Morgan Stanley International Limited Group

Pillar 3 Regulatory Disclosures Report

As at 30 June 2023

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1. Overview and Key Metrics

The principal activity of Morgan Stanley International Limited ("MSI") together with its subsidiaries (the "MSI Group") is the provision of financial services to corporations, governments and financial institutions. There have not been any significant changes in the MSI Group's principal activities during the second quarter of 2023 and no significant change is expected.

As at 30 June 2023, Morgan Stanley & Co. International plc ("MSIP") and Morgan Stanley Europe SE ("MSESE") are considered large subsidiaries within the MSI Group. MSIP is authorised by the Prudential Regulation Authority ("PRA") and regulated by the PRA and Financial Conduct Authority ("FCA"). MSESE and the Morgan Stanley Europe Holding SE Group ("MSEHSE Group"), of which MSESE is a subsidiary, are under the direct supervision of the European Central Bank ("ECB") under the Single Supervisory Mechanism.

The Pillar 3 disclosures as at 30 June 2023 are prepared on the basis of the consolidated situation of the MSI Group. In addition, certain disclosures are required for MSIP as a large listed subsidiary of MSI Group, and MSESE as a large non-listed subsidiary of MSI Group. MSESE is able to meet its capital requirements by incorporating its subsidiary Morgan Stanley Bank AG Morgan Stanley Europe SE ("MSESE" together with its subsidiaries) ("MSESE Consol"). As a result, MSESE Consol is considered the large subsidiary for disclosure purposes. The detailed large subsidiary disclosure requirements are included in the MSEHSE Group disclosure that is published separately and can be found at https://www.morganstanley.com/about-us-ir/pillar-eu.html.

Directors Responsibility Statement

I confirm that I have taken all reasonable measures to ensure that the information included in this disclosure complies to the best of my knowledge with section 4 of the PRA rulebook on Disclosure (CRR) and has been prepared in accordance with established formal policies and internal processes, systems and controls.

Anthony Mullineaux

Chief Financial Officer

Morgan Stanley International Limited

Key Metrics

Table 1: Key metrics (UK KM1) – MSI Group and MSIP

$MM MSI Group[1]		a Q2'23	b Q1'23	c Q4'22	d Q3'22	e Q2'22
	Available own funds					
1	Common Equity Tier 1 ("CET1") capital	24,550	22,926	23,038	21,526	22,055
2	Tier 1 ("T1") capital	28,850	27,226	27,338	25,826	26,355
3	Total capital	35,591	34,177	35,123	33,865	34,680
	Risk-weighted exposure amounts					
4	Total risk-weighted exposure amount	164,871	163,350	160,504	165,740	166,499
	Capital ratios (as a percentage of risk-weighted exposure amount)					
5	Common Equity Tier 1 ratio (%)	14.89%	14.04%	14.35%	12.99%	13.25%
6	Tier 1 ratio (%)	17.50%	16.67%	17.03%	15.58%	15.83%
7	Total capital ratio (%)	21.59%	20.92%	21.88%	20.43%	20.83%
	Additional own funds requirements based on Supervisory Review and Evaluation Process ("SREP") (as a percentage of risk-weighted exposure amount)					
UK 7a	Additional CET1 SREP requirements (%)	1.68%	1.68%	1.68%	1.68%	1.68%
UK 7b	Additional AT1 SREP requirements (%)	0.56%	0.56%	0.56%	0.56%	0.56%
UK 7c	Additional Tier 2 ("T2") SREP requirements (%)	0.75%	0.75%	0.75%	0.75%	0.75%
UK 7d	Total SREP own funds requirements (%)	10.99%	10.99%	10.99%	10.99%	10.99%
	Combined buffer requirement (as a percentage of risk-weighted exposure amount)					
8	Capital conservation buffer (%)	2.50%	2.50%	2.50%	2.50%	2.50%
UK 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	-	-	-	-	-
9	Institution specific countercyclical capital buffer (%)	0.39%	0.34%	0.32%	0.07%	0.05%
UK 9a	Systemic risk buffer (%)	-	-	-	-	-
10	Global Systemically Important Institution buffer (%)	-	-	-	-	-
UK 10a	Other Systemically Important Institution buffer	-	-	-	-	-
11	Combined buffer requirement (%)	2.89%	2.84%	2.82%	2.57%	2.55%
UK 11a	Overall capital requirements (%)	13.88%	13.83%	13.81%	13.56%	13.54%
12	CET1 available after meeting the total SREP own funds requirements (%)	8.71%	7.85%	8.17%	6.81%	7.07%
	Leverage ratio					
13	Total exposure measure excluding claims on central banks	463,515	480,781	454,835	473,219	464,889
14	Leverage ratio excluding claims on central banks (%)	6.22%	5.66%	6.01%	5.46%	5.67%
	Additional leverage ratio disclosure requirements[2]					
14a	Fully loaded ECL accounting model leverage ratio excluding claims on central banks (%)	6.22%	5.66%			
14b	Leverage ratio including claims on central banks (%)	6.00%	5.44%			
	Average total exposure measure including claims on central banks[3]	498,524	497,535			
	Average total exposure measure excluding claims on central banks[3]	480,132	479,088			
14c	Average leverage ratio excluding claims on central banks (%)	5.99%	5.70%			
14d	Average leverage ratio including claims on central banks (%)	5.77%	5.48%			
14e	Countercyclical leverage ratio buffer (%)	0.14%	0.12%			
	Liquidity Coverage Ratio[4]					
15	Total high-quality liquid assets ("HQLA") (Weighted value - average)	55,988	54,640	51,890	50,606	49,145
UK 16a	Cash outflows - Total weighted value	85,210	84,181	83,946	84,731	84,886
UK 16b	Cash inflows - Total weighted value	54,399	54,985	56,905	59,418	61,239
16	Total net cash outflows (adjusted value)	30,811	29,316	27,161	25,430	23,765
17	Liquidity coverage ratio (%)	182.12%	188.73%	193.54%	201.08%	206.79%
	Net Stable Funding Ratio[5]					
18	Total available stable funding	112,644	110,383	110,085		
19	Total required stable funding	97,293	96,608	95,602		
20	NSFR ratio (%)	115.78%	114.27%	115.16%		

1. The MSI Group is required to maintain a minimum ratio of own funds to Risk Weighted Exposure Amounts ("RWAs"). As at 30 June 2023, the MSI Group is in compliance with the PRA capital requirements.
2. Based on the guidance provided by the PRA under PS21/21, the MSI Group, a Leverage Ratio Requirements ("LREQ") entity, is subject to additional leverage ratio disclosure requirements beginning 1 January 2023.
3. Average total exposure measure including/excluding claims on central banks are included in key metrics to comply with the quarterly disclosure requirements.
4. From Q3'22, the calculation of Liquidity Coverage Ratio ("LCR") has changed to include an average of 12-month data points instead of an average Total High-Quality Liquid Assets ("HQLA") over Total net cash outflows.
5. Net Stable Funding Ratio ("NSFR") is computed as a trailing average of the last four spot quarter end positions.

Over the second quarter of 2023, MSI Group's own funds increased primarily due to a Common Equity Tier 1 ("CET1") capital infusion and the recognition of profits for the second half of 2022 post year-end audit completion. The leverage ratio increased by 0.56% due to a decrease in the leverage exposure and an increase in the Tier 1 ("T1") capital. The average leverage ratio increased by 0.29%, primarily due to higher average T1 capital.

$MM MSIP[1]		a Q2'23	b Q1'23	c Q4'22	d Q3'22	e Q2'22
	Available own funds					
1	Common Equity Tier 1 (“CET1”) capital	17,443		17,902		17,266
2	Tier 1 (“T1”) capital	21,743		22,202		21,566
3	Total capital	27,626		29,076		28,944
	Risk-weighted exposure amounts					
4	Total risk-weighted exposure amount	126,117		124,739		137,181
	Capital ratios (as a percentage of risk-weighted exposure amount)					
5	Common Equity Tier 1 ratio (%)	13.83%		14.35%		12.59%
6	Tier 1 ratio (%)	17.24%		17.80%		15.72%
7	Total capital ratio (%)	21.91%		23.31%		21.10%
	Additional own funds requirements based on Supervisory Review and Evaluation Process (“SREP”) (as a percentage of risk-weighted exposure amount)					
UK 7a	Additional CET1 SREP requirements (%)	1.65%		1.65%		1.65%
UK 7b	Additional AT1 SREP requirements (%)	0.55%		0.55%		0.55%
UK 7c	Additional Tier 2 (“T2”) SREP requirements (%)	0.73%		0.73%		0.73%
UK 7d	Total SREP own funds requirements (%)	10.93%		10.93%		10.93%
	Combined buffer requirement (as a percentage of risk-weighted exposure amount)					
8	Capital conservation buffer (%)	2.50%		2.50%		2.50%
UK 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	-		-		-
9	Institution specific countercyclical capital buffer (%)	0.36%		0.33%		0.05%
UK 9a	Systemic risk buffer (%)	-		-		-
10	Global Systemically Important Institution buffer (%)	-		-		-
UK 10a	Other Systemically Important Institution buffer	-		-		-
11	Combined buffer requirement (%)	2.86%		2.83%		2.55%
UK 11a	Overall capital requirements (%)	13.79%		13.76%		13.48%
12	CET1 available after meeting the total SREP own funds requirements (%)	7.68%		8.20%		6.44%
	Leverage ratio					
13	Total exposure measure excluding claims on central banks	424,455	440,032	416,138		427,375
14	Leverage ratio excluding claims on central banks (%)	5.12%	5.03%	5.34%		5.05%
	Additional leverage ratio disclosure requirements[2]					
14a	Fully loaded ECL accounting model leverage ratio excluding claims on central banks (%)	5.12%	5.03%			
14b	Leverage ratio including claims on central banks (%)	5.08%	4.97%			
	Average total exposure measure including claims on central banks[3]	444,496	443,251			
	Average total exposure measure excluding claims on central banks[3]	440,419	438,892			
14c	Average leverage ratio excluding claims on central banks (%)	5.00%	5.05%			
14d	Average leverage ratio including claims on central banks (%)	4.96%	5.00%			
14e	Countercyclical leverage ratio buffer (%)	0.13%	0.12%			
	Liquidity Coverage Ratio[4]					
15	Total high-quality liquid assets (“HQLA”) (Weighted value - average)	42,999		41,800		41,980
UK 16a	Cash outflows - Total weighted value	76,156		77,931		80,648
UK 16b	Cash inflows - Total weighted value	52,649		55,296		59,739
16	Total net cash outflows (adjusted value)	23,588		22,818		21,159
17	Liquidity coverage ratio (%)	183.37%		184.05%		198.41%
	Net Stable Funding Ratio[5]					
18	Total available stable funding	96,166		94,906		
19	Total required stable funding	87,184		86,213		
20	NSFR ratio (%)	110.29%		110.07%		

1. MSIP is required to maintain a minimum ratio of own funds to RWAs. As at 30 June 2023, MSIP is in compliance with the PRA capital requirements.
2. Based on the guidance provided by the PRA under PS21/21, MSIP, a LREQ entity, is subject to additional leverage ratio disclosure requirements beginning 1 January 2023.
3. Average total exposure measure including/excluding claims on central banks are included in key metrics to comply with the quarterly disclosure requirements.
4. From Q3'22, the calculation of LCR has changed to include an average of 12-month data points instead of an average Total HQLA over Total net cash outflows.
5. NSFR is computed as a trailing average of the last four spot quarter end positions.

Over the first half of 2023 MSIP's own funds decreased primarily due to a dividend payment to MSI Group and a Tier 2 ("T2") capital redemption, partially offset by the recognition of profits for the second half of 2022 post year-end audit completion. The leverage ratio increased over the second quarter of 2023 by 0.09% due to a decrease in leverage exposure partially offset by a decrease in T1 capital. The average leverage ratio decreased over the quarter by 0.05% due to lower average T1 Capital and higher average exposures.

Basis of Consolidation

The MSI Group completes its prudential consolidation in compliance with the PRA rulebook, with all entities fully consolidated. The basis of consolidation for prudential purposes is materially the same as consolidation for accounting purposes.

This disclosure is prepared for the MSI Group, rather than on an individual basis for each regulated entity, as permissible under the PRA rulebook. As noted above, the most significant subsidiaries of the MSI Group are MSIP and MSESE Consol, the results of which are material to the MSI Group. This disclosure comprehensively conveys the risk profile of the MSI Group.

Morgan Stanley Group

The MSI Group's ultimate parent undertaking and controlling entity is Morgan Stanley, a Delaware corporation which, together with its consolidated subsidiaries, form the Morgan Stanley Group. Morgan Stanley is a "Financial Holding Company" as defined by the Bank Holding Company Act of 1956, as amended, and is subject to regulation and oversight of the Board of Governors of the Federal Reserve System.

The MSI Group is a wholly owned sub-group of the Morgan Stanley Group. Whilst the MSI Group is a material sub-group, the information disclosed in this document is not necessarily indicative of the Morgan Stanley Group as a whole, nor is it comprehensively representative of the Morgan Stanley Group's activity in any particular region. Investors, stakeholders, creditors or other users seeking information on capital adequacy, liquidity, risk exposure and risk management policies should consult the public disclosures of Morgan Stanley Group.

Details of the latest Morgan Stanley Group Pillar 3 disclosure can be accessed at http://www.morganstanley.com/about-us-ir/pillar-us. Details of the latest Morgan Stanley Group LCR disclosure can be accessed at https://www.morganstanley.com/about-us-ir/lcr-disclosures-us.

Morgan Stanley is listed on the New York Stock Exchange and is required, by the US Securities and Exchange Commission ("SEC"), to file public disclosures, including Annual 10-K Report and Quarterly 10-Q Report. These can be accessed at https://www.morganstanley.com/pub/content/msdotcom/en/about-us-ir/sec-filings.

Additional Regulatory Supervision

As a provider of services to global clients, MSIP and MSESE, are registered with the SEC as a Securities Based Swap Dealer ("SBSD"). Both MSIP and MSESE are complying with home country capital requirements in lieu of SEC capital requirements pursuant to applicable substituted compliance rules.

MSIP, MSESE and Morgan Stanley Bank International Limited ("MSBIL") are also provisionally registered with the Commodity Futures Trading Commission ("CFTC") as a Swap Dealer. The CFTC are developing specific requirements to allow provisionally registered non-bank swap dealers to meet CFTC capital requirements by reference to local prudential standards. This work is country specific with a draft proposal published for Germany but still not available for the United Kingdom ("UK"). The provisional status exists until rules are finalised whereby, pursuant to interim no-action relief, the entities are currently complying with home-country capital requirements in lieu of CFTC capital requirements.

These swap dealer registrations provide a comprehensive regulatory framework applicable to the MSI Group's US-related swap and security-based swap dealer activities.

2. Regulatory Frameworks

2.1 Regulatory Overview

The Basel Committee on Banking Supervision ("BCBS") sets the Standard for international banking prudential regulation in a series of accords ("Basel Accords"). It is a forum for regular cooperation on the supervision of the banking system and is made up of national banks and supervisory authorities from 28 countries. The Basel Accords are not directly applicable legislation, and they apply only to internationally active banks. The Basel Accords have been updated a number of times, most recently through a series of reforms known collectively as Basel III. The Basel Accords are implemented in the UK via the PRA Rulebook including retained European Union ("EU") Law under the European Union (Withdrawal) Act 2018.

The Basel Accords are implemented in the EU through the Capital Requirements Regulation ("CRR") and the Capital Requirements Directive ("CRD") as well as standards issued by the European Banking Authority ("EBA") and the ECB. These regulations and technical standards continue to be relevant for EU subsidiaries of the MSI Group.

The framework consists of three "Pillars":

- Pillar 1 – Minimum capital and liquidity requirements: defines rules for the calculation of credit, market, operational and liquidity risk;
- Pillar 2 – Supervisory review process: including a requirement for firms to undertake an Internal Capital Adequacy Assessment Process ("ICAAP") and Internal Liquidity Adequacy Assessment Process ("ILAAP");
- Pillar 3 – Market discipline: requires expanded disclosures to allow investors and other market participants to understand capital and liquidity adequacy, particular risk exposures and risk management processes of individual firms.

Pillar 3 Disclosure

MSI Group Pillar 3 disclosures are prepared in accordance with the requirements of section 4 of the PRA Rulebook on Disclosure (CRR) applicable to CRR firms.

Further details on MSI Group and its large subsidiaries can be found in the annual Pillar 3 disclosure that can be accessed at: https://www.morganstanley.com/about-us-ir/pillar-uk.

Further details on the MSEHSE Group can be found in their Pillar 3 disclosures that can be accessed at: https://www.morganstanley.com/about-us-ir/pillar-eu.html.

2.2 Regulatory Development of Prudential Requirements

Finalising Basel III reforms

A number of remaining standards of the Basel III reform package have still to be implemented. These standards, referred to by the BCBS and international regulators as the 'Finalisation of Basel III', provide updates to key components of the capital framework. These include revised market RWAs requirements through the Fundamental Review of the Trading Book, new Credit Valuation Adjustments ("CVA") RWAs requirements, revisions to the credit RWA calculations covering both standardised and advanced treatments, and a new RWAs requirement for operational risk. They also introduce an aggregate floor for RWAs generated by the internal models, which will be set at 72.5% of total standardised RWAs. The output floor will be phased in over five years. Banks will also need to disclose their RWAs based upon the Standardised Approaches.

The PRA issued their draft rules to implement these final standards, which they referred to as Basel 3.1, on 30 November 2022 for consultation. These rules are expected to be effective from 1 January 2025. The proposed rules are largely consistent with the Basel III reform package with some adjustments to address UK specificities. Pending the publication of the final rules, expected later in 2023, there remains some uncertainty on the final requirements and the overall impact. The same uncertainty on final requirements and timing exists in the EU, where the European Commission published draft rules in October 2021.

3. Capital Management

The PRA reviews the MSI Group ICAAP through its Supervisory Review and Evaluation Process (“SREP”) and sets a Total Capital Requirement (“TCR”), comprising Pillar 1 and Pillar 2A, which establishes the minimum level of regulatory capital for the MSI Group and MSIP. As at 30 June 2023, the MSI Group TCR was $18.1Bn, equivalent to 10.99% of RWAs. Further detail on the make-up of the TCR and applicable Combined Buffer Requirement can be found in Key Metrics, Table 1. If required, the PRA also sets a buffer in addition to the Basel Combined Buffers, which is available to support the MSI Group in a stressed market environment.

4. Capital Resources

The capital resources of the MSI Group and MSIP are set out in Table 2. All capital resources included in T1 and T2 capital are of standard form.

Table 2: Own funds – MSI Group and MSIP

$MM	MSI Group	MSIP
Capital instruments eligible as CET1 capital	3,416	12,978
Prior Year Retained earnings	17,267	4,743
Independently reviewed interim profits net of any foreseeable charge or dividend	-	-
Accumulated other comprehensive income	(1,139)	(322)
Other reserves	7,461	1,403
Adjustments to CET1 due to prudential filters	(1,398)	(1,212)
Other intangible assets	(769)	(2)
Internal Ratings Based shortfall of credit risk adjustments to expected losses	(236)	(145)
Defined-benefit pension fund assets	(8)	-
Insufficient coverage for non-performing exposures	(23)	-
Deferred tax assets that rely on future profitability and do not arise from temporary differences net of associated tax liabilities	(21)	-
CET1 capital	**24,550**	**17,443**
Additional Tier 1 capital	4,300	4,300
Tier 1 capital	**28,850**	**21,743**
Capital instruments and subordinated loans eligible as Tier 2 capital	6,741	5,883
Instruments issued by subsidiaries that are given recognition in Tier 2 capital	-	-
Tier 2 capital	**6,741**	**5,883**
Total own funds	**35,591**	**27,626**

Over the first half of 2023, MSI Group's own funds increased primarily due to CET1 capital infusion and recognition of profits for the second half of 2022 post year-end audit completion.

Over the first half of 2023, MSIP's own funds decreased primarily due to dividend payment to MSI Group and T2 capital redemption, partially offset by recognition of profits for the second half of 2022 post year-end audit completion.

The MSI Group relies on its policies, procedures and systems to determine the adequacy of valuation for financial assets and compliance with accounting standards. To comply with the requirements of the PRA rulebook, Additional Valuation Adjustments (“AVAs”) are applied to capital over and above those that are taken in order to comply with the accounting requirements. The regulatory adjustments are referred to in the above table as prudential filters.

The capital resources of the MSI Group and MSIP as at 30 June 2023 are based on unaudited management accounts.

Table 3 provides a reconciliation of shareholders' equity in the management accounts to regulatory capital.

Table 3: Reconciliation of balance sheet total equity to regulatory capital – MSI Group and MSIP

$MM	MSI Group				MSIP			
		CET1 capital	AT1 capital	T2 capital		CET1 capital	AT1 capital	T2 capital
Equity instruments	7,678	3,378	4,300	-	16,765	12,465	4,300	-
Share premium	38	38	-	-	513	513	-	-
Other reserves	7,461	7,461	-	-	1,403	1,403	-	-
Other comprehensive income	(1,016)	(1,016)	-	-	(322)	(322)	-	-
Retained earnings	17,915	17,915	-	-	5,268	5,268	-	-
Independently reviewed interim profits net of any foreseeable charge or dividend	-	-	-	-	-	-		
Non-controlling interest	436	436	-	-	-	-		
Balance sheet total equity	**32,512**	**28,212**	**4,300**	**-**	**23,627**	**19,327**	**4,300**	**-**
Add:								
Tier 2 instruments classified as debt and other borrowings	8,916			8,916	7,898			7,898
Less:								
Qualifying own funds subordinated debt instruments not included in consolidated T2 capital	-	-	-	-	-	-	-	-
Amortised portion of subordinated debt instruments not included in T2 capital	(2,175)	-	-	(2,175)	(2,015)	-	-	(2,015)
Part of interim or year-end profit not eligible	(648)	(648)	-	-	(525)	(525)	-	-
Minority interests (amount not allowed in consolidated CET1)	(436)	(436)	-	-	-	-	-	-
Additional value adjustments	(1,316)	(1,316)	-	-	(1,226)	(1,226)	-	-
Negative amounts resulting from the calculation of expected loss amounts	(236)	(236)	-	-	(145)	(145)	-	-
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(82)	(82)	-	-	14	14	-	-
Intangible assets (net of related tax liability)	(769)	(769)			(2)	(2)		
Defined-benefit pension fund assets	(8)	(8)	-	-	-	-	-	-
Deferred tax assets that rely on future profitability and do not arise from temporary differences net of associated tax liabilities	(21)	(21)			-	-		
Insufficient coverage for non-performing exposures	(23)	(23)	-	-	-	-	-	-
Unaudited CTA reserve adjustment	(123)	(123)	-	-	-	-	-	-
Total own funds (transitional rules and fully loaded position)	**35,591**	**24,550**	**4,300**	**6,741**	**27,626**	**17,443**	**4,300**	**5,883**

The above table provides a bridge of balance sheet equity to regulatory own funds i.e. items considered or excluded to arrive at regulatory own funds.

5. Total Loss-Absorbing Capacity

The MSI Group is subject to internal Total Loss Absorbing Capacity ("TLAC") requirements under the CRR. These requirements are designed to enhance the resilience of the financial system by ensuring firms have sufficient capital and eligible liabilities to absorb losses and recapitalise in resolution. The minimum requirements are set at 18% of RWAs and 6.75% of leverage exposure, scaled at 90% for MSI Group as a material subsidiary, on a consolidated basis, of a non-UK Global Systemically Important Institution ("G-SII").

Morgan Stanley Group's preferred resolution strategy is a Single Point of Entry ("SPOE") strategy. Further information on the resolution strategy can be found in Morgan Stanley Group Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q. The MSI Group TLAC key metrics are provided in Table 4.

Table 4: TLAC Key Metrics – MSI Group

$MM

MSI Group[1]	Q2'23	Q1'23	Q4'22	Q3'22	Q2'22
TLAC available	**44,566**	**42,933**	**44,090**	**42,054**	**42,608**
Total RWAs at the level of the resolution group	**164,871**	**163,350**	**160,504**	**165,740**	**166,499**
TLAC as a percentage of RWAs (row 1/row2) (%)	27.03%	26.28%	27.47%	25.37%	25.59%
Leverage ratio exposure measure at the level of the resolution group	463,515	480,781	454,835	473,219	464,889
TLAC at a percentage of leverage ratio exposures measure (row1/row4) (%)	9.61%	8.93%	9.69%	8.89%	9.17%

1. As at 30 June 2023, the MSI Group is in compliance with the TLAC requirements.

Over the second quarter of 2023, MSI Group's TLAC available increased primarily due to an increase in own funds.

Table 5 provides details of the composition of the MSI Group's TLAC.

Table 5: TLAC composition – MSI Group

$MM

MSI Group	Q2'23
CET1 capital	24,550
AT1 capital before TLAC adjustments	4,300
AT1 ineligible as TLAC as issued out of subsidiaries to third parties	-
Other adjustments	0
AT1 instruments eligible under the TLAC framework	4,300
T2 capital before TLAC adjustments	6,741
Amortised portion of T2 instruments where remaining maturity >1 year	2,175
T2 Capital ineligible as TLAC as issued out of subsidiaries to third parties	-
Other adjustments	-
T2 instruments eligible under the TLAC framework	8,916
TLAC arising from regulatory capital	**37,766**
TLAC instruments subordinated to excluded liabilities	6,800
TLAC arising from non-regulatory capital instruments before adjustments	**6,800**
TLAC before deductions	**44,566**
Deduction of investments in own other TLAC liabilities	-
Other adjustments to TLAC	-
TLAC after deductions	**44,566**
Total RWAs adjusted as permitted under the TLAC regime	164,871
Leverage exposure measure	463,515
TLAC (as a percentage of risk-weighted assets adjusted as permitted under the TLAC regime)	27.03%
TLAC (as a percentage of leverage exposure)	9.61%
CET1 capital (as a percentage of RWAs) available after meeting the resolution group's Minimum Capital Requirement ("MCR") and TLAC requirement	8.71%
Institution-specific buffer requirement	**2.89%**
Of which: capital conservation buffer requirement	2.50%
Of which: bank specific countercyclical buffer requirement	0.39%
Memorandum items	
Total amount of excluded liabilities referred to in Article 72a(2) CRR II	521,149

Over the first half of 2023, MSI Group's TLAC available increased primarily due to an increase in own funds.

Table 6 provides a breakdown of eligible instruments in the creditor hierarchy of the MSI Group.

Table 6: TLAC creditor ranking – MSI Group

	Creditor ranking				
$MM	**1**	**2**	**3**	**4**	
MSI Group	**(most junior)**			**(most senior)**	
Description of creditor ranking	**Ordinary Shares[1]**	**AT1 Instruments**	**Subordinated loans**	**Senior Subordinated loans**	**Total**
Total capital and liabilities	**3,378**	**4,300**	**8,916**	**6,800**	**23,394**
Excluded liabilities[2]	-	-	-	-	-
Total capital and liabilities less excluded liabilities	3,378	4,300	8,916	6,800	23,394
Eligible as TLAC	3,378	4,300	8,916	6,800	23,394
with 1 year ≤ residual maturity < 2 years	-	-	-	6,800	6,800
with 2 years ≤ residual maturity < 5 years	-	-	4,318	-	4,318
with 5 years ≤ residual maturity < 10 years	-	-	4,598	-	4,598
with residual maturity ≥ 10 years	-	-	-	-	-
perpetual securities	3,378	4,300	-	-	7,678

1. Ordinary Shares exclude the value of share premium and reserves.
2. As at 30 June 2023 MSI Group has no excluded liabilities as defined in CRR II Article 72a (2) that rank pari passu or junior to Minimum Requirements for own funds and Eligible Liabilities-eligible instruments.

Over the first half of 2023, MSI Group's eligible TLAC liabilities decreased primarily due to a senior subordinated debt redemption, partially offset by CET1 capital infusion.

6. Leverage

The Basel III framework introduced a simple, transparent, non risk-based leverage ratio to act as a supplementary measure to the risk-based capital requirements. The Basel Committee is of the view that a simple leverage ratio framework is critical and complementary to the risk-based capital framework and that a credible leverage ratio ensures broad and adequate capture of both the on- and off-balance sheet sources of banks' leverage.

The MSI Group and MSIP leverage ratios as at 30 June 2023 exceed the proposed T1[1] and CET1[2] minimum requirements that were applicable from 1 January 2023.

MSI Group manages its risk of excessive leverage through the application and allocation of business unit leverage exposure limits and legal entity specific leverage ratio Early Warning Indicator ("EWI") levels. Limits are calibrated in line with legal entity capacity and ensure that leverage exposure remains within the MSI Board's risk appetite. If internal limits are exceeded, cross-functional teams identify the key drivers of the elevated exposures and consider appropriate remediation actions. EWI levels are monitored daily to ensure that any increases above the internal thresholds are escalated to governance forums on a timely manner to allow for any appropriate management actions to be taken.

Moreover, robust capital planning ensures future LREQ are considered. The capital planning focuses on, but is not limited to, forecasted business activity, planned mitigation, future regulatory changes, net income forecasts and required capital. In addition to capital planning, the firm's large transaction approval process requires the leverage exposure impact to be assessed prior to execution. Trades are approved based on, amongst others, risk appetite, capacity and return metrics.

Leverage exposures, for MSI Group, as well as MSIP and MSEHSE Group, including business unit limit utilisation, are regularly calculated and reported to the Europe, Middle East and Africa ("EMEA") & MSEHSE Asset and Liability Committees. These metrics include maturity mismatches, funding plan processes and asset encumbrance metrics, to ensure that any excessive risk is highlighted, assessed, and mitigated appropriately. Additionally, weekly capital resource meetings occur between senior cross-functional stakeholders to monitor, analyse and optimise resources including, but not limited to, leverage exposure.

Furthermore, a quarterly risk identification assessment is completed to monitor both qualitative and quantitative leverage exposure drivers and risks to ensure compliance with internal and regulatory minimums in the event contingent leverage exposure was to crystallise.

[1] A minimum leverage ratio of 3.25% is required to be always met.
[2] At least 75% of the firm's T1 capital must consist of CET1 capital. Additionally, the firm must maintain an additional countercyclical leverage ratio buffer of CET1 equal to 35% of its current Countercyclical Capital Buffer ("CCyB") rate.

Table 7 provides a reconciliation between total assets in the management accounts and the leverage exposure measure for MSI Group and MSIP as at 30 June 2023.

Table 7: Summary reconciliation of accounting assets and leverage ratio exposures (UK LR1) – MSI Group and MSIP

		a	
		Applicable amount	
$MM		MSI Group	MSIP
1	**Total assets as per published financial statements[1]**	**678,917**	**559,653**
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	-	-
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	-	-
4	(Adjustment for exemption of exposures to central banks)	(17,662)	(3,423)
5	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the total exposure measure in accordance with point (i) of Article 429a(1) of the CRR)	-	-
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting[2]	-	-
7	Adjustment for eligible cash pooling transactions	-	-
8	Adjustments for derivative financial instruments	(167,814)	(114,252)
9	Adjustments for Securities Financing Transactions (“SFTs”)	15,918	15,854
10	Adjustment for off-balance sheet items (i.e., conversion to credit equivalent amounts of off-balance sheet exposures)[3]	7,511	4,360
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced tier 1 capital (leverage))	(2,372)	(1,372)
UK-11a	(Adjustment for exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) of the CRR)	-	(473)
UK-11b	(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of Article 429a(1) of the CRR)	-	-
12	Other adjustments	(50,983)	(35,892)
13	**Total exposure measure**	**463,515**	**424,455**

1. MSI Group and MSIP do not publish financial statements and the reported balances are reconciled to unaudited management accounts.
2. As MSI Group follows settlement date accounting, no exposure is reported under regular-way purchases and sales subject to trade date accounting.
3. Regular-way purchases and sales subject to settlement date accounting are treated as off-Balance sheet items.

Over the first half of 2023, MSI Group's total assets increased primarily due to higher derivatives.

Table 8 provides a detailed breakdown of the components of the leverage ratio exposure for MSI Group and MSIP as at 30 June 2023.

Table 8: Leverage ratio common disclosure (UK LR2) – MSI Group and MSIP

MSI Group[1] $MM		a Leverage ratio exposures Q2'23	b Q4'22
	On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	239,336	222,318
2	Gross-up for derivatives collateral provided, where deducted from the balance sheet assets pursuant to the applicable accounting framework	2,872	7,787
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(50,268)	(55,345)
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)	-	-
5	(General credit risk adjustments to on-balance sheet items)	-	-
6	(Asset amounts deducted in determining tier 1 capital (leverage))	(2,372)	(2,389)
7	**Total on-balance sheet exposures (excluding derivatives and SFTs)**	**189,568**	**172,371**
	Derivative exposures		
8	Replacement cost associated with SA-CCR derivatives transactions (i.e., net of eligible cash variation margin)	42,556	45,342
UK-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	-	-
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	101,810	101,518
UK-9a	Derogation for derivatives: potential future exposure contribution under the simplified standardised approach	-	-
UK-9b	Exposure determined under the original exposure method	-	-
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(2,840)	(3,585)
UK-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	-	-
UK-10b	(Exempted CCP leg of client-cleared trade exposures) (original exposure method)	-	-
11	Adjusted effective notional amount of written credit derivatives	354,449	329,087
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(342,529)	(315,477)
13	**Total derivative exposures**	**153,446**	**156,885**
	Securities financing transaction (SFT) exposures		
14	Gross SFT assets (with no recognition of netting), after adjustments for sales accounting transactions	184,276	198,500
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(63,106)	(69,213)
16	Counterparty credit risk exposure for SFT assets	9,482	9,765
UK-16a	Derogation for SFTs: counterparty credit risk exposure in accordance with Articles 429e(5) and 222 of the CRR	-	-
17	Agent transaction exposures	-	-
UK-17a	(Exempted CCP leg of client cleared SFT exposures)	-	-
18	**Total securities financing transaction exposures**	**130,652**	**139,052**
	Other off-balance sheet exposures		
19	Off-balance sheet exposures at gross notional amount	19,078	13,832
20	(Adjustments for conversion to credit equivalent amounts)	(11,567)	(8,723)
21	(General provisions deducted in determining tier 1 capital (leverage) and specific provisions associated with off-balance sheet exposures)	-	-
22	**Off-balance sheet exposures**	**7,511**	**5,109**
	Excluded exposures		
UK-22a	(Exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) of the CRR)	-	-
UK-22b	(Exposures exempted in accordance with point (j) of Article 429a(1) of the CRR (on- and off- balance sheet))	-	-
UK-22g	(Excluded excess collateral deposited at triparty agents)	-	-
UK-22k	**(Total exempted exposures)**	**-**	**-**
	Capital and total exposure measure		
23	Tier 1 capital (leverage)	28,850	27,338
24	Total exposure measure including claims on central banks	481,177	473,417
UK-24a	(-) Claims on central banks excluded	(17,662)	(18,582)
UK-24b	**Total exposure measure excluding claims on central banks**	**463,515**	**454,835**

	Leverage ratio		
25	Leverage ratio excluding claims on central banks (%)	6.22%	6.01%
UK-25a	Fully loaded ECL accounting model leverage ratio excluding claims on central banks (%)	6.22%	6.01%
UK-25b	Leverage ratio excluding central bank reserves as if the temporary treatment of unrealised gains and losses measured at fair value through other comprehensive income had not been applied (%)	6.22%	6.01%
UK-25c	Leverage ratio including claims on central banks (%)	6.00%	5.77%
26	Regulatory minimum leverage ratio requirement (%)	3.25%	N/A
	Additional leverage ratio disclosure requirements - leverage ratio buffers		
27	Leverage ratio buffer (%)	0.14%	
UK-27a	Of which: G-SII or O-SII additional leverage ratio buffer (%)	-	
UK-27b	Of which: countercyclical leverage ratio buffer (%)	0.14%	
	Additional leverage ratio disclosure requirements - disclosure of mean values		
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	138,012	
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	121,170	
UK-31	Average total exposure measure including claims on central banks	498,524	
UK-32	Average total exposure measure excluding claims on central banks	480,132	
UK-33	Average leverage ratio including claims on central banks	5.77%	
UK-34	Average leverage ratio excluding claims on central banks	5.99%	

1. Based on the guidance provided by the PRA under PS21/21, the MSI Group, a LREQ entity, is subject to additional leverage ratio disclosure requirements beginning 1 January 2023.

MSIP[1]		a	b
		Leverage ratio exposures	
$MM		Q2'23	Q4'22
	On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	199,813	181,520
2	Gross-up for derivatives collateral provided, where deducted from the balance sheet assets pursuant to the applicable accounting framework	4,999	3,084
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(38,973)	(39,196)
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)	-	-
5	(General credit risk adjustments to on-balance sheet items)	-	-
6	(Asset amounts deducted in determining tier 1 capital (leverage))	(1,372)	(1,448)
7	**Total on-balance sheet exposures (excluding derivatives and SFTs)**	**164,467**	**143,960**
	Derivative exposures		
8	Replacement cost associated with SA-CCR derivatives transactions (i.e., net of eligible cash variation margin)	30,965	33,106
UK-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	-	-
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	85,750	86,860
UK-9a	Derogation for derivatives: potential future exposure contribution under the simplified standardised approach	-	-
UK-9b	Exposure determined under the original exposure method	-	-
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(1,771)	(2,017)
UK-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	-	-
UK-10b	(Exempted CCP leg of client-cleared trade exposures) (original exposure method)	-	-
11	Adjusted effective notional amount of written credit derivatives	333,168	301,590
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(322,395)	(288,587)
13	**Total derivative exposures**	**125,717**	**130,952**
	Securities financing transaction (SFT) exposures		
14	Gross SFT assets (with no recognition of netting), after adjustments for sales accounting transactions	191,047	202,389
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(66,659)	(70,766)
16	Counterparty credit risk exposure for SFT assets	9,418	9,860
UK-16a	Derogation for SFTs: counterparty credit risk exposure in accordance with Articles 429e(5) and 222 of the CRR	-	-
17	Agent transaction exposures	-	-
UK-17a	(Exempted CCP leg of client cleared SFT exposures)	-	-
18	**Total securities financing transaction exposures**	**133,806**	**141,483**

	Other off-balance sheet exposures		
19	Off-balance sheet exposures at gross notional amount	11,967	8,124
20	(Adjustments for conversion to credit equivalent amounts)	(7,606)	(5,829)
21	(General provisions deducted in determining tier 1 capital (leverage) and specific provisions associated with off-balance sheet exposures)	-	-
22	**Off-balance sheet exposures**	**4,361**	**2,295**
	Excluded exposures		
UK-22a	(Exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) of the CRR)	(473)	(431)
UK-22b	(Exposures exempted in accordance with point (j) of Article 429a(1) of the CRR (on- and off- balance sheet))	-	-
UK-22g	(Excluded excess collateral deposited at triparty agents)	-	-
UK-22k	**(Total exempted exposures)**	**(473)**	**(431)**
	Capital and total exposure measure		
23	Tier 1 capital (leverage)	21,743	22,202
24	Total exposure measure including claims on central banks	427,877	418,259
UK-24a	(-) Claims on central banks excluded	(3,423)	(2,121)
UK-24b	**Total exposure measure excluding claims on central banks**	**424,455**	**416,138**
	Leverage ratio		
25	Leverage ratio excluding claims on central banks (%)	5.12%	5.34%
UK-25a	Fully loaded ECL accounting model leverage ratio excluding claims on central banks (%)	5.12%	5.34%
UK-25b	Leverage ratio excluding central bank reserves as if the temporary treatment of unrealised gains and losses measured at fair value through other comprehensive income had not been applied (%)	5.12%	5.34%
UK-25c	Leverage ratio including claims on central banks (%)	5.08%	5.31%
26	Regulatory minimum leverage ratio requirement (%)	3.25%	N/A
	Additional leverage ratio disclosure requirements - leverage ratio buffers		
27	Leverage ratio buffer (%)	0.13%	
UK-27a	Of which: G-SII or O-SII additional leverage ratio buffer (%)	-	
UK-27b	Of which: countercyclical leverage ratio buffer (%)	0.13%	
	Additional leverage ratio disclosure requirements - disclosure of mean values		
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	140,937	
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	124,389	
UK-31	Average total exposure measure including claims on central banks	444,496	
UK-32	Average total exposure measure excluding claims on central banks	440,419	
UK-33	Average leverage ratio including claims on central banks	4.96%	
UK-34	Average leverage ratio excluding claims on central banks	5.00%	

1. Based on the guidance provided by the PRA under PS21/21, MSIP, a LREQ entity, is subject to additional leverage ratio disclosure requirements beginning 1 January 2023.

Over the first half of 2023, MSI Group's leverage ratio increased by 0.21% to 6.22% primarily due to an increase in T1 capital primarily due to a CET1 capital infusion and the recognition of profits for the second half of 2022, partially offset by an increase in leverage exposure primarily due to cash products driven by client activity.

Over the first half of 2023, MSIP's leverage ratio decreased by 0.21% primarily due to an increase in leverage exposure due to cash products driven by client activity together with a decrease in T1 capital post dividend payment, partially offset by the recognition of profits for the second half of 2022.

Table 9 provides a breakdown of the on-balance sheet exposures into trading and non-trading (banking book) exposures for MSI Group and MSIP as at 30 June 2023.

Table 9: Split of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures) (UK LR3) – MSI Group and MSIP

		a	
		Leverage ratio exposures	
$MM		MSI Group	MSIP
UK-1	**Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:**	**242,940**	**201,749**
UK-2	Trading Book exposures	201,487	179,202
UK-3	Banking book exposures, of which:	41,453	22,547
UK-4	Covered bonds	-	-
UK-5	Exposures treated as sovereigns	19,026	4,424
UK-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	45	42
UK-7	Institutions	16,865	15,349
UK-8	Secured by mortgages of immovable properties	-	-
UK-9	Retail exposures	-	-
UK-10	Corporates	2,548	1,698
UK-11	Exposures in default	220	87
UK-12	Other exposures (e.g., equity, securitisations, and other non-credit obligation assets)	2,749	947

Over the first half of 2023, MSI Group's and MSIP's on-balance sheet exposures increased primarily due to trading book exposures mainly from cash products.

7. Capital Requirements and RWAs

RWAs reflect both on- and off-balance sheet risk, as well as capital charges attributable to the risk of loss arising from the following.

Credit and Counterparty Credit Risk ("CCR") refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations. Credit and counterparty credit capital requirements are derived from RWAs, determined using the approved internal modelling approach - the Internal Model Method ("IMM") for CCR exposure. Standardised methods are applied for exposures not covered by internal models. Foundation Internal Ratings Based ("IRB")approach for credit risk or Standardised Approach ("SA") Risk Weights are applied as applicable.

CVA is the capital requirement that covers the risk of mark-to-market losses on the counterparty risk of derivatives. It is calculated using a combination of advanced internal modelling and standardised approaches.

Settlement risk refers to the capital requirement that covers the risk due to the possibility that a counterparty will fail to deliver on the terms of a contract at the agreed-upon time.

Securitisation exposures are a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranched. Payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures. The subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.

Market risk refers to the risk that a change in the level of one or more market prices, rates, indices, implied volatilities (the price volatility of the underlying instrument imputed from option prices), correlations or other market factors, such as market liquidity, will result in losses for a position or portfolio. The market risk capital requirements comprise of capital associated with the Internal Modelling Approaches ("IMA") approved by the PRA and those associated with the Standardised Approach.

Large exposures refer to the capital requirement that covers the risk due to concentrated exposures to a single counterparty or group of connected counterparties.

Operational risk refers to the risk of loss, or of damage to reputation, resulting from inadequate or failed processes, people and systems or from external events (e.g., fraud, theft, legal and compliance risks, cyber-attacks or damage to physical assets). Capital requirements for operational risk are currently calculated under the Basic Indicator Approach ("BIA").

Amounts below the thresholds for deduction correspond to items not deducted from own funds, as they are below the applicable thresholds for deduction, in accordance with the PRA rulebook.

The MSI Group enhances its risk management strategy and incorporates improvements in modelling techniques while maintaining compliance with the regulatory requirements. For further discussion on credit risk, CCR and market risk please refer to the specific sections within this document.

RWAs Overview

Table 10 summarises RWAs and Total Own Funds Requirements ("TOFR") for MSI Group and MSIP by risk type. MSI Group and MSIP calculate Pillar 1 capital requirements as 8% of RWAs.

Table 10: Overview of risk weighted exposure amounts (UK OV1) – MSI Group and MSIP

		a	b	c	a	b	c
			MSI Group			MSIP	
		RWAs	RWAs	TOFR	RWAs	RWAs	TOFR
$MM		Q2'23	Q1'23	Q2'23	Q2'23	Q1'23	Q2'23
1	**Credit risk (excluding CCR)**	**14,644**	**14,041**	**1,172**	**9,597**	**9,313**	**767**
2	Of which standardised approach	4,480	3,582	358	2,578	1,943	206
3	Of which the Foundation IRB ("FIRB") approach	6,195	6,544	496	3,054	3,399	244
4	Of which slotting approach	-	-	-	-	-	-
UK 4a	Of which equities under the simple risk weighted approach[1]	3,969	3,915	318	3,965	3,971	317
5	Of which the Advanced IRB ("AIRB") approach	-	-	-	-	-	-
6	**Counterparty credit risk – CCR**	**62,582**	**61,996**	**5,007**	**54,251**	**54,042**	**4,340**
7	Of which standardised approach	11,018	10,950	881	10,628	10,507	850
8	Of which internal model method (IMM)	26,361	26,544	2,109	21,596	22,082	1,724
UK 8a	Of which exposures to a CCP	1,384	1,409	111	763	876	61
UK 8b	Of which credit valuation adjustment - CVA	18,060	17,517	1,445	15,447	15,124	1,236
9	Of which other CCR	5,759	5,576	461	5,817	5,453	469
15	**Settlement risk**	**126**	**70**	**10**	**130**	**68**	**10**
16	**Securitisation exposures in the non-trading book (after the cap)**	**2,412**	**3,160**	**193**	**2,406**	**3,154**	**192**
17	Of which SEC-IRBA approach	-	-	-	-	-	-
18	Of which SEC-ERBA (including IAA)	811	808	65	805	803	64
19	Of which SEC-SA approach	-	-	-	-	-	-
UK 19a	Of which 1250%/ deduction	1,601	2,352	128	1,601	2,351	128
20	**Position, foreign exchange and commodities risks (Market risk)**	**65,380**	**64,074**	**5,231**	**47,508**	**46,933**	**3,801**
21	Of which standardised approach	16,657	14,612	1,333	7,696	6,844	616
22	Of which IMA	48,723	49,462	3,898	39,812	40,089	3,185
UK 22a	**Large exposures**	**4,370**	**4,652**	**349**	**1,418**	**2,402**	**114**
23	**Operational risk**	**15,357**	**15,357**	**1,228**	**10,807**	**10,807**	**865**
UK 23a	Of which basic indicator approach	15,357	15,357	1,228	10,807	10,807	865
UK 23b	Of which standardised approach	-	-	-	-	-	-
UK 23c	Of which advanced measurement approach	-	-	-	-	-	-
24	**Amounts below the thresholds for deduction (subject to 250% risk weight) (For information)[1]**	**726**	**661**	**58**	**777**	**723**	**62**
29	**Total**	**164,871**	**163,350**	**13,190**	**126,117**	**126,719**	**10,089**

1. Equity exposures subject to risk weight 1250% has been included under "*Of which equities under the simple risk weighted approach*" for MSI Group and MSIP.

Over the second quarter of 2023, MSI Group's RWAs increased primarily due to market risk driven by foreign exchange volatility. MSIP's RWAs decreased primarily due to large exposures driven by reduction in derivative exposure.

8. Credit Risk

8.1 Credit and Counterparty Credit Risk Management

Credit and counterparty risk refers to the risk of loss arising when a borrower, counterparty or issuer does not meet its financial obligations to the MSI Group. The MSI Group is exposed to credit risk from the extension of credit to clients through lending commitments, derivatives, securities financing and prime brokerage activities. The MSI Group primarily incurs credit risk exposure to Corporates, Institutions, Central Governments and Central Banks through its Institutional Securities business segment.

The MSI Group Credit Risk Management Department ("CRMD") is an independent risk oversight group headed by the Head of Credit who reports directly to the EMEA Chief Risk Officer. The MSI Group CRMD is responsible for managing and overseeing the credit risk profile of the MSI Group, including the design and oversight of the credit risk and limits framework covering the independent identification, analysis, monitoring, reporting and escalation of credit risks. In order to help protect the MSI Group from losses resulting from its business activities, CRMD establishes practices to evaluate, monitor and control credit risk exposure at the transaction, obligor and portfolio levels. CRMD analyses material lending and derivative transactions and helps ensure that the creditworthiness of the MSI Group's counterparties and borrowers is periodically reviewed and that credit exposure is actively monitored and managed.

Credit Risk Policies and Procedures

CRMD policies and procedures applicable to the MSI Group aim to ensure the identification of credit risks, compliance with established limits, requisite approvals for extensions of credit, and escalation of risk concentrations to appropriate senior management.

Credit Risk Limits

The MSI Group Credit Limits Framework ("CLF") is one of the primary tools used to monitor, manage, and control credit risk exposures. The MSI Board approves limits that reflect the credit risk tolerance of the MSI Group and serve as a basis from which more detailed limits are established. The CLF includes single name limits (e.g., counterparty, lending, settlement and treasury) and portfolio concentration limits by country, industry and product type. The MSI Group credit limit restricts potential credit exposure to any one borrower or counterparty and to groups of connected borrowers or counterparties. The limits are assigned based on multiple factors including the size of counterparty, the counterparty's Probability of Default ("PD"), the perceived correlation between the credit exposure and the counterparty's credit quality, and the Loss-Given Default ("LGD") and tenor profile of the specific credit exposure taking into account the effect of enforceable netting and eligible collateral.

Credit Evaluation

The MSI Group is exposed to single-name credit risk and country risk, requiring credit analysis of specific counterparties, both initially and on an ongoing basis. Credit risk management takes place at the transaction, counterparty and portfolio levels. For lending transactions, CRMD evaluates the relative position of its particular exposure in the borrower's capital structure and relative recovery prospects. CRMD also considers collateral arrangements and other structural elements of the particular transaction.

8.2 Counterparty and Credit Risk Capital Requirements

The regulatory framework distinguishes between credit risk and CCR capital requirements. The credit risk capital component reflects the capital requirements attributable to the risk of loss arising from a borrower failing to meet its obligations and relates to investments made in the Non-Trading Book such as loans and other securities that the MSI Group holds until maturity with no intention to trade. CCR exposure arises from the risk that counterparties are unable to meet their payment obligations under contracts for traded products including Over The Counter ("OTC") derivatives and Securities Financing Transactions ("SFTs"). The distinction between credit risk and CCR exposures, is due to the bilateral nature of the risk for CCR exposures, see Section 9 Counterparty Credit Risk.

RWAs are determined using the IRB approach which reflects the MSI Group’s internal estimate of a borrower or counterparty’s creditworthiness.

For exposures not covered by the IRB approach, the SA is applied, typically for certain business units which are non-significant and certain exposure classes or types of exposures, which are immaterial in terms of size and perceived risk profile.

The SA assigns fixed risk weights to the following exposures classes in accordance with the CRR: Central Governments and Central Banks, Corporates, Institutions, Multilateral Development Banks, International Organisations, Regional Governments and Local Authorities.

Credit Risk RWA flow statements

Table 11 summarises the movements of RWAs for MSI Group and MSIP’s credit risk exposures under the IRB approach.

Table 11: RWAs flow statements of credit risk exposures under the IRB approach (UK CR8) – MSI Group and MSIP

$MM		a MSI Group RWAs	a MSIP RWAs
1	**RWAs as at the end of the previous reporting period[1]**	**6,544**	**3,399**
2	Asset size	(369)	(380)
3	Asset quality	20	35
4	Model updates	-	-
5	Methodology and policy	-	-
6	Acquisitions and disposals	-	-
7	Foreign exchange movements	-	-
8	Other	-	-
9	**RWAs as at the end of the reporting period**	**6,195**	**3,054**

1. Previous reporting period was Q1’23.

Over the second quarter of 2023, MSI Group's and MSIP's RWAs decreased primarily due to reduction in corporate debt exposure and receivables.

Non-Trading Book Equity Exposure and Specialised Lending

The MSI Group applies the IRB simple risk weight approach for equity exposures falling outside of the Trading Book. The majority of these equity exposures are held as hedges for employee long-term compensation schemes. A Specialised Lending Slotting methodology is used in capital calculation for loans secured by Income Producing Real Estate, where applicable.

Table 12 shows the MSI Group and MSIP's equity exposures using the simple risk-weighted approach and, where appropriate, specialised lending.

Table 12: IRB (Specialised Lending and Equities) (UK CR10.5) – MSI Group and MSIP

	a	b	c	d	e	f
	Equity exposures under the simple risk-weighted approach					
	On-balance sheet exposures	Off-balance sheet exposures	Risk weight	Exposure value	RWAs	Expected loss amount
MSI Group[1]	**$MM**	**$MM**	**%**	**$MM**	**$MM**	**$MM**
Private equity exposures	-	-	190%	-	-	-
Exchange-traded equity exposures	245	780	290%	1,025	2,972	8
Other equity exposures	-	12	370%	12	46	-
	67	-	1250%[2]	67	951	-
Total	**312**	**792**	**-**	**1,104**	**3,969**	**8**
MSIP[1]						
Private equity exposures	-	-	190%	-	-	-
Exchange-traded equity exposures	244	669	290%	913	2,649	8
Other equity exposures	-	12	370%	12	44	-
	204	-	1250%[2]	204	1,272	-
Total	**448**	**681**	**-**	**1,129**	**3,965**	**8**

1. MSI Group and MSIP have no specialised lending.
2. Equity exposures subject to 1250% risk weight has been included under "Other equity exposures".

Over the first half of 2023, MSI Group's and MSIP's equity exposures increased due to higher equity investments.

8.3 Credit Risk Mitigation

The MSI Group may seek to mitigate credit risk from its lending and trading activities in multiple ways, including netting, collateral, guarantees and hedges. At the transaction level, the MSI Group seeks to mitigate risk through management of key risk elements such as size, tenor, financial covenants, seniority and collateral. The MSI Group actively hedges its lending and derivatives exposure through various financial instruments that may include single-name and structured credit derivatives. Additionally, the MSI Group may sell, assign or syndicate funded loans and lending commitments to other financial institutions in the primary and secondary loan market. In connection with its derivatives trading activities, the MSI Group generally enters into master netting and collateral arrangements with counterparties. These agreements provide the MSI Group with the ability to demand collateral, as well as to liquidate collateral and offset receivables and payables covered under the same master agreement in the event of a counterparty default.

9. Counterparty Credit Risk

9.1 Counterparty Credit exposures

Counterparty credit exposures arise from client and business activities in derivatives and SFTs. The MSI Group leverages models under IMM and Standardised Methods for calculation of CCR Exposures. The majority of OTC derivatives and SFTs within the MSI Group are in scope of the IMM permission. The central process in calculating CCR exposure under IMM is a Monte Carlo simulation, which generates independent realizations of market risk factors at future time horizons across a number of simulation paths. Each trade is revalued under the simulated market conditions with future collateral requirements, along each simulation path determined by the simulated trade valuations. Finally, simulated trade values and collateral balances are aggregated based on netting agreements and legally confirmed enforceability to yield a distribution of CCR exposure across the simulation paths at each future time horizon. Selected measures of this distribution are then calculated to report CCR exposure and full distribution is used for capital calculation. The most material risk factors are calibrated daily to market implied data, while other risk factors are calibrated based on three years or more of historical data.

Standardised Methods are applied for exposures not covered by IMM, including Standardised Approach for Counterparty Credit Risk ("SA-CCR") for OTC and Financial Collateral Comprehensive Method/ Master Netting Agreement for SFT. Under SA-CCR, the Exposures at Default ("EAD") is given by the sum of two components, the Replacement cost ("RC") and the Potential Future Exposure (PFE) , multiplied by a supervisory multiplier, alpha (1.4).

Table 13 shows a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method for the MSI Group as at 30 June 2023.

Table 13: Analysis of CCR exposure by approach (UK CCR1) – MSI Group

$MM		a	b	c	d	e	f	g	h
	MSI Group	**Replacement cost (RC)**	**Potential future exposure (PFE)**	**EEPE**	**Alpha used for computing regulatory exposure value**	**Exposure value pre-CRM**	**Exposure value post-CRM**	**Exposure value**	**RWA**
UK1	Original Exposure Method (for derivatives)	-	-	-	-	-	-	-	-
UK2	Simplified SA-CCR (for derivatives)	-	-	-	-	-	-	-	-
1	SA-CCR (for derivatives)	9,443	12,341		1.4	41,100	29,145	29,098	11,018
2	IMM (for derivatives and SFTs)	-	-	49,548	1.4	148,343	68,549	68,270	26,361
2a	*Of which securities financing transactions netting sets*	-	-	9,454	-	14,435	14,435	14,435	2,715
2b	*Of which derivatives & long settlement transactions netting sets*	-	-	40,094	-	133,908	54,114	53,835	23,646
2c	*Of which from contractual cross product netting sets*	-	-	-	-	-	-	-	-
3	Financial collateral simple method (for SFTs)	-	-	-	-	-	-	-	-
4	Financial collateral comprehensive method (for SFTs)					17,509	17,509	17,509	5,054
5	VaR for SFTs					-	-	-	-
6	**Total**					**206,952**	**115,203**	**114,877**	**42,433**

Over the first half of 2023, MSI Group's SA-CCR OTC and customer margin receivables RWAs increased due to market movements.

Table 14 summarises movements of RWAs for MSI Group and MSIP's CCR exposures under IMM.

Table 14: RWAs flow statements of CCR exposures under IMM (UK CCR7) – MSI Group and MSIP

		a	a
$MM		MSI Group RWAs	MSIP RWAs
1	**RWAs at the end of the previous reporting period**[1]	**26,544**	**22,082**
2	Asset size	(572)	(852)
3	Credit quality of counterparties	198	223
4	Model updates (IMM only)	191	143
5	Methodology and policy (IMM only)	-	-
6	Acquisitions and disposals	-	-
7	Foreign exchange movements	-	-
8	Other	-	-
9	**RWAs at the end of the current reporting period**	**26,361**	**21,596**

1. Previous reporting period was Q1'23.

Over the second quarter of 2023, MSI Group's and MSIP's RWAs decreased primarily due to business and market movements within OTC derivatives.

9.2 Credit Valuation Adjustment

CVA is the capital requirement that covers the risk of mark-to-market losses on the counterparty risk of OTC derivatives. It is calculated using a combination of an advanced approach based on using IMA and a standardised approach.

Table 15 shows CVA by approach for the MSI Group as at 30 June 2023.

Table 15: Transactions subject to own funds requirements for CVA risk (UK CCR2) - MSI Group

		a	b
$MM MSI Group		Exposure value	RWAs
1	Total transactions subject to the Advanced method	31,467	11,537
2	(i) VaR component (including the 3× multiplier)		2,911
3	(ii) Stressed VaR component (including the 3× multiplier)		8,626
4	Transactions subject to the standardised method	23,713	6,523
UK4	Transactions subject to the Alternative approach (Based on the Original Exposure Method)	-	-
5	**Total transactions subject to own funds requirements for CVA risk**	**55,180**	**18,060**

Over the first half of 2023, MSI Group's Advanced RWAs increased due to higher exposures across multiple counterparties.

9.3 Derivatives and SFTs composition of collateral

Table 16 shows the breakdown of all types of collateral posted or received to support or reduce CCR exposures related to derivative transactions or to SFTs, including transactions cleared through a Central Counterparty ("CCP") as at 30 June 2023 for the MSI Group.

Table 16: Composition of collateral for CCR exposures (UK CCR5) - MSI Group

		a	b	c	d	e	f
$MM		Collateral used in derivative transactions				Collateral used in securities financing transactions (SFTs)	
		Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of collateral posted
MSI Group		Segregated	Unsegregated	Segregated	Unsegregated		
1	Cash	23,324	76,539	0	84,259	475,787	515,653
2	Debt	14,053	21,599	8,987	8,118	272,819	198,224
3	Equity	2,786	3,595	1,553	132	217,737	94,274
4	Other	443	689	863	1,581	32,094	8,091
5	**Total**	**40,606**	**102,422**	**11,403**	**94,090**	**998,437**	**816,242**

Over the first half of 2023, MSI Group's unsegregated cash collateral held for derivatives decreased and equity held for SFTs increased.

9.4 Exposures to CCPs

Table 17 shows the breakdown of the exposures by Qualifying Central Counterparty ("QCCP") and non-QCCPs as at 30 June 2023 for the MSI Group.

Table 17: Exposures to CCPs (UK CCR8) - MSI Group

$MM		a	b
MSI Group		Exposure value	RWAs
1	**Exposures to QCCPs (total)**		**831**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	19,067	381
3	(i) OTC derivatives	8,980	180
4	(ii) Exchange-traded derivatives	7,046	141
5	(iii) SFTs	3,041	60
6	(iv) Netting sets where cross-product netting has been approved	-	-
7	Segregated initial margin	-	
8	Non-segregated initial margin	13,474	-
9	Prefunded default fund contributions	1,801	450
10	Unfunded default fund contributions	4,178	-
11	**Exposures to non-QCCPs (total)**		**553**
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	534	534
13	(i) OTC derivatives	-	-
14	(ii) Exchange-traded derivatives	534	534
15	(iii) SFTs	-	-
16	(iv) Netting sets where cross-product netting has been approved	-	-
17	Segregated initial margin	-	
18	Non-segregated initial margin	-	-
19	Pre-funded default fund contributions	3	19
20	Unfunded default fund contributions	-	-

Over the first half of 2023, MSI Group's OTC derivatives exposure increased.

9.5 Credit Derivative Transactions

Table 18 shows the extent of an institution's exposures to credit derivative transactions broken down between derivatives bought or sold for the MSI Group.

Table 18: Credit derivatives exposures (UK CCR6) - MSI Group

$MM		a	b
MSI Group[1]		Protection bought	Protection sold
	Notionals		
1	Single-name credit default swaps	140,880	135,843
2	Index credit default swaps	180,814	183,179
3	Total return swaps	19,609	17,640
4	Credit options	55,813	59,369
5	Other credit derivatives	18,372	18,813
6	**Total notionals**	**415,488**	**414,844**
	Fair values		
7	Positive fair value (asset)	3,846	5,756
8	Negative fair value (liability)	(5,835)	(3,347)

1.Credit Derivatives are not used as a Credit Risk Mitigation ("CRM") technique for RWAs benefits.

Over the first half of 2023, MSI Group's gross notionals increased primarily due to index and single-name credit default swaps.

10. Securitisation

The MSI Group acts, or has historically acted, as an originator, sponsor, liquidity provider, servicer and derivative counterparty to its own originated and sponsored securitisations, as well as those of third-party securitisations. The MSI Group also acts as market maker for, and refinancer of securitised products in EMEA. The majority of the securitisation exposures in the MSI Group result from where MSI Group acts as market maker for, and refinancer of securitised products in EMEA.

The MSI Group's strategy has been to use securitisations for customer facilitation. The MSI Group has engaged in securitisation activities related to commercial and residential mortgage loans, corporate bonds and loans, and other types of financial instruments.

The MSI Group participated as a book runner or lead manager in a number of new securitisations during 2023. The MSI Group did not originate or sponsor any new securitisations in 2023.

The MSI Group employs the Securitisation Standardised Approach ("SEC-SA"), Securitisation External Ratings Based Approach ("SEC-ERBA") and Default 1250% Approach to calculate the capital on its securitisation positions. MSI Group does not apply the Securitisation Internal Ratings Based Approach ("SEC-IRBA"). The MSI Group uses ratings from three External Credit Assessment Institutions (" ECAI") : Moody's Investors Service, Standard & Poor's and Fitch across all types of exposures.

Table 19 shows the securitisation exposures and MCR within the MSI Group as at 30 June 2023.

Table 19: Securitisation exposures summary - MSI Group

$MM MSI Group	Trading book	Non-trading book
Exposures	1,099	464
MCR	328	193

Over the first half of 2023, MSI Group's securitisation exposures increased and capital requirements decreased. The decrease in capital requirements was primarily driven by an increase in the senior tranche capping benefit.

Table 20 shows securitisation exposures in the non-trading book for MSI Group as at 30 June 2023.

Table 20: Securitisation exposures in the non-trading book (UK-SEC1) - MSI Group

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
$MM		Institution acts as originator							Institution acts as sponsor				Institution acts as investor			
		Traditional				Synthetic			Traditional		Synthetic		Traditional		Synthetic	
		STS		Non-STS					STS	Non-STS			STS	Non-STS		
MSI Group[1]			of which SRT[2]		of which SRT[2]		of which SRT[2]	Sub-total				Sub-total				Sub-total
1	**Total exposures**	-	-	**28**	-	-	-	**28**	-	-	-	-	-	**436**	-	**436**
2	Retail (total)	-	-	10	-	-	-	10	-	-	-	-	-	424	-	424
3	Residential mortgage	-	-	10	-	-	-	10	-	-	-	-	-	69	-	69
4	Credit card	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Other retail exposures	-	-	-	-	-	-	-	-	-	-	-	-	355	-	355
6	Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Wholesale (total)	-	-	18	-	-	-	18	-	-	-	-	-	12	-	12
8	Loans to corporates	-	-	18	-	-	-	18	-	-	-	-	-	7	-	7
9	Commercial mortgage	-	-	-	-	-	-	-	-	-	-	-	-	5	-	5
10	Lease and receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Other wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1. No Simple, Transparent and Standardised ("STS") as at 30 June 2023.
2. No Significant Risk Transfer ("SRT") as at 30 June 2023.

The above table represents the securitisation exposures broken down on the basis of retail and wholesale non-trading book exposure where institution is acting as an originator, sponsor or investor. Currently MSI Group only has exposures acting as an originator and investor. Over the first half of 2023, MSI Group's securitisation exposures increased primarily due to retail exposure under institution acting as an investor.

Table 21 shows securitisation exposures in the trading book for MSI Group as at 30 June 2023.

Table 21: Securitisation exposures in the trading book (UK-SEC2) - MSI Group

		a	b	c	d	e	f	g	h	i	j	k	l
$MM		Institution acts as originator				Institution acts as sponsor				Institution acts as investor			
		Traditional		Synthetic		Traditional		Synthetic		Traditional		Synthetic	
MSI Group		STS	Non-STS		Sub-total	STS	Non-STS		Sub-total	STS	Non-STS		Sub-total
1	**Total exposures**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,047**	**52**	**1,099**
2	Retail (total)	-	-	-	-	-	-	-	-	-	585	52	637
3	Residential mortgage	-	-	-	-	-	-	-	-	-	541	52	593
4	Credit card	-	-	-	-	-	-	-	-	-	13	-	13
5	Other retail exposures	-	-	-	-	-	-	-	-	-	19	-	19
6	Re-securitisation	-	-	-	-	-	-	-	-	-	12	-	12
7	Wholesale (total)	-	-	-	-	-	-	-	-	-	462	-	462
8	Loans to corporates	-	-	-	-	-	-	-	-	-	313	-	313
9	Commercial mortgage	-	-	-	-	-	-	-	-	-	149	-	149
10	Lease and receivables	-	-	-	-	-	-	-	-	-	-	-	-
11	Other wholesale	-	-	-	-	-	-	-	-	-	-	-	-
12	Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-

The above table represents the securitisation exposures broken down on the basis of retail and wholesale trading book exposure where institution is acting as an originator, sponsor or investor. Currently MSI Group only has exposures acting as an Investor. Over the first half of 2023, MSI Group's securitisation exposures increased due to higher wholesale and retail exposures.

Table 22 shows the securitisation positions broken down by SEC-SA capital approach and risk weight band within the MSI Group as at 30 June 2023.

Table 22: Securitisation exposures and capital requirements by standardised approach (SEC-SA) - MSI Group

$MM MSI Group	Trading book exposure	Non-trading book exposure	Trading book MCR	Non-trading book MCR
Investor securitisations by risk weight				
>10% <=20%	247	-	3	-
>20%<=50%	-	-	-	-
Total	**247**	**-**	**3**	**-**

1. No STS as at 30 June 2023.

Over the first half of 2023, trading book exposures and capital requirements increased due to new SEC-SA positions in the 10% to 20% risk weight banding.

Table 23 shows the securitisation positions broken down by SEC-ERBA capital approach and risk weights band within the MSI Group as at 30 June 2023.

Table 23: Securitisation exposures and capital requirements by external ratings approach (SEC-ERBA)

$MM MSI Group[1]	Trading book exposure	Non-trading book exposure	Trading book MCR	Non-trading book MCR
Investor securitisations by risk weight				
<=10%	-	-	-	-
>10% <=20%	105	-	1	-
>20% <=50%	46	48	1	2
>50% <= 100%	115	7	6	0
>100% <=650%	185	99	41	44
>650% <1250%	109	-	68	-
1250%	18	17	18	17
Originator securitisations by risk weight				
<=10%	-	-	-	-
>10% <=20%	-	-	-	-
>20% <=50%	-	-	-	-
>50% <= 100%	-	25	-	2
>100% <=650%	-	3	-	0
>650% <1250%	-	-	-	-
1250%	-	-	-	-
Total	**578**	**199**	**135**	**65**

1. No STS as at 30 June 2023.

Over the first half of 2023, trading book exposures increased primarily in the 50-100% risk weight band due to new and upsized SEC-ERBA positions. Trading book capital requirements decreased due to sold and downsized SEC-ERBA positions in the >100% to < 1250% risk weight bandings.

Table 24 shows the securitisation positions broken down by Default 1250% (Risk Weight) capital approach within the MSI Group as at 30 June 2023.

Table 24: Securitisation exposures and capital requirements by default approach (1250% Risk Weight) - MSI Group

$MM MSI Group	Trading book exposure	Non-trading book exposure	Trading book MCR	Non-trading book MCR
Investor securitisations	262	265	178	128
Originator securitisations	-	-	-	-
Investor re-securitisations	12	-	12	-
Originator re-securitisations	-	-	-	-
Total	**274**	**265**	**190**	**128**

Over the first half of 2023, across investor securitisations requiring 1250% capital approach , trading book exposures and capital requirements decreased due to downsized positions; non-trading book exposures and capital requirements increased due to upsized positions.

Table 25 shows securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as an originator or sponsor for MSI Group as at 30 June 2023.

Table 25: Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor (UK-SEC3) - MSI Group

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	$MM	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWAs (by regulatory approach)				Capital charge after cap			
	MSI Group	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% / deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% / deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250% / deductions
1	**Total exposures**	**-**	**-**	**25**	**3**	**-**	**-**	**28**	**-**	**-**	**-**	**25**	**-**	**-**	**-**	**2**	**-**	**-**
2	Traditional transactions	-	-	25	3	-	-	28	-	-	-	25	-	-	-	2	-	-
3	Securitisation	-	-	25	3	-	-	28	-	-	-	25	-	-	-	2	-	-
4	Retail underlying	-	-	7	3	-	-	10	-	-	-	11	-	-	-	1	-	-
5	Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Wholesale	-	-	18	-	-	-	18	-	-	-	14	-	-	-	1	-	-
7	Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Synthetic transactions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Currently only the SEC-ERBA regulatory approach is applied to the exposures. Over the first half of 2023, there were no material movements.

Table 26 shows securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor for MSI Group as at 30 June 2023.

Table 26: Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor (UK-SEC4) - MSI Group

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
$MM		Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWAs (by regulatory approach)				Capital charge after cap			
MSI Group		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions
1	**Total exposures**	**-**	**48**	**156**	**99**	**133**	**-**	**171**	**-**	**265**	**-**	**786**	**-**	**1,601**	**-**	**63**	**-**	**128**
2	Traditional securitisation	-	48	156	99	133	-	171	-	265	-	786	-	1,601	-	63	-	128
3	Securitisation	-	48	156	99	133	-	171	-	265	-	786	-	1,601	-	63	-	128
4	Retail underlying	-	48	149	99	128	-	164	-	260	-	780	-	1,543	-	63	-	123
5	Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Wholesale	-	-	7	-	5	-	7	-	5	-	6	-	58	-	0	-	5
7	Of which STS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Synthetic securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Retail underlying	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Wholesale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Re-securitisation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

The above table represents the securitisation exposures broken down by traditional and synthetic non-trading book exposure on basis of regulatory approaches & risk weight banding where institution is acting as Investor. Over the first half of 2023, MSI Group's RWAs decreased due to traditional transactions.

Table 27 shows Exposures securitised by the institution - Exposures in default and specific credit risk adjustments for MSI Group as at 30 June 2023.

Table 27: Exposures securitised by the institution - Exposures in default and specific credit risk adjustments (UK-SEC5) - MSI Group

		a	b	c
		Exposures securitised by the institution - Institution acts as originator or as sponsor		
$MM		Total outstanding nominal amount		Total amount of specific credit risk adjustments made during the period
MSI Group			Of which exposures in default	
1	**Total exposures**	**28**	**-**	**-**
2	Retail (total)	10	-	-
3	Residential mortgage	10	-	-
4	Credit card	-	-	-
5	Other retail exposures	-	-	-
6	Re-securitisation	-	-	-
7	Wholesale (total)	18	-	-
8	Loans to corporates	18	-	-
9	Commercial mortgage	-	-	-
10	Lease and receivables	-	-	-
11	Other wholesale	-	-	-
12	Re-securitisation	-	-	-

Currently, the MSI Group only has exposures acting as an originator. There were no exposures in default as at 30 June 2023. Over the first half of 2023, there were no material movements.

The MSI Group may retain interests in the securitised financial assets of one or more tranches of the securitisation. These retained interests are included at fair value. Any changes in the fair value of such retained interests are recognised through the profit and loss of the entity holding such interests.

The credit risk of the MSI Group's securitisations is controlled by actively monitoring and managing the associated credit exposures. The MSI Group evaluates collateral quality, credit subordination levels and structural characteristics of securitisation transactions at inception and on an ongoing basis, and manages exposures against internal limits.

The MSI Group follows a set of rigorous procedures for risk managing market risk on securitised products, evolving them with changes in market conditions:

- The MSI Group conducts an assessment of risk limits at least once a year, and more often if required. Market conditions, collateral quality, liquidity and downside risk are important factors for setting market risk limits;
- The MSI Group measures downside risk using various metrics, such as Value at Risk ("VaR") and scenarios analysis, differentiating products based on collateral, seniority and liquidity.

11. Market Risk

Market risk refers to the risk that a change in the level of one or more market prices, rates, indices, implied volatilities, correlations or other market factors, such as market liquidity, will result in losses for a position or portfolio.

The MSI Group manages the market risk associated with its trading activities at a division, business area and individual product level, and includes consideration of market risk at the legal entity level.

Sound market risk management is an integral part of the Morgan Stanley Group culture. The MSI Group is responsible for ensuring that market risk exposures are well-managed and monitored. The MSI Group Market Risk Department ("MRD") is responsible for ensuring transparency of material market risks, monitors compliance with established limits, and escalates risk concentrations to appropriate senior management. MRD is an independent risk oversight group headed by the EMEA Head of Market Risk, who reports directly to both the EMEA Chief Risk Officer and the Global Head of Market Risk.

To execute these responsibilities, MRD monitors the market risk against limits on aggregate risk exposures and performs a variety of risk analysis. Aggregate market risk limits have been approved for MSI Group in line with the risk appetite set by the MSI Board. Additional market risk limits are assigned, as appropriate, to trading desks, products and/or regions and are commensurate with the aggregate limits. MRD monitors market risk measures against limits in accordance with policies set by the MSI Board and senior management. Risk analysis includes monitoring VaR, stress testing and scenario analyses, routine reporting of risk exposures, and maintenance of the VaR and scenario analysis methodologies. The material risks identified by these processes are summarised and reported to senior management.

An IMA permission has been granted by the PRA for MSIP and MSESE Consol, for use within the MSI Group on an aggregation plus basis. IMA Models are applied consistently across all sub-portfolios; with the population in scope defined according to permission criteria. Models are independently reviewed on an annual basis by Model Risk Management ("MRM"), and changes to methodologies are approved by the Model Oversight Committee. The model validation process is independent of the Internal Models' development, implementation, and operation. The validation process includes tests of the model's sensitivity to key inputs and assumptions and evaluation of conceptual soundness.

The market risk management policies and procedures for the MSI Group are consistent with those of the Morgan Stanley Group and include escalation to the MSI Board and appropriate management personnel.

Risk Mitigation Policies

The MSI Group 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). Hedging activities may not always provide effective mitigation against trading losses due to differences in the terms, specific characteristics or other basis risks that may exist between the hedge instrument and the risk exposure that is being hedged.

The MSI Group manages and monitors its market risk exposures, including outright and basis risks, in such a way as to maintain a portfolio that the MSI Group believes is well-diversified in the aggregate with respect to market risk factors, and that reflects the MSI Group's aggregate risk tolerance as established by the MSI Group senior management. The effectiveness of hedges and mitigants is monitored using processes such as risk and limit reporting.

Data Quality

MRD has a data quality control process to monitor, validate, remediate, escalate, and report data quality issues that impact market risk and capital reporting. The Market Risk Middle Office team is responsible for coordinating data quality control with the aim of providing MRD with high quality data that is accurate, complete, and delivered in a timely manner. Threshold based checks are performed on input data for IMA models. Large moves are validated, and data adjustments are made where necessary, along with the appropriate escalation to ensure ongoing remediation. Completeness, accuracy, and timeliness key performance indicators for market risk metrics are reported to the senior management risk committees.

11.1 Value at Risk

The MSI Group uses the statistical technique known as VaR as one of the tools used to measure, monitor, and review the market risk exposures of its trading portfolios. MRD calculates and distributes daily VaR-based risk measures to various levels of management.

VaR Methodology, Assumptions and Limitations

The MSI Group calculates VaR using a model based on historical simulation for general market risk factors and for name-specific equity risk and on Monte Carlo simulation for name-specific risk in bonds, loans, and related derivatives. Market risk factors' daily moves are modelled either as absolute changes or relative changes, dependent on the most suitable stochastic process (normal or lognormal diffusion process) to describe the daily risk factor changes. The model constructs a distribution of hypothetical daily changes in the value of trading portfolios based on historical observation of daily changes in key market indices or other market risk factors, and information on the sensitivity of the portfolio values to these market risk factor changes.

The methodology for VaR at Morgan Stanley Group is 1-year historical simulation. The risk exposures used for the daily VaR calculation are based on greeks and full-revaluation grids, and simulations cover both systematic and specific risk components. The total simulated profit and loss of a given position for each simulation date in the historical window is calculated taking into account both systematic and specific risk components of the market factor moves. The final profit and loss distribution is a result of profit and losses of all risk factors and all positions being aggregated. The time series data is updated on a weekly basis, with the exception of idiosyncratic risk factors which are updated quarterly. The same valuation and aggregation approach is used for Stressed Value at Risk (“SVaR”).

A set of internal processes and controls ensure that all relevant trading positions booked by the MSI Group are included in VaR. The MSI Group’s 99%/one-day VaR corresponds to the unrealised loss in portfolio value that, based on historically observed market risk factor movements, would have been exceeded with a frequency of 1%, or once every 100 trading days, if the portfolio were held constant for one day. The 99th percentile is computed and is scaled by the square root of 10 to arrive at a 10-day VaR for regulatory purposes. The 95th percentile 1-day VaR is used by MRD internally to manage risk and to base the legal entity VaR limits on.

The MSI Group uses VaR as one of a range of risk management tools. Among their benefits, VaR models permit estimation of a portfolio’s aggregate market risk exposure, incorporating a range of market risks and portfolio assets. One key element of the VaR model is that it reflects portfolio diversification or hedging activities. However VaR has various limitations which include but are not limited to: use of historical changes in market risk factors, which may not be accurate predictors of future market conditions, and may not fully incorporate the risk of extreme market events that are outsized relative to observed historical market behaviour or reflect the historical distribution of results beyond the 99% confidence interval; and reporting of losses in a single day, which does not reflect the risk of positions that cannot be liquidated or hedged in one day. The modelling of the risk characteristics of some positions relies on approximations that, under certain circumstances, could produce significantly different results from those produced using more precise measures. VaR is most appropriate as a risk measure for trading positions in liquid financial markets and will understate the risk associated with severe events such as periods of extreme illiquidity.

The MSI Group is aware of these and other limitations and therefore uses VaR as only one component in its risk management oversight process. This process also incorporates stress testing and scenario analysis and extensive risk monitoring, analysis, quantification of risk not captured in VaR, and control at the trading desk, division and the MSI Group levels.

The MSI Group is committed to continuous review and enhancement of VaR methodologies and assumptions in order to capture evolving risks associated with changes in market structure and dynamics. As part of regular process improvement, additional systematic and name-specific risk factors may be added to improve the VaR model’s ability to estimate risks more accurately for specific asset classes or industry sectors.

Since the reported VaR statistics are estimates based on historical data, VaR should not be viewed as predictive of the MSI Group’s future revenues or financial performance or of its ability to manage risk. There can be no assurance that the MSI Group’s actual losses on a particular day will not exceed the VaR amounts indicated below or that such losses will not occur more than once in 100 trading days. VaR does not predict the magnitude of losses which, should they occur, may be significantly greater than the VaR amount.

VaR statistics are not readily comparable across firms because of differences in the firms’ portfolios, modelling assumptions and methodologies. These differences can result in materially different VaR estimates across firms for similar portfolios. The impact of such differences varies depending on the factor history assumptions, the frequency with which the factor history is updated and the confidence level. As a result, VaR statistics are more useful when interpreted as indicators of trends in a firm's risk profile rather than as an absolute measure of risk to be compared across firms.

11.2 Market Risk Capital Requirements

The market risk capital requirements of the MSI Group comprises of capital which is calculated using IMA in accordance with regulatory approved models and of capital which is calculated under the SA.

Standardised Approach

Table 28 shows the market risk RWAs for the MSI Group as at 30 June 2023, calculated in accordance with the SA and categorised by component type.

Table 28: Market risk under the standardised approach (UK MR1) - MSI Group

$MM		a
MSI Group		RWAs
	Outright products	
1	Interest rate risk (general and specific)	2,969
2	Equity risk (general and specific)	4
3	Foreign exchange risk	7,805
4	Commodity risk	819
	Options	
5	Simplified approach	-
6	Delta-plus method	955
7	Scenario approach	-
8	Securitisation (specific risk)	4,105
9	**Total**	**16,657**

Over the first half of 2023, MSI Group's capital requirements under the standardised approach increased, driven by foreign exchange risk due to higher EUR exposure.

IMA Approach

The VaR-based capital and the SVaR-based capital are determined by the higher of the 60-day average of the 10-day VaR/10-day SVaR numbers, multiplied by the regulatory internal model multiplication factor as prescribed by the PRA, and the 10-day VaR/10-day SVaR for the relevant day. The Incremental Risk Charge ("IRC") and Comprehensive Risk Measure ("CRMe") charges are determined by the higher of the average of the latest 12 weeks IRC/CRMe and the IRC/ CRMe charge for the relevant day.

Table 29 shows the VaR and SVaR, as well as the IRC and CRMe measures for the MSI Group, as at 30 June 2023. The VaR and SVaR capital measures presented in Table 30 is based on the 60-day averages, as they were higher than the daily measures as at 30 June 2023.

Table 29 : Market risk under Internal Model Approach (UK MR2-A) - MSI Group

$MM		a	b
MSI Group		RWAs	Own funds requirements
1	**VaR (higher of values a and b)**	**7,532**	**603**
(a)	Previous day's VaR (VaR t-1)	2,757	221
(b)	Multiplication factor (mc) x average of previous 60 working days (VaRavg)	7,532	603
2	**SVaR (higher of values a and b)**	**12,980**	**1,038**
(a)	Latest available SVaR (SVaRt-1)	3,681	294
(b)	Multiplication factor (ms) x average of previous 60 working days (sVaRavg)	12,980	1,038
3	**IRC (higher of values a and b)**	**6,266**	**501**
(a)	Most recent IRC measure	6,266	501
(b)	12 weeks average IRC measure	6,025	482
4	**CRMe (higher of values a, b and c)**	**-**	**-**
(a)	Most recent risk measure of comprehensive risk measure	-	-
(b)	12 weeks average of comprehensive risk measure	-	-
(c)	Comprehensive risk measure Floor	-	-
5	**Other**	**21,945**	**1,756**
6	**Total**	**48,723**	**3,898**

Over the first half of 2023, MSI Group's market risk RWAs under IMA approach decreased due to lower SVaR and RNIV RWAs, partially offset by an increase in IRC RWAs.

Table 30 summarises the key drivers of RWAs/TOFR for MSI Group and MSIP's market risk exposures under the IMA.

Table 30 : RWA flow statements of market risk exposures under the IMA (EU MR2-B)

$MM		a	b	c	d	e	f	g
MSI Group		**VaR**	**SVaR**	**IRC**	**Comprehensive risk measure**	**Other[4]**	**Total RWAs**	**TOFR**
1	**RWAs at previous period end[1]**	**8,217**	**14,151**	**6,384**	**0**	**20,710**	**49,462**	**3,957**
1a	Regulatory adjustment[2]	(5,323)	(8,982)	(2,400)	-	(10,124)	(26,829)	(2,146)
1b	RWAs at the previous quarter-end (end of the day)	2,894	5,169	3,984	0	10,586	22,633	1,811
2	Movement in risk levels	(93)	(1,584)	2,285	0	(2,272)	(1,664)	(132)
3	Model updates/changes	-	-	-	-	(58)	(58)	(5)
4	Methodology and policy	-	-	-	-	-	-	-
5	Acquisitions and disposals	-	-	-	-	-	-	-
6	Foreign exchange movements	(2)	2	(4)	-	10	6	0
7	Other[3]	(42)	94	1	-	(1,247)	(1,194)	(96)
8a	RWAs at the end of the disclosure period (end of the day)	2,757	3,681	6,266	-	7,019	19,723	1,578
8b	Regulatory adjustment[2]	4,775	9,299	-	-	14,926	29,000	2,320
8	**RWAs at the end of the disclosure period**	**7,532**	**12,980**	**6,266**	**-**	**21,945**	**48,723**	**3,898**
MSIP								
1	**RWAs at previous period end[1]**	**6,999**	**10,970**	**5,167**	**0**	**16,953**	**40,089**	**3,207**
1a	Regulatory adjustment[2]	(4,551)	(6,890)	(2,151)	-	(8,164)	(21,756)	(1,740)
1b	RWAs at the previous quarter-end (end of the day)	2,448	4,080	3,016	0	8,789	18,333	1,467
2	Movement in risk levels	(73)	(1,390)	1,634	0	(2,714)	(2,543)	(203)
3	Model updates/changes	-	-	-	-	(56)	(56)	(5)
4	Methodology and policy	-	-	-	-	-	-	-
5	Acquisitions and disposals	-	-	-	-	-	-	-
6	Foreign exchange movements	-	-	-	-	-	-	-
7	Other[3]	(28)	90	0	-	(383)	(321)	(26)
8a	RWAs at the end of the disclosure period (end of the day)	2,347	2,780	4,650	-	5,636	15,413	1,233
8b	Regulatory adjustment[2]	4,021	7,410	-	-	12,968	24,399	1,952
8	**RWAs at the end of the disclosure period**	**6,368**	**10,190**	**4,650**	**-**	**18,604**	**39,812**	**3,185**

1. Previous reporting period was Q1'23.
2. Regulatory adjustments accounts for the difference between the RWAs calculated based on the end-of-day position, compared with the RWAs calculated based on the 60-day average position in the case of VaR / SVaR and 12-week average position in the case of IRC and CRMe. The regulatory adjustments also account for the multiplication factors (mc) and (ms), per Article 366 of the CRR, for the VaR, SVaR and Other respectively.
3. Other (flow driver) represents low impact data and implementation changes including time series updates and periodic parameter updates to the respective models.
4. Other (risk measure) represents Risks Not in VaR ("RNIV").

Over the second quarter of 2023, modelled market risk RWAs decreased for MSI Group. There was a reduction in VaR and SVaR-based RWAs driven by risk profile changes that was partially offset by an increase in RNIV based RWAs.

Table 31 provides a summary of the maximum, minimum, average, and period-end values over the six months to 30 June 2023, for the MSI Group, resulting from the different models approved to be used for computing the regulatory capital charge.

Table 31 : IMA values for trading portfolios (UK MR3) - MSI Group

$MM		a
MSI Group[1]		
VaR (10 day 99%)		
1	Maximum value	272
2	Average value	205
3	Minimum value	140
4	Period end	221
	SVaR (10 day 99%)	
5	Maximum value	451
6	Average value	353
7	Minimum value	285
8	Period end	294
	IRC (99.9%)	
9	Maximum value	763
10	Average value	457
11	Minimum value	289
12	Period end	501
	Comprehensive risk measure (99.9%)	
13	Maximum value	0
14	Average value	0
15	Minimum value	-
16	Period end	-

1. UK MR3 table excludes RNIVs from the VaR and sVaR calculations. RNIVs (including VaR-based and scenario-based charges) are aggregated into the 'Other' category, shown in table UK MR2-B.

Over the first half of 2023, MSI Group's VaR, SVaR and IRC movements were primarily attributable to changes in the fixed income risk profile.

11.3 Positions Included in the Trading Book

The MSI Group has a comprehensive framework of policies, controls and reporting to meet the requirements of the CRR for inclusion of positions in the Trading Book. The underlying policies, controls and reporting mechanisms cover a range of different aspects including Trading Intent, Valuation, Liquidity, Restrictions, Hedgeability, Active Management and transfers between the Trading and Non-Trading Books. Governance is provided by the firm's Banking/Trading Committee whose role with respect to the banking/trading boundary is to oversee the determination of the banking/ trading/covered position designation in accordance with regulatory requirements. The committee acts as the adjudication forum for any positions where the appropriate banking/trading/covered position designation is unclear. The Banking/Trading Committee reports to the firm's Basel Capital Steering Committee.

The Trading Book comprises financial instruments that are: held for trading intent or intent to hedge a trading position; free from restrictive covenants on tradability or for which the material risk elements can be hedged in a two-way market; frequently/accurately valued and actively managed on a trading desk. If a position fails to meet the Trading Book criteria, it will be classified as Non-Trading Book.

Trading Book positions are subject to market risk-based rules, with market risk capital requirements calculated using regulatory approved internal models or a non-modelled standardised approaches.

The firm methodology for determining Non-Trading Book versus Trading Book classification is documented within the firm's Trading Book, Banking Book and Covered Positions Boundary Policy. The policy outlines criteria for identifying and classifying trading book positions for the purpose of regulatory capital and market risk measurement and sets out associated roles and responsibilities across the business unit, finance, and other stakeholder groups. This policy is subject to annual review and sign-off.

A firm-wide framework establishes controls around initial Banking/Trading classification as well as ongoing monitoring to ensure the initial classification remains appropriate over time.

11.4 Backtesting

MSI Group performs regulatory backtesting for MSIP and MSESE Consol on a daily basis at various levels of the business hierarchy to validate the accuracy of the VaR model. Backtesting is performed against the VaR model in accordance with requirements under the regulation, and per the firm's Backtesting Policy and Procedures. As at 30 June 2023, 75% of total MSI Group market risk capital requirements are covered by the internal models. VaR represents a subset of total model-based market risk capital requirements.

Backtesting compares the profit and loss for trade date T against the 99%/one-day Regulatory Trading VaR for T-1. As per the requirements of the CRR rules, backtesting uses "actual" and "hypothetical" definitions of the profit and loss. Backtesting on hypothetical changes in the portfolio's value refers to a comparison between the portfolio's end-of-day value and, assuming unchanged positions, its value at the end of the subsequent day. Backtesting on actual changes in the portfolio's value refers to a comparison between the portfolio's end-of-day value and its actual value at the end of the subsequent day (i.e., inclusive of intra-day trading/new activity). Both measures of the backtesting profit and loss exclude non risk-based fees (i.e., service fees), commissions, and NII. For the purposes of the regulatory backtest, actual profit and loss incorporates liquidity and model-driven fair value adjustments whilst hypothetical profit and loss retains only the latter.

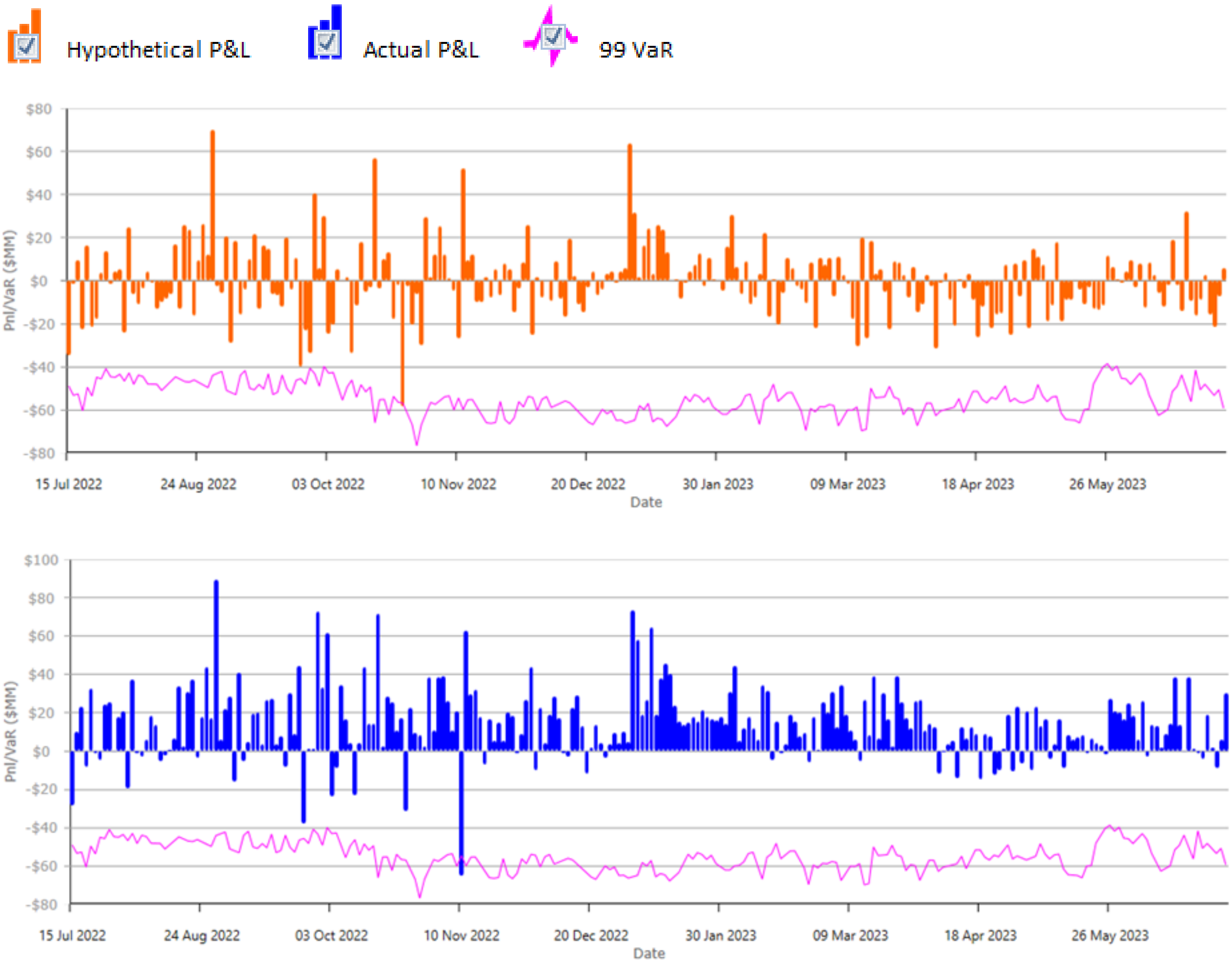
Performance is measured across a rolling 250 business day period and is expressed by the number of exceptions observed (instances where MSIP or MSESE Consol, actual or hypothetical, losses exceed 99% VaR). These exceptions are reported to the regulator. Firms observing five or more exceptions within the measurement period are required to set aside additional market risk capital based on a sliding scale.

Backtesting results are reported, analysed, and discussed by the MSI Group Market Risk Backtesting Review Forum. Findings or recommendations from this forum are escalated to Model Oversight and Risk Committees, who are responsible for authorising any further model analysis or model remediation efforts. The results of backtesting and model performance monitoring are also reported to the regulator on a periodic basis.

The plots of actual and hypothetical profit and loss, covering 250 business days of MSIP backtesting monitoring to 30 June 2023 are displayed below:

Figure 1: Comparison of VaR Estimates with Gains/Losses - MSIP (UK MR4)

The graphs below show the 1 day Regulatory Trading VaR against actual and hypothetical profit and loss for MSIP, values in millions of dollars:

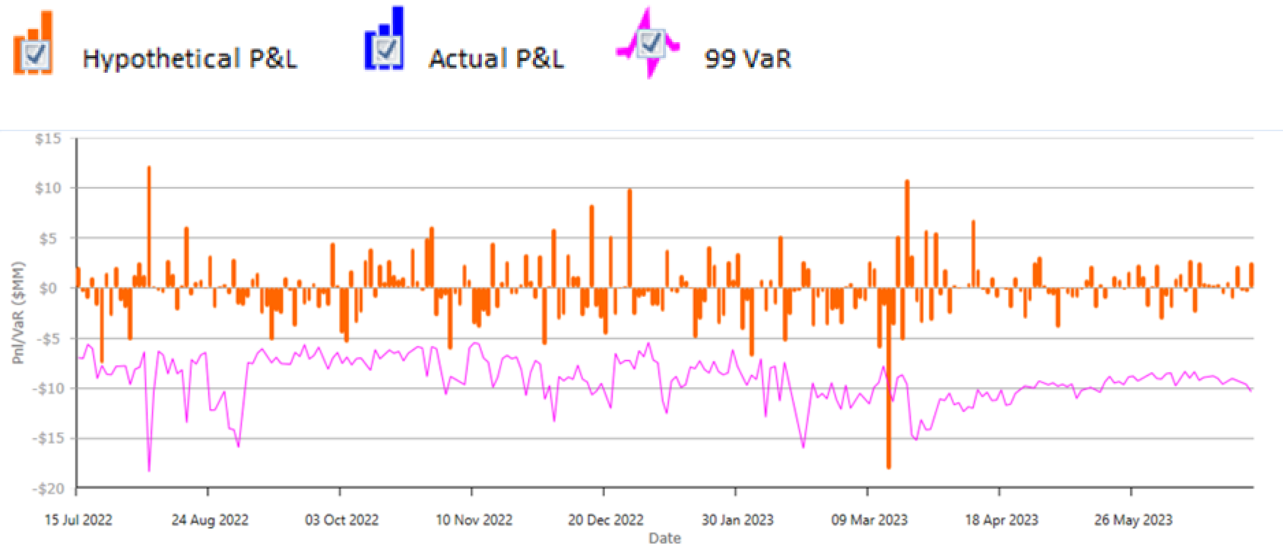


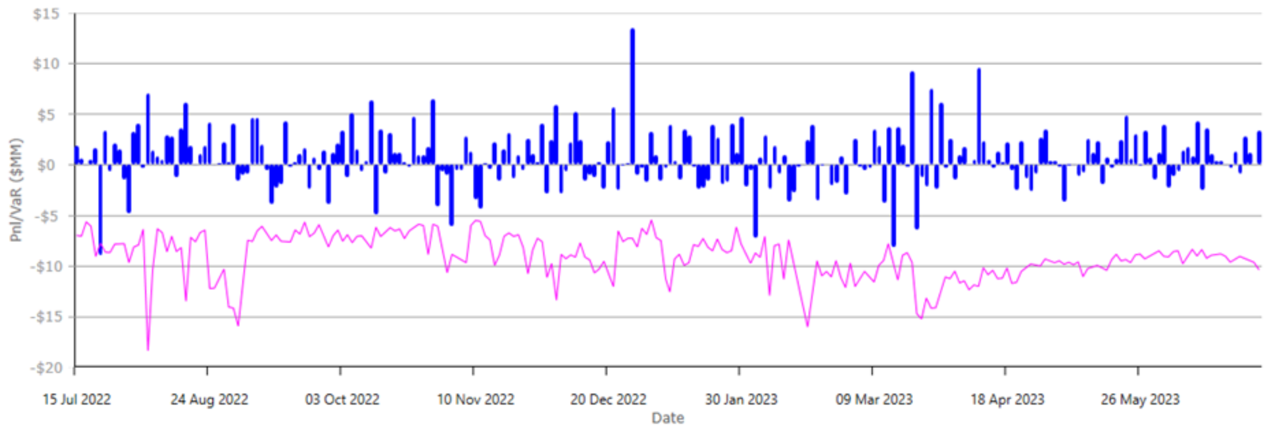
For the measurement period ended 30 June 2023, one hypothetical and one actual profit and loss exception was observed for MSIP which equates to the Green zone for capital multiplier addend purposes (less than five exceptions). The analysis of the October 2022 hypothetical only exception concluded that this was primarily driven by significant directional market moves in risk factors that were captured in the VaR model with sufficient granularity. The November 2022 actual only exception was driven by intraday volatility outside the scope of the internal model.

The plots of actual and hypothetical profit and loss, covering 250 business days of MSESE Consol backtesting monitoring to 30 June 2023, are displayed below:

Figure 2: Comparison of VaR Estimates with Gains/Losses – MSESE Consol (EU MR4)

The graphs below show the 1 day Regulatory Trading VaR against actual and hypothetical profit and loss for MSESE Consol, values in millions of dollars:





For the measurement period ended 30 June 2023, one hypothetical and one actual profit and loss exception was observed for MSESE Consol which equates to the Green zone for capital multiplier addend purposes (less than five exceptions). The analysis of the July 2022 actual only exception concluded that this was driven by intraday P&L outside the scope of the internal model. The March 2023 hypothetical only exception was driven by elevated market moves in risk factors that were captured in the VaR model with sufficient granularity.

11.5 Stressed VaR

SVaR uses the same underlying models as VaR to produce a 1-day 99% VaR constructed over a 1-year period of stress. SVaR uses historical simulations for the general market risk factors and for name-specific risk in corporate shares, and Monte Carlo simulation for name specific risk in bonds, loans, and related derivatives. The SVaR model is agreed and approved by the PRA for use in regulatory calculations. Stressed 10-day VaR is constructed by scaling the Stressed 1-day VaR.

The SVaR window for regulatory calculations is periodically set as the 1-year Unadjusted VaR window since the start of 2 January 2006 that generates the largest financial stress to the Bank's portfolio as measured by the resulting VaR.

11.6 Incremental Risk Charge

The IRC covers possible losses arising from correlated credit rating migration events and potentially joint default events for credit products in MSI Group's Trading Book portfolio. The model is applied to instruments with credit-like characteristics referencing corporate, sovereign, regional, supranational and agency obligors that are approved for specific risk treatment; this excludes securitisations and correlation trading products as these are capitalised separately. The model captures basis risks between credit derivatives and underlying reference instruments, maturity mismatches, regional and industry concentration risks, and simulates stochastic recovery rates.

The underlying model is based on a Merton style default modelling with a correlation structure between regions and industries that is calibrated to market implied default probabilities, and that uses through the cycle, historical transition matrices for rating migrations. The IRC model applies a constant level of risk with varying liquidity horizons of 3, 6 or 12 months reflective of underlying market liquidity and position concentrations in individual issuers.

MSI Group monitors various IRC model sensitivities and assumptions, including concentration sensitivities across industry, region, rating and security type, sensitivity to the "constant level of risk" assumption, and conservatism of stochastic loss given default.

11.7 Comprehensive Risk Measure

The CRMe covers possible losses in the Correlation Trading Portfolio ("CTP") arising from moves in credit spreads, base correlations, expected recovery, and basis risks including index versus single name, as well as defaults with stochastic recovery rates. The model is applied to correlation trading positions and their hedges, and assumes a constant level of risk and a fixed liquidity horizon of 6 months given underlying market liquidity and the MSI Group CTP inventory.

CRMe applies Monte Carlo simulations to a Merton style default modelling and separate but correlated multifactor processes for the modelled market risk factors. Profits and losses are calculated using the simulated market movement in the model calculated based on their time to expiry at the calculation date.

Market variables, including correlations, are calibrated to historical data, and parameters of the default process are the same as those used in the IRC model. Base correlation curves are calibrated using hazard rates with an assumption of constant LGD.

MSI Group monitors the accuracy and consistency of the CRMe model via a review of the explanatory power and completeness of the core market risk factors set, and both supervisory and internally defined market stress scenarios.

11.8 Stress Testing

The MSI Group has a comprehensive and dynamic Stress testing framework incorporating deterministic group-wide Macroeconomic and Climate Risk Stress tests, business area single and multi-factor scenarios, and reverse stress testing scenarios. Stress testing is one of the MSI Group's principal risk management tools used to identify and assess the impact of severe stresses on its portfolios. It complements other risk metrics by providing an assessment of MSI Group's resilience under stress scenarios over a range of severities. Stress testing methodologies are applied consistently across all sub-portfolios according to the MSI Group Stress Testing Procedure, which applies to the MSI Group.

In addition to helping the MSI Group understand the risks it is exposed and/or vulnerable to under a range of scenarios, Stress testing is also used by the MSI Board to set the boundary for risk taking within the loss capacity of the MSI Group.

12. Interest Rate Risk in the Banking Book

Interest Rate Risk in the Banking Book (“IRRBB”) is defined as the risk of losses arising from adverse changes in the interest rate curves within the defined Banking Book population.

The MSI Group is exposed to interest rate risk primarily through the Trading Book which is captured in VaR. The MSI Group has IRRBB primarily arising from MSI Group’s funding and liquidity management. The interest rate risk is measured on a daily basis through firmwide risk systems, except for the risks on internal funding positions which are measured on a quarterly basis. The IRRBB risk is mitigated by Treasury executing financial products to manage liquidity, funding and capital, including: cash, repo and reverse repo and interest rate derivatives.

The Economic Value of Equity (“EVE”) sensitivity measures the present value of cash flows assuming a static current balance sheet over the life of underlying assets and liabilities while factoring in any embedded optionality. The sensitivity is measured using proprietary Position Valuation and Risk Models (“PVRM”) in the Front Office Technology systems where the positions are captured and monitored using the Sensitivity of the Present Value to a 1 basis point move of the underlying interest rate (“PV01”) interest rate delta sensitivity.

The Net Interest Income ("NII") sensitivity measures the potential loss on NII due to a predefined market rate stress event on a certain time horizon. Quantitative Risk Management ("QRM"), an external application, is used to measure and monitor the NII sensitivity of the MSI Group's Banking Book.

Table 32 shows the changes in the EVE and NII using the regulatory defined scenarios that impact the level and shape of the yield curve.

Table 32: Quantitative information on IRRBB (UK IRRBB1) - MSI Group

$MM		ΔEVE		ΔNII		Tier 1 capital	
Period							
MSI Group		T[2]	T-1[2]	T	T-1	T	T-1
010	Parallel shock up	34	27	702	673		
020	Parallel shock down	(68)	(57)	(688)	(658)		
030	Steepener shock	14	8				
040	Flattener shock	(32)	(31)				
050	Short rates shock up	(9)	(11)				
060	Short rates shock down	(11)	(13)				
070	**Maximum[1]**	(68)	(57)	(688)	(658)		
080	**Tier 1 capital**					**28,850**	**27,338**

1. The maximum value for EVE is determined as the largest loss observed across the scenarios.
2.“T” date refers to 30 June 2023. “T-1” refers to 31 December 2022.

Furthermore, there are limits on the impact to NII under a 100 basis point down shock and on the total IRRBB PV01 exposure. The down 100 basis point NII sensitivity increased from $(335)MM on 31 December 2022 to $(347)MM on 30 June 2023, mainly due to higher equity balance partially offset by hedge activity. For the same period, the total IRRBB PV01 exposure decreased slightly from a $340K of gains per 1 basis point increase in interest rate levels to $328K of gains.

13. Liquidity Risk

13.1.a Qualitative Disclosures

On 30 June 2023, the MSI Group held excess HQLA over LCR required minimum of 100% (Pillar I) as specified by the total net cash outflows amount included in Table 8.

The Firm is subject to Pillar II requirements, assessed by the PRA, for risks not covered in the LCR (Pillar I). These risks are identified by the Firm and documented in the ILAAP that is then reviewed and assessed by the PRA as part of the Liquidity Supervisory Review Process ("L-SREP"). As a result, the Firm is required to hold sufficient liquidity in the form of HQLA to meet both Pillar I and Pillar II requirements. Pillar II amounts are not disclosed in Table 8.

Main drivers of the LCR

The 12-month LCR average values have been used to analyse the main requirement's drivers.

The most significant drivers of MSI Group and MSIP's cash outflows this quarter were secured wholesale funding, unsecured wholesale funding and outflows related to derivative exposures. MSI Group and MSIP's cash inflows this quarter were primarily driven by secured lending lending which includes reverse repurchase transactions, securities borrowed and margin loan transactions.

Explanations of the Changes in the LCR over Time

The MSI Group LCR decreased from 189% to 182%, driven by increase in HQLA and increase in the net average cash outflows, driven by decrease in secured wholesale funding.

The MSIP LCR has remained flat Quarter-On-Quarter ("QoQ") at 183% as of 30 June (31 March was 183%).

Concentration of Funding Sources

The MSI Group funds itself through diverse sources. These sources may include equity capital, long-term debt, securities sold under agreements to repurchase, securities lending and lines of credit.

The MSI Group funds itself through transactions with affiliates in the Morgan Stanley Group for capital, unsecured and secured funding, and through a diverse range of counterparties in unsecured and secured funding markets.

High-level description of the composition of the institution`s liquidity buffer

HQLA primarily comprises of Level 1 assets that includes government bonds, and cash with central banks.

Derivatives Exposures and Potential Collateral Calls

MSI Group participates in global derivatives markets. In some cases, the derivative counterparties have contractual rights that require the entities to post collateral to them in the event that credit rating agencies downgrade Group's credit rating. In measuring collateral call risks, all amounts of collateral that could be required to be posted in accordance with the terms and conditions of the downgrade trigger clauses found in applicable legal agreements are considered.

The impact of potential collateral calls related to the derivative exposures is inherently uncertain and depends on various interrelated factors, such as the magnitude of the downgrade, the rating relative to peers, the rating assigned by the relevant agency pre-downgrade, individual client behaviour and future mitigating actions that could be taken. MSI Group manages the risk of potential collateral calls on the derivative positions by employing a variety of risk mitigation strategies, including modelling the impact of credit rating agency downgrades in the liquidity stress test program, monitoring historical changes in variation margin, diversifying risk exposures, hedging, managing counterparty and product risk limits and maintaining Liquidity Resources to enable the MSI Group to meet unexpected collateral calls or other potentially adverse developments.

Currency mismatch in the LCR

A portion of MSI Group's business is conducted in currencies other than the U.S. Dollars ("USD"), and changes in foreign exchange rates relative to the USD, therefore, can affect the value of non-USD net assets, revenues and expenses. Potential exposures as a result of these fluctuations in currencies are closely monitored, and strategies are adopted to reduce the impact of these fluctuations on financial performance. These strategies may include the financing of non-USD assets with direct or swap-based borrowings in the same currency and the use of currency forward contracts or the spot market in various hedging transactions related to net assets, revenues, expenses or cash flows.

13.1.b Quantitative Disclosures

The LCR quantitative disclosures, shown in Table 33 reflects the monthly average value for each quarter-end period. The figures reported in the "Total Weighted Value" column reflect the prescribed industry-wide rules and haircuts applicable to the LCR to determine the firm's eligible HQLA and cash in/outflow amounts. The figures reported in the "Total Unweighted Value" columns reflect gross values prior to the application of the LCR weights.

Table 33 : Quantitative Information of LCR (UK LIQ1) – MSI Group and MSIP

$MM		**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**
MSI Group[1]		**Total unweighted value (average)**				**Total weighted value (average)**			
UK 1a	Quarter ending on (DD Month YYY)	**30-Jun-2023**	**31-Mar-2023**	**31-Dec-2022**	**30-Sep-2022**	**30-Jun-2023**	**31-Mar-2023**	**31-Dec-2022**	**30-Sep-2022**
UK 1b	Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
High-Quality Liquid Assets									
1	Total high-quality liquid assets (HQLA)					55,988	54,640	51,890	50,606
Cash-Outflows									
2	Retail deposits and deposits from small business customers, of which:	-	-	-	-	-	-	-	-
3	*Stable deposits*	-	-	-	-	-	-	-	-
4	*Less stable deposits*	-	-	-	-	-	-	-	-
5	Unsecured wholesale funding	21,573	20,866	19,586	18,464	20,874	20,462	19,494	18,464
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*	-	-	-	-	-	-	-	-
7	*Non-operational deposits (all counterparties)*	21,102	20,451	19,201	18,073	20,403	20,047	19,109	18,073
8	*Unsecured debt*	471	415	385	391	471	415	385	391
9	Secured wholesale funding					41,296	40,445	40,754	42,623
10	Additional requirements	29,992	30,272	30,566	30,453	19,913	20,146	20,588	20,417
11	*Outflows related to derivative exposures and other collateral requirements*	24,430	24,768	24,817	24,022	18,502	18,816	19,233	19,007
12	*Outflows related to loss of funding on debt products*	-	-	-	-	-	-	-	-
13	*Credit and liquidity facilities*	5,562	5,504	5,749	6,431	1,411	1,330	1,355	1,410
14	Other contractual funding obligations	47,262	47,443	47,150	46,929	1,233	1,278	1,227	1,160
15	Other contingent funding obligations	3,870	3,789	3,857	4,278	1,894	1,850	1,883	2,067
16	**Total Cash Outflows**					**85,210**	**84,181**	**83,946**	**84,731**
Cash Inflows									
17	Secured lending (e.g., reverse repos)	232,175	230,196	224,859	220,031	38,318	38,460	39,790	41,829
18	Inflows from fully performing exposures	10,618	10,729	10,877	11,423	9,911	10,027	10,123	10,517
19	Other cash inflows	7,384	7,821	8,291	8,367	7,384	7,821	8,291	8,367
UK-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					1,214	1,323	1,299	1,295
UK-19b	(Excess inflows from a related specialised credit institution)					-	-	-	-
20	**Total Cash Inflows**	**250,177**	**248,746**	**244,027**	**239,821**	**54,399**	**54,985**	**56,905**	**59,418**
UK-20a	*Fully exempt inflows*	-	-	-	-	-	-	-	-
UK-20b	*Inflows Subject to 90% Cap*	-	-	-	-	-	-	-	-
UK-20c	*Inflows Subject to 75% Cap*	201,589	199,241	193,917	190,766	54,399	54,985	56,905	59,418
						Total Adjusted Value			
UK-21	**Liquidity Buffer**					**55,988**	**54,640**	**51,890**	**50,606**
22	**Total Net Cash Outflows**					**30,811**	**29,316**	**27,161**	**25,430**
23	**Liquidity Coverage Ratio (%)**					**182.12%**	**188.73%**	**193.54%**	**201.08%**

1. All cash inflows and outflows shown are at the full unweighted/weighted value and do not reflect the phase in of LCR requirements.

$MM		a	b	c	d	e	f	g	h
MSIP[1]		Total unweighted value (average)				Total weighted value (average)			
UK 1a	Quarter ending on (DD Month YYY)	30-Jun-2023	31-Mar-2023	31-Dec-2022	30-Sep-2022	30-Jun-2023	31-Mar-2023	31-Dec-2022	30-Sep-2022
UK 1b	Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
High-Quality Liquid Assets									
1	Total high-quality liquid assets (HQLA)					42,999	42,976	41,800	41,940
Cash-Outflows									
2	Retail deposits and deposits from small business customers, of which:	-	-	-	-	-	-	-	-
3	*Stable deposits*	-	-	-	-	-	-	-	-
4	*Less stable deposits*	-	-	-	-	-	-	-	-
5	Unsecured wholesale funding	15,295	16,090	16,565	16,716	14,596	15,686	16,473	16,716
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*	-	-	-	-	-	-	-	-
7	*Non-operational deposits (all counterparties)*	14,824	15,674	16,179	16,325	14,125	15,270	16,087	16,325
8	*Unsecured debt*	471	416	386	391	471	416	386	391
9	*Secured wholesale funding*					41,991	41,073	41,368	43,213
10	Additional requirements	22,467	22,828	22,557	21,500	16,437	16,842	16,982	16,494
11	*Outflows related to derivative exposures and other collateral requirements*	22,460	22,826	22,556	21,498	16,436	16,841	16,981	16,493
12	*Outflows related to loss of funding on debt products*	-	-	-	-	-	-	-	-
13	*Credit and liquidity facilities*	7	2	1	2	1	1	1	1
14	Other contractual funding obligations	48,275	49,349	49,513	48,851	1,199	1,235	1,180	1,120
15	Other contingent funding obligations	3,948	3,878	3,947	4,366	1,933	1,895	1,928	2,111
16	**Total Cash Outflows**					**76,156**	**76,731**	**77,931**	**79,654**
Cash Inflows									
17	Secured lending (e.g., reverse repos)	236,097	234,542	229,889	225,020	38,442	38,566	39,929	41,951
18	Inflows from fully performing exposures	9,282	9,443	9,658	10,320	8,580	8,746	8,909	9,423
19	Other cash inflows	6,662	7,114	7,614	7,778	6,662	7,114	7,613	7,778
UK-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					1,035	1,163	1,155	1,165
UK-19b	(Excess inflows from a related specialised credit institution)					-	-	-	-
20	**Total Cash Inflows**	**252,041**	**251,099**	**247,160**	**243,118**	**52,649**	**53,263**	**55,296**	**57,987**
UK-20a	*Fully exempt inflows*	-	-	-	-	-	-	-	-
UK-20b	*Inflows Subject to 90% Cap*	-	-	-	-	-	-	-	-
UK-20c	*Inflows Subject to 75% Cap*	204,099	202,188	197,466	194,251	52,649	53,263	55,296	57,987
						Total Adjusted Value			
UK-21	**Liquidity Buffer**					**42,999**	**42,976**	**41,800**	**41,940**
22	**Total Net Cash Outflows**					**23,588**	**23,583**	**22,818**	**21,866**
23	**Liquidity Coverage Ratio (%)**					**183.37%**	**182.90%**	**184.05%**	**192.72%**

1. All cash inflows and outflows shown are at the full unweighted/weighted value and do not reflect the phase in of LCR requirements.

13.1.c Net Stable Funding Ratio

The NSFR as defined by UK CRR rules, is a funding liquidity ratio that took effect as of 1 January 2022 to ensure that the institution has a stable funding structure to cover existing assets and off-balance sheet commitments. Compliance with the ratio requires that sufficient weighted liabilities and own funds – Available Stable Funding ("ASF")– are available to cover the funding requirement from weighted assets and off-balance sheet exposures – Required Stable Funding ("RSF").

MSI Group is required to comply on a daily basis with the NSFR and held a significant excess of $16.2Bn stable funding as of 30 June 2023. MSI Group maintained excess ASF, in comparison to RSF assets and off-balance sheet commitments, throughout 2Q'23.

The management of the NSFR has been embedded into MSI Group internal processes to ensure that sufficient durable liabilities to cover the RSF requirements on an ongoing basis.

The Treasury Department and applicable business units (collectively the Centralised Liquidity Management Function) have primary responsibility for evaluating, monitoring and controlling the liquidity and funding resources. The primary sources of funding arise from capital, unsecured funding and SFTs.

The primary drivers of MSI Group's NSFR RSF are inventory, margin posted, derivatives exposures and secured financing transactions (weighted based on the liquidity value of the associated collateral).

Morgan Stanley Group provides client clearing services globally for listed derivative & OTC clearing products which meet the requirements of Article 428da of the PRA rulebook and therefore reported interdependent assets and liabilities in the tables below.

The NSFR quantitative disclosures, shown in Table 34 reflects the average value of end of quarter observation over the last 4 quarters. The figures reported in the "Total Unweighted Value" columns reflect gross values prior to the application of the NSFR weights. The figures reported in the "Total Weighted Value" column reflect the prescribed, industry-wide NSFR rules to determine the ASF and RSF weighted values.

Table 34 : Quantitative Information of NSFR (UK LIQ2) – MSI Group and MSIP

		a	b	c	d	e
		Unweighted value by residual maturity				
$MM		No maturity	< 6 months	6 months to < 1 year	≥ 1year	Weighted value
MSI Group				Q2'23		
Available stable funding (ASF) Items						
1	**Capital items and instruments**	29,935	-	-	9,427	39,361
2	*Own funds*	29,935	-	-	9,427	39,361
3	*Other capital instruments*		-	-	-	-
4	Retail deposits		-	-	-	-
5	*Stable deposits*		-	-	-	-
6	*Less stable deposits*		-	-	-	-
7	Wholesale funding:		112,905	17,325	58,020	73,283
8	*Operational deposits*		-	-	-	-
9	*Other wholesale funding*		112,905	17,325	58,020	73,283
10	Interdependent liabilities		8,958	-	-	-
11	Other liabilities:	-	58,342	-	-	-
12	*NSFR derivative liabilities*	-				
13	*All other liabilities and capital instruments not included in the above categories*		58,342	-	-	-
14	**Total available stable funding (ASF)**					**112,644**
Required stable funding (RSF) items						
15	Total high-quality liquid assets (HQLA)					16,702
UK-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		-	-	-	-
16	Deposits held at other financial institutions for operational purposes		928	-	-	464
17	Performing loans and securities:		176,544	2,624	36,849	46,210
18	*Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut*		93,015	190	4	1,744
19	*Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions*		80,755	1,586	1,566	11,612
20	*Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:*		1,884	61	432	1,349
21	*With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk*		564	14	-	290
22	*Performing residential mortgages, of which:*		-	-	-	-
23	*With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk*		-	-	-	-
24	*Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products*		890	787	34,847	31,505
25	Interdependent assets		8,958	-	-	-
26	Other assets:	-	79,258	309	20,004	33,646
27	*Physical traded commodities*				30	25
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*		8,834	-	14,303	19,666
29	*NSFR derivative assets*		4,351			4,351
30	*NSFR derivative liabilities before deduction of variation margin posted*		60,243			3,012
31	*All other assets not included in the above categories*		5,830	309	5,671	6,592
32	Off-balance sheet items		2,812	159	2,451	271
33	**Total RSF**					**97,293**
34	**Net Stable Funding Ratio (%)**					**115.78%**

$MM		a	b	c	d	e
		Unweighted value by residual maturity				
		No maturity	< 6 months	6 months to < 1 year	≥ 1year	Weighted value
MSIP				Q2'23		
Available stable funding (ASF) Items						
1	**Capital items and instruments**	23,480	-	-	8,399	31,880
2	*Own funds*	23,480	-	-	8,399	31,880
3	*Other capital instruments*		-	-	-	-
4	Retail deposits		-	-	-	-
5	*Stable deposits*		-	-	-	-
6	*Less stable deposits*		-	-	-	-
7	Wholesale funding:		108,551	17,350	49,012	64,286
8	*Operational deposits*		-	-	-	-
9	*Other wholesale funding*		108,551	17,350	49,012	64,286
10	Interdependent liabilities		7,089	-	-	-
11	Other liabilities:	74	55,394	-	-	-
12	*NSFR derivative liabilities*	74				
13	*All other liabilities and capital instruments not included in the above categories*		55,394	-	-	-
14	**Total available stable funding (ASF)**					96,166
Required stable funding (RSF) items						
15	Total high-quality liquid assets (HQLA)					16,597
UK-15a	Assets encumbered for a residual maturity of one year or more in a cover pool		-	-	-	-
16	Deposits held at other financial institutions for operational purposes		661	-	-	330
17	Performing loans and securities:		180,065	2,341	35,971	45,115
18	*Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut*		96,002	190	4	1,605
19	*Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions*		81,435	1,336	1,565	11,501
20	*Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:*		1,796	56	162	1,074
21	*With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk*		476	9		244
22	*Performing residential mortgages, of which:*		-	-	-	-
23	*With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk*		-	-	-	-
24	*Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products*		832	759	34,240	30,935
25	Interdependent assets		7,089	-	-	-
26	Other assets:	-	62,113	293	14,180	25,141
27	*Physical traded commodities*				30	25
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*		8,631	-	11,704	17,285
29	*NSFR derivative assets*		2,776			2,776
30	*NSFR derivative liabilities before deduction of variation margin posted*		46,511			2,326
31	*All other assets not included in the above categories*		4,195	293	2,446	2,729
32	Off-balance sheet items		11	-	-	1
33	**Total RSF**					**87,184**
34	**Net Stable Funding Ratio (%)**					**110.29%**

14. Appendix I: Own Funds Disclosure Template

Table 35 shows the composition of regulatory own funds for the MSI Group and MSIP as at 30 June 2023.

Table 35 : Composition of regulatory own funds (UK CC1)- MSI Group and MSIP

$MM		a	b
MSI Group		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
	Common Equity Tier 1 (CET1) capital: instruments and reserves		
1	Capital instruments and the related share premium accounts	3,416	A
	of which: Instrument type 1		
	of which: Instrument type 2		
	of which: Instrument type 3		
2	Retained earnings	17,267	B
3	Accumulated other comprehensive income (and other reserves)	6,322	C
UK-3a	Funds for general banking risk	-	
4	Amount of qualifying items referred to in Article 484 (3) CRR and the related share premium accounts subject to phase out from CET1	-	
5	Minority interests (amount allowed in consolidated CET1)	-	
UK-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	-	D
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**27,005**	
	Common Equity Tier 1 (CET1) capital: regulatory adjustments		
7	Additional value adjustments (negative amount)	(1,316)	
8	Intangible assets (net of related tax liability) (negative amount)	(769)	E
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)	(21)	F
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	-	
12	Negative amounts resulting from the calculation of expected loss amounts	(236)	
13	Any increase in equity that results from securitised assets (negative amount)	-	
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	217	G
15	Defined-benefit pension fund assets (negative amount)	(8)	H
16	Direct, indirect and synthetic holdings by an institution of own CET1 instruments (negative amount)	-	
17	Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
UK-20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	-	
UK-20b	of which: qualifying holdings outside the financial sector (negative amount)	-	
UK-20c	of which: securitisation positions (negative amount)	-	
UK-20d	of which: free deliveries (negative amount)	-	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)	-	
22	Amount exceeding the 17,65% threshold (negative amount)	-	
23	of which: direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	-	
25	of which: deferred tax assets arising from temporary differences	-	
UK-25a	Losses for the current financial year (negative amount)	-	

UK-25b	Foreseeable tax charges relating to CET1 items except where the institution suitably adjusts the amount of CET1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses (negative amount)	-	
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)	-	
27a	Other regulatory adjustments to CET1 capital (including IFRS 9 transitional adjustments when relevant)	(322)	
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(2,455)**	
29	**Common Equity Tier 1 (CET1) capital**	**24,550**	
	Additional Tier 1 (AT1) capital: instruments		
30	Capital instruments and the related share premium accounts	4,300	
31	of which: classified as equity under applicable accounting standards	4,300	
32	of which: classified as liabilities under applicable accounting standards	-	
33	Amount of qualifying items referred to in Article 484 (4) CRR and the related share premium accounts subject to phase out from AT1 as described in Article 486(3) CRR	-	
UK-33a	Amount of qualifying items referred to in Article 494a(1) CRR subject to phase out from AT1	-	
UK-33b	Amount of qualifying items referred to in Article 494b(1) CRR subject to phase out from AT1	-	
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	-	
35	of which: instruments issued by subsidiaries subject to phase out	-	
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**4,300**	
	Additional Tier 1 (AT1) capital: regulatory adjustments		
37	Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	-	
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)	-	
42a	Other regulatory adjustments to AT1 capital	-	
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**-**	
44	**Additional Tier 1 (AT1) capital**	**4,300**	I
45	**Tier 1 capital (T1 = CET1 + AT1)**	**28,850**	
	Tier 2 (T2) capital: instruments		
46	Capital instruments and the related share premium accounts	6,741	
47	Amount of qualifying items referred to in Article 484 (5) CRR and the related share premium accounts subject to phase out from T2 as described in Article 486(4) CRR	-	
UK-47a	Amount of qualifying items referred to in Article 494a (2) CRR subject to phase out from T2	-	
UK-47b	Amount of qualifying items referred to in Article 494b (2) CRR subject to phase out from T2	-	
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	-	
49	of which: instruments issued by subsidiaries subject to phase out	-	
50	Credit risk adjustments	-	
51	**Tier 2 (T2) capital before regulatory adjustments**	**6,741**	
	Tier 2 (T2) capital: regulatory adjustments		
52	Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans (negative amount)	-	
53	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
54	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
55	Direct, indirect and synthetic holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	

UK-56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	-	
UK-56b	Other regulatory adjustments to T2 capital	-	
57	**Total regulatory adjustments to Tier 2 (T2) capital**	-	
58	**Tier 2 (T2) capital**	**6,741**	J
59	**Total capital (TC = T1 + T2)**	**35,591**	
60	**Total Risk exposure amount**	**164,871**	
	Capital ratios and buffers		
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	14.89%	
62	Tier 1 (as a percentage of total risk exposure amount)	17.50%	
63	Total capital (as a percentage of total risk exposure amount)	21.59%	
64	Institution CET1 overall capital requirement (CET1 requirement in accordance with Article 92 (1) CRR, plus additional CET1 requirement which the institution is required to hold in accordance with point (a) of Article 104(1) CRD, plus combined buffer requirement in accordance with Article 128(6) CRD) expressed as a percentage of risk exposure amount)	9.08%	
65	of which: capital conservation buffer requirement	2.50%	
66	of which: countercyclical buffer requirement	0.39%	
67	of which: systemic risk buffer requirement	-	
UK-67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	-	
68	**Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)**	8.71%	
	Amounts below the thresholds for deduction (before risk weighting)		
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	900	
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 17.65% thresholds and net of eligible short positions)	-	
75	Deferred tax assets arising from temporary differences (amount below 17,65% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met)	290	K
	Applicable caps on the inclusion of provisions in Tier 2		
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	-	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	-	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	-	
	Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022)		
80	Current cap on CET1 instruments subject to phase out arrangements	-	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	
82	Current cap on AT1 instruments subject to phase out arrangements	-	
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	
84	Current cap on T2 instruments subject to phase out arrangements	-	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	

$MM		a	b
MSIP		Amounts	Source based on reference numbers/letters of the balance sheet under the regulatory scope of consolidation
	Common Equity Tier 1 (CET1) capital: instruments and reserves		
1	Capital instruments and the related share premium accounts	12,978	A
	of which: Instrument type 1		
	of which: Instrument type 2		
	of which: Instrument type 3		
2	Retained earnings	4,743	B
3	Accumulated other comprehensive income (and other reserves)	1,081	C

UK-3a	Funds for general banking risk	-	
4	Amount of qualifying items referred to in Article 484 (3) CRR and the related share premium accounts subject to phase out from CET1	-	
5	Minority interests (amount allowed in consolidated CET1)	-	
UK-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	-	D
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**18,802**	
	Common Equity Tier 1 (CET1) capital: regulatory adjustments		
7	Additional value adjustments (negative amount)	(1,226)	
8	Intangible assets (net of related tax liability) (negative amount)	(2)	E
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)	-	
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	-	
12	Negative amounts resulting from the calculation of expected loss amounts	(145)	
13	Any increase in equity that results from securitised assets (negative amount)	-	
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	217	F
15	Defined-benefit pension fund assets (negative amount)	-	
16	Direct, indirect and synthetic holdings by an institution of own CET1 instruments (negative amount)	-	
17	Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
UK-20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	-	
UK-20b	of which: qualifying holdings outside the financial sector (negative amount)	-	
UK-20c	of which: securitisation positions (negative amount)	-	
UK-20d	of which: free deliveries (negative amount)	-	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met) (negative amount)	-	
22	Amount exceeding the 17,65% threshold (negative amount)	-	
23	of which: direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	-	
25	of which: deferred tax assets arising from temporary differences	-	
UK-25a	Losses for the current financial year (negative amount)	-	
UK-25b	Foreseeable tax charges relating to CET1 items except where the institution suitably adjusts the amount of CET1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses (negative amount)	-	
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)	-	
27a	Other regulatory adjustments to CET1 capital (including IFRS 9 transitional adjustments when relevant)	(203)	
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(1,359)**	
29	**Common Equity Tier 1 (CET1) capital**	**17,443**	
	Additional Tier 1 (AT1) capital: instruments		
30	Capital instruments and the related share premium accounts	4,300	
31	of which: classified as equity under applicable accounting standards	4,300	
32	of which: classified as liabilities under applicable accounting standards	-	
33	Amount of qualifying items referred to in Article 484 (4) CRR and the related share premium accounts subject to phase out from AT1 as described in Article 486(3) CRR	-	
UK-33a	Amount of qualifying items referred to in Article 494a(1) CRR subject to phase out from AT1	-	
UK-33b	Amount of qualifying items referred to in Article 494b(1) CRR subject to phase out from AT1	-	
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	-	
35	of which: instruments issued by subsidiaries subject to phase out	-	

36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**4,300**	
	Additional Tier 1 (AT1) capital: regulatory adjustments		
37	Direct, indirect and synthetic holdings by an institution of own AT1 instruments (negative amount)	-	
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)	-	
42a	Other regulatory adjustments to AT1 capital	-	
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	-	
44	**Additional Tier 1 (AT1) capital**	**4,300**	G
45	**Tier 1 capital (T1 = CET1 + AT1)**	**21,743**	
	Tier 2 (T2) capital: instruments		
46	Capital instruments and the related share premium accounts	5,883	
47	Amount of qualifying items referred to in Article 484 (5) CRR and the related share premium accounts subject to phase out from T2 as described in Article 486(4) CRR	-	
UK-47a	Amount of qualifying items referred to in Article 494a (2) CRR subject to phase out from T2	-	
UK-47b	Amount of qualifying items referred to in Article 494b (2) CRR subject to phase out from T2	-	
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	-	
49	of which: instruments issued by subsidiaries subject to phase out	-	
50	Credit risk adjustments	-	
51	**Tier 2 (T2) capital before regulatory adjustments**	**5,883**	
	Tier 2 (T2) capital: regulatory adjustments		
52	Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans (negative amount)	-	
53	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	-	
54	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-	
55	Direct, indirect and synthetic holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	-	
UK-56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)	-	
UK-56b	Other regulatory adjustments to T2 capital	-	
57	**Total regulatory adjustments to Tier 2 (T2) capital**	-	
58	**Tier 2 (T2) capital**	**5,883**	**H**
59	**Total capital (TC = T1 + T2)**	**27,626**	
60	**Total Risk exposure amount**	**126,117**	
	Capital ratios and buffers		
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	13.83%	
62	Tier 1 (as a percentage of total risk exposure amount)	17.24%	
63	Total capital (as a percentage of total risk exposure amount)	21.91%	
64	Institution CET1 overall capital requirement (CET1 requirement in accordance with Article 92 (1) CRR, plus additional CET1 requirement which the institution is required to hold in accordance with point (a) of Article 104(1) CRD, plus combined buffer requirement in accordance with Article 128(6) CRD) expressed as a percentage of risk exposure amount)	9.01%	
65	of which: capital conservation buffer requirement	2.50%	
66	of which: countercyclical buffer requirement	0.36%	
67	of which: systemic risk buffer requirement	-	

UK-67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	-	
68	**Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)**	**7.68%**	
	Amounts below the thresholds for deduction (before risk weighting)		
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	900	
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 17.65% thresholds and net of eligible short positions)	128	I
75	Deferred tax assets arising from temporary differences (amount below 17,65% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met)	183	J
	Applicable caps on the inclusion of provisions in Tier 2		
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	-	
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	-	
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	-	
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	-	
	Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022)		
80	Current cap on CET1 instruments subject to phase out arrangements	-	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	
82	Current cap on AT1 instruments subject to phase out arrangements	-	
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	-	
84	Current cap on T2 instruments subject to phase out arrangements	-	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	

Under PRA supervision, MSI Group and MSIP are required to maintain a minimum ratio of own funds to RWAs. As at 30 June 2023, MSI Group and MSIP are in compliance with the PRA capital requirements as defined in the PRA rulebook.

Table 36 shows the reconciliation of regulatory own funds in Table 35 to balance sheet in the management accounts.

Table 36 : Reconciliation of regulatory own funds to balance sheet in the audited financial statements (UK CC2) – MSI Group and MSIP

$MM

MSI Group	Balance sheet as per financial statements[1] As at 30 Jun 2023	Under regulatory scope of consolidation As at 30 Jun 2023	Reference
Assets - Breakdown by asset classes according to the balance sheet in the financial statements			
Cash And Short-Term Deposits	33,618	33,618	
Trading Financial Assets	421,821	421,821	
Secured Financing	121,672	121,672	
Loans And Advances	142	142	
Investment Securities	148	148	
Trade And Other Receivables	98,920	98,920	
of which: Defined Pension Fund Assets (net of related tax liability)	8	8	H
Physical Commodities	-	-	
Current Tax Assets	322	322	
Deferred Tax Assets	311	311	
of which: Deferred tax assets that rely on future profitability and do not arise from temporary differences	21	21	F
of which: Deferred tax assets that rely on future profitability and arise from temporary differences	290	290	K
Other Assets	169	169	
Investments In Subsidiaries Associates And Joint Ventures	0	0	
Property Plant And Equipment	981	981	
Intangible Assets	813	813	
of which: Intangibles net of related tax liabilities	769	769	E
TOTAL ASSETS	**678,917**	**678,917**	
Liabilities - Breakdown by liability classes according to the balance sheet in the financial statements			
Bank Loans And Overdrafts	6,873	6,873	
Trading Financial Liabilities	378,492	378,492	
Secured Borrowing	94,655	94,655	
Trade And Other Payables	106,367	106,367	
Debt And Other Borrowings	58,785	58,785	
of which: Subordinated debt[2]	6,741	6,740	J
of which: Senior subordinated debt	6,800	6,800	
Provisions	218	218	
Current Tax Liabilities	225	225	
Deferred Tax Liabilities	1	1	
Accruals And Deferred Income	764	764	
Post-Employment Benefit Obligations	25	25	
TOTAL LIABILITIES	**646,405**	**646,405**	
Shareholders' equity			
Share Capital	7,678	7,678	
of which: amount eligible for CET1	3,378	3,378	A
Other Equity instruments	4,300	4,300	I
Share Premium Account	38	38	A
Currency Translation Reserve	(717)	(717)	
of which: Previous years currency translation reserve	(840)	(840)	C
Pension Reserve	(82)	(82)	C
Debt Valuation Adjustment Reserve	(217)	(217)	C & G
Capital Contribution Reserve	6,061	6,061	C
Capital Redemption Reserve	1,400	1,400	C
Available-For-Sale Reserve	-	-	
Retained Earnings	17,915	17,915	
of which: Previous years retained earnings	17,267	17,267	B
of which: Interim verified profit	-	-	D
of which: Profit or loss attributable to owners of the parent	648	648	
Equity Attributable To The Owners Of The Company	32,076	32,076	
Non-Controlling Interests	436	436	
TOTAL EQUITY	**32,512**	**32,512**	
TOTAL LIABILITIES AND EQUITY	**678,917**	**678,917**	

1.MSI Group does not publish financial statements and the reported balances are reconciled to unaudited management accounts.
2.This represents regulatory subordinated debt adjusted for amortisation.

$MM	a	b	c
MSIP	Balance sheet as per financial statements[1] As at 30 Jun 2023	Under regulatory scope of consolidation As at 30 Jun 2023	Reference
Assets - Breakdown by asset classes according to the balance sheet in the published			
Cash And Short-Term Deposits	18,174	18,174	
Trading Financial Assets	335,699	335,699	
Secured Financing	124,380	124,380	
Loans And Advances	79	79	
Investment Securities	147	147	
Trade And Other Receivables	80,416	80,416	
Physical Commodities	-	-	
Current Tax Assets	406	406	
Deferred Tax Assets	183	183	
of which: Deferred tax assets that rely on future profitability and arise from temporary differences	183	183	J
Other Assets	26	26	
Investments In Subsidiaries Associates And Joint Ventures	128	128	I
Property Plant And Equipment	13	13	
Intangible Assets	2	2	
of which: Intangibles net of related tax liabilities	2	2	E
TOTAL ASSETS	**559,653**	**559,653**	
Liabilities - Breakdown by liability classes according to the balance sheet in the published			
Bank Loans And Overdrafts	23	23	
Trading Financial Liabilities	296,929	296,929	
Secured Borrowing	99,455	99,455	
Trade And Other Payables	89,118	89,118	
Debt And Other Borrowings	50,061	50,061	
of which: Subordinated debt[2]	5,883	5,883	H
of which: Senior subordinated debt	4,900	4,900	
Provisions	130	130	
Current Tax Liabilities	78	78	
Deferred Tax Liabilities	-	-	
Accruals And Deferred Income	232	232	
Post-Employment Benefit Obligations	0	0	
TOTAL LIABILITIES	**536,026**	**536,026**	
Shareholders' equity			
Share Capital	16,765	16,765	
of which: amount eligible for CET1	12,465	12,465	A
Other Equity instruments	4,300	4,300	G
Share Premium Account	513	513	A
Currency Translation Reserve	(105)	(105)	C
Pension Reserve	0	0	C
Debt Valuation Adjustment Reserve	(217)	(217)	C & F
Capital Contribution Reserve	3	3	C
Capital Redemption Reserve	1,400	1,400	C
Available-For-Sale Reserve	-	-	
Retained Earnings	5,268	5,268	
of which: Previous years retained earnings	4,743	4,743	B
of which: Interim verified profit	-	-	D
of which: Profit or loss attributable to owners of the parent	525	525	
Equity Attributable To The Owners Of The Company	23,627	23,627	
Non-Controlling Interests	-	-	
TOTAL EQUITY	**23,627**	**23,627**	
TOTAL LIABILITIES AND EQUITY	**559,653**	**559,653**	

1. MSIP does not publish financial statements and the reported balances are reconciled to unaudited management accounts.
2. This represents the regulatory subordinated debt adjusted for amortisation.

The above table highlights the difference in the basis of consolidation for accounting and prudential reporting purposes as it compares the carrying values as reported under International Financial Reporting Standards ("IFRS") with the carrying values under the scope of regulatory consolidation.

15. Appendix II: Countercyclical Capital Buffer

Table 37 shows the geographical distribution of credit exposures relevant for the calculation of CCyB as at 30 June 2023 for the MSI Group and MSIP.

Table 37 : Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (UK CCyB1) – MSI Group and MSIP

		a	b	c	d	e	f	g	h	i	j	k	l	m
		General credit exposures		Trading book exposures				Own fund requirements						
		Exposure value under the standardised approach	Exposure value under the IRB approach	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Securitisation exposures Exposure value for non-trading book	Total exposure value	Relevant credit risk exposures - Credit risk	Relevant credit exposures – Market risk	Relevant credit exposures – Securitisation positions in the non-trading book	Total	Risk-weighted exposure amounts	Own fund requirement weights	CCyB rate
MSI Group		$MM	$MM	$MM	$MM	$MM	$MM	$MM	$MM	$MM	$MM	$MM	%	%
10	Australia	91	2,033	-	27	-	2,151	79	10	-	89	1,111	1.56%	1.00%
	Bulgaria	-	-	-	38	-	38	-	34	-	34	428	0.60%	1.50%
	Croatia	-	-	-	-	-	-	-	-	-	-	-	-	0.50%
	Czech Republic	2	-	-	54	-	57	1	12	-	13	162	0.23%	2.50%
	Denmark	3	1,078	-	5	-	1,085	33	17	-	50	619	0.87%	2.50%
	Estonia	-	-	-	-	-	-	-	-	-	-	-	-	1.00%
	France	5,409	3,391	81	654	-	9,535	145	85	-	230	2,870	4.04%	0.50%
	Germany	4,682	2,370	45	151	-	7,248	92	108	-	200	2,501	3.52%	0.75%
	Hong Kong	67	1,450	22	105	-	1,644	53	47	-	100	1,244	1.75%	1.00%
	Iceland	-	-	-	8	-	8	-	2	-	2	25	0.04%	2.00%
	Ireland	310	3,979	3	42	34	4,367	145	10	23	178	2,230	3.14%	0.50%
	Luxembourg	211	6,000	51	41	-	6,301	289	36	-	325	4,063	5.72%	0.50%
	Netherlands	32	2,946	45	426	7	3,456	103	68	-	171	2,132	3.00%	1.00%
	Norway	2	299	8	53	-	361	5	15	-	20	252	0.35%	2.50%
	Romania	-	-	-	5	-	5	-	2	-	2	19	0.03%	0.50%
	Slovakia	-	-	-	4	-	4	-	1	-	1	11	0.02%	1.00%
	Sweden	78	568	15	126	-	786	20	16	-	36	452	0.64%	2.00%
	United Kingdom	13,212	6,304	1,183	1,292	257	22,246	564	409	57	1,030	12,877	18.13%	1.00%
	Other	11,497	55,295	356	7,236	48	74,440	2,223	929	49	3,201	40,035	56.36%	0.00%
20	**TOTAL**	**35,596**	**85,713**	**1,809**	**10,267**	**346**	**133,732**	**3,752**	**1,801**	**129**	**5,682**	**71,031**	**100.00%**	
MSIP														
10	Australia	91	1,921	-	12	-	2,024	76	6	-	82	1,028	1.84%	1.00%
	Bulgaria	-	-	-	38	-	38	-	34	-	34	428	0.77%	1.50%
	Croatia	-	-	-	-	-	-	-	-	-	-	-	-	0.50%
	Czech Republic	2	-	-	49	-	52	1	8	-	9	110	0.20%	2.50%
	Denmark	1	157	-	3	-	162	8	17	-	25	311	0.56%	2.50%
	Estonia	-	-	-	-	-	-	-	-	-	-	-	-	1.00%
	France	4,307	78	-	305	-	4,690	22	64	-	86	1,076	1.92%	0.50%
	Germany	3,809	431	-	30	-	4,269	21	40	-	61	757	1.35%	0.75%
	Hong Kong	67	1,362	-	104	-	1,533	51	45	-	96	1,201	2.15%	1.00%
	Iceland	-	-	-	8	-	8	-	2	-	2	24	0.04%	2.00%
	Ireland	255	3,972	-	41	34	4,302	142	9	23	174	2,178	3.90%	0.50%
	Luxembourg	144	4,806	-	40	-	4,990	243	32	-	275	3,436	6.15%	0.50%
	Netherlands	22	1,179	-	374	-	1,575	38	38	-	76	952	1.70%	1.00%
	Norway	1	24	-	16	-	41	-	6	-	6	79	0.14%	2.50%
	Romania	-	-	-	5	-	5	-	2	-	2	19	0.03%	0.50%
	Slovakia	-	-	-	3	-	3	-	1	-	1	9	0.02%	1.00%
	Sweden	4	363	-	121	-	488	11	11	-	22	281	0.50%	2.00%
	United Kingdom	9,843	6,133	1,099	1,289	257	18,621	409	394	53	856	10,705	19.15%	1.00%
	Other	8,351	49,876	262	5,005	49	63,543	1,953	664	49	2,666	33,316	59.58%	0.00%
20	**TOTAL**	**26,897**	**70,302**	**1,361**	**7,443**	**340**	**106,344**	**2,975**	**1,373**	**125**	**4,473**	**55,910**	**100.00%**	

Over the first half of 2023, MSI Group’s and MSIP's countercyclical buffer increased following publication of six new country CCYB rates.

Table 38 shows the amount of institution specific CCyB as at 30 June 2023 for the MSI Group and MSIP.

Table 38: Amount of institution-specific countercyclical capital buffer (UK CCyB2) – MSI Group and MSIP

		a	a
$MM		**MSI Group**	**MSIP**
1	**Total risk exposure amount**	**164,871**	**126,117**
2	Institution specific countercyclical capital buffer rate	0.39%	0.36%
3	Institution specific countercyclical capital buffer requirement	650	458

Over the first half of 2023, MSI Group's and MSIP's countercyclical buffer increased following publication of six new country CCYB rates.

16. Appendix III: Additional Credit and Counterparty Credit Risk Tables

Table 39 shows a breakdown of net loans and advances and debt securities by residual maturity as at 30 June 2023 for the MSI Group and MSIP.

Table 39 : Maturity of exposures (UK CR1-A) - MSI Group and MSIP

$MM		a	b	c	d	e	f
				Net exposure value			
MSI Group		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
1	Loans and advances	-	330	3,997	-	1,647	5,974
2	Debt securities	-	-	105	-	-	105
3	**Total**	**-**	**330**	**4,102**	**-**	**1,647**	**6,079**
MSIP							
1	Loans and advances	-	299	2,466	-	1,274	4,039
2	Debt securities	-	—	105	-	-	105
3	**Total**	**-**	**299**	**2,571**	**-**	**1,274**	**4,144**

Over the first half of 2023, MSI Group’s and MSIP's loans & advances increased due to unsettled trades and receivables.

Table 40 shows changes in the stock of non-performing loans and advances as at 30 June 2023 for the MSI Group and MSIP.

Table 40 : Changes in the stock of non-performing loans and advances (UK CR2) – MSI Group and MSIP

$MM		a
MSI Group		Gross carrying amount
010	**Initial stock of non-performing loans and advances**	**134**
020	Inflows to non-performing portfolios	100
030	Outflows from non-performing portfolios	(122)
040	Outflows due to write-offs	(6)
050	Outflow due to other situations	(116)
060	**Final stock of non-performing loans and advances**	**112**
MSIP		
010	Initial stock of non-performing loans and advances	**110**
020	Inflows to non-performing portfolios	92
030	Outflows from non-performing portfolios	(100)
040	Outflows due to write-offs	(6)
050	Outflow due to other situations	(94)
060	**Final stock of non-performing loans and advances**	**102**

Over the first half of 2023, MSI Group’s and MSIP's non-performing loans and advances decreased primarily due to trade and other receivables.

Table 41 shows an overview of performing and non-performing exposures and the related provisions as at 30 June 2023 for the MSI Group and MSIP.

Table 41: Performing and Non-performing exposures and related provisions (UK CR1) – MSI Group and MSIP

	$MM	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							Collateral and financial guarantees received	
		Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					
	MSI Group		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3	Accumulated partial write-off	On performing exposures	On non-performing exposures
005	**Cash balances at central banks and other demand deposits**	**33,511**	**33,511**	**-**	**79**	**-**	**79**	**-**	**-**	**-**	**(79)**	**-**	**(79)**	**-**	**-**	**-**
010	**Loans and advances**	**220,377**	**42,464**	**54,960**	**112**	**36**	**76**	**(1)**	**(1)**	**-**	**(53)**	**-**	**(53)**	**-**	**120,935**	**-**
020	Central banks	1,400	-	749	-	-	-	-	-	-	-	-	-	-	637	-
030	General governments	1,154	-	1,143	-	-	-	-	-	-	-	-	-	-	11	-
040	Credit institutions	52,406	532	15,824	10	-	10	-	-	-	(5)	-	(5)	-	35,402	-
050	Other financial corporations	163,872	41,874	35,939	84	18	66	(1)	(1)	-	(48)	-	(48)	-	84,704	-
060	Non-financial corporations	1,545	58	1,305	18	18	-	-	-	-	-	-	-	-	181	-
070	Of which SMEs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
080	Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
090	**Debt securities**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100	Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	General governments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	Credit institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130	Other financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	**Off-balance-sheet exposures**	**3,751**	**3,581**	**100**	**-**	**-**	**-**	**(3)**	**(3)**	**-**	**-**	**-**	**-**		**16**	**-**
160	Central banks	-	-	-	-	-	-	-	-	-	-	-	-		-	-
170	General governments	-	-	-	-	-	-	-	-	-	-	-	-		-	-
180	Credit institutions	89	89	-	-	-	-	-	-	-	-	-	-		-	-
190	Other financial corporations	711	687	13	-	-	-	(1)	(1)	-	-	-	-		16	-
200	Non-financial corporations	2,951	2,805	87	-	-	-	(2)	(2)	-	-	-	-		-	-
210	Households	-	-	-	-	-	-	-	-	-	-	-	-		-	-
220	**Total**	**257,639**	**79,556**	**55,060**	**191**	**36**	**155**	**(4)**	**(4)**	**-**	**(132**	**-**	**(132)**	**-**	**120,951**	**-**
	MSIP															
005	**Cash balances at central banks and other demand deposits**	**18,406**	**18,406**	**-**	**76**	**-**	**76**	**-**	**-**	**-**	**(76)**	**-**	**(76)**	**-**	**-**	**-**
010	**Loans and advances**	**204,712**	**38,584**	**40,256**	**102**	**32**	**70**	**-**	**-**	**-**	**(49)**	**-**	**(49)**	**-**	**123,628**	**-**
020	Central banks	1,286	-	706	-	-	-	-	-	-	-	-	-	-	562	-
030	General governments	468	-	457	-	-	-	-	-	-	-	-	-	-	11	-
040	Credit institutions	57,468	1,565	9,752	7	-	7	-	-	-	(3)	-	(3)	-	45,263	-
050	Other financial corporations	144,291	37,018	28,326	80	17	63	-	-	-	(46)	-	(46)	-	77,611	-
060	Non-financial corporations	1,199	1	1,015	15	15	-	-	-	-	-	-	-	-	181	-
070	Of which SMEs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
080	Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
090	**Debt securities**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100	Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110	General governments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120	Credit institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130	Other financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	**Off-balance-sheet exposures**	**73**	-	-	-	-	-	-	-	-	-	-	-		-	-
160	Central banks	-	-	-	-	-	-	-	-	-	-	-	-		-	-
170	General governments	-	-	-	-	-	-	-	-	-	-	-	-		-	-
180	Credit institutions	-	-	-	-	-	-	-	-	-	-	-	-		-	-
190	Other financial corporations	15	-	-	-	-	-	-	-	-	-	-	-		-	-
200	Non-financial corporations	58	-	-	-	-	-	-	-	-	-	-	-		-	-
210	Households	-	-	-	-	-	-	-	-	-	-	-	-		-	-
220	**Total**	**223,191**	**56,990**	**40,256**	**178**	**32**	**146**	**-**	**-**	**-**	**(125**	**-**	**(125)**	**-**	**123,628**	**-**

Over the first half of 2023, MSI Group’s and MSIP's Stage 3 non-performing cash balances decreased primarily due to cash balances with Russian banks. Increase in Stage 2 and decrease in Stage 3 non-performing loans and advances is primarily due to trade and other receivables.

Table 42 shows the quality of non-performing exposures by geography as at 30 June 2023 for the MSI Group and MSIP.

Table 42 : Quality of non-performing exposures by geography (UK CQ4) – MSI Group and MSIP

$MM		a	b	c	d	e	f	g
		Gross carrying/nominal amount						
			Of which non-performing					
MSI Group				Of which defaulted	Of which subject to impairment	Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
010	**On-balance sheet exposures[1]**	**220,489**	**112**	**112**	**97,536**	**(53)**		
020	United States of America	96,343	31	31	45,494	-		
030	France	32,292	4	4	3,626	(2)		
040	United Kingdom	20,996	19	19	14,597	(7)		
050	Japan	14,267	-	-	546	-		
060	Other countries	56,591	58	58	33,273	(44)		
070	**Off-balance sheet exposures[2]**	**3,751**	**-**	**-**			**(3)**	
080	France	2,220	-	-			(1)	
090	Italy	465	-	-			(1)	
100	Netherlands	232	-	-			-	
110	Other countries	834	-	-			(1)	
120	**Total**	224,240	112	112	97,536	**(53)**	(3)	
MSIP								
010	**On-balance sheet exposures[1]**	**204,814**	**102**	**102**	**78,942**	**(49)**		
020	United States of America	89,581	30	30	40,745	(1)		
030	France	25,885	4	4	2,278	-		
040	Germany	18,809	2	2	2,364	-		
050	United Kingdom	18,711	17	17	12,310	(6)		
060	Japan	14,085	-	-	402	-		
070	Other countries	37,743	49	49	20,843	(42)		
080	**Off-balance sheet exposures[2]**	**73**	**-**	**-**			**-**	
090	United States of America	15	-	-	-		-	
100	Other countries	58	-	-			-	
110	**Total**	**204,887**	**102**	**102**	**78,942**	**(49)**	**-**	

1.Countries exceeding 5% of total gross carrying amount (On-balance sheet) for MSI Group and MSIP are reported individually.
2.Countries exceeding 5% of total gross carrying amount (Off-balance sheet) for MSI Group and MSIP are reported individually.

Over the first half of 2023, no material movement observed in total balance sheet exposures. However, at a country level, a decrease in exposures against UK and France is partially offset by an increase in exposures against United States of America, primarily within secured financing and trade and other receivables.

The movement in off balance sheet exposures relates to an underwriting commitment.

Countries included within “Other countries” category in Table 42:

	On-balance sheet	Off-balance sheet
MSI Group	Cayman Islands, Germany, Ireland, Netherlands, Hong Kong, Australia, Italy, Luxembourg, Korea (Republic of), Spain, Singapore, Switzerland, Taiwan, Province of China[a], Sweden, Finland, Norway, Canada, China, Denmark, Belgium, Portugal, Supra Nationals, Chile, Turkey, South Africa, Bahrain, Greece, Colombia, Malta, Virgin Islands (British), Austria, Russian Federation, United Arab Emirates, New Zealand, Malaysia, Thailand, Qatar, Bahamas, Liechtenstein, Bermuda, Jersey, Saudi Arabia, Hungary, Poland, Mexico, Israel, India, Estonia, Macao, Philippines, Monaco, Indonesia, Peru, Kuwait, Czechia, Namibia, Romania, Uganda, Anguilla, Andorra, Brazil, Egypt, Bulgaria, Cyprus, Latvia, Slovenia, Slovakia, Pakistan, Oman, Morocco, Ukraine, Guernsey, Nigeria, Viet Nam, Panama, Serbia, Armenia, Iceland, Angola, Costa Rica, Ghana, Croatia, Kenya, Tunisia, Cote d'Ivoire, Lithuania, Jordan, Kazakhstan, Botswana, Cameroon, Mauritius, Zambia, Benin, Macedonia (the former Yugoslav Republic of), Senegal, Argentina, Ethiopia, Isle of Man, Gabon, San Marino, Sudan,Rwanda, Azerbaijan, Mongolia, Curacao, Mozambique, Georgia, Puerto Rico	Norway, Luxembourg, Spain, Sweden, United States, United Kingdom, Jersey, Germany, Denmark, Austria
MSIP	Cayman Islands, Ireland, Australia, Korea (Republic of), Luxembourg, Hong Kong, Singapore, Italy, Taiwan, Province of China[a], Switzerland, Canada, China, Norway, Finland, Sweden, Supra Nationals, Spain, Denmark, Chile, Turkey, South Africa, Netherlands, Bahrain, Colombia, Malta, Virgin Islands (British), Greece, Russian Federation, Austria, United Arab Emirates, New Zealand, Malaysia, Thailand, Qatar,Bahamas, Bermuda, Liechtenstein, Jersey, Saudi Arabia, Portugal, Poland, Mexico, Israel, Belgium, India, Macao, Philippines, Indonesia, Peru, Monaco, Kuwait, Namibia, Romania, Czechia, Uganda, Anguilla, Andorra, Hungary, Brazil, Egypt, Latvia, Cyprus, Slovenia, Slovakia, Pakistan, Oman, Bulgaria, Morocco, Ukraine, Guernsey, Nigeria, Viet Nam, Panama, Serbia, Armenia, Iceland, Angola, Costa Rica, Ghana, Croatia, Kenya, Tunisia, Cote d'Ivoire, Lithuania, Jordan, Kazakhstan, Botswana, Cameroon, Mauritius, Zambia, Benin, Macedonia (the former Yugoslav Republic of), Senegal, Argentina, Ethiopia, Isle of Man, Estonia, Gabon, San Marino, Sudan, Rwanda, Azerbaijan, Mongolia, Curacao, Mozambique, Georgia, Puerto Rico	Austria

Table 43 shows the credit quality of loans and advances to non-financial corporations by industry as at 30 June 2023 for the MSI Group and MSIP.

Table 43 : Credit quality of loans and advances to non-financial corporations by industry (UK CQ5) - MSI Group and MSIP

$MM		a	b	c	d	e	f
		Gross carrying amount					
			Of which non-performing				
MSI Group				Of which defaulted	Of which loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non-performing exposures
010	Agriculture, forestry and fishing	18	-	-	18	-	-
020	Mining and quarrying	194	-	-	73	-	-
030	Manufacturing	344	6	6	283	-	-
040	Electricity, gas, steam and air conditioning supply	331	3	3	331	-	-
050	Water supply	19	-	-	19	-	-
060	Construction	14	-	-	14	-	-
070	Wholesale and retail trade	27	-	-	27	-	-
080	Transport and storage	68	1	1	68	-	-
090	Accommodation and food service activities	15	-	-	15	-	-
100	Information and communication	364	6	6	364	-	-
110	Financial and insurance activities	-	-	-	-	-	-
120	Real estate activities	118	1	1	118	-	-
130	Professional, scientific and technical activities	6	-	-	6	-	-
140	Administrative and support service activities	4	-	-	4	-	-
150	Public administration and defense, compulsory social security	-	-	-	-	-	-
160	Education	1	-	-	1	-	-
170	Human health services and social work activities	4	-	-	4	-	-
180	Arts, entertainment and recreation	9	-	-	9	-	-
190	Other services	28	1	1	27	-	-
200	**Total**	**1,564**	**18**	**18**	**1,381**	**-**	**-**
MSIP							
010	Agriculture, forestry and fishing	18	-	-	18	-	-
020	Mining and quarrying	174	1	1	53	-	-
030	Manufacturing	328	3	3	267	-	-
040	Electricity, gas, steam and air conditioning supply	130	2	2	130	-	-
050	Water supply	5	-	-	5	-	-
060	Construction	14	-	-	14	-	-
070	Wholesale and retail trade	25	-	-	25	-	-
080	Transport and storage	55	1	1	55	-	-
090	Accommodation and food service activities	7	-	-	7	-	-
100	Information and communication	292	6	6	292	-	-
110	Financial and insurance activities	-	-	-	-	-	-
120	Real estate activities	118	1	1	118	-	-
130	Professional, scientific and technical activities	6	-	-	6	-	-
140	Administrative and support service activities	2	-	-	2	-	-
150	Public administration and defense, compulsory social security	-	-	-	-	-	-
160	Education	1	-	-	1	-	-
170	Human health services and social work activities	2	-	-	2	-	-
180	Arts, entertainment and recreation	8	-	-	8	-	-
190	Other services	28	1	1	28	-	-
200	**Total**	**1,213**	**15**	**15**	**1,031**	**-**	**-**

Over the first half of 2023, MSI Group's and MSIP's loans and advances to non-financial corporations decreased primarily due to a decrease in trade and other receivables within the information and communication & human health services and social work activities, partially offset by an increase in mining and quarrying.

Table 44 shows the extent of the use of CRM techniques as at 30 June 2023 for the MSI Group and MSIP.

Table 44 : CRM techniques overview: Disclosure of the use of credit risk mitigation techniques (UK CR3)– MSI Group and MSIP

$MM	a	b	c	d	e
MSI Group	**Unsecured carrying amount**	**Secured carrying amount**	**Of which secured by collateral**	**Of which secured by financial guarantees**	**Of which secured by credit derivatives**
1 Loans and advances	133,011	120,935	120,935	-	-
2 Debt securities	-	-	-	-	
3 Total	**133,011**	**120,935**	**120,935**	**-**	**-**
4 Of which non-performing exposures	59	-	-	-	-
5 Of which defaulted	59	-			
MSIP					
1 Loans and advances	99,543	123,628	123,628	-	-
2 Debt securities	-	-	-	-	
3 Total	**99,543**	**123,628**	**123,628**	**-**	**-**
4 Of which non-performing exposures	53	-	-	-	-
5 Of which defaulted	53	-			

Over the first half of 2023, MSI Group’s and MSIP's loans and advances decreased primarily due to a decrease in secured financing & trade and other receivables and a decrease in cash balances with central bank & credit institutions.

Table 45 shows SA credit risk exposures at 30 June 2023 for the MSI Group and MSIP.

Table 45: Standardised approach: Credit risk exposure and CRM effects (UK CR4) – MSI Group and MSIP

		a	b	c	d	e	f
		Exposures before CCF and before CRM		Exposures post CCF and post CRM		RWAs and RWAs density	
		On-balance-sheet exposures	Off-balance-sheet exposures	On-balance-sheet exposures	Off-balance-sheet exposures	RWAs	RWAs density
MSI Group		$MM	$MM	$MM	$MM	$MM	%
1	Central governments or central banks	1,121	-	1,121	-	943	84%
2	Regional government or local authorities	6	-	6	-	-	4%
3	Public sector entities	1	-	1	-	-	-
4	Multilateral development banks	18	-	18	-	1	3%
5	International organisations	19	-	19	-	-	-
6	Institutions	442	394	442	80	477	92%
7	Corporates	1,742	-	1,742	-	1,870	107%
8	Retail	-	-	-	-	-	-
9	Secured by mortgages on immovable property	-	-	-	-	-	-
10	Exposures in default	4	-	4	-	6	150%
11	Exposures associated with particularly high risk	-	-	-	-	-	-
12	Covered bonds	-	-	-	-	-	-
13	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14	Collective investment undertakings	-	-	-	-	-	-
15	Equity	-	-	-	-	-	-
16	Other items	1,183	-	1,183	-	1,183	100%
17	**TOTAL**	**4,536**	**394**	**4,536**	**80**	**4,480**	**97%**
MSIP							
1	Central governments or central banks	980	-	980	-	620	63%
2	Regional government or local authorities	6	-	6	-	-	5%
3	Public sector entities	1	-	1	-	-	-
4	Multilateral development banks	18	-	18	-	1	3%
5	International organisations	18	-	18	-	-	-
6	Institutions	427	381	427	76	472	94%
7	Corporates	1,319	-	1,319	-	1,432	109%
8	Retail	-	-	-	-	-	-
9	Secured by mortgages on immovable property	-	-	-	-	-	-
10	Exposures in default	1	-	1	-	2	150%
11	Exposures associated with particularly high risk	-	-	-	-	-	-
12	Covered bonds	-	-	-	-	-	-
13	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
14	Collective investment undertakings	-	-	-	-	-	-
15	Equity	-	-	-	-	-	-
16	Other items	51	-	51	-	51	100%
17	**TOTAL**	**2,821**	**381**	**2,821**	**76**	**2,578**	**89%**

Over the first half of 2023, MSI Group's and MSIP's RWAs increased due to higher unsettled trades with corporates.

Table 46 shows the breakdown of exposures under SA by exposure class and risk weight as at 30 June 2023 for the MSI Group.

Table 46: Standardised approach (UK CR5)- MSI Group

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
$MM		**Risk weight**																
MSI Group		**0%**	**2%**	**4%**	**10%**	**20%**	**35%**	**50%**	**70%**	**75%**	**100%**	**150%**	**250%**	**370%**	**1250%**	**Others**	**Total**	**Of which: unrated**
1	Central governments or central banks	310	-	-	-	375	-	99	-	-	22	3	311	-	1	-	1,121	3
2	Regional government or local authorities	5	-	-	-	1	-	-	-	-	-	-	-	-	-	-	6	-
3	Public sector entities	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
4	Multilateral development banks	16	-	-	-	2	-	-	-	-	-	-	-	-	-	-	18	-
5	International organisations	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-
6	Institutions	3	79	-	-	219	-	122	-	-	73	2	-	-	24	-	522	87
7	Corporates	4	-	-	-	28	-	128	-	-	1,528	37	-	-	17	-	1,742	1,277
8	Retail exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Exposures secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Exposures in default	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	4	3
11	Exposures associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Exposures to institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Units or shares in collective investment undertakings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Other items	-	-	-	-	-	-	-	-	-	1,183	-	-	-	-	-	1,183	-
17	**TOTAL**	**358**	**79**	**-**	**-**	**625**	**-**	**349**	**-**	**-**	**2,806**	**46**	**311**	**-**	**42**	**-**	**4,616**	**1,370**

Over the first half of 2023, increase in EAD is driven by higher unsettled trades with corporates and institutions.

Table 47 shows the total SA exposures, including CCR, for each exposure class and broken down by Credit Quality Step (“CQS”).

Table 47 : Standardised approach EAD by credit quality step - MSI Group

$MM

MSI Group[1]		**CQS1**	**CQS2**	**CQS3**	**CQS4**	**CQS5**	**CQS6**	**Other**[2]	**Unrated**	**Total**
Central Governments or Central Banks	GROSS EAD	309	70	99	12	7	3	635	-	**1,135**
	EAD	309	70	99	12	7	3	635	-	**1,135**
Corporates	GROSS EAD	29	127	191	91	22	16	2,217	-	**2,693**
	EAD	29	127	191	91	22	16	2,217	-	**2,693**
High risk	GROSS EAD	-	-	-	-	-	-	-	-	**-**
	EAD	-	-	-	-	-	-	-	-	**-**
Institutions	GROSS EAD	12,146	7,380	57	121	8	1	10,073	-	**29,786**
	EAD	11,895	7,380	57	121	8	1	8,498	-	**27,960**
Multilateral developments banks	GROSS EAD	19	-	-	-	-	-	-	-	**19**
	EAD	19	-	-	-	-	-	-	-	**19**
Public sector entities	GROSS EAD	1	-	-	-	-	-	-	-	**1**
	EAD	1	-	-	-	-	-	-	-	**1**
Regional governments or Local Authorities	GROSS EAD	5	1	-	-	-	-	-	-	**6**
	EAD	5	1	-	-	-	-	-	-	**6**
International Organisations	GROSS EAD	19	-	-	-	-	-	-	-	**19**
	EAD	19	-	-	-	-	-	-	-	**19**
Securitisation	GROSS EAD	-	-	48	-	25	-	108	283	**464**
	EAD	-	-	48	-	25	-	108	283	**464**
Other Items	GROSS EAD	36	-	-	-	-	-	1,147	-	**1,183**
	EAD	36	-	-	-	-	-	1,147	-	**1,183**
Total	**GROSS EAD**	**12,564**	**7,578**	**395**	**224**	**62**	**20**	**14,180**	**283**	**35,306**
	EAD	**12,313**	**7,578**	**395**	**224**	**62**	**20**	**12,605**	**283**	**33,480**

1. Under the SA, ts are generally applied according to the relevant exposure class and the associated credit quality (CRR Article 113). Credit quality may be determined by reference to the credit assessments of an ECAI, which are then mapped to a CQS. The unrated segment represents exposure for which no ECAI credit assessment is available.
2. The Other segment represents exposures where alternative rules to the CQS treatment described in the note above apply. The majority of exposures in this segment are exposures to central counterparties to which a fixed risk weight is applied.

Over the first half of 2023, MSI Group’s EAD decreased due to reduced exposure with exchanges.

Table 48 shows the breakdown of exposures under the FIRB approach by exposure class and the effect on the RWA of credit derivatives used as CRM techniques as at 30 June 2023 for the MSI Group and MSIP.

Table 48 : IRB approach: Effect on the RWAs of credit derivatives used as CRM techniques (UK CR7) – MSI Group and MSIP

		a	b	a	b
		MSI Group		MSIP	
$MM		Pre-credit derivatives RWAs	Actual RWAs	Pre-credit derivatives RWAs	Actual RWAs
1	**Exposures under F-IRB[1]**	**6,195**	**6,195**	**3,054**	**3,054**
2	Central governments and central banks	514	514	147	147
3	Institutions	2,421	2,421	2,054	2,054
4	Corporates	3,260	3,260	853	853
4.1	*of which Corporates - SMEs*	-	-	-	-
4.2	*of which Corporates - Specialised lending*	-	-	-	-
10	**TOTAL (including F-IRB exposures and A-IRB exposures)**	**6,195**	**6,195**	**3,054**	**3,054**

1. MSI Group and MSIP have no A-IRB exposures.

Over the first half of 2023, MSI Group’s and MSIP's RWAs decreased primarily due to reduction in corporate debt exposure with institutions and corporates.

Table 49 shows the parameters used for the calculation of capital requirements under IRB approach as at 30 June 2023 for the MSI Group.

Table 49 : IRB approach: Credit risk exposures by exposure class and PD range (UK CR6) - MSI Group

	PD range	On-balance sheet exposure	Off-balance-sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post CCF and post CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	RWA after supporting factors	Density of RWA	Expected loss amount	Value adjustments and provisions
	a	b	c	d	e	f	g	h	i	j	k	l	m
MSI Group		$MM	$MM	%	$MM	%	#	%	Years	$MM	%	$MM	$MM
	0.00 to <0.15	17,863	1	75%	17,864	0.01%	7	45%	-	514	3%	1	-
	0.00 to <0.10	17,863	1	75%	17,864	0.01%	7	45%	-	514	3%	1	-
	0.10 to <0.15	-	-	-	-	-	-	-	-	-	-	-	-
	0.15 to <0.25	-	-	-	-	-	-	-	-	-	-	-	-
	0.25 to <0.50	-	-	-	-	-	-	-	-	-	-	-	-
	0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <2.50	-	-	-	-	-	-	-	-	-	-	-	-
	0.75 to <1.75	-	-	-	-	-	-	-	-	-	-	-	-
	1.75 to <2.5	-	-	-	-	-	-	-	-	-	-	-	-
	2.50 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
	2.5 to <5	-	-	-	-	-	-	-	-	-	-	-	-
	5 to <10	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	10 to <20	-	-	-	-	-	-	-	-	-	-	-	-
	20 to <30	-	-	-	-	-	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	-
Exposure class 1	**Central governments or central banks**	**17,863**	**1**		**17,864**		**7**		**-**	**514**		**1**	**-**
	0.00 to <0.15	10,180	1,018	79%	10,980	0.06%	94	45%	1	1,916	17%	3	(4)
	0.00 to <0.10	9,648	1,015	79%	10,446	0.05%	69	45%	1	1,738	17%	2	(3)
	0.10 to <0.15	532	3	75%	534	0.14%	25	45%	-	178	33%	0	(1)
	0.15 to <0.25	161	0	75%	161	0.22%	14	45%	-	73	45%	0	0
	0.25 to <0.50	158	6	75%	163	0.35%	6	45%	-	96	59%	0	0
	0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	0
	0.75 to <2.50	129	13	75%	138	0.88%	11	45%	1	137	99%	1	0
	0.75 to <1.75	129	13	75%	138	0.88%	10	45%	1	137	99%	1	0
	1.75 to <2.5	0	-	-	0	2.20%	1	45%	1	0	130%	0	-
	2.50 to <10.00	-	-	-	-	-	-	-	-	-	-	-	-
	2.5 to <5	-	-	-	-	-	-	-	-	-	-	-	-
	5 to <10	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <100.00	46	45	75%	80	11.13%	75	45%	2	199	249%	4	0
	10 to <20	46	45	75%	80	11.13%	75	45%	2	199	249%	4	0
	20 to <30	-	-	-	-	-	-	-	-	-	-	-	-
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	100.00 (Default)	0	-	-	0	100.00%	-	45%	1	-	-	0	-
Exposure class 2	**Institutions**	**10,674**	**1,082**		**11,522**		**200**		**2**	**2,421**		**8**	**(5)**
	0.00 to <0.15	1,008	4,465	76%	4,397	0.07%	94	45%	3	1,513	34%	1	(1)
	0.00 to <0.10	700	3,897	76%	3,663	0.06%	63	45%	3	1,192	33%	1	-
	0.10 to <0.15	308	568	75%	734	0.14%	31	45%	2	321	44%	0	(1)
	0.15 to <0.25	1	300	75%	226	0.22%	11	45%	2	125	55%	0	-
	0.25 to <0.50	53	278	75%	263	0.35%	23	45%	3	193	74%	0	(1)
	0.50 to <0.75	117	112	79%	205	0.55%	16	44%	3	149	72%	0	-
	0.75 to <2.50	37	567	75%	464	1.11%	51	45%	1	328	71%	2	(2)
	0.75 to <1.75	30	530	75%	429	1.02%	36	45%	1	278	65%	2	(1)
	1.75 to <2.5	7	36	76%	34	2.20%	15	45%	3	50	145%	0	(1)
	2.50 to <10.00	1	16	75%	13	4.95%	31	45%	3	23	175%	0	(1)
	2.5 to <5	1	16	75%	13	4.95%	31	45%	3	23	175%	0	(1)
	5 to <10	-	-	-	-	-	-	-	-	-	-	-	-
	10.00 to <100.00	351	7	117%	359	17.26%	114	45%	2	929	259%	28	(76)
	10 to <20	193	7	117%	200	11.13%	90	44%	2	496	247%	10	-
	20 to <30	158	0	75%	158	25.02%	24	45%	1	433	273%	18	(76)
	30.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	-
	100.00 (Default)	217	30	75%	239	100.00%	0	45%	4	-	-	108	-
Exposure class 3	**Corporates**	**1,785**	**5,775**		**6,166**		**340**		**2**	**3,260**		**139**	**(80)**
	Total (all exposure classes)	**30,322**	**6,858**		**35,552**		**547**		**2**	**6,195**		**148**	**(85)**

Over the first half of 2023, MSI Group's RWAs decreased primarily due to reduction in corporate debt exposure with institutions.

Table 50 provides disclosure of the extent of the use of CRM techniques for the MSI Group and MSIP as at 30 June 2023.

Table 50 : IRB approach: Disclosure of the extent of the use of CRM techniques (UK CR7-A) - MSI Group and MSIP

			Credit risk Mitigation techniques[2]											Credit risk Mitigation methods in the calculation of RWAs	
			Funded credit Protection (FCP) Part of exposures covered by -									Unfunded credit Protection (UFCP) Part of exposures covered by -			
		FIRB Total exposures[1]	Financial Collaterals	Other eligible collaterals	Immovable property Collaterals	Receivables	Other physical collateral	Other funded credit protection	Cash on deposit	Life insurance policies	Instruments held by a third party	Guarantees	Credit Derivatives	RWA post all CRM assigned to the obligor exposure class	RWA with substitution effects
		a	b	c	d	e	f	g	h	i	j	k	l	m	n
MSI Group		**$MM**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**	**(%)**	**$MM**	**$MM**
1	Central governments and central banks	17,864	-	-	-	-	-	-	-	-	-	-	-	514	514
2	Institutions	11,522	0.94%	-	-	-	-	-	-	-	-	2.71%	-	2,345	2,421
3	Corporates	6,165	72.31%	-	-	-	-	-	-	-	-	5.95%	-	4,002	3,260
	Of which: -														
3.1	SMEs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.2	Specialised lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Other	6,165	72.31%	-	-	-	-	-	-	-	-	5.95%	-	4,002	3,260
4	**Total**	**35,551**	**35.39%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3.45%**	**-**	**6,861**	**6,195**
MSIP															
1	Central governments and central banks	3,423	-	-	-	-	-	-	-	-	-	-	-	147	147
2	Institutions	10,227	65.54%	-	-	-	-	-	-	-	-	-	-	2,049	2,054
3	Corporates	1,088	1.92%	-	-	-	-	-	-	-	-	-	-	623	853
	Of which: -			-	-	-	-	-	-	-	-	-	-	-	-
3.1	SMEs	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.2	Specialised lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.3	Other	1,088	1.92%	-	-	-	-	-	-	-	-	-	-	623	853
4	**Total**	**14,738**	**56.94%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,819**	**3,054**

1.Total Exposure represents exposure after the use of CRM techniques.
2.Collateralisation is derived as funded credit protection or unfunded credit protection per category as a percentage of exposure before the use of CRM techniques.

Financial collateral primarily relates to on-balance sheet netting and guarantees relate to the sub-participation of loan exposures.

Table 51 shows CCR exposures under the SA approach by exposure class and risk weight for the MSI Group as at 30 June 2023.

Table 51: Standardised approach: CCR exposures by regulatory exposure class and risk weight (UK CCR3)- MSI Group

$MM		Risk weight											
		a	b	c	d	e	f	g	h	i	j	k	l
MSI Group		0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	Total exposure value
1	Central governments or central banks	4	-	-	-	-	-	-	-	9	-	-	13
2	Regional government or local authorities	-	-	-	-	-	-	-	-	-	-	-	-
3	Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-
4	Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-
5	International organisations	-	-	-	-	-	-	-	-	-	-	-	-
6	Institutions	-	19,067	7,815	-	528	7	-	-	22	-	-	27,439
7	Corporates	-	-	-	-	1	8	-	-	939	-	-	948
8	Retail	-	-	-	-	-	-	-	-	-	-	-	-
9	Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-
10	Other items	-	-	-	-	-	-	-	-	-	-	-	-
11	**Total exposure value**	**4**	**19,067**	**7,815**	**-**	**529**	**15**	**-**	**-**	**970**	**-**	**-**	**28,400**

Over the first half of 2023, MSI Group's institutional exposures with exchanges, primarily with a 2% risk weight, have decreased. This table excludes RWA derived from own funds requirements for CVA. Exposures to QCCPs are included except where MSI Group is acting as a financial intermediary between a client and a QCCPs.

Table 52 shows all the relevant parameters used for the calculation of CCR capital requirements for the IRB approach is as at 30 June 2023 for the MSI Group.

Table 52: IRB approach: CCR exposures by portfolio and PD scale (UK CCR4) - MSI Group

		a	b	c	d	e	f	g
		Exposure value	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	RWAs	RWAs density
MSI Group		$MM	%	#	%	Years	$MM	%
1	**Central governments and central banks**							
1	0.00 to <0.15	10,937	0.02%	127	45.00%	1	952	8.69%
2	0.15 to <0.25	139	0.22%	12	45.00%	3	79	57.02%
3	0.25 to <0.50	106	0.35%	4	45.00%	2	66	62.68%
4	0.50 to <0.75	1	0.55%	4	45.00%	-	1	51.39%
5	0.75 to <2.50	20	1.02%	6	45.00%	1	16	80.13%
6	2.50 to <10.00	0	-	-	-	-	0	-
7	10.00 to <100.00	198	24.94%	7	45.00%	1	491	248.55%
8	100.00 (Default)	0	-	-	-	-	0	-
		11,401	0.46%	160	45.00%	1	1,605	14.08%
2	**Corporates**							
1	0.00 to <0.15	32,257	0.08%	6,609	45.29%	2	9,490	29.42%
2	0.15 to <0.25	4,438	0.22%	962	45.00%	1	2,278	51.33%
3	0.25 to <0.50	3,956	0.35%	1,430	45.00%	1	2,654	67.09%
4	0.50 to <0.75	4,311	0.55%	596	45.00%	1	3,298	76.50%
5	0.75 to <2.50	6,442	1.30%	1,530	45.00%	1	6,785	105.32%
6	2.50 to <10.00	709	4.95%	388	45.00%	1	1,081	152.46%
7	10.00 to <100.00	930	16.77%	1,136	45.00%	1	2,197	236.35%
8	100.00 (Default)	0	100.00%	2	45.00%	1	0	-
		53,043	0.65%	12,653	45.18%	1	27,783	52.38%
3	**Institutions**							
1	0.00 to <0.15	37,653	0.07%	248	45.47%	1	8,164	21.68%
2	0.15 to <0.25	1,107	0.22%	64	45.07%	2	704	63.57%
3	0.25 to <0.50	1,711	0.35%	98	45.40%	1	1,116	65.25%
4	0.50 to <0.75	206	0.55%	37	45.00%	1	166	80.58%
5	0.75 to <2.50	436	1.03%	100	45.77%	2	546	125.28%
6	2.50 to <10.00	50	4.95%	4	45.00%	0	79	156.06%
7	10.00 to <100.00	388	11.94%	85	61.99%	2	1,358	349.95%
8	100.00 (Default	0	-	-	-	-	0	-
		41,551	0.21%	636	45.61%	1	12,133	29.20%
	Total (all CCR relevant exposure classes)	**105,995**	**0.46%**	**13,449**	**45.33%**	**1**	**41,521**	**39.17%**

Over the first half of 2023, MSI Group's exposures to institutions and corporates in the majority of PD bands increased due to movement in OTC derivatives.

17. Appendix IV: Abbreviations

Term	Definition
AIRB	Advanced IRB
ASF	Available Stable Funding
AT1	Additional Tier 1
AVAs	Additional Valuation Adjustments
Basel Accords	Standard for international banking prudential regulation in a series of accords
BCBS	Basel Committee on Banking Supervision
BIA	Basic Indicator Approach
Bn	Billions
CCP	Central Counterparty
CCR	Counterparty Credit Risk
CCyB	Countercyclical Capital Buffer
CET1	Common Equity Tier 1
CFTC	Commodity Futures Trading Commission
CLF	Credit Limits Framework
CQS	Credit Quality Step
CRD	Capital Requirements Directive
CRM	Credit Risk Mitigation
CRMD	Credit Risk Management Department
CRMe	Comprehensive Risk Measure
CRR	Capital Requirements Regulation
CTP	Correlation Trading Portfolio
CVA	Credit Valuation Adjustments
EAD	Exposures at Default
EBA	European Banking Authority
ECAI	External Credit Assessment Institutions
ECB	European Central Bank
EMEA	Europe, Middle East and Africa
EU	European Union
EVE	Economic Value of Equity
EWI	Early Warning Indicator
FCA	Financial Conduct Authority
FCP	Funded Credit Protection
FIRB	Foundation IRB
G-SII	Global Systemically Important Institution
HQLA	High-Quality Liquid Assets
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
ILAAP	Internal Liquidity Adequacy Assessment Process
IMA	Internal Modelling Approaches
IMM	Internal Model Method
IRB	Internal Ratings Based
IRC	Incremental Risk Charge
IRRBB	Interest Rate Risk in the Banking Book
LCR	Liquidity Coverage Ratio
LGD	Loss-Given Default
LREQ	Leverage Ratio Requirements
L-SREP	Liquidity Supervisory Review Process
MCR	Minimum Capital Requirement
MM	Millions
MRD	Market Risk Department
MRM	Model Risk Management
MSBAG	Morgan Stanley Bank AG
MSBIL	Morgan Stanley Bank International Limited
MSEHSE Group	Morgan Stanley Europe Holding SE Group
MSESE	Morgan Stanley Europe SE

Term	Definition
MSESE Consol	Morgan Stanley Europe SE ("MSESE" together with its subsidiaries)
MSI	Morgan Stanley International Limited
MSI Group	(“MSI”) together with its subsidiaries
MSIP	Morgan Stanley & Co. International plc
NII	Net Interest Income
NSFR	Net Stable Funding Ratio
OTC	Over The Counter
PD	Probability of Default
PFE	Potential Future Exposure
PRA	Prudential Regulation Authority
PV01	Present Value to a 1 basis point move of the underlying interest rate
PVRM	Position Valuation and Risk Models
QCCP	Qualifying Central Counterparty
QoQ	Quarter-On-Quarter
QRM	Quantitative Risk Management
RC	Replacement cost
RNIV	Risks Not in VaR
RSF	Required Stable Funding
RWAs	Risk Weighted Exposure Amounts
SA	Standardised Approach
SA-CCR	Standardised Approach for Counterparty Credit Risk
SBSD	Securities Based Swap Dealer
SEC	Securities and Exchange Commission
SEC-ERBA	Securitisation External Ratings Based Approach
SEC-IRBA	Securitisation Internal Ratings Based Approach
SEC-SA	Securitisation Standardised Approach
SFTs	Securities Financing Transactions
SPOE	Single Point of Entry
SREP	Supervisory Review and Evaluation Process
SRT	Significant Risk Transfer
STS	Simple, Transparent and Standardised
SVaR	Stressed Value at Risk
T1	Tier 1
T2	Tier 2
TCR	Total Capital Requirement
TLAC	Total Loss Absorbing Capacity
TOFR	Total Own Funds Requirements
UFCP	Unfunded Credit Protection
USD	U.S. Dollars
UK	United Kingdom
VaR	Value at Risk