



# Pillar 3 Regulatory Capital Disclosure

## Advanced Approaches

For the quarter ended December 31, 2021

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## SCOPE OF APPLICATION

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### Corporate Overview

Bank of America Corporation (together, with its consolidated subsidiaries, Bank of America, we or us) is a Delaware corporation, a bank holding company (BHC) and a financial holding company. When used in this report, “the Corporation” may refer to Bank of America Corporation individually, Bank of America Corporation and its subsidiaries or certain of Bank of America Corporation’s subsidiaries or affiliates. Bank of America is one of the world’s largest financial institutions, serving individual consumers, small- and middle-market businesses, institutional investors, large corporations and governments with a full range of banking, investing, asset management and other financial and risk management products and services. Our principal executive offices are located in the Bank of America Corporate Center, 100 North Tryon Street, Charlotte, North Carolina 28255.

### Principals of Consolidation and Basis of Presentation

The Consolidated Financial Statements include the accounts of the Corporation and its majority-owned subsidiaries and those variable interest entities (VIEs) where the Corporation is the primary beneficiary. Intercompany accounts and transactions have been eliminated. Results of operations of acquired companies are included from the dates of acquisition and for VIEs, from the dates that the Corporation became the primary beneficiary. Assets held in an agency or fiduciary capacity are not included in the Consolidated Financial Statements. The Corporation accounts for investments in companies for which it owns a voting interest and for which it has the ability to exercise significant influence over operating and financing decisions using the equity method of accounting. These investments are included in other assets. Equity method investments are subject to impairment testing, and the Corporation’s proportionate share of income or loss is included in other income.

The preparation of the Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect reported amounts and disclosures. Actual results could materially differ from those estimates and assumptions. For additional information, refer to *Note 1 – Summary of Significant Accounting Principles* in the December 31, 2021 Form 10-K.

These disclosures are required by regulatory capital rules set out by the Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (Federal Reserve) and the Federal Deposit Insurance Corporation (FDIC) (collectively, U.S. banking regulators) in alignment with the Basel 3 regulatory capital framework. These disclosures provide qualitative and quantitative information about regulatory capital and risk-weighted assets (RWA) for the Advanced approaches, and should be read in conjunction with our Form 10-K for the year ended December 31, 2021, and the Consolidated Financial Statements for Bank Holding Companies – FR Y-9C, the Market Risk Regulatory Report for Institutions Subject to the Market Risk Capital Rule – FFIEC 102 and the Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy

Framework – FFIEC 101 for the period ended December 31, 2021.

The Corporation’s Pillar 3 disclosures may include some financial information that has not been prepared under GAAP. Certain information contained in the Pillar 3 disclosures is prepared pursuant to instructions in the U.S. Basel 3 Final Rule (Basel 3).

U.S. banking regulators permit certain Pillar 3 disclosure requirements to be addressed by their inclusion in the Consolidated Financial Statements of the Corporation. In such instances, incorporation into this report is made by reference to the relevant section(s) of the most recent Form 10-K filed with the Securities and Exchange Commission (SEC) of the United States. This Pillar 3 report should be read in conjunction with the aforementioned reports as information regarding regulatory capital and risk management is largely contained in those filings. The table on the previous page indicates the location of such disclosures.

### Basel 3 Regulatory Capital Standards and Disclosures

As a financial holding company, the Corporation is subject to regulatory capital rules, including Basel 3, issued by the U.S. banking regulators. Basel 3 is a regulatory capital framework composed of three parts, or pillars. Pillar 1 addresses capital adequacy and provides minimum capital requirements. Pillar 2 requires supervisory review of capital adequacy assessments and strategies. Pillar 3 promotes market discipline through prescribed regulatory public disclosures on capital structure, capital adequacy and RWA.

The Corporation and its primary banking subsidiaries, Bank of America, National Association (BANA) and Bank of America California, National Association (BACANA), are Advanced approaches institutions under Basel 3. Basel 3 requires the Corporation and its banking subsidiaries to meet minimum regulatory capital ratios and buffers in order to avoid certain restrictions, including restrictions on capital distributions. The Corporation is subject to a capital conservation buffer, a countercyclical capital buffer (if any) and a global systemically important bank (G-SIB) surcharge. The buffers and surcharge must be comprised solely of Common equity tier 1 (CET1) capital. In addition, banking entities are required to meet adequately capitalized requirements under the Prompt Corrective Action (PCA) framework. The PCA framework establishes categories of capitalization including well capitalized, based on the Basel 3 regulatory capital ratio requirements. U.S. banking regulators are required to take certain mandatory actions depending on the category of capitalization, with no mandatory actions required for well capitalized banking organizations.

Basel 3 provides two methods of calculating RWA, the Standardized approach and the Advanced approaches. As an Advanced approaches institution, the Corporation is required to report regulatory risk-based capital ratios and RWA under both the Standardized and Advanced approaches. The approach that yields the lower ratio is used to assess capital adequacy including under the PCA framework. As of December 31, 2021, the Common equity tier 1, Tier 1 capital and Total Capital ratios for the Corporation were lower under the Standardized approach. The Corporation’s CET1 capital ratio must be a minimum of 9.5 percent under both Standardized and Advanced Approaches.

The Corporation is required to calculate its G-SIB surcharge on an annual basis under two methods and is subject to the higher of the resulting two surcharges. Method 1 is consistent with the approach prescribed by the Basel Committee's assessment methodology and is calculated using specified indicators of systemic importance. Method 2 modifies the Method 1 approach by, among other things, including a measure of the Corporation's reliance on short-term wholesale funding.

The Corporation's G-SIB surcharge, which is higher under Method 2, is expected to increase to 3.0 percent on January 1, 2024 unless its surcharge calculated as of December 31, 2022 is lower than 3.0 percent.

The current SCB of 2.5 percent, which remains effective from October 1, 2021 through September 30, 2022, could change based on results of the 2022 CCAR capital plan and related supervisory stress tests to be submitted in the first half of 2022.

The Corporation is also required to maintain a minimum supplementary leverage ratio (SLR) of 3.0 percent plus a leverage buffer of 2.0 percent in order to avoid certain restrictions, including restrictions on capital distributions. The Corporation's insured depository institution subsidiaries are required to maintain a minimum 6.0 percent SLR to be considered well capitalized under the PCA framework.

The Corporation is subject to the Federal Reserve's final rule requiring G-SIBs to maintain minimum levels of total loss-absorbing capacity (TLAC) and long-term debt. TLAC consists of the Corporation's Tier 1 capital and eligible long-term debt issued directly by the Corporation. Eligible long-term debt for TLAC ratios is comprised of unsecured debt that has a remaining maturity of at least one year and satisfies additional requirements as prescribed in the TLAC final rule. As with the risk-based capital ratios and SLR, the Corporation is required to maintain TLAC ratios in excess of minimum requirements plus applicable buffers in order to avoid certain restrictions, including restrictions on capital distributions.

For additional information on Basel 3 and management of the Corporation's regulatory capital and pending or proposed capital changes, refer to *Capital Management* within the Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) section in the December 31, 2021 Form 10-K and *Note 16 – Regulatory Requirements and Restrictions* in the December 31, 2021 Form 10-K.

Information contained in this report is presented in accordance with the Basel 3 rules for RWA and capital measurement under the Advanced approaches, and follows the Pillar 3 disclosure requirements for the quantitative and qualitative presentation of data. Information presented herein may differ from similar information presented in the Consolidated Financial Statements and other publicly available disclosures. Unless specified otherwise, all amounts and information are presented in conformity with the definitions, rules and requirements of Basel 3.

## CAPITAL STRUCTURE

Under Basel 3, Total capital consists of two tiers of capital, Tier 1 and Tier 2. Tier 1 capital is further composed of Common equity tier 1 capital and additional tier 1 capital. Common equity tier 1 capital primarily includes common stock, retained earnings and AOCI. Goodwill, disallowed intangible assets and certain deferred tax assets are excluded from Common equity tier 1 capital. Additional tier 1 capital primarily includes qualifying non-cumulative preferred stock. Tier 2 capital primarily consists of qualifying subordinated debt and a limited portion of eligible credit reserves. The Corporation's Total capital is the sum of Tier 1 capital and Tier 2 capital.

The following table presents the capital composition as of December 31, 2021. Results below reflect the impact of transition provisions related to the Corporation's adoption of the current expected credit losses (CECL) accounting standard, as well as information reflecting the full impact of CECL adoption.

|  | Basel 3 CECL<br>Transitional | Basel 3 CECL<br>Fully Phased-In |
|--|------------------------------|---------------------------------|
| <b>Table 1 - Capital Composition</b>   |                              |                                 |
| <i>December 31, 2021 (Dollars in millions)</i>   |                              |                                 |
| Total common shareholders' equity  | \$ 245,358                   | \$ 245,358                      |
| CECL transitional amount <sup>1</sup>  | 2,508                        | -                               |
| Goodwill, net of related deferred tax liabilities  | (68,641)                     | (68,641)                        |
| Deferred tax assets arising from net operating loss and tax credit carryforwards   | (7,743)                      | (7,743)                         |
| Intangibles, other than mortgage servicing rights and goodwill, net of related deferred tax liabilities  | (1,605)                      | (1,605)                         |
| Defined benefit pension plan net assets  | (1,261)                      | (1,261)                         |
| Cumulative unrealized net (gain) loss related to changes in fair value of financial liabilities attributable to own creditworthiness, net-of-tax | 1,400                        | 1,400                           |
| Accumulated net (gains) loss on certain cash flow hedges <sup>2</sup>  | 1,870                        | 1,870                           |
| Other  | (127)                        | (127)                           |
| <b>Common equity tier 1 capital</b>  | <b>171,759</b>               | <b>169,251</b>                  |
| Qualifying preferred stock, net of issuance cost   | 24,707                       | 24,707                          |
| Other  | (1)                          | (1)                             |
| <b>Tier 1 capital</b>  | <b>196,465</b>               | <b>193,957</b>                  |
| Tier 2 capital instruments   | 20,750                       | 20,750                          |
| Qualifying allowance for credit losses <sup>3</sup>  | 10,534                       | 13,944                          |
| Other  | (157)                        | (157)                           |
| <b>Total capital under the Standardized approach</b>   | <b>\$ 227,592</b>            | <b>\$ 228,494</b>               |
| Adjustment in qualifying allowance for credit losses under the Advanced approaches <sup>3</sup>  | (6,976)                      | (8,463)                         |
| <b>Total capital under the Advanced approaches</b>   | <b>\$ 220,616</b>            | <b>\$ 220,031</b>               |

<sup>1</sup> Basel 3 CECL Transitional includes the impact of the Corporation's adoption of the CECL accounting standard on January 1, 2020 and 25 percent of the increase in reserves since the initial adoption.

<sup>2</sup> Includes amounts in accumulated other comprehensive income related to the hedging of items that are not recognized at fair value on the Consolidated Balance Sheet

<sup>3</sup> Basel 3 CECL Transitional includes the impact of transition provisions related to the CECL accounting standard.

For additional information on the components of common shareholders' equity, refer to Schedule A "Advanced Approaches Regulatory Capital" in Bank of America's December 31, 2021 Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework – FFIEC 101. For the related breakdown of AOCI, refer to *Note 14 – Accumulated Other Comprehensive Income (Loss)* in the December 31, 2021 Form 10-K. For additional information on goodwill and intangibles, refer to *Note 7 – Goodwill and Intangible Assets* in the December 31, 2021 Form 10-K. For terms and conditions of common stock and preferred stock, refer to *Note 13 – Shareholders' Equity* in the December 31, 2021 Form 10-K. For additional information on Tier 2 capital instruments, refer to *Note 11 – Long-term Debt* in the December 31, 2021 Form 10-K.

## CAPITAL ADEQUACY

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The Corporation manages its capital position so that its capital is more than adequate to support its business activities and aligns with risk, risk appetite and strategic planning. Additionally, we seek to maintain safety and soundness at all times, even under adverse scenarios, take advantage of organic growth opportunities, meet obligations to creditors and counterparties, maintain ready access to financial markets, continue to serve as a credit intermediary, remain a source of strength for our subsidiaries and satisfy current and future regulatory capital requirements. Capital management is integrated into our risk and governance processes, as capital is a key consideration in the development of our strategic plan, risk appetite and risk limits.

We conduct an Internal Capital Adequacy Assessment Process (ICAAP) on a periodic basis. The ICAAP is a forward-looking assessment of our projected capital needs and resources, incorporating earnings, balance sheet and risk forecasts under baseline and adverse economic and market conditions. We utilize periodic stress tests to assess the potential impacts to our balance sheet, earnings, regulatory capital and liquidity under a variety of stress scenarios. We perform qualitative risk assessments to identify and assess material risks not fully captured in our forecasts or stress tests. We assess the potential capital impacts of proposed changes to regulatory capital requirements. Management assesses ICAAP results and provides documented quarterly assessments of the adequacy of our capital guidelines and capital position to the Board of Directors (the Board) or its committees.

The Federal Reserve requires BHCs to submit a capital plan and planned capital actions on an annual basis, consistent with the rules governing the Comprehensive Capital Analysis and Review (CCAR) capital plan. Based on the results of our 2021 CCAR capital plan and related supervisory stress tests, we are subject to a 2.5 percent SCB, unchanged from the prior level, effective October 1, 2021 to December 31, 2022. Our CET1 capital ratio under the Standardized approach must remain above 9.5 percent during this period in order to avoid restrictions on capital distributions.

Due to uncertainty resulting from the Coronavirus Disease 2019 (COVID-19) pandemic (the pandemic), the Federal Reserve imposed various restrictions on share repurchase

programs and dividends during 2020 and the first half of 2021. In conjunction with its release of 2021 CCAR supervisory stress test results, the Federal Reserve announced those restrictions would end as of July 1, 2021 for large banks, including the Corporation, and large banks would be subject to the normal restrictions under the Federal Reserve's SCB framework. On October 20, 2021, we announced that the Board renewed the Corporation's \$25 billion common stock repurchase program previously announced in April 2021. As with the April authorization, the Board also authorized common stock repurchases to offset shares awarded under the Corporation's equity-based compensation plans.

Pursuant to the Board's authorization, during 2021 we repurchased \$25.1 billion of common stock, including repurchases to offset shares awarded under equity-based compensation plans. For more information on our capital resources, see *Capital Management* within the MD&A section in the December 31, 2021 Form 10-K.

The timing and amount of common stock repurchases made pursuant to our stock repurchase program are subject to various factors, including the Corporation's capital position, liquidity, financial performance and alternative uses of capital, stock trading price, regulatory requirements and general market conditions, and may be suspended at any time. Such repurchases may be effected through open market purchases or privately negotiated transactions, including repurchase plans that satisfy the conditions of Rule 10b5-1 of the Securities Exchange Act of 1934, as amended (Exchange Act).

## Regulatory Capital Ratios

December 31, 2021 Key Capital Metrics – Bank of America Corporation



<sup>1</sup> As of December 31, 2021, the CET1 capital ratio for the Corporation was lower under the Standardized approach.

The following tables present capital ratios and related information as well as the regulatory minimum and well capitalized ratio requirements under Basel 3 Advanced and Basel 3 Standardized for the Corporation and its major national bank subsidiaries: BANA and BACANA as of December 31, 2021. For the Corporation and BANA, the results below include information that reflects the impact of transition provisions related to the adoption of the CECL accounting standard, as well as information reflecting the full impact of CECL adoption. BACANA did not elect to apply the transition provisions.

**Table 2 - Regulatory Capital - Bank of America Corporation**

December 31, 2021

| <i>(Dollars in millions, except ratios)</i>    | Bank of America Corporation    |                      |                                |                      |
|--|--------------------------------|----------------------|--------------------------------|----------------------|
|  | Basel 3 Standardized           |                      | Basel 3 Advanced               |                      |
|  | CECL Transitional <sup>1</sup> | CECL Fully Phased-In | CECL Transitional <sup>1</sup> | CECL Fully Phased-In |
| <b>Regulatory Capital</b>                      |                                |                      |                                |                      |
| Common equity tier 1 capital                   | \$ 171,759                     | \$ 169,251           | \$ 171,759                     | \$ 169,251           |
| Tier 1 capital                                 | 196,465                        | 193,957              | 196,465                        | 193,957              |
| Total capital <sup>2</sup>                     | 227,592                        | 228,494              | 220,616                        | 220,031              |
| <b>Assets</b>                                  |                                |                      |                                |                      |
| Risk-weighted assets                           | \$ 1,617,848                   | \$ 1,618,615         | \$ 1,399,160                   | \$ 1,398,588         |
| Adjusted quarterly average assets <sup>3</sup> | 3,087,247                      | 3,084,739            | 3,087,247                      | 3,084,739            |
| Supplementary Leverage Exposure                |                                |                      | 3,603,807                      | 3,601,300            |
| <b>Capital Ratios</b>                          |                                |                      |                                |                      |
| Common equity tier 1 capital                   | 10.6%                          | 10.5%                | 12.3%                          | 12.1%                |
| Tier 1 capital                                 | 12.1                           | 12.0                 | 14.0                           | 13.9%                |
| Total capital                                  | 14.1                           | 14.1                 | 15.8                           | 15.7%                |
| Tier 1 leverage                                | 6.4                            | 6.3                  | 6.4                            | 6.3%                 |
| Supplementary Leverage Ratio                   |                                |                      | 5.5                            | 5.4%                 |



Table 2 - Regulatory Capital - Bank of America, N.A.

December 31, 2021

| <i>(Dollars in millions, except ratios)</i>    | Bank of America, N.A.                                  |  |  |  |
|--|--|--|--|--|
|  | Basel 3 Standardized<br>CECL Transitional <sup>1</sup> | Basel 3 Standardized<br>CECL Fully Phased-In | Basel 3 Advanced<br>CECL Transitional <sup>1</sup> | Basel 3 Advanced<br>CECL Fully Phased-In |
| <b>Regulatory Capital</b>                      |  |  |  |  |
| Common equity tier 1 capital                   | \$ 182,526   | \$ 180,029                                   | \$ 182,526   | \$ 180,029                               |
| Tier 1 capital                                 | 182,526  | 180,029                                      | 182,526  | 180,029                                  |
| Total capital <sup>2</sup>                     | 194,773  | 195,658                                      | 188,091  | 186,411                                  |
| <b>Assets</b>                                  |  |  |  |  |
| Risk-weighted assets                           | \$ 1,351,917   | \$ 1,351,917                                 | \$ 1,048,114                                       | \$ 1,045,639                             |
| Adjusted quarterly average assets <sup>3</sup> | 2,414,002  | 2,411,505                                    | 2,414,002  | 2,411,505                                |
| Supplementary Leverage Exposure                |  |  | 2,824,374  | 2,821,877                                |
| <b>Capital Ratios</b>                          |  |  |  |  |
| Common equity tier 1 capital                   | 13.5%  | 13.3%  | 17.4%  | 17.2%                                    |
| Tier 1 capital                                 | 13.5   | 13.3%  | 17.4%  | 17.2                                     |
| Total capital                                  | 14.4   | 14.5%  | 17.9%  | 17.8                                     |
| Tier 1 leverage                                | 7.6  | 7.5%   | 7.6%   | 7.5                                      |
| Supplementary Leverage Ratio                   |  |  | 6.5  | 6.4                                      |

Table 2 - Regulatory Capital - Bank of America California, N.A.

December 31, 2021

| <i>(Dollars in millions, except ratios)</i>    | Bank of America California, N.A. |         |          |  |
|--|----------------------------------|---------|----------|--|
|  | Basel 3 Standardized             | Basel 3 | Advanced |  |
| <b>Regulatory Capital</b>                      |                                  |         |          |  |
| Common equity tier 1 capital                   | \$ 2,219                         | \$      | 2,219    |  |
| Tier 1 capital                                 | 2,219                            |         | 2,219    |  |
| Total capital <sup>2</sup>                     | 2,228                            |         | 2,219    |  |
| <b>Assets</b>                                  |                                  |         |          |  |
| Risk-weighted assets                           | \$ 6,717                         | \$      | 3,839    |  |
| Adjusted quarterly average assets <sup>3</sup> | 27,261                           |         | 27,261   |  |
| Supplementary Leverage Exposure                |                                  |         | 27,261   |  |
| <b>Capital Ratios</b>                          |                                  |         |          |  |
| Common equity tier 1 capital                   | 33.0%                            |         | 57.8%    |  |
| Tier 1 capital                                 | 33.0                             |         | 57.8     |  |
| Total capital                                  | 33.2                             |         | 57.8     |  |
| Tier 1 leverage                                | 8.1                              |         | 8.1      |  |
| Supplementary Leverage Ratio                   |                                  |         | 8.1      |  |

|                              | Bank Holding Compan                | Insured Depository Institutions    |
|------------------------------|------------------------------------|------------------------------------|
|                              | Regulatory<br>Minimum <sup>4</sup> | Regulatory<br>Minimum <sup>5</sup> |
| <b>Capital Ratios</b>        |                                    |                                    |
| Common equity tier 1 capital | 9.50%                              | 7.00%                              |
| Tier 1 capital               | 11.00                              | 8.50                               |
| Total capital                | 13.00                              | 10.50                              |
| Tier 1 leverage              | 4.00                               | 5.00                               |
| Supplementary leverage ratio | 5.00                               | 6.00                               |

<sup>1</sup> As of December 31, 2021, capital ratios are calculated using the regulatory capital rule that allows a five-year transition period related to the adoption of CECL.

<sup>2</sup> Total capital under the Advanced approaches differs from the Standardized approach due to differences in the amount permitted in Tier 2 capital related to the qualifying allowance for credit losses.

<sup>3</sup> Reflects total average assets adjusted for certain Tier 1 capital deductions.

<sup>4</sup> The capital conservation buffer and G-SIB surcharge were both 2.5 percent at December 31, 2021. At December 31, 2021, the Corporation's SCB of 2.5 percent was applied in place of the capital conservation buffer under the Standardized approach. The countercyclical capital buffer was zero. The CET1 capital regulatory minimum is the sum of the CET1 capital ratio minimum of 4.5 percent, our G-SIB surcharge of 2.5 percent and our SCB or the capital conservation buffer, as applicable, of 2.5 percent. The SLR minimum includes a leverage buffer of 2.0 percent.

<sup>5</sup> Risk-based capital regulatory minimums at December 31, 2021 are the minimum ratios under Basel 3 including a capital conservation buffer of 2.5 percent. The regulatory minimums for leverage ratios as of December 31, 2021 are the percent required to be considered well capitalized under the PCA framework.

As of December 31, 2021, Bank of America and its insured depository institution subsidiaries are well capitalized and meet all capital requirements to which each are subject. Bank of America's capital conservation buffer was 6.07 percent, in excess of its required capital conservation buffer (including the G-SIB surcharge) of 5.0 percent, and the leverage buffer was 2.45 percent. The leverage buffer, relative to the leverage buffer requirement of 2.0 percent, was more binding than the capital conservation buffer. The aggregate amount of surplus capital of subsidiaries engaged in the insurance business was \$25 million.

### Total Loss-Absorbing Capacity

The following table presents the Corporation's TLAC and long-term debt ratios and related information as of December 31, 2021. Results below reflect the election of CECL transition.

#### Total Loss-Absorbing Capacity and Long-Term Debt under CECL Transitional December 31, 2021

| <i>(Dollars in millions)</i>                        | TLAC <sup>1</sup> | Regulatory<br>Minimum <sup>2</sup> | Long-<br>term Debt | Regulatory<br>Minimum <sup>3</sup> |
|---|-------------------|------------------------------------|--------------------|------------------------------------|
| <b>Regulatory Capital</b>                           |                   |                                    |                    |                                    |
| Total eligible balance                              | \$ 435,904        |                                    | \$ 227,714         |                                    |
| Percentage of risk-weighted assets <sup>4</sup>     | 26.9%             | 22.0%                              | 14.1%              | 8.5%                               |
| Percentage of total supplementary leverage exposure | 12.1%             | 9.5%                               | 6.3%               | 4.5%                               |

<sup>1</sup> As of December 31, 2021, TLAC ratios are calculated using the regulatory capital rule that allows a five-year transition period related to the adoption of CECL.

<sup>2</sup> The TLAC RWA regulatory minimum consists of 18.0 percent plus a TLAC RWA buffer comprised of 2.5 percent plus the Method 1 G-SIB surcharge of 1.5 percent. The countercyclical buffer is zero for this period. The TLAC supplementary leverage exposure regulatory minimum consists of 7.5 percent plus a 2.0 percent TLAC leverage buffer. The TLAC RWA and leverage buffers must be comprised solely of CET1 capital and Tier 1 capital, respectively.

<sup>3</sup> The long-term debt RWA regulatory minimum is comprised of 6.0 percent plus an additional 2.5 percent requirement based on the Corporation's Method 2 G-SIB surcharge. The long-term debt leverage exposure regulatory minimum is 4.5 percent.

<sup>4</sup> The approach that yields the higher RWA is used to calculate TLAC and long-term debt ratios, which was the Standardized approach as of December 31, 2021.

Bank of America is not subject to payout ratio limitations, including limitations on capital distributions, under Basel 3 requirements. For additional information on regulatory capital, capital ratios, capital conservation and countercyclical capital buffers for the Corporation, refer to *Capital Management* within the MD&A section in the December 31, 2021 Form 10-K, Schedule A "Advanced Approaches Regulatory Capital" in Bank of America's December 31, 2021 Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework – FFIEC 101 and Schedule HC-R "Regulatory Capital" in Bank of America's December 31, 2021 Consolidated Financial Statements for Bank Holding Companies – FR Y-9C. For information on eligible retained income, refer to Schedule HC-R "Regulatory Capital" in Bank of America's December 31, 2021 Consolidated Financial Statements for Bank Holding Companies – FR Y-9C.

### Bank Subsidiary Distributions

The amount of dividends that a subsidiary bank may declare in a calendar year without OCC approval is the subsidiary bank's net profits for that year combined with its retained net profits for the preceding two years. Retained net profits, as defined by the OCC, consist of net income less dividends paid during the period. For additional information, refer to Note 16 – *Regulatory Requirements and Restrictions* in the December 31, 2021 Form 10-K.

### Risk-Weighted Assets

Basel 3 Advanced approaches include measures of credit risk, market risk, operational risk and risks related to the credit valuation adjustment (CVA) for over-the-counter (OTC) derivative exposures. The Advanced approaches rely on internal analytical models to measure risk weights for credit risk exposures and allow the use of models to estimate the exposure at default (EAD) for certain exposure types. Market risk applies to covered positions which include trading assets and liabilities, foreign exchange exposures and commodity exposures.

Market risk capital is modeled for general market risk as well as specific risk for products where specific risk regulatory approval has been granted; in the absence of specific risk model approval, standard specific risk charges apply.

For securitization exposures, institutions are permitted to use the Supervisory Formula Approach (SFA) and would use the Simplified Supervisory Formula Approach (SSFA) if the SFA is unavailable for a particular exposure.

Credit risk exposures are measured using internal ratings-based models to determine the applicable risk weight by estimating the probability of default (PD), loss-given default (LGD) and, in certain instances, EAD. The internal analytical models primarily rely on internal historical default and loss experience.

Operational risk is measured using internal analytical models which rely on both internal and external operational loss experience and data. The calculations require management to make estimates, assumptions and interpretations, including with respect to the probability of future events based on historical experience.

Actual results could differ from those estimates and assumptions. Under the Federal Reserve's reservation of authority, they may require us to hold an amount of capital greater than otherwise required under the capital rules if they determine that our risk-based capital requirement using our internal analytical models is not commensurate with our credit, market, operational or other risks.

The following table presents RWA by risk and exposure type under Basel 3 Advanced as of December 31, 2021. Total RWA increased \$19 billion from \$1,380 billion in September 2021 to \$1,399 billion in December 2021 primarily due to loan growth across all business segments.

**Table 3 - RWA by Risk and Exposure Type under Basel 3**

| <b>Advanced CECL Transitional</b>                 | December 31, 2021 |                  |
|---|-------------------|------------------|
| <i>(Dollars in millions)</i>                      |                   |                  |
| <b>Wholesale</b>                                  |                   |                  |
| Corporate   | \$                | 380,533          |
| Bank  |                   | 12,024           |
| Sovereign   |                   | 16,556           |
| Income-Producing Real Estate (IPRE)               |                   | 65,639           |
| High Volatility Commercial Real Estate (HVCRE)    |                   | 302              |
| <b>Total Wholesale RWA</b>                        | <b>\$</b>         | <b>475,054</b>   |
| <b>Retail</b>                                     |                   |                  |
| Residential Mortgage                              | \$                | 41,038           |
| Qualifying Revolving Exposures                    |                   | 58,485           |
| Other Retail Exposures                            |                   | 28,701           |
| <b>Total Retail RWA</b>                           | <b>\$</b>         | <b>128,224</b>   |
| <b>Counterparty</b>                               |                   |                  |
| Eligible Margin Loans and Repo-Style Transactions | \$                | 28,249           |
| OTC Derivatives                                   |                   | 55,346           |
| Cleared Transactions                              |                   | 8,261            |
| Unsettled Transactions                            |                   | 1,294            |
| <b>Total Counterparty RWA</b>                     | <b>\$</b>         | <b>93,150</b>    |
| Securitization Exposures <sup>1</sup>             | \$                | 35,541           |
| Equity Exposures                                  |                   | 63,780           |
| Credit Risk Supervisory Scalar                    |                   | 51,652           |
| CVA   |                   | 38,751           |
| Market Risk                                       |                   | 69,446           |
| Operational Risk                                  |                   | 378,439          |
| All Other <sup>2</sup>                            |                   | 65,123           |
| <b>Total RWA</b>                                  | <b>\$</b>         | <b>1,399,160</b> |

<sup>1</sup> Securitization exposures represent banking book only.

<sup>2</sup> Primarily consists of deferred tax assets, non-material portfolios and other assets not subject to the application of internal models to derive credit RWA under the Advanced approaches.

## RISK MANAGEMENT ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES

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The Corporation takes a comprehensive approach to risk management with a defined Risk Framework and an articulated Risk Appetite Statement which are approved annually by the Board's Enterprise Risk Committee (ERC) and the Board. Our Risk Framework serves as the foundation for the consistent and effective management of risks facing the Corporation. The Risk Framework sets forth roles and responsibilities for the management of risk and provides a blueprint for how the Board, through delegation of authority to committees and executive officers, establishes risk appetite and associated limits for our activities. Our risk appetite provides a common set of measures for senior management and the Board to clearly indicate the level of risk we are willing to take in alignment with our strategic and capital plans and ensure that the Corporation's risk profile remain aligned with our risk appetite. Our risk appetite is formally articulated in the Risk Appetite Statement, which includes both qualitative components and quantitative limits.

The Board's Audit Committee oversees the qualifications, performance and independence of the Independent Registered Public Accounting Firm, the performance of the Corporation's audit function, the integrity of the Corporation's consolidated financial statements, our compliance with legal and regulatory requirements, and makes inquiries of management or the Chief Audit Executive (CAE) to determine whether there are scope or resource limitations that impede the ability of Corporate Audit to execute its responsibilities. The Audit Committee is also responsible for overseeing compliance risk pursuant to the New York Stock Exchange listing standards.

The ERC has primary responsibility for oversight of the Risk Framework and key risks we face and of the Corporation's overall risk appetite. It approves the Risk Framework and the Risk Appetite Statement and further recommends these documents to the Board for approval. The ERC oversees senior management's responsibilities for the identification, measurement, monitoring and control of key risks facing the Corporation. The ERC may consult with other Board committees on risk-related matters.

Corporate Audit and the CAE maintain their independence from the Front Line Units, Global Risk Management and other control functions by reporting directly to the Audit Committee. The CAE administratively reports to the CEO. Corporate Audit provides independent assessment and validation through testing of key processes and controls across the Corporation. Corporate Audit includes Credit Review which provides an independent assessment of credit lending decisions and the effectiveness of credit processes across the Corporation's credit platform through examinations and monitoring.

For additional information on the Corporation's risk management policies, refer to *Managing Risk* within the MD&A section in the December 31, 2021 Form 10-K. For additional information on how the risks related to COVID-19 may adversely affect the Corporation's business, results of operations and financial condition, see *Item 1A. Risk Factors – Coronavirus Disease* in the December 31, 2021 Form 10-K.

## CREDIT RISK

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Credit risk is the risk of loss arising from the inability or failure of a borrower or counterparty to meet its obligations. Economic or market disruptions, insufficient credit loss reserves or concentrations of credit risk may result in an increase in the provision for credit losses. A number of our products expose us to credit risk, including loans, letters of credit, derivatives, debt securities, trading account assets and assets held for sale. Deterioration in the financial condition of our consumer and commercial borrowers, counterparties or underlying collateral could adversely affect our financial condition and results of operations.

Our credit portfolios may be impacted by global and U.S. macroeconomic and market conditions, events and disruptions, including declines in gross domestic product (GDP), consumer spending, or property values, asset price corrections, increasing consumer and corporate leverage, increases in corporate bond spreads, rising or elevated unemployment levels, rising or elevated inflation, fluctuations in foreign exchange or interest rates, as well as widespread health emergencies or pandemics, extreme weather events and the impacts of climate change and domestic and global efforts to transition to a low-carbon economy. Significant economic or market stresses and disruptions typically have a negative impact on the business environment and financial markets, which could impact the underlying credit quality of our borrowers and assets. Property value declines or asset price corrections could increase the risk of borrowers or counterparties defaulting or becoming delinquent in their obligations to us, and could decrease the value of the collateral we hold, which could increase credit losses. Credit risk could also be magnified by lending to leveraged borrowers or declining asset prices, including property or collateral values, unrelated to macroeconomic stress. Simultaneous drawdowns on lines of credit and/or an increase in a borrower's leverage in a weakening economic environment could result in deterioration in our credit portfolio, should borrowers be unable to fulfill competing financial obligations. Increased delinquency and default rates could adversely affect our credit portfolios, including consumer credit card, home equity and residential mortgage portfolios through increased charge-offs and provisions for credit losses.

For additional information on the assessment of credit risk as it relates to loans and leases, refer to *Credit Risk Management* within the MD&A section in the December 31, 2021 Form 10-K. For information on climate-related risks, refer to *Climate Risk Management* within the MD&A section in the December 31, 2021 Form 10-K. For information on how the risks related to COVID-19 may adversely affect the Corporation's business, results of operations and financial condition, see *Item 1A. Risk Factors – Coronavirus Disease* in the December 31, 2021 Form 10-K.

The allowance for credit losses decreased by \$6.8 billion from December 31, 2020 to \$13.8 billion at December 31, 2021, which included a \$3.8 billion reserve decrease related to the commercial portfolio and a \$3.1 billion reserve decrease related to the consumer portfolio. The decreases were primarily driven by improvements in the macroeconomic outlook and credit quality. For more information on the allowance for credit losses, refer to *Allowance for Credit Losses* within the MD&A section and *Note 5 - Outstanding*

*Loans and Leases and Allowance for Credit Losses* in the December 31, 2021 Form 10-K.

The pandemic has impacted the Corporation and may continue to do so, as uncertainty remains about the duration of the pandemic and the timing and strength of the global economic recovery.

The future direct and indirect impact of the pandemic on our businesses, results of operations and financial condition remains uncertain. Should current economic conditions deteriorate or if the pandemic worsens due to various factors, including through the spread of more easily communicable variants of COVID-19, such conditions could have an adverse effect on our businesses and results of operations and could adversely affect our financial condition.

During 2021, the economy gained momentum as unemployment continued to decline from double digit highs during 2020 and the economy re-opened as vaccination rates increased and restrictions eased. With the easing of restrictions, we saw increased business openings, a rebound to commercial and consumer spending, higher asset values and increased global GDP, all of which positively impacted our consumer and commercial credit portfolios. Additionally, individuals and businesses in the U.S. benefited from various forms of government support through economic stimulus packages enacted in 2020 and 2021, which contributed to strong asset quality across our credit portfolios.

As a result of the economic recovery experienced in 2021, net charge-offs, nonperforming loans and commercial reservable criticized exposure declined compared to 2020. While there has been significant economic improvement in comparison to 2020, uncertainty remains about the timing and strength of the economy's recovery, which may also be hampered by supply chain disruptions and inflationary pressures that could lead to adverse impacts to credit quality metrics in future periods. For more information on how the pandemic may affect our operations, see Executive Summary – Recent Developments – COVID-19 Pandemic and *Item 1A. Risk Factors – Coronavirus Disease* in the December 31, 2021 Form 10-K.

### Credit Risk Exposures

Credit risk exposures (calculated according to exposure type) as reported under GAAP can be found within the Corporation's most recent SEC filings. For additional information, the specific references related to credit risk are listed below.

*Accounting Policies* – For information on internal policies governing past due and delinquency status, nonaccrual, allowance for credit losses, and charge-offs of uncollectible accounts, refer to *Note 1 – Summary of Significant Accounting Principles* in the December 31, 2021 Form 10-K.

*Average Balances* – For average asset balances, refer to *Table 8 – Quarterly Average Balances and Interest Rates – FTE Basis* in the December 31, 2021 Form 10-K.

*Outstanding Loans and Leases* – The Corporation utilizes a Consumer and Commercial portfolio segmentation approach to present information related to loans and leases. For

additional information on loans and leases including nonperforming and past due loans, refer to *Credit Risk Management* within the MD&A section, *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses*, *Table 19 – Consumer Credit Quality*, and *Table 31 – Commercial Credit Quality* in the December 31, 2021 Form 10-K. For maturity data, refer to *Table 40 – Loan Maturity Data* in the December 31, 2021 Form 10-K.

*Paycheck Protection Program Loans (PPP)* – For more information on PPP loans, see *Executive Summary – Recent Developments – COVID-19 Pandemic* and *Note 1 – Summary of Significant Accounting Principles* in the December 31, 2021 Form 10-K.

*Credit Risk Management* – For additional information on the change in allowance for credit losses, including charge-offs, recoveries, provision for credit losses and a reconciliation of changes in allowance for loan and lease losses, refer to *Allowance for Credit Losses* within the MD&A section, *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses* and *Statistical Table V – Allowance for Credit Losses* in the December 31, 2021 Form 10-K.

*Investment Securities* – For additional information on securities and related allowance for credit losses, refer to *Note 4 – Securities* in the December 31, 2021 Form 10-K.

*Securities Financing Agreements* – For additional information on securities borrowed or purchased under agreements to resell and securities loaned or sold under agreements to repurchase, refer to *Note 10 – Securities Financing Agreements, Short-term Borrowings and Restricted Cash* in the December 31, 2021 Form 10-K.

*Derivatives* – For additional information on the derivative positions of the Corporation, refer to *Note 3 – Derivatives* in the December 31, 2021 Form 10-K. For additional information on purchased and sold credit derivatives, collateral held and gross positive fair value, refer to Schedule HC-L “Derivatives and Off-Balance Sheet Items” in Bank of America’s December 31, 2021 Consolidated Financial Statements for Bank Holding Companies – FR Y-9C.

*Off-Balance Sheet Exposures* – For additional information on the off-balance sheet exposures for the Corporation, refer to *Note 12 – Commitments and Contingencies* in the December 31, 2021 Form 10-K.

*Credit Exposures by Geographic / Industry Distribution* – For additional information on the geographic and industry distribution of credit exposures categorized by exposure type, refer to *Credit Risk Management* within the MD&A section in the December 31, 2021 Form 10-K.



## RETAIL CREDIT RISK

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Credit risk management for the consumer portfolio begins with initial underwriting and continues throughout a borrower's credit cycle. Statistical techniques in conjunction with experiential judgment are used in all aspects of portfolio management including underwriting, product pricing, risk appetite, setting credit limits, and establishing operating processes and metrics to quantify and balance risks and returns. Statistical models are built using detailed behavioral information from external sources such as credit bureaus and/or internal historical experience. These models are a component of our consumer credit risk management process and are used in part to assist in making both new and ongoing credit decisions, as well as portfolio management strategies, including authorizations and line management, collection practices and strategies, possible loan sales, and determination of the allowance for loan and lease losses and allocated capital for credit risk.

The Corporation monitors credit quality within its Consumer Real Estate, Credit Card and Other Consumer portfolio segments based on primary credit quality indicators. For additional information on the portfolio segments, refer to *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses* in the December 31, 2021 Form 10-K. Within the Consumer Real Estate portfolio segment, the primary credit quality indicators are refreshed loan-to-value (LTV) and refreshed Fair Isaac Corporation (FICO) score. Refreshed LTV measures the carrying value of the loan as a percentage of the value of the property securing the loan, refreshed quarterly. Home equity loans are evaluated using combined LTV (CLTV), which measures the carrying value of the Corporation's loan and available line of credit combined with any outstanding senior liens against the property as a percentage of the value of the property securing the loan, refreshed quarterly. FICO score measures the creditworthiness of the borrower based on the financial obligations of the borrower and the borrower's credit history. FICO scores are typically refreshed quarterly or more frequently. Certain borrowers (e.g., borrowers that have had debts discharged in a bankruptcy proceeding) may not have their FICO scores updated. FICO scores are a primary credit quality indicator for the Credit Card and Other Consumer portfolio segment and the business card portfolio within U.S. small business commercial.

Retail exposures are categorized as residential mortgage, qualifying revolving exposures and other retail exposures. A residential mortgage exposure is a retail exposure (other than a securitization exposure, equity exposure, presold construction loan or statutory multifamily mortgage exposure) that: (1) is primarily secured by a first or subsequent lien on a one-to-four family residential property; or (2) has an original and outstanding amount of \$1 million or less and is primarily secured by a first or subsequent lien on residential property that is not one-to-four family. Qualifying revolving exposures are exposures that are revolving, unsecured and unconditionally cancellable by the Corporation with a maximum exposure amount of \$100,000. In most cases consumer credit card lines are classified as qualified revolving exposures. Other retail exposures include exposures to individuals for non-business purposes that do not meet the

dollar threshold for qualifying revolving exposures as well as term loans, margin loans, auto loans and leases and loans to individuals for business purposes up to the amount of \$1 million for a single borrower.

### Retail Risk Rating System

When assessing the credit risk for retail exposures, the Corporation uses a segmentation process where exposures are managed as part of a group with homogeneous risk characteristics, not on an individual exposure basis. The Corporation has defined the segmentation methodology as the optimal grouping of risk parameters into clusters. The grouping process involves a statistical test to identify exposures whose risk parameters are collectively proximate to each other and simultaneously distant from the next identified cluster. Groupings are performed for each PD, EAD and LGD model at a product level. Through this segmentation method, we define homogeneous risk characteristics as groups of exposures that have similar risk parameters. A value for the PD parameter is calculated for each segment, which is then applied towards all exposures within that segment. This process ultimately determines the parameter ranges and capital allocations for Basel 3 RWA calculations.

### Determining Retail Risk Parameters

Retail PD is the Corporation's empirical estimate of the average one-year default rate for the segment based on its underlying risk characteristics and composition. The retail segmentation generally falls along product and delinquency status lines. Historical retail segment performance is viewed over a mix of economic conditions as the best available data for PD estimation. Retail portfolio PD parameters are organized along the Basel 3 retail subcategory definitions of residential mortgage, qualified revolving exposure and other retail. Within these subcategories and the segmentation mentioned above, data is summarized by various risk drivers.

To estimate PDs for the retail portfolios, the Corporation utilizes a regression model to formulate the relationship between segment attributes and credit performance. The exposure data is further summarized by segment and risk attribute through the use of static pools. These pools help determine composite default rates over a one-year time horizon.

Retail LGD is the Corporation's empirical estimate of the loss severity for the product or severity segmentation given downturn economic conditions. Retail LGD segmentation represents a grouping of exposures expected to have homogeneous LGD characteristics based on statistical analyses of historical performance. Severity segmentations are based on product, collateral type, LTV ratio and other risk attributes.

Retail EAD is defined as the estimated dollar amount of the drawn exposure for a defaulted credit line over a 12-month time horizon. Retail EAD has two primary components, current outstanding carrying value and potential utilization of the unfunded commitment. It represents the empirical estimate of the amount of exposure that would be outstanding if an obligor

defaulted, based on assumed homogeneous characteristics and statistical analyses of historical performance. Retail EAD segmentation represents a grouping of exposures expected to have homogeneous EAD characteristics based on the statistical analysis of historical performance. Retail EAD models within each subcategory are segmented by product and delinquency status, with the reference data summarized by various risk drivers.

Accuracy of the retail models is maintained through the use of backtesting and benchmarking predicted risk parameters against realized losses. For additional information regarding estimated losses, actual losses and factors that impact the loss experience, refer to *Credit Risk Management* within the MD&A section and *Note 5 – Outstanding Loans and Leases and Allowance for Credit Losses* in the December 31, 2021 Form 10-K.

## Retail Credit Exposures

The following table includes first lien and junior lien mortgages and revolving exposures allocated by PD range as of December 31, 2021. First lien mortgages represent approximately 85 percent of the exposure amount, with other home equity credit exposures approximately 15 percent.

|                               | Balance Sheet     |                  | Undrawn           |                  | Exposure-Weighted Average |               |               |  |
|-------------------------------|-------------------|------------------|-------------------|------------------|---------------------------|---------------|---------------|--|
|                               | Amount            | Commitments      | EAD               | RWA              | PD                        | LGD           | Risk Weight   |  |
| 0.00 to < 0.15                | \$ 150,029        | \$ 40,889        | \$ 158,776        | \$ 12,858        | 0.08%                     | 40.59%        | 8.10%         |  |
| 0.15 to < 0.50                | 58,384            | 1,252            | 59,245            | 12,961           | 0.26                      | 44.95         | 21.88         |  |
| 0.50 to < 5.50                | 12,413            | 156              | 12,478            | 8,438            | 1.23                      | 48.99         | 67.62         |  |
| 5.50 to < 20.00               | 1,761             | 1                | 1,757             | 3,371            | 12.61                     | 41.24         | 191.86        |  |
| 20.00 to < 100.00             | 536               | -                | 534               | 1,123            | 52.63                     | 46.21         | 210.30        |  |
| 100.00 (default) <sup>1</sup> | 2,327             | 7                | 2,338             | 2,287            | 100.00                    | 100.00        | 97.82         |  |
| <b>Total</b>                  | <b>\$ 225,450</b> | <b>\$ 42,305</b> | <b>\$ 235,128</b> | <b>\$ 41,038</b> | <b>1.39%</b>              | <b>42.74%</b> | <b>17.45%</b> |  |

<sup>1</sup> The exposure-weighted average risk weight for defaulted loans is less than 100 percent due to certain loans being insured and/or guaranteed by U.S. government agencies.

The following table presents a summary of qualifying revolving exposures (primarily consisting of credit card exposures) allocated by PD range as of December 31, 2021.

|                   | Balance Sheet    |                   | Undrawn           |                  | Exposure-Weighted Average |               |               |  |
|-------------------|------------------|-------------------|-------------------|------------------|---------------------------|---------------|---------------|--|
|                   | Amount           | Commitments       | EAD               | RWA              | PD                        | LGD           | Risk Weight   |  |
| 0.00 to < 0.50    | \$ 26,375        | \$ 326,890        | \$ 74,191         | \$ 8,026         | 0.23%                     | 95.73%        | 10.82%        |  |
| 0.50 to < 1.50    | 19,376           | 25,020            | 27,505            | 9,587            | 0.95                      | 95.73         | 34.86         |  |
| 1.50 to < 3.50    | 18,271           | 5,029             | 22,090            | 15,418           | 2.40                      | 95.73         | 69.80         |  |
| 3.50 to < 7.00    | 12,489           | 1,707             | 14,082            | 15,516           | 4.63                      | 95.88         | 110.18        |  |
| 7.00 to < 10.00   | 1,778            | 422               | 1,977             | 3,121            | 8.12                      | 95.73         | 157.87        |  |
| 10.00 to < 100.00 | 2,970            | 532               | 3,206             | 6,816            | 33.99                     | 95.73         | 212.60        |  |
| 100.00 (default)  | 1                | 1                 | 1                 | 1                | 100.00                    | 100.00        | 100.00        |  |
| <b>Total</b>      | <b>\$ 81,260</b> | <b>\$ 359,601</b> | <b>\$ 143,052</b> | <b>\$ 58,485</b> | <b>2.00%</b>              | <b>95.75%</b> | <b>40.88%</b> |  |

The following table presents a summary of all other retail exposures that do not meet the Basel 3 definition of either a residential mortgage or a qualifying revolving exposure, allocated by PD range as of December 31, 2021.

|                   | Balance Sheet    |                   | Undrawn           |                  | Exposure-Weighted Average |               |               |  |
|-------------------|------------------|-------------------|-------------------|------------------|---------------------------|---------------|---------------|--|
|                   | Amount           | Commitments       | EAD               | RWA              | PD                        | LGD           | Risk Weight   |  |
| 0.00 to < 0.50    | \$ 72,947        | \$ 213,265        | \$ 115,390        | \$ 11,028        | 0.09%                     | 42.50%        | 9.56%         |  |
| 0.50 to < 1.50    | 10,108           | 7,735             | 16,335            | 8,749            | 0.83                      | 57.34         | 53.56         |  |
| 1.50 to < 3.50    | 3,749            | 898               | 4,455             | 4,303            | 2.30                      | 73.12         | 96.59         |  |
| 3.50 to < 7.00    | 1,584            | 207               | 1,794             | 2,094            | 4.71                      | 79.75         | 116.72        |  |
| 7.00 to < 10.00   | 568              | 97                | 639               | 871              | 7.95                      | 86.39         | 136.31        |  |
| 10.00 to < 100.00 | 911              | 133               | 989               | 1,612            | 27.68                     | 81.57         | 162.99        |  |
| 100.00 (default)  | 40               | 61                | 44                | 44               | 100.00                    | 100.00        | 100.00        |  |
| <b>Total</b>      | <b>\$ 89,907</b> | <b>\$ 222,396</b> | <b>\$ 139,646</b> | <b>\$ 28,701</b> | <b>0.57%</b>              | <b>46.18%</b> | <b>20.55%</b> |  |



## WHOLESALE CREDIT RISK

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Credit risk management for the wholesale portfolio begins with an assessment of the credit risk profile of the borrower or counterparty based on an analysis of its financial position. As part of the overall credit risk assessment, our wholesale credit exposures are assigned a risk rating and are subject to approval based on defined credit approval standards. Subsequent to loan origination, risk ratings are monitored on an ongoing basis, and if necessary, adjusted to reflect changes in the financial condition, cash flow, risk profile or outlook of a borrower or counterparty. In making credit decisions, we consider risk rating, collateral, country, industry and single-name concentration limits while also balancing these considerations with the total borrower or counterparty relationship. We use a variety of tools to continuously monitor the ability of a borrower or counterparty to perform under its obligations. We use risk rating aggregations to measure and evaluate concentrations within portfolios. In addition, risk ratings are a factor in determining the level of allocated capital and the allowance for credit losses. For additional information on the Corporation's credit risk management policies of its commercial portfolio, refer to *Credit Risk Management* within the MD&A section in the December 31, 2021 Form 10-K.

Wholesale exposures include corporate exposures, real estate exposures, bank exposures and sovereign exposures. Real estate exposures are further divided into income-producing real estate exposures (IPRE) and high-volatility commercial real estate exposures (HVCRE). IPRE exposures represent commercial real estate exposures where the method of reimbursement is tied to the income produced from those exposures. HVCRE exposures are a type of credit facility that finances or has financed the acquisition, development or construction of real property (excluding facilities that finance one-to-four family residential properties or commercial real estate projects that meet certain LTV and capital contribution requirements).

### Wholesale Risk Rating System

The Corporation uses three types of risk rating methodologies to assign risk ratings to wholesale exposure: internally developed scorecards, external mappings and the judgmental approach. Scorecards and external mappings both provide quantifiable and objective means to assess risk. The primary risk rating methodology is internally, empirically developed portfolio or industry scorecards. These scorecards are considered preferable due to the combination of rich data available from financial statements, relationship based obligor specific information that, in general, cannot be extracted from financial statements, and the fact that most are developed on and calibrated to internal bank default experience yielding a generally consistent default behavior among risk ratings across risk rating models. The majority of risk ratings employ empirically estimated, internally developed scorecards.

### Determining Wholesale Risk Parameters

Wholesale PD is an empirical estimate of the average one-year default rate over a mix of economic conditions including downturn conditions for the obligor risk rating grade assigned by the Corporation. PD estimation aligns the scorecard risk ratings with the definition of default according to Basel 3 and a consistent performance observation window.

Wholesale LGD is defined as the greater of (1) the estimated long-run default-weighted average economic loss per dollar of EAD the Corporation would expect to incur if the obligor (or a typical obligor in the loss severity grade assigned to the exposure) were to default within a one-year horizon over a mix of economic conditions, including economic downturn conditions; and (2) the estimated economic loss per dollar of EAD the Corporation would expect to incur if the obligor (or a typical obligor in the loss severity grade assigned to the exposure) were to default within a one-year horizon during economic downturn conditions.

Wholesale EAD is defined as the estimated dollar amount of the drawn exposure for a defaulted credit line over a 12-month time horizon. Wholesale EAD has two components, current outstanding carrying value and potential utilization of the unfunded commitment. Wholesale EAD is the empirical estimate of the amount of exposure that would be outstanding if an obligor defaulted, based on assumed homogeneous characteristics and statistical analyses of historical performance.

Wholesale capital parameters are periodically backtested and benchmarked to evaluate their ongoing performance and appropriateness. Backtesting validates the appropriateness of wholesale parameters by comparing predicted parameters to realized outputs. Benchmarking evaluates the wholesale parameters calibrations against external benchmarks and/or alternative measurement approaches.

For additional information regarding estimated losses, actual losses and factors that impacted the loss experience, refer to *Credit Risk Management* within the MD&A section and *Note 5 - Outstanding Loan and Leases and Allowance for Credit Losses* in the December 31, 2021 Form 10-K.

## Wholesale Credit Exposures

The following table presents exposures to wholesale clients and issuers allocated by PD range as of December 31, 2021.

|                   | Balance Sheet       |                   | Undrawn             |                   | Exposure-Weighted Average |               |               |  |  |
|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------------|---------------|---------------|--|--|
|                   | Amount              | Commitments       | EAD                 | RWA               | PD                        | LGD           | Risk Weight   |  |  |
| 0.00 to < 0.15    | \$ 1,526,546        | \$ 320,401        | \$ 1,710,080        | \$ 160,898        | 0.03%                     | 22.43%        | 9.41%         |  |  |
| 0.15 to < 0.50    | 133,390             | 104,219           | 182,932             | 88,136            | 0.29                      | 38.88         | 48.18         |  |  |
| 0.50 to < 2.50    | 146,740             | 67,769            | 174,123             | 140,072           | 1.10                      | 36.64         | 80.44         |  |  |
| 2.50 to < 10.00   | 31,362              | 18,697            | 37,977              | 45,538            | 4.33                      | 36.74         | 119.90        |  |  |
| 10.00 to < 100.00 | 19,344              | 10,766            | 22,793              | 37,471            | 15.02                     | 36.38         | 164.40        |  |  |
| 100.00 (default)  | 2,741               | 612               | 3,026               | 2,939             | 100.00                    | 38.48         | 97.12         |  |  |
| <b>Total</b>      | <b>\$ 1,860,123</b> | <b>\$ 522,464</b> | <b>\$ 2,130,931</b> | <b>\$ 475,054</b> | <b>0.52%</b>              | <b>25.43%</b> | <b>22.29%</b> |  |  |

## COUNTERPARTY CREDIT RISK

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Counterparty credit risk is the risk that a counterparty to a transaction may default before completing the satisfactory settlement of the transaction. This risk applies to OTC derivatives, eligible margin loans, repo-style transactions and cleared transactions. Cleared transactions include exchange-traded derivatives, OTC derivatives and repo-style transactions that the Corporation clears through a central counterparty. An economic loss occurs if the transaction or portfolio of transactions with the counterparty has a positive replacement cost or outstanding loan amount that exceeds any collateral posted by the counterparty before the transaction(s) could be unwound, in the case of counterparty default.

When calculating counterparty credit risk RWA under the Advanced approaches, we use a combination of methods to calculate exposure amounts and utilize the PD and LGD methodologies described in the Wholesale Credit Risk section to determine risk weights. The internal model methodology (IMM) is used to calculate EAD for the majority of OTC and exchange-traded derivatives, while the standardized approach for counterparty credit risk (SA-CCR) is used for certain OTC and exchanged-traded derivatives not covered by IMM. IMM uses the Corporation's internal credit risk models to measure expected exposures by simulating the future movements of market risk factors underlying the derivative contracts, incorporating the effects of legally enforceable master netting and collateral agreements. Under SA-CCR, EAD is determined by adding the Corporation's replacement cost and potential future exposure as defined in Basel 3, with both measurements reflecting the risk reduction associated with legally enforceable master netting agreements and the value of eligible collateral received or posted. The EAD for eligible margin loans and repo-style transactions is calculated using standard supervisory haircuts under the collateral haircut approach.

In connection with certain OTC derivative contracts and other trading agreements, the Corporation can be required to provide additional collateral or to terminate transactions with certain counterparties in the event of a downgrade of the senior debt ratings of the Corporation or certain subsidiaries. The amount of additional collateral required depends on the contract and is usually a fixed incremental amount and/or the market value of the exposure. For additional information on the impact of a credit rating downgrade, refer to *Note 3 – Derivatives* in the December 31, 2021 Form 10-K.

### Valuation Adjustments

The Corporation records CVA on the Corporation's derivative assets, including our purchased credit default protection, in order to properly reflect the credit risk of the counterparty. CVA is based on a modeled expected exposure that incorporates current market risk factors including changes in market spreads and non-credit related market factors that affect the value of a derivative. The exposure also takes into consideration credit mitigants such as enforceable master netting agreements and collateral. We also record a funding valuation adjustment to include funding costs on uncollateralized derivatives and derivatives where the Corporation is not permitted to reuse the collateral it receives.

The Corporation also calculates a debit valuation adjustment (DVA) to properly reflect our own credit risk exposure as part of the fair value of derivative liabilities and/or structured liabilities. DVA is deducted from Common equity tier 1 capital if there is a gain, and added back if there is a loss. For additional information, refer to *Capital Management* and *Credit Risk Management* within the MD&A section, *Note 3 – Derivatives* and *Note 20 – Fair Value Measurements* in the December 31, 2021 Form 10-K.

### Credit Limits

As part of the overall credit risk assessment, our commercial credit exposures are assigned a risk rating and are subject to approval based on defined credit approval standards. In making credit decisions, we consider risk rating, collateral, country, industry and single-name concentration limits while also balancing these considerations with the total borrower or counterparty relationship. We use a variety of tools to continuously monitor the ability of a borrower or counterparty to perform under its obligations. For additional information on credit limits, refer to *Managing Risk*, *Capital Management* and *Credit Risk Management* within the MD&A section in the December 31, 2021 Form 10-K.

### Economic Capital

Economic capital for credit risk captures two types of risks. Default risk represents the loss of principal due to outright default or the borrower's inability to repay an obligation in full. Migration risk represents potential loss in market value due to credit deterioration over the one-year capital time horizon. Credit risk is assessed and modeled for all on- and off-balance sheet credit exposures within subcategories for commercial, retail, counterparty and investment securities. The economic capital methodology captures dimensions such as country and industry risk. The economic capital methodology is based on the PD, LGD, EAD and maturity for each credit exposure as well as portfolio correlations across exposures. Our economic capital measurement process provides a risk-based measurement of the capital required for unexpected credit, market and operational losses over a one-year time horizon at a 99.97 percent confidence level.

### Collateral Valuation

Many of our derivative transactions are executed under collateral agreements. Collateral consists of assets that are pledged as security by a single counterparty to another as assurance of payment or performance against an obligation. Collateral agreements generally provide the Corporation the right to liquidate collateral held as payment in the event of a counterparty default. Collateral is managed by a centralized team and most contracts are subject to a daily mark-to-market process. Collateral movements are generally executed daily in accordance with the Corporation's standard bilateral agreement with the counterparty. Collateral permits the reduction of the overall exposure to the counterparty by netting

the positive market value of a transaction against the market value of the collateral held after haircut adjustment.

Credit enhancements include a variety of provisions that may be used to reduce the credit risk related to a transaction or counterparty. Events such as a credit rating downgrade, depending on the ultimate rating level, or a breach of credit covenants would typically require an increase in the amount of collateral required by the counterparty, where applicable, and/or allow the Corporation to take additional protective measures such as early termination of all trades. These contingent features may be for the benefit of the Corporation as well as its counterparties with respect to changes in the

Corporation's creditworthiness and the mark-to-market exposure under the derivative transactions.

The Corporation's credit policy defines acceptable forms of collateral for OTC derivatives, repo-style transactions and eligible margin loans, and is generally limited to cash, U.S. Treasury securities, U.S. agency securities, select Government-sponsored enterprise (GSE) mortgage-backed securities and certain high quality sovereign securities.

For additional information, refer to *Note 1 – Summary of Significant Accounting Principles* in the December 31, 2021 Form 10-K.

## Counterparty Credit Exposures

The following table presents RWA by transaction type as of December 31, 2021.

|                         | <b>Basel 3 Advanced RWA</b> |               |
|-------------------------|-----------------------------|---------------|
| Margin Loans            | \$                          | 12,143        |
| Repo-style transactions |                             | 16,106        |
| OTC derivatives         |                             | 55,346        |
| Cleared transactions    |                             | 8,261         |
| Unsettled transactions  |                             | 1,294         |
| <b>Total</b>            | <b>\$</b>                   | <b>93,150</b> |

The following table presents counterparty credit risk exposures for OTC derivatives, repo-style transactions, and eligible margin loans allocated by PD range as of December 31, 2021. The table does not include cleared or unsettled transactions.

|                              |           |                | <b>Exposure-Weighted Average</b> |              |               |                    |
|------------------------------|-----------|----------------|----------------------------------|--------------|---------------|--------------------|
|                              |           |                | <b>RWA</b>                       | <b>PD</b>    | <b>LGD</b>    | <b>Risk Weight</b> |
| 0.00 to < 0.15               | \$        | 178,147        | \$ 34,382                        | 0.08%        | 41.71%        | 19.30%             |
| 0.15 to < 0.50               |           | 44,156         | 18,487                           | 0.30         | 43.44         | 41.87              |
| 0.50 to < 2.50               |           | 30,351         | 24,342                           | 1.10         | 43.21         | 80.20              |
| 2.50 to < 10.00              |           | 1,941          | 3,001                            | 4.45         | 47.80         | 154.61             |
| 10.00 to < 100.00            |           | 1,654          | 3,115                            | 11.67        | 45.94         | 188.33             |
| 100.00 (default)             |           | 46             | 46                               | 100.00       | 41.92         | 100.00             |
| Eligible margin loans - 300% |           | 74             | 222                              | n/a          | n/a           | 300.00             |
| <b>Total</b>                 | <b>\$</b> | <b>256,369</b> | <b>\$ 83,595</b>                 | <b>0.36%</b> | <b>42.26%</b> | <b>32.61%</b>      |

n/a = not applicable

## Wrong-Way Risk

Wrong-way risk arises when credit exposure to a counterparty during the life of a trade is adversely correlated to the counterparty's credit quality. The Corporation uses a range of policies and reporting to detect and monitor wrong-way risk from trade inception until maturity of the transaction. Product approval policies and forums have been established to review potential situations of specific wrong-way risk prior to trade inception. The Corporation has also developed a stress testing framework that is utilized for scenario analysis to proactively manage wrong-way risk in the portfolio.

For information on Counterparty Credit Risk and Credit Derivatives, refer to *Note 3 – Derivatives* and *Note 20 Fair Value Measurements* in the December 31, 2021 Form 10-K.

For information on collateral held, refer to Schedule HC-L "Derivatives and Off-Balance Sheet Items" in Bank of America's December 31, 2021 Consolidated Financial Statements for Bank Holding Companies – FR Y-9C.

## CREDIT RISK MITIGATION

We manage credit risk based on the risk profile of the borrower or counterparty, repayment sources, the nature of underlying collateral and other support given current events, conditions and expectations. We classify our portfolios as either consumer or commercial and monitor credit risk in each.

For wholesale credit exposures, credit risk management begins with an assessment of the credit risk profile of the borrower or counterparty based on an analysis of its financial position. The Corporation refines its underwriting and credit management practices, as well as credit standards, to meet the changing economic environment. As part of its credit risk and portfolio management activities, the Corporation purchases credit protection in the form of guarantees, private credit risk insurance and credit derivatives to hedge exposures that it purchases, originates or participates in such as loans and investment securities. Under Basel 3, the Corporation recognizes the risk mitigating effect of qualifying credit risk hedges on banking book wholesale exposures in its regulatory capital calculations. Eligible credit hedges that the Corporation typically uses to mitigate credit risk and that also provide regulatory capital relief include guarantees and credit protection purchased from third parties. Eligible credit default swap counterparties serving as guarantors of credit risks in the banking book include commercial banks, investment banks and insurance companies.

Apart from using eligible credit hedges to mitigate credit risk of wholesale exposures as described above, the Corporation also uses other risk mitigation techniques to manage the size and risk profile of the loan portfolio such as loan sales, including syndication of exposures to third parties, and portfolio risk diversification through loan size and geography. The Corporation also reviews, measures and manages commercial real estate loans by geographic location and property type.

The Corporation assesses credit risk using comprehensive tools and measures to allow us to identify and mitigate emerging risks before they become material. One process utilizes an analysis of commercial utilized credit exposure by industry based on S&P industry classifications. This analysis includes commercial loans and leases, standby letters of credit and financial guarantees, derivative assets, assets held-for-sale and commercial letters of credit. Additional analysis focuses on assessing concentrations for outstanding commercial real estate loans by the geographic region where the property is located as well as the type of property.

The following table quantifies the wholesale portfolios which reflected the benefit of eligible credit derivatives and guarantees as of December 31, 2021.

**Table 9 - Wholesale EAD and RWA reflecting the benefit of Eligible Guarantees / Credit Derivatives**

December 31, 2021

| (Dollars in millions) | EAD       |               | RWA       |               |
|-----------------------|-----------|---------------|-----------|---------------|
| Corporate             | \$        | 19,812        | \$        | 7,427         |
| Bank                  |           | 54            |           | 27            |
| Sovereign             |           | 250           |           | 5             |
| IPRE                  |           | 6,474         |           | 4,038         |
| HVCRE                 |           | -             |           | -             |
| <b>Total</b>          | <b>\$</b> | <b>26,590</b> | <b>\$</b> | <b>11,497</b> |

A number of techniques are used by the Corporation to manage counterparty credit risk. These include but are not limited to netting, collateral agreements and credit enhancements. A majority of the Corporation's derivative contracts contain credit risk-related contingency features. OTC derivative transactions are generally executed under an industry standard approved form of a master netting agreement primarily in the form of International Swaps and Derivatives Association, Inc. master agreements that provide the Corporation the right to offset amounts owed to the counterparty against amounts owed by the same counterparty and provides other rights such as the ability for the Corporation to terminate a transaction upon default. Secured financing transactions are generally executed under standard Master Repurchase Agreements, Securities Lending Agreements and other agreements that would serve similar purposes with respect to netting and termination provisions.

For inherent risk in securitization and resecuritization exposures, the Corporation manages and mitigates risk through offsetting positions and portfolio diversification. The use of offsetting positions includes the use of both macro- and position-level hedges to either reduce exposure to certain risk factors or potential market stress events. In addition, the Corporation maintains a diversified portfolio across securitized product types to reduce its sensitivity to individual product types, issuers and servicers. For further information, please refer to *Note 6 – Securitizations and Other Variable Interest Entities* in the December 31, 2021 Form 10-K.

For information on retail credit risk mitigation and processes for collateral valuation, refer to the *Retail Credit Risk* section above and *Consumer Portfolio Credit Risk Management* within the MD&A section in the December 31, 2021 Form 10-K.

For additional information on the policies and extent to which the Corporation uses netting, refer to *Note 1 – Summary of Significant Accounting Principles*, *Note 3 – Derivatives* and *Note 10 – Federal Funds Sold or Purchased, Securities Financing Agreements, Short-term Borrowings and Restricted Cash* in the December 31, 2021 Form 10-K. For additional information on credit risk mitigation, refer to *Credit Risk Management* within the MD&A section in the December 31, 2021 Form 10-K.

## SECURITIZATION

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Securitization exposures under Basel 3 are defined as on- or off-balance sheet credit exposures that arise from traditional or synthetic securitizations (including credit-enhancing representations and warranties and resecuritizations). Traditional securitization exposures are those where all or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties other than through the use of credit derivatives or guarantees, whereas synthetic securitizations utilize derivatives or guarantees to transfer the risk to a third-party. Resecuritizations are transactions that contain one or more underlying positions that are securitizations. Additionally, in all instances, securitizations reflect exposures where the credit risk has been separated into at least two tranches reflecting differing levels of seniority; performance of the securitization depends on the performance of the underlying exposures; and all or substantially all of the underlying exposures are financial exposures. On-balance sheet exposures include loans, available-for-sale (AFS) securitizations and trading securities. Off-balance sheet exposures include liquidity commitments, guarantees and derivatives. U.S. agency and GSE mortgage-backed securitizations (e.g., Fannie Mae, Freddie Mac and Ginnie Mae) that issue pass-through securities that are not broken into two or more tranche levels of seniority are not considered securitizations under the Basel 3 definition and are not included in the discussion that follows.

The Corporation periodically securitizes different types of exposures including residential loans, commercial loans, auto loans and leases and student loans. These securitizations are a source of funding for the Corporation and a means of transferring the economic risk of the loans or debt securities to third parties. Through the normal course of business we buy and sell securitization and resecuritization exposures across a number of asset classes. We are focused on making two-way markets and intermediating transfers of risk between clients. We also continue to manage a legacy portfolio with the primary objective of managing the risk while reducing the exposures.

In a securitization, various classes of financial instruments may be issued and are generally collateralized by a single class of transferred assets which may include residential mortgages, commercial mortgages, credit card receivables, home equity loans, automobile loans, municipal bonds or other securities. Loans that have been securitized may be serviced by the Corporation or by third parties. With each securitization, the Corporation may retain a portion of the resulting instruments, such as securities, subordinated tranches, interest-only strips, subordinated interests in accrued interest and fees on the securitized receivables or, in some cases, over collateralization and cash reserve accounts, all of which are referred to as retained interests. The Corporation may serve as originator, investor and/or servicer/collateral manager of assets transferred into traditional securitization vehicles. The Corporation may also provide credit enhancement or serve as liquidity provider to securitization vehicles. As an investor, the Corporation and its subsidiaries hold securitization positions from third-party originated deals and in some instances from internally originated deals.

The Corporation follows the Basel 3 prescribed hierarchy of approaches for computation of RWA related to securitization exposures and applies either SFA or SSFA provided the Corporation is able to meet the operational requirements related to data and modeling as required by these methodologies. The Corporation applies a 1,250 percent risk weight to those securitization exposures where SFA or SSFA cannot be applied.

### Risk Management

The Corporation manages credit and market risks related to securitization and resecuritization positions, including portfolio risk and seller's risk, according to the Corporation's Risk Framework. Methods to monitor credit and market risks may vary based on the type of securitization portfolio.

Credit risk management is responsible for approving credit exposure to new and ongoing securitization and resecuritization exposure. Initial and ongoing reviews include consideration of underlying collateral quality, credit enhancement levels and structural features. Portfolio management is responsible for monitoring periodic servicer reports against any loan performance triggers or covenants, as well as overall performance trends in the context of economic, sector and servicer developments.

Risk management closely monitors the securitization inventory and analyzes changes in trading positions, the composition of portfolios and market risk factors to assess the overall level of market risk of securitizations and resecuritizations to which the Corporation is exposed. For the purpose of managing the Corporation's risk appetite in relation to securitizations and resecuritizations, limits are established and tracked daily in the centralized limits management system. These limits range from granular measures such as fair value and the sensitivities to changes in market risk factors to aggregated portfolio measures such as Value-at-Risk (VaR) and stress testing results.

The modeling framework for securitization and resecuritization risk is based on a look-through approach to the underlying collateral level data. Models are used to project prepayment speeds, default rates and loss severity, which are key inputs in the valuation for both government guaranteed and private label securities. These models incorporate market variables such as the level and volatility of interest rates and credit spreads, as well as macro-economic variables such as GDP, unemployment and housing prices. Models are backtested periodically to measure the accuracy of the model forecasts against actual underlying collateral performance.



## Due Diligence

The Corporation performs due diligence for each securitization and resecuritization exposure, and documents such due diligence within three days of acquiring each position and on an ongoing basis at least every 90 days as required by Basel 3. The Corporation's due diligence focuses on each position's structural features and credit metrics of the underlying assets of the securitization and resecuritization that would materially affect the performance of the position.

For information on accounting policies for securitizations, refer to *Note 1 - Summary of Significant Accounting Principles* and *Note 6 - Securitizations and Other Variable Interest Entities in the December 31, 2021 Form 10-K*.

## Securitization Exposures

Table 10 presents the outstanding principal balance of assets which were originated and then securitized by a Bank of America-sponsored vehicle where the Corporation has retained exposure as of December 31, 2021. Third-party assets in which the firm has retained an interest are shown separately. Assets that are 90 days or more past due or in nonaccrual status are shown below in the last column. Tables 11 and 12 present banking book and trading book exposures that receive securitization capital treatment, with the exception of correlation trading positions presented in the Market Risk section of this report.

**Table 10 - Principal Amount Outstanding and Exposures Past Due by Underlying Collateral Type** December 31, 2021

|                           | Principal Amount Outstanding                   |  |  |                             |
|---------------------------|--|--|--|-----------------------------|
|                           | BAC assets held in traditional securitizations | Third-party assets held in traditional securitizations | BAC assets held in synthetic securitizations | Assets impaired or past due |
| <b>Collateral Type:</b>   |  |  |  |                             |
| Residential mortgages     | \$ 22,764                                      | \$ 3,031   | \$ -   | \$ 5,898                    |
| Commercial mortgages      | 27,767   | -  | -  | 775                         |
| Commercial and Industrial | -  | -  | -  | -                           |
| Consumer auto loans       | -  | -  | -  | -                           |
| Student Loans             | -  | -  | -  | -                           |
| Municipal bonds           | 2,894  | -  | -  | -                           |
| Other                     | -  | -  | -  | -                           |
| <b>Total</b>              | <b>\$ 53,425</b>                               | <b>\$ 3,031</b>  | <b>\$ -</b>                                  | <b>\$ 6,673</b>             |

The following table presents the amount of on- and off-balance sheet securitization exposures by underlying exposure type as of December 31, 2021.

**Table 11 - Total Securitization EAD and RWA** December 31, 2021

|                           | EAD              |                   |                  | RWA              |
|---------------------------|------------------|-------------------|------------------|------------------|
|                           | On-Balance Sheet | Off-Balance Sheet | Total            |                  |
| Residential mortgages     | \$ 9,168         | \$ 1,406          | \$ 10,574        | \$ 12,265        |
| Commercial mortgages      | 2,196            | 693               | 2,889            | 5,435            |
| Commercial and Industrial | 31,341           | 5,575             | 36,916           | 15,554           |
| Consumer auto loans       | 16,564           | 7,304             | 23,868           | 5,153            |
| Student Loans             | 618              | 617               | 1,235            | 448              |
| Municipal bonds           | -                | 1,888             | 1,888            | 825              |
| Other                     | 12,571           | 6,150             | 18,721           | 6,059            |
| <b>Total</b>              | <b>\$ 72,458</b> | <b>\$ 23,633</b>  | <b>\$ 96,091</b> | <b>\$ 45,738</b> |

The following table presents securitization exposures by risk weight bands as of December 31, 2021.

|                             | December 31, 2021 |                 |                  |                  |               |                 |                  |                  |
|-----------------------------|-------------------|-----------------|------------------|------------------|---------------|-----------------|------------------|------------------|
|                             | SFA               |                 | SSFA             |                  | 1,250%        |                 | Total            |                  |
|                             | EAD               | RWA             | EAD              | RWA              | EAD           | RWA             | EAD              | RWA              |
| <b>Securitization</b>       |                   |                 |                  |                  |               |                 |                  |                  |
| = 0% to ≤ 20%               | \$ 16,237         | \$ 3,247        | \$ 68,530        | \$ 13,706        | \$ -          | \$ -            | \$ 84,767        | 16,953           |
| > 20% to ≤ 50%              | 732               | 182             | 4,706            | 1,436            | -             | -               | 5,438            | 1,618            |
| > 50% to ≤ 100%             | 686               | 510             | 673              | 562              | -             | -               | 1,359            | 1,072            |
| > 100% to < 1,250%          | 70                | 81              | 3,020            | 14,194           | 30            | 329             | 3,120            | 14,604           |
| = 1,250%                    | -                 | -               | 627              | 7,834            | 46            | 569             | 672              | 8,403            |
| <b>Resecuritization</b>     |                   |                 |                  |                  |               |                 |                  |                  |
| = 0% to ≤ 20%               | -                 | -               | 306              | 61               | -             | -               | 306              | 61               |
| > 20% to ≤ 50%              | -                 | -               | 0                | 0                | -             | -               | 0                | 0                |
| > 50% to ≤ 100%             | -                 | -               | 15               | 9                | -             | -               | 15               | 9                |
| > 100% to < 1,250%          | -                 | -               | 357              | 2,324            | -             | -               | 357              | 2,324            |
| = 1,250%                    | -                 | -               | 5                | 58               | 51            | 636             | 56               | 694              |
| <b>Total Securitization</b> | <b>\$ 17,725</b>  | <b>\$ 4,019</b> | <b>\$ 78,239</b> | <b>\$ 40,184</b> | <b>\$ 127</b> | <b>\$ 1,535</b> | <b>\$ 96,091</b> | <b>\$ 45,738</b> |

As of December 31, 2021, a \$17 million gain-on-sale in connection with securitization exposures was deducted from the Corporation's capital. No credit risk mitigation is applied to securitization or resecuritization exposures as of December 31, 2021. The total amount of exposures intended to be securitized as of December 31, 2021 was \$1.8 billion in commercial real estate.

For additional information on securitization exposures, including exposures securitized by the Corporation, gains (losses) recognized during the period and securitization activity, refer to Note 1 - Summary of Significant Accounting Principles and Note 6 - Securitizations and Other Variable Interest Entities in the December 31, 2021 Form 10-K.



## MARKET RISK OVERVIEW

Market risk is the risk that changes in market conditions may adversely impact the value of assets or liabilities, or otherwise negatively impact earnings. This risk is inherent in the financial instruments associated with our operations, primarily within our Global Markets segment. We are also exposed to these risks in other areas of the Corporation (e.g., our Asset Liability Management (ALM) activities). In the event of market stress, these risks could have a material impact on the results of the Corporation. For additional information, refer to *Market Risk Management* and *Trading Risk Management* within the MD&A section in the December 31, 2021 Form 10-K.

Our traditional banking loan and deposit products are non-trading positions and are generally reported at amortized cost for assets or the amount owed for liabilities (historical cost). However, these positions are still subject to changes in economic value based on varying market conditions, with one of the primary risks being changes in the levels of interest rates. The risk of adverse changes in the economic value of our non-trading positions arising from changes in interest rates is managed through our ALM activities. We have elected to account for certain assets and liabilities under the fair value option. For additional information, refer to the *Interest Rate Risk Management for the Banking Book* section below.

### Trading Book

Our trading positions are reported at fair value with changes reflected in income. Trading positions are subject to various changes in market-based risk factors. The majority of this risk is generated by our activities in the interest rate, foreign exchange, credit, equity and commodities markets. In addition, the values of assets and liabilities could change due to market liquidity, correlations across markets and expectations of market volatility. We seek to manage these risk exposures by using a variety of techniques that encompass a broad range of financial instruments.

Global Risk Management is responsible for providing senior management with a clear and comprehensive understanding of the trading risks to which the Corporation is exposed. These responsibilities include ownership of market risk policy, developing and maintaining quantitative risk models, calculating aggregated risk measures, establishing and monitoring position limits consistent with risk appetite, conducting daily reviews and analysis of trading inventory, approving material risk exposures and fulfilling regulatory requirements.

Covered positions are defined by regulatory standards as trading assets and liabilities, both on- and off-balance sheet, that meet a defined set of specifications. These specifications identify the most liquid trading positions which are intended to be held for a short-term horizon and where the Corporation is able to hedge the material risk elements in a two-way market. Positions in less liquid markets, or where there are restrictions on the ability to trade the positions, typically do not qualify as covered positions. Foreign exchange and commodity positions are always considered covered positions, except for structural foreign currency positions that are excluded with prior regulatory approval. The characterization of an exposure as a trading asset or liability

under GAAP does not necessarily determine its treatment under Basel 3. Trading assets or liabilities that do not meet the regulatory definition of a covered position are excluded from market risk capital treatment and subject to the credit risk capital rules as non-covered exposures. The Corporation maintains policies and procedures for the determination of exposures meeting the covered position definition. Throughout this report, covered positions are also referred to as “trading book” positions. Similarly, non-covered positions are referred to as “banking book” positions.

The following table presents the components of Market Risk RWA as of December 31, 2021.

|   | Capital         | RWA              |
|---|-----------------|------------------|
| Regulatory VaR 10-day holding period <sup>1</sup> | \$ 434          | \$ 5,424         |
| Stressed VaR 10-day holding period <sup>1</sup>   | 1,090           | 13,626           |
| Incremental risk charge                           | 463             | 5,784            |
| Comprehensive risk measure                        | 210             | 2,621            |
| <b>Total internal models</b>                      | <b>2,196</b>    | <b>27,454</b>    |
| Standard specific risk                            |                 |                  |
| Securitization                                    | 816             | 10,196           |
| Non-securitization                                | 2,226           | 27,831           |
| Other charges <sup>2</sup>                        | 317             | 3,964            |
| <b>Total market risk</b>                          | <b>\$ 5,556</b> | <b>\$ 69,446</b> |

<sup>1</sup> A multiplier of 3.00 is used to determine VaR and Stressed capital numbers based on a 60-day average as of December 31, 2021.

<sup>2</sup> Other charges include VaR add-ons and De Minimis charges.

For additional information on market risk RWA calculated by capital requirement component under both the Standardized and Advanced approaches, refer to the Market Risk Regulatory Report for Institutions Subject to the Market Risk Capital Rule – FFIEC 102 for the period ended December 31, 2021.

### Trading Risk Management

To evaluate risks in our trading activities, the Corporation focuses on the actual and potential volatility of revenues generated by individual positions as well as portfolios of positions. VaR is a common statistic used to measure market risk as it allows the aggregation of market risk factors, including the effects of portfolio diversification. A VaR model simulates the value of a portfolio under a range of scenarios in order to generate a distribution of potential gains and losses. VaR represents the loss a portfolio is not expected to exceed more than a certain number of times per period, based on a specified holding period, confidence level and window of historical data. We use one VaR model consistently across the trading portfolios and it uses a historical simulation approach based on a three-year window of historical data. Our primary VaR statistic is equivalent to a 99 percent confidence level, which means that for a VaR with a one-day holding period, there should not be losses in excess of VaR, on average, 99 out of 100 trading days.

## Regulatory VaR

The VaR statistic used for the regulatory capital calculation shown in Table 14 is defined by regulatory standards (Regulatory VaR) and it differs from the VaR statistic disclosed in the Corporation's SEC disclosures (disclosed VaR) due to differences in the population and holding period. Regulatory standards require that Regulatory VaR only include the covered position portfolio, while the disclosed VaR also includes non-covered positions. The holding period for Regulatory VaR is ten days while for disclosed VaR it is one day. Both Regulatory VaR and disclosed VaR utilize the same framework and the same historical data.

Within the tables below, the VaR for each of the risk factors captures the expected loss with a 99 percent confidence level, similar to a stress scenario for each discrete risk factor. For example, the VaR for the interest rate risk factor identifies the potential loss the Corporation is not expected to exceed more than one out of every 100 days based on the previous three years of historical data for just the interest rate risk in the Corporation's portfolio. The historical days that generate these hypothetical losses might be different than the historical days that generate the hypothetical losses for the credit spread risk factor or for the Corporation's total portfolio. The combination of the potentially different historical days that generate the hypothetical losses for each risk factor is what produces the diversification benefit across the portfolio. As a result, the sum of the VaRs by risk factor is greater than the total Regulatory VaR.

Regulatory VaR does not incorporate the value that covered positions would gain or lose, in the absence of market moves, as they move toward expiration, which is known as time decay. Therefore, for certain portfolios the distribution of potential gains and losses estimated by the VaR model can produce a Regulatory VaR result that is not a loss.

The market risk related to all covered positions to which the Corporation is exposed is included in the total Regulatory VaR results. The majority of this portfolio is within the Global Markets segment. The table below presents the Regulatory VaR results by risk factors for the period end, average, high and low results. The add-ons and overlays to account for risks not captured in VaR are captured separately and are not included in Tables 14 and 15.

**Table 14 - Market Risk - Total Regulatory VaR**

|                             | 10-day Holding Period |               |               |               |
|-----------------------------|-----------------------|---------------|---------------|---------------|
|                             | Three months ended    |               |               |               |
|                             | December 31, 2021     |               |               |               |
|                             | Period End            | Average       | High          | Low           |
| Foreign exchange            | \$ 23                 | \$ 23         | \$ 43         | \$ 13         |
| Interest rate               | 130                   | 86            | 130           | 47            |
| Credit                      | 245                   | 240           | 275           | 220           |
| Equities                    | 68                    | 78            | 107           | 63            |
| Commodities                 | 20                    | 25            | 36            | 17            |
| Portfolio diversification   | (333)                 | (307)         | -             | -             |
| <b>Total Regulatory VaR</b> | <b>\$ 153</b>         | <b>\$ 145</b> | <b>\$ 178</b> | <b>\$ 111</b> |

<sup>1</sup> Designated as not meaningful ("NM"), because the High and Low for the total portfolio may have occurred during different trading days than the High and Low for the individual components. Therefore the amount of portfolio diversification, which is the difference between the total portfolio and the sum of the individual components, is not relevant for the High and Low results.

## Backtesting

The accuracy of the VaR methodology is evaluated by backtesting, which compares the daily VaR results, utilizing a one-day holding period, against a comparable subset of trading revenue. A backtesting excess occurs when a trading loss exceeds the VaR for the corresponding day. These excesses are evaluated to understand the positions and market moves that produced the trading loss with a goal to ensure that the VaR methodology accurately represents those losses.

Bank of America's backtesting multiplier remains unchanged at three for the December 31, 2021 reporting cycle. Backtesting excesses for our total Regulatory VaR results, utilizing a one-day holding period, occurred one day during the three months prior to December 31, 2021 and occurred on two days during the twelve months prior to December 31, 2021.

## Stressed Value-at-Risk

Stressed VaR is a variation of VaR in which the historical window is not the previous three years but is calibrated to a continuous 12-month window that reflects a period of significant financial stress appropriate to the Corporation's current portfolio. Stressed VaR is calculated daily based on a 99 percent confidence level, a ten-day holding period and the same population of exposures as Regulatory VaR. The Corporation utilizes a single model and process to calculate all Regulatory VaR, Stressed VaR, and disclosed VaR statistics. The following table presents the Stressed VaR results for the period end, average, high and low calculated over a ten-day holding period.

**Table 15 - Market Risk - Total Regulatory Stressed VaR**

|                               | 10-day Holding Period |         |        |        |
|-------------------------------|-----------------------|---------|--------|--------|
|                               | Three months ended    |         |        |        |
|                               | December 31, 2021     |         |        |        |
|                               | Period End            | Average | High   | Low    |
| Total Regulatory Stressed VaR | \$ 386                | \$ 363  | \$ 554 | \$ 207 |

## Incremental Risk Charge

The incremental risk charge (IRC) model is one component of the regulatory capital calculation for market risk. The model is intended to capture the potential losses that non-securitized covered position credit products in the trading portfolio might experience over a one-year period of financial stress from defaults, ratings migration and significant basis risk factors. To calculate potential losses at the required 99.9 percent confidence level, the Corporation utilizes a Monte-Carlo simulation calibrated using relevant, available historical data for each risk factor in order to sample potential market scenarios. The model reflects the impact of concentrated risks, including issuer, sector, region and product basis risks, and assigns a higher potential loss to a concentrated portfolio than a more diversified portfolio with a similar credit profile. The model framework also captures the broad relationships between the different risk factors and is flexible enough to allow additional dependencies or risk factors to be incorporated in the future. The IRC model assumes a constant position and a one-year liquidity horizon.

The following table presents the period end, average, high and low IRC over the period as of December 31, 2021. The IRC value used for the regulatory capital calculation is based on the higher of the period end value or the average value of the preceding 12 weeks.

**Table 16 - Market Risk - Incremental Risk Charge**

|                               | Three months ended |         |        |        |
|-------------------------------|--------------------|---------|--------|--------|
|                               | December 31, 2021  |         |        |        |
|                               | Period End         | Average | High   | Low    |
| Total incremental risk charge | \$ 463             | \$ 374  | \$ 476 | \$ 273 |

### Comprehensive Risk Measure

The Corporation's comprehensive risk measure (CRM) is another component of the regulatory capital calculation for market risk. The Corporation computes the metric as the greater of the modeled measure of all price risk or the total specific risk add-on applied to the Corporation's modeled correlation trading positions.

The modeled component of the CRM takes into account all of the risk factors that materially impact the value of the positions within the correlation trading portfolio. The model captures the complexity of these positions including the non-linear nature of the trade valuations, particularly during periods of market stress, and the impact of the joint evolution of the risk factors. The modeled component of the CRM utilizes the same Monte-Carlo simulation framework as the IRC model with the additional risk factors required for the correlation products in order to calculate the potential losses at the required 99.9 percent confidence level. The modeled component of the CRM, like the IRC model, assumes a constant position and a one-year liquidity horizon.

The CRM surcharge is calculated using two components. The first is the assessment made using the SFA, which calculates capital on securitization exposures based on the amount and the level of subordination available as credit support to each exposure. The second component of the surcharge is the capital for hedges of the correlation portfolio which are calculated under the specific risk standard charge framework. The surcharge is equal to 8 percent of the greater of the net longs or shorts of these aggregated components.

The following table presents the period end, average, high and low values for the CRM over the period as of December 31, 2021. The CRM value used for the regulatory capital calculation is based on the higher of the period end value or the average value of the preceding 12 weeks.

**Table 17 - Market Risk - Comprehensive Risk Measure**

|                                  | Three months ended |         |        |        |
|----------------------------------|--------------------|---------|--------|--------|
|                                  | December 31, 2021  |         |        |        |
|                                  | Period End         | Average | High   | Low    |
| Total comprehensive risk measure | \$ 210             | \$ 157  | \$ 210 | \$ 111 |

The following table presents the aggregate modeled amount of correlation trading positions as of December 31, 2021. Hedges to the correlation trading positions that are included in the modeled component of CRM are considered part of the aggregate correlation trading positions and are included in the table below. The values shown in the table are fair values.

**Table 18 - Market Risk - Correlation Trading Positions** December 31, 2021

|   | Correlation Positions |       | Hedges |
|---|-----------------------|-------|--------|
|   | (Dollars in millions) |       |        |
| Positions subject to comprehensive risk measure | \$                    | (289) | \$ 165 |
| Total correlation trading positions             | \$                    | (289) | \$ 165 |

The Corporation conducted an analysis to assess the validity of the IRC and CRM models and respective methodologies prior to being granted approval by the U.S. banking regulators to utilize the models. This analysis consisted of a comparison of alternative theories and approaches along with an understanding of the necessary assumptions and limitations of the models, as well as assessing the impact of stressing the calibrated parameters. This analysis was shared and discussed with the relevant regulatory agencies to ensure compliance with regulatory guidelines. The models are continually monitored to ensure that the implementation and applicability remain valid. We perform stress tests on these models on a regular basis. The calibration of these models is regularly reviewed. We incorporate relevant market data and changing market conditions on a regular basis. As with the Corporation's other quantitative risk models, the Stressed VaR, IRC and CRM models fall under the oversight of the Enterprise Model Risk Committee (EMRC) and adhere to its independent analysis and ongoing governance and standards policies.

### Trading Portfolio Stress Testing

Because the very nature of a VaR model suggests results can exceed estimates and it is dependent on a limited historical window, the Corporation also stress tests its portfolio using scenario analysis. This analysis estimates the change in the value of the trading portfolio that may result from abnormal market movements. For additional information on enterprise-wide stress testing, refer to *Managing Risk* and *Trading Risk Management* within the MD&A section in the December 31, 2021 Form 10-K.

## EQUITY EXPOSURES IN THE BANKING BOOK

Equity exposures in the banking book are primarily held for strategic business purposes and comprised of a diversified portfolio of investments in Bank-Owned Life Insurance, private equity investments and other equity investments primarily reported in other assets, as well as certain equity investments included in trading assets on the balance sheet that do not meet the criteria for market risk regulatory capital treatment. These positions are held either as direct investments or through a fund.

### Accounting and Valuation

Under GAAP, equity investments are generally required to be carried at fair value through net income with certain exceptions, including those accounted for under the equity method, ownership interests in exchanges, equity interests held by a broker dealer or investment company entity and Federal Home Loan and Federal Reserve Bank stock. Additionally, GAAP permits equity investments that do not have a readily determinable fair value to be carried at cost less impairment plus or minus observable price changes for identical or similar investments of the same issuer if certain criteria are met. Equity securities in the banking book are measured at fair value with all changes in fair value recorded in equity investment income. Certain equity investments in the portfolio are subject to investment company accounting under GAAP, and accordingly, are carried at fair value with changes in fair value reported in equity investment income. At

inception, the transaction price of an investment is generally considered to be the best indicator of fair value. Thereafter, valuation is based on an assessment of each individual investment using methodologies that include publicly traded comparable companies derived by multiplying a key performance metric (e.g., earnings before interest, taxes, depreciation and amortization) of the portfolio company by the relevant valuation multiple observed for comparable companies, acquisition companies, entry-level multiples and discounted cash flows, and are subject to appropriate discounts for lack of liquidity or marketability. Certain factors that may influence changes in fair value include, but are not limited to, recapitalizations, subsequent rounds of financing and offerings in the equity or debt capital markets. For additional information on fair value accounting and valuation techniques, refer to *Note 1 – Summary of Significant Accounting Principles* and *Note 20 – Fair Value Measurements* in the December 31, 2021 Form 10-K.

Under Basel 3, approaches for determining risk weights for equity investments in the banking book vary based on the type of exposure. If the equity exposure is to an investment fund, the Corporation applies the full look-through approach, the simple modified look-through approach or the alternative modified look-through approach. For all other equity investments in the banking book, the Corporation uses the simple risk weight approach and applies the appropriate multiplier to each exposure according to the prescribed regulatory percentages.

### Equity Exposures

The following table presents the carrying values, fair values, exposures and RWA of the Corporation's equity investments by risk weight categories as of December 31, 2021.

**Table 19 - Equity Exposures In Banking Book - Carrying Value and Fair Value by Risk Weight Approach**

December 31, 2021

| <i>(Dollars in millions)</i>                                     | Carrying Value   | Fair Value       | Exposure <sup>3</sup> | Risk-Weighted Assets | Risk Weight % |
|--|------------------|------------------|-----------------------|----------------------|---------------|
| <b>Simple Risk Weight Approach:</b>                              |                  |                  |                       |                      |               |
| 0% Risk Weight <sup>1</sup>                                      | \$ 5,130         | \$ 5,130         | \$ 5,130              | -                    | 0%            |
| 20% Risk Weight  | 319              | 319              | 319                   | 64                   | 20%           |
| Community Development Equity Exposures                           | 11,884           | 11,884           | 11,941                | 11,941               | 100%          |
| Publicly Traded Equity Exposures <sup>2</sup>                    | 1,135            | 1,294            | 5,965                 | 5,965                | 100%          |
| Non-publicly Traded Equity Exposures <sup>2</sup>                | 35,926           | 36,564           | 37,328                | 37,328               | 100%          |
| Significant Investments in Unconsolidated Financial Institutions | 52               | 52               | 52                    | 130                  | 250%          |
| <b>Total Simple Risk Weight Approach</b>                         | <b>54,446</b>    | <b>55,241</b>    | <b>60,735</b>         | <b>55,428</b>        | <b>91%</b>    |
| <b>Equity Exposures to Investment Funds:</b>                     |                  |                  |                       |                      |               |
| Full Look-through Approach                                       | 26,942           | 26,942           | 27,264                | 8,352                | 31%           |
| <b>Total Equity Exposures to Investment Funds</b>                | <b>26,942</b>    | <b>26,942</b>    | <b>27,264</b>         | <b>8,352</b>         | <b>31%</b>    |
| <b>Total Equity Exposures</b>                                    | <b>\$ 81,388</b> | <b>\$ 82,183</b> | <b>\$ 87,999</b>      | <b>\$ 63,780</b>     | <b>72%</b>    |

<sup>1</sup> Consists of Federal Reserve Bank stock.

<sup>2</sup> Equity exposures within the 300% and 400% risk weight categories were risk-weighted at 100% due to the aggregate carrying value of such exposures not exceeding the total capital threshold for higher risk weighting, or the exposure being the effective portion of hedge pairs.

<sup>3</sup> Includes off-balance sheet equity exposures of \$6.6 billion.

Total cumulative net realized gains arising from the sale and liquidation of equity investments were \$1 million for the quarter ended December 31, 2021.

## OPERATIONAL RISK OVERVIEW

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The Corporation defines operational risk as the risk of loss resulting from inadequate or failed processes, or systems, people or external events and includes legal risk. Operational risk may occur anywhere in the Corporation, including third-party business processes, and is not limited to operations functions. The Corporation faces a number of key operational risks including third-party risk, model risk, conduct risk, technology risk, information security risk and data risk. Operational risk can result in financial losses and reputational impacts and is a component in the calculation of total RWA used in the Basel 3 capital calculations.

Insurance maintained by the Corporation may mitigate the impact of operational losses. Certain insurance is purchased to be in compliance with laws, regulations or legal requirements, and in conjunction with specific hedging strategies to reduce adverse financial impacts arising from operational losses.

### **Advanced Measurement Approach**

The Advanced Measurement Approach (AMA) is used to quantify operational risk capital requirements. However, under the Federal Reserve's reservation of authority, they may require us to hold an amount of capital greater than otherwise required under the capital rules if they determine that our risk-based capital requirement using our internal analytical models is not commensurate with our Corporation's risks.

For additional information regarding operational risk, refer to *Compliance and Operational Risk Management* and

*Capital Management* within the MD&A section in the December 31, 2021 Form 10-K.

## INTEREST RATE RISK MANAGEMENT FOR THE BANKING BOOK

Interest rate risk represents the most significant market risk exposure to our banking book balance sheet. Interest rate risk is measured as the potential change in net interest income caused by movements in market interest rates. Client-facing activities, primarily lending and deposit-taking, create interest rate sensitive positions on our balance sheet.

*Rate Risk Management for the Banking Book* within the MD&A section in the December 31, 2021 Form 10-K.

### Risk Measurement

We prepare forward-looking forecasts of net interest income. The baseline forecast takes into consideration expected future business growth, ALM positioning and the direction of interest rate movements as implied by the market-based forward curve. We then measure and evaluate the impact that alternative interest rate scenarios have on the baseline forecast in order to assess interest rate sensitivity under varied conditions. The net interest income forecast is frequently updated for changing assumptions and differing outlooks based on economic trends, market conditions and business strategies. Thus, we continually monitor our balance sheet position in order to maintain an acceptable level of exposure to interest rate changes.

The interest rate scenarios that we analyze incorporate balance sheet assumptions such as loan and deposit growth and pricing, changes in funding mix, product repricing, maturity characteristics and investment securities premium amortization. Our overall goal is to manage interest rate risk so that movements in interest rates do not significantly adversely affect earnings and capital.

Table 20 presents the pretax dollar impact to forecasted net interest income over the next 12 months from December 31, 2021, resulting from instantaneous parallel and non-parallel shocks to the market-based forward curve. Periodically we evaluate the scenarios presented to ensure that they are meaningful in the context of the current rate environment. The interest rate scenarios also assume U.S. dollar rates are floored at zero.

**Table 20 - Estimated Banking Book Net Interest Income Sensitivity**

| Curve Change                   | Short Rate<br>(bps) | Long Rate<br>(bps) | December 31, 2021 |         |
|--------------------------------|---------------------|--------------------|-------------------|---------|
| <i>(Dollars in millions)</i>   |                     |                    |                   |         |
| <b>Parallel shifts</b>         |                     |                    |                   |         |
| +100 bps instantaneous shift   | +100                | +100               | \$                | \$6,542 |
| -25 bps instantaneous shift    | -25                 | -25                |                   | (2,092) |
| <b>Flatteners</b>              |                     |                    |                   |         |
| Short-end instantaneous change | +100                | -                  |                   | 4,982   |
| Long-end instantaneous change  | -                   | -25                |                   | (735)   |
| <b>Steepeners</b>              |                     |                    |                   |         |
| Short-end instantaneous change | -25                 | -                  |                   | (1,344) |
| Long-end instantaneous change  | -                   | +100               |                   | 1,646   |

For additional information on interest rate risk management for the banking book, including the impact to earnings from upward and downward shocks, refer to *Interest*



## SUPPLEMENTARY LEVERAGE RATIO

The Corporation is subject to minimum SLR requirements under Basel 3. The numerator of the SLR is quarter-end Basel 3 Tier 1 capital. The denominator is total leverage exposure based on the daily average of the sum of on-balance sheet exposures less permitted deductions as well as the simple average of certain off-balance sheet exposures, as of the end of each month in a quarter. Off-balance sheet exposures primarily include undrawn lending commitments, letters of credit, potential future derivative exposures and repo-style transactions. Total leverage exposure includes the effective notional principal amount of credit derivatives and similar instruments through which credit protection is sold. The credit conversion factors (CCFs) applied to certain off-balance sheet exposures conform to the graduated CCF utilized under the Basel 3 Standardized approach, but are subject to a minimum 10 percent CCF.

The following table presents the components of the Supplementary Leverage Ratio as of December 31, 2021.

Table 21 - Supplementary Leverage Ratio  
under CECL Transitional December 31, 2021  
*(Dollars in millions)*

|  |                     |
|--|---------------------|
| <b>Tier 1 Capital</b>                        | <b>\$ 196,465</b>   |
| <b>Total consolidated assets<sup>1</sup></b> | <b>3,172,003</b>    |
| Adjustment for derivative transactions       | 154,739             |
| Adjustment for repo-style transactions       | 31,072              |
| Adjustment for off-balance sheet exposures   | 333,999             |
| Other adjustments <sup>2</sup>               | (88,006)            |
| <b>Total Supplementary Leverage Exposure</b> | <b>\$ 3,603,807</b> |
| <b>SLR</b>                                   | <b>5.5%</b>         |

<sup>1</sup> Amounts as published in Bank of America's December 31, 2021 Consolidated Financial Statements for Bank Holding Companies - FR Y-9C including the impact of the Corporation's adoption of the CECL accounting standard on January 1, 2020 plus 25 percent of the increase in adjusted allowance for credit losses from January 1, 2020 through December 31, 2021.

<sup>2</sup> Includes adjustments to Tier 1 capital and adjustments for frequency calculations.

For additional information on the Supplementary Leverage Ratio, refer to Schedule A "Advanced Approaches Regulatory Capital" in Bank of America's December 31, 2021 Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework – FFIEC 101.

## MODEL RISK MANAGEMENT

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Model risk is the potential for adverse consequences from decisions based on incorrect or misused model outputs and reports. Given that models are used across the Corporation, model risk impacts all risk types including credit, market and operational risks. The Enterprise Model Risk Policy defines model risk standards, consistent with our Risk Framework and risk appetite, prevailing regulatory guidance and industry best practice. All models, including risk management, valuation and regulatory capital models, must meet certain validation criteria, including effective challenge of the conceptual soundness of the model, independent model testing and ongoing monitoring through outcomes analysis and benchmarking. The Enterprise Model Risk Committee (EMRC), a subcommittee of the Management Risk Committee (MRC), oversees that model standards are consistent with model risk requirements and monitors the effective challenge in the model validation process across the Corporation.



## APPENDIX: REFERENCES

Bank of America's Form 10-K contains pertinent information related to the Basel 3 disclosure requirements. A summary of the references made in the preceding disclosure can be found in the following table.

### References to Form 10-K

| <b>Section</b>  | <b>Location</b>              |
|---|------------------------------|
| <i>Business Overview</i>  | <i>Executive Summary</i>     |
| <i>Item 1A. Risk Factors</i>  | <i>Item 1A. Risk Factors</i> |
| <i>Allowance for Credit Losses</i>  | <i>MD&amp;A</i>              |
| <i>Capital Management</i>   | <i>MD&amp;A</i>              |
| <i>Credit Risk Management</i>   | <i>MD&amp;A</i>              |
| <i>Interest Rate Risk Management for the Banking Book</i>   | <i>MD&amp;A</i>              |
| <i>Liquidity Risk</i>   | <i>MD&amp;A</i>              |
| <i>Managing Risk</i>  | <i>MD&amp;A</i>              |
| <i>Market Risk Management</i>   | <i>MD&amp;A</i>              |
| <i>Trading Risk Management</i>  | <i>MD&amp;A</i>              |
| <i>Compliance and Operational Risk Management</i>   | <i>MD&amp;A</i>              |
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| <i>Maturities of Debt Securities Carried at Fair Value and Held-to-maturity Debt Securities Table</i> | <i>Note 4</i>                |
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