



# Risk Management Disclosure Report 2015



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**European Investment Bank Group  
Risk Management Disclosure Report  
2015**

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## 1. Overview of EIB Group

The EIB Group (also ‘the Group’) consists of the European Investment Bank (‘EIB’ or ‘the Bank’) and the European Investment Fund (‘EIF’ or ‘the Fund’).

### 1.1. EIB

The European Investment Bank was created by the Treaty of Rome in 1958 as the long term lending institution of the European Union (‘EU’).

As per its Statute, the mission of the Bank is to contribute towards the integration, balanced development and economic and social cohesion of the EU Member States (‘MS’). To achieve this, the EIB raises substantial volumes of funds on the capital markets and lends these funds on favourable terms to projects furthering EU policy objectives.

Due to the particular nature of the EIB, its economic mission and its shareholder structure, there are a number of important aspects that differentiate EIB from commercial banks:

#### *Governance*

Under its Statutes the EIB is governed by a three tier structure: the Board of Governors, the Board of Directors and the Management Committee.

#### *Supervision*

The EIB is principally not subject to prudential supervision, but aims to comply with relevant EU banking directives and best banking practice applicable to it. This aspect has been retained in the Bank’s Rules of Procedure, specifying that the Audit Committee shall verify that the activities of the Bank conform to best banking practice applicable to it.

#### *Public-policy driven, operating on a non-profit-making basis*

The EIB differs considerably from commercial banks in that its activity is driven by public policy objectives and it operates on a non-profit-making basis, as specified in Article 309 of the Treaty on the Functioning of the European Union (‘TFEU’). As such, the Bank does not have a specific target for return on equity, but rather aims at generating an income that shall enable it to meet its obligations, to cover its expenses and risks and to build up a reserve fund. For that purpose, the EIB aims to achieve operational excellence and cost efficiency.

#### *Taxation*

The EIB is not subject to national taxation and benefits from the provisions of the Protocol on Privileges and Immunities annexed to the TFEU (Protocol n. 7).

#### *Preferred creditor status*

As a Multilateral Development Bank (MDB), the Bank benefits from the so-called “preferred creditor status”, which common practice associates with a preferential treatment in case of a sovereign default.

### *Financial protection*

Statutory and political provisions constitute a protection to the Bank's creditor position vis-à-vis Member States. Article 26 of the EIB's Statute unequivocally states that the property of the Bank shall be exempted from all forms of requisition or expropriation. This is deemed to include sovereign debt restructuring. This financial protection and the benefit of the preferred creditor status result in zero loss or risk from Member States sovereign exposure or guarantees.

### *Mandate business*

The EIB originates most of its business at its own risk but for some assets (under mandate) it benefits from guarantees or other forms of credit enhancement and for others both funding and risk taking is for the account of the Mandator.

### *Shareholder structure*

EIB's shareholders comprise all EU Member States which in addition to paid-in capital also commit themselves to provide additional capital upon the request of EIB (callable capital)

### *Assessment by rating agencies*

Rating agencies recognise the specific nature of supranational and multilateral institutions, compared to commercial banks. They have developed and use specific models and metrics for assessing credit worthiness of the EIB and other multilateral institutions.

### *Accounting standards*

The EIB uses the EU Accounting Directives for its stand-alone statutory accounts and the International Financial Reporting Standards ('IFRS') as adopted by the EU for its consolidated financial statements. Since 2009 a second set of consolidated financial statements is also produced under the EU Accounting Directives.

## **1.2. EIF**

The EIF was established in 1994 on the basis of Article 28 of the Statute of the EIB, by decision of the Board of Governors of the EIB, with legal personality and financial autonomy.

The European Investment Fund is a specialist provider of risk finance to small and medium-sized enterprises ('SMEs'). The EIF develops and implements equity and debt financial instruments which respond to the current financing needs of European businesses.

Similarly to the EIB, there are a number of important aspects that differentiate EIF from commercial actors:

### *Governance*

Under its Statutes the EIF is also governed by a three layers structure: the General Meeting, the Board of Directors and the Chief Executive.

### *Supervision*

The EIF is principally not subject to prudential supervision, but aims to comply with relevant EU directives and best market practice, and enables compliance with relevant best banking practice

applicable to it at Group level for the purposes of prudential consolidation. The EIF Audit Board, which is appointed by the General Meeting, is responsible for the annual audit of EIF accounts according to Article 22 of the Statutes.

#### ***Public-policy driven organisation***

The EIF differs from commercial actors in that its task is to contribute to the objectives of the European Union. The level of remuneration or other income sought by the EIF shall be determined in such a way as to reflect risks incurred, cover operating expenses, establish necessary reserves and generate an appropriate return on its resources.

#### ***Taxation***

The EIF is not subject to national taxation and benefits of the Protocol on Privileges and Immunities of the European Union annexed to the TFEU (Protocol n. 7).

#### ***Preferred creditor status***

As an MDB, the EIF benefits from a so-called “preferred creditor status”, which common practice associates with a preferential treatment in case of a sovereign default.

#### ***Financial protection***

The EIF benefits of certain provisions constituting additional protection to its creditor position. Article 36 of the EIF’s Statutes clarifies that the protocol on Privileges and Immunities of the European Union shall also apply to the EIF. This Protocol provides that property and assets shall not be subject to any administrative or legal measure of constraint without the authorization of the Court of Justice of the European Union.

#### ***Mandate business***

EIF finances part of its operations out of its own resources. In addition, EIF may accept the task of administering resources entrusted to it by third parties (Mandates). The majority of EIF operations are currently funded under Mandates governed by specific Mandate agreements. Under such Mandates, EIF deploys financial instruments in the form of cash investments, guarantees or other form of credit enhancement.

#### ***Shareholder structure***

EIF’s shareholders comprise the EIB (61.4%), the European Union (26.5%), as well as financial institutions shareholders. EIF’s members have committed themselves to provide additional capital (up to 80% of the par value of each share – callable capital) in addition to paid-in capital upon request by the EIF General Meeting and to the extent required for the EIF to meet its liabilities towards its creditors.

#### ***Assessment by rating agencies***

Rating agencies recognize the specific nature of supranational and multilateral institutions, compared to commercial operators. They have developed and use specific models and metrics for assessing credit worthiness of the EIF and other multilateral institutions.

#### ***Accounting standards***

The EIF financial statements are prepared in accordance with International Financial Reporting Standards as adopted by the EU.



## 2. Executive summary

In performing its activities, the EIB Group relies on a conservative risk management framework. The Group is committed to a strong risk culture, continuously adapting its risk management policies and practices to the market conditions and best industry practice. To this extent, the Group publishes its first Risk Management Disclosure report, designed to provide detailed disclosures about the approach the Group takes to managing risk and assessing its capital adequacy.

The EIB Group does not fall within the scope of application of the Capital Requirements Directive and Regulation ('CRD IV' and 'CRR' or 'CRD IV/CRR package'), which is the EU legal framework of Basel III rules, and is therefore not legally obliged to meet the qualitative or quantitative disclosure requirements of the Directive and Regulation. However, the EIB Group aims to comply with relevant EU banking directives and best banking practice applicable to it under the control of its Audit Committee.

### 2.1. Key risk metrics dashboard at 31.12.2015

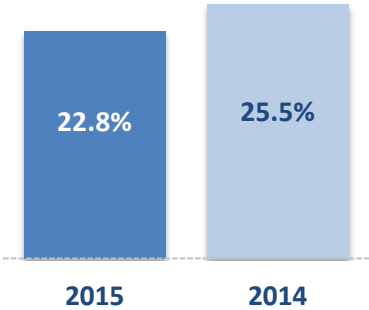
Capital adequacy (CET1) ratio	
<b>22.8%</b>	2014: 25.5%
Total risk weighted assets	
<b>€244,041m</b>	2014: €219,316m
Regulatory own funds (CET1)	
<b>€55,608m</b>	2014: €55,870m
Total credit risk exposure <sup>1</sup>	
<b>€697,992m</b>	2014: €666,734m
CRR Leverage ratio	
<b>8.0%</b>	2014: 8.4%
Liquidity coverage ratio (EIB stand-alone)	
<b>187%</b>	Not calculated for 2014
Pool of high quality liquid assets (EIB stand-alone)	
<b>€47,217m</b>	Not calculated for 2014

<sup>1</sup> Exposure as used in the CRD IV Leverage ratio calculation

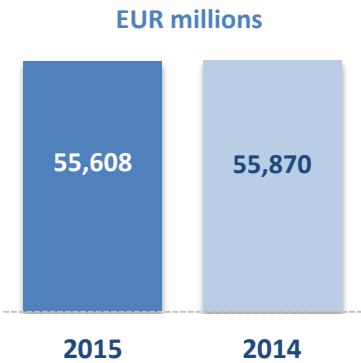
## 2.2. Capital adequacy

### Capital adequacy ratio (CET1)

- As at 31 December 2015, the Group’s common equity tier 1 (‘CET1’) capital ratio stood at 22.8%, down from 25.5% at the end of 2014.
- Ratio development was driven by the implementation of the Bank Resolution and Recovery Directive and by new business.
- While the ratio has slightly decreased, the capital position of the Group remains strong.



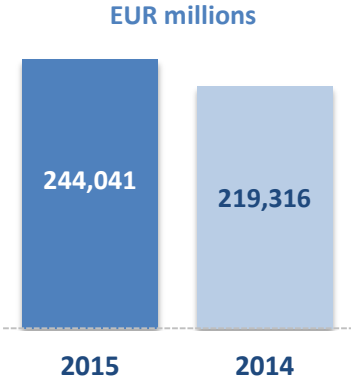
### Regulatory (CET1) own funds



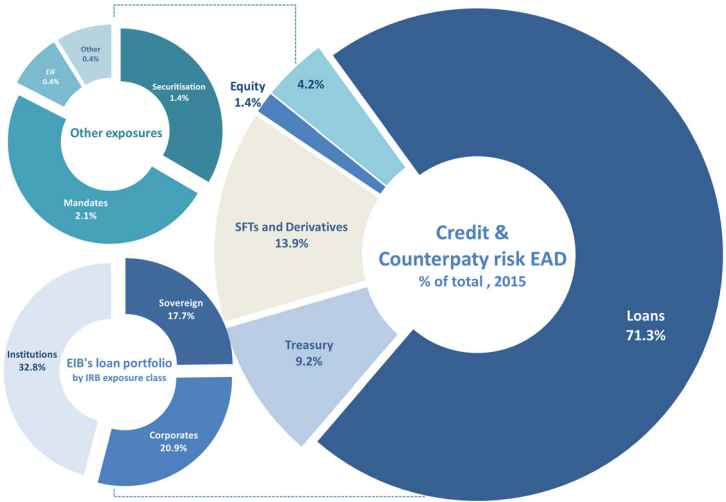
- EIB Group holds CET1 capital of EUR 55.6bn, net of applicable CRR adjustments.
- While profit for the financial year was high in 2015 at EUR 2.8bn, its positive impact on the Group’s own funds is concealed by the increase in regulatory adjustments.

### Total RWA

- The Group’s total risk weighted assets (‘RWA’) of EUR 244.0bn comprise credit risk (EUR 225.9bn), counterparty credit risk (EUR 15.7bn) and operational risk (EUR 2.5bn).
- The increase in credit risk RWA was driven by the increase in new business volumes and the higher risk associated with it.
- Counterparty credit risk remained stable year on year.

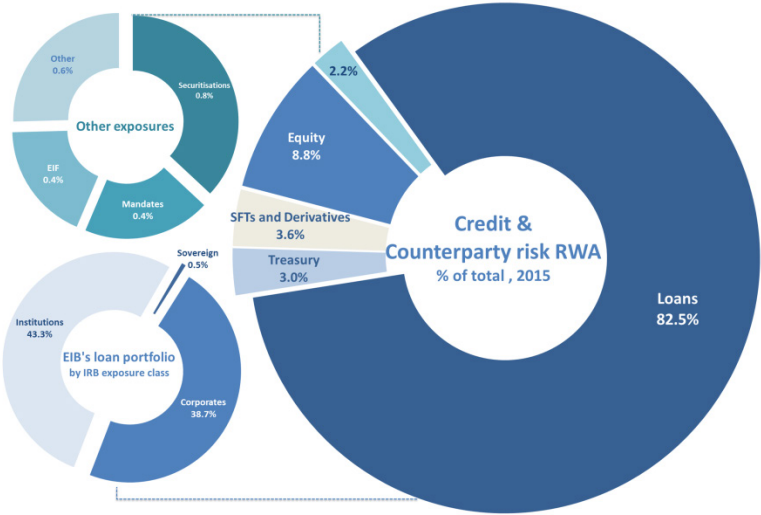


### Credit & counterparty risk exposure and RWA

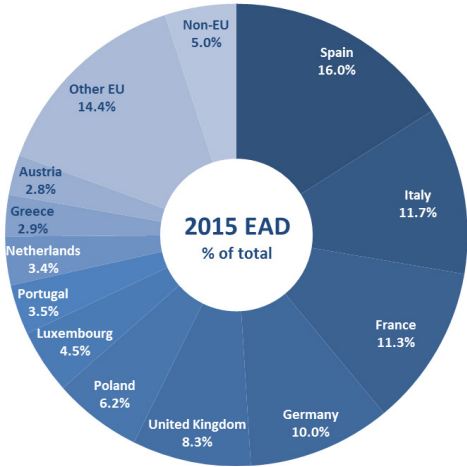


- The loan portfolio represents more than 70% of the total credit and counterparty risk exposure of the Group.
- The portfolio composition has remained relatively stable over time.

- Loans are also the main component of the total credit risk RWA of the Group.
- Loans to institutions (financial and public sectors) and to corporates each represent approximately more than a third of the total credit risk RWA.
- Sovereign<sup>2</sup> exposures, while significant by volume, represent only a small fraction of RWA.



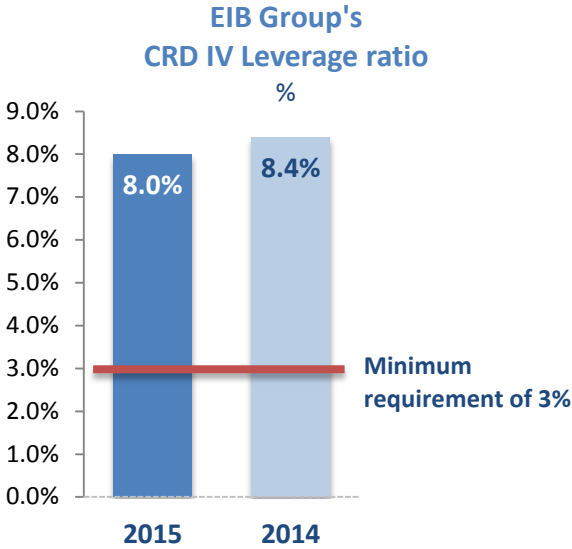
### Geographical split of EAD



- In line with its mission, the majority of the Group's operations are located in the EU. More details on the geographical split can be found in Chapter 6 of this report.

<sup>2</sup> Sovereign exposure refers to exposures to central governments and central banks under the IRB classification

**CRD IV leverage ratio**



- The Group’s CRD IV leverage ratio stands at 8.0%, well above the regulatory minimum of 3%.
- The decrease in the leverage ratio is primarily driven by the increase in new business in 2015.

The Group calculates 99% of its RWA under advanced regulatory calculation approaches. The Group is committed to ensuring that its internal models are fully aligned with the requirements of the CRR.

**2.3. Liquidity**

The average capital in 2015 amounted to 46.1bn (2014: EUR 59.9bn). The EIB achieved a total liquidity ratio<sup>3</sup> of 60.0% at end-2015 (end-2014: 69.1%) of the forecast annual net cash outflows. At end of 2015, the Group’s total treasury assets amounted to EUR 79.4bn (2014: EUR67.0bn).

EIB is an eligible counterparty in the Eurosystem monetary policy operations. As such, EIB has access to ECB’s refinancing operations.

<sup>3</sup> This liquidity ratio is defined as the ratio of the total net treasury to the next 12 months’ projected net cash outflows.

## 3. Introduction

### 3.1. Purpose

The EIB Group Risk Management Disclosure report is designed to provide detailed disclosures about the approaches the EIB Group takes to managing risk and assessing capital adequacy. The report is prepared in accordance with the CRD IV/CRR package on public disclosure and related Pillar 3 disclosure requirements. Additional relevant information may be found in the EIB 2015 Financial Report, which includes the EIB statutory financial statements under EU Accounting Directives and EIB Group consolidated financial statements under EU Accounting Directives and IFRS. The Risk Management Disclosure report should be read in conjunction with the EIB Group Consolidated Financial Statements under EU Accounting Directives.

The EIB Group does not fall within the scope of application of the CRD IV/CRR package, which is the EU legal framework of Basel III rules, and is therefore not legally obliged to meet the qualitative or quantitative disclosure requirements of the Directive and Regulation. However, the EIB Group aims to comply with relevant EU banking directives and best banking practice applicable to it under the control of its Audit Committee.

### 3.2. Scope of application

The institutions included in the EIB Group for prudential consolidation are the European Investment Bank and the European Investment Fund, which is fully consolidated. Disclosures of the Fund's risk taking activities and management processes are presented proportionally to the low risk materiality of the Fund within the EIB Group or are omitted where the risk is considered not material (on the basis of Article 432 of the CRR).

### 3.3. Disclosure criteria

Further to fulfilling the disclosure requirements of the CRR, this report also enhances the information provided by considering recommendations of other documents and guidelines on improving transparency of disclosures beyond Pillar 3. These documents and guidelines include the Consultative Document from the Basel Committee of Banking Supervision ('BCBS') on Pillar 3 disclosure requirements (BCBS 286), on which most quantitative disclosures will be based, a report on 'Enhancing the Risk Disclosures of Banks' and the related progress reports issued by the Enhanced Disclosure Task Force ('EDTF'), as well as opinions, reports and technical standards of the European Banking Authority ('EBA').

The CRD IV/CRR package came into force on 1 January 2014 and some of its provisions will be phased-in until 2019. Moreover, EBA will issue a number of technical standards, guidelines and opinions over the following years. The EIB Group monitors these developments and considers their impact on risk management and measurement, as well as the need for extending its disclosures.

### 3.4. Declaration on adequacy of risk management information provided

The information contained in this report is verified internally in accordance with the Group's Public Disclosure Policy and no material misstatements are noted in terms of the reasonableness of quantitative and qualitative information or the compliance to the disclosure requirements of the CRR.

The quantitative information in this report, as well as the underlying data, has been reconciled to the Financial Report where possible. Note however that some measures presented in this report differ significantly from the financial statements in terms of methodology, e.g. exposure at default as opposed to book value of a loan. Therefore, comparing the risk measures of Pillar 3 disclosure to accounting measures in the financial statements is not always relevant and meaningful.

Under the formal Public Disclosure Policy approved by the Board of Directors, EIB is committed to publishing a Risk Management Disclosure report yearly after approval from the Board of Directors. The Board of Directors approved this report on 23.09.2016.

The Risk Management Disclosure reports are available at EIB's website ([www.eib.org](http://www.eib.org)).

### 3.5. Overview of the report

Chapter 4 provides a summary of the Group's risk governance and management. It includes the main features of the Group's operational plan, risk management organisation, risk appetite framework, and risk management operational guidelines.

Chapter 5 contains the core information of the report: the Group's capital adequacy and risk-weighted assets (RWA) break-down. Both CRR and BCBS 286 emphasise a clear linkage between the Financial Statements and the composition of regulatory capital. For that purpose the 'Own funds disclosure template' of the Commission Implementing Regulation (EU) No 1423/2013 on own funds disclosure requirements was utilised to establish a good degree of comparability to other banks in the EU.

From Chapter 6 onwards, the Report discloses specific information about the risks the EIB Group is exposed to, how these risks are managed, measured and how the respective RWA amounts are calculated. The main risk types are credit and counterparty credit risk, risks arising from securitisation transactions, market, liquidity and operational risk. The disclosures follow the recommendation of BCBS 286 to present credit risk arising from derivatives and from securitisations separately, in Chapter 7 and Chapter 8 respectively. The majority of the quantitative information provided in these chapters follows the BCBS 286 draft disclosure templates.

Chapter 9 provides mainly qualitative information on non-traded market risk. As neither the Bank, nor the Fund has a trading book, all market risk of the Group is classified as non-traded market risk (also referred to as market risk in the banking book). Under the Basel framework there is no requirement to hold capital for this type of risk.

Chapter 10 presents liquidity risk. The disclosures provided are primarily based on the recommendations of the EDTF and liquidity risk disclosures of other banks. The Basel III framework

proposed significant enhancements to liquidity risk management, which include the Liquidity Coverage Ratio ('LCR') and the Net Stable Funding Ratio ('NSFR'). The LCR will be phased in until 2019, while the NSFR is expected to be binding from January 2018. The Group follows these developments closely and will disclose additional information on these ratios as they come into force.

Chapter 11 provides an overview of internal models, reporting and quantitative disclosures on operational risk at the Group.

Chapter 12 refers to remuneration disclosures.

## 4. Risk governance

This chapter provides an overview of EIB Group's risk governance and management, as well as an overview of the Group's business objectives.

Regarding the overall Governance of the EIB Group, and the Operational Plan, we refer to the EIB Group Annual Corporate Governance Report and respective websites of EIB and EIF. Detailed documentation about the governing bodies, their roles and appointments and the decision making process within the Bank and respectively within the Fund is provided there.

### 4.1. Operational plan

The Group's lending plan for the period 2016-2018 is described in its [Operational Plan 2016-2018](#), which can be found on the Bank's website.

### 4.2. Risk management organisation

Within the Bank, the [Risk Management Directorate](#) ('RM') manages, measures, and monitors all risks the Bank is exposed to. The Director General of RM reports to the [Management Committee](#) ('MC'), meets regularly with the [Audit Committee](#) ('AC'), and is also responsible for overseeing internal risk reporting to the MC, the [Board of Directors](#) ('BoD'), and the [Risk Policy Committee](#) ('RPC').

The Management Committee consists of a President and eight Vice-Presidents appointed for a period of six years by the Board of Governors on a proposal from the Board of Directors. The Management Committee is responsible for the current business of the Bank, under the authority of the President and the supervision of the Board of Directors. It prepares the decisions of the Board of Directors, in particular decisions on the raising of loans and the granting of finance, in particular in the form of loans and guarantees; it shall ensure that these decisions are implemented.

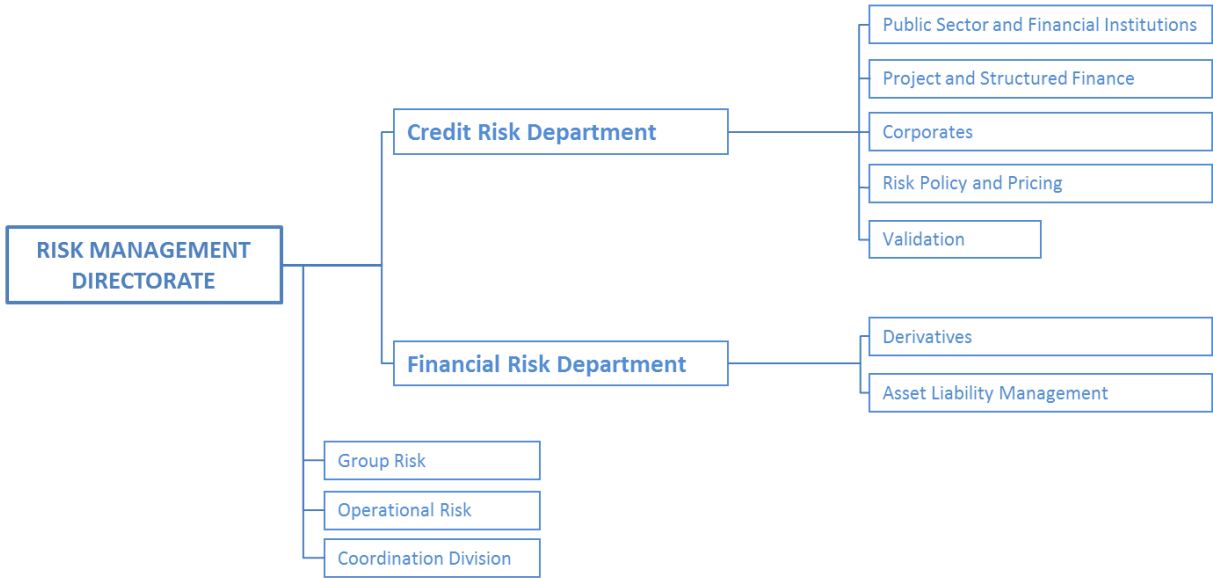
The RPC of the BoD is EIB's separate risk committee. It gives non-binding opinions and provides recommendations to the Board of Directors in relation to Bank risk policies so as to facilitate the decision-making process of the Board. It meets at least on a quarterly basis.

There are two departments within RM (see Figure 4-1), the Credit Risk & Policy Department ('CRD') and the Financial Risk and ALM Department ('FRD'). CRD consists of the Risk Policy and Pricing division ('RPP'), which covers internal risk models, pricing, capital adequacy and credit risk monitoring and reporting and divisions specific to the different exposure types: Corporates ('CORP'), Project and Structured Finance ('PSF') and Public Sector and Financial Institutions ('PFI'), as well as the Model Validation unit ('VAL'). Within RM, there is also a unit for Operational Risk ('OPR') and a Group Risk unit ('GR'), which oversees the risk management functions covering both the Bank and the Fund. FRD consists of the Derivatives division ('DER') and the Asset-Liability Management and Financial Risk division ('ALM').

Within the context of EIB's access to ECB's liquidity facilities, the Central Bank of Luxembourg ('BCL'), on behalf of ECB, performs liquidity assessments on EIB periodically, aiming at monitoring its liquidity position and liquidity risk management activities.



Figure 4-1: Organisational structure of the Risk Management Directorate at the EIB



The EIF ensures appropriate risk identification and management through its Risk Management department (see Figure 4-2), which is responsible for measuring and managing the main risk types of the Fund and ensuring compliance with best practices.

Figure 4-2: Organisational structure of Risk Management at the EIF

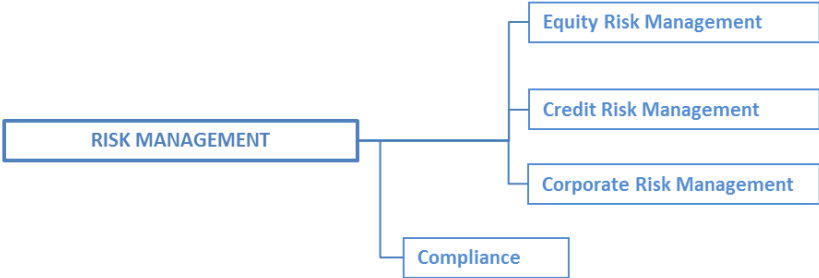


Table 4-1: Overview of risk management functions within the Group

Directorate / Department / Division / Unit	Function
RM	The <i>Risk Management Directorate</i> is the EIB's independent risk assessment team for new and existing lending, funding and treasury operations. RM provides policies, second opinions on individual proposals, an EIB-wide portfolio view and reporting, aspiring to follow best banking practice applicable to the EIB.
OPR	The <i>Operational Risk Unit</i> is responsible for operational risk related issues at the EIB.
GR	The <i>Group Risk Unit</i> is responsible for all group wide relevant purposes.
FRD	The <i>Financial Risk Department</i> is responsible for proposing and developing policies related to financial risk and Asset-Liability Management, as well as for the identification, assessment, monitoring, control and reporting within the Bank of the risks and key indicators connected to financial risks.
FRD/DER	The <i>Derivatives Division</i> covers all derivatives related issues as well as counterparty credit risk, monitors credit risk on Treasury operations and is in charge financial collateral management for loan operations.
FRD/ALM	The <i>Asset-Liability Management and Financial Risk Division</i> is responsible for Asset Liability Management and market risk
CRD	The <i>Credit Risk &amp; Policy Department</i> is responsible for all credit risk related issues.
CRD/CORP	The <i>Corporates Division</i> is responsible for all credit risk related issues, which are specific to exposure class corporates.
CRD/PSF	The <i>Project &amp; Structured Finance Division</i> is responsible for all credit risk related issues, which are specific to investments in projects as well as structured finance.
CRD/PFI	The <i>Public Sector &amp; Financial Institutes Division</i> is responsible for all credit risk related issues, which are specific to public sector and financial institutions counterparties.
CRD/RPP	The <i>Risk Policy &amp; Pricing Division</i> is responsible for credit risk related policies as well as loan pricing. Furthermore risk reporting, regulatory compliance and capital adequacy calculations are located in this division, as well as all credit model development.
CRD/VAL	The objective of the <i>Validation Unit</i> is to minimise model risk, i.e. to verify that the models are performing as expected, in line with their design objectives, business uses and in line with relevant regulations.
EIF/RM	The Risk Management Department is EIF's independent risk assessment team for the management and surveillance of the risk related to EIF's operations, including securitisations and portfolio guarantees, as well as venture capital investments. The department is split up into the Equity related division Equity Risk Management, a Credit related division Credit Risk Management and Corporate Risk Management, a division, which is responsible for the management and surveillance of risks related to mandates, treasury, operational risk and Corporate Social Responsibility. EIF Compliance constitutes an autonomous division within the Risk Management department with individual and unlimited direct access to the EIF Board of Directors and the EIF Audit Board, which includes regular private sessions.

Several internal risk committees support the implementation of the Bank's risk policies, with the main committees being the Credit Risk Assessment Group ('CRAG') and the Asset/Liability Committee ('ALCO').

CRAG is a high level forum for discussing credit risk issues arising from the Bank's operations and for advising the Management Committee on these topics. Its members are the Directors General of Operations, Projects, RM, Transaction Monitoring & Restructuring ('TMR'), Finance and Legal Affairs directorates. Members of the MC may attend the CRAG.

ALCO provides a high-level discussion forum for debating the Bank's ALM strategy and loan rate setting policy as well as the financial risks arising from the activities of the Bank. The committee monitors the trends in the main ALM operational targets, such as duration of Own Funds and funding gaps, and recommends actions to close existing imbalances or avoid potential future ones. Members of ALCO are the Directors General of Operations, Finance, Financial Control and RM directorates and the Chief Economist. The committee meets at least every two months. The ALCO has two technical sub-committees: the PWGIRRM, dealing with the management of the Bank's exposure to interest rate risk, and the ALWG, dealing with Liquidity risk matters.

In addition, EIB has several other committees focusing on different aspects, such as the New Product Committee ('NPC'), the Internal Rating Model Maintenance Committee ('IRMMC') or the Derivatives Strategy and Models Committee ('DSMC').

### 4.3. Risk management framework

#### Risk types

This section introduces the Group's exposure to risks as well as the overall strategies and processes to managing those risks. RM is responsible for managing all risks other than reputational risk. The primary risks arising from the Group's business operations are:

- **Credit risk:** the risk of loss resulting from client or counterparty default and arising on credit exposure in all forms, including settlement risk;
- **Market risk:** the risk of loss arising from exposure to observable market variables such as interest rates, foreign exchange rates and equity market prices;
- **Liquidity and Funding risk:** the risk that the Group is unable to fund assets or meet obligations at a reasonable price or, in extreme situations, at any price; and
- **Operational risk:** the potential loss resulting from inadequate or failed internal processes, people and systems or from external events.

EIB's risk profile is different compared to commercial banks in the Eurozone, due to the Group's specificities as the long term lending institution of the EU. As described in the operational plan, EIB concentrates on lending to support the EU policy objectives, which the Bank finances through funds raised on the capital markets. Consequently, most of the Bank's risk arises from lending operations, the management of liquidity in the treasury portfolios as well as its overall asset-liability management. As a result, the Bank is exposed mainly to credit risk, and to a lesser extent to market risk in the banking book (the EIB does not have a trading book), liquidity risk and operational risk.

The Fund is exposed to credit and market risks due to its mandate to support SME finance for start-up, growth and development, in line with EU policy objectives as described in the previous section. The Fund is also exposed to operational risk.

#### Risk management principles

The Group operates under a Group Risk Management Charter, which sets out the overarching principles of risk management at the Group level. The oversight of risk at Group level is performed

by the EIB. The EIB Risk Management Directorate coordinates the prudential consolidation of the EIF into the EIB as concerns amongst others the Risk Appetite, ICAAP and Stress Testing Frameworks.

The following principles are the fundamentals of the Group’s risk management culture and policies.

- **Best banking practice:** the Group strives at the implementation of best banking practice applicable to it.
- **Risk culture:** the Group promotes a sound risk-based culture in the performance of its activities.
- **Proactive, adaptive and on-going risk management:** the Group continuously identifies, analyses and assesses the risks inherent to its activities, products, funding sources and transactions.
- **Risk appetite framework:** efficient risk management is driven by the definition of a Risk Appetite.
- **Specific risk management policies, processes and procedures:** the Group sets specific risk management policies, processes and procedures, commensurate with the statutes and activities, in compliance with the principles under the Group Risk Management Charter.

For more details on the Group’s risk management principles, please refer to the official Group Risk Management Charter, which can be found on the Bank’s website.

The regular management and control of risks are handled separately by each legal entity and, therefore, risk management information presented here and within the remainder of the report distinguishes between the Bank and the Fund where appropriate.

The Fund’s Risk Management Department operates in close contact with the European Investment Bank’s Risk Management Directorate, particularly with regards to Group risk exposure relating to Guarantees, Securitisation & Microfinance (‘GSM’) and Private Equity (‘PE’) operations under the Bank’s Risk Capital Resources mandate (‘RCR’) and general EIF policy matters.

The Group puts emphasis on its code of conduct as well as a clear segregation of front and back office duties. As a result, the Group follows the principles of the “three lines of defence”:

- **First line:** Front office units, responsible for managing risks within the established set of (risk appetite framework) limits and boundaries;
- **Second line:** Risk management and compliance functions, responsible for the maintenance and development of the risk management and control framework, providing advice regarding its application, following up on its implementation and ensuring the compliance with respective policies and regulations;
- **Third line:** Internal audit, providing an independent review of the risk management practices and internal control framework.



## Reporting and Oversight

The Group analyses and monitors risks comprehensively ensuring an adequate level of capital and liquidity at all times. Within the Bank, the Risk Management Directorate is responsible for identifying, assessing, monitoring and reporting risks the Bank is exposed to. A monthly internal risk report provides a detailed view on credit, ALM, and financial risks and is provided to the Management Committee and the Board of Directors.

### Pillar 2

As a distinguished part of its best banking practice framework applicable to the EIB, EIB established an Internal Capital Adequacy Assessment Process ('ICAAP'). EIB's ICAAP takes into account the Venture Capital exposure that EIF originates on behalf of EIB (i.e. the RCR mandate) and the equity stake in EIF for respective capital measurement purposes. Hence EIB's ICAAP covers to a large extent risks arising from EIF. Further enhancements regarding inclusion of the Fund in the ICAAP are planned, to promote a group-wide approach in the future.

The ICAAP includes the following components: a risk appetite statement, a risk identification process, economic capital allocation, internal limit system and internal risk reporting.

### Risk Identification and Assessment Process

An integral part of EIB's ICAAP is the risk identification and assessment process. This process is performed by EIB's RM and results in an ICAAP report, which reflects the key risks based on materiality considerations. The content of this report is based upon self-assessments of each business line. The material risk types are shown below in Table 4-2 with the respective RM department that is responsible for managing the risk.

Table 4-2 Main EIB risk types as of 2015

Main risk category	Sub risk category	Scope	Risk management responsibility
Credit Risk	Credit default risk (including country and transfer risk)	Mainly lending	CRD
	Issuer credit risk	Mainly treasury and to a lesser extent lending (loan substitutes)	FRD / CRD
	Counterparty credit risk	Derivatives	FRD
	Credit concentration risk	Lending, treasury and derivatives	CRD / FRD
Market risk in the banking book	Interest rate risk	All activities	FRD
	FX risk	All activities	FRD
	Equity risk	Mainly lending	FRD
	Spread risk	All activities	FRD
	Liquidity risk	All activities	FRD
Operational risk	Operational risk	All activities	OPR
	Legal risk	All activities	OPR

The ICAAP Report is submitted to the Management Committee for approval, with copies provided to all Directorates. Upon approval of the Management Committee, the report is submitted to the Audit Committee and the Risk Policy Committee and to the Board of Directors, on the basis of a recommendation of the RPC.

Crucial to an ICAAP is the Bank's measurement of economic capital per risk type, which is done for all material risk types on a regular basis

Qualitative and quantitative validation of models underlying quantitative metrics is performed by the model validation unit within RM, which reviews all models included in EIB's model inventory. The cycle of model validation, the responsibilities and the procedures regarding model changes and model fixings are written and fixed in a model validation policy.

Model validation activity for non-derivative risk models is overseen by the Internal Rating Model Maintenance Committee ('IRMMC'), while validation activity for derivatives models is overseen by the Derivatives Strategy and Models Committee ('DSMC'). The model validation policy includes the detailed scope and objectives of validation and especially the details on the validation process, which includes initial and regular validations. The current scope of the model validation unit is the Bank's models.

#### 4.4. Risk Appetite Framework of the Bank

The Bank defines the concept of risk appetite as the level of risk that it is able and willing to incur in pursuing its activities in the context of its public mission and objectives. In essence, risk appetite is the targeted risk profile which is consistent and aligned with the Bank's strategy and risk bearing capacity. The Bank's risk appetite is articulated in a risk appetite statement, which makes transparent to management, supervisors, employees and other key stakeholders the boundaries of the risk profile EIB is willing to assume in the pursuit of its business strategy and objectives as reflected in its Operational Plan. Ultimately, risk appetite aims to align the Bank's risk taking with its business objectives.

The **Risk Appetite Framework** ('RAF') encompasses the main building blocks through which risk appetite is set, embedded, reported, monitored, governed and revised throughout the Bank. It can be summarised as follows:

EIB sets and articulates its overall bank-wide risk appetite (statement) based on the proper identification and assessment of its:

- Public mission
- Stakeholders (alongside their expectations);
- Business strategy and the related risks emanating from pursuing this strategy;
- Risk capacity to bear the risks it is exposed to in the pursuit of its objectives.

EIB embeds its high-level risk appetite in the organisation by translating it into measurable and controllable risk appetite metrics, which are subject to boundaries and - to the extent possible - cascaded further down in the Bank. EIB ensures alignment between the risk appetite boundaries and its limit framework at operational level. EIB monitors its actual risk profile against its risk appetite boundaries and reports on a frequent basis to the relevant stakeholders. Upon any (emerging) breach of these boundaries, designated corrective actions will be taken by the relevant decision bodies within EIB to ensure risk appetite compliance.

The RAF covers the major financial risks (credit, liquidity and market risks) that the Bank is exposed to. Work is in progress in parallel to the current RAF to address operational risk and other non-financial risk categories (such as reputational risk).

In the event of changes to its business strategy, EIB revises its risk appetite statement accordingly. All processes within the RAF are integrated into the governance of the Bank. Finally, it is essential to note that the Bank's RAF is intrinsically linked to its Operational Plan, ICAAP, Capital planning, Capital allocation and Stress testing processes.

#### *EIB's high level risk appetite statement*

In pursuit of its business strategy the Bank accepts to take on credit, market and liquidity risk up to the level where it remains aligned with the following high level risk appetite statement:

- The Bank aims to remain compliant with its Statute and public mission
- The Bank is aspiring to follow best banking practice applicable to it
- The Bank aims to retain its long-term AAA rating from the major rating agencies, which is a primary pillar of the Bank's business model
- The Bank aims for stability of earnings and preservation of the economic value of own funds in order to ensure the self-financing of the Bank's growth in the long term

As a public institution, the Bank does not aim to make profits from speculative exposures to risks. As a consequence, the Bank does not consider its treasury or funding activities as profit-maximising centres and does not engage in trading or arbitrage operations.

In compliance with its Statute, the Bank engages only in currency operations directly required to carry out its lending operations or fulfil commitments arising from borrowings or guarantees granted by it. The Bank's objective is to eliminate foreign exchange risk by reducing net positions per currency through operations on the international foreign exchange markets.

The Bank's ALM policy reflects the expectations of the main stakeholders of the Bank in terms of stability of earnings, preservation of the economic value of own funds, and self-financing of the Bank's growth in the long term. The ALM strategy is therefore driven by these medium to long term objectives and is not influenced by any short term views on trends in interest rates.

#### *EIF's high level risk appetite statement*

In pursuit of its business strategy the Fund accepts to take financial and non-financial risk up to the level where it remains aligned with the following high-level Risk Appetite Statement. This Statement represents the long-term view of the risk profile within which the EIF is expected to operate.

- EIF provides cover of financial risk to relevant financial intermediaries for the purpose of financing Small and Medium Sized Enterprises, Micro-Enterprises and small Mid Caps in Member States of the European Union or other geographies to the extent so authorised by the EIF General Meeting or under specific mandates;
- EIF shall act as a market oriented investor;
- Subject to mandate specificities, the Fund shall structure and price its operations in order to ensure that it will be adequately remunerated with a view to covering the financial risk incurred and to provide an appropriate return to the shareholders;

- EIF strives at contributing to the establishment, development and stabilisation of its target markets and promoting best standards in these markets;
- EIF shall remain compliant with its Statutes and public mission in due consideration of any applicable EIB Group Policy Framework;
- The Fund strives at maintaining the highest rating from all major rating agencies, which is a primary pillar of its business model;
- EIF strives at mitigating to the utmost possible, any risk, which might affect its reputation. In this context EIF pays specific attention to any possible spill-over effects of reputation risk to its Stakeholders and, in particular, EIB, in consideration of its adherence to the EIB Group.

### Declaration of adequacy of risk management arrangements

EIBs Board of Directors is satisfied with the adequacy of risk management arrangements taken given the risk profile of the Group.

## 4.5. Risk management operational guidelines and processes

The Group's risk management operational guidelines cover the three main types of risk:

- Credit risk
- Financial risk and ALM
- Operational risk.

The following sub-sections provide a comprehensive overview of the main elements of EIB's risk management operational guidelines per risk type, as well as concise descriptions of relevant risk management processes.

### 4.5.1. Credit risk

#### Overview

The credit risk management process consists of identifying, analysing, measuring and reporting the risks incurred by the Group in its operations and making decisions to effectively manage these risks.

Credit risk related matters within the Bank are organised within the RM/CRD department.

Credit risk is managed pursuant to detailed Credit Risk operational Guidelines ('CRGs'). The purpose of the CRGs is to ensure that credit risk is managed prudently within the parameters set by the Bank's Risk Appetite Framework and in accordance with best banking practice applicable to the EIB.

As operations inside and outside the EU may have different risk profiles, there are separate guidelines for EU and non-EU activities.

#### CRGs revision and approval process

Ownership of the CRGs is with RM which is responsible for drafting and proposing revisions of CRGs to the Management Committee in consultation with other services within the Bank. The CRGs are



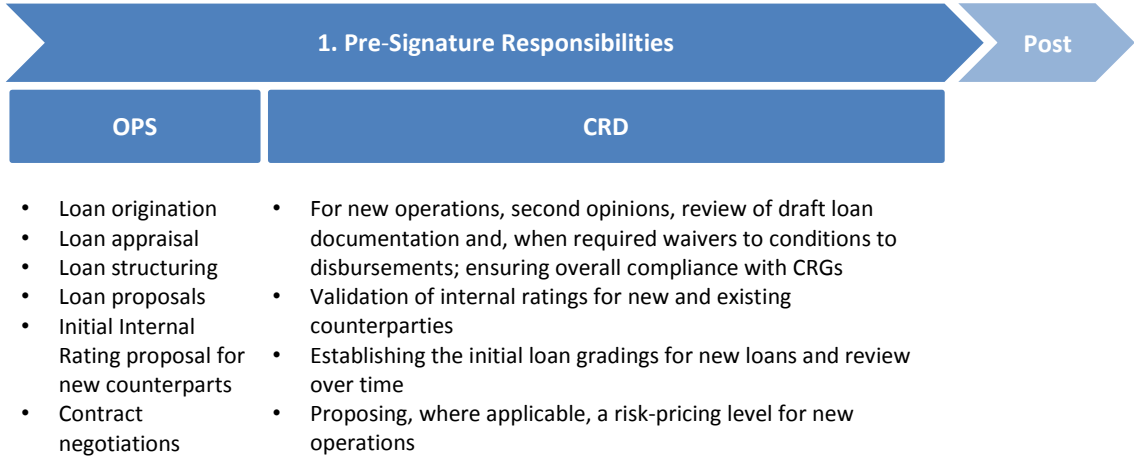
approved by the Bank’s Management Committee. The Board of Directors is updated at least annually about changes to the CRGs.

The CRGs are revised and updated on a continual basis to reflect the evolution of, inter alia the Bank’s risk appetite, best banking practice applicable to the EIB, the Bank’s regulatory framework and its business environment.

Any derogation from the CRGs must be specifically approved by the Bank’s Management Committee on the basis of a duly justified request from the Operations Directorate (‘OPS’) or TMR (as relevant) which will be accompanied by an opinion from CRD.

**Credit risk responsibilities and processes**

The main credit risk responsibilities are divided between CRD, OPS and TMR. The respective responsibilities are as follows divided between pre- and post-signature tasks:



Pre **2. Post-Signature Responsibilities**

CRD	OPS	TMR
-----	-----	-----

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>Reporting regularly on the evolution of the loan portfolio and Watch List containing all loans subject to a more frequent and stringent surveillance based on their loan gradings</li> <li>Co-approving loan documentation; conducting checks that security has been provided as required and that disbursement instructions are consistent with contractual documentation</li> </ul> | <ul style="list-style-type: none"> <li>Contract monitoring to full disbursement except for project finance (PF) and operations outside EU</li> <li>Relations and event resolution with regular, repeat promoters, or global relationship managers borrowers, guarantors graded E+ or higher</li> <li>Assessment of the impact of restructurings or workouts proposed by TMR on lending policy and client relations.</li> </ul> | <ul style="list-style-type: none"> <li>Refinancing, restructuring or workout for all non-regular, non-repeat borrowers and for all loans graded below E- or F</li> <li>Internal ratings and financial monitoring of counterparts and contracts post-signature to full disbursement; PF counterparts and contracts from signature; non-EU lending from first disbursement to maturity</li> <li>Propose, with reference to all credit exposures, the appropriate level of the General Loan Reserve and for credit impaired operations, the creation of specific provisions.</li> </ul> |
|--|--|--|

### Acceptable counterparts

Whether or not a given entity is acceptable to the Bank as a counterpart in a lending operation is determined on the basis of an in-depth analysis and evaluation of the entity using qualitative metrics but also relying on experience and expert judgment.

The following, in particular, are taken into account:

- The existence of a credit exposure limit for the entity.
- Satisfaction of a Minimum Internal Rating ('MIR') requirement set on the basis of the Bank's Internal Rating Methodology (see below).
- Any independent collateral, securities or guarantees available.

### Internal rating methodology

The Bank uses an Internal rating methodology to determine internal ratings for substantially all of its counterparts. The methodology is based on a system of scoring sheets and uses a granular rating scale to assess counterpart acceptability. The resulting rating given to a counterparty is one of the main elements used for the purposes of the Loan Grading system (explained later in this section) and as such is an important element in the Bank's risk management processes, including the monitoring of risks, risk pricing of lending operations and creation of provisions.

## The lending process: contractual guidelines

In depth analysis, evaluations and legal due diligence are performed to determine whether a counterpart should be accepted. The process uses quantitative and qualitative metrics, supported by professional experience and expert judgment.

### *Legal framework*

The CRGs set out guidelines for the legal framework under which the Bank may lend and in particular, defines the governing laws and jurisdictions for the settlement of disputes which the Bank deems acceptable in view of its specific status as a multilateral finance institution owned by the Member States of the European Union.

### *Risk mitigation clauses*

Risk mitigation clauses are the contractual clauses included in the lending documents entered into between the Bank and its counterparts in a lending operation. These documents are, principally, the loan agreement and any guarantee, security or collateral agreement.

Risk mitigation clauses include disbursement conditions making the disbursement of the loan conditional on certain conditions being satisfied, undertakings (covenants) given by the counterpart to the Bank and events of default enabling the Bank to take certain steps on the occurrence of a credit event post signature.

These clauses are designed to protect the Bank against the deterioration of an operation's credit risk and to enable it to take action to preserve its position upon occurrence of any such event.

The clauses may be either (i) "standard" (i.e. common to all EIB loan agreements) or (ii) inserted on a case by case basis depending on the nature of the counterpart and other factors affecting the credit risk profile of the relevant operation.

## The lending process: counterpart exposure limits

EIB distinguishes between new counterparties and existing ones. In the first case OPS makes suggestions for initial counterparty rating and counterparty limit. Then RM validates these suggestions and prepares a decision about the acceptance of a counterpart. Moreover, any adjustments to a counterpart's current limit are analysed with respect to the Group's risk appetite.

### *Counterparty limits*

The Bank places counterpart-based limits on its maximum exposure to all financial institutions, corporates and public sector counterparts (as borrowers and/or guarantors).

Such limits are designed to keep lending exposures within a reasonable proportion of the Bank's and the counterparts' own funds thereby maintaining credit risk on individual counterparts within acceptable bounds and avoiding the development of concentrations of credit risk on a limited number of counterparts.

The Bank also has exposure limits for certain sectors of economic activity.

### *Internal risk weights*

For the purposes of applying the exposure limits, the Bank has a risk weighting methodology whereby exposures set against the limit are weighted from 0% to 100% depending on the nature of the counterpart and the existence of external guarantees or collateral provided as security for the relevant exposure.

### *Regulatory limits*

In addition to the Bank's own limits referred to above, and in compliance with best banking practice applicable to the EIB, regulatory limits exist on the maximum exposure to a single client or a group of connected clients. EIB aims to comply with those limits.

## **Collateral and guarantee management**

### *Security classification*

The credit risk attached to a particular borrower may be enhanced by the provision of third party guarantees and/or valuable collateral.

Guarantees may also be credit enhanced through provision of collateral by the Guarantor.

In order to distinguish the quality of such credit enhancements, the Bank has a granular classification system defining the essential characteristics of the different types of credit enhancement, which may be offered as security.

This distinction is based not only on the credit standing of the issuer of the relevant instrument but also on the instruments legal enforceability and liquidity.

### *Security eligibility and management*

Detailed rules are set out in relation to, inter alia:

- Minimum rating requirements for guarantors and the Bank's rights in case the guarantor loses such rating
- Eligibility of collateral including applicable coverage ratios and haircuts
- Monitoring of guarantors and of the value of collateral
- Acceptable caps on guarantees

The CRGs contain specific rules relating to guarantees provided by monoline insurance companies.

## **EIB's Loan Grading system**

The Loan Grading ('LG') system is used for internal credit risk assessment of EIB's lending operations. The LG system is an important part of the loan appraisal and monitoring process. It is also used as a reference point for credit risk pricing.

A loan's LG reflects the present value of the estimated level of the lifetime expected loss for that loan. This is determined as the product of the probability of default, the loan exposure at risk and the loss given default. The LG system is used for the following purposes:

- aid to a finer and more quantitative assessment of lending risks
- indicator of credit risk variations for the purposes of prioritising monitoring efforts
- description of the Bank's loan portfolio quality at a given date
- benchmark for calculating the annual additions to the General Loan Reserve
- input in risk-pricing decisions

The following factors are used to determine an LG:

- i. **Borrower creditworthiness:** expressed as a Moody's equivalent rating determined in accordance with internal rating methodology ('IRM') (see above).
- ii. **Value of third party guarantees and/or collateral:** takes into account the correlation between the credit risk attaching to the guarantor/issuer of the collateral and the borrower.
- iii. **The applicable recovery rate:** being the amount assumed to be recovered following a default by the relevant counterpart expressed as a percentage of the relevant loan exposure.
- iv. **Risk mitigating clauses:** the presence of contractual clauses will add to the loan's quality and enhance its LG.
- v. **Loan maturity:** all else being equal, the longer the loan term, the higher the risk of default.

Depending on the level of expected loss determined on the basis of the above factors, a loan is assigned to one of the following LG classes:

"A" Prime quality loans of which there are three sub-categories.

"A0" comprising loans to or guaranteed by an EU Member State which have an expected loss of 0% (based on the Bank's preferred creditor status and statutory protection which are deemed to assure a full recovery of the Bank's assets upon maturity).

"A+" comprising loans granted to (or guaranteed by) entities other than EU Member States in respect of which there is no expectation of deterioration in quality over their term.

"A-" includes those lending operations where there is some doubt about the maintenance of their current status but where any downside is expected to be limited.

"B" High quality loans: these represent an asset class with which the EIB feels comfortable, although a minor deterioration is not ruled out in the future. B+ and B- are used to denote the relative likelihood of the possibility of such deterioration occurring.

"C" Good quality loans: an example could be unsecured loans to solid banks and corporates, with a reasonable maturity and adequate protective clauses.

"D" Borderline between acceptable quality loans (designated as D+) and those that have a risk profile which is higher than that generally accepted by the Bank (designated as D-). Operations whose LG is D- or below are classified as Special Activities (see section below) and are subject to specific rules, including specific size restrictions, reserve allocations and risk pricing rules.

- “E” Comprising loans that have explicitly been approved as higher risk Special Activity operations or loans whose quality has materially deteriorated such that a loss cannot be excluded. The sub-classes E+ and E- further differentiate the risk profile of the loans, with those operations graded E- being in a position where there is a possibility that debt service cannot be maintained on a timely basis and therefore some form of debt restructuring may be required, possibly leading to an impairment loss.
- “F” F (fail) denotes loans representing unacceptable risks. F-graded loans can only arise out of outstanding transactions that have experienced unforeseen, exceptional and dramatic adverse circumstances after signature. All operations where there is a loss of principal are graded F and a specific provision is raised.

### **The Watch List and guidelines for dealing with distressed operations**

EIB maintains a Watch List ('WL') for loan exposures which require special (high or moderate) credit risk monitoring following the deterioration of their risk profile post-signature.

The WL includes all outstanding loans graded at D- or below, excepting those originally approved as higher risk Special Activity loans (see below). Special Activity loans will, however, be included in the Watch List if the LG of such loan has deteriorated post-signature as a result of a material credit event.

The WL is updated on a continual basis throughout the year and is reported to the Management as part of RM's monthly internal risk report.

If the credit profile of a watch-listed loan improves sufficiently, it is upgraded and removed from the WL.

### **Distressed operations: restructurings**

Operations with credit quality that deteriorates to an LG of E- or lower are considered distressed and are, therefore, placed on the WL. For distressed loans, there is a possibility debt service may not be paid in a timely manner and a limited possibility of loss of principal. The Bank may undertake a credit-based restructuring to minimise the risk of loss.

When the credit quality of an operation deteriorates even further, and is assigned an LG of F, there is a material risk of loss of principal. Specific provisions will be created against the exposure.

Specific guidelines are set out in respect of distressed borrowers where the Bank may need to take exceptional measures to preserve its position and minimise losses. These guidelines include procedural rules reflecting the urgency of decision making in certain situations.

### **Risk pricing methodology**

The Bank has a risk pricing methodology, which ensures that the risk attached to any given operation is adequately remunerated. The level of risk pricing is based a number of factors including the Loan Grading assigned to the relevant lending operation.

## Special Activities ('SA')

Special Activities are lending or guarantee operations that entail risk that is greater than the risk generally accepted by the Bank, in line with article 16.3 of the Bank's Statute. Such operations are signified by a Loan Grading of "D-" or below.

SA operations are possible with certain customer groups (corporates and project finance transactions) and are subject to additional transaction and counterpart based limits; and a specific reserve allocation requirement (see below).

## Reserves and impairment provisions

The Bank maintains two reserves for expected and unexpected credit losses:

- General Loan Reserve ('GLR'), and
- Special Activities Reserve ('SAR').

The GLR covers expected losses resulting from EIB's loan and guarantee portfolio. The SAR covers unexpected losses of operations which are classified as Special Activities.

Specific provisions are raised for impaired assets. The amount of such provisioning reflects the difference between the loan book value and the present value of all the expected future cash flows generated by the impaired asset.

## Product specific guidelines for complex / higher risk products

In order to ensure that the additional risk involved in complex or structured lending transactions is adequately analysed, quantified and mitigated, specific detailed guidelines have been developed in respect of certain types of operations complementing the general guidelines.

The following types of operations are covered by specific sections of the CRGs:

- Subordinated corporate debt
- Project finance transactions
- Loan substitutes
- Risk sharing products
- Layered funds and securitisations
- Trade finance

## Non-EU lending

As non-EU lending often implies a higher risk profile than lending operations within the EU, the Bank established rigorous operational guidelines for such transactions to ensure that they are in line with the Bank's risk appetite. Moreover, the EIB benefits from an EU guarantee on certain operations outside the EU originated under the External Lending Mandate.

EIB's non-EU operations are split between public and private sector operations and due to the different risk profiles both are considered separately in the operational guidelines.

Similarly to all other transactions, EIB estimates expected losses taking into account a counterpart's internal rating and transaction contractual features and assigns a Loan Grading to non-EU lending transactions.

Beyond capturing the credit strength of a potential counterpart, EIB risk assessment also considers local and country jurisdiction and currency circumstances, which affect the particular market environments, e.g. for emerging market investments. Based on such risk assessment, EIB sets up an internal rating for each of the relevant counterparts. The internal rating reflects the counterpart's long-term foreign currency rating (or local currency equivalent when required) following in-depth analysis of the counterpart's industry, business and financial risk profile and its country risk operating context carried out by front office.

### **EIF Credit Risk**

EIF's Credit Risk arises mainly through its activity linked to debt products, which encompasses guarantees and securitisations. Credit risk management is based on a three-lines-of-defence model which permeates all areas of EIF's business functions and processes: (i) front office, (ii) independent risk and compliance functions and (iii) internal audit.

The EIF has developed a set of tools for its Guarantees and Securitisation business in order to analyse and monitor portfolio guarantees and structured finance transactions in line with common market practices.

In the context of the independent opinion process relating to its guarantees and securitisations, the Credit Risk Management division ("CRM") reviews each transaction proposal provided by the Guarantees, Securitization, and Microfinance ("GSM") department in accordance with EIF's internal rules and procedures.

The performance of a transaction is reviewed regularly – at least on a quarterly basis – and assessed based on EIF's surveillance triggers which take into account elements such as: a) the level of cumulative defaults, b) the credit enhancement, and, c) rating actions by external rating agencies. In case of breach of such triggers and depending on the magnitude and expected consequence(s) of such a breach, a transaction can either change its status (e.g. Under Review, Positive or Negative Outlook) or a model re-run is initiated to reassess EIF's internal rating.



## 4.5.2. Financial risk and ALM

### Overview

Financial risk is the risk of losses arising from the Group's financial operations. The primary financial risks are market risk, liquidity risk, and counterparty risk:

- **Market risk** is the risk of losses arising from evolution of market variables such as interest rates, foreign exchange rates and equity market prices.
- **Liquidity risk** is the risk that the Group is unable to timely fund assets or meet obligations or to liquidate treasury positions at a reasonable price or, in extreme situations, at any price.
- **Counterparty risk** is the risk of loss resulting from default of treasury and derivative counterparts, including settlement risk.

Financial risk is managed pursuant to detailed Financial Risk operational Guidelines ('FRGs'). The purpose of the FRGs is to ensure that financial risk is managed prudently within the parameters set by the Bank's Risk Appetite Framework and in accordance with best banking practice applicable to the EIB.

The financial risk management process consists of identifying, analysing, measuring and reporting the risks incurred by the Bank in its financial operations. Related matters within the EIB are organised within RM/FRD.

### FRGs revision and approval process

Ownership of the FRGs is with RM which is responsible for drafting and proposing revisions of FRGs to the Management Committee in consultation with other services within the Bank. The FRGs are approved by the Bank's Management Committee. The Board of Directors is updated at least annually about changes to the FRGs.

The FRGs are revised and updated on a continual basis to reflect the evolution of, inter alia the Bank's risk appetite, best banking practice applicable to the EIB, the Bank's regulatory framework and its business environment.

Any derogation from the FRGs must be specifically approved by the Bank's Management Committee on the basis of a duly justified request from the Financial Directorate, which will be accompanied by an opinion from the Financial Risk and ALM Department.

### Operational financial risk committees

The following operational committees have been set up as regards financial risk and ALM:

**Asset/Liability Committee** (ALCO) provides a high-level discussion forum for debating the Bank's approach to financial risks. The ALCO promotes and facilitates dialogue among the services of the Bank, providing a wider perspective on their understanding of the main financial issues.

**New Product Committee** (NPC) approves all new products, prior to their use. A product is considered as being new to the Bank if it contains features or risks not encountered in the past.

**Model Committee** analyses the methodological aspects of the development of pricing and valuation models in order to ensure their accuracy and coherence. All derivative transactions concluded by

the Bank must be valued for different purposes: “fair pricing” at inception, “fair value” for regular reporting, and collateral value for collateralisation.

### **Market risk – interest rate risk and ALM strategy**

Interest rate risk is the risk of loss due to the volatility and adverse movements of the term structure of interest rates. Exposure occurs due to mismatches in repricing and maturity characteristics of the assets, liabilities and hedge instruments. In measuring and managing interest rate risk, the Bank refers to the relevant key principles of the Basel Committee for Banking Supervision.

EIB’s ALM strategy is regularly reviewed by the Management Committee. The ALM strategy is not influenced by any short-term views on trends in interest rates. Based on the assumption that the term structure of interest rates is upward sloping most of the time, the own funds return is indexed to long term interest rates.

The own funds of the Bank are benchmarked to a notional portfolio with a target cash flow structure and financial duration. The structure of the notional portfolio is kept within the allowed range approved by the Management Committee. Any deviation of the actual Asset / Liability positions from the notional portfolio, measured in terms of Basis Point Value (‘BPV’) is hedged to bring it back within the approved limits.

Value at Risk and stress-testing on the economic value of the own funds is performed on a monthly basis. Some ad hoc analyses are performed as the case may be, in order to assess risk exposures due to new products and structures, or new market developments.

### **Market risk – foreign exchange risk**

In compliance with its Statute, the Bank does not engage in currency operations not directly required to carry out its lending operations or fulfil commitments arising from loans or guarantees granted by it.

Mismatches of currencies in the asset-liability structure of the Bank are kept within tight limits.

The foreign exchange risk implicit in interest margin accruing in currencies different from EUR is regularly hedged through operations on the forward exchange rate market. The hedging programme addresses the interest rate loan margins expressed in USD and in GBP for the next 3 years on a rolling basis.

The Group’s overall net foreign exchange position did not exceed 2% of the Group’s total own funds, and therefore, the Group did not calculate own funds requirement for foreign exchange risk, in accordance with Article 351 of the CRR.

### **Liquidity risk**

Liquidity risk refers to the ability of the Bank to fund itself and meet obligations as they come due, without incurring unacceptable losses. It can be split into funding liquidity risk and market liquidity risk:

- Funding liquidity risk is the risk that the Bank is unable to refinance the asset side of its balance sheet and to meet payment obligations punctually and in full.
- Market liquidity risk is the volatility in the economic value of, or in the income derived from, the Bank’s positions due to potential inability to execute a transaction to eliminate or

reduce outstanding positions at reasonable market prices. Such inability may force early liquidation of assets at unattractive market prices.

RM calculates and monitors a number of liquidity metrics with the aim of ensuring that the Bank holds an adequate liquidity buffer to cover its future net cash outflows.

Regular stress-testing analyses on different liquidity and funding scenarios are performed to determine the appropriate size of the Bank's liquidity buffer. The various scenarios take into account different lending and funding forecasts as well as stressed loan repayments and liquid assets.

The Bank has a Contingency Liquidity Plan ('CLP') in place, which specifies appropriate decision making procedures and corresponding responsibilities. The CLP is subject to ad-hoc updates and is approved by the Management Committee on an annual basis.

### Counterparty risk: treasury

The primary aim of the Treasury portfolios is to ensure that the Bank holds sufficient liquidity to meet its commitments at all times.

In order to meet these objectives, the Front Office manages several portfolios with different instruments, benchmarks and maturities. While the Front Office is solely responsible for the choice of the investments, the compliance of the latter with the FRGs is monitored on a daily basis by RM, which assigns limits to the eligible counterparties to define the maximum acceptable exposure.

Eligibility criteria for counterparties are fixed according to the type of institution, its credit quality (as measured by their internal rating), and its own funds (when relevant).

In the case of downgrading of a counterparty below the eligibility levels, the corresponding limits will be reduced or closed and new transactions will be blocked. Sale of securities issued by the downgraded counterparty may also take place.

In order to ensure the diversification of investments in the Treasury portfolios, concentration limits apply to counterparties and security issues.

Counterparts authorised for Treasury limits must be subject to a secure and robust legal and regulatory environment; in particular, repo and reverse repo transaction may only be concluded with counterparties that have signed a Global Master Repurchase Agreement (GMRA) with EIB.

### Counterparty risk: derivatives

Counterparty risk in derivative transactions is the loss that the Bank could incur in order to replace existing positions with a new counterparty in case of insolvency of the original counterparty to the trade.

The Bank only trades derivatives with counterparties meeting minimum internal rating criteria at the outset of each transaction. The Bank has a right of early termination if the rating drops below a certain level.

Exposures (exceeding thresholds) are collateralised by cash and/or bonds. All of the Bank's derivative transactions are concluded in the contractual framework of ISDA Master Agreements and Credit Support Annexes, which specify the conditions of exposure collateralisation. The Bank's derivatives and received collateral are valued on a daily basis, with a subsequent call for additional collateral or release.

The Bank measures the counterparty risk exposure related to derivatives using the Current Unsecured Exposure and Total (Current and Potential) Unsecured Exposure for reporting and limit monitoring.

The Current Unsecured Exposure is the larger of zero and the market value of the portfolio of transactions within the netting set with a counterparty, less the value of collateral received. The Total Unsecured Exposure takes into account the potential increase in the netting set's exposure - following a counterparty's insolvency - over a time horizon that depends on the actual portfolio of transactions. The Total Unsecured Exposure is computed using stressed market parameters in order to arrive at conservative estimates.

The derivatives portfolio is valued and compared against limits on a daily basis.

### **Fund transfer pricing system**

The Bank's financial results and overall risk exposure are generated through various activities. In particular:

- Lending
- Funding
- Treasury Portfolios
- Venture capital
- Participations
- Other equity holdings
- Debt management (buy-backs)
- Management of own funds

In conducting its day-to-day activities the Bank may hold a residual (i.e. net) position on its balance sheet resulting from the mismatches between its assets and liabilities. Such position is therefore consolidated in a portfolio called the Corporate ALM Centre ('CC'), and hedged as required by the ALM strategy. This consolidation is implemented via a transfer pricing ('TP') system.

The TP system has two main objectives – to measure the contribution of the various activities to the Bank's revenues and to transfer part or all of interest rate and FX risk out of the individual centres of activity such that this risk can be centrally measured by RM and hedged by the Front Office.

The TP system assigns a notional funding and liquidity cost to all activities consuming funds and a notional investment yield to all activities providing funds (mainly borrowings). For the CC, the former becomes the yield notionally generated by the Bank's assets while the latter represents its notional (or internal) funding and liquidity cost. The sum of all the individual contributions over any given period, CC's positions included, represents the Bank's financial revenue over the same period.

## Monitoring of financial collateral

In order to mitigate the credit exposure of transactions, EIB receives collateral from counterparties in different activities: derivatives, treasury and loans.

RM verifies on a daily basis that there is a sufficient amount of collateral posted in favour of the Bank as well as the eligibility of the securities received.

In some lending contracts, the Bank requires counterparties to post securities to mitigate the credit exposure on a borrower or a guarantor. These securities are usually documented as a pledge, where the ownership of the security stays with the counterparty.

In reverse repo treasury transactions, the Bank receives financial securities as collateral. Daily margining and eligibility checks are performed by triparty agents. RM verifies daily the tasks of the triparty agent.

## EIF Treasury

The Treasury of the EIF is managed by the EIB according to agreed guidelines. The funds are managed in such a way to ensure an adequate level of liquidity to meet foreseeable disbursements, to protect the value of the paid-in capital and to earn a reasonable yield on assets invested with due regard to the level of risk authorised. Performance for each portfolio is measured in order to compare returns against appropriate indices or reference benchmarks.

EIF manages third party funds separately from its own funds on behalf of mandate owners, according to Management agreements.

### 4.5.3. Operational risk

#### Overview

Operational risk is the potential loss resulting from inadequate or failed internal processes, people and systems or from external events.

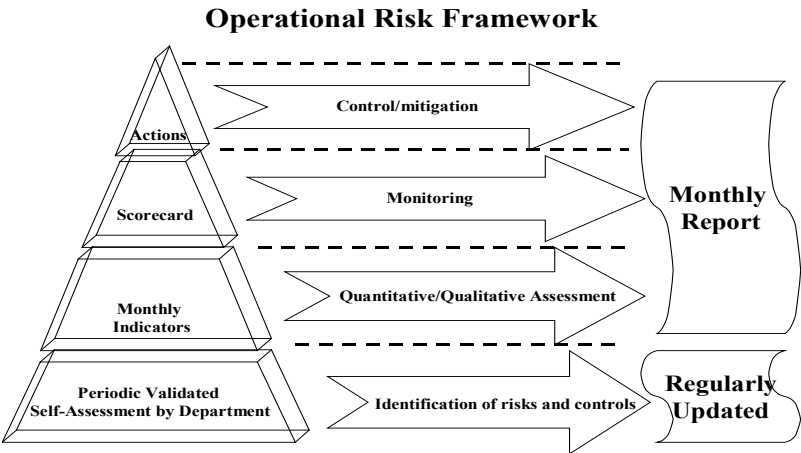
Operational risk is managed pursuant to detailed operational guidelines (the Operational Risk Guidelines or ‘ORGs’). The purpose of the ORGs is to ensure that operational risk is managed prudently within the parameters set by the Bank’s Risk Appetite Framework and in accordance with relevant best banking practice applicable to the EIB.

#### EIB’s Operational Risk Management Framework

EIB’s operational risk framework is a key component of the overall bank-wide Risk Management framework, designed to effectively manage operational risk and measure the capital charge in line with the CRR.

The Management Committee is responsible for setting acceptable levels for operational risks and for approving and periodically reviewing the Bank’s operational risk framework.

Figure 4-3: EIB's operational risk framework



The key elements of the operational risk framework are:

- Risk identification
- Risk assessment
- Risk monitoring
- Risk control and mitigation

#### Risk identification and assessment

Risk identification and assessment is the paramount for the development of a sound operational risk management system. The Bank identifies and assesses all material risks within each business and evaluates the key controls in place to mitigate those risks. Risks at the EIB are mainly being

identified through a scenario analysis process and New Product Committee ('NPC'), the latter particularly for new products implemented by the Bank.

The scenario analysis is a key input into the Advanced Measurement Approach calculation of regulatory and economic capital requirements. On an annual basis, the scenario analysis exercise is performed by an Operational Risk Manager together with the business expert where expert judgement is used to ascertain different risks the Bank might be exposed to. Through the process where risk scenarios are being identified, the scenario's frequency and potential losses are being assessed.

Furthermore, the Bank is a member of the British Bankers Association - Global Operational Loss Database ('GOLD'). Through the anonymous (external) consortium data, risk identification, assessment and measurement are being supported.

### **Risk measurement and monitoring**

The business environment and internal control systems are monitored through Key Risk Indicators ('KRIs'), which include measurable thresholds and limits to monitor the identified risks. The KRIs calculated every month are summarised and aggregated in the form of an Operational Risk Scorecard in order to provide an overall picture of the operational risk profile of the key departments and of the Bank as a whole. The KRIs are reported to alert management when risk levels exceed acceptable ranges.

Staff is required to escalate and report operational risk events, including details of actual operational losses as well as near misses. Through this process, any material exposures to losses within the Bank are being monitored.

### **Risk control and mitigation**

The control activities are an integral part of the regular activities of the Bank and involve all levels of personnel in order to be effective. These include the Management Committee, which establishes acceptable levels for operational risks, and ensures senior management takes steps necessary to identify, assess, monitor and control these risks.

### **EIF's Operational Risk Management Framework**

The EIF Corporate Risk Management division ("CORPRM") is responsible for the implementation and the management of the EIF operational risk management framework as described in the Operational Risk Management Charter approved by the EIF Board of Directors on 12 April 2010.

The EIF has developed a specific process-based Risk and Control Assessment methodology which takes into account both the potential financial and reputational impact of the risks inherent to its activities. On that basis, the overall operational risk profile of EIF is described in the annual Internal Control Framework report and the material residual risk exposures are mitigated through specific risk-mitigating actions where appropriate. The framework also encompasses the ongoing collection and analysis of the operational risk events reported to CORPM - Operational Risk, including the definition of action plans to address their root cause, and the coordination of an ex-ante operational risk assessment for new business initiatives, including new mandates and new products.

The Fund uses a Basic Indicator Approach for capital calculations and the calculated capital is used in the Group's regulatory calculations.



## 5. Capital adequacy and risk weighted assets

### 5.1. Capital management

Maintaining a strong capital position is one of the major objectives of EIB Group's risk management.

The Group's own funds for capital adequacy purposes comprise paid-in capital plus reserves, net of expected losses and provisions. In addition, the Group benefits from subscribed unpaid capital, which can be called by the Bank to the extent needed for EIB to meet its obligations.

The Bank plans its capital on a forward looking basis in accordance with its Operational Plan and risk appetite described in Chapter 4. This ensures EIB's risk taking activities are adequately covered by available capital. Capital projections are made based on business forecasts detailed in the EIB's Operational Plan and are also complemented by capital stress testing.

Table 5-1: CAD ratio across different stress testing scenarios

EIB operational plan CAD ratio scenarios (EIB stand-alone)	2016	2017	2018
Baseline COP 2016 - 2018	23.2%	24.0%	23.2%
Downgrade scenario	22.0%	21.1%	20.2%
Upgrade scenario	24.1%	27.3%	26.4%

### 5.2. Own funds

BCBS and EBA require banks to publish their capital composition according to a common disclosure template with the objective of mitigating the risk of inconsistent disclosure formats undermining market participants' ability to compare capital adequacy of banks. The following table fulfils two aspects of the disclosure requirements: it provides comprehensive details of own funds and it provides a reconciliation of the individual items to the balance sheet of the Consolidated Financial Statements under EU Accounting Directives.

The capital composition of the Group has changed over the period mainly due to changes in retained profits, capital payments from EIB shareholders and the amount of regulatory deductions applied.

Table 5-2: Own funds disclosure

<i>EUR million</i>	31.12.2015	31.12.2014
<b>Common Equity Tier 1 (CET1) capital</b>		
Capital instruments and the related share premium accounts	21,569	21,123
of which: paid-in share capital	21,569	21,123
Retained earnings	39,135	36,447
Profit for the financial year	2,801	2,680
<b>Common Equity Tier 1 (CET1) capital before adjustments</b>	<b>63,505</b>	<b>60,250</b>
<b>Regulatory adjustments</b>		
Intangible assets	-12	-9
Negative amounts resulting from the calculation of expected loss	-1,707	-1,276
Deduction of securitisation exposures <sup>4</sup>	-6,178	-3,095
<b>Total regulatory adjustments to Common Equity Tier 1 (CET1)</b>	<b>-7,897</b>	<b>-4,380</b>
<b>Common Equity Tier 1 (CET1) capital</b>	<b>55,608</b>	<b>55,870</b>
<b>Total capital<sup>5</sup></b>	<b>55,608</b>	<b>55,870</b>
<b>Total risk weighted assets</b>	<b>244,041</b>	<b>219,316</b>
<b>Capital ratios</b>		
<b>Common Equity Tier 1 (as a % of total risk exposure amount)</b>	<b>22.8%</b>	<b>25.5%</b>
<b>Total capital (as a % of total risk exposure amount)</b>	<b>22.8%</b>	<b>25.5%</b>

Table 5-3: Reconciliation tables for own funds

<i>EUR million</i>	31.12.2015	31.12.2014
<b>Subscribed capital</b>		
a) subscribed	243,284	243,284
b) uncalled	-221,585	-221,585
<b>Subtotal</b>	<b>21,699</b>	<b>21,699</b>
Subscribed capital and reserves, called but not paid	-130	-576
<b>Total</b>	<b>21,569</b>	<b>21,123</b>
<b>Reserves</b>		
a) reserve fund	24,328	24,328
b) additional reserves	5,554	2,882
d) special activities reserve	5,934	6,031
e) general loan reserve	3,319	3,206
<b>Reserves</b>	<b>39,135</b>	<b>36,447</b>
<b>Profit for the financial year</b>	<b>2,801</b>	<b>2,680</b>

### 5.3. Regulatory capital

The Group applies the Advanced internal ratings based (AIRB) approach to calculating capital requirements for credit risk on the majority of its portfolio. The Group also makes very limited use of the Standardised Approach, in particular on its strategic equity-type investments.

The composition of risk weighted assets by risk type is provided in this section.

<sup>4</sup> EIB Group deducts securitisation exposure in accordance with CRR Article 36(1)(k)

<sup>5</sup> EIB Group's capital consists entirely of CET 1 capital

Table 5-4: EIB Group's CRR methodologies per risk type

Risk type	CRR methodology
Credit risk	Advanced IRB approach Standardised approach
Counterparty credit risk	Mark-to-market approach for OTC-derivatives Comprehensive approach for credit risk mitigations regarding SFTs
Securitisation positions in the banking book	Ratings Based method Supervisory Formula Deduction from capital for unrated and defaulted exposures
Operational risk	Advanced Measurement approach

Table 5-5: Overview of risk-weighted assets (RWA) and regulatory capital (RGC) by exposure class

EUR million	31.12.2015		31.12.2014	
	RWA	RGC	RWA	RGC
<b>Advanced IRB approach</b>				
Central governments and central banks	1,330	106	2,271	182
Institutions	99,054	7,924	80,903	6,472
Corporates	99,407	7,953	67,376	5,390
Specialised lending (slotting)	0	0	28,447	2,276
Equities (simple risk-weight)	21,015	1,681	17,331	1,387
Cash and Other Assets	709	57	988	79
Securitisation	3,178	254	2,829	227
<b>Total Advanced IRB approach</b>	<b>224,693</b>	<b>17,975</b>	<b>200,145</b>	<b>16,013</b>
<b>Standardised approach</b>				
Strategic Investments	870	70	870	70
Corporates	308	25	0	0
<b>Total Standardised approach</b>	<b>1,178</b>	<b>95</b>	<b>870</b>	<b>70</b>
<b>Total Credit risk</b>	<b>225,871</b>	<b>18,070</b>	<b>201,015</b>	<b>16,083</b>
<b>Counterparty credit risk</b>				
Derivatives (Mark-to-market approach)	8,329	666	6,155	492
Securities Financing Transactions (Financial collateral comprehensive method)	61	5	118	9
CVA capital charge	7,301	584	8,866	709
<b>Total Counterparty credit risk</b>	<b>15,691</b>	<b>1,255</b>	<b>15,139</b>	<b>1,210</b>
<b>Operational risk</b>				
Advanced Measurement Approach	2,206	176	2,930	234
Basic Indicator Approach	273	22	232	19
<b>Total Operational risk</b>	<b>2,479</b>	<b>198</b>	<b>3,162</b>	<b>253</b>
<b>Total</b>	<b>244,041</b>	<b>19,523</b>	<b>219,316</b>	<b>17,546</b>

## 5.4. Leverage ratio

### Overview

The Bank uses its **gearing ratio**, which is defined in the Bank's Statute, to limit the excess of leverage. This ratio is defined as "the aggregate amount outstanding at any time of loans and guarantees granted by the Bank, which shall not exceed 250 % of its subscribed capital, reserves, non-allocated provisions and profit and loss account surplus. The latter aggregate amount shall be reduced by an amount equal to the amount subscribed (whether or not paid in) for any equity participation of the Bank" (Article 16.5 of the Bank's Statute). Based on the Operational Plan, the gearing ratio is simulated for future time periods and for different scenarios in order to ensure that the limit within the Statute will not be breached.

An **internal leverage ratio** measure is also calculated. It is defined as gross debt (long term and short term) divided by the adjusted shareholder's equity (own funds minus EIB participation in EIF's capital) and is monitored on an ongoing basis. Both ratios are calculated for the Bank only and are reported monthly in the internal RM Risk Report that is provided to the management of the Bank.

### CRR Leverage ratio

The **CRR (Basel III) leverage ratio** was introduced into the Basel III framework as a non-risk-based "backstop" measure, to supplement risk-based capital requirements. It aims to constrain the build-up of excess leverage in the banking sector, as well as to provide a safeguard against the risks associated with risk models (i.e. model risk and measurement errors). The ratio is a volume-based measure calculated as Basel III Tier 1 capital divided by total on and off balance sheet exposures.

The European Commission issued a delegated act in 2014 establishing a common definition of the leverage ratio for EU banks, which will be the basis for banks to publish the leverage ratio from early 2015. The methodology for the leverage ratio was aligned to the internationally agreed leverage ratio. The decision on whether or not to introduce a binding leverage ratio will be made in 2016; the current ratio is not binding, although public disclosure has been mandatory since 1 January 2015 according to CRD IV/CRR.

The leverage ratio is calculated based on Basel III Tier 1 capital. It changed over the period due to changes in capital and exposure level.

Table 5-6: CRR Leverage ratio common disclosure

<i>EUR million</i>	31.12.2015	31.12.2014
On-balance sheet items (excluding derivatives and SFTs and deductions)	543,253	509,239
<b>Total on-balance sheet exposures (excluding derivatives and SFTs)</b>	<b>543,253</b>	<b>509,239</b>
Replacement cost associated with derivatives transactions	65,444	63,035
Add-on amounts for PFE associated with derivatives transactions	14,653	14,019
<b>Total derivative exposures</b>	<b>80,097</b>	<b>77,054</b>
Securities financing transactions (SFTs) exposure	14,794	25,415
<b>Total securities financing transaction exposures</b>	<b>14,794</b>	<b>25,415</b>
Off-balance sheet exposures at gross notional amount	114,029	106,075
Adjustments for conversion to credit equivalent amounts	-54,181	-51,049
<b>Total off-balance sheet exposures</b>	<b>59,848</b>	<b>55,026</b>
<b>Total leverage ratio exposure</b>	<b>697,992</b>	<b>666,734</b>
Tier 1 capital	55,608	55,870
<b>Leverage ratio</b>	<b>8.0%</b>	<b>8.4%</b>

Table 5-7: Break-down of CRR leverage ratio exposure by type of banking book exposure

<i>EUR million</i>	31.12.2015	31.12.2014
<b>Total regulatory exposures</b>	<b>697,992</b>	<b>666,734</b>
Of which:		
<b>Trading book exposures</b>	<b>0</b>	<b>0</b>
<b>Banking book exposures</b>	<b>697,992</b>	<b>666,734</b>
Of which:		
Covered bonds	13,246	13,762
SFTs <sup>6</sup>	14,794	25,415
Derivatives	80,097	77,054
Exposures to central governments	149,479	135,907
Exposures to regional governments, international organisations and public sector entities not treated as sovereigns	108,463	100,970
Exposures to institutions	150,531	140,351
Exposures to corporates	141,621	144,469
Exposures in default	1,399	1,422
Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	38,362	27,384

<sup>6</sup> Securities Financing Transactions

## 5.5. Countercyclical buffer and G-SII indicators

### Countercyclical buffer

The countercyclical buffer rate is set by each jurisdiction on a quarterly basis. Banks have to apply weighted-average countercyclical buffer rate based on the geographical composition of their credit portfolio. The Member States have opted not to activate the countercyclical capital buffer for the time being with one exception (Sweden). Sweden and Norway have both announced countercyclical buffer rate of 1%.

Considering that the EU is currently not in a stage of excessive credit growth and the weighted-average countercyclical buffer rate applicable to the Bank's portfolio based on its geographical composition is 0.021%, the Banks's countercyclical buffer is at present set effectively at 0%. However, if the credit cycle in the EU starts to turn and the Member States decide to activate the countercyclical buffer in order to limit excessive credit growth, it would imply an additional regulatory capital buffer of up to 2.5%.

Table 5-8: Countercyclical capital buffer

Total off-balance sheet exposures <sup>7</sup>	Buffer rate	% of EIB's portfolio
Sweden	1.00%	2.08%
Norway	1.00%	0.02%
<b>Weighted-average buffer rate applicable to EIB</b>	<b>0.02%</b>	<b>2.10%</b>

### G-SII indicators disclosure

The EIB Group is neither identified, nor required to hold a G-SII buffer, but the Group voluntarily follows the G-SII disclosure standards.

Table 5-9: G-SII Indicators

Globally systemically important banks indicators	Amount ( in EUR million)
Total exposures	697,992
Intra-Financial System Assets	307,291
Intra-Financial System Liabilities	45,866
Securities Outstanding	514,620
Payments Activity	3,861,696
Assets Under Custody	-
Underwritten Transactions in Debt and Equity Markets	-
Notional Amount of OTC Derivatives	747,144
Trading and AFS Securities	5,175
Level 3 Assets	42,882

<sup>7</sup> Jurisdictions that have announced the deployment of the countercyclical buffer

## 6. Credit Risk

### Introduction

Credit risk is the risk of losses arising from the failure of counterparties to meet all or part of their financial obligations to the Group. Lending is the principal activity of the EIB, which offers loans, guarantees and other lending products which are subject to credit risk. The EIF is also exposed to credit risk as it invests in venture capital activities and provides guarantees in the context of securitisation transactions.

This section does not cover credit risk arising from over-the-counter (OTC) derivative transactions and securities financing transactions, which is defined as Counterparty Credit Risk in this report and is covered in Chapter 7. Credit exposures on securitisation positions are included in this chapter only when indicated, but are covered in more detail in Chapter 8.

### 6.1. Portfolio composition

#### Overview of exposure distribution

The Group grants loans and accepts credit exposure on financial transactions on terms and conditions that embed a high standard of credit quality and a low risk of loss. EIB operates with a range of counterparties that are shown below.

Information on exposures given in this chapter are exposures used for calculating regulatory capital and therefore differ to exposures for accounting purposes that are given in the Financial Statements. Differences include: i) not only current, but also future exposure (resulting e.g. from future commitments) is included, (ii) valuation adjustments made for accounting purposes do not necessarily apply here, (iii) credit risk mitigants are applied and in addition the segmentation by exposure classes used here follow the CRR and cannot be found in the Financial Statements.

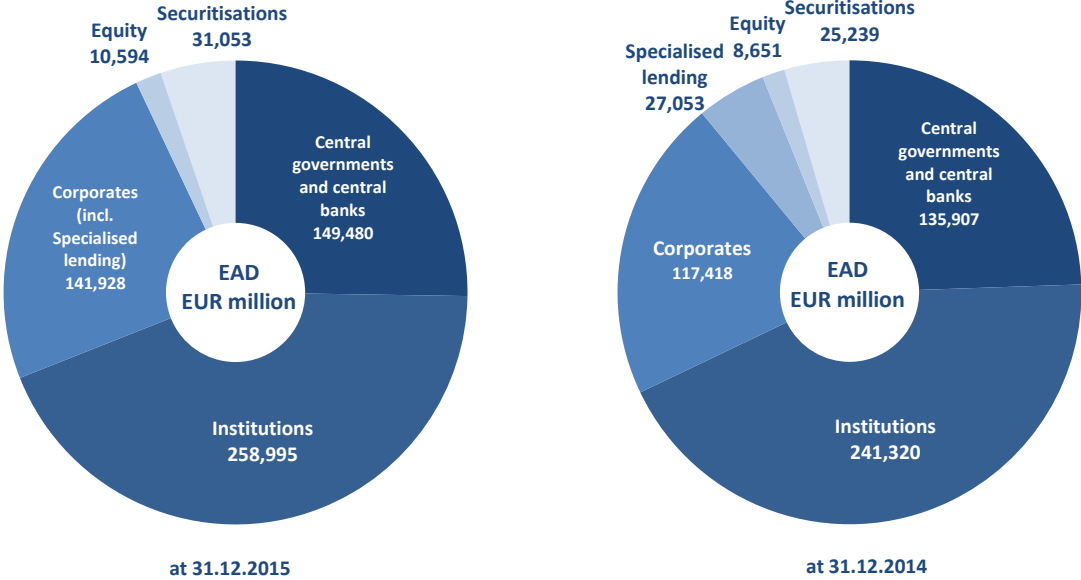
Table 6-1: CRR exposure classes mapped to EIB counterparty types

The following table provides an overview of EIB's counterparties and how these are treated for regulatory capital calculation purposes according to the CRR.

CRR exposure class	Counterparty types
Central Governments and Central Banks	Central Banks
	Governmental bodies
	Member States of the European Union
	Other sovereign entities
Institutions	Banks
	Leasing companies
	Insurance companies and financial guarantors
	Other financial institutions
	Public administrations
	Public sector entities
Corporates	Regional or local authorities
	Commercial companies
Corporate - Specialised Lending	Special purpose vehicles

Figure 6-1: Credit risk exposure by IRB exposure class

The following charts provide an overview of the Group’s credit exposure (EAD, exposure at default, post substitution of financial guarantees, including deductions) by IRB exposure class.



**Portfolio quality and credit risk adjustments**

In line with the CRR, EIB’s definition of default is such that a default is considered to have occurred with regard to a particular obligor when either or both of the two following conditions are met:

1. The obligor is past due more than 90 days on any material financial obligation to the Bank or
2. The Bank considers that the obligor is unlikely to pay in full its material credit obligations to the Bank. The following events are being considered as cases of unlikelihood to pay in full<sup>8</sup>:
  - a) Creation of a specific provision;
  - b) Distressed restructuring (modifications of the original contractual schedule) that is likely to result in a diminished financial obligation for the Bank;
  - c) When the EIB accelerates all or part of its loan following a contractual event of default;
  - d) The exposure (or part of it) is written off or written down;
  - e) The obligor has sought or has been placed in bankruptcy or similar protection;
  - f) The Bank realises security to avoid a potential loss, specifically:
    - The Bank proceeds with a realisation of securities or loan collaterals or call under guarantees;
    - Default on derivatives or realisation of derivative collaterals; or
  - g) The obligor is unable to provide security or collateral on terms the Bank has formally requested according to its contractual rights and after the steps foreseen in the contract.

<sup>8</sup> This list is not exhaustive, other events could also be considered as unlikelihood to pay.



The EIB keeps a manual on operational procedures which describes the procedures and responsibilities for identifying default events, monitoring and follow up of the events and input and management in the internal systems. An obligation is considered as being “past due” when a contractual payment has not been met.

For accounting purposes, a claim (meaning a loan, a commitment such as a letter of credit, a guarantee, a commitment to extend credit, or another credit product) is considered to be impaired if there is objective evidence that the Group will be unable to collect all amounts due on that claim according to the original contractual terms or an equivalent value. More precisely:

- The need to consider a loan as impaired is assessed regularly for all loans whose LG deteriorated to E-, while all loans with a LG of F are considered as impaired.
- In addition, if the Bank is not expecting to recover the original carrying amount on a loan with renegotiated payment terms (after having been on the Watch List previously), the loan will be considered as impaired and the LG will be adjusted to F accordingly in case it was not F previously.

Details about the approach adopted for determining specific credit risk adjustments for regulatory purposes based on the specific impairment charges for accounting purposes have been provided in Section 6.1. Movements in specific credit risk adjustments over the period can be found in the Financial Statements, Note D.2. All of the Bank’s exposures are assessed for impairment at least annually. Therefore no general credit risk adjustments are made.

**Table 6-2: Analysis of exposures (on and off balance sheet) and portfolio quality by product at 31.12.2015**

*The following tables provide an overview of the quality of the Bank’s credit exposures, on- and off- balance sheet exposures before application of credit conversion factors (“CCF”), EAD pre-CCF. The tables present a break-down of defaulted and non-defaulted exposures against specific provisions. Synthetic securitisations are not included under Securitisations; instead the underlying (securitised) exposures are split between Loans and Off-balance exposures. Counterparty credit risk exposures, such as OTC derivatives and securities-financing transactions, are not included.*

31.12.2015 EUR million	All exposures (EAD pre-CCF)			Specific provisions			Net value
	Defaulted exposure		Non-defaulted exposure	Defaulted exposure		Non-defaulted exposure	
	Past due (more than 90 days)	Other		Past due (more than 90 days)	Other		
Loans	1,161	0	456,086	(357)	0	(1)	456,889
Debt securities	0	0	61,187	0	0	0	61,187
Equity	0	0	5,671	0	0	(3)	5,668
Securitisations	0	0	7,977	0	0	0	7,977
Other	0	0	1,671	0	0	0	1,671
Off-balance	238	0	91,913	(241)	0	(23)	91,887
<b>Total</b>	<b>1,399</b>	<b>0</b>	<b>624,505</b>	<b>(598)</b>	<b>0</b>	<b>(27)</b>	<b>625,279</b>

31.12.2014	All exposures (EAD pre-CCF)			Specific provisions			Net value
EUR million	Defaulted exposure		Non-defaulted exposure	Defaulted exposure		Non-defaulted exposure	
	Past due (more than 90 days)	Other		Past due (more than 90 days)	Other		
Loans	1,164	0	438,825	(234)	0	(12)	439,743
Debt securities	0	0	41,971	0	0	0	41,971
Equity	0	0	3,971	0	0	(30)	3,941
Securitisations	0	0	8,067	0	0	0	8,067
Other	0	0	1,576	0	0	0	1,576
Off-balance	258	0	89,218	(183)	0	(24)	89,269
<b>Total</b>	<b>1,422</b>	<b>0</b>	<b>583,628</b>	<b>(417)</b>	<b>0</b>	<b>(66)</b>	<b>584,567</b>

Table 6-3: Changes in defaulted loans and debt securities from year-end 2014 to 2015

This table analyses the recent evolution of defaulted credit risk exposures and in particular the movements between non defaulted and defaulted status and the reductions of defaulted exposures due to write-offs. It does not include defaults on securitized exposures.

	EUR million
<b>Defaulted loans and debt securities at the beginning of the reporting period (1.1.2015)</b>	<b>1,422</b>
Loans and debt securities that have defaulted or impaired since the last reporting period	231
Returned to non-defaulted status	(254)
Amounts written off	0
Other changes	0
<b>Defaulted loans and debt securities at the end of the reporting period (31.12.2015)</b>	<b>1,399</b>

The total amount of defaulted loans and debt securities remains a small portion of the Group's overall portfolio.

Table 6-4: Specific credit risk adjustments by IRB exposure class

The following table provides an overview of EIB's specific provisions for impaired loan and equity-type exposures.

Specific provisions EUR million	31.12.2015	31.12.2014	Change
Corporates	594	432	162
Institutions	5	5	-
<b>Total specific provisions on loans</b>	<b>599</b>	<b>437</b>	<b>162</b>
Equity	26	46	(20)
<b>Total specific provisions</b>	<b>625</b>	<b>483</b>	<b>142</b>

Table 6-5: Defaulted exposures and specific provisions on loans

The following table provides an overview of EIB's defaulted exposures post collateral and guarantees. It also provides a geographical and economic sector break-down of specific provisions for impaired loans. This table does not include defaults on securitized exposures.

31.12.2015 EUR million	Defaulted exposure		Specific provisions	Change in 2015
	Past due (more than 90 days)	Other		
Air transport	0	0	50	50
Bank-intermediated loans	0	0	1	(3)
Chemicals, plastics and pharmaceuticals	0	0	0	(10)
Electricity, coal and others	154	0	51	(1)
Oil, gas and petroleum	0	0	0	(100)
Roads and motorways	1,005	0	503	190
Social infrastructure: education, health	224	0	10	10
Urban dev., renovation and transport	9	0	3	(1)
Waste recuperation, recycling	7	0	7	7
<b>Total by sector</b>	<b>1,399</b>	<b>0</b>	<b>625</b>	<b>142</b>
Austria	34	0	0	0
France	97	0	24	12
Germany	275	0	135	8
Greece	183	0	145	136
Ireland	104	0	5	(5)
Italy	53	0	3	3
Luxembourg	0	0	0	(101)
Netherlands	0	0	4	(11)
Portugal	439	0	202	64
Spain	78	0	19	(6)
United Kingdom	136	0	35	3
Non-EU	0	0	53	39
<b>Total by geographical area</b>	<b>1,399</b>	<b>0</b>	<b>625</b>	<b>142</b>

31.12.2014 <i>EUR million</i>	Defaulted exposure		Specific provisions
	Past due (more than 90 days)	Other	
Bank-intermediated loans	0	0	4
Chemicals, plastics and pharmaceuticals	3	0	10
Electricity, coal and others	185	0	52
Oil, gas and petroleum	200	0	100
Roads and motorways	1,024	0	313
Urban dev., renovation and transport	9	0	4
<b>Total by sector</b>	<b>1,422</b>	<b>0</b>	<b>483</b>
France	98	0	12
Germany	304	0	127
Greece	171	0	9
Ireland	112	0	10
Luxembourg	200	0	101
Netherlands	0	0	15
Portugal	459	0	138
Spain	78	0	25
United Kingdom	0	0	32
Non-EU	0	0	14
<b>Total by geographical area</b>	<b>1,422</b>	<b>0</b>	<b>483</b>

### Portfolio composition

The exposure values provided in this section are Exposure at Default ('EAD'), post-substitution and pre-mitigation by collateral, unless otherwise stated. Also securitisation activities have been included to provide their respective breakdown by geography and sector, although their RWA will be included only in Chapter 8 below.

Table 6-6: Average credit risk exposures over the year

This table shows the Group's average exposures over the period ending December 2015 and December 2014 by exposure class, excluding derivatives, SFT, and other credit non-obligation assets.

<i>EUR million</i>	Average EAD	
	2015	2014
Central governments and central banks	151,877	132,155
Institutions	257,863	249,749
Corporate (incl. Specialised lending)	138,257	133,860
Equity	9,121	6,934
Items representing securitisation positions	26,811	21,580
<b>Total</b>	<b>583,929</b>	<b>544,278</b>

Table 6-7: Geographical distribution of credit risk exposures

31.12.2015 EAD, EUR million	Central governments and central banks	Institutions	Corporates (including specialised lending)	Equity	Items representing securitisation positions	Cash and other assets	Total	Exposure as % of GDP
Austria	736	12,995	2,370	44	115	0	16,260	4.8%
Belgium	1,602	9,124	2,620	220	0	0	13,566	3.3%
Bulgaria	1,247	606	5	0	15	0	1,873	4.2%
Croatia	2,694	318	82	0	3	0	3,097	7.1%
Cyprus	2,289	119	68	0	0	0	2,476	14.2%
Czech Republic	3,223	4,463	868	49	96	0	8,699	5.2%
Denmark	562	2,366	1,895	326	0	0	5,149	1.9%
Estonia	648	89	487	0	0	0	1,224	6.0%
Finland	885	5,267	1,708	171	68	0	8,099	3.9%
France	7,575	45,221	11,874	1,573	209	0	66,452	3.0%
Germany	6,059	34,474	17,561	501	655	0	59,250	2.0%
Greece	15,750	789	664	2	0	0	17,205	9.8%
Hungary	7,175	894	806	0	5	0	8,880	8.2%
Ireland	606	2,702	1,589	258	435	0	5,590	2.2%
Italy	10,000	34,720	21,755	342	2,376	0	69,193	4.2%
Latvia	622	0	289	0	0	0	911	3.7%
Lithuania	1,608	0	203	0	0	0	1,811	4.9%
Luxembourg	108	2,058	1,493	1,658	19,817	1,661	26,795	51.4%
Malta	293	0	41	0	0	0	334	3.8%
Netherlands	622	8,650	9,857	513	381	0	20,023	3.0%
Poland	22,098	8,286	5,856	113	50	0	36,403	8.5%
Portugal	7,913	6,291	6,346	46	137	0	20,733	11.6%
Romania	2,739	996	245	0	0	0	3,980	2.5%
Slovakia	2,090	628	211	0	0	0	2,929	3.8%
Slovenia	3,081	141	241	0	0	0	3,463	9.0%
Spain	36,439	43,828	11,449	245	2,669	0	94,630	8.8%
Sweden	1,567	6,113	4,656	215	163	0	12,714	2.9%
United Kingdom	1,201	13,263	31,448	2,882	263	0	49,057	1.9%
<b>Total EU</b>	<b>141,432</b>	<b>244,401</b>	<b>136,687</b>	<b>9,158</b>	<b>27,457</b>	<b>1,661</b>	<b>560,796</b>	
<b>Non EU</b>	<b>8,048</b>	<b>14,594</b>	<b>5,241</b>	<b>564</b>	<b>1,148</b>	<b>0</b>	<b>29,595</b>	
Not applicable	0	0	0	872	2,448	281	3,601	
<b>Total</b>	<b>149,480</b>	<b>258,995</b>	<b>141,928</b>	<b>10,594</b>	<b>31,053</b>	<b>1,942</b>	<b>593,992</b>	

31.12.2014 EAD, EUR million	Central governments and central banks	Institutions	Corporates (including specialised lending)	Equity	Items representing securitisation positions	Cash and other assets	Total	Exposure as % of GDP
Austria	275	13,613	1,934	43	90	0	15,955	4.8%
Belgium	775	7,547	2,412	143	0	0	10,877	2.7%
Bulgaria	1,132	550	5	0	7	0	1,694	4.0%
Croatia	2,808	353	56	0	4	0	3,221	7.5%
Cyprus	2,151	122	72	0	0	0	2,345	13.5%
Czech Republic	3,314	4,390	1,207	37	109	0	9,057	5.8%
Denmark	191	1,144	2,323	240	0	0	3,898	1.5%
Estonia	634	91	500	0	0	0	1,225	6.1%
Finland	857	4,737	1,565	108	70	0	7,337	3.6%
France	2,343	41,476	11,102	1,220	181	0	56,322	2.6%
Germany	2,394	36,240	17,479	373	443	0	56,929	1.9%
Greece	14,453	915	1,981	5	0	0	17,354	9.8%
Hungary	7,635	1,211	838	0	5	0	9,689	9.3%
Ireland	479	2,788	1,692	152	211	0	5,322	2.8%
Italy	9,394	34,678	21,455	252	2,679	0	68,458	4.3%
Latvia	1,027	0	269	0	0	0	1,296	5.5%
Lithuania	1,386	0	166	0	0	0	1,552	4.2%
Luxembourg	15	520	1,828	1,254	17,327	1,518	22,462	45.9%
Malta	298	0	41	0	0	0	339	4.2%
Netherlands	402	6,560	11,544	450	142	0	19,098	2.9%
Poland	19,526	7,685	5,707	106	67	0	33,091	8.1%
Portugal	8,541	5,873	7,851	37	157	0	22,459	12.9%
Romania	2,859	691	348	0	0	0	3,898	2.6%
Slovakia	1,739	693	229	0	0	0	2,661	3.5%
Slovenia	2,995	140	157	0	0	0	3,292	8.8%
Spain	33,473	43,243	13,323	306	2,148	0	92,493	8.9%
Sweden	32	5,100	5,338	176	160	0	10,806	2.5%
United Kingdom	1,575	10,694	27,286	2,294	345	0	42,194	1.9%
<b>Total EU</b>	<b>122,703</b>	<b>231,054</b>	<b>138,708</b>	<b>7,196</b>	<b>24,145</b>	<b>1,518</b>	<b>525,324</b>	
<b>Non EU</b>	<b>13,204</b>	<b>10,266</b>	<b>5,763</b>	<b>585</b>	<b>946</b>	<b>250</b>	<b>31,014</b>	
Not applicable	0	0	0	870	148	271	1,289	
<b>Total</b>	<b>135,907</b>	<b>241,320</b>	<b>144,471</b>	<b>8,651</b>	<b>25,239</b>	<b>2,039</b>	<b>557,627</b>	

Figure 6-2: Credit risk exposure by geography (>15 EUR billion of EAD) in %

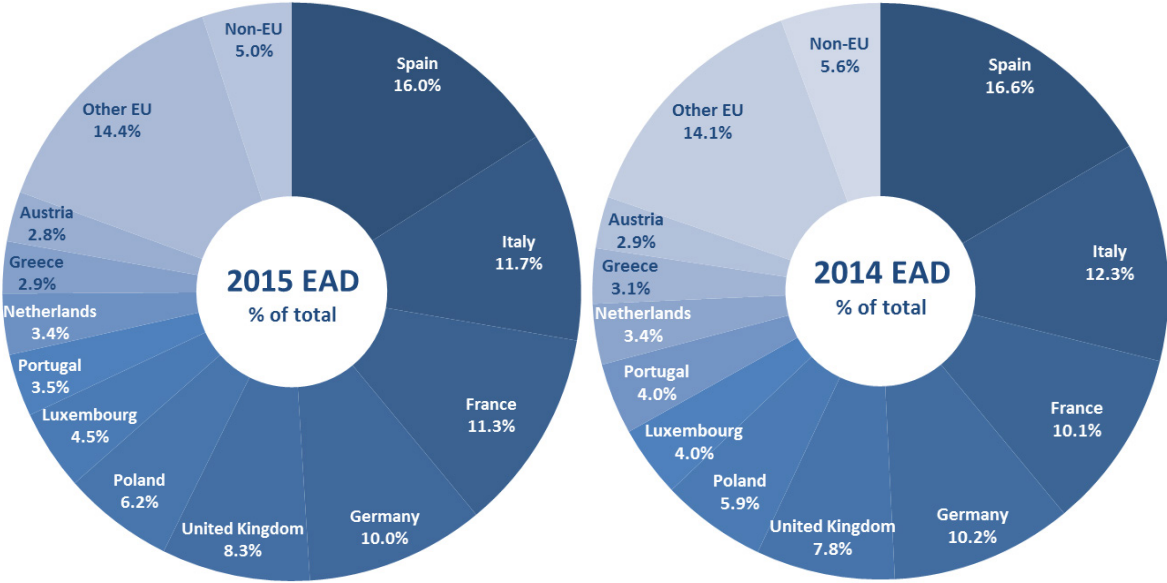


Table 6-8: Distribution of credit risk exposures by economic sector at year-end

31.12.2015 EAD, EUR million	Central governments and central banks	Institutions	Corporates (including specialised lending)	Equity	Items representing securitisation positions	Cash and other assets	Total
Air transport	6,262	1,457	6,365	23	0	0	14,107
Automobiles	184	1,017	9,893	0	0	0	11,094
Bank-intermediated loans	5,239	4,184	326	276	0	0	10,025
Basic material and mining	0	352	1,383	0	0	0	1,735
Chemicals, plastics and pharmaceuticals	68	629	3,827	26	0	0	4,550
Consumer goods	99	157	254	71	0	0	581
Drinking water, water treatment	10,821	11,500	10,269	0	0	0	32,590
Electricity, coal and others	7,965	14,495	36,027	662	300	0	59,449
Food chain	1,099	419	256	31	0	0	1,805
Investment goods/consumer durables	0	361	7,606	38	0	0	8,005
Marine transport	1,838	2,986	2,344	0	0	0	7,168
Materials processing, construction	0	1,142	713	47	0	0	1,902
Oil, gas and petroleum	591	918	14,525	0	0	0	16,034
Paper chain	349	1,316	326	45	0	0	2,036
Roads and motorways	22,428	11,963	16,496	34	0	0	50,921
Social infrastructure: education, health	9,999	33,915	5,485	136	0	0	49,535
Telecommunications	67	2,395	9,961	26	0	0	12,449
Traditional and high speed railways	22,497	9,817	6,462	0	0	0	38,776
Treasury	28,858	31,713	3,429	0	0	287	64,287
Urban dev., renovation and transport	8,622	36,686	2,203	57	0	0	47,568
Venture Capital	0	0	0	8,176	0	0	8,176
Waste recuperation, recycling	160	1,137	3,257	0	0	0	4,554
Other	22,334	90,436	521	946	30,753	1,655	146,645
<b>Total</b>	<b>149,480</b>	<b>258,995</b>	<b>141,928</b>	<b>10,594</b>	<b>31,053</b>	<b>1,942</b>	<b>593,992</b>



31.12.2014 EAD, EUR million	Central governments and central banks	Institutions	Corporates (including specialised lending)	Equity	Items representing securitisation positions	Cash and other assets	Total
Airlines and aircraft manufacture	103	258	3,111	0	0	0	3,472
Airports and air traffic management systems	6,067	2,061	2,822	0	0	0	10,950
Automobiles	985	1,111	11,723	0	0	0	13,819
Bank-intermediated loans	5,810	10,239	190	267	0	0	16,506
Basic material and mining	0	172	1,210	0	0	0	1,382
Chemicals, plastics and pharmaceuticals	0	720	3,727	0	0	0	4,447
Consumer goods	0	70	0	3	0	0	73
Drinking water, water treatment	4,451	9,546	7,491	0	0	0	21,488
Electricity, coal and others	5,849	11,582	36,234	348	310	0	54,323
Food chain	906	537	402	0	0	0	1,845
Investment goods/consumer durables	0	488	7,857	0	0	0	8,345
Marine transport and other	1,837	2,670	2,170	0	0	0	6,677
Materials processing, construction	0	965	798	48	0	0	1,811
Oil, gas and petroleum	620	1,036	13,846	0	0	0	15,502
Paper chain	529	1,807	302	73	0	0	2,711
Roads and motorways	18,883	9,956	20,523	132	0	0	49,494
Social infrastructure: education, health	6,316	27,436	5,160	206	0	0	39,118
Telecommunications	73	3,232	10,883	24	0	0	14,212
Traditional and high speed railways	22,818	9,128	6,042	48	0	0	38,036
Treasury	21,402	17,866	1,297	0	0	250	40,815
Urban dev., renovation and transport	19,244	37,870	4,067	144	0	0	61,325
Venture capital	0	0	0	6,366	0	0	6,366
Waste recuperation, recycling	3,085	1,708	4,167	0	0	0	8,960
Other	16,929	90,862	449	992	24,929	1,789	135,950
<b>Total</b>	<b>135,907</b>	<b>241,320</b>	<b>144,471</b>	<b>8,651</b>	<b>25,239</b>	<b>2,039</b>	<b>557,627</b>

While the overall exposure increased, no material changes in the distribution of exposures by sector could be observed.

Table 6-9: Distribution of credit risk exposures by residual maturity

<b>31.12.2015</b> <i>EAD, EUR million</i>	<b>&lt; 1 year</b>	<b>1-5 years</b>	<b>&gt; 5 years</b>	<b>Total</b>
Central governments and central banks	1,389	55,028	93,063	149,480
Institutions	25,276	98,125	135,594	258,995
Corporates	7,610	52,249	82,069	141,928
Equity	0	0	10,594	10,594
Securitisation	0	29,284	1,769	31,053
Cash and other assets	780	1,162	0	1,942
<b>Total</b>	<b>35,055</b>	<b>235,848</b>	<b>323,089</b>	<b>593,992</b>

<b>31.12.2014</b> <i>EAD, EUR million</i>	<b>&lt; 1 year</b>	<b>1-5 years</b>	<b>&gt; 5 years</b>	<b>Total</b>
Central governments and central banks	19,625	9,977	106,305	135,907
Institutions	29,455	50,517	161,348	241,320
Corporates	6,010	30,241	81,167	117,418
Corporates: Specialised Lending	276	852	25,925	27,053
Equity	0	0	8,651	8,651
Securitisation	1,903	3,598	19,738	25,239
Cash and other assets	2,039	0	0	2,039
<b>Total</b>	<b>59,308</b>	<b>95,185</b>	<b>403,134</b>	<b>557,627</b>

While the overall exposure increased, no material changes in the distribution of exposures by residual maturity could be observed.

## 6.2. Credit risk mitigation

The Bank details its approach to credit risk mitigation in its credit risk operational guidelines, which include the type of collateral and guarantees the Bank accepts. Credit risk mitigation used to limit the exposure of derivatives and securities financing transactions is presented in Chapter 7.

The Bank follows a detailed security classification to differentiate the quality of the security provided by a guarantor or collateral provider. The Bank accepts various types of credit enhancements and has defined requirements on the security's quality. The credit enhancements include guarantees, assignment of financial rights (e.g. claim on underlying loan exposures or revenues), pledge of assets like government securities or mortgages on fixed assets and financial collateral such as cash, bank accounts held with an independent bank, bonds and, on an exceptional basis, shares. The Bank does not use credit derivatives as a means of mitigating credit risk.

If a loan is guaranteed by a bank, the guarantor bank is subject to a minimum internal rating requirement, or minimum qualifying status ('MQS'). The minimum requirement also depends on the credit quality of the borrower. EIB's policies stipulate remedial actions when the minimum qualifying status is lost.

For financial collateral, the policy defines eligible types that take into account nature, currency, credit quality, maturity, liquidity and amount of such collateral. Internal haircuts that are at least as conservative as the regulatory haircuts are defined for each type of financial collateral.

Financial collateral received is subject to regular monitoring, which includes valuation and calculation of coverage ratios between loan and collateral and assessment of credit risk concentrations. For further information on collateral received, refer to Note S.2.5.1 (financial collateral for derivatives), Note S.2.3.4 (collateral on loans) and Note S.2.3.3 (guarantees received by the Group) of the Consolidated Financial Statements under IFRS. Financial monitoring guidelines exist to detail the security and collateral monitoring and guarantee renewal and the responsibilities within the Bank.

The following tables provide an overview of the extent of credit risk mitigation used by the Group, as well as information on the quality of the guarantor and the coverage ratio of secured exposures.

**Table 6-10: Overview of protections against credit risk**

*The following tables disclose the extent of reduction of credit risk exposure due to the use of collateral, financial guarantees as credit risk mitigation techniques. EIB currently does not use any credit derivatives as credit risk mitigants. Defaults on securitized exposures are not included.*

<i>EAD, EUR million</i>	31.12.2015			31.12.2014		
	Exposure Unsecured	Exposure secured by financial collateral	Exposure secured by financial guarantees	Exposure Unsecured	Exposure secured by financial collateral	Exposure secured by financial guarantees
Central governments and central banks	69,675	0	79,805	65,074	0	70,833
Institutions	194,246	19,242	45,506	176,752	20,401	44,168
Corporates (including Specialised lending)	132,622	4,324	4,983	126,625	5,529	12,314
Equity	10,593	0	0	8,651	0	0
Items representing securitisation positions	31,053	0	0	24,799	439	0
Cash and other assets	1,942	0	0	2,038	0	0
<b>Total</b>	<b>440,129</b>	<b>23,566</b>	<b>130,294</b>	<b>403,939</b>	<b>26,369</b>	<b>127,315</b>
Of which, defaulted	1,399	0	0	1,422	0	0

The amount of collateral received and exposures secured by guarantees have not materially changed over the period.

Table 6-11: Credit exposure secured by collateral and coverage ratio break-down

Following table provides a break-down of protected and unprotected exposures.

<i>EAD, EUR million</i>		31.12.2015	31.12.2014
Secured by collateral		23,567	26,369
Break-down by protection/exposure ratio	less than 25%	1,438	2,023
	25% to 50%	3,147	5,029
	50% to 75%	3,148	2,322
	75% to 90%	5,684	8,193
	90% to 100%	10,150	8,802
Unprotected residual exposure		570,425	531,258
<b>Total</b>		<b>593,992</b>	<b>557,627</b>

Table 6-12: Protected exposure by guarantor rating class

This table provides a view on the credit quality of the guarantors used by the Group to reduce its credit risk exposures. The break-down is based on external ratings.

<i>EAD, EUR million</i>	31.12.2015	31.12.2014
AAA	6,717	10,888
AA	13,864	11,688
A	24,904	26,997
BBB	48,008	45,591
BB	14,966	15,697
B	1,432	9,185
CCC	7,707	0
Unrated	12,695	7,270
<b>Total</b>	<b>130,293</b>	<b>127,316</b>

### 6.3. Standardised approach

The Group treats a small portion of its assets under the Standardised approach. This portfolio includes the Bank's strategic equity investment in the EBRD.

Table 6-13: Standardised approach

<i>EUR million</i>	31.12.2015				31.12.2014		
	Risk Weight	Exposure	RWA	RGC	Exposure	RWA	RGC
Strategic investments	100%	870	870	70	870	870	70
Corporates	100%	308	308	25	0	0	0
<b>Total</b>		<b>1,178</b>	<b>1,178</b>	<b>95</b>	<b>870</b>	<b>870</b>	<b>70</b>

## 6.4. Internal Ratings Based approach

The Internal Ratings Based ('IRB') approach allows banks to use their own risk parameters to quantify required capital for credit risk. After the Basel II Accord was published, EIB Group made the decision to use internal credit risk models and processes to be able to apply the IRB approach and therefore developed models for the Probability of Default ('PD'), Loss Given Default ('LGD') and Exposure at Default ('EAD'). PD, LGD and EAD models exist for all material exposure classes of the Bank and the Bank uses an "Advanced IRB" approach for the majority of its book. Strategic equity participations, such as the investment in the EBRD, are treated under the Standardised approach. The slotting approach is applied to unsecured specialised lending exposures and the simple risk-weight approach is used for equity exposures.

Internal credit risk parameter estimates are not only used for regulatory, but also for economic capital calculations. Internal ratings are a key driver of loan grading and therefore of loan pricing and provisioning. The Group is currently setting up a stress testing framework, in which the internal credit risk parameters and how they will change for different macroeconomic scenarios will play a major role.

### Internal ratings

EIB developed an Internal Rating methodology ('IRM') to determine the Internal Ratings of all its counterparts. The methodology is based on scorecards for all counterparty types. The table below sets out the relationship between internal ratings, equivalent external ratings and the ratings' definitions. Internal Ratings are updated and reviewed at least on a yearly basis by the Credit Risk Department.

Table 6-14: EIB's internal ratings

Internal Rating	Equivalent Moody's rating	Rating definition
1	Aaa	Counterpart of prime credit quality, with minimal credit risk
2+	Aa1	High credit quality counterpart and subject to very low credit risk. Considerable stability of earnings, strong position in a non-cyclical sector and moderate leverage. Long-term prospects quite solid.
2	Aa2	
2-	Aa3	
3+	A1	Good credit quality counterpart and subject to low credit risk. Capacity to repay all obligations in the normal course of business is undoubted, but operating in a cyclical sector (or not having a strong position in a non-cyclical one), and therefore potentially showing a degree of vulnerability to downturns. Long-term prospects remain, however, solid.
3	A2	
3-	A3	
4+	Baa1	Acceptable credit quality counterpart subject to moderate credit risk but with an exposure to economic or industry cycles that could well lead, in the medium term, to a material deterioration in the borrower's financial performance.
4	Baa2	Minimum acceptable credit quality counterpart subject to increased credit risk.
4-	Baa3	Counterpart is financially vulnerable to external or internal factors such as high leverage, highly cyclical and competitive industries, or where event risk is a major consideration. Short-term solvency is not in question, but long-term prospects are uncertain.
5+	Ba1	Financially weak counterpart, whose capacity to repay obligations on a timely basis may be in question.
5	Ba2	
5-	Ba3	
6+	B1	Counterpart subject to high credit risk; capacity to repay questionable.
6	B2	
6-	B3	
7	Caa2	Counterpart judged to be of very poor credit standing and subject to very high credit risk.
8	D	Counterpart in default.

### Internal ratings process

In order to ensure independence of the rating assignment, there is a clear division of responsibilities between OPS (Loan Officers), TMR (post signature monitoring) and CRD (Credit Officers) regarding the due diligence and internal rating exercise. While OPS/TMR have direct contact with the counterpart, are responsible for the detailed financial analysis, gather all information required for the scoring sheet and propose an initial counterpart rating, it is CRD's responsibility to validate the rating and perform adjustments/overrides to determine the final rating. The final rating decision is communicated and discussed between OPS/TMR and CRD and in case of material disagreements it is the decision of the CRD. Each counterpart is rated individually.

Several control mechanisms of the internal ratings system were established to ensure the internal ratings are robust:

- As EIB's internal rating system is "expert-based", CRD is responsible for the design and subsequent refinements of the internal ratings methodology, when needed. Review, maintenance and validation of the model's performance are performed regularly by CRD.
- A separate validation team within RM ensures the internal models' compliance with the applicable regulations.
- The Internal Rating Model Maintenance Committee ('IRMMC') has the oversight over regular validation of the IRMs.
- The internal audit function is responsible for checking annually the integrity of the internal rating system and its adherence to all applicable minimum requirements.

All internal rating models at EIB follow an expert system approach, meaning the ratings are primarily based on scorecards, which rely on quantitative factors and an analyst's opinion for qualitative factors, but also allow adjustments to the rating based on judgmental factors to an explicitly limited degree. EU and non-EU counterparts generally use the same rating approach, although the scores are partially weighted differently, such that for non-EU counterparts e.g. business risk factors are more heavily weighted than financial criteria.

The internal rating model for corporate counterparts (excluding Project Finance counterparts) assesses business risk and financial risk factors (including industry risks, company specifics, corporate governance, capital structure and debt service capacity) on a quantitative and qualitative basis by taking into account sector and country specific factors to determine an initial rating. Expert adjustments are made by considering the legal entities parental or government support. Before the final rating is determined, overriding tools assist in providing information that was not considered in the scoring sheet, or market pricing information.

Most Financial Institution counterparts are rated by external rating agencies; nevertheless an internal rating will be derived for all such counterparts. The internal ratings process is very much similar to that of Corporates, although the rating criteria used differ and measure on the one hand qualitative criteria such as economic environment, regulatory and legal framework or competitive position and on the other hand financial criteria are assessed to evaluate the institution's financial soundness. The final rating allows for judgemental overrides as seen above.

EU and non-EU sovereigns are rated by the Economics department.

The internal rating model for sub-sovereign public authority ('SSPA') counterparts assesses the two main areas operating environment and financial position/risk to derive an initial rating from the scorecard. Subsequently model driven adjustments including a country test (to ensure the rating in line with the rating of the sovereign) and overriding adjustments (expert-based) and market information are made.

A specific internal rating model exists for public sector entities ('PSE') that are neither sovereign nor sub-sovereign public authorities, nor corporates. They are considered within the institutions IRB exposure class though for capital calculation purposes. For the initial scorecard rating the business risk profile as well as financial risk profile is assessed. For potential adjustments the degree and likelihood of extraordinary support from the sponsoring sovereign or sub-sovereign is assessed through specific criteria.

## Internal rating models

Due to the shortage of statistically relevant historical default data, the Bank relies on external estimates of PDs for its internal ratings. For EU counterparts, internal rating grades are mapped to Moody's rating grades taking into account the criteria of the internal and external rating. The calibration method for PDs then relies on Moody's published data and loss experience, adjusted for differences in the definition of default. For non-EU counterparties, default data history is provided through the GEMs (Global Emerging Markets Risk) database, which allows for statistical modelling. The calibration of PDs relies on GEMs and Moody's data.

The LGD model also relies mainly on external data and expert judgement given the lack of default data and a downturn LGD is used for regulatory capital purposes. The LGD model differentiates between EU and non-EU sovereigns, corporates (including Project Finance), financial and public institutions. Credit risk mitigation clauses have a material impact on LGD and are taken into account for determining the LGD of a transaction. For non-EU counterparties the LGD is statistically estimated and annually reviewed on the basis of GEMs data. The Corporate and Financial Institutions model is currently being enhanced with the aim of using a statistical approach relying on external data in the near future.

On the basis of the protection provided by its Preferred Creditor Status (PCS) and Statute (Article 26.2, exemption from all forms of requisition or expropriation), the Bank deems full recovery of its EU sovereign assets upon maturity. Hence, the Bank assumes no credit risk on direct and guaranteed exposures to MS.

To obtain own estimates of Credit Conversion Factors ('CCFs') for the EAD calculation, the Bank uses a CCF model that takes into consideration the type and maturity of the credit exposure, including especially the extent to which details on future disbursements are known or unknown. The model differentiates between the counterparty type and whether the counterparty is located in or outside the EU.

## Model governance

The Model Validation unit ('VAL') within RM maintains a model inventory of all models in RM with basic information, such as model owners or location of documentation. All credit risk related models are owned by a dedicated modelling unit within the RPP division of CRD.

The performance of credit risk models, including models for both regulatory and economic capital calculation purposes, is validated VAL. Model validation activity for credit risk models is overseen by the Internal Rating Model Maintenance Committee ('IRMMC'). The Bank has a Model Validation Policy, which follows the guiding principles that are supposed to minimise model risk associated with the models developed and maintained by RM.

VAL performs regular independent validation of all models and documents its process and findings. The extent and frequency of the validation depends on the type and complexity of the model and whether it is subject to supervisory approval, i.e. CRR requirements are taken into account for the models individually. The scope and depth of a validation after a model change will depend on the materiality of the change.



Due to the low number of defaults, quantitative back-testing has limited explanatory power. Therefore other validation exercises performed at the Group are more important.

## Credit exposures and RWA

Table 6-15: Estimation of weighted average risk parameters by IRB portfolio and PD range at year-end

This table provides averages of risk parameters used as input to the calculation of IRB capital requirements.

31.12.2015												
PD scale	On balance sheet exposure	Un-drawn commitments (pre-CCF)	WA-CCF	EAD (post CCF)	WA-PD	Avg-EAD	WA-LGD	WA-M	RWA	RWA density	RGC	EL
(%)	(EURm)	(EURm)	(%)	(EURm)	(%)	(EURm)	(%)	(years)	(EURm)	(%)	(EURm)	(EURm)
<b>Central governments and central banks</b>												
0 to 0.15	89,783	12,714	46.1	95,667	0.1	3,827	0.5	12.3	260	0.3	21	0
0.15 to 0.25	9,397	1,195	50.5	10,000	0.2	10,000	0.0	8.3	0	0.0	0	0
0.25 to 0.35	2,807	1,826	64.6	3,987	0.3	1,993	0.0	16.8	0	0.0	0	0
0.5 to 0.75	17,062	2,493	59.9	18,556	0.6	4,639	2.1	10.5	918	4.9	73	2
0.75 to 1.35	2,323	989	58.6	2,903	1.1	1,451	0.8	13.0	55	1.9	4	0
1.35 to 2.5	2,138	743	64.6	2,617	2.4	872	1.3	17.1	98	3.7	8	1
10.0 to 20.0	14,627	1,754	64.0	15,750	15.0	15,750	0.0	15.2	0	0.0	0	0
100.0 (Default)	0	0	100.0	0	100.0	0	n.a.	0.0	0	0.0	0	0
<b>Sub-total</b>	<b>138,137</b>	<b>21,714</b>	<b>52.2</b>	<b>149,480</b>	<b>1.8</b>	<b>3,934</b>	<b>0.6</b>	<b>12.2</b>	<b>1,331</b>	<b>0.9</b>	<b>106</b>	<b>3</b>
<b>Institutions</b>												
0 to 0.15	176,555	35,456	60.5	198,004	0.1	318	33.1	11.3	53,864	27.2	4,309	45
0.15 to 0.25	22,661	3,019	73.2	24,873	0.2	276	45.0	9.9	18,093	72.7	1,447	19
0.25 to 0.35	5,298	999	79.5	6,091	0.3	95	21.7	11.0	2,478	40.7	198	4
0.5 to 0.75	9,682	1,961	77.5	11,202	0.6	158	17.7	7.8	5,312	47.4	425	11
0.75 to 1.35	8,956	1,284	80.3	9,986	1.1	250	25.8	7.4	8,190	82.0	655	28
1.35 to 2.5	3,050	530	50.0	3,315	1.9	83	35.2	6.2	4,255	128.4	340	22
2.5 to 5.5	274	20	49.3	284	3.7	22	10.2	7.2	113	39.8	9	1
5.5 to 10.0	1,800	93	94.5	1,888	7.4	79	47.2	8.1	3,930	208.2	314	66
10.0 to 20.0	777	84	77.5	842	15.0	65	50.1	4.4	2,453	291.3	196	63
100.0 (Default)	118	0	100.0	118	100.0	39	29.4	8.7	365	309.3	29	5
Unrated	2,173	254	86.2	2,392	n.a.	100	n.a.	1.5	0	0.0	0	907
<b>Sub-total</b>	<b>231,344</b>	<b>43,700</b>	<b>63.3</b>	<b>258,995</b>	<b>1.2</b>	<b>259</b>	<b>33.2</b>	<b>10.6</b>	<b>99,053</b>	<b>38.2</b>	<b>7,924</b>	<b>1,171</b>
<b>Corporates (including Specialised lending)</b>												
0 to 0.15	71,513	10,577	77.8	79,742	0.1	334	50.6	9.2	36,994	46.4	2,960	37
0.15 to 0.25	23,058	3,547	76.9	25,788	0.2	234	49.8	10.2	16,367	63.5	1,309	22
0.25 to 0.35	10,554	2,200	65.8	12,002	0.3	111	57.2	12.2	11,724	97.7	938	21
0.5 to 0.75	9,187	3,403	69.4	11,548	0.6	90	52.6	12.3	13,350	115.6	1,068	35
0.75 to 1.35	3,336	409	99.0	3,740	1.1	58	59.5	11.4	5,767	154.2	461	23
1.35 to 2.5	3,957	275	81.9	4,182	2.0	58	52.2	13.6	6,895	164.9	552	43
2.5 to 5.5	1,298	301	67.2	1,500	3.7	54	50.3	12.6	2,619	174.6	210	26
5.5 to 10.0	1,208	75	96.3	1,280	7.4	41	32.4	12.8	1,937	151.3	155	31
10.0 to 20.0	294	0	100.0	294	14.9	21	27.0	9.3	455	154.8	36	12
20.0 to 100.0	40	0	100.0	40	26.0	40	0.0	6.7	0	0.0	0	0
100.0 (Default)	1,043	238	91.8	1,261	100.0	79	64.7	13.8	3,300	261.6	264	679
Unrated	73	207	82.3	243	n.a.	11	n.a.	13.4	0	0.0	0	120
<b>Sub-total</b>	<b>125,561</b>	<b>21,232</b>	<b>75.6</b>	<b>141,621</b>	<b>1.6</b>	<b>171</b>	<b>51.3</b>	<b>10.2</b>	<b>99,408</b>	<b>70.2</b>	<b>7,953</b>	<b>1,049</b>

31.12.2014

PD scale	On balance sheet exposure	Un-drawn commitments (pre-CCF)	WA-CCF	EAD (post CCF)	WA-PD	Avg-EAD	WA-LGD	WA-M	RWA	RWA density	RGC	EL
(%)	(EURm)	(EURm)	(%)	(EURm)	(%)	(EURm)	(%)	(years)	(EURm)	(%)	(EURm)	(EURm)
<b>Central governments and central banks</b>												
0 to 0.15	44,644	8,979	52.3	49,340	0.1	2,145	7.4	12.4	854	1.7	68	1
0.15 to 0.25	41,496	1,735	79.1	42,868	0.2	21,434	0.0	13.8	0	0.0	0	0
0.25 to 0.35	2,783	2,312	52.3	3,992	0.3	1,996	0.0	15.5	0	0.0	0	0
0.5 to 0.75	16,521	2,839	75.6	18,667	0.6	4,667	1.5	10.8	658	3.5	53	2
0.75 to 1.35	2,317	2,097	69.6	3,777	1.1	755	3.6	14.3	409	10.8	33	2
1.35 to 2.5	43	60	38.8	66	1.7	33	16.3	9.6	35	52.8	3	0
2.5 to 5.5	13,846	1,170	82.4	14,810	3.9	4,937	0.3	16.3	113	0.8	9	1
5.5 to 10.0	1,735	888	50.4	2,183	7.9	727	0.2	19.6	21	1.0	2	0
10.0 to 20.0	1	161	13.7	23	13.6	8	14.2	25.6	19	82.4	2	0
20.0 to 100.0	10	880	19.5	181	26.0	60	14.0	14.7	162	89.5	13	7
100.0 (Default)	0	0	100.0	0	0.0	0	0.0	0.0	0	0.0	0	0
<b>Sub-total</b>	<b>123,396</b>	<b>21,121</b>	<b>59.2</b>	<b>135,907</b>	<b>0.8</b>	<b>2,718</b>	<b>3.1</b>	<b>13.3</b>	<b>2,271</b>	<b>1.7</b>	<b>182</b>	<b>13</b>
<b>Institutions</b>												
0 to 0.15	140,125	31,146	65.0	160,361	0.1	280	28.9	10.5	40,358	25.2	3,229	31
0.15 to 0.25	27,438	2,954	77.9	29,739	0.2	338	28.9	11.1	14,106	47.4	1,128	15
0.25 to 0.35	13,630	2,132	86.5	15,474	0.3	168	19.6	10.2	6,005	38.8	480	10
0.5 to 0.75	10,568	1,872	86.2	12,182	0.6	143	15.1	9.2	4,916	40.4	393	11
0.75 to 1.35	12,833	944	60.0	13,399	1.1	273	15.4	10.4	6,467	48.3	517	23
1.35 to 2.5	5,371	510	59.9	5,676	1.7	203	14.2	13.1	2,778	48.9	222	14
2.5 to 5.5	3,045	80	93.8	3,120	3.2	116	32.0	6.6	3,596	115.3	288	33
5.5 to 10.0	141	50	93.8	188	7.9	8	24.4	9.4	192	102.2	15	4
10.0 to 20.0	702	500	93.8	1,170	15.9	73	35.8	5.3	2,473	211.4	198	67
100.0 (Default)	9	0	100.0	9	100.0	9	10.5	0.0	12	133.3	1	0
Unrated	2	0	100.0	2	n.a.	2	n.a.	0.0	0	0.0	0	0
<b>Sub-total</b>	<b>213,864</b>	<b>40,188</b>	<b>68.3</b>	<b>241,320</b>	<b>0.3</b>	<b>246</b>	<b>26.6</b>	<b>10.5</b>	<b>80,903</b>	<b>33.5</b>	<b>6,472</b>	<b>208</b>
<b>Corporates</b>												
0 to 0.15	65,171	12,427	80.4	75,165	0.1	283	49.4	9.3	34,379	45.7	2,750	35
0.15 to 0.25	19,042	2,050	72.4	20,527	0.2	277	46.3	9.7	12,048	58.7	964	17
0.25 to 0.35	8,616	873	79.1	9,307	0.3	116	53.2	8.1	7,958	85.5	637	16
0.5 to 0.75	8,052	2,875	69.8	10,059	0.6	68	49.1	11.8	8,533	84.8	683	34
0.75 to 1.35	3,676	183	76.3	3,817	1.1	76	44.8	7.5	4,239	111.1	339	19
1.35 to 2.5	10,109	1,472	38.8	10,680	1.5	82	47.4	15.8	8,384	78.5	671	71
2.5 to 5.5	6,774	2,472	63.7	8,350	4.0	76	50.3	17.2	8,315	99.6	665	195
5.5 to 10.0	667	10	95.8	677	7.9	34	18.4	8.2	565	83.5	45	10
10.0 to 20.0	3,800	817	80.5	4,458	10.3	87	60.2	19.8	11,301	253.5	904	358
100.0 (Default)	1,154	258	91.0	1,389	100.0	87	60.7	15.0	101	7.3	8	689
Unrated	3	50	81.7	44	n.a.	14	n.a.	21.6	0	0.0	0	22
<b>Sub-total</b>	<b>127,064</b>	<b>23,487</b>	<b>74.5</b>	<b>144,471</b>	<b>1.9</b>	<b>161</b>	<b>49.3</b>	<b>10.7</b>	<b>95,823</b>	<b>66.3</b>	<b>7,666</b>	<b>1,466</b>

Table 6-16: Back-testing the internal rating process and PD per portfolio

These tables include information on estimates of losses against actual losses per exposure class and provide an analysis of PD. The number of defaulted obligors in the year is based on the internal default definition.

PD Range	External Rating equivalent	Weighted average PD	Arithmetic Average PD by obligors	Number of obligors		Obligors defaulted in the year	of which new obligors
				31.12.2015	31.12.2014		
<b>Central Governments and Central Banks</b>							
0.00% - 0.01%	Aaa	0.01%	0.01%	7	11		
0.02% - 0.03%	Aa	0.02%	0.01%	11	1		
0.04% - 0.09%	A	0.08%	0.07%	11	8		
0.09% - 0.36%	Baa	0.14%	0.21%	5	5		
0.36% - 1.00%	Ba	0.58%	0.58%	2	5		
1.00% - 13.64%	B	1.20%	2.00%	3	16		
13.64% - 26.00%	C	15.00%	14.95%	1	3		
100.00%	D	100.00%	100.00%	1	0		
<b>Institutions</b>							
0.02% - 0.03%	Aa	0.03%	0.03%	206	155		
0.04% - 0.09%	A	0.07%	0.07%	245	263		
0.09% - 0.36%	Baa	0.15%	0.18%	200	188		
0.36% - 2.59%	Ba	0.89%	0.90%	87	94		
2.59% - 13.64%	B	5.65%	5.42%	16	15		
13.64% - 26.00%	C	15.00%	14.95%	9	12	1	1
100.00%	D	100.00%	100.00%	1	1		
<b>Corporates</b>							
0.02% - 0.03%	Aa	0.04%	0.03%	10	36		
0.04% - 0.09%	A	0.08%	0.07%	107	142		
0.09% - 0.36%	Baa	0.17%	0.20%	275	200	1	1
0.36% - 2.59%	Ba	0.82%	0.86%	176	99		
2.59% - 13.64%	B	5.48%	5.62%	39	31	5	1
13.64% - 26.00%	C	16.00%	16.33%	8	6	4	4
100.00%	D	100.00%	100.00%	17	7		

Table 6-17: Changes in IRB Credit risk RWA during 2015

<i>EUR million</i>	
<b>RWA as at 1.1.2015</b>	<b>197,316</b>
Asset size	13,027
Asset quality	5,689
Model updates	9,263
Methodology and policy	4,229
Other (including foreign exchange movements)	(8,009)
<b>RWA as at 31.12.2015</b>	<b>221,515</b>

Table 6-18: Credit risk mitigation effect on RWA

This table shows the effect of credit risk mitigation ('CRM') on the IRB capital requirements for the loan and equity portfolios.

<b>31.12.2015</b>		<b>After application of financial collateral</b>	<b>After application of financial guarantees</b>
<i>EUR million</i>	<b>RWA before CRM</b>		
Cash and other assets	709	709	709
Central governments and central banks	64,103	64,103	1,330
Institutions	150,865	125,242	99,054
Corporates (including Specialised lending)	107,488	101,070	99,407
Equity	21,258	21,015	21,015
<b>Total</b>	<b>344, 423</b>	<b>312,139</b>	<b>221,515</b>

<b>31.12.2014</b>		<b>After application of financial collateral</b>	<b>After application of financial guarantees</b>
<i>EUR million</i>	<b>RWA before CRM</b>		
Cash and other assets	988	988	988
Central governments and central banks	61,685	61,685	2,271
Institutions	121,981	103,269	80,903
Corporates	77,022	73,560	67,376
Specialised lending	30,511	28,447	28,447
Equity	17,331	17,331	17,331
<b>Total</b>	<b>309,518</b>	<b>285,280</b>	<b>197,316</b>

Table 6-19: Exposure weighted-average risk parameters by relevant geographical region

31.12.2015	On balance sheet exposure	Off balance sheet exposure pre-CCF	WA-CCF	EAD post CCF	WA-PD	WA-LGD	WA-Maturity
	(EURm)	(EURm)	(%)	(EURm)	(%)	(%)	(years)
Austria	14,787	1,705	77.1	16,101	0.5	27.9	12
Belgium	11,531	2,362	71.5	13,219	1.1	26.6	13
Czech Republic	8,395	223	70.9	8,553	0.1	18.0	10
Finland	6,643	1,825	66.7	7,860	0.2	34.4	12
France	57,018	13,988	54.7	64,671	0.3	34.7	11
Germany	52,115	8,648	67.8	57,981	0.7	34.3	7
Greece	15,760	2,132	67.7	17,203	16.6	4.3	15
Hungary	8,081	1,887	42.1	8,875	0.8	6.9	11
Italy	59,449	9,087	77.3	66,476	0.5	41.8	11
Netherlands	17,608	2,340	65.0	19,129	0.1	57.0	9
Poland	32,249	8,424	47.4	36,240	0.1	14.3	16
Portugal	19,877	879	76.6	20,550	3.5	23.1	9
Spain	87,219	5,819	77.3	91,717	0.4	15.3	12
Sweden	10,649	2,553	66.1	12,336	0.1	38.7	6
United Kingdom	39,126	10,806	62.8	45,912	0.8	43.2	15
Other EU	30,211	9,241	56.8	35,461	5.9	19.1	12
Non EU	24,320	4,727	73.5	27,794	0.7	34.6	5
<b>Total</b>	<b>495,038</b>	<b>86,646</b>	<b>63.5</b>	<b>550,078</b>	<b>1.7</b>	<b>29.0</b>	<b>11</b>

31.12.2014	On balance sheet exposure	Off balance sheet exposure pre-CCF	WA-CCF	EAD post CCF	WA-PD	WA-LGD	WA-Maturity
	(EURm)	(EURm)	(%)	(EURm)	(%)	(%)	(years)
Austria	14,131	2,163	78.2	15,823	0.2	26.7	11
Belgium	9,516	2,044	59.6	10,734	0.5	23.0	15
Czech Republic	8,029	1,078	81.8	8,911	0.1	13.4	12
Finland	6,459	1,005	69.7	7,159	0.2	29.4	12
France	47,951	12,082	57.7	54,920	0.4	36.7	12
Germany	48,669	10,177	73.1	56,113	0.7	32.6	7
Greece	15,887	1,644	89.0	17,349	5.5	3.3	15
Hungary	8,552	1,713	66.1	9,684	0.7	6.8	10
Italy	59,103	7,950	80.8	65,527	0.5	35.2	11
Netherlands	16,552	2,747	71.1	18,506	0.3	49.1	9
Poland	28,985	7,516	52.3	32,918	0.2	12.2	16
Portugal	21,055	1,629	74.3	22,266	3.5	19.6	10
Spain	86,630	4,255	80.1	90,040	0.6	13.9	13
Sweden	8,903	2,272	69.0	10,470	0.2	40.6	7
United Kingdom	32,375	10,441	68.8	39,556	0.7	41.5	14
Other EU	27,010	8,128	67.5	32,492	2.0	17.2	13
Non-EU	24,520	7,952	59.2	29,230	0.5	36.9	6
<b>Total</b>	<b>464,327</b>	<b>84,796</b>	<b>67.7</b>	<b>521,698</b>	<b>0.9</b>	<b>26.8</b>	<b>11</b>

Table 6-20: Specialised lending under the simple risk weight method (slotting approach)<sup>9</sup>

This table provides an overview of specialised lending exposures and their credit quality. Note that SL exposures benefiting from financial guarantees are treated under k-IRB approach and are therefore excluded from the following tables.

31.12.2014		Project Finance						
Regulatory categories	Remaining maturity	On Balance sheet exposure	Off Balance sheet exposure	EAD (post CCF)	RW	RWA	RGC	EL
	(years)	(EURm)	(EURm)	(EURm)	(%)	(EURm)	(EURm)	(EURm)
Strong	< 2.5	381	0	381	70	251	20	1
	2.5 or more	3,320	1,968	4,739	70	2,927	234	17
Good	< 2.5	111	0	111	90	97	8	1
	2.5 or more	8,821	1,472	9,392	90	6,847	548	61
Satisfactory		5,259	2,385	6,784	115	7,751	620	189
Weak		3,571	817	4,229	250	10,574	846	338
Default		1,140	308	1,415		0	0	708
<b>Total</b>		<b>22,603</b>	<b>6,950</b>	<b>27,051</b>		<b>28,447</b>	<b>2,276</b>	<b>1,315</b>

Table 6-21: Equities under the simple risk weight method

This table provides an overview of the main types of equities and the risk weights applied.

31.12.2015		EUR million						
Regulatory categories		On Balance sheet exposure	Off Balance sheet exposure	RW	EAD	RWA	RGC	EL
Other equity exposures		874	700	370%	1,547	5,480	438	38
Private equity exposures		3,922	4,255	190%	8,177	15,535	1,243	65
<b>Total</b>		<b>4,796</b>	<b>4,955</b>		<b>9,724</b>	<b>21,015</b>	<b>1,681</b>	<b>103</b>

31.12.2014		EUR million						
Regulatory categories		On Balance sheet exposure	Off Balance sheet exposure	RW	EAD	RWA	RGC	EL
Other equity exposures		682	734	370%	1,416	5,237	419	34
Private equity exposures		3,132	3,234	190%	6,366	12,094	968	51
<b>Total</b>		<b>3,814</b>	<b>3,968</b>		<b>7,782</b>	<b>17,331</b>	<b>1,387</b>	<b>85</b>

<sup>9</sup> In 2015 the regulatory capital treatment for specialised lending exposures changed from slotting to using the IRB risk weight formulas. Thus, specialised lending is included under the corporate exposure class in 2015.

Table 6-22: Cash and other non-credit obligation exposures

*This table provides an overview of other assets, such as cash, property, plant and equipment. It shows all such exposures, the risk weight and RWA.*

EUR million	Risk Weight	31.12.2015			31.12.2014		
		Exposure	RWA	RGC	Exposure	RWA	RGC
Cash	0%	1,221	0	0	1,050	0	0
Other	100%	722	709	57	988	988	79
<b>Total</b>		<b>1,942</b>	<b>709</b>	<b>57</b>	<b>2,038</b>	<b>988</b>	<b>79</b>



## 7. Counterparty credit risk

### 7.1. Counterparty credit risk management

#### Introduction

Counterparty credit risk is defined as the risk that the counterparty of an OTC derivatives transaction or securities-financing transaction ('SFT') defaults before the final settlement of the transaction's cash flows and the counterparty will not be able to fulfil present and future payment obligations. The exposure at risk changes over time as market parameters change and it is of bilateral nature. SFTs, such as reverse repurchase and repurchase agreements are not calculated under the counterparty credit risk methodologies, but their exposure is calculated under the Financial Collateral Comprehensive Method and information about these transactions is included in this chapter.

The Basel III framework materially changed the counterparty credit risk regime leading to a significant increase in own funds requirements: EIB is now calculating the new CVA Capital Charge for derivatives, while the new requirements in relation to the Internal Model Method ('IMM') are not yet relevant for regulatory capital purposes and the lower risk weights for central counterparties ('CCPs') do not apply to the Group as CCPs are not used for OTC derivatives transactions<sup>10</sup>.

EIB uses derivatives, mainly currency and interest rate swaps, but also structured swaps, forward rate agreements and currency forwards, as part of its ALM activities to manage exposures to interest rate and foreign currency risk and as part of its treasury operations. The Fund does not hold derivatives.

EIB enters into SFT transactions, mostly in the form of triparty reverse repos with banking counterparts. Such transactions are used as part of its treasury management activities to place liquidity not immediately needed for disbursement of loans. The Fund does not engage into SFT transactions.

#### Management, monitoring and reporting

EIB's counterparty credit risk is governed by its financial risk operational guidelines. The Derivatives division within the Financial Risk Department is responsible for monitoring and measuring counterparty credit risk. Changes to models and methodology in relation to counterparty credit risk are approved by the Derivatives Strategy and Model Committee, which meets quarterly and has the mission to analyse and discuss possible improvements in policies, procedures, models, methods and tools that constitute the operational framework for derivatives transactions at EIB.

EIB uses internal credit limits for derivatives and SFT transactions, which are approved by the Management Committee, and which are monitored on a daily basis. Corrective actions will be taken in case there are limit breaches and a dedicated daily reporting about limit usage is in place. Credit limits for derivatives are used for both "Current Unsecured Exposure" and "Total Unsecured

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<sup>10</sup> For what concerns SFT transactions, one CCP is currently being used and discussions are ongoing to possibly introduce a second one.

Exposure”<sup>11</sup> and the related exposures are calculated using a simulated Potential Future Exposure for limit management purposes. For what concerns SFT, due to their short term nature, fixed percentages of the underlying nominal exposures are taken into account. Exposures and limits for derivatives and SFTs are consolidated with general credit risk exposures in the Global limit system to manage these within the overall credit processes.

A number of credit risk mitigants are used to limit EIB’s counterparty credit risk. To be able to trade derivatives with EIB, commercial banks need to enter into an ISDA Master Agreement with a Credit Support Annex (‘CSA’) that has rating dependent thresholds and the counterparty also needs to satisfy a minimum rating requirement. In order to trade repos with EIB, commercial banks need to enter into a GMRA. The GMRA agreements currently in place do not have rating-dependent parameters. Eligibility criteria for derivatives and repo counterparties as well as risk limits are approved by the Management Committee. All derivative exposures are priced on a daily basis and collateralised by cash or bonds under a CSA which allow for daily margin calls in nearly all the cases. EIB does not post collateral under a CSA. Collateral received is monitored and valued regularly and an internal haircut that is at least as conservative as the regulatory haircut is applied for internal and external exposure measurement purposes. Margining for SFTs is largely outsourced to triparty repo agents that calculate exposure and administer margin calls on an intraday basis. Wrong way risk occurs if the likelihood of default of a counterparty is positively correlated with the exposure EIB has to this counterparty.

EIB manages this risk within the derivatives limit framework by applying conservative assumptions on market risk factor volatilities producing a strong positive correlation between the counterparty default and the Bank’s potential future exposure to that counterparty.

## Measurement

The Bank currently uses the Mark-to-market method for calculating regulatory derivative exposures for capital adequacy purposes. This approach is based on the current market value of a derivative plus an add-on that is supposed to cover future changes in value and netting as well as collateral can be incorporated. Collateral applied in this calculation receives the regulatory risk haircut.

The own funds requirements for Credit Valuation Adjustment (‘CVA’) risk is calculated in accordance with the Standardised method and includes both OTC derivatives and securities financing transactions.

## 7.2. Quantitative disclosure

This section provides an overview of the exposures, RWA and capital requirements the Bank assumes with regards to counterparty credit risk. The bank has neither exposure to a central counterparty clearing house (CCP), nor does it have any credit derivatives transactions.

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<sup>11</sup> Total Unsecured Exposure includes Current Unsecured Exposure and Potential Future Exposure.

Table 7-1: Analysis of counterparty credit risk exposure (CCR) by approach

This table provides an overview of counterparty credit risk regulatory requirements and the methods used to calculate it.

31.12.2015						
EUR million	Replacement Cost	Potential Future Credit Exposure	EAD post CRM	RWA	RGC	EL
Mark-to-market method (OTC derivatives)	65,444	14,653	11,514	8,329	666	4
Financial collateral comprehensive method (SFTs)	0	0	525	61	5	0
<b>Total</b>	<b>65,444</b>	<b>14,653</b>	<b>12,039</b>	<b>8,390</b>	<b>671</b>	<b>4</b>

31.12.2014						
EUR million	Replacement Cost	Potential Future Credit Exposure	EAD post CRM	RWA	RGC	EL
Mark-to-market method (OTC derivatives)	63,035	14,019	13,069	6,155	492	3
Financial collateral comprehensive method (SFTs)	0	0	981	118	9	0
<b>Total</b>	<b>63,035</b>	<b>14,019</b>	<b>14,050</b>	<b>6,273</b>	<b>501</b>	<b>3</b>

Table 7-2: IRB - CCR exposures by portfolio and PD scale

All CCR exposures are treated under IRB for credit risk capital calculations. The below table provides a detailed analysis of exposures by portfolio and PD scale, equivalent to Table 6-15, where non-derivatives exposures were captured. "WA-" refers to exposure weighted averages of respective risk parameters.

31.12.2015											
Portfolio	PD scale	On Balance sheet exposure	Off Balance sheet exposure	WA-CCF	EAD post CCF	WA-LGD	WA-maturity	RWA	RWA density	RGC	EL
	(%)	(EUR m)	(EUR m)	(%)	(EUR m)	(%)	(%)	(EUR m)	(%)	(EUR m)	(EUR m)
OTC-Derivatives	0 to 0.15	0	80,097	1.0	80,097	9.8	6.8	8,329	10.4	666	4
SFTs	0 to 0.15	14,794	0	1.0	14,794	2.3	0.3	61	0.4	5	0
<b>Total</b>		<b>14,794</b>	<b>80,097</b>	<b>1.0</b>	<b>94,891</b>	<b>8.6</b>	<b>5.6</b>	<b>8,390</b>	<b>8.8</b>	<b>671</b>	<b>4</b>

31.12.2014											
Portfolio	PD scale	On Balance sheet exposure	Off Balance sheet exposure	WA-CCF	EAD post CCF	WA-LGD	WA-maturity	RWA	RWA density	RGC	EL
	(%)	(EUR m)	(EUR m)	(%)	(EUR m)	(%)	(%)	(EUR m)	(%)	(EUR m)	(EUR m)
OTC-Derivatives	0 to 0.15	0	77,054	1.0	77,054	7.6	7.1	6,155	8.0	492	3
SFTs	0 to 0.15	25,415	0	1.0	25,415	1.7	0.2	118	0.5	9	0
<b>Total</b>		<b>25,415</b>	<b>77,054</b>	<b>1.0</b>	<b>102,469</b>	<b>6.2</b>	<b>5.4</b>	<b>6,273</b>	<b>6.1</b>	<b>502</b>	<b>3</b>

Table 7-3: Credit valuation adjustment (CVA) overview

*This table provides an overview of the CVA Capital Charge at EIB, which is calculated according to the Standardised Approach.*

<i>EUR million</i>	<b>EAD post CRM</b>	<b>CVA RWA</b>	<b>CVA RGC</b>
31.12.2015	12,039	7,301	584
31.12.2014	14,051	8,866	709

The Group receives a material amount of collateral for derivatives covered by a CSA and as part of reverse repurchase transactions. A comprehensive overview of the composition of collateral received for derivatives under an ISDA Master Agreement can be found in Note S.2.5.1, while a summary of collateral received in reverse repos is given in Note S.2.4.2 of the Consolidated Financial Statements under IFRS. Not all such collateral is eligible for regulatory calculations.

## 8. Securitisation

### 8.1. Securitisation management

*The following section should include the most important features about EIB's use, intentions and risk management with respect to securitisations (CRR 449, BCBS 286 SECA).*

#### Introduction

Securitisation refers to a transaction or scheme, where the credit risk associated with an exposure or pool of exposures is tranching and has the following characteristics: payments in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures and the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme. A “traditional securitisation” is one where there is an economic transfer of the exposures being securitised from the originator institution to a special purpose vehicle (‘SPV’) while in a “synthetic securitisation” the transfer of risk is achieved by use of credit derivatives or guarantees.

The Group has exposure to both synthetic and traditional securitisations as investor and is originator of synthetic securitisation structures. At a high level, the Group is involved in the following transactions, more details are provided below:

- The Bank invests in Loan Substitutes, which are typically ABS or Covered Bonds<sup>12</sup>;
- The Bank has exposure to several facilities that focus on debt based financing via loans and guarantees, where a part of the first loss is taken by a third party and the Bank is the originator of these synthetic securitisations;
- Under its Guarantees and Securitisation (‘G&S’) business, EIF provides guarantees to financial intermediaries, credit enhancement to SME securitisation transactions and can purchase tranches of SME securitisation transactions.

#### Securitisation activities and the Group's objectives

EIB Group uses so called Loan Substitutes as alternative financing structures to reach new clients, enhance value added and to improve the Group's risk profile. The following types of Loan Substitute transactions are used at the Group:

- Acquisition of Asset Backed Securities (‘ABS’), which are structured debt securities issued by a bankruptcy-remote SPV and backed by a pool of financial assets.
- Purchase of Covered Bonds, which are ultimately backed by a pool of mortgages or by public sector claims. Although structured in a similar way to ABS, the issuer of a covered bond is a financial institution and it is liable for the repayment of the covered bond. Although mentioned here to provide a complete picture of the Group's activities, it should be noted that covered bonds are not treated as securitisation exposure for regulatory capital purposes, but under the IRB approach for general credit risk in Chapter 8 above, i.e. the quantitative section below will exclude covered bonds.

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<sup>12</sup> Covered Bonds are not treated as Securitisation for regulatory capital treatments though and are only mentioned here as they constitute part of the loan substitute portfolio.

- Investments in Structured Public Sector Bonds, which are obligations of public sector issuers, in which securitisation techniques are used to enhance the credit profile, e.g. through segregation or ring-fencing of certain of the issuer's assets. The credit risk has to be equal to a public sector loan and these products were therefore included in the quantitative disclosures in Chapter 8 above.

By utilising capital market instruments, such as covered bonds and ABS as a substitute for loans, the Bank significantly increases its ability to diversify the nature of its lending activity. In the field of SME securitisations, EIB and EIF closely cooperate to ensure a consistent risk assessment approach within the Group.

The Risk-Sharing Finance Facility ('RSFF') of the Bank (in cooperation with the EU) fosters investment in Research, Development and Innovation ('RDI'). EIB is the originator and provides (co-)financing jointly with commercial banks or other financial institutions. The EU provides a guarantee for the first loss piece, i.e. providing EIB with the synthetic risk transfer, while the remainder of risk remains at EIB. All loans remain on balance sheet of the EIB.

The Bank also has exposure to several similar programmes, which are all structured in a similar way, such that EIB is the originator and the risk transfer is done synthetically through guarantees. These include the Guarantee Fund Greece, Loan Guarantee Instrument for Ten-T Projects ('LGTT') and the Project Bond Initiative ('PBI'). Details on the exact objectives can be found in the EIB Group Financial Statements.

Under the RSFF there is a dedicated facility to address SMEs and smaller mid-caps, the Risk Sharing Instrument ('RSI'), which is a joint initiative of EIF, EIB and the EC and managed by EIF (i.e. also falling under the activities of the Fund mentioned below). RSI is a guarantee facility under which EIF provides guarantees to selected financial intermediaries.

Through its Guarantees and Securitisation ('G&S') business, EIF is a major provider of guarantees on SME financing and its aim is to catalyse bank lending to support SMEs and small mid-caps. EIF cooperates with financial intermediaries to provide guarantees on specific tranches of securitisation of SME loan/leases portfolios. The guarantee activities are split into own and mandate activities: EIF uses its own capital to credit enhance tranches of securitisations, which transfers risk from the financial institution providing the loan or lease and enables funding and

- EIF manages resources on behalf of the European Commission or Member States in mandate activities that facilitate granting of loans and leases to SMEs, where EIF acts as guarantor or counter-guarantor. One such mandate from EIB/EC is the Risk Sharing Instrument ('RSI'), which addresses SMEs and mid-caps in research, development and innovation and is managed by EIF. RSI is a guarantee facility, in which the EU takes the first loss tranche and EIB/EIF the second loss tranche.

The different programmes are described in further detail in the annual report of EIF. By providing guarantees (i.e. synthetic risk transfer), EIF can be seen as the investor in a synthetic securitisation. The nature of the activities expose the Group not only to credit risk and counterparty credit risk, but also to concentration risk, liquidity risk arising from liquidity needs to cover potential guarantee calls, foreign exchange risk if guarantees are not in EUR and potentially prepayment risk.

EIB Group does not have exposure to re-securitisations.

### Accounting policies

All Loan Substitutes (i.e. debt securities) the Group invests in are classified as held-to-maturity, with a minor part being classified as loans and receivable, and recorded at amortised cost with the obligation to have impairment tests at each official reporting date. The EIB's intention is to hold Loan Substitutes to maturity and to sell affected positions only in case of significant deterioration of creditworthiness, failure of the counterparty to ultimately use the proceeds for the financing of eligible investments and/or other unanticipated events considered admissible exceptions under IAS39. Any decision to sell a Loan Substitute will be taken in the context of rules and procedures set out in the credit risk operational guidelines.

In the case where EIB is the originator in a securitisation structure (i.e. RSFF and other mentioned facilities), no securitised assets are derecognised, but they are retained on balance sheet and their accounting treatment remains unchanged, i.e. third party guarantees are not recognised. There is no specific accounting treatment for synthetic securitisations. The Group does not have any assets awaiting securitisation as all such assets are placed under the RSFF or respective facility immediately at origination.

EIF guarantees are either measured in accordance with IAS 39 as financial guarantees or in accordance with IAS 37 as provisions for guarantees (refer to the financial statements for more details).

When applicable, any changes in accounting policies from the previous period can be found in the Financial Statements.

### Management, monitoring and reporting

In relation to Loan Substitute transactions, the EIB Group applies a consistent and prudent approach in order to minimise financial losses. This requires:

- An appropriate financial structure, allocation and mitigation of risks, including an appropriate limit system also addressing EIB Group exposures;
- Consistency with the Bank's general approach, the application of the four-eyes-principle;
- Appropriate and enforceable documentation;
- Monitoring of the transaction after purchase;
- Timely and active response and management of transactions in distress.

Credit risk of loan substitutes is managed through an individual analysis of all inherent risks of a transaction, detailed analysis of new transactions and monitoring of the loan substitute portfolio mainly relying on external ratings. Due to its importance, there is no cap on the overall volume of loan substitutes, unless they do not fulfil minimum acceptable criteria. TMR monitors loan substitutes on a continuous basis and actions are taken in respect to any deterioration of credit quality.

Due to the complex structure of securitisations, the credit performance during times of stress can only be approximated. Therefore EIB's credit review is prompted to identify the ability of the originator to cover high quality assets, to understand the nature and potentials of the risks, which arise of the underlying asset pool.

Loans under the RSFF or similar structures are subject to the same approval, management, monitoring and reporting procedures as conventional lending transactions, i.e. the information provided in Chapter 8 above applies. The residual risk of these loans is significantly reduced by the EU guarantee.

The Group manages the credit risk arising from guarantee and securitisation transactions of the Fund that are funded by own resources by risk management policies covered by the Statutes) and EIF's internal risk operational guidelines.

Each new transaction is reviewed in detail to analyse the risks, the methodologies that should be applied and an internal rating assessment is performed. The performance of each transaction is reviewed regularly, at least on a quarterly basis but more frequently for transactions not performing to EIF's expectations, and discussed at a quarterly IRC (Investment Risk Committee) meeting. Quarterly portfolio review and surveillance reports are also submitted to the IRC on a quarterly basis. Monthly internal risk reporting is performed by Risk Management, Credit Risk ('RM CRM'), which is submitted to the Chief Executive. Further information in respect to EIF's guarantee activities and its management, monitoring and reporting can be found in both the Group Financial Statements as well as in the Fund's Annual Report.

#### Measurement

The securitisation activities in which EIB is the originator, i.e. RSFF and other mentioned facilities, are not externally rated and the Supervisory Formula Method ('SFM') is used to calculate capital requirements. All such securitised assets remain on balance sheet at EIB.

The majority of loan substitutes are externally rated and therefore the Ratings Based Method ('RBM') is used to calculate regulatory capital. Ratings from all three major external rating agencies (Moody's, S&P and Fitch) are obtained, when available, and the risk weights are determined according to the second best external rating. Investments in securitisations without an external rating are deducted from capital.



## 8.2. Quantitative disclosure

Table 8-1: Securitisation activities - Balance of securitised product exposure and their type at the end of each reporting period

This table presents EIB's securitized exposure as originator of securitisation activities in the banking book during the reporting period.

31.12.2015	Bank acts as originator or sponsor			Bank acts as investor		
EUR million	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
Loans	0	20,055	20,055	6,288	4,710	10,998
Commercial mortgage	0	0	0	0	0	0
Lease and receivables	0	0	0	0	0	0
Re-securitisation	0	0	0	0	0	0
<b>Wholesale (total)</b>	<b>0</b>	<b>20,055</b>	<b>20,055</b>	<b>6,288</b>	<b>4,710</b>	<b>10,998</b>

31.12.2014	Bank acts as originator or sponsor			Bank acts as investor		
EUR million	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
Loans	0	17,171	17,171	5,438	2,629	8,067
Commercial mortgage	0	0	0	0	0	0
Lease and receivables	0	0	0	0	0	0
Re-securitisation	0	0	0	0	0	0
<b>Wholesale (total)</b>	<b>0</b>	<b>17,171</b>	<b>17,171</b>	<b>5,438</b>	<b>2,629</b>	<b>8,067</b>

Table 8-2: Securitisation positions and associated regulatory capital - Bank acting as originator

This table presents securitisation banking book positions when the Group acts as originator with the associated capital requirements by regulatory approach applied. Note that all exposures treated with 1250% risk weight are deducted from capital and therefore no RWA or capital requirement is given here.

31.12.2015																
EUR million	Long term external rating				EAD				RWA				Regulatory capital			
	AA- or better	A+ to BBB-	BB+ to CCC-	Unrated	IRB RBA	IRB SFA	SA / SSFA	1250% / Deduction	IRB RBA	IRB SFA	SA / SSFA	1250%	IRB RBA	IRB SFA	SA / SSFA	1250% / Deduction
Traditional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synthetic	0	146	0	19,909	144	18,242	0	1,668	230	1,738	0	0	18	139	0	1,668
<b>Total</b>	<b>0</b>	<b>146</b>	<b>0</b>	<b>19,909</b>	<b>144</b>	<b>18,242</b>	<b>0</b>	<b>1,668</b>	<b>230</b>	<b>1,738</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>139</b>	<b>0</b>	<b>1,668</b>

31.12.2014																
EUR million	Long term external rating				EAD				RWA				Regulatory capital			
	AA- or better	A+ to BBB-	BB+ to CCC-	Unrated	IRB RBA	IRB SFA	SA / SSFA	1250% / Deduction	IRB RBA	IRB SFA	SA / SSFA	1250%	IRB RBA	IRB SFA	SA / SSFA	1250% / Deduction
Traditional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Synthetic	0	0	0	17,171	0	17,171	0	0	0	1,848	0	0	0	148	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17,171</b>	<b>0</b>	<b>17,171</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,848</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>148</b>	<b>0</b>	<b>0</b>

All securitised assets are retained on balance sheet and no facilities are subject to the early amortisation treatment.

Table 8-3: Securitisation positions and associated regulatory capital - Bank acting as investor

The table presents securitisation banking book positions when the Group acts as investor with the associated capital requirements according to regulatory approach applied.

31.12.2015																
EUR million	Long term external rating				EAD				RWA				Regulatory capital			
	AA- or better	A+ to BBB-	BB+ to CCC-	Unrated	IRB RBA	IRB SFA	SA / SSFA	1250% / Deduction	IRB RBA	IRB SFA	SA / SSFA	1250%	IRB RBA	IRB SFA	SA / SSFA	1250% / Deduction
Traditional	3,776	1,565	0	948	5,340	0	0	948	670	0	0	0	54	0	0	948
Synthetic	420	412	103	3,774	893	0	0	3,817	540	0	0	0	43	0	0	3,817
<b>Total</b>	<b>4,196</b>	<b>1,977</b>	<b>103</b>	<b>4,722</b>	<b>6,233</b>	<b>0</b>	<b>0</b>	<b>4,765</b>	<b>1,210</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>97</b>	<b>0</b>	<b>0</b>	<b>4,765</b>

31.12.2014																
EUR million	Long term external rating				EAD				RWA				Regulatory capital			
	AA- or better	A+ to BBB-	BB+ to CCC-	Unrated	IRB RBA	IRB SFA	SA / SSFA	1250% / Deduction	IRB RBA	IRB SFA	SA / SSFA	1250%	IRB RBA	IRB SFA	SA / SSFA	1250% / Deduction
Traditional	1,412	2,812	255	959	4,479	0	0	959	875	0	0	0	70	0	0	959
Synthetic	367	112	66	2,084	493	0	0	2,136	106	0	0	0	8	0	0	2,136
<b>Total</b>	<b>1,779</b>	<b>2,924</b>	<b>321</b>	<b>3,043</b>	<b>4,972</b>	<b>0</b>	<b>0</b>	<b>3,095</b>	<b>981</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>78</b>	<b>0</b>	<b>0</b>	<b>3,095</b>

All securitisation exposures are classified as held-to-maturity. Therefore, any gains or losses from sale are immaterial as they only occur when significant deterioration of the asset allows for a sale.

Table 8-4: Summary of capital requirements (RGC) for securitisation activities

This table summarises the overall capital requirements and capital to be deducted from CET1 for securitisation activities of the Group.

EUR million	31.12.2015				31.12.2014			
	EAD	RWA	RGC	Capital deduction	EAD	RWA	RGC	Capital deduction
Bank acts as originator	20,055	1,968	157	1,668	17,171	1,848	148	0
Bank acts as investor	10,998	1,210	97	4,765	8,067	981	79	3,095
<b>Total</b>	<b>31,053</b>	<b>3,178</b>	<b>254</b>	<b>6,433</b>	<b>25,238</b>	<b>2,829</b>	<b>227</b>	<b>3,095</b>

Table 8-5: Assets securitised: Impaired or past due and recognised losses over the period

The following table provides a view on the impaired/past due assets that are securitised and the losses recognised over the year 2014.

31.12.2015 EUR million	Impaired / past due assets			Losses recognised over the period		
	Traditional	Synthetic	Total	Traditional	Synthetic	Total
Loans	0	1,204	1,204	0	0	0

Wholesale (total)	0	1,204	1,204	0	0	0
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31.12.2014 <i>EUR million</i>	Impaired / past due assets			Losses recognised over the period		
	Traditional	Synthetic	Total	Traditional	Synthetic	Total
Loans	0	951	951	0	0	0
Wholesale (total)	0	951	951	0	0	0

## 9. Non-traded market risk

### Introduction

Non-traded market risk covers the risks that may arise from banking book activities, such as interest rate risk, spread risk, equity risk or foreign exchange ('FX') risk. Information on liquidity and funding risks can be found in the following chapter. The Group does not have a trading book; therefore market risk only arises from the Group's ALM, treasury and the Fund's Equity Investment activities. The Fund's interest rate risk is driven by cash or cash equivalent positions as well as investments in debt securities. The Fund's treasury management has been fully outsourced to the Bank under a treasury management agreement.

No regulatory capital is required to be allocated to non-traded market risk; nevertheless the Bank identified market risk as a significant risk and allocates economic capital for some of its treasury positions.

### Management

Management of market risks of the Bank is undertaken in FRD within RM and by Risk Management for the Fund (except for risks related to treasury management as mentioned above). The Bank's financial risk operational guidelines relate to financial risk identification, measurement and monitoring, including limit setting, compliance and reporting. They are approved by the Management Committee and any amendments must be sent to the Management Committee for approval after consultation with the Finance Directorate ('FI') and discussion within ALCO, when appropriate. They do not explicitly address the risks arising from the management by the Bank of financial resources entrusted to it neither by the EIF nor, in general, third parties.

The Group's key market risks are interest rate and equity risk, which are considered in the following sections. There is a low risk tolerance for FX risk and derivatives are used to eliminate currency mismatches. The Group tries to limit its spread risk, which is the risk of widening the spread between lending and funding activities of the Bank, by reducing maturity mismatches on the lending and funding side

### Measurement

The Financial Statements provide a good overview on market risks in Note S.4. Interest rate and FX risk is quantified by a VaR of own funds, which is summarised here, but further information including methodology is provided in the Financial Statements.

Table 9-1: Interest rate and foreign exchange risk measurement at the EIB Group

*Figures are based on a one-day VaR using a 99% confidence level.*

EUR million	31.12.2015	31.12.2014
Group VaR	457	185

Stress testing of market risks is performed at EIB on a regular basis and information is reported through the CARE report and the ICAAP.

Table 9-2: Market risk stress testing results for EIB

The table provides an overview of the main market risks at EIB through the impact on the economic value of own funds of stress tests. The underlying scenarios are as follows:

- Interest rate risk: 200 basis point upward parallel shift of interest rate curve
- Spread risk: 50 basis point increase in the Bank's funding cost (measured in term of swap spreads) on all future funding requirements relating to the refinancing of outstanding assets
- Equity risk: 50% reduction of the Bank's subscribed capital in the EBRD and the EIF equity as well as a 50% reduction in investments related to venture capital operations and investments funds
- FX risk: 20% value reduction for the Bank's positions denominated in FX currencies

Impact on economic value of own funds EUR million	31.12.2015	31.12.2014
Interest rate risk <sup>13</sup>	7,254	7,495
Spread risk	1,624	868
Equity risk <sup>14</sup>	4,102	3,585
FX risk	648	539
<b>Total</b>	<b>13,628</b>	<b>12,487</b>

## 9.1. Interest rate risk in the banking book

### Introduction

From a regulatory perspective all interest rate risk the Group is exposed to, is classified as Interest Rate Risk in the Banking Book ('IRRBB'), as no trading book exists. Interest rate risk is defined as the volatility in the economic value of, or in the income derived from, the Group's positions due to adverse movements in market yields or the term structure of interest rates. Exposure to interest rate risk occurs due to differences in repricing and maturity characteristics of the different assets, liabilities and hedge instruments.

### Management, monitoring and reporting

The Group follows relevant key principles of BCBS<sup>15</sup> in its management and monitoring of interest rate risk. The Bank measures and reports IRRBB on a monthly basis in two ways. Firstly an aggregated version of value-at-risk ('VaR') figures is included in the RM internal risk reports, which are presented to the MC. Moreover, a Global Interest Rate Risk Report is published internally and serves as a report for financial risk management and operational ALM with a greater level of detail. There is a permanent working group on interest rate risk monitoring, which was established within the ALCO. The working group's activities include review and analysis of interest rate risk exposure, considering the exposure size and evolution and reporting to ALCO on operational actions and consequences.

<sup>13</sup> For this figure treasury deals and their hedges have not been taken into account, while in the stress scenario given below in the Interest rate section all bank exposures were considered.

<sup>14</sup> EUR 1,766m (2014: 1,775m) arises from strategic participations and EUR 2,336m (2014: EUR 1,810m) from venture capital operations and the investment funds. Note that the underlying exposures do not reconcile directly to the information in section 9.1 as here only the Bank's exposure is considered.

<sup>15</sup> See Principles for the Management and Supervision of Interest Rate Risk, July 2004

Interest rate risk of the Fund is immaterial to the Group and therefore disclosures focus on the Bank. The footnote to the stress test below on the Group provides an indication of materiality. The duration of the Fund's portfolios is monitored on a weekly basis.

## Measurement

The EIB applies a duration of own funds as a primary interest rate risk metric, with a target duration of 4.5 to 5.5 years.

EIB uses a VaR approach to quantify interest rate and foreign exchange risk on own funds. In addition, it performs stress tests to understand the impact on the economic value of own funds using a standardised interest rate shock and performs analysis on the Bank's sensitivity of earnings. For additional details, refer to the Financial Statements, Note S.4.2 "Interest rate risk".

When measuring interest rate risk, certain key assumptions are made for different products. Cash flows are modelled for revisable/convertible transactions and all principal cash flows due after the next revision/conversion date are summed and mapped to this date. For callable issues the maturity of the transaction is not altered by the call option, i.e. the deal is considered to last until final maturity.

Table 9-3: Interest Rate Risk in the Banking Book: 200 basis point stress test

The below table gives a stress test analysis of the Bank only (i.e. not including the Fund)<sup>16</sup>, which measures the impact of a +/- 200 basis point ('bp') parallel shift of the respective interest rate curve<sup>17</sup> on the economic value of own funds, measured in EUR million<sup>18</sup>. Values shown are for year end 2015 and 2014.

EUR million	31.12.2015		31.12.2014	
	-200bp IR Scenario	+200bp IR Scenario	-200bp IR Scenario	+200bp IR Scenario
CHF	-3	-6	-1	-7
CZK	1	-9	2	-9
DKK	0	0	0	1
EUR	2,559	-7,270	2,406	-7,428
GBP	80	-59	140	-134
HUF	1	-1	1	-1
JPY	-1	7	-1	4
PLN	20	-20	23	-22
SEK	-3	-1	-4	2
USD	41	-57	16	-50
ZAR	2	-2	3	-3
<b>Total own funds</b>	<b>2,697</b>	<b>-7,418</b>	<b>2,586</b>	<b>-7,647</b>

The Bank considers a Basis Point Value ('BPV') measure as another key metric that is monitored and reported regularly. The BPV is the gain or loss in the net present value of a position due to a one basis point (0.01%) increase in interest rates (swap curves) on tenors ranging within a specified time segment. The BPV exposures in EUR are subject to a different interpretation as they measure the

<sup>16</sup> For an impact of a 200 basis point upward parallel shift of the interest rate curves on economic value of own funds of the whole Group, refer to Note S.4.2.1 in the Consolidated Financial Statements under IFRS. This was EUR 7.6 billion for end of 2015 (2014: EUR 7.8bn). For the EIF, the impact was EUR 0.1bn for the end of 2015 (2014: EUR 0.1bn).

<sup>17</sup> There is a floor of 0% on the -200bp shock.

<sup>18</sup> Currencies for which all stress tests had an immaterial impact of less EUR 500,000 were excluded from this table.

deviations between the interest rate risk sensitivity of the Bank's positions denominated in EUR vis-à-vis the NOPOF (Notional Portfolio of Own funds) which is the Bank's benchmark portfolio representing the level of interest rate risk targeted by the Bank.

Table 9-4: Interest Rate Risk in the Banking Book: Basis Point Value

This table provides the economic value sensitivity to changes in interest rates based on a BPV measure. The sensitivities are provided for the Bank only, but are also relevant to the Fund<sup>19</sup>.

December 2015 BPV exposures (in '000 EUR)							
	Less than 1 year	Between 2-3 years	Between 4-6 years	Between 7-11 years	Between 12-20 years	Between 21-30 years	More than 30 years
CHF	-11	-9	-17	-3	12	0	0
CZK	-27	-5	-7	-6	-2	0	0
DKK	3	0	-1	-1	0	0	0
EUR	-401	108	-31	-185	-263	127	-135
GBP	-97	140	-110	20	-218	-105	19
HUF	-1	-4	-2	0	0	0	0
JPY	11	1	20	5	0	0	0
NOK	0	0	-1	-1	0	0	0
PLN	-53	-11	-18	-19	-4	0	0
SEK	-6	-5	-7	0	13	1	0
USD	-92	-48	-108	65	-126	53	-13
ZAR	0	-1	-2	-3	-2	0	0

December 2014 BPV exposures (in '000 EUR)						
	Less than 1 year	Between 2-3 years	Between 4-6 years	Between 7-11 years	Between 12-20 years	More than 20 years
CHF	-11	-9	-19	-9	10	2
CZK	-22	-5	-9	-8	-3	0
DKK	5	0	-1	0	0	0
EUR	-216	82	-219	-66	-133	-396
GBP	-102	-20	-104	-221	-259	-44
HUF	0	-3	-3	0	0	0
JPY	-4	4	0	23	0	0
NOK	-2	0	-1	-1	-1	0
PLN	-49	-14	-21	-24	-6	0
SEK	1	-4	-6	3	18	1
USD	-141	-28	-97	-61	70	36
ZAR	0	-2	-4	-5	-3	0

<sup>19</sup> Currencies for which the BPV sensitivity had an immaterial impact of less EUR 500 for all time buckets were excluded from this table.

## 9.2. Equity exposure in the banking book

### Introduction

Non-traded equity risk refers to the potential loss that may be incurred as a result of reduction in the fair value of an equity investment in the EIB Group banking book.

The Group is exposed to equity risk from the following sources:

- EIB's participations in the European Bank of Reconstruction and Development ('EBRD') and in the EIF (which is consolidated for the purpose of this report),
- Equity-type investments including investments in infrastructure funds and in the Structured Finance Facility ('SFF'), and
- Venture capital and Growth Capital operations made by EIF on behalf of EIB under the Risk Capital Resources ('RCR') and the EREM mandates<sup>20</sup> and under own resources (usually as co-investments with Mandates).

Detailed information on the size of the equity portfolio broken down by the above exposure type is provided in the Financial Statements for EIB Group under EU Directives in Note E, including further information on off-balance sheet exposures.

### Management, monitoring and reporting

The Fund established specific risk management practices and measurement methodologies, which are detailed in the EIF Financial Statements. This Report provides some general information about the management practice in the following paragraphs.

The core is a structured and regular fund manager review process, in which the financial performance of each fund manager and fund in the portfolio is assessed, operational issues at the level of fund managers are identified, and remedy actions are agreed. This process is run by Risk Management and involves the various front offices of the Fund.

Considering equity risk arising from venture capital and middle market investments under the RCR and EREM mandates, EIF monitors the exposures and reports to the Management Committee of the EIB on a quarterly basis. This report includes key performance indicators, the RCR headroom, allowed investments, details on portfolio diversification as well as expected investment performance.

For more quantitative details concerning equity exposures in the banking book, refer to Section 3.2. of the EIF Financial Statements. Private equity investments are especially important to the Fund, therefore further information about the private equity portfolio composition can be found in its Financial Statements.

Regarding equity risks associated with third party participations, EIB performs monitoring and reporting on a monthly basis in its internal risk reports. Furthermore the negative P&L impacts, which result from participations, are covered in the annual P&L statement and are therefore covered by the Financial Statements. Due to the strategic nature of these investments, no risk

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<sup>20</sup> The RCR was established out of the Risk Capital Mandate ('RCM') in 2013.



measurement is deemed necessary. The bank separates these exposures in the balance sheet using specific provisions such as capital reserves.

EIB separates between equity risks inside the European Union and operations outside the EU. As the latter sometimes bear more risk, relative to operations inside the European Union, EIB has established strong non-European equity risk guidelines. These guidelines range from more rigorous due diligence advisory and prudent valuation to continuous monitoring and reporting of equity investments.

### Measurement

Investments in venture capital operations, infrastructure and investment funds are valued in line with accounting policies, for which we refer to Note A.4.7.3 of the Financial Statements.

The Group assesses the impact on own funds due to reasonable possible changes in equity indices on a regular basis. The impact of such an assessment as well as more detailed information on the measurement is provided in the Financial Statements, Note S.4.4.

As for EIF, the measurement of the quality and performance of the EIF equity portfolio is grounded in the fund manager review process described above, and is performed on the basis of the grades assigned to the fund managers (“Operational Grade”) on the one hand and to the fund (“Performance Grade”) on the other. In addition, Risk Management exploits the breadth and depth of data accumulated on the past experience of the portfolio, in order to derive simulations and scenarios as to future expected returns and performance.

Finally, the EIF quantifies equity risk arising from private equity investments via a Capital Asset Pricing Model (‘CAPM’). Deriving reasonable statistics, which could then be used for a private equity CAPM, is challenging due to the lack of historical data concerning aforementioned investments. That is why EIF’s risk management estimates a conservative beta derived from different private equity indices, refer to Section 3.2.4.1 of EIF’s Financial Statements.

## 10. Liquidity risk

### 10.1 Liquidity risk management

#### Introduction

Liquidity risk is the risk that the Group has insufficient capacity to fund increases in assets and meet obligations as they come due, without occurring unacceptable losses. It can be further split into funding liquidity risk and market liquidity risk. Funding liquidity risk is connected to the risk of the Group of being unable to refinance the asset side of its balance sheet and to meet payment obligations punctually and in full out of readily available liquid resources. Market liquidity risk is the volatility in the economic value of, or in the income derived from, the Bank's positions due to potential inability to execute a transaction to offset, eliminate or reduce outstanding positions at reasonable market prices.

The Group's main objective is to ensure that it can always meet its payment obligations punctually and in full. The Bank relies on access to capital markets to raise funds at good conditions due to its high rating. In addition, EIB's funding policy stipulates as objective to obtain best possible funding cost conditions, while avoiding large mismatches between assets and liabilities. In general the issues of debt securities covers estimated disbursement targets and needed debt volumes as well as signed, but not yet disbursed amounts.

The Bank uses large, liquid benchmark bonds in the main currencies (EUR, GBP and USD, refer to Table 7-4) and, with a view to taking advantage of favourable market conditions and diversifying funding sources and techniques, of "opportunistic" issues, particularly in structured form. For an overview of the current funding programme and its currencies and maturities, refer to Note I of the Financial Statements.

Liquidity management is done by the Finance Treasury Department through the combination of different short, medium and long term portfolios that follow different objectives to ensure the Bank is able to meet its liquidity needs. The Bank can access short term liquidity provided by the European Central Bank ('ECB') when providing adequate collateral, as it has been admitted to participate in the Eurosystem Operations with the ECB. Regarding long term liquidity, the Bank tries to minimise the maturity mismatches between its lending and borrowing activities. The Financial Statements provide further information on liquidity management.

#### Management, monitoring and reporting

The Bank manages liquidity risk in the Financial Risk Department of the Risk Management Directorate. The Bank's liquidity risk management is aligned to the Principles for Sound Liquidity Management of BCBS, on which the liquidity policy is based. Liquidity risk is managed prudently in order to ensure the regular functioning of the Bank's core activities at reasonable cost.

EIB performs cumulative liquidity gap analyses to understand the Bank's funding requirements needed to reimburse all borrowings at maturity. In addition the Bank also measures the reinvestment risk components of spread risk (refer to Section 9.1). RM monitors the evolution of liquidity and funding metrics on a weekly basis and regularly informs Management through the Liquidity Situation and RM internal Risk Report.

Liquidity risk at the Fund is managed in such a way as to protect the value of the paid-in capital, ensure an adequate level of liquidity to meet possible guarantee calls, private equity commitments and administrative expenditure and earn a reasonable return on assets invested with due regard to minimisation of risk. The treasury guidelines are designed to ensure funds are available.

Further information on the Group's liquidity risk management is provided in the Financial Statements, Note S.2. These also provide a detailed maturity profile for derivative and non-derivative financial liabilities.

### Measurement

The Financial Risk Department calculates various liquidity metrics on a weekly basis with the aim of ensuring that the Bank holds an adequate liquidity buffer to cover its future net cash outflows. Also regular stress-testing analyses on different liquidity and funding scenarios are performed to determine the appropriate size of the Bank's liquidity buffer. The various scenarios take into account different lending and funding forecasts as well as stressed loan repayments and liquid assets. Both market and funding liquidity risks are covered by the scenarios.

## 10.2 Liquidity coverage ratio

Compliance with the Liquidity Coverage Ratio ('LCR') initial minimum limit (60%) is required for regulated banks as of 1 October 2015 while full implementation will be required by 2018 (100%). The EIB implemented the LCR reporting in line with the requirements of the 2014 delegated act by the European Commission.

The CRR does not specifically state that the LCR is to be disclosed, nor does the delegated act. However, it is to be expected that disclosure requirements will be published in the future by EBA. The draft EBA guidelines published in January 2016 provide a disclosure framework on liquidity as envisaged in Article 435 of the CRR. As currently foreseen, the application date for the guidelines will be in June 2017.

## 10.3 Net stable funding ratio

The NSFR is a significant component of the Basel III reforms and banks will be required to calculate it from 1 January 2018 (based on BCBS recommendations, not the European Commission). BCBS issued the final NSFR definition in October 2014. EBA has not issued any draft technical standards, but monitors the NSFR through its Basel III monitoring exercise based on supervisory reporting of items requiring stable funding (CRR Article 428). In 2015 EBA reported to the Commission on the proposed implementation of the net stable funding ratio in the EU framework. In 2016 the Commission is expected to decide about the introduction of the ratio in the EU framework and subsequently European banks might be required to calculate and disclose measures on stable funding.

## 10.4 Asset encumbrance

An asset is considered to be encumbered if it has been pledged or if it is used to secure, collateralise or credit enhance a transaction such that it cannot be freely withdrawn by the Bank. Marketable, high-quality assets that are unencumbered are part of a liquid asset portfolio as they can generally help to obtain emergency liquidity in stress situations.

Supervisors have started focusing more on monitoring levels of asset encumbrance and emphasise that this topic should be considered in a bank's risk management process. The Group monitors its encumbered assets through its Financial Control department and is in the process of setting up a robust methodology to ensure the level of encumbered and unencumbered assets is consistently monitored within the Group risk management.

At end-2015, the only assets which may be classified as encumbered according to EBA's guidelines<sup>21</sup> on encumbered assets are EIB's assets deposited at the BCL. The deposited assets are in the form of debt securities, which may be potentially used for refinancing operations with the central bank. However, the assets are not encumbered from a legal perspective because any refinancing operation would be executed in the form of a repo, which involves full title transfer. As at 31.12.2015 the Bank had engaged in repo transactions in GC Pooling platform of EUREX AG and for its collateral deposit at the BCL.

The EIB Group does not accept encumbered securities as financial collateral. No third party could encumber EIB's loan collateral unless EIB would re-pledge the collateral voluntarily. However, as at 31.12.2015 there was no recognized reuse of collateral.

Derivatives collateral is in the form of debt securities and cash. It is fully available for encumbrance because it is received under English law CSAs which involve full title transfer. However, as at 31.12.2015 there was no recognized reuse of collateral.

The following disclosures follow EBA's disclosure templates on asset encumbrance.

Table 10-1: Encumbered and unencumbered assets of EIB Group

The below table provides an overview of the amount and type of accounting values of on balance sheet assets that are encumbered and unencumbered at EIB Group.

EUR million	Encumbered Assets		Unencumbered assets	
	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
<b>Assets of the reporting institution</b>	<b>3,227</b>	<b>3,194</b>	<b>568,585</b>	<b>568,616</b>
Equity instruments	0	0	3,609	5,175
Debt securities	3,227	3,194	533,749	562,911
Other assets	0	0	31,227	530

<sup>21</sup> EBA/GL/2014/03: Guidelines on disclosure of encumbered and unencumbered assets.

Table 10-2: Encumbrance of collateral received by EIB Group

*This table shows the amount and type of collateral received by the Group that is encumbered or available for encumbrance.*

31.12.2015 EUR million	Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance
<b>Collateral received by the reporting institution</b>	<b>0</b>	<b>87,776</b>
Equity instruments	0	531
Debt securities	0	71,979
Other collateral received	0	15,266
<b>Own debt securities issued other than own covered bonds or ABSs</b>	<b>0</b>	<b>0</b>

Table 10-3: Sources of encumbrance

*The below table provides information on liabilities associated with encumbered assets and collateral.*

31.12.2015 EUR million	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
<b>Carrying amount of selected financial liabilities</b>	<b>0</b>	<b>0</b>

## 11. Operational risk

### Introduction

The Group aims to systematically identify operational risks, assess and monitor these on an ongoing basis and ensure that sufficient controls and risk mitigants are in place to limit the operational risk exposure the Group has. The approach to operational risk is defined through an Operational Risk Framework separately for EIB and EIF.

EIB uses an Advanced Measurement Approach ('AMA') to measure economic and regulatory capital requirements for operational risk for the Bank, while EIF applies the Basic Indicator Approach.

### EIB's AMA model

EIB has developed an operational risk model following the AMA, which is both used for economic capital as well as regulatory capital calculations. The Bank's AMA model relies on four key inputs, which are all defined through the above provided information on the operational risk framework:

- Internal loss data, which has been collected since 2003. Each event is documented in an internal system, out of which the AMA model obtains its data.
- External loss data, which is sourced from GOLD on a quarterly basis.
- Scenario analysis, which is performed annually to obtain expert opinion on high impact operational risk scenarios.
- Factors reflecting the business environment and internal control systems, which are the KRIs described above and exist for each business line.

Through a combination of above data, a statistical distributions reflecting the Bank's severity and frequency of losses due to operational risks is created, which is then adjusted by KRIs. The AMA model used in the Bank is regularly validated by independent expert third parties. The Group does not use insurance or similar risk control elements for mitigating operational risks within their AMA model.

### Internal risk reporting

Reports are used by the Operational Risk function ('OPR') to assist management in understanding, monitoring, managing and controlling risks and losses. The Operational Risk function produces the Operational Risk Monthly Report in order to reflect the up-to-date status of operational risks within the Bank. The reports includes: internal loss data, NPC actions, operational risk scorecards, as well as the quarterly VaR results calculated by the AMA model. The reports are distributed to appropriate levels of management and to areas of the Bank, which might be impacted by the report.

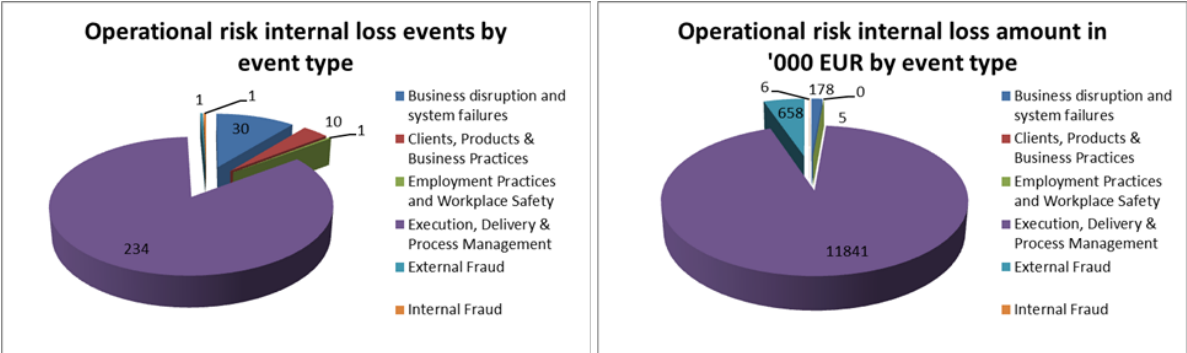
On an annual basis, OPR prepares a Cartography of Risks (thereafter 'CARE') report as a comprehensive analysis of the risks faced by the Bank and of any existing gap in their treatment or mitigation. The CARE report is a source of information for the ICAAP and is distributed and presented to the Audit Committee.

### 11.1. Quantitative disclosure

To provide a better understanding of the operational risk losses the Bank has incurred, an overview is provided in Figure 11-1 by type of operational risk event and by business line:

Figure 11-2: Overview of internal losses of EIB (2003 - 2015)

These charts provide an overview of internal losses from 2003 to 2015 of EIB. Information on the number of loss events as well as the total loss amounts are provided by internal loss event type. Only events that lead to losses have been included.



## 12. Remuneration policy

The information regarding the remuneration arrangements of key management personnel as well as staff can be found on EIB's official website.

The remuneration of members of the Governing Bodies is provided in detail, while for all staff (i.e. including staff that has a material impact on the Group's risk profile) salary bands are provided and EIB's bonus system is explained.



## 13. Appendix

### 13.1. Appendix I - Risk terminology

Risk type	Sub-risk type	Measurement, monitoring and management of risk
Credit Risk	<b>Credit default risk</b>	
	<i>The risk that a borrower or counterparty will fail to meet its obligations in accordance with agreed-upon terms. On EIB's definition this sub-risk type includes country and transfer risk.</i>	
	<b>Issuer credit risk</b>	
	<i>The potential loss in terms of a decrease in asset values or the default of payments that the bank may incur due to the decrease in the quality of the respective counterparts;</i>	<i>Different PD, LGD and EAD models; CreditMetrics for economic capital calculation, which especially covers credit concentration risk</i>
	<b>Credit concentration risk</b>	
	<i>The potential loss resulting from excessive concentration of exposure to a single client or a specific sector</i>	
<b>Counterparty credit risk</b>		
	<i>The risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty to the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors.</i>	<i>Current exposure method; IMM for internal use</i>
<b>Market risk (in the banking book)</b>		
	<b>Interest rate risk</b>	
	<i>The volatility in the economic value of, or in the income derived from, the Bank's positions due to adverse movements in market yields or the term structure of interest rates. Exposure to interest rate risk occurs due to differences in repricing and maturity characteristics of the different asset, liability and hedge instruments</i>	<i>Duration of own Funds Delta Normal Value at Risk for internal use</i>
	<b>Spread risk</b>	
	<i>is the volatility in the economic value of, or in the income derived from, the Bank's positions due to movements in the funding or lending spread of the Bank.</i>	<i>BPV Monitoring</i>
	<b>FX risk</b>	
	<i>is the volatility in the economic value of, or in the income derived from, the Bank's positions<sup>3</sup> due to adverse movements of FX rates.</i>	<i>Delta Normal Value at Risk for internal use</i>

### Equity risk

*The volatility in the economic value of, or in the income derived from, the Bank's positions due to the change in valuation of equity investments, in particular a reduction in value compared to the price paid or attributed to the equity investment at the time of the initial acquisition or commitment.* EIF uses a Capital Asset Pricing Model

### Liquidity risk

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#### Funding liquidity risk

*The risk for the Bank to be unable to refinance the asset side of its balance sheet and to meet payment obligations punctually and in full out of readily available liquid resources.*

#### Market liquidity risk

*The volatility in the economic value of, or in the income derived from, the Bank's positions due to potential inability to execute a transaction to offset, eliminate or reduce outstanding positions at reasonable market prices.*

The Bank installed several different ratios which match the liquidity in different time horizons

### Operational risk

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*The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.* EIB uses an AMA Model  
EIF uses the basis indicator approach

### Custodian risk

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*The risk of financial loss resulting from a custodian being unable or unwilling to fulfil any obligation incumbent on it in due time, which includes the risk that the custodian is unable or unwilling to fulfil any requirements to keep assets under custody appropriately segregated as required by law or contract.* No special risk measurement in place

### Model risk

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*The risk that the institution makes decisions (e.g. in assessment and valuation) that result in financial losses due to model deficiencies.* No special risk measurement in place

## 13.2. Appendix II - Abbreviations

ABS	Asset Backed Securities
ALCO	ALM Committee
ALM	Asset Liability Management
AMA	Advanced Measurement Approach (for operational risk)
AT1	Additional Tier 1 (Capital)
BCBS	Basel Committee on Banking Supervision
BPV	Basis Point Value
CAD	Capital Adequacy
CARE	Cartography of Risks
CCF	Credit Conversion Factor
CET1	Common Equity Tier 1 (Capital)
CRA	Credit Risk Adjustment
CRAG	Credit Risk Assessment Group
CRD IV/CRR	Capital Requirements Directive IV and Regulation
CRM	Credit Risk Mitigation
CSA	Credit Support Annex
DSMC	Derivatives Strategy and Models Committee
EAD	Exposure at Default
EBA	European Banking Authority
EC	European Commission
EDTF	Enhanced Disclosure Task Force
EIB	European Investment Bank
EIF	European Investment Fund
EL	Expected Loss
ELM	External Lending Mandate
EU	European Union
FI	Finance Directorate
FMGP	Financial Monitoring Guidelines and Procedures
FX	Foreign Exchange
GLR	General Loan Reserve
GSM	Guarantees, Securitisations and Microfinance
ICAAP	Internal Capital Adequacy Assessment Process
IMM	Internal Model Method (for counterparty credit risk)
IRB	Internal Ratings Based (approach for credit risk)
IRM	Internal Rating Methodology
IRMMC	Internal Rating Model Maintenance Committee
IRRBB	Interest Rate Risk in the Banking Book
ISDA	International Swaps and Derivatives Association
LCR	Liquidity Coverage Ratio
LG	Loan Grading
LGD	Loss Given Default
LGTT	Loan Guarantee Instrument for Ten-T Projects
MC	Management Committee
NOPOF	Notional Portfolio of Own Funds
NPC	New Product Committee
NSFR	Net Stable Funding Ratio
OPS	Operational Directorates
PE	Private Equity
PBI	Project Bond Initiative
PD	Probability of Default
RCR	Risk Capital Resource
RM	Risk Management Directorate
RSFF	Risk-Sharing Finance Facility
RSI	Risk Sharing Instrument

RWA	Risk Weighted Assets
SAR	Special Activities Reserve
SFF	Structured Finance Facility
SFT	Securities Financing Transactions
SME	Small and Medium-Sized Enterprises
SPV	Special Purpose Vehicle
T2	Tier 2 (Capital)
TMR	Transaction Management and Restructuring
VaR	Value-at-Risk

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## 13.5. Appendix V - Reconciliation with financial statements

The following table presents a high-level reconciliation between the EIB consolidated balance sheet prepared under EU accounting directives and regulatory exposures subject to credit risk calculation.

### Summary reconciliation of accounting assets and A-IRB regulatory exposures

31.12.2015 EUR million	On-balance sheet amounts	Off-balance sheet amounts	Fair value of derivatives	Exposure at default modelling	Assets synthetically securitised	Credit conversion factors	Regulatory EAD
Cash	206	0	0	0	0	0	206
Money market deposits and reverse repos	31,604	0	0	6	0	0	31,610
Treasury bills and debt securities (including loan substitutes)	66,842	0	0	586	0	0	67,428
Loans and advances	438,950	106,053	0	18,641	(28,843)	(41,036)	493,765
Specific provisions	(625)	0	0	625	0	0	0
Shares and variable yield securities	3,608	5,626	0	1,597	0	0	10,831
Tangible and intangible assets	284	0	0	2	0	0	286
Other assets	130	0	(1)	0	0	0	129
Subscribed capital and reserves, called but not paid	130	0	0	(130)	0	0	0
Prepayments and accrued income	30,683	0	(28,054)	(2,557)	0	0	72
Derivatives	0	0	35,225	44,872	0	0	80,097
Guarantees issued	0	6,893	0	0	0	(2,438)	4,455
<b>Total</b>	<b>571,811</b>	<b>118,572</b>	<b>7,170</b>	<b>63,643</b>	<b>(28,843)</b>	<b>(43,474)</b>	<b>688,879</b>





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