Merrill Lynch Capital Services, Inc.
and Subsidiaries

Consolidated Statement of Financial Condition and Supplemental Schedule

December 31, 2023

Filed pursuant to CFTC Regulation 23.105(i)(3) under the Commodity Exchange Act as a public document.

Page(s)

Independent Auditor's Report.....3

Consolidated Statement of Financial Condition..... 4-5

Notes to Consolidated Statement of Financial Condition.....6-25

Supplemental Schedule I

Unconsolidated Net Capital for Swap Dealers Pursuant to CFTC Regulation 23.101 under the CEA.....26

Report of Independent Auditors

To the Board of Directors and Management of Merrill Lynch Capital Services, Inc. and Subsidiaries:

Opinion

We have audited the accompanying consolidated statement of financial condition of Merrill Lynch Capital Services, Inc. and its subsidiaries (the "Company") as of December 31, 2023, including the related notes (referred to as the "consolidated statement of financial condition").

In our opinion, the accompanying consolidated statement of financial condition presents fairly, in all material respects, the financial position of the Company as of December 31, 2023 in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Statement of Financial Condition section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Consolidated Statement of Financial Condition

Management is responsible for the preparation and fair presentation of the consolidated statement of financial condition in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of a consolidated statement of financial condition that is free from material misstatement, whether due to fraud or error.

In preparing the consolidated statement of financial condition, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date the statement of financial condition is available to be issued.

Auditors' Responsibilities for the Audit of the Consolidated Statement of Financial Condition

Our objectives are to obtain reasonable assurance about whether the consolidated statement of financial condition as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated statement of financial condition.

PricewaterhouseCoopers LLP, 300 Madison Avenue, New York, NY 10017
T: (646) 471 3000, F: (813) 286 6000, www.pwc.com/us

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated statement of financial condition, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated statement of financial condition.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated statement of financial condition.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Supplemental Information

Our audit was conducted for the purpose of forming an opinion on the consolidated statement of financial condition taken as a whole. The accompanying Unconsolidated Net Capital for Swap Dealers Pursuant to CFTC Regulation 23.101 under the CEA as of December 31, 2023 (referred to as the "supplemental information") is presented for purposes of additional analysis as required by Regulation 23.105 under the Commodity Exchange Act and is not a required part of the consolidated statement of financial condition. Such supplemental information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated statement of financial condition. The supplemental information has been subjected to the auditing procedures applied in the audit of the consolidated statement of financial condition and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated statement of financial condition or to the consolidated statement of financial condition itself and other additional procedures, in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental information is fairly stated, in all material respects, in relation to the consolidated statement of financial condition taken as a whole.

PricewaterhouseCoopers LLP

New York, New York
February 28, 2024

Merrill Lynch Capital Services, Inc. and Subsidiaries
Consolidated Statement of Financial Condition
December 31, 2023

(dollars in thousands)

ASSETS		
Cash and cash equivalents	$	1,224,041
Cash and securities deposited with clearing organizations		1,360,419
Receivables under resale agreements		3,535,400
Trading assets, at fair value		
Corporate debt		70,905
Derivative contracts		598,899
Non-U.S. governments and agencies		298,419
		968,223
Other receivables		
Customers		42,273
Brokers and dealers		33,616
Income taxes		22,598
Interest and other		67,515
		166,002
Deferred tax assets		6,097
Total Assets	$	7,260,182

The accompanying notes are an integral part of the Consolidated Statement of Financial Condition

Merrill Lynch Capital Services, Inc. and Subsidiaries
Consolidated Statement of Financial Condition
December 31, 2023

(dollars in thousands, except share and per share amounts)

LIABILITIES		
Trading liabilities, at fair value		
Derivative contracts	$	2,290,873
Other payables		
Customers		106,060
Brokers and dealers		26
Interest and other		59,511
Loans due to affiliates		2,155,628
		2,321,225
Deferred tax liabilities		35,053
Long-term borrowings, measured at fair value in accordance with the fair value option election		2,600
Commitments, contingencies and guarantees (See note 10)		
Subordinated borrowings (See note 9)		500,000
Total Liabilities		5,149,751
STOCKHOLDER'S EQUITY		
Common stock, par value $1 per share; 50,000 shares authorized; 1,000 shares issued and outstanding		1
Preferred stock, par value $5 per share; 30,000 shares authorized; no shares issued or outstanding		—
Paid-in capital		2,432,844
Retained deficit		(322,414)
Total Stockholder's Equity		2,110,431
Total Liabilities and Stockholder's Equity	$	7,260,182

The accompanying notes are an integral part of the Consolidated Statement of Financial Condition.

1. Organization

Description of Business

Merrill Lynch Capital Services, Inc. ("MLCS"), together with its subsidiaries (the "Company"), is a United States ("U.S.") based derivatives dealer, primarily trading in interest rate, currency and credit derivatives. MLCS is registered as a swap dealer with the U.S. Commodity Futures Trading Commission ("CFTC") and as a swap firm with the National Futures Association ("NFA").

The Company is a wholly-owned indirect subsidiary of Bank of America Corporation ("Bank of America" or the "Parent"). The Company's direct parent is NB Holdings Corporation ("NB Holdings"), which is a wholly-owned subsidiary of Bank of America.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Consolidated Statement of Financial Condition is presented in accordance with U.S. Generally Accepted Accounting Principles ("U.S. GAAP"). Intercompany transactions and balances have been eliminated. The Consolidated Statement of Financial Condition is presented in U.S. dollars.

Consolidation Accounting

The Consolidated Statement of Financial Condition includes the accounts of the Company and its subsidiaries in which the Company has a controlling financial interest.

The Company determines whether it is required to consolidate an entity by first evaluating whether the entity qualifies as a voting rights entity ("VRE") or as a variable interest entity ("VIE").

VREs are defined to include entities that have both equity at risk that is sufficient to fund future operations and have equity investors that have a controlling financial interest in the entity through their equity investments. In accordance with Accounting Standards Codification ("ASC") 810, *Consolidation* ("Consolidation Accounting"), the Company generally consolidates those VREs where it has a majority of the voting rights.

VIEs are entities that do not meet the VRE criteria which are generally analyzed for consolidation as VIEs. A VIE is an entity that lacks equity investors or whose equity investors do not have a controlling financial interest in the entity through their equity investments. The Company consolidates a VIE if it has both the power to direct the activities that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. On a quarterly basis, the Company reassesses its involvement with the VIE and evaluates the impact of changes in governing documents and its financial interests in the VIE. The consolidation status of the VIEs with which the Company is involved may change as a result of such reassessments. The Company had no consolidated or unconsolidated VIEs during 2023.

Use of Estimates

In presenting the Consolidated Statement of Financial Condition, management makes estimates including the following:

- Valuations of assets and liabilities requiring fair value estimates;
- The allowance for credit losses;
- The ability to realize deferred tax assets and the recognition and measurement of uncertain tax positions;
- The outcome of pending litigation;
- Other matters that affect the reported amounts and disclosure of contingencies in the Consolidated Statement of Financial Condition

Estimates, by their nature, are based on judgment and available information. Therefore, actual results could differ from those estimates and could have a material impact on the Consolidated Statement of Financial Condition, and it is possible that such changes could occur in the near term. A discussion of certain areas in which estimates are a significant component of the amounts reported in the Consolidated Statement of Financial Condition are as follows:

Fair Value Measurement

The Company measures a significant portion of its financial instruments at fair value or considers fair value in their measurement. The Company measures certain financial assets and liabilities at fair value under various accounting literature that requires an entity to measure fair value on an exit price, including ASC 815, *Derivatives and Hedging,* ("Derivatives Accounting"), and the fair value option election in accordance with ASC 825-10-25, *Financial Instruments - Recognition,* ("fair value option election"). ASC 820, *Fair Value Measurements and Disclosures*, ("Fair Value Accounting") defines fair value, establishes a framework for measuring fair value, establishes a fair value hierarchy based on the quality of inputs used to measure fair value and enhances disclosure requirements for fair value measurements.

In determining fair value measurement of financial assets and financial liabilities, the Company considers the credit risk of its counterparties, as well as its own creditworthiness. The Company attempts to mitigate credit risk to third parties and affiliated companies by entering into netting and collateral agreements. Net counterparty exposure (counterparty positions netted by offsetting transactions and cash collateral) is valued for counterparty creditworthiness and the resultant credit valuation adjustment ("CVA") is incorporated into the fair value of the financial assets.

Fair value measurement also requires that the Company consider its own creditworthiness when determining the fair value of certain instruments (i.e., debit valuation adjustment or "DVA"). The Company does not have an independent credit rating. However, certain of its derivative liabilities are guaranteed by Bank of America. The DVA for the Company is based on Bank of America's credit ratings and spreads. The impact of the Company's DVA is incorporated into the fair measurement value of instruments such as over-the-counter ("OTC") derivative contracts.

The Company includes a funding valuation adjustment ("FVA") into valuation estimates primarily to include funding costs on uncollateralized derivatives and derivatives where the Company is not permitted to use the collateral it receives. FVA related to derivative assets and liabilities is the effect of funding costs on the fair value of these derivatives. The impact of the Company's FVA is incorporated into the fair value of its derivatives.

For additional information on calculating CVA, DVA and FVA see Note 5.

Legal Reserves

The Company is occasionally a party in various actions, some of which involve claims for substantial amounts. Amounts are accrued for the financial resolution of claims that have either been asserted or are deemed probable of assertion if, in the opinion of management, it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. In many cases, it is not possible to determine whether a liability has been incurred or to estimate the ultimate or minimum amount of that liability until the case is close to resolution, in which case no accrual is made until that time. Accruals are subject to significant estimation by management, with input from any outside counsel handling the matter. Refer to Note 10 for further information.

Income Taxes

There are two components of income tax expense: current and deferred. Current income tax expense reflects taxes to be paid or refunded for the current period. Deferred income tax expense results from changes in deferred tax assets and liabilities between periods. These gross deferred tax assets and liabilities represent decreases or increases in taxes expected to be paid in the future because of future reversals of temporary differences in the bases of assets and liabilities as measured by tax laws and their bases as reported in the Consolidated Statement of Financial Condition. Deferred tax assets are also recognized for tax attributes such as net operating loss carryforwards and tax credit carryforwards. Valuation allowances are recorded to reduce deferred tax assets to the amounts management concludes are more likely than not to be realized.

Unrecognized income tax benefits (UTBs) are recognized and measured based upon a two-step model: first, a tax position must be more likely than not to be sustained based solely on its technical merits in order to be recognized, and second, the benefit is measured as the largest dollar amount of that position that is more likely than not to be sustained upon settlement. The difference between the benefit recognized and the tax benefit claimed on a tax return is referred to as an unrecognized tax benefit.

Under the intercompany tax allocation agreements, tax benefits associated with net operating losses (NOLs) (or other tax attributes) of the Company are payable to the Company generally upon utilization in Bank of America's tax returns.

In addition, under these agreements, substantially all current income taxes (federal, combined and unitary state) are recorded as income tax receivable and payable due to affiliate, which are included on the Consolidated Statement of Financial Condition within Interest and other receivables, including loans due from affiliates, Interest and other payables, and Loans due to affiliates, and is settled on at least an annual basis.

In accordance with Bank of America's intercompany tax allocation agreements, any new or subsequent change in a UTB related to Bank of America's state consolidated, combined, or unitary return in which the Company is a member will generally not be reflected in the Company's Consolidated Statement of Financial Condition. However, upon resolution of the item, any significant impact determined to be attributable to the Company will be reflected in the Company's Consolidated Statement of Financial Condition.

See Note 11 - Income Taxes for further discussion of income taxes.

Consolidated Statement of Financial Condition Captions
The following are descriptions related to specific Consolidated Statement of Financial Condition captions.

Cash and Cash Equivalents
The Company defines cash equivalents as short-term, highly liquid securities, and interest-earning deposits with maturities, when purchased, of 90 days or less, that are not used for trading purposes.

Cash and Securities Deposited with Clearing Organizations
The Company is required to deposit cash and/or securities directly with the Brazilian Futures Exchange and London Clearing House ("LCH") Clearnet in order to clear on the exchange. Securities are deposited at the Brazilian Futures Exchange and cash and securities are deposited at LCH Clearnet at December 31, 2023.

Receivables Under Resale Agreements
The Company enters into resale agreements with affiliated companies to obtain collateral for derivatives contracts and to place collateral at futures exchanges. Refer to Note 3 for further information. Resale agreements are accounted for as collateralized financings and recorded at contractual amounts plus accrued interest.

Resale agreements that are recorded at their contractual amounts plus accrued interest approximate fair value, as the fair value of these items is not materially sensitive to shifts in market interest rates because of the short-term nature of these instruments and/or variable interest rates or to credit risk because the resale agreements are substantially collateralized.

For resale agreements, the Company's policy is to monitor the market value of the principal amount loaned and obtain collateral from counterparties, where appropriate. Resale agreements do not create material credit risk due to these collateral provisions and the allowance for losses is not material.

Substantially all resale agreements are transacted under legally enforceable master agreements that give the Company, in the event of default by the counterparty, the right to liquidate securities held and to offset payables with the same counterparty. The Company offsets certain resale transactions with the same counterparty on the Consolidated Statement of Financial Condition where it has such a legally enforceable master netting agreement and the transactions have the same maturity date.

Trading Assets and Liabilities
Trading assets and trading liabilities consist of cash instruments (primarily securities to hedge its risk) and derivative instruments. See Note 5 for additional information on derivative instruments.

Trading assets and liabilities are generally recorded on a trade date basis at fair value. Included in trading liabilities are securities that the Company has sold but did not own and will therefore be obligated to purchase at a future date ("short sales").

Derivatives
A derivative is an instrument whose value is derived from an underlying instrument or index, such as interest rates, equity security prices, currencies, commodity prices or credit spreads. Derivatives include futures, forwards, swaps, option contracts and other financial instruments with similar characteristics. Derivative contracts often involve future commitments to exchange interest payment streams based on a notional or contractual amount (e.g., interest rate swaps) or to purchase or sell other financial instruments at specified terms on a specified date (e.g., options). All derivatives are accounted for at fair value. Refer to Notes 5 and 6 for further information.

Other Receivables and Payables
Customers
Receivables from and payables to customers include cash collateral balances held or posted by the Company for derivatives transactions. The Company enters into certain credit support annex ("CSA") agreements that require collateral to be received from or posted to derivatives counterparties. The collateral maintenance provisions consisting of daily margining of collateral is expected to be maintained into the foreseeable future and the expected losses are assumed to not have a material impact to the Consolidated Statement of Financial Condition.

Brokers and Dealers
Broker and dealer receivables and payables primarily include amounts related to securities transactions and cash collateral posted to or received from an affiliated broker-dealer.

Income Taxes
Income taxes receivable represent current amounts due from affiliated companies and Internal Revenue Service ("IRS") for both federal and state income taxes.

Interest and Other
Interest and other receivables and payables include fails to deliver and fails to receive relating to derivative transactions, and payables and receivables to/from affiliated companies for certain affiliate transactions. The Company performs qualitative analyses, including consideration of historical losses and current economic conditions, to estimate any expected credit losses which are then included in a valuation account that is recorded as a contra-asset against the amortized cost basis of the financial asset.

Deferred Tax Assets and Liabilities
Significant components of the Company's deferred tax assets and liabilities are discussed in Note 11.

Loans Due to Affiliates
The Company's funding needs are generally met by and dependent upon separate intercompany loan arrangements with NB Holdings and Bank of America. The Company enters into these agreements to facilitate centralized liquidity management and to settle certain intercompany expenses with affiliates. These agreements automatically extend semi-annually unless specific actions are taken prior to the maturity date. The loan amounts are primarily U.S. dollar-denominated and are recorded at principal balance plus accrued interest based on prevailing short-term market rates. Refer to Note 3 for further information.

Subordinated Borrowings
The Company entered into subordinated borrowings with NB Holdings. Refer to Note 9 for further information.

Long-Term Borrowings
Long-term borrowings consist of borrowings from affiliated companies and prepaid derivative contracts. Long-term borrowings are carried at fair value under the fair value option election.

Translation of Foreign Currencies
The Company's functional currency is the U.S. dollar. Assets and liabilities denominated in foreign currencies are translated at period-end rates of exchange.

3. Related Party Transactions

The Company has entered into various transactions with affiliated companies, including transactions in connection with certain trading activities, financing activities as well as the allocation of certain shared services. Details on the amounts receivable from and payable to affiliated companies are presented below. Where applicable, the descriptions included in Note 2 also pertain to the affiliated balances presented below.

The Company may intermediate transactions with certain counterparties through affiliated companies who have existing relationships with these counterparties or enter into transactions with affiliated companies for the purpose of managing risks that the Company has assumed through various transactions it has entered into with counterparties.

The following two tables summarize related party balances included in the respective Consolidated Statement of Financial Condition captions as of December 31, 2023.

(dollars in thousands)		
Assets:		
Cash and cash equivalents	$	1,209,638
Receivables under resale agreements		3,535,400
Corporate debt		42,784
Derivative contracts [1]		13,303
Brokers and dealers receivables		33,616
Interest and other receivables		13,013
Total	$	4,847,754

(dollars in thousands)		
Liabilities:		
Derivative contracts [1]	$	6,774
Customer payables		71,856
Interest and other payables		41,056
Loans due to affiliates		2,155,628
Long-term borrowings		2,600
Subordinated borrowings		500,000
Total	$	2,777,914

[1] Net of counterparty and cash collateral netting. For additional information on derivatives, see Note 5

The Company has established unsecured borrowing agreements with NB Holdings, Merrill Lynch Bank and Trust Company (Cayman) Limited and Bank of America, National Association in the normal course of business. Amounts outstanding under these arrangements are included within *Loans due to affiliates*. The arrangements are summarized below:

Agreements with NB Holdings

- A $10.0 billion uncommitted six month revolving senior unsecured line of credit. Interest on the line of credit is based on prevailing short-term market rates. The credit line matures on August 1, 2024 and will automatically be extended semi-annually to the succeeding February 1st unless specific actions are taken 180 days prior to the maturity date. At December 31, 2023, approximately $2.2 billion was outstanding on the line of credit.
- A $2.0 billion committed six month revolving senior unsecured line of credit. Interest on the line of credit is based on prevailing short-term market rates. The credit line matures on August 1, 2024 and will automatically be extended semi-annually to the succeeding February 1st unless specific actions are taken 180 days prior to the maturity date. At December 31, 2023, approximately $10 thousand was outstanding on the line of credit.

Agreement with Merrill Lynch Bank and Trust Company (Cayman) Limited

- A $5.0 billion uncommitted six month revolving unsecured line of credit. Interest on the line of credit is based on prevailing short-term market rates. The credit line matures on August 1, 2024 and will automatically be extended semi-annually to the succeeding February 1st unless specific actions are taken 180 days prior to the maturity date. At December 31, 2023, there was no amount outstanding on this line of credit.

Agreements with Bank of America, National Association ("BANA")

- Company has a $1.7 billion uncommitted intra-day unsecured line of credit. The intraday liquidity is provided through daylight overdraft of the demand deposit accounts held by the Company at BANA. At December 31, 2023, there was no amount outstanding on this line of credit.

Refer to Note 9 for information on subordinated borrowings between the Company and NB Holdings.

4. Trading Activities

The Company's trading activities consist primarily of derivatives transactions with both affiliated companies and third party clients.

Trading Risk Management

Trading activities subject the Company to market and credit risks. These risks are managed in accordance with Bank of America's established risk management policies and procedures. Bank of America's risk management structure as applicable to the Company is described below.

Global Risk Management is responsible for providing senior management with a clear and comprehensive understanding of the trading risks to which Bank of America (including the Company's sales and trading business) 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.

Bank of America conducts its business operations through a substantial number of subsidiaries. The subsidiaries are established to fulfill a wide range of legal, regulatory, tax, licensing and other requirements. As such, to ensure a consistent application of minimum levels of controls and processes across its subsidiaries, Bank of America has in place a Subsidiary Governance Policy, to which the Company complies. This policy outlines the minimum required governance, controls, management reporting, financial and regulatory reporting, and risk management practices for Bank of America's subsidiaries.

Market Risk

Market risk is the risk that changes in market conditions may adversely impact the value of assets or liabilities, or otherwise negatively impact earnings.

Trading positions are reported at fair value. Trading positions are subject to various changes in market-based risk factors. The majority of this risk is generated by the Company's activities in the interest rate, foreign exchange and credit markets. The values of assets and liabilities could change due to market liquidity, correlations across markets and expectations of market volatility. The Company seeks to manage these risk exposures by using a variety of techniques that encompass a broad range of financial instruments.

Market Liquidity Risk

Market liquidity risk represents the risk that the level of expected market activity changes dramatically and, in certain cases, may even cease. This exposes the Company to the risk that the Company will not be able to transact business and execute trades in an orderly manner, which may impact results. This impact could be further exacerbated if expected hedging or pricing correlations are compromised by disproportionate demand or lack of demand for certain instruments.

Liquidity Risk

Liquidity Risk is the inability to meet expected or unexpected cash flow and collateral needs while continuing to support the Company's business and customer needs, under a range of economic conditions. The Company's primary liquidity risk management objective is to meet all contractual and contingent financial obligations at all times, including during periods of stress. To achieve that objective, the Company analyzes and monitors its liquidity risk under expected and stressed conditions, maintains excess liquidity and access to diverse funding sources and seeks to align liquidity-related incentives and risks. Excess liquidity is defined as readily available assets, limited to cash and high-quality, liquid, unencumbered securities that the Company can use to meet contractual and contingent financial obligations as those obligations arise. In addition, the Company is supported through committed and uncommitted borrowing arrangements with NB Holdings.

Interest Rate Risk

Interest rate risk represents exposure to instruments whose values vary with the level or volatility of interest rates. These instruments include, but are not limited to, interest rate swap agreements and futures. Hedging instruments used to mitigate these risks include derivatives such as options, futures, forwards and swaps.

Foreign Exchange Risk

Foreign exchange risk represents exposures to changes in the values of current holdings and future cash flows denominated in currencies other than the U.S. dollar. The types of instruments exposed to this risk include securities, future cash flows in foreign currencies arising from foreign exchange transactions and various foreign exchange derivatives whose values fluctuate with changes in the level or volatility of currency exchange rates or non-U.S. interest rates. Hedging instruments used to mitigate this risk include currency forwards and options.

Credit Spread Risk

Credit spread risk arises from the possibility that changes in credit spreads will affect the value of financial instruments. Certain instruments are used by the Company to manage this type of risk. Swaps and options, for example, can be designed to mitigate losses due to changes in credit spreads, and the credit downgrade or default of the issuer. Credit risk resulting from default on counterparty obligations is discussed in the *Counterparty Credit Risk* section.

Counterparty Credit Risk
The Company is exposed to risk of loss if an individual, counterparty or issuer fails to perform its obligations under contractual terms ("default risk"). Both cash instruments and derivatives expose the Company to default risk. Credit risk arising from changes in credit spreads is discussed above.

The Company has established policies and procedures for mitigating counterparty credit risk on principal transactions, including reviewing and establishing limits for credit exposure, maintaining qualifying collateral, purchasing credit protection, and continually assessing the creditworthiness of counterparties.

Derivatives Default Risk
The Company's trading derivatives consist of derivatives provided to customers and affiliates and derivatives entered into for trading strategies or risk management purposes. Default risk exposure varies by type of derivative. Default risk on derivatives can occur for the full notional amount of the trade where a final exchange of principal takes place, as may be the case for currency swaps. Swap agreements and forward contracts are generally OTC-transacted and thus are exposed to default risk to the extent of their replacement cost. Since futures contracts are exchange-traded and usually require daily cash settlement, the related risk of loss is generally limited to a one-day net positive change in fair value. Generally such receivables and payables are recorded in customers' receivables and payables on the Consolidated Statement of Financial Condition. Option contracts can be exchange-traded or OTC. Purchased options have default risk to the extent of their replacement cost. Written options represent a potential obligation to counterparties and typically do not subject the Company to default risk except under circumstances where the option premium is being financed or in cases where the Company is required to post collateral. Refer to Note 5 for further information on credit risk management related to derivatives.

Concentrations of Credit Risk
The Company's exposure to credit risk (both default and credit spread) associated with its trading and other activities is measured on an individual counterparty basis, as well as by groups of counterparties that share similar attributes. Concentrations of credit risk can be affected by changes in political, industry, or economic factors. To reduce the potential for risk concentration, credit limits are established and monitored in light of changing counterparty and market conditions.

Industry Concentration Risk
The Company's primary industry credit concentration is with financial institutions, including affiliates, which arises in the normal course of the Company's trading and financing activities. Financial institutions include brokers and dealers, commercial banks, financing companies, insurance companies, and investment companies.

5. Derivatives

The Company requires that an entity recognize all derivatives as either assets or liabilities and measure those instruments at fair value. The fair value of all derivatives and associated cash collateral is recorded on a net-by-counterparty basis on the Consolidated Statement of Financial Condition where the Company believes a legal right of offset exists under an enforceable master netting agreement. The Company enters into derivatives to facilitate client and affiliate transactions, for trading and financing purpose, and to manage risk exposures arising from trading assets and liabilities.

Derivative Balances by Primary Risk
Derivative instruments contain numerous market risks. In particular, most derivatives have interest rate risk, as they contain an element of financing risk that is affected by changes in interest rates. Additionally, derivatives expose the Company to counterparty credit risk, although this is generally mitigated by collateral margining and netting arrangements. For disclosure purposes below, the primary risk of a derivative is largely determined by the business that is engaging in the derivative activity. For instance, a derivative that is initiated by a credit derivative business will generally have credit price risk as its primary underlying market risk and is classified as such for the purposes of this disclosure, despite the fact that there may be other market risks that affect the value of the instrument.

The following table identifies the primary risk for derivative instruments at December 31, 2023. The primary risk balances are presented on a gross basis, prior to the application of counterparty and cash collateral netting. Total derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements and have been reduced by the cash collateral received or paid.

(dollars in thousands)	Contract/ Notional [1]	Trading Assets: Derivative Contracts [4]	Trading Liabilities: Derivative Contracts [4]
Interest rate contracts			
Swaps	$ 913,263,971	$ 19,426,940	$ 20,238,239
Futures and forwards	15,166,030	962	1,236
Written options [2]	112,814,260	568,512	2,139,521
Purchased options [3]	109,467,926	2,898,898	736,351
Foreign exchange contracts			
Swaps	110,096,149	3,585,514	2,280,753
Futures and forwards	21,832,904	786,648	758,749
Written options [2]	10,154,041	73,141	340,402
Purchased options [3]	6,076,452	348,083	101,640
Credit derivatives [5]			
Purchased credit derivatives			
Credit default swaps	4,326,718	546,977	38,021
Total return swaps	483,114	3,939	88,944
Written credit derivatives			
Credit default swaps	3,916,501	1,094	476,232
Total return swaps	418,002	2,199	1,647
Total gross derivative assets/liabilities		28,242,907	27,201,735
Less: Legally enforceable master netting agreements		(19,206,481)	(19,206,480)
Less: Cash collateral received/paid		(8,437,527)	(5,704,382)
Total derivative assets and liabilities		$ 598,899	$ 2,290,873

(1) Represents the total contract/notional amount of derivative assets and liabilities outstanding.
(2) Includes certain out-of-the-money purchased options that have a liability amount primarily due to the deferral of the option premiums to the end of the contract.
(3) Includes certain out-of-the-money written options that have an asset amount primarily due to the deferral of the option premiums to the end of the contract.
(4) The amounts in the table above include both third party and affiliate trading derivatives. At December 31, 2023, the Company had gross derivative assets with affiliated companies of $15.4 billion, legally enforceable netting with affiliated companies of $11.0 billion and cash collateral netting with affiliated companies of $4.3 billion. At December 31, 2023, the Company had gross derivative liabilities with affiliated companies of $11.4 billion, legally enforceable netting with affiliates of $11.0 billion, and cash collateral paid netting with affiliated companies of $0.3 billion. At December 31, 2023, the notional value of derivative asset and liability contracts with affiliated companies was $490 billion.
(5) The net derivative liability and notional amount of written credit derivatives for which the Company held purchased credit derivatives with identical underlying referenced names were $0.4 billion and $3.9 billion, respectively, at December 31, 2023.

Offsetting of Derivatives

The Company enters into International Swaps and Derivatives Association, Inc. ("ISDA") master netting agreements or similar agreements with substantially all of its derivative counterparties. Where legally enforceable, these master netting agreements give the Company, in the event of default by the counterparty, the right to liquidate securities held as collateral and to offset receivables and payables with the same counterparty. For purposes of the Consolidated Statement of Financial Condition, the Company offsets derivative assets and liabilities and cash collateral held with the same counterparty where it has such a legally enforceable master netting agreement.

The following table presents over-the counter derivative instruments included in derivative trading assets and liabilities on the Company's Consolidated Statement of Financial Condition at December 31, 2023 by primary risk (e.g., interest rate risk). Over-the-counter derivatives include bilateral transactions between the Company and a particular counterparty, and include cleared derivatives where the transactions are cleared through a clearing house.

Balances are presented on a gross basis, prior to the application of counterparty and cash collateral netting. Total gross derivative assets and liabilities are adjusted on an aggregate basis to take into consideration the effects of legally enforceable master netting agreements, which includes reducing the balance for counterparty netting and the cash collateral received or paid.

Other gross derivative assets and liabilities in the table represent derivatives entered into under master netting agreements where uncertainty exists as to the enforceability of these agreements under bankruptcy laws in some countries or industries and, accordingly, receivables and payables with counterparties in these countries or industries are reported on a gross basis.

Also included in the table is financial instrument collateral related to legally enforceable master netting agreements that represents securities collateral received or pledged and cash and securities collateral held and posted at third-party custodians. These amounts are not offset on the Consolidated Statement of Financial Condition, but are shown as a reduction to total derivative assets and liabilities in the table to derive net derivative assets and liabilities.

(dollars in thousands)	Trading Assets - Derivative Contracts	Trading Liabilities - Derivative Contracts
Interest rate contracts	$ 22,850,165	$ 23,107,367
Foreign exchange contracts	4,793,386	3,481,544
Credit derivatives	551,910	604,829
Total gross derivative assets/liabilities, before netting	28,195,461	27,193,740
Less: Legally enforceable master netting agreements and cash collateral received/paid	(27,644,008)	(24,910,862)
Derivative assets/liabilities, after netting	551,453	2,282,878
Other gross derivative assets/liabilities	47,446	7,995
Total derivative assets/liabilities	598,899	2,290,873
Less: Financial instruments collateral[1]	(102,416)	(2,153,754)
Total net derivative assets/liabilities	$ 496,483	$ 137,119

[1] These amounts are limited to the derivative asset/liability balance and, accordingly, do not include excess collateral received/pledged.

Credit Derivatives

The Company enters into credit derivatives primarily to facilitate client and affiliate transactions and to manage credit risk exposures. Credit derivatives derive value based on an underlying third party referenced obligation or a portfolio of referenced obligations. The Company is both a seller and a buyer of credit protection. A seller of credit protection is required to make payments to a buyer upon the occurrence of a predefined credit event. Such credit events generally include bankruptcy of the referenced credit entity and failure to pay under their credit obligations, as well as acceleration of indebtedness and payment repudiation or moratorium. For credit derivatives based on a portfolio of referenced credits or credit indices, the Company as a seller of credit protection may not be required to make payment until a specified amount of loss has occurred and/or may only be required to make payment up to a specified amount.

Credit derivatives where the Company is the seller of credit protection and their expiration are summarized below. These instruments are classified as investment and non-investment grade based on the credit quality of the underlying referenced obligation. The Company considers ratings of BBB- or higher as investment grade. Non-investment grade includes non-rated credit derivative instruments. The Company discloses internal categorizations of investment grade and non-investment grade consistent with how risk is managed for these investments.

(dollars in thousands)	Maximum Payout / Notional	Less than 1 Year	1 - 3 Years	3 - 5 Years	Over 5 Years	Carrying Value [1]
Credit derivatives:						
Investment grade[2]	$ 40,000	$ 5,000	$ 10,000	$ 25,000	$ —	$ —
Non-investment grade[2]	4,294,503	33,487	397,054	44,832	3,819,130	477,879
Total credit derivatives	$ 4,334,503	$ 38,487	$ 407,054	$ 69,832	$ 3,819,130	$ 477,879

[1]The carrying value of written credit derivative liabilities is shown on a gross basis prior to counterparty and and cash collateral netting

[2] Refers to the creditworthiness of the underlying reference obligations

For most credit derivatives, the notional value represents the maximum amount payable by the Company as a seller of credit protection. However, the Company does not monitor its exposure to credit derivatives based solely on notional amount because this measure does not take into consideration the probability of occurrence. As such, the notional amount is not a reliable indicator of the Company's exposure to these contracts. Instead, a risk framework is used to define risk tolerances and establish limits to help to ensure that certain credit risk-related losses occur within acceptable, predefined limits.

Credit Risk Management of Derivatives

The Company defines counterparty credit risk as the potential for loss that can occur as a result of an individual, counterparty, or issuer being unable to honor its contractual obligations. The Company mitigates its credit risk to counterparties through a variety of techniques, including, where appropriate, the right to require initial collateral or margin, the right to terminate transactions or to obtain collateral should unfavorable events occur, the right to call for collateral when certain exposure thresholds are exceeded, the right to call for third party guarantees, and the purchase of credit default protection.

The Company enters into ISDA master netting agreements or similar agreements with substantially all of its derivative counterparties. Netting agreements are generally negotiated bilaterally and can require complex terms. While the Company makes reasonable efforts to execute such agreements, it is possible that a counterparty may be unwilling to sign such an agreement and, as a result, would subject the Company to additional credit risk. The enforceability of master netting agreements under bankruptcy laws in certain countries or in certain industries is not free from doubt, and receivables and payables with counterparties in these countries or industries are accordingly recorded on a gross basis.

The performance of certain of the Company's derivative transactions has been guaranteed by Bank of America.

Credit-related Contingent Features

Most of the Company's derivative contracts contain credit risk related contingent features, primarily in the form of ISDA master netting agreements and credit support documentation that enhance the creditworthiness of these instruments compared to other obligations of the respective counterparty with whom the Company has transacted. These contingent features may be for the benefit of the Company as well as its counterparties with respect to changes in the Company's creditworthiness, and the exposure under the derivative transactions. At December 31, 2023, the Company held cash and securities collateral of approximately $1.4 billion and posted cash and securities collateral of approximately $4.9 billion in the normal course of business under derivative transactions with third parties. At December 31, 2023 the Company held cash and securities collateral of approximately $4.4 billion and posted cash and securities collateral of approximately $422 million with affiliates.

At December 31, 2023, the amount of collateral, calculated based on the terms of the contracts that the Company could be required to post to third parties and affiliates but had not yet posted, was approximately $43 million and $3 million respectively.

Some counterparties are able to unilaterally terminate certain contracts, or the Company may be required to take other action such as find a suitable replacement or obtain a guarantee. At December 31, 2023, there was no current liability for these derivative contracts.

In addition, under the terms of certain OTC derivative contracts and other trading agreements, in the event of a credit rating downgrade of Bank of America, counterparties to those agreements may require the Company to provide additional collateral or to terminate these contracts or agreements or provide other remedies. At December 31, 2023, if the rating agencies had downgraded their long-term senior debt ratings of Bank of America by one incremental notch, the amount of additional collateral contractually required by such derivative contracts and other trading agreements would have been approximately $9.9 million. If the rating agencies had downgraded their long-term senior debt ratings of Bank of America by a second incremental notch, approximately $8.7 million in additional collateral would have been required at December 31, 2023.

Also, if the rating agencies had downgraded their long-term senior debt ratings of Bank of America by either one or two incremental notches there would be approximately $16.6 million of derivative liability that would be subject to unilateral termination by the counterparties as of December 31, 2023 against which approximately $11.3 million of collateral has been posted.

Valuation Adjustments on Derivatives

The Company records credit risk valuation adjustments on derivatives in order to properly reflect the credit quality of the counterparties and its own credit quality. The Company calculates valuation adjustments on derivatives based on a modeled expected exposure that incorporates current market risk factors. The exposure also takes into consideration credit mitigants such as legally enforceable master netting arrangements and collateral. Credit default swap ("CDS") spread data is used to estimate the default probabilities and severities that are applied to the exposures. Where no observable credit default data is available for counterparties, the Company uses proxies and other market data to estimate default probabilities and severity.

Valuation adjustments on derivatives are affected by changes in market spreads, non-credit related market factors such as interest rate and currency changes that affect the expected exposure, and other factors such as changes in collateral arrangements and partial payments. Credit spreads and non-credit factors can move independently. For example, for an interest rate swap, changes in interest rates may increase the expected exposure, which would increase CVA. Independently, counterparty credit spreads may tighten, which would result in an offsetting decrease to CVA.

The Company enters into risk management activities to offset market driven exposures. The Company often hedges the counterparty spread risk in CVA with CDS. The Company hedges the other market risks in both CVA and DVA primarily with currency and interest rate swaps. In certain instances, the net-of-hedge amounts in the table below move in the same direction as the gross amount or may move in the opposite direction. This movement is a consequence of the complex interaction of the risks being hedged resulting in limitations in the ability to perfectly hedge all of the market exposure at all times.

The Company also incorporates FVA into valuation estimates primarily to include funding costs on uncollateralized derivatives and derivatives where it is not permitted to use collateral received. The Company calculates the FVA based on modeled expected exposure profiles discounted for the funding risk premium inherent in these derivatives. FVA related to derivative assets and liabilities is the effect of funding costs on the fair value of these derivatives. CVA, DVA, and FVA are immaterial as of December 31, 2023.

6. Fair Value Accounting

Fair Value Hierarchy

In accordance with Fair Value Accounting, the Company has categorized its financial instruments, based on the priority of the inputs to the valuation technique, into a three-level fair value hierarchy.

The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3).

Financial assets and liabilities recorded on the Consolidated Statement of Financial Condition are categorized based on the inputs to the valuation techniques as follows:

Level 1. Financial assets and liabilities whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market that the Company has the ability to access.

Level 2. Financial assets and liabilities whose values are based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly for substantially the full term of the asset or liability. Level 2 inputs include the following:

a. Quoted prices for similar assets or liabilities in active markets;

b. Quoted prices for identical or similar assets or liabilities in non-active markets;

c. Pricing models whose inputs are observable for substantially the full term of the asset or liability; and

d. Pricing models whose inputs are derived principally from or corroborated by observable market data through correlation or other means for substantially the full term of the asset or liability.

Level 3. Financial assets and liabilities whose values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. These inputs reflect management's view about the assumptions a market participant would use in pricing the asset or liability.

As required by Fair Value Accounting, when the inputs used to measure fair value fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement in its entirety. For example, Level 3 fair value measurements may include inputs that are observable (Levels 1 and 2) and unobservable (Level 3). Further, the following reconciliations do not take into consideration the offsetting effect of Level 1 and 2 financial instruments entered into by the Company that economically hedge certain exposures to the Level 3 positions.

A review of fair value hierarchy classifications is conducted on a quarterly basis. Changes in the observability or significance of valuation inputs may result in a reclassification for certain financial assets or liabilities. Transfers into or out of fair value hierarchy classifications are made if the significant inputs used in the financial models measuring the fair values of the assets and liabilities became unobservable or observable in the current market place.

Valuation Processes and Techniques

The following sections outline the valuation methodologies for the Company's material categories of assets and liabilities.

While the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

During 2023, there were no changes to the Company's valuation approaches or techniques that had, or are expected to have, a material impact on the Company's Consolidated Statement of Financial Condition.

Non U.S. sovereign debt and agency securities

Non-U.S. sovereign debt and agency securities are valued using quoted prices in active markets when available. To the extent quoted prices are not available, fair value is determined based on reference to recent trading activity and quoted prices of similar securities. These securities are generally classified as Level 2. For Level 3 securities, the pricing is calculated on a discounted cash flow methodology which is based on a benchmark observable curve.

Corporate debt

Corporate bonds are valued based on either the most recent observable trade and/or external quotes, depending on availability. The most recent observable trade price is given highest priority as the valuation benchmark based on an evaluation of transaction date, size, frequency, and bid-offer. This price may be adjusted by bond or CDS spread movement. When CDS spreads are referenced, cash-to-synthetic basis magnitude and movement as well as maturity matching are incorporated into the value. When neither external quotes nor a recent trade is available, the bonds are valued using a discounted cash flow approach based on risk parameters of comparable securities. In such cases, the potential pricing difference in spread and/or price terms with the traded comparable is considered. Corporate bonds are generally classified as Level 2 or Level 3 in the fair value hierarchy.

Derivative contracts

Listed Derivative Contracts: Listed derivatives that are not actively traded are valued using the same approaches as those applied to OTC derivatives; they are generally classified as Level 2 of the fair value hierarchy.

OTC Derivative Contracts: OTC derivative contracts include forwards, swaps and options, primarily related to interest rate, foreign currency or credit underlyings.

The fair values of derivative assets and liabilities traded in the OTC market are determined using quantitative models that utilize multiple market inputs, including interest rates, prices and indices to generate continuous yield or pricing curves and volatility factors to value the position. The majority of market inputs are actively quoted and can be validated through external sources, including brokers, market transactions and third-party pricing services. When third-party pricing services are used, the methods and assumptions are reviewed by the Company. Estimation risk is greater for derivative asset and liability positions that are either option-based or have longer maturity dates where observable market inputs are less readily available, or are unobservable, in which case, quantitative-based extrapolations of rate, price or index scenarios are used in determining fair values. The fair values of derivative assets and liabilities include adjustments for market liquidity, counterparty credit quality and other instrument-specific factors, where appropriate. In addition, the Company incorporates within its fair value measurements of OTC derivatives a valuation adjustment to reflect the credit risk associated with the net position. Positions are netted by counterparty, and fair value for net long exposures is adjusted for counterparty credit risk while the fair value for net short exposures is adjusted for the Company's own credit risk. The Company's creditworthiness is based upon the creditworthiness of Bank of America. The Company also incorporates FVA within its fair value measurements to include funding costs on uncollateralized derivatives and derivatives where the Company is not permitted to use the collateral it receives. An estimate of severity of loss is also used in the determination of fair value, primarily based on market data. The majority of OTC derivative contracts are classified as Level 2 in the fair value hierarchy.

OTC derivative contracts that do not have readily observable market based pricing parameters are classified as Level 3 in the fair value hierarchy. Examples of derivative contracts classified within Level 3 include contractual obligations that have tenures that extend beyond periods in which inputs to the model would be observable, exotic derivatives with significant inputs into a valuation model that are less transparent in the market and certain CDS referenced to mortgage-backed securities.

Long-term borrowings

Long-term borrowings include liabilities related to the transfer of assets where sale accounting is not achieved and certain prepaid derivative contracts under the fair value option election. Long-term borrowings are valued using discounted cash flow models and observable trade prices from the secondary market and are classified as Level 2 or Level 3 in the fair value hierarchy.

Recurring Fair Value

The following table presents the Company's fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis as of December 31, 2023:

(dollars in thousands)	Level 1	Level 2	Level 3	Netting Adjustment [1]	Total
Assets:					
Securities segregated for regulatory purposes or deposited with clearing organizations:					
Non U.S. sovereign debt and agency securities	$ —	$ 1,336,668	$ —	$ —	$ 1,336,668
Trading assets, excluding derivative contracts:					
Corporate debt	—	17,059	53,846	—	70,905
Non U.S. sovereign debt and agency securities	—	214,718	83,701	—	298,419
Total trading assets, excluding derivative contracts	—	231,777	137,547	—	369,324
Derivative contracts	—	27,758,556	484,351	(27,644,008)	598,899
Other Assets	—	—	18,157	—	18,157
Liabilities:					
Derivative contracts	—	26,911,522	290,214	(24,910,863)	2,290,873
Long-term borrowings	—	2	2,598	—	2,600

[1] Represents counterparty and cash collateral netting

The following table provides a summary of changes in fair value of the Company's Level 3 financial assets and liabilities for the year ended December 31, 2023.

(Dollars in thousands)	Beginning Balance	Principal Transactions	Sales	Purchases	Settlements	Transfers In	Transfers Out	Ending balance
Assets:								
Trading assets, excluding derivative contracts:								
Corporate debt	$ 96,049	$ 15,144	$ —	$ —	$ $ (57,347)	$ —	$ —	$ 53,846
Non U.S. sovereign debt and agency securities	93,048	8,016	—	—	(17,363)	—	—	83,701
Total trading assets, excluding derivative contracts	189,097	23,160	—	—	(74,710)	—	—	137,547
Derivative contracts (net)	308,900	(53,969)	(6,526)		(49,234)	(25,698)	20,664	194,137
Other assets	—	795	—	17,362	—	—	—	18,157
Liabilities:								
Long-term borrowings	3,652	343	—	—	(1,397)	—	—	2,598

Transfers in and out for derivative contracts primarily reflect decreased or increased price observability for certain positions.

Level 3 Significant Inputs
The following table presents information about significant unobservable inputs related to the Company's material categories of Level 3 financial assets and liabilities as of December 31, 2023:

Quantitative Information about Level 3 Fair Value Measurements

(dollars in thousands)

Financial Instrument	Fair Value	Valuation Techniques	Significant Observable Inputs	Ranges of Inputs	Weighted Average
Securities and other cash instruments [1]					
Corporate debt Trading Assets - Corporate securities, trading loans and others	$ 53,846	Discounted cash flow, Market comparables	Price Yield	$0 to $100 58.35%	$81 N/A
Non-U.S. Governments and Agencies Trading Assets - Non U.S. Sovereign Debt and Agency Securities	$ 83,701	Discounted cash flow, Market comparables	Price	$15 to $137	$102
Other Assets	$ 18,157	Market comparables	Price	$71	N/A
Liabilities Long-term borrowings	$ 2,598	Discounted cash flow, Market comparables, Net Asset Value	Price Yield	$20 58.35	N/A N/A

Financial Instrument	Fair Value	Valuation Techniques	Significant Observable Inputs	Ranges of Inputs	Weighted Average
Net Derivative Contracts [1]					
Credit derivatives	$ (66,000)	Discounted cash flow, Market comparables, Stochastic recovery	Credit spreads Default rates Price	44 to 272 points 1.5% $71 to $100	192 points N/A $91
Interest rate derivatives	$ 260,137	Discounted cash flow, Industry standard derivative pricing [2]	Correlation (IR/IR) Correlation (FX/IR) Long-dated inflation rates Long-dated inflation volatilities Interest rate volatilities Long Dated FX vol / other parameters	50% to 70% 10% to 52% 0% to 3% 2% to 5% 91% 16.21	60% 51% 3% 4% N/A N/A
Total net derivative contracts	**$ 194,137**				

[1] *Includes third party and affiliate balances*

[2] *Includes models such as Monte Carlo simulation, Black-Scholes and other numeric methods that model the joint dynamics of interest, inflation and foreign exchange rates.*

N/A - Not applicable

The Company uses multiple market approaches in valuing certain of its Level 3 financial instruments. For example, market comparables and discounted cash flows are used together. For a given product, such as corporate debt securities, market comparables may be used to estimate some of the unobservable inputs and then these inputs are incorporated into a discounted cash flow model. Therefore, the balances disclosed encompass both of these techniques.

The level of aggregation and diversity within the products disclosed in the table above results in certain ranges of inputs being wide and unevenly distributed across asset and liability categories.

Uncertainty of Fair Value Measurements from Unobservable Inputs

<u>**Securities and other cash instruments**</u>
A significant increase in price would have resulted in a significantly higher fair value. A significant increase in market yield would have resulted in a significantly lower fair value.

Derivatives

For credit derivatives, a significant increase in upfront points would have resulted in a significantly lower fair value for protection sellers and higher fair value for protection buyers. A significant increase in price of the underlying securities would have resulted in a significantly higher fair value for long positions, and short positions would have been impacted in a directionally opposite way.

For interest rate derivatives, a significant change in volatilities and correlation inputs (e.g., the degree of correlation between two different interest rates) would have resulted in a significant impact to the fair value. However, the magnitude and direction of the impact depends on whether the Company is long or short the exposure.

Fair Value Option Election

The fair value option election allows companies to irrevocably elect fair value as the initial and subsequent measurement attribute for certain financial assets and liabilities. The fair value option election is permitted on an instrument by instrument basis at initial recognition of an asset or liability or upon an event that gives rise to a new basis of accounting for that instrument. As discussed above, certain of the Company's financial instruments are required to be accounted for at fair value under Derivatives Accounting, as well as industry level guidance. For certain financial instruments that are not accounted for at fair value under other applicable accounting guidance, the fair value option election has been made.

The Company elected the fair value option for certain long-term borrowings that are risk managed on a fair value basis. The fair values and aggregate contractual principal amounts of long-term borrowings at December 31, 2023 were $2.6 million and $11.3 million (including balances with affiliated companies of $2.6 million and $4.6 million respectively).

7. Fair Value of Financial Instruments

The following disclosures include financial instruments that are not carried at fair value for which only a portion of the ending balance is carried at fair value on the Consolidated Statement of Financial Condition.

Short-term Financial Instruments

The carrying value of short-term financial instruments, including cash and cash equivalents, cash and securities deposited with clearing organizations, receivables under resale agreements, and loans due to affiliates, approximates the fair value of these instruments. These financial instruments generally expose the Company to limited credit risk and have no stated maturities or have short-term maturities and carry interest rates that approximate market.

Under the fair value hierarchy, securities deposited with clearing organizations are classified as Level 2.

8. Securities Financing Transactions

The Company enters into securities financing transactions to obtain collateral. Under these transactions, the Company receives collateral, including U.S. government agency and non U.S. sovereign debt and agency securities.

The Company receives collateral in connection with resale agreements and derivatives. Under most agreements the Company is permitted to sell or repledge the securities received (e.g., use these securities to secure repurchase agreements, or deliver to counterparties to cover short positions). At December 31, 2023, the fair value of securities received as collateral where the Company is permitted to sell or repledge the securities was $3.2 billion, of which $3.1 billion was received from affiliated companies. The fair value of securities received as collateral that had been sold or repledged was $3.0 billion, of which $3.0 billion have been sold or repledged to affiliated companies. At December 31, 2023, the company had not pledged firm-owned assets that can be repledged by counterparties.

Substantially all resale agreements are transacted under legally enforceable master repurchase agreements that give the Company, in the event of default by the counterparty, the right to liquidate securities held and to offset payables with the same counterparty. The Company offsets certain resale transactions with the same counterparty on the Consolidated Statement of Financial Condition where it has such a legally enforceable master netting agreement and the transactions have the same maturity date. At December 31, 2023, the Company had no nettable transactions.

See Note 2 for a discussion of how risks associated with securities financing are managed.

9. Subordinated Borrowings

At December 31, 2023, subordinated borrowings and credit committed under agreements with NB Holdings consisted of the following:

(dollars in thousands)

	Maturity	Amount Outstanding	Total Credit Facility
MLCS with NB Holdings			
Revolving Subordinated Line of Credit	October 4, 2025	$ 500,000	$ 1,000,000
Total Subordinated Liabilities		**$ 500,000**	**$ 1,000,000**

The borrowing, which has been approved for regulatory capital purposes for the Company, is a U.S. dollar-denominated obligation at variable interest rates based on daily Fed Funds rate plus a market-based spread. MLCS's revolving subordinated line of credit agreement contains a provision that automatically extends the loan's maturity by one year unless specified actions are taken 390 days prior to the maturity date.

10. Commitments, Contingencies and Guarantees

Litigation and Regulatory Matters

In the ordinary course of business, the Company is occasionally a defendant in or a party to pending and threatened legal actions and proceedings. In view of the inherent difficulty of predicting the outcome of such litigation and regulatory matters, particularly where the claimants seek unspecified or very large or indeterminate damages or where the matters present novel legal theories or involve a large number of parties, the Company cannot predict what the eventual outcome of the pending matters will be, what the timing of the ultimate resolution of these matters will be.

In accordance with applicable accounting guidance, the Company establishes an accrued liability for litigation and regulatory matters when those matters present loss contingencies that are both probable and estimable. In such cases, there may be an exposure to loss in excess of any amounts accrued. As a matter develops, the Company, in conjunction with any outside counsel handling the matter, evaluates on an ongoing basis whether such matter presents a loss contingency that is probable and estimable. Once the loss contingency related to a litigation or regulatory matter is deemed to be both probable and estimable, the Company will establish an accrued liability.

There is no accrued liability at December 31, 2023.

11. Income Taxes

At December 31, 2023, the Company did not have any liabilities for unrecognized tax benefits.

As described in Note 2, any unrecognized tax benefit related to a state consolidated, combined or unitary return in which the Company is a member, is not reflected in the Company's Consolidated Statement of Financial Condition until such a time as the tax position is resolved.

While it is reasonably possible that a significant change in unrecognized tax benefits related to certain state consolidated, combined or unitary returns will occur within twelve months of December 31, 2023, quantification of an estimated range cannot be made at this time due to the uncertainty of potential outcomes.

The Company files income tax returns in numerous state, local and non-U.S. jurisdictions each year. The Internal Revenue Service ("IRS") and other tax authorities in states, cities, and countries in which the Company has significant business operations, examine tax returns periodically (continuously in some jurisdictions). The table below summarizes the status of significant tax examinations, by jurisdiction, for the Company as of December 31, 2023.

Tax Examination Status

Jurisdiction	Years Subject to Examination[1]	Status at December 31, 2023
U.S. Federal	2017-2021	Field Examination
California	2015-2017	Field Examination
California	2018-2021	To begin in 2024
New York	2019-2021	Field Examination
United Kingdom[2]	2021	Field Examination

[1] All tax years subsequent to the above years remain open to examination.

Significant components of the Company's deferred tax assets and liabilities at December 31, 2023, which are included on the Consolidated Statement of Financial Condition, are presented below.

(dollars in thousands)		December 31, 2023
Deferred tax assets		
Net operating loss carryforwards	$	5,400
Deferred FTC		36,962
Other		704
Gross deferred tax assets		**43,066**
Valuation allowance		(36,969)
Total deferred tax assets, net of valuation allowance		**6,097**
Deferred tax liabilities		
Witholding Tax on Unremitted Earnings		35,053
Gross deferred tax liabilities		**35,053**
Total Net Deferred Tax liabilities	**$**	**28,956**

The Company is included in the consolidated U.S. federal income tax return and certain combined and unitary state income tax returns of Bank of America. At December 31, 2023, the Company had a current income tax receivable due from its affiliates of approximately $22.6 million as a result of its inclusion in consolidated, combined, and unitary tax return filings with Bank of America. During the year ended December 31, 2023, the Company received approximately $24 million of income tax settlements.

12. Subsequent Events

ASC 855, *Subsequent Events*, requires the Company to evaluate whether events, occurring after the Consolidated Statement of Financial Condition date but before the date the Consolidated Statement of Financial Condition are available to be issued, require accounting as of the Consolidated Statement of Financial Condition date, or disclosure in the Consolidated Statement of Financial Condition. The Company has evaluated such subsequent events through February 28, 2024.

In February 2024, the maturities of the Company's existing revolving senior unsecured lines of credit with NB Holdings and MLBTC were extended to February 1, 2025.

13. Regulatory Requirements

Commodity Exchange Act ("CEA") - Regulated Commodities and Cleared OTC Derivatives

As a registered swap dealer, MLCS is required to maintain minimum regulatory capital (as defined in CFTC Regulation 23.100) as set forth in CFTC Regulation 23.101.

At December 31, 2023, in accordance with the CEA, MLCS' regulatory capital as defined by CFTC Regulation 23.101 was $2.6 billion and exceeded the minimum requirement of $0.8 billion by $1.8 billion.

The Company prepares an unaudited NFA Form FR-CSE-BCH on an unconsolidated basis. The following is a summary of certain financial information of the Company:

(dollars in thousands)

	Unaudited Financials	Adjustments[1]	Subsidiaries	Eliminations	Audited Financials
Total Assets	$ 7,255,502	$ 6,104	$ 2,370,114	$ (2,371,538)	$ 7,260,182
Total Liabilities	5,145,078	6,097	(607)	(817)	5,149,751
Total Stockholder's Equity	2,110,424	7	2,370,721	(2,370,721)	2,110,431
Total Liabilities and Stockholder's Equity	$ 7,255,502	$ 6,104	$ 2,370,114	$ (2,371,538)	$ 7,260,182

[1] Primarily a deferred tax asset gross-up.

Schedule I
Regulatory Capital
Bank Holding Company Approach

(dollars in thousands)

Total aggregate BHC Capital	$	2,588,287
Minimum Capital Requirement		828,779
Excess Capital	$	1,759,508

Note: There are no material differences between the above aggregate Bank Holding Company Capital, and that filed with Company's unaudited December 31, 2023 form FR-CSE-BHC.