

#### TABLE 1. GUARANTY BOOK OF BUSINESS (\$ in Millions)<sup>1</sup>

|                | Fannie Mae MBS, excludir<br>the portion backed by<br>Freddie Mac securities, ar<br>Other Guarantees<br>[Table 4] | •     | Mortgage<br>Loans<br>[Table 3] | = | Fannie Mae<br>Guaranty Book<br>of Business | Compounded<br>Growth Rate | v Business<br>quisitions |
|----------------|--|-------|--------------------------------|---|--|---------------------------|--------------------------|
| October 2019   | \$ 3,242,8   | 88 3  | \$ 116,163                     | 9 | \$ 3,359,051                               | 2.3 %                     | \$<br>73,559             |
| November 2019  | 3,250,8  | 25    | 109,226                        |   | 3,360,051                                  | 0.4 %                     | 67,541                   |
| December 2019  | 3,261,9  | 40    | 105,558                        |   | 3,367,498                                  | 2.7 %                     | 65,801                   |
| Full Year 2019 | \$ 3,261,9   | 40 \$ | \$ 105,558                     | 9 | \$ 3,367,498                               | 3.0 %                     | \$<br>666,878            |
| January 2020   | \$ 3,272,0   | 87 9  | \$ 102,097                     | 5 | \$ 3,374,184                               | 2.4 %                     | \$<br>62,449             |
| February 2020  | 3,283,6  | 02    | 100,806                        |   | 3,384,408                                  | 3.7 %                     | <br>59,428               |
| March 2020     | 3,303,0  | 01    | 110,092                        |   | 3,413,093                                  | 10.7 %                    | <br>83,004               |
| April 2020     | 3,336,4  | 87    | 125,332                        |   | 3,461,819                                  | 18.5 %                    | 121,839                  |
| May 2020       | 3,375,5  | 00    | 115,616                        |   | 3,491,116                                  | 10.6 %                    | <br>120,930              |
| June 2020      | 3,409,9  | 98    | 117,994                        |   | 3,527,992                                  | 13.4 %                    | 128,210                  |
| July 2020      | 3,437,1  | 08    | 115,438                        |   | 3,552,546                                  | 8.7 %                     | <br>128,168              |
| August 2020    | 3,472,4  | 22    | 124,386                        |   | 3,596,808                                  | 16.0 %                    | <br>149,365              |
| September 2020 | 3,493,5  | 12    | 121,341                        |   | 3,614,853                                  | 6.2 %                     | 129,252                  |
| October 2020   | 3,527,1  | 25    | 121,935                        |   | 3,649,060                                  | 12.0 %                    | <br>149,624              |
| YTD 2020       | \$ 3,527,1   | 25 9  | \$ 121,935                     |   | \$ 3,649,060                               | 10.1 %                    | \$<br>1,132,269          |

### MONTHLY SUMMARY HIGHLIGHTS

#### October 2020

• Fannie Mae's Guaranty Book of Business increased at a compound annualized rate of 12.0% in October.

- The Conventional Single-Family Serious Delinquency Rate decreased 15 basis points to 3.05% in October.
- The Multifamily Serious Delinquency Rate increased 1 basis point to 1.13% in October.

• As of October 31, 2020, 4.0% and 3.6% of our *Single-Family Conventional Book of Business* based on unpaid principal balance and loan count, respectively, was in active forbearance, the vast majority of which were related to COVID-19; 17% of these loans in forbearance (based on loan count) were still current.

- As of October 31, 2020, 0.5% of our *Multifamily Guaranty Book of Business* based on unpaid principal balance was in an active forbearance, the vast majority of which were related to COVID-19.
- In October 2020, Fannie Mae issued resecuritizations that were backed by \$10.5 billion in Freddie Mac securities.

 As of October 31, 2020, Fannie Mae's maximum exposure to Freddie Mac collateral that was included in outstanding Fannie Mae resecuritizations was \$123.1 billion.

IMPORTANT NOTE:

Fannie Mae has been under conservatorship, with the Federal Housing Finance Agency (FHFA) acting as conservator, since September 6, 2008.

| TABLE 2. RETAINED MORTGAGE PORTFOLIO ACTIVITY (\$ | in Millions) 1,7 |
|---|------------------|
|---|------------------|

| TABLE 3. RETA | AINED MORTGAGE PORTFO | LIO COMPOSITION (\$ in Millions) 1,7 |
|---------------|-----------------------|--------------------------------------|
|---------------|-----------------------|--------------------------------------|

|                |    |          |                 |     |           | Rei | etained Mortgage   | Fannie Mae |        |    | N                 | on-Fannie Mae Mo | ortgage   | Securities  | Retained Mortgage Portfolio |    |         |
|----------------|----|----------|-----------------|-----|-----------|-----|--------------------|------------|--------|----|-------------------|------------------|-----------|-------------|-----------------------------|----|---------|
|                | Ρι | urchases | Sales           | Lic | uidations |     | tfolio End Balance | in Portfol |        |    | Agency Non-Agency |                  | on-Agency | End Balance |                             |    |         |
| October 2019   | \$ | 36,954   | \$<br>(36,459)  | \$  | (2,235)   | \$  | 175,249            | \$ 5       | 53,307 | \$ | 116,163           | \$               | 3,819     | \$          | 1,960                       | \$ | 175,249 |
| November 2019  |    | 30,123   | (40,477)        |     | (1,896)   |     | 162,999            | 4          | 48,210 |    | 109,226           |                  | 4,011     |             | 1,552                       |    | 162,999 |
| December 2019  |    | 30,525   | (37,965)        |     | (1,948)   |     | 153,611            | 4          | 41,994 |    | 105,558           |                  | 4,537     |             | 1,522                       |    | 153,611 |
| Full Year 2019 | \$ | 337,959  | \$<br>(338,622) | \$  | (24,879)  | \$  | 153,611            | \$ 4       | 41,994 | \$ | 105,558           | \$               | 4,537     | \$          | 1,522                       | \$ | 153,611 |
| January 2020   | \$ | 27,572   | \$<br>(30,368)  | \$  | (1,675)   | \$  | 149,140            | \$ 4       | 11,144 | \$ | 102,097           | \$               | 4,393     | \$          | 1,506                       | \$ | 149,140 |
| February 2020  |    | 26,885   | (29,840)        |     | (1,581)   |     | 144,604            | 3          | 37,860 |    | 100,806           |                  | 4,688     |             | 1,250                       |    | 144,604 |
| March 2020     |    | 45,558   | (36,983)        |     | (1,752)   |     | 151,427            | 3          | 35,905 |    | 110,092           |                  | 4,199     |             | 1,231                       |    | 151,427 |
| April 2020     |    | 63,954   | (49,254)        |     | (1,339)   |     | 164,788            | 3          | 34,210 |    | 125,332           |                  | 4,032     |             | 1,214                       |    | 164,788 |
| May 2020       |    | 72,053   | (71,385)        |     | (1,235)   |     | 164,221            | 4          | 14,090 |    | 115,616           |                  | 3,311     |             | 1,204                       |    | 164,221 |
| June 2020      |    | 74,053   | (69,771)        |     | (1,515)   |     | 166,988            | 4          | 14,627 |    | 117,994           |                  | 3,195     |             | 1,172                       |    | 166,988 |
| July 2020      |    | 70,008   | (76,571)        |     | (1,455)   |     | 158,970            | 3          | 38,998 |    | 115,438           |                  | 3,783     |             | 751                         |    | 158,970 |
| August 2020    |    | 81,373   | (72,151)        |     | (1,818)   |     | 166,374            | 3          | 37,302 |    | 124,386           |                  | 3,956     |             | 730                         |    | 166,374 |
| September 2020 |    | 78,171   | (70,833)        |     | (1,604)   |     | 172,108            | 4          | 46,538 |    | 121,341           |                  | 3,516     |             | 713                         |    | 172,108 |
| October 2020   |    | 84,937   | (90,883)        |     | (1,779)   |     | 164,383            | 3          | 38,366 |    | 121,935           |                  | 3,379     |             | 703                         |    | 164,383 |
| YTD 2020       | \$ | 624,564  | \$<br>(598,039) | \$  | (15,753)  | \$  | 164,383            | \$ 3       | 38,366 | \$ | 121,935           | \$               | 3,379     | \$          | 703                         | \$ | 164,383 |

### TABLE 4. FANNIE MAE MBS AND OTHER GUARANTEES (\$ in Millions) 1

|                | Fannie Mae MBS |           |     | cluding the portion | n backed by | Freddie Mac se | ecurities        |    | Other Fannie Mae | - 1 | Fannie Mae MBS, excluding the portion backed by |                        |  |
|----------------|----------------|-----------|-----|---------------------|-------------|----------------|------------------|----|------------------|-----|---|------------------------|--|
|                | ls             | suances   | Liq | uidations           | Er          | d Balance      | Liquidation Rate | -  | Guarantees       | -   | Freddie Mac securities, and Other Guarantees    | Compounded Growth Rate |  |
| October 2019   | \$             | 72,977    | \$  | (61,323)            | \$          | 3,229,963      | (22.9)%          | \$ | 12,925           | \$  | 3,242,888                                       | 4.4 %                  |  |
| November 2019  |                | 73,325    |     | (65,261)            |             | 3,238,027      | (24.2)%          |    | 12,798           |     | 3,250,825                                       | 3.0 %                  |  |
| December 2019  |                | 65,891    |     | (54,648)            |             | 3,249,270      | (20.3)%          |    | 12,670           |     | 3,261,940                                       | 4.2 %                  |  |
| Full Year 2019 | \$             | 660,950   | \$  | (540,310)           | \$          | 3,249,270      | (17.3)%          | \$ | 12,670           | \$  | 3,261,940                                       | 3.8 %                  |  |
| January 2020   | \$             | 65,778    | \$  | (55,530)            | \$          | 3,259,518      | (20.5)%          | \$ | 12,569           | \$  | 3,272,087                                       | 3.8 %                  |  |
| February 2020  |                | 60,626    |     | (48,993)            |             | 3,271,151      | (18.0)%          |    | 12,451           |     | 3,283,602                                       | 4.3 %                  |  |
| March 2020     |                | 73,420    |     | (53,969)            |             | 3,290,602      | (19.8)%          |    | 12,399           |     | 3,303,001                                       | 7.3 %                  |  |
| April 2020     |                | 106,183   |     | (72,614)            |             | 3,324,171      | (26.5)%          |    | 12,316           |     | 3,336,487                                       | 12.9 %                 |  |
| May 2020       |                | 130,671   |     | (91,562)            |             | 3,363,280      | (33.1)%          |    | 12,220           |     | 3,375,500                                       | 15.0 %                 |  |
| June 2020      |                | 125,481   |     | (90,926)            |             | 3,397,835      | (32.4)%          |    | 12,163           |     | 3,409,998                                       | 13.0 %                 |  |
| July 2020      |                | 129,768   |     | (102,677)           |             | 3,424,926      | (36.3)%          |    | 12,182           |     | 3,437,108                                       | 10.0 %                 |  |
| August 2020    |                | 140,729   |     | (105,352)           |             | 3,460,303      | (36.9)%          |    | 12,119           |     | 3,472,422                                       | 13.1 %                 |  |
| September 2020 |                | 128,517   |     | (107,258)           |             | 3,481,562      | (37.2)%          |    | 11,950           |     | 3,493,512                                       | 7.5 %                  |  |
| October 2020   |                | 149,241   |     | (115,555)           |             | 3,515,248      | (39.8)%          |    | 11,877           |     | 3,527,125                                       | 12.2 %                 |  |
| YTD 2020       | \$             | 1,110,414 | \$  | (844,436)           | \$          | 3,515,248      | (31.2)%          | \$ | 11,877           | \$  | 3,527,125                                       | 9.8 %                  |  |

| TABLE 5. OTHER INVESTMEN | TABLE 6. DEBT ACTIVITY(\$ in Millions) <sup>2</sup> |         |                         |              |           |                            |    |                        |             |         |                                 |      |             |         |                           |         |
|--------------------------|---|---------|-------------------------|--------------|-----------|----------------------------|----|------------------------|-------------|---------|---------------------------------|------|-------------|---------|---------------------------|---------|
|                          |   |         | Origi                   | nal Maturity |           | Original Maturity > 1 Year |    |                        |             |         |                                 |      |             |         |                           |         |
|                          | Other Investments<br>End Balance                    |         | < 1 Year<br>End Balance |              | Issuances |                            |    | rities and<br>emptions | Repurchases |         | Foreign Exchange<br>Adjustments |      | End Balance |         | Total Debt<br>Outstanding |         |
| October 2019             | \$  | 69,321  | \$                      | 30,504       | \$        | 3,200                      | \$ | (14,677)               | \$          | —       | \$                              | 23   | \$          | 166,264 | \$                        | 196,768 |
| November 2019            |   | 67,231  |                         | 25,975       |           | 10                         |    | (7,714)                |             | _       |                                 | (1)  |             | 158,559 |                           | 184,534 |
| December 2019            |   | 74,001  |                         | 26,688       |           | _                          |    | (3,011)                |             | _       |                                 | 11   |             | 155,559 |                           | 182,247 |
| Full Year 2019           | \$  | 74,001  | \$                      | 26,688       | \$        | 21,545                     | \$ | (73,523)               | \$          | (35)    | \$                              | 16   | \$          | 155,559 | \$                        | 182,247 |
| January 2020             | \$  | 67,271  | \$                      | 20,731       | \$        | 5,160                      | \$ | (9,321)                | \$          | _       | \$                              | (2)  | \$          | 151,396 | \$                        | 172,127 |
| February 2020            |   | 77,428  |                         | 24,862       |           | 2,045                      |    | (5,942)                |             | _       |                                 | (13) |             | 147,486 |                           | 172,348 |
| March 2020               |   | 132,137 |                         | 58,398       |           | 32,113                     |    | (8,835)                |             | (67)    |                                 | (14) |             | 170,683 |                           | 229,081 |
| April 2020               |   | 162,468 |                         | 55,423       |           | 45,502                     |    | (8,601)                |             | _       |                                 | 6    |             | 207,590 |                           | 263,013 |
| May 2020                 |   | 168,413 |                         | 48,851       |           | 20,490                     |    | (5,067)                |             | _       |                                 | (9)  |             | 223,004 |                           | 271,855 |
| June 2020                |   | 175,364 |                         | 42,266       |           | 16,921                     |    | (6,131)                |             | _       |                                 | 2    |             | 233,796 |                           | 276,062 |
| July 2020                |   | 188,765 |                         | 36,078       |           | 19,869                     |    | (8,357)                |             | _       |                                 | 24   |             | 245,332 |                           | 281,410 |
| August 2020              |   | 196,240 |                         | 28,928       |           | 23,620                     |    | (3,500)                |             | _       |                                 | 10   |             | 265,462 |                           | 294,390 |
| September 2020           |   | 185,582 |                         | 23,529       |           | 2,379                      |    | (1,263)                |             | (193)   |                                 | (16) |             | 266,369 |                           | 289,898 |
| October 2020             |   | 189,929 |                         | 14,651       |           | 9,395                      |    | (8,801)                |             | (865)   |                                 | 1    |             | 266,099 |                           | 280,750 |
| YTD 2020                 | \$  | 189,929 | \$                      | 14,651       | \$        | 177,494                    | \$ | (65,818)               | \$          | (1,125) | \$                              | (11) | \$          | 266,099 | \$                        | 280,750 |

## TABLE 7. SERIOUS DELINQUENCY RATES

|                                    |                |                           |             |         |            | Credit En          | hanced      |         |                          |
|------------------------------------|----------------|---------------------------|-------------|---------|------------|--------------------|-------------|---------|--------------------------|
|                                    | Vi             | ntage by Origination Year |             |         | Non-Credit | Primary MI and     | Credit Risk |         |                          |
|                                    | 2004 and Prior | 2005 - 2008               | 2009 - 2020 | Overall | Enhanced   | Other <sup>4</sup> | Transfer⁵   | Overall | Multifamily <sup>6</sup> |
| October 2019                       | 2.51 %         | 4.25 %                    | 0.33 %      | 0.67 %  | 0.73 %     | 0.97 %             | 0.28 %      | 0.67 %  | 0.04 %                   |
| November 2019                      | 2.45 %         | 4.08 %                    | 0.34 %      | 0.66 %  | 0.73 %     | 0.96 %             | 0.29 %      | 0.66 %  | 0.04 %                   |
| December 2019                      | 2.48 %         | 4.11 %                    | 0.35 %      | 0.66 %  | 0.79 %     | 0.96 %             | 0.27 %      | 0.66 %  | 0.04 %                   |
| January 2020                       | 2.46 %         | 4.08 %                    | 0.35 %      | 0.66 %  | 0.78 %     | 0.96 %             | 0.28 %      | 0.66 %  | 0.04 %                   |
| February 2020                      | 2.46 %         | 4.07 %                    | 0.35 %      | 0.65 %  | 0.78 %     | 0.95 %             | 0.28 %      | 0.65 %  | 0.07 %                   |
| March 2020                         | 2.48 %         | 4.11 %                    | 0.35 %      | 0.66 %  | 0.77 %     | 0.95 %             | 0.29 %      | 0.66 %  | 0.05 %                   |
| April 2020                         | 2.64 %         | 4.41 %                    | 0.38 %      | 0.70 %  | 0.81 %     | 1.01 %             | 0.33 %      | 0.70 %  | 0.06 %                   |
| May 2020                           | 3.09 %         | 5.22 %                    | 0.53 %      | 0.89 %  | 0.98 %     | 1.30 %             | 0.52 %      | 0.89 %  | 0.47 %                   |
| June 2020                          | 5.00 %         | 8.37 %                    | 2.21 %      | 2.65 %  | 2.37 %     | 3.85 %             | 2.78 %      | 2.65 %  | 1.00 %                   |
| July 2020                          | 5.57 %         | 9.36 %                    | 2.79 %      | 3.24 %  | 2.82 %     | 4.71 %             | 3.62 %      | 3.24 %  | 1.25 %                   |
| August 2020                        | 5.79 %         | 9.74 %                    | 2.86 %      | 3.32 %  | 2.85 %     | 4.87 %             | 3.84 %      | 3.32 %  | 1.20 %                   |
| September 2020                     | 5.81 %         | 9.84 %                    | 2.74 %      | 3.20 %  | 2.73 %     | 4.73 %             | 3.79 %      | 3.20 %  | 1.12 %                   |
| October 2020                       | 5.82 %         | 9.84 %                    | 2.57 %      | 3.05 %  | 2.57 %     | 4.54 %             | 3.67 %      | 3.05 %  | 1.13 %                   |
| October 2020 % of Book Outstanding | 2 %            | 3 %                       | 95 %        |         | 56 %       | 22 %               | 32 %        |         |                          |

Conventional Single-Family<sup>3</sup>

| Table 8. INTEREST RATE RISK | DISCLOSURES |              |           |           |              |  |  |
|-----------------------------|-------------|--------------|-----------|-----------|--------------|--|--|
|                             | Marke       | t Value Sens | Effective |           |              |  |  |
|                             | Rate        | Level        | Rate      | e Slope   | Duration Gap |  |  |
|                             | Shock       | (50 bp)      | Shock     | k (25 bp) | (in years)   |  |  |
| October 2019                | \$          | (2)          | \$        | (17)      | (0.03)       |  |  |
| November 2019               |             | 9            |           | (19)      | (0.02)       |  |  |
| December 2019               |             | 9            |           | (21)      |              |  |  |
| Full Year 2019              | \$          | (21)         | \$        | (12)      |              |  |  |
| January 2020                | \$          | (11)         | \$        | (18)      | (0.03)       |  |  |
| February 2020               |             | (22)         |           | (19)      | (0.03)       |  |  |
| March 2020                  |             | (61)         |           | (23)      | 0.01         |  |  |
| April 2020                  |             | (42)         |           | (22)      |              |  |  |
| May 2020                    |             | (49)         |           | (24)      | (0.01)       |  |  |
| June 2020                   |             | (49)         |           | (25)      | (0.02)       |  |  |
| July 2020                   |             | (29)         |           | (21)      | (0.01)       |  |  |
| August 2020                 |             | _            |           | (19)      | (0.01)       |  |  |
| September 2020              |             | (24)         |           | (25)      | 0.04         |  |  |
| October 2020                |             | _            |           | (45)      | _            |  |  |
| YTD 2020                    | \$          | (29)         | \$        | (24)      |              |  |  |

# **GLOSSARY & OTHER INFORMATION**

## <u>General</u>

Fannie Mae's maximum exposure to Freddie Mac collateral. Fannie Mae and Freddie Mac began issuing uniform mortgage-backed securities ("UMBS") in June 2019. Fannie Mae also began issuing commingled resecuritizations backed in whole or in part by Freddie Mac securities. Fannie Mae excludes the portion of Fannie Mae MBS outstanding ultimately backed by Freddie Mac securities from its guaranty book of business and reports its maximum exposure to Freddie Mac collateral in its Monthly Summary Highlights. This amount represents the maximum amount of Freddie Mac securities that Fannie Mae guarantees.

Risk Disclosures. In addition to the interest rate risk disclosures provided in Table 8, Fannie Mae's most recent available information relating to debt, liquidity management and credit risk is included in its most recent Form 10-K or Form 10-Q filed with the Securities and Exchange Commission.

Compounded Growth Rate. Monthly growth rates are compounded to provide an annualized growth rate.

#### Table 1

Guaranty Book of Business. Consists of (1) Fannie Mae MBS outstanding (excluding the portions of any structured securities Fannie Mae issues that are backed by Freddie Mac securities), (2) other credit enhancements that Fannie Mae provides on mortgage assets, and (3) mortgage loans of Fannie Mae held in its retained mortgage portfolio.

New Business Acquisitions. Single-family and multifamily mortgage loans purchased during the period and single-family and multifamily mortgage loans underlying Fannie Mae MBS issued pursuant to lender swaps.

#### Table 2

Retained Mortgage Portfolio Activity. Ending balance represents the unpaid principal balance ("UPB") of Fannie Mae's retained mortgage portfolio. Excludes certain matched trades and certain early funding activities.

Purchases. Acquisition of mortgage loans and mortgage securities for the retained mortgage portfolio.

Sales. Sales of mortgage securities and mortgage loans from the retained mortgage portfolio.

Liquidations. Represents the total amount of repayments, curtailments, payoffs, and foreclosures on mortgage loans and mortgages underlying securities held in the retained mortgage portfolio.

#### Table 3

Retained Mortgage Portfolio Composition. Shows the primary components of Fannie Mae's retained mortgage portfolio.

Fannie Mae MBS in portfolio. Includes Fannie Mae commingled securities, which may be backed in whole or in part by Freddie Mac securities.

Non-Fannie Mae Agency Securities. Represents mortgage-related securities issued by Freddie Mac and Ginnie Mae. May include commingled Freddie Mac securities backed in whole or in part by Fannie Mae MBS.

#### Table 4

Fannie Mae MBS, excluding the portion backed by Freddie Mac securities. Includes Fannie Mae MBS, private-label wraps, whole loan real estate mortgage investment conduit securities (REMICs), and Ginnie Mae wraps. If an MBS has been resecuritized into another MBS, the principal amount is only included once in this total. When Fannie Mae resecuritizes Freddie Mac securities in a Fannie Mae structured security, Fannie Mae reports the additive portion of the Freddie Mac securities that Fannie Mae guarantees in the Monthly Summary Highlights.

Issuances. Represents the total amount of Fannie Mae MBS created during the month, including lender-originated issues and Fannie Mae MBS created from mortgage loans previously held in Fannie Mae's portfolio. Fannie Mae MBS may be held in portfolio after their creation.

Liquidations. Represents the total amount of repayments, curtailments, payoffs, and foreclosures on mortgages underlying Fannie Mae MBS, including Fannie Mae MBS held in the retained mortgage portfolio.

Liquidation Rate. The liquidation rate is calculated as liquidations divided by the prior period ending balance of total Fannie Mae MBS, annualized.

Other Fannie Mae Guarantees. Outstanding balance of Fannie Mae guaranty arrangements that are not Fannie Mae MBS. This primarily includes long-term standby commitments Fannie Mae has issued and credit enhancements it has provided.

#### Table 5

Other Investments. Primarily consists of cash and readily marketable instruments such as certificates of deposit, federal funds sold, securities purchased under agreements to resell and Treasury bills.

#### Table 6

**Debt Activity.** Debt is classified in the table based on its original maturity. For debt with an original term of more than one year, the portion of that long-term debt that is due within one year is not reclassified to "Original Maturity < 1 Year." For more information about Fannie Mae's debt activity, please visit www.fanniemae.com/debtreports.

#### Table 7

Serious Delinquency Rates. A measure of credit performance and indicator of potential future defaults for the single-family and multifamily guaranty books. Single-family seriously delinquent loans are three months or more past due or in the foreclosure process. Multifamily seriously delinquent loans are 60 days or more past due. We report loans receiving payment forbearance as delinquent according to the contractual terms of the loan. Fannie Mae includes in its single-family delinquency rate conventional single-family loans that it owns and that back Fannie Mae MBS and excludes Freddie Mac-acquired mortgage loans underlying Freddie Mac securities that Fannie Mae has resecuritized.

## Table 8

The interest rate risk measures provide useful estimates of interest-rate risk and include the impact of Fannie Mae's purchases and sales of derivative instruments, which Fannie Mae uses to limit its exposure to changes in interest rates. While we believe that our market value sensitivity and duration gap metrics are useful risk management tools, they should be understood as estimates rather than precise measurements. Methodologies employed to calculate interest-rate risk sensitivity disclosures are periodically changed on a prospective basis to reflect improvements in the underlying estimation processes.

Market Value Sensitivity to Rate Level Shock (50bp). This measurement shows the most adverse pre-tax impact on the market value of Fannie Mae's on-balance sheet assets and liabilities from an immediate adverse 50 basis point shift in the level of LIBOR rates. The amounts shown are estimates, not precise measurements. The measurement excludes any sensitivity of the guaranty business. Fannie Mae tracks the daily average of this measurement for the reported month.

Market Value Sensitivity to Rate Slope Shock (25bp). This measurement shows the most adverse pre-tax impact on the market value of Fannie Mae's on-balance sheet assets and liabilities from an immediate adverse 25 basis point change in the slope of the LIBOR yield curve. To calculate the adverse change in the slope of the LIBOR yield curve, the company calculates the effect of a 25 basis point change in slope that results in a steeper LIBOR yield curve and the effect of a 25 basis point change in slope that results in a flatter LIBOR yield curve, and reports the more adverse of the two results. The amounts shown are estimates, not precise measurements. The measurement excludes any sensitivity of the guaranty business. Fannie Mae tracks the daily average of this measurement for the reported month.

Effective Duration Gap. The effective duration gap estimates the net sensitivity of the fair value of Fannie Mae's on-balance sheet assets and liabilities to movements in interest rates. This statistic is expressed as a number of years, based on the daily average for the reported month. A duration gap of zero implies that the change in the fair value of assets from an interest rate move will be offset by an equal move in the fair value of liabilities, including debt and derivatives, resulting in no change in the fair value of the net assets. The calculation excludes any sensitivity of the guaranty business.

## **ENDNOTES**

#### Note:

- 1. The end balances and business activity in this report represent UPB, which does not reflect market valuation adjustments, allowance for loan losses, impairments, unamortized premiums and discounts, and the impact of consolidation of variable interest entities.
- 2. Reported amounts represent the UPB at each reporting period or, in the case of long-term zero coupon bonds, at maturity. Also includes credit risk-sharing securities that were issued as Connecticut Avenue Securities<sup>®</sup> prior to November 2018. UPB does not reflect the effect of debt basis adjustments, including discounts, premiums, and issuance costs.
- 3. Delinquency rates represent seriously delinquent conventional single-family loans as a percentage of the total number of conventional single-family loans. These rates are based on conventional single-family mortgage loans and exclude reverse mortgages and non-Fannie Mae mortgage securities held in Fannie Mae's portfolio. The credit-enhanced categories are not mutually exclusive. A loan with primary mortgage insurance that is also covered by a credit risk transfer transaction will be included in both the "Primary MI and Other" category and the "Credit Risk Transfer" category. The percentage of book outstanding is calculated based on the aggregate UPB of conventional single-family loans for each category, divided by the aggregate UPB of loans in Fannie Mae's single-family loans for each category, divided by the aggregate UPB of loans in Fannie Mae's single-family conventional book of business.
- 4. Refers to loans included in an agreement used to reduce credit risk by requiring primary mortgage insurance, collateral, letters of credit, corporate guarantees, or other agreements to provide an entity with some assurance that it will be compensated to some degree in the event of a financial loss. Excludes loans covered by credit risk transfer transactions unless such loans are also covered by primary mortgage insurance.
- 5. Refers to loans included in reference pools for credit risk transfer transactions, including loans in these transactions that are also covered by primary mortgage insurance. For Connecticut Avenue Securities and some lender risk-sharing transactions, this represents outstanding UPB of the underlying loans on the single-family mortgage credit book, not the outstanding reference pool, as of the specified date.
- 6. Calculated based on the UPB of seriously delinquent multifamily loans owned by Fannie Mae or underlying Fannie Mae guaranteed securities, divided by the UPB of multifamily loans owned by Fannie Mae or underlying Fannie Mae or underlying Fannie Mae guaranteed securities.
- 7. The amount of mortgage assets that we may own in our retained mortgage portfolio is capped under our senior preferred stock purchase agreement with the U.S. Department of the Treasury at \$250 billion and by FHFA, our conservator, at \$225 billion. Effective January 2020, FHFA directed us, for purposes of calculating the size of our retained mortgage portfolio in regard to portfolio limits, to include 10% of the notional value of interest-only securities we hold. For this purpose, the balance of our retained mortgage portfolio was \$166.8 billion as of October 31, 2020, which includes \$2.4 billion representing 10% of the notional amount of the interest-only securities we held as of October 31, 2020.