	13,154,676
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,276,323	5,295,036	07/29/2020	07/29/2021	TRS Bond Index			020002-AZ-4	ALLSTATE CORP-SR UNSECURED	1	5,276,323	5,295,036
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		267,190	268,640	07/29/2020	07/29/2021	TRS Bond Index			12189L-AQ-4	Burlington Northern Sant-SENIOR UNSECURED	1	267,190	268,640
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		26,843,925	30,871,390	07/29/2020	07/29/2021	TRS Bond Index			448814-EJ-8	HYDRO-QUEBEC-NOTE	1	26,843,925	30,871,390
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,400,000	12,428,433	07/29/2020	07/29/2021	TRS Bond Index			38138D-AG-1	Goldentree Loan Managem-GLM 2019-5A B	1	12,400,000	12,428,433
57629* FIW6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		60,000,000	59,474,580	07/29/2020	07/29/2021	TRS Bond Index			67332F-AD-5	RRPF Engine Leasing Ltd Senior Secured	2	60,000,000	59,474,580
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	315,468,750	4,761,532	(31,187,588)	06/08/2020	06/08/2021	TRS Bond Index		(36,429,609)	571748-AZ-5	Marsh & McLennan Cos Inc-SR UNSECURED	2	4,761,532	5,242,021
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,519,481	6,060,068	06/08/2020	06/08/2021	TRS Bond Index			69353R-EQ-7	PNC Bank NA-SENIOR UNSECURED	1	5,519,481	6,060,068
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,100,792	14,934,128	06/08/2020	06/08/2021	TRS Bond Index			10373Q-AL-4	BP Capital Markets Ameri-SENIOR UNSECURED	1	14,100,792	14,934,128
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,028,885	3,359,324	06/08/2020	06/08/2021	TRS Bond Index			00440E-AV-9	ACE INA HOLDINGS-SR UNSECURED	1	3,028,885	3,359,324
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		17,325,483	18,974,316	06/08/2020	06/08/2021	TRS Bond Index			521070-AG-0	LAZARD GROUP LLC-SENIOR UNSECURED	2	17,325,483	18,974,316
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		17,271,613	19,168,100	06/08/2020	06/08/2021	TRS Bond Index			780082-AD-5	Royal Bank of Canada-SUBORDINATED	1	17,271,613	19,168,100
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,653,719	20,019,983	06/08/2020	06/08/2021	TRS Bond Index			00830Y-AB-7	Africa Finance Corp-SENIOR UNSECURED	1	18,653,719	20,019,983
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,020,549	18,081,733	06/08/2020	06/08/2021	TRS Bond Index			65557F-AA-4	Nordea Bank AB-UNSECURED NOTE	1	18,020,549	18,081,733
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,100,398	14,549,254	06/08/2020	06/08/2021	TRS Bond Index			74340X-BH-3	Prologis LP-SENIOR UNSECURED	1	13,100,398	14,549,254
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,706,013	6,083,625	06/08/2020	06/08/2021	TRS Bond Index			845743-BP-7	SOUTHWESTERN PUBLIC SERV-SECURED	1	5,706,013	6,083,625
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,000,000	14,001,470	06/08/2020	06/08/2021	TRS Bond Index			67592R-AC-7	Wells Fargo-OCT53 2021-1A B	1	14,000,000	14,001,470
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		29,226,006	33,923,018	06/08/2020	06/08/2021	TRS Bond Index			911312-AJ-5	UNITED PARCEL SERVICE IN-SENIOR UNSECURED NOTE	1	29,226,006	33,923,018
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,000,000	24,996,679	06/08/2020	06/08/2021	TRS Bond Index			65558T-ZC-2	Nordea Bank Abp/New York-SENIOR UNSECURED	1	25,000,000	24,996,679
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,500,000	7,505,989	06/08/2020	06/08/2021	TRS Bond Index			06654D-AB-3	Banner Health-UNSECURED	1	7,500,000	7,505,989
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,048,567	3,276,073	06/08/2020	06/08/2021	TRS Bond Index			06051G-GA-1	BANK OF AMERICA CORP-SENIOR UNSECURED	1	3,048,567	3,276,073
57629* FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		129,264,335	129,264,335	06/08/2020	06/08/2021	TRS Bond Index			57542Z-A7-2	MM Investment Holding Revolver Floating Line	2	129,264,335	129,264,335

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*FG1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,005,610	06/08/2020	06/08/2021	TRS Bond Index				671020-AZ-1	QHA Credit Partners VII -SERIES 2012-7A CLASS BR3	1	15,000,000	15,005,610
57629*EE7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	60,416,171	59,908,062	07/31/2019	07/31/2049	Interest Rate Swap		(508,109)		90139P-AB-5	Twin Brook Capital Funding I WSPV, LLC	1	60,416,171	60,416,171
57629*EE7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		59,767,123	59,767,123	07/31/2019	07/31/2049	Interest Rate Swap				90139Q-AB-3	Twin Brook Capital Funding II WSPV, LLC	1	59,767,123	59,767,123
57629*EE7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		68,000,000	68,550,800	07/31/2019	07/31/2049	Interest Rate Swap				72403Z-NL-4	PIONEERS GATE LLC 2019-6 AXIS Note	1	68,000,000	68,550,800
57629*EE7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,000,000	25,018,675	07/31/2019	07/31/2049	Interest Rate Swap				69701H-AA-7	Palmer Square CLO Ltd	1	25,000,000	25,018,675
57629*EE7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,323,070	21,500,301	07/31/2019	07/31/2049	Interest Rate Swap				05682V-AA-3	BAIN CAPITAL CREDIT CLO -SERIES 18-2A CLASS A1	1	21,323,070	21,500,301
57629*EE7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,955,067	12,057,977	07/31/2019	07/31/2049	Interest Rate Swap				78110F-AA-7	RR 9 Ltd-RRAM 2020-9A A1L	1	11,955,067	12,057,977
57629*EE7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,430,000	3,404,291	07/31/2019	07/31/2049	Interest Rate Swap				48275P-AJ-0	KREF 2018-FL1 LTD-KREF 2018-FL1 D	2	3,430,000	3,404,291
57629*EE7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,824,261	7,594,965	07/31/2019	07/31/2049	Interest Rate Swap				341081-FR-3	Florida Power & Light Co-SECURED	1	6,824,261	7,594,965
57629*EF4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	84,000,000	84,751,193	07/31/2019	07/31/2049	Interest Rate Swap		(38,407)		72403Z-MX-9	PIONEERS GATE LLC 2017-1 FNBM	1	84,000,000	84,789,600
57629*EF4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		68,000,000	68,367,404	07/31/2019	07/31/2049	Interest Rate Swap				48661W-AA-6	KAYNE CLO-SERIES 19-3A CLASS A	1	68,000,000	68,367,404
57629*EF4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		85,390,625	85,493,094	07/31/2019	07/31/2049	Interest Rate Swap				72403Z-NI-1	PIONEERS GATE LLC 2019-3 BWCONA Note	1	85,390,625	85,493,094
57629*EF4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,625,000	7,641,821	07/31/2019	07/31/2049	Interest Rate Swap				48250E-AE-5	KKR CLO 30 Ltd-KKR 30A B1	1	7,625,000	7,641,821
57629*EF4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	7,022,232	07/31/2019	07/31/2049	Interest Rate Swap				38136N-AE-6	Goldentree Loan Managem-GLM 2020-8A C	1	7,000,000	7,022,232
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	5,622,449	5,076,417	08/01/2019	08/01/2049	Interest Rate Swap		(576,402)		00038A-AB-9	ABB TREASURY CENTER USA-SENIOR UNSECURED NOTE	1	5,622,449	5,652,819
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,406,810	3,802,898	08/01/2019	08/01/2049	Interest Rate Swap				207597-EJ-0	Connecticut Light & Powe-SECURED	1	3,406,810	3,802,898
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,417,725	14,672,355	08/01/2019	08/01/2049	Interest Rate Swap				38141G-GS-7	Goldman Sachs Group Inc-/SENIOR UNSECURED NOTE	2	14,417,725	14,672,355
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,591,467	1,702,437	08/01/2019	08/01/2049	Interest Rate Swap				771196-BK-7	ROCHE HOLDING INC-SR UNSECURED	1	1,591,467	1,702,437
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		728,844	734,967	08/01/2019	08/01/2049	Interest Rate Swap				022650-AA-6	Amal Ltd Ex Im Bk Gtd Sr Nt	1	728,844	734,967
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,560,229	11,032,910	08/01/2019	08/01/2049	Interest Rate Swap				007589-AE-4	Advocate Health & Hospit-UNSECURED	1	11,560,229	11,032,910
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,911,099	4,931,888	08/01/2019	08/01/2049	Interest Rate Swap				17252M-AK-6	CINTAS CORPORATION NO. 2-SENIOR UNSECURED NOTE	1	4,911,099	4,931,888
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,312,639	3,730,123	08/01/2019	08/01/2049	Interest Rate Swap				78409V-AM-6	S&P Global Inc-SENIOR UNSECURED	1	3,312,639	3,730,123
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,999,407	11,269,819	08/01/2019	08/01/2049	Interest Rate Swap				67080L-AA-3	Nuveen LLC-SENIOR UNSECURED	1	10,999,407	11,269,819
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		220,762	215,146	08/01/2019	08/01/2049	Interest Rate Swap				02377A-AA-6	AMER AIRLN 14-1 A PTT-SECURED NOTE	3	220,762	215,146
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,885,396	11,136,626	08/01/2019	08/01/2049	Interest Rate Swap				12572Q-AJ-4	OME Group Inc-SENIOR UNSECURED	1	10,885,396	11,136,626
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,666,685	2,797,781	08/01/2019	08/01/2049	Interest Rate Swap				133131-AT-9	CAMDEN PROPERTY TRUST-SENIOR UNSECURED NOTE REID	1	2,666,685	2,797,781
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,424,587	10,768,584	08/01/2019	08/01/2049	Interest Rate Swap				828807-DE-4	Simon Property Group LP-SENIOR UNSECURED	1	10,424,587	10,768,584
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,022,397	08/01/2019	08/01/2049	Interest Rate Swap				250847-EG-1	DTE Electric Co-SECURED BOND	1	10,000,000	10,022,397
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,151,792	12,793,126	08/01/2019	08/01/2049	Interest Rate Swap				039483-AN-2	Archer-Daniels-Midland C-NOTE	1	10,151,792	12,793,126
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,591,670	3,929,222	08/01/2019	08/01/2049	Interest Rate Swap				369550-BG-2	General Dynamics Corp-SENIOR UNSECURED	1	3,591,670	3,929,222
57629*EQ0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,180,000	08/01/2019	08/01/2049	Interest Rate Swap				05580M-BO-1	B. Riley Financial Inc-SENIOR UNSECURED	2	10,000,000	10,180,000

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,006,530	10,574,594	08/01/2019	08/01/2049	Interest Rate Swap			448814-DX-8	HYDRO-QUEBEC-DEBENTURE	1	10,006,530	10,574,594
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		125,071	133,803	08/01/2019	08/01/2049	Interest Rate Swap			46625H-KC-3	JPMorgan Chase & Co-SR UNSECURED	1	125,071	133,803
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,723,472	6,201,766	08/01/2019	08/01/2049	Interest Rate Swap			28364W-AM-0	ENERGY LOUISIANA LLC 1ST MTD BD Baker Hughes a GE Co LLC-SENIOR	1	5,723,472	6,201,766
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,364,440	12,451,091	08/01/2019	08/01/2049	Interest Rate Swap			05723K-AD-2	UNSECURED	1	12,364,440	12,451,091
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,977,551	7,996,618	08/01/2019	08/01/2049	Interest Rate Swap			055451-AQ-1	BHP BILLITON FIN USA LTD-SR UNSECURED	1	7,977,551	7,996,618
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,514,002	3,480,767	08/01/2019	08/01/2049	Interest Rate Swap			48730P-AC-4	KEENAN DEV ASSOCS TENN LLC LEASE REV BD 2005	1	3,514,002	3,480,767
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,820,951	3,928,400	08/01/2019	08/01/2049	Interest Rate Swap			931142-EE-9	Walmart Inc-SENIOR UNSECURED	1	3,820,951	3,928,400
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,264,998	3,334,149	08/01/2019	08/01/2049	Interest Rate Swap			88579Y-BC-4	3M Co-SENIOR UNSECURED	1	3,264,998	3,334,149
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,184,404	25,296,775	08/01/2019	08/01/2049	Interest Rate Swap			00830Y-AC-5	UNSECURED	1	23,184,404	25,296,775
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		38,205,168	43,597,318	08/01/2019	08/01/2049	Interest Rate Swap			039483-BM-3	ARCHER-DANIELS-MIDLAND C-SENIOR UNSECURED	1	38,205,168	43,597,318
57629*E00	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	30,000,360	08/01/2019	08/01/2049	Interest Rate Swap			67104L-AE-7	CHA Loan Funding 2013-2 -OHALF 2013-2A AR	1	30,000,000	30,000,360
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	150,000,000	7,542,233	7,213,798	08/01/2019	08/01/2049	Interest Rate Swap		(395,561)	72403*-AK-8	PIONEERS GATE LLC 2017 2 GSOF 2011-2A-1	1	7,542,233	7,609,359
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,618,867	10,631,610	08/01/2019	08/01/2049	Interest Rate Swap			72403Z-MY-7	PIONEERS GATE LLC 2017-4 Alkali Term Loan	1	10,618,867	10,631,610
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,038,680	08/01/2019	08/01/2049	Interest Rate Swap			55954Y-AA-3	Magnetite CLO Ltd-MAGNE 2020-26A A	1	20,000,000	20,038,680
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,043,580	08/01/2019	08/01/2049	Interest Rate Swap			670881-AA-9	OCP CLO Ltd-SERIES 20-19A CLASS A1	1	20,000,000	20,043,580
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,994,589	6,699,113	08/01/2019	08/01/2049	Interest Rate Swap			448814-CP-6	HYDRO-QUEBEC-DEBENTURE	1	4,994,589	6,699,113
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,986,852	5,254,374	08/01/2019	08/01/2049	Interest Rate Swap			751277-AQ-7	NESTLE PURINA PETCARE CO-DEBENTURE	1	4,986,852	5,254,374
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,612,906	4,020,891	08/01/2019	08/01/2049	Interest Rate Swap			002824-BM-1	ABBOTT LABORATORIES-SENIOR UNSECURED	1	3,612,906	4,020,891
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,312,778	4,611,625	08/01/2019	08/01/2049	Interest Rate Swap			44107H-AC-6	NY Society for Relief of-SECURED	1	4,312,778	4,611,625
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,889,023	4,998,834	08/01/2019	08/01/2049	Interest Rate Swap			68233J-AR-5	ONCOR ELECTRIC DELIVERY-SENIOR SECURED NOTE	1	4,889,023	4,998,834
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		66,000,000	66,620,400	08/01/2019	08/01/2049	Interest Rate Swap			72403Z-MX-9	PIONEERS GATE LLC 2017-1 FNBM	1	66,000,000	66,620,400
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,600,000	5,600,571	08/01/2019	08/01/2049	Interest Rate Swap			40437W-AS-7	HPS Loan Management 14-2-HLM 14A-19 BR	1	5,600,000	5,600,571
57629*ET4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		259,829	259,692	08/01/2019	08/01/2049	Interest Rate Swap			341081-FJ-1	FLORIDA POWER & LIGHT CO-SECURED	1	259,829	259,692
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	2,125,141	1,732,026	08/01/2019	08/01/2049	Interest Rate Swap		(576,402)	45866F-AD-6	INTERCONTINENTALEXCHANGE-SENIOR UNSECURED	2	2,125,141	2,308,428
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,497,869	9,479,749	08/01/2019	08/01/2049	Interest Rate Swap			64952W-CX-9	New York Life Global Fun-SECURED	1	8,497,869	9,479,749
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,172,402	10,167,785	08/01/2019	08/01/2049	Interest Rate Swap			927804-FZ-2	Virginia Electric & Powe-SENIOR UNSECURED	2	9,172,402	10,167,785
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		299,256	324,083	08/01/2019	08/01/2049	Interest Rate Swap			907818-DV-7	UNION PACIFIC CORP-SENIOR UNSECURED NOTE	2	299,256	324,083
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,545,275	8,429,209	08/01/2019	08/01/2049	Interest Rate Swap			559222-AR-5	Magna International Inc-SR UNSECURED	1	7,545,275	8,429,209
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		199,918	211,003	08/01/2019	08/01/2049	Interest Rate Swap			857477-AL-7	State Street Corp-SUBORDINATED NOTE	1	199,918	211,003
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,138,801	11,480,738	08/01/2019	08/01/2049	Interest Rate Swap			863871-AM-1	STUDENT LOAN MKTG ASSOC-ZERO CPN BND	2	10,138,801	11,480,738
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,162,762	3,487,326	08/01/2019	08/01/2049	Interest Rate Swap			91159H-HR-4	US Bancorp-SENIOR UNSECURED	1	3,162,762	3,487,326

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,375,000	6,836,703	08/01/2019	08/01/2049	Interest Rate Swap				680033-AC-1	Old National Bancorp/IN-SENIOR UNSECURED NOTE	1	6,375,000	6,836,703
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,329,715	2,604,988	08/01/2019	08/01/2049	Interest Rate Swap				22160K-AM-7	Costco Wholesale Corp-SENIOR UNSECURED	1	2,329,715	2,604,988
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,440,567	25,333,620	08/01/2019	08/01/2049	Interest Rate Swap				594918-BE-3	MICROSOFT CORP-SR UNSECURED	1	24,440,567	25,333,620
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,883,178	10,984,286	08/01/2019	08/01/2049	Interest Rate Swap				594918-CA-0	Microsoft Corp-SENIOR UNSECURED	1	11,883,178	10,984,286
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,478,151	4,644,050	08/01/2019	08/01/2049	Interest Rate Swap				70109H-AK-1	Parker-Hannifin Corp-NOTE	2	4,478,151	4,644,050
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,861,592	8,614,970	08/01/2019	08/01/2049	Interest Rate Swap				0010EP-AN-8	AEP TEXAS CENTRAL CO-SR UNSECURED	1	7,861,592	8,614,970
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,183,819	8,234,362	08/01/2019	08/01/2049	Interest Rate Swap				24422E-RE-1	John Deere Capital Corp-SENIOR UNSECURED NOTE	1	8,183,819	8,234,362
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,241,925	7,857,578	08/01/2019	08/01/2049	Interest Rate Swap				448814-CS-0	HYDRO-QUEBEC-DEBENTURE	1	7,241,925	7,857,578
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		45,000,000	45,000,000	08/01/2019	08/01/2049	Interest Rate Swap				57542Z-AG-8	MM Investment Holding Revolver Fixed Line	2	45,000,000	45,000,000
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,042,026	1,122,089	08/01/2019	08/01/2049	Interest Rate Swap				92826C-AD-4	VISA INC-SR UNSECURED	1	1,042,026	1,122,089
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,203,108	2,506,900	08/01/2019	08/01/2049	Interest Rate Swap				45866F-AF-1	Intercontinental Exchange-SENIOR UNSECURED	2	2,203,108	2,506,900
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,453,467	8,097,115	08/01/2019	08/01/2049	Interest Rate Swap				94974B-GH-7	Wells Fargo & Co-SR UNSECURED	2	7,453,467	8,097,115
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,283,728	7,503,644	08/01/2019	08/01/2049	Interest Rate Swap				377373-AD-7	GLAXOSMITHKLINE CAP LTD-SR UNSECURED	1	7,283,728	7,503,644
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,786,058	7,064,938	08/01/2019	08/01/2049	Interest Rate Swap				478111-AB-3	JOHNS HOPKINS HEALTH SYS-SENIOR UNSECURED NOTE	1	6,786,058	7,064,938
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,136,560	4,393,938	08/01/2019	08/01/2049	Interest Rate Swap				09681L-AJ-9	BOC Aviation Ltd-SENIOR UNSECURED	1	4,136,560	4,393,938
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,895,845	5,493,643	08/01/2019	08/01/2049	Interest Rate Swap				133131-AW-2	Camden Property Trust-SENIOR UNSECURED	1	4,895,845	5,493,643
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,788,056	2,895,575	08/01/2019	08/01/2049	Interest Rate Swap				903638-AA-8	USTA National Tennis Cen Senior Secured	1	2,788,056	2,895,575
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,571,856	2,582,211	08/01/2019	08/01/2049	Interest Rate Swap				247358-FG-4	EAI V Delta MSN 15200	1	2,571,856	2,582,211
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,440,000	1,478,078	08/01/2019	08/01/2049	Interest Rate Swap				48661E-AF-5	KAYNE ANDERSON MID/ENERGY-SR UNSEC	1	1,440,000	1,478,078
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,000,000	3,312,261	08/01/2019	08/01/2049	Interest Rate Swap				42251F-AM-6	SER C	1	3,000,000	3,312,261
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,408,063	2,416,533	08/01/2019	08/01/2049	Interest Rate Swap				247358-EE-0	HEB Grocery Co. L.P. Senior Note Ser	1	2,408,063	2,416,533
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,400,936	2,409,381	08/01/2019	08/01/2049	Interest Rate Swap				247358-MT-8	EAI V Delta MSN 15186	1	2,400,936	2,409,381
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,661,382	14,970,140	08/01/2019	08/01/2049	Interest Rate Swap				16876B-AB-8	Children's Hospital Corp-SENIOR UNSECURED	1	16,661,382	14,970,140
57629*EX5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		28,234,103	32,493,561	08/01/2019	08/01/2049	Interest Rate Swap				00401M-AB-2	ABU DHABI CRUDE OIL PIPE-SECURED	1	28,234,103	32,493,561
57629*ER8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2	150,000,000	16,587,170	7,035,061	08/30/2019	08/30/2034	Interest Rate Swap		(10,274,551)		443510-AF-9	Hubbell Inc-SENIOR UNSECURED NOTE	2	16,587,170	17,309,612
57629*ER8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		13,700,000	14,635,299	08/30/2019	08/30/2034	Interest Rate Swap				03666H-AA-9	Antares Holdings LP-SENIOR UNSECURED	2	13,700,000	14,635,299
57629*ER8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		12,310,134	12,713,226	08/30/2019	08/30/2034	Interest Rate Swap				445658-CE-5	JB HUNT TRANSPRT SVCS-SR UNSECURED	2	12,310,134	12,713,226
57629*ER8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		12,160,209	12,993,279	08/30/2019	08/30/2034	Interest Rate Swap				708696-BY-4	Pennsylvania Electric Co-SENIOR UNSECURED	2	12,160,209	12,993,279
57629*ER8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		23,897,148	26,845,870	08/30/2019	08/30/2034	Interest Rate Swap				806851-AK-7	Schlumberger Holdings Co-SENIOR UNSECURED	2	23,897,148	26,845,870
57629*ER8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		20,607,721	22,776,822	08/30/2019	08/30/2034	Interest Rate Swap				10510K-AC-1	BRAMBLES USA INC-SR UNSECURED	2	20,607,721	22,776,822
57629*ER8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		32,686,122	36,802,822	08/30/2019	08/30/2034	Interest Rate Swap				438516-BB-1	HONEYWELL INTERNATIONAL - SENIOR UNSECURED NOTE	1	32,686,122	36,802,822

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*ERB	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		4,835,861	5,278,659	08/30/2019	08/30/2034	Interest Rate Swap			438516-AT-3	HONEYWELL INTERNATIONAL -SENIOR NOTE	1	4,835,861	5,278,659
57629*ERB	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		15,228,823	15,418,822	08/30/2019	08/30/2034	Interest Rate Swap			03328Y-AA-2	ANCHORAGE CAPITAL CLO 1--ANCHC 2018-1RA A1	1	15,228,823	15,418,822
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2	200,000,000	13,263,935	(5,837,860)	08/30/2019	08/30/2039	Interest Rate Swap		(20,863,075)	883556-BX-9	Thermo Fisher Scientific-SENIOR UNSECURED	2	13,263,935	15,025,215
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		19,719,444	18,516,599	08/30/2019	08/30/2039	Interest Rate Swap			693304-AY-3	PECO Energy Co-SECURED	1	19,719,444	18,516,599
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		15,821,557	17,922,351	08/30/2019	08/30/2039	Interest Rate Swap			579780-AN-7	MCCORMICK & CO INC/MID-SENIOR UNSECURED	2	15,821,557	17,922,351
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		21,658,650	20,968,588	08/30/2019	08/30/2039	Interest Rate Swap			90932K-AA-7	United Airlines 2019-2 C-FIRST LIEN	3	21,658,650	20,968,588
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		26,233,187	29,067,360	08/30/2019	08/30/2039	Interest Rate Swap			22822V-AE-1	CROWN CASTLE INTL CORP-SENIOR UNSECURED	2	26,233,187	29,067,360
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		29,217,514	31,210,247	08/30/2019	08/30/2039	Interest Rate Swap			378272-AF-5	GLENDARE FUNDING LLC-SENIOR UNSECURED NOTE	2	29,217,514	31,210,247
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		26,092,256	28,356,790	08/30/2019	08/30/2039	Interest Rate Swap			05369A-AA-9	Aviation Capital Group L-SENIOR UNSECURED	2	26,092,256	28,356,790
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		45,350,000	49,636,119	08/30/2019	08/30/2039	Interest Rate Swap			592688-B8-3	Mettler-Toledo Internati Senior Note Ser	2	45,350,000	49,636,119
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		10,000,000	10,065,180	08/30/2019	08/30/2039	Interest Rate Swap			290015-AN-6	Elmwood CLO I Ltd-ELM11 2019-1A BR	1	10,000,000	10,065,180
57629*EY3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		7,850,000	7,907,423	08/30/2019	08/30/2039	Interest Rate Swap			48661Q-AE-1	Kayne CLO 9 Ltd-SERIES 20-9A CLASS B1	1	7,850,000	7,907,423
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2	200,000,000	994,684	(30,079,593)	08/30/2019	08/30/2049	Interest Rate Swap		(31,202,250)	984851-AF-2	Yara International ASA-SENIOR UNSECURED	2	994,684	1,122,657
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		30,159,904	33,991,888	08/30/2019	08/30/2049	Interest Rate Swap			28176E-AD-0	Edwards Lifesciences Cor-SENIOR UNSECURED	2	30,159,904	33,991,888
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		37,019,290	42,292,146	08/30/2019	08/30/2049	Interest Rate Swap			361448-BC-6	GATX Corp-SENIOR UNSECURED	2	37,019,290	42,292,146
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		28,813,447	31,593,676	08/30/2019	08/30/2049	Interest Rate Swap			120568-AX-8	BUNGE LTD FINANCE CORP-SENIOR UNSECURED	2	28,813,447	31,593,676
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		24,078,086	23,285,360	08/30/2019	08/30/2049	Interest Rate Swap			00908P-AC-1	Air Canada 2017-1 Class -SECURED	3	24,078,086	23,285,360
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		5,109,275	5,856,350	08/30/2019	08/30/2049	Interest Rate Swap			171340-AN-2	CHURCH & DWIGHT CO INC-SENIOR UNSECURED	2	5,109,275	5,856,350
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		10,215,752	10,605,564	08/30/2019	08/30/2049	Interest Rate Swap			80687P-AA-4	Schneider Electric SE-SENIOR UNSECURED NOTE	1	10,215,752	10,605,564
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		45,110,145	49,161,023	08/30/2019	08/30/2049	Interest Rate Swap			23338V-AE-6	DTE Electric Co-SECURED	1	45,110,145	49,161,023
57629*EU1	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	2		40,000,000	40,000,000	08/30/2019	08/30/2049	Interest Rate Swap			57542Z-A9-8	MM Investment Holding Revolver Fixed Line	2	40,000,000	40,000,000
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	306,000,000	75,000,000	38,998,807	09/03/2019	09/03/2049	Interest Rate Swap		(45,066,818)	30290Y-AC-5	FS Global Credit Opportu-FS GLOBAL CREDIT	1	75,000,000	84,065,625
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,452,183	11,713,620	09/03/2019	09/03/2049	Interest Rate Swap			801060-AD-6	Sanofi-SENIOR UNSECURED	1	10,452,183	11,713,620
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,075,438	7,725,796	09/03/2019	09/03/2049	Interest Rate Swap			00108W-AH-3	AEP Texas Inc-SENIOR UNSECURED	1	7,075,438	7,725,796
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,200,000	23,489,299	09/03/2019	09/03/2049	Interest Rate Swap			892331-AD-1	Toyota Motor Corp-SENIOR UNSECURED	1	21,200,000	23,489,299
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		28,852,206	32,289,974	09/03/2019	09/03/2049	Interest Rate Swap			79466L-AF-1	salesforce.com Inc-SENIOR UNSECURED	1	28,852,206	32,289,974
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		27,881,945	30,750,443	09/03/2019	09/03/2049	Interest Rate Swap			369550-BC-1	General Dynamics Corp-SENIOR UNSECURED	1	27,881,945	30,750,443
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,799,168	25,737,689	09/03/2019	09/03/2049	Interest Rate Swap			892330-AC-5	Toyota Industries Corp-SENIOR UNSECURED	1	23,799,168	25,737,689
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		34,566,900	34,907,880	09/03/2019	09/03/2049	Interest Rate Swap			501886-AT-0	LCM XVIII LP-LCM 18A A1R	1	34,566,900	34,907,880
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		45,000,000	45,000,675	09/03/2019	09/03/2049	Interest Rate Swap			13876J-AC-6	Canyon Capital CLO Ltd-CANVC 2012-1RA A	1	45,000,000	45,000,675
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,312,916	2,484,652	09/03/2019	09/03/2049	Interest Rate Swap			313747-AU-1	Federal Realty Investmen-SENIOR UNSECURED	1	2,312,916	2,484,652

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,914,050	7,136,183	09/03/2019	09/03/2049	Interest Rate Swap			219868-BS-4	CORP ANDINA DE FOMENTO-SENIOR UNSECURED NOTE	1	6,914,050	7,136,183
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,302,736	5,509,394	09/03/2019	09/03/2049	Interest Rate Swap			879240-AQ-2	COMCAST CABLE HOLDINGS-SENIOR UNSECURED NOTE	1	5,302,736	5,509,394
57629*FB2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		45,000,000	45,000,000	09/03/2019	09/03/2049	Interest Rate Swap			57542Z-A9-8	MM Investment Holding Revolver Fixed Line	2	45,000,000	45,000,000
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	255,000,000	25,000,000	(11,325,082)	09/03/2019	09/03/2049	Interest Rate Swap		(36,325,082)	57542Z-A9-8	MM Investment Holding Revolver Fixed Line	2	25,000,000	25,000,000
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,931,769	8,795,905	09/03/2019	09/03/2049	Interest Rate Swap			06406R-AF-4	Bank of New York Mellon -SENIOR UNSECURED	1	7,931,769	8,795,905
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,621,198	3,032,503	09/03/2019	09/03/2049	Interest Rate Swap			90932P-AA-6	UNITED AIR 2014-1 A PTT-SECURED NOTE	2	2,621,198	3,032,503
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,826,398	14,325,663	09/03/2019	09/03/2049	Interest Rate Swap			606822-AV-6	Mitsubishi UFJ Financial-SENIOR UNSECURED	1	12,826,398	14,325,663
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,532,912	14,034,288	09/03/2019	09/03/2049	Interest Rate Swap			808513-AG-0	CHARLES SCHWAB CORP-SENIOR UNSECURED NOTE	1	13,532,912	14,034,288
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,076,167	3,390,538	09/03/2019	09/03/2049	Interest Rate Swap			857477-AN-3	State Street Corp-SR UNSECURED	1	3,076,167	3,390,538
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,800,000	7,462,653	09/03/2019	09/03/2049	Interest Rate Swap			631005-BH-7	Narragansett Electric Co-SENIOR UNSECURED	2	6,800,000	7,462,653
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,417,768	2,690,358	09/03/2019	09/03/2049	Interest Rate Swap			532457-AZ-1	Eli Lilly & Co-SENIOR UNSECURED	1	2,417,768	2,690,358
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,976,428	2,041,087	09/03/2019	09/03/2049	Interest Rate Swap			06366R-JJ-5	BANK OF MONTREAL-SR UNSECURED	1	1,976,428	2,041,087
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,104,882	13,445,630	09/03/2019	09/03/2049	Interest Rate Swap			09062X-AF-0	BIOMGEN INC-SR UNSECURED	1	12,104,882	13,445,630
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,346,283	7,796,917	09/03/2019	09/03/2049	Interest Rate Swap			46625H-JY-7	JPMorgan Chase & Co-SUBORDINATED NOTE	1	7,346,283	7,796,917
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,667,293	2,984,071	09/03/2019	09/03/2049	Interest Rate Swap			452308-AX-7	Illinois Tool Works Inc-SENIOR UNSECURED	1	2,667,293	2,984,071
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,663,918	3,678,001	09/03/2019	09/03/2049	Interest Rate Swap			10112R-AU-8	BOSTON PROPERTIES LP-SENIOR UNSECURED NOTE REID	2	3,663,918	3,678,001
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		31,192,981	32,883,333	09/03/2019	09/03/2049	Interest Rate Swap			254687-CP-9	Walt Disney Co/The-SENIOR UNSECURED	1	31,192,981	32,883,333
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,604,460	8,183,488	09/03/2019	09/03/2049	Interest Rate Swap			313747-AY-3	Federal Realty Investmen-SENIOR UNSECURED	1	7,604,460	8,183,488
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,079,011	7,658,903	09/03/2019	09/03/2049	Interest Rate Swap			477143-AJ-0	JetBlue 2019-1 Class A P-FIRST LIEN	2	8,079,011	7,658,903
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,193,751	6,914,408	09/03/2019	09/03/2049	Interest Rate Swap			670346-AP-0	Nucor Corp-SENIOR UNSECURED	2	6,193,751	6,914,408
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,871,504	7,875,167	09/03/2019	09/03/2049	Interest Rate Swap			91159H-HA-1	US BANCORP-SENIOR UNSECURED NOTE	1	7,871,504	7,875,167
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,800,000	23,811,305	09/03/2019	09/03/2049	Interest Rate Swap			42086V-AC-4	Hayfin Kingsland X Ltd-SERIES 2019-1A CLASS B1	1	23,800,000	23,811,305
57629*ES6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		100,000,000	100,003,600	09/03/2019	09/03/2049	Interest Rate Swap			42086Q-AA-9	Kingsland VI Ltd-KING 2013-6A AR	1	100,000,000	100,003,600
57629*EG2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	89,000,000	16,000,000	3,309,588	09/03/2019	09/03/2049	Interest Rate Swap		(12,691,372)	06760X-AC-8	BARINGS CLO LTD 2018-IV-SERIES 18-4A CLASS A2	1	16,000,000	16,000,960
57629*EG2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		63,000,000	62,976,375	09/03/2019	09/03/2049	Interest Rate Swap			87271L-AJ-1	TIAA CLO I Ltd-TIA 2016-1A AR	1	63,000,000	62,976,375
57629*EG2	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	30,000,000	09/03/2019	09/03/2049	Interest Rate Swap			57542Z-A9-8	MM Investment Holding Revolver Fixed Line	2	30,000,000	30,000,000
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	125,000,000	40,000,000	31,903,900	01/08/2020	01/08/2050	Interest Rate Swap		(8,096,100)	57542Z-A9-8	MM Investment Holding Revolver Fixed Line	2	40,000,000	40,000,000
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,600,517	13,602,067	01/08/2020	01/08/2050	Interest Rate Swap			09626U-AJ-2	BlueMountain CLO 2013-1 -SERIES 2013-1A CLASS A1R2	1	13,600,517	13,602,067
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,441,427	12,443,430	01/08/2020	01/08/2050	Interest Rate Swap			50188Q-AJ-0	LCM XVIII LP-LCM 19A AR	1	12,441,427	12,443,430
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,600,000	11,601,183	01/08/2020	01/08/2050	Interest Rate Swap			64130H-AN-1	Neuberger Berman Loan Ad-NEUB 2017-24A BR FLOATING	1	11,600,000	11,601,183
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,700,000	11,702,048	01/08/2020	01/08/2050	Interest Rate Swap			05683V-AJ-3	BCC 2019-1A B	1	11,700,000	11,702,048

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,600,000	11,600,684	01/08/2020	01/08/2050	Interest Rate Swap				88434H-AG-8	THL Credit Wind River 20-WINDR 2018-2A B	1	11,600,000	11,600,684
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,700,000	11,702,106	01/08/2020	01/08/2050	Interest Rate Swap				06759J-AG-3	Barings CLO Ltd 2019-I-SERIES 19-1A CLASS B	1	11,700,000	11,702,106
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,750,000	11,691,332	01/08/2020	01/08/2050	Interest Rate Swap				50200F-AE-9	LOM 26 Ltd-SERIES 26A CLASS B	1	11,750,000	11,691,332
57629*EA5	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,165,547	13,703,000	01/08/2020	01/08/2050	Interest Rate Swap				92917N-AJ-7	Voya CLO 2019-1 Ltd-VOYA 2019-1A AR	1	12,165,547	13,703,000
57629*EB3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	110,000,000	107,980,386	01/08/2020	01/08/2032	Interest Rate Swap		(1,316,934)		85816W-AC-8	Steele Creek CLO 2014-1-SERIES 14-1RA CLASS A	1	110,000,000	109,297,320
57629*EB3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		55,000,000	55,129,965	01/08/2020	01/08/2032	Interest Rate Swap				03329F-AA-2	Anchorage Credit Funding-ANCHF 2020-15A A FLOATING COU	1	55,000,000	55,129,965
57629*EB3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		32,670,226	33,182,424	01/08/2020	01/08/2032	Interest Rate Swap				40638T-AA-0	Halsey Point CLO Ltd-SERIES 20-2A CLASS A1	1	32,670,226	33,182,424
57629*EB3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	30,069,960	01/08/2020	01/08/2032	Interest Rate Swap				83614X-AA-9	Sound Point CLO Ltd-SERIES 20-1A CLASS A1A	1	30,000,000	30,069,960
57629*EB3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,409,215	24,947,250	01/08/2020	01/08/2032	Interest Rate Swap				05875H-AA-1	Ballyrock CLO 2018-1 Ltd	1	24,409,215	24,947,250
57629*EW7	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	200,000,000	206,000,000	201,859,151	01/08/2020	01/08/2035	Interest Rate Swap		(4,140,849)		12499F-MM-8	CCOF Onshore Co-Borrower Revolving Loan	1	206,000,000	206,000,000
57629*ED9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	150,000,000	41,028,819	35,568,038	01/08/2020	01/08/2040	Interest Rate Swap		(5,937,731)		033291-AA-3	Anchorage Capital Clo 13-ANCHC 2019-13A A	1	41,028,819	41,505,769
57629*ED9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,600,000	23,567,456	01/08/2020	01/08/2040	Interest Rate Swap				542798-AC-7	Long Point Park CLO Ltd-LNGPT 2017-1A A1B	1	23,600,000	23,567,456
57629*ED9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		34,941,652	35,168,430	01/08/2020	01/08/2040	Interest Rate Swap				282523-AH-2	1828 CLO Ltd-GUGG4 2016-1A A1S1	1	34,941,652	35,168,430
57629*ED9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,000,000	25,002,300	01/08/2020	01/08/2040	Interest Rate Swap				14312J-AA-5	CGMS 2015-5A A1R	1	25,000,000	25,002,300
57629*ED9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,000,000	24,002,184	01/08/2020	01/08/2040	Interest Rate Swap				48252R-AA-2	KKR 24 A1	1	24,000,000	24,002,184
57629*ED9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,400,000	12,401,252	01/08/2020	01/08/2040	Interest Rate Swap				124166-AE-9	Buttermilk Park CLO Ltd-BMILK 2018-1A B1	1	12,400,000	12,401,252
57629*FA4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	400,000,000	74,770,000	37,284,250	02/11/2020	02/11/2050	Interest Rate Swap		(42,209,494)		A3158F-AC-3	Hofer Financial Services Senior Note Ser	1	74,770,000	79,493,744
57629*FA4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		79,100,000	85,395,490	02/11/2020	02/11/2050	Interest Rate Swap				87278*-AD-4	TPF Equity REIT Operatin Gtd Senior Note	1	79,100,000	85,395,490
57629*FA4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		57,050,000	62,125,225	02/11/2020	02/11/2050	Interest Rate Swap				00458*-AB-5	AquaSure Finance Pty Ltd Gtd Senior Secu	1	57,050,000	62,125,225
57629*FA4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		59,800,000	63,193,770	02/11/2020	02/11/2050	Interest Rate Swap				G5147*-AD-8	Johnson Matthey PLC Senior Note Ser	1	59,800,000	63,193,770
57629*FA4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		62,900,000	68,333,742	02/11/2020	02/11/2050	Interest Rate Swap				786584-AA-9	Safran Senior Note Ser	2	62,900,000	68,333,742
57629*FA4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		62,800,000	70,242,177	02/11/2020	02/11/2050	Interest Rate Swap				Q0832*-AD-8	Australia Pacific Airpor Gtd Senior Note	2	62,800,000	70,242,177
57629*FA4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,500,000	7,434,368	02/11/2020	02/11/2050	Interest Rate Swap				03330A-AE-2	Anchorage Capital CLO 3-ANCHC 2014-3RA C	1	7,500,000	7,434,368
57629*FA4	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,750,000	6,751,330	02/11/2020	02/11/2050	Interest Rate Swap				00119Y-AC-7	AGL CLO Ltd-AGL 2021-10A B	1	6,750,000	6,751,330
57629*EH0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	25,000,000	19,100,000	16,122,818	02/20/2020	02/20/2050	Interest Rate Swap		(3,059,178)		07090A-AA-1	BATLN 2019-14A A1	1	19,100,000	19,181,996
57629*EH0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,758,961	8,300,332	02/20/2020	02/20/2050	Interest Rate Swap				48253W-AA-0	KKR CLO 28 LTD-KKR 28A A	1	7,758,961	8,300,332
57629*EH0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,000,000	1,977,306	02/20/2020	02/20/2050	Interest Rate Swap				63942N-AC-2	Navient Student Loan Tru-NAVSL 2021-1A B	1	2,000,000	1,977,306
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	185,000,000	11,400,000	(11,194,216)	02/20/2020	02/20/2050	Interest Rate Swap		(22,596,462)		05683H-AE-5	BAIN CAPITAL CREDIT CLO -SERIES 17-2A CLASS BR	1	11,400,000	11,402,246
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,500,000	10,501,848	02/20/2020	02/20/2050	Interest Rate Swap				06759J-AE-8	Barings CLO Ltd 2019-I-SERIES 19-1A CLASS A2	1	10,500,000	10,501,848
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,400,000	12,368,616	02/20/2020	02/20/2050	Interest Rate Swap				38136F-AW-3	Goldentree Loan Management U	1	12,400,000	12,368,616
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,500,000	11,501,495	02/20/2020	02/20/2050	Interest Rate Swap				282523-AM-1	1828 CLO Ltd-GUGG4 2016-1A A1JR	1	11,500,000	11,501,495

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,100,000	9,101,729	02/20/2020	02/20/2050	Interest Rate Swap			413717-AC-3	Harriman Park CLO LTD-HRPK 2020-1A B1	1	9,100,000	9,101,729
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	8,000,544	02/20/2020	02/20/2050	Interest Rate Swap			14317R-AC-3	CARLYLE US CLO 2018-3 LT-CGMS 2018-3A A1B	1	8,000,000	8,000,544
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,700,000	7,717,810	02/20/2020	02/20/2050	Interest Rate Swap			67113G-AG-2	Oak Hill Credit Partners-OAKC 2020-5A B	1	7,700,000	7,717,810
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,200,000	9,200,607	02/20/2020	02/20/2050	Interest Rate Swap			64129J-BG-4	Neuberger Berman CLO XIV-NEUB 2013-14A BR2	1	9,200,000	9,200,607
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	8,000,904	02/20/2020	02/20/2050	Interest Rate Swap			27831B-AE-3	Eaton Vance CLO 2018-1 L-EATON 2018-1A B	1	8,000,000	8,000,904
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,800,000	7,801,108	02/20/2020	02/20/2050	Interest Rate Swap			67592F-AE-9	OCTAGON INVESTMENT PARTNERS 41, LTD	1	7,800,000	7,801,108
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,800,000	7,801,240	02/20/2020	02/20/2050	Interest Rate Swap			06761H-AE-8	Babson CLO Ltd/Cayman Is-SERIES 19-2A CLASS A2	1	7,800,000	7,801,240
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,300,000	6,301,304	02/20/2020	02/20/2050	Interest Rate Swap			14316B-AE-5	Carlyle Global Market St-SERIES 19-1A CLASS A2	1	6,300,000	6,301,304
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,134,550	3,200,182	02/20/2020	02/20/2050	Interest Rate Swap			05875H-AC-7	BALLYROCK CLO 2018-1 LTD-SERIES 2018-1A CLASS A2	1	3,134,550	3,200,182
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,921,065	9,965,005	02/20/2020	02/20/2050	Interest Rate Swap			03328T-BC-8	Anchorage Capital CLO 7 -ANCHC 2015-7A BR2 FLOATING	1	9,921,065	9,965,005
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,000,000	8,000,744	02/20/2020	02/20/2050	Interest Rate Swap			74979V-AE-3	RR Ltd-RRAM 2018-5A A2	1	8,000,000	8,000,744
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,300,000	6,301,304	02/20/2020	02/20/2050	Interest Rate Swap			67592B-AE-8	Octagon Investment Partn-OCT40 2019-1A B	1	6,300,000	6,301,304
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,020,300	02/20/2020	02/20/2050	Interest Rate Swap			74980P-AC-7	ALM Ltd/KY-SERIES 21-14A CLASS A2	1	20,000,000	20,020,300
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,700,000	7,701,548	02/20/2020	02/20/2050	Interest Rate Swap			97314H-AC-3	Wind River CLO Ltd-WINDR 2021-1A B1	1	7,700,000	7,701,548
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,300,000	6,301,184	02/20/2020	02/20/2050	Interest Rate Swap			67707E-AG-9	OAKC 2019-2A B1	1	6,300,000	6,301,184
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,300,000	6,301,166	02/20/2020	02/20/2050	Interest Rate Swap			12553D-AC-1	CIFC Funding 2019-1 Ltd-CIFC 2019-1A B	1	6,300,000	6,301,166
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,000,960	02/20/2020	02/20/2050	Interest Rate Swap			55820C-AG-0	Madison Park Funding XXI-MDPK 2018-29A B	1	10,000,000	10,000,960
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,800,000	7,801,435	02/20/2020	02/20/2050	Interest Rate Swap			88433C-AE-5	WINDR 2019-1A B	1	7,800,000	7,801,435
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	7,001,169	02/20/2020	02/20/2050	Interest Rate Swap			50188Q-AL-5	LCM XVIII LP-LCM 19A BR	1	7,000,000	7,001,169
57629*EJ6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,000,000	7,001,876	02/20/2020	02/20/2050	Interest Rate Swap			36248M-AL-1	GT Loan Financing I Ltd -SERIES 2013-1A CLASS BR	1	7,000,000	7,001,876
57629*FC0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	215,000,000	172,685,732	146,135,901	02/20/2020	02/20/2050	Interest Rate Swap	(26,549,831)		50079E-MS-5	KREF Lending VII LLC - Term Loan Series 2019-7	1	172,685,732	172,685,732
57629*FC0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,770,000	4,758,055	02/20/2020	02/20/2050	Interest Rate Swap			48275P-AG-6	KREF 2018-FL1 Ltd-KREF 2018-FL1 C	1	4,770,000	4,758,055
57629*FC0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,000,000	22,002,332	02/20/2020	02/20/2050	Interest Rate Swap			97315T-AE-2	THL Credit Wind River 20-WINDR 2017-1A BR	1	22,000,000	22,002,332
57629*FC0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,250,000	21,252,040	02/20/2020	02/20/2050	Interest Rate Swap			87246M-AS-1	TICP CLO VI 2016-2 Ltd-TICP 2016-6A BR2	1	21,250,000	21,252,040
57629*FC0	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,000,000	21,002,037	02/20/2020	02/20/2050	Interest Rate Swap			55821C-AC-8	Atrium IX-ATRM 9A BR2	1	21,000,000	21,002,037
57629*EV9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	51,500,000	18,717,428	02/25/2020	02/25/2050	Interest Rate Swap		(37,383,737)	65791F-AA-9	Manchester United Football Club, Ltd Senior Secu	1	51,500,000	56,101,165
57629*EV9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		56,000,000	56,000,000	02/25/2020	02/25/2050	Interest Rate Swap			57542Z-AG-8	MM Investment Holding Revolver Fixed Line	2	56,000,000	56,000,000
57629*EV9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		45,500,000	48,843,295	02/25/2020	02/25/2050	Interest Rate Swap			15678F-AJ-4	Cerner Corporation Senior Note Ser	1	45,500,000	48,843,295
57629*EV9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		39,500,000	40,927,333	02/25/2020	02/25/2050	Interest Rate Swap			Q9396F-AK-7	Victoria Power Networks Gtd Senior Note	1	39,500,000	40,927,333
57629*EV9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	15,002,835	02/25/2020	02/25/2050	Interest Rate Swap			04019L-AC-8	ARES 2019-51A A2	1	15,000,000	15,002,835
57629*EV9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,242,543	31,849,674	02/25/2020	02/25/2050	Interest Rate Swap			04351L-AA-8	ASCENSION HEALTH-UNSECURED BOND	1	24,242,543	31,849,674

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*EV9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,507,578	3,900,722	02/25/2020	02/25/2050	Interest Rate Swap				48251B-AN-0	KKR Clo 16 Ltd-KKR 16 A2R	1	3,507,578	3,900,722
57629*EV9	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		32,267,709	35,861,751	02/25/2020	02/25/2050	Interest Rate Swap				46247E-AA-2	Iowa Interstate Railroad Senior Secured	1	32,267,709	35,861,751
57629*EZO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	37,900,000	5,141,309	02/25/2020	02/25/2050	Interest Rate Swap		(36,711,320)		Q3920#-AL-3	Fonterra Co-operative Gr Senior Unsecured Notes	1	37,900,000	41,852,629
57629*EZO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		42,700,000	46,832,079	02/25/2020	02/25/2050	Interest Rate Swap				838515-G*-9	South Jersey Gas Co. First Mortgage	1	42,700,000	46,832,079
57629*EZO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,200,000	31,333,617	02/25/2020	02/25/2050	Interest Rate Swap				23325P-A*-5	DNP Select Income Fund I Senior Secured	1	30,200,000	31,333,617
57629*EZO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		36,150,000	44,538,933	02/25/2020	02/25/2050	Interest Rate Swap				Q3535#-AD-8	Envestra Victoria Pty Lt Senior Secured	1	36,150,000	44,538,933
57629*EZO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		39,000,000	42,483,129	02/25/2020	02/25/2050	Interest Rate Swap				74986E-AV-3	RREEF AMERICA REIT II INC SR UNSEC	1	39,000,000	42,483,129
57629*EZO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		38,250,000	40,891,010	02/25/2020	02/25/2050	Interest Rate Swap				Q3920#-AG-4	NT SER D Fonterra Co-operative Gr Senior Note	1	38,250,000	40,891,010
57629*EZO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,983,499	28,028,698	02/25/2020	02/25/2050	Interest Rate Swap				873050-CM-1	TTX CO-SENIOR UNSECURED	1	24,983,499	28,028,698
57629*EZO	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,100,000	14,100,705	02/25/2020	02/25/2050	Interest Rate Swap				69688A-AA-9	Palmer Square CLO 2013-2-SERIES 13-2A CLASS AARR	1	14,100,000	14,100,705
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	38,900,000	(1,608,513)	02/26/2020	02/26/2050	Interest Rate Swap		(43,333,120)		Q6235#-AN-2	Mirvac Group Finance Ltd Senior Note	1	38,900,000	41,724,607
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		36,742,500	39,898,681	02/26/2020	02/26/2050	Interest Rate Swap				74979U-AA-3	RS 2018 Private, LLC Senior Secured	1	36,742,500	39,898,681
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		35,600,000	38,146,966	02/26/2020	02/26/2050	Interest Rate Swap				05565E-G8-8	BMW U.S. Capital LLC Gtd Senior Note	1	35,600,000	38,146,966
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		38,150,000	41,231,376	02/26/2020	02/26/2050	Interest Rate Swap				Q3189*-AC-3	DEXUS Funds Management L Senior Note Ser	1	38,150,000	41,231,376
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		37,600,000	38,972,212	02/26/2020	02/26/2050	Interest Rate Swap				00003#-AB-9	A&E Television Networks, Senior Note Ser	1	37,600,000	38,972,212
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		31,100,000	33,754,354	02/26/2020	02/26/2050	Interest Rate Swap				74264*-AC-0	PRISA LHC Senior Note Ser	1	31,100,000	33,754,354
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		32,900,000	34,225,870	02/26/2020	02/26/2050	Interest Rate Swap				48661E-B*-8	KAYNE ANDERSON MID/ENERGY-SR UNSEC	1	32,900,000	34,225,870
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,000,000	15,999,968	02/26/2020	02/26/2050	Interest Rate Swap				65023P-AC-3	SER D Newark BSL CLO 2 Ltd-NBCLO 2017-1A A2R	1	16,000,000	15,999,968
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,850,000	9,865,839	02/26/2020	02/26/2050	Interest Rate Swap				48254H-AC-8	KKR Clo 32 Ltd-KKR 32A B	1	9,850,000	9,865,839
57629*FD8	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,300,000	8,344,646	02/26/2020	02/26/2050	Interest Rate Swap				290020-AC-3	Elmwood CLO VII Ltd-ELMW7 2020-4A B	1	8,300,000	8,344,646
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	20,000,000	(51,864,855)	06/15/2020	06/15/2050	Interest Rate Swap		(71,922,595)		67576X-AA-8	Octagon Credit Investors-SERIES 20-1A CLASS A1	1	20,000,000	20,057,740
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,250,000	19,286,113	06/15/2020	06/15/2050	Interest Rate Swap				125550-AA-4	CIFC Funding Ltd	1	19,250,000	19,286,113
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,000,000	19,043,016	06/15/2020	06/15/2050	Interest Rate Swap				29003B-AA-9	Elmwood CLO V Ltd-ELMW5 2020-2A A1	1	19,000,000	19,043,016
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		88,446,394	88,516,904	06/15/2020	06/15/2050	Interest Rate Swap				29001L-AA-9	ELMWOOD CLO II LTD NT CL A	1	88,446,394	88,516,904
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,300,000	12,336,912	06/15/2020	06/15/2050	Interest Rate Swap				67576X-AE-0	Octagon Credit Investors-SERIES 20-1A CLASS B	1	12,300,000	12,336,912
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,080,268	12,212,310	06/15/2020	06/15/2050	Interest Rate Swap				86315R-AC-3	Stratus CLO 2020-1, Ltd.-STRAS 2020-1A B	1	12,080,268	12,212,310
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,750,000	11,780,938	06/15/2020	06/15/2050	Interest Rate Swap				04018B-AC-1	Ares LV CLO Ltd-SERIES 2020-55A CLASS B	1	11,750,000	11,780,938
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,050,000	10,056,332	06/15/2020	06/15/2050	Interest Rate Swap				38138L-AA-6	Goldentree Loan Managem-SERIES 20-7A CLASS A	1	10,050,000	10,056,332
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,200,000	9,200,883	06/15/2020	06/15/2050	Interest Rate Swap				39809G-AC-9	GREYWOLF CLO VI Ltd-GWOLF 2018-1A A2	1	9,200,000	9,200,883
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,650,000	8,650,631	06/15/2020	06/15/2050	Interest Rate Swap				67400F-AE-1	OAKTREE CLO 2018-1 LTD SR SEC'D NT CL A-2	1	8,650,000	8,650,631
57629*FF3	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,930,398	8,300,921	06/15/2020	06/15/2050	Interest Rate Swap				124166-AA-7	Buttermilk Park CLO Ltd-BMILK 2018-1A A1	1	7,930,398	8,300,921

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,166,548	8,204,592	06/15/2020	06/15/2050	Interest Rate Swap				69701H-AC-3	Palmer Square CLO Ltd	1	8,166,548	8,204,592
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,071,989	7,258,925	06/15/2020	06/15/2050	Interest Rate Swap				87250C-AA-5	TICP CLO Ltd	1	7,071,989	7,258,925
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,200,000	7,200,806	06/15/2020	06/15/2050	Interest Rate Swap				06759M-AE-1	A2R QHA Loan Funding 2016-1 -QHAF 2016-1A B1R	1	7,200,000	7,200,806
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,900,000	6,913,993	06/15/2020	06/15/2050	Interest Rate Swap				67110U-AN-9	QHA Loan Funding 2016-1 -QHAF 2016-1A B1R	1	6,900,000	6,913,993
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,900,000	6,900,952	06/15/2020	06/15/2050	Interest Rate Swap				92338B-AE-5	VERDE CLO-VERDE 2019-1A B TICP CLO X LTD-SERIES 18-10A CLASS	1	6,900,000	6,900,952
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,700,000	6,700,054	06/15/2020	06/15/2050	Interest Rate Swap				87249C-AC-5	KREF 2018-FL1 Ltd-KREF 2018-FL1 B	1	6,700,000	6,700,054
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,650,000	6,645,807	06/15/2020	06/15/2050	Interest Rate Swap				48275P-AE-1	Goldentree Loan Managem-SERIES 19-6A CLASS B1	1	6,650,000	6,645,807
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,600,000	6,627,865	06/15/2020	06/15/2050	Interest Rate Swap				38137W-AE-5	Goldentree Loan Managem-SERIES 19-6A CLASS B1	1	6,600,000	6,627,865
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,887,030	6,211,160	06/15/2020	06/15/2050	Interest Rate Swap				87250R-AA-2	TICP CLO XV Ltd-TICP 2020-15A A Magnetite CLO Ltd-MAGNE 2020-26A B FLOATING	1	5,887,030	6,211,160
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,950,000	5,964,096	06/15/2020	06/15/2050	Interest Rate Swap				55954Y-AC-9	Elmwood CLO IV Ltd-ELMIV4 2020-1A B	1	5,950,000	5,964,096
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,800,000	5,810,272	06/15/2020	06/15/2050	Interest Rate Swap				29002G-AC-5	Elmwood CLO IV Ltd-ELMIV4 2020-1A B	1	5,800,000	5,810,272
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,750,000	5,750,391	06/15/2020	06/15/2050	Interest Rate Swap				77340G-AL-5	Rockford Tower CLO 2017-2 Ltd	1	5,750,000	5,750,391
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,650,000	5,579,635	06/15/2020	06/15/2050	Interest Rate Swap				50200F-AG-4	LCM 26 Ltd-SERIES 26A CLASS C	1	5,650,000	5,579,635
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,155,095	5,205,100	06/15/2020	06/15/2050	Interest Rate Swap				13876L-AA-5	CANYC 2020-1A-A FLOATING COUP Canyon Capital CLO Ltd-SERIES 19-1A CLASS B	1	5,155,095	5,205,100
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,400,000	5,401,037	06/15/2020	06/15/2050	Interest Rate Swap				13887T-AC-1	Canyon Capital CLO Ltd-SERIES 19-1A CLASS B	1	5,400,000	5,401,037
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,250,000	5,268,102	06/15/2020	06/15/2050	Interest Rate Swap				12555X-AG-6	CIFC Funding Ltd-CIFC 2019-6A C TCI Direct Lending Structured Solutions 2019 LLC - Class A Note	1	5,250,000	5,268,102
57629*FF3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,400,000	5,400,000	06/15/2020	06/15/2050	Interest Rate Swap				87241F-AA-0	CIFC Funding Ltd-CIFC 2019-6A C TCI Direct Lending Structured Solutions 2019 LLC - Class A Note	1	5,400,000	5,400,000
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	300,000,000	56,453,764	(30,976,300)	06/29/2020	06/29/2050	Interest Rate Swap		(88,470,634)		149123-CJ-8	Caterpillar Inc-SENIOR UNSECURED UnitedHealth Group Inc-SENIOR UNSECURED	1	56,453,764	57,494,334
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		50,534,238	49,168,014	06/29/2020	06/29/2050	Interest Rate Swap				91324P-EA-6	UnitedHealth Group Inc-SENIOR UNSECURED Carnegie Institution of -UNSECURED	1	50,534,238	49,168,014
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		46,543,113	44,886,455	06/29/2020	06/29/2050	Interest Rate Swap				143499-AB-7	Carnegie Institution of -UNSECURED Fred Hutchinson Cancer R-UNSECURED	1	46,543,113	44,886,455
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		40,631,632	42,499,053	06/29/2020	06/29/2050	Interest Rate Swap				355611-AA-2	Emory University-UNSECURED	1	40,631,632	42,499,053
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,892,823	12,765,577	06/29/2020	06/29/2050	Interest Rate Swap				29157T-AD-8	Emory University-UNSECURED	1	12,892,823	12,765,577
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		77,777,778	78,361,111	06/29/2020	06/29/2050	Interest Rate Swap				72403Z-NR-1	PIONEERS GATE LLC 2020-2 CERB	1	77,777,778	78,361,111
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		50,000,000	50,590,000	06/29/2020	06/29/2050	Interest Rate Swap				72403Z-MZ-4	PIONEERS GATE LLC 2017-7 FNBM Carlyle Global Market St-CGMS 2021-3SA A2	1	50,000,000	50,590,000
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,700,000	6,700,697	06/29/2020	06/29/2050	Interest Rate Swap				14315D-AC-6	Duke University-SECURED	1	6,700,000	6,700,697
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,904,223	25,095,942	06/29/2020	06/29/2050	Interest Rate Swap				26442T-AH-0	Duke University-SECURED	1	25,904,223	25,095,942
57629*FE6	Evergreen Basket of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,634,025	25,553,813	06/29/2020	06/29/2050	Interest Rate Swap				06654D-AC-1	Banner Health-UNSECURED CSLB Holdings, Inc. Gtd Senior Note	1	25,634,025	25,553,813
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	191,608,278	16,600,000	(26,722,019)	07/13/2020	07/13/2021	TRS Bond Index		(45,204,426)		12656*-AD-4	CSLB Holdings, Inc. Gtd Senior Note	1	16,600,000	18,482,407
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,500,000	17,647,757	07/13/2020	07/13/2021	TRS Bond Index				12656*-AC-6	CSLB Holdings, Inc. Gtd Senior Note	1	16,500,000	17,647,757
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,500,000	18,110,103	07/13/2020	07/13/2021	TRS Bond Index				09194@-AC-1	Transpower New Zealand L Senior Note Ser	1	16,500,000	18,110,103
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		16,450,000	17,775,294	07/13/2020	07/13/2021	TRS Bond Index				674003-A*-9	Oaktree Capital Managem Senior Note Ser	1	16,450,000	17,775,294

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SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,339,375	10,594,540	07/13/2020	07/13/2021	TRIS Bond Index			02379*-AA-7	American Airlines Group Senior Secured Notes Class A	1	10,339,375	10,594,540
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,400,000	10,402,954	07/13/2020	07/13/2021	TRIS Bond Index			64132J-AG-0	NEUB 2019-31A B	1	10,400,000	10,402,954
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		37,500,035	40,750,485	07/13/2020	07/13/2021	TRIS Bond Index			91412N-AK-6	UNIVERSITY OF CHICAGO-UNSECURED BOND	1	37,500,035	40,750,485
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,200,000	7,322,450	07/13/2020	07/13/2021	TRIS Bond Index			12656*-AB-8	CSLB Holdings, Inc. Gtd Senior Note	1	7,200,000	7,322,450
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,250,000	15,254,198	07/13/2020	07/13/2021	TRIS Bond Index			486606-K#-2	KAYNE ANDERSON MLP INVT CO-SR UNSECD SER KK	1	14,250,000	15,254,198
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,000,000	16,109,550	07/13/2020	07/13/2021	TRIS Bond Index			05616B-A#-1	BABSON CAPITAL PARTN INVS TR-SR CONV NT	1	15,000,000	16,109,550
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,500,000	14,247,995	07/13/2020	07/13/2021	TRIS Bond Index			74170*-AN-9	Prime Property Fund LLC Senior Note Ser	1	13,500,000	14,247,995
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,900,000	12,525,476	07/13/2020	07/13/2021	TRIS Bond Index			73020*-AK-9	PNG Companies LLC Senior Secured Austin Powder Holdings C Senior Note Ser	1	11,900,000	12,525,476
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,730,000	15,105,238	07/13/2020	07/13/2021	TRIS Bond Index			05237*-AH-7	Oaktree Capital Managem Senior Note Ser	1	13,730,000	15,105,238
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		14,325,000	15,754,005	07/13/2020	07/13/2021	TRIS Bond Index			674003-A#-7	Anchorage Capital Clo 13-ANHC	1	14,325,000	15,754,005
57629*FV8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,175,000	7,175,775	07/13/2020	07/13/2021	TRIS Bond Index			033291-AN-5	2019-13A BTR	1	7,175,000	7,175,775
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	200,000,000	23,000,000	(25,989,492)	09/02/2020	09/02/2050	Interest Rate Swap		(50,315,143)	41242*-AY-8	Hardwood Funding LLC Senior Secured	1	23,000,000	24,325,651
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,190,000	24,261,503	09/02/2020	09/02/2050	Interest Rate Swap			07795#-AA-0	QIC Finance (Shopping Ce Gtd Senior Note	1	22,190,000	24,261,503
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,600,000	24,817,987	09/02/2020	09/02/2050	Interest Rate Swap			63144#-AF-7	Fenner International Ltd Gtd Senior Note	1	22,600,000	24,817,987
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,597,462	12,502,099	09/02/2020	09/02/2050	Interest Rate Swap			02376*-AA-0	American Airlines Group Senior Secured	1	12,597,462	12,502,099
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,600,000	23,720,904	09/02/2020	09/02/2050	Interest Rate Swap			05237*-AF-1	Austin Powder Holdings C Senior Note Ser	1	21,600,000	23,720,904
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,600,000	20,201,014	09/02/2020	09/02/2050	Interest Rate Swap			62044#-BA-2	Compass Group PLC Senior Note Ser WINGS Aviation 62696 USD Tranche A-1 Ln	1	18,600,000	20,201,014
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,427,955	21,065,790	09/02/2020	09/02/2050	Interest Rate Swap			929287-ZZ-6	CSLB Holdings, Inc. Gtd Senior Note	1	19,427,955	21,065,790
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,400,000	21,250,782	09/02/2020	09/02/2050	Interest Rate Swap			12656*-AK-8	YORKSHIRE WTR SERV BRADFORD-GTD SR SEC CL A	1	20,400,000	21,250,782
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,100,000	22,534,526	09/02/2020	09/02/2050	Interest Rate Swap			68850#-AC-7	LMI LTD PARTNERSHIP-SERIES 15A	1	21,100,000	22,534,526
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,950,000	8,949,928	09/02/2020	09/02/2050	Interest Rate Swap			50184N-AP-7	CLASS CR	1	8,950,000	8,949,928
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		27,996,286	30,805,409	09/02/2020	09/02/2050	Interest Rate Swap			141781-BJ-2	Cargill Inc-SENIOR UNSECURED	1	27,996,286	30,805,409
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,500,000	8,500,884	09/02/2020	09/02/2050	Interest Rate Swap			38136F-BJ-1	Goldentree Loan Managem-GLM 2017-1A B1R2	1	8,500,000	8,500,884
57629*FJ5	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,550,000	7,549,992	09/02/2020	09/02/2050	Interest Rate Swap			92917W-AY-4	Voya CLO 2018-4 Ltd-SERIES 18-4A CLASS BR	1	7,550,000	7,549,992
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	200,000,000	19,200,000	(30,935,145)	09/02/2020	09/02/2050	Interest Rate Swap		(50,156,227)	74264*-AA-4	PRISA LHC, LLC Senior Note Ser	1	19,200,000	19,221,082
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,750,000	20,975,531	09/02/2020	09/02/2050	Interest Rate Swap			74170*-AC-3	Prime Property Fund LLC Senior Note Ser	1	18,750,000	20,975,531
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,100,000	21,244,735	09/02/2020	09/02/2050	Interest Rate Swap			56081#-CA-6	Major League Baseball Tr Series 44 Term Note	1	20,100,000	21,244,735
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,180,975	19,729,167	09/02/2020	09/02/2050	Interest Rate Swap			47715*-AA-5	JetBlue Airways Corporat Pass Thru Certi	1	19,180,975	19,729,167
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,450,000	21,881,255	09/02/2020	09/02/2050	Interest Rate Swap			62044#-AY-1	Compass Group PLC Senior Note Ser	1	20,450,000	21,881,255
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		18,700,000	20,230,389	09/02/2020	09/02/2050	Interest Rate Swap			41242*-AU-6	Hardwood Funding LLC Senior Note Ser	1	18,700,000	20,230,389
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		19,315,000	20,166,212	09/02/2020	09/02/2050	Interest Rate Swap			36198*-AA-4	GI Manager L.P. Senior Secured Notes	1	19,315,000	20,166,212

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		17,700,000	18,714,936	09/02/2020	09/02/2050	Interest Rate Swap			41242*-AX-0	Hardwood Funding LLC Senior Secured	1	17,700,000	18,714,936
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,225,822	9,507,473	09/02/2020	09/02/2050	Interest Rate Swap			00114*-AA-1	AEP TRANSMISSION CO LLC SR NT SER A	1	9,225,822	9,507,473
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		15,900,000	17,327,486	09/02/2020	09/02/2050	Interest Rate Swap			68233J-A8-3	Oncor Electric Delivery SR SECD NT SER B	1	15,900,000	17,327,486
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		26,349,228	35,269,532	09/02/2020	09/02/2050	Interest Rate Swap			931142-CS-0	WAL-MART STORES INC-SENIOR NOTE	1	26,349,228	35,269,532
57629*FLO	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		27,700,000	27,473,082	09/02/2020	09/02/2050	Interest Rate Swap			38176D-AJ-8	Golub Capital Partners C-GOCAP 2015-26A A2R	1	27,700,000	27,473,082
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	200,000,000	24,000,000	(24,471,620)	09/02/2020	09/02/2050	Interest Rate Swap		(50,451,356)	00114*-AR-4	AEP Transmission Company Senior Note Ser	1	24,000,000	25,979,736
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,900,000	13,145,306	09/02/2020	09/02/2050	Interest Rate Swap			G9850E-AB-9	Yorkshire Water Services Gtd Senior Secu	1	12,900,000	13,145,306
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,700,000	29,353,666	09/02/2020	09/02/2050	Interest Rate Swap			G4622E-AB-5	Howard De Walden Estates Gtd Senior Note	1	25,700,000	29,353,666
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,750,000	26,605,631	09/02/2020	09/02/2050	Interest Rate Swap			G0646E-AN-9	Associated British Foods Senior Note Ser	1	24,750,000	26,605,631
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		23,900,000	25,953,010	09/02/2020	09/02/2050	Interest Rate Swap			57169*-AU-1	Mars, Inc. Senior Note Ser	1	23,900,000	25,953,010
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,750,000	24,201,182	09/02/2020	09/02/2050	Interest Rate Swap			Q6235E-AF-9	Mirvac Group Finance Ltd Gtd Senior Note	1	21,750,000	24,201,182
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		22,600,000	22,205,879	09/02/2020	09/02/2050	Interest Rate Swap			40447E-AJ-4	Hmshost Corporation Gtd Senior Note	1	22,600,000	22,205,879
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,150,000	21,543,655	09/02/2020	09/02/2050	Interest Rate Swap			25763E-AE-0	Donaldson Co Inc Senior Note Ser	1	20,150,000	21,543,655
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		55,000,000	55,000,000	09/02/2020	09/02/2050	Interest Rate Swap			57542Z-A9-8	MM Investment Holding Revolver Fixed Line	2	55,000,000	55,000,000
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,000,000	12,990,627	09/02/2020	09/02/2050	Interest Rate Swap			48250W-AG-0	KKR QLO 14 Ltd-KKR 14 AR	1	13,000,000	12,990,627
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	150,000,000	4,513,233	(32,897,613)	09/02/2020	09/02/2050	Interest Rate Swap		(37,463,930)	G2044E-AX-3	Compass Group PLC Senior Note	1	4,513,233	4,566,317
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,500,000	9,098,910	09/02/2020	09/02/2050	Interest Rate Swap			74170*-AR-0	Prime Property Fund LLC Senior Note Ser	1	8,500,000	9,098,910
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,200,000	9,964,235	09/02/2020	09/02/2050	Interest Rate Swap			G1108E-AF-5	British Land Company PLC Senior Note Ser	1	9,200,000	9,964,235
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,500,000	9,040,600	09/02/2020	09/02/2050	Interest Rate Swap			41242*-BF-8	Hardwood Funding LLC Senior Secured	1	8,500,000	9,040,600
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,200,000	8,876,967	09/02/2020	09/02/2050	Interest Rate Swap			47914Z-E8-6	Johnson Matthey PLC Series A Senior Notes	1	8,200,000	8,876,967
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,375,128	6,484,251	09/02/2020	09/02/2050	Interest Rate Swap			05389L-AF-0	Avolon Aerospace Leasing Secured Note A3	1	6,375,128	6,484,251
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,750,000	9,060,319	09/02/2020	09/02/2050	Interest Rate Swap			151515-YY-3	Bridge Investment Group Senior Secured Notes	1	8,750,000	9,060,319
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,700,000	8,440,948	09/02/2020	09/02/2050	Interest Rate Swap			838515-F8-8	South Jersey Gas Co. Medium Term Not	1	7,700,000	8,440,948
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,386,855	7,744,046	09/02/2020	09/02/2050	Interest Rate Swap			184692-B8-9	Clearbridge Energy MLP F Senior Secured	1	7,386,855	7,744,046
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,386,855	7,899,724	09/02/2020	09/02/2050	Interest Rate Swap			184692-B8-7	Clearbridge Energy MLP Fd Inc-Senior Secured	1	7,386,855	7,899,724
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,035,998	6,224,104	09/02/2020	09/02/2050	Interest Rate Swap			05389L-AM-5	Avolon Aerospace Leasing Secured Note B7	1	6,035,998	6,224,104
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,955,274	6,033,478	09/02/2020	09/02/2050	Interest Rate Swap			05389L-AK-9	Avolon Aerospace Leasing Secured Note B7	1	5,955,274	6,033,478
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,400,000	3,460,081	09/02/2020	09/02/2050	Interest Rate Swap			G3144E-AE-0	Fenner International Ltd Gtd Senior Note	1	3,400,000	3,460,081
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,860,342	7,531,689	09/02/2020	09/02/2050	Interest Rate Swap			C1466E-AA-6	QPR Leasing Ltd Senior Secured	1	6,860,342	7,531,689
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,950,000	7,966,027	09/02/2020	09/02/2050	Interest Rate Swap			92203E-AR-9	Yanguard Group, Inc. Senior Notes Series D	1	6,950,000	7,966,027
57629*FIM8	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,600,000	3,738,244	09/02/2020	09/02/2050	Interest Rate Swap			92203E-AQ-1	Yanguard Group, Inc. Senior Notes Series C	1	3,600,000	3,738,244

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*FN6	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,596,468	5,688,497	09/02/2020	09/02/2050	Interest Rate Swap			05389L-AH-6	Avolon Aerospace Leasing Secured Note B7	1	5,596,468	5,688,497
57629*FN6	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,006,870	09/02/2020	09/02/2050	Interest Rate Swap			04625A-AC-8	ASSURANT CLO I LTD-SERIES 17-1A CLASS B	1	10,000,000	10,006,870
57629*FN6	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,100,000	11,116,561	09/02/2020	09/02/2050	Interest Rate Swap			27830X-AE-6	EATON 2019-1A B	1	11,100,000	11,116,561
57629*FN6	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		41,569,259	46,678,144	09/02/2020	09/02/2050	Interest Rate Swap			055451-AV-0	BHP Billiton Finance USA-SR UNSECURED	1	41,569,259	46,678,144
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	150,000,000	13,864,000	(22,991,979)	09/02/2020	09/02/2050	Interest Rate Swap		(37,004,210)	78403D-AR-1	SBA Tower Trust-ASSET BACKED Major League Baseball Tr Senior	1	13,864,000	14,012,231
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,583,163	3,651,254	09/02/2020	09/02/2050	Interest Rate Swap			56081F-AL-4	Note Ser RREEF America REIT II, I Senior	1	3,583,163	3,651,254
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,700,000	7,249,782	09/02/2020	09/02/2050	Interest Rate Swap			74986E-AN-1	Note Ser Avolon Aerospace Leasing Secured	1	6,700,000	7,249,782
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,442,266	5,529,042	09/02/2020	09/02/2050	Interest Rate Swap			05389L-AA-1	Note A3 Prime Property Fund LLC Senior Note Ser	1	5,442,266	5,529,042
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,440,000	6,944,316	09/02/2020	09/02/2050	Interest Rate Swap			74170*-AD-1	Avolon Aerospace Leasing Secured Note A3	1	6,440,000	6,944,316
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,406,241	5,498,779	09/02/2020	09/02/2050	Interest Rate Swap			05389L-AD-5	Avolon Aerospace Funding Senior Secured	1	5,406,241	5,498,779
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,403,965	6,699,732	09/02/2020	09/02/2050	Interest Rate Swap			05400F-AE-1	Avolon Aerospace Funding Senior Secured	1	6,403,965	6,699,732
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,380,292	6,698,120	09/02/2020	09/02/2050	Interest Rate Swap			05400F-AG-6	Tortoise Pipeline & Ener Senior Note Ser	1	6,380,292	6,698,120
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,401,429	3,469,253	09/02/2020	09/02/2050	Interest Rate Swap			89148H-B*-8	Clearbridge Energy MLP Fd Inc-Senior Secured	1	3,401,429	3,469,253
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,500,805	7,012,171	09/02/2020	09/02/2050	Interest Rate Swap			184692-B*-1	Avolon Aerospace Funding Senior Secured	1	6,500,805	7,012,171
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,965,178	6,244,616	09/02/2020	09/02/2050	Interest Rate Swap			05400F-AC-5	Avolon Aerospace Funding Senior Secured	1	5,965,178	6,244,616
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,940,781	6,241,349	09/02/2020	09/02/2050	Interest Rate Swap			05400F-AJ-0	Avolon Aerospace Funding Senior Secured	1	5,940,781	6,241,349
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,200,000	6,621,680	09/02/2020	09/02/2050	Interest Rate Swap			393154-L8-6	Bond Green Mountain Power Cor First Mtg	1	5,200,000	6,621,680
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,238,669	10,256,874	09/02/2020	09/02/2050	Interest Rate Swap			110122-CL-0	Bristol-Myers Squibb Co-SENIOR UNSECURED	1	10,238,669	10,256,874
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		6,721,716	6,804,006	09/02/2020	09/02/2050	Interest Rate Swap			04685A-2E-0	ATHENE GLOBAL FUNDING-SECURED	1	6,721,716	6,804,006
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		36,645,530	38,963,699	09/02/2020	09/02/2050	Interest Rate Swap			45866F-AH-7	Intercontinental Exchange-SENIOR UNSECURED	2	36,645,530	38,963,699
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		20,000,000	20,001,840	09/02/2020	09/02/2050	Interest Rate Swap			55819D-AE-6	Madison Park Funding XXX-MDPK 2018-31A A2A	1	20,000,000	20,001,840
57629*FP1	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	30,000,000	09/02/2020	09/02/2050	Interest Rate Swap			57542Z-A9-8	MM Investment Holding Revolver Fixed Line	2	30,000,000	30,000,000
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	150,000,000	6,500,000	(29,466,767)	09/02/2020	09/02/2050	Interest Rate Swap		(37,055,290)	90312*-AC-8	UNS Gas, Inc. Gtd Senior Note	1	6,500,000	7,588,523
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,086,612	2,085,121	09/02/2020	09/02/2050	Interest Rate Swap			46625H-JE-1	JPMorgan Chase & Co-SR UNSECURED	1	2,086,612	2,085,121
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,173,316	5,919,587	09/02/2020	09/02/2050	Interest Rate Swap			63080F-AA-5	NARA Caves Lease Trust Lease Backed Ce	1	5,173,316	5,919,587
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,400,000	5,937,332	09/02/2020	09/02/2050	Interest Rate Swap			479142-E#-4	Johnson Matthey PLC Series B Senior Notes	1	5,400,000	5,937,332
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,958,165	5,164,063	09/02/2020	09/02/2050	Interest Rate Swap			05400F-AA-9	Avolon Aerospace Funding Senior Secured	1	4,958,165	5,164,063
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,169,644	8,219,076	09/02/2020	09/02/2050	Interest Rate Swap			064159-SH-0	Bank of Nova Scotia/The-SENIOR UNSECURED	1	8,169,644	8,219,076
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,649,951	8,650,677	09/02/2020	09/02/2050	Interest Rate Swap			369550-BE-7	General Dynamics Corp-SENIOR UNSECURED	1	8,649,951	8,650,677
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,119,394	1,193,935	09/02/2020	09/02/2050	Interest Rate Swap			05577#-AN-0	BTMU Capital Corp. Equipment Note	1	1,119,394	1,193,935
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		820,687	848,770	09/02/2020	09/02/2050	Interest Rate Swap			709068-C*-9	Pennsylvania Power Co. First Mtg Serie	1	820,687	848,770

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions							
1	2	3	4	5	6	7	8	Derivative Instrument(s) Open			Cash Instrument(s) Held				
Number	Description	NAIC Designation or Other Description	Notional Amount	Book/Adjusted Carrying Value	Fair Value	Effective Date	Maturity Date	9	10	11	12	13	14	15	16
								Description	Book/Adjusted Carrying Value	Fair Value	CUSIP	Description	NAIC Designation or Other Description	Book/Adjusted Carrying Value	Fair Value
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,881,841	4,229,982	09/02/2020	09/02/2050	Interest Rate Swap			872540-AS-8	TJX Cos Inc/The-SENIOR UNSECURED	1	3,881,841	4,229,982
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,108,895	4,980,450	09/02/2020	09/02/2050	Interest Rate Swap			589331-AD-9	MERCK SHARP & DOHME CORP-DEBENTURE	1	4,108,895	4,980,450
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		928,439	1,017,229	09/02/2020	09/02/2050	Interest Rate Swap			05348E-AW-9	AVALONBAY COMMUNITIES IN-SR UNSECURED	1	928,439	1,017,229
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		4,500,000	4,909,707	09/02/2020	09/02/2050	Interest Rate Swap			74264*-AD-8	PRISA LHC LLC-SENIOR NOTE SER B	1	4,500,000	4,909,707
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,000,000	5,163,620	09/02/2020	09/02/2050	Interest Rate Swap			46513A-NC-0	ISRAEL STATE JUBILEE ISSUE BD 7TH SER	1	5,000,000	5,163,620
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		5,232,373	5,431,705	09/02/2020	09/02/2050	Interest Rate Swap			89236T-DR-3	Toyota Motor Credit Corp-SENIOR UNSECURED	1	5,232,373	5,431,705
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,750,000	4,246,028	09/02/2020	09/02/2050	Interest Rate Swap			018522-D8-8	ALLETTE Inc. First Mortgage	1	3,750,000	4,246,028
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,870,527	4,167,226	09/02/2020	09/02/2050	Interest Rate Swap			18468P-A#-7	Clearbridge Energy MLP Op Fd Inc-Senior Secured	1	3,870,527	4,167,226
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,500,000	9,500,941	09/02/2020	09/02/2050	Interest Rate Swap			74980X-AC-0	ALM Ltd/KY-RRAM 2021-15A A2	1	9,500,000	9,500,941
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,767,648	4,068,423	09/02/2020	09/02/2050	Interest Rate Swap			18469Q-A#-5	Clearbridge Energy MLP Fd Inc-Senior Secured	1	3,767,648	4,068,423
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,250,000	9,250,944	09/02/2020	09/02/2050	Interest Rate Swap			64131T-AS-3	Neuberger Berman CLO XVI-SERIES 2017 CALSS 16SA	1	9,250,000	9,250,944
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,011,728	3,132,765	09/02/2020	09/02/2050	Interest Rate Swap			486606-J8-6	Kayne Anderson MLP Inves Senior Note Ser	1	3,011,728	3,132,765
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		3,031,828	3,086,100	09/02/2020	09/02/2050	Interest Rate Swap			84519#-AF-1	Southwest Power Pool, In Senior Note Ser	1	3,031,828	3,086,100
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		2,347,509	2,354,875	09/02/2020	09/02/2050	Interest Rate Swap			247358-LL-6	EAIV Delta MSN 15176	1	2,347,509	2,354,875
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,835,317	1,841,076	09/02/2020	09/02/2050	Interest Rate Swap			247358-VV-3	EAIV Delta MSN 15170	1	1,835,317	1,841,076
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,349,307	1,406,215	09/02/2020	09/02/2050	Interest Rate Swap			89838#-AA-5	Dartmouth College Senior Secured	1	1,349,307	1,406,215
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		1,960,596	2,059,085	09/02/2020	09/02/2050	Interest Rate Swap			18469Q-A#-7	Clearbridge Energy MLP TR Fd Inc-Senior Secured	1	1,960,596	2,059,085
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		17,400,000	17,404,663	09/02/2020	09/02/2050	Interest Rate Swap			06761K-AE-1	Babson CLO Ltd/Cayman Is-SERIES 19-3A CLASS B	1	17,400,000	17,404,663
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	30,009,390	09/02/2020	09/02/2050	Interest Rate Swap			38172X-AG-4	GOLUB CAPITAL PARTNERS C-SERIES 13-16A CLASS A1R	1	30,000,000	30,009,390
57629*F09	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		25,298,825	24,707,519	09/02/2020	09/02/2050	Interest Rate Swap			68233J-BB-9	ONCOR ELECTRIC DELIVERY -FIRST LIEN	1	25,298,825	24,707,519
57629*FT3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	300,000,000	141,741,762	52,626,851	07/14/2020	07/14/2050	Interest Rate Swap		(96,939,949)	228782-AA-6	CRUGER ISSUER TR PRIN UNIT TR CTF	1	141,741,762	149,566,800
57629*FT3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		44,868,750	44,868,750	07/14/2020	07/14/2050	Interest Rate Swap			749329-MM-7	RCC REAL ESTATE SPE 9 LLC - Term Loan	1	44,868,750	44,868,750
57629*FT3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		36,034,769	37,115,232	07/14/2020	07/14/2050	Interest Rate Swap			65284F-AA-3	KKR Wolverine I Ltd Class A Senior	1	36,034,769	37,115,232
57629*FT3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,966,402	31,984,305	07/14/2020	07/14/2050	Interest Rate Swap			244199-AW-5	Deere & Co-BOND	1	24,966,402	31,984,305
57629*FT3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		21,465,000	35,779,725	07/14/2020	07/14/2050	Interest Rate Swap			Z22066-36-8	AUST & NZ BANKING GROUP-SUBORDINATED NOTE	1	21,465,000	35,779,725
57629*FT3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		41,892,031	54,499,782	07/14/2020	07/14/2050	Interest Rate Swap			873050-CB-5	TTX CO-UNSECURED NOTE	1	41,892,031	54,499,782
57629*FT3	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		36,117,842	45,722,327	07/14/2020	07/14/2050	Interest Rate Swap			594918-CB-8	MICROSOFT CORP-SENIOR UNSECURED	1	36,117,842	45,722,327
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	150,000,000	13,689,768	(34,266,660)	07/14/2020	07/14/2050	Interest Rate Swap		(49,131,860)	662325-B8-7	North Shore Gas Co. First Mtg Bond	1	13,689,768	14,865,200
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,300,000	15,285,477	07/14/2020	07/14/2050	Interest Rate Swap			G1108#-AG-3	British Land Company PLC Senior Note Ser	1	13,300,000	15,285,477
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		12,400,000	13,351,192	07/14/2020	07/14/2050	Interest Rate Swap			720186-F#-1	Piedmont Natural Gas Co. Senior Note Ser	1	12,400,000	13,351,192
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		7,075,000	7,127,546	07/14/2020	07/14/2050	Interest Rate Swap			486606-K#-4	KAYNE ANDERSON MLP INVT CO-SR UNSEC SER JJ	1	7,075,000	7,127,546

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STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 1

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

Replication (Synthetic Asset) Transactions								Components of the Replication (Synthetic Asset) Transactions								
1 Number	2 Description	3 NAIC Designation or Other Description	4 Notional Amount	5 Book/Adjusted Carrying Value	6 Fair Value	7 Effective Date	8 Maturity Date	Derivative Instrument(s) Open			Cash Instrument(s) Held					
								9 Description	10 Book/Adjusted Carrying Value	11 Fair Value	12 CUSIP	13 Description	14 NAIC Designation or Other Description	15 Book/Adjusted Carrying Value	16 Fair Value	
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,600,000	12,449,352	07/14/2020	07/14/2050	Interest Rate Swap				41242*-AT-9	Hardwood Funding LLC Senior Note Ser	1	11,600,000	12,449,352
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,200,000	11,125,330	07/14/2020	07/14/2050	Interest Rate Swap				40447*-AH-8	Hmshost Corporation Gtd Senior Note	1	11,200,000	11,125,330
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,042,308	11,626,656	07/14/2020	07/14/2050	Interest Rate Swap				48661E-C#-5	Kayne Anderson Midstream SER H SR UNSECD NT	1	11,042,308	11,626,656
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,534,615	11,288,104	07/14/2020	07/14/2050	Interest Rate Swap				48661E-C#-3	Kayne Anderson Midstream SER I SR UNSECD NT	1	10,534,615	11,288,104
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		11,250,000	11,723,445	07/14/2020	07/14/2050	Interest Rate Swap				151515-XX-6	Bridge Investment Group Senior Secured Notes	1	11,250,000	11,723,445
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,925,000	10,896,380	07/14/2020	07/14/2050	Interest Rate Swap				74170*-AE-9	Prime Property Fund LLC Senior Note Ser	1	9,925,000	10,896,380
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,676,440	07/14/2020	07/14/2050	Interest Rate Swap				57169*-AT-4	Mars, Inc. Senior Note Ser	1	10,000,000	10,676,440
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		10,000,000	10,539,430	07/14/2020	07/14/2050	Interest Rate Swap				003009-A#-6	Aberdeen Asia-Pacific In Senior Secured	1	10,000,000	10,539,430
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		8,600,000	9,290,675	07/14/2020	07/14/2050	Interest Rate Swap				05237*-AG-9	Austin Powder Holdings C Senior Note Ser	1	8,600,000	9,290,675
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		9,513,968	9,643,450	07/14/2020	07/14/2050	Interest Rate Swap				607369-D*-3	Mobile Gas Service Corpo 1st Mtg Bond	1	9,513,968	9,643,450
57629*FU0	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		45,000,000	45,000,000	07/14/2020	07/14/2050	Interest Rate Swap				57542Z-A#-8	MM Investment Holding Revolver Fixed Line	2	45,000,000	45,000,000
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1	250,000,000	94,863,415	32,196,509	09/02/2020	09/02/2050	Interest Rate Swap		(62,666,906)		11702#-AA-4	Brunswick Asset Financing LLC - Term A Loan	1	94,863,415	94,863,415
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		31,750,000	32,763,555	09/02/2020	09/02/2050	Interest Rate Swap				Q3629#-AG-8	ETSA Utilities Finance P Gtd Senior Note	1	31,750,000	32,763,555
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		24,000,000	24,788,280	09/02/2020	09/02/2050	Interest Rate Swap				91020Q-A#-4	UNITED ENERGY DISTRIBUTION PTY-GTD SR NT SER A	1	24,000,000	24,788,280
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		30,000,000	31,998,510	09/02/2020	09/02/2050	Interest Rate Swap				57629Z-YY-6	Barings Corporate Invest Convertible Not	1	30,000,000	31,998,510
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		26,500,000	28,864,489	09/02/2020	09/02/2050	Interest Rate Swap				68233J-A*-5	ONCOR ELECTRIC DELIVERY-SENIOR SECURED NOTE	1	26,500,000	28,864,489
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,850,000	13,980,606	09/02/2020	09/02/2050	Interest Rate Swap				68228*-AG-7	Smith & Nephew plc Senior Note Ser	1	13,850,000	13,980,606
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		26,600,000	27,759,893	09/02/2020	09/02/2050	Interest Rate Swap				Q9194#-AF-4	Transpower New Zealand L Gtd Senior Note	1	26,600,000	27,759,893
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		13,200,000	13,888,433	09/02/2020	09/02/2050	Interest Rate Swap				Q1297#-AK-4	GSL Finance Pty Ltd Gtd Senior Note	1	13,200,000	13,888,433
57629*FK2	Evergreen Basked of Long Fixed Rate ABS Bank Loans and Corporate Bonds	1		35,166,995	45,710,487	09/02/2020	09/02/2050	Interest Rate Swap				20030N-AM-3	Comcast Corp-NOTE	1	35,166,995	45,710,487
999999999 - Totals				17,285,862,493	17,266,825,923	XXX	XXX	XXX	(524,043)	(668,998,861)	XXX	XXX	XXX	XXX	17,286,386,536	17,935,824,784

S105.35

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - PART C - SECTION 2

Replication (Synthetic Asset) Transactions Open

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter		Year To Date	
	1 Number of Positions	2 Total Replication (Synthetic Asset) Transactions Statement Value	3 Number of Positions	4 Total Replication (Synthetic Asset) Transactions Statement Value	5 Number of Positions	6 Total Replication (Synthetic Asset) Transactions Statement Value	7 Number of Positions	8 Total Replication (Synthetic Asset) Transactions Statement Value	9 Number of Positions	10 Total Replication (Synthetic Asset) Transactions Statement Value
1. Beginning Inventory	111	15,988,959,993							111	15,988,959,993
2. Add: Opened or Acquired Transactions	5	100,000,000							5	100,000,000
3. Add: Increases in Replication (Synthetic Asset) Transactions Statement Value	XXX		XXX		XXX		XXX		XXX	
4. Less: Closed or Disposed of Transactions	5	100,000,000							5	100,000,000
5. Less: Positions Disposed of for Failing Effectiveness Criteria										
6. Less: Decreases in Replication (Synthetic Asset) Transactions Statement Value	XXX		XXX		XXX		XXX		XXX	
7. Ending Inventory	111	15,988,959,993							111	15,988,959,993

STATEMENT AS OF MARCH 31, 2021 OF THE Massachusetts Mutual Life Insurance Company

SCHEDULE DB - VERIFICATION

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

	Book/Adjusted Carrying Value Check
1. Part A, Section 1, Column 14.....	3,748,652,185
2. Part B, Section 1, Column 15 plus Part B, Section 1 Footnote - Total Ending Cash Balance.....
3. Total (Line 1 plus Line 2).....	3,748,652,185
4. Part D, Section 1, Column 6.....	15,227,019,226
5. Part D, Section 1, Column 7.....	(11,639,309,250)
6. Total (Line 3 minus Line 4 minus Line 5).....	160,942,209
	Fair Value Check
7. Part A, Section 1, Column 16.....	3,080,177,362
8. Part B, Section 1, Column 13.....	(160,942,210)
9. Total (Line 7 plus Line 8).....	2,919,235,153
10. Part D, Section 1, Column 9.....	15,948,227,971
11. Part D, Section 1, Column 10.....	(13,028,992,817)
12. Total (Line 9 minus Line 10 minus Line 11).....
	Potential Exposure Check
13. Part A, Section 1, Column 21.....	4,188,576,504
14. Part B, Section 1, Column 20.....	150,810,546
15. Part D, Section 1, Column 12.....	4,339,387,050
16. Total (Line 13 plus Line 14 minus Line 15).....

SCHEDULE E - PART 2 - VERIFICATION

(Cash Equivalents)

	1	2
	Year To Date	Prior Year Ended December 31
1. Book/adjusted carrying value, December 31 of prior year	3,252,909,998	2,428,048,838
2. Cost of cash equivalents acquired	27,763,018,783	238,037,972,220
3. Accrual of discount		
4. Unrealized valuation increase (decrease)	998,991	46,078,991
5. Total gain (loss) on disposals	586,113	(11,171,126)
6. Deduct consideration received on disposals	26,763,341,213	237,248,018,925
7. Deduct amortization of premium		
8. Total foreign exchange change in book/adjusted carrying value	(917,340)	
9. Deduct current year's other than temporary impairment recognized		
10. Book/adjusted carrying value at end of current period (Lines 1+2+3+4+5-6-7+8-9)	4,253,255,332	3,252,909,998
11. Deduct total nonadmitted amounts		
12. Statement value at end of current period (Line 10 minus Line 11)	4,253,255,332	3,252,909,998