



**Pershing Securities International Limited**

**PILLAR 3 DISCLOSURE  
DECEMBER 31, 2016**



**BNY MELLON** | **Invested**

# Contents

<b>1</b>	<b>Scope of Application .....</b>	<b>6</b>
1.1	Disclosure policy.....	6
1.2	The Basel III Framework.....	6
1.3	Purpose of Pillar 3 .....	6
1.4	Non-material, Proprietary or Confidential Information .....	7
1.5	Frequency and Means of Disclosure.....	7
1.6	Board Approval.....	7
1.7	Key Metrics.....	7
1.8	Company Description .....	8
1.9	Core Business Lines.....	9
<b>2</b>	<b>Capital Requirements .....</b>	<b>12</b>
2.1	Calculating Capital Requirements.....	12
<b>3</b>	<b>Risk Management Objectives and Policies.....</b>	<b>13</b>
3.1	Risk Governance .....	13
3.2	Risk Management Framework .....	16
3.3	Risk Appetite .....	17
3.4	Stress Testing .....	17
<b>4</b>	<b>Credit Risk.....</b>	<b>18</b>
4.1	Definition and Identification.....	18
4.2	Management of Credit Risk .....	18
4.3	Governance.....	19
4.4	Analysis of Credit Risk.....	19
4.5	Analysis of Past Due and Impaired Exposures .....	21
<b>5</b>	<b>Credit Risk Mitigation .....</b>	<b>24</b>
5.1	Collateral Valuation and Management.....	24
5.2	Wrong-way Risk .....	24
5.3	Credit Risk Concentration.....	24
<b>6</b>	<b>External Credit Assessment Institutions (ECAIs).....</b>	<b>26</b>
<b>7</b>	<b>Counterparty Credit Risk.....</b>	<b>28</b>
7.1	Credit Valuation Adjustment .....	28
<b>8</b>	<b>Asset Encumbrance .....</b>	<b>30</b>
<b>9</b>	<b>Market Risk.....</b>	<b>31</b>
<b>10</b>	<b>Interest Rate Risk – Non-Trading Book.....</b>	<b>32</b>
<b>11</b>	<b>Operational Risk.....</b>	<b>33</b>
11.1	Operational Risk Management Framework.....	33
<b>12</b>	<b>Remuneration Disclosure.....</b>	<b>35</b>
12.1	Governance.....	35

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12.2	Aligning Pay with Performance .....	35
12.3	Fixed Remuneration .....	35
12.4	Ratio between Fixed and Variable Pay .....	36
12.5	Variable Compensation Funding and Risk Adjustment .....	36
12.6	Deferral Policy and Vesting Criteria .....	36
12.7	Variable Remuneration of Control Function Staff .....	37
12.8	Quantitative Disclosures .....	37

## Index of Tables

Table 1: Capital ratios .....	8
Table 2: Capital requirements .....	12
Table 3: Standardised credit exposure by exposure class .....	19
Table 4: Standardised credit exposure by country .....	20
Table 5: Standardised post mitigated credit exposures by counterparty type .....	20
Table 6: Standardised credit exposure by residual maturity .....	21
Table 7: Credit quality of exposures by counterparty type .....	21
Table 8: Credit quality of exposures by industry .....	22
Table 9: Credit quality of exposures by geographical breakdown .....	22
Table 10: Credit risk mitigation techniques – overview .....	24
Table 11: Mapping of ECAs credit assessments to credit quality steps .....	26
Table 12: Credit quality steps and risk weights.....	26
Table 13: Credit risk exposure and Credit Risk Mitigation (CRM) effects.....	26
Table 14: Credit risk exposure by asset class and risk weight post CCF and CRM .....	27
Table 15: Analysis of the counterparty credit risk (CCR) exposure by approach .....	28
Table 16: CCR exposures by exposure class and risk weight .....	28
Table 17: Impact of netting and collateral held on exposure values.....	29
Table 18: Encumbered assets.....	30
Table 19: Collateral encumbrance.....	30
Table 20: Sources of encumbrance.....	30
Table 21: Market risk – risk weighted assets and capital required .....	31

## Appendices

<b>Appendix 1 Other Risks.....</b>	<b>38</b>
Liquidity Risk.....	38
Regulatory and Compliance Risk .....	38
Reputational Risk.....	38
Legal Risk .....	38
Concentration Risk.....	39
Group Risk.....	39
Model Risk .....	40
Strategic Risk.....	40
Country Risk .....	40
<b>Appendix 2 Glossary of Terms.....</b>	<b>41</b>
<b>Appendix 3 CRD IV Reference.....</b>	<b>43</b>

# 1 Scope of Application

## 1.1 Disclosure policy

This document comprises the Pershing Securities International Limited (“PSIL” or “the Company”) Pillar 3 disclosures on capital and risk management at 31 December 2016. 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.

These disclosures have been prepared for PSIL and information in this report has been prepared solely to meet the Pillar 3 disclosure requirements of the entity noted, and to provide certain specified information about capital and other risks 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 of the business.

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

## 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

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

## 1.3 Purpose of Pillar 3

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	Not all of the above risk and exposure types are relevant to PSIL. In accordance with CRD IV, the PSIL Board of Directors (“the Board”) may omit one or more disclosures if the information provided is not regarded as material. Accordingly, these Pillar 3 disclosures only focus on those risk and exposure types relevant to PSIL.
Counterparty credit risk	
Market risk	
Credit valuation adjustment	
Securitisations	
Operational risk	Furthermore, the Board may omit one or more disclosures if the information provided is regarded as proprietary or confidential.

For completeness, other risks that PSIL is exposed to, but are not covered above, are also discussed in Appendix 1.

#### 1.4 Non-material, Proprietary or Confidential Information

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 PSIL 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 company’s competitive position. 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 these are to be classified as confidential.

#### 1.5 Frequency and Means of Disclosure

Disclosure will be made annually based on calendar year end and will be published following the preparation of the Annual Report and Financial Statements. PSIL 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 ([www.bnymellon.com/investorrelations/filings/index.html](http://www.bnymellon.com/investorrelations/filings/index.html)).

#### 1.6 Board Approval

These disclosures were approved for publication by the Board on 29 June 2017.

#### 1.7 Key Metrics

The following risk metrics reflect PSIL’s risk profile:

**Table 1: Capital ratios**

<b>Own Funds</b>	<b>2016</b>	<b>2015</b>
<b>Available capital (€000s)</b>		
Common Equity Tier 1 (CET1) capital	26,522	24,002
Tier 1 capital	26,522	24,002
<b>Total capital</b>	<b>26,522</b>	<b>24,002</b>
<b>Risk-weighted assets (€000s)</b>		
Total risk-weighted assets (RWA)	16,934	17,251
<b>Risk-based capital ratios as a percentage of RWA</b>		
CET1 ratio	156.6%	139.1%
Tier 1 ratio	156.6%	139.1%
<b>Total capital ratio</b>	<b>156.6%</b>	<b>139.1%</b>
Capital conservation buffer requirement	9.0%	N/A
<b>Total of CET1 specific buffer requirements</b>	<b>9.0%</b>	N/A

## 1.8 Company Description

Pershing Securities International Limited is the Dublin based, wholly owned subsidiary of Pershing Limited, which is, in turn a subsidiary of Pershing Holdings (UK) Limited. Pershing Holdings (UK) Limited is a parent financial holding company incorporated in the UK and is a wholly owned and operationally independent subsidiary of Pershing Group LLC which is, in turn a subsidiary of the Bank of New York Mellon Corporation (“BNYMellon”).

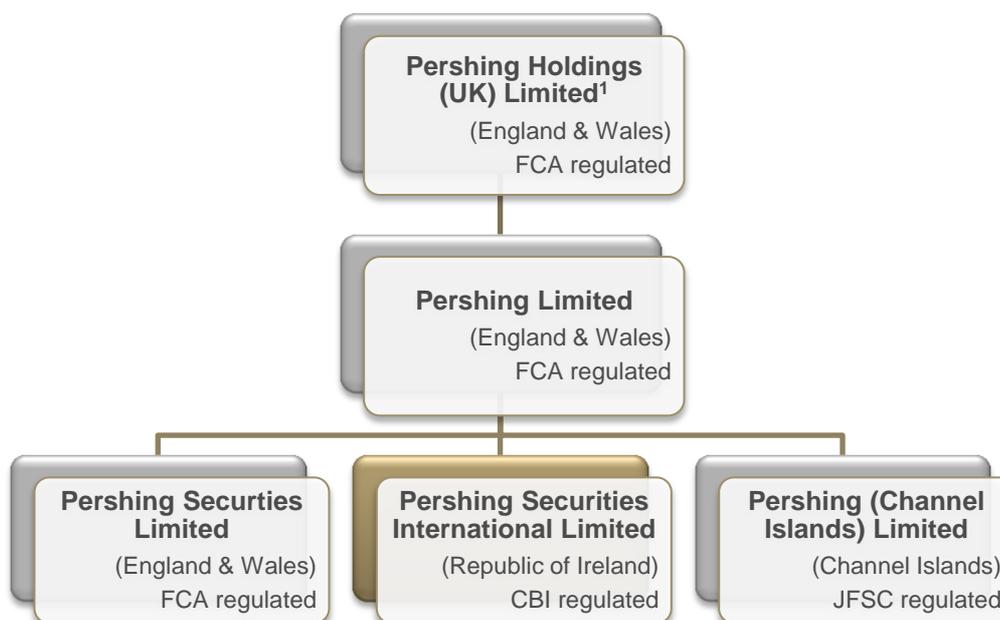
When referenced in this document, the term ‘PHUK Group’ refers to Pershing Holdings (UK) Limited and its subsidiary undertakings.

Pershing Group LLC is engaged in broadly the same business activity as PHUK Group. As at 31 December 2016, Pershing Group LLC had total assets of \$32 billion. BNYMellon 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, BNYMellon delivers informed investment management and investment services in 35 countries and more than 100 markets. As at 31 December 2016, BNY Mellon had \$29.9 trillion in assets under custody and/or administration, and \$1.6 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.

As a €125k minimum capital investment firm regulated by the Central Bank of Ireland (CBI), PSIL is required to operate under the CBI’s Basel III implementation rules, which include the disclosures provided in this document.

There is no current or foreseen material or legal impediments to the prompt transfer of capital resources or repayment of liabilities among the parent undertaking and its subsidiary undertakings.

The corporate structure of PHUK Group is illustrated in Figure 1.

**Figure 1: PHUK Group structure at 31 December 2016**

<sup>1</sup>On 1 June 2017, BNY Markets Limited acquired 25% of the outstanding shares of Pershing Holdings (UK) Limited from Pershing Group LLC.”

## 1.9 Core Business Lines

The PHUK Group provides a broad range of financial business solutions to investment banks, broker dealers, wealth managers, financial planners and advisers across EMEA (Europe, Middle-East and Africa) from offices in London, Liverpool, Manchester, Channel Islands and Ireland. Our multi-asset class solution combines sophisticated front-end technology and flexible middle office capabilities with execution, settlement and custody services. These are supported by a robust regulatory and compliance framework with dedicated client asset experience and expertise.

The principal activities of PSIL include the provision of a full range of clearing and settlement, investment administration, collateral management, global custody and related services. PSIL functionality provides broker-dealers, asset managers, intermediary firms and financial institutions with a comprehensive range of services and solutions, including retail clearing, institutional global clearing, broker services and execution services (through Pershing Securities Limited).

Having a local presence and also being independently regulated by the Central Bank of Ireland is seen as a competitive advantage. Similarly, being a subsidiary ultimately of BNYMellon, a G-SIFI (Global Systemically Important Financial Institution) is also viewed positively. The PSIL business model inherently carries less balance sheet risk than many traditional financial services firms.

PSIL’s business model is split into two main market segments:

### **Institutional Broker Dealer Services (IBD)**

PSIL provides a broad range of financial business solutions to investment banks and broker-dealers.

Our multi-asset class solutions combine sophisticated front-end technology with flexible middle and back office capabilities. PSIL can manage and help our clients with the full spectrum of post-trade services, from execution through to settlement and clearing, specialising in Fixed Income and Equities across 40+ markets.

Our clients recognise us as an industry leader in directing them to operate more efficiently by affording them the facility to outsource any, or all, of their trade life-cycle. Our clients leverage upon our technology, strength and global stability and as such we have become a trusted and independent partner to many financial institutions.

We retain our leadership by investing heavily in our technology, so that our customers can be confident in the knowledge that the functionality and capability of our systems and services will continually meet their industry needs, whilst simultaneously addressing the ever changing regulatory landscape, thereby enabling them to focus on their core business proposition and future proof their corporate positioning.

### **Wealth and Adviser Solutions (WAS)**

PSIL specialises in providing administration and custody services to wealth management professionals. Many of our clients prefer to outsource back and middle office functions to PSIL so they can focus on serving their existing clients and developing new business. Clients benefit from reduced operational costs, PSIL's expertise in meeting regulatory requirements and from holding their clients' assets with the world's largest global custodian.

Clients include banks, wealth managers, family offices, advisers and "consolidator" platforms that provide platform services for smaller advisory firms.

Many wealth management firms are large enough to self-clear their business and most will choose to do this. However, the increasing rate of technological change, transparency in pricing exerting a downward pressure on charges, and the increasing cost of regulatory demands can reduce profit margins and so there is a general industry trend for wealth management firms to consider other ways of working to reduce costs.

### **Contract basis**

Clients contract on a basis appropriate to their business needs, either Model A, B or GlobalClear, as outlined below.

#### **Model A**

Model A business provides the outsourcing of settlement and clearing functions by client firms. All settlement accounts are maintained in the name of the client and PSIL has no settlement obligation to any counterparty, except where it is providing a General Clearing Member ("GCM") service. Therefore, in all other cases, PSIL is not exposed to any credit and market risk relating to such activity. PSIL does however have credit exposure as a GCM, as it assumes an obligation to deliver cash and stock to the Central Counterparty ("CCP") and is reliant upon receiving cash or stock from the CCP or client firm.

#### **Model B**

The largest portion of PSIL's business is contracted on a Model B basis where we assume the settlement obligations of clients and it is PSIL's name not the clients in the market place. The main risk exposure from this activity relates to credit risk arising from clients failing to meet their corresponding obligations to PSIL. However the actual exposure is generally limited to any adverse mark to market movement in the underlying securities and is mitigated through various techniques and processes, including credit risk monitoring, rights over retained commissions and cash collateral deposits.

**GlobalClear**

The GlobalClear Model is designed as an intermediate model. The model utilises key Model A components where, for non-GCM trades, PSIL does not assume the settlement obligations of clients as we do under Model B. Clients support these trades on their own balance sheet and PSIL is under no obligation to clear such transactions. GlobalClear also utilises key Model B components where the client uses PSIL's network for clearing of GCM trades and PSIL's settlement network for settlement of GCM and non-GCM transactions. Clients also use PSIL for associated cash and network management.

## 2 Capital Requirements

PSIL has an Internal Capital Adequacy Assessment Process (“ICAAP”) which defines the risks that the PSIL is exposed to, and sets out the associated capital plan which aims to ensure that PSIL holds an appropriate amount of capital to support its business model, through the economic cycle and given a range of plausible but severe stress scenarios. The plan is reflective of PSIL’s commitment to a low risk appetite, with no proprietary trading, coupled with a strong capital structure which gives the necessary confidence to our clients.

### 2.1 Calculating Capital Requirements

CRD IV allows for different approaches towards calculating capital requirements. PSIL has chosen to use 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.

PSIL is required to hold regulatory capital which will be the higher of the sum of credit risk and market risk capital requirement and the Fixed Overhead Requirement (‘FOR’).

#### Table 2: Capital requirements

This table shows the risk weighted assets using the standardised approach and their respective capital requirements

Type of Risk (€000s)	Risk Exposure Amount		Capital Requirements	
	31-Dec-16	31-Dec-15	31-Dec-16	31-Dec-15
Credit risk SA*	10,416	3,831	833	306
Counterparty credit risk SA*	18	41	1	3
Settlement risk	43	70	3	6
Market risk SA*	368	170	29	14
<i>of which: Foreign exchange position risk</i>	368	170	29	14
<b>Total (Credit risk and Market risk)</b>	<b>10,845</b>	<b>4,112</b>	<b>866</b>	<b>329</b>
Fixed overhead requirement	16,934	17,251	1,353	1,380
<b>Pillar I requirement</b>	<b>16,934</b>	<b>17,251</b>	<b>1,353</b>	<b>1,380</b>
<b>Total Capital</b>			<b>26,522</b>	<b>24,002</b>
Surplus Capital			25,169	22,622

\* SA: Standardised Approach

PSIL significantly exceeds the minimum capital ratios required to ensure compliance with regulatory requirements at all times. PSIL sets the internal capital target levels higher than the minimum regulatory requirements to ensure there is a buffer which reflects balance sheet volatility. These ratios have been determined to be appropriate, sustainable and consistent with the capital objectives, business model, risk appetite and capital plan.

### 3 Risk Management Objectives and Policies

Clients and other market participants need to have confidence that PSIL will remain strong and continue to deliver operational excellence and maintain an uninterrupted service throughout market cycles and especially during periods of market turbulence. PSIL is committed to maintaining a strong balance sheet and this philosophy is also consistent with PHUK Group, Pershing Group LLC and BNY Mellon Corporation as a whole.

Whilst PSIL assumes less balance sheet risk than most financial services companies due to its focus on transaction processing, its business model does give rise to some risk as described below. As a consequence, Pershing has developed a 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

An appropriate risk framework is in place to identify, manage, monitor and report on risk within the governance structure

Monitoring and reporting of key risk metrics to senior management and the Board takes place

There is a capital planning process based on a stress testing programme

#### 3.1 Risk Governance

##### 3.1.1 Board of Directors

The main duty and responsibility of the Board is to define the strategy of PSIL and to supervise the management of PSIL. Whilst acting autonomously and in accordance with its legal and regulatory requirements, the Board also aligns PSIL's strategy to that of its primary shareholder, Pershing Limited. The Board has overall responsibility for the establishment and maintenance of PSIL's risk appetite framework and for the approval of the risk appetite statement. The Board ensures that strategic business plans are consistent with the approved risk appetite.

The Board is also responsible for both the management and the oversight of risks, together with the quality and effectiveness of internal controls, but delegates risk management oversight to general management, supported by the risk management committees. It is also responsible for reviewing, challenging and approving all risk management processes including risk identification and assessment, stress testing and capital adequacy. The various control functions provide further support for the management of risk within the business.

The Board meets at least quarterly and the directors who served as of 31 December 2016 were:

Name	Role	Nationality	Appointed	Resignation
Patrick Joseph Duffy	Director	Irish		
Niall Harrington	Director	Irish		
Gregory Hutt	Director	British		7 June 2016
Pat Mahon	Director	Irish		6 March 2017
Kevin Molony	Director	Irish	18 January 2016	
Geoffrey Towers	Director	British	19 September 2016	
Joseph Wheatley	Director	Irish		

### 3.1.2 Regional Risk Governance

Pershing shares a common framework of risk management objectives and policies with other subsidiaries of Pershing Holdings (UK) Limited. PSIL's approach to risk management is to ensure that all material risks are defined, understood and effectively managed according to well-designed policies and controls. Due to reasons of operational efficiency, PSIL has outsourced many of its processing and support activities within the PHUK Group. While PSIL Senior Management provides an oversight of these arrangements on a day to day basis, it was nevertheless agreed by the PHUK Group Boards that a common risk framework and appetite would be the most effective and consistent means of managing risk across the group.

### 3.1.3 Risk Committees

#### PSIL Risk Governance

The PSIL Board is the senior strategic and decision making body. The Board delegates day to day responsibility for managing the business to the Executive Committee of PHUK Group ("ExCo") according to approved plans, policies and risk appetite.

ExCo further delegates specific responsibilities to various committees to provide an appropriate oversight and direction to various risk and regulatory processes and activities, including:

#### Pershing Risk Committee

The Pershing Risk Committee (PRC) provides a senior management oversight to the overall risk framework and identified risk types that could potentially impact PHUK Group. The PRC reports to the PHUK Group Executive Committee and forms a central point for the oversight and management of risk and the escalation of significant risk issues and events to PHUK Group Senior Management, PHUK Group Executive Committee and the PHUK Group Boards. Subsidiary risk committees and councils report to the PRC to ensure a consistent and effective reporting of risks and these include the Credit and Market Risk Committee, the Business Acceptance Committee, the PHUK Group Asset and Liability Committee, the Operational Risk Review Council and the Client Assets Council. The PRC is chaired by the Chief Risk Officer.

#### Irish Compliance, Risk and Oversight Committee

The purpose of the Irish Compliance, Risk and Oversight Committee is to assist the Board and the PHUK Executive Committee in overseeing the Company's compliance with its regulatory and legal obligations and with Pershing Limited (PL) Compliance and Oversight Policies. Accordingly, while the Committee may adopt policies or procedures developed at PL level, the Committee shall satisfy itself that such policies or procedures meet all of the requirements of Irish regulatory and legal obligations. It is chaired by the Pershing Country Manager for Ireland.

#### Operational Risk Review Council

The Operational Risk Review Council (ORRC) has oversight of the embedding of the operational risk framework within PSIL. The Operational Risk Management Department is responsible for providing all necessary support to the ORRC to ensure that the framework meets regulatory requirements and industry best practice in identifying, measuring and reporting on the relevant operational risks inherent in PSIL's business (including events such as, but not limited to, technical system failures, disaster events, failed processes or fraud).

#### Credit and Market Risk Committee

The Credit and Market Risk Committee (C&MRC) oversees the review of all Credit and Market Risk issues associated with and impacting on business undertaken by PSIL. The Committee's principal Credit Risk responsibility is to determine and maintain an acceptable credit exposure to PSIL's

clients, as well as to market makers, custodians and banks, within the limits set by the Boards. It is chaired by the Head of Credit and Market Risk.

### **Asset and Liability Committee**

The PHUK Group Asset and Liability Committee (ALCO) is responsible for overseeing the asset and liability management activities of the balance sheet of PSIL, and for ensuring compliance with all treasury related regulatory requirements.

The ALCO is responsible for ensuring that the policy and guidance set through the BNY Mellon's Global ALCO and EMEA ALCO is understood and executed locally. This includes the strategy related to the investment portfolio, placements, interest rate risk, capital management and liquidity risk. It is chaired by the Chief Financial Officer.

### **Client Asset Council**

The Client Asset Council is responsible for the oversight and governance of PSIL's adherence to the CBI custody and client money rules. The council reports to the Pershing Risk Committee to confirm the adequacy of systems and controls in place to identify, segregate, and hold client assets in accordance with regulatory rules.

### **Business Acceptance Committee**

The Pershing Business Acceptance Committee (BAC) is an integral part of the new business process and is responsible for the review and approval of all new clients, products/services and material changes to existing processes before they are executed or implemented and includes responsibility for the pricing of new client activity, products and services. It is chaired by the Chief Executive Officer and included representatives of all of the risk and control functions, as well as line support functions.

### **Audit Oversight Review Council**

The Audit Oversight Review Council provides review, discussion and challenge of control related issues within PSIL. The Council's responsibilities include discussing emerging control risks, thematic control concerns or weaknesses and considering possible means to monitor, control or mitigate such exposures.

### **ICAAP Working Group**

The ICAAP Working Group coordinates and oversees the processes for the identification and assessment of risks as they relate to the calculation of regulatory capital and ensure that these are fully described within the ICAAP

### 3.2 Risk Management Framework

PSIL’s risk management framework is designed to:

- Ensure that risks are identified, managed, mitigated, monitored and reported
- Define and communicate the types and amount of risks to take
- Ensure that risk-taking activities are consistent with the risk appetite
- Monitor emerging risks and ensure they are weighed against the risk appetite
- Promote a strong risk management culture that considers risk-adjusted performance

Suitable policies and procedures have been adopted by PSIL in order to ensure an appropriate level of risk management is directed at the relevant element of the business.

As part of PHUK Group, PSIL has adopted the ‘Three Lines of Defence’ (3LOD) model in deploying its risk management framework (figure 2 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 its 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 risk management framework and provide independent oversight of the 1LOD, ensuring that policies are adhered to and challenged. The 2LOD 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 various Boards of PHUK Group and senior management with the assurance that the governance structures, risk management and internal controls in place are effective.

**Figure 2: Managing Three Lines of Defence**



The risk management function monitors and identifies emerging risks with a forward-looking approach. It provides risk management information to the PSIL Board and governance committees,

and contributes to a “no surprise” risk culture. It aligns closely with Compliance (2LOD) and Internal Audit (3LOD) plus Finance and Treasury (as 1LOD control functions). It independently educates staff, promotes risk awareness and continually makes improvements, whilst monitoring progress against defined success criteria for improving the effectiveness of the risk function.

### 3.3 Risk Appetite

PSIL defines risk appetite as the maximum level of risk it is normally willing to accept while pursuing the interests of major stakeholders, including clients, shareholders, employees and regulators i.e. it considers the balance between risk and reward aligning the strategic goals and the overall risk. It is linked to the strategic direction set by senior management and is approved by the PSIL Board. The statement applies to all subsidiaries and is reviewed at least annually or when the Company’s risk profile changes. The risk appetite ultimately determines the level of regulatory capital.

PSIL uses a variety of metrics to measure and monitor its risk taking activities relative to its risk appetite. Articulating risk appetite through its 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 PRC.

Thresholds are established to measure the performance of the business against its risk appetite. The metrics are actively monitored, managed and mitigated through the monthly Pershing Risk Committee (PRC), to ensure that the performance of business activities remains within risk tolerance levels.

### 3.4 Stress Testing

Stress testing is undertaken at PSIL to monitor and quantify risk 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 PSIL’s risk profile. PSIL’s 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.

Scenarios are derived from current, emerging, and plausible future risks and strategy, and reviewed, discussed and agreed by Pershing Risk Committee and Board.

## 4 Credit Risk

### 4.1 Definition and Identification

Credit risk is defined as the risk that an obligor will fail to repay a loan or otherwise meet a contractual obligation as and when it falls due.

On balance sheet Credit Risk covers default risk for loans, commitments, securities, receivables and other assets where the realisation of the value of the asset is dependent on the counterparty's ability and willingness to repay its contractual obligations.

Due to the nature of PSIL's business as a provider of clearing and settlement services, Credit Risk mainly arises from the risk of loss in the event that a client, underlying investor or market counterparty fails to meet its contractual obligations to pay for a trade, or to deliver securities for sale. However, the legal structure of the clearing agreements provides PSIL with the right to set-off any indebtedness of underlying clients against any credit balance in the name of the same underlying client. PSIL also has recourse to securities and cash as collateral and indemnities from client firms in respect of any underlying clients. Consequently, the residual credit risk (i.e. post-mitigation) will devolve to market risk, as the exposure in such cases is the movement in the underlying stock and foreign currency prices. In addition, Pershing also requires clients to place a security deposit with PSIL to cover this potential mark to market exposure.

Credit Risk also arises from the non-payment of other receivables, cash at bank, loans to third parties, investment securities and outstanding client invoices and loans to third parties.

### 4.2 Management of Credit Risk

PSIL manages credit risk exposure by a two-stage process:

- 1) Setting minimum thresholds for the type of client acceptable to PSIL in terms of net worth and business profile, including:

The type of business to be conducted through PSIL (e.g. retail vs. institutional; agency/matched principal vs. proprietary trading / market making)

Markets and financial instruments in which the client can trade

Any special conditions clients are subject to (e.g. cash on account)

Obtaining credit approval for a particular client is the primary responsibility of the business as the first line of defence alongside guidance and oversight from Credit Risk as the second line. Any new relationship requires approval from the Business Acceptance Committee.

- 2) Monitoring all exposure (both pre- and post-settlement) on a daily basis against various limits for its clients, as follows:

Trade Limit (set per client following analysis of the financial strength, management expertise, nature of business and expected – or historical – peak and average exposure levels);

Gross Exposure Limit (calculated with reference to the security deposit and net worth of the client and utilised as the higher of total purchases or total sales)

Negative mark to market exposure

It should also be noted that the metrics supporting the management of credit risk are monitored on a daily basis and reported to senior management. Breaches are reported to senior management which may lead to management action such as requesting additional collateral, or requiring the client to inject additional capital into the business.

### 4.3 Governance

Governance of credit risk oversight as a second line of defence function is described and controlled through credit risk policies and day-to-day procedures as follows:

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

Approvals for excesses are controlled by a series of credit risk authorities held within credit policy – each Credit Risk Officer has their own level granted ultimately by the Director, Credit and Market

Limit excesses are reported in the daily Risk Management Pack and reviewed at the weekly Credit Committee.

### 4.4 Analysis of Credit Risk

Credit risk exposure is computed under the standardised approach, as defined in BIPRU 3.1.6 R, which uses external credit assessment institution ratings and supervisory risk weights supplied by external credit assessment agencies. The following credit risk exposure tables summarise the credit exposure for PSIL 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

**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 defined as 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 continental 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 3: Standardised credit exposure by exposure class

The following tables show the credit risk for post CRM techniques using the standardised approach by exposure class at 31 December 2016.

Exposure Class (€000s)	Net value at the end of the period	Average net value over the period
Corporates	3	6
Institutions	24,460	21,960
Other items	325	234
Public sector entities	96	34
<b>Total</b>	<b>24,884</b>	<b>22,234</b>

**Table 4: Standardised credit exposure by country**

This table shows the post CRM exposure by class and by geographic area of the counterparty.

31 December 2016 (€000s)	Belgium	Ireland	UK	Canada	Netherlands	Other	Total
Corporates	0	3	0	0	0	0	3
Institutions	9,506	8,176	6,473	42	31	232	24,460
Other items	0	325	0	0	0	0	325
Public sector entities	0	96	0	0	0	0	96
<b>Total</b>	<b>9,506</b>	<b>8,600</b>	<b>6,473</b>	<b>42</b>	<b>31</b>	<b>232</b>	<b>24,884</b>
31 December 2015 (€000s)	Belgium	UK	US	Ireland	France	Other	Total
Corporates	0	0	0	5	0	0	5
Institutions	5,647	3,661	1,984	1,055	1,158	153	13,658
Other items	0	0	0	373	0	0	373
Public sector entities	0	0	0	62	0	0	62
<b>Total</b>	<b>5,647</b>	<b>3,661</b>	<b>1,984</b>	<b>1,495</b>	<b>1,158</b>	<b>153</b>	<b>14,098</b>

**Table 5: Standardised post mitigated credit exposures by counterparty type**

This table shows the credit exposure post CRM classified by class and by counterparty type.

At 31 December 2016 (€000s)	General governments	Credit institutions	Other financial corporations	Various balance sheet items	Total
Corporates	0	0	3	0	3
Institutions	0	24,460	0	0	24,460
Other items	0	0	0	325	325
Public sector entities	96	0	0	0	96
<b>Total</b>	<b>96</b>	<b>24,460</b>	<b>3</b>	<b>325</b>	<b>24,884</b>

**Table 6: Standardised credit exposure by residual maturity**

This table shows the exposure post credit risk mitigation, classified by credit exposure class and residual maturity.

At 31 December 2016 (€000s)	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
Corporates	3	0	0	0	0	3
Institutions	24,460	0	0	0	0	24,460
Other items	321	0	0	0	4	325
Public sector entities	96	0	0	0	0	96
<b>Total</b>	<b>24,880</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24,884</b>

#### 4.5 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 2016, PSIL 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. PSIL did not incur any material write-offs of bad debts or make any recovery of amounts previously written off during the year.

**Table 7: Credit quality of exposures by counterparty type**

This table provides a comprehensive picture of the credit quality of on- and off-balance sheet exposures.

Counterparty type at 31 December 2016 (€000s)	Exposures		Credit Risk Adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
General governments	0	96	0	0	0	0	96
Credit institutions	0	27,552	0	3,092	0	3,092	24,460
Other financial corporations	0	9	0	6	0	6	3
Various Balance Sheet Items	0	2,465	0	2,140	0	2,140	325
<b>Total</b>	<b>0</b>	<b>30,122</b>	<b>0</b>	<b>5,238</b>	<b>0</b>	<b>5,238</b>	<b>24,884</b>

Counterparty type at 31 December 2015 (€000s)	Exposures		Credit Risk Adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non- defaulted	Specific	General			
General governments	0	62	0	0	0	0	62
Credit institutions	0	15,459	0	1,801	0	1,801	13,658
Other financial corporations	0	33	0	28	0	28	5
Various Balance Sheet Items	0	1,648	0	1,275	0	1,275	373
<b>Total</b>	<b>0</b>	<b>17,202</b>	<b>0</b>	<b>3,104</b>	<b>0</b>	<b>3,104</b>	<b>14,098</b>

**Table 8: 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.

Industry type at 31 December 2016 (€000s)	Exposures		Credit Risk Adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non- defaulted	Specific	General			
Financial and insurance activities	0	30,122	0	5,238	0	5,238	24,884
<b>Total</b>	<b>0</b>	<b>30,122</b>	<b>0</b>	<b>5,238</b>	<b>0</b>	<b>5,238</b>	<b>24,884</b>

Industry type at 31 December 2015 (€000s)	Exposures		Credit Risk Adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non- defaulted	Specific	General			
Financial and insurance activities	0	16,972	0	2,874	0	2,874	14,098
<b>Total</b>	<b>0</b>	<b>16,972</b>	<b>0</b>	<b>2,874</b>	<b>0</b>	<b>2,874</b>	<b>14,098</b>

**Table 9: Credit quality of exposures by geographical breakdown**

This table shows an analysis of past due, impaired exposures and allowances by country using the IFRS methodology.

Counterparty type at 31 December 2016 (€000s)	Exposures		Credit Risk Adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non- defaulted	Specific	General			
Belgium	0	9,506	0	0	0	0	9,506
Ireland	0	13,783	0	5,185	0	5,185	8,598
UK	0	6,511	0	38	0	38	6,473

Counterparty type at 31 December 2016 (€000s)	Exposures		Credit Risk Adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non- defaulted	Specific	General			
Canada	0	42	0	1	0	1	41
The Netherlands	0	37	0	5	0	5	32
Other	0	242	0	8	0	8	234
<b>Total</b>	<b>0</b>	<b>30,121</b>	<b>0</b>	<b>5,237</b>	<b>0</b>	<b>5,237</b>	<b>24,884</b>

Counterparty type at 31 December 2015 (€000s)	Exposures		Credit Risk Adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non- defaulted	Specific	General			
Belgium	0	5,649	0	1	0	1	5,648
UK	0	3,684	0	24	0	24	3,661
US	0	1,984	0	0	0	0	1,984
Ireland	0	4,567	0	3,072	0	3,072	1,495
France	0	1,158	0	0	0	0	1,158
Other	0	160	0	7	0	7	153
<b>Total</b>	<b>0</b>	<b>17,202</b>	<b>0</b>	<b>3,104</b>	<b>0</b>	<b>3,104</b>	<b>14,098</b>

## 5 Credit Risk Mitigation

PSIL mitigates Credit Risk through a variety of strategies including obtaining cash collateral.

### 5.1 Collateral Valuation and Management

PSIL can receive collateral from a counterparty which can include guarantees, cash and both equity and debt securities and has the ability to call on this collateral in the event of a default by the counterparty.

Collateral amounts are adjusted on a daily basis to reflect market activity to ensure they continue to achieve an appropriate mitigation of risk value. Securities are marked-to-market daily and haircuts are applied to protect PSIL in the event of the value of the collateral suddenly reducing in value due to adverse market conditions. Customer agreements can include requirements for the provision of additional collateral should valuations decline.

### 5.2 Wrong-way Risk

PSIL takes particular care to ensure that wrong-way risk between collateral and exposures does not exist. Wrong-way risk results when the exposure to the counterparty increases when the counterparty's credit quality deteriorates.

### 5.3 Credit Risk Concentration

Credit risk mitigation taken by PSIL to reduce Credit Risk may result in Credit Risk Concentration. Credit Concentration Risk results from concentration of exposures to a single counterparty, borrower or group of connected counterparties or borrowers.

PSIL is exposed to Credit Concentration Risk through exchanges and central counterparties, correspondent banks and issuers of securities. These risks are managed and mitigated through the establishment of various limits, on-going monitoring of exposure, collateral and contractual obligations upon the client, including margin calls.

The number of counterparties PSIL is willing to place funds with is limited and hence, Concentration Risk can also arise from cash balances placed with a relatively small number of counterparties. To mitigate this, exposures are only placed on a very short-term basis, generally overnight (maximum of 180 days), ensuring ability to withdraw funds in a timely manner

**Table 10: Credit risk mitigation techniques – overview**

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

31 December 2016 (€000s)	Exposures unsecured: carrying amount	Total Exposures secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Corporates	9	6	6	0	0
Institutions	27,658	3,107	3,107	0	0
Other items	325	0	0	0	0
Public sector entities	96	0	0	0	0
Retail	2,245	2,245	2,245	0	0
<b>Total exposures</b>	<b>30,333</b>	<b>5,358</b>	<b>5,358</b>	<b>0</b>	<b>0</b>
Of which defaulted	0	0	0	0	0

Financial and other eligible collateral can include cash, debt securities, equities or gold, 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 or credit derivatives at 31 December 2016. Using guarantees has the effect of replacing the risk weight of the underlying exposure with that of the institution providing the credit protection. Guarantors are primarily rated as investment grade.

## 6 External Credit Assessment Institutions (ECAIs)

The standardised approach requires PSIL to use risk assessments prepared by External Credit Assessment Institutions (ECAIs) to determine the risk weightings applied to rated counterparties. PSIL 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 11: Mapping of ECAIs credit assessments to credit quality steps**

PSIL 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 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 12: Credit quality steps and risk weights**

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

Exposure class	Risk Weight					
	CQS 1	CQS 2	CQS 3	CQS 4	CQS 5	CQS 6
Central governments and central banks	0%	20%	50%	100%	100%	150%
Covered Bonds	10%	20%	20%	50%	50%	100%
Institutions maturity <= 3 months	20%	20%	20%	50%	50%	150%
Institutions maturity > 3 months	20%	50%	50%	100%	100%	150%
Public sector entities	20%	50%	100%	100%	100%	150%
Corporates	20%	50%	100%	100%	150%	150%
Securitisation	20%	50%	100%	350%	1250%	1250%
Institutions and corporates with short-term credit assessment	20%	50%	100%	150%	150%	150%
Collective investment undertakings (CIU's)	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 13: 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 PSIL. Risk weighted exposure amount (RWA) density provides a synthetic metric on the riskiness of each portfolio.

Exposure classes (€000s)	Exposures before CCF and CRM		Exposures post CCF and CRM		RWA	RWA density
	balance sheet amount		balance sheet amount			
	On-	Off-	On-	Off-		
Corporates	9	0	3	0	3	100%
Institutions	27,552	0	24,460	0	10,069	41%
Other items	325	0	325	0	325	100%
Public sector entities	96	0	96	0	19	20%
Retail	2,140	0	0	0	0	0%
<b>Total</b>	<b>30,122</b>	<b>0</b>	<b>24,884</b>	<b>0</b>	<b>10,416</b>	<b>42%</b>

**Table 14: Credit risk exposure by asset class and risk weight post CCF and CRM**

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

Exposure Class at 31 December 2016 (€000s)	0%	20%	50%	75%	100%	Total
Corporates	0	0	0	0	3	3
Institutions	0	17,542	715	0	6,203	24,460
Other items	0	0	0	0	325	325
Public sector entities	0	96	0	0	0	96
Retail	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>17,638</b>	<b>715</b>	<b>0</b>	<b>6,531</b>	<b>24,884</b>

Exposure Class at 31 December 2015 (€000s)	0%	20%	50%	75%	100%	Total
Corporates	0	0	0	0	5	5
Institutions	0	11,438	2,220	0	0	13,658
Other items	0	0	0	0	373	373
Public sector entities	0	62	0	0	0	62
Retail	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>11,500</b>	<b>2,220</b>	<b>0</b>	<b>378</b>	<b>14,098</b>

## 7 Counterparty Credit Risk

Counterparty credit risk is the risk of a counterparty to a contract (recorded in either the trading book or non-trading book) defaulting before fulfilment of cash-flow obligations. The size of the potential loss could be reduced by the application of netting or collateral agreements with the counterparty.

**Table 15: Analysis of the counterparty credit risk (CCR) exposure by approach**

This table shows a comprehensive view of the methods used to calculate counterparty credit risk regulatory requirements and the main parameters used within each method.

<b>Counterparty Credit Risk (€000s)</b>		
<b>Derivatives and Long Settled trades - Mark to Market method</b>	<b>31 December 2016</b>	<b>31 December 2015</b>
Gross positive fair value of contracts	0	0
Potential future credit exposure	0	0
Netting benefits	0	0
Net current credit exposure	211	434
Collateral held notional value	127	230
Exposure and Collateral Adjustments	(8)	0
<b>Net derivatives / long settled trades credit exposure</b>	<b>92</b>	<b>204</b>
Risk Weighted Assets	18	41
<b>SFT - under financial collateral comprehensive method</b>	<b>31 December 2016</b>	<b>31 December 2015</b>
Net current credit exposure	0	0
Risk Weighted Assets	0	0
<b>Counterparty Credit Risk exposure</b>	<b>92</b>	<b>204</b>

Note: SFT (Securities Financing Transactions)

### 7.1 Credit Valuation Adjustment

The credit valuation adjustment is the capital charge for potential mark-to-market losses due to the credit quality deterioration of a counterparty for derivative transactions. As PSIL did not have any derivative transactions as at 31 December 2016, the credit valuation adjustment was nil.

**Table 16: CCR exposures by exposure class and risk weight**

This table shows the breakdown of counterparty credit risk exposures by exposure class and risk weight attributed according to the standardised approach.

<b>Exposure Class</b>	<b>0%</b>	<b>20%</b>	<b>75%</b>	<b>100%</b>	<b>Other</b>	<b>Total</b>
<b>31 December 2016 (€000s)</b>						
Institutions	0	92	0	0	0	92
Other items	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>92</b>
<b>Exposure Class</b>	<b>0%</b>	<b>20%</b>	<b>75%</b>	<b>100%</b>	<b>Other</b>	<b>Total</b>
<b>31 December 2015 (€000s)</b>						
Institutions	0	204	0	0	0	204
Other items	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>204</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>204</b>

**Table 17: Impact of netting and collateral held on exposure values**

This table provides an overview of the collateral held on exposures.

<b>31 December 2016 (€000s)</b>	<b>Gross positive fair value or net carrying amount</b>	<b>Netting benefits</b>	<b>Netted current credit exposure</b>	<b>Collateral held</b>	<b>Net credit exposure</b>
Derivatives by underlying	211	0	211	119	92
Securities Financing Transactions	0	0	0	0	0
Cross-product netting	0	0	0	0	0
<b>Total</b>	<b>211</b>	<b>0</b>	<b>211</b>	<b>119</b>	<b>92</b>

## 8 Asset Encumbrance

As of 31 December 2016 the carrying and fair value of encumbered assets by type of assets were as follows:

**Table 18: Encumbered assets**

31 December 2016 (€000s)	Encumbered assets				Unencumbered assets			
	Carrying amount	of which notionally eligible EHQLA and HQLA	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>100</b>	<b>0</b>			<b>35,213</b>	<b>0</b>		
Loans on demand	0	0			23,066	0		
Loans & advances other than loans on demand	100	0	0	0	0	0	0	0
Other assets	0	0			12,147	0		

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

**Table 19: Collateral encumbrance**

31 December 2016 (€000s)	Fair value of encumbered collateral received or own debt securities issued		Unencumbered	
		of which notionally eligible EHQLA and HQLA	Fair value of collateral received or own debt securities issued available for encumbrance	of which EHQLA and HQLA
<b>Total assets, collateral received &amp; own debt securities issued</b>	<b>100</b>	<b>0</b>		

**Table 20: Sources of encumbrance**

31 December 2016 (€000s)	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
<b>Carrying amount of selected financial liabilities</b>	<b>100</b>	<b>100</b>
Deposits	100	100
Collateralised deposits other than repurchase agreements	100	100
<b>Total sources of encumbrance</b>	<b>100</b>	<b>100</b>

Note: ABS (Asset-Backed Securities)

## 9 Market Risk

Market Risk is defined as the risk of adverse change to the economic condition of PSIL due to variations in prices, rates, implied volatilities, or correlations of Market Risk factors. Market Risk factors include but are not limited to interest rates, foreign exchange rates, market liquidity and equity prices.

By simply executing orders on behalf of its clients, the PSIL business model does not result in any proprietary trading or high risk investments. However it does act as a riskless principal between its clients and the market which results from time to time in a small position, including in foreign exchange, and which is traded out on an expedited basis. The PHUK Group Credit and Market Risk Committee set small overall limits for foreign exchange positions resulting from client-generated exposure.

PSIL's exposure to Market Risk mainly arises from Foreign Exchange (FX) Risk arising from revenue flows in foreign (non-Euro) currencies.

### Table 21: Market risk – risk weighted assets and capital required

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

Position risk components 31 December 2016 (€000s)	Risk Weighted Assets	Capital requirements
Foreign exchange risk	368	29
<b>Total</b>	<b>368</b>	<b>29</b>

## 10 Interest Rate Risk – Non-Trading Book

Interest Rate Risk (IRR) is the risk associated with changes in interest rates that affect net interest income (NII) from interest-earning assets and interest-paying liabilities. IRR exposure in the non-trading book arises from on and off-balance sheet assets and liabilities and changes with movements in domestic and foreign interest rates.

PSIL does not have any material exposure to Interest Rate Risk in its non-trading book.

## 11 Operational Risk

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.

### 11.1 Operational Risk Management Framework

The Operational Risk Management Framework (ORMF) provides the processes and tools necessary to fulfil a strategy of managing risk through a culture of risk awareness, a clear governance structure, well defined policies and procedure, 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. PSIL has set a risk appetite statement which recognises the inherent nature of Operational Risk and the reliance on the ORMF to mitigate it.

The ORMF defines roles and responsibilities for managing risk, 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 support functions as the first line of defence, where ownership and accountability for the identification, assessment and management of risks that arise through the course of its business and service provision reside.

The second line of defence, being the independent Operational Risk Management function, is responsible for reviewing and challenging the risks identified, assessed and managed by the first line of defence. The Operational Risk function is also responsible for building and maintaining the ORMF framework and partnering the first line of defence to enable them to embed it within their normal business processes.

The third line is Internal Audit, which is organizationally independent from both the first and second line of defence. A key responsibility of the third line as it pertains to the ORMF is to opine on the adequacy of the framework and governance process.

The mechanisms for identifying and managing operational risk include but are not limited to:

**Operational Risk Events (OREs)** – A standard for the capture, notification and reporting of OREs. The collection of internal loss data provides information for assessing the company's exposure to Operational Risk. Analysis of loss events provides insight into the root cause and information on whether a control weakness is isolated or potentially more systemic

**Risk & Control Self-Assessments** – A comprehensive process for business groups and select business partners to identify risks associated with key business processes, identifying and assessing the quality of controls in place to mitigate risk and assigning accountability for the effective operation of those controls in place to mitigate that risk

**Key Risk Indicators (KRIs)** – The use of key metrics designed to monitor risks which could cause financial loss, adverse consequences or reputation damage to the Company. Periodic and consistent monitoring of KRIs ensures that deviations from predetermined standards can be identified, managed and mitigated.

**Operational Risk Scenario Analysis** - Operational risk scenario analysis is used to forecast the significant forward looking operational risks by combining operational risk data with expert management judgement

These risk management processes are mandated through individual Operational Risk Policies. PSIL also uses the BNYMellon group system of record, the Risk Management Platform (RMP), to facilitate many of these processes.

PSIL also maintains a risk register which captures the most material risks associated with the business undertaken and the risk mitigations currently in place. The risk register is updated on a monthly basis.

Current issues, emerging and top risks, adverse KRIs and OREs (>\$10,000) are reported to the PHUK Group Risk Committee.

Risk managers are assigned to oversee the risk management activities undertaken in the business of PSIL. Besides the operational risk function, other internal functions also ensure that processes are in place to support the sound operational risk management of the business e.g. Information Risk Management and Business Continuity Planning.

## 12 Remuneration Disclosure

### 12.1 Governance

The Human Resources and Compensation Committee (HRCC) of The Bank of New York Mellon Corporation (BNY Mellon) oversees Pershing's enterprise-wide employee compensation, benefit policies and programmes. It reviews and is responsible for other compensation plans, policies and programmes in which the executive officers participate and the incentive, retirement, welfare and equity plans in which all employees participate.

Members of the HRCC are non-executive board members, delegated by Pershing's Board of Directors to act on behalf of the Board on remuneration matters.

The company's compensation plans are also monitored by a management-level Compensation Oversight Committee (COC). An important responsibility of the COC is to advise the HRCC on any remuneration risk-related issues.

To ensure alignment with local regulations in BNY Mellon's EMEA (Europe, Middle-East and Africa) region, the EMEA Remuneration Governance Committee (ERGC) was set up as a regional governance committee that reviews and ensures compliance with local regulations affecting BNY Mellon's EMEA businesses.

### 12.2 Aligning Pay with Performance

BNY Mellon's compensation philosophy is to offer a total compensation scheme that supports its 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 rewards 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.

### 12.3 Fixed Remuneration

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.

## 12.4 Ratio between Fixed and Variable Pay

In respect of remuneration to material risk takers (“MRTs”) as determined under the requirements of the Prudential Regulation Authority (PRA) and FCA, the shareholder of Pershing, 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.

## 12.5 Variable Compensation Funding and Risk Adjustment

The employees of PSIL 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.

## 12.6 Deferral Policy and Vesting Criteria

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.

### **12.7 Variable Remuneration of Control Function Staff**

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.

### **12.8 Quantitative Disclosures**

Details of the aggregate remuneration of Material Risk Takers for PSIL for the year ending 31 December 2016 cannot be disclosed on the grounds of data confidentiality.

## Appendix 1 Other Risks

### Liquidity Risk

Liquidity Risk is the risk that PSIL cannot meet its cash and collateral obligations without significantly affecting daily operations or financial conditions. Liquidity risks can arise from funding mismatches, market constraints from an inability to convert assets to cash, inability to raise cash in the markets, deposit run-off, or contingent liquidity events. Changes in economic conditions or exposure to credit, market, operational, legal, and reputational risks also can affect PSIL's liquidity risk profile and are considered in the liquidity risk management framework.

PSIL does not engage in proprietary trading activities or hold assets for resale on its balance sheet, and so does not have significant asset liquidity risk. PSIL's business model is of a transaction processing nature and PSIL maintains a prudent funding profile in order to support its clients trading activities. The availability of sufficient and appropriate credit lines is of paramount importance.

A liquidity risk management framework has been established which is maintained on a day to day basis by the Pershing Treasury department. The ALCO provides oversight and ultimately the PRC and the PSIL Board.

### Regulatory and Compliance Risk

Regulatory and Compliance Risk is defined as sustaining loss arising from non-compliance with laws, directives, regulations, reporting standards and lack of adequately documented and understood processes.

Monitoring and Reporting Risk is the risk of loss arising from a failure to comply with financial reporting standards, agreements or regulatory requirements. This includes risks resulting from action taken by existing and new stockholders, regulators and investors who may have sustained losses due to incomplete, inaccurate or untimely reporting of financial performance.

Existing and new directives and regulations are monitored and reviewed by Compliance and Finance for finance regulatory reporting management and findings are reported to senior management and the Board. Strategies and changes to comply with new regulations are put in place when necessary.

### Reputational Risk

Reputation Risk is the risk to the PSIL's brand and relationships which does not arise out of any one specific error. It can arise from all aspects of business activities, including but not limited to operational failures in business practices, legal or regulatory sanctions, joint ventures with outside firms, engagements with third party vendors, or off-balance sheet activities.

PSIL relies heavily on its reputation and standing in the market place to retain and attract clients.

### Legal Risk

Legal Risk is the risk of inadequate legal advice, inadequate contractual arrangements and failing to take appropriate legal measures to protect rights or changes in laws or regulations. Legal Risk could crystallise through:

Receipt or provision of wrong or inadequate legal advice  
Failure to manage litigation or disputes effectively  
Failure to identify and implement changes in legislation or law  
Failure to appropriately make notifications required as a result of legal requirements  
Failure to ensure adequate contractual arrangements (excluding outsourcing arrangements)  
Failure to manage and/or protect the infringement of rights arising outside of contracts

### **Outsourcing Risk**

Outsourcing Risk is the risk that failure in respect of the provision of services by third party provider(s) could potentially damage PSIL's operations, or if contracts with any of the third party providers are terminated, that PSIL may not be able to find alternative providers on a timely basis or on equivalent terms.

PSIL relies on internal and external outsourcing entities within and outside of the BNY Mellon group to perform its core business activities. To date, PSIL has only outsourced critical tasks to Pershing group entities that hold the required permissions in their jurisdiction to carry out the respective delegated tasks. Currently there are no critical tasks outsourced to third parties outside Pershing entities.

PSIL's outsourcing policy describes minimum standards that should be adopted when considering or dealing with a service and/or activity that is outsourced to another legal entity, either within the Pershing group or to an external provider and establishes a framework for evaluating and analysing outsourcing projects.

### **Business Risk**

Business Risk is the risk of loss that the business environment poses to PSIL's profitability. It normally consists of items such as changes in the external macro environment or client behaviour, inappropriate management actions and performance of competitors. The list is not exhaustive.

### **Concentration Risk**

Concentration Risk is the risk of loss arising from significant interrelated asset or liability exposures, which in cases of distress associated with markets, sectors, countries, or areas of activity, may threaten the soundness of the institution.

Traditionally analysed in relation to credit activities, concentration risk arises from exposures that may arise within or across different risk types, including intra-risk concentration where exposure concentration exists within a single risk type, and inter-risk concentrations arising from interactions between different risk exposures across different risk categories connected by a common risk factor (e.g. counterparties, vendor, economic sector, geographic region, and/or financial instrument/product type).

### **Group Risk**

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

PSIL has a number of dependencies on the larger Pershing group. These range from business leadership, dependency on certain IT systems and support services provided by central functions.

PSIL management has considered several possible scenarios where these services may be affected, these include IT services outage and other business continuity issues. These stress scenarios are included as part of the operational risk assessment, and in the liquidity stress testing.

### **Model Risk**

Model Risk refers to the possibility of unintended business outcomes arising from the design, implementation or use of models. Model risk includes the potential risk that management makes incorrect decisions based either upon incorrect model results, or incorrect understanding and use of model results.

PSIL uses models in its risk management framework. All models have been assessed in line with the relevant corporate policies and model risk management framework wherein the individual model is categorised into one of three tiers based on materiality, complexity, and level of reliance.

Models that impact the capital assessment process are categorised as Tier 1 models and the execution of the validation of Tier 1 models is done by a designated Independent model validation function. Tier 1 models are required to be validated or reviewed, as per the validation standards, on at least an annual basis.

Pershing internal audit provides independent reviews of compliance with the corporate model validation policy

### **Strategic Risk**

Strategic Risk is defined as the risk of direct or indirect loss arising from the adverse effects or the improper implementation of business decisions. It is a function of the compatibility of an organisation's strategic goals, the business strategies developed, the resources deployed to achieve those goals and the quality of implementation. It can result from either a misalignment between strategic decisions taken at the asset servicing and alternative investment services business level which impact PSIL, or failure to deliver business value through new strategic initiatives.

### **Country Risk**

Country Risk is the risk of unfavourable evolution of operating profits and/or value of assets due to changes in the business environment resulting from political or macroeconomic factors.

## 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
- **Central Bank of Ireland (CBI):** Responsible for the regulation of all financial services firms in Ireland
- **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
- **Jersey Financial Services Commission (JFSC):** The Commission is responsible for the regulation, supervision and development of the financial services industry in the Island of Jersey
- **Key Risk Indicator (KRI):** Key Risk Indicators are used by business lines to evaluate control effectiveness and residual risk within a business process
- **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:** PHUK Group'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

CRR ref.	Requirement summary	Compliance ref.	Page ref.
<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		
<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 3 Risk Management Objectives and Policy	13-17
435 (1) (a)	Strategies and processes to manage those risks	Section 3 Risk Management Objectives and Policy	13-17
435 (1) (b)	Structure and organisation of the risk management function	Section 3.1 Risk Governance	13
435 (1) (c)	Scope and nature of risk reporting and measurement systems	Section 3 Risk Management Objectives and Policy	13-17
435 (1) (d)	Policies for hedging and mitigating risk	Section 3 Risk Management Objectives and Policy	13-17
435 (1) (e)	Approved declaration on the adequacy of risk management arrangements	Section 3 Risk Management Objectives and Policy	13-17
435 (1) (f)	Approved risk statement describing the overall risk profile associated with business strategy	Section 3 Risk Management Objectives and Policy	13-17
435 (2) (a)	Number of directorships held by directors	Section 3.1.1 Board of Directors	13

435 (2) (b)	Recruitment policy of Board members, their experience and expertise	Section 3.1.1 Board of Directors	13
435 (2) (c)	Policy on diversity of Board membership and results against targets	Section 3.1.1 Board of Directors	13
435 (2) (d)	Disclosure of whether a dedicated risk committee is in place, and number of meetings in the year	Section 3.1.3 Risk Committees	14
435 (2) (e)	Description of information flow on risk to Board	Section 3.1.3 Risk Committees	14-15
<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	6-11
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	6-11
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	N/A	N/A
437 (1) (a)	Full reconciliation of Common Equity Tier 1 (CET1) items	N/A	N/A
437 (1) (b)	Description of the main features of the CET1 and Additional Tier 1 and Tier 2 instruments	N/A	N/A
437 (1) (c)	Full terms and conditions of all CET1, Additional Tier 1 and Tier 2 instruments	N/A	N/A
437 (1) (d) (i)	Each prudent filter applied	N/A	N/A
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 2 Capital Requirements	12
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 3: Standardised credit exposure by exposure class	19

438 (d) 438 (d) (i) 438 (d) (ii) 438 (d) (iii) 438 (d) (iv)	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 (e)	Own funds requirements for market risk or settlement risk, or large exposures where they exceed limits	Table 2: Capital requirements and Section 9: Market Risk	12 & 31
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 2: Capital requirements and Section 11: Operational Risk	12 & 33-34
438 (endnote)	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach	Table 2: Capital requirements	12
<i>Exposure to counterparty credit risk (CCR)</i>			
439 (a)	Description of process to assign internal capital and credit limits to CCR exposures	Section 7 Counterparty Credit Risk	28-29
439 (b)	Discussion of process to secure collateral and establishing reserves	Section 7 Counterparty Credit Risk	28-29
439 (c)	Discussion of management of wrong-way exposures	Section 7 Counterparty Credit Risk	28-29
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 7 Counterparty Credit Risk	28-29
439 (f)	Exposure values for mark-to-market, original exposure, standardised and internal model methods	Section 7 Counterparty Credit Risk	28-29
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 4.5 Analysis of Past Due and Impaired Exposures	21-23
442 (b)	Approaches for calculating credit risk adjustments	Section 4.5 Analysis of Past Due and Impaired Exposures	21-23
442 (c)	Disclosure of pre-CRM EAD by exposure class	Table 3: Standardised credit exposure by exposure class	19

442 (d)	Disclosures of pre-CRM EAD by geography and exposure class	Table 4: Standardised credit exposure by country	20
442 (e)	Disclosures of pre-CRM EAD by industry and exposure class	Table 5: Standardised post mitigated credit exposures by counterparty type	20
442 (f)	Disclosures of pre-CRM EAD by residual maturity and exposure class	Table 6: Standardised credit exposure by residual maturity	21
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	Table 7: Credit quality of exposures by counterparty type	21
442 (h)	Impaired, past due exposures, by geographical area, and amounts of specific and general impairment for each geography	Table 9: Credit quality of exposures by geographical breakdown	22
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 4.5 Analysis of Past Due and Impaired Exposures	21-23
442 endnote	Specific credit risk adjustments recorded to income statement are disclosed separately	Section 4.5 Analysis of Past Due and Impaired Exposures	21-23
<i>Unencumbered assets</i>			
443	Disclosures on unencumbered assets	Section 8 Asset Encumbrance	30
<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 6 External Credit Assessment Institutions (ECAs)	26-27
444 (b)	Exposure classes associated with each ECAI	Section 6 Table 12: Credit quality steps and risk weights	26
444 (c)	Explanation of the process for translating external ratings into credit quality steps	Section 6 Table 12: Credit quality steps and risk weights	26
444 (d)	Mapping of external rating to credit quality steps	Section 6 External Credit Assessment Institutions (ECAs)	26-27
444 (e)	Exposure value pre and post-credit risk mitigation, by credit quality step	Section 6 Table 11-13: External Credit Assessment Institutions (ECAs)	26-27
<i>Exposure to market risk</i>			
445	Disclosure of position risk, large exposures exceeding limits, FX, settlement and commodities risk	Section 9 Market Risk	31
<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 11 Operational Risk	33-34
<i>Exposure in equities not included in the trading book</i>			
447 (a)	Differentiation of exposures based on objectives	Appendix 1 Settlement Risk: no non-trading book exposure in equities	38
447 (b)	Recorded and fair value, and actual prices of exchange traded equity where it differs from fair value	Appendix 1 Settlement Risk: no non-trading book exposure in equities	38
447 (c)	Types, nature and amounts of the relevant classes of equity exposures	Appendix 1 Settlement Risk: no non-trading book exposure in equities	38
447 (d)	Realised cumulative gains and losses on sales over the period	Appendix 1 Settlement Risk: no non-trading book exposure in equities	38

447 (e)	Total unrealised gains/losses, latent revaluation gains/losses, and amounts included within Tier 1 capital	Appendix 1 Settlement Risk: no non-trading book exposure in equities	38
<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 Bank has no significant Balance Sheet Interest Rate Risk	32
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	N/A	N/A
<i>Exposure to securitisation positions</i>			
449	Exposure to securitisations positions	Appendix 1 Settlement Risk: no non-trading book exposure in equities	38
<i>Remuneration disclosures</i>			
450	Remuneration disclosure regarding remuneration policy and practices	Section 12 Remuneration Disclosure	35-37
450 (1) (a)	Information concerning the decision-making process used for determining the remuneration policy	Section 12.1 Governance	35
450 (1) (b)	Information on link between pay and performance	Section 12.2 Aligning Pay with Performance	35
450 (1) (c)	Important design characteristics of the remuneration system	Section 12 Remuneration Disclosure	35-37
450 (1) (d)	Ratios between fixed and variable remuneration	Section 12.5 Ratio between Fixed and Variable Pay	36
450 (1) (e)	Information on the performance criteria on which the entitlement to shares, options and variable components of remuneration is based	Section 12.6 Deferral Policy and Vesting Criteria	36
450 (1) (f)	Main parameters and rationale for any variable component scheme and any other non-cash benefits	Section 12.7 Variable Remuneration of Control Function Staff	37
450 (1) (g)	Aggregate quantitative information on remuneration by business area	Not disclosed	H/A
450 (1) (h)	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	Not disclosed	H/A
450 (1) (h) (i)			
450 (1) (h) (ii)			
450 (1) (h) (iii)			
450 (1) (h) (iv)			
450 (1) (h) (v)			
450 (1) (h) (vi)			
450 (1) (i)	Number of individuals being remunerated €1 million or more per financial year	Not disclosed	H/A
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	N/A	N/A
451 (1) (b)	Breakdown of total exposure measure	N/A	N/A
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	N/A	N/A
451 (2)	EBA to publish implementation standards for points above	N/A	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	N/A	N/A
453 (b)	How collateral valuation is managed	Section 5.1 Collateral Valuation and Management	24
453 (c)	Description of types of collateral used	Section 5.3 Credit Risk Concentration	24
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 5.3 Credit Risk Concentration	24
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 5.3 Table 10: Credit risk mitigation techniques – overview	24
<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	N/A	N/A
Article 3	Description of the main features of CET1, AT1 and Tier 2 instruments issued (Annex II and III)	N/A	N/A
Article 4	Disclosure of nature and amounts of specific items on own funds (Annex IV and V)	N/A	N/A
Article 5	Disclosure of nature and amounts of specific items on own funds during transitional period (Annex VI and VII)	N/A	N/A
Article 6	Entry into force from 31 March 2014	N/A	N/A



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