#### MORGAN STANLEY CAPITAL GROUP INC.

#### CONSOLIDATED STATEMENT OF FINANCIAL CONDITION AS OF JUNE 30, 2023 (UNAUDITED)

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Filed pursuant to the Regulation 23.105(i)(5) under the Commodity Futures Trading Commission as a Public Document.

# MORGAN STANLEY CAPITAL GROUP INC. CONSOLIDATED STATEMENT OF FINANCIAL CONDITION As of June 30, 2023

(In millions of dollars, except where noted)

Total Liabilities and Stockholder's Equity	14,423
Total Stockholder's Equity	 4,799
Non-controlling interest	 
Total Morgan Stanley Capital Group Inc. Stockholder's Equity	4,799
Accumulated other comprehensive loss	(13)
Retained earnings	2,265
Paid-in-capital	2,547
Common stock (\$1 par value, 100 shares authorized, issued and outstanding)	_
Stockholder's Equity Morgan Stanley Capital Group Inc. stockholder's equity:	
Subordinated liabilities (see Note 10)	800
Total Liabilities	8,824
Borrowings (includes \$1,370 at fair value)	2,702
Other liabilities and accrued expenses	178
Affiliates	125
Customers	1,785
Brokers, dealers and clearing organizations	28
Payables:	
Other secured financings, at fair value	748
Liabilities and Stockholder's Equity  Trading liabilities, at fair value	\$ 3,258
Total Assets	\$ 14,423
Other assets	155
Affiliates	30
Customers (net of allowance for credit losses of \$10)	832
Brokers, dealers and clearing organizations	2,537
Receivables:	
Securities purchased under agreements to resell	2,981
Frading assets, at fair value (\$2,102 were pledged to various parties)	7,676
Cash and cash equivalents	212

# MORGAN STANLEY CAPITAL GROUP INC. NOTES TO CONSOLIDATED STATEMENT OF FINANCIAL CONDITION As of June 30, 2023

(In millions of dollars, except where noted)

#### 1. Introduction and Basis of Presentation

#### The Company

MSCGI, together with its subsidiaries (the "Company"), engages mainly in sales, trading and market-making activities in commodities and foreign exchange products. MSCGI was incorporated in 1984 in Delaware. See the "Glossary of Common Terms and Acronyms" for the definition of certain terms and acronyms used throughout the notes to the Consolidated statement of financial condition.

The Company is a wholly owned subsidiary of MSDHL (the "Parent", formerly named MSDHI) which is an indirect subsidiary of Morgan Stanley (the "Ultimate Parent").

MSCGI is a non-clearing member or participant of the CME Group Inc. (which includes the New York Mercantile Exchange, Inc.), Dubai Mercantile Exchange Limited, and a number of swap execution facilities, regional transmission organizations, independent system operators, and similar commodities related venues. Additionally, the FERC has granted the Company market-based rate authorization for wholesale sales of electric energy, capacity and ancillary services. The Dodd-Frank Act requires the registration of, among other entities, "swap dealers" with the CFTC. The Company is provisionally registered with the CFTC as a swap dealer effective October 6, 2021. Additionally, the Company has obtained a number of licenses or authorizations from governmental authorities in connection with the Company's commodities business activities.

The Company's short-term and long-term issuer ratings by S&P Global Ratings are 'A-1' and 'A+', respectively. The Company's short-term and long-term issuer ratings by Moody's Investor Service, Inc. ("Moody's") are 'P-1' and 'Aa3', respectively. The outlook by both S&P Global Ratings and Moody's is stable, which is linked to the Ultimate Parent credit profile.

#### **Basis of Financial Information**

The Consolidated statement of financial condition is prepared in accordance with U.S. GAAP, which requires the Company to make estimates and assumptions regarding the valuations of certain financial instruments, intangible assets, compensation, deferred tax assets, the outcome of legal and tax matters, and other matters that affect the Consolidated statement of financial condition and related disclosures.

The Company believes that the estimates utilized in the preparation of the Consolidated statement of financial condition are prudent and reasonable. Actual results could differ materially from these estimates.

The Company has evaluated subsequent events for adjustment to or disclosure in the Consolidated statement of financial condition through the date of this report in which the Consolidated statement of financial condition is available to be issued, and the Company has not identified any recordable or disclosable events, not otherwise reported in the Consolidated statement of financial condition or the notes thereto.

#### Consolidation

All material intercompany balances with its subsidiaries have been eliminated in consolidation.

The Consolidated statement of financial condition include the accounts of MSCGI, its wholly owned subsidiaries and other entities in which MSCGI has a controlling financial interest, including certain VIEs. For further information, see Note 12. For consolidated subsidiaries that are less than wholly owned, the third-party holdings of equity interests are referred to as non-controlling interests. The portion of the stockholder's equity that is attributable to non-controlling for such subsidiary is presented as non-controlling interest in the Consolidated statement of financial condition.

For entities where the total equity investment at risk is sufficient to enable the entity to finance its activities without additional support and the equity holders bear the economic residual risks and returns of the entity and have the power to direct the activities of the entity that most significantly affect its economic performance, the Company consolidates those entities it controls either through a majority voting interest or otherwise. For VIEs (i.e., entities that do not meet these criteria), the Company consolidates those entities where the Company has the power to make the decisions that most significantly affect the economic performance of the VIE and has the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE.

For investments in entities in which the Company does not have a controlling financial interest but has significant influence over operating and financial decisions, the Company generally applies the equity method of accounting.

#### 2. Significant Accounting Policies

#### **Contracts with Customers**

Receivables from contracts with customers are primarily recognized in Receivables - Customers in the Consolidated statement of financial condition when the underlying performance obligations have been satisfied and the Company has the right per the contract to bill the customer. Contract liabilities are recognized in Other liabilities and accrued expenses when the Company has collected payment from a customer based on the terms of the contract, but the underlying performance obligations are not yet satisfied.

#### Fair Value of Financial Instruments

Instruments within Trading assets and Trading liabilities are measured at fair value, either as required or allowed by accounting guidance. These financial instruments primarily represent the Company's trading and investment positions and include both cash and derivative products.

The fair value of OTC financial instruments, including derivative contracts related to financial instruments and commodities, is presented in the accompanying Consolidated statement of financial condition on a net-by-counterparty basis, when appropriate. Additionally, the Company nets the fair value of cash collateral paid or received against the fair value amounts recognized for net derivative positions executed with the same counterparty under the same master netting agreement.

#### Fair Value Option

The Company has elected to measure certain eligible instruments at fair value, including certain loans and lending commitments, Other secured financings and Borrowings. The Company elected the fair value option for certain eligible instruments that are risk managed on a fair value basis to mitigate income statement volatility caused by measurement basis differences between the elected instruments and their associated risk management transactions and to eliminate complexities of applying certain accounting models.

#### Fair Value Measurement — Definition and Hierarchy

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date.

Fair value is a market-based measure considered from the perspective of a market participant rather than an entity-specific measure. Therefore, even when market assumptions are not readily available, assumptions are set to reflect those that the Company believes market participants would use in pricing the asset or liability at the measurement date. Where the Company manages a group of financial assets, financial liabilities and

nonfinancial items accounted for as derivatives on the basis of its net exposure to either market risk or credit risk, the Company measures the fair value of that group of financial instruments consistently with how market participants would price the net risk exposure at the measurement date.

In determining fair value, the Company uses various valuation approaches and establishes a hierarchy for inputs used in measuring fair value that requires the most observable inputs be used when available.

Observable inputs are inputs that market participants would use in pricing the asset or liability that were developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect assumptions the Company believes other market participants would use in pricing the asset or liability that are developed based on the best information available in the circumstances. The fair value hierarchy is broken down into three levels based on the observability of inputs as follows with Level 1 being the highest and Level 3 being the lowest level:

Level 1 — Valuations based on quoted prices in active markets that the Company has the ability to access for identical assets or liabilities. Valuation adjustments and block discounts that would not transfer to market participants are not applied to Level 1 instruments. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these products does not entail a significant degree of judgment.

Level 2 — Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

*Level 3* — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The availability of observable inputs can vary from product to product and is affected by a wide variety of factors, including, the type of product, whether the product is new and not yet established in the marketplace, the liquidity of markets and other characteristics particular to the product. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3 of the fair value hierarchy.

The Company considers prices and inputs that are current as of the measurement date, including during periods of market dislocation. In periods of market dislocation, the observability of prices and inputs may be reduced for many instruments. This condition could cause an instrument to be reclassified from Level 1 to Level 2 or from Level 2 to Level 3 of the fair value hierarchy.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the total fair value amount is disclosed in the level appropriate for the lowest level input that is significant to the total fair value of the asset or liability.

#### Valuation Techniques

Many cash instruments and OTC derivative contracts have bid and ask prices that can be observed in the marketplace. Bid prices reflect the highest price that a party is willing to pay for an asset. Ask prices represent the lowest price that a party is willing to accept for an asset. The Company carries positions at the point within the bid-ask range that meet its best estimate of fair value. For offsetting positions in the same financial instrument, the same price within the bid-ask spread is used to measure both the long and short positions.

Fair value for many cash instruments and OTC derivative contracts is derived using pricing models. Pricing models take into account the contract terms, as well as multiple inputs, including, where applicable, commodity prices, interest rate yield curves, credit curves, correlation, creditworthiness of the counterparty, creditworthiness of the Company, option volatility and currency rates.

Where appropriate, valuation adjustments are made to account for various factors such as liquidity risk (bid-ask adjustments), credit quality, model uncertainty and concentration risk and funding in order to arrive at fair value. Adjustments for liquidity risk adjust model-derived mid-market amounts of Level 2 and Level 3 financial instruments for the bid-mid or mid-ask spread required to properly reflect the exit price of a risk position. Bid-mid and mid-ask spreads are marked to levels observed in trade activity, broker quotes or other external third-party data. Where these spreads are unobservable for the particular position in question, spreads are derived from observable levels of similar positions.

The Company applies credit-related valuation adjustments to its OTC derivatives, as well as certain Borrowings for which the fair value option was elected. The Company considers the impact of changes in its own credit spreads based upon observations of the secondary bond market spreads when measuring the fair value of certain Borrowings.

For OTC derivatives, the impact of changes in both the Company's and the counterparty's credit rating is considered when measuring fair value. In determining the expected exposure, the Company simulates the distribution of the future exposure to a counterparty, then applies market-based default probabilities to the future exposure, leveraging external third-party CDS spread data. Where CDS spread data are unavailable for a specific counterparty, bond market spreads, CDS spread data based on the counterparty's credit rating or CDS spread data that reference a comparable counterparty may be utilized.

The Company also considers collateral held and legally enforceable master netting agreements that mitigate its exposure to each counterparty.

Adjustments for model uncertainty are taken for positions whose underlying models are reliant on significant inputs that are neither directly nor indirectly observable, hence requiring reliance on established theoretical concepts in their derivation. These adjustments are derived by making assessments of the possible degree of variability using statistical approaches and market-based information where possible.

The Company may apply a concentration adjustment to certain of its OTC derivatives portfolios to reflect the additional cost of closing out a particularly large risk exposure. Where possible, these adjustments are based on observable market information but in many instances significant judgment is required to estimate the costs of closing out concentrated risk exposures due to the lack of liquidity in the marketplace.

For further information, see Note 5 for a description of valuation techniques applied to the major categories of financial instruments measured at fair value

#### **Offsetting of Derivative Instruments**

In connection with its derivative activities, the Company generally enters into master netting agreements and collateral agreements with its counterparties. These agreements provide the Company with the right, in the event of a default by the counterparty, to net a counterparty's rights and obligations under the agreement and to liquidate and set off cash collateral against any net amount owed by the counterparty. Derivatives with enforceable master netting agreements are reported net of cash collateral received and posted.

However, in certain circumstances the Company may not have such an agreement in place; the relevant insolvency regime may not support the enforceability of the master netting agreement or collateral agreement; or the Company may not have sought legal advice to support the enforceability of the agreement. In cases where the Company has not determined an agreement to be enforceable, the related amounts are not offset (see Note 6).

The Company's policy is generally to receive securities and cash posted as collateral (with rights of rehypothecation), irrespective of the enforceability determination regarding the master netting and collateral agreement. In certain cases, the Company may agree for such collateral to be posted to its affiliate, MS&Co, or a third-party custodian under a control agreement that enables it to take control of such collateral in the event of a counterparty default. The enforceability of the master netting agreement is taken into account in the Company's risk management practices and application of counterparty credit limits.

For information related to offsetting of derivatives and certain collateralized transactions, see Notes 6 and 8, respectively.

#### **Income Taxes**

Deferred tax assets and liabilities are recorded based upon the temporary differences between the financial statement and income tax bases of assets and liabilities using currently enacted tax rates in effect for the year in which the differences are expected to reverse.

The Company recognizes net deferred tax assets to the extent that it believes these assets are more likely than not to be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies and results of recent operations. When performing the assessment, the Company considers all types of deferred tax assets in combination with each other, regardless of the origin of the underlying temporary difference. If a deferred tax asset is determined to be unrealizable, a valuation allowance is established. If the Company subsequently determines that it would be able to realize deferred tax assets in excess of their net recorded amount, it would make an adjustment to the deferred tax asset valuation allowance.

Uncertain tax positions are recorded on the basis of a two-step process whereby (i) the Company determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position, and (ii) for those tax positions that meet this threshold, the Company recognizes the largest amount of tax benefit that is more likely than not to be realized upon ultimate settlement with the related tax authority.

#### **Cash and Cash Equivalents**

Cash and cash equivalents consist of funds deposited with financial institution and Restricted cash.

Restricted cash includes cash deposited with exchanges in compliance with exchange requirements, see Note 3.

#### Transfers of Financial Assets

Transfers of financial assets are accounted for as sales when the Company has relinquished control over the transferred assets. Transfers that are not accounted for as sales are treated as collateralized financing, see Note 9.

#### **Collateralized Financings**

Securities purchased under agreements to resell ("reverse repurchase agreements") and securities sold under agreements to repurchase ("repurchase agreements") are treated as collateralized financings. Reverse repurchase agreements and repurchase agreements, if any, are carried on the Consolidated statement of financial condition at the amounts of cash paid or received, plus accrued interest. Where appropriate, transactions with the same counterparty are reported on a net basis.

The Company manages credit exposure arising from such transactions by, in appropriate circumstances, entering into master netting agreements and collateral agreements with its counterparties. These agreements provide the Company, with the right, in the event of a default by the counterparty, to net a counterparty's rights and obligations under the agreement and to liquidate and set off collateral held by the Company against the net amount owed by the counterparty.

The Company's policy is generally to take possession of securities purchased in connection with reverse repurchase agreements and to receive cash under agreements to repurchase (with rights of rehypothecation).

For information related to offsetting of certain collateralized transactions, see Note 8.

# Receivables and Payables – Brokers, Dealers and Clearing Organizations

Receivables from and Payables to Brokers, dealers and clearing organizations include amounts arising from margin requirements posted to affiliates for cleared derivatives, unsettled trades, and other requirements to clearing organizations. Receivables and payables arising from unsettled trades are reported on a net basis.

#### **Receivables and Payables - Customers**

Receivables from and Payables to customers include amounts posted or received as cash collateral with respect to OTC derivatives. Collateral amounts are offset with related OTC derivatives where eligible in accordance with current accounting guidance.

#### **Allowance for Credit Losses**

The Company records an increase in the allowance for credit losses when the prospect of collecting a specific customer account balance becomes doubtful. Management analyzes accounts receivable and historical bad debt experience when evaluating the adequacy of the allowance for credit losses. Should any of these factors change, the estimates made by management will also change, which could affect the level of the Company's future provision for credit losses. The allowance for credit losses is included in Receivables - Customers on the Consolidated statement of financial condition.

#### **Deferred Compensation Plans**

Certain current and former employees of the Company and affiliates participate in various deferred stock-based and cash-based compensation plans. Compensation expense associated with these plans is recognized over the vesting period relevant to each separately vesting portion of the award.

The Company measures compensation for stock-based awards at fair value. The Company determines the fair value of Restricted Stock Units based on the grant-date fair value of the common stock of the Ultimate Parent, measured at VWAP on the date of grant.

The deferred cash-based compensation plans generally provide a return to the plan participants based upon the performance of each participant's referenced investments.

#### **Foreign Currencies**

Assets and liabilities of operations having non-U.S. dollar functional currencies are translated as of June 30, 2023. Gains or losses resulting from translating foreign currency financial statements and related tax effects, are reflected in AOCL on the Consolidated statement of financial condition.

#### **Accounting Development Updates**

Financial Accounting Standards Board has issued certain accounting updates, which the Company has either determined to be not applicable or are not expected to have a significant impact on the Consolidated statement of financial condition.

#### 3. Cash and Cash Equivalents

At June 30, 2023, Cash and Cash equivalents include:

	At Ju					
Cash and due from banks	\$	111				
Restricted cash		101				
Total	\$	212				

For additional information on cash and cash equivalents, including restricted cash, see Note 2.

#### 4. Related Party Transactions

The Company enters into transactions with the Ultimate Parent and its consolidated subsidiaries (the "Firm") in order to, among other things, manage risk, facilitate client demand, meet liquidity requirements, and fund its business activities. These transactions include OTC derivatives, collateralized financings, and other secured financings as described in Notes 6, 8 and 9, respectively.

The Company also obtains funding from the Ultimate Parent and subordinated liabilities from the Parent as described in Notes 9 and 10, respectively.

Trading assets and liabilities with affiliates include OTC derivative contracts. See Notes 5 and 6 for further information.

The Company participates in various deferred stock-based and cash-based compensation plans sponsored by the Ultimate Parent for the benefit of certain current and former employees, as described in Note 2, as well as employee benefit plans as described in Note 15. Additionally, the Company has recognized liabilities to the Ultimate Parent for the deferred stock-based compensation plans which are recorded in Other liabilities and accrued expenses.

Receivables from and Payables to Brokers, dealers and clearing organizations mainly consist of initial and variation margin requirements posted to exchanges by broker-dealer affiliates that

clear certain derivatives for the Company after consideration of eligible offset as described in Note 2.

Receivables from and Payables to Customers include cash collateral from other affiliates, including broker dealer affiliates related to bilateral OTC derivative transactions after consideration of eligible offset as described in Note 2.

The Company has agreements with affiliates for other activities, including a tax sharing agreement with the Ultimate Parent as described in Note 16, global transfer pricing policies, and other activities as described further below. Unsettled amounts for these activities are recorded within Receivables from or Payables to Affiliates, are payable on demand.

The Company applies global transfer pricing policies among affiliates. These policies are consistent with the 2022 OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations. The Firm has also engaged in negotiations of Advanced Pricing Agreements with selected tax authorities in respect of its key transfer pricing methodologies. Negotiations may result in changes to methodologies or inputs that could have an impact on the Company's statement of financial condition in the future.

The Company shares the majority of its non-interest expenses with MS&Co., which is the primary employing entity for the U.S. business activities undertaken by the Company, based on the level of business activity transacted on the Company relative to MS&Co.

The Company has an agreement with an affiliated service entity, MSSG, in which MSSG agrees to provide the Company with certain services including infrastructure group support, information processing and communications, and occupancy and equipment.

At June 30, 2023

Assets and receivables from affiliated companies:									
Trading assets	\$ 24								
Securities purchased under agreements to resell	2,981								
Receivables - Brokers, dealers and clearing organizations	2,495								
Receivables - Customers	29								
Receivables – Affiliates	30								
Other assets	2								
Liabilities and payables to affiliated companies	:								
Trading liabilities	\$ 104								
Other secured financings	547								
Payables - Brokers, dealers and clearing organizations	19								
Payables - Customers	1,400								
Payables - Affiliates	125								
Other liabilities and accrued expenses	69								
Borrowings	1,342								
Subordinated debt	800								

The Ultimate Parent or the Company's affiliates have issued guarantees under certain derivative contracts. For these derivative contracts, the Company's obligations to its counterparties are guaranteed by the Ultimate Parent or the Company's affiliates if the Company's financial obligations are not met.

5. Fair Values

#### Assets and Liabilities Measured at Fair Value on a Recurring Basis

	At June 30, 2023								
	 Level 1	Level 2	Level 3	Netting <sup>(1)</sup>	Total				
Assets at fair value									
Trading assets:									
Corporate and other debt:									
Loans and lending commitments	\$ — \$	<b>— \$</b>	57 \$	<b>— \$</b>	57				
Other debt	_	793	18	_	811				
Total corporate and other debt	_	793	75	_	868				
Derivative and other contracts:									
Interest rate contracts	_	1,044	_	_	1,044				
Credit contracts	_	_	_	_	_				
Foreign exchange contracts	_	2,985	_	_	2,985				
Equity contracts	_	1	_	_	1				
Commodity contracts	2,364	15,942	2,580	_	20,886				
Netting	(2,363)	(15,637)	(347)	(2,266)	(20,613)				
Total derivative and other contracts	1	4,335	2,233	(2,266)	4,303				
Investments	_	_	1	_	1				
Total Investments	_	_	1	_	1				
Physical commodities	_	2,504	_	_	2,504				
Total trading assets	1	7,632	2,309	(2,266)	7,676				
Total Assets measured at fair value	\$ 1 \$	7,632 \$	2,309 \$	(2,266) \$	7,676				
Liabilities at fair value									
Trading liabilities:									
Derivative and other contracts:									
Interest rate contracts	\$ — \$	964 \$	37 \$	— \$	1,001				
Credit contracts	_	74	_	_	74				
Foreign exchange contracts	_	2,987	_	_	2,987				
Equity contracts	_	1	_	_	1				
Commodity contracts	2,612	14,805	1,646	_	19,063				
Netting	(2,363)	(15,637)	(347)	(1,521)	(19,868)				
Total derivative and other contracts	249	3,194	1,336	(1,521)	3,258				
Physical commodities	_	_	_		_				
Total trading liabilities	249	3,194	1,336	(1,521)	3,258				
Other secured financings	_	748	_		748				
Borrowings	_	1,370	_	_	1,370				
Total Liabilities measured at fair value	\$ 249 \$	5,312 \$	1,336 \$	(1,521) \$	5,376				

<sup>(1)</sup> For positions with the same counterparty that cross over the levels of the fair value hierarchy, both counterparty netting and cash collateral netting are included in the column titled "Netting". Positions classified within the same level that are with the same counterparty are netted within that level. For further information, see Note 6.

#### Valuation Techniques for Assets and Liabilities Measured at Fair Value on a Recurring basis:

#### Asset and Liability/Valuation Technique

#### **Valuation Hierarchy Classification**

#### Loans and Lending Commitments

- Fair value of corporate loans is determined using recently executed transactions, market price quotations (where observable), implied yields from comparable debt, market observable CDS spread levels obtained from independent external parties adjusted for any basis difference between cash and derivative instruments, along with proprietary valuation models and default recovery analysis where such transactions and quotations are unobservable.
- Level 3 in instances where prices or significant spread inputs are unobservable

#### Other Debt

- The fair value of other debt is related to outstanding physical commodities spot purchases and sales and corresponding forward sale or purchases undertaken contemporaneously that are accounted for as financing transactions and other prepaid commodity contracts.
- Level 2 if valued based on observable market data for comparable instruments
  - Level 3 in instances where prices or significant spread inputs are unobservable

#### Derivative Contracts

#### Exchange-Traded Derivative Contracts

- Exchange-traded derivatives that are actively traded are valued based on quoted prices from the exchange.
- Exchange-traded derivatives that are not actively traded are valued using the same approaches as those applied to OTC derivatives.
- Level 1 when actively traded
- Level 2 when not actively traded

#### **OTC Derivative Contracts**

- OTC derivative contracts include forward, swap and option contracts related to interest rates, foreign currencies, credit standing of reference entities, or commodity prices.
- Depending on the product and the terms of the transaction, the fair value of OTC derivative products can be modeled using a series of techniques, including closed-form analytic formulas, such as the Black-Scholes option-pricing model, simulation models or a combination thereof. Many pricing models do not entail material subjectivity as the methodologies employed do not necessitate significant judgment since model inputs may be observed from actively quoted markets, as is the case for generic interest rate swaps, many equity, commodity and foreign currency option contracts, and certain CDS. In the case of more established derivative products, the pricing models used by the Company are widely accepted by the financial services industry.
- For further information on the valuation techniques for OTC derivative products, see Note 2.
- Generally, Level 2 when valued using observable inputs, or where the unobservable input is not deemed significant
- Level 3 if an unobservable input is deemed significant

#### Investments

- Investments include direct investments in equity investments, direct private equity investments and privately held investments. Initially, the transaction price is generally considered by the Company as the exit price and is the Company's best estimate of fair value.
- Fair value after initial recognition is based on an assessment of each investment, considering recent rounds of financing and third-party transactions, discounted cash flow analyses and market-based information, including comparable company transactions, trading multiples and changes in market outlook among other factors.
- Level 1 exchange-traded direct equity investments in an active market
- Level 3 non-exchange-traded direct equity investments and investments in various investment management funds where rounds of financing or third-party transactions are not available

#### Physical Commodities

- The Company trades various physical commodities, including renewable energy credits and other emission credits, natural gas, base metals, and precious metals.
- Fair value is determined using observable inputs, including broker quotations and published indices.
- Level 2 valued using observable inputs.

#### Other Secured Financings

- Other secured financings are comprised of agreements to repurchase physical commodities. For further information, see Note 8.
- Level 2 valued using observable inputs.

For further information on the determination of fair value, refer to the Physical Commodities and Other Debt valuation techniques described herein.

#### **Borrowings**

- · Borrowings include hybrid financial instruments with embedded derivatives.
- Level 2 when valued using observable inputs, or where the unobservable input is not deemed significant.

## Significant Unobservable Inputs Used in Recurring Level 3 Fair Value Measurements

#### Valuation Techniques and Unobservable Inputs

	Ва	lance/ Range (Averages) <sup>(1)</sup>
		At June 30, 2023
Net Assets at Fair Value on a recurring basis:		
Loans and lending commitments	\$	57
Expected Recovery:		
Asset Coverage		30% to 98% (61%)
Net derivative and other contracts:		
Commodity contracts	\$	934
Option Model:		
Forward power price		\$3 to \$332 (\$49) per MWh
Commodity volatility		12% to 180% (35%)
Cross commodity correlation		57% to 100% (94%)

(1)A single amount is disclosed for a range and average when there is no significant difference between the minimum, maximum and average. Amounts represent weighted averages except where simple averages and the median of the inputs are more relevant.

The previous table provides information on the valuation techniques, significant unobservable inputs, and their ranges and averages for each major category of assets and liabilities measured at fair value with a significant Level 3 balance. The level of aggregation and breadth of products cause the range of inputs to be wide and not evenly distributed across the inventory of financial instruments. Further, the range of unobservable inputs may differ across firms in the financial services industry because of diversity in the types of products included in each firm's inventory. Generally, there are no predictable relationships between multiple significant unobservable inputs attributable to a given valuation technique.

An increase (decrease) to the following significant unobservable inputs would generally result in a higher (lower) fair value.

 Asset coverage: The ratio of a borrower's underlying pledged assets less applicable costs relative to their outstanding debt (while considering the loan's principal and the seniority and security of the loan commitment).

An increase (decrease) to the following significant unobservable inputs would generally result in an impact to the fair value, but the magnitude and direction of the impact would depend on whether the Company is long or short the exposure.

- Correlation: A pricing input where the payoff is driven by more than one underlying risk. Correlation is a measure of the relationship between the movement of two variables (i.e., how the change in one variable influences a change in the other variable).
- Volatility: The measure of variability in possible returns for an instrument given how much that instrument changes in

value over time. Volatility is a pricing input for options and, generally, the lower the volatility, the less risky the option. The level of volatility used in the valuation of a particular option depends on a number of factors, including the nature of the risk underlying that option, the tenor and the strike price of the option.

#### Financial Instruments Not Measured at Fair Value

	At June 30, 2023									
	C	arrying			Fa	ir Val				
		Value	Le	evel 1	Le	vel 2	Level 3			Total
Financial Assets:										
Cash and cash equivalents	\$	212	\$	212	\$	_	\$	_	\$	212
Securities purchased under agreements to resell		2,981		_	2	2,981		_		2,981
Receivables:										
Brokers, dealers and clearing organizations		2,537		_	2	2,537		_		2,537
Customers		832		_		832		_		832
Affiliates		30		_		30		_		30
Other assets		4		_		4		_		4
Financial Liabilities:										
Payables:										
Brokers, dealers and clearing organizations	\$	28	\$	_	\$	28	\$	_	\$	28
Customers		1,785		_	1	,785		_		1,785
Affiliates		125		_		125		_		125
Other liabilities and accrued expenses		45		_		45		_		45
Borrowings		1,332		_	1	,332		_		1,332
Subordinated liabilities		800		_		799		_		799

The previous table excludes certain financial instruments and all non-financial assets and liabilities.

#### 6. Derivative Instruments

The Company trades and makes markets globally in exchange-traded futures and options, OTC swaps, forwards, options and other derivatives referencing, among other things, commodities, interest rates, equities, currencies, loans and credit indices. The Company enters into derivative transactions with external counterparties and affiliates for trading or hedging purposes. For further information, see Note 4. The Company does not apply hedge accounting.

The Company manages its market-making positions by employing a variety of risk mitigation strategies. These strategies include diversification of risk exposures and hedging. Hedging activities consist of the purchase or sale of positions in related securities and financial instruments, including a variety of derivative products (e.g., futures, forwards, swaps and options).

The Company manages the market risk associated with its market-making activities on a Company-wide basis, on a worldwide trading division level and on an individual product basis.

#### **Derivative Fair Values and Notional**

Assets At June 30, 2023

						At build	30, Z	JEJ					
	Fair Value							Notional <sup>(2)</sup>					
	Bila	ateral OTC	Exchange- Traded		Total	Exchange- Bilateral OTC Traded				Total			
Derivative contracts:													
Interest rate	\$	1,044	\$	_	\$	1,044	\$	20,984	\$	1	\$	20,985	
Credit		_		_		_		33		_		33	
Foreign exchange		2,985		_		2,985		108,764		_		108,764	
Equity		1		_		1		51		_		51	
Commodity		18,287		2,599		20,886		189,234		55,646		244,880	
Total gross derivative contracts		22,317		2,599		24,916		319,066		55,647		374,713	
Amounts offset													
Cash collateral netting		(2,043)		_		(2,043)							
Counterparty netting		(15,978)		(2,592)		(18,570)							
Total derivative contracts assets		4,296		7		4,303							
Amounts not offset (1)													
Financial instruments - collateral		(603)		_		(603)							
Net amounts	\$	3,693	\$	7	\$	3,700							
Net amounts for which master netting or collateral not be legally enforceable	agreeme	ents are not	in <sub>l</sub>	place or may	\$	159	•						

### Liabilities

At June 30, 2023

				,	,			
			Fair Value	Notional <sup>(2)</sup>				
	Exchange- Bilateral OTC Traded Total		Total	Bilateral OTC	Total			
Derivatives contracts:								
Interest rate	\$	1,001	\$ —	\$ 1,001	\$ 19,159	\$ 9	\$ 19,168	
Credit		74	_	74	3,337	_	3,337	
Foreign exchange		2,987	_	2,987	102,479	_	102,479	
Equity		1	_	1	64	_	64	
Commodity		16,173	2,890	19,063	167,337	72,524	239,861	
Total gross derivatives contracts		20,236	2,890	23,126	292,376	72,533	364,909	
Amounts offset								
Cash collateral netting		(1,298)	_	(1,298)	)			
Counterparty netting		(15,978)	(2,592)	(18,570)	)			
Total derivative contracts liabilities		2,960	298	3,258				
Amounts not offset (1)					_			
Financial instruments - collateral		(33)	_	(33)	)			
Net amounts	\$	2,927	\$ 298	\$ 3,225	_			
Net amounts for which master netting or collate not be legally enforceable	eral agreemen	its are not in		\$ 458	-			

<sup>(1)</sup> Amounts relate to master netting agreements and collateral agreements that have been determined by the Company to be legally enforceable in the event of default but where certain other criteria are not met in accordance with applicable offsetting accounting guidance.

For information related to offsetting of certain collateralized transactions, see Note 8

<sup>(2)</sup>The Company believes that the notional amounts of derivative contracts generally overstate its exposure. In most circumstances notional amounts are used only as a reference point from which to calculate amounts owed between the parties to the contract. Furthermore, notional amounts do not reflect the benefit of legally enforceable netting arrangements or risk mitigating transactions.

#### **Derivatives with Credit Risk-Related Contingencies**

#### Net Derivative Liabilities and Collateral Posted

	At June 30, 2023				
Net derivative liabilities with credit risk-related contingent features	\$	2,131			
Collateral posted		415			

The previous table presents the aggregate fair value of certain derivative contracts that contain credit risk-related contingent features that are in a net liability position for which the Company has posted collateral in the normal course of business.

# Incremental Collateral and Termination Payments upon Potential Future Rating Downgrades

	At June 30, 2023				
One-notch downgrade	\$	167			
Two-notch downgrade		242			
Bilateral downgrade agreements included in the amounts above <sup>(1)</sup>	\$	345			

(1)Amounts represent arrangements between the Company and other parties where upon the downgrade of the counterparty or the Ultimate Parent, the counterparty or the Company must deliver collateral to the other party. These bilateral downgrade arrangements are used by the Company to manage the risk of counterparty downgrades.

The previous table shows the future potential collateral amounts and termination payments for the Company that could be called or required by counterparties or exchange and clearing organizations in the event of one-notch or two-notch downgrade scenarios based on the relevant contractual downgrade triggers of the Ultimate Parent.

The additional collateral or termination payments that may be called in the event of a future credit rating downgrade vary by contract and can be based on either the counterparty's or the Ultimate Parent's ratings by either or both of Moody's and S&P.

## Maximum Potential Payout/Notional of Credit Protection Sold $^{(1)}$

	Years to Maturity at June 30, 2023									023
	_	: 1	1	l <b>-</b> 3	3	3-5	O۱	er 5	To	otal
Single-name CDS:										
Investment grade	\$	11	\$	22	\$	_	\$	_	\$	33
CDS protection sold with identical protection purchased \$							_			

#### Fair Value Asset (Liability) of Credit Protection Sold<sup>(1)</sup>

	At June	30, 2023
Single-name CDS:		•
Investment grade	\$	_

<sup>(1)</sup>Investment grade determination is based on the internal credit rating of the reference obligation. Internal credit ratings serve as the Credit Risk Management Department's assessment of credit risk and the basis for a comprehensive credit limits framework used to control credit risk. The Company uses quantitative models and judgment to estimate the various risk parameters related to each obligor.

#### Protection Purchased with CDS

		At June 30, 2023		
	Fair	Fair Value		
	Asset	(Liability)	Notional	
Single name CDS	\$	(29) \$	488	
Index and basket CDS		(45)	2,849	
Total	\$	(74) \$	3,337	

The Company enters into credit derivatives, principally CDS, under which it receives or provides protection against the risk of default on a set of debt obligations issued by a specified reference entity or entities. The Company's counterparties for these derivatives are affiliates. For further information, see Note 4.

The fair value amounts as shown in the previous tables represent the net asset or liability fair value by underlying type prior to cash collateral or counterparty netting.

The purchase of credit protection does not represent the sole manner in which the Company risk manages its exposure to credit derivatives. The Company manages its exposure to these derivative contracts through a variety of risk mitigation strategies, which include managing the credit and correlation risk across single name, non-tranched indices and baskets, and cash positions. Aggregate market risk limits have been established for credit derivatives, and market risk measures are routinely monitored against these limits. The Company may also recover amounts on the underlying reference obligation delivered to the Company under CDS where credit protection was sold.

Single Name CDS. A CDS protects the buyer against the loss of principal on a bond or loan in case of a default by the issuer. The protection buyer pays a periodic premium (generally quarterly) over the life of the contract and is protected for the period. The Company, in turn, performs under a CDS if a credit event as defined under the contract occurs. Typical credit events include bankruptcy, dissolution or insolvency of the referenced entity, failure to pay and restructuring of the obligations of the referenced entity.

*Index and Basket CDS.* Index and basket CDS are products where credit protection is provided on a portfolio of single name CDS. Generally, in the event of a default on one of the

underlying names, the Company pays a pro rata portion of the total notional amount of the CDS.

#### 7. Receivables from Contracts with Customers

Receivables from contracts with customers, which are primarily included in Receivables – Customers balances in the Consolidated statement of financial condition arise when the Company has both recorded revenues and has the right per the contract to bill customers. At June 30, 2023 and December 31, 2022, the balances related to receivables from contracts with customers was \$14 and \$112 and payables for contract liabilities was \$21 and \$20, respectively.

Contract liabilities relate primarily to commodities contracts that are billed in advance and recognized into revenue as the underlying services are provided.

#### 8. Collateralized Transactions

The Company enters into securities purchased under agreements to resell and securities sold under agreements to repurchase to, among other things, finance its inventory positions, and meet collateral and liquidity requirements.

The Company monitors the fair value of the underlying securities as compared with the related receivable or payable, including accrued interest, and requests or posts additional collateral, as required under the applicable agreement to ensure such transactions are adequately collateralized, or that excess collateral is returned.

The risk related to a decline in the market value of collateral pledged or received is managed by setting appropriate market-based margin requirements. Increases in collateral margin calls on repurchase agreements due to market value declines may be mitigated by increases in collateral margin calls on reverse repurchase agreements with similar quality collateral. Additionally, the Company may request lower quality collateral pledged be replaced with higher quality collateral through collateral substitution rights in the underlying agreements.

The Company actively manages its repurchase agreements in a manner that reduces the potential refinancing risk of repurchase agreements of less liquid assets and also considers the quality of collateral when negotiating collateral eligibility with counterparties. The Company utilizes shorter-term repurchase agreements for highly liquid assets and has established longer tenor limits for less liquid assets, for which funding may be at risk in the event of a market disruption.

#### Offsetting of Certain Collateralized Transactions

	At June 30, 2023								
	Gross Amounts	Amounts Offset	Net Amounts Presented	Amounts not offset	Net Amounts				
Assets									
Reverse repurchase agreements	\$ 2,981	\$ —	\$ 2,981	\$ (2,981)	\$ —				

<sup>(1)</sup>Amounts relate to master netting agreements which have been determined by the Company to be legally enforceable in the event of default but where certain other criteria are not met in accordance with applicable offsetting accounting guidance.

For information related to offsetting of derivatives, see Note 6.

The Company pledges its trading assets to collateralize other secured financings and derivatives. Counterparties may or may not have the right to sell or repledge the collateral.

Pledged financial instruments that can be sold or repledged by the secured party are identified as Trading assets (pledged to various parties) in the Consolidated statement of financial condition.

### Fair Value of Collateral Received with Right to Sell or Repledge

	At Ju	ne 30, 2023
Collateral received with right to sell or repledge	\$	3,515
Collateral that was sold or repledged		1,218

The Company receives collateral in the form of securities in connection with reverse repurchase agreements and derivatives. In many cases, the Company is permitted to sell or repledge these securities held as collateral and use the securities to collateralize repurchase agreements and derivatives.

#### 9. Borrowings and Other Secured Financings

#### **Borrowings**

Maturities and Terms of Borrowings at June 30, 2023

	Variable Rate	
Original maturities of one year or less:		
Next 12 months	\$	1,333
Original maturities greater than one year:		
Due in 2023	\$	11
Due in 2024		966
Due in 2025		365
Due in 2026		_
Due in 2027		27
Thereafter		_
Total		1,369
Total borrowings	\$	2,702
Weighted average coupon rate at period-end <sup>(1)</sup>		6.46 %

<sup>(1)</sup> Includes only borrowings with original maturities greater than one year. Weighted average coupon was calculated utilizing U.S. dollar interest rates and excludes financial instruments for which the fair value option was elected.

Borrowings with original maturities of one year or less primarily consist of unsecured borrowings from the Ultimate Parent that mature in less than 12 months.

Borrowings with original maturities greater than one year consist of unsecured borrowings from the Ultimate Parent and hybrid financial instruments with embedded derivatives. These unsecured borrowings from the Ultimate Parent are callable with maturities of 13 months or more from when it is called.

Hybrid instruments with embedded derivatives are carried at fair value under the fair value option. For further information, see Note 5.

The interest rates for the unsecured borrowings from the Ultimate Parent are in line with the Firm's proxy rate.

The weighted average maturity of borrowings, based upon stated maturity dates, was approximately 1.2 years at June 30, 2023.

#### **Other Secured Financings**

	une 30, 2023
Original maturities:	
One year or less	\$ _
Greater than one year	_
Transfer of assets accounted for as secured financings	748
Total	\$ 748

Other secured financings include amounts related to physical commodities assets which the Company has agreed to

repurchase. These liabilities are generally payable from the cash flows of the related assets accounted for within Trading assets. For further information, see Notes 5 and 6.

### Maturities of Transfers of Assets Accounted for as Other Secured Financings

	At June 30, 2023
Due in 2023	748
Due in 2024	_
Due in 2025	_
Due in 2026	_
Thereafter	_
Total	\$ 748

For transfers of assets that fail to meet accounting criteria for a sale, the Company continues to record the assets and recognizes the associated liabilities as Other secured financings in the Consolidated statement of financial condition.

#### 10. Subordinated Liabilities

The Company entered into agreements with its Parent for subordinated liabilities. The agreements consist of a \$400 subordinated loan and a \$1,500 subordinated revolving note, of which \$400 was drawn.

The interest rates for the agreements are in line with the Firm's proxy rate.

The maturity dates, interest rates and book value of the subordinated notes at June 30, 2023 are as follows:

Subordinated Notes	Maturity Date	Interest Rate	Book Value
Cash Subordination Agreement	August 24, 2031	6.46 %	\$ 400
Subordinated Revolving Credit Agreement	August 24, 2031	6.46 %	400
Total			\$ 800

# 11. Commitments, Guarantees and Contingencies Commitments

	Years to Maturity at June 30, 2023									
	Less tha	n 1	1	-3		3-5	Ove	r 5	٦	Total
Letters of credit and other financial guarantees	\$	80	\$	35	\$	_	\$	6	\$	121

The Company's commitments associated with outstanding letters of credit and other financial guarantees obtained to satisfy collateral requirements as of June 30, 2023 are summarized above by period of expiration.

#### Types of Commitments

Letters of Credit and Other Financial Guarantees. The Company has outstanding letters of credit and other financial guarantees issued by third-party banks to certain of the Company's counterparties. The Company is contingently liable for these letters of credit and other financial guarantees, which are primarily used to provide collateral for securities and commodities traded and to satisfy various margin requirements in lieu of depositing cash or securities with these counterparties.

Other Commitments. Other commitments include a binding contingent lending commitment on behalf of a client in connection with the Company's business.

#### Guarantees

# Obligations under Guarantee Arrangements at June 30, 2023 Maximum Potential Payout/Notional

Years to Maturity Less than 1 1-3 3-5 Over 5 Total Non-credit derivative<sup>(1)</sup> 12,682 839 892 85,736 71,323 Performance quarantees 11 23 188 229 Total \$71,334 \$12,689 \$ 862 \$ 1,080 \$85,965

	Carrying (Asset)/	Amount Liability
Non-credit derivative (1)		6,319
Performance guarantees		1
Total	\$	6,320

<sup>&</sup>lt;sup>(1)</sup>Carrying amount of derivatives contracts are shown on a gross basis prior to cash collateral or counterparty netting. For further information on derivative contracts, see Note 5.

The Company has obligations under certain guarantee arrangements, including contracts and indemnification agreements that contingently require the Company to make payments to the guaranteed party based on changes in an underlying measure (such as an interest or foreign exchange rate, security or commodity price, an index or the occurrence or nonoccurrence of a specified event) related to an asset, liability or equity security of a guaranteed party. Also included as guarantees are contracts that contingently require the Company to make payments to the guaranteed party based on another entity's failure to perform under an agreement, as well as indirect guarantees of the indebtedness of others.

Non-Credit Derivative Contracts. Certain derivative contracts meet the accounting definition of a guarantee, including certain written options, contingent forward contracts and CDS (see Note 6 regarding credit derivatives in which the Company has sold credit protection to the counterparty which are excluded from the previous table). For non-credit derivative contracts that meet the accounting definition of a guarantee, the notional amount is used as the maximum potential payout for certain derivative contracts,

such as written foreign currency, written commodities options, and written interest rate caps. The Company evaluates collateral requirements for all derivatives, including derivatives that do not meet the accounting definition of a guarantee. For further information on the effects of cash collateral and counterparty netting, see Note 6.

In certain situations, collateral may be held by the Company for those contracts that meet the definition of a guarantee. Generally, the Company sets collateral requirements by counterparty so that the collateral covers various transactions and products and is not allocated specifically to individual contracts. Also, the Company may recover amounts related to the underlying asset delivered to the Company under the derivative contract.

#### **Contingencies**

Legal

In the normal course of business, the Company has been named, from time to time, as a defendant in various legal actions, including arbitrations, class actions and other litigation, arising in connection with its activities as a financial services institution. Certain of the actual or threatened legal actions include claims for substantial compensatory and/or punitive damages or claims for indeterminate amounts of damages. In some cases, the entities that would otherwise be the primary defendants in such cases are bankrupt or are in financial distress.

The Company is also involved, from time to time, in other reviews, investigations and proceedings (both formal and informal) by governmental and self-regulatory agencies regarding the Company's business, and involving, among other matters, sales, trading, financing, market-making activities, capital market activities, financial products or offerings sponsored, underwritten or sold by the Company, and accounting and operational matters, certain of which may result in adverse judgments, settlements, fines, penalties, injunctions, limitations on our ability to conduct certain business, or other relief.

In many proceedings and investigations, however, it is inherently difficult to determine whether any loss is probable or even possible or to estimate the amount of any loss. In addition, even where loss is possible or an exposure to loss exists in excess of the liability already accrued with respect to a previously recognized loss contingency, it is not always possible to reasonably estimate the size of the possible loss or range of loss, particularly for proceedings and investigations where the factual record is being developed or contested or where plaintiffs or government entities seek substantial or indeterminate damages, restitution, disgorgement or penalties. Numerous issues may need to be resolved before a loss or additional loss, or range of loss or additional range of loss, can be reasonably estimated for a proceeding or investigation, including through potentially lengthy discovery and determination of important factual matters, determination of issues related to class certification and the

calculation of damages or other relief, and consideration of novel or unsettled legal questions relevant to the proceedings or investigations in question.

The Company contests liability and/or the amount of damages as appropriate in each pending matter. Where available information indicates that it is probable a liability had been incurred at the date of the consolidated statement of financial condition and the Company can reasonably estimate the amount of that loss, the Company accrues the estimated loss by a charge to income.

For certain other legal proceedings and investigations, the Company can estimate, in some instances, reasonably possible losses, additional losses, ranges of loss or ranges of additional loss in excess of amounts accrued (if any) but does not believe, based on current knowledge and after consultation with counsel, that such losses could have a material adverse effect on the Company's financial condition.

Subject to the foregoing, the Company believes, based on current knowledge and after consultation with counsel, that the outcome of such proceedings and investigations will not have a material adverse effect on the financial condition of the Company, although the outcome of such proceedings or investigations could be material to the Company's operating results and cash flows for a particular period depending on, among other things, the level of the Company's revenues or income for such period.

#### 12. Variable Interest Entities

#### Overview

The Company is involved with various SPEs in the normal course of business. In most cases, these entities are deemed to be VIEs.

The Company's variable interests in VIEs include debt and equity interests. The Company's involvement with VIEs arises primarily from loans made to and investments in VIEs and derivatives entered into with VIEs.

The Company determines whether it is the primary beneficiary of a VIE upon its initial involvement with the VIE and reassesses whether it is the primary beneficiary on an ongoing basis as long as it has any continuing involvement with the VIE. This determination is based upon an analysis of the design of the VIE, including the VIE's structure and activities, the power to make significant economic decisions held by the Company and by other parties and the variable interests owned by the Company and other parties.

The power to make the most significant economic decisions may take a number of different forms in different types of VIEs. The Company accounts for the assets held by the consolidated VIEs in Trading assets and the liabilities of the VIEs in Other secured

financings in the Consolidated statement of financial condition. The assets and liabilities are measured at fair value, with changes in fair value reflected in earnings. Assets owned by the consolidated VIEs generally are not available to the Company. The related liabilities issued by many consolidated VIEs are non-recourse to the Company. At June 30, 2023 after intercompany eliminations, the Company had no consolidated VIE assets, including assets financed on a non-recourse basis.

In general, the Company's exposure to a loss in consolidated VIEs is limited to losses that would be absorbed on the VIE's net assets recognized in its Consolidated statement of financial condition.

Non-consolidated VIEs	At June 30, 2023		
VIE assets	\$	211	
Maximum exposure to loss			
Debt and equity interests		30	
Total	\$	30	
Carrying value of variable interests - Assets			
Debt and equity interests	\$	30	
Additional VIE assets owned <sup>(1)</sup>		12	

(1) Additional VIE assets owned represents the carrying value of total exposure to non-consolidated VIEs for which the maximum exposure to loss is less than specific thresholds. The Company's maximum exposure to loss generally equals the fair value of the assets owned. These assets are included in Trading assets, derivative contracts and are measured at fair value (see Note 4). The Company does not provide additional support in these transactions through contractual facilities, guarantees or similar derivatives.

The previous table presents information about the non-consolidated VIEs in which the Company had variable interests at June 30, 2023.

The maximum exposure to loss is dependent on the nature of the Company's variable interest in the VIEs and is limited to notional amounts of certain liquidity facilities, other credit support, total return swaps, written put options, and fair value of certain investments the Company has made in the VIEs.

The Company's maximum exposure to loss does not include the offsetting benefit of hedges or any reductions associated with the amount of collateral held as part of a transaction with the VIE or any party to the VIE directly against a specific exposure to loss.

Liabilities issued by VIEs generally are non-recourse to the Company.

#### 13. Risk Management

Risk is an inherent part of the Company's business activities. Management believes effective risk management is vital to the success of the Company's business activities. Accordingly, the Company has an established risk management governance structure and framework in place to identify, measure, monitor, advise, challenge and control the principal risks involved in the activities of the Institutional Securities business segment, as well as at the Company level. The principal risks involved in the Company's business activities include market, credit, operational, model, compliance, cybersecurity, liquidity, strategic and reputational risk.

The Company's risk management policies and related procedures are aligned with those of the Firm. These policies and related procedures are administered on a coordinated global and legal entity basis with consideration given to the Company's specific capital and regulatory requirements.

The cornerstone of the Company's risk management philosophy is the pursuit of risk-adjusted returns through prudent risk-taking that protects the Company's capital base and franchise. This is implemented utilizing five kev principles: integrity, comprehensiveness, independence, accountability transparency. To help ensure the efficacy of risk management, which is an essential component of the Company's reputation, management requires thorough communication and the appropriate escalation of risk matters. The fast-paced, complex, and constantly-evolving nature of global financial markets requires the Company to maintain a risk management culture that is incisive, knowledgeable about specialized products and markets, and subject to ongoing review and enhancement.

The Company's risk appetite defines the types of risk that the Company is willing to accept, taking into account market, credit, operational, model, liquidity, legal and compliance, cybersecurity, strategic, reputational and conduct risk. This risk appetite and the related Board of Directors ("Board") level risk limit framework and risk tolerance statements are reviewed and approved by the Board annually

#### Risk Governance Structure

Risk management at the Company requires independent Company-level oversight, accountability of the Company's businesses, and effective communication of risk matters across the Company, to senior management and ultimately to the Board. The Company's risk governance structure is composed of the Board; the RC; senior management oversight; the Internal Audit Department of the Ultimate Parent ("Internal Audit Department"); and risk managers and groups within and across the businesses

Board of Directors. The Company's Board has oversight of the risk governance framework, approves the risk limit frameworks and certain risk limits, and is responsible for helping to ensure that the Company's risks are managed in a sound manner. The Board has authorized the RC to help facilitate the Company's risk oversight responsibilities.

Risk and Asset and Liability Committee. The RC is a management committee co-chaired by the Company's Chief Risk Officer and Chief Financial Officer and oversees the risk governance framework. The RC composition includes the Chief Risk Officer, Chief Financial Officer, Treasurer, Chief Market Risk Officer, Chief Credit Risk Officer, Chief Operational Risk Officer, Chief Liquidity Risk Officer, Chief Compliance Officer, Chief Auditor and members of the trading business unit's risk management group. The RC's responsibilities include oversight of the Company's risk management policies, procedures and limits, the monitoring of capital levels as well as material market, operational, model, liquidity, legal, compliance, cybersecurity, strategic, reputational and conduct risk matters, and other risks, as appropriate, and the steps management has taken to monitor and manage such risks. Among the risk limits presented to the RC by the Independent Risk Management Functions are stress scenarios designed to ensure that the magnitude of potential losses in severe market and liquidity scenarios are appropriate relative to the Company's capitalization and liquidity.

Chief Risk Officer. The Chief Risk Officer, who is independent of business units, reports to the Board. The Chief Risk Officer oversees compliance with the Company's risk limits; approves exceptions to the Company's risk limits; independently reviews material market, credit, operational, model and liquidity risks; and reviews results of risk management processes with the Board and the RC, as appropriate.

Independent Risk Management Functions. The Company's risk management functions (Market Risk, Credit Risk, Operational Risk, Liquidity Risk Management and Model Risk departments) are independent of the Company's business units and report to the Chief Risk Officer. These functions assist senior management and the RC in monitoring and controlling the Company's risk. The Independent Risk Management Functions assess a variety of stress scenarios and calibrate limits that are informed by the Company's liquidity and loss-absorbing capacity. Further discussion about the responsibilities of the risk management functions may be found under "Market Risk," "Credit Risk," "Operational Risk,", "Model Risk" and "Liquidity Risk."

Internal Audit Department. The Internal Audit Department reviews and tests the Company's compliance with internal guidelines set for risk management and risk monitoring, as well as external rules and regulations governing the Company.

#### Risk Management Process

The following is a discussion of the Company's risk management policies and procedures for the Company's primary risks.

#### Risk Limits Framework

Risk limits and quantitative metrics provide the basis for monitoring risk taking activity and avoiding outsized risk-taking. The Company's highest-level risk limits incorporate stress scenarios, and are informed by the Company's capitalization and levels of liquidity. Additionally, the Company maintains risk limits and quantitative metrics to support and implement the Company's risk appetite statement. The Company's risk limit frameworks support linkages between the overall risk appetite, which is reviewed by the Company's Risk Committee and is set by the Board, and more granular risk-taking decisions and activities. Risk limits and associated limit frameworks are reviewed and updated on at least an annual basis, with more frequent updates as necessary. Board-level risk limits and approved frameworks address the most important Company-wide aggregations of risk, including, but not limited to, stressed market, credit and liquidity risks. Additional risk limits approved by the RC address more specific types of risk and are bound by the higher-level Board risk limits.

#### Market Risk

Market risk refers to the risk that a change in the level of one or more commodity prices, market prices, rates, indices, volatilities, correlations or other market factors, such as market liquidity, will result in losses for a position or portfolio. Generally, the Company incurs market risk as a result of trading, investing and client facilitation activities.

During 2022, the Company had exposures to a wide range of interest rates, equity prices, commodity prices and foreign exchange rates – and the associated implied volatilities and spreads – related to the global markets in which the Company conducts its trading activities.

Sound market risk management is an integral part of the Company's culture. The various business units and trading desks are responsible for ensuring that market risk exposures are well-managed and prudent. The control groups help ensure that these risks are measured and closely monitored and are made transparent to senior management. Market Risk professionals are responsible for ensuring transparency of material market risks, monitoring compliance with established limits and escalating risk concentrations to appropriate senior management. Market risk is also monitored through various measures: by use of statistics (including VaR); by measures of position sensitivity; and through routine stress testing, which measures the impact on the value of existing portfolios of specified changes in market factors, and scenario analyses conducted in collaboration with business units.

#### Credit Risk

Credit risk refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations to the Company. The Company primarily incurs credit risk exposure to institutions and individuals. This risk may arise from a variety of business activities, including, but not limited to, entering into swap or derivative contracts under which counterparties may have obligations to make payments to the Company; extending credit to clients; providing short- or longterm funding that is secured by physical or financial collateral whose value may at times be insufficient to fully cover the loan repayment amount; posting margin and/or collateral to clearinghouses, clearing agencies, exchanges, banks, securities firms and other financial counterparties; placing funds on deposit at other financial institutions to support the Company's clearing and settlement obligations; and investing or trading in securities and loan pools, whereby the value of these assets may fluctuate based on realized or expected defaults on the underlying obligations or loans. This type of risk requires credit analysis of specific counterparties, both initially and on an ongoing basis. The Company also incurs credit risk in traded securities whereby the value of these assets may fluctuate based on realized or expected defaults on the underlying obligations or loans.

The Company establishes practices to evaluate, monitor and control credit risk exposure both within and across its business activities. The Company's credit risk exposure is actively managed by credit professionals and the RC who monitor risk exposures, including margin loans and credit sensitive, higher-risk transactions. The Company is responsible for ensuring timely and transparent communication of material credit risks, compliance with established limits, approving material extensions of credit, and escalating risk concentrations to appropriate senior management.

#### Cybersecurity

The Firm's cybersecurity and information security policies, procedures, and technologies are designed to protect the Company's own, client and employee data against unauthorized disclosure, modification or misuse and are also designed to address regulatory requirements. These policies and procedures cover a broad range of areas, including: identification of internal and external threats, access control, data security, protective controls, detection of malicious or unauthorized activity, incident response and recovery planning.

#### **Operational Risk**

Operational risk refers to the risk of loss, or of damage to the Company's reputation, resulting from inadequate or failed processes or systems, from human factors or from external events (e.g. fraud, theft, legal and compliance risks, cyber attacks or damage to physical assets). The Company may incur operational risk across the full scope of its business activities, including

revenue-generating activities and support and control groups (e.g., information technology and trade processing).

The Company's operational risk framework is established to identify, measure, monitor and control risk. Effective operational risk management is essential to reducing the impact of operational risk incidents and mitigating legal, regulatory and reputational risks. The framework is continually evolving to account for changes in the Company and to respond to the changing regulatory and business environment.

#### **Model Risk**

Model risk refers to the potential for adverse consequences from decisions based on incorrect or misused model outputs. Model risk can lead to financial loss, poor business and strategic decision making or damage to the Company's reputation. The risk inherent in a model is a function of the materiality, complexity and uncertainty around inputs and assumptions. Model risk is generated from the use of models impacting financial statements, regulatory filings, capital adequacy assessments and the formulation of strategy.

Sound model risk management is an integral part of the Company's Risk Management Framework. MRM is a distinct department in Risk Management responsible for the oversight of model risk. MRM establishes a model risk tolerance in line with the Ultimate Parent's risk appetite. The tolerance is based on an assessment of the materiality of the risk of financial loss or reputational damage due to errors in design, implementation and/or inappropriate use of models. The tolerance is monitored through model-specific and aggregate business-level assessments, which are based upon qualitative and quantitative factors.

A guiding principle for managing model risk is the "effective challenge" of models. The effective challenge of models is defined as critical analysis by objective, informed parties who can identify model limitations and assumptions and drive appropriate changes. MRM provides effective challenge of models, independently validates and approves models for use, annually recertifies models, identifies and tracks remediation plans for model limitations, and reports on model risk metrics. The department also oversees the development of controls to support a complete and accurate Firm-wide model inventory.

#### **Liquidity Risk**

Liquidity risk refers to the risk that the Company will be unable to finance its operations due to a loss of access to the capital markets or difficulty in liquidating its assets. Liquidity risk also encompasses the Company's ability (or perceived ability) to meet its financial obligations without experiencing significant business disruption or reputational damage that may threaten its viability

as a going concern. Generally, the Company incurs liquidity and funding risk as a result of its trading, investing and client facilitation activities.

The Company's Liquidity Risk Management Framework is critical to help ensure that the Company maintains sufficient liquidity reserves and durable funding sources to meet the Company's daily obligations and to withstand unanticipated stress events.

The Liquidity Risk Department ensures transparency of material liquidity and funding risks, compliance with established risk limits and escalation of risk concentrations to appropriate senior management. To execute these responsibilities, the Liquidity Risk Department establishes limits in line with its risk appetite, identifies and analyses emerging liquidity and funding risks to ensure such risks are appropriately mitigated, monitors and reports risk exposures against metrics and limits, and reviews the methodologies and assumptions underpinning its Liquidity Stress Tests to ensure sufficient liquidity and funding under a range of adverse scenarios.

#### 14. Employee Stock-Based Compensation Plans

Certain current and former employees of the Company participate in the Ultimate Parent's stock-based compensation plans. Compensation expense is recognized over the vesting period relevant to each separately vesting portion of the award.

#### **Restricted Stock Units**

RSUs are subject to vesting over time, generally one to three years from the date of award, contingent upon continued employment and subject to restrictions on sale, transfer or assignment until conversion to common stock. All or a portion of an award may be forfeited if employment is terminated before the end of the relevant vesting period or cancelled after the relevant vesting period in certain situations. Recipients of RSUs may have voting rights, at the Ultimate Parent's discretion, and generally receive dividend equivalents if the awards vest. The Ultimate Parent determines the fair value of RSUs based on the grant-date fair value of its common stock, measured at VWAP on the date of grant.

#### 15. Employee Benefit Plans

#### Morgan Stanley 401(k) Plan

The Company's employees meeting certain eligibility requirements may participate in the Morgan Stanley 401(k) Plan sponsored by the Parent. Eligible employees receive discretionary 401(k) matching cash contributions as determined annually by the Firm. In 2023, the Company matched eligible employee contributions up to the IRS limit at 4% or 5% up to a certain compensation level. Eligible employees with eligible pay

less than or equal to \$100,000 also received a fixed contribution equal to 2% of eligible pay. Contributions were invested among available funds according to each participant's investment direction

#### 16. Income Taxes

The Company is included in the consolidated federal income tax return filed by the Ultimate Parent. Federal income taxes have generally been provided on a modified separate entity basis. The Company is included in the combined state and local income tax returns with the Ultimate Parent and certain other subsidiaries of the Ultimate Parent.

In accordance with the terms of the Tax Sharing Agreement, current taxes (federal, combined and unitary states) are settled periodically with the Ultimate Parent, who pays these taxes on behalf of the Company.

The Company is subject to the income and indirect tax laws of the U.S., its states and municipalities and those of the foreign jurisdictions in which the Company has significant business operations. These tax laws are complex and subject to interpretations by the taxpayer and the relevant governmental taxing authorities. The Company must make judgments and interpretations about the application of these inherently complex tax laws when determining the provision for income taxes and the expense for indirect taxes and must also make estimates about when certain items affect taxable income in the various tax jurisdictions.

Disputes over interpretations of the tax laws may be settled with the taxing authority upon examination or audit. The Company periodically evaluates the likelihood of assessments in each taxing jurisdiction resulting from current and subsequent years' examinations, and unrecognized tax benefits related to potential losses that may arise from tax audits are established in accordance with the relevant accounting guidance. Once established, unrecognized tax benefits are adjusted when there is more information available or when an event occurs requiring a change.

The Company, through its inclusion in the return of the Ultimate Parent, is routinely under examination by the IRS and other tax authorities in certain countries, such as Canada, and in states and localities in which the Company has significant business operations, such as New York.

The Company believes that the resolution of these tax examinations will not have a material effect on the Consolidated statement of financial condition.

It is reasonably possible that significant changes in the balance of unrecognized tax benefits may occur within the next 12 months. At this time, however, it is not possible to reasonably estimate the

expected change to the total amount of unrecognized tax benefits and the impact on the Company's effective tax rate over the next 12 months.

#### 17. Regulatory Requirements

The Dodd-Frank Act requires the registration of "swap dealers" and "major swap participants" with the CFTC (collectively, "Swaps Entities"). MSCGI is a provisionally registered swap dealer and, accordingly, is subject to the minimum capital requirements of the CFTC pursuant to 17 Code of Federal Regulations ("CFR") § 23.101.

Under these rules, MSCGI is required to maintain minimum capital of:

- (A) \$20 of common equity tier 1 ("CET1") capital, as defined under the BHC regulations in 12 CFR 217.20, as if the swap dealer itself were a BHC subject to 12 CFR part 217;
- (B) An aggregate of CET1 capital, additional tier 1 capital, and tier 2 capital, all as defined under the BHC regulations in 12 CFR § 217.20, equal to or greater than 8.0% of the swap dealer's BHC equivalent risk-weighted assets; provided, however, that the swap dealer must maintain a minimum of CET1 capital equal to 6.5% of its BHC equivalent risk-weighted assets; provided further, that any capital that is subordinated debt under 12 CFR § 217.20 and that is included in the swap dealer's capital for purposes of this paragraph (a)(1)(i)(B) must qualify as subordinated debt under 17 CFR § 240.18a-1d; and
- (C) An aggregate of CET1 capital, additional tier 1 capital, and tier 2 capital, all as defined under the BHC regulations in 12 CFR § 217.20, equal to or greater than 8.0% of the amount of uncleared swap margin, as that term is defined in 17 CFR § 23.100; and
- (D) The amount of capital required by a registered futures association of which the swap dealer is a member.

At June 30, 2023, MSCGI's CET1 Capital Ratio was 18.9% and Total Capital Ratio was 22.1%, which were greater than the minimum capital requirements of 6.5% and 8.0% respectively, based on BHC equivalent risk-weighted assets. MSCGI's risk-weighted requirements were also greater than its uncleared swap margin requirements. MSCGI is compliant with the calculation of the applicable regulatory capital requirement under 17 CFR § 23.101 and no additional capital was required by the NFA.

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### **Glossary of Common Terms and Acronyms**

AOCL	Accumulated other comprehensive loss	MSSG	Morgan Stanley Services Group, Inc.
BPS	Basis Points	MWh	Megawatts per hour
внс	Bank Holding Company	NFA	National Futures Association
CET1	Common Equity Tier 1	OECD	Organization for Economic Cooperation and Development
CDS	Credit Default Swaps	ОТС	Over the Counter
CFTC	Commodity Futures Trading Commission	RC	Risk and Asset and Liability Operating Committee
FERC	Federal Energy Regulatory Commission	ROU	Right of Use
IRS	Internal Revenue Service	RSU	Restricted Stock Units
Moody's	Moody's Investors Service, Inc.	SPEs	Special-Purpose Entities
MRM	Model Risk Management Department	S&P	Standard & Poor's Global Ratings
MSCGI	Morgan Stanley Capital Group, Inc.	U.S.	United States of America
MS&Co	Morgan Stanley & Co. LLC	U.S. GAAP	Accounting principles generally accepted in the United States of America
MSDHI	Morgan Stanley Domestic Holdings, Inc.	VaR	Value-at-Risk
MSDHL	Morgan Stanley Domestic Holdings, LLC	VIEs	Variable Interest Entities