BNY MELLON

Pershing Securities International Limited

Pillar 3 Disclosure

December 31, 2018

Executive summary

Capital

Risk

Human resources

Index of tables

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

Appendices

Executive summary

1 Article 431 CRR - Scope of disclosure requirements

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 2018. These Pillar 3 disclosures are published in accordance with the requirements of the Capital Requirements Regulation ('CRR') and the Capital Requirements Directive ('CRD') referred to together as CRD IV, which came into effect on 1 January 2014. CRD IV has the effect of implementing the international Basel III reforms of the Basel Committee on Banking Supervision within the European Union. The Pillar 3 disclosure requirements are contained in Part Eight of the CRR, in particular articles 431 to 455.

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

Clarity

Meaningfulness

Consistency over time

Comparability across institutions

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

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.

The following risk metrics present PSIL's risk components as at 31 December 2018. Please see page 10 for the full comprehensive list capital ratios.

Common Equity Tier 1 ratio	167.3%	↑
	2017: 157.4%	
Tier 1 capital ratio	167.3%	↑
	2017: 157.4%	
Total capital ratio	167.3%	↑
	2017: 157.4%	

CET1 ratio = CET1 capital / Pillar 1 RWAs

Tier 1 ratio = Tier 1 capital / Pillar 1 RWAs

Total capital ratio = Total capital / Pillar 1 RWAs

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

Wherever possible and relevant, the PSIL Board of Directors ('the Board') will ensure consistency between Pillar 3 disclosures, Pillar 1 reporting and Pillar 2 Internal Capital Adequacy Assessment Process ('ICAAP') content.

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	**Counterparty credit risk**	**Asset encumbrance**	**Market risk**
Interest rate risk	**Operational risk**	**Leverage**	

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

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

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

1.4 Article 432 CRR - 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 criteria for materiality used in these disclosures is that the PSIL will regard as material any information where its 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.

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

1.5 Article 433/434 CRR - Frequency and means of disclosure

Disclosure will be made annually based on calendar year end and will be published in conjunction with the preparation of the Annual Report and Financial Statements. 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 will be periodically reassessed and updated in light of market developments associated with Pillar 3.

Disclosures are published on the Pershing and The Bank of New York Mellon Corporation group websites which can be accessed using the link below:

Pershing - Disclosures - Financial & Regulatory Disclosures

BNY Mellon - Investor Relations - Pillar 3 Disclosures

1.6 Board approval

These disclosures were approved for publication by the Board on 17 July 2019. The Board has verified that the disclosures are consistent with formal policies adopted regarding production and validation and are satisfied with the adequacy and effectiveness of the risk management arrangements.

1.7 Key 2018 and subsequent events

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

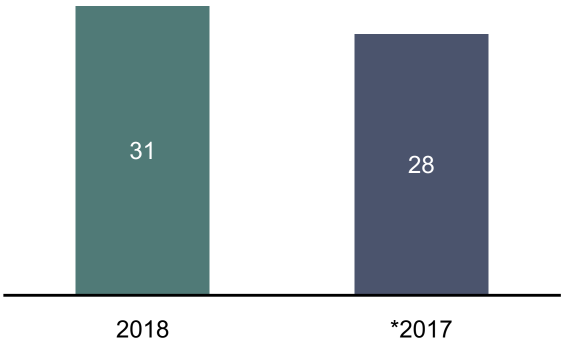
Brexit

In relation to the assessment and monitoring of economic, political and regulatory risks, the Company is continuing to evaluate the impact of the outcome of the referendum in relation to the UK's membership of the EU on the Company's business strategy and business risks in the short, medium and long term. In the short term the Pershing Brexit Programme has determined that there is no significant impact expected on the Company's business activities, there will be no immediate change in business strategy, and we have therefore determined that the going concern position of the Company is not affected. The Company will continue to closely monitor developments and will make appropriate changes to the business strategy as the impact on the UK and European financial services industries becomes clearer.

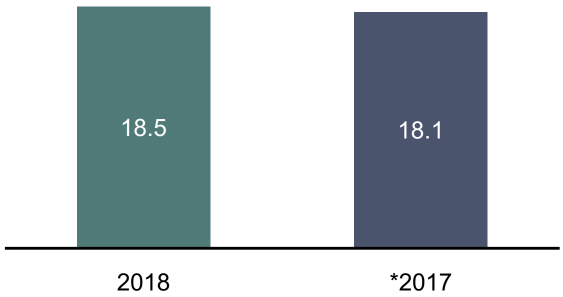
1.8 Key metrics

The following risk metrics reflect PSIL's risk profile:

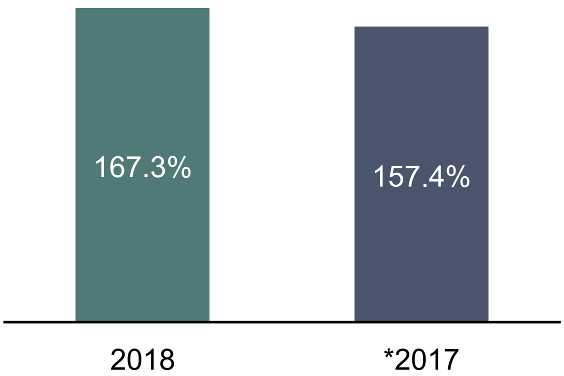
Regulatory capital (€m)



Risk-weighted assets (€m)



CET1 ratio



Total capital ratio

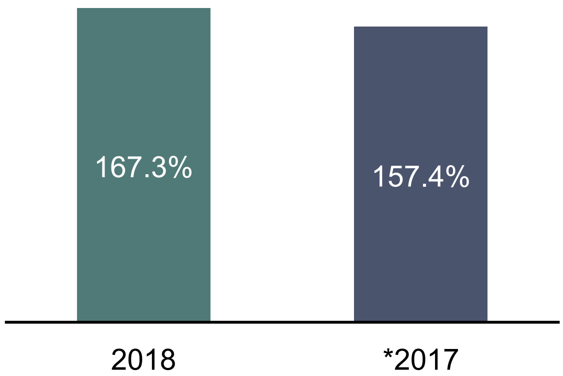


Table 1: KM1 - Key metrics

Own Funds	2018	*2017
Available capital (€000s)		
Common Equity Tier 1 ('CET1') capital	**30,905**	28,457
Tier 1 capital	**30,905**	28,457
Total capital	**30,905**	28,457
Risk-weighted assets (€000s)		
Total risk-weighted assets ('RWA')	**18,473**	18,079
Risk-based capital ratios as a percentage of RWA		
CET1 ratio	**167.3%**	157.4%
Tier 1 ratio	**167.3%**	157.4%
Total capital ratio	**167.3%**	157.4%

*2017 figures have been updated to include all final audit adjustments

1.9 Article 436 CRR - Scope of application

Pershing Securities International Limited ('PSIL') is a private company incorporated and domiciled in the Republic of Ireland. PSIL's immediate parent undertaking is Pershing Limited ('PL'), which is, in turn a subsidiary of Pershing Holdings (UK) Limited ('PHUK'). Pershing Holdings (UK) Limited is a holding company for a group of subsidiaries which provide a full range of execution, middle-office and post-trade services, investment administration, Self-Invested Personal Pension ('SIPP') operation services and related services. Pershing Holdings (UK) Limited is incorporated in the UK and is a operationally independent subsidiary of Pershing Group LLC which is, in turn a subsidiary of the Bank of New York Mellon Corporation.

Pershing Group LLC is engaged in broadly the same business activity as PSIL.

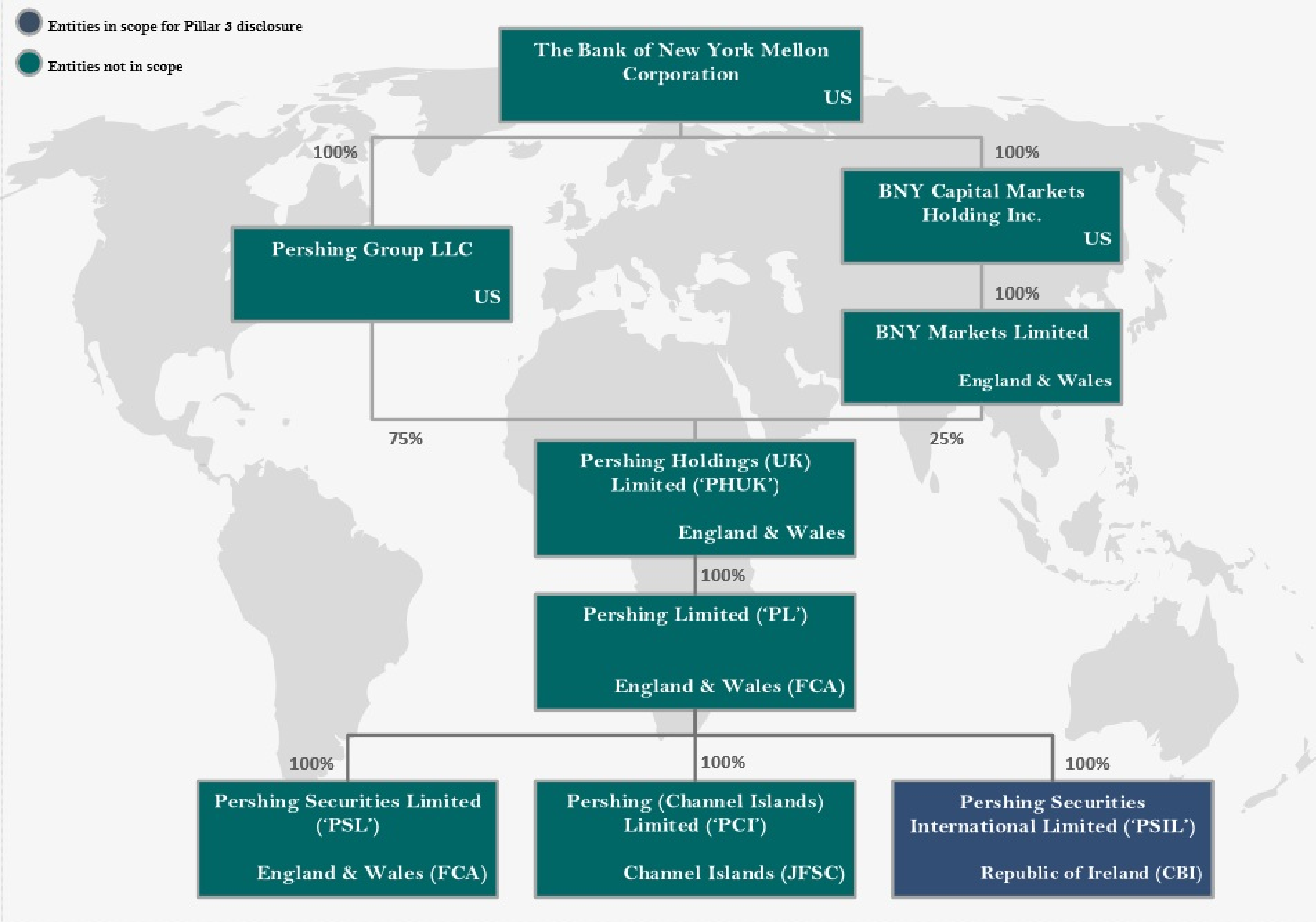
BNY Mellon Group ('BNY Mellon') is a global investments company dedicated to helping its clients manage and service their financial assets throughout the investment lifecycle. Whether providing financial services for institutions, corporations or individual investors, BNY Mellon delivers informed investment management and investment services in 35 countries and more than 100 markets. As of 31 December 2018, BNY Mellon had $33.1 trillion in assets under custody and/or administration, and $1.7 trillion in assets under management. BNY Mellon can act as a single point of contact for clients looking to create, trade, hold, manage, service, distribute or restructure investments. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation (NYSE: BK). Additional information is available on www.bnymellon.com. Follow us on Twitter @BNYMellon or visit our newsroom at www.bnymellon.com/newsroom for the latest company news.

PSIL is 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 legal entity structure of PSIL is illustrated in Figure 1.

Figure 1: PSIL legal entity structure at 31 December 2018



Basis of consolidation

Entity name	Consolidation basis	Services provided
Pershing Securities International Limited ('PSIL')	No subsidiaries for consolidation	PSIL's principal activities are the provision of execution, middle-office and post-trade services, investment administration and related services.

1.10 Core business lines

The principal activities of PSIL include the provision of a full range of clearing and settlement, investment administration, 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, with execution services being facilitated through PSL.

The financial strength of PSIL's ultimate parent BNY Mellon, a G-SIFI (Global Systemically Important Financial Institution) is viewed as giving PSIL a competitive advantage in the market place. 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 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 the knowledge of holding their end investors assets with the world's largest global custodian.

Clients include wealth managers, advisers and independent financial advisor ('IFA') consolidators that provide platform services for smaller IFA 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, Model B, WAS or GlobalClear Model, as outlined below.

Model A

Under Model A client firms contract to outsource their settlement and clearing functions to PSIL. 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 earned by client firms and cash collateral deposits.

WAS Model

The WAS Model is very similar to Model B, but utilises less functionality than is available for Model B clients. Trades are routed exclusively to PSL for execution only where the underlying investor has cash or stock on their accounts. The single execution counterparty for the WAS client is PSL. Also, because trade instructions will not be accepted/dealt by PSL unless cash or stock is on the end investors accounts there is no requirement for a client cash deposit.

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.

Capital

2 Article 438 CRR - Capital requirements

The following risk metrics present PSIL's risk components as at 31 December 2018.

Total pillar 1 risk exposure amount	€18m 2017: €18m	⇔
Total pillar 1 capital requirement	€1.48m 2017: €1.45m	↑

PSIL has an Internal Capital Adequacy Assessment Process ('ICAAP') which defines the risks that 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.

For investment firms, in the sense of Article 20(2) of the Capital Requirements Directive 6, the minimum capital requirement is the higher of the sum of credit risk and market risk or the Fixed Overhead Requirement ('FOR').

Table 2: EU OV1 - Overview of RWAs

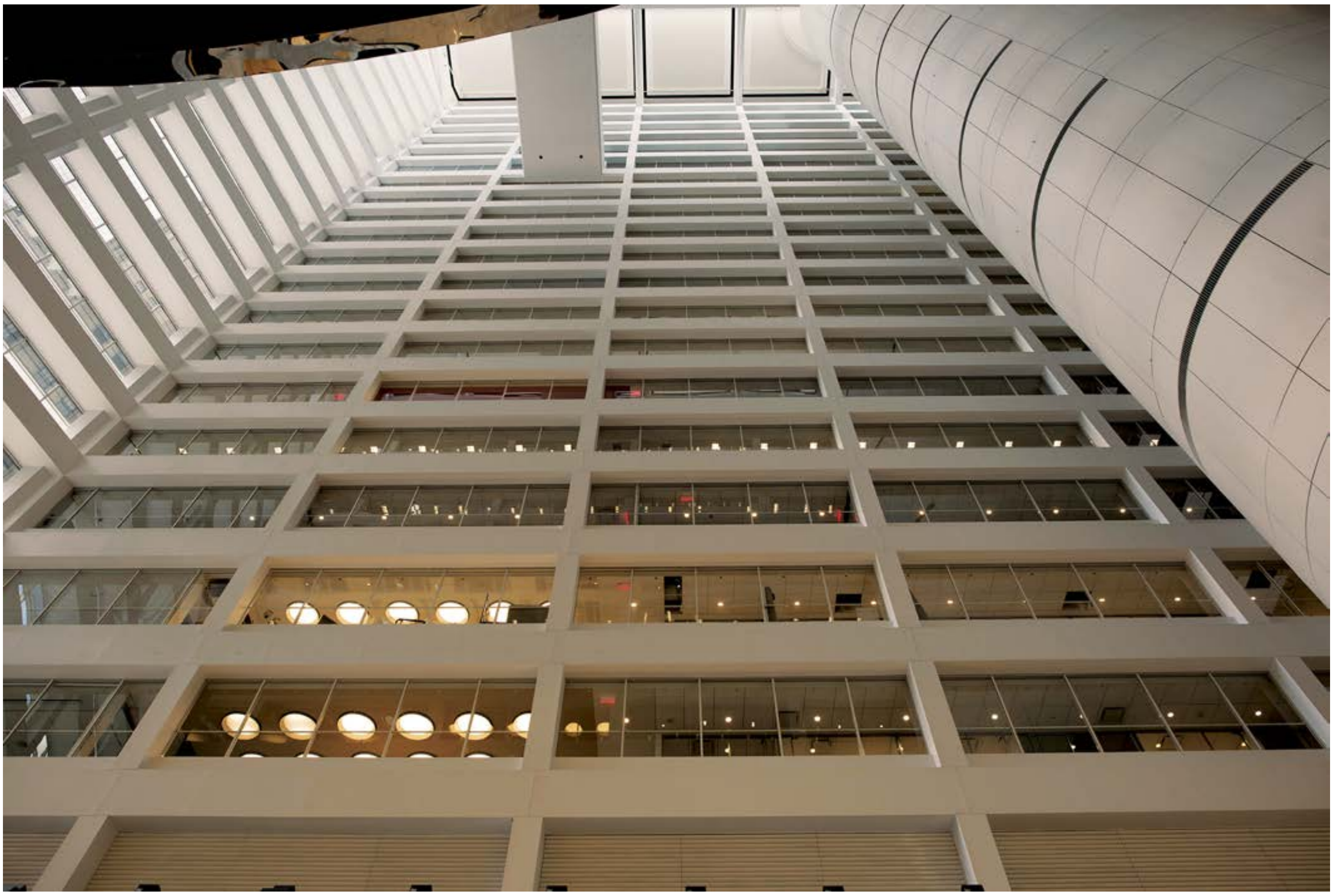
This table shows the risk-weighted assets using the standardised approach and their respective capital requirements

	Risk exposure amount		Capital requirements	
Type of risk (€000s)	**31-Dec-18**	**31-Dec-17**	**31-Dec-18**	**31-Dec-17**
Credit risk*	**8,566**	11,667	**685**	933
Counterparty credit risk*	**72**	17	**6**	1
Settlement risk*	**59**	91	**5**	7
Market risk*	**423**	564	**34**	45
*of which: Foreign exchange position risk**	**423**	564	**34**	45
Total (credit risk and market risk)	**9,120**	**12,339**	**730**	**987**
Fixed overhead requirement	**18,473**	18,079	**1,478**	1,446
Pillar I requirement	**18,473**	**18,079**	**1,478**	**1,446**
Total capital			**30,905**	**28,457**
Surplus capital			**29,427**	27,010

*Standardised approach

PSIL significantly exceeds the minimum capital ratios required to maintain a well-capitalised status and 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.

Risk



3 Article 435 CRR - Risk management objectives and policies

PSIL adopts a prudent approach to all elements of risk to which it is exposed. It is risk averse by nature and manages its business activities in a manner consistent with the tolerances and limits defined within its risk appetite quantitative and qualitative measures.

PSIL seeks to manage risk through a collection of complementary processes and methodologies, designed to enable risks to be consistently identified, measured, managed and ultimately reported through its governance structure.

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 PL, PHUK, PGL and BNY Mellon 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

Risk statement

As part of a global investment company, risk is a fundamental characteristic of our business. As such, our approach to risk taking and how we consider risk relative to reward directly impacts our success. We have, therefore, established what we consider acceptable risk and set limits on the level and nature of the risk that we are willing and able to assume in achieving our strategic objectives and business plans. Our Risk Appetite Statement ("RAS") serves this purpose and guides our decision-making processes, including the manner by which we pursue our business strategy and the method by which we manage risk and determine whether our risk position is within our risk appetite.

The RAS outlined below describes both the nature of, and our tolerance for, the material risks that are inherent in our business. Because reputational risk typically arises as a consequence of another risk event, it is not explicitly described. However, maintaining a strong brand and reputation is fundamental to our ability to attract and retain clients. As such, we consider reputational impact as part of our overall risk management process. Similar to reputational risk, litigation risk is often an outcome of another risk event and is therefore not individually described. However, the financial services industry continues to face increasingly large adverse litigation outcomes that can substantively impact capital position. As such, litigation risk is a key consideration within our overall risk management framework.

The Board adopts a prudent approach to all elements of risk to which it is exposed. It is risk averse by nature and manages its business activities in a manner consistent with the tolerances and limits defined within it risk appetite quantitative and qualitative measures. These measures and thresholds are built into its operating processes and governance structures.

PSIL business model is centered upon the provision of a broad range of financial business solutions to broker-dealers, wealth managers, financial planners and advisers across EMEA. We provide sophisticated front-end technology and flexible middle office capabilities with settlement and custody services. These are supported by a robust regulatory and compliance framework with dedicated client asset experience and expertise.

PSIL's strategy is to strengthen its digital offering, whilst continuing to concentrate upon the delivery of services that are essential to the current marketplace that focuses upon operational and market efficient, advanced technology solutions and fully meets regulatory expectations.

PSIL is faced with complex statutory and regulatory requirements that are evolving and intensifying as new market and regulatory reforms are implemented. Select new reforms could impact our business activity and strategy creating both risk and opportunity that we seek to fully mitigate and leverage.

PSIL seeks to maintain a strong liquidity profile by actively managing its liquidity positions and ensuring that there are sufficient deposits and funding in place to meet timely payment and settlement obligations under both normal and stressed conditions.

PSIL seeks to minimise credit and market risk to the amount and type appropriate for it to accept in order to execute its principal activities. This is achieved through the monitoring and managing of established mark-to-market portfolio tolerances, tailored credit limits and collateral management.

Given the nature of the PSIL business, the potential for operational risk is inherent. While we seek to mitigate such risk through the application of a prudent control framework across three lines of defence, we recognise that a moderate degree of residual risk is intrinsic and forms part of our overall appetite.

Thresholds and Metrics

Risk Type	Qualitative Statement	Objective	Quantitative Metric	Risk Appetite (Amber Threshold)	Risk Appetite (Red Threshold)	Frequency of Measurement	Governance
Strategic	The development of PSIL's business objectives are sponsored by the CEO and approved by the Board.	Track the percentage change in pre-tax income on a rolling 4 - quarter basis.	Annualised percentage change in pre-tax income on a rolling 4 - quarter basis (if negative).	> 12%	> 24%	Quarterly	The CEO and Board provide oversight and monitoring of the business plans, objectives and strategic direction
Capital	The Board is committed to ensuring that the firm is appropriately capitalised at all times. The level of capital held by PSIL seeks to be in excess of the current regulatory requirements and at no times should fall below the levels approved by the Board.	Seeks to ensure that the firm remains capitalised at all times. Regulatory Capital (CET1, T1 and Total) will not fall to a level below internally set capital target levels which are higher than the minimum capital requirements (regulatory and/or internally assessed) as set out within III-OP-7.115 Pershing Limited Consolidated Capital Management Policy.	Number of times in the month Regulatory Capital (CET1, T1 and Total) fell below 120%.	N/A	> 0	Monitored Daily & Reported Monthly in Risk Appetite	Daily Compliance Officer, Monthly PSIL Mgmt., ICROC, and ALCO
			Regulatory Capital Stress Test	< 140%	<120%	Annually	ICROC oversight of the capital stress testing programme conducted via ICAAP
Market	PSIL seeks to minimise market risk to the amount and type appropriate for it to be appropriate in order to execute its principal activities. The management of market risk is correlated to the management of related credit risk. Given the broad range of products traded by PSIL clients and the varying levels of risk presented by each asset class PSIL has adopted a daily negative mark-to-market exposure measure for all open trades as an indication of risk appetite adjusted by the Tangible Net Worth of each client.	Net client Mark-to-Market exposure (top 3 counterparties) v 100% of the client's Tangible Net Worth (TNW) should not exceed €485k (£430k) in aggregate on a daily basis. Any breaches are mitigated as per actions set out in Pershing EMEA credit and market risk management policies.	Number of days in the month where net client MtM exposure (top 3 counterparties) v 100% of each client's TNW exceeded €485k (£430k) in aggregate.	N/A	> 0	Monitored Daily & Reported Monthly in Risk Appetite	Daily Risk Officer, Weekly report to PECAM, Monthly report to PSIL Mgmt. and ICROC

Risk Type	Qualitative Statement	Objective	Quantitative Metric	Risk Appetite (Amber Threshold)	Risk Appetite (Red Threshold)	Frequency of Measurement	Governance
Credit	**Collateralised Lending risk** PSIL provides a limited amount of credit facilities in the form of margin finance and securities finance to a small number of clients.	Daily oversight of the active clients' margin excess/deficit via their daily Margin Statement as uploaded to the clients' FTP site.	Number of days in the month the clients Margin Statement was in deficit.	> 1	> 2	Monitored Daily, Weekly & Reported Monthly in Risk Appetite	Daily Risk Officer Weekly reported to PECAM Monthly report to PSIL Mgmt. and ICROC
	Provision of Credit Facilities risk Other than above, PSIL does not actively sell or provide credit facilities to clients except to the extent that this is required to facilitate the settlement of trades.	Daily oversight of active clients' MtM exposure as % of their TNW to seek to ensure remains is within agreed internal limits.	Average number of active clients whose daily MtM exposure (top 3 counterparties) exceeded 100% of their TNW.	> 0	> 1	Monitored Daily, Weekly & Reported Monthly in Risk Appetite	Daily Risk Officer Weekly reported to PECAM Monthly report to PSIL Mgmt. and ICROC
	Counterparty risk PSIL seeks to minimise its bank counterparty risk through selective and conservative placement process. PSIL seeks to minimise its counterparty credit risk through its prudent approval process and monitoring.	Establish and monitor client free money bank deposits and seek to ensure compliance with policy, risk appetite and regulatory requirement.	The number of PSIL Client Money Bank Accounts breaches of the PSIL Bank and Custodian Review Policy (III-OP-7.061).	N/A	> 0	Monitored Daily, Weekly & Reported Monthly in Risk Appetite	Daily Risk Officer Weekly reported to PECAM Monthly report to PSIL Mgmt. and ICROC

3.1 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 during 2018 were:

Board member	Function at PSIL	Name of the other company in which an external function is exercised	Location (country)	Type of activities	Listed company (Y/N)	External mandate (title)	Capital connection with PSIL (Y/N)
J Duffy	Non-executive Director						
N Harrington	Chief Executive Officer						

Board member	Function at PSIL	Name of the other company in which an external function is exercised	Location (country)	Type of activities	Listed company (Y/N)	External mandate (title)	Capital connection with PSIL (Y/N)
K Molony	Chair and Independent Non-executive Director						
G Towers	Executive Director						
J Wheatley	Non-executive Director						
E Canning	Executive Director	Providence Row	United Kingdom	Social work activities, housing	N	Chair of the Trustees	N

Note: All Board members have no material interest of more than 1% in the share capital of the ultimate holding company or its subsidiaries

Note: E Canning appointed as director effective from April 25, 2018

3.1.1 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 Pershing Limited ('ExCo') according to approved plans, policies and risk appetite.

ExCo further delegates specific responsibilities to various committees and councils 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 PL entities including PSIL. The PRC reports to ExCo and forms a central point for the oversight and management of risk and the escalation of significant risk issues and events to PSIL Senior Management, ICROC and the PSIL Board. 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, Asset and Liability Committee, and the Client Assets Council. PRC is chaired by the Chief Risk Officer.

Credit and Market Risk Committee

The Credit and Market Risk Committee ('PECAM') oversees the review of all credit and market risk issues associated with and impacting on business undertaken by PL entities including PSIL. The committee's principal credit risk responsibility is to achieve and maintain an acceptable credit exposure to PSIL's clients, as well as to market makers, custodians and banks. PECAM is chaired by the Director of Credit and Market Risk.

Asset and Liability Committee

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

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. ALCO is chaired by the Chief Financial Officer.

Irish Compliance, Risk and Oversight Committee

The Irish Compliance, Risk and Oversight Committee ('ICROC') assist the Board of PSIL and ExCo in overseeing PSIL's compliance with its regulatory, risk and legal obligations including adherence to applicable Irish laws, guidelines and notices effecting its operations and regulatory requirements and guidelines issued by the Central Bank of Ireland and with PL's compliance, risk and oversight policies. ICROC is chaired by PSIL Chief Executive Office.

Business Acceptance Committee

The 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 for all PL entities including PSIL. It is chaired by the PL Chief Executive Officer and includes 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 all PL entities including 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.

Client Asset Council

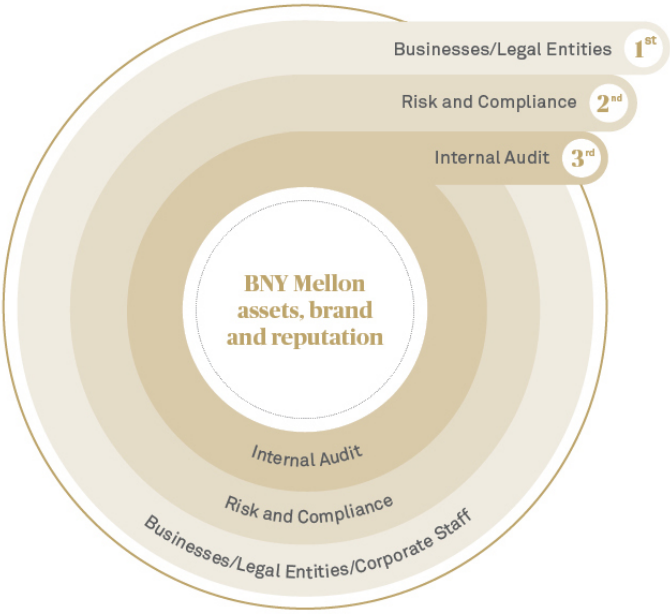
The Client Asset Council is responsible for the oversight and governance of all PL entities including PSIL and ensuring PSIL adherence to the CBI custody and client money rules. The council reports to the PRC to confirm the adequacy of systems and controls in place to ensure that the seven client asset core principles are fully adhered to in accordance with regulatory rules.

3.2 Risk management framework

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. In line with global policy, PSIL has adopted the ‘Three Lines of Defense’ model in deploying its risk management framework (figure 2 below).

Figure 2: Managing Three Lines of Defense

Three Lines of Defense



1st Businesses, corporate staff and legal entities

- Understand and manage the risks inherent in their business, including those associated with products and clients
- Assume full ownership through identifying, managing and monitoring risks
- Ensure that controls and sound business-level policies are in place
- Operate within their risk appetite
- Escalate issues in a timely manner

2nd Risk and compliance

- Provides independent oversight and challenge of risk management by the first line
- Owns enterprise risk and compliance framework, including policies, measures and limits
- Monitors the effectiveness of the accuracy of reports, compliance with laws and regulations, and timely remediation of deficiencies
- Identifies and anticipates known risks and emerging issues; reports on enterprise-wide risks

3rd Internal audit

- Acts independently from first two lines of defense
- Conducts risk-based audits
- Monitors effectiveness of governance, risk management and internal controls, including how the first and second lines meet their risk management responsibilities
- Reports on the company's effectiveness in identifying and controlling risks
- Tracks and validates resolution of audit issues

3.3 Risk appetite

The Board adopts a prudent approach to all elements of risk to which it is exposed. It is risk averse by nature and manages its business activities in a manner consistent with the tolerances and limits defined within its risk appetite quantitative and qualitative measures. These measures and thresholds are built into its operating processes and governance structures. The risk appetite statement describes both the nature of, and tolerance for, the material risks that are inherent in PSIL's business.

3.4 Stress testing

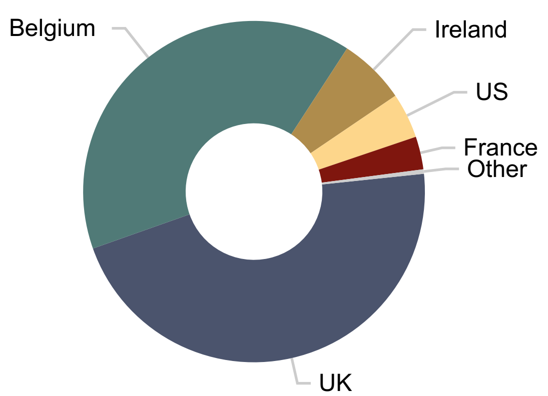
Capital Stress testing is undertaken at PSIL to monitor and quantify risk exposures and capital requirements to ascertain whether or not there are sufficient capital resources on a forward-looking basis. The process involves developing stressed scenarios that identify an appropriate range of adverse circumstances of varying nature, severity and duration relevant to PSIL's risk profile and business activities. Scenarios are derived from current, emerging, and plausible future risks and strategy, and reviewed, discussed and agreed by ICROC, PRC, ExCo and the Board.

4 Article 442 CRR - Credit risk adjustments

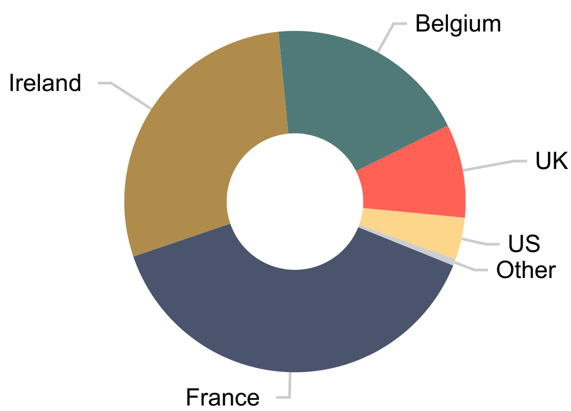
The following risk metrics present PSIL's risk components as at 31 December 2018.

Standardised net credit exposure amount	€39m	
	2017:	€29m
Total on and off-balance sheet exposures	€39m	
	2017:	€29m

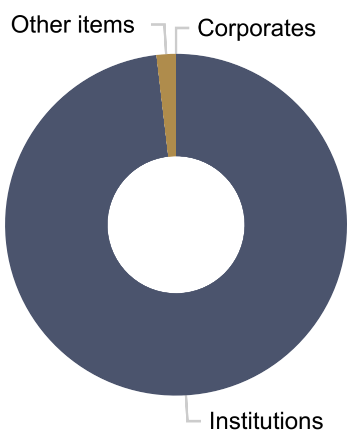
Standardised credit exposure by country at 31 December 2018



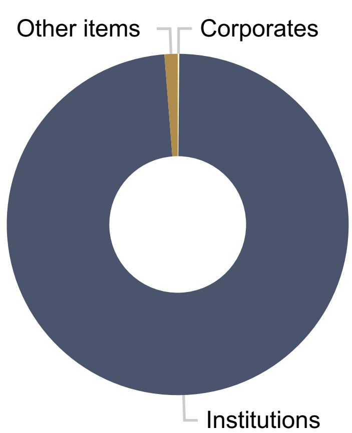
Standardised credit exposure by country at 31 December 2017



Standardised net credit exposure by counterparty at 31 December 2018



Standardised net credit exposure by counterparty at 31 December 2017



4.1 Definition and identification

Credit risk is the risk of loss in the event that a client, underlying investor or counterparty fails to meet its contractual obligations to PSIL.

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.

The nature of PSIL's business as a provider of clearing and settlement services results in credit risk mainly arising from the risk of loss in the event that a client, underlying client 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 financial instruments and foreign currency prices. In addition, PSIL also requires most 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 tangible 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 of defence. 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 tangible net worth of the client and utilised as the higher of total purchases or total sales)
    - Negative mark-to-market exposure

    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.

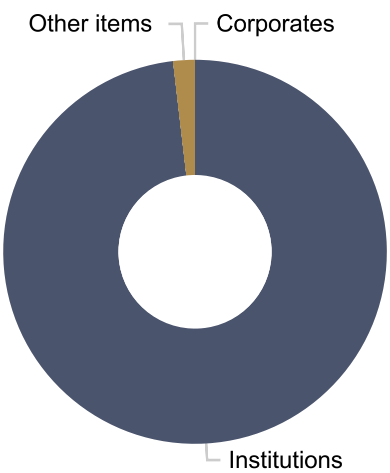
4.3 Governance

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:

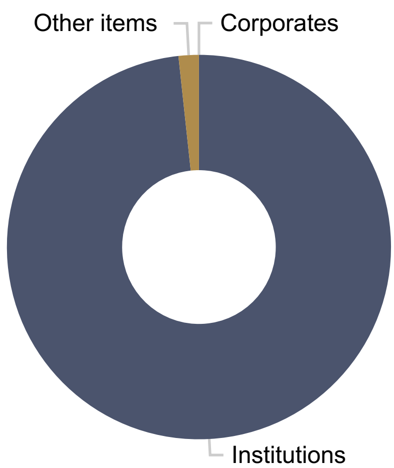
- Credit Risk Policy for each legal entity describes the outsourcing of credit risk tasks, defines roles and responsibilities and requires reporting to be carried out to each business line and entity that the policy applies to. Any deviation from approved policy requires either senior business or senior legal entity approval depending on the type of event
- Approvals for excesses are controlled using a matrix of credit risk approval authorities held within the Credit Risk Policy, each Credit Risk Officer has his/her own individual delegated approval authority granted by the Director of Credit and Market Risk. He/she must act within those limits when making approvals. If an excess is beyond the officer's approval limit, it is escalated to a more senior officer as per the applicable Credit Risk Policy. The outsourcing of credit responsibility to Credit Risk is through the Board approved Credit Risk Policy
- Daily exposure reports are reviewed and signed by a senior member of the Credit Risk Department. The Credit & Market Risk Committee reviews the top exposure items for each client and counterparty weekly; monthly reports are reviewed by ICROC and PRC within the overall framework set by the PSIL Risk Appetite Statement. At each of these monitoring and review stages action points are recorded to follow up on breaches.

4.4 Analysis of credit risk

Total net exposures at 31 December 2018



Average net exposures over 2018



PSIL's minimum credit risk capital requirement is calculated using the standardised approach and is expressed as 8% of risk-weighted exposures. Where available, issuer ratings from External Credit Rating Assessment Institutions ('ECAI') are used in the determination of the relevant risk-weighting across all exposure classes. Where ECAI ratings differ, the more conservative rating is applied.

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 country location for the counterparty
- **Residual maturity** is defined as the period outstanding from the reporting date to the maturity or end date of an exposure

Table 3: EU CRB-B - Total and average net amount of exposures

The following tables show the credit risk for pre-CRM techniques using the standardised approach by exposure class at 31 December 2018.

Exposure class (€000s)	Net value at the end of the period	Average net value over the period
Corporates	—	—
Institutions	38,335	34,526
Other items	722	599
Public sector entities	—	—
Total	**39,057**	**35,125**

Table 4: EU CRB-C - Geographical breakdown of exposures

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

31 December 2018 (€000s)	UK	Belgium	Ireland	US	France	Other	Total
Corporates	—	—	—	—	—	—	—
Institutions	18,066	15,459	1,754	1,676	1,215	165	38,335
Other items	—	—	722	—	—	—	722
Public sector entities	—	—	—	—	—	—	—
Total	**18,066**	**15,459**	**2,477**	**1,676**	**1,215**	**165**	**39,057**

31 December 2017 (€000s)	France	Ireland	Belgium	UK	US	Other	Total
Corporates	—	44	—	—	—	—	44
Institutions	11,286	7,965	5,603	2,585	1,155	187	28,780

31 December 2017 (€000s)	France	Ireland	Belgium	UK	US	Other	Total
Other items	—	363	—	—	—	—	363
Public sector entities	—	—	—	—	—	—	—
Total	**11,286**	**8,372**	**5,603**	**2,585**	**1,155**	**187**	**29,187**

Table 5: EU CRB-D - Concentration of exposures by counterparty types

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

At 31 December 2018 (€000s)	General governments	Credit institutions	Other financial corporations	Various balance sheet Items	Total
Corporates	—	—	—	—	—
Institutions	—	38,335	—	—	38,335
Other items	—	—	—	722	722
Public sector entities	—	—	—	—	—
Total	**—**	**38,335**	**—**	**722**	**39,057**

Table 6: EU CRB-E - Maturity of exposures

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

At 31 December 2018 (€000s)	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
Corporates	—	—	—	—	—	—
Institutions	38,335	—	—	—	—	38,335
Other items	722	—	—	—	—	722
Public sector entities	—	—	—	—	—	—
Total	**39,057**	**—**	**—**	**—**	**—**	**39,057**

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 2018, 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: EU CR1-A - Credit quality of exposures by exposure class and instrument

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

31 December 2018 (€000s)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
General governments	—	—	—	—	—	—	—
Credit institutions	—	38,335	—	—	—	—	38,335
Other financial corporations	—	—	—	—	—	—	—
Various balance sheet Items	—	722	—	—	—	—	722
Total	**—**	**39,057**	**—**	**—**	**—**	**—**	**39,057**

31 December 2017 (€000s)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
General governments	—	—	—	—	—	—	—
Credit institutions	—	28,780	—	—	—	—	28,780
Other financial corporations	—	44	—	—	—	—	44
Various balance sheet Items	—	363	—	—	—	—	363
Total	**—**	**29,187**	**—**	**—**	**—**	**—**	**29,187**

Table 8: EU CR1-B - Credit quality of exposures by industry

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

31 December 2018 (€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	—	39,057	—	—	—	—	39,057
Total	**—**	**39,057**	**—**	**—**	**—**	**—**	**39,057**

31 December 2017 (€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	—	29,187	—	—	—	—	29,187
Total	**—**	**29,187**	**—**	**—**	**—**	**—**	**29,187**

Table 9: EU CR1-C - Credit quality of exposures by geography

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

31 December 2018 (€000s)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
United Kingdom	—	18,066	—	—	—	—	18,066
Belgium	—	15,459	—	—	—	—	15,459
Ireland	—	2,477	—	—	—	—	2,477
United States	—	1,676	—	—	—	—	1,676
France	—	1,215	—	—	—	—	1,215
Other	—	165	—	—	—	—	165
Total	**—**	**39,057**	**—**	**—**	**—**	**—**	**39,057**

31 December 2017 (€000s)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
France	—	11,286	—	—	—	—	11,286
Ireland	—	8,456	—	—	—	—	8,456
Belgium	—	5,603	—	—	—	—	5,603
United Kingdom	—	2,585	—	—	—	—	2,585
United States	—	1,155	—	—	—	—	1,155

31 December 2017 (€000s)	Exposures		Credit risk adjustments		Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted	Non-defaulted	Specific	General			
Other	—	103	—	—	—	—	103
Total	**—**	**29,187**	**—**	**—**	**—**	**—**	**29,187**

5 Article 453 CRR - Credit risk mitigation

The following risk metrics present PSIL's risk components as at 31 December 2018.

Total exposure unsecured	€39m	
	2017: €29m	
Total exposure secured	€0m	
	2017: €0m	

PSIL mitigates credit risk through a variety of strategies including obtaining cash collateral.

5.1 Collateral valuation and management

PSIL can receive collateral from clients which can include guarantees, cash or eligible debt securities and has the ability to call on this collateral in the event of a default by the client.

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 client or market counterparty increases when the counterparty's credit quality deteriorates.

5.3 Credit risk concentration

PSIL is exposed to credit risk concentration 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.

Ongoing assessments of credit concentration risk are performed as part of the Pillar 2 risk assessment process.

The number of counterparties PSIL is willing to place funds with is limited and hence, concentration risk can 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: EU CR3 - Credit risk mitigation techniques - overview

This table shows the extent of credit risk mitigation techniques utilised by PSIL including all credit derivatives.

31 December 2018 (€000s)	Exposures unsecured: carrying amount	Total exposures secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Corporates	—	—	—	—	—
Institutions	38,693	—	—	—	—
Other items	722	—	—	—	—
Public sector entities	—	—	—	—	—
Retail	—	—	—	—	—
Total exposures	**39,415**	**—**	**—**	**—**	**—**
Of which defaulted	—	—	—	—	—

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

There are no exposures covered by guarantees or credit derivatives at 31 December 2018 consistent with the previous year. Using guarantees has the effect of replacing the risk-weight of the underling exposure with that of the institution providing the credit protection. Guarantors are primarily rated as investment grade.

6 Article 444 CRR - External credit rating assessment institutions

The following risk metrics present PSIL's risk components as at 31 December 2018.

Total risk-weighted assets	€39m 2017: €29m	↑
Total credit risk exposure post CCF and CRM	€39m 2017: €29m	↑

The standardised approach requires PSIL to use risk assessments prepared by External Credit Rating Assessment Institutions ('ECAI') 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 PSIL's nominated ECAIs' credit assessments to the credit quality steps.

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

Table 12: Credit quality steps and risk-weights

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

	Risk-weight					
Exposure class	**CQS 1**	**CQS 2**	**CQS 3**	**CQS 4**	**CQS 5**	**CQS 6**
Central governments and central banks	0%	20%	50%	100%	100%	150%

Exposure class	Risk-weight CQS 1	CQS 2	CQS 3	CQS 4	CQS 5	CQS 6
Covered Bonds	10%	20%	20%	0.5	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: EU CR4 - 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 at 31 December 2018 (€000s)	Exposures before CCF and CRM balance sheet amount On-	Off-	Exposures post CCF and CRM balance sheet amount On-	Off-	RWA	RWA density
Corporates	—	—	—	—	—	100%
Institutions	38,335	—	38,335	—	7,844	20%
Other items	722	—	722	—	722	100%
Total	**39,057**	**—**	**39,057**	**—**	**8,566**	**22%**

Table 14: EU CR5 - Credit risk exposure by 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 2018 (€000s)	—%	20%	50%	75%	100%	Total
Corporates	—	—	—	—	—	—

Exposure class at 31 December 2018 (€000s)	—%	20%	50%	75%	100%	Total
Institutions	—	37,738	580	—	17	38,335
Other items	—	—	—	—	722	722
Total	**—**	**37,738**	**580**	**—**	**739**	**39,057**

Exposure class at 31 December 2017 (€000s)	—%	20%	50%	75%	100%	Total
Corporates	—	—	—	—	44	44
Institutions	—	20,414	2,378	—	5,988	28,780
Other items	—	—	—	—	363	363
Public sector entities	—	—	—	—	—	—
Total	**—**	**20,414**	**2,378**	**—**	**6,395**	**29,187**

7 Article 439 CRR - Exposure to counterparty credit risk

The following risk metrics present PSIL's risk components as at 31 December 2018.

Counterparty credit risk exposure	€0.36m	
	2017:	€0.08m
Risk-weighted assets	€0.07m	
	2017:	€0.02m

Counterparty credit risk arises in limited circumstances when PSIL approves a client or counterparty trades to not settle on a delivery versus payment basis or at a settlement or delivery date that is later than the market standard of five business days.

Table 15: EU CCR1 - 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.

Counterparty Credit Risk (€000s)		
Derivatives and long settled trades - Mark-to-market method	**31 December 2018**	**31 December 2017**
Gross positive fair value of contracts	—	—
Potential future credit exposure	—	—
Netting benefits	—	—
Net current credit exposure	358	84
Collateral held notional value	—	—
Exposure and collateral adjustments	—	—
Net derivatives / long settled trades credit exposure	**358**	**84**
Risk-weighted assets	72	17
SFT - under financial collateral comprehensive method	**31 December 2017**	**31 December 2017**
Net current credit exposure	—	—
Risk-weighted assets	—	—
Counterparty Credit Risk exposure	**358**	**84**

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. The standardised approach uses the external credit rating of each counterparty and includes the effective maturity and exposure at default.

As at 31 December 2018, PSIL had no exposure subject to the credit valuation adjustment capital charge.

Table 16: EU CCR3 - CCR exposures by regulatory portfolio and risk

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

Exposure class 31 December 2018 (€000s)	0%	20%	75%	100%	Other	Total
Institutions	—	358	—	—	—	358
Other items	—	—	—	—	—	—
Total	**—**	**358**	**—**	**—**	**—**	**358**

Exposure class 31 December 2017 (€000s)	0%	20%	75%	100%	Other	Total
Institutions	—	84	—	—	—	84
Other items	—	—	—	—	—	—
Total	**—**	**84**	**—**	**—**	**—**	**84**

Table 17: EU CCR5-A - Impact of netting and collateral held on exposure values

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

31 December 2018 (€000s)	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives by underlying	358		358	—	358
Securities Financing Transactions	—		—	—	—
Cross-product netting	—		—	—	—
Total	**358**	**—**	**358**	**—**	**358**

8 Article 443 CRR - Asset encumbrance

The following risk metrics present PSIL's risk components as at 31 December 2018.

Carrying amount - encumbered assets

€0.05m

2017: €0.10m

Carrying amount - unencumbered assets

€19.4m

2017: €39.1m

Table 18: AE-A - Encumbered assets

The carrying and fair value of encumbered assets by type, based on median values in 2018, are as follows:

31 December 2018 (€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
Assets of the reporting institution	**50**	**—**			**19,443**	**—**		
Other assets	50	—			19,443	—		

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

Table 19: AE-B - Collateral

The reportable encumbered collateral received, or available for encumbrance based on median values are presented below:

31 December 2018 (€000s)	Fair value of encumbered collateral received or own debt securities issued		Unencumbered: Fair value of collateral received or own debt securities issued available for encumbrance	
		of which notionally elligible EHQLA and HQLA		of which EHQLA and HQLA
Total assets, collateral received & own debt securities issued	**50**	**—**		

Table 20: AE-C - Sources of encumbrance

31 December 2018 (€000s)	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	**110**	**110**
Deposits	110	110
Collateralised deposits other than repurchase agreements	110	110
Total sources of encumbrance	**110**	**110**

Note: ABS (Asset-backed Securities)

Figures are based on median values during 2018.

9 Article 445 CRR - Exposure to market risk

The following risk metrics present PSIL's risk components as at 31 December 2018.

Market risk exposure amount	€0.42m	
	2017:	€0.56m
Market risk capital requirements	€0.03m	
	2017:	€0.05m

Market risk is the risk of adverse change to the economic condition of PSIL resulting from 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, equity prices, credit spreads, prepayment rates, and commodity prices. All open positions are closely monitored.

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 risk-less 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 PSIL 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: EU MR1 - Market risk

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

Position risk components 31 December 2018 (€000s)	Risk-weighted Assets	Capital requirements
Foreign exchange risk	423	34
Total	**423**	**34**

10 Article 448 CRR - Interest rate risk in the banking 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 Article 446 CRR - Operational risk

Operational risk is defined as being the risk of loss resulting from inadequate or failed internal processes, people, systems or from external events (including legal risk, but excluding strategic risk). However, the PSIL Operational Risk Policy further extends this definition to include any operational risk to achieving the business objectives of PSIL and causing financial loss, regulatory action or reputational damage to the standing of PSIL.

The PSIL business model is primarily designed to provide clearing, settlement and custody services to a variety of financial institutions. Within the PSIL business model operational risk may arise from errors in transaction processing, breaches of compliance requirements, internal or external fraud, business disruption due to system failures, execution, delivery and process management failures or other events. Operational risk can also arise from potential legal or regulatory actions caused by non-compliance with regulatory requirements, prudential ethical standards or contractual obligations.

11.1 Operational risk management framework

PSIL seeks to manage the inherent risk within its operational processes through an Operational Risk Management Framework ('ORMF').

The ORMF provides consistent capture, management and governance of operational risks. It is aligned around the elements of the risk management cycle (Identify, Measure, Manage and Report) and includes the requirements of good governance and capital planning as key elements.

12 Article 450 CRR - Remuneration policy

12.1 Governance

The governance of remuneration matters for BNY Mellon and its group entities, including Pershing, is overseen by four committees, each with separate responsibilities in respect of remuneration as summarised below:

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

Compensation Oversight Committee of BNY Mellon ('COC') is responsible for ensuring compensation plans are based on sound risk management, it provides governance and risk oversight and advises the HRCC on any compensation risk issues. The members of the COC are senior members of BNY Mellon management, including the Chief Human Resources Officer, the Chief Risk Officer, the Chief Financial Officer ('CFO') and the Head of Compensation & Benefits. The Chief Executive Officer ('CEO') is responsible for the funding and design of incentive plans. All new incentive plans, material changes to existing incentive/ sales plans and funding accrual decisions are subject to the review and approval of the CEO and CFO.

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

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

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

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 Financial Conduct Authority ('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.

Variable compensation is determined by the business performance as outlined above and an individual's performance as measured against feedback on the following aspects:

- Corporate goals
- Individual results-based performance
- Individual behaviours (including alignment to BNY Mellon's global competencies and values; adherence to risk, compliance and ethical obligations/competencies; and goals related to diversity and inclusion)
- Regulatory Fitness & Propriety Assessment (applicable to MRTs)

MRTs are subject to an additional layer of performance assessment, referred to as the Risk Culture Summary Scorecard ('RCSS'). The RCSS score for each individual is based on separate ratings of five risk factor areas:

- Compliance
- Reputation
- Operational risk
- Risk exposures
- Audit

12.6 Deferral policy and vesting criteria

Corporate Policy (General): Awards are delivered to employees entirely in cash (payable shortly after the date of award), except where the employee's total incentive award exceeds a particular threshold (or where they are of a particular level of role). (This is set out in the table below). In this case, a portion of the annual incentive award is deferred over a period of at least four years - this portion vests in equal portions on the first, second, third and fourth anniversary of the date of award (subject to the employee remaining in employment on each of these dates).

	Total incentive award (US$000)				
Level	**< 50.0**	**50.0 to 149.9**	**150 to 249.9**	**250 to 499.9**	**>= 500.0**
J, K and L	—	15.0%	20.0%	25.0%	30.0%
M	—	25.0%	30.0%	35.0%	40.0%
S	—	32.5%	40.0%	45.0%	50.0%

Regulatory Policy: For identified MRTs, in receipt of total remuneration of £500,000 or more, and variable remuneration greater than 33% of total remuneration, the Corporate Deferral Rules are superseded by the Regulatory Deferral Rules as follows:

a) At least 40% of variable remuneration is deferred unless the MRT is a Director (CF1) or where variable remuneration exceeds £500,000, in which case 60% of variable remuneration is deferred
b) Variable remuneration is deferred for the following periods:
    i. 7 years for individuals performing a PRA/FCA Senior Management Function ('Senior Managers')
    ii. 5 years for PRA designated "Risk Managers"
    iii. 3 years for other identified MRTs
c) At least 50% of variable remuneration (upfront and deferred) is delivered in shares or equivalent instruments
d) Each tranche of deferred vested equity is subject to a retention period post vesting before it may be sold, 6 months for Risk Managers and 12 months for Senior Managers and other MRTs

40% Deferral Table		
	Upfront	**Deferred**
Cash	30.0%	20.0%
Equity	30.0%	20.0%

60% Deferral Table		
	Upfront	**Deferred**
Cash	20.0%	30.0%
Equity	20.0%	30.0%

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 2018 cannot be disclosed on the grounds of data confidentiality.

Appendix 1 - Other risks

Liquidity risk

PHUK Group defines liquidity risk as the ability to maintain liquidity resources which are adequate, both as to the amount and quality, so that there is no significant risk that PHUK Group's liabilities cannot be met as they fall due.

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 dictates that PSIL maintains a prudent funding profile in order to supports its clients trade activities.

Liquidity risks can arise from funding mismatches, market constraints from the inability to convert assets to cash, meet Client Free Money ('CFM') withdrawals, or contingent liquidity events. Changes in economic conditions or exposure to credit, market, legal, operational and reputational risks also can affect PSIL's liquidity risk profile and are considered in the liquidity risk framework.

PSIL also manages a significant amount of CFM which is held at tier one third party banks under a trust status letter. Approximately 97% of its CFM at is maintained on an instant access basis or breakable term deposits maturing in less than one month and is, therefore, only subject to minimal liquidity risk.

PSIL utilises PLC direct participant in a number of settlement systems for settling trades. An important feature of this settlement process is the intra-day funding obligation for PLC for trade settlement on a Delivery verses Payment ('DvP') basis. Intra-day liquidity is provided by third party institutions via Standby Letters of Credit or Credit Lines. The withdrawal of the guarantee by BNY Mellon could cause the providers of the Standby Letters of Credit or intraday credit lines to withdrawal their support to the settlements and this would have a serious impact upon the continued functioning of the PSIL business. To this end PLC holds a Liquid Asset Buffer comprised of eligible UK Government Securities that, amongst other things, could be used to meet its settlement funding requirements. Further, a Contingency Funding Plan has been established by PLC Senior Management which sets out the strategy for managing liquidity in stressed conditions for PLC with the aim being to ensure it will continue to support client operational activities and to have sufficient liquidity resources to meet liabilities as they fall due.

Group risk

Group risk is the risk that the financial position of PSIL may be adversely affected by its relationships and arrangements (financial or non-financial) with other entities in the BNY Mellon group or by risk that may affect the whole group.

PSIL maintains appropriate oversight and ownership of all processes and activities outsourced to other group entities. Because group risk typically arises as a consequence of another risk event and, as such, PSIL considers group impact as part of its overall risk management process.

Business and financial risk

Business risk is the risk to PSIL arising from changes in its business including the acute risk to earnings posed by falling or volatile income; and the broader risk of PSIL's business model or strategy proving inappropriate due to macroeconomic, geopolitical , industry, regulatory or other factors; or its remuneration policy.

The PSIL business model has been clearly defined, in place for a number of years, is relatively transparent and contained within its business sector. This is not envisaged to change.

Residual risk

Residual risk may arise from the partial performance or failure of credit risk mitigation techniques for reasons, such as ineffective documentation, a delay in payment or the inability to realise collateral held by the underlying client in a timely manner.

Given the nature of PSIL's business, residual risk occurs only in respect of the right to use securities as collateral and the Credit and Market risk capital calculation, therefore, includes the potential impact of residual risk.

Appendix 2 - Glossary of terms

The following acronyms may be used in this document:

Acronym	Description
ABS	Asset-Backed Securities
ACPR	Autorite de Controle Prudentiel et de Resolution
AFR	Available Financial Resources
AIF	Alternative Investment Fund
ALCO	Asset and Liability Committee
AML	Anti-Money Laundering
AS	Asset Servicing
AT1	Additional Tier 1
AUC	Assets Under Custody
BAC	Business Acceptance Committee
BAU	Business as usual
BaFin	Federal Financial Supervisory Authority / Bundesanstalt fur Finanzdienstleistungsaufsicht
BDAS	Broker-Dealer and Advisory Services
BDF	Banque De France
BEMCO	Belgium Management Council
BI	Banca D'Italia
BNY Mellon	The Bank of New York Mellon Corporation
BNY Mellon SA/NV	The Bank of New York Mellon SA/NV
BNY Mellon TDUKL	BNY Mellon Trust & Depositary (UK) Limited
BNYIFC	BNY International Financing Corporation
BNY Mellon KG	BNY Mellon Service Kapitalanlage-Gesellschaft mbH
BRC	Business Risk Committee
CASS	Client Asset Sourcebook Rules
CBI	Central Bank of Ireland
CCF	Credit Conversion Factor

Acronym	Description
CEO	Chief Executive Officer
CEF	Critical Economic Function
CET1	Common Equity Tier 1
CGB	CASS Governance Body
CIS	Collective Investment Scheme
COC	Compensation Oversight Committee
COOC	CASS Operational Oversight Committee
COREP	Common Reporting
CQS	Credit Quality Steps
CRD	Capital Requirements Directive
CRM	Credit Risk Mitigation
CRO	Chief Risk Officer
CROC	Credit Risk Oversight Committee
CRR	Capital Requirements Regulation
CSD	Client Service Delivery
CSRSFI	Committee for Systemic Risks and System-relevant Financial Institutions
CSSF	Commission de Surveillance du Secteur Financier
CSTC	Capital and Stress Testing Committee
CT	Corporate Trust
CTS	Client Technology Solutions
DB	Deutsche Bank
DNB	De Nederlandsche Bank
DVP	Delivery versus Payment
EAD	Exposure at default
EC	European Commission
ECL	Expected Credit Losses
ECAP	Economic Capital
ECB	European Central Bank
ECM	Embedded Control Management

Acronym	Description
EEC	EMEA Executive Committee
EHQLA	Extremely High Quality Liquid Assets
EMEA	Europe, Middle East and Africa
ERGC	EMEA Remuneration Governance Committee
ESRMC	EMEA Senior Risk Management Committee
EU	European Union
EUR	Euro
EWI	Early Warning Indicators
ExCo	Executive Committee
FCA	Financial Conduct Authority
FMUs	Financial market utilities
FoP	Free of payment
FRS	Financial Reporting Standard
FSMA	Financial Services and Markets Authority
FX	Foreign Exchange
G-SIFI	Global Systemically Important Financial Institution
GCA	Global Custody Agreement
GSP	Global Securities Processing
HLA	High-level Assessment
HQLA	High Quality Liquid Assets
HRCC	Human Resources Compensation Committee
IAS	International Accounting Standards
IASB	International Accounting Standards Board
ICA	Internal Capital Assessment
ICAAP	Internal Capital Adequacy Assessment Process
ICRC	Incentive Compensation Review Committee
IFRS	International Financial Reporting Standards

Acronym	Description
ILAAP	Internal Liquidity Adequacy Assessment Process
ILG	Individual Liquidity Guidance
IRRBB	Interest Rate Risk on Banking Book
IMMS	International Money Management System
ISDA	International Swaps and Derivatives Association
ISM	Investment Services and Markets
ILG	Individual Liquidity Guidance
IRRBB	Interest Rate Risk on Banking Book
IMMS	International Money Management System
ISDA	International Swaps and Derivatives Association
ISM	Investment Services and Markets
IT	Information Technology
IWG	ICAAP working group
JFSC	Jersey Financial Services Commission
KRI	Key Risk Indicator
KYC	Know your customer
LAB	Liquidity Asset Buffer
LCR	Liquidity Coverage Ratio
LERO	Legal Entity Risk Officer
LOB	Line of Business
LOD	Line of Defense
MiFID II	Markets in Financial Instruments Directive II
MNA	Master Netting Agreements
MRMG	Model Risk Management Group
MRT	Material Risk Taker
MtM	Mark-to-market
NAV	Net Asset Value
NBB	National Bank of Belgium
NoCo	Nomination Committee
NSFR	Net Stable Funding Ratio

Acronym	Description
O-SII	Other systemically important institution
OCI	Other Comprehensive Income
OEICs	Open-ended Investment Companies
ORE	Operational risk event
ORMF	Operational Risk Management Framework
ORSA	Operational Risk Scenario Analysis
OTC	Over the counter
P/L	Profit and Loss
PFE	Potential Future Exposure
PRA	Prudential Regulatory Authority
RCoB	Risk Committee of the Board
RCSA	Risk and Control Self-Assessment
RM	Risk Manager
RMC	Risk Management Committee
RMP	Risk Management Platform
RRP	Recovery and Resolution Planning

Acronym	Description
RW	Risk-weight
RWA	Risk Weighted Assets
SA	Standardised Approach
SFT	Security Financing Transaction
SLD	Service Level Description
SREP	Supervisory review and evaluation process
SRO	Senior Risk Officer
T&D	Trust & Depositary
T1 / T2	Tier 1 / Tier 2
TCR	Total Capital Requirements
TIRC	Technology and Information Risk Council
TLAC	Total Loss-Absorbing Capacity
UCITS	Undertakings for Collective Investment in Transferable Securities
VaR	Value-at-Risk

The following terms may be used in this document:

Ad valorem: Method for charging fees according to the value of goods and services, instead of by a fixed rate, or by weight or quantity. Latin for, [according] to the value

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

BIPRU: Prudential sourcebook for banks, building societies and investment firms

Brexit: The United Kingdom's referendum decision to leave the EU

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Risk Governance Framework: The 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 Management Committee ('RMC'): A committee which meets monthly to provide governance on risk related items arising from the business of the group

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

Standardised Approach ('SA'): Method used to calculate credit risk capital requirements using the Basel III, CRD IV, CRR model supplied by the BCBS. 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.
Scope of disclosure requirements			
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
Non-material, proprietary or confidential information			
432 (1)	Institutions may omit disclosures if the information is not regarded as material (except Articles 435(2) (c), 437 and 450)	Refer to Pillar 3 policy	N/A
432 (2)	Institutions may omit information that is proprietary or confidential if certain conditions are respected	Refer to Pillar 3 policy	N/A
432 (3)	Where 432 (1) and (2) apply this must be stated in the disclosures, and more general information must be disclosed	N/A	N/A
432 (4)	Paragraphs 1, 2 & 3 are without prejudice to the scope of the liability for failure to disclose material information	N/A	N/A
Frequency of disclosure			
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
Means of disclosure			
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
Risk management objectives and policies			
435 (1)	Institutions shall disclose their risk management objectives and policies	Article 435 CRR - Risk management objectives and policies	17
435 (1) (a)	Strategies and processes to manage those risks	Article 435 CRR - Risk management objectives and policies	17
435 (1) (b)	Structure and organisation of the risk management function	Section 3.1 Board of Directors	20
435 (1) (c)	Scope and nature of risk reporting and measurement systems	Section 3 Risk Management Objectives and Policy	17
435 (1) (d)	Policies for hedging and mitigating risk	Article 435 CRR - Risk management objectives and policies	17
435 (1) (e)	Approved declaration on the adequacy of risk management arrangements	Article 435 CRR - Risk management objectives and policies	17

CRR ref.	Requirement summary	Compliance ref.	Page ref.
435 (1) (f)	Approved risk statement describing the overall risk profile associated with business strategy	Article 435 CRR - Risk management objectives and policies	17
435 (2) (a)	Number of directorships held by directors	Section 3.1 Board of Directors	20
435 (2) (b)	Recruitment policy of Board members, their experience and expertise	Section 3.1 Board of Directors	20
435 (2) (c)	Policy on diversity of Board membership and results against targets	Section 3.1 Board of Directors	20
435 (2) (d)	Disclosure of whether a dedicated risk committee is in place, and number of meetings in the year	Section 3.1 Board of Directors	21
435 (2) (e)	Description of information flow on risk to Board	Section 3.1 Board of Directors	21
Scope of application			
436 (a)	The name of the institution to which the requirements of this Regulation apply	Article 431 CRR - Scope of disclosure requirements	6
436 (b) 436 (b) (i) 436 (b) (ii) 436 (b) (iii) 436 (b) (iv)	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: fully consolidated; proportionally consolidated; deducted from own funds; neither consolidated nor deducted	Article 431 CRR - Scope of disclosure requirements	6
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
Own funds			
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) 437 (1) (d) (ii) 437 (1) (d) (iii)	Each prudent filter applied Each deduction made Items not deducted	N/A	N/A
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
Capital requirements			
438 (a)	Summary of institution’s approach to assessing adequacy of capital levels	Article 438 CRR - Capital requirements	15
438 (b)	Result of ICAAP on demand from authorities	N/A	N/A

CRR ref.	Requirement summary	Compliance ref.	Page ref.
438 (c)	Capital requirement amounts for credit risk for each Standardised Approach exposure class	Table 3: EU CRB-B Total and average net amount of exposures	27
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	Article 445 CRR - Exposure to market risk	41
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: EU OV1 - Overview of RWAs and Article 446 CRR - Operational risk	16 & 43
438 (endnote)	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach	Table 2: EU OV1 - Overview of RWAs	16
Exposure to counterparty credit risk (CCR)			
439 (a)	Description of process to assign internal capital and credit limits to CCR exposures	Article 439 CRR - Exposure to counterparty credit risk	37
439 (b)	Discussion of process to secure collateral and establishing reserves	Article 439 CRR - Exposure to counterparty credit risk	37
439 (c)	Discussion of management of wrong-way exposures	Article 439 CRR - Exposure to counterparty credit risk	37
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 BNY Mellon corporate level	N/A
439 (e)	Derivation of net derivative credit exposure	Article 439 CRR - Exposure to counterparty credit risk	37
439 (f)	Exposure values for mark-to-market, original exposure, standardised and internal model methods	Article 439 CRR - Exposure to counterparty credit risk	37
439 (g)	Notional value of credit derivative hedges and current credit exposure by type of exposure	N/A - BNY Mellon 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 - BNY Mellon does not have credit derivative transactions	N/A
439 (i)	Estimate of alpha, if applicable	N/A	N/A
Capital buffers			
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
Indicators of global systemic importance			
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

CRR ref.	Requirement summary	Compliance ref.	Page ref.
Credit risk adjustments			
442 (a)	Disclosure of bank's definitions of past due and impaired	Section 4.5 Analysis of past due and impaired exposures	28
442 (b)	Approaches for calculating credit risk adjustments	Section 4.5 Analysis of past due and impaired exposures	28
442 (c)	Disclosure of pre-CRM EAD by exposure class	Table 3: EU CRB-B Total and average net amount of exposures	27
442 (d)	Disclosures of pre-CRM EAD by geography and exposure class	Table 4: EU CRB-C Geographical breakdown of exposures	27
442 (e)	Disclosures of pre-CRM EAD by industry and exposure class	Table 5: EU CRB-D Concentration of exposures by counterparty types	28
442 (f)	Disclosures of pre-CRM EAD by residual maturity and exposure class	Table 6: EU CRB-E Maturity of exposures	28
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: EU CR1-A Credit quality of exposures by class and instrument	29
442 (h)	Impaired, past due exposures, by geographical area, and amounts of specific and general impairment for each geography	Table 9: EU CR1-C Credit quality of exposures by geography	30
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	28
442 endnote	Specific credit risk adjustments recorded to income statement are disclosed separately	Section 4.5 Analysis of past due and impaired exposures	28
Unencumbered assets			
443	Disclosures on unencumbered assets	Article 443 CRR - Asset encumbrance	39
Use of ECAIs			
444 (a)	Names of the ECAIs used in the calculation of Standardised Approach RWAs, and reasons for any changes	Article 444 CRR - External credit rating assessment institutions	34
444 (b)	Exposure classes associated with each ECAI	Table 12: Credit quality steps and risk-weights	34
444 (c)	Explanation of the process for translating external ratings into credit quality steps	Table 12: Credit quality steps and risk-weights	34
444 (d)	Mapping of external rating to credit quality steps	Article 444 CRR - External credit rating assessment institutions	34
444 (e)	Exposure value pre and post-credit risk mitigation, by credit quality step	Table 11-13: External credit rating assessment institutions	34
Exposure to market risk			
445	Disclosure of position risk, large exposures exceeding limits, FX, settlement and commodities risk	Article 445 CRR - Exposure to market risk	41
Operational risk			
446	Disclosure of the scope of approaches used to calculate operational risk, discussion of advanced methodology and external factors considered	Article 446 CRR - Operational risk	43

CRR ref.	Requirement summary	Compliance ref.	Page ref.
Exposure in equities not included in the trading book			
447 (a)	Differentiation of exposures based on objectives	No non-trading book exposure in equities	N/A
447 (b)	Recorded and fair value, and actual prices of exchange traded equity where it differs from fair value	No non-trading book exposure in equities	N/A
447 (c)	Types, nature and amounts of the relevant classes of equity exposures	No non-trading book exposure in equities	N/A
447 (d)	Realised cumulative gains and losses on sales over the period	No non-trading book exposure in equities	N/A
447 (e)	Total unrealised gains/losses, latent revaluation gains/losses, and amounts included within Tier 1 capital	No non-trading book exposure in equities	N/A
Exposure to interest rate risk on positions not included in the trading book			
448 (a)	Nature of risk and key assumptions in measurement models	Article 448 CRR - Interest rate risk in the banking book	42
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
Exposure to securitisation positions			
449	Exposure to securitisations positions	No non-trading book exposure in equities	N/A
Remuneration disclosures			
450	Remuneration disclosure regarding remuneration policy and practices	Article 450 CRR - Remuneration policy	44
450 (1) (a)	Information concerning the decision-making process used for determining the remuneration policy	Section 12.1 Governance	44
450 (1) (b)	Information on link between pay and performance	Section 12.2 Aligning pay with performance	44
450 (1) (c)	Important design characteristics of the remuneration system	Article 450 CRR - Remuneration policy	44
450 (1) (d)	Ratios between fixed and variable remuneration	Section 12.4 Ratio between fixed and variable pay	45
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	46
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	47
450 (1) (g)	Aggregate quantitative information on remuneration by business area	Not disclosed	N/A
450 (1) (h) 450 (1) (h) (i) 450 (1) (h) (ii) 450 (1) (h) (iii) 450 (1) (h) (iv) 450 (1) (h) (v) 450 (1) (h) (vi)	Aggregate quantitative information on remuneration, broken down by senior staff management and members of staff whose actions have a material impact on the risk profile	Not disclosed	N/A

CRR ref.	Requirement summary	Compliance ref.	Page ref.
450 (1) (i)	Number of individuals being remunerated €1 million or more per financial year	Not disclosed	N/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
Leverage			
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
Use of the IRB approach to credit risk			
452	Risk-weighted exposure under the IRB approach	N/A	N/A
Use of credit risk mitigation techniques			
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	32
453 (c)	Description of types of collateral used	Section 5.3 Credit risk concentration	32
453 (d)	Types of guarantor and credit derivative counterparty, and their creditworthiness	N/A - BNY Mellon'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	32
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	Table 10: EU CR3 - Credit risk mitigation techniques - overview	33
Use of the Advanced Measurement Approaches to operational risk			
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
Use of internal market risk models			
455	Institutions calculating their capital requirements using internal market risk models	N/A	N/A
Commission Implementing Regulation (EU) No 1423/2013			
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

CRR ref.	Requirement summary	Compliance ref.	Page ref.
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

BNY MELLON

PERSHING SECURITIES INTERNATIONAL LIMITED
RIVERSIDE II
SIR JOHN ROGERSON'S QUAY
DUBLIN 2
IRELAND
+353 1900 7960