Pillar 3 Semi-Annual Disclosure Report as at 30th June 2018

- J.P. Morgan Capital Holdings Limited
- J.P. Morgan Securities Plc

Table of Contents

1.	INTRODUCTION	4
2.	OWN FUNDS (ARTICLE 437)	5
3.	CAPITAL REQUIREMENTS (ARTICLE 438)	10
4.	EXPOSURE TO COUNTERPARTY CREDIT RISK (ARTICLE 439)	12
5.	CREDIT RISK ADJUSTMENTS (ARTICLE 442)	15
6.	USE OF EXTERNAL CREDIT ASSESSMENT INSTITUTIONS (ARTICLE 444)	22
7.	EXPOSURE TO MARKET RISK (ARTICLE 445)	24
8.	LEVERAGE (ARTICLE 451)	25
9.	USE OF CREDIT RISK MITIGATION TECHNIQUES (ARTICLE 453)	27
10	. USE OF INTERNAL MARKET RISK MODEL (ARTICLE 455)	29
11	. LIQUIDITY (ARTICLE 435 (1))	32
12	. GLOSSARY OF ACRONYMS	33

Table 1: CRDIV Regulatory Capital for JPMCHL	5
Table 2: CRDIV Regulatory Capital for JPMS plc	6
Table 3: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMCHL	7
Table 4: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMS plc	7
Table 5: Main Features of Regulatory Capital Instruments	8
Table 6: EU OV1 - Overview of RWAs for JPMCHL	10
Table 7: EU OV1 - Overview of RWAs for JPMS plc	10
Table 8: Total Capital Requirements for JPMCHL	11
Table 9: EU CCR1 – Analysis of CRR exposure by approach for JPMCHL	12
Table 10: EU CCR7 – RWA flow statements of CCR exposures under the IMM for JPMCHL	12
Table 11: EU CCR5-A – Impact of netting and collateral held on exposure values for JPMCHL	12
Table 12: EU CCR5-B – Composition of collateral for exposures to CCR for JPMCHL	13
Table 13: EU CCR2 – CVA capital charge for JPMCHL	13
Table 14: EU CCR8 – Exposures to CCPs for JPMCHL	13
Table 15: EU CCR6 – Credit derivatives exposures for JPMCHL	14
Table 16: EU CR1-A – Credit quality of exposures by exposure class and instrument for JPMCHL	16
Table 17: EU CR1-A – Credit quality of exposures by exposure class and instrument for JPMS plc	16
Table 18: EU CR1-B – Credit quality of exposures by industry or counterparty types for JPMCHL	17
Table 19: EU CR1-B – Credit quality of exposures by industry or counterparty types for JPMS plc	17
Table 20: EU CR1-C – Credit quality of exposures by geography for JPMCHL	18
Table 21: EU CR1-C – Credit quality of exposures by geography for JPMS plc	19
Table 22: EU CR1-D – Ageing of past-due exposures for JPMCHL	19
Table 23: EU CR1-E – Non-performing and forborne exposures for JPMCHL	20
Table 24: EU CR1-E – Non-performing and forborne exposures for JPMS plc	20
Table 25: EU CR2-A – Changes in the stock of general and specific credit risk adjustments	21
Table 26: EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities	21
Table 27: EU CR5 – Standardised approach (post-CRM) for JPMCHL	23
Table 28: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk (post CRM) for JPMCHL	23
Table 29: EU MR1 – Market risk under the standardised approach for JPMCHL	24
Table 30: Summary Reconciliation of Accounting Assets and Leverage Ratio Exposures	25
Table 31: Leverage Ratio Common Disclosure	25
Table 32: EU CR4 – Standardised approach – Credit risk exposure and CRM effects for JPMCHL	27
Table 33: EU CR4 – Standardised approach – Credit risk exposure and CRM effects for JPMS plc	27
Table 34: EU CR3 – CRM techniques – Overview for JPMCHL	27
Table 35: EU CR3 – CRM techniques – Overview for JPMS plc	28
Table 36: EU MR2-A – Market risk under the IMA for JPMCHL	29
Table 37: EU MR2-B – RWA flow statements of market risk exposures under the IMA for JPMCHL	29
Table 38: EU MR3 – IMA values for trading portfolios for JPMCHL	30
Table 39: EU MR4 – Comparison of VaR estimates with gains/losses for JPMCHL	31
Table 40: Items prone to rapid change as defined in EBA GL/2017/01 for JPMCHL and JPMS plc	32

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') Guidelines² ('GL1'), which were adopted by the Prudential Regulation Authority ('PRA') from 15th October 2015³.

In addition, the requirements of EBA Final Report on Guidelines for Disclosure under Part Eight of the CRR⁴ ('EBA GL2') have been incorporated into JPMC's disclosure process from 1st January 2018, and are followed for this document.

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 solo entity 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 second quarter of 2018, and for selected areas defined by EBA GL2, for the first half of 2018.

All data is recorded as at 30th June 2018 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 <u>http://investor.shareholder.com/jpmorganchase/sec.cfm</u>. 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: <u>http://investor.shareholder.com/jpmorganchase/sec.cfm.</u>

¹Capital Requirements Regulation (CRR) / Regulation [EU] No. 575/2013

²EBA Guidelines on materiality, proprietary and confidentiality and on disclosure frequency 23 December 2014

³PRA expectation of firms' compliance with EBA/GL/2014/14: <u>http://www.bankofengland.co.uk/pra/Pages/crdiv/updates.aspx</u> ⁴EBA Final Report on Guidelines for Disclosure under Part Eight of Regulation (EU) No 575/2013 Version 2 published 16th December 2016

⁵Capital Requirements Directive (CRD IV) / Regulation [EU] Directive 2013/36/EU

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 information represented in the tables below constitutes the applicable data elements for Own Funds identified in Title VII of the Guidelines.

The final column represents the capital position on a fully-phased in basis after all CRR transitional provisions have expired and phaseout of grandfathered capital instruments under pre-CRR national transposition measures is complete. Other capital impacts including instrument maturity or behavioural changes are not considered for the fully-phased in position.

Key Changes during the Period

- JPMCHL: The total capital ratio has increased by 0.66% (17.27% as at 31st March 2018). The increase in the total capital ratio is mainly driven by an increase in CET1 impacting the numerator of the ratio. This movement was primarily driven by recognition of 2017 audited profits.
- JPMS plc: The total capital ratio has decreased by 0.41% (16.30% as at 31st March 2018). The decrease in the total capital ratio is mainly driven by an increase in RWAs impacting the denominator of the ratio. This movement was primarily driven by increases in Counterparty Credit Risk ('CCR') due to Securities Financing Transactions ('SFTs').

	Transitional Own Funds Disclosure Template (\$'mm)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Commo	n Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	8,081	26 (1), 27, 28, 29, EBA list 26 (3)	8,081
	of which: Ordinary shares	8,081	EBA list 26 (3)	8,081
2	Retained earnings	30,851	26 (1) (c)	30,851
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	9,436	26 (1)	9,436
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	48,368		48,368
Commo	n Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	(1,226)	34, 105	(1,226)
8	Intangible assets (net of related tax liability) (negative amount)	(84)	36 (1) (b), 37, 472 (4)	(84)
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(1,310)		(1,310)
29	Common Equity Tier 1 (CET1) capital	47,058		47,058
Addition	nal Tier 1 (AT1) capital: Instruments			
44	Additional Tier 1 (AT1) capital			_
45	Tier 1 capital (T1 = CET1 + AT1)	47,058		47,058
Tier 2 (T	2) capital: instruments and provisions			
58	Tier 2 (T2) capital			
59	Total capital (TC = T1 + T2)	47,058		47,058
60	Total risk weighted assets	262,444		262,444
Capital	ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	17.93%	92 (2) (a), 465	17.93%
62	Tier 1 (as a percentage of total risk exposure amount)	17.93%	92 (2) (b), 465	17.93%
63	Total capital (as a percentage of total risk exposure amount)	17.93%	92 (2) (c)	17.93%
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)	6.50%	CRD 128, 129, 130	7.12%
65	of which: capital conservation buffer requirement	1.87%		2.5%
66	of which: countercyclical buffer requirement	0.13%		0.13%

Table 1: CRDIV Regulatory Capital for JPMCHL

	Transitional Own Funds Disclosure Template (\$'mm)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	9.93%	CRD 128	9.93%
Amoun	ts 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)	3,616	36 (1) (h), 46, 45, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	3,616
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)	393	36 (1) (i), 45, 48, 470, 472 (11)	393
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)	119	36 (1) (c), 38, 48, 470, 472 (5)	119

Table 2: CRDIV Regulatory Capital for JPMS plc

	Transitional Own Funds Disclosure Template (\$'mm)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
Commo	n Equity Tier 1 capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	22,394	26 (1), 27, 28, 29, EBA list 26 (3)	22,394
	of which: Ordinary shares	22,394	EBA list 26 (3)	22,394
2	Retained earnings	12,402	26 (1) (c)	12,402
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	6,697	26 (1)	6,697
5a	Independently reviewed interim profits net of any foreseeable charge or dividend		26 (2)	
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	41,493		41,493
Commo	n Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	(1,224)	34, 105	(1,224)
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(1,224)		(1,224)
29	Common Equity Tier 1 (CET1) capital	40,269		40,269
Addition	nal Tier 1 (AT1) capital: Instruments			
44	Additional Tier 1 (AT1) capital	—		—
45	Tier 1 capital (T1 = CET1 + AT1)	40,269		40,269
Tier 2 (T	2) capital: instruments and provisions			
58	Tier 2 (T2) capital	—		—
59	Total capital (TC = T1 + T2)	40,269		40,269
60	Total risk weighted assets	253,417		253,417
Capital	ratios and buffers			
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	15.89%	92 (2) (a), 465	15.89%
62	Tier 1 (as a percentage of total risk exposure amount)	15.89%	92 (2) (b), 465	15.89%
63	Total capital (as a percentage of total risk exposure amount)	15.89%	92 (2) (c)	15.89%
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)	6.50%	CRD 128, 129, 130	7.13%
65	of which: capital conservation buffer requirement	1.87%		2.50%
66	of which: countercyclical buffer requirement	0.13%		0.13%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	7.89%	CRD 128	7.89%
Amount	s 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)	3,220	36 (1) (h), 46, 45, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	3,220
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)	3,722	36 (1) (i), 45, 48, 470, 472 (11)	3,722

	Transitional Own Funds Disclosure Template (\$'mm)	Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
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)	112	36 (1) (c), 38, 48, 470, 472 (5)	112

Own Funds Reconciliation

The tables below present a reconciliation between unaudited balance sheet own funds and regulatory own funds as at 30th June 2018 in accordance with the requirements set out in Commission Implementing Regulation (EU) No 1423/2013.

Table 3: Reconciliation of Regulatory Own Funds to Balance Sheet for JPMCHL

egulatory Own Funds Reconciliation to Balance Sheet					
CET1 Capital					
406,909,774 Ordinary Shares of \$10 each	4,069				
Share Premium Account	4,012				
Pension Reserve	(100				
Other Reserves	9,536				
Retained Earnings	32,965				
CET1 Capital - Balance Sheet Own Funds	50,482				
Less Regulatory Adjustments					
(-) Unaudited Profit	(2,114				
(-) Goodwill and Other Intangible Assets	(84				
(-) Additional Valuation Adjustments	(1,226				
CET1 Capital - Regulatory Own Funds After Adjustments	47,058				
Total Regulatory Own Funds	47,058				

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

Regulatory Own Funds Reconciliation to Balance Sheet				
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	6,697			
Retained Earnings	14,415			
CET1 Capital - Balance Sheet Own Funds	43,506			
Less Regulatory Adjustments				
(-) Unaudited Profit	(2,013)			
(-) Additional Valuation Adjustments	(1,224)			
CET1 Capital - Regulatory Own Funds After Adjustments	40,269			
Total Regulatory Own Funds	40,269			

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 2018 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 5: Main Features of Regulatory Capital Instruments

		JPMCHL		JPMS plc	
	Capital Instruments Main Features	CET1	CET1	CET1	CET1
		\$10 ordinary shares	\$10,000 ordinary shares	£1 ordinary shares	£1 .24 ordinary shares
1	Issuer	JPMCHL	JPMS plc	JPMS plc	JPMS plc
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	Private Placement	Private Placement	Private Placement	Private Placement
3	Governing law(s) of the instrument	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006	The Companies Act 2006
Reg	ulatory treatment				
4	Transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1
5	Post-transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1	Common Equity Tier 1
6	Eligible at solo/(sub-)consolidated/ solo&(sub-)consolidated	(sub-)consolidated	Solo	Solo	Solo
7	Instrument type (types to be specified by each jurisdiction)	\$ Ordinary	\$ Ordinary	£ Ordinary	£ Ordinary
8	Amount recognised in regulatory capital (Currency in million, as of most recent reporting date).	\$8,081 includes nominal and premium	\$22,394 includes nominal and premium	0	0
9	Nominal amount of instrument	\$10	\$10,000	£1	£1.24
9a	Issue price	average issue price \$20	average issue price \$17,997	£1	£1.24
9b	Redemption price	N/A	N/A	N/A	N/A
10	Accounting classification	Shareholders' equity	Shareholders' equity	Shareholders' equity	Shareholders' equity
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	\$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	£0.000002m Oct 27 1999	£0.062m May 28 2012
12	Perpetual or dated	Perpetual	\$2051m Sep 11 2017 Perpetual	Perpetual	Perpetual
13	Original maturity date	No maturity	No maturity	No maturity	No maturity
14	Issuer call subject to prior supervisory approval	No	No	No	No

		JPMCHL		JPMS plc	
	Capital Instruments Main Features	CET1	CET1	CET1	CET1
		\$10 ordinary shares	\$10,000 ordinary shares	£1 ordinary shares	£1 .24 ordinary shares
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A	N/A
Cou	ipons / dividends				
17	Fixed or floating dividend/coupon	N/A	N/A	N/A	N/A
18	Coupon rate and any related index	N/A	N/A	N/A	N/A
19	Existence of a dividend stopper	No	No	No	No
20 a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Full discretionary	Full discretionary	Full discretionary	Full discretionary
20 b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Full discretionary	Full discretionary	Full discretionary	Full discretionary
21	Existence of step up or other incentive to redeem	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	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
30	Write-down features	N/A	N/A	N/A	N/A
31	If write-down, write-down trigger(s)	N/A	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A	N/A
33	If write-down, permanent or temporary	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
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	One class of share & same rights attached to all shares	Ranks pari passu	Ranks pari passu	Ranks pari passu
36	Non-compliant transitioned features	No	No	No	No
37	If yes, specify non-compliant features	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

• RWAs increased due to increases in CCR driven by SFTs.

Table 6: EU OV1 - Overview of RWAs for JPMCHL⁶

	\$'mm		RV	Minimum capital requirements		
			Q2 2018	Q1 2018	Q2 2018	
	1	Credit risk (excluding CCR)	32,277	31,821	2,582	
Article 438(c)(d)	2	Of which the standardised approach	32,277	31,821	2,582	
Article 107 and Article 438(c)(d)	6	CCR	111,986	102,440	8,959	
Article 438(c)(d)	7	Of which mark to market	30,698	30,651	2,456	
	10	Of which internal model method (IMM)	22,622	22,767	1,810	
Article 438(c)(d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	84	95	7	
Article 438(c)(d)	12	Of which CVA	9,647	10,984	772	
Article 438(e)	13	Settlement risk	461	667	37	
Article 438 (e)	19	Market risk	101,429	102,397	8,114	
	20	Of which the standardised approach	87,562	85,361	7,005	
	21	Of which IMA	13,867	17,036	1,109	
Article 438(f)	23	Operational risk	15,956	15,134	1,276	
	24	Of which basic indicator approach	15,956	15,134	1,277	
Article 437(2), Article 48 and Article 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight)	335	445	27	
	29	Total	262,444	252,904	20,995	

Table 7: EU OV1 - Overview of RWAs for JPMS plc⁷

	\$'mm			RWA		
			Q2 2018	Q1 2018	Q2 2018	
	1	Credit risk (excluding CCR)	24,974	23,761	1,998	
Article 438(c)(d)	2	Of which the standardised approach	24,974	23,761	1,998	
Article 107 and Article 438(c)(d)	6	CCR	111,128	101,697	8,890	
Article 438(c)(d)	7	Of which mark to market	30,029	30,044	2,402	
	10	Of which internal model method (IMM)	22,622	22,767	1,810	
Article 438(c)(d)	11	Of which risk exposure amount for contributions to the default fund of a CCP	84	95	7	
Article 438(c)(d)	12	Of which CVA	9,450	10,813	756	
Article 438(e)	13	Settlement risk	381	590	30	
Article 438 (e)	19	Market risk	96,043	98,960	7,683	
	20	Of which the standardised approach	82,176	81,924	6,574	

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

		\$'mm	RV	Minimum capital requirements	
			Q2 2018	Q1 2018	Q2 2018
	21	Of which IMA	13,867	17,036	1,109
Article 438(f)	23	Operational risk	12,258	12,258	981
	24	Of which basic indicator approach	12,258	12,258	981
Article 437(2), Article 48 and Article 60	27	Amounts below the thresholds for deduction (subject to 250% risk weight)	8,633	8,617	691
	29	Total	253,417	245,883	20,273

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 8: Total Capital Requirements for JPMCHL

\$'mm	JPMCHL			
\$ 11111	Q2 2018	Q1 2018		
Total Capital Requirements	28,884	27,868		
Total Capital Requirements as percentage of RWA (%)	13.03%	12.54%		

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

	\$'mm		Potential future credit exposures	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market	16,835	57,760			47,047	29,521
4	IMM (for derivatives and SFTs)			21,613	1.4	30,258	22,622
6	Of which derivatives and long settlement transactions			21,613	1.4	30,258	22,622
9	Financial collateral comprehensive method (for SFTs)					77,485	48,747
11	Total						123,512

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

Table 10: 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 (1 st April 2018)	22,767	1,821
2	Asset size	24	2
3	Credit quality of counterparties	(2)	_
4	Model updates (IMM only)	—	—
5	Methodology and policy (IMM only)	(83)	(6)
8	Other ⁸	(84)	(7)
9	RWAs as at the end of the current reporting period (30 th June 2018)	22,622	1,810

The following table represents an overview of the impact of netting and collateral held on exposures for derivatives (including long settlement transactions) and SFTs. Following the implementation of the IMM for OTC derivatives in March 2018, the value of collateral used reduced by \$54.7bn (\$107.9bn as at 31st December 2017).

Table 11: 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	208,837	(129,733)	79,104	(30,282)	48,822
SFTs subject to a netting agreement	410,854	(280,442)	130,412	(45,365)	85,047
SFTs not subject to a netting agreement	5,894	—	5,894	(4,001)	1,893
Non-eligible collateral under the CRR ¹¹				(10,645)	
Total	625,585	(410,175)	215,410	(79,648)	135,762

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.

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 2018, the majority of collateral used which JPMCHL held was in cash.

	Co	llateral used in de	Collateral used in SFTs				
\$'mm	Fair value of col	lateral received	Fair value of po	osted collateral	Fair value of	Fair value of posted collateral	
	Segregated	Unsegregated	Segregated	Unsegregated	collateral received		
Cash	—	60,504	—	72,042	43,041	16,299	
Debt securities (Central Governments)	_	1,416	_	188	-	3,944	
Debt securities (Corporates)	_	22,119	_	2,035	3,621	15,596	
Debt securities (Institutions)	_	4,916	_	11,721	7,064	2,708	
Equities	_	322		1	25,837	41,550	
Convertible securities	_	—	_	—	957	717	
CIUs	_	—	_	—	1,638	462	
Other	_	1	_	—	14	56	
Total	—	89,278	—	85,987	82,172	81,332	

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 13: EU CCR2 – CVA capital charge for JPMCHL

		JPMCHL (\$'mm)		
		Exposure value	RWAs	
1	Total portfolios subject to the advanced method	12,946	5,973	
2	(i) VaR component (including the 3× multiplier)		1,494	
3	(ii) SVaR component (including the 3× multiplier)		4,478	
4	All portfolios subject to the standardised method	7,419	3,674	
5	Total subject to the CVA capital charge	20,365	9,647	

Exposure to CCPs

The following table shows a comprehensive picture of JPMCHL's exposures to CCPs. JPMCHL does not have any exposure to non-QCCPs¹³. The exposure amount for default funds contributions is calculated as per CRR Article 308.

Table 14: EU CCR8 – Exposures to CCPs for JPMCHL

		JPMCHL	. (\$'mm)
		EAD post CRM	RWAs
1	Exposures to QCCPs (total)		1,660
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	77,254	1,555
3	(i) OTC derivatives	35,639	713
4	(ii) Exchange-traded derivatives	32,161	653
5	(iii) SFTs	9,454	189
7	Segregated initial margin		
8	Non-segregated initial margin	1,067	21
9	Prefunded default fund contributions	1,141	84
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.

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 and JPMIB which consolidate to JPMCHL.

Table 15: EU CCR6 – Credit derivatives exposures for JPMCHL

	Credit deriva	Other credit	
\$'mm	Protection bought	Protection sold	derivatives
Notionals			
Credit default swaps	-	_	908,553
Total return swaps	23,652		4,114
Total notionals	23,652	_	912,667
Fair values			
Positive fair value (asset)	-	—	932
Negative fair value (liability)	(7,075)	_	(2,414)

5. Credit Risk Adjustments (Article 442)

Definitions

The following definitions are used for accounting purposes:

- Impairment of financial assets: Impairment losses on loans and receivables are measured as the difference between the financial assets carrying amount and the present value of the estimated future cash flows discounted at the financial asset's effective interest rate.
- Impairment of non-financial assets: An impairment loss is recognized 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).
- **Past due:** A financial asset is past due when a counterparty has failed to make a payment when contractually due.

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.

		а	b	С	d	е	f	g
	\$'mm	Gross carrying values of			General credit	Accumulated	Credit risk	Net Values
		Specific credit lisk General credit		risk adjustment	write-offs	adjustment charges of the period	(a+b-c-d)	
1	Central governments or central banks		30,512			—	—	30,512
2	Institutions		22,826	-		—	—	22,826
3	Corporates	153	35,535	18		_	18	35,670
4	Other Residual Exposure	-	3,804	—		—	—	3,804
5	Total standardised approach	153	92,677	18	—	—	18	92,812
6	Total	153	92,677	18	_	_	18	92,812
7	Of which: Loans	153	12,953	18	—	_	18	13,088
8	Of which: Debt securities	—	44	—	_	_	—	44
9	Of which: Off-balance-sheet exposures		24,022	_			—	24,022

Table 16: EU CR1-A – Credit quality of exposures by exposure class and instrument for JPMCHL

Table 17: EU CR1-A – Credit quality of exposures by exposure class and instrument for JPMS plc

		а	b	С	d	е	f	g
	\$'mm	Gross carrying values of		Specific credit risk	General credit	Accumulated	Credit risk	Net Values
	Defa expo		Non-defaulted exposures	adjustment	risk adjustment	write-offs	adjustment charges of the period	(a+b-c-d)
1	Central governments or central banks	—	30,373	—		_	_	30,373
2	Institutions	—	24,260	—	—		—	24,260
3	Corporates	153	28,187	18	_	_	18	28,322
4	Other Residual Exposure	—	5,762	—	—	—	—	5,762
5	Total standardised approach	153	88,582	18	—	—	18	88,717
6	Total	153	88,582	18	_	—	18	88,717
7	Of which: Loans	153	10,630	18	—	_	18	10,765
8	Of which: Debt securities	_	44	—	—	_	—	44
9	Of which: Off-balance-sheet exposures	_	21,118	—	—	_	_	21,118

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

		а	b	С	d	е	f	g
	\$'mm	Gross carryi	ing values of	Specific credit	General credit	Accumulated	Credit risk	Net Values
		Defaulted exposures	Non-defaulted exposures	risk adjustment	risk adjustment	write-offs	adjustment charges	(a+b-c-d)
1	Finance Industry	153	66,829	18	—	—	18	66,964
2	Manufacturing	—	8,061	—	—	—	—	8,061
3	Other Residual Exposure	—	17,787	—	—	—	—	17,787
4	Total	153	92,677	18	—		18	92,812

Table 19: EU CR1-B – Credit quality of exposures by industry or counterparty types for JPMS plc

		а	b	С	d	e	f	g
	\$'mm	Gross carryi	ng values of	Specific credit General credit		Accumulated	Credit risk	Net Values
		Defaulted exposures	Non-defaulted exposures	risk adjustment	risk adjustment	write-offs	adjustment charges	(a+b-c-d)
1	Finance Industry	153	64,612	18	—	—	18	64,747
2	Manufacturing	—	7,149	—	—	—	—	7,149
3	Other Residual Exposure	—	16,821	—	—	—	—	16,821
4	Total	153	88,582	18	_	—	18	88,717

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

		а	b	С	d	е	f	g
	\$'mm	Gross carryi	ng values of	Specific	General	Accumulated	Credit risk	Net Values
				credit risk adjustment	credit risk adjustment	write-offs	adjustment charges	(a+b-c-d)
1	EMEA	_	64,194	—	—	—	-	64,194
2	Federal Republic of Germany	—	32,816	—	—	—	—	32,816
3	United Kingdom	—	7,396	_	_	—	_	7,396
4	France	—	4,113	—		—	—	4,113
5	Luxembourg	—	3,936	—	_	—	—	3,936
6	Spain	_	2,608	_	_	—	_	2,608
7	Other Countries in EMEA (Residual Exposure)	—	13,325	_	_	—	—	13,325
8	AMERICA	153	23,688	18	_	—	18	23,823
9	United States of America	—	19,714	—	—	—	—	19,714
10	Other Countries in AMERICA (Residual Exposure)	153	3,974	18	—	—	18	4,109
11	APAC	_	4,794	—	_	_	-	4,794
12	Other Geographical Areas	—	1	—	_	_	—	1
13	Total	153	92,677	18	—	-	18	92,812

Table 21: EU CR1-C – Credit quality of exposures by geography for JPMS plc

		а	b	с	d	е	f	g
	\$'mm	Gross carryi	ng values of	Specific credit	General credit	Accumulated	Credit risk	Net Values
		Defaulted Non-defaulted exposures		risk adjustment	risk adjustment	write-offs	adjustment charges	(a+b-c-d)
1	EMEA	—	63,487	—	—	—	—	63,487
2	Federal Republic of Germany	—	32,523	—	—	—	—	32,523
3	United Kingdom	—	9,810	—	—	—	—	9,810
4	Luxembourg	—	3,686	—	—	—	—	3,686
5	France	—	3,196	—	—	—	—	3,196
6	Republic of South Africa	—	2,887	—	—	—	—	2,887
7	Other Countries in EMEA (Residual Exposure)	—	11,385	—	—	—	—	11,385
8	AMERICA	153	20,484	18	—	—	18	20,619
9	United States of America	—	17,160	_	—	—	—	17,160
10	Other Countries in AMERICA (Residual Exposure)	153	3,324	18	—	—	18	3,459
11	APAC	—	4,610	—	—	—	—	4,610
13	Other Geographical Areas	_	1	—	_	—	—	1
14	Total	153	88,582	18	—	_	18	88,717

Past Due Exposures

As at 30th June 2018 There were no past due exposures reported in JPMS plc.

Table 22: EU CR1-D – Ageing of past-due exposures for JPMCHL

	\$'mm	<= 30 days	> 30 days <= 60 days	> 60 days <= 90 days	> 90 days <= 180 days	> 180 days <= 1 year	> 1 year
1	Loans	_	—	_	—	—	8
2	Debt securities	_	—	_	—	—	—
3	Total exposures	_	_	_	—	_	8

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

	\$'mm		Gross carrying	amount of pe	erforming and	d non-perforr	ning exposur	res		ited impairme negati adjustments	ve fair [`]			als and uarantees ived	
			\$'mm		Of which performing		Of which non-performing			On performing exposures		On non-performing exposures		On non-	Of which
			but past due > 30 days and <= 90 days	performing forborne		Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne	performing exposures	forborne exposures	
010	Debt securities	44	—	—	_	—	—	—	—	-	-	_	_	—	
020	Loans and advances	13,106		927	153	153	18	—	_	—	18	_	_	_	
030	Off-balance-sheet exposures	24,022	_	_	_	_	_	_		_		_	_	_	

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

	\$'mm		Gross carrying	amount of pe	erforming and	d non-perforn	ning exposur	es		ted impairme negati adjustments	ve fair [`]		financial g	als and uarantees ived
			\$'mm		Of which performing		hich Of which non-performing			On performing exposures		On non-performing exposures		On non-
		but past due > 30 days and <= 90 days		performing forborne		Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne	performing exposures	forborne exposures
010	Debt securities	44	—	—	_	_	—				—	_	_	—
020	Loans and advances	10,783	_	_	153	153	18	_	_	_	18		_	—
030	Off-balance-sheet exposures	21,118	_	—	-	_	_	_		_			_	—

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 25: EU CR2-A	- Changes in the stock of	f general and specific credit	risk adjustments
--------------------	---------------------------	-------------------------------	------------------

		JPMCHL	JPMS plc
	\$'mm	Accumulated specific credit risk adjustment	Accumulated specific credit risk adjustment
1	Opening balance (1 st January 2018)	137	137
2	Increases due to amounts set aside for estimated loan losses during the period	18	18
3	Decreases due to amounts reversed for estimated loan losses during the period	(137)	(137)
9	Closing balance (30 th June 2018)	18	18
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss ¹⁴	(116)	(116)
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	18	18

Defaulted and Impaired Exposures

The table below presents changes in defaulted or impaired loans and debt securities between 1st January 2018 and 30th June 2018. The defaulted exposure of \$153m represents loans made to corporate customers.

Table 26: EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities

		JPMCHL	JPMS plc		
	\$'mm	Gross carrying value defaulted exposures	Gross carrying value defaulted exposures		
1	Opening balance (1 st January 2018)	339	339		
2	Loans and debt securities that have defaulted or impaired since the last reporting period	153	153		
5	Other changes ¹⁵	(339)	(339)		
6	Closing balance (30 th June 2018)	153	153		

 ¹⁴ The negative balance represents positive entry in the P&L.
¹⁵ Includes loans sold in the reporting period.

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

	Exposure classes (\$'mm)				Risk v	veight				Total	Of which
		0%	2%	20%	50%	100%	150%	250%	1250%	TOTAL	unrated
1	Central governments or central banks	30,128	—	189	—	65	—	130	—	30,512	146
3	Public sector entities	—	—	166	—	—	—	—	—	166	95
4	Multilateral development banks	—	_		—	1	_		—	1	—
6	Institutions	—	8,273	12,887	874	465	27		99	22,625	10,158
7	Corporates	—		1,963	2,405	19,335	1,089		14	24,806	14,855
9	Secured by mortgages on immovable property	—			_	996	_		—	996	996
10	Exposures in default	—			—	135	_		—	135	135
11	Higher-risk categories	—			—	26	1,224		4	1,254	1,254
15	Equity	—			—	20	130	4	—	154	64
16	Other items	—	_		—	1,219	_		—	1,219	1,219
17	Total	30,128	8,273	15,205	3,279	22,262	2,470	134	117	81,868	28,922

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

	Exposure Classes (\$'mm)	Risk Weight						Total	Of which
	Exposure Classes (\$ mm)	0%	2%	20%	50%	100%	150%	TOLAI	unrated
1	Central government or central banks	12,500	_	242	1	4,093	—	16,836	4,014
2	Regional government or local authorities	191	_	179	—	—	—	370	31
3	Public sector entities	—	_	1,301	—	5	_	1,306	725
4	Multilateral development banks	334	_	—	6		_	340	30
5	International organisations	457		_	—			457	16
6	Institutions	—	70,037	44,804	17,704	1,391	96	134,032	80,701
7	Corporates	—	_	3,510	2,750	45,603	486	52,349	43,371
9	Higher-risk categories	—		—	_		19,102	19,102	19,102
11	Other items	1						1	1
12	Total	13,483	70,037	50,036	20,461	51,092	19,684	224,793	147,991

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

		JPMCHL (\$'mm)	
		RWAs	Capital requirements
	Outright products		
1	Interest rate risk (general and specific)	34,670	2,773
2	Equity risk (general and specific)	30,200	2,416
3	Foreign exchange risk	7,821	626
4	Commodity risk	1,569	126
	Options		
6	Delta-plus method	4,826	386
7	Scenario approach	3,749	300
8	Securitisation (specific risk)	4,727	378
9	Total	87,562	7,005

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.

As a result of this, CRD IV legislation allows for the calculation of a transitional leverage ratio aligned to the phasing in of a number of capital deductions and the phasing out of grandfathered instruments as allowed for the calculation of own funds under the CRR.

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 0.1% (6.54% as at 31st March 2018). The increase in the leverage ratio is driven by an increase in Tier 1 Capital impacting the numerator of the ratio due to recognition of 2017 audited profits in CET1. The increase was partially offset by increased leverage exposure value driven by derivative exposures.
- JPMS plc: The leverage ratio has decreased by 0.32% (5.99% as at 31st March 2018). The decrease in the leverage ratio is driven by an increase in the leverage exposure value impacting the denominator of the ratio. This movement is primarily due to increased derivative exposures.

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

Table 30: 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	649,184	641,379
4	Adjustments for derivative financial instruments	7,309	6,758
5	Adjustment for securities financing transactions (SFTs)	51,834	51,774
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off- balance sheet exposures)	12,901	11,321
7	Other adjustments	(1,226)	(1,224)
8	Leverage ratio total exposure measure	720,002	709,991

Table 31: Leverage Ratio Common Disclosure

	LR Com: Leverage Ration 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)	266,281	262,042
2	(Asset amounts deducted in determining Tier 1 capital)	(1,226)	(1,224)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	265,055	260,818
	Derivative exposures		
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	47,705	47,428
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to- market method)	231,915	231,294
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(48,642)	(48,642)
8	(Exempted CCP leg of client-cleared trade exposures)	(16,621)	(16,621)
9	Adjusted effective notional amount of written credit derivatives	456,333	455,599
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(456,333)	(455,599)
11	Total derivative exposures (sum of lines 4 to 10)	214,357	213,459
	SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	354,014	350,794
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(178,159)	(178,158)
14	Counterparty credit risk exposure for SFT assets	51,834	51,774
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	227,689	224,410
	Other off-balance sheet exposures		

	LR Com: Leverage Ration Common Disclosure (\$'mm)	JPMCHL	JPMS plc			
17	Off-balance sheet exposures at gross notional amount	22,691	19,786			
18	(Adjustments for conversion to credit equivalent amounts)	(9,790)	(8,465)			
19	Other off-balance sheet exposures (sum of lines 17 and 18)	12,901	11,321			
Exen	npted exposures in accordance with Article 429(7) and (14) of regulation (EU) No 575/201	13 (on and off bal	ance sheet)			
EU-19A	(Intragroup exposures (solo basis) exempted in accordance with Article 429 (7) of Regulation (EU) No 575/2013 (on and off balance sheet))	—	(17)			
	Capital and total exposure measure					
20	Tier 1 capital	47,058	40,269			
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	720,002	709,991			
	Leverage ratio					
22	Leverage ratio	6.54%	5.67%			

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

	Exposure class (\$'mm)	Exposures before CCF and CRM		Exposures pos	t 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	30,512	_	30,512	_	429	1.40%
3	Public sector entities	166		166	-	33	20.00%
4	Multilateral development banks	1	_	1	_	1	100.00%
6	Institutions	22,154	672	22,451	174	4,928	21.78%
7	Corporates	12,214	23,322	12,092	12,714	22,734	91.65%
9	Secured by mortgages on immovable property	996	_	996	—	996	100.00%
10	Exposures in default	135	—	135	—	135	100.00%
11	Higher-risk categories	1,241	26	1,241	13	1,913	152.60%
15	Equity	154	—	154	—	224	145.61%
16	Other items	1,219	2	1,219	—	1,219	100.00%
17	Total	68,792	24,022	68,967	12,901	32,612	39.84%

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

_	xposure class (\$'mm)	Exposures before CCF and CRM		Exposures pos	t 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	30,373	_	30,373	_	383	1.26%
3	Public sector entities	166	_	166	—	33	20.00%
4	Multilateral development banks	1	_	1	_	1	100.00%
6	Institutions	23,794	467	24,091	80	5,099	21.10%
7	Corporates	7,562	20,625	7,440	11,228	16,639	89.13%
10	Exposures in default	135	_	135	—	135	100.00%
11	Higher-risk categories	1,238	26	1,238	13	1,909	152.60%
15	Equity	3,471	—	3,471	—	8,548	246.25%
16	Other items	860	—	860	—	860	100.00%
17	Total	67,600	21,118	67,775	11,321	33,607	42.49%

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. There are a small number of Credit Default Swap trades in JPMIB, representing client-driven trading activity, and which are deemed to be immaterial under the definitions in EBA GL2014/14.

The following tables show CRM for loans and debt securities.

Table 34: 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	12,956	132	132		—
2	Total debt securities	44	_	_	_	—
3	Total exposures	13,000	132	132		—
4	Of which defaulted	135	_	_	_	_

Table 35: 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	10,633	132	132	_	—
2	Total debt securities	44		_		—
3	Total exposures	10,677	132	132		—
4	Of which defaulted	135	_	—	_	—

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 14.4% of total market risk capital charge. The table below summarises the components of the own funds requirements under the IMA for market risk.

Table 36: EU MR2-A – Market risk under the IMA for JPMCHL

		JPMCHL (\$'mm)	
		RWAs	Capital requirements
1	VaR (higher of values a and b)	2,613	209
(a)	Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		100
(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		209
2	SVaR (higher of values a and b)	8,790	703
(a)	Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		415
(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)		703
3	IRC (higher of values a and b)	2,464	197
(a)	Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		122
(b)	Average of the IRC number over the preceding 12 weeks		197
6	Total	13,867	1,109

As it is displayed in the table below, own funds requirements decreased by \$294m to \$1,109m mainly driven by decreases in SVaR due to lower average SVaR points in Q2 2018.

Table 37: 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	2,485	11,232	3,320	17,036	1,363
2	Movement in risk levels	114	(3,507)	(856)	(4,249)	(340)
3	Model updates/changes	14	1,065	—	1,080	86
4	Methodology and policy	—	_	—	—	—
8	RWAs at the end of reporting period	2,613	8,790	2,464	13,867	1,109

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 2018.

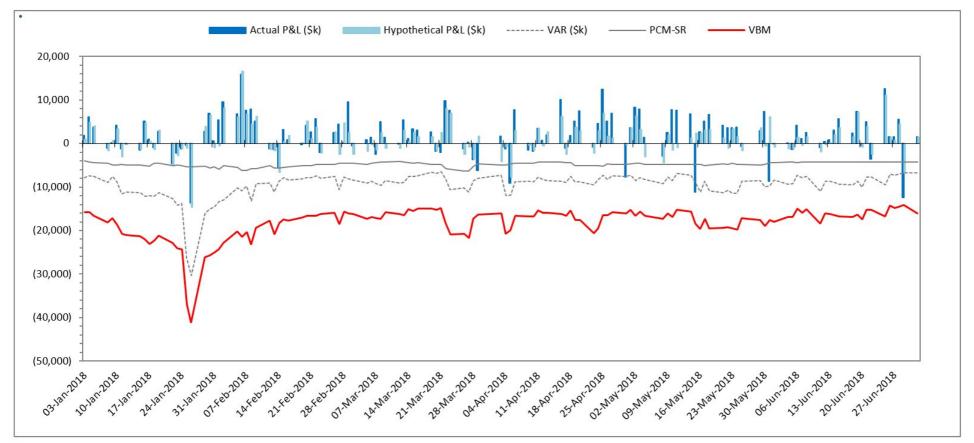
Table 38: EU MR3 – IMA values for trading portfolios for JPMCHL

		JPMCHL (\$'mm)					
VaR (1	VaR (10 day 99%)						
1	Maximum value	142					
2	Average value	89					
3	Minimum value	59					
4	Period end	100					
SVaR	SVaR (10 day 99%)						
5	Maximum value	641					
6	Average value	484					
7	Minimum value	413					
8	Period end	415					
IRC (9	9.9%)						
9	Maximum value	330					
10	Average value	231					
11	Minimum value	122					
12	Period end	122					

VBM Back-Testing

The Firm evaluates the effectiveness of its VBM¹⁶ 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&L¹⁷.

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 2018, the concerned trading book positions observed no top level back-testing exceptions.





¹⁶J.P. Morgan uses 'VaR- based measure' ('VBM'), which should be treated as VaR for IMA regulatory capital purposes (as defined in the CRR).

¹⁷*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')¹⁸, 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. The LCR, in line with the PRA's LCR phasing-in schedule, was required to be 80% at 1st October 2015, rising to 90% on 1st January 2017 until reaching a minimum requirement of 100% from 1st January 2018.

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).

		JPMCHL			JPMS plc	
Currency and units:	(\$'mm)	(\$'mm)	(\$'mm)	(\$'mm)	(\$'mm)	(\$'mm)
Quarter ending on:	31-Dec-17	31-Mar-18	30-Jun-18	31-Dec-17	31-Mar-18	30-Jun-18
Number of data points used in the calculation of averages	12	12	12	12	12	12
	Total weighted adjusted value (average)					
LIQUIDITY BUFFER	76,225	72,401	67,367	69,645	66,738	62,539
TOTAL NET CASH OUTFLOWS	31,072	29,608	27,172	33,266	31,849	28,716
LIQUIDITY COVERAGE RATIO (%)	250%	250%	255%	214%	216%	227%

Table 40: Items prone to rapid change as defined in EBA GL/2017/01 for JPMCHL and JPMS plc

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.

¹⁸ In line with the EBA guidelines the average ratio disclosed in Table 40 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	ICAAP	Internal Capital Adequacy Assessment Process
AT	Additional Tier	IFRS	International Financial Reporting Standards
BIA	Basic Indicator Approach	IRR	Interest Rate Risk
ССР	Central Counterparty Clearing House	ITS	Implementing Technical Standards
CCR	Credit Counterparty Risk	JPMC	J.P. Morgan Chase and Company
CET	Common Equity Tier	JPMCHL	J.P. Morgan Capital Holdings Limited
CIB	Corporate and Investment Bank	JPMEL	J.P. Morgan Europe Limited
CQS	Credit Quality Step	JPMIB	J.P. Morgan International Bank Limited
CRD	Capital Requirements Directive	JPML	J.P. Morgan Limited
CRR	Capital Requirements Regulation	JPMS plc	J.P. Morgan Securities plc
CVA	Credit Valuation Adjustment	LCR	Liquidity Coverage Ratio
EBA	European Banking Authority	LOB	Line of Business
ECAI	External Credit Assessment Institutions	отс	Over the Counter
EMEA	Europe, Middle East and Africa	PRA	Prudential Regulation Authority
FCCM	Financial Collateral Comprehensive Method	RWA	Risk Weighted Assets
FRC	Firmwide Risk Committee	S&P	Standard & Poor's
FRS	Financial Reporting Standard	SFT	Securities Financing Transactions
IAS	International Accounting Standards	VaR	Value-at-Risk