Pillar 3 Semi-Annual Disclosure Report as at 30th June 2019

J.P. Morgan Capital Holdings Limited

J.P. Morgan Securities Plc

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1. Introduction

Background

The need to assess whether an institution should disclose some information more frequently than annually, under Part Eight of the Capital Requirements Regulation ('CRR')[1], originates in Article 433 and the requirements are further articulated in the European Banking Authority ('EBA') Guidelines[2] ('GL1') , which were adopted by the Prudential Regulation Authority ('PRA') from 15th October 2015[3].

In addition, the requirements of EBA Final Report on Guidelines for Disclosure under Part Eight of the CRR[4] ('EBA GL2') have been incorporated into JPMC's disclosure process from 1st January 2018, and are followed for this document.

This document also includes some items required under the amendments to CRR that became applicable in June 2019.

Production of all Pillar 3 disclosure for J.P. Morgan entities in the EMEA region is governed by the JPMC EMEA Pillar 3 Policy Addendum which outlines scope, review and approval governance process requirements, including annual review on frequency and omissions policies, and by the EMEA Pillar 3 Process document.

All J.P. Morgan Chase entities regulated under the Capital Requirements Directive IV ('CRD IV')[5] have applied the Guidelines by:

- Enhancing the Pillar 3 policy and process to include a full assessment of the need to publish data more frequently than annually; and
- Identifying the key data elements to disclose in order to meet the needs of potential users of the disclosure.

Scope

All J.P. Morgan European regulated entities have been considered in the assessment, under the JPMC EMEA Pillar 3 Policy , for inclusion for disclosure, and then for more frequent than annual disclosure.

J.P. Morgan Capital Holdings Limited ('JPMCHL') is the highest consolidated level of J.P. Morgan entities within the UK and is defined as an Other Systemically Important Institution ('O-SII') as disclosed by the EBA on 25th April 2016, and is therefore included for disclosure under the requirements of EBA GL2.

J.P. Morgan Securities Plc ('JPMS plc') has been identified as a significant subsidiary of JPMCHL under Article 13 of the CRR, according to the aforementioned JPMC EMEA Pillar 3 Policy and is included on that basis.

The internal assessment process to determine which J.P. Morgan entities should disclose more frequently than annually concluded that both **JPMCHL** and **JPMS plc** are the UK entities meeting the qualitative and quantitative thresholds to necessitate more frequent disclosure.

The data disclosed in this document represents disclosure for the first half of 2019.

All data is recorded as at 30th June 2019 and consistent with CoRep and produced on an unaudited basis.

No items have been omitted due to confidentiality, materiality or for proprietary reasons under Titles III and IV of the Guidelines. Any line items that are not applicable have been hidden for presentation purposes.

Means of Disclosure (Article 434)

The disclosure report is made available according to Article 434 CRR on the website of JPMorgan Chase & Co. ('JPMC') at http://investor.shareholder.com/jpmorganchase/sec.cfm. The latest Annual disclosure is also available via this link.

Firmwide Disclosure

The ultimate parent of the entities in scope of this disclosure is JPMorgan Chase & Co., which is incorporated in the United States of America. Firmwide disclosure is made under the Basel III requirement available at the below link. In addition, the U.S. Securities and Exchange Commission filings made at the firmwide level, 10K and 10Q, provide further information at the following link: http://investor.shareholder.com/jpmorganchase/sec.cfm.

Expected departure of the UK from the EU

In 2016, the UK voted to withdraw from the EU, and in March 2017, the UK invoked Article 50 of the Lisbon Treaty, which commenced withdrawal negotiations with the EU. As a result, and after two extensions of the negotiation timeline, the UK is currently scheduled to depart from the EU on 31st October, 2019. Negotiations regarding the terms of the UK's withdrawal continue between the UK and the EU, although the situation remains highly uncertain.

The Firm established a Firmwide Brexit Implementation programme in 2017. The Firm has been making the necessary modifications to

[1] Capital Requirements Regulation (CRR) / Regulation [EU] No. 575/2013
[2] EBA Guidelines on materiality, proprietary and confidentiality and on disclosure frequency 23 December 2014
[3] PRA expectation of firms' compliance with EBA/GL/2014/14: http://www.bankofengland.co.uk/pra/Pages/crdiv/updates.aspx
[4] EBA Final Report on Guidelines for Disclosure under Part Eight of Regulation (EU) No 575/2013 Version 2 published 16th December 2016
[5] Capital Requirements Directive (CRD IV) / Regulation [EU] Directive 2013/36/EU

its legal entity structure and operations in the EU, the locations in which it operates and the staffing in those locations to ensure the continuity of service to the clients. For further details please refer to the Annual reports of the companies for the year ended 31st December 2018 available on the Companies House Website.

Key Metrics

Table 1: Key Metrics

$' mm	JPMCHL		JPMS plc	
	Q2 2019	Q1 2019	Q2 2019	Q1 2019
Own funds				
Tier 1 Capital	44,573	44,040	43,598	43,743
Tier 2 Capital	12,000	12,000	12,000	12,000
Total Own Funds	56,573	56,040	55,598	55,743
Risk Weighted Assets				
Risk Weighted Assets	242,104	243,556	243,182	242,196
Capital Ratios as a Percentage of RWA				
Tier 1 Capital Ratio	18.41%	18.08%	17.93%	18.06%
Total Capital Ratio	23.37%	23.01%	22.86%	23.02%
Leverage Ratio				
Leverage Exposure	643,174	703,226	639,922	702,991
Leverage Ratio	6.93%	6.26%	6.81%	6.22%
Liquidity Coverage Ratio				
Liquidity Coverage Ratio	287%	280%	278%	268%

2. Own Funds (Article 437)

Own Funds Disclosures

Capital resources represent the amount of regulatory capital available to an entity to cover all risks. Defined under the CRR, capital resources are designated into two tiers, Tier 1 and Tier 2. Tier 1 capital consists of Common Equity Tier 1 ('CET1') and Additional Tier 1 ('AT1'). CET1 is the highest quality of capital and typically represents share capital, reserves and audited profit; AT1 contains hybrid debt instruments; Tier 2 capital typically consists of subordinated debt and other eligible capital instruments.

The Financial Stability Board ('FSB') Total Loss Absorbing Capacity ('TLAC') standard, issued in November 2015, specified minimum TLAC requirements for G-SIBs, including at the level of their material sub-groups. Within the EU and the UK, the EU Bank Recovery and Resolution Directive ('BRRD') and the UK transposition of the Directive established a requirement for the Bank of England ('BoE') to set a target level for the Minimum Requirement for Own Funds and Eligible Liabilities ('MREL'). Both TLAC and MREL are intended to facilitate the resolution of a financial institution without causing financial instability and without recourse to public funds. The BoE updated Statement of Policy on its Approach to Setting MREL, published in June 2018, included requirements on the internal MREL resources to be held by UK material subsidiaries of overseas groups. In line with the FSB TLAC standard, these rules came into effect, on a transitional basis, from 1st January 2019, with full compliance required by 1st January 2022. Amendments to the CRR published in June 2019 implement the FSB TLAC standard for EU Global Systemically Important Institutions ('G-SIIs') and material subsidiaries of non-EU G-SIIs. These came into effect, on a transitional basis, from 27th June 2019, with full compliance required by 1st January 2022 and apply at the level of the consolidated E.U parent entity.

The information represented in the tables below constitutes the applicable data elements for Own Funds specified in the Commission Implementing Regulation (EU) No 1423/2013.

Key Changes during the Period

- **JPMCHL** : The total capital ratio has increased by 0.36% from 23.01% as at 31st March 2019 to 23.37%. The increase in the total capital ratio is driven by recognised audited profits in CET1.

- **JPMS plc:** The total capital ratio has decreased by 0.15% from 23.02% as at 31st March 2019 to 22.86% with no significant changes.

Table 2: CRDIV Regulatory Capital for JPMCHL

Own Funds Disclosure Template ($'mm)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference
Common Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	8,081	26 (1), 27, 28, 29
1.1	of which: Ordinary shares	8,081	EBA list 26 (3)
2	Retained earnings	28,561	26 (1) (c)
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	9,294	26 (1)
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	45,936	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	(1,313)	34, 105
8	Intangible assets (net of related tax liability) (negative amount)	(51)	36 (1) (b), 37
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	(1,364)	
29	**Common Equity Tier 1 (CET1) capital**	44,572	
Additional Tier 1 (AT1) capital: Instruments			
44	**Additional Tier 1 (AT1) capital**	—	
45	**Tier 1 capital (T1 = CET1 + AT1)**	44,572	
Tier 2 (T2) capital: instruments and provisions			
46	Capital instruments and the related share premium accounts	12,000	62, 63
51	**Tier 2 (T2) capital before regulatory adjustments**	12,000	
Tier 2 (T2) capital: regulatory adjustments			
57	**Total regulatory adjustments to Tier 2 (T2) capital**	—	
58	**Tier 2 (T2) capital**	12,000	
59	**Total capital (TC = T1 + T2)**	56,572	
60	**Total risk weighted assets**	242,104	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	18.41%	92 (2) (a)
62	Tier 1 (as a percentage of total risk exposure amount)	18.41%	92 (2) (b)

Own Funds Disclosure Template ($'mm)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference
63	Total capital (as a percentage of total risk exposure amount)	23.37%	92 (2) (c)
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution buffer (G-SII or O-SII buffer) expressed as a percentage of risk exposure amount)	4.50%	CRD 128, 129, 130, 131, 133
65	of which: capital conservation buffer requirement	2.5%	
66	of which: countercyclical buffer requirement	0.2%	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	11.34%	CRD 128
Amounts below the thresholds for deduction (before risk weighting)			
72	Direct and indirect holdings of the capital 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)	4,457	36 (1) (h), 46, 45, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70
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 10% threshold and net of eligible short positions)	777	36 (1) (i), 45, 48
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	131	36 (1) (c), 38, 48

Table 3: CRDIV Regulatory Capital for JPMS plc

Own Funds Disclosure Template ($'mm)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference
Common Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	22,394	26 (1), 27, 28, 29
1.1	of which: Ordinary shares	22,394	EBA list 26 (3)
2	Retained earnings	15,847	26 (1) (c)
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	6,668	26 (1)
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	44,909	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	(1,311)	34, 105
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	(1,311)	
29	**Common Equity Tier 1 (CET1) capital**	43,598	
Additional Tier 1 (AT1) capital: Instruments			
44	**Additional Tier 1 (AT1) capital**	—	
45	**Tier 1 capital (T1 = CET1 + AT1)**	43,598	
Tier 2 (T2) capital: instruments and provisions			
46	Capital instruments and the related share premium accounts	12,000	62, 63
51	**Tier 2 (T2) capital before regulatory adjustments**	12,000	
Tier 2 (T2) capital: regulatory adjustments			
57	**Total regulatory adjustments to Tier 2 (T2) capital**	—	
58	**Tier 2 (T2) capital**	12,000	
59	**Total capital (TC = T1 + T2)**	55,598	
60	**Total risk weighted assets**	243,182	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	17.93%	92 (2) (a)
62	Tier 1 (as a percentage of total risk exposure amount)	17.93%	92 (2) (b)
63	Total capital (as a percentage of total risk exposure amount)	22.86%	92 (2) (c)
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution buffer (G-SII or O-SII buffer) expressed as a percentage of risk exposure amount)	4.50%	CRD 128, 129, 130, 131, 133
65	of which: capital conservation buffer requirement	2.5%	
66	of which: countercyclical buffer requirement	0.20%	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	11.93%	CRD 128

Own Funds Disclosure Template ($'mm)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference
Amounts below the thresholds for deduction (before risk weighting)			
72	Direct and indirect holdings of the capital 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)	4,224	36 (1) (h), 46, 45 56 (c), 59, 60 66 (c), 69, 70
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 10% threshold and net of eligible short positions)	2,421	36 (1) (i), 45, 48
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	127	36 (1) (c), 38, 48

Own Funds Reconciliation

The tables below present a reconciliation between unaudited balance sheet own funds and regulatory own funds as at 30th June 2019 in accordance with the requirements set out in Commission Implementing Regulation (EU) No 1423/2013.

Table 4: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMCHL

Regulatory Own Funds Reconciliation to Balance Sheet	$'mm
CET1 Capital	
406,909,774 Ordinary Shares of $10 each	4,069
Share Premium Account	4,012
Other Reserves	9,293
Retained Earnings	29,796
CET1 Capital - Balance Sheet Own Funds	47,170
Less Regulatory Adjustments	
(-) Unaudited Profit	(1,234)
(-) Goodwill and Other Intangible Assets	(51)
(-) Additional Valuation Adjustments	(1,313)
CET1 Capital - Regulatory Own Funds After Adjustments	44,572
T2 Capital	
Subordinated Loan (maturity 17/12/2028)	12,000
T2 Capital - Balance Sheet Own Funds	12,000
T2 Capital - Regulatory Own Funds After Adjustments	12,000
Total Regulatory Own Funds	56,572

Table 5: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMS plc

Regulatory Own Funds Reconciliation to Balance Sheet	$'mm
CET1 Capital	
1,244,343 Ordinary Shares of $10,000 each	12,443
50,000 Ordinary Shares of £1.24 each	—
Share Premium Account	9,951
Other Reserves	6,668
Retained Earnings	17,005
CET1 Capital - Balance Sheet Own Funds	46,067
Less Regulatory Adjustments	
(-) Unaudited Profit	(1,158)
(-) Additional Valuation Adjustments	(1,311)
CET1 Capital - Regulatory Own Funds After Adjustments	43,598
Subordinated Loan (maturity 17/12/2028)	12,000
T2 Capital - Balance Sheet Own Funds	12,000
T2 Capital - Regulatory Own Funds After Adjustments	12,000
Total Regulatory Own Funds	55,598

Liabilities

The amendments to the CRR published in June 2019 specify, under Article 72a(2), the liabilities that shall be excluded from eligible liabilities items for the purposes of MREL compliance. The table below provides a breakdown of the liability structure of JPMCHL, including the aggregate excluded liabilities under the provisions of Article 72a(2).

Table 6: Liability structure for JPMCHL

Liability structure	Revised Regulation (EU) No 575/2013 Article Reference	JPMCHL ($'mm)
Tier 2 instruments	Article 72a(1)	12,000
Excluded liabilities	Article 72a(2)	496,279
Residual liabilities		184,232
Total liabilities		692,511

Main Features of Capital Instruments

The table below presents the main features of regulatory capital instruments for JPMCHL and JPMS plc as at 30th June 2019 and as required by Commission Implementing Regulation (EU) No 1423/2013. The terms and conditions for these instruments can be found on the Companies House website.

Table 7: Main Features of Regulatory Capital Instruments

Capital Instruments Main Features		JPMCHL		JPMS plc			
		CET1	T2	CET1	CET1	CET1	T2
		$10 ordinary shares	$12,000mm subordinated loan	$10,000 ordinary shares	£1 ordinary shares	£1.24 ordinary shares	$12,000mm subordinated loan
1	Issuer	JPMCHL	JPMCHL	JPMS plc	JPMS plc	JPMS plc	JPMSplc
2	Unique identifier	Private Placement	Internal issuance	Private Placement	Private Placement	Private Placement	Internal issuance
3	Governing law(s) of the instrument	The Companies Act 2006	English Law	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	English Law
Regulatory treatment							
4	Transitional CRR rules	Common Equity Tier 1	Tier 2	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Tier 2
5	Post-transitional CRR rules	Common Equity Tier 1	Tier 2	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Tier 2
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	(sub-)consolidated	(sub-)consolidated	Solo	Solo	Solo	Solo
7	Instrument type (types to be specified by each jurisdiction)	$ Ordinary	$ Subordinated Notes/ Loan	$ Ordinary	£ Ordinary	£ Ordinary	$ Subordinated Notes/ Loan
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date).	$8,081 includes nominal and premium	$12,000	$22,394 includes nominal and premium	0	0	$12,000
9	Nominal amount of instrument	$10	$12,000,000,000	$10,000	£1	£1.24	$12,000,000,000
9a	Issue price	average issue price $20	$12,000,000,000	average issue price $17,997	£1	£1.24	$12,000,000,000
9b	Redemption price	N/A	1	N/A	N/A	N/A	1
10	Accounting classification	Shareholders' equity	Liability - amortised cost	Shareholders' equity	Shareholders' equity	Shareholders' equity	Liability - amortised cost
11	Original date of issuance (issued paid up share capital)	$0.2m Nov 18 1999 $2,000m Jan 25 2000 $959m Nov 2 2000 $1,110m Apr 9 2002 $0.01m Dec 12 2006 $0.01m Mar 7 2007	$12,000m Dec 17 2018	$647m Oct 22 1991 $290m Mar 1 2000 $500m Jan 2 2007 $278m Jan 12 2007 $270m Dec 1 2008 $230m Dec 4 2008 $300m Jan 30 2009 $2,000m Dec 20 2010 $2,274m May 27 2011 $362m Dec 12 2011 $1,263m Dec 16 2013 $116m Dec 2014 $662m Jul 27 2015 $2,051m Sep 11 2017	£0.000002m Oct 27 1999	£0.062m May 28 2012	$12,000m Dec 17 2018

Capital Instruments Main Features		JPMCHL		JPMS plc			
		CET1	T2	CET1	CET1	CET1	T2
		$10 ordinary shares	$12,000mm subordinated loan	$10,000 ordinary shares	£1 ordinary shares	£1.24 ordinary shares	$12,000mm subordinated loan
12	Perpetual or dated	Perpetual	Dated	Perpetual	Perpetual	Perpetual	Dated
13	Original maturity date	No maturity	December 17 2028	No maturity	No maturity	No maturity	December 17 2028
14	Issuer call subject to prior supervisory approval	No	Yes	No	No	No	Yes
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A	N/A	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A	N/A
Coupons / dividends							
17	Fixed or floating dividend/coupon	N/A	Floating	N/A	N/A	N/A	Floating
18	Coupon rate and any related index	N/A	1M USD Libor +1.55%	N/A	N/A	N/A	1M USD Libor + 1.55%
19	Existence of a dividend stopper	No	No	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Full discretionary	Mandatory	Full discretionary	Full discretionary	Full discretionary	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Full discretionary	Mandatory	Full discretionary	Full discretionary	Full discretionary	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A	N/A
30	Write-down features	N/A	N/A	N/A	N/A	N/A	No
31	If write-down, write-down trigger(s)	N/A	N/A	N/A	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	One class of share & same rights attached to all shares	Unsecured and Subordinated Creditors	Ranks pari passu	Ranks pari passu	Ranks pari passu	Unsecured and subordinated Creditors
36	Non-compliant transitioned features	No	No	No	No	No	No
37	If yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A	N/A

3. Capital Requirements (Article 438)

Minimum Capital Requirements

The tables below show a breakdown of the risk weighted assets and associated minimum capital requirements for JPMCHL and JPMS plc. The minimum capital requirement is the amount of Pillar 1 capital that the CRR requires JPMCHL and JPMS plc to hold at all times. Both JPMCHL and JPMS plc's total capital resources must be greater than its minimum capital requirement, allowing for a capital excess to cover any additional obligations, for example, Pillar 2.

The standardised approach has been used for the calculation of credit risk. The Mark-to-Market Method ('MtM') and Internal Model Method ('IMM') have been employed to calculate OTC derivative exposure in CCR.

Market risk capital requirements have been measured by using a combination of the standardised approach and internal models including Value-at-Risk ('VaR') approved by the PRA. The basic indicator approach has been used for the calculation of operational risk capital requirements.

Key Changes during the Period

- No significant changes in Risk Weighted Assets ('RWA') for JPMCHL and JPMS plc in the reporting period.

Table 8: EU OV1 - Overview of RWAs for JPMCHL[6]

$'mm			RWA		Minimum capital requirements
			Q2 2019	Q1 2019	Q2 2019
	1	**Credit risk (excluding CCR)**	18,723	17,711	1,498
Article 438(c)(d)	2	Of which the standardised approach	18,723	17,711	1,498
Article 107 and Article 438(c)(d)	6	**CCR**	107,942	109,719	8,635
Article 438(c)(d)	7	Of which mark to market	26,968	25,983	2,157
	10	Of which internal model method (IMM)	23,478	23,025	1,878
Article 438(c)(d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	87	71	7
Article 438(c)(d)	12	Of which CVA	11,186	10,680	895
Article 438(e)	13	**Settlement risk**	304	282	24
Article 438 (e)	19	**Market risk**	98,207	99,552	7,856
	20	Of which the standardised approach	84,102	84,914	6,728
	21	Of which IMA	14,105	14,638	1,128
Article 438(f)	23	**Operational risk**	16,579	15,959	1,326
	24	Of which basic indicator approach	16,579	15,959	1,326
Article 437(2), Article 48 and Article 60	27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	349	333	28
	29	**Total**	242,104	243,556	19,367

Table 9: EU OV1 - Overview of RWAs for JPMS plc[7]

$'mm			RWA		Minimum capital requirements
			Q2 2019	Q1 2019	Q2 2019
	1	**Credit risk (excluding CCR)**	17,758	15,978	1,421
Article 438(c)(d)	2	Of which the standardised approach	17,758	15,978	1,421
Article 107 and Article 438(c)(d)	6	**CCR**	107,965	109,756	8,637
Article 438(c)(d)	7	Of which mark to market	26,968	25,975	2,157
	10	Of which internal model method (IMM)	23,479	23,029	1,878
Article 438(c)(d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	87	71	7
Article 438(c)(d)	12	Of which CVA	11,186	10,680	895
Article 438(e)	13	**Settlement risk**	201	181	16
Article 438 (e)	19	**Market risk**	97,946	96,995	7,835
	20	Of which the standardised approach	83,841	82,357	6,707

[6] The exposure value to SFTs is included under CCR, it is not shown in the CCR breakdown, as in line with the EBA prescribed template.
[7] As per footnote 6.

$'mm			RWA		Minimum capital requirements
			Q2 2019	Q1 2019	Q2 2019
	21	Of which IMA	14,105	14,638	1,128
Article 438(f)	23	**Operational risk**	13,632	13,632	1,091
	24	Of which basic indicator approach	13,632	13,632	1,091
Article 437(2), Article 48 and Article 60	27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	5,680	5,654	454
	29	**Total**	243,182	242,196	19,454

Total Capital Requirements

In accordance with PRA Supervisory Statement SS31/15 the firm is now required to disclose the Total Capital Requirements (‘TCR’). TCR is the sum of Pillar 1 and Pillar 2A capital requirements. The requirement is only applicable for firms at the highest level of consolidation in the UK.

Table 10: Total Capital Requirements for JPMCHL

$'mm	JPMCHL	
	Q2 2019	Q1 2019
Total Capital Requirements	25,554	26,871

4. Exposure to Counterparty Credit Risk (Article 439)

Counterparty Credit Risk Analysis

The table below shows counterparty credit risk exposures (excluding trades cleared through a CCP) by methods used to calculate CRR regulatory requirements for JPMCHL. Counterparty credit risk exposures are calculated under the standardised approaches set out in the CRR. Derivative exposures are calculated using the MtM method (CRR Article 274) and the IMM (CRR Article 283). SFTs use the Financial Collateral Comprehensive Method (‘FCCM’) (CRR Article 223). Long settlement transactions are treated under the FCCM method.

Table 11: EU CCR1 – Analysis of CRR exposure by approach for JPMCHL

	$'mm	Replacement cost/current market value	Potential future credit exposures	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market	4,605	41,012			48,559	26,198
4	IMM (for derivatives and SFTs)			22,087	1.4	30,922	23,478
6	Of which derivatives and long settlement transactions			22,087	1.4	30,922	23,478
9	Financial collateral comprehensive method (for SFTs)					68,577	46,018
11	**Total**						**95,694**

The flow statements explaining changes in the CCR RWAs determined under the IMM are depicted in the table below.

Table 12: EU CCR7 – RWA flow statements of CCR exposures under the IMM for JPMCHL

	$'mm	RWA amounts	Capital requirements
1	**RWA as at end of previous reporting period (31st March 2019)**	**23,025**	**1,842**
2	Asset size	323	26
3	Credit quality of counterparties	39	3
4	Model updates (IMM only)	51	4
5	Methodology and policy (IMM only)	—	—
8	Other[8]	40	3
9	**RWAs as at the end of the current reporting period (30th June 2019)**	**23,478**	**1,878**

The following table represents an overview of the impact of netting and collateral held on exposures for derivatives (including long settlement transactions) and SFTs.

Table 13: EU CCR5-A – Impact of netting and collateral held on exposure values for JPMCHL

$'mm	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held[9]	Net credit exposure
Derivatives[10]	286,008	(217,424)	68,584	(32,522)	36,062
SFTs subject to a netting agreement	438,980	(305,292)	133,688	(56,432)	77,255
SFTs not subject to a netting agreement	3,803	—	3,803	(2,233)	1,570
Non-eligible collateral under the CRR[11]				(337)	
Total	728,791	(522,716)	206,075	(91,187)	114,887

[8] Includes changes in Specific Wrong Way Risk (‘SWWR’).
[9] Includes supervisory volatility adjustments and excludes collateral for OTC derivative exposures under IMM.
[10] The prudent valuation adjustments are deducted from the regulatory capital but they are not used to calculate the derivative credit exposure, therefore the balances represent values before the application of the prudent valuation adjustments.
[11] Non-eligible collateral does not include supervisory volatility adjustments.

Collateral Used in Counterparty Credit Risk

The breakdown of all types of collateral posted or received by JPMCHL to mitigate CCR exposure to derivatives and SFTs is shown in the table below. As at 30th June 2019, the majority of collateral used which JPMCHL held was in cash.

Table 14: EU CCR5-B – Composition of collateral for exposures to CCR for JPMCHL[12]

$'mm	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	—	59,830	—	77,581	40,144	17,044
Debt securities (Central Governments)	—	20,297	—	13,533	—	4,208
Debt securities (Corporates)	—	347	—	—	3,582	11,679
Debt securities (Institutions)	—	—	—	—	5,616	2,345
Equities	—	171	—	4	28,933	38,446
Convertible securities	—	—	—	—	1,305	875
CIUs	—	—	—	—	1,733	707
Other	—	3	—	—	6	2
Total	—	80,648	—	91,118	81,319	75,306

CVA Capital Charge

The exposure value and associated RWAs subject to CVA capital charges are calculated according to both the Advanced method as set in CRR Article 383 and the Standardised method as prescribed in CRR Article 384.

Table 15: EU CCR2 – CVA capital charge for JPMCHL

	$'mm	JPMCHL	
		Exposure value	RWAs
1	Total portfolios subject to the advanced method	13,549	5,715
2	(i) VaR component (including the 3× multiplier)		1,058
3	(ii) SVaR component (including the 3× multiplier)		4,657
4	All portfolios subject to the standardised method	8,344	5,471
5	**Total subject to the CVA capital charge**	21,893	11,186

Exposure to CCPs

The following table shows a comprehensive picture of JPMCHL's exposures to CCPs. JPMCHL does not have any exposure to non-QCCPs[13]. The exposure amount for default funds contributions is calculated as per CRR Article 308.

Table 16: EU CCR8 – Exposures to CCPs for JPMCHL

	$'mm	JPMCHL	
		EAD post CRM	RWAs
1	**Exposures to QCCPs (total)**		1,063
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	48,215	965
3	(i) OTC derivatives	19,137	383
4	(ii) Exchange-traded derivatives	18,829	377
5	(iii) SFTs	10,249	205
7	Segregated initial margin[14]		
8	Non-segregated initial margin	570	11
9	Prefunded default fund contributions	638	87
11	**Exposures to non-QCCPs (total)**		—

[12] The table includes both eligible and non-eligible collateral before application of supervisory volatility adjustments.
[13] QCCP (qualifying central counterparty) means a central counterparty that has been either authorised in accordance with Article 14 of Regulation (EU) No 648/ 2012 or recognised in accordance with Article 25 of that Regulation.
[14] For regulatory purposes all segregated margin is treated as non-segregated.

Credit Derivatives Breakdown

The table below presents a breakdown of credit derivatives notionals for JPMCHL by product type and whether they are held for client intermediation (other credit derivatives) or for the firm's own portfolio (credit derivative hedges). The firm makes limited use of credit derivatives hedges for the purpose of credit risk mitigation as disclosed in Section 9. Credit derivatives trading activity is only carried out within the JPMS plc which consolidates to JPMCHL.

Table 17: EU CCR6 – Credit derivatives exposures for JPMCHL

$'mm	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
Notionals			
Credit default swaps	—	—	1,200,408
Total return swaps	22,727	—	3,377
Total notionals	22,727	—	1,203,785
Fair values			
Positive fair value (asset)	—	—	21,849
Negative fair value (liability)	(8,173)	—	(20,715)

5. Credit Risk Adjustments (Article 442)

Adoption of IFRS 9

Effective 1st January 2018, the Company adopted IFRS 9 'Financial Instruments', which superseded IAS 39 'Financial Instruments Recognition and Measurement'. The adoption of IFRS 9 resulted in changes to the classification and measurement of financial assets including the impairment of financial assets and the presentation of gains and losses related to certain financial liabilities designated at fair value through profit or loss.

Impairment of financial assets and lending-related commitments

The Company recognises expected credit losses (‘ECL’) for financial assets that are measured at amortised cost or fair value through other comprehensive income (‘FVOCI’), and specified off-balance sheet lending-related commitments such as loan commitments and financial guarantee contracts.

Provisions for ECL are recognised on initial recognition of the financial instrument based on expectations of credit losses at that time. The credit loss allowance includes ECLs for financial instruments that may default in the next 12-month period for financial instruments that have not observed a significant increase in credit risk since initial recognition (‘stage 1’) or over a lifetime period for financial instruments that have observed a significant increase in credit risk since initial recognition (‘stage 2’). The allowance also includes lifetime ECLs for financial instruments where there is objective evidence of credit-impairment at the reporting date (‘stage 3’). In determining the appropriate stage for a financial instrument, the Company applies the definition of default consistent with the Basel definition of default to maintain uniformity of the definition across the Firm.

The determination of the stage for credit losses under the ECL model is dependent on the measurement of a significant increase in credit risk (‘SICR’). In determining SICR, the Company has conducted quantitative tests, which considers, but is not limited to, existing risk management indicators, credit rating changes and reasonable and supportable forward-looking information. Forward-looking information reflects a range of scenarios that incorporate macro-economic factors that are composed and monitored by the Firmwide specialised economic forecasting team.

The key input components for the quantification of expected credit loss through the ECL model includes the probability of default (‘PD’), loss given default (‘LGD’) and exposure at default (‘EAD’). The Company seeks to efficiently and effectively leverage as much as possible existing regulatory and capital frameworks where overlap is present for IFRS 9. Differences observed between content in existing frameworks and requirements under IFRS 9 have been identified and are adjusted accordingly. The inputs to the ECL model capture historical datasets and a reasonable and supportable forecasting horizon to estimate expected credit losses.

Impairment of non-financial assets

Non-financial assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset’s carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset’s fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash-generating units). Prior impairments of non-financial assets (other than goodwill) are reviewed for possible reversal at each reporting date.

Past due

A financial asset is past due when a counterparty has failed to make a payment when contractually due following appropriate market convention.

The following analysis for credit exposures is only provided for material exposure classes or industries exceeding 5% of the total net value. All other exposure classes or industries are included under 'Other residual exposure'. Exposure class 'Exposure in default' is only shown as its original exposure class. All tables in this section do not include counterparty credit risk.

Analysis of Credit Exposures

The tables below show defaulted and non-defaulted exposures before credit risk mitigation broken down by exposure class and associated credit risk adjustments. Credit risk adjustments arising from loan loss provisions which are individually immaterial are not used to reduce the exposure value. This is consistent with the CoRep submission.

Table 18: EU CR1-A – Credit quality of exposures by exposure class and instrument for JPMCHL

	$'mm	a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net Values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	Central governments or central banks	—	23,403	—	—	—	—	23,403
2	Institutions	—	7,628	—	—	—	—	7,628
3	Corporates	290	22,072	59	—	—	59	22,303
4	Other Residual Exposure	—	1,198	—	—	—	—	1,198
5	Total standardised approach	290	54,301	59	—	—	59	54,532
6	**Total**	**290**	**54,301**	**59**	**—**	**—**	**59**	**54,532**
7	Of which: Loans	199	6,761	56	—	—	56	6,903
8	Of which: Debt securities	—	149	—	—	—	—	149
9	Of which: Off-balance-sheet exposures	91	15,584	3	—	—	3	15,672

Table 19: EU CR1-A – Credit quality of exposures by exposure class and instrument for JPMS plc

	$'mm	a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net Values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	Central governments or central banks	—	23,393	—	—	—	—	23,393
2	Institutions	—	11,710	—	—	—	—	11,710
3	Corporates	290	19,993	59	—	—	59	20,223
4	Other Residual Exposure	—	3,287	—	—	—	—	3,287
5	Total standardised approach	290	58,383	59	—	—	59	58,613
6	**Total**	**290**	**58,383**	**59**	**—**	**—**	**59**	**58,613**
7	Of which: Loans	199	10,938	56	—	—	56	11,080
8	Of which: Debt securities	—	149	—	—	—	—	149
9	Of which: Off-balance-sheet exposures	91	13,975	3	—	—	3	14,063

Industry Analysis of Credit Exposures

The tables below present an analysis of credit quality of on-balance sheet and off-balance sheet exposures before credit risk mitigation by industry sector and associated credit risk adjustments.

Table 20: EU CR1-B – Credit quality of exposures by industry or counterparty types for JPMCHL

	$'mm	a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	Finance Industry	164	39,977	55	—	—	55	40,086
2	Manufacturing	22	6,012	1	—	—	1	6,033
3	Other Residual Exposure	104	8,312	3	—	—	3	8,413
4	**Total**	**290**	**54,301**	**59**	**—**	**—**	**59**	**54,532**

Table 21: EU CR1-B – Credit quality of exposures by industry or counterparty types for JPMS plc

	$'mm	a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	Finance Industry	164	43,292	55	—	—	55	43,400
2	Manufacturing	22	5,364	1	—	—	1	5,385
3	Other Residual Exposure	104	9,727	3	—	—	3	9,828
4	**Total**	**290**	**58,383**	**59**	**—**	**—**	**59**	**58,613**

Geographical Location of Exposures

The tables below show credit exposures before credit risk mitigation broken down by geographic location. Other geographical areas includes multilateral development banks and international organisations which operate across multiple regions.

Table 22: EU CR1-C – Credit quality of exposures by geography for JPMCHL

	$'mm	a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	**EMEA**	**126**	**38,078**	**4**	**—**	**—**	**4**	**38,200**
2	Federal Republic of Germany	—	23,610	—	—	—	—	23,610
3	Luxembourg	64	2,867	2	—	—	2	2,930
4	Belgium	—	1,912	—	—	—	—	1,912
5	Sweden	40	1,376	1	—	—	1	1,414
6	Other Countries in EMEA (Residual Exposure)	22	8,313	1	—	—	1	8,334
7	**AMERICA**	**164**	**14,531**	**55**	**—**	**—**	**55**	**14,640**
8	United States of America	—	12,961	—	—	—	—	12,961
9	Other Countries in AMERICA (Residual Exposure)	164	1,570	55	—	—	55	1,679
10	**APAC**	**—**	**1,635**	**—**	**—**	**—**	**—**	**1,635**
12	**Other Geographical Areas**	**—**	**57**	**—**	**—**	**—**	**—**	**57**
13	**Total**	**290**	**54,301**	**59**	**—**	**—**	**59**	**54,532**

Table 23: EU CR1-C – Credit quality of exposures by geography for JPMS plc

	$'mm	a	b	c	d	e	f	g
		Gross carrying values of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net Values
		Defaulted exposures	Non-defaulted exposures					(a+b-c-d)
1	**EMEA**	**126**	**43,496**	**4**	**—**	**—**	**4**	**43,618**
2	Federal Republic of Germany	—	23,594	—	—	—	—	23,594
3	Republic of South Africa	—	4,595	—	—	—	—	4,595
4	United Kingdom	—	3,120	—	—	—	—	3,120
5	Luxembourg	64	2,802	2	—	—	2	2,864
6	Belgium	—	1,896	—	—	—	—	1,896
7	Other Countries in EMEA (Residual Exposure)	62	7,489	2	—	—	2	7,549
8	**AMERICA**	**164**	**13,196**	**55**	**—**	**—**	**55**	**13,304**
9	United States of America	—	11,631	—	—	—	—	11,631
10	Other Countries in AMERICA (Residual Exposure)	164	1,565	55	—	—	55	1,673
11	**APAC**	**—**	**1,634**	**—**	**—**	**—**	**—**	**1,634**
13	**Other Geographical Areas**	**—**	**57**	**—**	**—**	**—**	**—**	**57**
14	**Total**	**290**	**58,383**	**59**	**—**	**—**	**59**	**58,613**

Non-performing and Forborne Exposures

The following tables provide an overview of non-performing and forborne exposures as per the Commission Implementing regulation (EU) No 680/2017.

Table 24: EU CR1-E – Non-performing and forborne exposures for JPMCHL

$'mm		Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
			Of which performing but past due > 30 days and <= 90 days	Of which performing forborne	Of which non-performing				On performing exposures		On non-performing exposures		On non-performing exposures	Of which forborne exposures
						Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne		
010	Debt securities	149	—	—	—	—	—	—	—	—	—	—	—	—
020	Loans and advances	6,960	—	—	199	199	56	—	—	—	56	—	—	—
030	Off-balance-sheet exposures	15,675	—	—	91	91	3	—	—	—	3	—	—	—

Table 25: EU CR1-E – Non-performing and forborne exposures for JPMS plc

$'mm		Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
			Of which performing but past due > 30 days and <= 90 days	Of which performing forborne	Of which non-performing				On performing exposures		On non-performing exposures		On non-performing exposures	Of which forborne exposures
						Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne		
010	Debt securities	149	—	—	—	—	—	—	—	—	—	—	—	—
020	Loans and advances	11,137	—	—	199	199	56	—	—	—	56	—	—	—
030	Off-balance-sheet exposures	14,066	—	—	91	91	3	—	—	—	3	—	—	—

Credit Risk Adjustments

No general credit risk adjustment was made in the reporting period. The specific credit risk adjustments relate to loans to corporate customers.

Table 26: EU CR2-A – Changes in the stock of general and specific credit risk adjustments

$'mm		JPMCHL	JPMS plc
		Accumulated specific credit risk adjustment	Accumulated specific credit risk adjustment
1	**Opening balance (1st January 2019)**	1	1
2	Increases due to amounts set aside for estimated loan losses during the period	58	58
8	Other adjustments	—	—
9	**Closing balance (30th June 2019)**	59	59
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	56	56

Defaulted and Impaired Exposures

The table below presents changes in defaulted or impaired loans and debt securities between 1st January 2019 and 30th June 2019. The defaulted exposure of $199m represents loans made to corporate customers.

Table 27: EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities

$'mm		JPMCHL	JPMS plc
		Gross carrying value defaulted exposures	Gross carrying value defaulted exposures
1	**Opening balance (1st January 2019)**	161	161
2	Loans and debt securities that have defaulted or impaired since the last reporting period	38	38
6	**Closing balance (30th June 2019)**	199	199

Past Due Exposures

As at 30th June 2019 there were no material past due exposures reported in the entities in scope.

6. Use of External Credit Assessment Institutions (Article 444)

ECAIs and Exposure Classes

Under the Standardised approach, RWA are calculated using credit ratings assigned by External Credit Assessment Institutions ('ECAI'). The firm applies the standard ECAI ratings to risk weight mappings provided by the EBA.

J. P. Morgan uses the following ECAIs to determine risk weights for this purpose:

- Moody's;
- Standard & Poor's ('S&P'); and
- Fitch.

These rating assessments are used for calculation of the risk weights for the following classes of exposure:

- Central governments and central banks;
- Institutions;
- Corporates;
- Securitisation positions;
- Multilateral development banks;
- Regional governments and local authorities; and
- Short-term claims on institutions and corporates.

All other exposure classes are assigned risk weightings described in the standardised approach as per the CRR (Article 113 to Article 134).

Exposures at Default by Risk Weights

Credit Risk Exposures at Default Post-Credit Risk Mitigation

The breakdown of credit risk exposures (excluding counterparty credit risk) post conversion factor and post risk mitigation technique (including volatility adjustments) under the standardised approach, by exposure class, is presented in the table below.

Table 28: EU CR5 – Standardised approach (post-CRM) for JPMCHL

Exposure classes ($'mm)		Risk weight								Total	Of which unrated
		0%	20%	50%	100%	150%	250%	1250%	Deducted		
1	Central governments or central banks	23,037	97	40	87	4	138	—	—	23,403	190
3	Public sector entities	—	1	—	4	—	—	—	—	5	2
4	Multilateral development banks	55	—	—	—	—	—	—	—	55	7
6	Institutions	—	5,645	938	287	—	—	122	—	6,992	901
7	Corporates	—	1,816	1,989	11,427	261	2	25	—	15,520	7,331
10	Exposures in default	—	—	—	147	52	—	—	—	199	147
11	Higher-risk categories	—	—	—	—	533	—	9	—	542	542
15	Equity	—	—	—	2	131	—	—	—	133	131
16	Other items	—	—	—	434	—	—	—	51	485	434
17	**Total**	23,094	7,559	2,967	12,388	981	140	156	51	47,336	9,685

Counterparty Credit Risk Exposures at Default Post-Credit Risk Mitigation

The table below shows exposures at default post credit risk mitigation technique (including volatility adjustments) for counterparty credit risk broken down by exposure class and risk weight.

Table 29: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk (post CRM) for JPMCHL

Exposure Classes ($'mm)		Risk Weight						Total	Of which unrated
		0%	2%	20%	50%	100%	150%		
1	Central government or central banks	10,095	—	1,228	—	3,724	—	15,047	3,560
2	Regional government or local authorities	328	—	100	—	—	—	428	—
3	Public sector entities	—	—	2,525	—	7	—	2,532	1,573
4	Multilateral development banks	169	—	—	16	—	—	185	16
5	International organisations	111	—	—	—	—	—	111	—
6	Institutions	53	48,785	45,085	18,884	1,076	—	113,883	46,719
7	Corporates	—	—	833	2,051	44,470	416	47,770	41,929
9	Higher-risk categories	—	—	—	—	—	16,848	16,848	16,830
12	Total	10,756	48,785	49,771	20,951	49,277	17,264	196,804	110,627

7. Exposure to Market Risk (Article 445)

JPMCHL's market risks arise predominantly from activities in the Firm's CIB business booked in JPMS plc. CIB makes markets in products across fixed income, foreign exchange, equities and commodities markets. JPMCHL's portfolio of covered positions under Basel III is predominantly held by the CIB. Some additional covered positions are held by the Firm's other LOBs.

Table 30: EU MR1 – Market risk under the standardised approach for JPMCHL

$'mm		JPMCHL ($'mm)	
		RWAs	Capital requirements
	Outright products		
1	Interest rate risk (general and specific)	34,225	2,738
2	Equity risk (general and specific)	29,802	2,384
3	Foreign exchange risk	10,551	844
4	Commodity risk	653	52
	Options		
6	Delta-plus method	1,520	122
7	Scenario approach	4,537	363
8	Securitisation (specific risk)	2,814	225
9	**Total**	84,102	6,728

8. Leverage (Article 451)

The leverage ratio is a measure of Tier 1 capital as a percentage of exposure as defined under the CRR rules.

The requirement for the calculation and reporting of leverage ratios was introduced as part of CRD IV in 2014, and amended by the European Commission Delegated Act (EU) 2015/62 in 2015.

CRD IV does not currently include a minimum Leverage Ratio requirement; however, the Basel Committee on Banking Supervision (the 'Basel Committee') has indicatively proposed a minimum requirement of 3%.

Leverage risk is monitored through the same processes and frameworks as capital adequacy and stress-testing. The latter is particularly important, as it is forward-looking: if the Firm's leverage ratios remain sustainable under stressed conditions, the risk of forced de-leveraging will be low.

The Firm has adopted a point-in-time calculation of the leverage ratio, as per Commission Delegated Regulation 2015/62.

Leverage Ratio Commentary

- **JPMCHL**: The leverage ratio has increased by 0.67% from 6.26% as at 31st March 2019 to 6.93%. The increase in the leverage ratio is driven by an increase in Tier 1 capital due to recognised audited profits in CET1 capital and by a decrease in the leverage exposure primarily due to reduction in SFTs.

- **JPMS plc**: The leverage ratio has increased by 0.59% from 6.22% as at 31st March 2019 to 6.81%. The increase in the leverage ratio is driven by a decrease in the leverage exposure primarily due to reduction in SFTs.

The information represented in the tables below constitutes the key applicable data elements for leverage identified in Title VII of the EBA Guidelines.

Table 31: Leverage Ratio Common Disclosure

	LR Com: Leverage Ratio Common Disclosure ($'mm)	JPMCHL	JPMS plc
	On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	285,712	265,081
2	(Asset amounts deducted in determining Tier 1 capital)	(1,313)	(1,311)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)**	284,399	263,770
	Derivative exposures		
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	34,285	34,285
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to- market method)	194,464	194,463
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(53,364)	(53,364)
8	(Exempted CCP leg of client-cleared trade exposures)	(17,326)	(17,326)
9	Adjusted effective notional amount of written credit derivatives	601,892	601,892
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(601,892)	(601,892)
11	**Total derivative exposures (sum of lines 4 to 10)**	158,059	158,058
	SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	347,615	368,802
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(178,811)	(178,811)
14	Counterparty credit risk exposure for SFT assets	22,610	20,052
16	**Total securities financing transaction exposures (sum of lines 12 to 15a)**	191,414	210,043
	Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	15,832	14,137
18	(Adjustments for conversion to credit equivalent amounts)	(6,530)	(6,086)
19	**Other off-balance sheet exposures (sum of lines 17 and 18)**	9,302	8,051
	Capital and total exposure measure		
20	**Tier 1 capital**	44,572	43,598
21	**Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)**	643,174	639,922
	Leverage ratio		
22	**Leverage ratio**	6.93%	6.81%

Table 32: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures

	LR Sum: Leverage Ratio Summary Reconciliation ($'mm)	JPMCHL	JPMS plc
1	Total assets as per published financial statements	740,037	740,571
4	Adjustments for derivative financial instruments	(127,462)	(127,440)
5	Adjustment for securities financing transactions (SFTs)	22,610	20,051
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	9,302	8,051
7	Other adjustments	(1,313)	(1,311)
8	**Leverage ratio total exposure measure**	643,174	639,922

9. Use of Credit Risk Mitigation Techniques (Article 453)

Credit Risk Mitigation Effect for Credit Risk Exposures

The following tables illustrate the effect of credit risk mitigation techniques applied for credit risk exposures (i.e. on-balance sheet and off-balance sheet exposures) including RWA density as a synthetic metric on the riskiness of each exposure class portfolio.

Table 33: EU CR4 – Standardised approach – Credit risk exposure and CRM effects for JPMCHL

Exposure class ($'mm)		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
		On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
1	Central governments or central banks	23,403	—	23,403	—	477	2.04%
3	Public sector entities	5	—	5	—	4	75.78%
4	Multilateral development banks	55	—	55	—	—	0.04%
6	Institutions	6,336	1,292	6,336	656	3,324	47.54%
7	Corporates	7,834	14,238	7,203	8,317	13,490	86.92%
10	Exposures in default	142	88	142	57	226	113.11%
11	Higher-risk categories	515	54	515	27	916	169.10%
15	Equity	133	—	133	—	201	151.41%
16	Other items	434	—	434	—	434	100.00%
17	**Total**	38,859	15,672	38,228	9,057	19,072	40.33%

Table 34: EU CR4 – Standardised approach – Credit risk exposure and CRM effects for JPMS plc

Exposure class ($'mm)		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
		On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
1	Central governments or central banks	23,393	—	23,393	—	451	1.93%
3	Public sector entities	5	—	5	—	4	75.78%
4	Multilateral development banks	55	—	55	—	—	0.04%
6	Institutions	10,591	1,119	10,591	499	4,050	36.52%
7	Corporates	7,192	12,801	6,561	7,308	11,853	85.46%
10	Exposures in default	142	88	142	57	226	113.11%
11	Higher-risk categories	515	54	515	27	916	169.10%
15	Equity	2,275	—	2,275	—	5,558	244.25%
16	Other items	380	—	380	—	380	100.00%
17	**Total**	44,550	14,062	43,919	7,891	23,438	45.24%

Credit Risk Mitigation Techniques

To reduce capital requirements exposures can be secured by collateral, financial guarantees or credit derivatives. JPMCHL and JPMS plc secure their exposure by collateral and financial guarantees. JPMS plc has a significant volume of credit derivatives in its trading portfolio. These are held for trading intent and are treated under the market risk framework rather than as credit risk mitigation.

The following tables show CRM for loans and debt securities.

Table 35: EU CR3 – CRM techniques – Overview for JPMCHL

($'mm)		Exposures unsecured - Carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total loans	6,272	631	631	—	—
2	Total debt securities	149	—	—	—	—
3	**Total exposures**	6,421	631	631	—	—
4	Of which defaulted	199	—	—	—	—

Table 36: EU CR3 – CRM techniques – Overview for JPMS plc

	($'mm)	Exposures unsecured - Carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total loans	10,449	631	631	—	—
2	Total debt securities	149	—	—	—	—
3	**Total exposures**	10,598	631	631	—	—
4	Of which defaulted	199	—	—	—	—

10. Use of Internal Market Risk Model (Article 455)

Own Funds Requirements for Market Risk under the IMA

The standardised approach (see Section 7) and Internal market risk models are employed to compute own funds requirements for market risk. The capital charge under the IMA represents approximately 14.36% of total market risk capital charge. The table below summarises the components of the own funds requirements under the IMA for market risk.

Table 37: EU MR2-A – Market risk under the IMA for JPMCHL

$'mm		JPMCHL	
		RWAs	Capital requirements
1	**VaR (higher of values a and b)**	1,689	135
(a)	Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		40
(b)	Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor(mc) in accordance with Article 366 of the CRR		135
2	**SVaR (higher of values a and b)**	9,841	787
(a)	Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		524
(b)	Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)		787
3	**IRC (higher of values a and b)**	2,575	206
(a)	Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		166
(b)	Average of the IRC number over the preceding 12 weeks		206
6	**Total**	14,105	1,128

Table 38: EU MR2-B – RWA flow statements of market risk exposures under the IMA for JPMCHL

($'mm)		VaR	SVaR	IRC	Total RWAs	Total capital requirements
1	**RWAs at previous quarter end**	2,309	9,310	3,019	14,638	1,171
2	Movement in risk levels	(620)	532	(444)	(533)	(43)
3	Model updates/changes	—	(1)	—	—	—
4	Methodology and policy	—	—	—	—	—
8	**RWAs at the end of reporting period**	1,689	9,841	2,575	14,105	1,128

Other Quantitative Information for Market Risk under the IMA

The following table displays the capital requirement values (maximum, minimum, average and the ending for the reporting period) resulting from different types of models approved by the PRA to be used for computing the regulatory capital charge at group level. The table captures data for last two consecutive quarters ending 30th June 2019.

Table 39: EU MR3 – IMA values for trading portfolios for JPMCHL

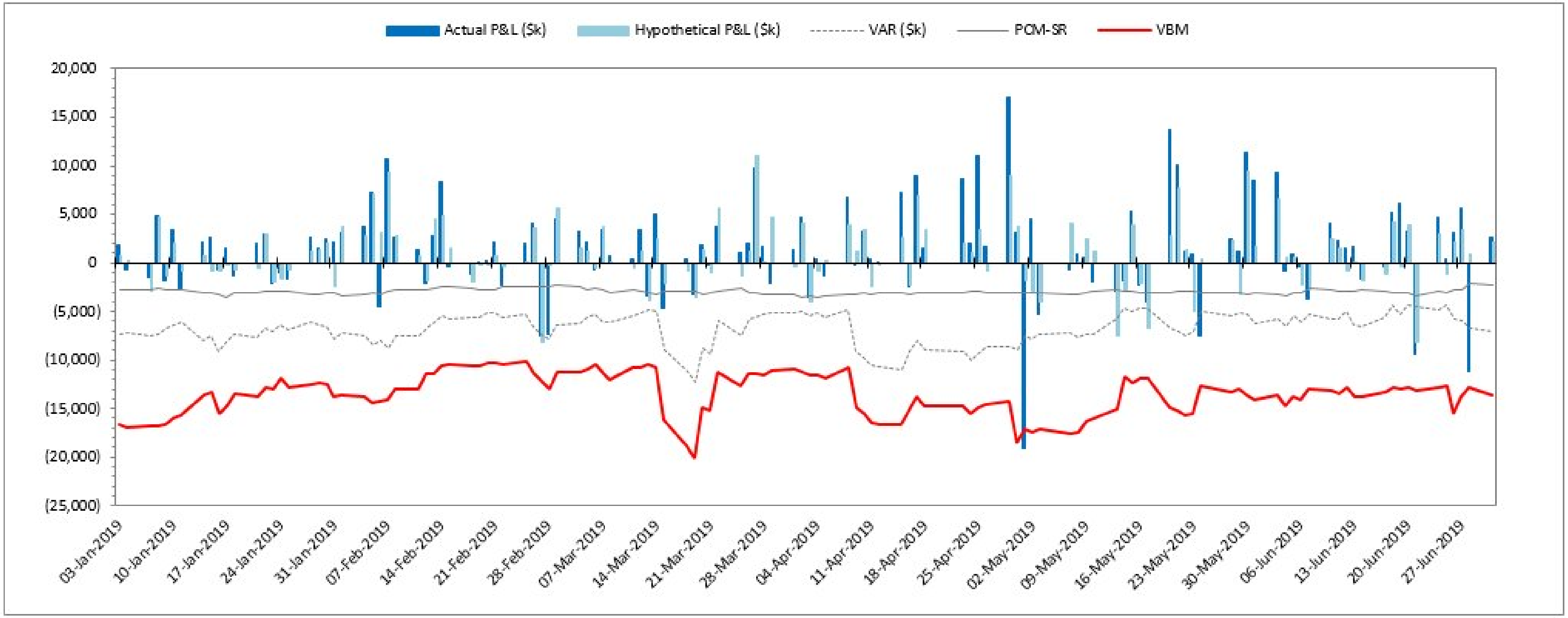
$'mm		JPMCHL
VaR (10 day 99%)		
1	Maximum value	127
2	Average value	75
3	Minimum value	34
4	Period end	40
SVaR (10 day 99%)		
5	Maximum value	563
6	Average value	477
7	Minimum value	444
8	Period end	524
IRC (99.9%)		
9	Maximum value	256
10	Average value	206
11	Minimum value	150
12	Period end	166

VBM Back-Testing

The Firm evaluates the effectiveness of its VBM[15] methodology by back-testing, which compares daily market risk-related gains and losses with daily VBM results for a one-day holding period and a 99% confidence level as prescribed by capital rules. Market risk related gains and losses are defined as profits and losses on trading book positions, captured through Hypothetical P&L and Actual P&L[16].

VBM 'back-testing exceptions' occur when market risk related losses are greater than the estimate predicted by the VBM for the corresponding day. The following chart presents the VBM back-testing results for JPMS plc trading book positions covered by current IMA permission. The chart shows that for the half year 1st January till 30th June 2019, the concerned trading book positions observed one top level back-testing exception.

Table 40: EU MR4 – Comparison of VaR estimates with gains/losses for JPMCHL



[15]J.P. Morgan uses 'VaR- based measure' ('VBM'), which should be treated as VaR for IMA regulatory capital purposes (as defined in the CRR).
[16]***Hypothetical P&L*** (which is defined in JPM internal terminology as 'Clean P&L') is defined as market risk-related gains and losses on in-scope products and legal entities, excluding fees, brokerage commissions, fair value adjustments, net interest income, carry and gains and loss arising from day one positions.
Actual P&L consists of 'Hypothetical P&L,' as defined above, plus carry, gains and losses from day one positions and certain reserves. P&L is updated with reserves including but not limited to fair value adjustments, model limitation and price testing at month-end.

11. Liquidity (Article 435 (1))

The Liquidity Coverage Ratio ('LCR')[17], as per the Commission Delegated Regulation (EU) 2015/61, requires credit institutions to maintain an amount of unencumbered high quality liquid assets that is sufficient to meet their estimated total net cash outflows over a prospective 30 calendar-day period of significant stress. From 1st January 2018 the LCR is required to be a minimum of 100%.

Key Ratios and Figures

The LCR disclosure in this document has been assessed in accordance with the European Banking Authority (EBA) guidelines on LCR disclosure (EBA/GL/2017/01) applying the necessary considerations set out in the EBA guidelines on materiality, proprietary and confidentiality and on disclosure frequency (EBA/GL/2014/14) and consistent with the EBA guidelines on disclosure requirements (EBA/GL/2016/11).

Table 41: Items prone to rapid change as defined in EBA GL/2017/01 for JPMCHL and JPMS plc

	JPMCHL				JPMS plc			
Currency and units:	($'mm)	($'mm)	($'mm)	($'mm)	($'mm)	($'mm)	($'mm)	($'mm)
Quarter ending on:	30-Jun-19	31-Mar-19	31-Dec-18	30-Sep-18	30-Jun-19	31-Mar-19	31-Dec-18	30-Sep-18
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
	Total weighted adjusted value (average)				Total weighted adjusted value (average)			
LIQUIDITY BUFFER	**58,925**	**59,237**	**61,352**	**63,315**	**56,901**	**56,438**	**57,880**	**59,331**
TOTAL NET CASH OUTFLOWS	**20,629**	**21,195**	**22,731**	**24,244**	**20,537**	**21,091**	**22,847**	**25,046**
LIQUIDITY COVERAGE RATIO (%)	**287%**	**280%**	**275%**	**266%**	**278%**	**268%**	**259%**	**244%**

The weighted adjusted value of the liquidity buffer is the value of the total high quality liquid assets after the application of both haircuts and any applicable cap. The weighted adjusted value of net cash outflows is calculated after the inflows and outflows rates are applied and after any applicable cap on inflows.

The liquidity buffer disclosed covers both Pillar I and Pillar II liquidity risks.

[17] In line with the EBA guidelines the average ratio disclosed in Table 41 is calculated as an average over the 12 data points used for each item, and therefore the quoted ratio is not equal to the average 'Liquidity buffer' divided by average 'Total net cash outflows'.

12. Glossary of Acronyms

APAC	Asia Pacific
AT1	Additional Tier 1
BBRD	Bank Recovery and Resolution Directive
BoE	Bank of England
CCP	Central Counterparty Clearing House
CCR	Credit Counterparty Risk
CET1	Common Equity Tier 1
CIB	Corporate and Investment Bank
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CVA	Credit Valuation Adjustment
EBA	European Banking Authority
ECAI	External Credit Assessment Institutions
EMEA	Europe, Middle East and Africa
FCCM	Financial Collateral Comprehensive Method
FSB	Financial Stability Board
IMA	Internal Market Risk Model
IMM	Internal Model Method
JPMC	J.P. Morgan Chase and Company
JPMCHL	J.P. Morgan Capital Holdings Limited
JPMS plc	J.P. Morgan Securities plc
LCR	Liquidity Coverage Ratio
LOB	Line of Business
MtM	Mark-to-Market Method
MREL	Minimum Requirement for own funds and Eligible Liabilities
O-SII	Other Systemically Important Institution
OTC	Over the Counter
PRA	Prudential Regulation Authority
RWA	Risk Weighted Assets
S&P	Standard & Poor’s
SFT	Securities Financing Transactions
TCR	Total Capital Requirements
TLAC	Total Loss Absorbing Capacity
VaR	Value-at-Risk