

**Disclosure Report 2017**  
pursuant to Part Eight  
of the Capital Requirements Regulation (CRR)

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## Definitions

### Reporting Period

The report is based on figures as of 31 December 2017.

In case tables include information on more periods, figures are properly marked.

### Exposure for the regulatory purpose

The values corresponding to exposure amount applied in credit risk Standardised approach (Part Three, Title II, Chapter 2, Article 111 of the CRR) or to exposure at default (EAD) in case of Internal Rating Based approach (Part Three, Title II, Chapter 3, Article 166-168 of the CRR).

### Accounting values

The values corresponding to the book values. Gross values of on-balance items are before any allowances/impairments. Off-balance represent nominal values of off-balance item (guarantees given, loan commitments, other commitments), before application of the CCF. Net value, in case of the on-balance sheet exposure is carrying amount (gross amounts less allowances), while in case of off-balance are nominal values after deduction of provisions for off-balance items.

### Exposure classes

The breakdown by exposure class is presented in accordance with Part Three, Title II, Chapter 2, Article 112 (referred to as Standardised Approach) and in accordance with Part Three, Title II, Chapter 3, Section 1, Article 147 (referred to as IRB Approach) of the Capital Requirements Regulation (CRR).

### PD class (Probability of Default)

Erste Group has defined ten PD classes, of which class 01 corresponds to the highest credit quality while 10 represents the default grade with a PD of 100%. Where exposures are guaranteed by eligible protection providers, amounts are shown under the PD class of the protection providers.

### Credit risk adjustments

Credit risk adjustments comprise only specific credit risk adjustments. Specific credit risk adjustments include allowances and provisions calculated in line with the relevant accounting standards. "Credit risk adjustments as of 31 December" are shown as at the reporting date, whereas "Credit risk adjustments as of 1 January" show the relevant amount at the beginning of the year. Credit risk adjustment presented in the report are calculated in line with the IAS 39 and IAS 37 standards. As of Q1 2018 reports and publications, credit risk adjustments are reported in line with IFRS9.

### Write-offs

Derecognition of financial instruments as the Bank has no reasonable expectation of recovering the contractual cash flows. Write-offs include (1) decrease of book value directly recognised in profit and loss and (2) utilisation of allowances (decrease of book value based on allowances created in previous period).

## Disclosures in other published reports

### Annual Report 2017

A number of CRR disclosure requirements are covered by Erste Group's annual report. The respective articles of the CRR and the corresponding page number(s) of the annual report can be found in the last column of the table below.

CRR article		Disclosure requested in the CRR article	Reference to annual report	Sub-chapter in annual report	Page
435 (1) (b)	Risk management objectives and policies	Structure and organisation of the relevant risk management function including information on its authority and statute, or other appropriate arrangements	Note 44. Risk management	Note 44.2 Risk management organisation	180-187
435 (1) (c)	Risk management objectives and policies	Scope and nature of risk reporting and measurement systems	Note 44. Risk management	Note 44.3 - 44.7	187-221
435 (2) (a)	Governance arrangements	Number of directorships held by members of the management body	Corporate governance chapter		84-87
435 (2) (b)	Governance arrangements	Recruitment policy for the selection of members of the management body and their actual knowledge, skills and expertise	Corporate governance chapter		84
435 (2) (c)	Governance arrangements	Policy on diversity with regard to selection of members of the management body, its objectives and any relevant targets set out in that policy, and the extent to which these objectives and targets have been achieved	Corporate governance chapter		94
436 (b)	Scope of application	Differences in the basis of consolidation for accounting and prudential purposes	Note 52. Own funds and capital requirements	Comparison of consolidation for accounting purposes and regulatory purposes	238-240
436 (c)	Scope of application	Material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities	Note 52. Own funds and capital requirements	Impediments to the transfer of own funds	241
436 (d)	Scope of application	Aggregate amount by which the actual own funds are less than required in all subsidiaries not included in the consolidation	Note 52. Own funds and capital requirements	Total capital shortfall of all subsidiaries not included in the consolidation	241
436 (e)	Scope of application	Circumstance of making use of the provisions	Note 52. Own funds and capital requirements	Total capital shortfall of all subsidiaries not included in the consolidation	241
437 (1) (a)	Own funds	Full reconciliation of Common Equity Tier 1 items, Additional Tier 1 items, Tier 2 items and filters and deductions applied pursuant to Articles 32 to 35, 36, 56, 66 and 79 to own funds of the institution and the balance sheet in the audited financial statements of the institution	Note 52. Own funds and capital requirements	Own funds reconciliation	245-249
437 (1) (d)	Own funds	Separate disclosure of the nature and amounts of the following: each prudential filter..., each deduction made..., items not deducted	Note 52. Own funds and capital requirements	Own funds template during the transitional period	249-259
437 (1) (e)	Own funds	Description of all restrictions applied to the calculation of own funds in accordance with this regulation and the instruments, prudential filters and deductions to which those restrictions apply	Note 52. Own funds and capital requirements	Own funds template during the transitional period	249-259

Table 1: Overview of CRR disclosure requirements covered by Erste Group's annual report

Metrics that are identical to the figures published in the annual report represent audited data, while the remaining information in the Pillar 3 Disclosure Report is unaudited by external audit.

### **Own Funds - Capital Instruments**

**DISCLOSURE REQUIREMENTS COVERED:** Art. 437 (1) (b) AND (c) CRR

On the website of Erste Group <https://www.erstegroup.com/en/investors/reports/regulatory-reports/basel3/capitalinstruments>, all capital instruments that are eligible at Erste Group consolidated level are listed in a separate document based on the template published in the Official Journal of the EU No. 1423/2013 on 20 December 2013. Furthermore, the full terms and conditions of the capital instruments are available on Erste Group's website or on the website of each of the issuing credit institutions respectively.

### **Indicators of Global Systemic Importance**

**DISCLOSURE REQUIREMENTS COVERED:** Art. 441 CRR

The data template for the indicators of Global Systemic Importance is disclosed in a separate document, which is published on Erste Group's website under <https://www.erstegroup.com/en/investors/reports/regulatory-reports/basel3>

### **Remuneration Policy**

**DISCLOSURE REQUIREMENTS COVERED:** Art. 450 CRR

Information on the remuneration policy and practices at Erste Group is disclosed in a separate document, which is published on Erste Group's website under <http://www.erstegroup.com/en/investors/reports/regulatory-reports/basel3>.

### **Outline of the differences in the scopes of consolidation by entity level**

**DISCLOSURE REQUIREMENTS COVERED:** Art. 436 CRR

Description of the differences in the scope of the consolidation at the level of each entity based on Guidelines on disclosure requirements under Part Eight of the Regulation (EU) No 575/2013 is available at the Erste Group's website under <http://www.erstegroup.com/en/investors/reports/regulatory-reports/basel3>.

## Overview of non-applicable disclosures

The following table provides an overview of the Articles of the CRR not covered by the Disclosure Report or included in other disclosures as mentioned above with an explanation of reasons for non-disclosure in this report.

CRR article	Disclosure requested in the CRR article	Reason for non-applicable disclosure
437 (1) (f)	Own funds Where institutions disclose capital ratios calculated using elements of own funds determined on a basis other than that laid down in this Regulation, a comprehensive explanation of the basis on which those capital ratios are calculated	Erste Group does not disclose capital ratios calculated using elements of own funds determined on a basis other than that laid down in the CRR.
438 (b)	Capital requirements Upon demand from the relevant competent authority, the result of the institution's internal capital adequacy assessment process including the composition of the additional own funds requirements based on the supervisory review process as referred to in point (a) of Article 104(1) of Directive 2013/36/EU	There is no demand from the relevant competent authority.
439 (i)	Exposure to counterparty credit risk Estimate of $\alpha$ if the institution has received the permission of the competent authorities to estimate $\alpha$	Erste Group does not apply any own estimates of the scaling factor.
449 (i)	Exposure to securitisation positions Disclosure of types of SSPE that the institution, as sponsor, uses to securitise third-party exposures	Erste Group is not acting as a sponsor of an asset-backed commercial paper programme or another securitisation scheme according to Article 4 (1) (14) CRR.
449 (j) (vi)	Exposure to securitisation positions Policies for recognising liabilities on the balance sheet for arrangements that could require the institution to provide financial support for securitised assets	No implicit support according to Art. 248 (1) CRR was provided to Edelweiss 2013-1 and BEE SME 2016-1 securitisation transactions by Erste Group.
449 (l)	Exposure to securitisation positions Description of the Internal Assessment Approach for calculation of the risk weighted exposure amounts	The Internal Assessment Approach for calculation of the risk weighted exposure amounts is not applied by Erste Group
449 (o) (ii)	Exposure to securitisation positions Separately for the trading and the non-trading book, the aggregate amount of re-securitisation exposures retained or purchased and the exposure to financial guarantors	Erste Group does not hedge its re-securitisation positions.
449 (q)	Exposure to securitisation positions For the trading book, the total outstanding exposures securitised by the institution and subject to a capital requirement for market risk, broken down into traditional/synthetic and by exposure type	There are no exposures in the trading book securitised by Erste Group.
449 (r)	Exposure to securitisation positions Whether the institution has provided support within the terms of Article 248(1) and the impact on own funds	No implicit support according to Art. 248 (1) CRR has been provided to Edelweiss 2013-1 and BEE SME 2016-1 securitization transactions by Erste Group.
455 (a) (ii)	Use of Internal Market Risk Models Where applicable, for the internal models for incremental default and migration risk and for correlation trading, the methodologies used and the risks measured through the use of an internal model including a description of the approach used by the institution to determine liquidity horizons, the methodologies used to achieve a capital assessment that is consistent with the required soundness standard and the approaches used in the validation of the model	Erste Group does not use internal models for incremental default and migration risk and for correlation trading.
455 (d) (iii)	Use of Internal Market Risk Models Highest, lowest and mean of risk numbers for incremental default and migration risk and for the specific risk of the correlation trading portfolio over the reporting period and as per the period-end	Erste Group does not use internal models for incremental default and migration risk and does not have a correlation trading portfolio.
455 (f)	Use of Internal Market Risk Models Weighted average liquidity horizon for each sub-portfolio covered by the internal models for incremental default and migration risk and for correlation trading.	Erste Group does not use internal models for incremental default and migration risk and for correlation trading.

Table 2: Overview of non-applicable disclosures

## List of abbreviations

<b>ALCO</b>	Asset Liability Committee	<b>MRS</b>	Market Risk Solution
<b>ALM</b>	Asset Liability Management	<b>MVoE</b>	Market value of equity
<b>AMA</b>	Advanced Measurement Approach	<b>NFR</b>	Non-Financial Risks
<b>BaSAG</b>	Bundesgesetz über die Sanierung und Abwicklung von Banken; Austrian Banking Recovery and Resolution Law	<b>NSFR</b>	Net Stable Funding Ratio
<b>BIA</b>	Basic Indicator Approach	<b>NPV</b>	Net Present Value
<b>CCF</b>	Credit Conversion Factor	<b>OeNB</b>	Oesterreichische Nationalbank; Austrian National Bank
<b>CEE</b>	Central and Eastern Europe	<b>OLC</b>	Operational Liquidity Committee
<b>CFP</b>	Contingency Funding Plan	<b>OTC</b>	Over-the-counter
<b>CLO</b>	Collateralised Loan Obligation	<b>OeKB</b>	Oesterreichische Kontrollbank
<b>COREP</b>	Common Reporting Framework	<b>PD</b>	Probability of Default
<b>CRD IV</b>	Capital Requirements Directive IV	<b>QIS</b>	Quantitative Impact Study
<b>CRM</b>	Credit Risk Mitigation	<b>RAS</b>	Risk Appetite Statement
<b>CRO</b>	Chief Risk Officer	<b>RCC</b>	Risk-bearing Capacity Calculation
<b>CRR</b>	Capital Requirements Regulation	<b>RW</b>	Risk Weight
<b>dpd</b>	Days past due	<b>RWA</b>	Risk-Weighted Assets
<b>EAD</b>	Exposure at Default	<b>ROCC</b>	Regional Operational Conduct Committee
<b>EBA</b>	European Banking Authority	<b>SFT</b>	Securities Financing Transactions
<b>EBOe</b>	Erste Bank der oesterreichischen Sparkassen AG	<b>SL</b>	Specialised Lending
<b>ECB</b>	European Central Bank	<b>S&amp;P</b>	Standard & Poor's
<b>EEPE</b>	Effective expected positive exposure	<b>SME</b>	Small and Medium-sized Enterprises
<b>ERM</b>	Enterprise-wide Risk Management	<b>SPA</b>	Survival Period Analysis
<b>EU</b>	European Union	<b>SRC</b>	Standard Risk Costs
<b>EVE</b>	Economic value of equity	<b>SRM</b>	Single Resolution Mechanism
<b>FMA</b>	Austrian Financial Market Authority	<b>SSPE</b>	Securitisation Special Purpose Entity
<b>FTP</b>	Funds Transfer Pricing	<b>STA</b>	Standardised Approach
<b>FX</b>	Foreign exchange	<b>sVaR</b>	Stressed Value at Risk
<b>GLRMP</b>	Group Liquidity Risk Management Policy	<b>TPU</b>	Temporary Partial Use
<b>GM</b>	Group Markets	<b>VaR</b>	Value at Risk
<b>HMC</b>	Holding Model Committee		
<b>HQLA</b>	High-quality liquid assets		
<b>IAS</b>	International Accounting Standards		
<b>ICAAP</b>	Internal Capital Adequacy Assessment Process		
<b>IFRS</b>	International Financial Reporting Standards		
<b>ILAAP</b>	Internal Liquidity Adequacy Assessment Process		
<b>IMA</b>	Internal Models Approach		
<b>IRB</b>	Internal Ratings Based		
<b>ISDA</b>	International Swaps and Derivatives Association		
<b>LCR</b>	Liquidity Coverage Ratio		
<b>LGD</b>	Loss Given Default		
<b>MRC</b>	Market Risk Committee		



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# Introduction

## DISCLOSURE REQUIREMENTS Art. 436 (a) CRR

The provisions of Part Eight of the Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, hereinafter referred to as the Capital Requirements Regulation (CRR) apply to Erste Group Bank AG, hereinafter referred to as Erste Group, on a consolidated basis. Erste Group was founded in 1819 as the first Austrian savings bank. In 1997, Erste Group went public on the Vienna Stock Exchange with a strategy to expand its retail business into the part of Central and Eastern Europe (CEE) that had realistic prospects of joining the European Union. Against the backdrop of emerging European integration and limited potential for growth in Austria, Erste Group acquired savings banks and financial institutions in countries adjacent to Austria from the late 1990s onwards. Today, Erste Group has an extensive presence in its core markets of Austria, the Czech Republic, Slovakia, Romania, Hungary and Croatia – all of which are members of the European Union. In Serbia, which has been assigned European Union candidate status, Erste Group maintains a minor presence. Erste Group's shares are listed on the Vienna Stock Exchange, on the Prague Stock Exchange (since October 2002) and on the Bucharest Stock Exchange (since February 2008).

The core activities of Erste Group, in addition to the traditional focus on serving private individuals, include advisory services and support for corporate clients in financing, investment and access to international capital markets, public sector funding and interbank market operations.

This disclosure report gives readers a comprehensive overview of the current risk profile and risk management of Erste Group and covers the following areas:

- \_ risk management;
- \_ capital structure;
- \_ capital adequacy;
- \_ risk management systems and procedures;
- \_ risk management with respect to each type of risk;
- \_ risks assumed; and
- \_ credit risk mitigation techniques

## Disclosure policy and structure

The current Disclosure Report of Erste Group meets the disclosure requirements of Part Eight of the CRR, which took effect on 1 January 2014. In addition, report complies with the requirements set in Guidelines on disclosure requirements under Part Eight of the Regulation (EU) No 575/2013 (EBA/GL/2016/11, version 2, published on 09 June 2017) and other disclosure related guidelines.

The Disclosure Report provides comprehensive disclosures on risks, risk management and capital management. The main document is published once a year in English, even though specific information is published more often pursuant to the Guidelines on the materiality, proprietary nature and confidentiality of information, and on disclosure frequency under Article 432(1), 432(2) and 433 of Regulation (EU) 575/2013 issued by EBA in December 2014.

Pursuant to Article 434 (1) CRR, Erste Group has opted for the Internet as the medium of publication of the Disclosure Report. Details are available on the website of Erste Group at [www.erstegroup.com/ir](http://www.erstegroup.com/ir). Relevant disclosures are included in the annual report in the section "Reports" or published as separate documents in the section "Regulatory disclosure".

The preparation of the Disclosure Report and the formal review for completeness and compliance with the applicable requirements is carried out by Enterprise wide Risk Management. The Disclosure Report is subject to review by internal audit.

The Group Disclosure Policy, supplemented by a series of operating procedures, sets out the overarching principles and guidelines used by the Group in order to fulfil its disclosure requirements under Part Eight of the CRR as well as the processes in place to establish, review and approve the actual disclosures.

## The regulatory framework of Basel 3

### Implementation of Basel 3 in the European Union (EU)

On 16 April 2013, the European Parliament adopted the new capital and liquidity requirements for the implementation of Basel 3 in the EU. On 27 June 2013, the final Capital Requirements Directive IV (CRD IV) and the final Capital Requirements Regulation (CRR) were published in the Official Journal of the EU. The application of the new regulatory requirements for credit institutions and investment firms became effective as of 1 January 2014. As of this time, Erste Group has been calculating regulatory capital and regulatory capital requirements according to Basel 3.

The “Three Pillars” were introduced for the first time under Basel 2. The objectives of this framework are: a more risk sensitive capital allocation (Pillar 1 – Minimum Capital Requirements), a more detailed regulatory assessment of material risk categories (Pillar 2 - Supervisory Review Process) and increased market transparency (Pillar 3 – Market Discipline). Basel 3 enlarged the scope of these requirements.

### Pillar 1 – Minimum requirements

As introduced by Basel 2, Pillar 1 covers the calculation of capital requirements for credit risk, market risk and operational risk. As such, it details the different methods available for calculating risk weighted assets for the three risk types and provides information on the eligibility criteria for the constituents of the capital base. Under Basel 3, a leverage exposure requirement was introduced to complement the minimum risk-based capital requirements; however, the leverage ratio is not yet a binding requirement for EU institutions.

Basel 3 extended minimum requirements to also cover liquidity in addition to capital. In this regard, Pillar 1 specifies the requirements for the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), with the latter not yet a binding requirement in the EU.

### Pillar 2 – Supervisory review process

Pillar 2 requires banks to conduct an internal capital adequacy assessment process (ICAAP) to demonstrate that they have implemented methods and procedures to safeguard capital adequacy with due attention to all material risks. The ICAAP supplements the minimum regulatory requirements of Pillar 1. It considers a broader range of risk types as well as Erste Group’s risk and capital management capabilities.

In parallel to the introduction of Pillar 1 requirements for liquidity through the Basel 3 framework, the ICAAP was complemented with an internal liquidity adequacy assessment process (ILAAP) to ensure banks have implemented processes and tools to safeguard the adequacy of their funding and liquidity.

Furthermore, Pillar 2 requires supervisors to conduct a Supervisory Review and Evaluation Process (SREP) to assess the soundness of banks’ ICAAP and ILAAP and take any appropriate actions that may be required.

### Pillar 3 – Market discipline

Taking account of Pillar 1 (Minimum Capital Requirements) and Pillar 2 (Supervisory Review Process), Pillar 3 aims to increase market transparency by providing information on the scope of application, regulatory capital, risk positions, risk measurement approaches and therefore, the capital adequacy of a bank.

# Risk management at Erste Group

DISCLOSURE REQUIREMENTS Art. 435 (1) CRR and Art. 435 (2) CRR

## Risk policy and strategy

A core function of each bank is taking risks in a conscious and selective manner and professionally steer those risks. Adequate risk policy and risk strategy is essential to a bank's fundamental financial health and operational business success.

Erste Group has developed a risk management framework that is forward-looking and tailored to its business and risk profile. This framework is based on a clear risk strategy that sets out general principles according to which risk taking must be performed across the group. The risk strategy is consistent with the business strategy and incorporates the expected impact of external environment on the planned business and risk development.

The risk strategy defines the current and the targeted risk profile for the main risk types and sets strategic limits for the significant financial and non-financial risk types as defined in the risk materiality assessment. The risk strategy is executed within a clear defined governance structure. This structure applies also to monitoring the risk appetite, additional metrics, as well as escalation of limit breaches.

In 2017, management has continued to steer critical portfolios, including active management of non-performing exposures to further strengthen the risk profile. This has been particularly demonstrated by the continuous improvement of the credit quality and the ongoing decrease of non-performing loans and risk costs.

## Risk management organisation

Risk monitoring and control is achieved through a clear organisational structure with defined roles and responsibilities, delegated authorities and risk limits.

Erste Group's risk management organisation is presented in detail in Erste Group's Annual Report 2017, Note 44.2 to the Group financial statements.

## GROUP GOVERNANCE FOR RISK MANAGEMENT ACTIVITIES

The management board (holding board) deals regularly with risk issues of all risk types in its board meetings. Actions are discussed and taken when needed. Cross-functional representation of risk management and finance area in the relevant steering boards across the group ensures risk information transfer and steering in line with the Group Risk Strategy and Group RAS.

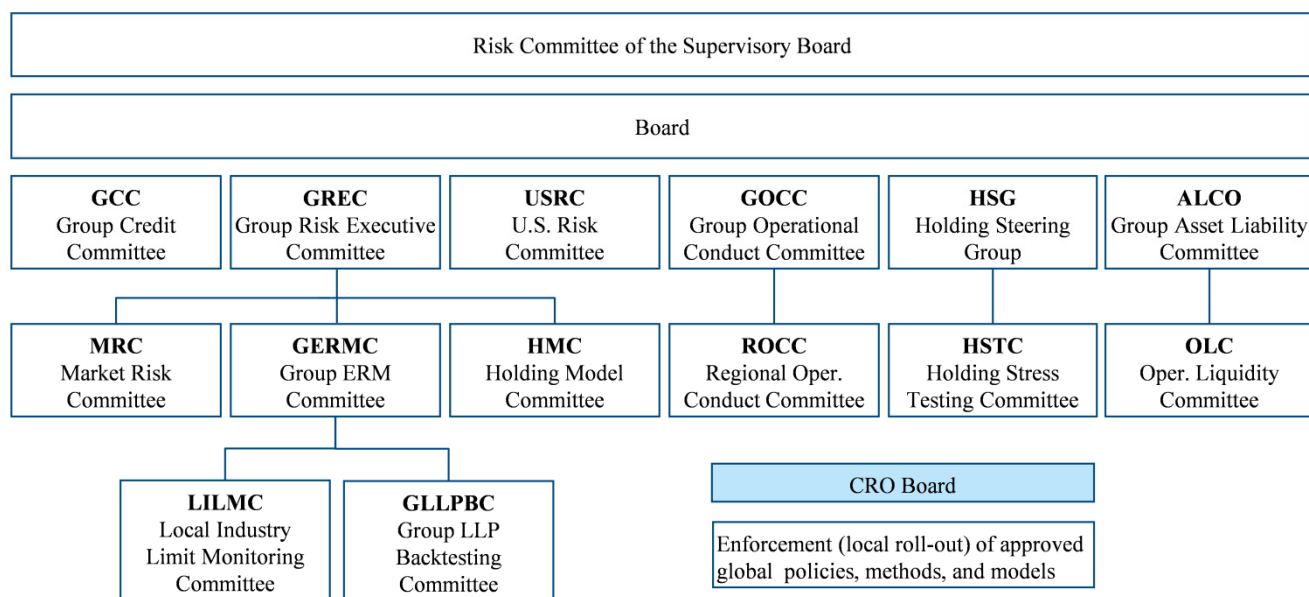


Figure 1: Risk Management Committees

The **Risk Committee of the Supervisory Board** is responsible for granting approval in all cases in which loans and exposures reach an amount exceeding the approval authority of the management board according to the Credit Risk Approval Authority Regulations. It is in charge of granting approval to large exposures pursuant to Article 392 CRR, if such a claim is equal to or exceeds 10% of the eligible capital of the credit institution. Within the competence assigned to it, the Committee may grant advance approvals to the extent permitted by law. In addition, it is responsible for supervising the risk management of Erste Group Bank AG. The risk committee meets regularly. As the central risk control body, the risk committee is regularly briefed on the risk status across all risk types.

The **CRO Board** is responsible for the consistent coordination and implementation of risk management activities within Erste Group, including joint liabilities. The CRO Board consists of the Group CRO, the chief risk officers of major subsidiaries within Erste Group and the senior area managers of the CRO division of Erste Group Bank AG. Chaired by the Group CRO, the CRO Board is responsible for group-wide coordination of risk management and for ensuring the roll-out of group policies to the subsidiaries.

The **Group Credit Committee (GCC)** is the supreme operative decision-making body for approvals of credit risks according to the existing regulations. Based on the advice of GCC, decisions of significant exposures and extended risks are decided by the Risk Committee of the Supervisory Board. The GCC is headed by the Group CRO and comprises the chairman of Corporates & Markets, the head of Group Credit Risk Management, the head of Group Workout, and the head of the requesting business line. Each subsidiary equips their own local credit committee established by the same principles.

The **Group Risk Executive Committee (GREC)** is the central forum for all joint resolutions and acknowledgements in the Erste Group Bank AG CRO division. Its purpose is the division-wide coordination of all the risk management functions of Erste Group Bank AG. It discusses and decides on key risk management issues and overarching regulatory topics. In particular, it defines the division's strategy and ensures implementation of common risk management standards (e.g. pertaining to processes, systems, reporting and governance).

The **Group Operational Conduct Committee (GOCC)** is an executive-level committee responsible for enforcement of the Code of Conduct as well as the management of non-financial risks. Moreover, the GOCC serves as an escalation and decision-making committee for the Regional Operational Conduct Committee (ROCC).

The **United States Risk Committee (USRC)** has been established to meet the requirements of the United States Federal Reserve Board (FRB) regulation, which has been in force since 1 July 2016. The objective is to involve the management board as key governance and control function for the U.S. trade portfolio which has been specified in the Combined U.S. Operations (CUSO) guidance.

The **Holding Steering Group (HSG)** is responsible for the monitoring of the group's Risk Appetite Statement (especially with regard to capital and liquidity adequacy, under both normal and stressed conditions), the review of proposed group and local capital measures and the proposal of remediation actions. Furthermore, it monitors recovery triggers and indicators and, when appropriate advises the manage-

ment board to trigger recovery governance. The oversight of the implementation of the risk-return strategy and the proposal of actions to reinforce the risk-return steering also belong to the HSG's tasks and responsibilities.

The **Holding Stress Testing Committee (HSTC)** is the sole forum for all joint resolutions, decisions and acknowledgements in the stress testing area for group-wide stress testing activities.

The **Group Asset Liability Committee (ALCO)** manages the consolidated Erste Group balance sheet, focusing on trade-offs between all affected consolidated balance sheet risks (interest rate, exchange rate and liquidity risks), and takes care of the setting of group standards and limits for the members of Erste Group. In addition, it approves policies and strategies for controlling liquidity risk as well as interest rate risk (net interest income) and examines proposals, statements and opinions of ALM, risk management, controlling and accounting functions. The approved investment strategy complies with the guidelines agreed with Risk Management.

The **Operational Liquidity Committee (OLC)** is responsible for the day-to-day management of the global liquidity position of Erste Group. It analyses the liquidity situation of Erste Group on a regular basis and reports directly to the ALCO. It also proposes measures to the ALCO within the scope of the management policies and principles laid down in the Liquidity Risk Management Rule Book. Furthermore, members of the Group OLC are points of contact for other departments or Erste Group members for liquidity-related matters. Each local bank has its own local operational liquidity committee.

The **Market Risk Committee (MRC)** is the main steering body for market risk and trading book related issues of Erste Group. MRC approves group-wide market risk limits and elaborates on the current market situation. Furthermore, it approves market risk methodologies and models, model changes, and related validation results.

The **Group ERM Committee (GERMC)** is the sole forum for all joint decisions and acknowledgements in the Enterprise wide Risk Management (ERM) area across all Erste Group entities and Erste Group Bank AG. Its purpose is the group-wide coordination of the ERM functions, in particular on ICAAP and economic capital, stress testing, RWA, risk appetite and limit steering, risk strategies and alignment of risk input for capital planning as well as pricing/provisioning. Furthermore, the GERMC ensures alignment on key ERM topics and the group-wide implementation of common ERM standards. The Group Loan Loss Provisions Back testing Committee (GLLPBC), as a subcommittee of GERMC, agrees and approves back-testing results and remedial actions. In addition the Local Industry Limit Monitoring Committee (LILMC), as a subcommittee of the GERMC, is the steering and monitoring body to ensure comprehensive control of local Industry limits and oversight of their breaches as well as any escalations to the Credit and/or Group ERM Committee.

The **Holding Model Committee (HMC)** is the steering and control body for the model development, validation and monitoring. All new or changed models and model related aspects (e.g. risk parameters, group-wide methodology standards) are reviewed by the Holding Model Committee and require its approval.

The **Regional Operational Conduct Committee (ROCC)** decides on business applications and implements group-wide corrective measures to steer non-financial risks (NFR). This is done based on a risk-return evaluation. Furthermore, ROCC defines group-wide standards for non-financial risk topics. The ROCC is a forum for joint alignments, decisions, and escalations in non-financial risk areas across Erste Group entities and Erste Group Bank AG itself.

In addition, committees are established at local level, such as the 'Team Risikomanagement' in Austria. It is responsible for a common risk approach with the Austrian savings banks.

## GROUP-WIDE RISK AND CAPITAL MANAGEMENT

Enterprise-wide Risk Management (ERM) includes as its fundamental pillar the Internal Capital Adequacy Assessment Process (ICAAP) required under Pillar 2 of the Basel framework.

The ERM framework is designed to support the bank's management in managing the risk portfolios as well as the coverage potential to ensure that the bank holds at all times adequate capital for the nature and magnitude of the bank's risk profile. The framework is tailored to the Erste Group's business and risk profile and reflects the strategic goal of protecting shareholders and senior debt holders while ensuring the sustainability of the organisation.

The ERM framework is a modular and comprehensive management and steering system within Erste Group and is an essential part of the overall steering and management instruments. The ERM components necessary to ensure all aspects, in particular to fulfil regulatory requirements and to provide an effective internal steering tool can be clustered as follows:



- \_ Risk Appetite Statement (RAS), limits and Risk Strategy;
- \_ portfolio and risk analytics including risk materiality assessment, concentration risk management, and stress testing;
- \_ Risk-bearing Capacity Calculation (RCC);
- \_ planning of key risk indicators;
- \_ recovery and resolution planning.

In addition to the ICAAP's ultimate goal of assuring capital adequacy and sustainability at all times, the ERM components serve to support the bank's management in pursuing its strategy.

## Risk appetite

Erste Group defines the maximum level of risk it is willing to accept in order to deliver its business objectives within the Group's risk appetite (Group RAS). The Group RAS acts as a binding constraint to Erste Group's business activities within its overall risk appetite through triggers and limits approved by the management board. The Group RAS consists of a set of core risk metrics providing quantitative direction for overall risk-return steering and qualitative statements in the form of key risk principles that form part of guidelines for managing risks. The core risk metrics are set as ultimate boundaries for the group risk-return target setting and form a key input into the annual strategic planning / budgeting process, creating a holistic perspective on capital, liquidity and risk-return trade-offs. The key objective of the RAS is to:

- \_ ensure that Erste Group has sufficient resources to support its business at any given point in time and absorb potential losses from stress events;
- \_ set boundaries for the Group's risk target setting;
- \_ support maintaining the Group's financial strength and the robustness of its systems and controls.

To foster risk-return steering and ensure proactive management of the risk profile, Erste Group sets its RAS on a forward-looking basis. External constraints such as regulatory requirements set the ceiling for the RAS and therefore the amount of risk Erste Group is willing to accept. In order to ensure that the group remains within the targeted risk profile, a traffic light system was established and assigned to the core metrics. This approach allows a timely delivery of information to the respective governance and the implementation of effective remediation measures. The RAS traffic light system is defined as follows:

- \_ RAS is green: The target risk profile is inside the specified boundaries.
- \_ RAS is amber: The undershooting or overshooting of a pre-defined threshold leads to an escalation to the designated governance and the discussion of potential remediation actions.
- \_ RAS is red: The undershooting or overshooting of a pre-defined limit initiates an immediate escalation to the designated governance and a prompt implementation of remediation actions.

Moreover, stress indicators are defined for selected core metrics and integrated into the assessment of the stress test results. They are reported as early warning signals to the management board to support proactive management of the risk and capital profile.

In addition, based on the Group RAS, supporting metrics and principles are defined by material risk type in the group risk strategy. These support implementation of the mid- to long-term strategy. Risk management governance ensures full oversight of risk decisions and sound execution of the group risk strategy. Mitigating actions are undertaken as part of the regular risk management process to ensure that the group remains within its RAS.

The Group RAS 2017 was approved by the management board and the supervisory board. The group further developed an aggregated and consolidated risk appetite dashboard (RAS Monitor) illustrating the group's and local entities' risk profile developments by comparing the risk exposure and risk limits. The RAS Monitor is regularly presented to the risk committee of the supervisory board and supervisory board to support its review, oversight, and monitoring of the group risk profile and the risk profile of its local entities.

The table below provides an overview of the Group performance at year-end 2017 against the approved Group RAS:

<b>RAS core metrics</b>	<b>Category</b>	<b>Year-end 2017</b>	<b>Status</b>	<b>Governance</b>
Solvency Ratio (fully loaded)	Capital	18.2%	●	Holding Steering Group/ management board
Tier 1 Ratio (fully loaded)	Capital	13.8%	●	Holding Steering Group/ management board
Common Equity Tier 1 Ratio (fully loaded)	Capital	12.9%	●	Holding Steering Group/ management board
Economic Capital Adequacy Ratio	Capital	56.7%	●	Holding Steering Group/ management board
Leverage Ratio (fully loaded)	Capital	6.6%	●	Holding Steering Group/ management board
Survival Period Analysis (SPA)	Liquidity	> 12months;buffer kept	●	Operational Liquidity Committee/ Group Asset Liability Committee
Liquidity Coverage Ratio (LCR)	Liquidity	145%	●	Operational Liquidity Committee/ Group Asset Liability Committee
Net Stable Funding Ratio (NSFR)	Liquidity	133%	●	Operational Liquidity Committee/ Group Asset Liability Committee
Risk-Earnings Ratio	Earnings / Profitability	2.9%	●	Holding Steering Group/ management board

Table 3: Group Risk Appetite Assessment as of year-end 2017

For further information on governance see chapter ‘Group Governance for Risk Management Activities’.

The Group RAS is also broken down to local entities. The local RAS is approved by the local management board to ensure alignment with local regulatory requirements, as well as by the management board to ensure compliance with the Group RAS. The group may also decide to include further compulsory constraints and limits in the local RAS to ensure alignment with the Group RAS and Group Risk Strategy.

The Group RAS framework streamlines core capital, liquidity, and risk/earnings metrics as well as reinforces key risk principles that form part of guidelines for managing risks. In addition, the Group RAS strengthens internal governance responsible for oversight of the risk profile development, embeds RAS into strategic planning and budgeting processes as well as day-to-day management, and ensures timely management actions in case of adverse developments.

### Portfolio and risk analytics

Erste Group uses dedicated infrastructure, systems and processes to actively identify, measure, control, report, and manages risks within its portfolio. Portfolio and risk analytics processes are designed to quantify, qualify and discuss risks in order to raise awareness to management in a timely manner.

### Risk materiality assessment

The Risk Materiality Assessment (RMA) determines the materiality of risk types and consequently the risk profile across Erste Group and its entities. RMA is an annual process with the purpose of systematically identifying new and assessing all existing material risks for Erste Group. As such, the RMA is an integral part of the ICAAP and serves as a steering tool for senior management.

Insights generated by the assessment are used to improve risk management practices and further mitigate risks within the group. The assessment also serves as an input for the design and definition of the group’s Risk Strategy and Risk Appetite Statement. Key outputs and recommendations of the RMA are considered in the scenario design and selection of the comprehensive and reverse stress tests.

### Risk concentration analysis

Erste Group has implemented a process to identify measure, control and manage risk concentrations. This process is essential to ensure the long-term viability of Erste Group, especially in times of an adverse business environment and stressed economic conditions.

The risk concentration analysis at Erste Group covers credit risk, market risk, operational risk, liquidity risk and inter-risk concentrations. Identified risk concentrations are considered in the scenario design of the comprehensive stress test and measured under stressed conditions. The output of the risk concentration analysis additionally contributes to the identification of material risks within the risk materiality assessment as well as to the Risk Appetite Statement and to the setting/calibration of Erste Group’s limit system.

The result of the concentration analysis helps also to detect major risks within the risk materiality assessment for developing the RAS as well as for defining and calibrating the limit system of Erste Group.

### Stress testing

Modelling sensitivities of the group’s assets, liabilities and profit or loss provide management steering impulses and help to optimise Erste Group’s risk-return profile. Stress tests help to factor in severe but plausible scenarios providing further robustness to the measurement, steering and management. Risk modelling and stress testing are vital forward-looking elements of the ICAAP. Finally, sensitivities and stress scenarios are considered within the group’s planning process.

Erste Group’s most complex stress testing activities are scenario stress tests that take a comprehensive account of the impact of various economic scenarios, including second-round effects on all risk types (credit, market, liquidity and operational) and in addition impacts on

the associated volumes of assets and liabilities as well as on profit and loss sensitivities. In addition to the standard scenario driven stress testing exercises, reverse stress tests are performed to identify a scenario or a combination of scenarios in which viability of the current business model can be questioned.

Erste Group has developed specific tools to translate macroeconomic variables (e.g. GDP or unemployment rate) into risk parameters in order to support the stress testing process, which combines bottom-up and top-down approaches. For adapting the stress parameters, Erste Group additionally leverages the experience of its local professionals and uses, where appropriate, their statistical models to simulate the impacts of macroeconomic variables on the probabilities of default in the respective markets. Special attention is given to account for adequate granularity and special characteristics (i.a. countries and industries) when determining the segmentation in which the stressed parameters are defined.

Results from Erste Group's comprehensive stress tests are analysed in order to decide on appropriate measures. The Comprehensive Stress Test performed in 2017 indicated no breach of stressed RAS triggers.

Additionally, Erste Group will participate in the European-Wide Stress Test executed by the European Central Bank (ECB) in cooperation with the European Banking Authority (EBA) in 2018.

### **Risk-bearing capacity calculation**

The Risk-bearing Capacity Calculation (RCC) defines the capital adequacy required by the Internal Capital Adequacy Assessment Process (ICAAP). In contrast to the regulatory view of Pillar 1, the RCC is based on an economic view and determines whether the bank has sufficient capital for covering all risks it is exposed to. Based on the results of the RMA, economic capital is considered for all relevant risk types. The aggregated capital requirement is then compared to internally available capital, as reflected by the coverage potential. The integral forecast, risk appetite limit and a traffic light system support management in its discussions, decision processes and helps to alert the management in case there is a need to decide on, plan and execute actions either to replenish the capital base or to take measures for reducing risk.

The management board and risk management committees are briefed on a quarterly basis in relation to the results of the capital adequacy calculation. The report includes movements in risks, available capital and coverage potential, consideration of potential losses in stress situations, the degree of the risk limit utilisation and the overall status of capital adequacy.

Besides the Pillar 1 risk types (credit, market and operational risks), in the context of Pillar 2, interest rate risk in the banking book, foreign exchange risk arising from equity investments, credit spread risk in the banking book, risk from foreign currency loans, risk from repayment vehicles as well as business and strategic risk are explicitly considered within the economic capital requirement via internal models. During 2017 the utilisation of the economic capital was between 55% and 57%. The methodologies that are applied for the different risk types are diverse and range from historical simulations and other value at risk approaches to the regulatory approach for residual portfolios. Moreover, calculations for portfolios under the Standardised Approach for credit risk are extended by risk parameters from the Internal Ratings-Based approach in order to give a better economic view.

In addition to the Risk-bearing Capacity Calculation, liquidity, concentration and macroeconomic risks in particular are managed by means of a proactive management framework that includes forward-looking scenarios, stress testing, trigger levels and traffic light systems.

Credit risk accounts for approximately 67% of the total economic capital requirement. Reflecting Erste Group's conservative risk management policy and strategy, the group does not offset diversification effects between these three risk types. The economic capital requirement for unexpected losses is computed on a one-year time horizon with a 99.95% confidence level, which reflects the implied default risk as well as Erste Group's conservative approach and high risk management standards.

The capital or coverage potential required to cover economic risks and unexpected losses is based on Basel 3 fully loaded regulatory own funds adjusted by held-to-maturity reserves and the year-to-date profit. The coverage potential must be sufficient to absorb unexpected losses resulting from the group's operations at any point in time.

### **Risk planning**

Group Risk Planning framework is essential for the capital allocation and overall financial planning processes and supports the adequate reflection of risks within the strategy, steering and management processes of the group.

Key risk indicators covered by the Risk Planning framework include indicators that provide an overview of incurred or potential risks, with respect to both portfolio and economic environment developments. Indicators include RWA (and related indicators), portfolio quality

indicators (impairments, NPL/NPE and relevant performance indicators etc.), as well as indicators required by the regulatory authorities under the responsibility of the Risk division.

Planning activities are performed in close cooperation with all stakeholders in the group's overall process, and follow a clear governance structure to ensure sound risk planning process.

### Risk-weighted asset management

As risk-weighted assets (RWA) determine the actual regulatory capital requirement of a bank and influence the capital ratio as a key performance indicator, particular emphasis is devoted to meeting targets and to the planning and forecasting capacity for this parameter. Insights from RWA analyses are used to improve the calculation infrastructure and the quality of input parameters and data.

There is a process in place for tracking developments with RWA targets, forecasting their future development and thereby defining further targets. The management board is also informed about the current status, and findings are taken into account in the context of Erste Group's regular steering process. Furthermore, RWA targets are included in the Risk Appetite Statement.

### Capital allocation

An important task integral to the risk planning process is the allocation of capital to entities, business lines and segments. This is done with close cooperation between Risk Management and Controlling. Methodology for allocation reflects risk and controlling processes in order to allocate capital with risk-return considerations.

### Recovery and resolution plans

In compliance with the Austrian Banking Recovery and Resolution Law ('Bundesgesetz über die Sanierung und Abwicklung von Banken – BaSAG') Erste Group annually submits an updated Group Recovery Plan to ECB.

The Group Recovery Plan identifies options for restoring financial strength and viability in case Erste Group comes under severe economic stress. The plan specifies potential options for the replenishment of capital and liquidity resources of the bank in order to cope with a range of scenarios including both idiosyncratic and market-wide stress.

Erste Group collaborates with the resolution authorities in the drawing up of resolution plans based on BaSAG and EU Regulation No 806/2014 establishing the Single Resolution Mechanism (SRM Regulation).

## RISK MONITORING

All risks and exposures are monitored on a continuous basis and managed on the following levels: portfolio, organisational and risk type level. The following figure presents an overview of the risk monitoring framework at Group level consisting of both strategic and operational oversight as set out below.

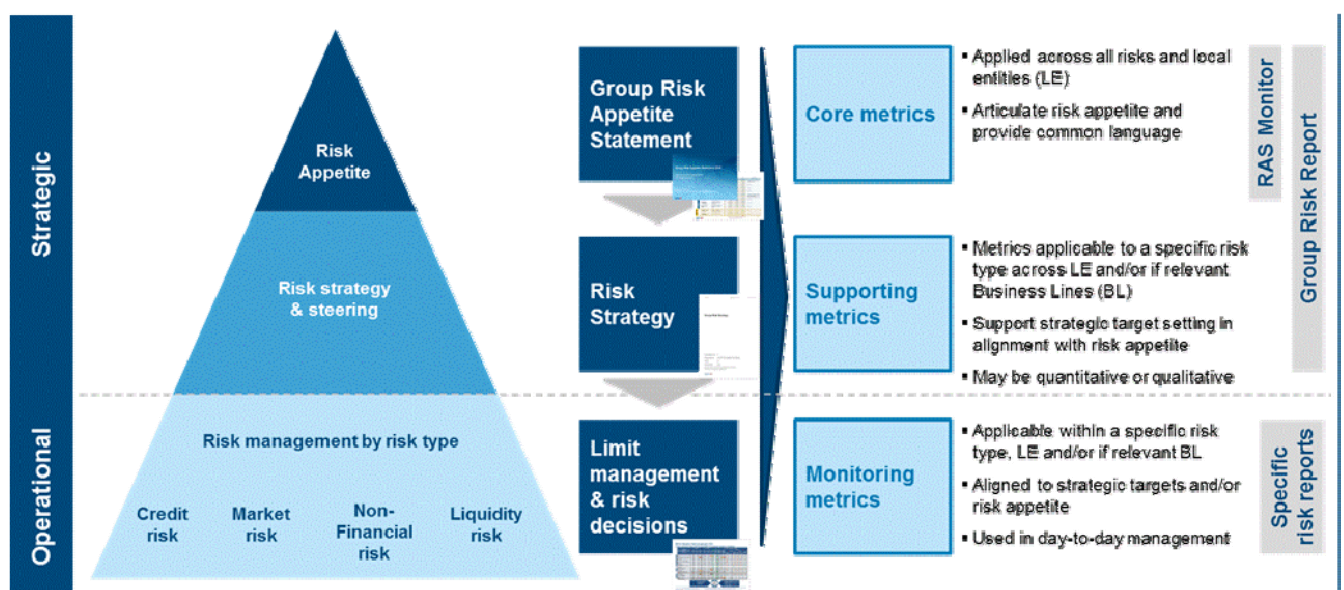


Figure 2: Strategic and operational risk oversight and management at Erste Group

### Strategic oversight

The RAS sets the boundary for the maximum risk the bank is willing to accept in order to pursue its business objectives; this includes a set of core steering metrics with trigger levels providing strategic guidelines for risk management and planning.

The risk strategy sets strategic risk targets based on the target risk profile and RAS, and provides a balanced risk-return view considering the strategic focus and business plans.

Both are regularly monitored and reported in the Group Risk Report including a traffic light overview together with respective measures to address deviations from strategic plans or objectives identified. Group and local RAS are also reported in the RAS Monitor. The Group Risk Report and the RAS Monitor are presented and discussed in the management board, the risk committee of the supervisory board, as well as the supervisory board on a quarterly basis.

### Operational oversight

Risk management by risk type ensures that the risk-specific profile remains in line with the risk strategy and operational limits support achievement of the strategic targets. The development of the specific risk profile (i.e. retail credit, corporate credit, operational risk, etc.) is reported through dedicated risk reports in a more granular way and supports risk decision-making of the dedicated risk functions to ensure the risk profile remains within the risk strategy (i.e. operational risk report, retail risk report, etc.). These reports also include specific monitoring metrics that provide an early warning signal for adverse developments of, e.g., portfolio quality (client, segment, countries and industries) or risk drivers.

## Management bodies

Erste Group has a two-tier governance structure with a management board and a supervisory board as management bodies. Details on the mandates of supervisory boards or similar functions, on the recruitment policy for the selection and assessment of members of management bodies, as well as on the policy on diversity are contained in the corporate governance report, which is part of the annual report. Details on career and education of the management board and the supervisory board members are available on Erste Group's website under <https://www.erstegroup.com/en/about-us>.

### RISK COMMITTEE OF THE SUPERVISORY BOARD

The risk committee is one of six committees set up by the supervisory board of Erste Group. It advises the management board with regard to Erste Group's current and future risk appetite and risk strategy and monitors the implementation of this risk strategy. The committee also reviews whether the services and products offered are adequately priced in accordance with the bank's business model and risk strategy. Without prejudice to the duties of the remuneration committee, the risk committee is also responsible for reviewing whether the incentives offered by the internal remuneration system adequately take into account risk, capital, liquidity and the probability and timing of profit realisation. The risk committee is responsible for granting approval in all those cases in which loans and exposures reach an amount exceeding the approval authority of the management board defined in the approval authority regulation. The approval of the risk committee is required for any exposure as defined in section 28b of the Austrian Banking Act (large exposure). In addition, it may grant advance approvals to the extent permitted by law. The risk committee is responsible for monitoring the risk management of Erste Group Bank AG. A report providing key information about the organisation, structure and operation of the risk management system in place for the company and major subsidiaries has to be submitted to the committee at least once a year. The supervisory board has delegated to the risk committee the right to approve the establishment and closure of branches, to grant special statutory power of attorney (Prokura) for all business operations. The committee is responsible for monitoring the Group's portfolio of participations except in cases where this is the responsibility of the audit committee. The tasks of the risk committee include the acknowledgement of reports on legal disputes and on the risk impact and costs of major IT projects as well as of reports on important audits of subsidiaries conducted by regulatory authorities.

The risk committee held seventeen meetings in 2017 at which it regularly took decisions and received reports that are within its duties and powers as outlined above.

## Material risks at Erste Group

At Erste Group, the risk materiality assessment is performed for risk types to which a credit institution may be exposed. This Disclosure Report presents the qualitative and quantitative features of the following material risk types in detail:

- \_ Credit risk (including counterparty and country risk)

- \_ Market risk (including interest rate and credit spread risks in the banking book)
- \_ Operational risk
- \_ Liquidity risk
- \_ Macroeconomic risk
- \_ Concentration risk
- \_ Business risk
- \_ Reputational risk
- \_ Cross-guarantee risk

In addition, this report also provides details on interest rate risk, counterparty credit risk and the risks arising from securitisation positions and equity exposures, which form an integral part of the risk types mentioned above.

# Scope of application

## DISCLOSURE REQUIREMENTS Art. 436 CRR

In the application of the Article 436 (b) CRR, Erste Group is disclosing the differences due to scope of consolidation, followed by the differences between carrying amounts available in financial statements and exposure used for the regulatory purpose.

Carrying amounts of the items:							
in EUR million	IFRS	CRR	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitisation framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
Assets							
Cash and cash balances	21,796	21,794	20,399	178	0	1,217	0
Financial assets - held for trading	6,349	6,343	0	3,331	0	5,550	0
Derivatives	3,333	3,331	0	3,331	0	2,538	0
Other trading assets	3,016	3,012	0	0	0	3,012	0
Financial assets - at fair value through profit or loss	543	514	498	0	0	0	16
Financial assets - available for sale	16,060	15,565	15,496	0	69	0	0
Financial assets - held to maturity	19,800	19,799	19,798	0	1	0	0
Loans and receivables to credit institutions	9,126	9,122	2,127	6,760	0	3,339	0
Loans and receivables to customers	139,532	139,869	138,562	249	1,035	171	29
Derivatives - hedge accounting	884	884	0	867	0	555	0
Changes in fair value of portfolio hedged items	0	0	0	0	0	0	0
Property and equipment	2,387	2,278	2,278	0	0	0	0
Investment properties	1,112	828	828	0	0	0	0
Intangible assets	1,524	1,515	0	0	0	0	1,515
Investments in associates and joint ventures	198	174	174	0	0	0	0
Current tax assets	108	107	107	0	0	0	0
Deferred tax assets	258	252	203	0	0	0	49
Assets held for sale	214	136	136	0	0	0	0
Other assets	769	860	860	0	0	0	0
<b>Total assets</b>	<b>220,659</b>	<b>220,041</b>	<b>201,467</b>	<b>11,386</b>	<b>1,104</b>	<b>10,832</b>	<b>1,609</b>
Liabilities and equity							
Financial liabilities - held for trading	3,423	3,424	0	2,935	0	2,465	0
Derivatives	2,934	2,935	0	2,935	0	1,976	0
Other trading liabilities	489	489	0	0	0	489	0
Financial liabilities - at fair value through profit or loss	1,801	1,801	0	0	0	0	1,801
Deposits from banks	0	0	0	0	0	0	0
Deposits from customers	49	49	0	0	0	0	49
Debt securities issued	1,753	1,753	0	0	0	0	1,753
Other financial liabilities	0	0	0	0	0	0	0
Financial liabilities measured at amortised costs	191,711	191,300	0	0	0	8,470	182,830
Deposits from banks	16,349	16,345	0	0	0	5,338	11,007
Deposits from customers	150,921	151,082	0	0	0	3,132	147,951
Debt securities issued	23,342	23,307	0	0	0	0	23,307
Other financial liabilities	1,099	566	0	0	0	0	566
Derivatives - hedge accounting	360	360	0	0	0	0	360
Changes in fair value of portfolio hedged items	666	666	0	0	0	0	666
Provisions	1,648	1,638	0	0	0	0	1,638
Current tax liabilities	101	99	0	0	0	0	99
Deferred tax liabilities	61	50	0	0	0	0	50
Liabilities associated with assets held for sale	3	3	0	0	0	0	3
Other liabilities	2,596	2,492	0	0	0	0	2,492
<b>Total equity</b>	<b>18,288</b>	<b>18,206</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,206</b>
Equity attributable to non-controlling interests	4,416	4,403	0	0	0	0	4,403
Equity attributable to owners of the parent	13,872	13,803	0	0	0	0	13,803
<b>Total liabilities and equity</b>	<b>220,659</b>	<b>220,041</b>	<b>0</b>	<b>2,935</b>	<b>0</b>	<b>10,935</b>	<b>208,147</b>

Table 4: Differences between accounting and regulatory scopes of consolidation and mapping of financial statements categories with regulatory risk categories (EU LI1- EBA/GL/2016/11)

Information on the differences between IFRS and CRR scope of consolidation is disclosed in Erste Group's annual report, as stated in the table 1 of this report. Break down of the carrying amounts depends on the risk framework under which capital requirement is calculated in accordance with the Part Three of the CRR. Overlapping between risk frameworks exist for the trading book derivatives and repo transac-



tions, as they are included in both counterparty credit risk and market risk framework. Another overlap exists between deduction and securitisation framework for the part of securitisation exposure with the risk weight of 1250% (as explained in more details in securitisation part of the report). Therefore the sum of different frameworks is not equal to the total carrying values presented under CRR scope of consolidation. In the last column on-balance positions deducted from own funds in accordance with the Part Two of CRR are presented. Detailed information on deductions from own funds are disclosed in annual report, as presented in the table 1 of this report.

The aim of table below is to provide information on the main sources of difference between the financial statements carrying amounts and exposure values used for regulatory purposes by relevant risk frameworks.

in EUR million	Total	Items subject to:		
		Credit risk framework	Counterparty credit risk framework	Securitisation framework
Asset carrying value amount under scope of regulatory consolidation	220,041	201,467	11,386	1,104
Liabilities carrying value amount under regulatory scope of consolidation	201,835	0	2,935	0
Total net amount under regulatory scope of consolidation	220,041	201,467	11,386	1,104
Off-balance sheet amounts	41,823	20,255	0	0
Effect of CCF to off-balance	-21,567	0	0	0
Differences in valuations	16	0	16	0
Differences due to SFT	2,783	0	2,783	0
Differences due to derivatives	609	0	609	0
Differences due to consideration of provisions for on-balance exposure	3,983	2,969	0	0
Provisions for on-balance exposure in STA	-1,014	0	0	0
Differences due to securitisation	-79	0	0	-79
Other	3,971	3,971	0	0
<b>Exposure amounts considered for regulatory purposes before CRM</b>	<b>244,481</b>	<b>228,663</b>	<b>14,793</b>	<b>1,025</b>

Table 5: Main sources of differences between regulatory exposure amounts and carrying values in financial statements (EU LI2-EBA/GL/2016/11)

Asset carrying value amount represents total asset of the bank under the regulatory scope of consolidation, while in respective columns portion related to relevant risk frameworks is presented. Derivative liabilities are not considered in the Total net amount. The netting benefit from derivative liabilities are included in the line Differences due to derivatives.

In the column total, off-balance sheet amounts represents the nominal value of the off-balance items under the regulatory scope of consolidation, while in the column credit risk framework, off-balance amount after application of the relevant conversion factors is disclosed.

Effect of the CCF to off-balance is shown separately.

Differences in valuations represents consideration of credit value adjustments (CVA) for Derivatives in the carrying value.

Differences in SFTs due to regulatory exposures from reverse repo transactions.

Differences in Derivatives due to different treatment of netting (balance sheet netting vs. regulatory netting). Regulatory add-ons according to CRR article 274 are increasing the regulatory exposure.

Differences due to consolidation of credit risk adjustments relate to part of the allowances for on-balance exposure assigned to the regulatory exposure in IRB approach. In the column total, allowances for the total on-balance are presented and the portion of the allowances related to the exposures in STA.

Differences due to securitisation refer to net effect of (1) tranches placed with the investors; (2) reserve fund that is not collateralized with the assets; (3) redemptions between last payment date for Notes Edelweiss 2 11 Oct. 2017 and Assets of Edelweiss 2 as of 31 Dec. 2017; (4) part of allowances assigned to the performing portfolio under the securitisation.

Other differences in credit risk are mainly driven by: (1) house bank guarantees based on OeKB export finance loans – guarantee booked off balance for the part of the underlying exposure transaction which is covered by the government guarantee; (2) on-balance booked accrued interest after default of the client (fully covered by allowances); (3) differences due to FX rates used in CEE countries.

Exposures subject to market risk are not included in table 5. The market risk exposures shown in table 4 include only positions booked in the trading book.

As on-balance items subject to deductions are not considered in regulatory exposure, they are not included in the table 5.

Total regulatory exposure is shown before application of the credit risk mitigates.



# Capital requirements

## DISCLOSURE REQUIREMENTS Art. 438 CRR

Based on the business activities of Erste Group, capital requirements are derived for the Pillar 1 risk types credit risk, market risk and operational risk. In the context of Pillar 2, interest rate risk in the banking book, foreign exchange risks arising from equity investments, credit spread risk in the banking book, risks from foreign currency loans as well as business and strategic risks are explicitly considered within economic capital requirements by means of internal models. The capital requirements were complied with at all times during the reporting period.

The table below gives an overview of the RWA and capital requirements calculated in accordance with the Article 92 of the CRR.

In EUR million	RWAs		Minimum capital requirements
	31.12.2017	31.12.2016	31.12.2017
Credit risk (excluding CCR)	84,662	79,724	6,773
Of which the standardised approach	15,511	14,860	1,241
Of which the foundation IRB (FIRB) approach	50,562	47,058	4,045
Of which the advanced IRB (AIRB) approach	17,093	16,082	1,367
Of which equity IRB under the simple risk-weighted approach or the IMA	1,496	1,724	120
CCR	2,022	3,197	162
Of which mark to market	1,096	1,359	88
Of which original exposure	29	30	2
Of which the standardised approach	0	0	0
Of which internal model method (IMM)	0	0	0
Of which comprehensive method	274	668	22
Of which risk exposure amount for contributions to the default fund of a CCP	0	0	0
Of which CVA	622	1,141	50
Settlement risk	1	0	0
Securitisation exposures in the banking book (after the cap)	101	135	8
Of which IRB approach	0	0	0
Of which IRB supervisory formula approach (SFA)	101	135	8
Of which internal assessment approach (IAA)	0	0	0
Of which standardised approach	0	0	0
Market risk	2,914	3,612	233
Of which the standardised approach	1,022	1,157	82
Of which IMA	1,891	2,456	151
Large exposures	0	0	0
Operational risk	17,911	15,140	1,433
Of which basic indicator approach	3,219	3,155	257
Of which standardised approach	0	0	0
Of which advanced measurement approach	14,692	11,985	1,175
Amounts below the thresholds for deduction (subject to credit risk 250% risk weight)	1,264	1,160	101
Floor adjustment	0	0	0
Other exposure amounts	2,419	0	194
<b>Total</b>	<b>110,028</b>	<b>101,809</b>	<b>8,802</b>

Table 6: Overview of RWAs and capital requirement (EU OV1- EBA/GL/2016/11)

Since the end of the second quarter of 2017 Erste Group reports on consolidated level an RWA add-on in view of the calculation of risk-weighted assets for credit risk in Banca Comercială Română (BCR) in the amount of around EUR 2.4 billion. This RWA increase front-loads the expected difference in BCR between the treatments of exposures under the Standardised Approach compared to the treatment under IRB Approach and is limited in time until the authorization of the IRB Approach in BCR. This figure is shown in table above in the row Other exposure amounts.

## CREDIT AND COUNTERPARTY CREDIT RISK

The Austrian Financial Market Authority (FMA) together with the Austrian National Bank (OeNB) approved the application to use the IRB Approach for the majority of the credit risk positions of Erste Group in January 2007. The Supervisory Slotting Approach is applied to Specialised Lending (SL). The remaining risk positions are covered by the Standardised Approach. Further information on the topic is included in the chapters “Use of ECAIs”, “Use of the IRB Approach to Credit Risk” and “Counterparty Credit Risk”. More details on securitisations are included in the chapter “Exposure to Securitisation Positions”, and for equity exposures in the chapter “Exposures in Equities not included in the Trading Book”.

The table below shows an overview of capital requirements to cover credit risk, counterparty credit risk and securitisation. The capital requirements under the IRB Approach and the Standardised Approach respectively are broken down into the relevant exposure classes.

## Capital requirements for credit ,counterparty credit risk and securitisation by exposure class

in EUR million	Capital requirements	Capital requirements (% of total)
<b>IRB Approach</b>		
Central Governments and Central Banks	26	0.4%
Institutions	260	3.8%
Corporates	3,632	52.7%
Specialised Lending	1,109	16.1%
Retail	1,368	19.8%
SME	299	4.3%
Secured by immovable property collateral	536	7.8%
Qualifying revolving	0	0.0%
Other retail	532	7.7%
Equity	120	1.7%
Simple Risk Weight Approach	51	0.7%
PD/LGD Approach	24	0.3%
Significant Investments with RW of 250%	45	0.7%
Securitisation Positions	8	0.1%
Other non-credit obligation assets	229	3.3%
<b>IRB Approach Total</b>	<b>5,642</b>	<b>81.8%</b>
<b>Standardised Approach</b>		
Central Governments and Central Banks	95	1.4%
Regional Governments and Local Authorities	30	0.4%
Public Sector Entities	22	0.3%
Multilateral Development Banks	0	0.0%
International Organisations	0	0.0%
Institutions	13	0.2%
Corporates	507	7.4%
Retail	239	3.5%
Exposures secured by mortgages on immovable property	98	1.4%
Exposures in default	38	0.5%
Exposures associated with particular high risk	13	0.2%
Covered Bonds	0	0.0%
Securitisation Positions	0	0.0%
Exposures to institutions and corporates with a short-term credit assessment	0	0.0%
Collective Investment Undertakings	5	0.1%
Equity	46	0.7%
Institutions in Standardised Approach	7	0.1%
Permanent Partial Use	4	0.1%
Grandfathering Provisions	36	0.5%
Other items	145	2.1%
<b>Standardised Approach Total</b>	<b>1,251</b>	<b>18.2%</b>
<b>Total</b>	<b>6,893</b>	<b>100.0%</b>

Table 7: Capital requirements for credit risk by exposure class under the Standardised and IRB Approach (Art. 438 (c) (d) CRR)

In table below, additional quantitative disclosure of the Specialised lending and equity under the simple weight approach is provided.

Specialised lending							
Regulatory categories	Remaining maturity	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA	Expected losses
Category 1	Less than 2.5 years	809	242	50%	976	545	0
	Equal to or more than 2.5 years	4,416	550	70%	4,817	3,853	19
	Less than 2.5 years	1,242	529	70%	1,605	1,220	6
Category 2	Equal to or more than 2.5 years	4,417	820	90%	5,005	4,966	40
	Less than 2.5 years	279	152	115%	380	451	11
Category 3	Equal to or more than 2.5 years	1,043	133	115%	1,143	1,428	32
	Less than 2.5 years	124	41	250%	151	414	12
Category 4	Equal to or more than 2.5 years	342	48	250%	374	982	30
	Less than 2.5 years	221	11	-	229	0	114
Category 5	Equal to or more than 2.5 years	594	73	-	652	0	326
	Less than 2.5 years	2,674	975		3,341	2,629	143
<b>Total</b>	<b>Equal to or more than 2.5 years</b>	<b>10,812</b>	<b>1,625</b>		<b>11,991</b>	<b>11,229</b>	<b>447</b>
Equities under the simple risk-weight approach							
Categories		On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA	Capital requirements
	Exchange-traded equity exposures	27	7	190%	34	65	5
	Private equity exposures	30	0	290%	30	86	7
	Other equity exposures	131	0	370%	131	483	39
<b>Total</b>		<b>187</b>	<b>7</b>		<b>194</b>	<b>634</b>	<b>51</b>

Table 8: Calculation of RWA in accordance with Article 153 (5) and Article 155 (2) of CRR for Specialised lending and equity (EU CR10 EBA/GL/2016/11)

Erste Group is reporting on consolidated level since Q3 2017 - due to a decision of the European Central Bank in the context of its supervisory assessments in view of deficiencies in credit risk models – a RWA-Add-On of around EUR 1.7 billion until these deficiencies will be addressed in the course of an update of these models.

## MARKET RISK

The table below gives an overview of the capital requirements to cover position risk, foreign-exchange risk, commodities risk and settlement risk.

in EUR million	Capital requirements	Capital requirements (% of total)
Standardised Approach	82	35.1%
position risk with interest rate instruments	56	23.9%
position risk in equity instruments	10	4.5%
commodities risk	0	0.0%
foreign-exchange risk (incl. gold)	16	6.7%
Internal Model	151	64.9%
Settlement Risk	0	0.0%
<b>Total</b>	<b>233</b>	<b>100.0%</b>

Table 9: Capital requirements for position risk, foreign-exchange risk, commodities risk and settlement risk (Art. 438 (e) CRR)

The main driver for the decrease of own funds requirements for market risk is due to changed exposures towards governments. Position changes led to higher diversification and a decrease of stressed VaR also translating to lower internal model contribution in 2017.

## OPERATIONAL RISK

For the calculation of regulatory capital requirements for operational risk at Erste Group, the Advanced Measurement Approach (AMA) has been used since approval by the OeNB in the first half of 2009. In subsidiaries which do not yet use the AMA, the Basic Indicator Approach (BIA) is used. The table below shows the capital requirements for operational risk under the AMA and the BIA. Details on the management of operational risk at Erste Group are presented in the chapter “Operational Risk”.

in EUR million	Capital requirements	Capital requirements (% of total)
Advanced Measurement Approach	1,175	82.0%
Basic Indicator Approach	257	18.0%
<b>Total</b>	<b>1,433</b>	<b>100.0%</b>

Table 10: Capital requirements for operational risk (Art. 438 (f) CRR)

## NON-DEDUCTED PARTICIPATIONS IN INSURANCE UNDERTAKINGS

Table below provides information on not deducted holdings of own funds instruments of an insurance undertaking, a re-insurance undertaking or insurance holding company in which institution has significant investment (according to Article 49 (1) of the CRR).

In EUR million	Value
Holdings of own funds instruments of a financial sector entity where the institution has a significant investment not deducted from own funds (before risk weighting)	303
Total RWAs	757

Table 11: Non-deducted participations in insurance undertakings (Article 438 (c) (d) CRR & EU INS1 - EBA/GL/2016/11)

## INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS

### DISCLOSURE REQUIREMENTS Art. 438 (a) CRR

The Internal Capital Adequacy Assessment Process (ICAAP) and the Risk-bearing Capacity Calculation (RCC) form integral parts of Pillar 2 requirements pursuant to the Basel regime. Erste Group's RCC measures the economic risks across all relevant risk types and compares them to the capital or the coverage potential Erste Group holds for covering such risks.

More specifically, the risk side of the calculation serves to determine the economic capital requirement from unexpected losses in respect of credit, market, operational and other risks. The risk is calculated at a confidence level of 99.95%. This economic capital requirement is then compared to the capital held as coverage potential, which is based on regulatory own funds and additional coverage reserves available, thus determining the bank's ability to absorb potential unexpected losses. The calculation of RCC is designed in accordance with the business strategy and risk profile of Erste Group and is accounted for in the Risk Appetite Statement (RAS) of the Group. The RAS defines, from a strategic perspective, the risk level that the Group is willing to expose itself to. The RAS specifies restrictions and limits required for daily operations. In general, the entire coverage potential has to be higher than or equal to the bank's overall risk exposure. The Group has defined Economic Capital Adequacy Limits as one of several measures to express and monitor the Group's risk appetite.

To determine the Group's capital adequacy, Erste Group deploys a forward-looking traffic light system. In this manner, management may assess at any time the extent to which the economic capital adequacy of the Group is appropriate and sufficient. This process enables the management to respond in time to changes, and, if necessary, to take the relevant measures on either the risk/economic capital side or the available capital/coverage potential side.

The management board and risk management committees are briefed regularly, at least quarterly, on the results of the risk-bearing capacity determined, including the movements in risk/economic capital and in available capital/coverage potential, the degree of utilisation of risk limits, and modelled risks/economic capital and available capital/coverage potential going forward. The calculation of the RCC forms a vital part of the management of risk and capital at Erste Group.

The figure below shows the distribution of risk types which make up the economic capital requirement of Erste Group. Other risks encompass business and strategic risks.

### Economic capital allocation (in %) 31 December 2017

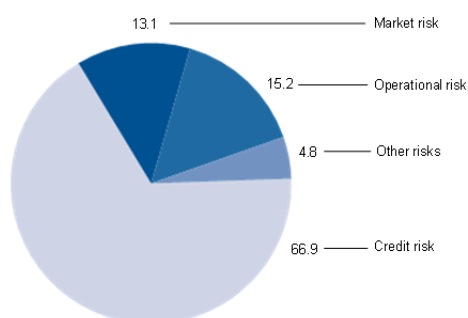


Figure 3: Economic capital composition

The results of the RCC are presented in the table below:

#### Risk bearing capacity calculation

in EUR million	
Economic capital requirement	12,307
Coverage potential	21,715
<b>Excess</b>	<b>9,408</b>

Table 12: Risk-bearing capacity calculation as of 31 December 2017 (Art. 438 (a) CRR)

Pursuant to FMA Minimum Standards for the Risk Management and Granting of Foreign Currency Loans and Loans with Repayment Vehicles (FMA- FXTT-MS), published in June 2017, institutions are obliged to disclose risk arising from foreign currency loans and loans with repayment vehicle.

As of 31 December 2017, funding gap for loans with the repayment vehicles is over prescribed threshold for enhanced monitoring and reporting of 20%, therefore Erste Group is providing in the tables below information on the loan portfolio with repayment vehicles on consolidated basis. Share of loans with repayment vehicles in total loan portfolio is 3.3%.

in EUR million	Loans with repayment vehicle	out of which: Bullet loans	out of which: Amortising loans
up to 1 year	170	103	67
from 1 to 5 years	722	570	152
from 5 to 10 years	1,239	905	334
from 10 to 15 years	1,771	1,255	516
above 15 years	854	339	515
<b>Total</b>	<b>4,755</b>	<b>3,172</b>	<b>1,583</b>

Table 13: Breakdown of loans with repayment vehicle by residual maturity and repayment type

Share of non-performing loans is 4.6%.

in EUR million	Loans with repayment vehicle
Total loans	4,755
out of which non-performing loans	219
Total LLP	111
out of which LLP on non-performing loans	101

Table 14: Asset quality of the loans with repayment vehicles

Calculation of the funding gap is based on portfolio booked in Austria, which encompasses 81.6% of total loans with repayment vehicle in Erste Group.

Currency of the loan	Gap (%)
EUR	21.7%
USD	28.8%
CHF	31.1%
Other	22.9%
<b>Total</b>	<b>29.0%</b>

Table 15: Funding gap of the portfolio with repayment vehicles by currencies

# Capital buffers

## DISCLOSURE REQUIREMENTS Art. 440 CRR

Erste Group calculates countercyclical buffer requirements at consolidated level in accordance with Title VII, Chapter 4 of Directive 2013/36/EU (CRD IV). As of 31 December 2017, a small number of jurisdictions (Hong Kong, Norway, Sweden, Czech Republic, Slovak Republic, Island) applied countercyclical buffer rates of more than 0%, resulting in an overall countercyclical buffer rate for the Group of 0.1509%.

tables below set out the geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer as well as the institution-specific countercyclical buffer rate for the Group as of 31 December 2017. The disclosure follows templates prescribed by Commission Delegated Regulation (EU) 2015/1555 with regard to regulatory technical standards for the disclosure of information in relation to the compliance of institutions with the requirement for a countercyclical capital buffer.

The table detailing the distribution of credit exposures has been simplified by listing individually only those countries which either represent core markets for the Group or have communicated countercyclical buffer rates other than zero. All other countries are shown in aggregated country groupings that reflect the geographical segmentation used in other tables in this report.

in EUR million	General credit exposures		Trading book exposures		Securitisations exposures		Own funds requirements				Own funds requirements weight	Counter-cyclical capital buffer rate	Institution specific counter-cyclical capital buffer rate
	STA	IRB	Sum of long and short positions of trading book exposure for STA	Value of trading book exposure for internal models	STA	IRB	General credit exposure	Trading book exposure	Securitis-ation exposure	Total			
Czech Republic	991	30,110	9	9	0	0	1,232	0	0	1,232	21%	0.50%	0.00107%
Slovakia	327	13,358	5	5	0	0	443	1	0	443	8%	0.50%	0.00039%
Sweden	5	189	18	18	0	0	11	1	0	11	0%	2.00%	0.00004%
Hong Kong	0	55	0	0	0	0	2	0	0	2	0%	1.25%	0.00001%
Norway	1	52	0	0	0	0	2	0	0	2	0%	2.00%	0.00001%
Iceland	0	1	0	0	0	0	0	0	0	0	0%	1.25%	0.00000%
Austria	4,362	80,423	81	104	0	1,021	2,239	10	8	2,257	39%	0.00%	0.00000%
Croatia	923	5,313	0	0	0	0	289	0	0	289	5%	0.00%	0.00000%
Hungary	178	4,976	26	26	0	0	318	2	0	320	6%	0.00%	0.00000%
Romania	7,482	635	1	1	0	0	402	0	0	402	7%	0.00%	0.00000%
Serbia	1,116	288	97	0	0	0	65	8	0	72	1%	0.00%	0.00000%
Asia	0	259	0	0	0	0	19	0	0	19	0%	0.00%	0.00000%
Latin America	15	47	0	0	0	0	4	0	0	4	0%	0.00%	0.00000%
Middle East/Africa	6	621	3	3	0	0	20	0	0	20	0%	0.00%	0.00000%
SE Europe/CIS	1,230	166	2	0	0	0	80	0	0	81	1%	0.00%	0.00000%
Other EU Countries	1,616	7,821	42	127	0	0	452	8	0	460	8%	0.00%	0.00000%
Other Industrialised Countries	198	2,225	23	27	0	0	134	2	0	136	2%	0.00%	0.00000%
<b>Total</b>	<b>18,452</b>	<b>146,541</b>	<b>308</b>	<b>320</b>	<b>0</b>	<b>1,021</b>	<b>5,713</b>	<b>31</b>	<b>8</b>	<b>5,752</b>	<b>100%</b>		

Table 16: Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (Art. 440 (1) (a) CRR)

Czech Republic, Slovakia, Austria, Croatia, Hungary, Romania and Serbia are Core market countries. Emerging markets are following geographical areas: Asia, Latin America, Middle East/Africa and SE Europe/CIS.

in EUR million	
Total Risk Exposure amount	110,028
Institution specific countercyclical capital buffer rate	0.1509%
<b>Institution specific countercyclical buffer requirement</b>	<b>166</b>

Table 17: Amount of institution-specific countercyclical capital buffer (Art. 440 (1) (b) CRR)

# Credit risk

## Goals and principles of risk management

### DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

Credit risk arises in the traditional lending and investment business and includes losses incurred due to the default of a borrower or the impairment of a credit exposure due to the downgrading of a debtor. Country risk is implicitly considered when assessing credit risk.

Credit risk in retail lending arises from the probability that customers may fail to settle their financial obligations as stipulated by the contractual terms. Managing credit risk in retail involves dealing with a large number of relatively small exposures extended to private individuals, independent professionals, entrepreneurs or to micro companies in line with the Basel definitions. These exposures can be clustered into different risk segments with similar characteristics based on their rating and/or payment behaviour and treated accordingly by applying a rule-based approach.

Credit risk related to retail loan portfolios is managed at the Group and at the local entity level with a common interest to ensure regulatory compliant risk management practices and to provide customers with manageable loan facilities that are within their financial capacities supported by underlying profitability.

At Group level, retail credit risk is managed by the Group retail lending framework that sets out specific risk management policy requirements. All local entities engaged in lending activities must comply with these requirements. In addition, a standardised retail risk specific reporting platform is in place throughout the Group. This ensures that loan portfolio dynamics can be monitored and analysed regularly, identifying potential adverse developments early on and developing targeted mitigating actions.

Local banks develop their local lending strategy in which input from local risk management plays a key role. Local retail risk management supports the local business lines by identifying which customer segments should be in focus in terms of new lending initiatives. Moreover, local retail risk management ensures that any new products or changes in lending criteria are in line with the Group lending framework requirements and are adequately supported by the existing risk infrastructure. Local risk management also has the primary responsibility for ensuring that country-specific know-how is incorporated into risk management practices and that implications of the local environment (market, competitive, economic, political and legal/regulatory) are appropriately addressed.

In the non-retail business, the Group Risk Strategy defines the maximum level of risk Erste Group is willing to accept in its non-retail portfolio to deliver its business objectives in accordance with the Group RAS. It sets quantitative credit risk portfolio limits and qualitative risk principles to ensure that the credit risk profile remains in line with the Group Risk Strategy. Further limits are derived from the credit risk portfolio limits and include industries, countries, single names and products. These are established to manage credit risk concentrations and align the portfolio composition to the approved relevant business and risk strategies. For single names, the business and risk strategies are defined jointly by business and risk managers. The underlying principle is to ensure that lending activities are in compliance with the client rating based maximum (including uncollateralised) credit limit, are based on expert opinions and analyses and involve relevant cross-functional support from other departments. In addition, as and when available, peer group analyses and information from industry leaders/losers are used to identify industry consolidation trends early on and to adjust the business and risk strategies accordingly.

No transaction can be executed without prior approval by credit risk management in accordance with the procedural requirements and explicitly delegated approval authorities. No credit decision is taken without a thorough assessment of the industry each borrower operates in, its risk profile, repayment capability and the assignment of an internal rating.

Collateral and credit enhancements are evaluated pursuant to internally defined rules. Depending on rating grade, purpose and tenor, risk-bearing products are protected against losses by stipulating adequate collateral that is fully and indisputably legally enforceable and sufficiently documented for the bank. Nevertheless, collateral and credit enhancements can never substitute repayment capability.

The credit monitoring process is used to ensure consistency between the credit decision and the loan agreement, and to monitor the fulfilment of contractual obligations of a client. The process encompasses pre-drawn checks (i.e. fulfilment of all conditions precedent and other contractual conditions) and ongoing monitoring (i.e. fulfilment of conditions subsequent and operationalised covenants). Counterparty credit risk limits are monitored daily in an internal limit management system with remedial actions taken in case limits are exceeded. An early warning framework is implemented to proactively identify negative developments. When early warning signals are identified, adequate risk mitigating actions are taken.

## ORGANISATION

In 2017, two risk functions, Group Retail Risk Management and Group Credit Risk Management, were merged into one function of Group Credit Risk Management. The reorganized Group Credit Risk Management is the operative risk management function for the retail (private individual and micro customers) and non-retail portfolio (medium-sized enterprises, large corporate and real estate customers, corporate finance, institutional clients and counterparties, sovereigns and countries). It reports directly to the Group Chief Risk Officer (CRO) of the Management Board of Erste Bank Group AG.

Group Credit Risk Management is responsible for setting standards and steering the Group's retail and non-retail lending portfolios, including defining the lending and portfolio analytical framework, and operating the group-wide credit decision-making process, early warning system and credit monitoring requirements for the corporate portfolio. It recommends the unconditional approval authorities of the local management boards for approval by the Management Board of Erste Bank Group AG and fosters group-wide credit know-how and culture through regular training activities and sharing lessons learnt. It ensures that only credit risk that is in line with the risk appetite, the risk strategy and limits set by Group Enterprise-wide Risk Management is taken on the books of Erste Group. In addition, this function is the first line credit risk management for business booked in Erste Group Bank AG, and, above defined thresholds, the second line risk management for business booked in Erste Group's subsidiaries and the 'Haftungsverbund'. In its capacity as second line risk management, it provides the local management boards with recommendations for credit decisions that take into account the Group perspective. It is also responsible for monitoring and reporting relevant credit risk limit utilizations. Furthermore it conducts regular in-depth portfolio reviews with local risk management to understand portfolio dynamics and identify potential adverse portfolio developments early on.

Group Credit Risk Management is represented in several relevant governance committees as described in the section on Group Governance for risk management activities.

## RISK MEASUREMENT AND CONTROL

Prior to granting a loan, the creditworthiness of a retail client is determined and verified in view of the risk/return trade-off supported by clients' rating. Loans can only be granted if the repayment capacity of the borrower is sufficient to service the regular repayments. Risk-adjusted pricing ensures a balanced relationship between risk and return. Following the loan origination, clients are monitored and in case of adverse developments serviced by the Collection units.

For non-retail clients, the creditworthiness and repayment capacity is determined via in-depth financial analyses and individual rating, based on the clients' financials, projections, industry analyses and assessments of the clients' business model. Defined lending standards apply and credit decision are taken in line with the currently valid internal credit risk approval authority rules. Counterparty limits are set towards a client / client group and monitored on a daily basis to ensure that the credit risk remains within the approved limits. For each client / client group a credit review is performed at least once a year. In addition, early warning signals are regularly monitored in order to timely recognise adverse developments and immediately take appropriate mitigating actions.

Regular group-wide credit risk reports are prepared and contain relevant information for the risk management committees, Management Board and Supervisory Board. These reports inform about development of the credit portfolios in all segments, and provide detailed risk-relevant information on customers at risk of default or already defaulted. To further manage credit risk concentration in the portfolio, limits are also set on products, industries and countries, regularly monitored and reported in the group-wide credit risk reports. These reports also include specific monitoring metrics that provide an early warning signal for adverse developments of, e.g. portfolio quality (client, segment, countries and industries) and risk drivers. In instances where certain risk portfolios or clients / client groups are identified as potentially in distress, these are closely monitored by the dedicated risk functions (i.e. Group Credit Risk Management, Group Workout and Group Enterprise-wide Risk Management) to manage the risk impact and to develop effective strategies to minimize potential losses. This process facilitates early risk detection and reaction. In addition, these reports serve as the basis for reviewing the credit lending standards and the risk strategy.

Complementing the group-wide credit risk report, Group Credit Risk Management prepares a consolidated, group-wide retail risk management report that shows retail loan portfolio dynamics across local entities with monthly frequency. This report, building on up-to-date portfolio monitoring techniques (vintage analysis, delinquency trends, segment analyses, etc.) shows the key drivers behind specific portfolio developments. The report covers new loan bookings as well as the main developments (including FX share trends) in the existing portfolio. In case of the non-retail customers (i.e. SME), the report includes information on rating and industry segmentation, debt and collateral coverage, etc.



A management summary of the key developments is distributed at least quarterly to senior management and key decision makers.

It is the interest of Erste Group not to put customers into a position in which they are no longer able to meet their contractual obligations. This also includes the principle of matching the term of the debt to the object financed, in particular, as regards the relationship between operating output, cash flow, repayment capability and financing need; the recoverability of the loan and its use must be plausible and verifiable. Transactions with financial holding companies are entered into only in well-defined cases based on detailed (also intragroup) cash flow analyses. Foreign currency loans depend on regional market conditions and customer class. Generally, financing in local currency is given preference, especially if the customer does not have any income in foreign currency. However, market practices vary in the different CEE markets along with different business strategies. Interest rate hedging is provided to the extent necessary. Erste Group has established clear policies with respect to FX lending across countries and businesses. This includes appropriate monitoring and governance in place with distinct limits set as part of the Group Risk Strategy to manage and ensure proper oversight of FX lending risk.

Erste Group strictly follows a cash-flow based corporate lending approach. Any financing is based on a corporate client's ability to generate future cash-flows. Lending based exclusively on collateral is avoided as collateral only serves to reduce potential losses caused by unexpected cash-flow shortfalls. All corporate lending activities (including leverage financing) are regulated by the lending policies applied to the entire Group, prescribing limits and minimum requirements.

## RISK MITIGATION

Apart from economic creditworthiness, the provision of collateral is a central element of risk limiting and is particularly important for Specialised lending. However, collateral is no substitute for lacking creditworthiness. The eligibility of collateral is determined in accordance with the bank's internal collateral catalogue. Non-collateralised portions of debt are usually not accepted for new customers below a certain credit quality as expressed by rating grades.

In addition, risk mitigation for retail and non-retail clients is based, above all, on prudent lending criteria.

In retail lending, the debt-to-income and loan-to-value ratios have to be limited to a percentage that allows for a sufficient buffer in case of stressed conditions. Furthermore, FX loans (i.e. loans that are at least partially receivable in currencies other than the legal tender of the country in which the borrower is domiciled) are not allowed – with the exception of the following:

- \_ customers have a natural hedge (i.e. no FX risk involved)
- \_ the loan is fully secured with matching currency liquid collateral
- \_ explicitly approved in the Group Risk Strategy

Customers experiencing financial difficulties are managed by Retail Collection. This unit proactively supports customers with payment difficulties as appropriate by offering them forbearance.

Subsidiaries or sub-groups of a customer group are financed only if all material documents are available. All customers of a group of connected clients or within a corporate group are subjected to a rating process. In such cases, the group rating and the "corporate ceiling" are taken into account. Beyond a predefined total debt level, companies or groups that have credit relations with more than one fully consolidated company of Erste Group are classified as limit customers, with the limit cap being determined in the respective limit application. In the case of sector clusters, once a certain size is reached, joint business strategies are defined following the GO/HOLD/STOP logic.

## Definition of past due, substandard, defaulted and impaired

### DISCLOSURE REQUIREMENTS Art. 442 (a) CRR

The Group's ongoing assessment of the customers' capacity to fulfil their obligations is carried out using a large number of risk management instruments. This includes the constant monitoring of the Group's portfolio of past due, substandard and defaulted exposures.

#### Past due

In the case of payments in arrears, payments are considered past due as of the date when the borrower exceeded an approved credit limit, or the borrower was advised of a lower limit than the current outstanding, or drew on an unauthorised credit facility, or did not make a contractually agreed payment in due time, and the amount concerned is significant. Unpaid credit card debt is deemed past due from the earliest due date.

### Substandard

The borrower is vulnerable to negative financial and economic impacts; as a rule, such loans are managed in specialised risk management departments.

### Defaulted

There is a default if one or more of the default criteria under the Basel capital adequacy framework apply:

- \_ full repayment unlikely,
- \_ interest or principal payments on a material exposure more than 90 days past due,
- \_ restructuring resulting in a loss to the lender,
- \_ realisation of a loan loss,
- \_ initiation of bankruptcy proceedings or
- \_ the customer is regarded as impaired.

### Impaired

The financial asset is classified as impaired as a result of one or more events that occurred after the initial recognition of the asset and which has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated, such as:

- \_ significant financial difficulty of the issuer or obligor;
- \_ a breach of contract, such as default or delinquency in interest or principal payments;
- \_ the lender, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider;
- \_ it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
- \_ observable data indicating that there is a measurable decrease in the estimated future cash flows from a group of financial assets since their initial recognition, although the decrease cannot yet be identified in the individual financial assets.

If a customer is in default, an impairment process is triggered. Depending on the outcome of the discounted cash flow analysis, the financial asset of the defaulted customer is regarded as impaired or not.

## Credit risk adjustments

### DISCLOSURE REQUIREMENTS Art. 442 (a) (b) (i) (ii) CRR

The following paragraphs provide a description of the approaches and methods adopted for determining value adjustments and credit risk adjustments.

### CREDIT RISK ADJUSTMENT CALCULATION

The general principles and standards for credit risk adjustments within Erste Group are described in internal policies. The bank evaluates the need for credit risk adjustments in line with regulatory and accounting standards and allocates them accordingly. Credit risk adjustments are calculated

- \_ for financial assets carried at amortised cost (loans and advances, financial assets held to maturity) in accordance with IAS 39 and
- \_ for contingent liabilities (financial guarantees, loan commitments) in accordance with IAS 37.

Credit risk adjustments are created in a process performed at customer level. The process includes the identification of default and impairment and the type of assessment (individual or collective) to be applied. 'At customer level' means in this context that if one of the customer's exposures is classified as defaulted then typically all of this customer's exposures are classified as defaulted. Depending on the characteristics of the exposure and the respective expected cash flows (e.g. considering collateral), some exposures may not be impaired.

The bank distinguishes between

- \_ specific credit risk adjustments calculated for exposures to defaulted customers that are deemed to be impaired and
- \_ general credit risk adjustments (credit risk adjustments for incurred but not reported losses) calculated for exposures to non-defaulted customers or defaulted customers that are not deemed to be impaired.

For the purposes of prudential reporting, no distinction is made between specific and general credit risk adjustments. Pursuant to Commission Delegated Regulation (EU) No 183/2014 in connection with EBA/RTS/2013/04<sup>1</sup>, all credit risk adjustments are treated as specific credit risk adjustments in COREP.

Erste Group regularly reviews its specific and general credit risk adjustments. These exercises include the parameters and methodologies used in the credit risk adjustment calculation. Adjustments can take place in the context of specific reviews (in view of specific credit risk adjustments), routine maintenance of parameters (such as regular calibration) or in the case of specific events (e.g. improved knowledge about recovery behaviour, back-testing results).

## **CALCULATION OF SPECIFIC CREDIT RISK ADJUSTMENTS AND IMPAIRMENT**

Objective evidence of impairment is given as a result of one or more events (“trigger event” or “loss event”) that occurred after the initial recognition of the asset which has an impact on the estimated future cash flows of the financial asset or group of financial assets and that can be reliably estimated. This includes, for example, the observation of significant financial difficulty of an issuer or obligor, or a high likelihood of entering bankruptcy or other financial reorganisation.

Upon observation of such loss events, an impairment process is being triggered. Depending on the outcome of the discounted cash flow analysis, the financial asset of the defaulted customer is regarded as impaired or not.

For the calculation of specific credit risk adjustments, the discounted cash flow model is applied. This means that a difference between gross carrying amount and net present value (NPV) of the expected cash flows leads to an impairment and defines the amount of any adjustment requirement. All estimated interest and redemption payments as well as estimated collateral recoveries and costs for selling and obtaining collateral are considered as expected cash flows. The effective interest rate is used as the discount rate for the calculation of the NPV of the expected cash flows.

The calculation of specific credit risk adjustments is performed either on an individual basis or as a collective assessment (rule-based approach). In case of significant customers, expected cash flows are estimated individually by workout or risk managers. A customer is considered as significant if the total exposure defined as the sum of all on and off-balance sheet exposures exceeds a defined materiality limit. Otherwise, the customer is considered as insignificant and a rule-based approach is used for the calculation of the specific credit risk adjustment. Under this approach, specific credit risk adjustments are calculated as the product of the carrying amount and the loss given default (LGD), where LGD depends on relevant characteristics such as time in default or the stage of the workout process.

## **CALCULATION OF GENERAL CREDIT RISK ADJUSTMENTS**

Collective allowances/provisions are calculated for on-balance and off-balance sheet exposures to non-defaulted customers for which a default has not been detected or reported. The level of collective allowances depends on the carrying amount, the PD, the LGD, the credit conversion factor (CCF) in case of off-balance sheet exposures, and the loss identification period. The loss identification period corresponds to the average period between the occurrence and the detection of the loss and ranges from four months to one year. The result of discounting future cash flows to their NPVs is taken into consideration in the LGD calculation.

Generally, risk parameters used in the calculation of collective allowances may be different to the Basel 3 Pillar 1 or Pillar 2 risk parameters, if the properties of the respective portfolio in combination with accounting rules necessitate this.

Collective allowances are also calculated in case of exposures to defaulted customers which are not identified as impaired. For these customers, no specific credit risk adjustments are allocated. Collective allowances are calculated based on the historical loss experience for the relevant customer segment.

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<sup>1</sup> Recital (9) of Commission Delegated Regulation (EU) No 183/2014 states “Whereas the treatment of losses exclusively related to credit risk recognised under applicable accounting frameworks depends on the fulfilment of those criteria, the large majority of those amounts should normally be classified as Specific Credit Risk Adjustments given the restrictive nature of the criteria for General Credit Risk Adjustments”.<sup>1</sup> EBA Final draft Regulatory Technical Standards on specification of the calculation of specific and general credit risk adjustments, 26 July 2013 states in answer 3 to Question 1 of the consultation “impairments recognised in accordance with current IAS 39 rules, also referred to as an ‘incurred loss’ model, would be considered as Specific Credit Risk Adjustments. For the IFRS framework as it currently stands, no example for General Credit Risk Adjustments can be given.

## Quantitative disclosure on credit risk

### DISCLOSURE REQUIREMENTS Art. 442 (c) (d) (e) (f) (g) (h) (i) CRR

In the following table total and average credit risk exposure over the period by significant exposure classes is provided. Table comprises all asset positions and off-balance items relevant for credit risk framework and based on the accounting values reported in financial statements. Exposure is reported net of the credit risk adjustments. Exposures related to counterparty credit risk and securitisation are not subject of this chapter.

#### Exposure classes and net exposure subject to credit risk framework

in EUR million	Net exposure at the end of the period	Average net exposure over the period
Central Governments and Central Banks	1,545	2,005
Institutions	5,092	5,468
Corporate	79,271	76,364
of which Specialised Lending	15,427	14,704
of which SME	32,600	30,397
Retail	75,326	72,759
of which Retail SME secured by immovable property	7,309	7,226
of which Retail SME non-secured by immovable property	6,587	6,315
of which Retail secured by immovable property	40,791	39,312
of which Retail revolving	20	390
of which Other retail	20,619	19,517
Equity	450	537
Other	4,766	5,827
<b>IRB Approach Total</b>	<b>166,449</b>	<b>162,961</b>
Central Governments and Central Banks	43,783	43,317
Regional governments or local authorities	5,025	5,222
Public Sector Entities	3,322	3,656
Multilateral Development Banks	292	338
International Organisations	337	345
Institutions	512	499
Corporates (including secured by immovable property)	10,144	9,387
of which SME	2,823	3,188
Retail (including secured by immovable property)	8,144	7,984
of which SME	1,444	1,036
Exposures in default	475	855
Equity exposures	457	507
Other items	4,026	3,506
<b>Standardised Approach Total</b>	<b>76,517</b>	<b>75,617</b>
<b>Total</b>	<b>242,967</b>	<b>238,578</b>

Table 18: Credit Risk – Total and average net amount of credit exposure (Art. 442 (c) (e) CRR and in line with EU CRB-B EBA/GL/2016/11)

In order to present the clear view of the credit risk in the following tables, loans and receivables and debt securities are presented. On top of the asset relevant positions, off-balance items are included.

In the table below disclosed and undisclosed balance sheet positions in credit risk tables are presented:

in EUR million	Subject to credit risk framework	Not disclosed positions	Credit risk tables
<b>Assets</b>			
Cash and cash balances	20,399	4,303	16,097
Financial assets - held for trading	0	0	0
Derivatives	0	0	0
Other trading assets	0	0	0
Financial assets - at fair value through profit or loss	498	95	403
Financial assets - available for sale	15,496	1,675	13,821
Financial assets - held to maturity	19,798	0	19,798
Loans and receivables to credit institutions	2,127	0	2,127
Loans and receivables to customers	138,562	0	138,562
Derivatives - hedge accounting	0	0	0
Changes in fair value of portfolio hedged items	0	0	0
Property and equipment	2,278	2,278	0
Investment properties	828	828	0
Intangible assets	0	0	0
Investments in associates and joint ventures	174	174	0
Current tax assets	107	107	0
Deferred tax assets	203	203	0
Assets held for sale	136	136	0
Other assets	860	860	0
<b>Total assets</b>	<b>201,467</b>	<b>10,659</b>	<b>190,808</b>

Table 19: Overview on disclosed and undisclosed balance sheet positions in credit risk tables

Positions that are not included in following quantitative disclosures are cash in hand, equities (at fair value through profit or loss and available for sale), property and equipment, investment properties, current taxes, deferred taxes not subject to deduction, assets held for sale and other assets, which in total comprise 5.3% of assets under the credit risk framework.

Table below presents net credit risk exposure (net value of the on-balance and off-balance sheet exposure corresponding to accounting values) by significant geographical areas based on country of residence of the counterparty.

#### Exposure classes and significant areas

in EUR million	Core Markets							Emerging Markets	Other EU Countries	Other Industrialised Countries	Total
	Austria	Croatia	Czech Republic	Hungary	Romania	Serbia	Slovakia				
Central Governments and Central Banks	0	202	0	104	16	0	77	328	209	609	1,545
Institutions	594	7	1,404	237	0	0	293	774	1,373	407	5,088
Corporate	43,972	3,035	12,225	2,667	686	265	4,430	1,684	8,130	2,098	79,192
Retail	43,141	2,188	16,844	2,399	8	6	9,547	138	887	166	75,324
Equity	24	0	0	0	0	0	0	0	11	0	36
Other	7	0	0	0	0	0	0	5	14	0	26
<b>IRB Approach Total</b>	<b>87,738</b>	<b>5,432</b>	<b>30,474</b>	<b>5,407</b>	<b>710</b>	<b>272</b>	<b>14,346</b>	<b>2,930</b>	<b>10,623</b>	<b>3,279</b>	<b>161,211</b>
Central Governments and Central Banks	6,653	2,038	10,383	2,588	5,904	334	4,093	7,046	4,422	0	43,460
Regional governments or local authorities	3,571	108	1	0	736	18	245	27	318	0	5,024
Public Sector Entities	2,517	423	0	73	7	14	8	3	277	0	3,322
Multilateral Development Banks	0	0	0	0	0	1	0	0	292	0	292
International Organisations	0	0	0	0	0	0	0	0	337	0	337
Institutions	158	4	83	13	115	6	1	11	105	13	510
Corporates (including secured by immovable property)	2,061	449	872	219	3,881	629	158	521	389	95	9,275
Retail (including secured by immovable property)	628	449	565	75	4,242	606	114	646	746	3	8,072
Exposures in default	7	91	34	22	213	8	36	21	29	7	469
Equity exposures	67	0	0	0	0	0	0	0	0	0	67
Other items	9	41	2	17	109	1	0	65	24	0	268
<b>Standardised Approach</b>	<b>15,671</b>	<b>3,603</b>	<b>11,940</b>	<b>3,006</b>	<b>15,206</b>	<b>1,617</b>	<b>4,654</b>	<b>8,341</b>	<b>6,939</b>	<b>118</b>	<b>71,097</b>
<b>Total</b>	<b>103,410</b>	<b>9,035</b>	<b>42,414</b>	<b>8,413</b>	<b>15,916</b>	<b>1,889</b>	<b>19,001</b>	<b>11,270</b>	<b>17,562</b>	<b>3,397</b>	<b>232,308</b>

Table 20: Credit Risk – Net credit risk exposure by significant area and exposure class (Art. 442 (d) CRR and in line with EU CRB-C EBA/GL/2016/11)

Emerging markets include Asia, Latin America, Middle East and Africa and other (the non-EU countries in South-Eastern Europe as well as countries that were formerly part of the Soviet Union (e.g. Russia, Belarus, Georgia, Armenia, Kazakhstan, Ukraine, Uzbekistan, etc.)).

Table below provides the breakdown of the net credit risk exposure by significant industries.

**Exposure classes and significant industries**

in EUR million	A	C	D	F	G	H	I	K	L	M	O	T	Other	Total
Central Governments and Central Banks	0	0	0	0	0	0	0	218	0	2	1,314	0	12	1,545
Institutions	0	0	0	0	0	0	0	4,029	0	0	1,056	0	4	5,088
Corporate	1,192	13,867	3,344	8,087	7,829	2,855	2,786	4,835	21,482	7,010	16	100	5,788	79,192
Retail	993	990	87	1,204	1,872	362	1,198	170	3,188	1,275	1	61,364	2,621	75,324
Equity	0	0	0	0	0	0	0	36	0	0	0	0	0	36
Other	0	0	0	0	0	0	0	12	6	1	1	0	7	26
<b>IRB Approach Total</b>	<b>2,185</b>	<b>14,857</b>	<b>3,431</b>	<b>9,291</b>	<b>9,701</b>	<b>3,217</b>	<b>3,984</b>	<b>9,300</b>	<b>24,676</b>	<b>8,287</b>	<b>2,388</b>	<b>61,464</b>	<b>8,431</b>	<b>161,211</b>
Central Governments and Central Banks	0	0	0	42	0	0	0	16,615	0	0	26,695	0	108	43,460
Regional governments or local authorities	0	0	3	0	0	1	0	14	0	0	4,853	0	154	5,025
Public Sector Entities	9	0	0	601	0	732	0	273	340	8	868	0	493	3,322
Multilateral Development Banks	0	0	0	0	0	0	0	292	0	0	0	0	0	292
International Organisations	0	0	0	2	0	0	0	0	0	0	0	0	334	337
Institutions	0	0	0	0	0	0	0	378	0	0	1	6	125	510
Corporates (including secured by immovable property)	357	1,847	438	934	1,685	508	47	690	1,098	201	79	209	1,182	9,275
Retail (including secured by immovable property)	280	279	15	146	383	205	69	21	92	104	3	6,253	222	8,072
Exposures in default	33	56	11	60	69	6	7	22	56	9	3	75	62	469
Equity exposures	0	0	0	0	0	0	0	67	0	0	0	0	0	67
Other items	0	0	0	6	1	0	0	35	1	2	0	75	149	268
<b>Standardised Approach Total</b>	<b>678</b>	<b>2,183</b>	<b>468</b>	<b>1,791</b>	<b>2,138</b>	<b>1,451</b>	<b>122</b>	<b>18,408</b>	<b>1,587</b>	<b>323</b>	<b>32,501</b>	<b>6,618</b>	<b>2,828</b>	<b>71,097</b>
<b>Total</b>	<b>2,864</b>	<b>17,040</b>	<b>3,900</b>	<b>11,082</b>	<b>11,838</b>	<b>4,669</b>	<b>4,106</b>	<b>27,707</b>	<b>26,263</b>	<b>8,609</b>	<b>34,888</b>	<b>68,082</b>	<b>11,259</b>	<b>232,308</b>

Table 21: Credit Risk – Net credit risk exposure by industry group and exposure class (Art. 442 (e) CRR and in line with EU CRB-D EBA/GL/2016/11)

Industry breakdown is based on the NACE codes, and includes following: (A)- Agriculture, forestry and fishing; (C)- Manufacturing; (D)- Electricity, gas, steam and air conditioning supply; (F)- Construction; (G)- Wholesale and retail trade; (H)- Transport and storage; (I)- Accommodation and food service activities; (K)- Financial and insurance services; (L)- Real estate activities; (M)- Professional, scientific and technical activities; (O)- Public administration and defence, compulsory social security.

All industries that are below 1% of total credit risk exposure are aggregated in the position Other and together represent 4.8% of total.

As Other following industries are included: (B)- Mining and quarrying; (E)- Water supply; (J)- Information and communication; (N)- Administrative and support service activities; (P)- Education; (Q)- Human health services and social work activities; (R)- Arts, entertainment and recreation; (S)- Other services.

Table below provides information on the breakdown of the net credit risk exposure to residual maturity by significant exposure classes.

**Exposure classes and residual maturity**

in EUR million	On demand	<=1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
Central Governments and Central Banks	10	146	646	743	0	1,545
Institutions	412	1,306	1,861	1,509	0	5,088
Corporate	6,158	14,707	24,856	33,471	0	79,192
Retail	7,487	3,860	6,805	57,172	0	75,324
Equity	5	0	1	30	0	36
Other	4	0	0	0	22	26
<b>IRB Approach Total</b>	<b>14,076</b>	<b>20,020</b>	<b>34,168</b>	<b>92,925</b>	<b>22</b>	<b>161,211</b>
Central Governments and Central Banks	15,547	2,971	14,925	9,828	189	43,460
Regional governments or local authorities	202	430	1,124	3,267	1	5,025
Public Sector Entities	164	564	902	1,691	2	3,322
Multilateral Development Banks	1	37	178	77	0	292
International Organisations	0	46	184	107	0	337
Institutions	226	102	19	143	21	510
Corporates (including secured by immovable properties)	1,060	3,417	2,289	2,238	271	9,275
Retail (including secured by immovable properties)	115	940	2,296	4,525	197	8,072
Exposures in default	163	114	97	93	1	469
Equity exposures	57	0	0	9	0	67
Other items	119	13	93	43	0	268
<b>Standardised Approach Total</b>	<b>17,654</b>	<b>8,635</b>	<b>22,105</b>	<b>22,021</b>	<b>682</b>	<b>71,097</b>
<b>Grand Total</b>	<b>31,730</b>	<b>28,654</b>	<b>56,274</b>	<b>114,946</b>	<b>704</b>	<b>232,308</b>

Table 22: Credit Risk – Net credit risk exposure by residual maturity and exposure class (Art. 442 (f) CRR and in line with EU CRB-E EBA/GL/2016/11)

In the following tables, detailed split of gross credit exposure, specific credit risk adjustments, write offs and credit relevant charges are presented, by the significant exposure classes, industries and geographical areas. Charges for the credit risk adjustments are reported as a difference between allocation and the releases of credit risk adjustments booked over the year.

Figures related to defaulted clients in STA approach are shown in original classes (in which they would be classified if they were not defaulted). However, exposure class Exposure in default is shown as “out of which” in table below.



## Credit quality by exposure classes

in EUR million	Gross exposure		Specific credit risk adjustments	Write-offs	Credit risk adjustments charges	Net values
	Non-defaulted	Defaulted				
Central Governments and Central Banks	1,545	0	1	0	0	1,545
Institutions	5,088	2	2	0	16	5,088
Corporate	78,188	2,819	1,815	291	-3	79,192
of which Specialised Lending	15,073	916	562	0	0	15,427
of which SME	32,068	1,660	1,124	47	8	32,604
Retail	74,634	2,042	1,352	281	80	75,324
Retail SME secured by immovable property	7,085	352	128	0	0	7,309
Retail SME non-secured by immovable property	6,591	238	243	0	0	6,587
Retail secured by immovable property	40,346	847	402	0	0	40,790
Retail revolving	20	1	1	0	0	20
Other retail	20,593	603	578	0	0	20,618
Equity	36	0	0	0	-1	36
Other	35	16	26	0	5	26
<b>IRB Approach Total</b>	<b>159,527</b>	<b>4,879</b>	<b>3,195</b>	<b>573</b>	<b>98</b>	<b>161,211</b>
Central Governments and Central Banks	43,462	0	3	0	0	43,460
Regional governments or local authorities	5,033	4	10	0	-2	5,027
Public Sector Entities	3,325	1	3	0	0	3,322
Multilateral Development Banks	292	0	0	0	0	292
International Organisations	337	0	0	0	-2	337
Institutions	511	0	1	0	0	510
Corporates (including secured by immovable properties)	9,412	802	614	281	114	9,600
of which SME	2,836	309	223	18	7	2,921
Retail (including secured by immovable properties)	8,173	490	473	30	-30	8,191
of which SME	1,391	47	47	11	-5	1,390
Equity exposures	67	0	0	0	0	67
Other items	274	25	8	13	22	291
<b>Standardised Approach Total</b>	<b>70,886</b>	<b>1,322</b>	<b>1,112</b>	<b>324</b>	<b>102</b>	<b>71,097</b>
out of which Exposures in default	0	1,322	854	301	117	469
<b>Total</b>	<b>230,413</b>	<b>6,201</b>	<b>4,306</b>	<b>897</b>	<b>199</b>	<b>232,308</b>
Of which: Loans	154,937	5,682	3,978	896	217	156,641
Of which: Debt securities	34,159	13	5	0	0	34,167
Of which: Off-balance sheet exposures	41,318	505	323	1	-18	41,500

Table 23: Credit Risk – Gross and net credit risk exposure, credit risk adjustments, write-offs and credit risk charges by exposure class (Art. 442 (g) CRR and in line with EU CR1-A EBA/GL/2016/11)

## Credit quality by industries

in EUR million	Gross exposure		Specific credit risk adjustments	Write-offs	Credit risk adjustments charges	Net values
	Non-defaulted	Defaulted				
Agriculture, forestry and fishing	2,815	152	104	9	-1	2,864
Manufacturing	16,928	599	487	205	21	17,040
Electricity, gas, steam and air conditioning supply	3,892	92	84	6	26	3,900
Construction	10,926	564	407	84	28	11,082
Wholesale and retail trade	11,545	808	514	104	128	11,838
Transport and storage	4,658	94	83	12	-1	4,669
Accommodation and food service	3,948	353	195	17	-16	4,106
Financial and insurance services	27,651	190	134	22	22	27,707
Real estate activities	25,981	676	395	95	-108	26,263
Professional, scientific and technical activities	8,470	332	193	14	7	8,609
Public administration	34,903	5	19	0	-4	34,888
Private households	67,607	1,850	1,376	282	64	68,082
Others	11,088	487	315	47	33	11,259
<b>Total</b>	<b>230,413</b>	<b>6,201</b>	<b>4,306</b>	<b>897</b>	<b>199</b>	<b>232,308</b>

Table 24: Credit Risk – Gross and net credit risk exposure, credit risk adjustments, write-offs and credit risk charges by industries (Art. 442 (g) CRR and in line with EU CR1-B EBA/GL/2016/11)

## Credit quality by significant areas

in EUR million	Gross exposure		Specific credit risk adjustments	Write-offs	Credit risk adjustments charges	Net values
	Non-defaulted	Defaulted				
Core Market - Austria	102,433	2,268	1,291	123	37	103,410
Core Market - Croatia	8,741	923	629	131	142	9,035
Core Market - Czech Republic	42,239	721	546	139	32	42,414
Core Market - Hungary	8,389	245	220	63	-68	8,413
Core Market - Romania	15,840	740	664	272	16	15,916
Core Market - Serbia	1,878	83	71	55	2	1,889
Core Market - Slovakia	18,847	586	433	53	32	19,001
Emerging Markets	11,261	153	143	60	4	11,270
Other EU Countries	17,410	421	269	1	1	17,562
Other Industrialised Countries	3,377	61	40	0	2	3,397
<b>Grand Total</b>	<b>230,413</b>	<b>6,201</b>	<b>4,306</b>	<b>897</b>	<b>199</b>	<b>232,308</b>

Table 25: Credit Risk – Gross and net credit risk exposure, credit risk adjustments, write-offs and credit risk charges by significant areas (Art. 442 (h) CRR and in line with EU CR1-C EBA/GL/2016/11)

In the tables below past due credit exposure is reported by financial instruments, countries and exposure classes.

### Past due exposure by financial instruments

in EUR million	<= 30 days	> 30 days <= 60 days	> 60 days <= 90 days	> 90 days <= 180 days	> 180 days <= 1 year	> 1 year	Total overdue
Loans and advances	2,087	378	199	266	391	1,597	4,918
Debt securities	1	13	0	0	0	0	14
<b>Total</b>	<b>2,087</b>	<b>392</b>	<b>199</b>	<b>266</b>	<b>391</b>	<b>1,597</b>	<b>4,932</b>

Table 26: Credit Risk – Past due gross credit risk exposure by financial instrument (EU CR1-D EBA/GL/2016/11)

### Past due exposure by exposure classes

in EUR million	<= 30 days	> 30 days <= 60 days	> 60 days <= 90 days	> 90 days <= 180 days	> 180 days <= 1 year	> 1 year	Total overdue
Central Governments and Central Banks	0	13	0	0	0	0	14
Institutions	15	0	0	0	0	0	16
Corporate	464	62	58	94	86	485	1,250
Retail	657	150	74	102	154	678	1,817
Equity	0	0	0	0	0	0	0
Other	4	0	0	0	0	0	4
<b>IRB Approach Total</b>	<b>1,141</b>	<b>226</b>	<b>133</b>	<b>196</b>	<b>241</b>	<b>1,164</b>	<b>3,100</b>
Central Governments and Central Banks	8	0	0	0	0	0	9
Regional governments or local authorities	17	2	1	0	0	1	21
Public Sector Entities	2	2	5	0	0	0	9
Multilateral Development Banks	0	0	0	0	0	0	0
International Organisations	0	0	0	0	0	0	0
Institutions	128	0	0	0	0	0	128
Corporates (including secured by immovable properties)	220	34	4	0	1	2	261
Retail (including secured by immovable properties)	526	80	31	8	2	2	649
Exposures in default	37	47	26	62	147	428	747
Equity exposures	0	0	0	0	0	0	0
Other items	8	0	0	0	0	1	9
<b>Standardised Approach Total</b>	<b>947</b>	<b>166</b>	<b>66</b>	<b>70</b>	<b>150</b>	<b>434</b>	<b>1,832</b>
<b>Total</b>	<b>2,087</b>	<b>392</b>	<b>199</b>	<b>266</b>	<b>391</b>	<b>1,597</b>	<b>4,932</b>

Table 27: Credit Risk – Past due gross credit risk exposure by exposure class (Art. 442 (g) CRR)

## Past due exposure by significant geographical areas

in EUR million	<= 30 days	> 30 days <= 60 days	> 60 days <= 90 days	> 90 days <= 180 days	> 180 days <= 1 year	> 1 year	Total overdue
Core Market - Austria	407	83	45	30	66	380	1,009
Core Market - Croatia	314	85	42	84	156	408	1,090
Core Market - Czech Republic	151	42	20	27	36	140	415
Core Market - Hungary	242	27	20	22	24	90	425
Core Market - Romania	328	80	37	36	28	241	751
Core Market - Serbia	94	4	1	2	2	27	129
Core Market - Slovakia	362	36	24	42	62	183	709
Emerging Markets - Asia	0	0	0	0	0	0	0
Emerging Markets - Latin America	1	0	0	0	0	0	1
Emerging Markets - Middle East/Africa	34	0	0	0	0	0	34
Emerging Markets - SE Europe/CIS	101	20	4	6	9	51	192
Other EU Countries	53	13	6	16	8	72	168
Other Industrialized Countries	3	0	0	0	0	5	8
<b>Total</b>	<b>2,087</b>	<b>392</b>	<b>199</b>	<b>266</b>	<b>391</b>	<b>1,597</b>	<b>4,932</b>

Table 28: Credit Risk – Past due gross credit risk exposure by significant geographical area (Art. 442 (h) CRR)

In order to show comprehensive picture of the asset quality table below presents split of credit exposure to performing and non-performing parts, including additional information on defaulted and impaired volumes.

## Asset quality by financial instruments

in EUR million	Gross Exposure	of which performing						of which non-performing						Accumulated impairment and provisions and negative fair value adjustments due to credit risk		Collaterals and financial guarantees received	
		past due (30-90) dpd				of which forborne				Total defaulted				Performing Exposure		Non-performing exposure	
		Total	of which forborne	of which impaired	of which forborne	Total defaulted	of which impaired	of which forborne	of which forborne	Total defaulted	of which impaired	of which forborne	of which forborne	Total forborne	of which forborne	Total	of which forborne
Debt securities	34,171	34,158	14	4	13	13	13	0	-3	1	8	0	0	0	0	0	0
Loans and advances	160,620	154,853	513	1,182	5,767	5,682	5,563	1,843	706	42	3,272	928	1,784	1,253	1,253	1,253	1,253
Off-balance	41,823	41,310	0	36	513	505	0	142	137	0	186	14	97	50	50	50	50
<b>Total</b>	<b>236,613</b>	<b>230,321</b>	<b>527</b>	<b>1,221</b>	<b>6,292</b>	<b>6,201</b>	<b>5,577</b>	<b>1,984</b>	<b>840</b>	<b>43</b>	<b>3,466</b>	<b>943</b>	<b>1,881</b>	<b>1,303</b>	<b>1,303</b>	<b>1,303</b>	<b>1,303</b>

Table 29: Credit Risk – Defaulted, impaired credit risk exposure supplemented with the information on non-performing and forborne exposure (EU CR1-E EBA/GL/2016/11)

In the table above the difference between non-performing exposure and defaulted exposure is related to non-defaulted part of nonperforming forbearance portfolio.

## Change of specific credit risk adjustments

in EUR million	Specific credit risk adjustment of defaulted exposure
<b>Opening balance</b>	<b>4,219</b>
Increases due to amounts set aside for estimated loan losses during the period	1,671
Decreases due to amounts reversed for estimated loan losses during the period	-1,467
Decreases due to amounts taken against accumulated credit risk adjustments	-817
Transfers between credit risk adjustments	-18
Impact of exchange rate differences	53
Business combinations, including acquisitions and disposals of subsidiaries	2
Other adjustments	-188
<b>Closing balance</b>	<b>3,455</b>
Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	192
Specific credit risk adjustments recorded directly to the statement of profit or loss	-80

Table 30: Credit Risk – Changes in the stock of specific credit risk adjustments held against defaulted exposures (Art. 442 (i) CRR and in line with EU CR2-A EBA/GL/2016/11)

Specific risk provisions (held against defaulted exposures) decreased by EUR 642 million, or 15.7%, throughout the financial year largely in line with the overall decrease of the NPL portfolio. The continued, focused resolution of non-performing loans as well as the positive macroeconomic developments supported this trend. Compared with last year, allocations and releases of specific credit risk adjustments remained stable while usage of risk provision decreased significantly.

## Yearly development of defaulted exposures

in EUR million	Gross carrying value defaulted exposures
<b>Opening balance</b>	<b>6,989</b>
Loans and debt securities that have defaulted or impaired since the last reporting period	1,649
Returned to non-defaulted status	-549
Amounts written off	-897
Other changes	-992
<b>Closing balance</b>	<b>6,201</b>

Table 31: Credit Risk – Changes in the stock of defaulted exposures (EU CR2-A EBA/GL/2016/11)

Credit risk exposure towards defaulted clients is significantly improving over the period. New defaults have been recorded in the amount of EUR 1,649 million, mainly in Corporate segment. However, the main driver of the decrease are write-offs performed during the year. The most significant clean-up actions are performed in CEE countries and majority of it is related to the Corporate segment. Other changes that resulted in this positive trend were recoveries (including from NPL sales).

# Use of ECAIs

## Scope of application and use of external ratings

### DISCLOSURE REQUIREMENTS Art. 444 (a) (b) (c) (d) CRR

Pursuant to Article 4 (98) CRR, external credit assessment institution (ECAI) means a credit rating agency that is registered or certified in accordance with Regulation (EC) No 1060/2009.

Erste Group generally uses the IRB Approach for determining the minimum capital requirements pursuant to Basel 3. The Standardised Approach is applied to exposures in insignificant business areas and business units as well as when the rollout plan specifies a later date for transition to the IRB Approach. Furthermore, specific legal regulations for certain business segments may trigger the application of the Standardised Approach (e.g. zero weighting for Austrian municipalities).

### STANDARD & POOR'S RATINGS

Erste Group generally uses Standard & Poor's (S&P) ratings. The assignment of the rating grades to credit quality steps is undertaken according to Article 136 CRR.

External ratings are used to a limited extent in some exposure classes to calculate the RWA in the Standardised Approach:

- \_ in case of institutions, if an external rating by an ECAI of the counterparty is available, the risk weight (RW) has to be determined pursuant to Article 120 CRR;
- \_ in case an external rating by an ECAI of the counterparty is not available, the RW has to be determined pursuant to Article 121 CRR;
- \_ in case of central governments and central banks, the RW has to be determined pursuant to Article 114 CRR

In addition, the external ratings published by S&P are used by Erste Group Bank AG as well as by the Austrian subsidiaries for the sub-portfolio of insurance companies of the corporates exposure class. Furthermore, the S&P ratings of securities issuers are used for determining the eligibility of financial collateral according to Article 197 CRR and the calculation of the volatility adjustment pursuant to Article 224 (1) CRR.

### Allocation of external ratings to credit quality steps and risk weights

The allocation of the ratings to credit quality steps is as follows:

Standard & Poor's	Credit quality step
AAA to AA-	1
A+ to A-	2
BBB+ to BBB-	3
BB+ to BB-	4
B+ to B-	5
CCC+ and below	6

Table 32: Allocation of external ratings to credit quality steps (Art. 444 (c) (d) CRR (1/2))

The risk weight allocation depending on the credit quality step and the exposure class is as follows:

Credit Quality Step	Central governments and central banks (Article 114 CRR)	Institutions (Article 121 CRR)	Institutions (Article 120 (1) CRR) long-term	Institutions (Article 120 (2) CRR) short-term	Corporates (Article 122 CRR)
1	0%	20%	20%	20%	20%
2	20%	50%	50%	20%	50%
3	50%	100%	50%	20%	100%
4	100%	100%	100%	50%	100%
5	100%	100%	100%	50%	150%
6	150%	150%	150%	150%	150%

Table 33: Allocation of external ratings to credit quality steps and risk weights (Art. 444 (d) CRR (2/2))

## Quantitative disclosure on credit risk – Standardised Approach

DISCLOSURE REQUIREMENTS Art. 444 (e) CRR

### Regulatory exposure by exposure classes and CRM effects

In EUR million	Exposure before CCF and CRM		Exposure post CCF and CRM		RWA and RWA density	
	On-balance	Off-balance	On-balance	Off-balance	RWA	RWA density
Central Governments and Central Banks	45,112	358	48,696	286	1,184	2.4%
Regional governments or local authorities	4,380	646	6,052	242	374	5.9%
Public Sector Entities	2,657	693	954	191	272	23.8%
Multilateral Development Banks	294	7	353	10	1	0.2%
International Organisations	348	0	348	0	0	0.0%
Institutions	550	158	0	617	140	22.8%
Corporates	5,835	4,974	5,821	2,231	6,250	77.6%
Retail	4,761	721	3,915	224	2,978	72.0%
Exposures secured by mortgages on immovable property	3,270	57	3,269	26	1,224	37.1%
Exposures in default	412	63	394	17	470	114.3%
Exposures associated with particular high risk	98	9	97	7	157	150.0%
Covered bonds	18	0	18	0	3	18.8%
Collective investment undertakings (CIUs)	121	0	121	0	67	55.6%
Equity exposures	467	0	467	0	580	124.1%
Other items	2,948	4	2,986	1	1,811	60.6%
<b>Total</b>	<b>71,274</b>	<b>7,689</b>	<b>73,493</b>	<b>3,852</b>	<b>15,511</b>	<b>20.1%</b>

Table 34: Standardised approach – Credit risk exposure and CRM effect (Art. 453 (f) (g) CRR and in line with the EU CR4 EBA/GL/2016/11)

Exposure before CCF and CRM is regulatory exposure net of credit risk adjustments, before application of credit conversion factor to off-balance and before application of the credit risk mitigation techniques. Exposure post CCF and CRM is exposure on which RW% are applied and table below presents its breakdown.

### Regulatory exposure by exposure classes and risk weights

In EUR million	Risk weights													Total	Unrated
	0%	2%	10%	20%	35%	50%	70%	75%	100%	150%	250%	Other	Deducted		
Central governments or central banks	48,165	0	0	2	0	10	0	0	671	0	135	0	0	48,983	38,591
Regional governments or local authorities	5,210	0	0	915	0	0	0	0	168	0	0	0	0	6,293	5,263
Public Sector Entities	1,042	0	0	60	0	15	0	0	24	0	0	5	0	1,146	764
Multilateral Development Banks	360	0	0	3	0	0	0	0	0	0	0	0	0	363	363
International Organisations	348	0	0	0	0	0	0	0	0	0	0	0	0	348	348
Institutions	317	11	0	222	0	33	0	0	31	0	0	3	0	617	459
Corporates	2,461	0	0	45	10	117	0	126	5,237	0	0	56	0	8,052	7,666
Retail	761	0	0	29	37	76	169	3,063	0	0	0	3	0	4,139	4,139
Exposures secured by mortgages on immovable property	244	0	0	536	1,671	618	59	0	18	0	0	150	0	3,295	3,295
Exposures in default	103	0	0	0	0	0	0	0	217	90	0	0	0	411	411
Exposures associated with particular high risk	7	0	0	0	0	0	0	0	0	94	0	4	0	104	104
Covered bonds	0	0	2	16	0	0	0	0	0	0	0	0	0	18	18
Collective investment undertakings (CIUs)	13	0	9	0	0	80	0	0	20	0	0	0	0	121	121
Equity exposures	90	0	0	0	0	0	0	0	377	0	1	0	0	467	412
Other items	2,088	0	0	6	0	84	0	15	759	0	0	36	0	2,987	2,987
<b>Total</b>	<b>61,209</b>	<b>11</b>	<b>11</b>	<b>1,834</b>	<b>1,719</b>	<b>1,032</b>	<b>228</b>	<b>3,204</b>	<b>7,521</b>	<b>184</b>	<b>135</b>	<b>257</b>	<b>0</b>	<b>77,345</b>	<b>64,943</b>

Table 35: Standardised approach – Credit risk exposure by risk weights (Art. 444 (e) CRR and in line with EU CR5 EBA/GL/2016/11)

In the table above, under column Unrated, exposures for which credit risk assessment by a nominated ECAI is not available and for which specific risk weights are applied depending on their exposure class.

# Leverage

## Leverage ratio

### DISCLOSURE REQUIREMENTS Art. 451 (1) (a) CRR

The leverage ratio represents the relationship between Tier 1 capital and the leverage exposure pursuant to Article 429 CRR, more specifically the Delegated Regulation (EU) 2015/62 with regard to leverage ratio (Delegated Act) of 10 October 2014, which was published in the Official Journal of the European Union on 17 January 2015. Essentially, the leverage exposure represents the sum of unweighted on-balance sheet and off-balance sheet positions considering valuation and risk adjustments as defined in the Delegated Act.

As of 31 December 2017, the leverage ratio for Erste Group Bank AG at consolidated level amounted to 6.6%, comfortably above the 3.0% minimum requirement expected to apply from 2018. The ratio is calculated on period-end values as of 31 December 2017 for both leverage exposure and Tier 1 capital, while the Tier 1 capital is determined based on fully-fledged CRR definitions, i.e. not including any transitional provisions.

## Leverage exposure breakdown and reconciliation

### DISCLOSURE REQUIREMENTS Art. 451 (1) (a) (b) (c) CRR

Erste Group discloses its CRR leverage ratio in accordance with the Commission Implementing Regulation (EU) 2016/200 which specifies implementing technical standards for the disclosure of the leverage ratio<sup>2</sup>.

The table below provides a reconciliation of the Group's published financial statements to the total leverage ratio exposure as of 31 December 2017:

in EUR million	Category	Applicable Amount
1	Total assets as per published financial statements	220,659
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	619
4	Adjustments for derivative financial instruments	5,084
5	Adjustments for securities financing transactions (SFTs)	461
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	14,818
7	Other adjustments	-7,034
8	<b>Leverage ratio total exposure measure</b>	<b>234,606</b>

Table 36: Reconciliation of accounting assets and leverage ratio exposure (Art. 451 (1) (b) CRR / Table LRSum)

Under IFRS accounting standards, Erste Group does not recognise fiduciary items on its balance sheet. As such, there are no derecognised fiduciary items in accordance with Article 429 (13) CRR. Equally, there are no adjustments for intragroup exposures as disclosure is at consolidated Group level. Article 429(14) CRR is not applicable to Austrian banks; therefore, no exclusions to the leverage ratio exposure in accordance with this article apply<sup>3</sup>.

<sup>2</sup> Items included in the prescribed disclosure tables which are not relevant for Erste Group are omitted from the tables disclosed in this section in order to improve the readability of the information. As a consequence, the numbering of rows in the tables may not be consecutive.

<sup>3</sup> As a result, rows relating to these items have been excluded from all disclosure tables

The following table provides a breakdown of the total leverage exposure measure into its main constituent parts as well as the calculation of the period-end leverage ratio as of 31 December 2017.

in EUR million		CRR leverage ratio exposures
<b>On-balance sheet exposures (excluding derivatives and SFTs)</b>		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	208,603
2	(Asset amounts deducted in determining Tier 1 capital)	-1,968
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	206,635
<b>Derivative exposures</b>		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	3,360
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	1,601
EU-5a	Exposure determined under Original Exposure Method	44
9	Adjusted effective notional amount of written credit derivatives	500
11	Total derivative exposures (sum of lines 4 to 10)	5,505
<b>SFT exposures</b>		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	7,187
14	Counterparty credit risk exposure for SFT assets	461
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	7,648
<b>Other off-balance sheet exposures</b>		
17	Off-balance sheet exposures at gross notional amount	42,678
18	(Adjustments for conversion to credit equivalent amounts)	-27,860
19	Other off-balance sheet exposures (sum of lines 17 to 18)	14,818
<b>Capital and total exposure measure</b>		
20	Tier 1 capital	15,440
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19)	234,606
<b>Leverage ratio</b>		
22	Leverage ratio	6.6%

Table 37: Leverage ratio common disclosure (Art. 451 (1) (b) CRR / Table LRCom)

The following table provides a breakdown of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures) by exposure class as of 31 December 2017:

in EUR million	Category	CRR Leverage Ratio Exposures
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures), of which:	208,603
EU-2	Trading book exposures	4,110
EU-3	Banking book exposures, of which:	204,493
EU-4	Covered bonds	1,195
EU-5	Exposures treated as sovereigns	55,053
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	2,629
EU-7	Institutions	3,121
EU-8	Secured by mortgages / immovable property	42,898
EU-9	Retail exposures	39,535
EU-10	Corporate	46,870
EU-11	Exposures in default	2,277
EU-12	Other exposures (e.g. equity, securitisations and other non-credit obligation assets)	10,915

Table 38: Split-up of on-balance sheet exposures (Art. 451 (1) (b) CRR / Table LRSpl)

## Management of the risk of excessive leverage

### DISCLOSURE REQUIREMENTS Art. 451 (1) (d) CRR / Table LRQua

The focus of Erste Group's business model, in line with its stated strategic objectives, is on retail and corporate lending businesses. Therefore, the Group's leverage exposure is mainly driven by on-balance sheet and off-balance sheet credit-related exposures with limited impact from derivatives and securities financing transactions. As a result, the risk of excessive leverage is mitigated by Erste Group's solid and diversified business model. Since the lending-focused business model results in a relatively high RWA density (defined as RWA/leverage exposure), the risk-based capital requirements (capital requirements expressed as a percentage of total RWA) rather than the leverage ratio currently represent the primary capital constraint for the business activities of Erste Group.

This notwithstanding, the leverage ratio is planned as part of the annual forecasting and budgeting process and also represents a core risk metric included in the Group RAS with defined RAS thresholds, which, when breached, trigger management discussions and actions to manage and control excessive leverage. As a RAS metric, the development of the Group leverage ratio is regularly monitored by the management board (reported in the Group Risk Report) and the supervisory board (reported in the Group Risk Report and RAS Monitor).



Local leverage ratio limits and triggers are also defined in the Local RAS by relevant local entities and monitoring is undertaken at local entity level.

## **Factors influencing the development of leverage exposure**

DISCLOSURE REQUIREMENTS Art. 451 (1) (e) CRR / Table LRQua

The Leverage ratio increased by 40 basis points to 6.6% driven by Tier 1 capital increase which was partially offset by growth in leverage exposure. Tier 1 capital increased by 12.3% or by EUR 1.7 billion mainly due to the inclusion of the profit for the year and additional tier 1 capital issuance of EUR 500 million in April 2017. The overall leverage exposure increased by 5.2% to EUR 235 billion. This change was mainly driven by an increase in on-balance sheet primarily as a result of business and loan growth in the retail and corporate segments as well as increased reverse repo transactions.

# Use of the IRB Approach to credit risk

## Approved approaches and transitional rules by the regulator

### DISCLOSURE REQUIREMENTS Art. 452 (a) CRR

Erste Group was authorised by the Austrian Financial Market Authority (FMA) and Oesterreichische Nationalbank (Austrian central bank) to calculate risk-weighted exposure amounts for credit risk using the IRB Approach as of 1 January 2007.

The following segments fall under the Foundation IRB Approach:

- \_ Institutions
- \_ Sovereigns (exposures to central governments and central banks of the Member States and their regional governments, local authorities and public sector entities assigned with a 0% risk weight remain under the Permanent Partial Use)
- \_ Corporates
- \_ Specialised Lending - Slotting Criteria approach

The following segment falls under the Advanced IRB Approach:

- \_ Retail

For the equity portfolio, the grandfathering option is applied to all investments made up to 31 December 2007. For equity exposures entered into after 31 December 2007, the PD/LGD approach is applied. Equity exposures without a valid rating grade are treated under the simple risk weight method. Erste Group Bank AG, as the ultimate parent credit institution, and the subsidiary institutions of Erste Group uniformly apply the IRB Approach pursuant to Article 143 CRR.

The authorisation by the supervisory authorities was issued for an indefinite period of time.

## IRB OFFICIAL NOTICES AND IRB ROLL-OUT PLAN

### IRB official notice for single banking entities and at consolidated level in Austria

The following savings banks in the cross-guarantee system and domestic operating subsidiaries of Erste Group were audited locally by the FMA/OeNB and received approval to apply the IRB Approach indefinitely as of 1 January 2007 or later:

#### IRB approval with application starting from 1 January 2007

- \_ Erste Group Bank AG
- \_ Allgemeine Sparkasse Oberösterreich Bank AG
- \_ Dornbirner Sparkasse Bank AG
- \_ Kärntner Sparkasse AG
- \_ Sparkasse Imst AG
- \_ Sparkasse Niederösterreich Mitte West AG
- \_ Steiermärkische Bank und Sparkassen AG
- \_ Tiroler Sparkasse Bank AG Innsbruck
- \_ Bausparkasse der österreichischen Sparkassen AG
- \_ Sparkasse Baden
- \_ Sparkasse Bregenz Bank AG
- \_ Sparkasse Herzogenburg-Neulengbach Bank AG
- \_ Lienzer Sparkasse AG
- \_ Salzburger Sparkasse Bank AG
- \_ Sparkasse Bludenz Bank AG
- \_ Sparkasse der Stadt Feldkirch
- \_ Sparkasse Korneuburg AG
- \_ Sparkasse Frankenmarkt AG
- \_ Sparkasse Hainburg-Bruck-Neusiedl AG
- \_ Sparkasse Horn-Ravelsbach-Kirchberg AG
- \_ Waldviertler Sparkasse Bank AG
- \_ Sparkasse der Gemeinde Egg
- \_ Sparkasse der Stadt Amstetten AG
- \_ Sparkasse Eferding-Peuerbach-Waizenkirchen
- \_ Sparkasse Feldkirchen/ Kärnten
- \_ Sparkasse Lambach Bank AG

- \_ Sparkasse Langenlois
- \_ Sparkasse Mühlviertel-West Bank AG
- \_ Sparkasse Mürzzuschlag AG
- \_ Sparkasse Neuhofen Bank AG
- \_ Sparkasse Neunkirchen
- \_ Sparkasse Pöllau AG
- \_ Sparkasse Pottenstein N.Ö.
- \_ Sparkasse Poysdorf AG
- \_ Sparkasse Pregarten – Unterweißenbach AG
- \_ Sparkasse Rattenberg Bank AG
- \_ Sparkasse Scheibbs AG
- \_ Sparkasse Voitsberg-Köflach Bank AG
- \_ Wiener Neustädter Sparkasse
- \_ Bankhaus Krentschker & Co. AG
- \_ Kremser Bank und Sparkassen AG

#### **IRB approval with application from a later date**

- \_ Sparkasse Salzkammergut AG (IRB Official Notice 30 June 2008)
- \_ Erste Bank der oesterreichischen Sparkassen AG (IRB Official Notice 9 August 2008 after the split-off from Erste Group)
- \_ Sparkasse Ried im Innkreis-Haag am Hausruck (IRB Official Notice 20 July 2009)
- \_ s Wohnbaubank AG (IRB Official Notice 1 January 2010)

The following savings banks were granted an individual IRB Official Notice prior to joining the cross-guarantee system that was supplemented when they joined the cross-guarantee system:

- \_ Sparkasse Schwaz AG (IRB Official Notice 28 June 2007 / 29 September 2008)
- \_ Sparkasse Reutte AG (IRB Official Notice 18 April 2007 / 22 September 2008)
- \_ Sparkasse der Stadt Kitzbühel (IRB Official Notice 18 April 2007 / 22 September 2008)
- \_ Sparkasse Mittersill Bank AG (IRB Official Notice 18 April 2007 / 22 September 2008)
- \_ Sparkasse Kufstein, Tiroler Sparkasse von 1877 (IRB Official Notice 18 April 2007 / 1 October 2009)

#### **IRB official notice for single banking entities and at consolidated level for institutions abroad**

The following foreign banks have been audited by the local supervisory authorities on behalf of the FMA and have been granted an indefinite approval to apply the IRB Approach as of 1 January 2007 or later:

- \_ Česká spořitelna, a.s. (IRB Official Notice 1 January 2007)
- \_ Stavební spořitelna Ceske sporitelny a.s. (IRB Official Notice 1 January 2007)
- \_ Erste Bank Hungary Zrt (IRB Official Notice 1 April 2008)
- \_ Slovenská sporiteľňa, a.s. (IRB Official Notice 1 July 2008)
- \_ Erste & Steiermärkische bank d.d., Rijeka (IRB Official Notice for the consolidated level 1 July 2009 and single-entity level 7 October 2011)

#### **IRB official notice at consolidated level only**

The following financial institutions have been audited by the OeNB or by local supervisory authorities on behalf of the FMA and were granted approval to apply the IRB Approach at the consolidated level indefinitely:

- \_ Erste Bank und Sparkassen Leasing GmbH
- \_ Erste Group Immorent AG
- \_ Sparkassen Leasing Süd GmbH
- \_ Sparkassen Leasing Süd GmbH & Co KG

#### **IRB application planned**

The following members of the Group of credit institutions will be gradually included in the application of the IRB Approach, for which a specific rollout plan is in place:

- \_ Banca Comerciala Romana SA
- \_ Waldviertler Sparkasse Bank AG (only business area Czech Market)
- \_ Erste Bank Hungary Zrt (Micro and Specialised Lending Project Finance)

At present, the application of the IRB Approach is not planned for any of the other fully consolidated credit institutions.

## PERMANENT PARTIAL USE

Based on the approval of the FMA, Permanent Partial Use is applicable to the following exposure classes and in the following cases:

- Exposures with respect to the mandatory liquidity reserve with the central institution;
- Exposures with insignificant risk profiles in minor business areas and exposure classes of insignificant volume;
- Exposures in the exposure classes of the federal government, the federal states, municipalities and public sector entities;
- Exposures regarding claims of a credit institution vis-à-vis its parent company, its subsidiaries or a subsidiary of its parent company;
- Investments within the scope of government programmes of the member states to promote specific economic sectors;
- Exposures in the form of mandatory minimum reserves;
- Liabilities and back-to-back guarantees of central governments;
- Investments in companies if the exposures to these companies are assigned a weighting of 0% under the credit risk Standardised Approach.

in EUR million	EAD	% of total	Total TPU EAD	Total TPU EAD (% of total)	Banca Comerciala Romana SA	Erste Bank Hungary Zrt	Waldviertler Sparkasse Bank AG,
Retail-SME secured by immovable property	7,137	3%					
Retail-secured by immovable property	40,489	17%					
Retail revolving	7	0%					
Retail SME non-secured by immovable property	6,028	2%					
Other retail	18,354	8%					
<b>Advanced IRB Approach Total</b>	<b>72,015</b>	<b>30%</b>					
Central governments and central banks	1,393	1%					
Institutions	10,758	4%					
Corporates-SME without supporting factor	20,368	8%					
Specialised lending	15,332	6%					
Other corporates	32,178	13%					
Equity exposures	571	0%					
Securitisation positions	1,025	0%					
Other non-credit obligation assets	6,078	2%					
<b>Foundation IRB Approach Total</b>	<b>87,702</b>	<b>36%</b>					
Central governments or central banks	54,422	22%	5,421	2%	5,421	0	0
Regional governments or local authorities	6,306	3%	672	0%	672	0	0
Public Sector Entities	1,208	0%	3	0%	3	0	0
Multilateral Development Banks	369	0%	0	0%	0	0	0
International Organisations	348	0%	0	0%	0	0	0
Institutions	1,764	1%	131	0%	131	0	0
Corporates	8,145	3%	2,349	1%	2,306	41	1
Retail	4,158	2%	1,566	1%	1,551	14	0
Exposures secured by mortgages on immovable property	3,295	1%	1,683	1%	1,682	0	0
Exposures in default	412	0%	162	0%	160	2	0
Exposures associated with particular high risk	104	0%	75	0%	75	0	0
Covered bonds	18	0%	0	0%	0	0	0
Collective investment undertakings (CIUs)	121	0%	0	0%	0	0	0
Other items	2,987	1%	1,319	1%	1,319	0	0
Equity exposures	467	0%	5	0%	0	0	5
<b>Standardised Approach Total</b>	<b>84,128</b>	<b>35%</b>	<b>13,384</b>	<b>5%</b>	<b>13,320</b>	<b>58</b>	<b>6</b>
<b>Total</b>	<b>243,844</b>	<b>100%</b>					

Table 39: Overview of the EAD figures based on the exposure classes according to the approaches in the rollout plan FIRB, AIRB, TPU, PPU

In the table above EAD figure represents exposure value used as a base for RWA calculation (post CCF and after CRM) and includes exposure under credit risk, counterparty credit risk and securitisation frameworks.

## Rating systems

### DISCLOSURE REQUIREMENTS Art. 452 (b) (i) CRR

A rating system comprises all models, methods, processes, controls, data collection and data processing processes that serve the assessment of credit risks, the allocation of exposures to rating grades and the quantification of default probabilities and loss estimates for certain types of exposures.

The rating systems used by Erste Group meet the requirements for the application of the IRB Approach.

## RATING MODELS

The internal rating models and the estimates of related risk parameters play a key role in credit risk management, in the decision-making processes and in lending operations. Furthermore, they deliver the main determinants for the procedures to assess capital requirements. Erste Group uses empirical-statistical and expert-based model types. A periodic validation ensures the quality of the rating models and risk parameters.

### Empirical-statistical models

Empirical-statistical models of risk assessment require a large data base and are especially suitable for mass market businesses.

Based on sufficiently large empirical data bases (data of a large population from the customer base of the bank), scorecards are developed using logistic regression techniques. The key criterion used for selecting the best scorecard is the accuracy ratio. The accuracy ratio indicates the ability of the scorecard to differentiate between customers with low and high default risk. The result of the scorecard is presented as a rating grade, which is associated with a probability of default estimate.

The key element in rating models applied to retail portfolios is the assessment of account behaviour, which is updated on a monthly basis. This enables continuous risk monitoring of customer portfolios in the retail banking business. Furthermore, the rating models also include customer information that is updated at least once a year but in any case when a credit application is made (in the event of a credit decision).

The rating results (rating grades) are verifiable and objective, i.e. if the input information is the same they supply the same rating grade regardless of the individual assessment by the account manager.

Empirical-statistical models are used not only in the retail business, but also in the corporate segment. In the case of corporates, the emphasis is on statistically developed financial ratings (evaluation of financial statement ratios). Apart from the financial rating (hard facts), qualitative customer information (soft facts) also enters into the risk evaluation of corporate customers, which is updated at least once a year.

### Expert-based models

For expert-based models, the empirical-statistical component is not as important – due to the lack of a sufficiently large population of customers in the respective customer segments or a sufficient number of defaulted customers – and is replaced by expert know-how, which takes into account quantitative criteria (e.g. financial statements), qualitative criteria (e.g. market and industry developments), but also macro-economic factors (e.g. country rating).

By helping to assess the specific debtor- and business-specific features, this expert knowledge makes an important contribution to the rating models for the following customer segments: specialised lending, banks (for which the rating model is currently being amended with an empirical-statistical financial rating) and sovereigns.

These rating models ensure a sound assessment of the debtor- and business-specific features, risk differentiation as well as precise and consistent quantitative risk estimates.

## RATING METHODS

### DISCLOSURE REQUIREMENTS Art. 452 (c) CRR

#### Exposure classes of the IRB Approach and applied rating methods

	Empirical-statistical models			Expert-based models			External ratings (ECAIs)
	Rating Private Individuals	Rating SME	Rating Corporates	Rating Specialised Lending	Bank Rating	Country Rating	
Retail	•	•					
Corporate incl. SME, SL		•	•	•	•		
Institutions					•		
Central government and central banks						•	
Equity			•	•	•		
Securitisations							•
Other assets							

Table 40: Map of rating methods (Art. 452 (c) (i) CRR)

The rating methods Bank Rating and Country Rating are used as centralised methods throughout Erste Group without any regional modifications. The rating grades are determined by Erste Group centrally and made available to the Group companies.

The other rating methods (Rating Private Individuals, Rating SME, Rating Corporates and Rating Specialised Lending (Rating SL)) follow uniform modelling guidelines and – where possible – model structures, and feature regional adaptations appropriate to the respective portfolios in the individual Group companies.

For Rating SME, two different type of models, one for single entry bookkeeping and one for double entry bookkeeping are used. For Rating Corporates, two types of models are used with respect to size of the company based on company's annual turnover. For rating models in Specialised Lending, two types of models based on financing object, real estate or project financing are used. For remaining segments there is one model covering the segment.

## **Rating Private Individuals**

### **Classification**

Customers are classified as private individuals according to their occupational status. They are assigned to the rating method Rating Private Individuals in the customer database.

### **Development**

The rating method Rating Private Individuals was developed by experts at Erste Group as an empirical-statistical model. The variants used at the various subsidiaries were developed on the basis of the local customer database, making it possible to take local specifics into account. The rating method is applied in case of applications for a financing decision (e.g. new loan applications) and automatically with-in the monthly update of customer ratings.

### **Rating determinants**

The rating model assigns scores based on demographic information, account data (e.g. debit balances and days in overdraft), product attributes as well as external data (e.g. information supplied by Kreditschutzverband, an Austrian creditor protection association, or other credit reference agencies). The assessment of account behaviour is performed monthly and provides an essential input for timely risk assessment. Analyses done in the case of applications take into account not only the input factors for the rating, but also the current customer information on their income and expenditure.

### **Outputs of the rating process**

Based on a scorecard, every private individual is assigned a rating grade on a rating scale of 8 grades. The customers with rating grade A1 have the lowest and customers with rating grade D2 have the highest PD. The customer rating serves as the basis for the calculation of capital requirements and is an indicator for the credit decision and the lending terms. Private individual ratings derived from the analysis of the loan application, which includes all loans granted and applied for, are an integral part of the decision recommendation. Rating grades of customers are updated at the monthly reappraisal of account behaviour. The monthly processing of customer and account data is also the basis for the early warning system. The early warning list supplies account managers with valuable information on current risk assessments and also contains private individuals of substandard creditworthiness because of specific customer or account features. Such customers may include, for example, those with regular overdrafts or customers that have been sent reminders.

## **Rating SME**

### **Classification**

The rating method Rating SME (incl. small commercial customers and independent professionals) is applied to SMEs with sales revenues of up to EUR 5 million as well as to independent professionals.

### **Development**

The SME rating procedure was developed at Erste Group. Statistically-derived rating models are used in all subsidiaries. In principle, the PD for SME customers and independent professionals must be determined taking into account the financial situation before and after the financing being applied for. This Basel requirement is complied with by means of an online rating initiated manually for determining the current rating grade and the rating in the case of a loan application (rating by type of financing). In addition to the online rating, there is also a monthly batch rating in which the current rating grade is determined based on behaviour. This automatically updates the rating grade (based on an evaluation of account behaviour and any available external information).

### **Rating determinants**

According to differences in income patterns, the method is broken down into three sub-groups: customers using double-entry bookkeeping, customers using single-entry book-keeping and customers using simplified accounting. Depending on these accounting types, the following six rating determinants apply:

- \_ Double-entry book-keeping: From the analysis of financial statements, condensed information is extracted (financial rating) that can be adjusted by entering any corrections relevant to financial strength (such as hidden reserves or liabilities).
- \_ Single-entry book-keeping: A financial rating is also calculated based on the statement of income and expenses.

- Asset and liability status: The asset and liability position may be considered in the financial rating for customers that use single-entry book-keeping. For customers using simplified accounting, it is used to calculate a debt ratio, which in turn is considered in the overall rating.
- Qualitative factors: Qualitative factors make it possible to take into account input factors that cannot be derived directly from financial statements. Examples are management, accounting practices, market and its trends, and external information (credit bureau notifications).
- Account behavior: Particular attention is paid to account behavior, which is automatically assessed and updated on a monthly basis. The evaluation considers and scores, for example, the incidence of payment difficulties, account balances and the extent to which available credit and overdraft facilities are used.
- Creditworthiness based on cash flow considerations: Finally, the ability to service debts is evaluated. To this end, disposable income derived from the business documentation and from revenue and expenditure accounting is compared to current liabilities.

### Outputs of the rating process

A specific rating grade from a scale of 13 grades is assigned to every SME or professional customer. This customer rating serves as the basis for determining the required regulatory capital, as an indicator for the credit decision and as a factor in credit terms.

## Rating Corporates

### Classification

Corporates, i.e. commercial customers with sales revenues above specified thresholds, are rated by the “Rating Corporates” method. Within the corporate segment a further size differentiation exists. In addition, some locally specific corporate rating methods exist adapted to the nature of certain portfolio segments.

### Development

Rating Corporates was developed at Erste Group. Statistically-derived rating models are used in all subsidiaries.

### Rating determinants

The assignment of ratings for corporates is done systematically both with respect to information on past developments as well as future prospects, with special attention being paid to the relevant customer segment (e.g. whether the customers’ business is capital goods intensive) and the characteristics of the relevant markets (e.g. divergent accounting rules in Eastern European countries).

Rating Corporates is a two-stage process including the assignment of individual customer ratings and group ratings.

- Individual customer rating: The cornerstone is the evaluation of the company’s financials. Based on ratios from the financial statements, a so-called “financial rating” (hard facts) is calculated. This financial rating also takes into account local factors based on the country where the company has its registered office. Another component for rating corporates are qualitative factors (soft facts). Unlike the hard facts that enter into the financial rating, these soft facts also include projections into the future. A company’s potential, opportunities and risks are determined, evaluated and documented according to a standardised procedure.
- Group rating: In a second step, the company is considered within the context of a Group of companies that form an economic unit. A separate customer rating is produced for the Group as a whole. The capacity and the willingness to provide support are analysed, which may have a positive influence on the individual customer rating. Additionally, the Group’s rating is the cap for the rating of the individual customer. Rating caps also result from country ratings.

### Outputs of the rating process

Based on the score, every corporate is assigned a rating grade on a scale of 13 grades. The customer rating serves as the basis for determining the regulatory capital requirement, as an indicator for the credit decision and as a factor in the credit terms and conditions.

## Rating Specialised Lending

### Classification

The Corporates customer category includes the specialised lending customer segment. These are mainly real estate projects (e.g. rental, tourism and for-sale properties) and other project financing (e.g. power plants, infrastructure).

### Rating determinants

Both the hard facts (financial ratios) and the soft facts differ substantially from the rating for general corporates. The indicators include the loan-to-value and the debt service coverage ratio, features of the object financed (e.g. location quality) and project risks.

### Outputs of the rating process

The model output is mapped to the regulatory risk categories in the Supervisory Slotting Approach within the IRB Approach. These categories are the basis for the calculation of the capital requirement.

#### **Bank Rating**

##### Classification

The rating method “Banks” is used to evaluate foreign and domestic banks, investment banks as well as financial institutions belonging to banking groups.

##### Development

The expert-based Bank Rating model was developed and is supported centrally by Erste Group.

A credit institution or financial institution is to be assigned a rating grade if

- \_ a bank overdraft limit is granted;
- \_ there is an exposure vis-à-vis the Group;
- \_ Erste Group has a nostro account with the institution or
- \_ the institution has a loro account with Erste Group with overdraft privileges.

##### Rating determinants

The central component of the bank rating is a peer group comparison on the basis of quantitative, qualitative and country-related criteria. The institution to be analysed is compared with a group of banks of similar size, business activities, geographic location, ownership structure, etc.

The following quantitative data for the institution to be rated are automatically compared by the rating model to the data for the peer group and evaluated:

- \_ profitability (e.g. return on equity)
- \_ liquidity (e.g. deposit base)
- \_ asset quality (e.g. ratio of non-performing loans to gross loans)
- \_ capitalisation (e.g. capital ratio).

The following qualitative criteria are evaluated by the expert analyst:

- \_ likelihood of support (e.g. by the owner or the state)
- \_ importance of the institution for the country’s financial system
- \_ quality of banking supervision
- \_ experience to date
- \_ future potential.

To recognise transfer risk, the country rating of the home country of the bank is also considered in the rating. The model automatically assigns scores depending on the country’s rating.

### Outputs of the rating process

Based on the score achieved in the rating model, every customer from the Bank rating segment is assigned a rating grade on a scale of 13 grades. The rating serves as the basis for the calculation of the limit for the maximum exposure that the bank is prepared to enter into with a given customer. The rating grade must be stated in every limit and credit application. After approval of the rating, the rating grade is made available to all member institutions of Erste Group.

#### **Country Rating**

##### Classification

The rating method Country Rating is a rating for the sovereign and, at the same time, covers central governments, central banks and institutions guaranteed by the central government.

##### Development

The expert-based country rating model was developed in 1992/1993, adapted after the Asian crisis (1997/1998) and implemented in 2001 and subsequently adjusted as a consequence of the financial crisis 2008/2009. External ratings do not enter into the model as input factors. The rating reflects the risk of a default in foreign currency and thus primarily represents the transfer risk (risk arising from cross-border transactions). The country ratings are determined centrally by Erste Group with binding effect for the entire Group (generally quarterly, at least once a year) and are made available to the Group entities.



### Rating determinants

Two groups of countries are distinguished: industrialised nations and emerging markets. The reason for the distinction is that foreign debt and debt service play an important role in emerging markets, but are of minor importance as indicators in established industrialised countries. For industrialised countries, the Maastricht criteria are used as indicators to help determine creditworthiness.

The emerging markets model contains 18 indicators. Of these, 12 are quantitative and 6 qualitative indicators. Eight further quantitative indicators are indirectly incorporated via the qualitative variables. The data are obtained from the research organisation Economist Intelligence Unit. The qualitative indicators have a weighting of about 40%.

### Outputs of the rating process

Based on the score achieved in the rating model, every customer from the Country Rating segment is assigned a rating grade on a scale of 13 grades. The country rating assigned is a key factor for determining the limits for countries and their sovereign institutions. Usually, the country rating serves as a cap for the assessment of the companies located in a given country (“sovereign ceiling”); exceptions exist, for example, when sovereign powers are transferred to higher-ranking supranational organisations (e.g. in the euro zone).

### External ratings (ECAIs)

External ratings are used for securitisations only.

## RELATION BETWEEN INTERNAL AND EXTERNAL RATINGS

### DISCLOSURE REQUIREMENTS Art. 452 (b) (i) CRR

All IRB rating models currently in use at Erste Group are internally-developed models. External ratings are not used directly for internal ratings and are used as input factors only in the Corporates model. For the segment “Large Corporates”, the valuation of the soft fact “capacity for raising external capital” takes external ratings into consideration, if available. Therefore, external ratings play almost no role in the internally-developed rating models and do not influence the rating grades that result from the model.

## RATING PROCESS

Mandatory elements of any rating process are defined group-wide. These include:

- \_ A definition of persons who are authorised to assign ratings
- \_ A definition of rating and re-rating triggers
- \_ The rating method assignment
- \_ The rating approval process
- \_ A regulation of manual override of a rating
- \_ Mandatory downgrading rules in case of outdated financial information
- \_ A synchronization process for ratings of the same client in different entities

### Assignment of customers to an internal rating method

Clients are assigned a rating method according to the Basel customer class (i.e. portfolio) to which they have been allocated. The criteria for the selection of the rating method include factors such as occupational status, type of determination of income (i.e. whether the client uses simplified accounting, single-entry or double-entry book-keeping), the company’s legal form and its size as expressed by operating income.

For the Equity asset class, no special rating methods are used. The same rating methods are used for equity positions as for customers in the exposure classes Corporates and Institutions.

### Rating by the selected method

#### Decentralised methods

Under the decentralised methods – Rating Private Individuals, Rating SME, Rating Corporates, and Rating SL – the input data needed for the rating is entered into the IT system by the account manager or the risk manager or is inferred from historical data on payment and account behaviour. The result is a computer-assisted rating grade.

#### Centralised methods

The centralised approaches are the rating methods Bank Rating and Sovereign Rating. The input data is captured by central specialised departments; the process results in an internal rating grade.

### Rating confirmation by risk management

As a main principle, the rating determined based on any of these methods must be confirmed by the risk management function. The only exceptions are certain assets in the retail portfolio, where the risk management decision may be derived from an automation-assisted rating result (unless this is manually overridden).

## CONTROL MECHANISMS FOR RATING SYSTEMS

DISCLOSURE REQUIREMENTS Art. 452 (b) (iv) CRR

### Independent validation

Every new IRB model developed must be validated prior to use by the independent validation function. Compliance with development standards and the quality of the results are assessed based on documented validation standards.

The final decision on a model's use is taken by the Holding Model Committee (HMC).

The rating systems are regularly validated and reviewed by Model Validation by means of a standardised validation process carried out annually. The validation comprises the following methods (as applicable):

- \_ review of the documentation of the rating method
- \_ review of the basic assumptions underlying the models (representativeness)
- \_ testing of the data quality
- \_ testing of the correlations and the multi-collinearity structure
- \_ benchmarking based on external ratings
- \_ testing of the discriminatory power of the rating method
- \_ testing of the discriminatory power of the rating method in sub-portfolios
- \_ testing of the coefficients of the risk variables
- \_ review of the distribution of rating grades
- \_ testing of migration matrices
- \_ testing of calibration
- \_ analysis of manual overrides of model results.

The validation methods comprise qualitative methods (data quality, model design, overrides) and quantitative methods (discriminatory power, stability, calibration) with the results being presented on the basis of objective assessment criteria. If the validation of a rating model reveals a weakness, appropriate actions are agreed to remediate the relevant deficiencies; for example further analysis, re-calibration, partial or full re-development as necessary.

Apart from the rating model, the rating process is also reviewed. This review comprises an evaluation of the model's coverage of the portfolio (lacking/overdue ratings) and of cross-portfolio migration (rating method switching). In this case as well, measures are developed and implemented to address any shortcomings.

### Review of the rating systems in use by exposure segment

The usage of rating method is determined depending on the customer classification:

- \_ retail
- \_ corporates
- \_ banks
- \_ sovereigns

Every customer is assigned to a specific rating method. This allocation process is highly automated to keep the percentage of manual decisions as low as possible. It includes a number of checks executed by the IT system, e.g. the permanent monitoring of the criteria occupational status, operating income, legal form and industry code, which are needed for the automated allocation of rating methods to customers.

The checks conducted by the system for plausibility and correct completion of the data entry fields inform the user of any errors by sending a warning or error message. Ensuring data quality is done by special periodic evaluations. The responsibility for the correct application of the rating methods and correct data entry ultimately lies with the local level, from the account managers to the persons responsible in operative risk management departments.

## KEY ROLES AND RESPONSIBILITIES IN RATING SYSTEM LIFE-CYCLE

### Model Development

Main principle of Model Development is a “Subsidiarity model” approach. It means that as a rule, responsibilities are assigned to the lowest level that can effectively execute, i.e.:

- \_ Model development is executed by large local banks for their local models locally;
- \_ Models of smaller local banks are developed by the Holding.
- \_ All group-wide models are developed by the Holding.

The Holding is responsible to set standards for the development of all models and provides methodological support to ensure consistency within the Group. A subsidiarity model for model development is therefore balancing development efforts between the Holding and local banks and is simplifying tailoring of approaches to local requirements and data situation. This design fosters local acceptance and ownership and facilitates involvement of local experts and business stakeholders.

### Model Validation

Model validation is organized in a “Hub-and-Spoke” model, which means that all validation responsibilities are bundled within the Holding validation unit, but local banks remain responsible for the sign-off of the results and for taking appropriate remediation action when necessary. Such design ensures independence and control of model validation, as well as enforce adherence to uniform standards. The local responsibility for sign-off implicitly requires local understanding of the validation results and of the actions required for the remediation.

### Model Approval

Model approval is carried out via a dual approach - corresponding Holding and local committee structures to reflect joint responsibilities. Responsibilities are assigned depending on the model perimeter: the ultimate responsibility for all models used within the Group (at consolidate levels) lies with the Group CRO. Notwithstanding this, local models used (incl. local ‘usage’ of group-wide models) lies within the responsibility of the local CROs. A formal local and Holding approval is implemented, via a tailored committee structure. This setup for model approval reflects ownership requirements across Group entities.

### Model Monitoring

Model monitoring is following a “subsidiarity model” analogue to model development:

- \_ Local banks are monitoring local models, incl. local use of group-wide models, both large and smaller local banks.
- \_ Holding monitors group-wide models.

A subsidiarity model for model monitoring fosters synchronization with model development and ensures close local oversight and understanding of models through proximity to local business and local use of models. Holding remains responsible for setting the standards and approach for model monitoring to ensure a consistent application throughout the Group. This enables group-wide oversight and benchmarking of similar models across the Group, as well as appropriate reporting at both levels.

### Internal Audit

Internal audit or another comparable independent auditing unit shall review at least annually the institution's rating systems and its operations, including the operations of the credit function and the estimation of PDs, LGDs, ELs and conversion factors (according to the CRR, Article 191).

In order to allow an objective assessment, the internal audit function is granted an adequate level of independence from the reviewed processes and units in order to ensure that:

- \_ there is an effective separation between the staff performing the internal audit function and the staff involved in the operation of the internal models; model development, model validation and the relevant business area;
- \_ the internal audit reports directly to the management body; and
- \_ no undue influence is exerted on the staff responsible for the audit conclusions.

Independence between internal audit and risk management functions is ensured by the separation up to the board level (audit - CEO, risk management - CRO). Ensuring that internal audit provides independent and objective assurance on risk management is vital for risks to be managed effectively.

Audit's assessment includes a confirmation of the fulfilment of tasks of quantitative nature performed by the units responsible for development and initial validation of the rating model(s) according to CRR (Article 191), RTS (Article 17) and internal requirements.

## DEFINITIONS, METHODS, AND DATA FOR THE ESTIMATION AND VALIDATION OF THE RISK PARAMETERS

DISCLOSURE REQUIREMENTS Art. 452 (c) (i) CRR

### Probability of default

The PD represents the probability that a given customer will default within the subsequent twelve months (one-year PD). The PD is estimated internally for the portfolios Retail, Corporates, Banks and Sovereigns.

The one-year PD is estimated per rating grade by a method developed by Lando and Skødeberg (Lando Method). The Lando Method permits the determination of default and migration probability matrices for any desired period. An advantage of this method is that it also covers indirect defaults. This means that even a very good rating grade in which no customers defaulted historically can have a PD greater than zero when applying this method. Additionally, when estimating PD, a safety margin or margin of conservatism is added for each portfolio in order to ensure a conservative estimate as per IRB Approach standards.

PDs for low default portfolios are calculated based on long term average default experience in the default rates. The estimations include conservative margins defined by the regulations. The regulatory floors on the minimal level of PD are applied. The difference between PDs and actual default rates arise due to long term average nature of PDs and conservative margins defined in the regulation that are applied in the PD estimation.

The validation of the PDs employs both qualitative and quantitative methods:

- \_ review of the documentation
- \_ review of the underlying model assumptions
- \_ testing of data quality
- \_ analysis of time series
- \_ back-testing

In the quantitative validation, the estimated PDs are validated using the binomial test (back-testing). This involves comparing actual default rates with estimated probabilities of default. Qualitative methods comprise population distribution tests, time-series analysis of default rates and analysis of raw data. Both the qualitative and quantitative validation is performed annually in conjunction with the validation of the rating models by the independent validation function. Where appropriate, improvement measures are initiated depending on the results. The same also applies to the risk parameters LGD and CCF described below.

The table below shows the estimated PDs per rating method compared to actual default rates (back-testing). The figures are derived from the number-weighted average across all Group member banks which apply the IRB Approach, for each time period given. For the rating method Country Rating, all countries rated by Erste Group are used for the PD estimate and the default rate calculation because of the small number of countries involved, while otherwise only customers with exposure were considered as relevant. From a Group-wide perspective, the PD estimates are generally higher than the actual default rates, confirming the conservativeness of the estimates .

Customer class	Arithmetic average PD by obligors	Average historical annual default rate
Country rating	2.16%	0.50%
Bank rating	1.10%	0.24%
Rating Corporates	2.14%	1.88%
Rating SME	2.35%	1.89%
Rating of private individuals	2.46%	1.92%

Table 41: Back-testing PD (Art. 452 (i) CRR (1/3))

PD is calculated at client level; hence Erste Group omitted the segmentation by exposure class within the retail portfolio (private individuals and SMEs) due to comparison reasons.

### Loss given default

LGD is currently estimated at Erste Group only for the retail portfolio for Pillar 1 purposes. LGD is defined as the expected economic loss after recoveries (from collateral and other repayments) as a percentage of EAD. Depending on data availability and local factors (e.g. processes, business needs), modelling is based either on a total recovery rate or on a combination of a redemption recovery rate (customer repayments) and a collateral recovery rate (proceeds of realisation of collateral). Depending on credit exposure, LGD is calculated taking into account proportionately allocated costs and a margin of conservatism. The risk drivers are identified, homogenous segments (pools) formed and a recovery rate calculated for every segment. This rate is directly incorporated into the modelling and estimation of LGD.

LGDs for low default portfolios are estimated both on closed exposures and the exposures that are currently in the workout phase. The remaining expected LGDs on workout cases are calculated based on the models that use both experience from closed exposures as well as workout strategies projections. The time lapse between default event and closure of exposure may differ based on exposure type and may be from few months up to more years of workout process. LGD include regulatory conservative margins as well as down turn regulatory add on.

Regular validation of the LGD risk parameter is performed by the independent validation function once a year, using both qualitative and quantitative methods:

- \_ review of the documentation
- \_ review of the underlying model assumptions
- \_ testing of data quality
- \_ analysis of time series
- \_ back-testing

The quantitative validation (back-testing) consists primarily of the comparison of actual and expected LGDs. Qualitative methods address the assessment of compliance with all relevant rules in the models (e.g., investigation of documentation and data quality).

The table below shows the LGD back-testing results for defaulted customers at Group level on the long-term EAD-weighted average. All defaults over a period of at least five years (years from 2006 to 2016 from internal validation reports) were considered, with the model valid as of the beginning of 2013 being used for the calculation of estimated LGD. The estimated LGDs were higher than the observed value for all sub-classes of the retail exposure class, indicating the conservativeness of the estimates.

Asset class	Average LGD estimates	Average annual observed LGD
Retail	27.88%	19.72%
thereof SME	27.68%	19.13%
thereof Private Individuals	29.88%	20.96%

Table 42: Back-testing LGD (Art. 452 (i) CRR (2/3))

As LGD is estimated on own LGD pools at client level in some geographical areas; hence Erste Group omitted the segmentation by exposure class within the retail portfolio (private individuals and SMEs) due to comparison reasons.

### Credit conversion factor

The CCF is estimated internally only in the Retail portfolio for Pillar 1 purposes. It is defined as the expected drawdown of off-balance sheet, non-derivative positions within twelve months on the condition that the customer defaults within this period. EAD represents current drawings plus the off-balance sheet non-derivative positions (that is, the available undrawn credit), multiplied by the CCF.

The CCF is estimated in a two-stage process: In the first step, empirical conversion rates are determined based on the data collected on defaulted customers. The conversion rate represents the relationship between the net credit increase from the reference date to the default date, on the one hand, and the available undrawn credit at the reference date on the other hand. The reference date is the date one year before default. The second step consists of the identification of risk drivers and, based on this, the segmentation and the estimation of the CCF for each homogeneous segment.

The estimates of CCFs are calculated by segment as the respective mean of all conversion rates per given segment over the entire period, plus a margin of conservatism allowance for estimation error. The relevant amount of error is determined based on a bootstrapping method.

Regular validation of the CCF risk parameter is performed by independent validation function once a year, using both qualitative and quantitative methods:

- \_ review of the documentation
- \_ review of the underlying model assumptions
- \_ segmentation
- \_ outlier rules
- \_ use test
- \_ approval of limits
- \_ testing of data quality
- \_ analysis of time series
- \_ benchmarking

Quantitative methods consist primarily of the comparison of actual and expected CCFs. Qualitative methods are large population distribution tests, such as analysis of raw data and time series analysis of defaults, of conversion rates and of exposure at the reference date.

The following table presents the results of back-testing at Group level over the time period from year 2006 to 2016 based on the internal validation reports.

Asset class	Average CCF estimates	Average observed CCF
Retail	55.36%	43.40%
thereof SME	69.89%	44.56%
thereof Private Individuals	48.36%	41.63%

Table 43: Back-testing CCF (Art. 452 (i) CRR (3/3))

As CCF is estimated on own CCF pools at retail asset class level in some geographical areas; hence Erste Group omitted the segmentation by exposure class within the retail portfolio (private individuals and SMEs) due to comparison reasons.

## Use of internal estimates for purposes other than for calculating risk-weighted exposure amounts

### DISCLOSURE REQUIREMENTS Art. 452 (b) (ii) CRR

Having qualified for the IRB Approach under Basel, Erste Group has internal risk parameters which, aside from the calculation of regulatory capital requirements, are also employed for the purposes of loan loss provision calculation and standard risk costs (SRC).

### LOAN LOSS PROVISION CALCULATION

In general, internally-assessed risk parameters are applied to the recognition of portfolio loan loss provisions when either the incurred loss concept according to IAS 39 (in case of on-balance sheet exposures) or the expected loss concept according to IAS 37 (in case of off-balance sheet exposures) is applied. Generally, risk parameters used in the calculation of collective allowances may be different to the Basel 3 Pillar 1 or Pillar 2 risk parameters if the properties of the respective portfolio in combination with accounting rules necessitate this.

### STANDARD RISK COSTS

SRC are used in Erste Group as a component of risk-adjusted pricing. SRC at the time of origination (internally called “expected risk margin”) represent, in absolute terms, the sum of revenues that the bank should obtain over the lifetime (or until the next re-pricing date) of a given product to cover losses generated by this product.

Based on SRC, the bank is able to estimate losses until the final maturity date or until the next re-pricing date.

IRB parameters are not used directly in the calculation of SRC. This is particularly the case for PD, as:

- \_ a different granularity of segmentation is required for SRC
- \_ PD until maturity (or until the next re-pricing date) is required as opposed to the one-year IRB PDs used in the RWA calculation.

### STRESS TESTING

Stress testing is a vital component of the risk management framework at Erste Group and is incorporated into the planning process, capital and liquidity assessments. The assessment of the ability of the bank to sustain losses in severe but plausible macroeconomic scenarios provides information on the adequacy of the overall business model and supports the planning of emergency and mitigation measures.

Stress testing for credit risk is undertaken at Erste Group for all portfolios including the portfolios under the Standardised Approach. Especially with respect to the IRB portfolio, the internal risk parameters are used for stress tests by simulating the values of these parameters under stressed conditions. Erste Group models sensitivities for the individual parameters (e.g. PD or LGD) as well as employing complex crisis testing scenarios based on simulations.

Simulations are calculated for the individual exposures by performing downgrades of rating grades and by applying shifts to the current values of the PD, LGD and CCF parameters and collaterals in the IRB portfolio in order to compute the effects on RWA, expected loss, non-performing loans and risk costs. The results are used to define the impact on the income statement and overall capital position.

Stress testing results and recommendations are incorporated into the process for defining the RAS, subsequent financial projections and budgeting processes, the assessment of risk concentrations, as well into the calculation of risk-bearing capacity and the determination of the economic capital adequacy limit.

## Quantitative disclosure on credit risk – IRB Approach

### DISCLOSURE REQUIREMENTS Art. 452 (d) (e) (f) (g) (j) CRR IN CONJUNCTION WITH Art. 447 (c) CRR

The table below presents distribution of EAD (post CCF and CRM) in IRB portfolio broken down by exposure classes. IRB exposures included in counterparty credit risk and securitisation frameworks are not covered by table below, but within respective chapters.

#### IRB Approach - exposure classes

in EUR million	EAD	EAD (% of total)
Central governments and central banks	1,393	0.9%
Institutions	4,897	3.2%
Corporate	66,138	43.8%
of which Specialised Lending	15,254	10.1%
Retail	72,013	47.7%
Retail SME secured by immovable property	7,137	4.7%
Retail SME non-secured by immovable property	6,027	4.0%
Retail secured by immovable property	40,489	26.8%
Retail revolving	7	0.0%
Other retail	18,353	12.1%
Equity	571	0.4%
Other	6,078	4.0%
<b>Total</b>	<b>151,089</b>	<b>100.0%</b>

Table 44: IRB Approach (incl. supervisory slotting) – EAD by exposure classes (Art. 452 (d) CRR)

Table below presents the flow statement explaining yearly development of the RWA calculated in accordance with the Part Three, Title II, Chapter 3 of the CRR. The counterparty credit risk relevant exposures are not subject of the table below.

#### IRB Approach - RWA flow

in EUR million	RWA amounts	Capital requirements
<b>RWAs as of 31.12.2016</b>	<b>64,999</b>	<b>5,200</b>
Asset size	5,176	414
Asset quality	-3,053	-244
Model updates	1,746	140
Methodology and policy	-237	-19
Acquisitions and disposals	288	23
Foreign exchange movements	305	24
Other:	27	2
Enhancement of IRB Fall-back	102	8
Adjustments and Financial Reconciliation	-75	-6
<b>RWAs as of 31.12.2017</b>	<b>69,251</b>	<b>5,540</b>

Table 45: RWA flow statement of credit risk exposure under IRB approach (EU CR8 EBA/GL/2016/11)

Credit RWA for IRB portfolio increased by EUR 4 billion. Main drivers consist of net business growth mainly in Ceska Sporitelna and Slovenska Sporitelna and the regulatory Specialised Lending add-on imposed by ECB, partially offset by change in asset quality mainly driven by net rating upgrades in Corporate, Retail and SME portfolio. Retail portfolio bought by Erste Bank Hungary was integrated in the bank in 2017 and its effect is seen in the row acquisitions and disposals.

With respect to exposures under the IRB Approach, a breakdown is given below of the exposure classes of central governments and central banks, institutions, corporates, retail by PD classes. Equity exposures, Specialised lending and Other non-credit obligation assets are not subject to following tables.

The following table shows the probability of default used in calculation of RWA.

PD scale	Lower bend	Upper bend
1	0.00%	0.03%
2	0.03%	0.10%
3	0.10%	0.30%
4	0.30%	0.70%
5	0.70%	1.70%
6	1.70%	3.10%
7	3.10%	5.80%
8	5.80%	10.80%
9	10.80%	99.99%
10- default		100%

Table 46: Probability of default lower and upper bends

#### IRB Approach – Central governments and central banks

In EUR million	On-balance	Off-balance	Average CCF	EAD	Average PD	Number of Obligors	Average LGD	Average maturity	RWA	RWA density	EL	Value adjustments
PD scale	Central governments and central banks											
1	695	0	0.0%	696	0.0%	115	45.0%	2.5	70	10.0%	0	
2	682	6	93.3%	576	0.1%	3	44.9%	2.5	129	22.3%	0	
3	19	0	0.0%	14	0.2%	215	45.0%	2.5	7	48.2%	0	
4	0	0		0		0			0		0	
5	102	7	75.0%	103	1.2%	66	45.0%	2.5	109	105.4%	1	
6	33	0	0.0%	2	2.6%	39	45.0%	2.5	2	130.8%	0	
7	0	0		0		0			0		0	
8	1	0	0.0%	1	5.9%	116	45.0%	2.5	1	168.6%	0	
9	21	3	75.0%	1	13.7%	36	45.0%	2.5	2	228.4%	0	
10	0	0	0.0%	0	100.0%	25	45.0%	2.5	0	0.0%	0	
<b>Total</b>	<b>1,553</b>	<b>16</b>	<b>75.0%</b>	<b>1,393</b>	<b>0.0%</b>	<b>615</b>	<b>45.0%</b>	<b>2.5</b>	<b>320</b>	<b>23.0%</b>	<b>1</b>	<b>1</b>

Table 47: IRB Approach – Exposure class: Central Governments and Central Banks by PD classes (Art. 452 (e) CRR and EU CR6 EBA/GL/2016/11 )

#### IRB Approach – Institutions

In EUR million	On-balance	Off-balance	Average CCF	EAD	Average PD	Number of Obligors	Average LGD	Average maturity	RWA	RWA density	EL	Value adjustments
PD scale	Institutions											
1	7	0	0.0%	37	0.0%	23	0.0%	2.5	6	15.3%	0	
2	459	239	73.6%	773	0.1%	3	73.6%	2.5	190	24.5%	0	
3	2,915	527	31.3%	3,099	0.2%	920	31.3%	2.5	1,341	43.3%	2	
4	500	25	21.1%	557	0.4%	2653	21.1%	2.5	258	46.4%	1	
5	361	33	63.0%	318	1.0%	488	63.0%	2.5	310	97.4%	1	
6	46	107	6.8%	30	1.8%	178	6.8%	2.5	35	116.4%	0	
7	13	5	30.8%	6	4.0%	36	30.8%	2.5	9	149.1%	0	
8	73	2	57.5%	74	9.5%	115	57.5%	2.5	149	201.3%	3	
9	1	0	88.5%	1	29.0%	59	88.5%	2.5	2	279.0%	0	
10	2	0	0.0%	2	100.0%	54	0.0%	2.5	0	0.0%	1	
<b>Total</b>	<b>4,376</b>	<b>938</b>	<b>40.1%</b>	<b>4,897</b>	<b>0.4%</b>	<b>4529</b>	<b>40.1%</b>	<b>2.5</b>	<b>2,298</b>	<b>46.9%</b>	<b>9</b>	<b>6</b>

Table 48: IRB Approach – Exposure class: Institutions by PD classes (Art. 452 (e) CRR and EU CR6 EBA/GL/2016/11)



### IRB Approach – Corporates (excluding SL)

In EUR million	On-balance	Off-balance	Average CCF	EAD	Average PD	Number of Obligors	Average LGD	Average Maturity	RWA	RWA density	EL	Value adjustments
<b>PD scale</b>	<b>SME</b>											
1	0	0	75.0%	0	0.0%	2	45.0%	2.5	0	9.5%	0	
2	365	89	44.2%	397	0.1%	167	42.9%	2.5	68	17.1%	0	
3	2,069	1,006	53.0%	2,606	0.2%	3023	41.5%	2.5	948	36.4%	3	
4	3,802	1,824	51.9%	4,341	0.5%	4592	41.7%	2.5	2,246	51.7%	8	
5	4,603	2,040	48.1%	5,421	1.1%	5800	41.3%	2.5	3,852	71.1%	24	
6	2,531	911	47.5%	2,880	2.4%	3392	42.1%	2.5	2,619	90.9%	29	
7	1,316	352	49.7%	1,437	4.5%	2313	40.7%	2.5	1,401	97.5%	26	
8	967	255	51.0%	1,001	7.1%	2071	40.8%	2.5	1,216	121.4%	29	
9	499	123	53.0%	548	20.8%	2078	39.9%	2.5	875	159.6%	46	
10	972	94	55.2%	1,005	100.0%	2096	42.0%	2.5	0	0.0%	422	
<b>Total</b>	<b>17,125</b>	<b>6,692</b>	<b>50.1%</b>	<b>19,638</b>	<b>7.2%</b>	<b>25534</b>	<b>41.5%</b>	<b>2.5</b>	<b>13,224</b>	<b>67.3%</b>	<b>588</b>	<b>749</b>
<b>PD scale</b>	<b>Other corporates</b>											
1	299	420	74.3%	557	0.0%	54	44.9%	2.5	85	15.3%	0	
2	7,340	2,286	43.9%	7,624	0.1%	1155	40.4%	2.5	1,482	19.4%	2	
3	7,317	4,902	47.7%	9,192	0.2%	4828	43.5%	2.5	4,465	48.6%	9	
4	5,355	3,453	39.9%	6,489	0.4%	3610	43.7%	2.5	4,365	67.3%	13	
5	3,179	2,222	42.4%	3,923	1.1%	2279	43.0%	2.5	3,703	94.4%	18	
6	1,234	581	40.6%	1,389	2.3%	805	42.3%	2.5	1,638	117.9%	14	
7	658	184	39.4%	569	4.6%	915	40.4%	2.5	762	133.9%	10	
8	413	168	40.3%	429	7.1%	575	40.4%	2.5	668	155.9%	12	
9	315	380	18.0%	369	26.5%	4209	43.4%	2.5	897	243.1%	43	
10	683	182	63.5%	706	100.0%	362	43.3%	2.5	0	0.0%	306	
<b>Total</b>	<b>26,793</b>	<b>14,779</b>	<b>44.2%</b>	<b>31,247</b>	<b>3.2%</b>	<b>18792</b>	<b>42.6%</b>	<b>2.5</b>	<b>18,066</b>	<b>57.8%</b>	<b>427</b>	<b>478</b>
<b>Total</b>	<b>43,918</b>	<b>21,471</b>	<b>46.0%</b>	<b>50,885</b>	<b>4.7%</b>	<b>44326</b>	<b>42.2%</b>	<b>2.5</b>	<b>31,290</b>	<b>61.5%</b>	<b>1,014</b>	<b>1,228</b>

Table 49: IRB Approach – Exposure class: Corporates (excluding SL) by PD classes (Art. 452 (e) CRR and EU CR6 EBA/GL/2016/11)

## IRB Approach – Retail

In EUR million	On-balance	Off-balance	Average CCF	EAD	Average PD	Number of Obligors	Average LGD	RWA	RWA density	EL	Value adjustments
<b>PD scale</b>	<b>SME secured by immovable property</b>										
1	0	0		0		0		0		0	
2	43	4	61.2%	46	0.1%	651	9.7%	1	1.7%	0	
3	1,821	251	47.4%	1,940	0.2%	10632	14.7%	101	5.2%	1	
4	952	83	52.0%	995	0.4%	6734	13.0%	74	7.5%	1	
5	1,415	118	52.8%	1,478	1.0%	8538	17.9%	276	18.7%	3	
6	489	33	64.2%	510	2.5%	2903	21.4%	191	37.5%	3	
7	925	63	48.8%	955	4.7%	5510	16.9%	420	44.0%	8	
8	370	35	56.9%	390	7.3%	2176	26.1%	334	85.6%	8	
9	468	21	64.0%	481	19.0%	2694	22.9%	480	99.7%	21	
10	338	13	21.0%	341	100.0%	2417	17.0%	91	26.8%	111	
<b>Total</b>	<b>6,821</b>	<b>621</b>	<b>50.7%</b>	<b>7,137</b>	<b>7.6%</b>	<b>42255</b>	<b>17.1%</b>	<b>1,968</b>	<b>27.6%</b>	<b>154</b>	<b>129</b>
<b>PD scale</b>	<b>Retail-secured by immovable property</b>										
1	3,947	222	10.8%	3,971	0.0%	39929	12.8%	50	1.3%	0	
2	5,279	210	13.8%	5,308	0.1%	47062	12.0%	133	2.5%	0	
3	9,888	226	100.0%	10,114	0.2%	214213	21.7%	884	8.7%	4	
4	10,153	314	23.2%	10,226	0.4%	130711	11.3%	788	7.7%	4	
5	5,872	188	63.7%	5,991	1.1%	108894	20.8%	1,769	29.5%	14	
6	1,292	23	98.1%	1,314	2.4%	45431	27.4%	823	62.6%	9	
7	1,247	25	44.9%	1,258	4.1%	18006	17.8%	716	56.9%	10	
8	842	68	6.5%	847	8.2%	13658	15.1%	581	68.6%	11	
9	638	10	28.3%	640	26.8%	11488	18.8%	706	110.2%	31	
10	818	11	18.5%	820	100.0%	17183	21.3%	253	30.9%	347	
<b>Total</b>	<b>39,975</b>	<b>1,297</b>	<b>39.7%</b>	<b>40,489</b>	<b>3.1%</b>	<b>646575</b>	<b>16.7%</b>	<b>6,702</b>	<b>16.6%</b>	<b>431</b>	<b>383</b>
<b>PD scale</b>	<b>Retail revolving</b>										
1	0	0		0		0		0		0	
2	0	0		0		0		0		0	
3	0	14	28.4%	4	0.1%	26015	69.7%	0	5.2%	0	
4	0	3	28.8%	1	0.3%	6492	69.6%	0	12.3%	0	
5	0	1	28.9%	0	1.1%	3592	69.4%	0	30.7%	0	
6	0	0		0		0		0		0	
7	0	0	33.7%	0	3.3%	1048	66.8%	0	64.3%	0	
8	0	0	36.5%	0	6.7%	565	65.8%	0	102.5%	0	
9	0	0	37.0%	0	19.3%	687	65.6%	0	165.9%	0	
10	1	0	56.3%	1	100.0%	1522	62.9%	1	135.1%	1	
<b>Total</b>	<b>1</b>	<b>20</b>	<b>29.2%</b>	<b>7</b>	<b>14.1%</b>	<b>39921</b>	<b>68.5%</b>	<b>2</b>	<b>32.4%</b>	<b>1</b>	<b>1</b>
<b>PD scale</b>	<b>Retail SME non-secured by immovable property</b>										
1	0	0		0		0		0		0	
2	11	14	77.5%	22	0.1%	10546	37.9%	2	7.1%	0	
3	1,093	785	55.3%	1,527	0.2%	2820	33.9%	185	12.1%	1	
4	576	256	59.3%	728	0.4%	49908	33.9%	133	18.3%	1	
5	1,063	380	60.9%	1,295	1.1%	26403	35.0%	386	29.8%	5	
6	560	117	67.5%	639	2.3%	38254	36.1%	250	39.1%	5	
7	625	233	61.0%	767	4.8%	15494	34.1%	312	40.7%	13	
8	322	163	59.6%	420	7.2%	26965	37.7%	203	48.3%	12	
9	350	68	74.3%	400	18.1%	13161	35.8%	246	61.4%	27	
10	223	16	41.8%	230	100.0%	30084	38.0%	57	24.8%	165	
<b>Total</b>	<b>4,824</b>	<b>2,032</b>	<b>59.2%</b>	<b>6,027</b>	<b>6.7%</b>	<b>213635</b>	<b>35.0%</b>	<b>1,773</b>	<b>29.4%</b>	<b>229</b>	<b>246</b>
<b>PD scale</b>	<b>Other retail</b>										
1	1,161	2,459	55.6%	2,529	0.0%	517360	40.2%	107	4.2%	0	
2	1,562	1,483	52.4%	2,339	0.1%	402606	39.5%	203	8.7%	1	
3	1,404	1,281	76.8%	2,388	0.2%	821748	50.2%	510	21.4%	2	
4	2,925	818	50.0%	3,334	0.4%	410866	38.3%	818	24.5%	5	
5	3,343	795	71.7%	3,913	1.1%	593798	47.1%	2,046	52.3%	20	
6	963	364	81.3%	1,259	2.4%	321441	57.0%	1,014	80.5%	18	
7	817	146	71.8%	923	4.2%	174451	47.3%	673	72.9%	19	
8	450	69	53.8%	486	7.7%	96948	44.8%	363	74.5%	17	
9	546	65	77.5%	597	23.2%	289396	46.2%	650	108.8%	64	
10	579	15	47.7%	586	100.0%	121708	44.9%	265	45.2%	415	
<b>Total</b>	<b>13,752</b>	<b>7,493</b>	<b>61.4%</b>	<b>18,353</b>	<b>4.9%</b>	<b>3750322</b>	<b>44.5%</b>	<b>6,648</b>	<b>36.2%</b>	<b>561</b>	<b>574</b>
<b>Total</b>	<b>65,374</b>	<b>11,464</b>	<b>57.9%</b>	<b>72,013</b>	<b>4.3%</b>	<b>4692708</b>	<b>25.3%</b>	<b>17,093</b>	<b>23.7%</b>	<b>1,376</b>	<b>1,333</b>

Table 50: IRB Approach – Exposure class: Retail by exposure classes and PD classes (Art. 452 (f) CRR and EU CR6 EBA/GL/2016/11)

## IRB Approach – Group of countries

in % - EAD weighted	Retail LGD	Retail PD	Non-Retail PD
Core Market - Austria	19.7%	3.7%	2.9%
Core Market - Croatia	35.0%	10.7%	10.4%
Core Market - Czech Republic	34.4%	3.2%	2.7%
Core Market - Hungary	45.2%	10.8%	1.2%
Core Market - Romania	24.9%	30.1%	0.7%
Core Market - Serbia	27.3%	5.3%	12.9%
Core Market - Slovakia	26.0%	5.2%	1.9%
Other EU Countries	16.3%	10.0%	1.9%
Other Industrialized Countries	19.5%	9.7%	1.5%
Emerging Markets	26.3%	3.6%	1.4%
<b>Total</b>	<b>25.1%</b>	<b>4.3%</b>	<b>2.8%</b>

Table 51: IRB Approach – Retail and non-retail average parameters by country groups (based on country of residence) (Art. 452 (j) CRR)

In the table above, EAD weighted average parameters by country of the residence in IRB portfolios are reported.

The following table shows the development of total specific credit risk adjustments for both IRB and Standardised Approach portfolios by exposure class during the reporting period:

in EUR million	Specific credit risk adjustments			Specific credit risk adjustments (% of total)
	1 Jan	31 Dec	Change (%)	
Sovereigns	5	2	-58.2%	0.1%
Institutions	10	2	-80.8%	0.1%
Corporates	2,452	1,974	-19.5%	57.1%
Retail	1,752	1,477	-15.7%	42.8%
<b>Total</b>	<b>4,219</b>	<b>3,455</b>	<b>-18.1%</b>	<b>100.0%</b>

Table 52: Specific credit risk adjustments and changes in specific credit risk adjustments by main exposure class (Art. 452 (g) CRR)

The specific credit risk adjustments decrease in the Retail portfolio was driven mainly by an overall decrease of the NPL portfolio. Further the asset quality improved with main contributors to this trend being Czech Republic, Romania and Serbia.

Active management of the Corporate portfolio – in particular restructurings of Corporate cases and write-downs of legacy cases – led to an improvement of the asset quality in this segment. This positive effect of decreasing specific credit risk adjustments was however partly offset by new defaults throughout the Group, with the largest new defaults in Austria and Croatia.

Overall, risk costs remained at a low level and overall asset quality continued to improve, especially in Czech Republic, Romania, and Hungary.

# Credit risk mitigation techniques

## Management and recognition of credit risk mitigation

DISCLOSURE REQUIREMENTS Art. 452 (b) (iii)

Group Collateral Management is a staff unit within the Group Workout division. Group Collateral Management is responsible for the standardised and consistent management of collateral across Erste Group. For this purpose, Group Collateral Management issues the Group Collateral Management Policy as a framework for compliance with the CRR.

The Group Collateral Management Policy provides guidelines for a robust end-to-end process and responsibilities for managing collateral including valuation, revaluation and monitoring standards, requirements for consideration of collateral for internal risk calculation and criteria for eligibility of collateral according to CRR. All collateral assets accepted by Erste Group are described in the Group Collateral Catalogue – as a part of the Group Collateral Policy - including their definitions and eligibility criteria, as well as the minimum requirements of valuation, revaluation and monitoring. Each local entity defines an exhaustive list of acceptable and eligible collateral depending on the locally used approach.

In each subsidiary of Erste Group, the local Collateral Management unit is responsible for the implementation of the framework by issuing a local policy and working instructions taking into consideration any additional local legal and regulatory requirements and the organisation of the subsidiary. The local implementation is supervised by Group Collateral Management.

## Collateral valuation and netting

### COLLATERAL VALUATION AND MANAGEMENT

DISCLOSURE REQUIREMENTS Art. 453 (b) (c) CRR

Collateral is accepted at Erste Group only to back up loans and does not serve as a substitute for the borrower's ability to meet his obligations. Therefore, collateral can only be evaluated in the credit application along with the assessment of the borrower's creditworthiness and capacity for repayment.

The valuation of collateral is performed pursuant to the following process:

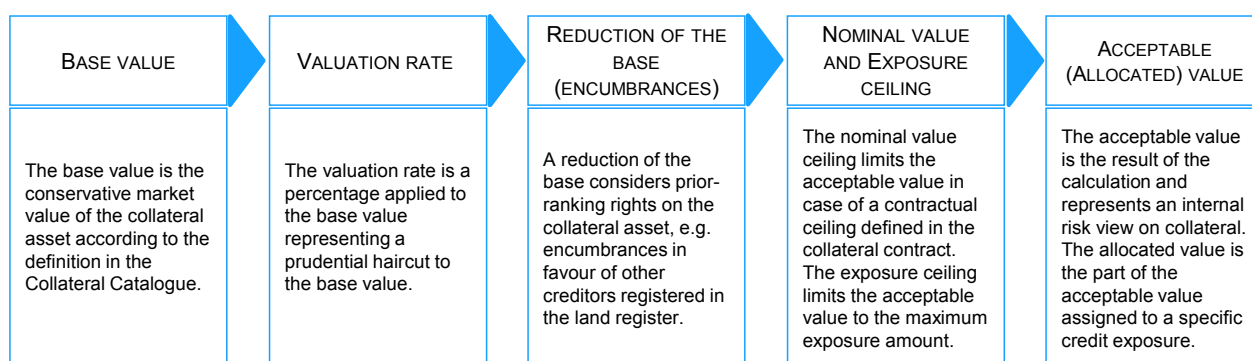


Figure 4: Collateral valuation

Collateral valuation is based on current market prices, considering an amount that can be recovered within a reasonable time period. The calculation methodology for the base value is specified by Collateral Management taking into consideration the collateral asset type. In the collateral valuation process, a pre-defined prudential haircut, i.e. the valuation rate, is applied to the base value. The valuation rates are set by Local Collateral Management based on empirical data representing the past experience of the workout departments and on the results of the data collected regarding the proceeds from the realisation of collateral. The valuation rates depend on the collateral types.

The valuation processes are defined and technically implemented by authorised staff using the appropriate software applications. The valuation rates and methods are back-tested regularly – at least once a year – to current recovery proceeds. When facing significant changes in market developments, the valuation rates are adjusted ad hoc.

Collateral revaluation is done periodically and is automated as far as possible. The relevant interfaces are used for external data sources. The maximum periods for the revaluation of individual collateral are predefined and Risk Management monitors compliance supported by

software applications. Irrespective of the periodically conducted revaluations, revaluations must also be carried out when information becomes available indicating that the value of the collateral has decreased for special reasons.

Only standard contracts of the local legal departments or contracts with sufficient legal review are used to ensure the enforceability of the collateral in the relevant jurisdiction, including the event of insolvency and bankruptcy of the borrower or the collateral provider. Local Collateral Management Policies and working instructions determine responsibilities for the end-to-end collateral management process from activation of collateral to release (liquidation) of collateral to ensure the best results in case of a realisation of collateral.

The following types of collateral are accepted:

- \_ real estate: both residential and commercial real estate
- \_ financial collateral: securities, cash deposits and life insurance policies
- \_ guarantees: guarantees of sovereigns and public sector entities, financial institutions, other corporate entities and individuals.
- \_ movables: equipment, investment goods, machinery, motor vehicles, inventories and commodities
- \_ claims and rights: accounts receivable, leasehold rights and shares in a company's capital

Real estate, financial collateral and guarantees are the most frequently used types of collateral and are discussed in more detail in the following sections. Movables as well as claims and rights are accepted collateral by Erste Group but have less relevance.

### **Real estate**

Real estate is the most important collateral within Erste Group. Residential real estate (i.e. real estate which is or will be occupied or let by the owner for residential purposes) and commercial real estate are used for credit risk mitigation.

Real estate properties are evaluated at a conservative market value. The applicable appraisal methods are predefined and depend on the type of real estate. In general, the comparative method is used for residential real estate whereas the income method is used for commercial real estate. Only independent external or internal appraisers, who are not involved in the lending decision process, are permitted to perform real estate valuations. Local Collateral Management defines the accepted appraisers.

For quality assurance purposes, real estate valuations are validated on an ongoing basis and real estate appraisers who do not fulfil the quality requirements are eliminated from future valuations as a consequence.

The monitoring of real estate values is performed at least yearly. Statistical monitoring based on official transaction data is used for residential real estate. If statistical method is not applicable or the market value exceeds defined thresholds individual monitoring is done by real estate experts.

Revaluations follow the same process as initial valuations. It is performed at least every three years when the loan amount secured by residential real estate exceeds EUR 3 million or when the loan amount secured by commercial real estate situated in Austria, Czech Republic or Slovakia exceeds EUR 1 million or when the loan amount secured by commercial real estate situated in all other countries exceeds EUR 500.000.

### **Financial collateral**

Financial collateral assets are mainly security accounts, cash deposits (accounts, savings books) and life insurance policies. Gold (bullion and coins) is accepted and used for risk mitigation. The pledge or assignment of financial collateral has to be unconditional and irrevocable. If the financial collateral is held by third party institutions, they are to be notified of the pledge or assignment. The base value of the financial collateral depends on the type of collateral asset. The base value of the cash deposit is the pledged amount. The base value of security accounts (securities) is their market value on the stock exchange, whereas the base value of life insurance policies is the cash surrender value. The revaluation is carried out automatically at least semi-annually.

### **Guarantees**

Guarantees are mostly provided by corporates, financial institutions, sovereigns, and public sector-related entities in combination with special credit products. The guarantee must represent a direct claim on the guarantor. The contract must not contain any condition, the fulfilment of which is outside the direct control of the bank and could prevent the guarantor from being obliged to pay.

All guarantors must be checked with regards to their economic capacity. They must have a minimum credit rating which is reviewed at least annually. The PD of the guarantor is used for risk weighted asset calculation when the defined preconditions are met.

### **Receivables**

Trade accounts receivables are used for credit risk mitigation if they fulfil the requirements of CRR. The base value is the average level of gross monthly receivables. Overdue receivables, receivables against affiliates of the borrower and claims with high commercial dependency between the collateral borrower and the garnishee as well as receivables against garnishee with doubtful eco-

nomic quality or domiciled in countries where the enforcement may be problematic are excluded. The revaluation is performed at least annually.

## **POLICIES AND PROCESSES FOR NETTING**

DISCLOSURE REQUIREMENTS Art. 453 (a) CRR

Netting is currently not used for risk mitigation in the on-balance sheet customer lending business. The consideration of netting agreements for the over-the-counter (OTC) derivative business is described in the chapter “Counterparty Credit Risk”.

## **Main types of guarantors and credit derivative counterparties**

DISCLOSURE REQUIREMENTS Art. 453 (d) CRR

Most guarantees are provided by corporates, financial institutions, sovereigns and public sector-related entities.

The credit derivatives business is conducted only with credit institutions of sufficient credit quality based in Austria or abroad, and only within a limit that is based on the counterparty’s credit rating. Furthermore, the transactions are executed with credit institutions with a rating in the investment grade range assigned by recognised rating agencies.

## **Risk concentrations within credit risk mitigation**

DISCLOSURE REQUIREMENTS Art. 453 (e) CRR

Risk concentrations resulting from CRM techniques are understood to be the risk of a detrimental correlation of risks that may arise from the use of these techniques. This may affect a single customer, but also a portfolio defined by region, industry or type of collateral.

Due to Erste Group’s retail banking model, its customer structure and the different markets in which it does business, it is not facing any concentrations with respect to collateral.

The following processes are applied for monitoring and preventing possible concentrations:

- \_ in the case of corporate guarantees, all loans and guarantee liabilities of the provider across Erste Group are taken into consideration in the credit application process
- \_ in the case of guarantees provided by a sovereign, a public sector entity or a financial institution, the guarantee amount has to be covered within the approved limit of the guarantor.

## Quantitative disclosure on credit risk mitigation

### DISCLOSURE REQUIREMENTS Art. 453 (f) (g) CRR

The following table gives an overview on the extent of the use of CRM techniques applied to the exposures under credit risk framework.

in EUR million	Exposure unsecured	Exposure to be secured	Exposure secured by collateral	Exposure secured by financial guarantees	Exposure secured by credit derivatives
<b>Total exposure STA</b>	<b>68,272</b>	<b>10,691</b>	<b>9,209</b>	<b>5,462</b>	<b>0</b>
of which loans and debt securities	56,224	9,604	8,518	5,091	0
of which defaulted	313	154	138	41	0
<b>Total exposure IRB</b>	<b>104,390</b>	<b>68,429</b>	<b>55,088</b>	<b>1,604</b>	<b>0</b>
of which loans and debt securities	63,878	64,068	52,067	1,210	0
of which defaulted	3,093	1,786	1,341	81	0
<b>Total exposure</b>	<b>172,662</b>	<b>79,120</b>	<b>64,297</b>	<b>7,066</b>	<b>0</b>
of which loans and debt securities	120,102	73,672	60,585	6,301	0
of which defaulted	3,406	1,941	1,479	122	0

Table 53: CRM overview ( Art. 453 (f) (g) CRR and EU CR3 EBA/GL/2016/11)

In the table above, for the standardised approach exposure net of specific credit risk adjustments (before application of CCF to off-balance items) is reported, while for IRB approach gross exposure (before application of CCF to off-balance items) is disclosed. Exposure amounts that have at least one CRM mechanism associated, irrespective of its value, are included in the column exposure to be secured. Exposure secured by collateral is value secured by the eligible collateral.

in EUR million	Guarantees	Mortgage collateral	Financial and other collateral
Exposure Classes			
IRB Approach			
Central Governments and Central Banks	153	0	1
Institutions	298	13	79
Corporates	781	11,567	1,744
Specialised Lending	0	0	0
Retail	372	37,017	3,059
SME	258	4,406	961
Secured by immovable property collateral	64	32,611	1,064
Qualifying revolving	0	0	0
Other retail	51	0	1,034
Equity	0	0	0
Securitisation Positions	0	0	0
Other non-credit obligation assets	0	6	0
IRB Approach Total	1,604	48,602	4,882
Standardised Approach			
Central Governments and Central Banks	2,125	0	0
Regional Governments and Local Authorities	1,868	0	1
Public Sector Entities	392	2	5
Multilateral Development Banks	1	0	0
International Organisations	0	0	0
Institutions	5	0	0
Corporates	268	34	258
Retail	790	28	51
Exposures secured by mortgages on immovable property	0	3,269	1
Exposures in default	14	97	1
Exposures associated with particular high risk	0	0	0
Covered Bonds	0	0	0
Securitisation Positions	0	0	0
Exposures to institutions and corporates with a short-term credit assessment	0	0	0
Collective Investment Undertakings	0	0	0
Equity	0	0	0
Other items	0	0	0
Standardised Approach Total	5,462	3,429	317
<b>Total</b>	<b>7,066</b>	<b>52,032</b>	<b>5,199</b>

Table 54: Eligible collateral values by exposure class and type of collateral (Art. 453 (f) (g) CRR)

As the Bank does not have credit derivatives, template EU CR7 – Effect on the RWAs of credit derivatives used as CRM techniques is not applicable.

# Counterparty credit risk

## Goals and principles of risk management

DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

Counterparty credit risk for OTC derivatives and securities financing transactions (securities repurchasing transactions and securities lending) is measured as the sum of current replacement costs in the case of default of the counterparty (i.e. the positive market value taking into account netting agreements) and the potential replacement costs that may result from future changes in market values due to a change in the underlying market risk factors (e.g. interest rates, currencies, equity or commodity prices).

Counterparty credit risks are monitored and controlled at transaction level as well as at portfolio level. Erste Group has a real-time limit monitoring system for the entire Group to which the entities of the Group, especially the units with trading activities, are connected online. The availability of unused limits must be checked before a transaction is executed.

## ORGANISATION

Credit risks from derivatives, repurchase agreements and securities lending transactions are fully integrated into the general credit risk management system. A requirement for entering into derivative transactions is the compliance with the credit process, where the same standards with respect to classification, limits and monitoring apply as in the case of conventional credit transactions. Counterparty credit risks are measured and monitored on a daily basis by an independent risk management unit in Group Credit Risk Management. Counterparty default risk is taken into consideration in credit risk reporting.

## RISK MEASUREMENT AND CONTROL

For the internal measurement of credit risk arising from derivatives, repurchase transactions and securities lending transactions, the current market values (replacement values) and potential fluctuations of the replacement values (Potential Future Exposure) due to changes in the underlying market risk factors until maturity are taken into account.

The calculation of the potential future exposure uses standard methods as well as Monte Carlo simulation methods. The simulation method is used especially for interest rate and currency derivatives. These derivatives account for the larger part of the portfolio.

For repurchase agreements and derivatives that are not included in the simulation method, a standard method is used. This method takes into account the current market value and an add-on for potential changes to the EAD in the future. The add-on values are based on internal estimates (derived from historic volatilities) depending on the product, maturity and underlying risk factors.

For the calculation of current and potential credit risks, netting procedures are taken into account only if they can be legally enforced (depending on business partner and jurisdiction). The legal enforcement of netting agreements is examined based on legal expert opinions.

The amounts receivable are limited by own limits as well as within the scope of the limits of the overall credit risk exposure of the respective counterparty, groups of counterparties and countries. Additionally, settlement risk is controlled by adequate limits.

## NETTING AND COLLATERAL

An important basis for the reduction of counterparty credit risk is entering into framework agreements (international framework agreements for derivatives of the International Swap and Derivatives Association (ISDA), Austrian or German framework agreements, framework agreements for securities lending transactions and repurchase deals) with the respective business partners. Based on these agreements, it is possible to net all amounts due or payable for each individual transaction under a framework agreement in the case of a credit default, with the result that only the net receivables vis-à-vis the business partner are of relevance for credit risk. Erste Group does not make use of cross product netting (i.e. exposures, including both derivatives and SFTs netted at counterparty level).

Furthermore, collateral agreements (e.g. ISDA Credit Support Annex) are used for reducing the credit risk from derivatives. Within the scope of these collateral agreements, the portfolio with the respective counterparty is revalued periodically, usually daily, and in case of insufficient coverage additional collateral is requested.



## Internal capital allocation and definition of credit limits for counterparty credit exposures

### DISCLOSURE REQUIREMENTS Art. 439 (a) CRR

Counterparty credit risk is assessed as part of the centralised calculation of RWAs and treated as a component of credit risk in the RCC. In part, portfolios subject to the Standardised Approach are recalculated using IRB parameters in order to gain an economic perspective. RWAs are scaled to the confidence level of 99.95% in the RCC. Counterparty credit risk is incorporated into the Group RCC, which is reported quarterly to the management board. It forms one of the vital components of the Economic Capital Adequacy Limit, which is approved by the management board.

A credit limit for counterparties at individual customer level is requested and approved by the appropriate credit processing channels. Individual customer limits are regularly monitored and tracked in the reporting system.

Further relevant credit limits include the maximum lending limit for the group of connected clients and industry limits which are defined in line with the Group RAS and the Group Risk Strategy and also periodically reviewed and reported to the management board and supervisory board.

## Securing of collateral and establishing of reserves

### DISCLOSURE REQUIREMENTS Art. 439 (b) CRR

On the basis of bilateral contracts (securities repurchase transactions, securities lending, ISDA netting agreements, credit support annexes, etc.), Erste Group has the ability to apply risk mitigating measures (netting, taking of security). Erste Group incurs credit risk only when the net market value is positive (replacement risk). As this risk depends mainly on fluctuations in the market risk parameters (exchange rates, interest rate movements, share prices, credit spreads), open transactions must regularly be revalued and the collateral adjusted.

Acceptable collateral usually consists of cash denominated in certain defined major currencies (generally EUR, USD) and securities of top-rated issuers (government bonds of several European countries and the US or issues of Austrian banks backed by the Austrian government). In the case of securities used as collateral, an additional valuation discount (haircut) depending on the residual maturity is applied. The adjustment of the collateral to the current risk situation (mark-to-market valuation of the transactions with the respective counterparty) and the review of the current collateral value (taking into account exchange rate fluctuations for collateral in foreign currency, market value of securities) are performed at contractually agreed intervals. Valuation frequencies customary in the market are daily or weekly; Erste Group strives to ensure daily valuation.

The ability to realise collateral in the event of counterparty insolvency and to reuse collateral (notably to re-pledge it to third parties, or to reuse it for lending or repo transactions) is ensured based on legal opinions issued on behalf of ISDA for the relevant jurisdictions of the individual counterparties. As Erste Group accepts either cash deposits or securities with the best credit ratings issued by sovereign issuers as collateral, no further reserves are being created for exposures secured in this manner. Credit value adjustments are made for unsecured exposures from derivative transactions contingent on the credit rating or PD of the counterparty and the maturity of the contract.

For repurchase and securities lending agreements, collateral limits are set for single issuers and rating groups contingent on credit quality. As the mutual obligation to meet margin calls ensures full collateralisation on an ongoing basis, no additional reserves are formed for these transactions.

## Limitation on wrong-way risk

### DISCLOSURE REQUIREMENTS Art. 439 (c) CRR

Erste Group is using various scenarios and standard reports to identify wrong-way risk. Based on the results, specific limits are set in order to avoid general and specific wrong-way risk (e.g. limitations for acceptable collateral for OTC and repurchase agreements, limitations on trades where specific wrong-way risk could occur).

## Impact on collateralisation of a rating downgrade

### DISCLOSURE REQUIREMENTS Art. 439 (d) CRR

Contractual provisions concerning dependencies between collateralisation and the credit rating of Erste Group exist in the context of collateral agreements. The variables affected by this in some of the collateral agreements are the exposure-independent amount of collateral (referred to as the independent amount), the amount of exposure the counterparty is willing to accept before Erste Group is required to post collateral (the threshold amount), and the minimum amount of additional collateral that may be requested (the minimum transfer amount). A process for additional liquidity outflows due to contracts with downgrade triggers shown in the Liquidity Coverage Ratio and yearly reporting of all relevant contracts has been established in Erste Group.

## Quantitative disclosure on counterparty risk

### DISCLOSURE REQUIREMENTS Art. 439 (e) (f) (g) (h) CRR

The table below provides an overview of the methods used to calculate CCR regulatory requirements, the main parameters used within each method, as well as the resulting net exposures and RWAs. Erste Group does not use the Standardised approach or an internal model for the calculation of exposures for CCR purposes.

in EUR million	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
Mark to market		3,978	920			4,370	1,096
Original exposure	1,005					44	29
Standardised approach		0			0	0	0
IMM (for derivatives and SFTs)				0	0	0	0
Of which securities financing transactions				0	0	0	0
Of which derivatives and long settlement transactions				0	0	0	0
Of which from contractual cross-product netting				0	0	0	0
Financial collateral simple method (for SFTs)						0	0
Financial collateral comprehensive method (for SFTs)						9,971	274
VaR for SFTs						0	0
<b>Total</b>							<b>1,400</b>

Table 55: Analysis of CCR exposure by approach (Art. 436 (e) (f) (i) CRR and EU CCR1 EBA/GL/2016/11)

As IMM for derivatives and SFTs is not used, template EU CCR7 – RWA flow statement of CCR exposures under the IMM according to EBA/GL/2016/11 is not disclosed.

The table below provides an overview of the exposures subject to CVA capital charges in accordance with Part three, Title VI, Article 382 in the CRR. Erste Group applies the standardized method to compute CVA capital charges exclusively. Compared to 2016 there was a significant reduction in CVA RWAs (2016: EUR 1,137 million) driven by an overall reduction in exposures as well as by newly signed netting and collateral agreements.

in EUR million	Exposure Value	RWAs
Total portfolios subject to the advanced method	0	0
(i) VaR component (including the 3× multiplier)		0
(ii) SVaR component (including the 3× multiplier)		0
All portfolios subject to the standardised method	2,531	622
Based on the original exposure method	0	0
<b>Total subject to the CVA capital charge</b>	<b>2,531</b>	<b>622</b>

Table 56: Analysis of CCR CVA Capital Charge (Art. 439 (e) (f) CRR and EU CCR2 EBA/GL/2016/11)

The template below provides an overview of the exposures towards CCPs in the scope of Part Three, Title II, Chapter 6, Section 9 of the CRR and related capital requirements. Compared to 2016 there was a significant reduction in overall exposures to CCPs mainly driven by lower exposures in OTC derivatives (2016: EUR 1,866 million). Erste Group does not have exposures to non-qualifying CCPs.

in EUR million	EAD post CRM	RWAs
Exposures to QCCPs (total)		26
Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	1,267	26
(i) OTC derivatives	1,267	26
(ii) Exchange-traded derivatives	0	0
(iii) SFTs	0	0
(iv) Netting sets where cross-product netting has been approved	0	0
Segregated initial margin	62	
Non-segregated initial margin	0	0
Prefunded default fund contributions	5	0
Alternative calculation of own funds requirements for exposures		0
Exposures to non-QCCPs (total)		0
Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	0	0
(i) OTC derivatives	0	0
(ii) Exchange-traded derivatives	0	0
(iii) SFTs	0	0
(iv) Netting sets where cross-product netting has been approved	0	0
Segregated initial margin	0	99
Non-segregated initial margin	0	0
Prefunded default fund contributions	0	0
Unfunded default fund contributions	0	0

Table 57: Exposures to CCPs (Art. 439 (e) (f) CRR and in line with EU CCR8 EBA/GL/2016/11)

The table below provides a breakdown of CCR exposure calculated in accordance with Part Three, Title II, Chapter 6 of the CRR and risk-weighted according to Chapter 3 of the same title: by portfolio (type of counterparties) and by risk weight (riskiness attributed according to the standardised approach).

in EUR million	Risk weights											Total	of which Unrated
	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others		
Central governments or central banks	5,440	0	0	0	0	0	0	0	0	0	0	5,440	5,386
Regional government or local authorities	13	0	0	0	0	0	0	0	0	0	0	13	12
Public sector entities	61	0	0	0	1	0	0	0	0	0	0	63	1
Multilateral development banks	7	0	0	0	0	0	0	0	0	0	0	7	7
International organisations	0	0	0	0	0	0	0	0	0	0	0	0	0
Institutions	0	1,129	0	0	17	0	0	0	2	0	0	1,148	1,148
Corporates	0	0	0	0	7	0	0	0	86	0	0	93	38
Retail	0	0	0	0	0	0	0	19	0	0	0	19	19
Institutions and corporates with a short term credit assessment	0	0	0	0	0	0	0	0	0	0	0	0	0
Other items	0	0	0	0	0	0	0	0	0	1	0	1	1
<b>Total</b>	<b>5,521</b>	<b>1,129</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>88</b>	<b>1</b>	<b>0</b>	<b>6,782</b>	<b>6,610</b>

Table 58: Standardised approach – CCR exposures by regulatory portfolio and risk (Art. 444 (e) CRR and in line with EU CCR3 EBA/GL/2016/11)

In the table above, under column Unrated, exposures for which credit risk assessment by a nominated ECAI is not available and for which specific risk weights are applied depending on their exposure class.

The table below provides an overview of RWAs and parameters used in RWA calculations for exposures subject to the CCR framework (excluding CVA charges or exposures cleared through a CCP) and where the credit risk approach is used (in accordance with Article 107 in the CRR) to compute RWAs in IRB approach.

In EUR million	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA density
<b>PD scale</b>			<b>Institutions</b>				
1	0	0.0%	1	45%	2.5	0	15.3%
2	8	0.1%	14	45%	2.5	2	25.6%
3	5,110	0.2%	211	13%	1.4	755	14.8%
4	79	0.5%	27	25%	2.0	42	53.0%
5	640	1.0%	8	11%	0.7	148	23.1%
6	5	1.8%	6	5%	1.6	1	13.6%
7	15	4.0%	5	5%	1.1	2	14.7%
8	5	10.2%	3	0%	1.4	5	115.2%
9	0		0			0	
10	0		0			0	
<b>Total</b>	<b>5,862</b>	<b>0.3%</b>	<b>275</b>	<b>13%</b>	<b>1.4</b>	<b>955</b>	<b>16.3%</b>
<b>PD scale</b>			<b>Corporate</b>				
1	2	0.0%	6	45.0%	2.5	0	15.3%
2	28	0.1%	30	45.0%	2.5	6	20.8%
3	912	0.2%	172	5.9%	0.8	57	6.3%
4	298	0.5%	390	18.0%	1.2	77	25.7%
5	162	1.0%	326	17.9%	1.3	61	37.9%
6	200	2.7%	274	5.6%	0.7	28	14.2%
7	43	4.8%	114	5.9%	0.8	7	17.4%
8	8	8.5%	52	18.9%	1.3	6	69.0%
9	7	25.5%	34	15.8%	1.1	6	85.2%
10	1	100.0%	27	45.0%	2.5	0	0.0%
<b>Total</b>	<b>1,662</b>	<b>0.9%</b>	<b>1425</b>	<b>9.6%</b>	<b>0.9</b>	<b>249</b>	<b>15.0%</b>
Other	80		410			71	89.4%
<b>Total</b>	<b>7,603</b>		<b>2110</b>			<b>1,275</b>	<b>16.8%</b>

Table 59: IRB approach – CCR portfolio by exposure class and PD scale (Art. 452 (e) CRR and EU CCR4 EBA/GL/2016/11)

In the table above, the same PD scale applies as for credit risk exposures.

The table below provides an overview of the impact of netting and collateral held on exposures for which the exposure value is measured as per Part Three, Title II, Chapter 6 of the CRR, including exposures arising from transactions cleared through a CCP. Erste Group does not make use of counterparty netting for SFT transactions for the purposes of RWA calculations and there are no cross product netting agreements in place. Compared to 2016 there is a reduction in the net credit exposures to OTC derivatives (2016: EUR 1,211 million) which corresponds to the overall lower derivatives positions. The netted current credit exposure is lower (2016: EUR 2,868 million) however due to the extended scope of collateral agreements the level of collateral held is higher (2016: EUR 1,657 million). There is a significant increase in the net carrying amount for SFTs (2016: EUR 5,295 million) which is largely due to transactions with central banks.

In EUR million	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
Derivatives	5,988	3,496	2,492	1,761	731
SFTs	9,971	0	9,971	9,633	338
Cross-product netting	0	0	0	0	0
<b>Total</b>	<b>15,959</b>	<b>3,496</b>	<b>12,463</b>	<b>11,394</b>	<b>1,069</b>

Table 60: Impact of netting and collateral held on exposure values (Art. 439 (e) CRR and EU CCR5-A EBA/GL/2016/11)

The table below provides an overview of all types of collateral posted or received by Erste Group to support or reduce CCR exposures related to derivative transactions or to SFTs, including transactions cleared through a CCP. Compared to 2016 there is a reduction in the volume of both collateral received (2016: EUR 2,247 million) and collateral posted (2016: EUR 435 million). The proportion of exposures collateralized by cash remains high at 97.0% (2016: 95.3%) for received collateral and is slightly lower at 89.0%. (2016: 98.6%) for posted collateral. For SFTs the overall level of collateral received grew significantly for both collateral received (2016: EUR 2,776 million) and collateral posted (2016: EUR 5,295 million) due to higher volumes placed with central banks.

in EUR million	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	0	1,709	0	357	2,607	7,187
Government bonds	0	51	0	44	6,538	1,141
Corporate bonds	0	0	0	0	489	1,642
<b>Total</b>	<b>0</b>	<b>1,761</b>	<b>0</b>	<b>400</b>	<b>9,633</b>	<b>9,971</b>

Table 61: Composition of collateral for exposures to CCR (Art. 439 (e) CRR and EU CCR5-B EBA/GL/2016/11)

The table below provides an overview of Erste Group's exposures to credit derivative transactions broken down between derivatives bought or sold. Compared to 2016 there is an increase in credit protection bought (2016: EUR 605 million) and a slight decrease in protection sold (2016: EUR 548 million). Erste Group does not have exposures to exotic credit derivatives and currently has no credit derivative positions purchased for hedging in the banking book.

in EUR million	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
<b>Notionals</b>			
Single-name credit default swaps	539	431	0
Index credit default swaps	147	90	0
Total return swaps	0	0	0
Credit options	0	0	0
Other credit derivatives	0	0	0
<b>Total notionals</b>	<b>686</b>	<b>521</b>	<b>0</b>
<b>Fair values</b>			
Positive fair value (asset)	1	12	0
Negative fair value (liability)	21	1	0

Table 62: Credit derivatives exposures (Art. 439 (g) (h) CRR and EU CCR6 EBA/GL/2016/11)

# Exposure to securitisation positions

## Investments in securitisation positions

DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d), 449 (a) (c) (f) (h) (n) (v) CRR

In the past, securitisation deals were concluded by Erste Group to diversify risks and returns when acting as an investor in securitisation positions. There have not been any new investments in securitisation positions since 2011. It is planned to largely phase out this portfolio through amortisations.

Credit decisions are reached on the basis of a fundamental analysis of the underlying pools, while on a regular basis a waterfall simulation of the pool is done, for which structural risks of securitisation are taken into account. The continuous monitoring of the securitisation portfolio is undertaken via a standardised process using various impairment tests. Changes in market risk are analysed on a monthly basis using current market prices for each of the securitisation positions. Furthermore, developments in credit spreads are analysed in the various asset classes of the securitisation portfolio and used in the regular monitoring of market liquidity. Valuations by external rating agencies as well as a series of performance-linked indicators are used for the monthly assessment of credit risk. Additionally, annual reviews are prepared at the individual transaction level to check for impairment and measure the development of the securitisation positions. Transactions that fall below certain defined thresholds are furthermore tracked in a watch list that is regularly updated.

To value securitisation positions, Erste Group receives third-party pricing for each of its US investments on a monthly basis. Third party pricing for US CLOs is based on observable inputs including (i) discount margins, (ii) conditional prepayment rate (CPR) and (iii) yield curves. For the European ABS Portfolio, Erste Group receives prices from external market data providers on a daily basis. Erste Group's pricing validation practice has been in place since 2013. There have been no changes in the valuation methods.

Erste Group is using the Ratings Based Method pursuant to Article 261 CRR for investor positions to calculate risk-weighted exposure amounts.

From 31 December 2016 onwards, Erste applies to all 1250% risk-weighted securitisation positions on its balance sheet the deduction of the exposure amount from the amount of Common Equity Tier 1 items pursuant to the Article 266 (3) CRR and Article 36 (1)(k) CRR as an alternative to applying a risk weight of 1250%.

The 1250% securitisation positions deducted from own funds as of 31 December 2017 include the two first loss positions of the two originated transactions Edelweiss 2013-1 (EUR 3 million) and Bee SME 2016-1 (EUR 25 million).

## Securitisation activities at Erste Group

DISCLOSURE REQUIREMENTS Art. 449 (a) (b) (d) (e) (g) (h) (j) (k) (n) CRR

As an originator, securitisation transactions can improve the risk/return profile and enable growth through the following effects:

- \_ transfer of credit risk to the capital market
- \_ freeing of credit limits for customers of Erste Group
- \_ release of economic and regulatory capital
- \_ raising liquidity at attractive terms.

In December 2013, Erste Group securitised a portion of the car leasing portfolio of Erste Bank und Sparkassen Leasing GmbH (former EBV-Leasing Gesellschaft m.b.H.), through the Edelweiss 2013-1 transaction with a volume of EUR 267 million. There was no gain recognised for the sale of leasing receivables by Erste Bank und Sparkassen Leasing GmbH as they were sold at notional values.

Compartment Edelweiss 2013-1 bond of the Luxembourg Securitisation Special Purpose Entity (SSPE) Bee First Finance S.A. was structured in four tranches with AAA to BB+ ratings by Moody's and Fitch. The four tranches were fully placed with institutional investors, thereby achieving funding and a capital relief effect by transferring a significant portion of credit risk of the securitised assets to third parties.

Erste Group uses the Rating Based Method pursuant to Article 261 CRR for originator positions to calculate risk-weighted exposure amounts for Edelweiss 2013-1.

Erste Group's Edelweiss 2013-1 securitisation transaction of Austrian car leasing receivables is structured and rated as shown in the table below:

in EUR million	Notional value outstanding as of 11 Oct. 2017 (last payment date)	Share (in %)	Current rating (Moody's/Fitch)	Spread (in bps)
Tranche A	18	34.6%	Aaa/AAA	47
Tranche B	18	35.0%	Aaa/AAA	92
Tranche C	9	17.7%	Aa2/AA+	200
Tranche D	7	12.7%	-/BBB	300
<b>Total</b>	<b>53</b>	<b>100.0%</b>		
Reserve fund	3	3.2%		

Table 63: Overview of Edelweiss 2013-1 securitisation tranche structure as well as external ratings (Art. 449 (k) CRR)

As of the last payment date, which was on 11 October 2017, tranche A has been paid down by 92% of its initial balance. Both rating agencies, Fitch Ratings Limited and Moody's have taken various rating actions on the Edelweiss 2013-1 notes reflecting the transaction's deleverage as well as its better than expected performance to date.

Fitch upgraded on 26 October 2015 the rating of tranche B from A (rating at issue date) to AA, the rating of tranche C from BBB (rating at issue date) to A and the rating of tranche D from BB+ (rating at issue date) to BBB-. On 28 September 2016 the upgrade of the tranche B from AA to AAA, the upgrade of the tranche C to A+ and the upgrade of the tranche D to BBB- was announced. The latest rating action by Fitch was done on 06 September 2017. The rating agency upgraded the rating of tranche C from A+ to AA+ and the rating of tranche D from BBB- to BBB.

Moody's upgraded the mezzanine ratings in Edelweiss 2013-1 transaction on 28 March 2017. The rating agency upgraded the rating of tranche B to Aaa from Aa3 (rating at issue date) and the rating of tranche C to Aa2 from Baa2 (rating at issue date).

The reserve fund (first-loss piece) of EUR 3.3 million is provided by Erste Bank und Sparkassen Leasing GmbH in the form of a subordinated loan to the issuer, Bee First Finance S.A. acting for and on behalf of its compartment Edelweiss 2013-1. This loan represents the first loss piece of the transaction, i.e. it covers the losses of the securitised leasing exposures after usage of excess spread up to its total amount of EUR 3.3 million. The loan is unrated, has a risk-weight of 1250% under Article 261 CRR and is retained on the balance sheet. From 31 December 2016 onwards, Erste Group deducts the 1250% risk-weighted reserve fund amount from the amount of Common Equity Tier 1 items pursuant to Article 266 (3) CRR and Article 36 (1)(k) CRR as an alternative to applying a risk weight of 1250%. No hedging or unfunded credit protection is used to mitigate the risk of the retained first loss piece.

The average spread of the four tranches at issuance was 62 bps over the 3-month Euribor. Edelweiss 2013-1 was structured in four tranches and a liquidity facility. The replenishment period ended in October 2014. The portfolio consists of 100% Austrian car leasing receivables that are redeemed monthly, while the notes have quarterly payments.

The 5% originator retention required under Article 405 CRR was met by retaining exposures with a volume of EUR 14.1 million or 5% prior to securitisation at Erste Bank und Sparkassen Leasing GmbH level by random selection and on each quarterly replenishment date.

Jointly with the Royal Bank of Scotland plc, Erste Group acted as co-arranger, joint lead manager and joint bookrunner for the structuring and placement of the transaction, and is responsible for the following activities during the transaction's life: deemed collections guarantee provider, back-up servicer and swap counterparty. EBOe is the collection account bank and Erste Bank und Sparkassen Leasing GmbH fulfils the functions of the seller, servicer and subordinated loan provider in the transaction.

In July 2016, Erste Group executed its first synthetic securitisation transaction ("Bee SME 2016-1"). The main objective of the EUR 1.425 billion transaction was credit protection of a predominantly Austrian SME credit portfolio via an unfunded financial guarantee on the mezzanine tranches. The significant risk transfer pursuant to Article 244 (2) (a) CRR contributed to regulatory capital relief. The transaction has a final legal maturity on 1 March 2035 and includes loans to SME, corporate and self-employed customers. The reference portfolio was not sold but remains on the balance sheet of Erste Bank der oesterreichischen Sparkassen AG. No SSPE was involved in the transaction.

Erste Group uses the Supervisory Formula Method pursuant to Article 262 CRR for this transaction to calculate risk-weighted exposure amounts. No rating agency was involved in the transaction. The transaction was structured in four tranches whereby the two mezzanine tranches are guaranteed by the European Investment Fund as part of its mission to support SME lending and economic growth in the European Union. The structure of the transaction is set out in the table below:

in EUR million	Notional value outstanding as of 31 December 2016	Seniority of tranche	Tranche characteristic
Senior Tranche	926	Senior	Retained
Senior Mezzanine Tranche	27	Senior Mezzanine	Guaranteed
Junior Mezzanine Tranche	15	Junior Mezzanine	Guaranteed
Junior Tranche	25	First Loss	Retained
<b>Total</b>	<b>993</b>		

Table 64: Overview of Bee SME 2016-1 securitisation tranche structure and characteristics

The share of SMEs or small mid-caps amounted to 83% at closing, in line with the investor's requirement of at least 75%. The transaction has no replenishment period.

As of 31 December 2017 the tranches of the transaction have been paid down by 30% of their initial balance. The redemption of the senior and mezzanine tranches is on a pro-rata basis and losses are allocated to the tranches in the reverse order of seniority starting with the junior tranche. The Junior Tranche is deducted from the amount of Common Equity Tier 1 items pursuant to Article 266 (3) CRR and Article 36 (1)(k) CRR. No hedging or unfunded credit protection is used to mitigate the risk of the retained first loss piece.

The specific provisions booked for a credit event loan are used as an estimate for the final loss ("initial loss") in respect of the credit event loan in the transaction. Revised estimates of the loss lead to positive or negative loss adjustments during the work-out process. After completion of the work-out process the total loss accounted for in respect of the credit event loan is the final loss. In case of losses above the junior tranche and up to the senior mezzanine tranche Erste Bank der oesterreichischen Sparkassen Bank AG receives credit protection payments from the investor.

The 5% originator retention required under Article 405 CRR was met by retaining exposures with a volume of EUR 75 million or 5% prior to securitisation at Erste Bank der oesterreichischen Sparkassen AG level by random selection.

Erste Group acted together with Unicredit as joint arranger for the structuring and placement of the transaction. The administration and monitoring is executed according to the policy "process documentation for execution and administration of synthetic securitisation transactions" in the newly set-up internal IT securitisation platform. The policy covers the roles, responsibilities, governance and organisation of the synthetic securitisation process within Erste Group and Erste Bank der oesterreichischen Sparkassen AG.

In 2017, Erste Group did not issue a securitisation transaction. After Edelweiss 2013-1, Erste Group plans to issue another EUR 250 million true sale Austrian leasing receivables securitisation in 2019. In addition, Erste Group is currently in discussion with the investor of Bee SME 2016-1 about a possible restructuring of the transaction in 2018.

In cases in which Erste Group invested in synthetic securitisations, assets were allocated to the financial category available-for-sale and measured at fair value. On the balance sheet, available-for-sale assets are disclosed under the line item "Financial assets – available for sale".

Assets awaiting securitisation are loans which are valued at amortised cost and are not recorded in the credit institution's trading book or trading. On the balance sheet, loans are disclosed under the line items "Loans and receivables to credit institutions" and "Loans and receivables to customers".

## Quantitative disclosure on securitisation positions

### SECURITISATION ACTIVITIES

DISCLOSURE REQUIREMENTS Art. 449 (m) (n) (p) CRR

#### Type of securitisation

in EUR million	Type of exposure	Exposure	Exposure (% of total)
Traditional	Car finance	43	6.8%
Synthetic	Corporate and SME loans	993	93.2%
<b>Total</b>		<b>1,036</b>	<b>100.0%</b>

Table 65: Overview on outstanding exposures securitised as of 31 December 2017 (Art. 449 (n) (i) CRR)



The total amount of outstanding exposures securitised decreased due to the redemptions of Bee SME 2016-1 and Edelweiss 2013-1 by EUR 276 million compared to 31 December 2016. The securitized exposures are all on-balance. The aggregate amount of off-balance sheet securitisation exposures is 0.

## Risk category

in EUR million	Type of exposure	Exposure	Exposure (% of outstanding exposures)
Impaired / past due assets	Car finance	0.9	2.0%
Losses	Car finance	0.1	0.2%
Impaired / past due assets	Corporate and SME loans	0.3	0.0%
Losses	Corporate and SME loans	0.1	0.0%

Table 66: Impaired/past due assets (Art. 449 (p) CRR)

The amount of impaired/past due car finance assets securitised refers to leases in arrears as of 31 December 2017 and to defaulted car finance assets in 2017. Losses recognised during the reporting period for Edelweiss 2013-1 are calculated as defaulted loans fully written-off in 2017 minus recoveries of defaulted loans in 2017.

The amount of impaired/past due corporate and SME loans under Bee SME 2016-1 refers to the notional amount of credit event loans in 2017. The amount of losses for Bee SME 2016-1 are the initial specific provisions as well as positive and negative loss adjustments of the loans with a credit event in 2017.

## EXPOSURE AMOUNTS FOR INVESTMENTS IN SECURITISATION

### DISCLOSURE REQUIREMENTS Art. 449 (o) CRR

Investments in securitisation positions differ by type of securitisation and are broken down by risk weight bands and rating approach: Securitisation that is deducted from own funds is also included in total EAD figure presented in tables below.

### By type of securitisation

in EUR million		EAD	EAD (% of total)	Capital requirements
Asset Backed Securities	ABS	67	6.6%	3
out of which retained		3	0.3%	0
Collateralised Bond Obligation	CBO	0	0.0%	0
Collateralised Loan Obligation	CLO	952	92.9%	5
out of which retained		952	92.9%	5
Commercial Mortgage Backed Securities	CMBS	0	0.0%	0
Collateralised Mortgage Obligation	CMO	0	0.0%	0
Other Collateralised Debt Obligation	Other CDO	0	0.0%	0
Residential Mortgage Backed Securities	RMBS	6	0.6%	0
Resecuritisations	Resecuritisations	0	0.0%	0
<b>Total</b>		<b>1,025</b>	<b>100.0%</b>	<b>8</b>

Table 67: Exposure class securitisation positions – EAD and associated capital requirements by type of securitisation (Art. 449 (n) (ii) (o) (i) CRR (1/3))

### By risk weight band

in EUR million	EAD	EAD (% of total)	Capital requirement
<=10% RW	929	90.7%	5
>10% to 20% RW	34	3.3%	0
>20% to 50% RW	3	0.3%	0
>50% to 100% RW	0	0.0%	0
>100% to 350% RW	30	2.9%	3
>350% to 650% RW	0	0.0%	0
>650% to <1250% RW	0	0.0%	0
1250% RW	0	0.0%	0
<b>Total</b>	<b>996</b>	<b>97.2%</b>	<b>8</b>
deducted from capital	29	2.8%	0
<b>Total</b>	<b>1,025</b>	<b>100.0%</b>	<b>8</b>

Table 68: Exposure class securitisation positions – EAD and associated capital requirements by risk weight band (Art. 449 (o) (i) CRR (2/3))

### By rating approach and by securitisation and re-securitisation exposures

in EUR million		EAD	EAD (% of total)
IRB Approach	Resecuritisation Exposure	0	0.0%
	Securitisation Exposure	1,025	100.0%
Standardised Approach	Resecuritisation Exposure	0	0.0%
	Securitisation Exposure	0	0.0%
<b>Total</b>		<b>1,025</b>	<b>100.0%</b>

Table 69: Exposure class securitisation positions – EAD by rating approach and by securitisation and re-securitisation exposures (Art. 449 (o) (i) CRR (3/3))

# Market Risk

## Goals and principles of risk management

DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) AND 445 CRR

Market risks arise due to fluctuations of interest rates, exchange rates, equity prices and commodity prices. Market risks derive from short-term trading in instruments whose prices are determined daily (trading book) as well as from the traditional banking business (banking book). The measurement method for risk in the trading book is Value at Risk (VaR).

### ORGANISATION

The responsibility for market risk at Group level rests in the division Group Liquidity and Market Risk Management (GLMRM). This division is responsible for steering, measurement, and controlling of liquidity and market risk of Erste Group. It covers both banking book and trading book and comprises the departments Banking Book Risk Management, Trading Book Risk Management, Market and Liquidity Risk Methods and Models, and Market and Liquidity Risk Model Validation.

Banking Book Risk Management is responsible for the group wide governance of market and liquidity risk of the banking book. This includes the identification, measurement and controlling of market and liquidity risk as well as the integration into the group's enterprise wide risk management and risk appetite framework. Furthermore, this department is responsible for setting, controlling, and monitoring of group wide liquidity and market risk limits in the banking book and respective limit escalation procedures.

Trading Book Risk Management is responsible for the group wide governance of market risk of the trading book. It acts independently of the trading units and takes responsibility for identifying, measuring, and monitoring of all market risks arising from capital market business. The scope of this department also comprises setting, controlling, and monitoring of group wide market risk limits in the trading book and respective limit escalation procedures.

Market and Liquidity Risk Methods and Models covers the development of risk models related to Pillar 1 (i.e. the calculation of the regulatory capital requirements for market risk in the trading book) and Pillar 2 capital requirements as well as valuation and various internal steering purposes.

Market and Liquidity Risk Model Validation is responsible for the independent review and validation of market and liquidity risk related methods and models.

### RISK MEASUREMENT AND CONTROL

VaR is calculated based on the method of historic simulation. A confidence interval of 99% and a holding period of one day apply. The software package MRS is used for this purpose. The validity of the statistical methods used is constantly checked through back-testing.

The management board sets the strategic framework for market risk management in the Group, approves the risk appetite, which is appropriate to the business strategy, and approves the Group strategy. The breakdown and allocation of strategic market risk limits to segments follows a proposal of the risk management department Trading Book Risk Management, which is subject to approval by the MRC. The MRC is the ultimate decision-making body for market risk and other trading book-related issues of all entities of Erste Group. Its key function is to discuss and decide on important risk management issues related to Group Markets activities, in particular, to approve and implement common risk management standards, limit structures, trading strategies and to establish the overall governance framework. The chairman of the MRC is the CRO. The MRC further comprises of the Chief Financial Officer, the board member responsible for the Group capital markets business, key staff from risk management and the relevant business units. Limit compliance is verified at several levels by the appropriate local decentralised risk management units as well as by the department Trading Book Risk Management.

### METHODS AND INSTRUMENTS OF RISK MITIGATION

The general standards of market risk controlling and management (standards, limits and analyses) are defined by Erste Group and are described in the Group Principles for Managing Market Risk which are constantly reviewed and improved.

Risk measurement is guaranteed by the daily calculation of VaR for the entire Group and for each of the trading units. Additionally, sensitivity limits are in place for all asset classes. This system permits control that extends to the level of the individual trading desks and the individual traders. The limits are monitored daily. Furthermore, a consistency check between the VaR limits and the sensitivity limits is carried out on a regular basis.

Risk measurement by purely statistical methods such as VaR does not adequately take into account the consequences of crisis situations. For this reason, Erste Group supplements its VaR-based risk measurement with stress testing based on several methods (stressed Value at risk (sVaR), daily and ad-hoc scenario analysis). These assessments help to analyse the effects of market movements of low probability; the results are made available to the MRC.

## MARKET RISK REPORTING

Risk reporting is divided into internal and external reporting.

Internal reporting comprises:

- \_ daily measurement and limit control of the market risk for all trading books at Group level (includes VaR, sensitivity and stop-loss limit reporting to management)
- \_ detailed monthly reports including the banking book sent to the management board and supervisory board
- \_ VaR overview for the Group, movements over time by risk type, banking book, hedge funds, detailed analyses of the trading book, limit utilisation
- \_ stress testing: sVaR, standard scenarios, combination scenarios

External reporting comprises:

- \_ capital requirements based on the internal model
- \_ quarterly reports to the Joint Supervisory Team
- \_ reports on exceptions in back-testing of the internal model as required

## OWN FUNDS REQUIREMENT FOR EXPOSURE TO MARKET RISK UNDER THE STANDARDISED APPROACH

The table below provides an overview of the capital requirements of Erste Group for market risk covered by the Standardised approach, broken down by risk type. Own funds in the Standardised approach is calculated for entities and risk types not part of the internal model on the consolidated level. In particular:

Entities scope of the Standardised Approach: Trading books in

- \_ Banca Comercială Română (BCR),
- \_ Erste Bank Croatia (EBC),
- \_ Erste Bank Serbia (EBS),
- \_ Allgemeine Sparkasse OÖ (ASK).

Risk Types not covered in the internal model:

- \_ specific interest rate risk
- \_ CIUs.

In addition Standardised approach is applied to residual positions in entities generally covered in the internal model but with market data not sufficient in length and quality to be modelled (e.g. new shares whose price history is too short or certain types of collective investment undertakings).

in EUR million	RWA	Capital requirement
Outright products		
Interest rate risk (general and specific)	696	56
Equity risk (general and specific)	129	10
Foreign exchange risk	194	16
Commodity risk	0	0
Options		
Simplified approach	0	0
Delta-plus method	3	0
Scenario approach	0	0
Securitisation (specific risk)	0	0
<b>Total</b>	<b>1,022</b>	<b>82</b>

Table 70: Market risk under the Standardised approach (Art. 445 CRR and in line with EU MR1 EBA/GL/2016/11)

## Internal Market risk model

### SCOPE OF APPLICATION AS APPROVED BY THE SUPERVISORY AUTHORITY

DISCLOSURE REQUIREMENTS Art. 455 (b) CRR

Erste Group Bank AG calculates own funds requirements for market risk based on an internal model in accordance with Part 3, Title IV Chapter 5 CRR. The VaR model was originally approved on 3 September 2001 for the trading book of Erste Group Bank AG. The model was expanded on multiple occasions to meet market developments and new regulatory requirements with the most recent changes having been approved by the regulator in December 2016. Besides the earlier approved extensions like the integration of event risk of equity instruments and the implemented sVaR calculation the current model was expanded to use OIS discounting for derivatives, FX-derived curves for VaR and sVaR calculation and applies benchmark curves as new risk factors.

The following entities within Erste Group (consolidated level) are within the application scope of the internal model:

- \_ Erste Group Bank (including the branches in London, New York and Hong Kong),
- \_ Česká spořitelna (CS),
- \_ Slovenská sporiteľňa (SLSP),
- \_ Erste Bank Hungary (EBH),
- \_ Erste Bank Investment Hungary (EBIH).

The model considers the following risk positions:

- \_ general position risk in interest-related instruments
- \_ specific and general position risk in equity instruments
- \_ commodity position risk
- \_ risk from positions in foreign currency and gold
- \_ gamma risk
- \_ vega risk.

### CHARACTERISTICS OF THE INTERNAL MODEL

DISCLOSURE REQUIREMENTS COVERED: Art. 455 (a) (i) CRR

The internal model uses the method of historical simulation for the VaR and sVaR calculation. VaR is the maximum loss that will not be exceeded within a defined period with a certain probability. To calculate VaR by this method, a historical time series is needed for every market parameter that enters into the valuation of the portfolio. Subsequently, the assumption is made that past price changes are an approximation of future market behaviour.

The calculation of VaR involves three stages:

- \_ in the first step, the NPV of the positions being assessed is calculated based on current market data (e.g. interest rates, volatilities);
- \_ in the second step, the changes in market data are determined for every day – within a selected historical time period. The current market data are adapted to take account of these changes and then the value of the portfolio is re-assessed. The difference between the current NPV and the new NPV based on historical changes is calculated for every day of the simulation period. This produces a time series of gains and losses;
- \_ in the third step, the NPV gains and losses are analysed statistically. To this end, confidence intervals and ranks are calculated.

The computation is based on a confidence level of 99% and a holding period of one day. VaR and sVaR are calculated on a daily basis. For VaR, the simulation period is the past two years. For sVaR, the simulation period is only one year and the calibration of the relevant period for sVaR is performed weekly.

For the purpose of event-specific risk for equity exposures Erste Group applies a combination of historical simulation and Monte-Carlo simulation based. Equity risk factors are augmented with idiosyncratic and market wide events and VaR is calculated by using the augmented time series. The maximum of the original historical VaR and the VaR including events is the final Event VaR number used for the calculation of own funds requirements.

For the purposes of determining capital requirements, the calculated values are scaled to a holding period of ten days using the square-root-of-time rule.

The methodology described is consistently applied to all portfolios and positions included in the internal market risk model.

As Erste Group does not have an approval for specific risk in interest-linked instruments, no model for incremental default and migration risk is used. Additionally, Erste Group does not have a correlation trading portfolio therefore no related model is used.

All components of the internal market risk model are subject to at least annual validation by the department Market & Liquidity Risk Model Validation.

## OWN FUNDS REQUIREMENT FOR MARKET RISK UNDER THE INTERNAL MODEL

in EUR million	RWAs	Capital requirements
VaR (higher of values a and b)	495	40
Previous day's VaR (Article 365(1) of the CRR (VaRt-1))		16
Average of the daily VaR (Article 365(1)) of the CRR on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with Article 366 of the CRR		40
SVaR (higher of values a and b)	1,396	112
Latest SVaR (Article 365(2) of the CRR (SVaRt-1))		30
Average of the SVaR (Article 365(2) of the CRR) during the preceding 60 business days (SVaRavg) x multiplication factor (ms) (Article 366 of the CRR)		112
IRC (higher of values a and b)	0	0
Most recent IRC value (incremental default and migration risks calculated in accordance with Article 370 and Article 371 of the CRR)		0
Average of the IRC number over the preceding 12 weeks		0
Comprehensive risk measure (higher of values a, b and c)	0	0
Most recent risk number for the correlation trading portfolio (Article 377 of the CRR)		0
Average of the risk number for the correlation trading portfolio over the preceding 12 weeks		0
8% of the own funds requirement in the standardised approach on the most recent risk number for the correlation trading portfolio (Article 338(4) of the CRR)		0
Other	0	0
<b>Total</b>	<b>1,891</b>	<b>151</b>

Table 71: Market risk under the IMA (Art. 455 (e) CRR and EU MR2-A EBA/GL/2016/11)

In accordance with Article 364 CRR, the own funds contributions from both VaR and sVaR are derived from the average VaR and sVaR of the past 60 business days scaled to 10 days and using a multiplier determined by the regulator. A decrease of the regulatory multiplier from 3.5 to 3.0 was approved by the regulator in Q2 2017. Based on the results of the back-testing an additional add-on to the multiplier of 0.75 was applied at year end 2017. Erste Group does not use an internal model for the specific risk of debt instruments and, therefore, does not calculate capital requirements for incremental default and migration risk. In addition, Erste Group does not have a correlation trading portfolio.

The own funds requirement for market risk under the IMA has been reduced in 2017 (from EUR 196 million in Q4 2016 to EUR 151 million in Q4 2017). The reduction is a combined effect of reduced VaR and SVaR contribution due to exposure reduction and an increase of the regulatory multiplier from 3.5 to 3.75. The increase of the multiplier is due to an increased number of overshootings in the backtesting programme in Q4 2017.

## RWA FLOWS FOR MARKET RISK IN THE IMA

in EUR million	VaR	SVaR	Total RWAs	Total capital requirements
<b>RWAs as of 31.12.2016</b>	<b>408</b>	<b>2,047</b>	<b>2,456</b>	<b>196</b>
Regulatory adjustment <sup>1</sup>	-274	-1,485	-1,759	-141
RWAs at end of previous period-end (end of the day)	134	563	697	56
Movement in risk levels <sup>2</sup>	64	-214	-151	-12
Model updates/changes <sup>3</sup>	-1	26	25	2
Methodology and policy	0	0	0	0
Acquisitions and disposals	0	0	0	0
Foreign exchange movements	0	0	0	0
Other	0	0	0	0
RWAs at the end of the reporting period (end of the day)	197	374	571	46
Regulatory adjustment <sup>4</sup>	265	929	1,194	96
Change in backtesting multiplier (QoQ)	33	93	126	10
<b>RWAs as of 31.12.2017</b>	<b>495</b>	<b>1,396</b>	<b>1,891</b>	<b>151</b>

1) Difference between: single day RWAs without multiplier and RWAs at end of period (higher of either 60-day average with multiplier, or single end of day without multiplier).

2) changes due to position changes.

3) updates to the model, as well as significant changes in model scope.

4) difference between: RWAs at end of period (higher of either 60-day average with multiplier, or single end of day without multiplier) and single day RWAs without multiplier

Table 72: RWA flow statements of market risk exposures under the IMA (Art. 455 (e) CRR and EU MR2-B EBA/GL/2016/11)

The market risk RWA under the IMA are determined by the 60-day average of VaR and SVaR. The main drivers for RWA changes in 2017 can be attributed to lower risk exposure mainly from the SVaR contribution compensated by an increase in the regulatory multiplier from 3.5 to 3.75 as a consequence of increased back-testing overshootings in Q4 2017. Erste Group introduced one immaterial model change in Q4 2017 related to harmonization of the general interest rate risk of bonds and Credit Default Swaps. The impact can be seen in the above table under model updates/changes.

## DESCRIPTION OF THE STRESS TESTS APPLIED

### DISCLOSURE REQUIREMENTS Art. 455 (a) (iii) CRR

#### Stressed value at risk (sVaR)

In contrast to the normal VaR calculation, the simulation does not cover the past two years, but rather a 12-month period during which there were particularly adverse market price fluctuations for the position of the bank. At present, this is the period from 1 July 2008 to 30 June 2009.

#### Standard scenarios

The following standard scenarios are calculated:

- four interest rate scenarios with a respective shift of 1, 25, 50, 100, 200 and 500 basis points upward and downward in the currencies EUR, CZK, HUF, RON, HRK, USD and CHF
- increases and declines of 10%, 25% and 50% in the equity index
- appreciation and depreciation of USD, CZK, HUF, RON and HRK vs. EUR by 6%, 25% and 50%
- increases and declines in volatilities of interest rates, exchange rates and equities of 50%

#### Comprehensive stress tests

On the one hand, historical scenarios are used as a basis for calculations, i.e. actual historical market crises are replicated and applied to the current position. The historical scenarios contain, but are not restricted to, e.g. Lehman Default Crisis 2008, Recession hits Europe 2009, the 9/11 attacks etc. The advantage of this approach is that no assumptions need to be made about the correlations between market risk factors and that the scenarios are always realistic since they actually happened in the past. Calculations are made for holding periods of 1, 10 and 20 working days, which also generates information on the development of the portfolio under illiquid market conditions.

In addition, the method also relies on probabilistic scenarios in which the strongest historical fluctuations in the most relevant market risk factors are applied to the portfolio. Such scenarios can be computed with different holding periods and difference percentiles.

## BACK-TESTING AND VALIDATION OF THE INTERNAL MODEL

DISCLOSURE REQUIREMENTS Art. 455 (a) (iv) CRR

Back-testing is performed mark-to-model, i.e. based on hypothetical changes in the portfolio value at unchanged daily closing positions as well as on the economic result.

Back-testing is executed in three steps based on the mark-to-model method:

- \_ first, the net present value of the daily closing position is measured at current prices;
- \_ in a second step, the position is then revalued at the next business day's prices;
- \_ the difference represents the hypothetical profit or loss on the trading position given a one-day holding period.

Back-testing is done both for the overall risk and the individual risk types (interest rate, currency, equities, commodity, and volatility) as well as at unit and trading desk level.

As for the determination of VaR, the back-testing calculations also employ MRS. For the economic back-testing, actual profit and loss results are used and, if necessary, corrected for profit and loss resulting from positions not covered by the internal model. The validation methods used that exceed regulatory back-testing include:

- \_ as statistical methods, Kupiec's dual proportion-of-failure test and testing of the independence of outliers to each other
- \_ validation of the scaling of the holding period of ten days using the square-root-of-time rule
- \_ validation of the validity of risk factors in product valuation as well as the influence of proxies on market risk factors.

## DESCRIPTION OF THE EXTENT AND METHODOLOGIES FOR COMPLIANCE WITH THE REQUIREMENTS PURSUANT TO ART. 104 AND 105 CRR

DISCLOSURE REQUIREMENTS Art. 455 (c) CRR

Market risks are actively taken as part of trading activities including market making, specific types of client servicing and proprietary trading. The definition of the trading book is included in the Group Principles for Managing Market Risks.

### Valuation at market prices

Generally, all positions in the trading book are valued daily in the front-office system independent of trading operations. The valuation of all positions is done, if possible, based on market data obtained from independent external providers such as Reuters, Bloomberg, etc. Bond positions are valued on bid-ask prices, and exchange-traded securities and trades are valued using the closing prices or the last traded price.

### Valuation at model prices

If it is not possible to conduct the valuation at market prices, model prices are used. For this purpose, models commonly used in the market are used (e.g. Black Scholes, Hagan, Hull White, Libor Market). If available, the input data is obtained from the same data providers that are used for determining market prices. The valuation of the positions is done at mean rates. The figures of relevance for the internal model are determined daily in a system independent of trading operations.

The periodic review of market conformity of the models, model parameters and model prices determined is the responsibility of Trading Book Risk Management which operates separately from the trading business. The sections of the trading book for which model prices are used are reported periodically to the management board.

### Independent price review

The valuations are coordinated periodically between Mid-Office and Risk Management. Additionally, at least once a month, a reconciliation of the valuations is conducted with Accounting.

### Valuation adjustments or reserves

For financial instruments for which a mid-model price is determined, product-specific valuation adjustments are determined that take into account the usual market bid-ask spreads, remaining times to maturity and nominal values which reflect the model and liquidity risks as well as ask-bid spreads. The adjustments are reported separately in the risk systems.



## Systems and controls

All models used are documented and aligned with Risk Management, Trading and the auditors. An independent validation of valuation models is done by department Market & Liquidity Risk Model Validation. All model parameters and data that cannot be obtained from market providers are documented and are reviewed periodically for market conformity independently of the Front Office.

The valuation method applied for a specific product is defined and documented in the Product Approval Process. The final approval is given by the MRC, which serves as Product Approval Board.

Generally, three categories are distinguished for positions in the trading book:

**Level 1.** Financial instruments for which there is a price in an active market belong to this category. An active market is a market in which there are transactions in sufficient frequency and volume. In some cases, it may occur that a price on an active market does not reflect the fair value. For example, if a major event occurs after the market closes but before the value date. If the price quoted needs to be adjusted (to account for this), it results in a classification at a lower level.

**Level 2.** Level 2 instruments use inputs to the valuation that are not included in Level 1; these inputs may be directly observable (prices) or indirectly observable inputs (derived from prices). When a financial instrument has a fixed maturity, Level 2 inputs must be observable for the entire life (for example the discount curve for a bond or swap). The following inputs belong to Level 2:

- \_ prices quoted for similar instruments in active markets;
- \_ prices quoted for identical or similar financial instruments in inactive markets;
- \_ inputs that do not represent prices such as interest rates (if available for the entire life), volatilities, prepayment rates and default rates
- \_ and inputs that may be derived from observable market data.

**Level 3.** These are instruments where the valuation uses inputs that are not based on observable market data. Unobservable inputs may be used if there are no observable inputs to determine the fair value of a financial instrument for which there is no active market. Unobservable inputs must reflect the assumptions that market participants would make in their assessment. When measuring unobservable inputs as much information as possible must be used, including internal data.

## Prudent valuation

The CRR sets out requirements relating to prudent valuation adjustments (Article 105) of all asset and liability positions measured at fair value, including those positions not in the trading book, to determine prudent values that achieve an appropriate degree of certainty.

In Article 34 (“Additional value adjustments”) of the CRR, the demand for additional value adjustments, as specified in Article 105 CRR (“Requirements for prudent valuation”) is laid down as mandatory from 1 January 2014.

In accordance with the CRR and the relevant Regulatory Technical Standards, the absolute sum of fair valued assets and liabilities lies above the threshold of EUR 15 billion and hence Erste Group implemented additional value adjustments under the ‘core approach’. Additional value adjustments are applied to the fair values of the positions to calculate an asset’s ‘prudent’ value in the sense that the prudent value is unfavourable or equal to a realised value with a certainty of 90%. The implemented valuation adjustment framework encompasses the following valuation adjustment types: market price uncertainty, model risk, unearned credit spreads, investing and funding costs, concentrated positions, and future administrative costs. Valuation adjustments for operational risk, early termination and close out costs are not evaluated explicitly in the prudent valuation process in order to avoid double counting, as they are covered elsewhere in the risk and valuation measurement framework. The valuation adjustment calibration relies primarily on quantitative methods for measuring the individual valuation adjustments with only limited use of expert based approaches where a straightforward quantification cannot be applied to the bank’s methodological valuation approach. The additional value adjustments reduce the regulatory Common Equity Tier 1 capital.

## Quantitative disclosure on market risk

### DISCLOSURE REQUIREMENTS Art. 455 (d) (i) (ii) (g) CRR

The table below shows the maximum, the mean and the minimum VaR and sVaR values of the reporting period as well as the value at the end of the reporting period

<b>VaR (10 day 99%)</b>	
Maximum value	16
Average value	11
Minimum value	8
Period end	16
<b>sVaR (10 day 99%)</b>	
Maximum value	58
Average value	39
Minimum value	23
Period end	30
<b>IRC (99.9%)</b>	
Maximum value	0
Average value	0
Minimum value	0
Period end	0
<b>Comprehensive risk capital charge (99.9%)</b>	
Maximum value	0
Average value	0
Minimum value	0
Period end	0

Table 73: IMA values for trading portfolios (Art. 455 (d) CRR and EU MR3 EBA/GL/2016/11)

The figure below shows the back-testing results referring to the market risk in the trading book of the reporting year. It provides a comparison of the daily VaR estimates with both the mark-to-model back-testing and actual gains/losses of the bank. Valuation adjustment related to bid-ask spread of securities are included in the actual back-testing. All other reserves and valuation adjustments are not included in back-testing.

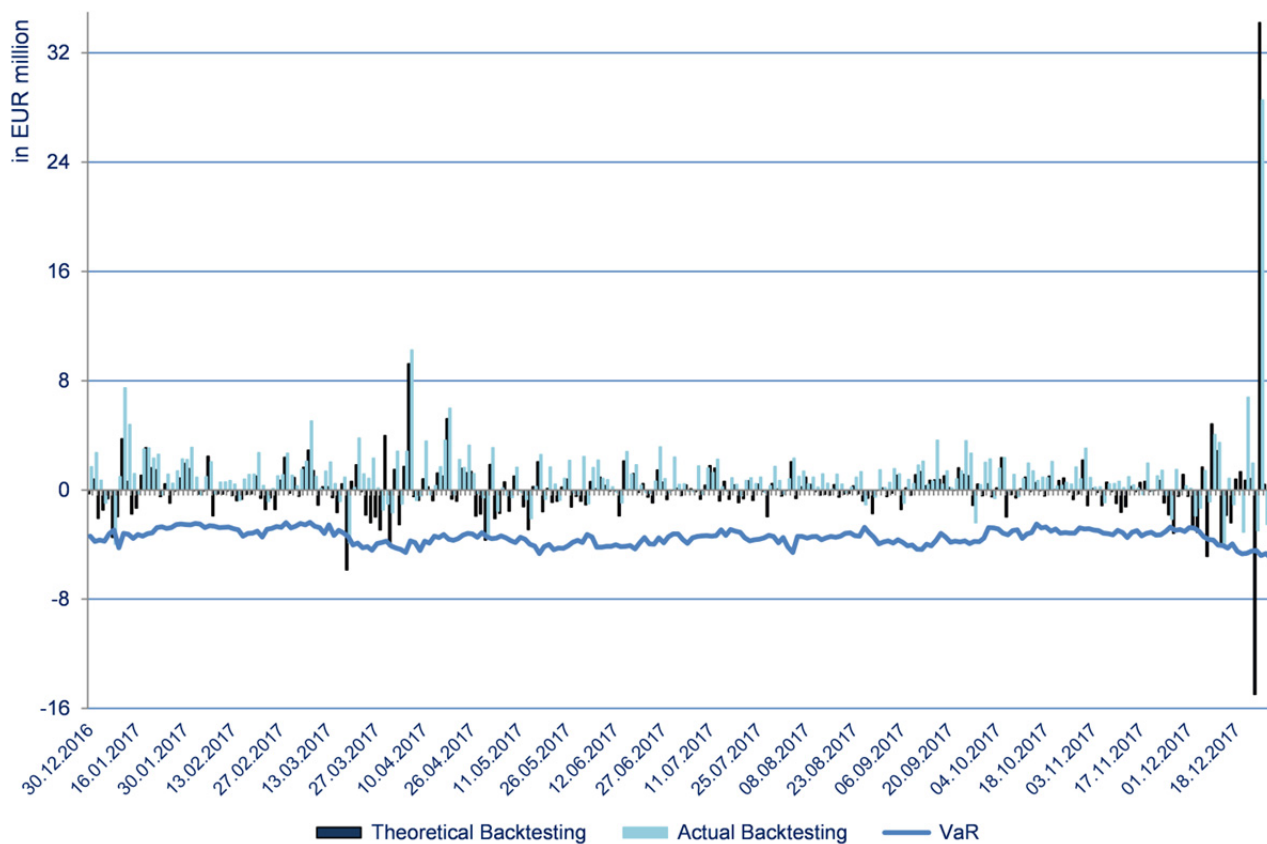


Figure 5: Results for actual back-testing (EU MR4 EBA/GL/2016/11)

In the reporting year 2017 the internal market risk model showed eight overshootings in the hypothetical back-testing and four overshootings in the actual back-testing. With the exception of the first overshooting, which occurred in January 2017 all of the remaining occurred in November and December 2017. The risk drivers in all overshootings are due to CZK Money Market products (Loan/Depos and FX Swaps). When approaching year end, these risk factors showed increased volatility. The main driver for the strong daily moves was related to resolution fund costs and other balance sheet constraints due to year-end.

# Interest rate risk

## Goals and principles of risk management

DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) AND 448 (a) CRR

Interest rate risk is the risk that the bank's earnings and/or economic value might be negatively affected by changes in interest rates. Changes in the yield curve can have a negative effect on net interest income. These changes also affect the market value of assets, liabilities and off-balance sheet items, as the future payments (and thus also their NPV) vary directly with changes in interest rates. As a consequence, an effective risk management process that keeps the impacts of interest rate changes on the bank's balance sheet within appropriate limits is of fundamental importance for the security and creditworthiness of the bank.

The types of interest rate risk to which the Group is exposed are:

- \_ re-pricing risk – results from the mismatch in the maturity and repricing of assets and liabilities and off-balance sheet short and long term positions.
- \_ yield curve risk – is caused by changes in the slope and shape of the interest rate curve
- \_ basis risk – results from the imperfect correlation in the adjustment of the credit and debit interest rates of different products that otherwise would have the same interest rate terms
- \_ optionality risk – is derived mainly from options (gamma and vega effect) that are contained in positions of the banking book (e.g., prepayments, embedded optionalities such as caps / floors, call rights on bonds, etc.).

The first three types represent traditional interest rate risk. The fourth type is becoming increasingly important with the growing number of options embedded in products reported both on and off the balance sheet.

The interest rate risk management process is governed by clear responsibilities of all stakeholders in the interest rate risk framework (Organisation) and can be divided into four high level components:

- \_ Risk identification
- \_ Risk measurement
- \_ Risk management and Risk control
- \_ Risk reporting.

## ORGANISATION

The Asset Liability Committee is the highest decision making committee concerning all aspects of interest rate risk management in the banking book and consists of all members of the Board of Directors. The purpose of the Asset Liability Committee (ALCO) is the steering of assets and liabilities on the balance sheet. It meets monthly within the scope of the regular management board meetings.

The tasks of Asset and Liability Management (ALM) comprise the management of interest risk on the banking book of Erste Group and also the further development and maintenance of the Funds Transfer Pricing (FTP) System while Banking Book Risk Management is responsible for risk controlling. For the Group's Austrian subsidiaries and the savings banks a special service model is applied where local ALCO coverage is provided by ALM of EBOe and Group Banking Book Risk Management respectively. The foreign subsidiaries have their own ALM and Risk departments, which are responsible for the analyses and the preparation of the documents. With respect to these subsidiaries, the responsibility of Erste Group's ALM and Risk department is to safeguard uniform standards of analysis and ensure that the ALM tasks in the subsidiaries are performed in accordance with Group guidelines.

## RISK IDENTIFICATION

The ALM software QRM Balance Sheet Management is used throughout the entire Group. This software makes both Group-level planning and consolidation as well as the modelling of interest rate risk on the balance sheet of Erste Group possible. This system is capable of capturing all sources of interest rate risk and calculates their effect on the balance sheet of Erste Group. The data for the current portfolio, market data for the cut-off date in question and the assumptions on future portfolio developments (volume, margins, etc.) are all entered into this system. It measures both the effect on profit/loss and the market value of the banking book positions. The data is organised by account and product. The account structure corresponds to that of the IFRS balance sheet, while the product structure represents the currency and the interest rate-related behaviour of the products in the Group.

## KEY ASSUMPTIONS USED IN RISK MODELLING

The repricing profiles of demand deposits (split between retail, corporate and financial institutions) used for risk measurement are determined from replicating portfolios based on the ARIMA model resulting in a static linear amortizing run-off profile with a short- and long-term component. The longest duration resulting from this modelling for demand deposits is 5 years, the shortest duration is 3 months.

## RISK MEASUREMENT

In general there are four methods which are used to measure interest rate risk in the banking book:

- \_ Sensitivity measures (PVBP, CR01) to assess the market value sensitivity of certain portfolios
- \_ Economic value measures (MVoE, EVE) to assess the market value change under certain scenarios
- \_ Earnings at risk measure (NII sensitivity) to assess the impact on operating income of certain scenarios on Group level.
- \_ Value at Risk based measures to assess all aggregated risk types on Group level and used for economic capital allocation under Pillar 2

Based on these tools a big variety of scenarios are assessed on a regular basis to capture all aspects of interest rate risk.

## RISK MANAGEMENT AND RISK CONTROL

For the practical management of interest rate risk two main tools are used and monitored on a regular basis:

- \_ Earnings at risk measure (NII sensitivity)
- \_ Economic value measure (MVoE, EVE)

The earnings at risk measure assesses the accounting impact of interest rate changes under various scenarios over a horizon up to 5 years and provides insights on P&L changes stemming from changes in interest rates.

The economic value measure (MVoE, EVE) analyses the banking book by means of NPV simulations of the market value, for example the effect of a 200 bps interest rate shock on market value. It provides insights on the balance of fixed rate assets versus fixed rate liabilities and indicates an economic over- or underperformance of the bank in the long run given certain interest rate scenarios.

The interest rate risk strategy of the Group sets out interest rate targets and is based on the optimisation of market risk and income possibilities, i.e. all measures developed in the interest rate strategy are analysed with respect to their effect on the income defined in the financial projections and on the market value. The interest rate risk strategy is approved by the ALCO on an annual basis and periodically reviewed to ensure that it is up to date. A modification may become necessary due to changes in the business plan or the market situation and is therefore a requirement for active risk control.

Based on the targets set out in the interest rate strategy, the results of the regular analysis and the economic forecast, investment and hedging recommendations are presented to the ALCO. These recommendations may increase or decrease risk. They may be implemented by means of on-balance sheet or off-balance sheet transactions. For cash flow hedges and fair value hedges, the relationship between the underlying transaction and the hedge (effectiveness) is continually monitored and documented.

## INTEREST RATE RISK REPORTING

The interest rate risk of Erste Group is calculated separately for each relevant currency and reported on the monthly basis to Group ALCO. Furthermore, materials on the following topics are prepared for the Group ALCO:

- \_ Market overview;
- \_ Periodic and economic risk ratios and measures related to market risk (Market Risk Banking Book Pillar 2 RWA, EVE, PVBP, VaR, MVoE, etc);
- \_ Positions (held-to-maturity portfolios in the Group, strategies);
- \_ Balance sheet movements (equity, liquidity, primary deposits, non-bank business) and
- \_ Liquidity management.

## Quantitative disclosure on interest rate risk

### DISCLOSURE REQUIREMENTS Art. 448 (b) CRR

The potential effects of interest rate changes on equity of the Group are analysed at Erste Group using the simulation method already described under "Risk Measurement and Control". Simulation models make it possible to apply maximum precision and flexibility to risk measurement, also for complex portfolio structures. The NPV simulation accounts for all future cash flows based on current knowledge.

The following table exhibits the risk of a change in the market value of equity in the case of a 1 bp upward shock of the interest rate curve. At Erste Group, upward and downward shocks of 200 bps (not considering any interest rate floors) are calculated and analysed monthly for all entities and all material currencies. The 200 bps shock is used for the calculation of the market value of equity (MVoE). In

addition economic value of equity (EVE) is calculated on a quarterly basis as prescribed by EBA regulation (the change of economic value of the balance sheet that results from calculating the outcome of standard interest rate shock scenarios).

#### Interest rate risk

in EUR million	EGB	EBOe	CS	SLSP	BCR	EBH	EBC	EBNS	SPKs	Total
EUR	-3	0	-0	-1	-0	0	0	0	-1	-5
USD	-0	-0	-0	-0	0	-0	-0	-0	-0	-0
CZK	-0	0	1	0	0	0	0	0	-0	1
HUF	-0	0	-0	0	0	0	0	0	0	0
RON	-0	0	-0	0	-0	0	0	0	0	-0
HRK	-0	0	0	0	0	0	0	0	-0	0
RSD	0	0	0	0	0	0	0	-0	0	-0
CHF	-0	0	0	0	0	-0	0	-0	0	-0
Others	-0	-0	0	0	0	0	0	-0	-0	-0
<b>Total</b>	<b>-4</b>	<b>0</b>	<b>1</b>	<b>-1</b>	<b>-0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1</b>	<b>-5</b>

EGB: Erste Group Bank; EBOe: Erste Bank Österreich; CS: Česká spořitelna, Stavební spořitelna České spořitelny, a.s. SLSP: Slovenská sporiteľňa; BCR: Banca Comercială Română; EBH: Erste Bank Hungary, Erste Lakas-Takarekpenztar Zrt, ERSTE Jelzálogbank Zrt; EBC: Erste Bank Croatia; EBNS: Erste Bank Serbia; SPK: Savings Banks, Bausparkasse der österreichischen Sparkassen, s Autoleasing, s WohnbaubankEGB

Table 74: Changes in the market value by interest rate shock (Art. 448 (b) CRR)

The table below shows the sensitivity of Erste Groups Net Interest Income (NII) result to a +100 bps shock of the interest rate curve.

#### Net Interest Income

in EUR million	EGB	EBOE	CS	SLSP	BCR	EBH	EBC	EBNS	SPKs	Total
EUR	-40	14	-4	-1	-2	2	5	3	132	107
USD	4	1	0	-0	2	0	0	-0	-0	7
CZK	12	0	100	0	0	0	0	0	2	113
HUF	1	-0	0	0	0	11	0	0	0	12
RON	1	0	0	0	3	0	0	0	0	4
HRK	-0	0	0	0	0	0	4	0	0	4
RSD	-0	0	0	0	0	0	0	1	0	1
CHF	-2	1	0	0	0	-0	0	-0	2	1
Others	1	0	0	0	0	0	0	0	0	1
<b>Total</b>	<b>-23</b>	<b>15</b>	<b>96</b>	<b>-1</b>	<b>3</b>	<b>13</b>	<b>10</b>	<b>3</b>	<b>135</b>	<b>252</b>

EGB: Erste Group Bank; EBOe: Erste Bank Österreich; CS: Česká spořitelna, Stavební spořitelna České spořitelny, a.s. SLSP: Slovenská sporiteľňa; BCR: Banca Comercială Română; EBH: Erste Bank Hungary, Erste Lakas-Takarekpenztar Zrt, ERSTE Jelzálogbank Zrt; EBC: Erste Bank Croatia; EBNS: Erste Bank Serbia; SPK: Savings Banks, Bausparkasse der österreichischen Sparkassen, s Autoleasing, s Wohnbaubank

Table 75: Earnings at risk by interest rate risk shock (Art. 448 (b) CRR)

# Exposures in equities not included in the trading book

## Goals and principles of risk management

DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

Investment risk refers to the potential loss in value resulting from a lack of dividend payouts, the (partial) write-off of assets, losses from divestments and the reduction of hidden reserves from invested own funds, from profit transfer contracts (loss transfers) or from liability risks (e.g. letters of comfort). Investment risk covers both strategic investments as well as operating equity investments and includes all equity investments of the Group (irrespective of type of consolidation).

The continuing implementation of the concept of a comprehensive financial services provider is Erste Group's strategy for equity exposures aimed primarily at complementing and rounding out the bank's core business through investment companies that provide financial products and services (esp. Bausparkasse der österreichischen Sparkassen Aktiengesellschaft, Erste Group Immorent GmbH, Erste Asset Management GmbH, s Real Immobilienvermittlung GmbH). Investments outside the bank's core business (except for providers of support services for banking operations) are being reduced in the interest of the strategic focus. Within its international business activities in Europe, the USA and Asia, Erste Group places particular emphasis on Central and Eastern Europe ("CEE") as it views the region as its extended core market.

## ORGANISATION

The responsibility for equity investments lies with Participation Management, a staff unit of Erste Group that reports to the Head of Group Accounting and Group Controlling of Erste Group Bank AG. Erste Bank der oesterreichischen Sparkassen AG has a separate Participation Management staff unit which reports directly to the CEO of Erste Bank der oesterreichischen Sparkassen AG. The Participation Management unit assists the management board and business units of Erste Group Bank AG by providing coordination and information processing services as well as support for decision-making. Inside the Group, it acts as contact, interface, service provider and coordinator for the various units and governing bodies of the subsidiaries. Outside the Group, it serves as contact and coordinator for auditors, notaries, lawyers, public authorities and other parties for business, legal, tax and equity investment related matters. In the case of sub-groups with equity investments of their own (currently CEE subsidiaries and Erste Group Immorent GmbH), Group Participation Management fulfils its Group responsibilities by ensuring that an equity investment management framework in line with the system of Erste Group is established at these sub-groups (policy-making powers rest with Erste Group Bank AG) and by assuming Group-wide responsibility for defined topics (e.g. offshore investments).

In detail, this results in the following responsibilities of the Participation Management unit:

- \_ equity investment related decision support (relating to any kind of equity measure) to the management board and other governing bodies of Erste Group Bank AG in line with applicable guidelines on decision-making powers;
- \_ preparation of reports on equity investments (quarterly reports as reporting instrument and as basis for budget approvals);
- \_ implementation, management and ongoing administration of the equity investment database AMI and central information distributor of the banks' equity investment data (for internal and external purposes);
- \_ implementation of notifications and reports to the OeNB, the Ministry of Finance and foreign authorities and organisations; and
- \_ implementation and support for company setups, acquisition and selling processes.

## RISK MEASUREMENT AND CONTROL

At least once a year, all equity investments are subjected to a standardised earning-capacity value calculation based on future budgets and multiple year projections, taking into account, among other things, the valid (local) capital adequacy regulations for each of the entities. These calculations are based on standards for the valuation of goodwill from the acquisition of investments pursuant to IFRS from which the required depreciations and write-ups, capital measures and hidden reserves are derived. Since 2012, a standardised evaluation tool has been increasingly used for this purpose which was developed jointly with a leading audit firms. The result of these calculations is discussed in detail with other units in Group Accounting and Group Controlling, and the corresponding measures (accounting entries, reports) are initiated. Moreover, any capital measures required are accorded with the business area responsible for operations prior to execution.

## REPORTING ON EQUITY EXPOSURES

As part of the monitoring and control process, the economic development of all significant direct and indirect equity investments and any risk provisions or revaluations that may become necessary during the course of the year are evaluated regularly on the basis of standard-

ised reports and internal procedures. Any adjustments to provisions or valuations that may become necessary during the year are done based on the actual and projected figures presented for each individual equity investment. Any corrections required are forwarded to the banks' accounting and controlling units for further processing.

## Description of the investment objectives

### DISCLOSURE REQUIREMENTS Art. 447 (a) CRR

The objective of Erste Group is to achieve market leadership in financial services for retail customers and corporates in the region of CEE by establishing a supranational network of banks. According to the core strategy, the objective of Erste Group is to offer a wide range of financial services, and for this reason, investments in banking-related entities (fully consolidated banks and financial institutions, ancillary units, financial holding companies and other financial services providers) are regularly made for business policy or strategic reasons. This usually also applies to minority interests in equity investments from the area of combined banking. If such services cannot be provided directly by Erste Group, investments are made in new subsidiaries or by acquiring existing entities. A further strategic focus is the adjustment to constantly changing customer behaviour by integrating mobile banking and brokerage services into the bank's range of services.

In connection with the realisation of collateral, decisions to acquire ownership are taken on a case-by-case basis in order to facilitate orderly realisation, which is done primarily in the area of real estate. To a limited extent, Erste Group enters positions with the basic intention of earning returns on capital through its private equity investments.

## Accounting policies and valuation methods

### DISCLOSURE REQUIREMENTS Art. 447 (a) CRR

Equity investments are either classified as available for sale or at fair value through profit or loss and are measured at fair value.

#### **Available for sale**

Unrealised gains and losses are recognised in other comprehensive income and reported in the 'Available for sale reserve' until the equity investment is disposed of or impaired. If available-for-sale assets are disposed of or impaired, the cumulative gain or loss previously recognised in other comprehensive income is reclassified to profit or loss.

In 2017, as part of IFRS 9 implementation, valuation models for investments in unquoted equities were developed. Erste Group considers that these models deliver reliable fair value measurement. As a result, these investments were remeasured to fair value throughout 2017.

If the fair value of investments in non-quoted equity instruments could not be measured reliably in the comparative period, they were recorded at cost less impairment. This was the case when the range of reasonable fair value estimates as calculated by valuation models was significant and the probabilities of the various estimates could not be reasonably assessed. There was no market for these investments.

In cases of equity investments classified as available for sale, objective evidence of impairment also includes a 'significant' or 'prolonged' decline in the fair value of the investment below its cost. For this purpose at Erste Group, 'significant' decline means a market price below 80% of the acquisition cost and 'prolonged' decline refers to a market price that is permanently below the acquisition cost for a period of nine months up to the reporting date.

Where there is evidence of impairment on equity investments, the cumulative loss measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investment previously recognised in the statement of income, is shown as an impairment loss in the statement of income. Any loss previously recognised under the other comprehensive income has to be reclassified to the statement of income as part of an impairment loss.

Impairment losses on equity investments are not reversed through the statement of income; increases in the fair value after impairment are recognised directly in other comprehensive income. Impairment losses and their reversals are recognised directly against the assets on the balance sheet.



For investment in unquoted equity instruments carried at cost because their fair value cannot be determined reliably, the amount of the impairment loss is measured as the difference between the carrying amount of the financial asset and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment losses shall not be reversed.

#### Fair value through profit or loss

Financial assets or financial liabilities classified in this category are those that have been designated by management on initial recognition (fair value option). Erste Group uses the fair value option in the case of financial assets managed on a fair value basis. In accordance with a documented investment strategy, the performance of the portfolio is evaluated and regularly reported to the management board. Financial assets - designated at fair value through profit or loss are recorded on the balance sheet at fair value, with changes in fair value recognised in the statement of income.

## Quantitative disclosure on exposures in equities not included in the trading book

### DISCLOSURE REQUIREMENTS Art. 447 (b) (c) (d) (e) CRR

The following table presents an overview of the different valuations in the individual exposures not included in the trading book as of 31 December 2017:

#### Type of equity exposures

in EUR million	Type of instrument	Book value	Fair value	Market value
<b>Credit institutions</b>				
	Exchange traded instruments	1	17	17
	Instruments not traded on an equity exchange	21	42	0
	Other equity instruments	0	0	0
<b>Financial institutions</b>				
	Exchange traded instruments	0	0	0
	Instruments not traded on an equity exchange	0	0	0
	Other equity instruments	0	0	0
<b>Others</b>				
	Exchange traded instruments	0	0	0
	Instruments not traded on an equity exchange	706	771	0
	Other equity instruments	0	0	0
<b>Total</b>		<b>729</b>	<b>829</b>	

Table 76: Exposures in equities not included in the trading book (Art. 447 (b) (c) CRR)

The category instruments not traded on an equity exchange in the section others includes private equity exposures at a book value of EUR 29 million and a fair value of EUR 36 million.

The following gains and losses from sales and liquidations of investees were achieved in the reporting period:

#### Realised and unrealised gains or losses from exposures in equities

in EUR million	Value
Realised gains or losses from sales and liquidations	20
Unrealised gains or losses	49
Deferred revaluation gains or losses	0
values in core capital	0
values in supplementary capital	0

Table 77: Realised and unrealised gains or losses from exposures in equities not included in the trading book (Art. 447 (d) (e) CRR)

# Operational Risk

## Goals and principles of risk management

DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

Pursuant to Article 4 (52) CRR, Erste Group defines operational risk as the risk of loss resulting from inadequacy or failure of internal processes, people or systems, or from external events, including legal risks. Both quantitative and qualitative methods are used to identify operational risks, and are refined further in order to capture all information relevant to risk management.

## ORGANISATION

While the business areas and infrastructure units are responsible for the daily management of operational risks, Group NFR Governance & Operational Risk is responsible for operational risk control across all business areas and countries as well as for the uniform application of the strategy and Group standards for operational risk management in all areas of the bank. In detail, this results in the following tasks:

- \_ identification of potential risks; including measures for early detection and risk avoidance
- \_ definition of ratios, risk indicators and guidelines
- \_ implementation, management and ongoing administration of the loss database
- \_ calculation of scenarios and assessment of specific risk situations
- \_ Group-wide calculation of the own funds requirement for all operational risks and execution of stress tests
- \_ analysis and periodic reporting
- \_ promoting “three lines of defence” governance model through operational risk methods
- \_ definition of the Group’s risk appetite and setting the limits of the residual operational risk tolerated by Erste Group
- \_ further development of methods

Operational risk management is part of the division Non-Financial Risk Management. The structure of operational risk management and control at Erste Group is also defined in the Group Risk Policy Framework in order to safeguard the complete identification of all risk components and consistent treatment of all operational risks.

## RISK MEASUREMENT AND CONTROL

The quantitative measurement methods are based on internal loss data, which is collected throughout the Group using a standard methodology and entered in a central data pool. In order to model losses that have not yet occurred but are nonetheless possible, scenarios and external data are used. In this context it is worth noting that Erste Group has been a member of the Operational Riskdata eXchange Association, an international risk loss data consortium, since 2006, and participates in the consortium on a Group-wide basis.

Apart from quantitative approaches, qualitative approaches are used to determine operational risk, primarily by performing risk analysis surveys (Risk Control Self Assessments). In order to also ensure early detection of potential risks, a series of risk indicators were developed and implemented at the Group level.

The results and proposals for risk control derived from the quantitative and qualitative processes are reported to line management and form the basis for measures to reduce operational risk. Furthermore, Erste Group defined its risk appetite for operational risk and all operational risk decisions are to be taken bearing in mind adequately balanced costs and benefits commensurate with the RAS.

## RISK HEDGING

Since the beginning of 2004, the insurance contracts for operational risks of Erste Group’s core institutions have been combined in a Group-wide insurance programme. This reduced the cost of meeting the Group’s traditional property insurance needs and thus made it possible to buy additional insurance for previously uninsured banking-specific risks. The savings potential and the additional cover are achieved – while keeping expenses unchanged as far as possible – by having a certain share of the loss or damage assumed by the Group’s own insurance company, Erste Reinsurance S.A. This makes it possible to diversify operational risk within Erste Group.

## OPERATIONAL RISK REPORTING

Information on operational risks is reported regularly to the management board. This is done within the scope of various reports, most importantly the quarterly Group Risk Report, which informs on recent losses, loss trends, qualitative information derived from Risk Control Self-Assessments, risk indicators, key ratios and the Erste Group VaR for operational risk.

## Approaches for the assessment of minimum capital requirements

### DISCLOSURE REQUIREMENTS Art. 446 CRR

In 2009, Erste Group was granted approval by the supervisory bodies to apply the AMA at the Group level for five entities:

- \_ Erste Group Bank AG
- \_ Erste Bank der oesterreichischen Sparkassen AG
- \_ Česká spořitelna a.s.
- \_ Slovenská sporiteľňa a.s.
- \_ Erste Bank Hungary Zrt.

In 2010 the approval was extended to two further entities:

- \_ Banca Comercială Română
- \_ Erste & Steiermärkische Bank d.d.

The scope of application of the AMA was further enlarged in the second half of 2011 by two entities:

- \_ Bausparkasse der österreichischen Sparkassen AG
- \_ Stavební spořitelna České spořitelny, a.s.

In 2012, another five entities were approved:

- \_ Steiermärkische Sparkasse Bank AG
- \_ Kärntner Sparkasse AG
- \_ Salzburger Sparkasse AG
- \_ Tiroler Sparkasse Bank AG Innsbruck
- \_ Brokerjet Bank AG

In 2013 the following entities were approved:

- \_ ERSTE BANK AD NOVI SAD

In 2014 Brokerjet Bank AG was merged into EBOe.

The AMA is used in all entities listed above in all areas of application.

Risk mitigating effects within the Advanced Measurement Approach are applied to all entities as of Q4 2017. Steiermärkische Sparkasse Bank AG was added to the Insurance program on Group level (approved in Q4 2017); at the moment insurance savings from Steiermärkische Sparkasse are only accounted for on consolidated level, on entity level it is pending regulatory approval.

Minimum capital requirements for those subsidiaries that do not yet apply the AMA are calculated using the BIA.

## Advanced Measurement Approach

### DISCLOSURE REQUIREMENTS Art. 454 CRR

The AMA is a complex approach used for the valuation of operational risk. The required capital is calculated using an internal VaR model taking into account the following factors:

- \_ internal loss data (historic gross loss)
- \_ external loss data (data from the external consortium Operational Riskdata eXchange Association)
- \_ scenario analysis (supplements the internal and external data by rare events that may lead to large loss or damage)
- \_ business environment and internal risk control factors (such as risk indicators and risk assessment)

The key ratio in this context for regulatory capital requirements is the VaR at a confidence level of 99.9% for one year, which is computed for all units using the AMA and is distributed across the respective subsidiaries based on a risk-sensitive allocation key.

Furthermore, apart from the regulatory capital requirement under the CRR, the economic risk capital is represented for the material part of the Group using the AMA. Here, all entities providing sufficient loss data information – irrespective of the AMA approval for regulatory capital requirement purposes – are covered within AMA calculating the VaR at a confidence level of 99.95% for one year. The remaining part is taken into account using the BIA method.

The quantitative methods outlined (based on the central data pool, scenarios and external data) and the qualitative methods (e.g. risk control self-assessments) including the insurance strategy and the modelling approaches, form the operational risk framework of Erste Group.

For the modelling of operational risk, Erste Group uses the Loss Distribution Approach. The modelling of the aggregate loss distribution is done in two steps. In a first step, the individual distributions of loss frequency and loss severity are calculated and then combined using a Monte Carlo simulation. The structure of the Loss Distribution Approach model complies with the CRR requirements.

Apart from internal and external loss data, scenario analyses, the business external and internal control factors (the outputs of risk and control self-assessments, key risk indicators, product approval process, outsourcing process, emerging risks analysis) and the resulting changes to the risk profile are all input factors for the Erste Group AMA model. Erste Group does not take any correlation effects into account in its model. The regulatory capital requirement is not reduced by the expected loss.

The AMA capital value of Erste Group takes into account both unexpected and expected losses of all banks using the AMA. Both the expected loss and the unexpected loss are reported to the management.

The model assumptions and input factors are validated annually by Group Validation and the results of the validation are reported to the Holding Model Committee. Furthermore, Erste Group conducts periodic stress tests and sensitivity analyses to assess risk potential.

#### Differentiation of operational risk from credit and market risk

A loss event relating to credit risk is reported as an operational risk event in the loss database when the operational risk was the actual cause of the loss. In line with regulatory requirements, these losses are not considered in the AMA model for the purposes of calculating operational risk capital requirements. Whenever an event occurs that may be attributed to operational risk or that triggers a loss or gain on the market side, then this is deemed an operational risk, reported as such and included in the AMA capital calculation.

## Use of insurance for risk mitigation in AMA

#### DISCLOSURE REQUIREMENTS Art. 454 CRR

Risk mitigating insurance effects under existing insurance contracts, taking into account all applicable legal provisions, are included in the models developed for the insurance-related reduction of capital requirements for operational risk only when the risk is reinsured on the external insurance market. The risk mitigating insurance effects are calculated using a Monte Carlo simulation for all eligible losses. In selecting insurance partners, Erste Reinsurance S.A. strictly observes supervisory requirements. The insurance portfolio and the captive reinsurance activities are periodically audited by Group Audit.

## Quantitative disclosure on operational risk

#### DISCLOSURE REQUIREMENTS Art. 454 CRR

The figure below shows the percentage composition by type of event of operational risk as defined in the CRR. The observation period runs from 1 January 2013 to 31 December 2017.

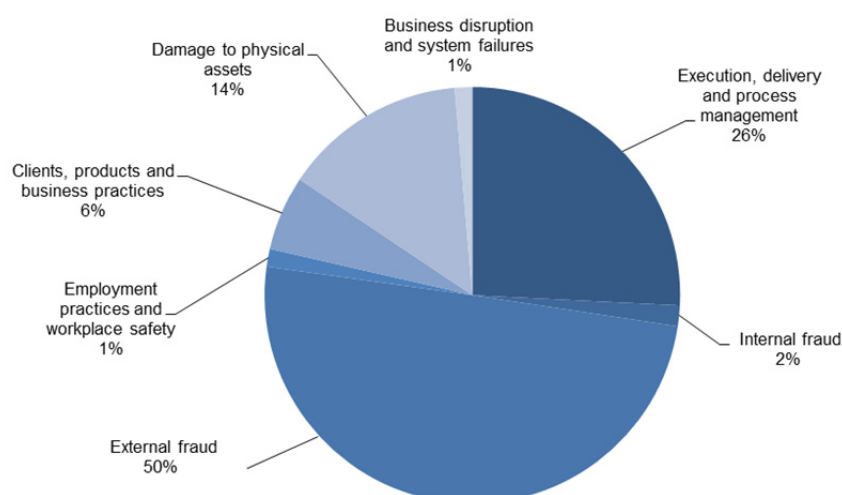


Figure 6: Percentage composition by type of event of operational risk (related to number of OpRisk events)

The different types of event categories are defined as follows:

**Internal fraud.** Losses due to acts intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversity/discrimination loss events, which involve at least one internal party.

**External fraud.** Losses due to acts of a type intended to defraud, misappropriate property or circumvent the law by a third party.

**Employment practices and workplace safety.** Losses arising from acts in breach of employment, health or safety laws and agreements; losses from payment of personal injury claims; from diversity/discrimination events.

**Clients, products and business practices.** Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements); losses due to the nature or design of a product

**Damage to physical assets.** Losses arising from loss or damage to physical assets caused by natural disasters or other events.

Business disruption and system failures. Losses arising from disruption of business or system failures.

**Execution, delivery and process management.** Losses from failed transaction processing or process management; from relations with trade counterparties and suppliers/vendors.

# Other risks

## Liquidity risk

### GOALS AND PRINCIPLES OF RISK MANAGEMENT

DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

#### Liquidity risk management framework

Liquidity risk is defined in Erste Group in line with the principles set out by the Basel Committee on Banking Supervision as well as the European and the Austrian regulations (Capital Regulations Requirement (CRR) – Regulation (EU) No 575/2013, Delegated Regulation (EU) 2015/61, ‘Kreditinstitute-Risikomanagement-Verordnung – KI-RMV’). Accordingly, a distinction is made between market liquidity risk, which is the risk that the group entities cannot easily offset or close a position at the market price because of inadequate market depth or market disruption, and funding liquidity risk, which is the risk that the banks in the group will not be able to meet efficiently both expected and unexpected current and future cash flow and collateral needs without affecting either daily operations or the financial condition of the group members.

Funding liquidity risk is further divided into insolvency risk and structural liquidity risk. The former is the short-term risk that current or future payment obligations cannot be met in full and on time in an economically justified manner, while structural liquidity risk is the long-term risk of losses due to a change in the Group’s own refinancing cost or spread.

Erste Group has defined and implemented a Group Risk Strategy, which is approved by the Holding Board and the Supervisory Board on an annual basis. The Group Risk Strategy defines, inter alia, the Risk Appetite for liquidity risk as a part of the Group Risk Appetite Statement. In line with the Group Risk Appetite Statement, key liquidity principles are defined to ensure that processes are in place to manage the liquidity risk profile and the strategic limits are set in the Group Risk Strategy. These are further translated into operating limits and liquidity risk management policies. In addition to that, governance arrangements are in place to address any adverse developments of the Erste Group’s liquidity profile.

#### Structure and organization of the liquidity risk management function

Erste Group Bank AG has the central liquidity risk management function for Erste Group in addition to the responsibility for its solo level functions, i.e. it defines the principles and methodology for liquidity risk management for the other entities and ensures their proper implementation at local level. The legal entity structure of Erste Group consists of 3 levels, with Erste Group Bank AG as the top institute for the Group. Level 2 includes the core subsidiaries of Erste Group Bank AG and the Austrian savings banks, while Level 3 includes the other subsidiaries of Erste Group Bank AG and the subsidiaries of the entities at Level 2. They are also responsible for the accurate and timely delivery of the data relevant for liquidity risk measurement to the Erste Group Bank AG.

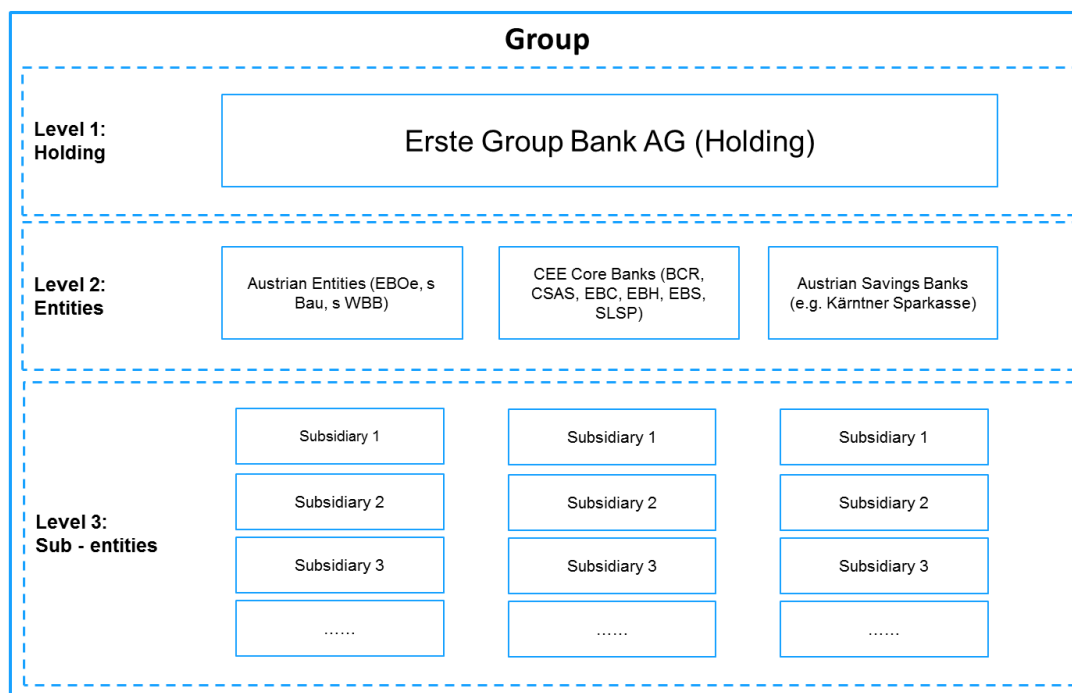


Figure 7: Levels of Erste Groups legal entity structure

A distinction is made between the Level 2 core subsidiaries (all entities in Level 2 excluding savings banks, but including EBOe) and the cross guarantee system - Haftungsverbund (according to the group's segments, savings banks).

The organizational structure of Erste Group ensures the Liquidity Risk Management at both decision-making and operational level. The figure below provides an overview of the governance structure for liquidity risk management at Group level:

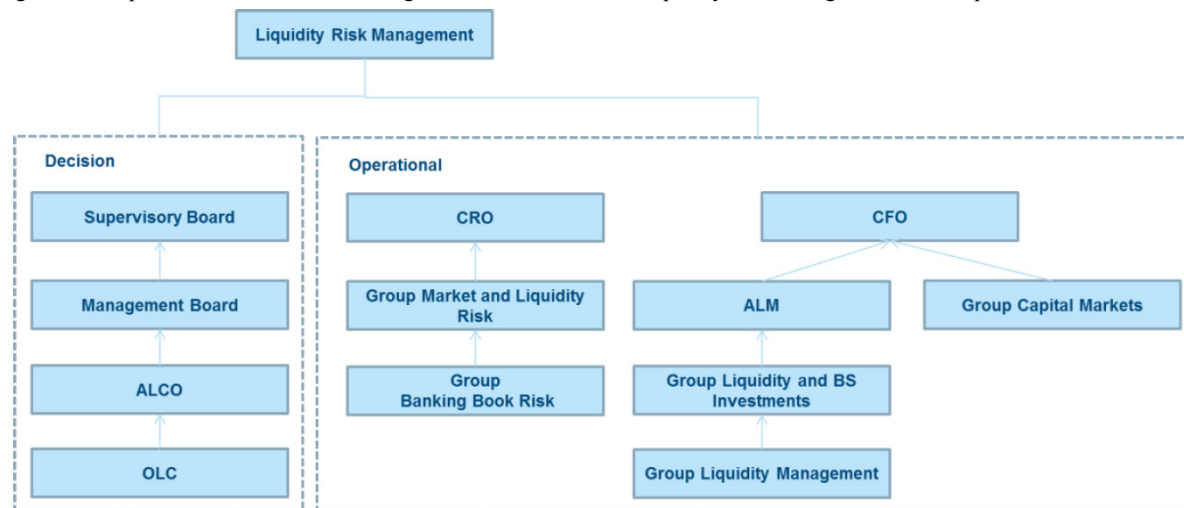


Figure 8: Governance structure for liquidity risk management

A detailed overview of the various bodies and organizational units involved in the liquidity risk governance process at both the group and local entity level is described in the Group Liquidity Risk Management Policy (GLRMP).

## RISK MEASUREMENT AND CONTROL

Erste Group produces a number of regular reports for both internal and external (predominantly supervisory authorities) stakeholders. These reports are covering both, structural liquidity risk as well as insolvency risk and are used to monitor and steer the liquidity position in Erste Group.

### Survival period analysis

The short-term insolvency risk is monitored and limited by calculating the survival period for each material currency on both entity and group levels. This analysis determines the maximum period during which the entity can survive a set of defined scenarios, including a severe combined market and idiosyncratic crisis while relying on its pool of liquid assets. The monitored worst-case scenario simulates very limited money market and capital market access and at the same time significant client deposit outflows. Furthermore, the simulation assumes increased drawdown on guarantees and loan commitments dependent on the type of customer, as well as the potential outflows from collateralized derivative transactions estimating the effect of collateral outflows in the case of adverse market movements. To reflect the reputational risk from callable own issues, the principal outflows from these liabilities are modelled to the next call date in all stress scenarios.

### Liquidity coverage ratio (LCR)

Erste Group is reporting the Liquidity Coverage ratio according to the delegated regulation (EU) 2015/61 to the authorities on solo and group level. The LCR has been part of the Group RAS since 2014 targeting to be well above the regulatory requirement

### Net Stable Funding Ratio (NSFR)

Erste Group is calculating the Net Stable Funding Ratio (NSFR) according to the CRR based on the weights of the Basel Committee on Banking Supervision (BCBS) and is constantly participating and reporting the QIS monitoring according to the BCBS guidelines. Internally, these ratios are monitored on entity level as well as on group level. Erste Group is reporting the NSFR according to the CRR in the quarterly Short Term Exercise to the regulator.

### Concentration analysis

Concentration risks in terms of funding providers, products and assets in the counterbalancing capacity (CBC) are regularly monitored and reported to the regulator. Additionally, the diversification of the High Quality Liquid Assets is monitored internally on solo and Group level.

### Comprehensive stress testing and recovery and resolution planning

Additional scenarios are analysed to further elaborate on the main vulnerabilities of Erste Group's liquidity position. These scenarios are elaborated based on specific storylines. The scenarios and the relevant stress parameters are taken from historical evidence where available. When historical evidence is not available, expert opinions and assumptions are used.

### **Funds transfer pricing (FTP)**

The Funds Transfer Pricing (FTP) of Erste Group has proven to be an efficient control instrument for the management of structural liquidity risk.

## **METHODS AND INSTRUMENTS OF RISK MITIGATION**

Erste Group uses a number of measurement tools and metrics to quantify liquidity risk. In addition to regulatory measures (e.g. LCR, NSFR and LLSFR), Erste Group defines its own internal metrics. The key internal metric is the Survival Period Analysis, which serves as the key tool to measure insolvency risk in Erste Group. It focuses on a one-year horizon and uses a dynamic stress testing methodology. The FTP system is yet another important instrument for managing and steering the liquidity risk within Erste Group Bank AG in relation to its subsidiaries. Early warning indicators also form an integral part of the liquidity risk management framework, in particular with respect to detecting the type and severity of liquidity stress events.

Limits are defined centrally and locally in the Risk Appetite Statement and the Risk Strategies. Limit breaches are reported to the Operational Liquidity Committee (OLC) and the Group Asset Liability Committee (ALCO).

Additional important information for liquidity management can be obtained via the process of planning funding needs. Therefore, a detailed overview of funding needs is prepared over the whole planning horizon. It covers all major entities in the Group and is prepared at least annually as part of the Group ALM Strategy.

The Contingency Funding Plans (CFPs) of Erste Group's entities ensure an adequate set of liquidity enhancing actions in times of stress as well as the necessary coordination of all parties involved in the liquidity management process. The CFPs are reviewed at least annually and are checked for compliance with minimum standards set within the Group Liquidity Management Policy.

## **ADEQUACY OF LIQUIDITY RISK MANAGEMENT**

The concise statement on liquidity risk or more exact the Comprehensive Statement on Liquidity Adequacy provides an overview of major principles for managing the liquidity adequacy of Erste Group. It is following the bank's business strategy and operational environments in order to keep the current amount of liquid resources on an adequate level and to ensure a prudent funding profile. In addition major liquidity risk measures and limits for external and internal reporting and for internal steering of liquidity risk are included. The statement is updated on a yearly basis in course of ILAAP.



## QUANTITATIVE INFORMATION ON LCR

Consolidated		Total unweighted value				Total weighted value			
EUR million		31-Mar-17	30-Jun-17	30-Sep-17	31-Dec-17	31-Mar-17	30-Jun-17	30-Sep-17	31-Dec-17
Quarter ending on (DD Month YYYY)		31-Mar-17	30-Jun-17	30-Sep-17	31-Dec-17	31-Mar-17	30-Jun-17	30-Sep-17	31-Dec-17
Number of data points used in the calculation of averages		7	10	12	12	7	10	12	12
<b>HIGH-QUALITY LIQUID ASSETS</b>									
1	Total high-quality liquid assets (HQLA)					37,826	39,019	40,200	41,969
<b>CASH-OUTFLOWS</b>									
2	Retail deposits and deposits from small business customers, of which:	86,629	87,600	88,757	90,475	6,984	6,955	6,900	6,960
3	Stable deposits	44,634	46,275	48,182	50,291	2,232	2,314	2,409	2,515
4	Less stable deposits	41,832	41,171	40,428	40,042	4,590	4,488	4,344	4,304
5	Unsecured wholesale funding	37,396	38,372	39,684	42,147	18,227	19,063	20,107	21,856
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	6,927	6,222	5,816	5,557	1,617	1,444	1,339	1,264
7	Non-operational deposits (all counterparties)	30,292	31,942	33,658	36,355	16,433	17,411	18,558	20,357
8	Unsecured debt	177	208	211	234	177	208	211	234
9	Secured wholesale funding					53	57	91	76
10	Additional requirements	21,168	22,705	23,766	25,880	11,164	12,369	12,839	13,761
11	Outflows related to derivative exposures and other collateral requirements	10,133	11,270	11,663	12,473	10,133	11,270	11,663	12,473
12	Outflows related to loss of funding on debt products	10	38	44	68	10	38	44	68
13	Credit and liquidity facilities	11,025	11,397	12,059	13,339	1,021	1,061	1,132	1,220
14	Other contractual funding obligations	940	947	920	949	701	713	689	684
15	Other contingent funding obligations	30,108	30,478	30,585	30,100	1,846	1,877	1,879	1,829
16	<b>Total cash outflows</b>					<b>38,975</b>	<b>41,034</b>	<b>42,505</b>	<b>45,165</b>
<b>CASH-INFLOWS</b>									
17	Secured lending (eg reverse repos)	4,075	4,486	5,984	8,584	326	424	477	547
18	Inflows from fully performing exposures	4,077	4,196	4,214	4,422	2,997	3,084	3,082	3,245
19	Other cash inflows	10,128	11,769	12,451	13,572	9,903	11,160	11,670	12,535
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					0	0	0	0
EU-19b	(Excess inflows from a related specialised credit institution)					0	0	0	0
20	<b>Total cash inflows</b>	<b>18,280</b>	<b>20,450</b>	<b>22,649</b>	<b>26,577</b>	<b>13,226</b>	<b>14,668</b>	<b>15,229</b>	<b>16,327</b>
EU-20a	Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b	Inflows Subject to 90% Cap	-	-	-	-	-	-	-	-
EU-20c	Inflows Subject to 75% Cap	18,280	20,450	22,584	26,512	13,226	14,668	15,229	16,327
21	<b>Liquidity buffer</b>					<b>37,826</b>	<b>39,019</b>	<b>40,200</b>	<b>41,969</b>
22	<b>Total net cash outflows</b>					<b>25,749</b>	<b>26,366</b>	<b>27,276</b>	<b>28,838</b>
23	<b>Liquidity coverage ratio (%)</b>					<b>147%</b>	<b>148%</b>	<b>147%</b>	<b>146%</b>

Table 78: Quantitative Information on LCR (values are calculated as averages of month-end observations over the number of data points as outlined in the table)

### **Further details on the items included in the quantitative information of LCR**

Diversification of the liquidity buffer and funding sources in Erste Group is ensured by the relevant policies and the implementation of regular monitoring of the HQLA and funding concentration in diverse categories. Derivative exposures and all potential collateral calls are considered in Erste Group's LCR calculation and reported accordingly in the appropriate categories.

The LCR is calculated and monitored for all significant currencies of Erste Group. The review of significant currencies is done either in case of significant business strategy changes or at least on an annual basis.

## **LIQUIDITY MANAGEMENT IN ERSTE GROUP**

Liquidity management is a joint effort of ALM units and Group Markets (GM) units within Erste Group. Generally ALM units are responsible for structural liquidity management while GM units are responsible for day-to-day liquidity management and execution of liquidity relevant transactions.

Structural Liquidity Management is performed by local ALM units for the entities falling under their local scope of consolidation, thereby following the principles and guidelines outlined in the Group Liquidity Management Policy, whose owner is Group ALM. Hence, local ALM units are responsible to create a local Liquidity Strategy for their partial subgroup, which is approved by the local Board of Directors after alignment with Group ALM.

Furthermore, Group ALM sets requirements on the set-up and statutes of the local Operative Liquidity Committees and formulates strategic guidelines, which include Group guidance on different strategic liquidity-related issues that have to be considered during the regular budgeting process by local entities. Examples would be: compliance with liquidity-risk limits, available intra-group funding volume/products, rules for accessing liquidity from central banks, rules for gathering local wholesale funding or funding from supranationals, rules on investments in liquidity buffer assets (tenors, volumes, types), etc. In addition, Group ALM performs an analysis of whether each local entity's liquidity strategy meets the requirements set out in the Group Liquidity Management Policy and whether it complies with the above mentioned Group Strategic Guidelines. Based on all local entities' liquidity strategies, Group ALM creates the Group's (and Holding's) Liquidity Strategy which is approved by Group ALCO in the beginning of each year.

Throughout the year Group ALM oversees liquidity management across the Group by monitoring liquidity indicators and balance sheet developments of all entities on individual and on Group level. In addition, Group ALM manages the liquidity flows within the Group in its role as a central liquidity hub for all entities of the Group in major currencies and as the owner of the intra-group funding pricing policy. Furthermore, guidance is provided to local ALM units regarding principles and minimum standards for the management of local liquidity buffers. Group ALM is also responsible to reflect the costs and benefits of compliance with different liquidity-related limits and regulations in the internal Funds Transfer Price system, whose design and methodology are defined in the Group FTP policy. In terms of crisis management, Group ALM sets minimum standards for local entities' Contingency Funding Plans and performs a check of whether each entity's CFP is compliant with those requirements.

## Encumbered and unencumbered assets

### DISCLOSURE REQUIREMENTS Art. 443 CRR AND EBA GUIDELINES ON DISCLOSURE OF ENCUMBERED AND UNENCUMBERED ASSETS

Erste Group is obliged to report encumbered and unencumbered assets at Group level based on the CRR scope of consolidation in the manner set out in the EBA guidelines on disclosure of encumbered and unencumbered assets:

#### Template A – Assets

median in EUR million	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
Assets of the reporting institution	33,727		186,269	
Loans on demand	2,615	0	17,354	0
Equity instruments	196	196	1,814	1,827
Debt securities	6,914	7,317	31,260	32,236
of which: covered bonds	217	217	1,203	1,241
of which: asset-backed securities	0	0	0	0
of which: issued by general governments	24,531	25,964	97,912	101,636
of which: issued by financial corporations	848	858	4,170	4,229
of which: issued by non-financial corporations	420	421	2,395	2,423
Loans and advances other than loans on demand	21,406	0	124,023	0
of which: mortgage loans	13,348	0	65,759	0
Other assets	2,596	0	12,727	0

Table 79: Encumbered and unencumbered assets – assets (Art. 443 CRR)

#### Template B - Collateral received

in 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
Collateral received by the reporting institution	919	8,332
Loans on demand	0	0
Equity instruments	38	235
Debt securities	867	7,916
of which: covered bonds	29	665
of which: asset-backed securities	0	0
of which: issued by general governments	388	2,108
of which: issued by financial corporations	440	2,400
of which: issued by non-financial corporations	7	115
Loans and advances other than loans on demand	0	0
Other collateral received	0	149
Own debt securities issued other than own covered bonds or ABSs	0	0
Own covered bonds and asset-backed securities issued and not yet pledged	0	5,296

Table 80: Encumbered and unencumbered assets – collateral received (Art. 443 CRR)

#### Template C - Encumbered assets/collateral received and associated liabilities

in EUR million	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
Carrying amount of selected financial liabilities	22,849	29,073
Derivatives	3,404	3,517
Deposits	9,840	12,487
Debt securities issued	9,605	13,069
of which: covered bonds issued	9,602	13,069
Other sources of encumbrance	1,005	3,666

Table 81: Encumbered and unencumbered assets – encumbered assets/collateral received and associated liabilities (Art. 443 CRR)

Any difference between the regulatory consolidation scope used for the purpose of the disclosures on asset encumbrance and the scope retained for the application of the liquidity requirements on a consolidated basis as defined in Part II, Chapter 2 of Regulation (EU) No 575/2013 are evaluated on Erste Group Bank AG level and considered negligible (Average 2017 >EUR 25 million).

In 2017 EUR 35 billion (sum of median as stipulated in EBA ITS) of the Group's own and received assets were identified as being encumbered based on the EBA definition. The main sources of encumbrance in Erste Group are: issuance of covered bonds, collateralised trading activities as well as collateralised open market transactions with the ECB. Asset classes used for the above mentioned purposes are loans and advances to customers (mortgage and public cover pool collateral assets) and debt securities predominately made up of assets

both being central bank eligible collateral as well as qualifying as HQLA under the LCR Delegated Act. As a result of the total unsecured funding position, predominantly made up of customer savings and current accounts, the median amount of encumbered assets and matching liabilities stemming from secured funding is relatively low in proportion to the total balance sheet of Erste Group Bank AG.

There is material intragroup encumbrance in Erste Group whereby it should be distinguished between long term and short term intragroup encumbrance. The long term portion is almost exclusively driven by intragroup encumbrance due to the Austrian covered bond issuance platform involving Erste Group Bank AG (Holding) and the Austrian entities (Erste Bank der Österreichischen Sparkassen AG and Savings Banks belonging to the institutional protection scheme) which contribute mortgage and public loan assets to the cover pool in Erste Group Bank AG (Holding) which in turn issues covered bonds on said pool of assets. The Austrian cover pool model constitutes two thirds of the total intragroup encumbrance. The short term portion making up the remaining third of intra-group encumbrance is driven by collateralized transactions for the purpose of liquidity optimization and market making across the Group.

The main drivers of asset encumbrance in Erste Group are currently 4 rated covered bond programs with relevant over collateralization levels required for external ratings. The programs are situated in countries with different risk profiles regarding the issuance of covered bonds and are rated by different rating agencies. The issuance models differ significantly between certain jurisdictions (e.g. Austria: Off balance asset pooling on Holding level and on-balance issuance of covered bonds; Hungary: Issuance from specialized mortgage bank institution) and therefore have varying effects on the level of encumbrance of the relevant issuing entity. With EUR 7 billion (carrying amount as of Q4 2017) out of the total consolidated Group covered bond issuance of EUR 9 billion, Erste Group Bank AG (Holding) is the main driver of encumbrance stemming from covered bond issuance. The over collateralization requirement for Erste Group Bank AG's current covered bond ratings as of Q3 2017 is 12,5% (NPV for the mortgage program currently rated Aaa by Moody's) and 14% (NPV for the public program currently rated Aaa by Moody's) both of which are used to determine assets encumbered resulting from the issuance of covered bonds. The other programs' over collateralization requirements currently range from 5% (Erste Bank Hungary Mortgage Bank) to 7.5% (SLSP in committed form).

Erste Group Bank AG currently holds retained own covered bonds in the amount of EUR 6 billion. The assets backing the mentioned covered bonds are considered unencumbered unless the covered bonds are used to collateralize any transactions pursuant the EBA ITS on asset encumbrance reporting under Article 100 of the CRR.

The actual Group level of asset encumbrance is reviewed quarterly by the Asset Liability Committee (Group ALCO) of Erste Group Bank AG, where material changes are discussed and potential steering measures approved. It is worth mentioning that the levels of individual asset encumbrance vary on single entity level mainly due to heterogeneous business models within the Group. Any risk arising from such discrepancies is sufficiently monitored and managed at both Group and individual entity level. In addition, an internal governance framework is in place, which includes a Group-wide policy on reporting, steering and limiting the level of asset encumbrance on Group and individual entity level. Furthermore, asset encumbrance is an integral part of the Group's ALM and Risk Strategies. Local levels are monitored and managed in the relevant local committees. The prevailing as well as projected levels of asset encumbrance (Group and local) are taken into consideration when setting up the Group's and individual entities funding plans and the respective liquidity risk profiles during the yearly budgeting process.

## Macroeconomic risk

### DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

Macroeconomic risk is the risk that the bank incurs losses due to adverse changes in the overall economic environment, ie business cycle risk.

### METHODS AND INSTRUMENTS APPLIED

In the course of stress testing, scenarios are developed based on the assumption of deteriorating economic conditions. These macroeconomic scenarios apply not only to the entire portfolio of the Group, but also to earnings and capital adequacy. This method reveals how the changed economic conditions affect the risk and earnings situation as well as own funds.

Risk modelling and stress testing are vital forward-looking elements of the ICAAP. Sensitivities and macroeconomic stress scenarios are considered within the Group's planning and budgeting process.

## Concentration risk

### DISCLOSURE REQUIREMENTS 435 (1) (a) (b) (c) (d) CRR

Concentration risk is the risk of possible adverse consequences that may result from concentrations or mutually reinforcing effects of similar and divergent risk factors or risk types. These include, for example, the risk that may arise from loans to the same customer, to a Group of associated companies or to customers from the same region or industry or to customers offering the same services and goods, from the use of credit risk mitigation techniques and especially from indirect large volume loans.

### METHODS AND INSTRUMENTS APPLIED

Erste Group has implemented a comprehensive system for the identification, measurement, control, reporting and management of concentration risks. This is of key importance for securing the long-term viability of every single credit institution especially in phases with an adverse macroeconomic environment.

Concentration risk management at Erste Group is based upon a framework of processes, methods and reports covering both intra-risk and inter-risk concentrations. Diverse analyses are conducted on a regular basis, reviewed and reported. Concentration risks are also taken into account systematically in the stress factors of stress tests.

The output of the risk concentration analysis additionally contributes to the identification of material risks within the risk materiality assessment as well as to the Risk Appetite Statement and to the setting/calibration of Erste Group's limit system.

## Business risk

### DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

Business risk is the risk of suffering unexpected operating losses due to decreases in operating revenues or increases in costs, which cannot be compensated by cost reduction or revenue increases, respectively. All revenue or cost fluctuations which are attributable to position taking, credit losses or operational events are excluded; however, the materialisation of strategic risk is included in this risk type.

### METHODS AND INSTRUMENTS APPLIED

Erste Group has implemented a comprehensive framework for the identification, measurement, control, reporting and management of business risks. As part of its overall risk management framework, Erste Group is regularly reviewing business and strategic risks at both Group and local entity levels, reflecting current developments in different macroeconomic environments, legal jurisdictions as well as different business strategies and balance sheet structures.

For pillar 2 purposes, Erste Group quantifies business risks using a quantitative model, using the deviation of budgeted vs realised values. The results of the model are used in economic capital and risk bearing capacity computations. In addition, they are incorporated into the risk appetite and risk strategy of Erste Group. Finally, the effects of the model are also analysed in the context of the Group's regular stress testing framework.

## Reputational risk

### DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

Reputational risk is the current or prospective risk arising from negative perceptions on the part of customers, suppliers, stakeholders, the public or other relevant parties that can adversely affect the bank's earnings, funds and liquidity. It mostly depends on competence, integrity, social responsibility and reliability of the bank. Reputational risk issues usually arise from transactions with clients or through different business activities.

However, due to its nature reputational risks usually materialise as secondary effects of other risk types.

## GOALS AND PRINCIPLES OF RISK MANAGEMENT

Erste Group does not quantify reputational risk explicitly in the economic capital calculation under Pillar 2. The quantification of reputational risk distinguishes two types of losses:

- \_ losses the bank is willing to accept in order to avoid reputational damage, typically quantified in terms of market, credit and operational risk economic capital;
- \_ negative reputational damage on future earnings, e.g. reduced operating revenues due to the loss of customers covered by the strategic risk EC.

## METHODS AND INSTRUMENTS APPLIED

Reputational Risk Management is embedded in the “Non Financial Risk Management” Governance, where two committees with the following responsibilities are established:

- \_ The “Group Operational Conduct Committee” (GOCC) is responsible for enforcement of the Code of Conduct and management of non-financial risks (NFR). Furthermore this committee ensures the execution of NFR - it decides on critical non-financial risk decisions and serves as an escalation committee for the ROCC
- \_ The “Regional Operational Conduct Committee” (ROCC) is steering non-financial risks via the NFR Profile. Furthermore it is responsible for the Group-wide definition of standards for respective NFR topics, as well as significant decisions on business applications based on the risk-return evaluation

The primary responsibility for the identification, escalation and resolution of reputational risk issues resides with the business and the relevant risk type owner supports their resolution. As an example, reputational risk is mitigated by the following measures:

- \_ statement of purpose
- \_ code of conduct
- \_ new product approval process
- \_ credit policies
- \_ pro-active press and investor communication
- \_ outsourcing policy
- \_ conflicts of interest and anti-corruption policy
- \_ Responsible Finance Policy.

Identified risks in “run” or “change the bank” activities are assessed and decided using the unified method (“Risk Return Decision” for Risk Acceptance) and monitored by relevant risk type owners. Reputational risk is also part of the annual risk materiality assessment and the RAS.

## Cross-guarantee risk

### DISCLOSURE REQUIREMENTS Art. 435 (1) (a) (b) (c) (d) CRR

Cross-guarantee risk is the risk arising from legal obligations due to Erste Group’s membership in cross guarantee schemes (e.g. Sparkassen Haftungsverbund in Austria). The Haftungsverbund scheme in Austria supplements the statutory deposit guarantee and investor compensation schemes as an additional safety net. When a guaranteed event occurs (i.e., a member of the Haftungsverbund declares bankruptcy), the Haftungsverbund is a subsidiary tool that takes effect once the statutory deposit guarantee has been exhausted.

## METHODS AND INSTRUMENTS APPLIED

In order to guarantee adequate capitalisation, liquidity and a consistent understanding and treatment of the various risk types, standardised regulations were implemented at every Austrian savings bank that is member of Sparkassen Haftungsverbund. These regulations are regularly reviewed and further developed.

Furthermore, Haftungsverbund GmbH, the steering company of the Austrian Sparkassen Haftungsverbund scheme, has implemented an early warning system to identify potential liability events and to facilitate early counteraction.