

**MassMutual Ascend Life Insurance Company (MMALIC)**

**Funds Withheld Reinsurance Supplement**

Year Ended June 30, 2023

(Dollars in Millions)

|  | June 30, 2023                                     |                              |  |
|--|---|------------------------------|--|
|  | MMALIC, Gross of<br>Funds Withheld<br>Reinsurance | Funds<br>Withheld Adjustment | MMALIC, Net of Funds<br>Withheld Reinsurance |
| <b>ASSET MIX</b>                                   |   |                              |  |
| <b>Non-Affiliated</b>                              |   |                              |  |
| Corporate Bonds                                    | 16,415  | 4,697                        | 11,718                                       |
| US Gov't, Agencies, Municipals, Foreign Gov't      | 2,023   | 117                          | 1,906  |
| RMBS   | 2,786   | 1,428                        | 1,358  |
| CMBS   | 1,402   | 812                          | 590  |
| Other ABS (including CLOs)                         | 10,794  | 2,306                        | 8,488  |
| Mortgage Loans and Real Estate                     | 3,642   | 420                          | 3,222  |
| Schedule BA Assets                                 | 1,250   | 180                          | 1,070  |
| Unaffiliated Stocks                                | 390   | 26                           | 364  |
| <b>Total Non-Affiliated</b>                        | <b>38,702</b>                                     | <b>9,986</b>                 | <b>28,716</b>                                |
| <b>Affiliated</b>                                  |   |                              |  |
| Corporate Bonds                                    | 121   | 71                           | 50   |
| US Gov't, Agencies, Municipals, Foreign Gov't      | 0   | 0                            | 0  |
| RMBS   | 0   | 0                            | 0  |
| CMBS   | 0   | 0                            | 0  |
| Other ABS (including CLOs)                         | 399   | 181                          | 218  |
| Mortgage Loans and Real Estate                     | 0   | 0                            | 0  |
| Schedule BA Assets                                 | 165   | 107                          | 58   |
| Affiliated Stocks                                  | 411   | 0                            | 411  |
| <b>Total Affiliated</b>                            | <b>1,096</b>                                      | <b>359</b>                   | <b>737</b>                                   |
| <b>Other</b>                                       |   |                              |  |
| Cash, Cash Equivalents, and Short-Term Investments | 2,300   | 807                          | 1,493  |
| Derivatives  | 848   | 0                            | 848  |
| All Other  | 224   | 0                            | 224  |
| <b>Total Other</b>                                 | <b>3,372</b>                                      | <b>807</b>                   | <b>2,565</b>                                 |
| <b>Total Cash and Invested Assets</b>              | <b>43,170</b>                                     | <b>11,152</b>                | <b>32,018</b>                                |
| <b>CREDIT QUALITY</b>                              |   |                              |  |
| NAIC 1   | 18,725  | 5,066                        | 13,659                                       |
| NAIC 2   | 13,099  | 3,694                        | 9,405  |
| Investment Grade                                   | 31,824  | 8,760                        | 23,064                                       |
| NAIC 3   | 1,438   | 763                          | 675  |
| NAIC 4   | 471   | 59                           | 412  |
| NAIC 5   | 172   | 11                           | 161  |
| NAIC 6   | 35  | 19                           | 16   |
| Below Investment Grade                             | 2,116   | 852                          | 1,264  |
| <b>Total Bonds</b>                                 | <b>33,940</b>                                     | <b>9,612</b>                 | <b>24,328</b>                                |