



BNY MELLON

**BNY MELLON Capital Markets  
EMEA Limited**

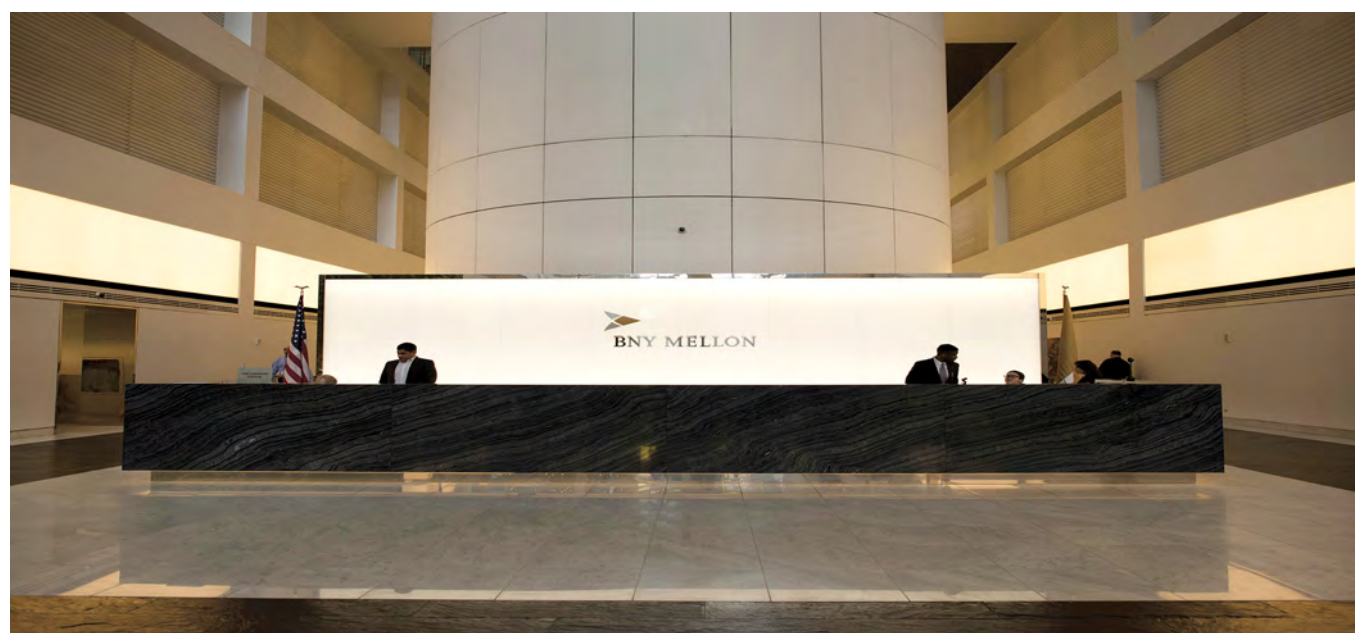
# **Pillar 3 Disclosure**

December 31, 2017

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Any discrepancies between the totals and sums of components within the tables and graphs within this report are due to rounding.



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# 1 Scope of application

## 1.1 Disclosure policy

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This document comprises the BNY Mellon Capital Markets EMEA Ltd (CaML or the Company) Pillar 3 disclosures on capital and risk management at 31 December 2017. These Pillar 3 disclosures are published in accordance with the requirements of the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD), referred to together as CRD IV, which came into effect on 1 January 2014. CRD IV has the effect of implementing the international Basel III reforms of the Basel Committee on Banking Supervision within the European Union. The Pillar 3 disclosure requirements are contained in Part Eight of the CRR, in particular articles 431 to 455.

Pillar 3 disclosures are required for a consolidated group and for those parts of the group covered by CRD IV. When assessing the appropriateness of these disclosures in the application of Article 431(3) in the CRR, CaML has ensured adherence to the following principles of:

- Clarity
- Meaningfulness
- Consistency over time
- Comparability across institution

The Basel Committee on Banking Supervision (BCBS) requires these disclosures to be published at the highest level of consolidation. CaML has adopted this approach with information presented at a fully consolidated and solo level where appropriate.

Information in this report has been prepared solely to meet Pillar 3 disclosure requirements of the entity noted, and to provide certain specified information about capital, risk and details about the management of those risks, and for no other purpose. These disclosures do not constitute any form of financial statement of the business nor do they constitute any form of contemporary or forward looking record or opinion about the business.

Unless indicated otherwise, information contained within this document has not been subject to external audit.

The following risk metrics present CaML's risk components as at 31 December 2017. Please see page 11 for the full comprehensive list of capital ratios.

	Consolidated	Solo
<b>Common Equity Tier 1 ratio</b>	<b>98.4%</b>	<b>95.8%</b>
	2016: 166.8%	2016: 110.0%
<b>Common Equity Tier 1 capital</b>	<b>£33m</b>	<b>£31m</b>
	2016: £34m	2016: £28m
<b>Total risk-weighted assets</b>	<b>£33m</b>	<b>£32m</b>
	2016: £21m	2016: £26m
<b>Basel III leverage ratio</b>	<b>35.7%</b>	<b>35.7%</b>
(This ratio is for information only. CaML is not subject to a binding leverage requirement)	2016: 56.5%	2016: 52.8%

## 1.2 The Basel III framework

Basel III is the international banking accord intended to strengthen the measurement and monitoring of financial institutions' capital. The Basel III framework was implemented in the European Union through the Capital Requirements Directive (CRD) and establishes a more risk sensitive approach to capital management. It is comprised of three pillars:

### **Pillar 1 - Minimum capital requirement:**

Establishes rules for the calculation of minimum capital for credit risk, counterparty credit risk, market risk and operational risk and capital resources requirements

### **Pillar 2 - Supervisory review process:**

Requires firms and supervisors to undertake an internal capital adequacy assessment process to determine whether the financial institution needs to hold additional capital against risks not adequately covered in Pillar 1 and to take action accordingly

### **Pillar 3 - Market discipline:**

Complements the other two pillars and effects market discipline through public disclosure showing an institution's risk management policies, approach to capital management, its capital resources and an analysis of its credit risk exposures

Wherever possible and relevant, the Board will ensure consistency between Pillar 3 disclosures, Pillar 1 reporting and Pillar 2 ICAAP content.

### 1.3 Purpose of Pillar 3

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Pillar 3 requires the external publication of exposures and associated risk weighted assets and the approach to calculating capital requirements for the following risk and exposure types:

- Credit risk
- Counterparty credit risk
- Credit valuation adjustment
- Market risk
- Operational risk
- Interest rate risk

These Pillar 3 disclosures only focus on those risk and exposure types relevant to CaML.

CaML includes both quantitative and qualitative disclosures to show the relevant information and describe its approach to capital management, its capital resources and an analysis of its credit risk exposures. The disclosures also include, where appropriate, comparative figures for the prior year and an analysis of the more significant movements to provide greater insight into its approach to risk management.

### 1.4 Non-material, proprietary or confidential information

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In accordance with CRD IV, the Board may omit one or more disclosures if the information provided is not regarded as material. The criterion for materiality used in these disclosures is that CaML will regard as material any information where omission or misstatement could change or influence the assessment or decision of a user relying on that information for the purpose of making economic decisions.

Furthermore, the Board may omit one or more disclosures if the information provided is regarded as proprietary or confidential. Information is regarded as proprietary if disclosing it publicly would undermine the competitive position of a company. It may include information on products or systems which, if shared with competitors, would render an institution's investment therein less valuable. In such circumstance, the Board will state in its disclosures the fact that specific items of information are not disclosed and the reason for non-disclosure. In addition it will publish more general information about the subject matter of the disclosure requirement except where this is classified as confidential.

CaML undertakes no obligation to revise or to update any forward looking or other statement contained within this report regardless of whether or not those statements are affected as a result of new information or future events.

### 1.5 Frequency and means of disclosure

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Disclosure will be made annually based on calendar year end and will be published in conjunction with the preparation of the Annual Report and Financial Statements. CaML will reassess the need to publish some or all of the disclosures more frequently than annually in light of any significant change to the relevant characteristics of its business including disclosure about capital resources and adequacy, and information about risk exposure and other items prone to rapid change.

This policy will be periodically reassessed and updated in light of market developments associated with Pillar 3.



Disclosures are published on The Bank of New York Mellon Corporation group website:

[BNY Mellon Investor Relations - Pillar 3](#)

## 1.6 Board approval

These disclosures were approved for publication by CaML's Board of Directors on 23 July 2018. The Board has verified that the disclosures are consistent with formal policies adopted regarding production and validation and are satisfied with the adequacy and effectiveness of the risk management arrangements.

## 1.7 Key 2017 and subsequent events

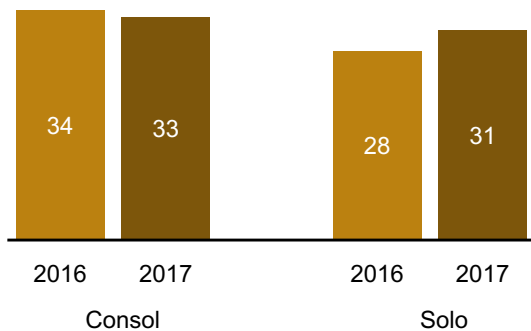
The Board of Directors periodically reviews the strategy of the Company and the associated products and services it provides to clients. This generally takes place during the first quarter of each year following the yearly refresh of the legal entity strategy.

In relation to the assessment and monitoring of economic, political and regulatory risks, the Company is continuing to evaluate the impact of the outcome of the recent referendum in relation to the UK's membership of the EU on business strategy and business risks in the short, medium and long term.

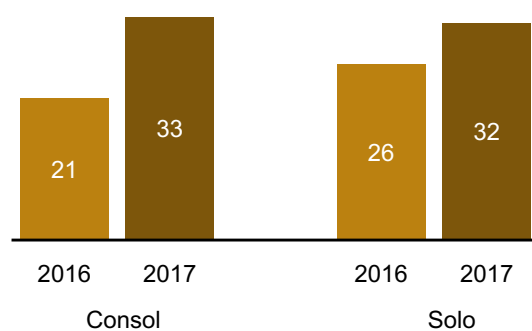
## 1.8 Key metrics

The following risk metrics reflect CaML's risk profile:

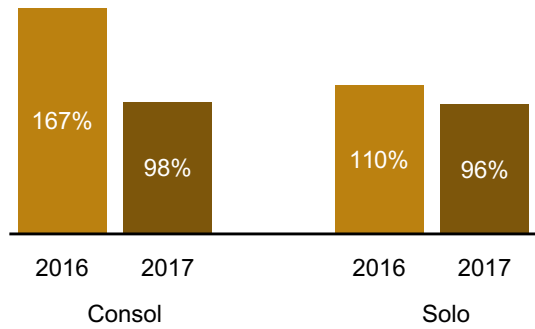
### ➤ Regulatory capital (£m)



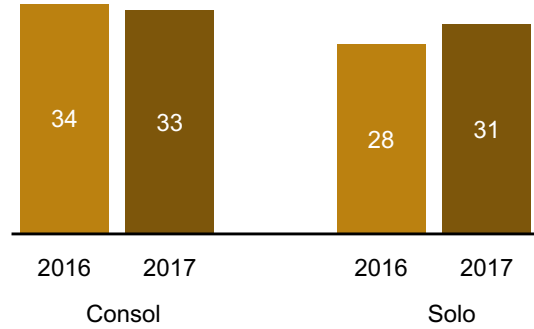
### ➤ Risk weighted assets (£m)



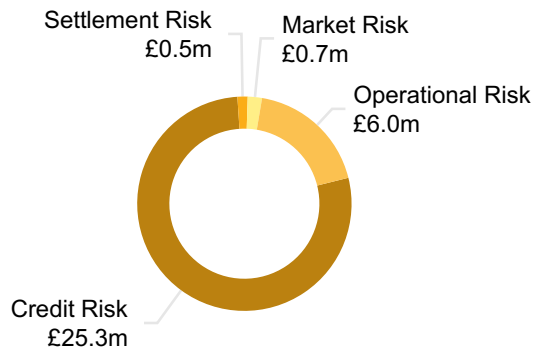
➤ **CET1 Ratio Trend (%)**



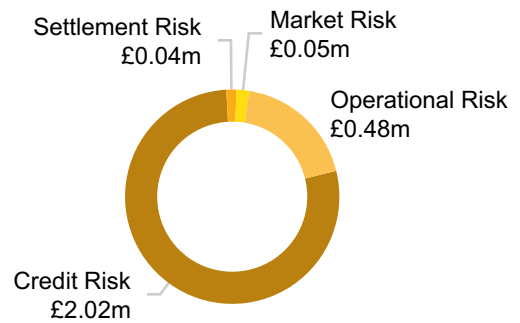
➤ **Total Capital (£m)**



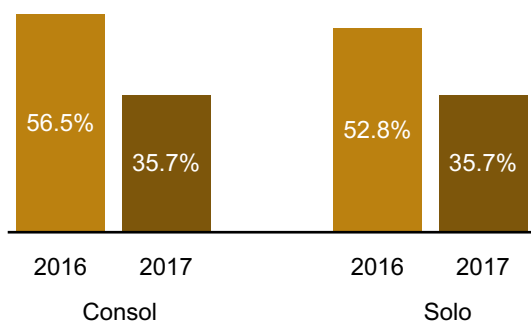
➤ **Risk Exposure Amount (£32m) 2017**



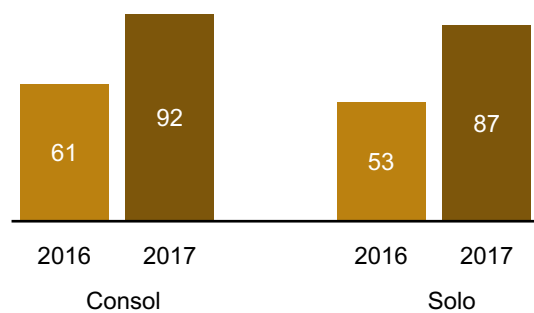
➤ **Capital Requirements (£2.6m) 2017**



➤ **Leverage ratio trend**



➤ **Leverage ratio exposure (£m)**





Own Funds	Consolidated		Solo	
	2017	2016	2017	2016
<b>Available capital (£m)<sup>1</sup></b>				
Common Equity Tier 1 (CET1) capital	33	34	31	28
Tier 1 capital	33	34	31	28
Total capital	33	34	31	28
<b>Risk-weighted assets (£m)<sup>2</sup></b>				
Total risk-weighted assets (RWA)	33	21	32	26
<b>Risk-based capital ratios as a percentage of RWA</b>				
CET1 ratio	98.4%	166.8%	95.8%	110.0%
Tier 1 ratio	98.4%	166.8%	95.8%	110.0%
Total capital ratio	98.4%	166.8%	95.8%	110.0%
<b>Additional CET1 buffers requirements as a percentage of RWA</b>				
Capital conservation buffer requirement	1.25%	0.6%	1.25%	0.6%
CET1 available to meet buffers after meeting the bank's minimum capital requirements, and, if applicable, TLAC requirements	93.4%	166.8%	95.8%	84.2%
<b>Basel III leverage ratio</b>				
Total Basel III leverage ratio exposure measure (£m)	92	61	87	53
Basel III leverage ratio	35.7%	56.5%	35.7%	52.8%

<sup>1</sup> 2017 capital as stated is after the inclusion of audited profits for the year.

<sup>2</sup> 2017 RWAs include the latest operational risk RWAs, updated in line with the audited results for the year.

Thus the common equity tier 1, total tier 1 and total capital ratios remain in excess of the minimum regulatory requirement of 4.5%, 6.0% and 8.0% respectively.

## 1.9 Company description

BNY Mellon Group (BNY Mellon) is a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment management and investment services in 35 countries and more than 100 markets. As at 31 December 2017, BNY Mellon had \$33.3 trillion in assets under custody and/or administration, and \$1.9 trillion in assets under management. BNY Mellon can act as a single point of contact for clients looking to create, trade, hold, manage, service, distribute or restructure investments. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation (NYSE: BK). Additional information is available on [www.bnymellon.com](http://www.bnymellon.com), follow us on Twitter [@BNYMellon](https://twitter.com/BNYMellon) or visit our newsroom at [www.bnymellon.com/newsroom](http://www.bnymellon.com/newsroom) for the latest company news.

CaML is a private limited company incorporated in the UK and is authorised and regulated by the Financial Conduct Authority (FCA). It is a wholly-owned subsidiary of BNY International Financing Corporation (BNYIFC), a holding company with investments in banking and non-banking entities. BNYIFC is a wholly-owned US-regulated subsidiary of The Bank of New York Mellon, the main banking entity of BNY Mellon.

In the UK, CaML operates as a broker-dealer operating under a 'restricted' Full Scope licence from the FCA (€730k Full Scope Firm). As part of this licence, CaML will not take positions (proprietary trading) or 'make markets', it primarily targets cross-selling opportunities within the BNY Mellon Group (primarily

customers of Asset Servicing, Alternative Investment Services and Corporate Trust division) and other third party clients.

➤ **Figure 1: CaML corporate structure at 31 December 2017**



### EMEA Operating Model (Three Bank Model)

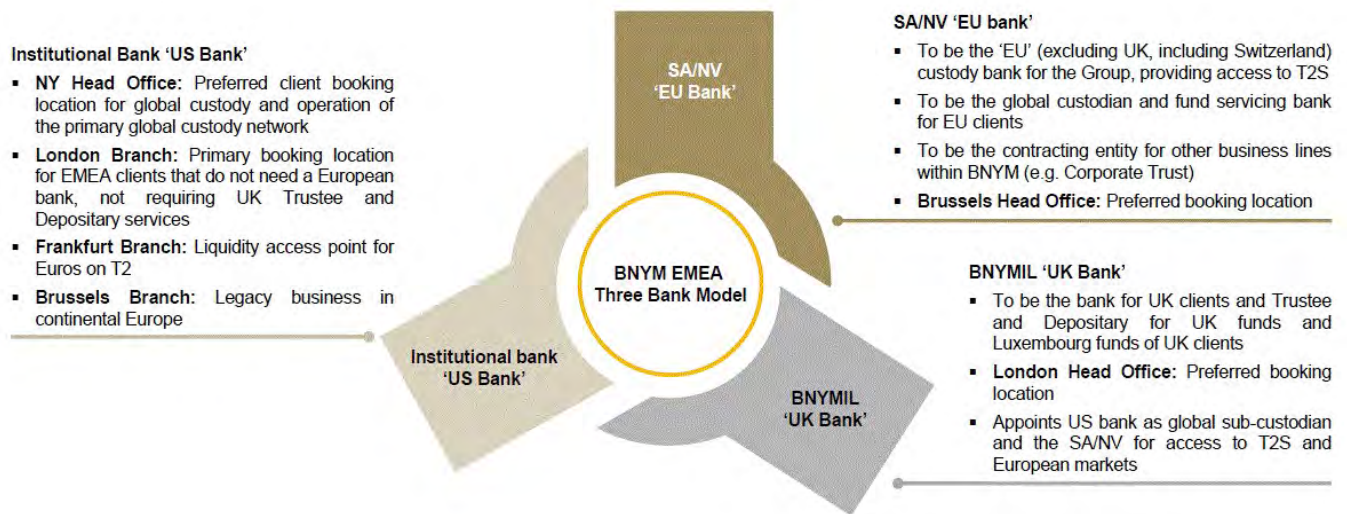
To create a more efficient operating model and respond to increasing demands from regulators in the US, UK and EMEA, the BNY Mellon EMEA Operating Model is proposed to be re-aligned around Three Banking Entities in EMEA. To facilitate the proposed model, a new global booking principle and a Dual Custody model will be implemented within BNY Mellon over the next few years. This rationalized, more efficient and simple structure will give CaML flexibility for growth by freeing up capital and allowing more room for new products and services, thereby allowing the Company to focus its business on UK clients.

The **rationales** behind the Three Bank Model initiative include:

- Reduction of complexity in Legal Entity structure as well as respective contractual framework
- Improvement of resolvability by removing duplication, potential conflicts and improving transparency on risks
- Viability of businesses with appropriate client base, operations / balance sheet size, capital and management
- Appropriate alignment to client needs whilst improving client experience through more efficient service delivery
- Deliver shareholders value through more efficient use of resources, liquidity and capital and improved client growth and retention

The **outcome** of the Three Bank Model is illustrated in figure 2 below:

**Figure 2: The Three Bank Model**



## 1.10 Core business lines

CaML is a U.K. based broker-dealer offering fixed income and equity trade execution for clients of BNY Mellon. CaML generates spreads and commissions on its trade execution of fixed income products, primarily on an agency and risk-less principal trading basis, and on U.K., U.S. and E.U. listed equities and exchange traded funds, primarily on an agency basis. CaML also is a broker dealer that generates spreads on principal trading, commission for agency trading and underwriting fees by participating as co-manager underwriter on debt offerings. CaML is not permitted to carry overnight positions (no inventory) and all principal and agency trades are executed in the course of fulfilling client orders. The entity is prudentially supervised by the UK Financial Conduct Authority ("FCA").

### 1.10.1 Fixed Income

CaML offers agency and principal trading brokerage services across fixed income securities, collaborating with BNYM LLC which holds an inventory of US Treasuries. CaML focusses on internal marketing and captures cross selling opportunities across the BNY Mellon franchise, expanding relationships and services, especially from the newly formed Markets division.

### 1.10.2 Equities

CaML is an active broker in equities/securities (both International and US) and Exchange Traded Funds (ETF). Whilst its equities offering is primarily agency based, the business also executes on a principal basis where required.

CaML's equities and fixed income desks also service external clients who wish to "outsource" or appoint a single broker for all their execution needs. If required, CaML can collaborate with other BNY Mellon Broker Dealers to offer a global service.

### **1.10.3 Underwriting**

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CaML acts as co-managing underwriter for selected new issuances of securities and may collaborate with BNYM LLC, which offers capital markets services, including acting as lead manager and distributor in the US. CaML attracts these deals through existing BNY Mellon client relationships particularly across the Markets business and Corporate Trust divisions.

## 2 Own funds

The following risk metrics present CaML's risk components as at 31 December 2017.

	Consolidated	Solo
<b>Total assets</b>	<b>£94m</b> 2016: £67m	<b>£90m</b> 2016: £65m
<b>Common Equity Tier 1 capital</b>	<b>£33m</b> 2016: £34m	<b>£31m</b> 2016: £28m
<b>Total own funds</b>	<b>£33m</b> 2016: £34m	<b>£31m</b> 2016: £28m
<b>Total Risk Weighted Assets</b>	<b>£33m</b> 2016: £21m	<b>£32m</b> 2016: £26m

Own funds comprise tier 1 and tier 2 capital less deductions. This section provides an overview of the regulatory balance sheet and composition of CaML's regulatory own funds. There are a number of differences between the balance sheet prepared in accordance with International Financial Reporting Standards (IFRS) and Pillar 3 disclosures published in accordance with prudential requirements.

CaML's regulatory capital is defined by CRD IV and includes:

- **Common equity tier 1 capital** which is the highest quality form of regulatory capital under Basel III comprising common shares issued and related share premium, retained earnings and other reserves excluding the cash flow hedging reserve, less specified regulatory adjustments

### ▶ Table 2: Regulatory adjustments

These tables show a reconciliation of CaML's balance sheets on a consolidated and solo basis prepared in accordance with UK Accounting Standards and applicable law (UK Generally Accepted Accounting Practice), including Financial Reporting Standard 101: Reduced Disclosure Framework (FRS 101) and the regulatory balance sheet prepared under prudential rules. The regulatory balance sheet forms the basis for the calculation of regulatory capital requirements.

CaML (Consolidated) 31 December 2017 (£m)	Consolidated balance sheet	Regulatory adjustments	Regulatory balance sheet
<b>Assets</b>			
Cash at bank and in hand	89.3	(0.1)	89.2
Trade debtors	0.5	0.3	0.8
Prepayments and accrued income	0.3	—	0.3

<b>CaML (Consolidated) 31 December 2017 (£m)</b>	<b>Consolidated balance sheet</b>	<b>Regulatory adjustments</b>	<b>Regulatory balance sheet</b>
Other intangible assets	—	—	—
Other assets	3.5	(0.2)	3.3
<b>Total assets</b>	<b>93.6</b>	<b>—</b>	<b>93.6</b>
<b>Liabilities</b>			
Taxation and social security	0.2	—	0.2
Accruals and deferred income	0.5	1.3	1.8
Amounts owed to group undertakings	53.4	1.9	55.3
Other liabilities	6.3	(3.0)	3.3
<b>Total liabilities</b>	<b>60.4</b>	<b>0.2</b>	<b>60.6</b>
<b>Shareholders' equity</b>			
Share capital	30.3	—	30.3
Profit or loss account	4.2	(4.2)	—
Profit (loss) for the period	(1.4)	1.4	—
Other reserves	0.2	2.5	2.7
<b>Capital and reserves</b>	<b>33.3</b>	<b>(0.3)</b>	<b>33.0</b>
<b>Total equity and liabilities</b>	<b>93.7</b>	<b>(0.1)</b>	<b>93.6</b>

<b>CaML (Solo) 31 December 2017 (£m)</b>	<b>Solo balance sheet</b>	<b>Regulatory adjustments</b>	<b>Regulatory balance sheet</b>
<b>Assets</b>			
Cash at bank and in hand	81.2	(0.1)	81.1
Trade debtors	0.9	(0.1)	0.8
Prepayments and accrued income	0.1	—	0.1
Investment in group undertakings	5.1	—	5.1
Other assets	2.7	0.1	2.8
<b>Total assets</b>	<b>90.0</b>	<b>(0.1)</b>	<b>89.9</b>
<b>Liabilities</b>			
Loan and bank overdrafts	53.4	(0.8)	52.6
Accruals and deferred income	0.5	0.9	1.4
Other liabilities	2.8	—	2.8
<b>Total liabilities</b>	<b>56.7</b>	<b>0.1</b>	<b>56.8</b>
<b>Shareholders' equity</b>			
Share capital	30.3	—	30.3
Profit or loss account	3.7	(3.7)	—
Profit (loss) for the period	(0.9)	0.9	—
Other reserves	0.2	2.6	2.8
<b>Capital and reserves</b>	<b>33.3</b>	<b>(0.2)</b>	<b>33.1</b>
<b>Total equity and liabilities</b>	<b>90.0</b>	<b>(0.1)</b>	<b>89.9</b>

**Regulatory adjustment:** Adjustments to the liabilities all relate to amounts owed to group undertakings which includes intercompany accruals in the Statutory Accounts. These are recorded under accruals in the regulatory return.

**Shareholders' equity:** The profit and loss adjustments include £1.1m in interest income and £1.1m in bonus accrual. Statutory Accounts also provide greater granularity on the types of reserves.



 **Table 3: Composition of regulatory capital**

This table shows the composition of regulatory capital including all regulatory adjustments at 31 December 2017.

Own Funds (£m)	CaML (Consolidated)		CaML (Solo)	
	2017	2016	2017	2016
<b>Common Equity Tier 1 (CET1)</b>				
Capital Instruments	30	30	30	30
Retained Earnings	3	4	3	4
Other comprehensive income	—	—	—	—
Reserves and others	—	—	—	—
CET1 Adjustments	—	—	(2)	(6)
<b>Total CET1</b>	<b>33</b>	<b>34</b>	<b>31</b>	<b>28</b>
<b>Additional Tier 1 Capital (AT1)</b>				
Capital Instruments	—	—	—	—
Others	—	—	—	—
AT1 Adjustments	—	—	—	—
<b>Total AT1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Total Tier 1</b>	<b>33</b>	<b>34</b>	<b>31</b>	<b>28</b>
<b>Tier 2 Capital (T2)</b>				
Capital Instruments and subordinated loans	—	—	—	—
Others	—	—	—	—
T2 Adjustments	—	—	—	—
<b>Total T2 Capital</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Total Own Funds</b>	<b>33</b>	<b>34</b>	<b>31</b>	<b>28</b>

 **Table 4: Transitional own funds**

The table below shows the transitional own funds disclosure at 31 December 2017. There are no items subject to pre-CRR treatment or prescribed residual amount of CRR.

CaML (Consolidated) (£m) Equity Instruments, Reserves and Regulatory Adjustments	Amount at disclosure date
<b>CET1 capital: Instruments and Reserves</b>	
Capital instruments and the related share premium accounts	30
of which: ordinary shares	30
Retained earnings	4
<b>CET1 capital before regulatory adjustments</b>	<b>34</b>
<b>CET1 capital: regulatory adjustments</b>	

<b>CaML (Consolidated) (£m) Equity Instruments, Reserves and Regulatory Adjustments</b>	<b>Amount at disclosure date</b>
Losses for the current financial year (negative amount)	(1)
<b>Total regulatory adjustments to CET1</b>	<b>(1)</b>
<b>CET1 capital</b>	<b>33</b>
<b>AT1 capital</b>	<b>—</b>
<b>Tier 1 capital</b>	<b>33</b>
<b>Tier 2 (T2) capital: Instruments and provisions</b>	
<b>Total regulatory adjustments to T2 capital</b>	<b>—</b>
<b>T2 capital</b>	<b>—</b>
<b>Total capital</b>	<b>33</b>
<b>Total risk weighted assets</b>	<b>33</b>
<b>Capital ratios and buffers</b>	
CET1 (as a percentage of risk exposure amount)	98.4%
T1 (as a percentage of risk exposure amount)	98.4%
Total capital (as a percentage of risk exposure amount)	98.4%
of which: capital conservation buffer requirement	1.25%
CET1 available to meet buffers (as a percentage of risk exposure amount)	98.4%
<b>Amounts below the thresholds for deduction (before risk weighting)</b>	
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	—

<b>CaML (Solo) (£m) Equity Instruments, Reserves and Regulatory Adjustments</b>	<b>Amount at disclosure date</b>
<b>CET1 capital: Instruments and Reserves</b>	
Capital instruments and the related share premium accounts	30
of which: ordinary shares	30
Retained earnings	4
<b>CET1 capital before regulatory adjustments</b>	<b>34</b>
<b>CET1 capital: regulatory adjustments</b>	
Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities	(2)
Losses for the current financial year	(1)
<b>Total regulatory adjustments to CET1</b>	<b>(3)</b>
<b>CET1 capital</b>	<b>31</b>
<b>AT1 capital</b>	<b>—</b>

CaML (Solo) (£m) Equity Instruments, Reserves and Regulatory Adjustments	Amount at disclosure date
<b>Tier 1 capital</b>	<b>31</b>
<b>Tier 2 (T2) capital: Instruments and provisions</b>	
<b>Total regulatory adjustments to T2 capital</b>	—
<b>T2 capital</b>	—
<b>Total capital</b>	<b>31</b>
<b>Total risk weighted assets</b>	<b>32</b>
<b>Capital ratios and buffers</b>	
CET1 (as a percentage of risk exposure amount)	95.8%
T1 (as a percentage of risk exposure amount)	95.8%
Total capital (as a percentage of risk exposure amount)	95.8%
of which: capital conservation buffer requirement	1.25%
CET1 available to meet buffers (as a percentage of risk exposure amount)	95.8%
<b>Amounts below the thresholds for deduction (before risk weighting)</b>	
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	3

 **Table 5: Common tier 1 and additional tier 1 instruments and tier 2 instruments**

This table provides a description of the main features of regulatory instruments issued and included as either tier 1 or tier 2 capital in Table 2 at 31 December 2017.

Capital instruments main features <sup>(1)</sup>	Ordinary Shares issue denominated in GBP	Ordinary Shares issue denominated in USD
Issuer	BNY Mellon Capital Markets EMEA Limited	BNY Mellon Capital Markets EMEA Limited
Governing law(s) of the instrument	Law of England and Wales	Law of England and Wales
<b>Regulatory treatment</b>		
Transitional CRR rules	Not applicable	Not applicable
Post-transitional CRR rules	Common Equity Tier 1	Common Equity Tier 1
Eligible at solo/(sub-)consolidated/solo & (sub-) consolidated	Solo	Solo
Instrument type	Ordinary Shares	Ordinary Shares
Amount recognised in regulatory capital	£20 million	£10 million
Nominal amount of instrument	£1	\$1
Issue price	£1	\$1
Redemption price	Not applicable	Not applicable

<b>Capital instruments main features <sup>(1)</sup></b>	<b>Ordinary Shares issue denominated in GBP</b>	<b>Ordinary Shares issue denominated in USD</b>
Accounting classification	Shareholders' equity	Shareholders' equity
Original date of issuance	7-May-1999	20-March-2000
Perpetual or dated	No maturity	No maturity
Issuer call subject to prior supervisory approval	No	No
<b>Coupons / dividends</b>		
Fixed or floating dividend/coupon	Not applicable	Not applicable
Coupon rate and any related index	Not applicable	Not applicable
Existence of a dividend stopper	No	No
Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary
Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary
Existence of step up or other incentive to redeem	No	No
Write-down features	No	No
Non-compliant transitioned features	No	No

Note <sup>(1)</sup>: this table is based on Annex II of ITS Regulation (EU) No. 1423/2013. Some 'not applicable' lines have been omitted.

### 3 Capital requirements

The following risk metrics present CaML's risk components as at 31 December 2017.

<b>Total risk exposure amount</b>	<b>£32m</b>
	2016: £26m
<b>Total capital requirement</b>	<b>£2.6m</b>
	2016: £2.0m

The following capital and risk tables present CaML's position on a solo basis. The consolidated capital requirement differs only in respect of the treatment of the subsidiary, QSR Ltd. The solo basis represents the higher of the two.

#### 3.1 Calculating capital requirements

CRD IV allows for different approaches to the calculation of capital requirements. CaML uses the standardised approach where risk weights are based on the exposure class to which the exposure is assigned and its credit quality. These risk weights used to assess requirements against credit exposures are consistent across the industry. The standardised approach is used for calculating the risk weights assigned to each risk component including credit risk, counterparty credit risk, market risk and operational risk.

##### Table 6: Capital requirements

This table shows the risk weighted assets for CaML (Solo) using the standardised approach and their respective capital requirements.

Type of risk (£000s)	Risk exposure amount		Capital requirements	
	31-Dec-17	31-Dec-16	31-Dec-17	31-Dec-16
Credit risk SA*	25,294	10,518	2,024	841
Counterparty credit risk SA*	—	—	—	—
Settlement risk	466	49	37	4
Market risk SA*	655	132	52	11
of which: Foreign exchange position risk	655	132	52	4
Operational risk	5,986	6,405	479	512
of which: standardised approach	5,986	6,405	479	512
Credit Valuation Adjustment - standardised method	—	—	—	—
<b>Total</b>	<b>32,401</b>	<b>25,597</b>	<b>2,592</b>	<b>2,048</b>
<b>Total capital</b>			<b>31,054</b>	<b>28,149</b>
Surplus capital			28,462	26,101

\* SA: standardised approach.

CaML's capital management strategy is to maintain appropriate capital commensurate with the risks and business strategy of the firm and to ensure capital is sufficient to meet the risk appetite requirements in relation to the regulatory expectations.

## 4 Risk management objectives and policies

BNY Mellon, a Global Systemically Important Financial Institution (G-SIFI) plays a critical role supporting clients, therefore the financial stability of all of its constituent legal entities, throughout market cycles and especially during periods of market turbulence, is recognised at the Corporation level as an imperative. Clients and market participants need to have confidence that the Corporation's many legal entities will remain strong and continue to deliver operational excellence and maintain an uninterrupted service. Therefore CaML and, BNY Mellon Corporation as a whole, is committed to maintaining a strong balance sheet and as a strategic position assumes less risk than many financial services companies.

Whilst BNY Mellon assumes less balance sheet risk than most financial services companies, it does assume a significant amount of Operational risk as a result of its business model. As a consequence, BNY Mellon has developed an enterprise risk management program that is designed to ensure that:

- Risk tolerances (limits) are in place to govern its risk-taking activities across all businesses and risk types
- Risk appetite principles are incorporated into its strategic decision making processes
- Monitoring and reporting of key risk metrics to senior management and the Board takes place
- There is a capital planning process which incorporates both economic capital modelling and a stress testing programme

The CaML Board of Directors has adopted a conservative risk appetite to maintain a strong capital position and balance sheet throughout all market cycles with strong liquidity, superior asset quality, ready access to external funding sources at competitive rates, and a robust capital structure whilst delivering operational excellence to meet stakeholders' expectations.

### 4.1 Risk governance

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BNY Mellon Corporation Risk Management is coordinated at a global, regional, legal entity and line of business levels. A formal governance hierarchy is in place to ensure effective escalation of issues through the regional and global structure.

The main governing body of CaML is its Board of Directors. The CaML Board meets on a quarterly basis, and receives reports from Risk Management and Compliance to evaluate the effectiveness of the existing control environment. Internal Audit reports are submitted to the CaML Operating Committee and escalated to Board of Directors where appropriate.

#### 4.1.1 Board of Directors

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The Board of Directors ("Board") has the powers to carry out all acts that are necessary to achieve the corporate purpose of CaML, as defined in the Articles of Association. The Board takes an active role in both management and oversight of its identified risks and the effectiveness of its internal controls. The Board and the business management are responsible and accountable for its risk management and risk mitigation.

While the Risk Appetite Statement and metrics are owned by the Board, responsibility for monitoring these vests with first and second lines of defence and the results are discussed and reviewed by the Operating Committee.

The principal responsibilities of the Board include but are not limited to the following;

- Monitoring the implementation of the general business strategy, objectives and values within CaML

- Approving CaML's risk tolerance level and regularly reviewing and approving the strategies and policies relating to the taking, management, follow-up and mitigation of risks
- Approving the capital adequacy position and ensuring any changes in the CaML strategy consider capital impacts
- Approving the recovery plan
- Approving the liquidity policy including the Contingency Funding Plan (CFP)
- Approving capital management policy
- Assessing regularly (at least once per year) the efficiency of the internal organisation and system of internal control of the Company and its compliance with applicable laws and regulations
- Ensuring that the Company's internal governance is appropriate to its business, size and organisation
- Reviewing CaML's processes for protecting the Company's assets and reputation
- Approving policies and procedures as may be required by law or otherwise appropriate
- Selecting and evaluating members of the Operating Committee and reviewing the process for the selection, evaluation, and development of other key managers
- Reviewing CaML's processes for compliance with applicable laws, regulations and the internal policies including the Code of Conduct

The CaML Board is comprised of the following members:

Name	Position	Nationality	Number of directorships held	Role
J Edwards*	Director	British	1 (internal)	Chief Executive Officer, CaML
R Savchuk	Director	Canadian	2 (internal)	Head of International Treasury
D Watkins	Director	British	1 (internal)	Head of Markets Group, EMEA
J Tisdall	Director	British	25 (internal)	UK Financial Controller

Note: RJ Gill resigned on 10 February 2017 and JM Johnston resigned on 31 March 2017. D Watkins and J Tisdall were appointed to the Board on 6 July 2017. No external placements are held by members of the Board.

\* J Edwards resigned as Chief Executive Officer on 23 May 2018.

All nominations to the Board are based on merit, director's qualifications, and in accordance with the needs of the Board at the time of the nomination with due regard to diversity and gender parity. In addition each appointment is made with a view on the nominee's skills and development requirements and with a line of sight to talent placements and succession planning for the broader organisation. This provides a route to both develop and mobilise key talent.

There is no specific policy on diversity of Board members however CaML is committed to providing equal employment opportunities to all employees and applicants by establishing employment practices, terms, conditions and privileges of employment regardless of race, disability, religion or belief or creed, colour, gender or sex, gender re-assignment, national origin, age, marriage or civil partnership, ancestry, citizenship, ethnic origin, sexual orientation, pregnancy or maternity or other factors prohibited by law. This policy approach has the full support and commitment of the Chief Executive Officer and CaML's Senior Management.



#### 4.1.2 Legal Entity Specific

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##### **CaML Operating Committee (OpCom)**

The CaML OpCom was proposed and approved by the Board in April 2011. The OpCom deals with project governance, risk, and the approval of new products. It meets on a monthly basis and is a key decision making committee. Membership comprises of business line management, Risk Management and business partners. The Committee reports into both CaML Board and the Markets EMEA Business Risk Committee.

The main duties and responsibilities of the OpCom primarily comprise (but are not limited to) the following:

- Ensuring that Risk and Compliance activities undertaken by CaML are executed in accordance with internal BNY Mellon policies and relevant regulations
- Day to day management of CaML (responsibility of the Chief Executive Officer) includes daily oversight and managing of the trading functions

In the context of capital management, OpCom performs the following responsibilities:

- Review and endorse the capital management policy of CaML for recommendation to the Board for approval
- Review and endorse the results of capital stress testing for recommendation to the Board for approval
- Review and endorse the annual capital forecast (as part of the ICAAP document) and all material capital actions for recommendation to the Board for approval
- Review and endorse the capital crisis continuum framework developed the purposes of CaML's recovery planning process
- Review and endorse the ICAAP for CaML and recommend to the Board for approval

CaML also escalates key operational, stress testing, capital and risk information to the Markets EMEA Business Committee (BRC) and the Board of Directors (BOD).

##### **CaML Capital Stress Testing Council (CSTC)**

The CaML CSTC is responsible for ensuring adequate governance and ownership for the processes and documentation pertaining to CaML's economic capital requirements, risk model methodologies and capital stress testing.

#### 4.1.3 Business Unit Risk Governance

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The business conducted through CAML is also subject to oversight by the following committees.

##### **Markets EMEA Business Risk Committee (BRC)**

The Markets EMEA BRC is the point of review and approval of all new or materially modified products and monthly risk issues. The BRC shall consider a variety of issues, including potential conflicts of interest, sensitive business practices, operational errors and service delivery failures, especially with impact to customers and/or to legal and regulatory obligation. The remit of the BRC does not cover the approval for CaML's stress testing or capital adequacy results. The capital stress test results are approved by the CSTC.

##### **Business Acceptance Committees (BAC)**

The BAC is responsible for documenting the discussion around the acceptance of non-standard businesses and clients for CaML as part of its minutes. The committee meets once a week and when necessary as part of an ad-hoc committee meeting.

The OpCom plays an important part in that all non-standard business must be discussed, reviewed and approved by the OpCom membership prior to these non-standard businesses and clients' documents being submitted to the BAC for approval.

#### 4.1.4 Regional Risk Governance

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A regional level risk governance structure is in place to oversee all business and legal entity risk. Oversight and escalation is provided through the following key committees:

##### **EMEA Senior Risk Management Committee (ESRMC)**

Exercises responsibility and provides independent oversight for policies, processes and controls relating to all aspects of risk for the EMEA region. This includes the following EMEA sub-committees:

- EMEA Anti-Money Laundering Oversight Committee
- EMEA Asset and Liability Committee
- EMEA Controls Council

The ESRMC responsibilities include, but are not limited to, the following:

- Monitor and assess the impact of significant current and emerging risks including those associated with strategic initiatives at an EMEA level. Consider the impact on the risk profile of the region and provide further direction if appropriate
- Act as a point of convergence for regional risk reporting (providing a consolidated Legal Entity and Line of Business view) and sharing of risks and issues across Investment Management & Investment Services
- Escalate material issues and recommendations through common membership of the Chairman's Forum to the BNYM Senior Risk Management Committee (SRMC) and/or relevant Legal Entities

The ESRMC derives its authority from the BNYM Senior Risk Management Committee, but subject to constraints of corporate policy, legislation and regulation as appropriate.

##### **EMEA Asset & Liability Committee (EMEA ALCO)**

EMEA ALCO focuses on the balance sheets in the region from an asset & liability management perspective and is responsible for the efficient and effective functioning of the Legal Entity Local / Country ALCO or Branch Management Committees pertaining to asset and liability management matters in its region. EMEA ALCO is responsible for ensuring that Company policy and guidance set through the Company ALCO is understood and executed locally. This includes strategy related to the investment portfolio, placements, Interest Rate Risk capital, and Liquidity Risk.

BNY Mellon has an ALCO structure, which is responsible for Liquidity, Capital and Interest Rate Risk management at the company level. In order to effectively manage the balance sheet and Liquidity Risk across all regions and legal entities, ALCO governance is structured as follows: BNY Mellon Corporate ALCO at the consolidated group level, regional ALCO at the regional level (e.g. EMEA ALCO), and legal entity ALCOs and other executive / operating / branch management committees at the legal entity level.

EMEA ALCO performs the following responsibilities with respect to capital management and planning:

- Approve the capital management policy for CaML ensuring compliance towards capital Risk Appetite statement, recovery triggers and regulatory requirements
- Oversee all capital management activities and approve all capital actions

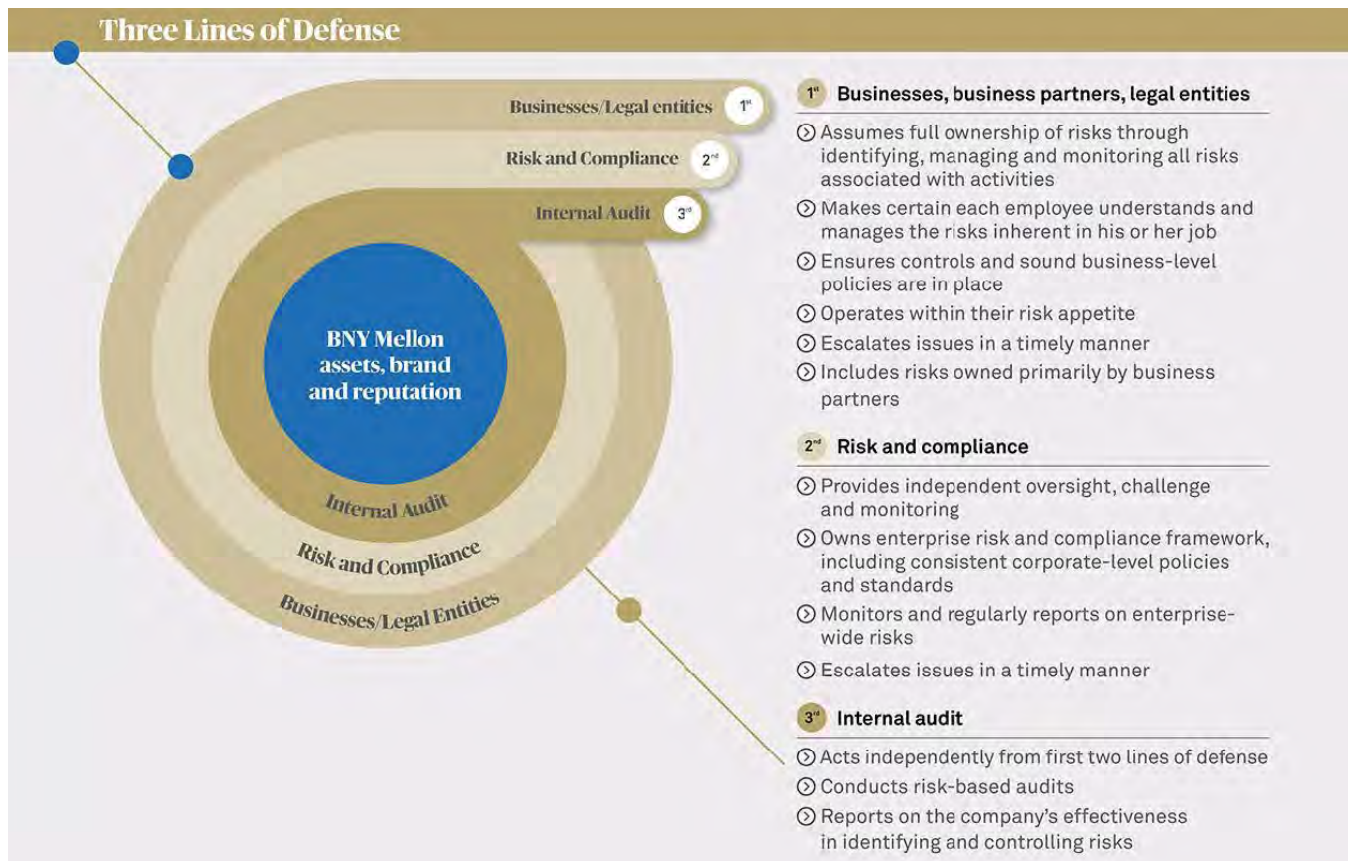
- Monitors the capital position versus the regulatory and internally assessed capital requirements
- Approve the capital plan for CaML

## 4.2 Risk management framework

In line with global policy, CaML has adopted the ‘Three Lines of Defence’ model in deploying its risk management framework (figure 3 below). The first line of defence (1LOD) is the business or, in some cases, business partner level. The business takes and owns the risk associated with activities, and it manages the risks and the related control processes and procedures on an operational basis. The risk management and compliance functions are the second line of defence (2LOD) and own the enterprise-wide risk management framework and provide independent oversight of the 1LOD, ensuring that policies are adhered to and challenged. This also includes Corporate Security, Business Continuity, Financial Management and Analysis within Finance. The third line of defence (3LOD) is Internal Audit, which independently provides the CaML Board and senior management with the assurance that the governance structures, risk management and internal controls in place are effective.

Risk Management develops, maintains and ensures compliance with specific regulations for Risk Management governance and oversight, risk culture, Risk Management function, Risk Management Framework (including Risk Appetite Statement, risk management policies, risk management procedures), Risk Management operating model (including Risk Registers and Management Information) and risk models oversight, in accordance with the BNY Mellon regional model and recognising best market practice to ensure CaML develops a well-controlled environment and an environment where risks are well understood and managed. This model encourages a proactive culture of managing risks across all Risk Management teams.

➤ **Figure 3: Managing Three Lines of Defence**



Business / Legal Entities as the First Line of Defence has the following responsibilities:

- Embraces personal responsibility for identifying, monitoring and managing risk;
- Identifies, mitigates and manages risks by considering business drivers and strategy, markets and the regulatory environment, and through the use of forecasting and stress testing;
- Understands and manages risks inherent in their function, including those associated with products and clients;
- In collaboration with the Second Line of Defence, creates relevant policies and procedures;
- Identifies and address known risks and emerging issues; and escalates as appropriate;
- Appropriately monitors systemically significant clients and products;
- Evaluates, assesses, and approves new business/products/processes in collaboration with the Second Line of Defence;
- Ensures a well-controlled environment that is proactively reassessed for appropriateness and completeness, and is updated or modified as necessary to reflect either change in the business or to address emerging risks; and
- With the exception of the Company Risk Appetite Statement which is the responsibility of the Chief Risk Officer, the First Line of Defence creates and maintains Risk Appetite Statements at the regional, country, legal entity or line of business level. Risk Appetite statements consider objectives and strategies, are forward looking, guide decision making, and are monitored through risk metrics

Risk and Compliance as the Second Line of Defence has the following responsibilities:

- Provides ongoing independent oversight and challenge of risk management by the First Line of Defence;
- Owns the risk framework including policies, processes, measures and limits;
- Identifies and anticipates known risks and emerging issues; and escalates as appropriate;
- Assists in developing processes and controls to manage risks;
- Monitors the adequacy and effectiveness of internal controls, accuracy and completeness of reports, compliance with laws and regulations, and timely remediation of deficiencies;
- Assists in forecasting and stress testing activities; and
- Ensures robust monitoring and challenge of business and legal entity activities

Through its on-going BAU processes, Risk Management is involved from the second line in the identification, measurement, management, monitoring and reporting of risks that could potentially result in CaML breaching its risk appetite.

Compliance ensures that CaML maintains appropriate processes to comply with all applicable laws, regulations, policies and ethics. Compliance is responsible for identifying new and updated regulatory requirements, developing and implementing applicable policies and procedures that CaML monitors as part of its overall risk management framework.

Internal Audit as the Third Line of Defence has the following responsibilities:

- Maintains independence from First and Second Lines of Defence;
- Conducts risk-based audits as per annual audit plan and continuous monitoring through the year;
- Identifies opportunities for improvement in the First and Second Lines of Defence. Reports on effectiveness in identifying and appropriately controlling risks; and
- Tracks and validates resolution of audit issues and escalates concerns as appropriate

### 4.3 Risk register

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The CaML Risk Register is a risk management tool used for the identification, assessment documentation and mitigation of the key risks associated with the legal entity.

Senior Risk Managers of each Line of Business (LOB RMs), Risk Management function heads (e.g. Credit Risk) and key representatives from the Lines of Business/Legal Entities contribute to the risk register. The Risk Register is reviewed by the OpCom, presented to the Board for approval and is a living document and is updated regularly, at least annually or upon significant change.

### 4.4 Risk appetite

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CaML's Risk Appetite Statement is owned and approved by the Board. It describes the level of risk that the Board is willing to accept in its strategy and business activities, given its business objectives and obligations. The statement is reviewed at least annually or when the Company's risk profile changes.

CaML uses a variety of metrics to measure and monitor its risk taking activities relative to its risk appetite. Articulating risk appetite through these metrics aids important decision-making by determining actions such as pursuing new products and enterprises, exiting businesses, and aligning resources to maximise potential gains given acceptable levels of risk. The metrics are actively monitored, managed and mitigated through the monthly OpCom.

### 4.5 High level assessment

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The High Level Assessment ("HLA") is a business level qualitative assessment performed at the Business/Business Partner Group level. It is a consolidated review that analyses the risk profile of the business, the quality of controls in place to mitigate risks and internal and external factors impacting the business.

The HLA is designed to ensure that Business/Business Partners and Risk Management identify, review and discuss the risks of the business including Material Operational Risks on a regular basis. It enables current and emerging risks to be identified, discussed, addressed and elevated as appropriate. Focussing on the Business Line, the HLA does not provide specific information on Legal Entities, however it is a useful source of information to enable the Legal Entity to form a view on the risks identified by the Business Lines operating within CaML.

### 4.6 Operational risk tools

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CaML uses the Operational Risk Management Framework to capture, analyse and monitor its Operational Risks. These activities are prescribed through the enterprise Operational Risk program, assessment systems and related processes, including but not limited to:

#### **Risk and Control Self-Assessment (RCSA)**

The RCSA is a tool used by the business to identify its risks associated with their key processes. Areas of concern within the RCSAs are escalated by the Line of Business (LOB) Risk Managers to the Risk Management Committee.

#### **Key Risk Indicators (KRIs)**

KRIs are used by Line of Business to evaluate the control effectiveness against the agreed thresholds. KRI reporting and monitoring is performed monthly by the LOB Risk Managers and key concerns are escalated to CaML's OpCom.

### **Operational Risk Events**

All Operational Risk losses and fortuitous gains exceeding USD 10k are captured within the Risk Management Platform (RMP), verified by the Line of Business Risk Manager, and reconciled to the General Ledger. Operational Risk event reporting forms part of the standard risk management report to the OpCom monthly.

### **Operational Risk Scenario Analysis**

Operational Risk Scenario Analysis is used by CaML to identify and assess plausible, high impact, low probability Operational Risk loss events using a combination of the Operational Risk data and expert management judgement. Scenario Analysis provides a broad perspective of risks faced globally based on the expertise of senior business and risk managers and supports an understanding of how significant operational losses could occur. Scenario Analysis also supports, directly or indirectly, the calculation of Operational Risk capital by using the output of scenario analysis (frequencies and severities) as an input for Pillar 2 Operational Risk capital modelling.

## **4.7 Credit risk**

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All counterparties (clients and banks) are assessed and allocated a borrower rating in accordance with BNY Mellon's rating system. Monitoring and control is conducted via daily reporting to ensure that approved exposure levels are not exceeded, or are pre-approved by a suitable credit officer in light of individual circumstances. Post-event monitoring is also conducted by the Credit Risk function.

## **4.8 Market risk**

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BNY Mellon undertakes Market Risk within the boundaries of its Risk Appetite as approved by the Board of Directors of The Bank of New York Mellon Corporation. The subsidiaries that issue Risk Appetite Statements approved by their boards must undertake Market Risk within the boundaries of those statements as well.

BNY Mellon manages Market Risk using a Three Lines of Defence approach (i.e. by each business unit, by Market Risk, and by Internal Audit).

Market Risk limits are set consistent with the CaML's Risk Appetite Statements and are jointly managed by the business units undertaking the risk and the Market Risk function (respectively, the First and Second Line of Defence).

Market Risk exposure is measured, monitored and analysed using both quantitative and qualitative methods by the Market Risk function.

BNY Mellon measures, monitors, and analyses Market Risk in a manner consistent with applicable law, regulations, and supervisory guidance.

The control framework elements addressing Market Risk limits include the following actions by the Market Risk Management function:

- Monitoring of utilisation of Market Risk limits on a daily basis
- Reporting of limit utilisation and limit breaches
- Periodic limit reviews

- Coordinating with business data providers to ensure the completeness and accuracy of data that is the basis for Market Risk data

The current Market Risk mandate and limit schedule within this framework for CaML is simple and sets straightforward controls on the level of market Risk exposure permitted in CaML's treasury activities.

Market Risk independently monitors exposures against limits daily; any breaches, depending on the level and type of limit that is breached, are escalated and notified to the ALCO, or to Senior Risk Management and Business Management.

## 4.9 Capital stress testing

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Capital stress testing is undertaken at CaML to monitor and quantify risk and capital and ascertain that sufficient capital resources are held against risks on a forward-looking basis. The process reflects stressed scenarios that identify an appropriate range of adverse circumstances of varying nature, severity and duration relevant to CaML's risk profile. The stress testing process conclusion is a statement of the future risk(s) that the business faces, control improvements to mitigate the impact should the risk arise and where appropriate, a recommendation for capital to be held against each risk type.

Capital stress testing is undertaken to quantify capital requirements and ensure that sufficient capital resources are held against severe yet plausible events on a forward-looking basis. The capital stress scenarios identified include an appropriate range of adverse circumstances of varying nature, severity and duration relevant to CaML's risk profile and business model.

The capital stress scenarios are derived from current, emerging, and plausible future risks and strategy, and reviewed, discussed and agreed by CaML's CSTC.

The output of CaML's capital stress testing, including a statement of the future risk(s) that the business faces, control improvements to mitigate the impact should the risk arise and where appropriate, a recommendation for capital to be held against each risk type, is presented to the Board for approval.

## 4.10 Escalation of risks and issues

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A robust framework exists for monitoring and escalation of issues and risks. If a material risk issue occurs, the EMEA Governance Guide for reporting and escalation of material issues and risks is followed. Business management is required to notify senior management, which includes CaML Board members, soon after determination. Risk management is responsible for supporting the business lines in achieving the following:

- Identifying and documenting all material risks, assessing the effectiveness of control design, and ensuring that control gaps are closed
- Developing and implementing standards and policies appropriate for the business that conform to the principles and guidelines established by Risk
- Elevating, reporting and investigating operating errors, losses and near misses, identifying root causes and implementing corrective actions
- Reviewing key indicators for coverage and effectiveness, identifying root causes for red and amber conditions and ensuring implementation of corrective actions
- Approving the process to accept new business, including 'Request for Proposal' preparation, contract acceptance and compliance, and challenging whether CaML is being compensated appropriately for the assumption of risk
- Reviewing the impact of changes in business processes on inherent risks and controls such as reorganisations, new products or processes, system conversions and acquisitions, etc.

- Ensuring that processes, risks and controls are continually reassessed for appropriateness and completeness

Management information is used to monitor the performance of the transaction processing and support services including specific risk exposures (e.g. cash and securities reconciliation breaks) and red/amber/green ratings in respect of the health of the operational functions.

#### **4.11 Internal Capital Adequacy Assessment Process (ICAAP)**

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An ICAAP document is produced at least annually for CaML on a consolidated basis. The process and document is owned by the CaML Board and supported by the ICAAP and Stress Testing team. The purpose of the ICAAP is to:

- Ensure the ongoing assessment and monitoring of the Firm's risks and the approaches used to mitigate those risks, such that they remain within the Risk Appetite established by the Board
- Determine the capital requirement for the Residual Risk exposure at the point when the assessment is made and also over the Firm's three-year planning horizon, both under baseline and stressed conditions
- Document the capital adequacy assessment process both for internal stakeholders and for prudential supervisors
- Provide the necessary information so that senior management, including the Board, can make decisions about the amount of capital that is required and what approach to risk management should be adopted by CaML

#### **4.12 Recovery and Resolution Planning (RRP)**

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CaML updates its recovery plan annually, in accordance with regulatory guidance. The recovery plan is designed to ensure that the CaML group has credible and executable options to meet the challenges that may arise from potential future financial and/or operational crises. CaML also submits its resolution information to the regulator every two years, as prescribed by supervisory policy



## 5 Credit risk

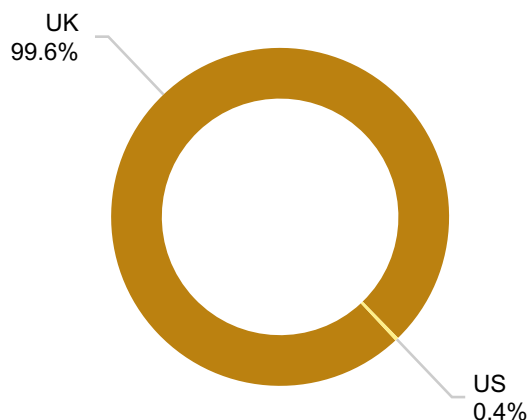
The following risk metrics present CaML's risk components as at 31 December 2017.

**Total net credit exposure amount** **£85m**  
2016: £53m

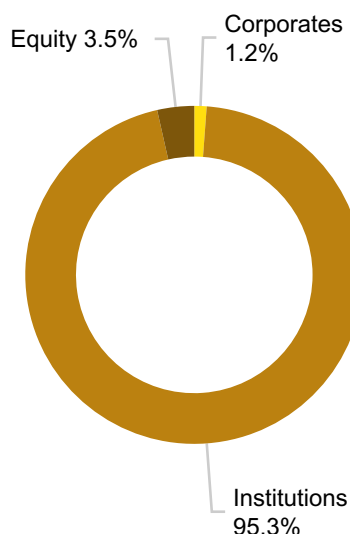
**Total on and off-balance sheet exposures** **£85m**  
2016: £53m

Credit risk exposure increased to £85m in 2017 (2016: £53m) driven by incremental term funding being secured and placed with a UK bank.

### Standardised credit exposure by country



### Standardised credit exposure by class



### 5.1 Definition and identification

Credit Risk is the risk that an obligor/issuer is unable or unwilling to satisfy an obligation when it falls due. Credit Risk can originate from on-balance sheet obligations such as deposits, loans, commitments, securities and other assets by failing to make the required repayments.

On-balance sheet credit risk for CaML covers default risk for placements and other assets where the realisation of the value of the asset is dependent on the counterparty's ability and willingness to perform its contractual obligations. Off-balance sheet credit risk includes counterparty credit risk, which represents unfunded commitments.

Credit risk for CaML is primarily generated on its bank placements/cash deposits; it does not undertake any client/third-party lending or offer credit facilities. Credit risk management of banks and corporates is undertaken by the BNY Mellon Group Credit Risk team and a Credit Risk Manager supports CaML.

CaML's Counterparty Credit Risk comprises Pre-Settlement Risk and Settlement Risk.

#### Pre-Settlement Risk

The risk that the counterparty on one side of a riskless principal transaction defaults before settlement and leaves CaML obligated to complete the trade with an open market security purchase or sale. This trade replacement could cause CaML to incur a loss on this sale or purchase, depending on the underlying market price movements since the original trade execution date, as well as incurring associated replacement costs or fees.

CaML's Pre-Settlement Risk arises over its typical settlement time horizon of 2-3 days. A daily model is used to determine how much Pre-Settlement Risk exposure CaML has to each client and counterparty and is reported against Pre-Settlement Risk limits.

The CaML risk metric used to monitor Pre-Settlement Risk exposure is called Cross Product Potential Risk (CPPR), also referred to more widely in the industry as Potential Future Exposure.

CPPR limits enable the business to measure and monitor the exposure it creates whilst remaining within the overall risk appetite of CaML. The CaML Credit Risk Officer proposes these limits which are then reviewed by the CaML operating committee in line with CaML credit policy. These limits are reviewed daily by the CaML Credit Risk Officer and by the CaML Operating Committee retrospectively every month.

### **Settlement Risk**

Settlement Risk associated with a securities transaction is the risk of a failed payment or security delivery by a counterparty to whom CaML has already performed its obligation under the transaction.

## **5.2 Credit risk management framework**

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CaML has an embedded Credit Risk framework, consistent with the BNYM Group framework and uses a continuous risk management process to support its implementation. The framework defines roles and responsibilities using the three lines of defence model as its foundation.

- The first line - principally the business is responsible for complying with the credit policy and for effectively managing all pre-settlement and other Credit Risks arising in the context of their business
- The second line Financial Markets Credit Risk (FMCR) function in London operates independently of CaML's business and operations and is responsible for ensuring implementation of the credit policy in the management of Settlement and Pre-Settlement Risks in CaML
- The third line - Internal Audit conducts risk-based audits, and reports on the company's effectiveness in identifying and managing risk

At the outset of a new trading counterpart, a review is undertaken by the business in partnership with Credit Risk to determine the client's suitability for the products offered and CaML's Risk Appetite for the name. Once it is agreed that the relationship can be entered into and suitable limits made available to accommodate the activity, the client can be mandated and moved through the Business Acceptance Committee process for formal approval by all relevant parties.

### **Pre-Settlement Risk Limit**

All new CaML clients and counterparties need to be assigned a Borrower Risk Rating (BRR) by the relevant BNYM Credit Risk group, using the BNYM CRIS system, before they can be allowed to trade. The BRR of clients and counterparties are reviewed at least annually.

Following this rating, the CaML Credit Risk Officer will select suitable CPPR guidance limits to be proposed per client. The CaML risk rating and limit assignment process is undertaken by BNYM Credit Risk under the Service Level Agreement.

Limits and borrower risk ratings are reviewed at least annually or more often if determined necessary by the CaML credit officer or BNYM Credit Risk Management.

## Pre-settlement Limit Approval Authorities

All initial CPPR guidance limits are subject to adjustment based on the client's Borrower Risk Rating (BRR).

### 5.3 Monitoring and reporting

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The EMEA Financial Markets Credit Risk 'FMCR' officer in London is responsible for monitoring pre-settlement exposures vs guidance limits.

- CaML's CPPR exposures are computed daily and are provided to the appropriate CaML operations and business areas to support monitoring processes in accordance with this policy
- A daily report of exposures is generated by the EMEA FMCR Officer for monitoring and escalation to CaML senior management where necessary
- These daily reports will be stored by FMCR for a period as defined in BNYM Global Record Retention Schedule
- On a quarterly and year-end basis client's and counterparty's CPPR limits based on their highest exposure a prior 2 year period or the default limit amount, whichever is the higher, will be used to calculate CaML's Settlement Risk Pillar II requirement

### 5.4 Governance

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Governance of credit risk oversight as a second line of defence function is described and controlled through CaML's Credit Risk Policy and day-to-day procedures as follows:

- Credit Risk Policy for CaML describes the credit risk tasks, defines roles and responsibilities and requires reporting to be carried out. Any deviation from approved policy requires either senior business or senior legal entity approval depending on the type of event

### 5.5 Analysis of credit risk

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Credit risk exposure is computed under the standardised approach which uses external credit assessment institutional ratings and supervisory risk weights supplied by external credit assessment agencies. The following credit risk exposure tables summarise the credit exposure for CaML in accordance with the CRD IV requirements.

The definitions below are used in the following tables:

- **Exposure at Default (EAD)** is defined as the amount expected to be outstanding, after any credit risk mitigation, if and when a counterparty defaults. Exposure reflects drawn balances as well as allowance for undrawn amounts of commitments and contingent exposures over a one-year time horizon. As such, exposure in this context may differ from statutory IFRS accounting balance sheet carrying values
- **Exposures in Default (past due)** - CaML has a low level of exposures in default which are defined as accounts receivable balances in excess of agreed limits for more than 90 days. This definition only applies to regulatory computations and is disclosed under exposure class, exposures in default. In the case of CaML this carries no impairment
- **Credit Conversion Factor (CCF)** converts the amount of a free credit line and other off-balance-sheet transactions (with the exception of derivatives) to an EAD amount. This function is used to calculate the exposure at default

- **Credit Risk Mitigation (CRM)** is a technique to reduce the credit risk associated with an exposure by application of credit risk mitigants such as collateral, guarantees and credit protection
- **Geographic area** is based on the country location for the counterparty
- **Residual maturity** is defined as the period outstanding from the reporting date to the maturity or end date of an exposure

➤ **Table 7: Standardised credit exposure by exposure class**

The following tables show the credit risk for CaML (Solo) post CRM techniques using the standardised approach by exposure class at 31 December 2017.

Exposure class (£m)	Net value at the end of the period	Average net value over the period
Central governments or central banks	—	—
Corporates	1	1
Institutions	81	66
Other items	—	—
Equity	3	3
<b>Total</b>	<b>85</b>	<b>70</b>

➤ **Table 8: Standardised credit exposure by country**

This table shows the post CRM exposure by class and by geographic area of the counterparty for CaML (Solo).

31 December 2017 (£m)	UK	Other	Total
Central governments or central banks	—	—	—
Corporates	1	—	1
Institutions	81	—	81
Other items	—	—	—
Equity	3	—	3
<b>Total</b>	<b>85</b>	<b>—</b>	<b>85</b>

31 December 2016 (£m)	UK	US	Other	Total
Central governments or central banks	—	—	—	—
Corporates	1	—	—	1
Institutions	47	2	—	49
Other items	—	—	—	—
Equity	3	—	—	3
<b>Total</b>	<b>51</b>	<b>2</b>	<b>—</b>	<b>53</b>

➤ **Table 9: Standardised post mitigated credit exposures by counterparty type**

This table shows the credit exposure for CaML (Solo) post CRM classified by class and by counterparty type.

31 December 2017 (£m)	General governments	Credit institutions	Other financial corporations	Various balance sheet items	Total
Central governments or central banks	—	—	—	—	—
Corporates	—	—	1	—	1
Institutions	—	81	—	—	81
Other items	—	—	—	—	—
Equity	—	—	—	3	3
<b>Total</b>	<b>—</b>	<b>81</b>	<b>1</b>	<b>3</b>	<b>85</b>

➤ **Table 10: Standardised credit exposure by residual maturity**

This table shows the exposure post credit risk mitigation for CaML (Solo), classified by credit exposure class and residual maturity.

31 December 2017 (£m)	On demand	Less than 1 year	Less than 5 years	No stated maturity	Total
Central governments or central banks	—	—	—	—	—
Corporates	—	—	—	1	1
Institutions	81	—	—	—	81
Other items	—	—	—	—	—
Equity	—	—	—	3	3
<b>Total</b>	<b>81</b>	<b>—</b>	<b>—</b>	<b>4</b>	<b>85</b>

## 5.6 Analysis of past due and impaired exposures

An aspect of credit risk management relates to problem debt management, which entails early problem identification through to litigation and recovery of cash where there is no realistic potential for rehabilitation.

The following tables provide an analysis of past due and impaired exposures using the following definitions:

- **Past due** exposure is when a counterparty has failed to make a payment when contractually due
- **Impaired exposure** is when the entity does not expect to collect all the contractual cash flows when they are due

As at 31 December 2017, CaML had no material impaired assets for which a specific or general provision was required. There were no material assets past due greater than 90 days. CaML did not incur any material write-offs of bad debts or make any recovery of amounts previously written off during the year. It should also be noted that the Company transitioned to International Financial Reporting Standards 9 (IFRS 9) at 31 December 2017 with no material impact in relation to Expected Credit Losses (ECL).

➤ **Table 11: Credit quality of exposures by counterparty type**

This table provides a comprehensive picture of the credit quality of on- and off-balance sheet exposures pre credit risk mitigation for CaML (Solo).

Counterparty type 31 December 2017 (£m)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
General governments	—	—	—	—	—	—	—
Credit institutions	—	81	—	—	—	—	81
Other financial corporations	—	1	—	—	—	—	1
Various balance sheet items	—	3	—	—	—	—	3
<b>Total</b>	<b>—</b>	<b>85</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>85</b>

Counterparty type 31 December 2016 (£m)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
General governments	—	—	—	—	—	—	—
Credit institutions	—	52	—	—	—	—	52
Other financial corporations	—	1	—	—	—	—	1
Various balance sheet items	—	—	—	—	—	—	—
<b>Total</b>	<b>—</b>	<b>53</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>53</b>

➤ **Table 12: Credit quality of exposures by industry**

This table provides a comprehensive picture of the credit quality of on- and off-balance sheet exposures by industry type for CaML (Solo).

Industry type 31 December 2017 (£m)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
Other services	—	85	—	—	—	—	85
<b>Total</b>	<b>—</b>	<b>85</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>85</b>
Of which: Loans	—	—	—	—	—	—	—

Industry type 31 December 2016 (£m)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
Other services	—	53	—	—	—	—	53

Industry type 31 December 2016 (£m)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
<b>Total</b>	—	<b>53</b>	—	—	—	—	<b>53</b>
Of which: Loans	—	—	—	—	—	—	—

 **Table 13: Credit quality of exposures by geographical breakdown**

This table provides a comprehensive picture of the credit quality of on- and off-balance sheet exposures by country using the IFRS methodology for CaML (Solo).

Counterparty type 31 December 2017 (£m)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
UK	—	85	—	—	—	—	85
US	—	—	—	—	—	—	—
Other	—	—	—	—	—	—	—
<b>Total</b>	—	<b>85</b>	—	—	—	—	<b>85</b>

CaML (Solo) Counterparty type 31 December 2016 (£m)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
UK	—	51	—	—	—	—	51
US	—	2	—	—	—	—	2
Other	—	—	—	—	—	—	—
<b>Total</b>	—	<b>53</b>	—	—	—	—	<b>53</b>

## 6 Credit risk mitigation

The following risk metrics present CaML's risk components as at 31 December 2017.

**Total gross credit risk exposures  
(includes on- and off-balance sheet amounts)**

**£85m**

2016: £53m

Currently CaML does not undertake any Credit Risk Mitigation techniques.

### 6.1 Netting

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CaML did not have any derivative positions as at 31 December 2017 and so does not currently make use of ISDA master netting agreements.

### 6.2 Collateral valuation and management

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CaML does not currently engage in collateral agreements due to its low risk DVP-RVP settlement business model.

### 6.3 Wrong-way risk

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CaML does not hold collateral so is not exposed to wrong-way risk.

### 6.4 Credit concentration risk

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Credit concentration risk is the risk of loss resulting from risk concentrations as a result of insufficient diversification (including single name, industry and country concentration risk).

Credit concentration risk within CaML originates mostly through CaML's banking activities. CaML has an appetite to place funds only with UK institutions having an internal rating of 6 or better (equivalent to S&P/Fitch external rating of A/A respectively). Whilst this approach undoubtedly constrains the number of eligible placement counterparties as well as the deposit spread, it also ensures that exposures are well controlled and less likely to default.

The Risk Appetite Statement of CaML states that exposures with individual banks must be no-more than 100% of CET1 capital.



 **Table 14: Credit risk mitigation techniques - overview**

This table shows the extent of credit risk mitigation techniques utilised.

<b>31 December 2017 (£m)</b>	<b>Exposures unsecured: carrying amount</b>	<b>Total exposures secured</b>	<b>Exposures secured by collateral</b>	<b>Exposures secured by financial guarantees</b>	<b>Exposures secured by credit derivatives</b>
Total loans	85	—	—	—	—
Total debt securities	—	—	—	—	—
<b>Total exposures</b>	<b>85</b>	—	—	—	—
Of which defaulted	—	—	—	—	—

Financial and other eligible collateral can include cash, debt securities or equities, and their values are taken into account for the purposes of calculating the risk weighted exposure amount of the underlying exposure.

There are no exposures covered by guarantees at 31 December 2017.

## 7 External Credit Rating Assessment Institutions (ECAIs)

The following risk metrics present CaML's risk components as at 31 December 2017.

**Risk Weighted Asset Density** **30%**

2016: 36%

**Total credit risk exposure post CCF and CRM** **£85m**

2016: £85m

The standardised approach requires CaML to use risk assessments prepared by External Credit Assessment Institutions (ECAIs) to determine the risk weightings applied to rated counterparties. CaML uses S&P Global Ratings, Moody's and Fitch Ratings as its chosen ECAIs. There has been no change to these ECAIs during the year.

### ➤ Table 15: Mapping of ECAIs credit assessments to credit quality steps

CaML uses Credit Quality Steps (CQS) to calculate the RWAs associated with credit risk exposures. Each CQS maps to the ECAIs' credit assessments.

This table shows the mapping of CaML's nominated ECAIs' credit assessments to the credit quality steps.

Credit quality steps	S&P Global Ratings	Moody's	Fitch Ratings
1	AAA to AA-	Aaa to Aa3	AAA to AA-
2	A+ to A-	A1 to A3	A+ to A-
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-
5	B+ to B-	B1 to B3	B+ to B-
6	CCC+ and below	Caa1 and below	CCC+ and below

### ➤ Table 16: Credit quality steps and risk weights

ECAI risk assessments are used for each exposure class except eligible retail exposures which are assigned a risk weight of 75%. In accordance with the regulations, institutions with a residual maturity of three months or less denominated and funded in the national currency of the borrower shall be assigned a risk weight different to institutions with a risk weight of more than three months. This distinction is shown in the table below.

This table shows the prescribed risk weights associated with the credit quality steps by exposure class.

Credit quality steps and risk weights	CQS 1	CQS 2	CQS 3	CQS 4	CQS 5	CQS 6
Exposure class	1	2	3	4	5	6

Credit quality steps and risk weights	CQS 1	CQS 2	CQS 3	CQS 4	CQS 5	CQS 6
Central governments and central banks	0%	20%	50%	100%	100%	150%
Institutions maturity <= 3 months	20%	20%	20%	50%	50%	150%
Institutions maturity > 3 months	20%	50%	50%	100%	100%	150%
Corporates	20%	50%	100%	100%	150%	150%
Collective investment undertakings	20%	50%	100%	100%	150%	150%
Unrated institutions	20%	50%	100%	100%	100%	150%

The risk systems maintain the credit quality step mappings to customers in their database. When calculating the risk weighted value of an exposure using the ECAI risk assessments, the system will identify the customer, the maturity of the transaction and the relevant credit quality step to determine the risk weight percentage.

➤ **Table 17: Credit risk exposure and Credit Risk Mitigation (CRM) effects**

This table shows the effect of the standardised approach on the calculation of capital requirements for CaML. Risk weighted exposure amount (RWA) density provides a synthetic metric on the riskiness of each portfolio.

Exposure class 31 December 2017 (£m)	Exposures before CCF and CRM		Exposures post CCF and CRM		RWA	RWA density
	balance sheet amount		balance sheet amount			
	On-	Off-	On-	Off-		
Central governments and central banks	—	—	—	—	—	—%
Corporates	1	—	1	—	1	100%
Institutions	81	—	81	—	16	20%
Other items	—	—	—	—	—	100%
Public sector entities	—	—	—	—	—	—%
Equity	3	—	3	—	8	250%
<b>Total</b>	<b>85</b>	<b>—</b>	<b>85</b>	<b>—</b>	<b>25</b>	<b>30%</b>

➤ **Table 18: Credit risk exposure by asset class and risk weight post CCF and CRM**

This table shows the breakdown of exposures for CaML after the application of both conversion factors and risk mitigation techniques.

Exposure class 31 December 2017 (£m)	—%	20%	100%	150%	250%	Other	Total
Central governments or central banks	—	—	—	—	—	—	—
Corporates	—	—	1	—	—	—	1
Covered bonds	—	—	—	—	—	—	—
Institutions	—	81	—	—	—	—	81
Multilateral Development Banks	—	—	—	—	—	—	—
Other items	—	—	—	—	—	—	—

<b>Exposure class 31 December 2017 (£m)</b>	<b>—%</b>	<b>20%</b>	<b>100%</b>	<b>150%</b>	<b>250%</b>	<b>Other</b>	<b>Total</b>
Public sector entities	—	—	—	—	—	—	—
Equity	—	—	—	—	3	—	3
<b>Total</b>	<b>—</b>	<b>81</b>	<b>1</b>	<b>—</b>	<b>3</b>	<b>—</b>	<b>85</b>

<b>Exposure class 31 December 2016 (£m)</b>	<b>—%</b>	<b>20%</b>	<b>100%</b>	<b>150%</b>	<b>250%</b>	<b>Other</b>	<b>Total</b>
Central governments or central banks	—	—	—	—	—	—	—
Corporates	—	—	1	—	—	—	1
Covered bonds	—	—	—	—	—	—	—
Institutions	—	49	—	—	—	—	49
Multilateral Development Banks	—	—	—	—	—	—	—
Other items	—	—	—	—	—	—	—
Public sector entities	—	—	—	—	—	—	—
Equity	—	—	—	—	3	—	3
<b>Total</b>	<b>—</b>	<b>49</b>	<b>1</b>	<b>—</b>	<b>3</b>	<b>—</b>	<b>53</b>

## 8 Counterparty credit risk

Counterparty credit risk is the risk of a counterparty to a contract defaulting before fulfillment of cash-flow obligations.

The main source of counterparty credit risk for CaML arises from its business trading fixed income and equities on behalf of clients on a principal trading and agency basis. Risk arises to CaML upon a client default, or a lack of client performance under contract creating counterparty credit risk. This is known as pre-settlement risk and is the potential mark-to-market variation in the stock price that would need to be resold or repurchased elsewhere in the market. CaML transacts all business on a DVP (Delivery vs Payment) basis and, on this basis, settlement risk is reduced and limited to special circumstances where approval is granted for 'free delivery' of stock or cash and only occurs in the rare occasion that settlement activity is not DVP.

As at 31 December 2017 CaML had no derivative positions, and hence no counterparty credit risk arising from trading book positions.

### 8.1 Credit valuation adjustment

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The credit valuation adjustment is the capital charge for potential mark-to-market losses resulting from the deterioration of counterparty's credit quality. The standardised approach uses the external credit rating of each counterparty and includes the effective maturity and exposure at default.

#### 8.1.1 Credit valuation adjustment capital charge

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As at 31 December 2017 CaML did not have any trading book positions, or counterparty credit risk originating from banking book derivative positions, hence it is not necessary to disclose table EU CCR2 on credit valuation adjustments.

#### 8.1.2 Impact of netting and collateral held on exposure values

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As at 31 December 2017 CaML did not have any trading book positions, or counterparty credit risk originating from banking book derivative positions, hence it is not necessary to disclose table EU CCR5 on the impact of netting and collateral held on exposures for CaML.

## 9 Asset encumbrance

The following risk metrics present CaML's risk components as at 31 December 2017.

**Carrying amount - encumbered assets** **£0.25m**

2016: £0.25m

**Carrying amount - unencumbered assets** **£90m**

2016: £95m

➤ **Table 19: Encumbered assets**

CaML (Solo) 31 December 2017 (£000s)	Encumbered assets				Unencumbered assets			
	Carrying amount	of which issued by other entities of the group	Fair value	of which notionally eligible EHQLA and HQLA	Carrying amount	of which EHQLA and HQLA	Fair value	of which EHQLA and HQLA
<b>Assets of the reporting institution</b>	<b>250</b>	<b>250</b>			<b>89,610</b>	—		
Loans on demand	250	250			81,616	—		
Equity instruments	—	—	—	—	5,103	—	5,103	—
Other assets	—	—			2,892	—		

Note: HQLA (High Quality Liquid Assets) / EHQLA (Extremely High Quality Liquid Assets).

➤ **Table 20: Collateral encumbrance**

CaML (Solo) 31 December 2017 (£000s)	Fair value of encumbered collateral received or own debt securities issued		Fair value of unencumbered collateral received or own debt securities issued available for encumbrance	
		of which issued by other entities of the group		of which EHQLA and HQLA
Collateral received by the reporting institution	0	0	0	0
Own covered bonds and asset-backed securities issued and not yet pledged			0	0
<b>Total assets, collateral received and own debt securities issued</b>	<b>250</b>	<b>250</b>		

Note: ABS (Asset-Backed Securities).

 **Table 21: Sources of encumbrance**

<b>CaML (Solo) 31 December 2017 (£000s)</b>	<b>Matching liabilities, contingent liabilities or securities lent</b>	<b>Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered</b>
Carrying amount of selected financial liabilities	—	—
Other sources of encumbrance	—	250
Other	—	250
<b>Total sources of encumbrance</b>	<b>—</b>	<b>250</b>

Note: ABS (Asset-Backed Securities).

## 10 Market risk

The following risk metrics present CaML's risk components as at 31 December 2017.

**Market risk exposure amount** **£655k**

2016: £132k

**Market risk capital requirements** **£52k**

2016: £11k

Market Risk is the risk to a firm's financial condition arising as a result of adverse movements in the markets, such as foreign currency exchange rates, interest rates and equity and commodity prices.

Market Risk is a systemic risk: movements in markets are beyond the control of CaML. Market Risk to CaML is reviewed below in two contexts: impact on revenues and as a result its profitability; and impact on balance sheet. CaML is not allowed to carry intended open positions, and transacts on a riskless principal (no inventory) where transactions are never exposed to market risk throughout the execution of the transaction and agency basis only, it will only be exposed to Market Risk should a counterparty default or in case of an operational error resulting in an open position.

CaML is currently only exposed to Foreign Exchange Translation Risk. Foreign exchange (FX) Risk in CaML arises from revenue flows in foreign currencies as the traded currency of transactions is mainly non-GBP; FX Translation Risk is the risk that a change in foreign exchange rates will create adverse impacts to the financial performance of the firm. CaML is naturally exposed to this type of risk where there is a currency mismatch between income and costs. In order to mitigate this, open foreign exchange positions on the balance sheet are closed out on a regular basis as they arise, and as a minimum at monthly intervals as set in the respective Corporate Accounting Policy.

CaML did not have any non-trading book exposures in equities as at 31 December 2017 or during the reporting period.

The Company is committed to ensure low level of market and interest rate risks inherent to its business strategy and model.

### **Table 22: Market risk - risk weighted assets and capital required**

This table shows the components of the capital requirements and risk weighted assets for market risk using the standardised approach.

CaML's market risk capital requirement consists solely of foreign exchange risk. (See [chapter 11](#) regarding interest rate risk).

<b>CaML (Solo) outright products at 31 December 2017 (£000s)</b>	<b>Risk weighted assets</b>	<b>Capital requirements</b>
Foreign exchange risk	655	52
<b>Total</b>	<b>655</b>	<b>52</b>



## 11 Interest rate risk in the banking book

Interest rate risk in the banking book (IRRBB) is not considered a material risk for the Company as CaML does not lend or take deposits in the normal course of its business. CaML is funded by equity and term loans of USD 30m and GBP 30m from The Bank of New York Mellon London Branch, which it places out on an overnight basis with internal and external bank counterparties. Interest rate risk is monitored by the Market Risk function and reported to the Operating Committee on a monthly basis.

CaML is exposed to relatively minor interest rate risk on its balance sheet due to the mismatch in duration of its overnight placements on the asset side versus the duration of the short term funding on the liability side. CaML does not take client deposits nor does it provide credit to its clients.

### ➤ Table 23: Net interest income sensitivity by currency

This table shows the net interest income sensitivity by CaML's major transactional currencies.

Currency (£000s)	+100 basis points	- 100 basis points	+100 basis points	- 100 basis points
	2017	2017	2016*	2016*
GBP	96	(96)	83	(83)
USD	—	—	—	—
EUR	—	—	—	—
Other currencies	—	—	—	—
<b>Total</b>	<b>96</b>	<b>(96)</b>	<b>83</b>	<b>(83)</b>
As percentage of net interest income	23%	(23)%	32%	(32)%

\* 2016 data has been restated as it was identified that the prior year disclosure was overstated by a factor of 3 times, as the 100bps was applied for a year when the mismatch is a maximum of 4 months.

## 12 Liquidity risk

CaML defines Liquidity risk as the inability to access funding, convert assets to cash quickly and efficiently, or to roll over or issue new debt, especially during periods of market stress, at a reasonable cost in order to meet its short-term (up to one year) obligations.

CaML defines Funding Liquidity risk as the risk that it cannot meet its cash and collateral obligations at a reasonable cost for both expected and unexpected cash flow and collateral needs without affecting daily operations or financial conditions.

Liquidity risks can arise from funding mismatches, market constraints from inability to convert assets to cash, inability to raise cash in the markets, or contingent liquidity events. Changes in economic conditions or exposure to credit, market, operational, legal, and reputational risks also can affect CaML's liquidity risk profile and are considered in the liquidity risk management framework.

CaML seeks to maintain adequate liquidity reserves to meet business as usual liquidity requirements. In addition, sufficient liquidity is maintained to enable CaML to withstand liquidity shocks based on modelled liquidity stress scenarios and to ensure an orderly run-down of the business is feasible at any point.

## 13 Operational risk

The following risk metrics present CaML's risk components as at 31 December 2017.

<b>Operational risk exposure amount</b>	<b>£6.0m</b>
	2016: £6.4m

<b>Operational risk capital requirements</b>	<b>£0.5m</b>
	2016: £0.5m

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, systems, or from external events (including legal risk but excluding strategic and reputation risk).

Operational risk may arise from errors in transaction processing, breaches of internal control, systems and compliance requirements, internal or external fraud, damage to physical assets, and/or business disruption due to systems failures or other events. Operational risk can also arise from potential legal or regulatory actions as a consequence of non-compliance with regulatory requirements, prudent ethical standards or contractual obligations.

### 13.1 Operational risk management framework

The Operational Risk Management Framework (ORMF) provides the processes and tools necessary to manage risk through a culture of risk awareness, a clear governance structure, well defined policies, procedures and reporting and suitable tools for reporting and monitoring to effectively identify, manage, mitigate, monitor and report the risks in an organised way to the appropriate governance bodies.

The ORMF defines roles and responsibilities through the global policy, using the Three Lines of Defence model as a foundation. Thus, responsibility for the management of Operational Risk sits first and foremost with the business and functions.

Therefore, the monitoring and reporting of Operational Risks occurs within the business, entity and EMEA-region risk oversight functions as well as decision-making forums such as Business Risk Committees and CaML's Op Com.

CaML's ORMF relies on a culture of risk awareness, a clear governance structure and Operational Risk policies and procedures, which define the roles and responsibilities of the First, Second and Third lines of defence. These policies and procedures complement each other to ensure that the Operational Risks of the business are effectively identified, managed, mitigated (where possible) and reported to the appropriate governance committees on a monthly basis.

CaML uses the ORMF to capture, analyse and monitor its Operational Risks. These activities are prescribed through the enterprise Operational Risk program, assessment systems and related processes, including but not limited to:

- **Risk Register** - Section 4.3
- **Risk Appetite** - Section 4.4
- **High Level Assessments (HLA)** - Section 4.5
- **Risk and Control Self-Assessments (RCSAs)** - Section 4.6

- **Key Risk Indicators (KRIs)** - Section 4.6
- **Operational Risk Events** - Section 4.6
- **Operational Risk Scenario Analysis** - Section 4.6

## 13.2 Capital resource requirement

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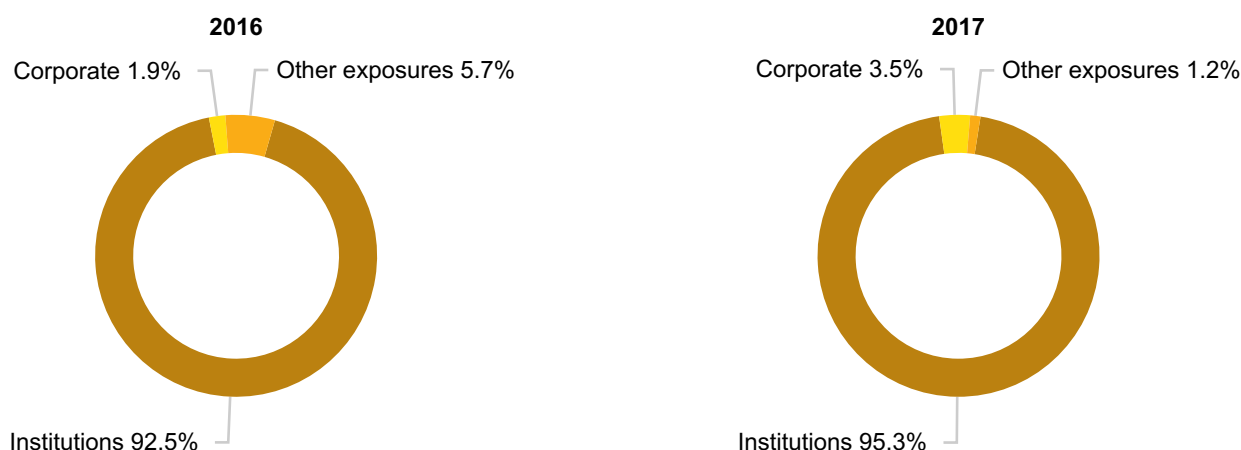
CaML calculates the Pillar 1 operational risk capital resource requirement under the Standardised Approach. CaML falls under the Agency Services Basel business line which mandates a 15% beta factor to determine capital from gross income. During 2017 CaML's operational risk exposure amount decreased to £6.0m (2016: £6.4m) resulting in the capital requirement reduction to £0.48m (2016: £0.51m).

## 14 Leverage

The following risk metrics present CaML's risk components as at 31 December 2017.

<b>Total leverage ratio exposure</b>	<b>£87m</b>
	2016: £53m
<b>Fully phased-in leverage ratio</b>	<b>35.7%</b>
	2016: 59.7%

### ➤ CRR banking book leverage ratio exposures



The leverage ratio is calculated by dividing tier 1 capital by a total exposure measure which is comprised of a defined sum of asset exposure values and off-balance sheet items.

Although the BNY Mellon Corporation manages its leverage ratio in line with US regulatory limits, CaML itself is not subject to a leverage ratio requirement in the UK.

Nevertheless CaML monitors its leverage position and reports accordingly. The table below is reflective of the standard EBA reporting format, but CaML is mindful of the exclusion for Bank of England reserves from the leverage exposure value that has been prescribed by the PRA, which would dramatically reduce this value and hence increase the leverage ratio itself.

### ➤ Table 24: Leverage ratio summary

This table shows the summary reconciliation of accounting assets and leverage ratio exposures.

#### CaML (Solo) at 31 December 17 (£m)

<b>Total assets as per published financial statements</b>	<b>90</b>
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	—

**CaML (Solo) at 31 December 17 (£m)**

Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429 (13) of Regulation (EU) No 575/2013 "CRR"	—
Adjustments for derivative financial instruments	—
Adjustments for securities financing transactions (SFTs)	—
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	—
Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013	—
Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013	—
Other adjustments	(3)
<b>Total leverage ratio exposure</b>	<b>87</b>

 **Table 25: Leverage ratio common disclosure**
**CaML (Solo) regulatory leverage ratio exposures at 31 December 17 (£m)**

On-balance sheet exposures (excluding derivatives and SFTs)	
On-balance sheet items (excluding derivatives and SFTs, but including collateral)	90
Asset amounts deducted in determining Tier 1 capital	(3)
<b>Total on-balance sheet exposures (excluding derivatives and SFTs)</b>	<b>87</b>

**Derivative exposures**

Replacement cost associated with derivatives transactions	—
Add-on amounts for PFE associated with derivatives transactions	—
Exposure determined under Original Exposure Method	—
<b>Total derivative exposures</b>	<b>—</b>

**Securities financing transaction exposures**

SFT exposure according to Article 220 of CRR	—
SFT exposure according to Article 222 of CRR	—
<b>Total securities financing transaction exposures</b>	<b>—</b>

**Off-balance sheet exposures**

Off-balance sheet exposures at gross notional amount	—
Adjustments for conversion to credit equivalent amounts	—
<b>Total off-balance sheet exposures</b>	<b>—</b>

**Capital and Total Exposures**

Tier 1 capital	31
Exposures of financial sector entities according to Article 429(4) 2nd of CRR	—

**Leverage Ratios**

<b>Total Exposures</b>	<b>87</b>
End of quarter leverage ratio	35.71%

**CaML (Solo) regulatory leverage ratio exposures at 31 December 17 (£m)**

Leverage ratio (avg. of the monthly leverage ratios over the quarter)	35.71%
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**Choice on transitional arrangements and amount of derecognised fiduciary items**

Choice on transitional arrangements for the definition of the capital measure	Fully phased-in
Amount of derecognised fiduciary items in accordance with Article 429(11) of CRR	—

 **Table 26: Composition of on-balance sheet exposures**

This table shows the composition of on-balance sheet exposures excluding derivatives, SFTs and exempted exposures at 31 December 2017.

**CaML (Solo) CRR leverage ratio exposures (£m)**

<b>Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:</b>	<b>85</b>
Trading book exposures	—
Banking book exposures, of which:	85
Covered bonds	—
Exposures treated as sovereigns	—
Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	—
Institutions	81
Secured by mortgages of immovable properties	—
Retail exposures	—
Corporate	3
Exposures in default	—
Other exposures	1

## 15 Remuneration

The following risk metrics present CaML's risk components as at 31 December 2017.

<b>Total remuneration</b>	<b>£2.39m</b>
	2016: £0.79m
<b>Total deferred variable remuneration outstanding from previous years</b>	<b>£1.26m</b>
	2016: £0.06m

### 15.1 Governance

The governance of remuneration matters for BNYM and its group entities, including Capital Markets Ltd (“CaML”), is overseen by four committees, each with separate responsibilities in respect of remuneration as summarised below:

**Human Resources and Compensation Committee of BNYM (“HRCC”)** is responsible for overseeing BNYM’s employee compensation and benefits policies and programmes globally. It reviews and is responsible for the compensation plans, policies and programs in which the senior officers participate and has general oversight for the other incentive, retirement, welfare and equity arrangements for all employees globally. The members of the HRCC are non-executive members of the BNYM’s Board of Directors, acting on behalf of the BNYM Board of Directors.

**Compensation Oversight Committee of BNYM (“COC”)** is responsible for providing formal input to the remuneration decision-making process (including through the review of remuneration policies for BNYM), which includes reviewing and approving both remuneration arrangements annually and any significant changes proposed to remuneration arrangements (including termination of any arrangement) and advising the HRCC of any remuneration-related issues. The members of the COC are members of management of BNYM, including the Chief Human Resources Officer, the Chief Risk Officer, the Chief Financial Officer and the Chief Enterprise Risk Officer.

**EMEA Remuneration Governance Committee (“ERGC”)** is a regional governance committee that was established to ensure alignment of remuneration arrangements operated within BNYM EMEA with local laws and regulations impacting on remuneration. The ERGC is responsible for ensuring that local BNYM EMEA offices implement processes and practices that are consistent with the requirements of local regulators and also have oversight of the functioning and decisions taken by the Remuneration Committees of subsidiaries of BNYM (excluding IM), which are incorporated within the EMEA region, with the exclusion of oversight over individual award decisions.

**Incentive Compensation Review Committee (“ICRC”)** is the coordinating body of senior executives responsible for the oversight of the process to evaluate and recommend compensation reductions for all employees. These decisions are based on feedback regarding risk, compliance, audit and legal outcomes as well as situations of an employee engaged in fraud or directly or indirectly to have contributed to a financial restatement or other irregularity. The ICRC is a management-level committee that reports its recommendations to the HRCC. Ex ante adjustments are recommended by the employee’s management for review and approval by the committee and ex post adjustments are formulated by the committee. The Chief Human Resources Officer chairs the committee supported by the Global Head of Compensation and Benefits. Voting members include the Chief Executive Officer, Chief Risk Officer, Chief Compliance Officer, Chief Auditor, Chief Financial Officer and General Counsel.



BNYM undergoes an annual attestation process to ensure that its remuneration practices comply with all local laws and regulations as well as best market practice. The implementation of BNYM's remuneration policies is subject to an annual independent internal review by the internal audit function.

## 15.2 Aligning pay with performance

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BNY Mellon's compensation philosophy is to offer a total compensation opportunity that supports our values, client focus, integrity, teamwork and excellence. We pay for performance, both at the individual and corporate level. We value individual and team contributions and reward based on how both contribute to business results. In support of this philosophy, variable compensation is used as a means of recognising performance.

Through our compensation philosophy and principles, we align the interests of our employees and shareholders by encouraging actions that contribute to superior financial performance and long-term shareholder value; by rewarding success; and by ensuring that our incentive compensation arrangements do not encourage our employees to take unnecessary and excessive risks that threaten the value of BNY Mellon or benefit individual employees at the expense of shareholders or other stakeholders. Our compensation structure is comprised of an appropriate mix of fixed and variable compensation that is paid over time. We aim to ensure that both fixed and variable compensation are consistent with business and market practice, fixed compensation is sufficient to provide for a fully flexible variable compensation program, and variable compensation is in the form of annual and/or long-term incentives, and, where appropriate, granted over equity to align employee remuneration with that of shareholder growth.

## 15.3 Fixed remuneration

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Fixed remuneration is composed of (i) salary, (ii) any additional non-performance related amounts paid as a result of contractual obligations or applicable law, or as a result of market practice, including role-based allowances, and (iii) any benefits in kind which are awarded as a result of the responsibilities of the job rather than the performance within the job.

The fixed remuneration of an employee is determined by the job performed, its level of complexity and responsibility, and the remuneration paid in the market for that type of job. It is set, for all staff, at a rate to be at all times sufficient to provide for full flexibility with regards to any variable remuneration element, including zero variable remuneration.

Employees who are directors of other BNY Mellon group entities are not remunerated separately in their capacity as a director of those entities. Independent directors of BNY Mellon only receive fixed remuneration, as disclosed in our annual Proxy Statement to shareholders.

## 15.4 Ratio between fixed and variable pay

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In respect of remuneration to material risk takers as determined under the requirements of the PRA and FCA ("MRTs"), the shareholder of CaML, The Bank of New York Mellon Corporation, approved an increase in the maximum ratio of Variable to Fixed pay from 100% to 200%. This increase was confirmed by the HRCC on 27 January 2014 on the grounds that the increased ratio would not affect the firm's ability to maintain a sound capital base, and allows for appropriate incentivisation and reward in accordance with our Pay for Performance philosophy.

## 15.5 Variable compensation funding and risk adjustment

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The employees of CaML are eligible to be awarded variable compensation but have no entitlement to such awards which are discretionary in nature.

In general, the incentive pools for the business lines are based on the profitability of each business line, with the potential for adjustment by the COC on the basis of a number of factors, including risk management.

Typically, the line of business incentive plans are determined primarily based on pre-tax income, which is a profit rather than revenue based measure. The plans are subject to discretionary adjustment by the business head, COC and HRCC based on factors in assessing the earnings including (but not limited to) significant non-recurring activity, market conditions, interest and currency rates.

The incentive pools for the business partner groups are based on a management approved fixed pool, adjusted for a number of factors, including corporate performance and risk management.

Variable compensation may consist of both cash and equity and both upfront and deferred components and is determined by the functional hierarchy of the business or business partner service to which the individual staff member belongs, and in accordance with the terms and conditions of the incentive compensation plan that is applicable for the business or business partner service.

For MRTs, the variable compensation portion of an award comprises four different parts: upfront cash, upfront equity, deferred cash and deferred equity, in order to comply with local regulations. The deferred compensation component awarded in the form of BNY Mellon restricted stock units aligns a portion of the variable compensation award with the management of longer-term business risk.

To ensure effective risk adjustment, BNY Mellon requires employees who receive variable remuneration awards (both upfront and deferred) to agree to forfeiture and clawback of such awards in the event of fraud, misconduct or actions contributing to the detriment of business interests, including competing with the business and soliciting employees or clients. Where required by regulations, awards to MRTs are subject to more stringent risk adjustment, including, but not limited to, forfeiture and clawback in the event of employee misbehaviour, material error, material downturn in business unit performance or a material failure of risk management.

## 15.6 Deferral policy and vesting criteria

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For more senior-level employees, a portion of variable compensation will be deferred, under ordinary circumstances for a period of at least three years with vesting on an annual one-third basis (albeit such compensation may be deferred for longer periods and with a revised vesting schedule, and, for MRTs, in line with regulatory requirements), and will normally be subject to the employee remaining in employment until the deferred payment date (unless provided otherwise under national law). The deferred component of the variable compensation award is usually delivered as restricted stock units whose value is linked to BNY Mellon's share price. The percentage of the variable compensation award to be deferred depends on the level and responsibility of the individual's role (including if they are a MRT), regulatory requirements and the amount and value of the award.

## 15.7 Variable remuneration of control function staff

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The variable compensation awarded to control function staff (for example: audit, compliance and risk) is dependent on performance that is assessed according to the achievement of objectives specific to their functional role that is independent of the activities they oversee. Remuneration is benchmarked against

the market level and funded independently of individual business line results and adjusted based on BNY Mellon's overall annual financial performance.

## 15.8 Quantitative disclosures

The tables below provide details of the aggregate remuneration of the MRTs that are CaML Board Members. Although they are not directly employed by CaML, it has been deemed that they can take risk on behalf of CaML. One or more of the MRTs included in the data below may also appear on the Pillar 3 disclosure of another entity.

The remuneration amounts are presented on a gross basis, regardless of the time spent by BNY Mellon staff in respect of CaML to reflect the full reporting period.

### ➤ Table 27: Aggregate remuneration expenditure by business

This table shows the aggregate remuneration expenditure for MRTs in 2017 by business.

(£m)	Investment services	Other <sup>2</sup>	Total
Total remuneration <sup>1</sup>	—	2	2

<sup>1</sup>Includes base salary and other cash allowances, plus any incentive awarded for full year 2017. Pension contribution is not included.

<sup>2</sup>Includes all support functions and general management positions.

### ➤ Table 28: Aggregate remuneration expenditure by remuneration type

This table shows the aggregate remuneration expenditure for MRTs by remuneration type.

	Senior management <sup>3</sup>	Other MRTs	Total
Number of beneficiaries	2	2	4
Fixed remuneration (£000s) <sup>4</sup>	881	410	1,291
Total variable remuneration (£000s)	947	154	1,101
Variable cash (£000s)	473	87	560
Variable shares (£000s)	473	67	540
Total deferred remuneration awarded during the financial year (£000s)	568	67	635
Total deferred remuneration paid out during the financial year (£000s)	188	279	467
Total deferred remuneration reduced through performance adjustments (£000s)	0	0	0

<sup>3</sup>Senior management is comprised of MRTs categorised as 'Senior Managers' who carry out a senior management function as determined by the relevant regulators.

<sup>4</sup>Fixed Remuneration includes base salary and any cash allowances. Pension contribution is not included.

 **Table 29: Deferred variable remuneration**

This table shows the total deferred remuneration for MRTs outstanding from previous years.

	Senior management	Other MRTs	Total
Number of beneficiaries	2	2	4
Total deferred variable remuneration outstanding from previous years (£000s)	595	668	1,263
Total vested (£000s) <sup>5</sup>	188	279	467
Total unvested (£000s) <sup>6</sup>	407	389	796

<sup>5</sup>Includes total vested cash and equity. Equity portion is valued as at the date the award vested.

<sup>6</sup>Total unvested equity is valued as at 1 January 2018.

 **Table 30: Number of individuals being remuneration GBP 1 million or more**

Remuneration	Total number of individuals
£1m - £1.5m	1
£1.5m - £2m	—

## Appendix 1 - Other risks

### Business risk

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Business risk is defined as the risk of loss caused by unexpected changes in the external macro environment, client behaviour or events that impacts earnings including contracting markets, reduced margins from competitive pressure, adverse customer selection, and business concentration.

### Conduct risk

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Conduct risk is defined as the risk that detriment is caused to clients, the market, the Company or its employees because of inappropriate execution of our business activities or inappropriate behaviour by Company or its employees.

### Group risk

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Group risk is the risk that the financial position of CaML may be adversely affected by its relationships (financial and non-financial) with other entities within BNY Mellon or by risks which may affect the financial position of the entire Group, for example reputational contagion or Group default.

As part of a large complex and interconnected company, CaML has a number of dependencies on BNY Mellon. These include business leadership, dependency on certain IT systems and support services provided by central functions.

### Model risk

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Model risk refers to risk of loss from the reliance on models, proxy-pricing methodologies, as well as on expert judgement in the valuation of (illiquid) assets.

### Strategic risk

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The risk arising from adverse business decisions, poor implementation of business decisions, or lack of responsiveness to changes in the financial industry and operating environment. Strategic and/or Business risks may also arise from the acceptance of new businesses, the introduction or modification of products, strategic finance and risk management decisions, business process changes, complex transactions, acquisitions/ divestitures/ joint ventures and major capital expenditures/ investments.

### Country risk

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Country Risk is the risk of exposure to loss caused by events in a foreign country. The concept is broader than Sovereign Risk, which is a sub-set of Country Risk, as all forms of lending or investment activity whether to/with individuals, corporates, banks or governments are covered. It includes sovereign risk, transfer risk and contagion risk.

## Appendix 2 - Glossary of terms

The following terms are used in this document:

**ALCO:** Asset and Liability Committee

**Basel III:** The capital reforms and introduction of a global liquidity standard proposed by the Basel Committee on Banking Supervision in 2010

**BNY Mellon:** The Bank of New York Mellon Corporation

**CRD IV:** On 27 June 2013, the European Commission published, through the Official Journal of the European Union, its legislation for a Capital Requirements Directive (CRD) and Capital Requirements Regulation (CRR), which together form the CRD IV package. Amendments published on 30 November 2013 were made to the Regulation. The package implements the Basel III reforms in addition to the inclusion of new proposals on sanctions for non-compliance with prudential rules, corporate governance and remuneration. CRD IV rules apply from 1 January 2014 onwards, with certain requirements set to be phased in

**Capital Requirements Directive (CRD):** A capital adequacy legislative package issued by the European Commission and adopted by EU member states

**Capital Requirements Regulation (CRR):** Regulation that is directly applicable to anyone in the European Union and is not transposed into national law

**Common Equity Tier 1 capital:** The highest quality form of regulatory capital under Basel III comprising common shares issued and related share premium, retained earnings and other reserves excluding the cash flow hedging reserve, less specified regulatory adjustments

**Core Tier 1 Capital:** Called-up share capital and eligible reserves plus equity non-controlling interests, less intangible assets and other regulatory deductions

**Credit Risk Mitigation (CRM):** A technique to reduce the credit risk associated with an exposure by application of credit risk mitigants such as collateral, guarantees and credit protection

**Derivatives:** A derivative is a financial instrument that derives its value from one or more underlying assets, for example bonds or currencies

**EMEA:** Europe, Middle-East and Africa region

**Exposure:** A claim, contingent claim or position which carries a risk of financial loss

**Exposure at default (EAD):** The amount expected to be outstanding, after any credit risk mitigation, if and when a counterparty defaults. EAD reflects drawn balances as well as allowance for undrawn amounts of commitments and contingent exposures over a one-year time horizon

**Financial Conduct Authority (FCA):** The Financial Conduct Authority regulates the conduct of financial firms and, for certain firms, prudential standards in the UK. It has a strategic objective to ensure that the relevant markets function well

**High Level Assessment (HLA):** An assessment of the quality of controls in place to mitigate risk and residual risk. Residual risk is assessed as high, moderate to high, moderate, moderate to low and low with direction anticipated

**Institutions:** Under the Standardised Approach, institutions are classified as credit institutions or investment firms

**Internal Capital Adequacy Assessment Process (ICAAP):** The group's own assessment of the levels of capital that it needs to hold through an examination of its risk profile from regulatory and economic capital viewpoints

**ISDA Master Agreement:** A document that outlines the terms applied to a derivatives transaction between two parties. Once the two parties have agreed to the standard terms, they do not have to renegotiate each time a new transaction is entered into

**Key Risk Indicator (KRI):** Key Risk Indicators are used by business lines to evaluate control effectiveness and residual risk within a business process

**Master Netting Agreement:** An agreement between two counterparties that have multiple contracts with each other that provides for the net settlement of all contracts through a single payment in the event of default or termination of any one contract

**Pillar 3:** The part of Basel III that sets out information banks must disclose about their risks, the amount of capital required to absorb them and their approach to risk management. The aim is to encourage market discipline and improve the information made available to the market

**Prudential Regulation Authority (PRA):** The statutory body responsible for the prudential supervision of banks, building societies, credit unions, insurers and major investment firms in the UK. The PRA is a subsidiary of the Bank of England

**Residual maturity:** The period outstanding from the reporting date to the maturity or end date of an exposure

**Risk appetite:** A definition of the types and quantum of risks to which the firm wishes to be exposed

**Risk and Control Self-Assessment (RCSA):** Risk and Control Self-Assessment is used by business lines to identify risks associated with their key business processes and to complete a detailed assessment of the risk and associated controls

**Risk Governance Framework:** CaML's risk governance framework has been developed in conjunction with BNY Mellon requirements. Key elements of the framework are:

- Formal governance committees, with mandates and defined attendees
- Clearly defined escalation processes, both informally (management lines) and formally (governance committees, board, etc.)
- A clear business as usual process for identification, management and control of risks
- Regular reporting of risk issues

**Risk Weighted Assets (RWA):** Assets that are adjusted for their associated risks using weightings established in accordance with CRD IV requirements

**Standardised Approach:** Method used to calculate credit risk capital requirements using the Basel III, CRD IV, CRR model supplied by the BCBS. All financial institutions must opt to either use the Standardised Approach (SA) specified by the regulator, or develop and use their own Internal Ratings Model (IRM). The

SA model uses external credit assessment institution ratings and supervisory risk weights supplied by external credit assessment agencies

**Tier 2 capital:** A component of regulatory capital under Basel III, mainly comprising qualifying subordinated loan capital, related non-controlling interests and eligible collective impairment allowances

**Value-at-Risk (VaR):** A measure of the potential loss at a specified confidence level from adverse market movements in an ordinary market environment



**Appendix 3 - CRD IV reference**

<b>CRR ref.</b>	<b>Requirement summary</b>	<b>Compliance ref.</b>	<b>Page ref.</b>
<i>Scope of disclosure requirements</i>			
431 (1)	Institutions shall publish Pillar 3 disclosures	BNY Mellon publishes Pillar 3 disclosures	N/A
431 (2)	Firms with permission to use specific operational risk methodologies must disclose operational risk information	N/A	N/A
431 (3)	Institutions shall adopt a formal policy to comply with the disclosure requirements	BNY Mellon has a dedicated Pillar 3 policy	N/A
431 (4)	Explanation of ratings decision upon request	N/A	N/A
<i>Non-material, proprietary or confidential information</i>			
432 (1)	Institutions may omit disclosures if the information is not regarded as material (except Articles 435(2) (c), 437 and 450)	Refer to Pillar 3 policy	N/A
432 (2)	Institutions may omit information that is proprietary or confidential if certain conditions are respected	Refer to Pillar 3 policy	N/A
432 (3)	Where 432 (1) and (2) apply this must be stated in the disclosures, and more general information must be disclosed	N/A	N/A
432 (4)	Paragraphs 1, 2 & 3 are without prejudice to the scope of the liability for failure to disclose material information	N/A	N/A
<i>Frequency of disclosure</i>			
433	Institutions shall publish the disclosures required at least on an annual basis, in conjunction with the date of the publication of the financial statements	Refer to Pillar 3 policy	N/A
<i>Means of disclosure</i>			
434 (1)	Institutions may determine the appropriate medium, location and means of verification to comply effectively	Single Pillar 3 disclosure	N/A
434 (2)	Disclosures made under other requirements (e.g. accounting) can be used to satisfy Pillar 3 if appropriate	Any cross-references to accounting or other disclosures are clearly signposted in this document	N/A
<i>Risk management objectives and policies</i>			
435 (1)	Institutions shall disclose their risk management objectives and policies	Section 4 Risk Management Objectives and Policy	23
435 (1) (a)	Strategies and processes to manage those risks	Section 4.1 Risk Objectives	23
435 (1) (b)	Structure and organisation of the risk management function	Section 4.2 Risk Governance	23
435 (1) (c)	Scope and nature of risk reporting and measurement systems	Section 4 Risk Management Objectives and Policy	23
435 (1) (d)	Policies for hedging and mitigating risk	Section 4.3 - 4.16	27
435 (1) (e)	Approved declaration on the adequacy of risk management arrangements	Section 4 Risk Management Objectives and Policy	23
435 (1) (f)	Approved risk statement describing the overall risk profile associated with business strategy	Section 4 Risk Management Objectives and Policy	23
435 (2) (a)	Number of directorships held by directors	Section 4.2.1 Board of Directors	23
435 (2) (b)	Recruitment policy of Board members, their experience and expertise	Section 4.2.1 Board of Directors	23

435 (2) (c)	Policy on diversity of Board membership and results against targets	Section 4.2.1 Board of Directors	23
435 (2) (d)	Disclosure of whether a dedicated risk committee is in place, and number of meetings in the year	Section 4.2.2 Key Committees	23
435 (2) (e)	Description of information flow on risk to Board	Section 4.2.2 Key Committees	23
<i>Scope of application</i>			
436 (a)	The name of the institution to which the requirements of this Regulation apply	Section 1 Scope of Application	6
436 (b)	Outline the differences in the basis of consolidation for accounting and prudential purposes, with a brief description of the entities therein, explaining whether they are:	Section 1 Scope of Application	6
436 (b) (i)	fully consolidated;		
436 (b) (ii)	proportionally consolidated;		
436 (b) (iii)	deducted from own funds;		
436 (b) (iv)	neither consolidated nor deducted		
436 (c)	Current or foreseen material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities among the parent undertaking and its subsidiaries	N/A	N/A
436 (d)	Aggregate amount by which the actual Own Funds are less than required in all subsidiaries not included in the consolidation, and the name or names of such subsidiaries	N/A - Entities outside the scope of consolidation are appropriately capitalised	N/A
436 (e)	If applicable, the circumstance of making use of the provisions laid down in Articles 7 & 9	N/A	N/A
<i>Own funds</i>			
437 (1)	Requirements regarding capital resources table	Section 2 Own Funds	15
437 (1) (a)	Full reconciliation of Common Equity Tier 1 (CET1) items	Table 2: Regulatory adjustments	15
437 (1) (b)	Description of the main features of the CET1 and Additional Tier 1 and Tier 2 instruments	Table 3: Composition of regulatory capital	17
437 (1) (c)	Full terms and conditions of all CET1, Additional Tier 1 and Tier 2 instruments	Table 3: Composition of regulatory capital	17
437 (1) (d) (i)	Each prudent filter applied	Table 2: Regulatory adjustments	15
437 (1) (d) (ii)	Each deduction made		
437 (1) (d) (iii)	Items not deducted		
437 (1) (e)	Description of all restrictions applied to the calculation of Own Funds	N/A - no restrictions apply	N/A
437 (1) (f)	Explanation of the basis of calculating capital ratios using elements of Own Funds	N/A - Capital ratios calculated on basis stipulated in the Regulations	N/A
437 (2)	EBA to publish implementation standards for points above	BNYM follows the implementation standards	N/A
<i>Capital requirements</i>			
438 (a)	Summary of institution's approach to assessing adequacy of capital levels	Section 3 Capital Requirements	21
438 (b)	Result of ICAAP on demand from authorities	N/A	N/A
438 (c)	Capital requirement amounts for credit risk for each Standardised Approach exposure class	Table 7: Standardised credit exposure by exposure class	36
438 (d)	Capital requirements amounts for credit risk for each Internal Ratings Based Approach exposure class	N/A - internal ratings based approach is not used	N/A
438 (d) (i)			
438 (d) (ii)			
438 (d) (iii)			
438 (d) (iv)			
438 (e)	Own funds requirements for market risk or settlement risk, or large exposures where they exceed limits	Table 6: Capital requirements and Section 10: Market Risk	21 & 48

438 (f)	Own funds amounts for operational risk, separately for the basic indicator approach, the standardised approach, and the advanced measurement approaches as applicable	Table 6: Capital requirements and Section 12: Operational Risk	21 & 51
438 (endnote)	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach	Table 6: Capital requirements	21
<i>Exposure to counterparty credit risk (CCR)</i>			
439 (a)	Description of process to assign internal capital and credit limits to CCR exposures	Section 8 Counterparty Credit Risk	45
439 (b)	Discussion of process to secure collateral and establishing reserves	Section 8 Counterparty Credit Risk	45
439 (c)	Discussion of management of wrong-way exposures	Section 8 Counterparty Credit Risk	45
439 (d)	Disclosure of collateral to be provided (outflows) in the event of a ratings downgrade	N/A - a credit ratings downgrade is managed at the BNYM Corp level	N/A
439 (e)	Derivation of net derivative credit exposure	Section 8 Counterparty Credit Risk	45
439 (f)	Exposure values for mark-to-market, original exposure, standardised and internal model methods	Section 8 Counterparty Credit Risk	45
439 (g)	Notional value of credit derivative hedges and current credit exposure by type of exposure	N/A - BNYM does not have credit derivative transactions	N/A
439 (h)	Notional amounts of credit derivative transactions for own credit, intermediation, bought and sold, by product type	N/A - BNYM does not have credit derivative transactions	N/A
439 (i)	Estimate of alpha, if applicable	N/A	N/A
<i>Capital buffers</i>			
440 (1) (a)	Geographical distribution of relevant credit exposures	N/A	N/A
440 (1) (b)	Amount of the institution specific countercyclical capital buffer	N/A	N/A
440 (2)	EBA will issue technical implementation standards related to 440 (1)	N/A	N/A
<i>Indicators of global systemic importance</i>			
441 (1)	Disclosure of the indicators of global systemic importance	N/A	N/A
441 (2)	EBA will issue technical implementation standards related to 441 (1)	N/A	N/A
<i>Credit risk adjustments</i>			
442 (a)	Disclosure of bank's definitions of past due and impaired	Section 5.6 Analysis of Past Due and Impaired Exposures	37
442 (b)	Approaches for calculating credit risk adjustments	Section 5.6 Analysis of Past Due and Impaired Exposures	37
442 (c)	Disclosure of pre-CRM EAD by exposure class	Section 5.5 Table 7: Standardised credit exposure by exposure class	36
442 (d)	Disclosures of pre-CRM EAD by geography and exposure class	Section 5.5 Table 8: Standardised credit exposure by country	36
442 (e)	Disclosures of pre-CRM EAD by industry and exposure class	Section 5.5 Table 9: Standardised post mitigated credit exposures by counterparty type	37
442 (f)	Disclosures of pre-CRM EAD by residual maturity and exposure class	Section 5.5 Table 10: Standardised credit exposure by residual maturity	37

442 (g) 442 (g) (i) 442 (g) (ii) 442 (g) (iii)	Breakdown of impaired, past due, specific and general credit adjustments, and impairment charges for the period, by exposure class or counterparty type	Section 5.6 Table 11: Credit quality of exposures by counterparty type	38
442 (h)	Impaired, past due exposures, by geographical area, and amounts of specific and general impairment for each geography	Section 5.6 Table 13: Credit quality of exposures by geographical breakdown	39
442 (i) 442 (i) (i) 442 (i) (ii) 442 (i) (iii) 442 (i) (iv) 442 (i) (v)	Reconciliation of changes in specific and general credit risk adjustments	Section 5.6 Analysis of Past Due and Impaired Exposures	37
442 endnote	Specific credit risk adjustments recorded to income statement are disclosed separately	Section 5.6 Analysis of Past Due and Impaired Exposures	37
<i>Unencumbered assets</i>			
443	Disclosures on unencumbered assets	Section 9 Asset Encumbrance	46
<i>Use of ECAs</i>			
444 (a)	Names of the ECAs used in the calculation of Standardised Approach RWAs, and reasons for any changes	Section 7 External Credit Assessment Institutions (ECAs)	42
444 (b)	Exposure classes associated with each ECA	Section 7 Table 15: Mapping of ECAs credit assessments to credit quality steps	42
444 (c)	Explanation of the process for translating external ratings into credit quality steps	Section 7 Table 16: Credit quality steps and risk weights	42
444 (d)	Mapping of external rating to credit quality steps	Section 7 External Credit Assessment Institutions (ECAs)	42
444 (e)	Exposure value pre and post-credit risk mitigation, by credit quality step	Section 7 Table 15-18: External Credit Assessment Institutions (ECAs)	42
<i>Exposure to market risk</i>			
445	Disclosure of position risk, large exposures exceeding limits, FX, settlement and commodities risk	Section 10 Market Risk	48
<i>Operational risk</i>			
446	Disclosure of the scope of approaches used to calculate operational risk, discussion of advanced methodology and external factors considered	Section 13 Operational Risk	51
<i>Exposure in equities not included in the trading book</i>			
447 (a)	Differentiation of exposures based on objectives	N/A: no non-trading book exposure in equities	N/A
447 (b)	Recorded and fair value, and actual prices of exchange traded equity where it differs from fair value	N/A: no non-trading book exposure in equities	N/A
447 (c)	Types, nature and amounts of the relevant classes of equity exposures	N/A: no non-trading book exposure in equities	N/A
447 (d)	Realised cumulative gains and losses on sales over the period	N/A: no non-trading book exposure in equities	N/A
447 (e)	Total unrealised gains/losses, latent revaluation gains/losses, and amounts included within Tier 1 capital	N/A: no non-trading book exposure in equities	N/A
<i>Exposure to interest rate risk on positions not included in the trading book</i>			

448 (a)	Nature of risk and key assumptions in measurement models	Section 10: The Investments Company has no significant Balance Sheet Interest Rate Risk because no maturity mismatch exists between client cash deposits and Bank's cash holdings. In addition, interest rates applicable to clients' cash deposits are market driven	48
448 (b)	Variation in earnings or economic value, or other measures used by the bank from upward and downward shocks to interest rates, by currency	Section 11 Table 23: Net interest income sensitivity by currency	49
<i>Exposure to securitisation positions</i>			
449	Exposure to securitisations positions	N/A: no non-trading book exposure in equities	N/A
<i>Remuneration disclosures</i>			
450	Remuneration disclosure regarding remuneration policy and practices	Section 15 Remuneration Disclosure	56
450 (1) (a)	Information concerning the decision-making process used for determining the remuneration policy	Section 15.1 Governance	56
450 (1) (b)	Information on link between pay and performance	Section 15.2 Aligning Pay with Performance	57
450 (1) (c)	Important design characteristics of the remuneration system	Section 15 Remuneration Disclosure	56
450 (1) (d)	Ratios between fixed and variable remuneration	Section 15.4 Ratio between Fixed and Variable Pay	57
450 (1) (e)	Information on the performance criteria on which the entitlement to shares, options and variable components of remuneration is based	Section 15.6 Deferral Policy and Vesting Criteria	58
450 (1) (f)	Main parameters and rationale for any variable component scheme and any other non-cash benefits	Section 15.7 Variable Remuneration of Control Function Staff	58
450 (1) (g)	Aggregate quantitative information on remuneration by business area	Section 15.8 Table 27: Aggregate Remuneration Expenditure by Business	59
450 (1) (h) 450 (1) (h) (i) 450 (1) (h) (ii) 450 (1) (h) (iii) 450 (1) (h) (iv) 450 (1) (h) (v) 450 (1) (h) (vi)	Aggregate quantitative information on remuneration, broken down by senior staff management and members of staff whose actions have a material impact on the risk profile	Section 15.8 Table 28: Aggregate Remuneration Expenditure by Remuneration Type	59
450 (1) (i)	Number of individuals being remunerated £1 million or more per financial year	Section 15.8 Quantitative disclosures: Table 30	60
450 (1) (j)	Total remuneration for each member of the management body upon demand from the Member State or competent authority	N/A	N/A
450 (2)	For institutions that are significant in terms of their size, internal organisation and the nature, scope and the complexity of their activities, the quantitative information above shall be made available to the public at the level of members of the management body of the institution	N/A	N/A
<i>Leverage</i>			
451 (1) (a)	Leverage ratio	Section 14 Leverage Ratio	53

451 (1) (b)	Breakdown of total exposure measure	Section 14 Table 25: Leverage ratio common disclosure	54
451 (1) (c)	Derecognised fiduciary items	N/A	N/A
451 (1) (d)	Description of the process used to manage the risk of excessive leverage	N/A	N/A
451 (1) (e)	Description of the factors that had an impact on the leverage ratio	Section 14 Leverage Ratio	53
451 (2)	EBA to publish implementation standards for points above	BNYM follows the implementation standards	N/A
<i>Use of the IRB approach to credit risk</i>			
452	Risk-weighted exposure under the IRB approach	N/A	N/A
<i>Use of credit risk mitigation techniques</i>			
453 (a)	Use of on- and off-balance sheet netting	Section 6.1 Netting	40
453 (b)	How collateral valuation is managed	Section 6.2 Collateral Valuation and Management	40
453 (c)	Description of types of collateral used	N/A	N/A
453 (d)	Types of guarantor and credit derivative counterparty, and their creditworthiness	N/A - BNYM's EMEA entities do not enter into credit derivative transactions	N/A
453 (e)	Disclosure of market or credit risk concentrations within risk mitigation exposures	Section 6.4 Credit Risk Concentration	40
453 (f)	For exposures under either the Standardised or Foundation IRB approach, disclose the exposure value covered by eligible collateral	N/A	N/A
453 (g)	Exposures covered by guarantees or credit derivatives	Section 6.4 Table 14: Credit risk mitigation techniques - overview	41
<i>Use of the Advanced Measurement Approaches to operational risk</i>			
454	Description of the use of insurance or other risk transfer mechanisms to mitigate operational risk	N/A - Pillar 1 : standardized approach, Pillar 2 : self-assessment approach	N/A
<i>Use of internal market risk models</i>			
455	Institutions calculating their capital requirements using internal market risk models	N/A	N/A
<i>Commission Implementing Regulation (EU) No 1423/2013</i>			
Article 1	Specifies uniform templates for the purposes of disclosure	N/A	N/A
Article 2	Full reconciliation of own funds items to audited financial statements	Section 2 Own Funds	15
Article 3	Description of the main features of CET1, AT1 and Tier 2 instruments issued (Annex II and III)	Table 5: Common tier 1 and additional tier 1 instruments and tier 2 instruments	19
Article 4	Disclosure of nature and amounts of specific items on own funds (Annex IV and V)	Table 4: Transitional own funds	17
Article 5	Disclosure of nature and amounts of specific items on own funds during transitional period (Annex VI and VII)	Table 4: Transitional own funds	17
Article 6	Entry into force from 31 March 2014	N/A	N/A



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