

# Pillar 3 Semi-Annual Disclosure Report as at 31<sup>st</sup> Dec 2017

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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')<sup>1</sup>, originates in Article 433 and the requirements are further articulated in the European Banking Authority ('EBA') Guidelines<sup>2</sup> ('GL1'), which were adopted by the Prudential Regulation Authority ('PRA') from 15<sup>th</sup> October 2015<sup>3</sup>.

In addition, the requirements of EBA Final Report on Guidelines for Disclosure under Part Eight of the CRR<sup>4</sup> ('EBA GL2') have been incorporated into JPMC's disclosure process from 1<sup>st</sup> 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.

All J.P. Morgan Chase entities regulated under the Capital Requirements Directive IV ('CRD IV')<sup>5</sup> 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 25<sup>th</sup> 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 fourth quarter of 2017, and for selected areas defined by EBA GL2, for the second half of 2017.

All data is recorded as at 31<sup>st</sup> December 2017 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>.

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

<sup>2</sup>EBA Guidelines on materiality, proprietary and confidentiality and on disclosure frequency 23 December 2014

<sup>3</sup>PRA expectation of firms' compliance with EBA/GL/2014/14: <http://www.bankofengland.co.uk/pr/Pages/crdiv/updates.aspx>

<sup>4</sup>EBA Final Report on Guidelines for Disclosure under Part Eight of Regulation (EU) No 575/2013 Version 2 published 16<sup>th</sup> December 2016

<sup>5</sup>Capital 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 phase-out 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.

**Table 1: CRDIV Regulatory Capital for JPMCHL**

Transitional Own Funds Disclosure Template (\$'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
<b>Common Equity Tier 1 capital: instruments and reserves</b>				
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	27,634	26 (1) (c)	27,634
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	9,445	26 (1)	9,445
6	<b>Common Equity Tier 1 (CET1) capital before regulatory adjustments</b>	45,160		45,160
<b>Common Equity Tier 1 (CET1) capital: regulatory adjustments</b>				
7	Additional value adjustments (negative amount)	(1,175)	34, 105	(1,175)
8	Intangible assets (net of related tax liability) (negative amount)	(123)	36 (1) (b), 37, 472 (4)	(123)
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10 % threshold and net of eligible short positions) (negative amount)	(1,042)	36 (1) (h), 43, 45, 46, 49 (2) (3), 79, 472 (10)	(1,042)
28	<b>Total regulatory adjustments to Common Equity Tier 1 (CET1)</b>	(2,340)		(2,340)
29	<b>Common Equity Tier 1 (CET1) capital</b>	42,820		42,820
<b>Additional Tier 1 (AT1) capital: Instruments</b>				
44	<b>Additional Tier 1 (AT1) capital</b>	—		—
45	<b>Tier 1 capital (T1 = CET1 + AT1)</b>	42,820		42,820
<b>Tier 2 (T2) capital: instruments and provisions</b>				
58	<b>Tier 2 (T2) capital</b>	—		—
59	<b>Total capital (TC = T1 + T2)</b>	42,820		42,820
60	<b>Total risk weighted assets</b>	254,651		254,651
<b>Capital ratios and buffers</b>				
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	16.82%	92 (2) (a), 465	16.82%
62	Tier 1 (as a percentage of total risk exposure amount)	16.82%	92 (2) (b), 465	16.82%
63	Total capital (as a percentage of total risk exposure amount)	16.82%	92 (2) (c)	16.82%
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)	5.81%	CRD 128, 129, 130	7.06%
65	of which: capital conservation buffer requirement	1.25%		2.5%
66	of which: countercyclical buffer requirement	0.06%		0.06%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	8.82%	CRD 128	8.82%
<b>Amounts below the thresholds for deduction (before risk weighting)</b>				
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)	4,386	36 (1) (h), 46, 45, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	4,386

Transitional Own Funds Disclosure Template (\$'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
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)	465	36 (1) (i), 45, 48, 470, 472 (11)	465
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)	169	36 (1) (c), 38, 48, 470, 472 (5)	169

Table 2: CRDIV Regulatory Capital for JPMS plc

Transitional Own Funds Disclosure Template (\$'m)		Amount at Disclosure Date	Regulation (EU) No 575/2013 Article Reference	Fully-Phased in Position
<b>Common Equity Tier 1 capital: instruments and reserves</b>				
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	9,788	26 (1) (c)	9,788
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	6,651	26 (1)	6,651
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	2,403	26 (2)	2,403
6	<b>Common Equity Tier 1 (CET1) capital before regulatory adjustments</b>	41,236		41,236
<b>Common Equity Tier 1 (CET1) capital: regulatory adjustments</b>				
7	Additional value adjustments (negative amount)	(1,175)	34, 105	(1,175)
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10 % threshold and net of eligible short positions) (negative amount)	(462)	36 (1) (h), 43, 45, 46, 49 (2) (3), 79, 472 (10)	(462)
28	<b>Total regulatory adjustments to Common Equity Tier 1 (CET1)</b>	(1,637)		(1,637)
29	<b>Common Equity Tier 1 (CET1) capital</b>	39,599		39,599
<b>Additional Tier 1 (AT1) capital: Instruments</b>				
44	<b>Additional Tier 1 (AT1) capital</b>	—		—
45	<b>Tier 1 capital (T1 = CET1 + AT1)</b>	39,599		39,599
<b>Tier 2 (T2) capital: instruments and provisions</b>				
58	<b>Tier 2 (T2) capital</b>	—		—
59	<b>Total capital (TC = T1 + T2)</b>	39,599		39,599
60	<b>Total risk weighted assets</b>	248,936		248,936
<b>Capital ratios and buffers</b>				
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	15.91%	92 (2) (a), 465	15.91%
62	Tier 1 (as a percentage of total risk exposure amount)	15.91%	92 (2) (b), 465	15.91%
63	Total capital (as a percentage of total risk exposure amount)	15.91%	92 (2) (c)	15.91%
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)	5.81%	CRD 128, 129, 130	7.06%
65	of which: capital conservation buffer requirement	1.25%		2.5%
66	of which: countercyclical buffer requirement	0.06%		0.06%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	7.91%	CRD 128	7.91%
<b>Amounts below the thresholds for deduction (before risk weighting)</b>				
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)	4,006	36 (1) (h), 46, 45, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	4,006
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)	3,795	36 (1) (i), 45, 48, 470, 472 (11)	3,795
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)	142	36 (1) (c), 38, 48, 470, 472 (5)	142

## Own Funds Reconciliation

The tables below present a reconciliation between unaudited balance sheet own funds and regulatory own funds as at 31<sup>st</sup> December 2017 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**

Regulatory Own Funds Reconciliation to Balance Sheet	\$'m
<b>CET1 Capital</b>	
406,909,774 Ordinary Shares of \$10 each	4,069
Share Premium Account	4,012
Pension Reserve	(99)
Other Reserves	9,544
Retained Earnings	30,745
<b>CET1 Capital - Balance Sheet Own Funds</b>	<b>48,271</b>
<i>Less Regulatory Adjustments</i>	
(-) Unaudited Profit	(3,111)
(-) Intangible Assets Goodwill	(123)
(-) Additional Valuation Adjustments	(1,175)
(-) Non significant investments	(1,042)
<b>CET1 Capital - Regulatory Own Funds After Adjustments</b>	<b>42,820</b>
<b>Total Regulatory Own Funds</b>	<b>42,820</b>

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

Regulatory Own Funds Reconciliation to Balance Sheet	\$'m
<b>CET1 Capital</b>	
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	6,651
Retained Earnings	12,394
<b>CET1 Capital - Balance Sheet Own Funds</b>	<b>41,439</b>
<i>Less Regulatory Adjustments</i>	
(-) Unaudited Profit	(203)
(-) Additional Valuation Adjustments	(1,175)
(-) Non significant investments	(462)
<b>CET1 Capital - Regulatory Own Funds After Adjustments</b>	<b>39,599</b>
<b>Total Regulatory Own Funds</b>	<b>39,599</b>

## Main Features of Capital Instruments

The table below presents the main features of regulatory capital instruments for JPMCHL and JPMS plc as at 31<sup>st</sup> December 2017 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**

Capital Instruments Main Features (\$m)		JPMCHL	JPMS plc		
		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
<b>Regulatory treatment</b>					
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 \$2051m Sep 11 2017	£0.000002m Oct 27 1999	£0.062m May 28 2012
12	Perpetual or dated	Perpetual	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



Capital Instruments Main Features (\$m)		JPMCHL	JPMS plc		
		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
<b>Coupons / dividends</b>					
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 below preference shares in respect of income and capital distributions	Ranks below preferred ordinary and preference shares in respect of income and capital distributions	Ranks below preference ordinary and preference shares in respect of income and capital distributions
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)

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. 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.

Table 6: EU OV1 - Overview of RWAs for JPMCHL<sup>6</sup>

(\$'m)			RWA		Minimum capital requirements
			Q4 2017	Q3 2017	Q4 2017
	1	<b>Credit risk (excluding CCR)</b>	32,805	32,050	2,624
Article 438(c)(d)	2	Of which the standardised approach	32,805	32,050	2,624
Article 107 and Article 438(c)(d)	6	<b>CCR</b>	121,113	119,542	9,689
Article 438(c)(d)	7	Of which mark to market	59,914	62,909	4,793
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	30,109	32,905	2,409
Article 438(e)	13	<b>Settlement risk</b>	654	972	52
Article 438 (e)	19	<b>Market risk</b>	84,477	85,947	6,758
	20	Of which the standardised approach	77,666	79,753	6,213
	21	Of which IMA	6,811	6,194	545
Article 438(e)	22	<b>Large exposures</b>	—	—	—
Article 438(f)	23	<b>Operational risk</b>	15,134	15,134	1,211
	24	Of which basic indicator approach	15,134	15,134	1,211
Article 437(2), Article 48 and Article 60	27	<b>Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	468	468	38
	29	<b>Total</b>	254,651	254,113	20,372

Table 7: EU OV1 - Overview of RWAs for JPMS plc<sup>7</sup>

(\$'m)			RWA		Minimum capital requirements
			Q4 2017	Q3 2017	Q4 2017
	1	<b>Credit risk (excluding CCR)</b>	25,165	24,017	2,013
Article 438(c)(d)	2	Of which the standardised approach	25,165	24,017	2,013
Article 107 and Article 438(c)(d)	6	<b>CCR</b>	120,376	118,808	9,630
Article 438(c)(d)	7	Of which mark to market	59,342	62,341	4,747
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	29,965	32,748	2,397
Article 438(e)	13	<b>Settlement risk</b>	581	900	47
Article 438 (e)	19	<b>Market risk</b>	82,628	84,210	6,610
	20	Of which the standardised approach	75,817	78,016	6,065
	21	Of which IMA	6,811	6,194	545
Article 438(e)	22	<b>Large exposures</b>	463	—	37
Article 438(f)	23	<b>Operational risk</b>	11,016	11,016	881
	24	Of which basic indicator approach	11,016	11,016	881
Article 437(2), Article 48 and Article 60	27	<b>Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	8,707	8,686	697
	29	<b>Total</b>	248,936	247,637	19,915

<sup>6</sup>The exposure value to SFTs is included under CCR, it is not shown in the CCR breakdown, as mandated

<sup>7</sup>as per footnote 6

The table below shows a breakdown of the Minimum Capital Requirements for Credit Risk (including Counterparty Credit Risk) for JPMCHL and JPMS plc. Credit Risk (including Counterparty Credit Risk) is the risk of loss arising from a borrower or counterparty failing to meet its financial obligations.

**Table 8: EU OV1 additional - Overview of RWAs by exposure class**

Exposure classes (\$'m)		JPMCHL		JPMS plc	
		RWA	Capital Requirement	RWA	Capital Requirement
1	Central governments or central banks	1,630	130	1,562	125
2	Regional governments or local authorities	1	—	1	—
3	Public sector entities	75	6	75	6
4	Multilateral Development Banks	60	5	60	5
5	International Organisations	—	—	—	—
6	Institutions	28,583	2,287	28,678	2,294
7	Corporates	67,681	5,415	60,643	4,852
9	Secured by mortgages on immovable property	858	68		
10	Exposures in default	242	19	242	19
11	Items associated with particularly high risk	24,223	1,938	24,216	1,937
15	Equity exposures	211	17	8,503	680
16	Other exposures	629	50	219	18
17	<b>Total</b>	124,193	9,935	124,199	9,936

## 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. All derivative exposures are calculated using the Mark to Market method (CRR Article 274) and SFTs using the Financial Collateral Comprehensive Method ('FCCM') (CRR Article 223). 'Other' financial contract types relates to long settlement transactions which are treated under the FCCM method.

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

(\$'m)		b	c	f	g
		Replacement cost/current market value	Potential future credit exposures	EAD post CRM	RWAs
1	Mark to market	59,484	144,346	193,135	60,886
9	Financial collateral comprehensive method (for SFTs)			43,460	30,919
11	<b>Total</b>				91,805

The following table represents an overview of the impact of netting and collateral held on exposures for derivatives (including long settlement transactions) and SFTs. The netted current credit exposure and collateral held include volatility adjustments.

**Table 10: EU CCR5-A – Impact of netting and collateral held on exposure values for JPMCHL**

(\$'m)		a	b	c	d	e
		Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1	Derivatives	751,687	(499,234)	252,453	(107,940)	144,513
2	SFTs	168,678	(118,446)	50,232	(2,373)	47,859
3	SFTs subject to a netting agreement	165,410	(118,446)	46,963	—	46,963
4	SFTs not subject to a netting agreement	3,269	—	3,269	(2,373)	896
5	<b>Total</b>	920,365	(617,680)	302,685	(110,313)	192,372

### Collateral Used in Counterparty Credit Risk

The breakdown of all types collateral posted or received by JPMCHL to mitigate CCR exposure to derivatives and SFTs is shown in the table below. As at December 31<sup>st</sup> 2017, the majority of collateral used which JPMCHL held was in cash while the rest was in equities and high quality bonds.

**Table 11: EU CCR5-B – Composition of collateral for exposures to CCR for JPMCHL**

(\$'m)	a	b	c	d	e	f
	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	—	114,182	—	47,715	85,548	14,426
Debt securities (Central Governments)	—	1,752	—	7	—	5,908
Debt securities (Corporates)	103	15,001	—	3,508	3,048	8,028
Debt securities (Institutions)	2,429	6,251	—	11,351	6,854	4,588
Equities	—	288	—	1	20,370	32,197
Convertible securities	—	—	—	170	1,104	278
CIUs	—	—	—	—	908	479
Other	—	1	—	—	4	51
<b>Total</b>	2,532	137,475	—	62,752	117,836	65,955

## CVA Capital Charge

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

**Table 12: EU CCR2 – CVA capital charge for JPMCHL**

		JPMCHL (\$'m)	
		a	b
		Exposure value	RWAs
4	All portfolios subject to the standardised method	51,286	30,109
5	Total subject to the CVA capital charge	51,286	30,109

## 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<sup>8</sup>. The exposure amount for default funds contributions is calculated as per Article 308 of CRR.

**Table 13: EU CCR8 – Exposures to CCPs for JPMCHL**

		JPMCHL (\$'m)	
		a	b
		EAD post CRM	RWAs
1	<b>Exposures to QCCPs (total)</b>		1,293
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	58,660	1,173
3	(i) OTC derivatives	21,524	430
4	(ii) Exchange-traded derivatives	32,737	655
5	(iii) SFTs	4,399	88
7	Segregated initial margin		
8	Non-segregated initial margin	1,795	36
9	Prefunded default fund contributions	1,031	84
11	<b>Exposures to non-QCCPs (total)</b>		—

## Credit Derivatives Breakdown

The table below presents a breakdown of credit derivatives notional 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 14: EU CCR6 – Credit derivatives exposures for JPMCHL**

(\$'m)	a	b	c
	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
Notionals			
Credit default swaps			608,148
Total return swaps	24,328		5,827
Total notionals	24,328		613,975
Fair values			
Positive fair value (asset)	7,515		1,432
Negative fair value (liability)			(2,941)

<sup>8</sup> 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.

## 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.

## 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 15: EU CR1-A – Credit quality of exposures by exposure class and instrument for JPMCHL**

(\$'m)		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 (a+b-c-d)
		Defaulted exposures	Non-defaulted exposures					
1	Central governments or central banks	—	22,873	—	—	—	—	22,873
2	Institutions	—	25,828	—	—	—	—	25,828
3	Corporates	399	37,111	137	—	—	137	37,373
4	Other Residual Exposure	—	2,786	—	—	—	—	2,786
5	Total standardised approach	399	88,598	137	—	—	137	88,860
6	<b>Total</b>	<b>399</b>	<b>88,598</b>	<b>137</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>88,860</b>
7	Of which: Loans	339	16,467	116	—	—	116	16,690
8	Of which: Debt securities	—	39	—	—	—	—	39
9	Of which: Off-balance-sheet exposures	60	24,069	21	—	—	21	24,108

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

(\$'m)		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 (a+b-c-d)
		Defaulted exposures	Non-defaulted exposures					
1	Central governments or central banks	—	22,710	—	—	—	—	22,710
2	Institutions	—	27,332	—	—	—	—	27,332
3	Corporates	399	28,907	137	—	—	137	29,169
4	Other Residual Exposure	—	4,822	—	—	—	—	4,822
5	Total standardised approach	399	83,771	137	—	—	137	84,033
6	<b>Total</b>	<b>399</b>	<b>83,771</b>	<b>137</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>84,033</b>
7	Of which: Loans	339	13,621	116	—	—	116	13,844
8	Of which: Debt securities	—	39	—	—	—	—	39
9	Of which: Off-balance-sheet exposures	60	20,388	21	—	—	21	20,427

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

(\$'m)		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	—	63,762	—	—	—	—	63,762
2	Manufacturing	—	7,979	—	—	—	—	7,979
3	Transport and storage	—	5,353	—	—	—	—	5,353
4	Other Residual Exposure	399	11,504	137	—	—	137	11,766
5	<b>Total</b>	<b>399</b>	<b>88,598</b>	<b>137</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>88,860</b>

**Table 18: EU CR1-B – Credit quality of exposures by industry or counterparty types for JPMS plc**

(\$'m)		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	—	59,397	—	—	—	—	59,397
2	Manufacturing	—	6,665	—	—	—	—	6,665
3	Transport and storage	—	5,021	—	—	—	—	5,021
4	Other Residual Exposure	399	12,688	137	—	—	137	12,950
5	<b>Total</b>	<b>399</b>	<b>83,771</b>	<b>137</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>84,033</b>



## 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 19: EU CR1-C – Credit quality of exposures by geography for JPMCHL**

(\$'m)		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 (a+b-c-d)
		Defaulted exposures	Non-defaulted exposures					
1	<b>EMEA</b>	<b>399</b>	<b>58,845</b>	<b>137</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>59,107</b>
2	AUSTRIA	399	707	137	—	—	137	969
3	BELGIUM	—	2,030	—	—	—	—	2,030
4	SWITZERLAND	—	1,076	—	—	—	—	1,076
5	FEDERAL REPUBLIC OF GERMANY	—	24,838	—	—	—	—	24,838
6	SPAIN	—	3,885	—	—	—	—	3,885
7	FRANCE	—	4,483	—	—	—	—	4,483
8	UNITED KINGDOM	—	6,413	—	—	—	—	6,413
9	ITALY	—	2,033	—	—	—	—	2,033
10	LUXEMBOURG	—	4,797	—	—	—	—	4,797
11	KINGDOM OF THE NETHERLANDS	—	1,382	—	—	—	—	1,382
12	SWEDEN	—	1,593	—	—	—	—	1,593
13	Other Countries in EMEA (Residual Exposure)	—	5,608	—	—	—	—	5,608
14	<b>APAC</b>	<b>—</b>	<b>5,262</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>5,262</b>
15	PEOPLE'S REPUBLIC OF CHINA	—	1,194	—	—	—	—	1,194
16	HONG KONG	—	1,625	—	—	—	—	1,625
17	Other Countries in APAC (Residual Exposure)	—	2,443	—	—	—	—	2,443
18	<b>AMERICA</b>	<b>—</b>	<b>24,490</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>24,490</b>
19	CANADA	—	1,794	—	—	—	—	1,794
20	UNITED STATES OF AMERICA	—	20,384	—	—	—	—	20,384
21	Other Countries in AMERICA (Residual Exposure)	—	2,312	—	—	—	—	2,312
22	<b>Other Geographical Areas</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>
24	<b>Total</b>	<b>399</b>	<b>88,598</b>	<b>137</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>88,860</b>

Table 20: EU CR1-C – Credit quality of exposures by geography for JPMS plc

	(\$'m)	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	<b>EMEA</b>	<b>399</b>	<b>57,675</b>	<b>137</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>57,937</b>
2	BELGIUM	—	1,774	—	—	—	—	1,774
3	SWITZERLAND	—	1,004	—	—	—	—	1,004
4	FEDERAL REPUBLIC OF GERMANY	—	24,518	—	—	—	—	24,518
5	SPAIN	—	2,855	—	—	—	—	2,855
6	FRANCE	—	3,621	—	—	—	—	3,621
7	UNITED KINGDOM	—	8,695	—	—	—	—	8,695
8	LUXEMBOURG	—	4,564	—	—	—	—	4,564
9	KINGDOM OF THE NETHERLANDS	—	1,354	—	—	—	—	1,354
10	SWEDEN	—	1,532	—	—	—	—	1,532
11	REPUBLIC OF SOUTH AFRICA	—	2,625	—	—	—	—	2,625
12	Other Countries in EMEA (Residual Exposure)	399	5,133	137	—	—	137	5,395
13	<b>APAC</b>	<b>—</b>	<b>5,074</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>5,074</b>
14	PEOPLE'S REPUBLIC OF CHINA	—	1,193	—	—	—	—	1,193
15	HONG KONG	—	1,601	—	—	—	—	1,601
16	Other Countries in APAC (Residual Exposure)	—	2,280	—	—	—	—	2,280
17	<b>AMERICA</b>	<b>—</b>	<b>21,021</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>21,021</b>
18	CANADA	—	1,733	—	—	—	—	1,733
19	UNITED STATES OF AMERICA	—	17,632	—	—	—	—	17,632
20	Other Countries in AMERICA (Residual Exposure)	—	1,656	—	—	—	—	1,656
21	<b>Other Geographical Areas</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>
22	<b>Total</b>	<b>399</b>	<b>83,771</b>	<b>137</b>	<b>—</b>	<b>—</b>	<b>137</b>	<b>84,033</b>

## 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. No exposure was forborne as at 31<sup>st</sup> December 2017

**Table 21: EU CR1-E – Non-performing and forborne exposures for JPMCHL**

(\$'m)		a	b	c	d	e	f	g	h	i	j	k	l	m
		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	39												
020	Loans and advances	16,806			339	339	116				116			
030	Off-balance-sheet exposures	24,129			60	60	21				21			

**Table 22: EU CR1-E – Non-performing and forborne exposures for JPMS plc**

(\$'m)		a	b	c	d	e	f	g	h	i	j	k	l	m
		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	39												
020	Loans and advances	13,960			339	339	116				116			
030	Off-balance-sheet exposures	20,448			60	60	21				21			

## Credit Risk Adjustments

No general credit risk adjustment was made in the reporting period. The specific credit risk adjustments of £137m relates to loans to a corporate customer domiciled in Austria.

**Table 23: EU CR2-A – Changes in the stock of general and specific credit risk adjustments**

(\$'m)		JPMCHL	JPMS plc
		a	a
		Accumulated specific credit risk adjustment	Accumulated specific credit risk adjustment
1	Opening balance (1 <sup>st</sup> July 2017)	—	—
2	Increases due to amounts set aside for estimated loan losses during the period	137	137
9	Closing balance (31 <sup>st</sup> December 2017)	137	137
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	116	116

## Defaulted and Impaired Exposures

The table below presents changes in defaulted or impaired loans and debt securities between 1<sup>st</sup> July 2017 and 31<sup>st</sup> December 2017. The defaulted exposure of £339m represents loans made to a corporate customer domiciled in Austria.

**Table 24: EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities**

(\$'m)		JPMCHL	JPMS plc
		a	a
		Gross carrying value defaulted exposures	Gross carrying value defaulted exposures
1	Opening balance (1 <sup>st</sup> July 2017)	—	—
2	Loans and debt securities that have defaulted or impaired since the last reporting period	339	339
6	Closing balance (31 <sup>st</sup> December 2017)	339	339

## Past Due Exposures

As at 31<sup>st</sup> December 2017 there were no past due exposures reported in JPMCHL and JPMS plc.

## 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 Pre-Credit Risk Mitigation

The following table shows exposures at default before credit risk mitigation broken down by exposure class and risk weights. The table includes only credit risk exposures (excluding counterparty credit risk). Risk weights applied for EEA member states are applied under Article 114 and hence bucketed under 0%.

Table 25: EU CR5 – Standardised approach (pre-CRM) for JPMCHL

Exposure classes (\$'m)		Risk weight								Total	Of which unrated
		0%	2%	20%	50%	100%	150%	250%	1250%		
1	Central governments or central banks	22,639		40	—	25		169		22,873	187
3	Public sector entities			116						116	116
4	Multilateral development banks				1					1	1
6	Institutions	—	5,458	17,466	859	1,987	41		16	25,827	8,093
7	Corporates	—	1,837	2,505	4,070	26,397	2,655		46	37,510	20,695
9	Secured by mortgages on immovable property					858				858	858
10	Exposures in default					261	—			261	262
11	Higher-risk categories						644		4	648	304
15	Equity					15	100	18		1,042	37
16	Other items					632				123	632
17	<b>Total</b>	22,639	7,295	20,127	4,930	30,175	3,440	187	66	90,024	31,185

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

Exposure classes (\$'m)		Risk weight								Total	Of which unrated
		0%	2%	20%	50%	100%	150%	250%	1250%		
1	Central governments or central banks	22,639		40	—	25		169		22,873	187
3	Public sector entities			116						116	116
4	Multilateral development banks				1					1	1
6	Institutions	—	5,568	17,588	801	1,956	21		16	25,950	8,210
7	Corporates	—	1,865	1,589	2,351	19,118	1,696		46	26,665	17,375
9	Secured by mortgages on immovable property					858				858	858
10	Exposures in default					242	—			242	242
11	Higher-risk categories						544		4	548	204
15	Equity					15	100	18		1,042	37
16	Other items					629				123	629
17	<b>Total</b>	22,639	7,433	19,333	3,153	22,843	2,361	187	66	79,180	27,859

### Counterparty Credit Risk Exposures at Default Pre-Credit Risk Mitigation

The table below shows exposures at default before credit risk mitigation technique for counterparty credit risk broken down by exposure class and risk weight.

**Table 27: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk (pre-CRM) for JPMCHL**

Exposure Classes (\$'m)		Risk Weight						Total	Of which unrated
		0%	2%	20%	50%	100%	150%		
1	Central government or central banks	27,662	—	231	—	1,900	—	29,793	1,843
2	Regional government or local authorities	52	—	—	—	1	—	53	—
3	Public sector entities	—	—	338	—	5	—	343	220
4	Multilateral development banks	—	—	—	62	30	—	92	23
5	International organisations	18	—	—	—	—	—	18	18
6	Institutions	—	30,710	93,022	27,812	5,002	1,563	158,109	105,157
7	Corporates	—	22,898	2,470	3,197	66,520	350	95,435	87,464
8	Retail	—	—	—	—	—	—	—	—
9	Higher-risk categories	—	—	—	—	—	18,789	18,789	18,789
12	Total	27,732	53,608	96,061	31,071	73,458	20,702	302,632	213,514

### 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 (\$'m)		Risk Weight						Total	Of which unrated
		0%	2%	20%	50%	100%	150%		
1	Central government or central banks	14,646	—	231	—	1,129	—	16,006	1,071
2	Regional government or local authorities	52	—	—	—	1	—	53	—
3	Public sector entities	—	—	241	—	4	—	245	150
4	Multilateral development banks	—	—	—	59	30	—	89	20
5	International organisations	13	—	—	—	—	—	13	13
6	Institutions	—	30,124	37,657	18,923	3,926	560	91,190	44,120
7	Corporates	—	22,898	2,183	2,560	41,212	350	69,203	62,441
8	Retail	—	—	—	—	—	—	—	—
9	Higher-risk categories	—	—	—	—	—	15,573	15,573	15,573
12	Total	14,711	53,022	40,312	21,542	46,302	16,483	192,372	123,388

## 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 (\$'m)	
		a	b
		RWAs	Capital requirements
	Outright products		
1	Interest rate risk (general and specific)	27,844	2,227
2	Equity risk (general and specific)	30,890	2,471
3	Foreign exchange risk	10,713	857
4	Commodity risk	412	33
	Options		
6	Delta-plus method	2,194	176
7	Scenario approach	2,242	179
8	Securitisation (specific risk)	3,371	270
9	<b>Total</b>	<b>77,666</b>	<b>6,213</b>



## 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.

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 (\$m)		JPMCHL	JPMS plc
1	Total assets as per published financial statements	611,327	603,154
4	Adjustments for derivative financial instruments	(58,829)	(59,055)
5	Adjustment for securities financing transactions (SFTs)	43,547	43,465
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	13,146	11,122
7	Other adjustments	(2,340)	(1,637)
8	<b>Leverage ratio total exposure measure</b>	<b>606,851</b>	<b>597,049</b>

**Table 31: Leverage Ratio Common Disclosure**

LR Com: Leverage Ratio Common Disclosure (\$'m)		JPMCHL	JPMS plc
<b>On-balance sheet exposures (excluding derivatives and SFTs)</b>			
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	223,380	219,878
2	(Asset amounts deducted in determining Tier 1 capital)	(2,340)	(1,637)
3	<b>Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)</b>	<b>221,040</b>	<b>218,241</b>
<b>Derivative exposures</b>			
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	41,203	41,877
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	176,733	175,311
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(53,202)	(53,202)
8	(Exempted CCP leg of client-cleared trade exposures)	(4,294)	(4,294)
9	Adjusted effective notional amount of written credit derivatives	306,988	306,775
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(306,988)	(306,775)
11	<b>Total derivative exposures (sum of lines 4 to 10)</b>	<b>160,440</b>	<b>159,692</b>
<b>SFT exposures</b>			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	317,899	313,750
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(149,221)	(149,221)
14	Counterparty credit risk exposure for SFT assets	43,547	43,465
16	<b>Total securities financing transaction exposures (sum of lines 12 to 15a)</b>	<b>212,225</b>	<b>207,994</b>
<b>Other off-balance sheet exposures</b>			
17	Off-balance sheet exposures at gross notional amount	24,108	20,428
18	(Adjustments for conversion to credit equivalent amounts)	(10,962)	(9,305)
19	<b>Other off-balance sheet exposures (sum of lines 17 and 18)</b>	<b>13,146</b>	<b>11,122</b>
<b>Capital and total exposure measure</b>			
20	<b>Tier 1 capital</b>	<b>42,820</b>	<b>39,599</b>
21	<b>Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)</b>	<b>606,851</b>	<b>597,049</b>
<b>Leverage ratio</b>			
22	<b>Leverage ratio</b>	<b>7.06%</b>	<b>6.63%</b>

## 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 classes (\$'m)		a	b	c	d	e	f
		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	22,873		22,873		454	1.99%
3	Public sector entities	116		116		23	20.00%
4	Multilateral development banks	1		1		—	50.00%
6	Institutions	25,521	306	25,806	144	6,222	23.98%
7	Corporates	13,951	23,559	13,784	12,881	23,770	89.14%
9	Secured by mortgages on immovable property	858		858		858	100.00%
10	Exposures in default	222	39	222	20	242	100.00%
11	Higher-risk categories	448	200	448	100	864	157.54%
15	Equity	133		133		211	158.45%
16	Other items	628	4	628	1	629	100.00%
17	<b>Total</b>	64,751	24,108	64,869	13,146	33,273	42.65%

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

Exposure classes (\$'m)		a	b	c	d	e	f
		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	22,710		22,710		387	1.70%
3	Public sector entities	116		116		23	20.00%
4	Multilateral development banks	1		1		—	50.00%
6	Institutions	27,246	86	27,531	43	6,418	23.28%
7	Corporates	9,204	20,102	9,037	10,959	17,218	86.11%
10	Exposures in default	222	40	222	20	242	100.00%
11	Higher-risk categories	446	200	446	100	861	157.56%
15	Equity	3,441		3,441		8,504	247.09%
16	Other items	219		219		219	100.00%
17	<b>Total</b>	63,605	20,428	63,723	11,122	33,872	45.26%

### 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 only by collateral as it is shown in the tables below. 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 credit risk mitigation for credit risk and credit counterparty risk is summarised in the tables below.

**Table 34: CRM techniques – Overview by exposure class for JPMCHL**

Exposure classes (\$'m)		a	b	c
		Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral
1	Central governments or central banks	38,878	13,789	13,789
2	Regional government or local authorities	53	—	—
3	Public sector entities	362	98	98
4	Multilateral development banks	90	2	2
5	International organisations	13	5	5
6	Institutions	117,302	66,933	66,933
7	Corporates	106,545	26,493	26,493
9	Secured by mortgages on immovable property	858	—	—
10	Exposures in default	262	—	—
11	Higher-risk categories	16,221	3,235	3,235
15	Equity	133	—	—
16	Other items	632	—	—
17	<b>Total</b>	<b>281,349</b>	<b>110,555</b>	<b>110,555</b>

**Table 35: CRM techniques – Overview by exposure class for JPMS plc**

Exposure classes (\$'m)		a	b	c
		Exposures unsecured – Carrying amount	Exposures secured – Carrying amount	Exposures secured by collateral
1	Central governments or central banks	38,648	13,789	13,789
2	Regional government or local authorities	53	—	—
3	Public sector entities	361	98	98
4	Multilateral development banks	90	2	2
5	International organisations	13	5	5
6	Institutions	118,380	66,821	66,821
7	Corporates	97,854	26,493	26,493
10	Exposures in default	262	—	—
11	Higher-risk categories	16,216	3,235	3,235
15	Equity	3,441	—	—
16	Other items	219	—	—
17	<b>Total</b>	<b>275,537</b>	<b>110,443</b>	<b>110,443</b>

**Table 36: EU CR3 – CRM techniques – Overview for JPMCHL**

(\$'m)		a	b	c
		Exposures unsecured - Carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral
1	Total loans	16,564	242	242
2	Total debt securities	39	—	—
3	<b>Total exposures</b>	<b>16,603</b>	<b>242</b>	<b>242</b>
4	Of which defaulted	339		

**Table 37: EU CR3 – CRM techniques – Overview for JPMS plc**

(\$'m)		a	b	c
		Exposures unsecured - Carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral
1	Total loans	13,718	242	242
2	Total debt securities	39	—	—
3	<b>Total exposures</b>	<b>13,757</b>	<b>242</b>	<b>242</b>
4	Of which defaulted	339		

## 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 IMA represents approximately 8% of total market risk capital charge. The table below summarises the components of the own funds requirements under the IMA for market risk.

**Table 38: EU MR2-A – Market risk under the IMA for JPMCHL**

		JPMCHL (\$'m)	
		a	b
		RWAs	Capital requirements
1	<b>VaR (higher of values a and b)</b>	1,141	91
(a)	Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		24
(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		91
2	<b>SVaR (higher of values a and b)</b>	2,810	225
(a)	Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		84
(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)		225
3	<b>IRC (higher of values a and b)</b>	2,860	229
(a)	Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		209
(b)	Average of the IRC number over the preceding 12 weeks		229
6	<b>Total</b>	6,811	545

As it is displayed in the table below, own funds requirements increased by \$49m to \$545m mainly driven by an increase in IRC due, in turn, to an increase in long bond risk. There were no material model updates nor methodology or policy changes to the calculations.

**Table 39: EU MR2-B – RWA flow statements of market risk exposures under the IMA for JPMCHL**

(\$'m)		a	b	c	f	g
		VaR	SVaR	IRC	Total RWAs	Total capital requirements
1	<b>RWAs at previous quarter end</b>	1,098	2,765	2,332	6,194	496
2	Movement in risk levels	43	45	528	617	49
3	Model updates/changes				—	
4	Methodology and policy				—	
8	<b>RWAs at the end of reporting period</b>	1,141	2,810	2,860	6,811	545

## 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 31<sup>st</sup> December 2017.

**Table 40: EU MR3 – IMA values for trading portfolios for JPMCHL**

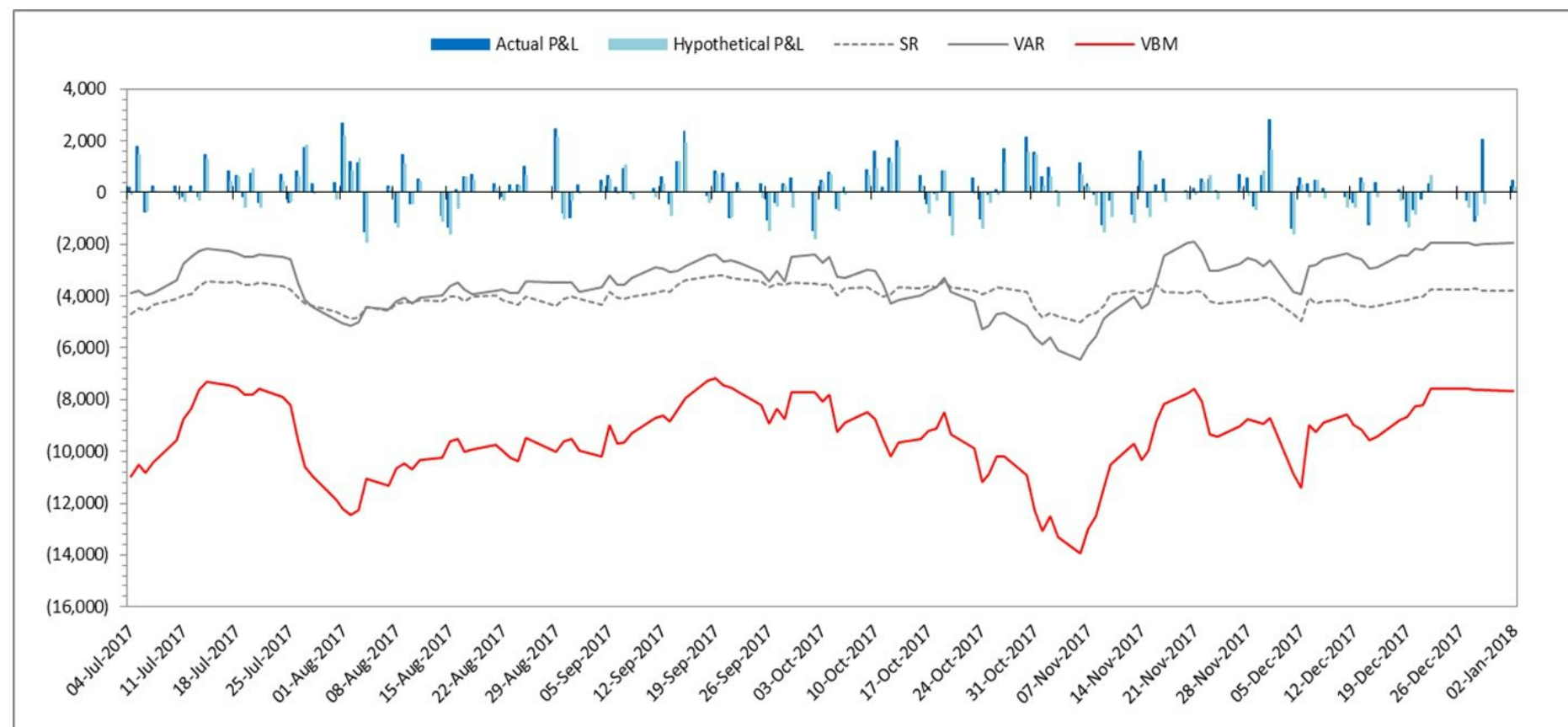
		JPMCHL (\$'m)
		a
<b>VaR (10 day 99%)</b>		
1	Maximum value	44
2	Average value	30
3	Minimum value	23
4	Period end	24
<b>SVaR (10 day 99%)</b>		
5	Maximum value	114
6	Average value	92
7	Minimum value	76
8	Period end	84
<b>IRC (99.9%)</b>		
9	Maximum value	281
10	Average value	208
11	Minimum value	140
12	Period end	209

## VBM Back-Testing

The Firm evaluates the effectiveness of its VBM<sup>9</sup> 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<sup>10</sup>.

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 1<sup>st</sup> July till 31<sup>st</sup> December 2017, the concerned trading book positions observed no top level back-testing exceptions.

**Table 41: EU MR4 – Comparison of VaR estimates with gains/losses for JPMCHL**



<sup>9</sup>J.P. Morgan uses 'VaR- based measure' (VBM), which should be treated as VaR for IMA regulatory capital purposes (as defined in the Capital Requirements Regulation (CRR)).

<sup>10</sup>**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)(f))

The Liquidity Coverage Ratio<sup>11</sup> as per the Commission Delegated Regulation (EU) 2015/16 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 was required to be 80% at 1<sup>st</sup> October 2015, rising to 90% on 1<sup>st</sup> January 2017 until reaching a minimum requirement of 100% from 1<sup>st</sup> January 2018.

### Key Ratios and Figures

The LCR disclosure in this document has been assessed in accordance with the EBA Final report on 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 under articles 432(1), 432(2) and 433 of Regulation (EU) No 575/2013.

**Table 42: Items prone to rapid change as defined in EBA GL/2017/01 for JPMCHL and JPMS plc**

	JPMCHL	JPMS plc
Currency and units:	(\$'m)	(\$'m)
Quarter ending on:	31-Dec-17	31-Dec-17
Number of data points used in the calculation of averages	12	12
	Total weighted adjusted value (average)	Total weighted adjusted value (average)
<b>LIQUIDITY BUFFER</b>	<b>76,225</b>	<b>69,645</b>
<b>TOTAL NET CASH OUTFLOWS</b>	<b>31,072</b>	<b>33,266</b>
<b>LIQUIDITY COVERAGE RATIO (%)</b>	<b>250%</b>	<b>214%</b>

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. JPMCHL's average LCR was 250% for the quarter ending on 31<sup>st</sup> December 2017 and JPMS plc's average LCR was 214%. The liquidity buffer disclosed covers both Pillar I and Pillar II liquidity risks.

<sup>11</sup> The average ratio disclosed is calculated as a simple average over the 12 data points used and not as a formula of liquidity buffer divided by total net cash outflows

## 12. Glossary of Acronyms

ALCO	Asset and Liability Committee	LCR	Liquidity Coverage Ratio
ALMM	Additional Liquidity Monitoring Metrics	LDA	Loss Distribution Approach
APAC	Asia Pacific	LGD	Loss given default
AT	Additional Tier	LOB	Line of Business
BIA	Basic Indicator Approach	NBIA	New Business Initiative Approval
BRRD	Bank Recovery and Resolution Directive	NSFR	Net Stable Funding Ratio
BSUKHL	Bear Stearns United Kingdom Holdings Limited	ORC	Operational Risk Regulatory Capital
CCP	Central Counterparty Clearing House	ORG	Operational Risk Governance
CEO	Chief Executive officer	ORMF	Operational Risk Management Framework
CET	Common Equity Tier	OTC	Over the Counter
CFO	Chief Finance Office	PD	Probability of Default
CIB	Corporate and Investment Bank	PRA	Prudential Regulation Authority
CIO	Chief Investment Office	RCSA	Risk Control Self Assessment
CMDC	Compensation and Management Development Committee	RWA	Risk Weighted Assets
CQS	Credit Quality Step	S&P	Standard & Poor's
CRD	Capital Requirements Directive	SFT	Securities Financing Transactions
CRO	Chief Risk Officer	SNPR	Single Name Position Risk
CRR	Capital Requirements Regulation	UKMC	UK Management Committee
CTC	CIO, Treasury and Corporate	VaR	Value-at-Risk
CTC RC	The CIO, Treasury and Other Corporate Risk Committee		
CVA	Credit Valuation Adjustment		
DRE	Derivative Risk Equivalent		
DRPC	Directors' Risk Policy Committee		
EBA	European Banking Authority		
ECAI	External Credit Assessment Institutions		
EMEA	Europe, Middle East and Africa		
EOC	EMEA Operating Committee		
ERC	EMEA Risk Committee		
FCCM	Financial Collateral Comprehensive Method		
FRC	Firmwide Risk Committee		
FRS	Financial Reporting Standard		
IAS	International Accounting Standards		
ICAAP	Internal Capital Adequacy Assessment Process		
IFRS	International Financial Reporting Standards		
ILAAP	Internal Liquidity Adequacy Assessment Process		
IRM	Independent Risk Management		
IRR	Interest Rate Risk		
IRRBB	Interest Rate Risk in the Banking Book		
ITS	Implementing Technical Standards		
JPMAME	JPMorgan Asset Management (Europe) Sarl		
JPMC	J.P. Morgan Chase and Company		
JPMCHL	J.P. Morgan Capital Holdings Limited		
JPMEI	J.P. Morgan Europe Limited		
JPMFIL	J.P. Morgan Financial Investments Limited		
JPMIB	J.P. Morgan International Bank Limited		
JPML	J.P. Morgan Limited		
JPMML	J.P.Morgan Markets Limited		
JPMMLL	J.P. Morgan Mansart Management Limited		
JPMS plc	J.P. Morgan Securities plc		