MORGAN STANLEY CAPITAL SERVICES LLC

STATEMENT OF FINANCIAL CONDITION AS OF JUNE 30, 2023 (Unaudited)

Note: A copy of this report, the Morgan Stanley Capital Services LLC Statement of Financial Condition as of June 30, 2023, may be mailed to you at no cost by calling 1 (833) 445-2492.

As of June 30, 2023

(In millions of dollars)

Assets	
Cash and cash equivalents	\$ 2,201
Trading assets at fair value (\$45,701 were pledged to various parties)	63,701
Securities purchased under agreements to resell	33,741
Securities borrowed	4,325
Receivables:	
Customers	1,433
Brokers, dealers and clearing organizations	4,310
Fees, interest and other	330
Other assets	42
Total assets	\$ 110,083
Liabilities and Member's Equity	
Trading liabilities at fair value	\$ 31,079
Securities sold under agreements to repurchase	28,952
Securities loaned	1,913
Other secured financings at fair value	199
Payables:	
Customers	17,438
Brokers, dealers and clearing organizations	2,141
Interest and dividends	689
Affiliates	116
Other liabilities and accrued expenses	80
Borrowings (includes \$319 at fair value)	9,123
Total liabilities	91,730
Commitments and contingent liabilities (See Note 10)	
Subordinated liabilities	12,800
Member's equity	5,553
Total liabilities and member's equity	\$ 110,083

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1. Introduction and Basis of Presentation

The Company

MSCS, a Delaware Limited Liability Company (the "Company"), engages primarily in OTC derivative transactions as a market maker. The Company provides trading related services to a broad range of customers and clients, including affiliates. See the "Glossary of Common Terms and Acronyms" for the definition of certain terms and acronyms used throughout the Notes to the Company's statement of financial condition.

MSCS is conditionally registered with the SEC as a security-based swap dealer and is registered as an OTC derivative dealer. MSCS is also provisionally registered with the CFTC as a swap dealer and is a member with ICE Clear Europe Ltd, ICE Clear Credit, LLC and LCH Clearnet Group Ltd.

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

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

Basis of Financial Information

The 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, the outcome of legal and tax matters, and other matters that affect its statement of financial condition and related disclosures. The Company believes that the estimates utilized in the preparation of its statement of financial condition are prudent and reasonable. Actual results could differ materially from these estimates. The Notes are an integral part of the Company's statement of financial condition.

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

2. Significant Accounting Policies

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 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 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 borrowings and other secured financings. 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 non-financial 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.

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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 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 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 meets 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, equity 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. 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. For OTC derivatives with non-affiliated counterparties, 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.

The Company applies FVA in the fair value measurements of OTC uncollateralized or partially collateralized derivatives and in collateralized derivatives where the terms of the agreement do not permit the reuse of the collateral received. The Company's FVA estimate reflects the inclusion of FVA in the pricing and valuations by the majority of market participants involved in the Company's principal exit market for these instruments. In general, FVA reflects a market funding risk premium inherent in the noted derivative instruments. The methodology for measuring FVA leverages the Company's existing credit-related valuation adjustment calculation methodologies, which apply to both assets and liabilities.

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In determining the fair value of a financial instrument between two affiliated entities, the Company believes that the principal market is another affiliated entity. Therefore, fair value is the price that the Company would pay to transfer a financial liability to an affiliate, or the price the Company would receive to sell or transfer a financial asset to an affiliate. Affiliates have not and do not require compensation for credit risk upon purchase or transfer of OTC derivatives; as such, an adjustment for the credit and funding risk would not be appropriate since credit risk is not a component of the exit price.

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 concentration adjustments to certain of its OTC derivative 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.

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 cash and/or securities 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

affiliates, MS&Co., or MSES, 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, see Note 6.

Income Taxes

Deferred tax assets and liabilities are recorded based upon the temporary differences between the statement of financial condition 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 institutions and restricted cash.

Restricted cash includes the Company's initial margin deposited with clearing organizations, 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 financings. In addition, transfers that are not

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accounted for as purchases are recorded within Trading assets as other debt

Collateralized Financings

Securities borrowed, securities purchased under agreements to resell ("reverse repurchase agreements"), securities loaned and securities sold under agreements to repurchase ("repurchase agreements") are treated as collateralized financings (see Note 7). Reverse repurchase agreements and repurchase agreements are carried in the statement of financial condition at the amount of cash paid or received, plus accrued interest. Where appropriate, transactions with the same counterparty are reported on a net basis. Securities borrowed and Securities loaned are recorded at the amount of cash collateral advanced or received

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 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 or borrowed in connection with reverse repurchase agreements and securities borrowed transactions, respectively, and to receive cash and/or securities delivered under repurchase agreements or securities loaned transactions (with rights of rehypothecation).

For information related to offsetting of certain collateralized transactions, see Note 7.

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. Receivables from customers also includes cash collateral posted to affiliates related to reverse repurchase and repurchase agreements.

Receivables and Payables - Brokers, Dealers and Clearing Organizations

Receivables from brokers, dealers and clearing organizations primarily includes unsettled trades and margin requirements posted to affiliates in connection with the Company's trading and market making activity for exchange traded derivatives, cleared OTC derivatives and futures contracts. Payables to brokers, dealers and clearing organizations primarily includes margin loans (net of related cash and short sale proceeds) with MS&Co. related to the Company's Corporate equities trading

activity and amounts on unsettled trades. Receivables and payables arising from unsettled trades are reported on a net basis.

Borrowings

Borrowings consist mainly of unsecured borrowings from the Parent. See Note 8 for additional information.

Accounting Development Updates

The FASB has issued certain accounting updates, which the Company has either determined are not applicable or are not expected to have a significant impact on the Company's statement of financial condition

3. Cash and Cash Equivalents

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

	A	t June 30, 2023
Cash and due from banks	\$	388
Restricted Cash		1,813
Total Cash and cash equivalents	\$	2,201

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, meet collateral requirements with respect to its OTC derivatives, meet capital and liquidity requirements, and fund its business activities. These transactions include OTC derivatives and collateralized financings, as described in Notes 6 and 7, respectively.

The Company also obtains funding and subordinated liabilities from the Parent as described in Notes 8 and 9, respectively.

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

As part of its normal trading activity, the Company enters into OTC derivatives transactions with its affiliates in order to manage the relevant market risks, such as interest rate and equity risk, that such affiliates may incur. In managing those risks, the Company may enter into OTC derivatives with third-party counterparties or other affiliates.

The Company enters into securities borrowed and securities loaned transactions primarily with an affiliate, PDS, in order to fund a portion of its Corporate equities trading.

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Receivables from brokers, dealers and clearing organizations includes initial and variation margin requirements posted to exchanges by broker-dealer affiliates that clear certain derivatives and futures contracts for the Company after consideration of eligible offset as described in Note 2. Payables to brokers, dealers and clearing organizations include margin loans (net of related cash and short sale proceeds) with MS&Co. in order to fund a portion of the Company's Corporate equities trading activity.

Receivables from and payables to customers include amounts arising from cash collateral posted to and received from affiliates, including broker dealer affiliates, related to bilateral OTC derivatives after consideration of eligible offset as described in Note 2. Receivables from customers also includes cash collateral posted to affiliates related to reverse repurchase and repurchase agreements.

Other secured financings include OTC derivative contracts with affiliates which are not classified as Trading liabilities because they fail net investment criteria as described further in Note 8.

The Company has agreements with affiliates for other activities, including a tax sharing agreement with the Ultimate Parent as described in Note 13 and other activities as described further below. Unsettled amounts for these activities are recorded within Receivables from or Payables to affiliates, and are payable on demand.

The Company applies global transfer pricing policies among affiliates. These policies are consistent with 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., who is the primary employing entity for the U.S. business activities undertaken by the Company, based on the level of activity on the Company relative to MS&Co.

	lune 30, 2023
Assets and receivables from affiliated companies:	
Cash and cash equivalents	\$ 1
Trading assets at fair value	596
Securities purchased under agreement to resell	33,741
Securities borrowed	4,325
Receivables - Customers	390
Receivables - Brokers, dealers and clearing organizations	2,498
Liabilities and payables to affiliated companies:	
Trading liabilities, at fair value	\$ 83
Securities sold under agreements to repurchase	28,952
Securities loaned	1,913
Other secured financings at fair value	199
Payables - Customers	207
Payables - Brokers, dealers and clearing organizations	2,129
Payables – Interest and Dividends	577
Payables – Affiliates	116
Other liabilities	62
Borrowings (includes \$2 at fair value)	8,805

12,800

Subordinated debt

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5. Fair Value

Assets and Liabilities Measured at Fair Value

	At June 30, 2023								
		Level 1		Level 2		Level 3	Netting	Total	
Assets at fair value:									
Trading assets:									
U.S. treasury securities	\$	27,060	\$	_	\$	_	\$ - \$	27,060	
Other debt		_		4,432		301	_	4,733	
Corporate equities ¹		23,116		314		16	_	23,446	
Derivative contracts:									
Interest rate		1,187		352,746		758	_	354,691	
Credit		_		12,330		386	_	12,716	
Foreign exchange		41		70,191		298	_	70,530	
Equity		11		11,721		260	_	11,992	
Commodity and other		_		1,239		262	_	1,501	
Netting ²		(880))	(402,252)		(1,021)	(38,815)	(442,968)	
Total derivative contracts		359		45,975		943	(38,815)	8,462	
Total trading assets	\$	50,535	\$	50,721	\$	1,260	\$ (38,815) \$	63,701	

	At June 30, 2023								
	Level 1	L	Level 2		Level 3		3	Total	
Liabilities at fair value:									
Trading liabilities:									
U.S. treasury securities	\$ 4,394	\$	_	\$	_	\$	— \$	4,394	
Corporate equities ¹	17,460		251		1		_	17,712	
Derivative contracts:									
Interest rate	845		332,669		572		_	334,086	
Credit	_		12,026		383		_	12,409	
Foreign exchange	35		66,766		193		_	66,994	
Equity	_		13,984		69		_	14,053	
Commodity and other	_		1,151		237		_	1,388	
Netting ²	(880)		(402,253)		(1,021)	(15,8	303)	(419,957)	
Total derivative contracts	_		24,343		433	(15,8	303)	8,973	
Total trading liabilities	\$ 21,854	\$	24,594	\$	434	\$ (15,8	303) \$	31,079	
Other secured financings	_		54		145		_	199	
Borrowings	_		268		51		_	319	

- For trading purposes, the Company holds or sells short equity securities issued by entities in diverse industries and of varying sizes. Corporate equities are generally used to economically hedge equity derivative contracts.
 For positions with the same counterparty that cross over the levels of the fair value hierarchy, both counterparty netting and cash collateral netting are
- 2. 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 the column for that level. For further information on derivative instruments, see Note 6.

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Fair Value Measurements

Valuation Techniques for Assets and Liabilities Measured at Fair Value

Asset and Liability/Valuation Technique	Valuation Hierarchy Classification
U.S. Treasury SecuritiesFair value is determined using quoted market prices.	• Level 1
 Other Debt Other debt referencing Listed fund units are generally marked to the exchange-traded price if actively traded. Other debt includes transfers of financial assets that failed to meet the accounting criteria for a purchase. Other debt includes hybrid financial instruments with embedded derivatives. See the Derivative Contracts section below for a description of the valuation technique applied. 	 Generally Level 2 Level 3 - in instances where the unobservable inputs are deemed significant
 Corporate Equities Exchange-traded equity securities are generally valued based on quoted prices from the exchange To the extent these securities are actively traded, valuation adjustments are not applied. Unlisted equity securities are generally valued based on an assessment of each security, considering rounds of financing and third-party transactions, discounted cash flow analyses and market-based information, including comparable transactions, trading multiples and changes in market outlook, among other factors. 	 Level 1 - actively traded exchange-trade securities and fund units Level 2 - if not actively traded, inputs an observable or if undergoing a recent M8 event or corporate action Level 3 - if not actively traded, inputs an unobservable or if undergoing an aged M&A event or corporate action
 Exchanged-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 techniques as those applied to OTC derivatives. 	 Level 1 - if actively traded Level 2 - if 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, equity prices, or commodity prices. Depending on the product and the terms of the transaction, the fair value of OTC derivative product can be modelled 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. More complex OTC derivative products are typically less liquid and require more judgment in the implementation of the valuation technique since direct trading activity or quotes are unobservable. This includes certain types of interest rate derivatives with both volatility and correlation exposure, equity or foreign currency derivatives that are either longer-dated or include exposure to multiple underlying, and credit derivatives, including CDS on certain mortgage or ABS and basket CDS. Where required inputs are unobservable, relationships to observable data points, based on historic and/or implied observations, may be employed as a technique to estimate the model input values. For further information on the valuation techniques for OTC derivative products, see Note 2. 	Level 3 - when valued using observable inputs with limited market liquidity or if a unobservable input is deemed significars,
Other Secured Financings and Borrowings Borrowings and Other secured financings are contracts that are not classified as OTC derivatives because they fail net investment criteria. See the Derivative Contracts section above for a description of the valuation technique applied to the Company's Borrowings and Other secured financings.	 Level 2 - If value based on observable market data for comparable instruments or where the unobservable input is not deemed significant Level 3 - in instances where the unobservable inputs are deemed significant

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Significant Unobservable Inputs Used in Recurring Level 3 Fair Value Measurements at June 30, 2023

The following disclosures provide information on the valuation techniques, significant unobservable inputs, and the ranges and averages for each major category of assets and liabilities measured at fair value on a recurring basis 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. A single amount is disclosed when there is no significant difference between the minimum, maximum and average.

	Balance / Range (Average ¹)					
		At June 30, 2023				
Assets at fair value						
Trading assets:						
Other debt	\$	301				
Discounted Cash flow:						
Loss Given Default		54% to 84% (62% / 54%)				
Corporate equities	\$	16				
Comparable pricing:						
Equity price		100%				
Net derivative contracts:						
Interest rate ²	\$	186				
Option model:						
IR volatility skew		83% to 118% (94% / 89%)				
IR curve correlation		56% to 99% (78% / 80%)				
Inflation volatility		22% to 70% (44% / 38%)				
IR - FX correlation		29% to 57% (39% / 34%)				
IR quanto correlation		-8% to 37% (11% / 17%)				
Credit	\$	3				
Credit default swap model:						
Cash synthetic basis		6.5 points (6.5 points)				
Comparable pricing:						
Bond price		0 to 92 points (49 points)				
Credit spread		2 to 491 bps (90 bps)				
Foreign exchange ²	\$	105				
Option model:						
Deal contingent probability		n/m				
IR - FX correlation		n/m				
IR curve		0% to 10% (6% / 6%)				
FX volatility skew		8% to 10% (9% / 9%)				

Equity	\$ 191
Option model:	
At the money volatility	5% to 41% (34%)
Volatility skew	-4% to 0% (-1%)
Comparable pricing:	
Comparable equity price	100% (100%)
Growth Spread	0% (0%)
Commodity and other	\$ 25
Option Model:	
Commodity volatility	11% to 16% (14% / 14%)
Discounted Cash flow:	
Loss Given Default	54% to 84% (62% / 54%)
Discounted Cash flow:	
Funding spread	3 to 613 bps (49.1 bps / 112.4 bps)
Liabilities at fair value:	
Borrowings	\$ 51
Credit default swap model	
Credit spread	3bps (3bps)
Other secured financings	\$ 145
Discounted cash flow:	
Loss Given Default	54% to 84% (62% / 54%)
Points - Percentage of par	

Points - Percentage of par

IR - Interest rate

FX - Foreign exchange

- A single amount is disclosed for 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.
- 2. Includes derivatives contracts with multiple risks (i.e., hybrid products).

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

- Comparable Bond Price: A pricing input used when prices for the identical instrument are not available. Significant subjectivity may be involved when fair value is determined using pricing data available for comparable instruments. Valuation using comparable instruments can be done by calculating an implied yield (or spread over a liquid benchmark) from the price of a comparable bond or loan, then adjusting that yield (or spread) to derive a value for the bond or loan. The adjustment to yield (or spread) should account for relevant differences in the bonds or loans such as maturity or credit quality. Alternatively, a price-to-price basis can be assumed between the comparable instrument and the bond being valued in order to establish the value of the bond.
- Comparable Equity Price: A price derived from equity raises, share buybacks and external bid levels, etc. A discount or premium may be included in the fair value estimate.

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 Contingency Probability: Probability associated with the realization of an underlying event upon which the value of an asset is contingent.

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

- Cash Synthetic Basis: The measure of the price differential between cash financial instruments and their synthetic derivative-based equivalents. The range disclosed in the table above signifies the number of points by which the synthetic bond equivalent price is higher than the quoted price of the underlying cash bonds.
- Funding Spread: The cost of borrowing defined as the incremental spread over the overnight index swap rate for a specific collateral rate (which refers to the rate applicable to a specific type of security pledged as collateral).

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).
- Credit Spread: The credit spread reflects the additional net yield an investor can earn from a security with more credit risk relative to one with less credit risk. The credit spread of a particular security is often quoted in relation to the yield on a credit risk-free benchmark security or reference rate.
- Growth Spread: The cost of funding a position defined as the incremental spread over the relevant funding curve for a specific equity underliers.
- Interest Rate Curve: The term structure of interest rates (relationship between interest rates and the time to maturity) and a market's measure of future interest rates at the time of observation. An interest rate curve is used to set interest rate and foreign exchange derivative cash flows and is a pricing input used in the discounting of any OTC derivative cash flow.
- Loss given default: Amount expressed as a percentage of par that is the expected loss when a credit event occurs.
- 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.

 Volatility Skew: The measure of the difference in implied volatility for options with identical underliers and expiry dates but with different strikes.

Financial Instruments Not Measured at Fair Value At June 30, 2023

	711 04110 00, 2020								
	Carrying								
	Value	Level 1	Level 2	Level 3	Total				
Financial Assets									
Cash and cash equivalents	\$ 2,201	\$ 2,201	\$ —	\$ —	\$ 2,201				
Reverse repurchase									
agreements	33,741	_	33,741	_	33,741				
Securities borrowed	4,325	_	4,325	_	4,325				
Receivables:									
Customers	1,433	_	1,433	_	1,433				
Brokers, dealers and									
clearing organizations	4,310	_	4,310	_	4,310				
Fees, interest and other	330	_	330	_	330				
Financial Liabilities									
Repurchase agreements	\$28,952	\$ —	\$28,952	\$ —	\$28,952				
Securities loaned	1,913	_	1,913	_	1,913				
Payables:									
Customers	17,438	_	17,438	_	17,438				
Brokers, dealers and									
clearing organizations	2,141	_	2,141	_	2,141				
Interest and dividends	689	_	689	_	689				
Affiliates	116	_	116	_	116				
Other liabilities	62		62		62				
Borrowings	8,804	_	8,856	_	8,856				
Subordinated Liabilities	12,800	_	12,758	_	12,758				

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

As of June 30, 2023 (In millions of dollars)

6. Derivative Instruments

The Company trades and makes markets globally in exchange-traded futures and options, as well as OTC swaps, forwards, options and other derivatives referencing, among other things, interest rates, equities, currencies, investment grade and non-investment grade corporate credits, loans, bonds, U.S. government securities, emerging market bonds, credit indices, ABS indices, and mortgage-related and other ABS. The Company enters into derivative transactions with external counterparties and affiliates (see Note 4) for trading purposes. The Company does not apply hedge accounting.

The Company manages its trading 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 trading activities on a Company-wide basis, on a worldwide trading division level and on an individual product basis.

Derivative Assets and Liabilities

	Derivative Assets at June 30, 2023												
		Fair Value							Notional ²				
	E	Bilateral OTC	C	Cleared OTC		change- raded Total		Bilateral OTC	Cleared OTC	Exchange- Traded	Total		
Derivative contracts:													
Interest rate contracts	\$	353,049	\$	455	\$ 1,1	87	\$ 354,691	\$8,158,231	\$5,641,248	\$ 76,659	\$13,876,138		
Credit contracts		10,258		2,458		_	12,716	378,283	98,788	_	477,071		
Foreign exchange contracts		70,489		_		41	70,530	3,011,859	_	8,544	3,020,403		
Equity contracts		11,895		_		97	11,992	302,516	_	1,519	304,035		
Commodity and other contracts		1,501		_		_	1,501	38,417	_	_	- 38,417		
Total gross derivative contracts		447,192		2,913	1,3	25	451,430	\$11,889,306	\$5,740,036	\$ 86,722	\$17,716,064		
Amounts offset													
Counterparty netting	(401,165)		(2,458)	(9	67)	(404,590)						
Cash collateral netting		(38,378)		_		_	(38,378)						
Total derivative assets		7,649		455	3	58	8,462						
Amounts not offset ¹													
Financial Instruments collateral		(3,285)		_		_	(3,285)						
Net amounts	\$	4,364	\$	455	\$ 3	58	\$ 5,177						
Net amounts for which master netting or collate not be legally enforceable	eral ag	reements	are	e not in p	lace or n	nay	\$ 576						

As of June 30, 2023 (In millions of dollars)

Derivative Liabilities at June 30, 2023

		Fair Value					Notional ²				
	Bilateral OTC		leared OTC	Exchange- Traded		Total	Bilateral OTC	Cleared OTC		change- Traded	Total
Derivative contracts:											
Interest rate contracts	\$ 333,227	\$	13	\$ 846	\$	334,086	\$ 8,322,074	\$ 5,399,208	\$	46,222	\$13,767,504
Credit contracts	9,592		2,817	_		12,409	372,767	108,591		_	481,358
Foreign exchange contracts	66,959		_	35	,	66,994	2,953,404	_		20,748	2,974,152
Equity contracts	13,866		_	187		14,053	321,412	_		923	322,335
Commodity and other contracts	1,388		_	_		1,388	29,261	_		_	29,261
Total gross derivative contracts	425,032		2,830	1,068	,	428,930	\$11,998,918	\$ 5,507,799	\$	67,893	\$17,574,610
Amounts offset											
Counterparty netting	(401,165))	(2,458)	(967)	(404,590)					
Cash collateral netting	(15,008))	(359)	_		(15,367)					
Total derivative liabilities	8,859		13	101		8,973					
Amounts not offset ¹							•				
Financial instruments collateral	(754))	_	_	-	(754)					
Net amounts	\$ 8,105	\$	13	\$ 101	\$	8,219					
Net amounts for which master netting or collate may not be legally enforceable	eral agreement	s are	e not in p	olace or	\$	376	•				

- 1. 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.
- 2. Notional amounts of derivative contracts generally overstate the Company's exposure. In most circumstances, notional amounts are only used 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.

Credit Risk-Related Contingencies

The following table presents the aggregate fair value of OTC 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.

Net Derivative Liabilities and Collateral Posted

	lune 30, 2023
Net derivative liabilities with credit	
risk-related contingent features	\$ 5,692
Collateral posted	3,559

The additional collateral or termination payments which 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. The table below 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.

Incremental Collateral or Termination Payments upon Potential Future Ratings Downgrades

	une 30, 2023
One-notch downgrade	\$ 106
Two-notch downgrade	23
Bilateral downgrade agreements included in the amounts above 1	\$ 125

 Amounts represent arrangements between the Company and counterparties 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.

Credit Derivatives and Other Credit Contracts

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. A majority of the Company's counterparties are banks, broker-dealers and other financial institutions.

As of June 30, 2023 (In millions of dollars)

Maximum Potential Payout/Notional of Credit Protection Sold

		Years to Maturity at June 30, 2023							Fair Value Asset/	
		< 1		1-3		3-5	Over 5		Total	(Liability) ¹
Single name CDS ² :										
Investment grade	\$	24,779	\$	43,847	\$	59,394 \$	11,999	\$	140,019	\$ 2,326
Non-investment grade		10,045		20,436		23,755	3,222		57,458	(1,198)
Total		34,824		64,283		83,149	15,221		197,477	1,128
Index and basket CDS ² :										
Investment grade		2,764		8,540		11,178	_		22,482	1,008
Non-investment grade		20,993		49,324		150,814	37,002		258,133	(982)
Total		23,757		57,864		161,992	37,002		280,615	26
Total CDS sold	\$	58,581	\$	122,147	\$	245,141	52,223	\$	478,092	\$ 1,154
Other credit contracts ³	\$	_	\$		\$	— \$	5 1	\$	1 :	\$ —
Total credit derivatives and										
other credit contracts	\$	58,581	\$	122,147	\$	245,141 \$	52,224	\$	478,093	\$ 1,154
CDS protection sold with identical prote	ction purchase	ed					•	\$	423,281	

- 1. Fair value amounts are shown on a gross basis prior to cash collateral or counterparty netting
- 2. Investment grade/non-investment grade determination is based on the internal credit rating of the reference obligation. Internal credit ratings serve as the CRM'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 judgement to estimate the various risk parameters related to each obligor.
- 3. Other credit contracts are CDS that are considered hybrid instruments.

Protection Purchased with CDS

	 At June 30, 2023				
	 Notional		Fair Value		
	INOLIOITAI	As	set/(Liability)		
Single Name CDS	\$ 200,473	\$	(1,171)		
Indices and Baskets	247,973		961		
Tranched Indices and Baskets	31,891		(637)		
Total	\$ 480,337	\$	(847)		

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, 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.

The Company also enters into tranched index and basket CDS where the credit protection is provided on a particular portion of the portfolio loss distribution. The most junior tranches cover initial defaults, and once losses exceed the notional of the tranche, they are passed on to the next most senior tranche in the capital structure.

7. Collateralized Transactions

The Company enters into reverse repurchase agreements, repurchase agreements, securities borrowed and securities loaned transactions with affiliates to, among other things, acquire securities to cover short positions and settle other securities obligations, meet collateral requirements with respect to its OTC derivatives, finance its inventory positions and meet liquidity and regulatory 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-

As of June 30, 2023 (In millions of dollars)

based margin requirements. Increases in collateral margin calls on repurchase agreements and securities loaned transactions (collectively, "secured financing payables") due to market value declines may be mitigated by increases in collateral margin calls on reverse repurchase agreements and securities borrowed transactions 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 secured financing payables in a manner that reduces the potential refinancing risk of secured financing payables of less liquid assets and also considers the quality of collateral when negotiating collateral eligibility with counterparties. The Company utilizes shorter-term secured financing payables for highly liquid assets and establishes 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 Net Amounts Gross Amounts Amounts Net Offset¹ Amounts Offset Presented Amounts Assets Reverse repurchase agreements 37,430 \$ (3,689) \$ 33,741 \$(33,741) \$ Securities borrowed 17,543 (13,218)4,325 (4,325)Liabilities Repurchase \$ 32,641 \$ (3,689) \$ 28,952 \$ (28,951) \$ agreements Securities loaned 15,131 (13,218)1,913 (1,913)

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

Gross Secured Financing Payables by Remaining Contractual Maturity

	At June 30, 2023									
	vernight nd Open			30-6	60 Days	Total				
Repurchase agreements	\$ 31,645	\$	996	\$	- \$	32,641				
Securities loaned	15,131		_		_	15,131				
Total	\$ 46,776	\$	996	\$	— \$	47,772				

Gross Secured Financing Payables by Class of Collateral Pledged

	At June 30, 2023
Repurchase agreements	_
U.S. government and agency securities	\$ 30,920
Other sovereign government obligations	226
Corporate and other debt	1,492
State and municipal securities	3
Total repurchase agreements	\$ 32,641
Securities loaned	
Corporate and other debt	\$ 1,892
Corporate equities	13,221
Other	18
Total securities loaned	15,131
Total	\$ 47,772

Trading Assets Pledged

The Company pledges its trading assets to its affiliates to collateralize repurchase agreements and margin loans. Pledged financial instruments that can be sold or repledged by the affiliates are identified as Trading assets (pledged to various parties) in the Company's statement of financial condition. At June 30, 2023, the carrying value of Trading assets that have been loaned or pledged to counterparties, where those counterparties do not have the right to sell or repledge the collateral was \$825.

Collateral Received

The Company receives collateral in the form of securities in connection with its OTC derivative transactions, reverse repurchase agreements and securities borrowed. In many cases, the Company is permitted to sell or repledge these securities held as collateral and use the securities to collateralize OTC derivatives, repurchase agreements and securities loaned. At June 30, 2023, the fair value of financial instruments received as collateral where the Company is permitted to sell or repledge the securities was \$59,340 and the fair value of the portion that had been sold or repledged was \$37,888.

Amounts relate to master netting 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.

As of June 30, 2023 (In millions of dollars)

8. Borrowings and Other Secured Financings

	Fixed Rate		٧	ariable Rate	Total at lune 30, 2023
Original maturities of one year or less:					
Next 12 months	\$	317	\$	3,995	\$ 4,312
Original maturities greater than one year:					
Due in 2023		_		_	
Due in 2024		_		4,809	4,809
Due in 2025		_		2	2
Total	\$	_	\$	4,811	\$ 4,811
Total Borrowings	\$	317	\$	8,806	\$ 9,123
Weighted average coupon at periodend				6.46%	6.46%
Weighted average stated maturity, in years ¹				·	1.1

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 Parent that mature in less than 12 months and hybrid financial instruments with embedded derivatives which are not classified as OTC derivatives because they fail net investment criteria.

Borrowings with original maturities greater than one year primarily consist of unsecured borrowings from Parent and contracts which are not classified as OTC derivatives because they fail net investment criteria. The unsecured borrowings from Parent are callable with maturities of 13 months or more from when it is called.

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

Other Secured Financings

Other secured financings are stated at fair value and include hybrid financial contracts with embedded derivatives which are not classified as OTC derivatives because they fail net investment criteria.

Maturities and Terms of Other Secured Financings

	At June 30, 2023							
	Fixe	d Rate	Varial	ole Rate	Total			
Original maturities of one year or less:								
Next 12 months	\$	_	\$	_	\$	_		
Original maturities greater than one year:								
Due in 2024		15		37		52		
Due in 2025		108		39		147		
Thereafter		_		_		_		
Total Other secured financings	\$	123	\$	76	\$	199		

9. Subordinated Liabilities

The Company entered into agreements with its Parent for subordinated liabilities. The agreements consist of a \$6,800 subordinated loan and a \$10,000 subordinated revolving note, of which \$6,000 was drawn.

The interest rates for the agreements are in line with the Firm 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	Во	ok Value
Cash subordination agreement	September 9, 2031	6.46 %	\$	6,800
Subordinated revolving credit agreement	September 9, 2031	6.46 %	ı	6,000
Total			\$	12,800

10. Commitments, Guarantees and Contingencies

Commitments

	Years to Maturity at June 30, 2023							23		
Type of Commitment Forward-starting secured		< 1	1	-3	3	-5	O۱	ver 5	٦	Γotal
financing receivables ¹	\$	458	\$	_	\$	_	\$	_	\$	458
Total	\$	458	\$	_	\$	_	\$	_	\$	458

Forward-starting secured financing receivables are generally settled within three business days.

Type of Commitments

Forward-Starting Secured Financing Receivables. This amount represents reverse repurchase agreements that the Company has entered into prior to the date of the statement of financial condition that will settle after the statement of financial condition. These transactions are primarily secured by collateral

As of June 30, 2023 (In millions of dollars)

from U.S. government agency securities and other sovereign government obligations when they are funded.

Guarantees

Obligations under Guarantee Arrangements at June 30, 2023

	Maximum Potential Payout/Notional										
		Years to Maturity									
Type of Guarantee	< 1	1-3	3-5	Over 5	Total						
Non-credit	\$1 204 983	\$1 214 187	\$ 327 885	\$ 746 766	\$3 493 821						

Carrying Amount Asset / (Liability)

Non-credit derivative contracts¹

Types of Guarantees

Non-Credit Derivative

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). 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 interest rate caps and written foreign currency options. The Company evaluates collateral requirements for all derivatives, including derivatives that do not meet the accounting definition of a guarantee. For 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.

Other Guarantees

Clearinghouse Member Guarantees

The Company is a member of various U.S. and non-U.S. clearinghouses that trade and clear securities and/or derivative contracts. Associated with its membership, the Company may be required to pay a proportionate share of the financial obligations of another member who may default on its obligations to the clearinghouse. While the rules governing different clearinghouse memberships vary, in general the Company's obligations under these rules would arise only if the clearinghouse had previously exhausted its resources. The maximum potential payout under

these membership agreements cannot be estimated. The Company has not recorded any contingent liability in the statement of financial condition for these agreements and believes that any potential requirement to make payments under these agreements is remote.

Contingencies

Legal

In addition to the matter described below, 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, prime brokerage, market-making activities, investment banking advisory services, capital market activities, financial products or offerings sponsored, underwritten or sold by the Company, wealth and investment management services, 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.

While the Company has identified below any individual proceedings or investigations where the Company believes a material loss to be reasonably possible and in some cases reasonably estimable, there can be no assurance that additional material losses will not be incurred from claims that have not yet been asserted or those where potential losses have not yet been determined to be probable or possible and reasonably estimable.

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

Carrying amount of derivative contracts that meet the accounting definition of a guarantee are shown on a gross basis prior to cash collateral or counterparty netting. For further information on derivative contracts, see Note 6.

As of June 30, 2023 (In millions of dollars)

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 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, in some instances, estimate 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, other than the matter referred to in the following paragraph.

Beginning in February of 2016, the Company was named as a defendant in multiple purported antitrust actions now consolidated into a single proceeding in the United States District Court for the Southern District of New York styled In Re: Interest Rate Swaps Antitrust Litigation. Plaintiffs allege, inter alia, that the Company, together with a number of other financial institution defendants violated U.S. and New York state antitrust laws from 2008 through December of 2016 in connection with their alleged efforts to prevent the development of electronic exchange-based platforms for interest rate swaps trading. Complaints were filed both on behalf of a purported class of investors who purchased interest rate swaps from defendants, as well as on behalf of two swap execution facilities that allegedly were thwarted by the defendants in their efforts to develop such platforms. The consolidated complaints seek, among other relief, certification of the investor class of plaintiffs and treble damages. On July 28, 2017, the court granted in part and denied in part the defendants' motion to dismiss the complaints. A decision on plaintiffs' motion for class certification is pending.

11. Variable Interest Entities

The Company is involved with various SPE 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 and derivative instruments. The Company's involvement with VIEs arises from purchasing interests, primarily ELNs, and entering into derivative transactions with VIEs. The purchased interests with VIEs are related to derivative transactions, primarily total return swaps referencing the purchased interests, that are entered into with other counterparties. 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.

Consolidated VIEs

The Company records assets held by consolidated VIEs primarily in Trading assets and liabilities in Other secured financings in the statement of financial condition. The assets and liabilities are measured at fair value, with changes in fair value reflected in earnings. As of June 30, 2023, the Company did not consolidate any VIEs.

Non-consolidated VIEs

The following table presents information about certain non-consolidated VIEs in which the Company had variable interests at June 30, 2023. The table includes all VIEs in which the Company has determined that its maximum exposure to loss is greater than specific thresholds or meets certain other criteria.

	Notes Issue by SPEs ¹		
VIE assets that the Company does not consolidate			
(unpaid principal balance)	\$	8,085	
Maximum exposure to loss:			
Debt and equity interests	\$	2,625	
Derivatives and other contracts		152	
Total	\$	2,777	
Carrying value of exposure to loss - Assets:			
Debt and equity interests	\$	2,625	
Derivatives and other contracts		37	
Total	\$	2,662	
Carrying value of exposure to loss - Liabilities:			
Derivatives and other contracts	\$	57	

^{1.} The Company's transactions with VIEs primarily include ELNs.

The maximum exposure to loss is dependent on the nature of the Company's variable interest in the VIEs and is limited to the fair value of interests the Company has purchased and certain other derivative contracts, as well as the notional amounts of total return swaps.

The Company's maximum exposure to loss in the previous table 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.

As of June 30, 2023 (In millions of dollars)

Assets Sold With Retained Exposure

	At Ju	ine 30, 2023
Gross cash proceeds from sale of assets ¹	\$	47,119
Fair value		_
Assets sold		48,985
Derivative assets recognized in the statement of financial condition		1,871
Derivative liabilities recognized in the statement of financial condition		4

The carrying value of assets at the time of sale approximates gross cash proceeds.

The Company enters into transactions in which it sells securities, primarily equities, and contemporaneously enters into bilateral OTC derivatives with the purchasers of the securities, through which it retains exposure to the sold securities.

12. 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 and transparency. To help ensure the efficacy of risk management, which is an essential component of the Company's reputation, management requires thorough and frequent senior 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 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 oversight over the Company's principal risks and 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 to execute 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, credit, operational, and liquidity 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 and MRM) are independent of the Company's business units and report to the Chief Risk Officer. These

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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," "Liquidity Risk," and "Model 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 RC 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. Boardlevel 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 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.

The Company has exposures to a wide range of interest rates, equity 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. Credit risk includes Country Risk, which is the risk that the events in, or that affect a foreign country (any country other than the U.S.) might adversely affect 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 long-term 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 its 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, ensuring compliance with established limits, approving material extensions of credit, and escalating of risk concentrations to appropriate senior management.

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

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(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 (e.g., sales and trading) 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.

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.

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 statement of financial condition, 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 Firm 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 analyzes 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.

Concentration Risk

The Company is subject to concentration risk by holding large positions in certain types of securities or commitments to purchase securities of a single issuer, including sovereign governments and other entities, issuers located in a particular country or geographic area, public and private issuers involving developing countries, or issuers engaged in a particular industry. Financial instruments owned by the Company include U.S. government and agency securities, which, in the aggregate, represented approximately 25% of the Company's total assets at June 30, 2023. In addition, substantially all of the collateral held by the Company for reverse repurchase agreements represented approximately 31% of the Company's total assets at June 30, 2023, consist of securities issued by the U.S. government, federal agencies or other sovereign governments.

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London Interbank Offered Rate and Other Interest Rate Benchmarks

Central banks around the world, including the Federal Reserve, have sponsored initiatives in recent years to replace LIBOR and replace or reform certain other interest rate benchmarks (collectively, the "IBORs"). A transition away from use of the IBORs to alternative rates and other potential interest rate benchmark reforms is underway and is a multi-year initiative.

The publication of most non-U.S. dollar LIBOR rates ceased as of the end of December 2021. The publication of all remaining tenors of U.S. dollar LIBOR on a representative basis ceased as of the end of June 2023. For the limited number of U.S. dollar LIBOR linked contracts without a current market standard fallback, or to which the federal legislation does not apply, we executed appropriate transition plans in connection with the June 30, 2023 cessation date for the then-remaining U.S. dollar LIBOR tenors.

The IBOR transition plan is overseen by a global steering committee of the Firm, with senior management oversight. The Company continues to execute against the Firm-wide IBOR transition plan to complete the transition to alternative reference rates.

13. Income Taxes

The Company is a single-member limited liability company that is treated as a disregarded entity for federal income tax purposes, but has elected to continue to include its allocated amount of current and deferred taxes in the statement of financial condition. As such, the Company has a Tax Sharing Agreement with the Ultimate Parent in order to record its related current and deferred federal, state and local 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. State and local income taxes have been provided on a separate entity income basis at the effective tax rate of the Company's combined filing group.

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 in which the Company has significant business operations. These tax laws are complex and subject to interpretation 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.

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.

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 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 statement of financial condition.

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14. Regulatory Requirements

MSCS Regulatory Capital

MSCS is a conditionally registered U.S. security-based swap dealer and a registered OTC derivatives dealer with the SEC. The Company is also provisionally registered as a swap dealer with the CFTC. Accordingly, the Company is subject to the minimum net capital requirements of the SEA Rule 18a-1 and CFTC Rule 23.101.

Under the rules, MSCS is required to maintain minimum Net Capital of the greater of :

- (a) 2% of initial margin amount on all uncleared security-based swaps, or minimum fixed amount of \$20; or
- (b) 2% of initial margin amount on all uncleared swaps, or minimum fixed amount of \$20.

MSCS is required to hold Tentative Net Capital in excess of \$100 and Net Capital in excess of \$20 in accordance with the market and credit risk standards of Rule 18a-1(e). MSCS is also required to notify the SEC in the event that its tentative net capital is less than \$120.

At June 30, 2023, MSCS had tentative net capital of \$13,848 which is in excess of the minimum and notification requirements.

At June 30, 2023, MSCS net capital was \$8,579 which exceeded the greater minimum requirement by \$7,204.

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Glossary of Common Terms and Acronyms

ABS	Asset-backed securities	OECD	Organization for Economic Cooperation and Development
CDS	Credit default swap(s)	ОТС	Over-the-counter
CFTC	Commodity Futures Trading Commission	PDS	Prime Dealer Services Corp.
ELNs	Equity Linked Notes	RC	Risk and Asset Liability Committee
FASB	Financial Accounting Standards Board	S&P	Standard & Poor
FVA	Funding Valuation Adjustment	SEC	U.S. Securities and Exchange Commission
IBORs	Interbank Offered Rates	SPE	Special purpose entities
ICE	Intercontinental Exchange, Inc.	U.S.	United States of America, which includes the District of Columbia, Puerto Rico, and the U.S. territories and possessions
IRS	Internal Revenue Service	U.S. GAAP	Accounting principles generally accepted in the United States of America
LCH	London Clearing House	VaR	Value at Risk
LIBOR	London Inter-bank Offered Rate	VIE	Variable interest entity
M&A	Merger, acquisition and restructuring transaction		
Moody's	Moody's Investor Service, Inc		
MRM	Model Risk Management department		
MS&Co	Morgan Stanley & Co. LLC		
MSCS	Morgan Stanley Capital Services LLC		
MSDHI	Morgan Stanley Domestic Holdings, Inc.		
MSDHL	Morgan Stanley Domestic Holdings, LLC		
MSES	Morgan Stanley Equity Services LLC		
