

Erste Group undertakes a part of interest rate derivative and credit derivative transactions via Clearing Houses. These derivatives and related variation margin balances fulfil the requirements for balance sheet offsetting in accordance with the criteria described in chapter 'B. Significant accounting policies'. The impact of offsetting is shown in the column 'Amounts offset'. The net position between the offset derivative amounts EUR 186 million (2016: EUR 283 million) is further offset with variation margin balances presented under balance sheet items 'Cash and cash balances' in amount EUR 32 million (2016: EUR 2 million) and 'Financial liabilities measured at amortised cost', sub-item 'Deposits from banks' in amount of EUR 218 million (2016: EUR 285 million).

Erste Group employs repurchase agreements and master netting agreements as a means of reducing credit risk of derivative and financing transactions. They qualify as potential offsetting agreements. Master netting agreements are relevant for counterparties with multiple derivative contracts. They provide for the net settlement of all the contracts in the event of default of any counterparty. For derivatives transactions the values of assets and liabilities that would be set off as a result of master netting agreements are presented in the column Financial instruments. If the net position is further secured by cash collateral or non-cash financial collaterals the effects are disclosed in columns Cash collateral received/pledged and Non-cash financial collaterals received/pledged respectively.

Repurchase agreements are primarily financing transactions. They are structured as a sale and subsequent repurchase of securities at a pre-agreed price and time. This ensures that the securities remain in the hands of the lender as collateral in case the borrower defaults on fulfilling any of its obligations. Offsetting effects from repurchase agreements are disclosed in the column Non-cash financial collateral received / pledged respectively. Collateral is presented at the fair value of the transferred securities. However, if the fair value of collateral exceeds the carrying amount of the receivable/liability from the repo transaction the value is capped at the level of the carrying amount. Remaining position may be secured by cash collateral. Cash and non-cash financial collateral involved in these transactions is restricted from being used by the transferor during the time of the pledge.

## **44. Risk management**

### **44.1 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 monitoring the risk appetite, additional metrics, as well as escalation of limit breaches.

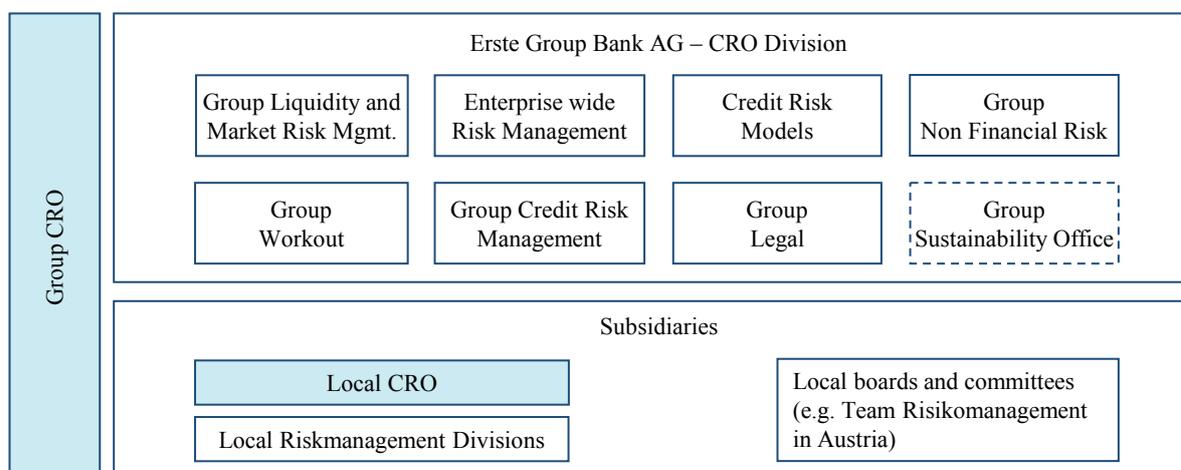
In 2017, management has continued to steer critical portfolios, including active management of non-performing exposures to further strengthen the risk profile. This has been particularly demonstrated by the continuous improvement of the credit quality and the ongoing decrease of non-performing loans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

Erste Group Bank AG uses the Internet as the medium for publishing disclosures of Erste Group under Article 434 of the Regulation (EU) No. 575/2013 on prudential requirements for credit institutions and investment firms (Capital Requirements Regulation - CRR). 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'.

### **44.2 Risk management organisation**

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

The following chart presents an overview of Erste Group's risk management organization:



In 2017, it has been decided to streamline the Group CRO area's structure aiming to reduce complexity and to ensure more efficient processes and clear responsibilities, with focus on risk types. The changes addressed the following:

- \_ Group Liquidity and Market Risk Management was founded to cover all related topics with respect to liquidity risk and market risk;
- \_ Risk Methods and Models and Group Validation were integrated into the new division Credit Risk Models;
- \_ Group Retail and SME Risk Management was integrated into Group Credit Risk Management;
- \_ Group Sustainability Office was moved in Group CRO area as a staff unit;
- \_ Group EGI Real Estate Risk Management was integrated into existing dedicated functions and structure, i.e. Group Workout and Group Credit Risk Management;
- \_ Group Risk Operating Office has been shifted to the COO (Chief Operating Officer) divisions.

### Risk management structure

The management board and in particular Erste Group's Chief Risk Officer (Group CRO) perform the oversight function within Erste Group's risk management structure. Risk control and risk steering within Erste Group are performed based on the business strategy and risk appetite approved by the management board. The Group CRO, working together with the chief risk officers of the subsidiaries, is responsible for the implementation and adherence to the risk control and risk management strategies across all risk types and business lines.

The management board and, in particular, the Group CRO ensure the availability of appropriate infrastructure and staff as well as methods, standards and processes to that effect; the actual identification, measurement, assessment, approval, monitoring, steering and limit setting for the relevant risks are performed on the operating entity level within Erste Group.

At group level, the management board is supported by several divisions established to perform operating risk control functions and exercise strategic risk management responsibilities. The following risk management functions report directly to the Group CRO:

- \_ Group Liquidity and Market Risk Management;
- \_ Enterprise wide Risk Management;
- \_ Credit Risk Models;
- \_ Group Non Financial Risk;
- \_ Group Workout;
- \_ Group Credit Risk Management;
- \_ Group Legal;
- \_ Group Sustainability Office;
- \_ Local Chief Risk Officers.

### Group Liquidity and Market Risk Management

The newly formed division Group Liquidity and Market Risk Management (GLMRM) comprises all market and liquidity risk functions. 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. 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.

### Enterprise wide Risk Management

Enterprise wide Risk Management (ERM) enables an increased focus on holistic risk management and ensures comprehensive cross-risk group-wide risk portfolio steering, monitoring, analysis, and reporting. ERM drives key strategic initiatives to establish greater cohesion between risk strategy (including risk appetite and limit steering) and operational execution. Furthermore, ERM works together with all risk functions and key divisions to strengthen oversight group-wide risk to cover capital, credit, liquidity, market, operational, and business risk. The Enterprise wide Risk Management division consists of the departments Credit RWA Management and Simulation, Group ICAAP, Group Recovery and Resolution Planning, Risk Cost Management, and Risk Monitoring and Reporting.

The Credit RWA Management and Simulation department is responsible for the group-wide management and steering of risk-weighted assets for credit risk (credit RWA) according to the Basel framework as well as for carrying out credit risk stress tests according to the regulatory stress testing framework. The unit Credit RWA Management and Control performs the central credit RWA computation (Pillar 1/Pillar 2), the analysis and steering as well as the control of the group-wide credit RWA. The Credit RWA Methodology and Projects team's main responsibilities are the methodology of credit RWA calculation, the provision and maintenance of an optimised credit RWA calculation infrastructure as well as the implementation of regulatory changes. The main tasks of the unit Credit Risk Simulations are the simulation of the impact on credit RWA resulting from planned changes in the RWA calculation and the preparation of a credit risk stress testing framework as part of the overall ERM framework that is applied for the optimisation of the Group's risk/return profile.

The department Group ICAAP (Internal Capital Adequacy Assessment Process) encompasses next to risk planning and stress testing also ICAAP methods and limit steering. The responsibility of the unit Risk Planning and Stresstesting includes design, governance, organization and implementation of the risk planning and stress testing processes as well as governance, design and execution of the risk concentration analysis. Risk planning processes ensure delivery of the risk side inputs to regular planning rounds and cover monthly and quarterly forecasts of selected key risk indicators. With the ICAAP framework the department Group ICAAP supports the management in ensuring adequate capital capacity that reflects the nature and magnitude of the Group's risk portfolio. The mission of the unit ICAAP Methods and Limit Steering is to maintain and further enhance a robust enterprise wide risk management framework as well as to compile the operational components of the Group's risk strategy.

Group Recovery and Resolution Planning is responsible for the annual update of the recovery plan of Erste Group and coordinates the departments involved. This department supports entities of the Group in recovery planning and aligns local recovery plans with the group recovery plan. Moreover, it provides information required for the resolution plan to the resolution authorities. For this purpose, the unit delivers data templates on a regular basis, participates in workshops with the authorities and coordinates all departments and group entities involved.

Risk Cost Management is responsible for group wide standards in determining credit risk provisions and pricing for credit risk as well as determining and monitoring credit risk provisions for Erste Group Bank AG. These responsibilities include preparation for compliance with IFRS9 impairment requirements effective from 1 January 2018. The Risk Cost Governance team is responsible for group policies for determining credit risk provisions and for policies setting out and for supervision of the back testing of credit risk provisions as well as policies for setting credit risk components in pricing.

Risk Monitoring and Reporting is responsible for the coordination of complex risk reports as well as for the generation of credit risk relevant reports/information for the bank's senior management, regulators, external auditors and rating agencies, at Group and Erste Group Bank AG level. Beyond these recurring tasks the unit is also involved in change the bank activities: implementation of new regulatory and financial reporting requirements, change management process and maintenance of risk reporting framework and tools as well as implementation of dedicated projects for improving data quality and refining data granularity. Furthermore, this department provides group-wide governance for risk data aggregation and risk reporting practices. Acting within its responsibilities, Risk Monitoring and Reporting supports group-wide risk steering and monitoring. Group Credit Risk Reporting, one of the four teams of the department, is in charge with data extraction, consistency and plausibility checks, analysis and reporting to senior management, regulators, auditors, and rating agencies. Its tasks also comprise the coordination and preparation of comprehensive risk reports covering all risk types. Furthermore, this unit is involved in the implementation of regulatory and financial reporting requirements. The Analytics, Processes and Project team is responsible for the change management process and the maintenance of the Group's standardised credit risk reporting systems and tools. Risk Data Steering is a dedicated team aim to develop a group-wide aligned central data management process from data origination to reporting, with special focus on credit risk. Group Retail Risk Analytics ensures oversight and independent management control through providing regular retail risk management information. This unit defines the operative reporting requirements across the Group, monitors and analyses the retail loan portfolio, and identifies risk mitigation measures.

### Credit Risk Models

The Credit Risk Models division covers development and validation responsibilities in the area of credit risk. It is responsible for all the policies, standards, and procedures across the full credit risk model lifecycle. This area provides adequate risk measurement methodologies and tools as well as an appropriate framework for relevant risk policies.

Model development follows subsidiarity model that means responsibilities are split depending on model perimeter. Local models are developed locally following group standards and group-wide models are developed centrally. Model validation is fully centralized function, independent in line with regulatory requirements.

Model validation is responsible to independently challenge model development and make certain all IRB models used by the Group are fit for purpose. They are responsible for verifying that models are performing as expected, in line with their design objectives, and intended business uses as well as in line with regulatory requirement and internal group standards. It is fully centralized function. That means all validation responsibilities are bundled within the validation unit of Erste Bank Group AG. Subsidiaries remain responsible for the results and take care of adequate measures. This design will ensure independence and control of model validation as well as enforce adherence to uniform standards.

### Group Non Financial Risk

Group Non Financial Risk (Group NFR) is responsible for the management of reputational and operational risks including compliance risks, IT and communication technology risks, conduct risks, model risks, and legal risks as well as security issues. These tasks support and protect the first line activities with special focus on the business areas. The division consists of three departments Group Compliance, Group Security Management, and Group NFR Governance and Operational Risk.

Group Compliance is responsible for the management of risks stemming from the non-compliance with regulatory obligations, in particular concerning money laundering, terrorism financing, financial sanctions, market abuse, fraud and rules of conduct.

Group Security Management protects bank personnel and assets (including information assets), and preserves the safety and security of these, and is responsible for the definition of security standards, quality assurance and the monitoring and further development of security-related issues at Erste Group, e.g. cybersecurity.

The department Group NFR Governance and Operational Risk ensures the effective, integrative and holistic implementation of the NFR objectives. This comprises the steering and controlling, alignment of procedures as well as support regarding regulatory requirements and their impact on NFR. Providing a service for a robust NFR process and the identification of synergies complete the spectrum of tasks of NFR governance. The unit Operational Risk acts as the central and independent risk management unit for identification, measurement and steering of operational risk within Erste Group.

### Group Workout

Group Workout (GWO) acts as single point of contact for the group's NPL strategy in line with the overall strategy of the group and all group related initiatives on NPLs and NPL management. It is responsible for the implementation of the group NPL strategy, the definition of strategic targets on group level, and ensures that these targets are met on by means of monitoring, reporting, and steering. It coordinates

and communicates any group-wide initiatives and requirements to the subsidiaries. Furthermore, Group Workout assumes group-wide responsibility for management of clients allocated to the business segments Large Corporates, Commercial Real Estate, and Other Corporate that are rated non-performing or are specifically defined as workout clients.

It undertakes the direct workout management function for corporate workout clients of Erste Group Bank AG and Erste Group Immorent GmbH. Additionally, Group Workout acts as a competence centre by issuing expert opinions for corporate workout clients of the subsidiaries exceeding local management's approval level, and by managing the divestment processes of NPLs, as an alternative to client-by-client workout management. It also ensures the management of repossessed assets (final stage of the problem assets management), setting-up and implementing the strategy for repossessed real estate asset management).

Based on regulatory requirements, Group Workout is responsible for generating group-wide workout policies, the design of guidelines for the preparation of local workout reports and the preparation of Erste Group Bank AG workout reports. Additionally, the division organizes expert training programs as well as workshops to ensure knowledge transfer across Erste Group entities. Another important task of the division is its responsibility for group-wide collateral management. This includes the set-up of standards for collateral management, the framework for a group collateral catalogue, and principles for collateral evaluation and revaluation.

### Group Credit Risk Management

Group Credit Risk Management is the operative risk management function for both retail and non-retail portfolios (medium-sized enterprises, large corporate and real estate customers, as well as institutional clients and counterparties). In addition, the division is responsible for setting standards and steering the group's non-retail and retail lending portfolios. It ensures that only credit risk which is in line with the risk appetite, risk strategy, and limits set by ERM are taken on the books of Erste Group. Group Credit Risk Management consists of six departments Group EBA - Erste Business Analysis, Credit Underwriting Corporates, Credit Underwriting Financial Institutions and Sovereigns, Credit Underwriting Real Estate, Corporate Portfolio Monitoring and Management, and Group Portfolio Steering Corporate and Retail.

The department Group EBA - Erste Business Analysis defines group-wide standards for company analyses, generates these analyses for Erste Group Bank AG and Erste Group Immorent GmbH, and is responsible for the group financial analysis tool SABINE. Corporate Rating Unit Desk, as part of Group EBA, acts as single point of contact for all operative issues related to corporate ratings within Group Credit Risk Management.

Credit Underwriting Corporates is responsible for the group-wide underwriting of credit risks associated with large corporate customers and for the management of credit applications and training activities. It is the first line risk management unit for all corporate business booked in Erste Group Bank AG and, above defined thresholds, the second line risk management unit for corporate business booked in Erste Group's subsidiaries and the 'Haftungsverbund'.

Credit Underwriting Financial Institutions and Sovereigns is responsible for ratings, analysis, operative credit risk management (risk assessment, approval of transactions and limits, policies, watch lists and early warning systems) and workout activities related to financial institutions (banks, insurance companies and funds), regional governments, sovereigns, and structured products.

Credit Underwriting Real Estate is responsible for the underwriting of credit risks in the real estate business. The area of responsibility includes all real estate customers doing international business as well as the local and regional large-volume business of Erste Group's subsidiaries with corporate customers in the real estate sector. This organisational unit is the first line risk management unit for all real estate lending and leasing business of Erste Group Bank AG and Erste Group Immorent GmbH as well as the second line risk management unit for business booked in banking subsidiaries and exceeding defined thresholds.

Corporate Portfolio Monitoring and Management is responsible for corporate risk policies and procedures along the credit process, the optimization of corporate credit processes and the operative monitoring of credit risk (counterparty and country limit management).

Group Credit Portfolio Steering Corporate and Retail is responsible for the group-wide steering of the corporate and retail lending portfolios. This includes the definition of the retail lending framework, the operative corporate and retail portfolio analytical framework as well as the group-wide early warning system and credit monitoring requirements for the corporate portfolio. In the latter case, it also ensures the operative implementation and management in the parent company Erste Group Bank AG. In addition, this department conducts regular in-depth portfolio reviews together with risk management units of subsidiaries in order to identify and analyse portfolio dynamics.

### Group Legal

Group Legal, with its three sub-units Banking Legal, Markets Legal, and Corporate Legal, acts as the central legal department of Erste Group Bank AG. This division provides legal support and counsel for the management board, the business units and the central functions, and mitigates legal risk. It also attends to legal sourcing and to dispute resolution and litigation.

Legal support for the business activities of the banking subsidiaries in the respective jurisdictions in which they operate is performed by separate locally established legal departments. While reporting to the local management, typically the local CRO, the heads of the local legal department also report to the head of Group Legal in a functional dotted line matrix responsibility.

### Group Sustainability Office

Due to the growing impact of non-financial issues on the reputation of a bank, Group Sustainability Office (GSO) became a staff unit within the CRO division on June 1 2017. The main tasks of the GSO include implementing the diversity and environmental policy, adapting and communicating the Erste Group ‘Code of Conduct’, and further developing the ‘Time Bank’ in Austria (a corporate volunteering platform for co-operation between NGOs and Erste employees). In addition, the GSO is involved in the evaluation of non-financial risks in connection with corporate business, and is the main contact for sustainability ratings and the Erste Group sustainability report.

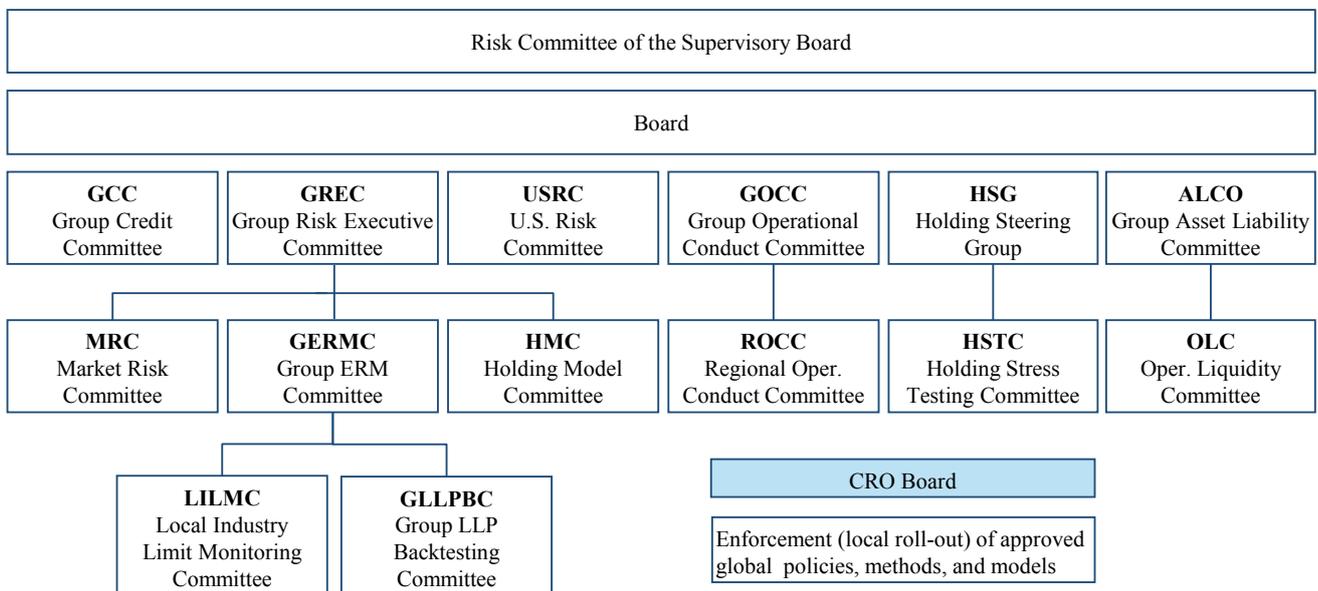
### Local Chief Risk Officers

Each subsidiary has separate risk control and management units with responsibilities tailored to the local requirements, which are headed by the respective local chief risk officer (Local CRO).

### Group coordination of risk management activities

The management board regularly deals with risk issues of all risk types in its regular board meetings. Actions are discussed and taken when needed.

Furthermore, certain cross-divisional committees were established with the purpose of carrying out risk management activities in Erste Group. They are shown in the following diagram:



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 a 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 management board of the supervisory committee. 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 management 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 (GLL-PBC), 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.

#### 44.3 Group-wide risk and capital management

Enterprise wide Risk Management (ERM) includes as its fundamental component 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.

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 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 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 and decision processes.

The traffic light system embedded in Erste Group's RCC 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.

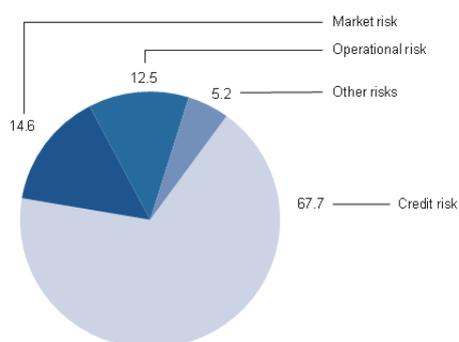
### Capital allocation

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.

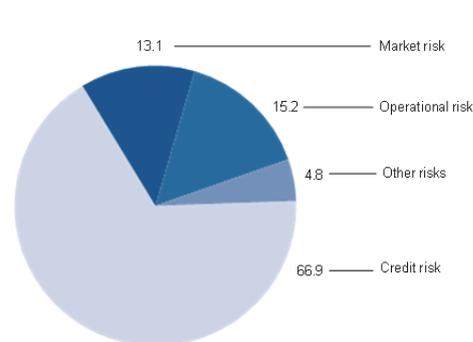
### Erste Group's aggregate capital requirement by risk type

The following diagrams present the composition of the economic capital requirement according to type of risk:

**Economic capital allocation  
in %, 31.12.2016**



**Economic capital allocation  
in %, 31.12.2017**



Other risks include business and strategic risk.

### Leverage ratio

The leverage ratio represents the relationship between core capital (tier 1) and leverage exposure according to Article 429 CRR. Essentially, the leverage exposure represents the sum of unweighted on- and off-balance-sheet positions considering valuation and risk adjustments as defined within the CRR.

The calculation and disclosure of the leverage ratio is based on the European Commission's delegated regulation ((EU) 2015/62 of 10 October 2014), which was published in the Official Journal of the European Union on 17 January 2015.

#### 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).

#### 44.4 Credit risk

Credit risk arises in Erste Group's traditional lending and investment businesses. It involves losses incurred as a result of default by borrowers and the need to set aside allowances as a result of the deteriorating credit quality of certain borrowers as well as due to counterparty risk from trading in instruments and derivatives bearing market risk. Country risk is also recognised in the calculation of credit risk. Operative credit decisions are made by the credit risk management units in each of the banking subsidiaries locally and by Group Credit Risk Management at group level. A detailed explanation of the role and responsibilities of Group Credit Risk Management is covered in section 'Risk management organisation'.

In contrary to large corporates, banks and governments managing credit risk in retail involves dealing with a large number of relatively small exposures extended to private individuals, free professionals, entrepreneurs or to micro companies in line with the Basel definitions. Credit risk related to retail loan portfolios is managed at group and at local entity 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.

The central database used for credit risk management is the Business Intelligence data warehouse (BI-DWH). All data relevant to credit risk management, performance management and determination of risk-weighted assets and the regulatory capital requirement is regularly loaded into this database. Relevant subsidiaries not yet integrated into the Group data pool regularly deliver reporting packages.

The Risk Monitoring and Reporting department uses mainly the BI-DWH for centralised credit risk reporting. This ensures centralised analysis and application of ratios according to unified methods and segmentation across Erste Group as a whole. Credit risk reporting comprises regular reports on Erste Group's credit portfolio for external and internal recipients and permits continuous monitoring of credit risk developments, thus enabling management to take control measures. In-house recipients of these reports include, above all, the supervisory and management boards of Erste Group Bank AG as well as the risk managers, business unit directors and internal audit staff.

The unit Corporate Portfolio Monitoring & Management, which is part of Group Credit Risk Management, is in charge of operating, supervising and continuously improving the group-wide online limit system for the control of counterparty credit risk arising from treasury transactions, as well as for the monitoring of credit risk from exposures in the asset classes corporates, financial institutions and sovereigns.

#### Internal rating system

Erste Group has business and risk strategies in place that govern policies for lending and credit approval processes. These policies are reviewed and adjusted regularly, at a minimum on an annual basis. They cover the entire lending business, taking into account the nature, scope and risk level of the transactions and the counterparties involved. Credit approval considers individual information on the credit-worthiness of the customer, the type of credit, collateral, covenant package and other risk mitigation factors involved.

The assessment of counterparty default risk within Erste Group is based on the customer's probability of default (PD). For each credit exposure and lending decision, Erste Group assigns an internal rating, which is a unique measure of the counterparty default risk. The internal rating of each customer is updated event-specific, however, at least once a year (annual rating review). Ratings of workout customers are reviewed with higher frequency.

The main purpose of the internal ratings is to support the decision-making for lending and for the terms of credit facilities. Internal ratings also determine the level of credit-approval authority within Erste Group and the monitoring procedures for existing exposures. At a quantitative level, internal ratings influence the level of required risk pricing, risk allowances and risk-weighted assets under Pillar 1 or 2.

For entities of Erste Group that use the internal ratings-based (IRB) approach, internal ratings are a key input into the risk-weighted assets calculation. They are also used in the group's assessment of the economic capital requirement according to Pillar 2. For these purposes, a distinct PD value is assigned to each rating grade for its IRB portfolios within a calibration process that is performed individually for each rating method and each regional portfolio. PD values reflect a 12-month probability of default based on long-term average default rates per rating grade. The bank assigns margins of conservatism to the calculated PDs.

Internal ratings take into account all available significant information for the assessment of counterparty default risk. For non-retail borrowers, internal ratings take into account the financial strength of the counterparty, the possibility of external support, flexibility in corporate financing, general company information and external credit history information, where available. For retail clients, internal ratings are based mainly on payment behaviour versus the bank and, where applicable, credit bureau information, supplemented with information provided by the respective client and general demographic information. Rating ceiling rules on credit quality are applied based on membership in a group of economically related entities and the country of main economic activity (applicable to cross-border financing facilities).

Internal specialist teams develop and improve internal rating models and risk parameters in cooperation with risk managers. Model development follows an internal group-wide methodological standard and utilises relevant data covering the respective market. In this way, Erste Group ensures the availability of rating models with the best possible prediction across its core regions.

All rating models and their components (scorecards), whether retail or non-retail, are regularly validated by the central validation unit based on a group-wide standard methodology. Validation uses statistical techniques to evaluate the accuracy of default prediction, rating stability, data quality, completeness and relevance and reviews the quality of documentation and degree of user acceptance. The results of this validation process are reported to the management and regulatory bodies. In addition to the validation process, the group applies a regular monitoring process on the performance of rating tools, reflecting developments in new defaults and early delinquencies.

A Holding Model Committee (HMC) is established as the primary steering and control body for the model development and validation process and is a delegated committee of the Group Risk Executive Committee (GREC). All new models, model changes, and changes to risk parameters in the group as well as group-wide methodology standards are reviewed by the Holding Model Committee and require its approval. This ensures group-wide integrity and consistency of models and methodologies. Furthermore, the Holding Model Committee organises the group-wide validation process, reviews validation results and approves remedial actions. All development and validation activities are coordinated by the Credit Risk Models division.

### **Risk grades and categories**

The classification of credit assets into risk grades is based on Erste Group's internal ratings. Erste Group uses two internal risk scales for risk classification of non-defaulted customer:

- \_ a risk scale of 8 risk grades for private clients and
- \_ a risk scale of 13 risk grades for all other segments.

Defaulted customers are classified into a separate risk grade.

For the purpose of aggregated portfolio reporting, internal rating grades of Erste Group are grouped into the following four risk categories:

**Low risk.** Typically regional customers with well-established and rather long-standing relationships with Erste Group or large internationally recognised customers. Very good to satisfactory financial position and low likelihood of financial difficulties relative to the respective market in which the customers operate. Retail clients having long relationships with the bank, or clients with a wide product pool use. No relevant late payments currently or in the most recent 12 months. New business is generally done with clients in this risk category.

**Management attention.** Vulnerable non-retail clients that may have overdue payments or defaults in their credit history or may encounter debt repayment difficulties in the medium term. Retail clients with possible payment problems in the past triggering early collection reminders. These clients typically have a good recent payment history.

**Substandard.** The borrower is vulnerable to short term negative financial and economic developments and shows an elevated probability of failure. In some cases, restructuring measures are possible or already in place. As a rule, such loans are managed in specialised risk management departments.

**Non-performing.** One or more of the default criteria under Article 178 of the CRR are met: among others, 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, or initiation of bankruptcy proceedings. Erste Group applies the customer view for all customer segments, including retail clients; if an obligor defaults on one deal then the customer's performing transactions are classified as non-performing as well. Furthermore, non-performing exposures also comprise non-performing forbore transactions even in cases where the client has not defaulted.

#### Credit risk review and monitoring

In order to manage the credit risk for large corporates, banks, sovereigns and country risk, credit limits are established to reflect the maximum exposure that Erste Group is willing to have towards a particular customer or group of connected clients. An upper boundary for such limits is given by the entity-specific maximum lending limit (MLL), which is derived from the respective group and local Risk Appetite Statement (RAS). All credit limits and the transactions booked within the limits are reviewed at least once a year. During the year, early warning signals are monitored continuously. In case of adverse developments, the exposure strategy is reviewed immediately and adapted accordingly.

Credit portfolio reports for asset classes and business lines are prepared on a regular basis and a group-wide early warning system was introduced. Watch-list meetings and remedial committee meetings are held on a regular basis to monitor customers with a poor credit standing and to discuss pre-emptive measures to help a particular debtor avoid default.

For smaller enterprises (micro) and retail customers, the monitoring and credit review are based on an automated early warning system. In retail risk management the early warning signals for adverse portfolio developments include, for instance, a quality deterioration in new business or a decreasing collections effectiveness and require appropriate countermeasures.

The early warning signals are monitored at group level by Group Credit Risk Management and at subsidiary level by the local units for retail risk and collections management. Adverse developments identified during the monitoring are discussed and the need for risk mitigation is addressed jointly.

#### Credit risk exposure

Credit risk exposure relates to the sum of the following balance sheet items:

- \_ cash and cash balances - other demand deposits;
- \_ financial assets - held for trading (without equity instruments);
- \_ financial assets - at fair value through profit or loss (without equity instruments);
- \_ financial assets - available for sale (without equity instruments);
- \_ financial assets - held to maturity;
- \_ loans and receivables to credit institutions;
- \_ loans and receivables to customers;
- \_ positive fair value of derivatives;
- \_ off-balance sheet credit risks (primarily financial guarantees and undrawn irrevocable credit commitments).

The credit risk exposure equates the gross carrying amount (or nominal value in the case of off-balance sheet positions) excluding:

- \_ account loan loss allowances;
- \_ provisions for guarantees;
- \_ any collateral held (including risk transfer to guarantors);
- \_ netting effects;
- \_ other credit enhancements;
- \_ credit risk mitigating transactions.

Between 31 December 2016 and 31 December 2017, the credit risk exposure increased from EUR 214,938 million to EUR 226,172 million. This is an increase of 5.2% or EUR 11,234 million.

## Reconciliation between the gross carrying amount and the carrying amount of the separate components of the credit risk exposure

in EUR million	Gross carrying amount	Credit risk provisions	Carrying amount
<b>As of 31 December 2017</b>			
Cash and cash balances – other demand deposits	1,028	0	1,028
Loans and receivables to credit institutions	9,133	7	9,126
Loans and receivables to customers	143,509	3,977	139,532
Financial assets - held to maturity	19,804	3	19,800
Financial assets - held for trading	2,887	-	2,887
Financial assets - at fair value through profit or loss	403	-	403
Financial assets - available for sale	14,896	-	14,896
Positive fair value of derivatives	4,217	-	4,217
Contingent liabilities	30,295	323	-
<b>Total</b>	<b>226,172</b>	<b>4,310</b>	<b>191,890</b>
<b>As of 31 December 2016</b>			
Cash and cash balances – other demand deposits	1,282	0	1,282
Loans and receivables to credit institutions	3,478	8	3,469
Loans and receivables to customers	135,267	4,613	130,654
Financial assets - held to maturity	19,274	4	19,270
Financial assets - held for trading	3,396	-	3,396
Financial assets - at fair value through profit or loss	336	-	336
Financial assets - available for sale	18,522	-	18,522
Positive fair value of derivatives	5,899	-	5,899
Contingent liabilities	27,484	338	-
<b>Total</b>	<b>214,938</b>	<b>4,963</b>	<b>182,829</b>

The gross carrying amount of contingent liabilities refers to the nominal value, while credit risk provisions refer to provisions for guarantees. A carrying amount is not presented in the case of contingent liabilities.

### Breakdown of credit risk exposure

On the next pages the credit risk volume is categorized in the following way:

- \_ Basel 3 exposure class and financial instrument;
- \_ contingent liabilities by product;
- \_ industry and financial instrument;
- \_ risk category;
- \_ industry and risk category;
- \_ region and risk category;
- \_ business segment and risk category;
- \_ geographical segment and risk category;
- \_ non-performing credit risk exposure by business segment and credit risk provisions;
- \_ non-performing credit risk exposure by geographical segment and credit risk provisions;
- \_ composition of allowances;
- \_ credit risk exposure, forbearance exposure, and credit risk provisions;
- \_ types of forbearance exposure, the development of forbearance exposure, and credit risk provisions;
- \_ credit quality of forbearance exposure by geographical segments;
- \_ business segment and collateral;
- \_ geographical segment and collateral;
- \_ financial instrument and collateral;
- \_ past due and not covered by specific allowances by financial instruments and collateralisation.

### Credit risk exposure by Basel 3 exposure class and financial instrument

The assignment of obligors to Basel 3 exposure classes is based on legal requirements. For reasons of clarity, individual Basel 3 exposure classes are aggregated in the tables below. In addition to central governments, central banks, international organisations, and multinational development banks, the aggregated exposure class 'sovereigns' contains regional and local governments as well as public sector entities. Institutions include banks and recognised investment firms.

in EUR million	Cash and cash balances – other demand deposits	Loans and receivables to credit institutions	Loans and receivables to customers	Debt securities					Contingent liabilities	Total credit risk exposure
				Financial assets - held to maturity	Financial assets - at fair value through profit or loss		Financial assets - available for sale	Positive fair value of derivatives		
					Financial assets - held for trading	Financial assets - held for trading				
	At amortised cost			At fair value						
<b>As of 31 Dec 2017</b>										
Sovereigns	8	5,893	6,557	18,743	2,242	79	11,495	282	1,296	46,595
Institutions	997	2,988	726	807	467	137	1,456	3,638	544	11,762
Corporates	23	251	62,962	254	178	186	1,946	296	20,649	86,744
Retail	0	0	73,265	0	0	0	0	1	7,806	81,071
<b>Total</b>	<b>1,028</b>	<b>9,133</b>	<b>143,509</b>	<b>19,804</b>	<b>2,887</b>	<b>403</b>	<b>14,896</b>	<b>4,217</b>	<b>30,295</b>	<b>226,172</b>
<b>As of 31 Dec 2016</b>										
Sovereigns	6	680	7,347	18,459	2,549	42	14,823	330	1,639	45,876
Institutions	1,270	2,080	149	538	467	139	1,646	5,120	251	11,659
Corporates	6	717	59,010	277	380	155	2,053	448	19,002	82,048
Retail	0	0	68,761	0	0	0	0	1	6,592	75,354
<b>Total</b>	<b>1,282</b>	<b>3,478</b>	<b>135,267</b>	<b>19,274</b>	<b>3,396</b>	<b>336</b>	<b>18,522</b>	<b>5,899</b>	<b>27,484</b>	<b>214,938</b>

### Contingent liabilities by product

in EUR million	Dec 16	Dec 17
Financial guarantees	6,577	6,985
Irrevocable commitments	20,907	23,310
<b>Total</b>	<b>27,484</b>	<b>30,295</b>

## Credit risk exposure by industry and financial instrument

in EUR million	At amortised cost										At fair value			Contingent liabilities	Total credit risk exposure	
	Cash and cash balances – other demand deposits	Loans and receivables to credit institutions	Loans and receivables to customers	Debt securities			Financial assets - at fair value through profit or loss	Financial assets - available for sale	Positive fair value of derivatives	Contingent liabilities	Total credit risk exposure					
				Loans and receivables to institutions	Loans and receivables to customers	Financial assets - held to maturity						Financial assets - held for trading	Financial assets - at fair value through profit or loss			Financial assets - available for sale
<b>As of 31 December 2017</b>																
Agriculture and forestry	0	0	2,642	0	0	0	0	0	0	0	0	1	295	2,937		
Mining	0	0	364	0	6	17	1	398	787							
Manufacturing	0	0	10,734	1	8	259	40	4,688	15,729							
Energy and water supply	0	0	3,270	0	9	142	49	758	4,227							
Construction	0	0	6,451	100	2	231	2	3,680	10,466							
Development of building projects	0	0	3,834	0	1	8	1	1,156	5,001							
Trade	0	0	8,298	0	0	56	9	2,995	11,358							
Transport and communication	0	0	3,913	135	58	1,013	36	1,746	6,901							
Hotels and restaurants	0	0	3,709	0	0	1	4	554	4,269							
Financial and insurance services	1,027	9,094	3,789	1,411	548	2,657	3,802	1,806	24,468							
Holding companies	0	0	1,718	41	12	160	5	523	2,458							
Real estate and housing	0	0	23,121	32	31	78	66	3,282	26,610							
Services	0	1	8,375	31	60	338	39	2,782	11,626							
Public administration	0	34	5,713	18,067	2,165	9,768	160	1,065	37,060							
Education, health and art	0	0	2,813	0	0	7	8	403	3,232							
Private households	0	0	60,298	0	0	0	0	5,555	65,854							
Other	1	3	19	27	2	307	0	288	648							
<b>Total</b>	<b>1,028</b>	<b>9,133</b>	<b>143,509</b>	<b>19,804</b>	<b>2,887</b>	<b>403</b>	<b>4,217</b>	<b>30,295</b>	<b>226,172</b>							
<b>As of 31 December 2016</b>																
Agriculture and forestry	0	0	2,367	0	0	0	4	268	2,638							
Mining	0	0	435	0	6	17	0	421	880							
Manufacturing	0	0	10,089	1	18	262	98	4,428	14,895							
Energy and water supply	0	0	3,032	0	10	120	62	3,841	7,095							
Construction	0	0	6,236	150	1	283	8	3,323	10,002							
Development of building projects	0	0	3,567	0	0	8	3	975	4,553							
Trade	0	0	7,912	0	0	29	14	2,990	10,945							
Transport and communication	0	0	3,622	145	55	1,060	35	1,694	6,612							
Hotels and restaurants	0	0	3,699	6	0	2	6	481	4,193							
Financial and insurance services	1,282	3,473	3,833	1,187	904	305	5,254	1,756	21,596							
Holding companies	0	0	1,975	19	13	151	13	557	2,734							
Real estate and housing	0	0	21,842	24	21	146	155	2,348	24,535							
Services	0	2	7,044	46	50	311	50	2,468	9,971							
Public administration	0	0	6,004	17,700	2,322	31	174	1,375	39,935							
Education, health and art	0	0	2,704	0	0	3	12	416	3,136							
Private households	0	0	56,415	0	0	0	1	4,621	61,037							
Other	0	3	33	15	9	358	27	278	723							
<b>Total</b>	<b>1,282</b>	<b>3,478</b>	<b>135,267</b>	<b>19,274</b>	<b>3,396</b>	<b>336</b>	<b>5,899</b>	<b>27,484</b>	<b>214,938</b>							

## Credit risk exposure by risk category

in EUR million	Low risk	Management attention	Substandard	Non-performing	Total credit risk exposure
<b>As of 31 December 2017</b>	<b>200,788</b>	<b>16,904</b>	<b>2,207</b>	<b>6,273</b>	<b>226,172</b>
Share of credit risk exposure	88.8%	7.5%	1.0%	2.8%	
<b>As of 31 December 2016</b>	<b>188,031</b>	<b>17,733</b>	<b>2,072</b>	<b>7,102</b>	<b>214,938</b>
Share of credit risk exposure	87.5%	8.3%	1.0%	3.3%	
Change in credit risk exposure	12,757	-829	135	-829	11,234
Change	6.8%	-4.7%	6.5%	-11.7%	5.2%

From 31 December 2016 to 31 December 2017, the share of credit risk exposure in the low risk category increased significantly. Non-performing claims as a percentage of total credit risk exposure (NPE ratio) decreased from 3.3% to 2.8%. During the year 2017, the combined proportion of the two weakest risk categories, substandard and non-performing, declined by 0.5 percentage points from 4.3% to 3.8% of total credit risk exposure.

## Credit risk exposure by industry and risk category

in EUR million	Low risk	Management attention	Substandard	Non-performing	Total credit risk exposure
<b>As of 31 December 2017</b>					
Agriculture and forestry	2,207	487	41	202	2,937
Mining	690	30	6	61	787
Manufacturing	13,541	1,363	228	597	15,729
Energy and water supply	3,684	392	34	118	4,227
Construction	8,514	1,126	261	564	10,466
Development of building projects	4,351	475	24	151	5,001
Trade	8,956	1,420	183	798	11,358
Transport and communication	6,140	551	79	131	6,901
Hotels and restaurants	2,945	873	91	360	4,269
Financial and insurance services	23,333	887	83	165	24,468
Holding companies	2,183	113	30	131	2,458
Real estate and housing	23,150	2,532	230	698	26,610
Services	9,865	1,156	126	479	11,626
Public administration	36,833	217	1	9	37,060
Education, health and art	2,514	477	23	219	3,232
Private households	58,056	5,387	539	1,872	65,854
Other	359	5	284	0	648
<b>Total</b>	<b>200,788</b>	<b>16,904</b>	<b>2,207</b>	<b>6,273</b>	<b>226,172</b>
<b>As of 31 December 2016</b>					
Agriculture and forestry	1,966	495	28	149	2,638
Mining	704	60	4	112	880
Manufacturing	12,422	1,389	190	895	14,895
Energy and water supply	3,352	351	29	111	3,843
Construction	7,994	1,251	100	657	10,002
Development of building projects	3,875	437	20	220	4,553
Trade	8,524	1,568	160	693	10,945
Transport and communication	5,957	455	36	164	6,612
Hotels and restaurants	2,787	852	150	405	4,193
Financial and insurance services	20,503	881	61	146	21,592
Holding companies	2,453	126	41	114	2,734
Real estate and housing	20,563	2,770	238	966	24,537
Services	8,397	1,069	140	354	9,960
Public administration	39,403	500	7	24	39,935
Education, health and art	2,433	431	28	244	3,136
Private households	52,632	5,658	574	2,174	61,037
Other	393	1	330	10	734
<b>Total</b>	<b>188,031</b>	<b>17,733</b>	<b>2,072</b>	<b>7,102</b>	<b>214,938</b>

## Credit risk exposure by region and risk category

The geographic analysis of credit exposure is based on the country of risk of the borrower and counterparty. It comprises obligors domiciled in other countries if the economic risk exists in the respective country of risk. The distribution by regions differs from the composition of the credit risk exposure by geographical segments of Erste Group.

in EUR million	Low risk	Management attention	Substandard	Non-performing	Total credit risk exposure
<b>As of 31 December 2017</b>					
<b>Core markets</b>	<b>175,189</b>	<b>14,952</b>	<b>1,990</b>	<b>5,698</b>	<b>197,828</b>
Austria	87,413	7,659	1,268	2,291	98,631
Croatia	7,281	920	144	930	9,275
Romania	12,477	1,744	139	753	15,114
Serbia	1,615	135	7	84	1,843
Slovakia	17,095	1,161	67	595	18,918
Czech Republic	41,016	2,725	258	785	44,784
Hungary	8,291	607	106	260	9,264
<b>Other EU</b>	<b>18,842</b>	<b>1,205</b>	<b>176</b>	<b>404</b>	<b>20,627</b>
<b>Other industrialised countries</b>	<b>3,809</b>	<b>137</b>	<b>9</b>	<b>51</b>	<b>4,007</b>
<b>Emerging markets</b>	<b>2,949</b>	<b>610</b>	<b>32</b>	<b>119</b>	<b>3,710</b>
South-Eastern Europe/CIS	1,492	418	26	99	2,035
Asia	856	104	3	0	963
Latin America	50	26	1	15	92
Middle East/Africa	551	62	2	5	620
<b>Total</b>	<b>200,788</b>	<b>16,904</b>	<b>2,207</b>	<b>6,273</b>	<b>226,172</b>
<b>As of 31 December 2016</b>					
<b>Core markets</b>	<b>160,052</b>	<b>15,679</b>	<b>1,914</b>	<b>6,409</b>	<b>184,055</b>
Austria	84,766	8,035	1,233	2,400	96,435
Croatia	7,075	1,035	142	821	9,073
Romania	12,059	1,891	82	1,058	15,090
Serbia	865	410	12	138	1,425
Slovakia	16,282	1,184	128	629	18,222
Czech Republic	32,414	2,441	177	910	35,942
Hungary	6,592	683	140	453	7,868
<b>Other EU</b>	<b>20,744</b>	<b>1,299</b>	<b>91</b>	<b>455</b>	<b>22,590</b>
<b>Other industrialised countries</b>	<b>4,176</b>	<b>167</b>	<b>5</b>	<b>58</b>	<b>4,406</b>
<b>Emerging markets</b>	<b>3,059</b>	<b>588</b>	<b>61</b>	<b>180</b>	<b>3,888</b>
South-Eastern Europe/CIS	1,400	376	54	156	1,986
Asia	1,099	124	4	0	1,228
Latin America	61	33	2	18	114
Middle East/Africa	499	54	1	6	560
<b>Total</b>	<b>188,031</b>	<b>17,733</b>	<b>2,072</b>	<b>7,102</b>	<b>214,938</b>

The credit risk exposure increased by EUR 2,196 million, or 2.3% in Austria, and by EUR 11,577 million, or 13.2%, in the CEE core markets. In the other EU member states (EU 28 excluding core markets), the credit risk exposure declined by EUR 1,963 million, or 8.7%, from EUR 22,590 million to EUR 20,627 million between the two balance sheet dates. A decrease was also recorded in other industrialised countries (EUR -399 million) and in emerging markets (EUR -178 million). In total, Erste Group's core markets and the EU accounted for 96.6% (2016: 96.1%) of credit risk exposure as of 31 December 2017. At 1.6% (2016: 1.8%), the share of emerging markets remained of minor importance.

### Credit risk exposure by reporting segment and risk category

The segment reporting of Erste Group is based on the matrix organisation by business segment as well as by geographical segment. The geographical segmentation follows the country markets in which Erste Group operates and the locations of the banking and other financial institutions participations.

### Credit risk exposure by business segment and risk category

in EUR million	Low risk	Management attention	Substandard	Non-performing	Total credit risk exposure
<b>As of 31 December 2017</b>					
Retail	51,988	5,475	522	1,723	59,708
Corporates	56,366	4,529	579	2,641	64,114
Group Markets	15,515	372	31	3	15,921
Asset/Liability Management and Local Corporate Center	28,183	96	185	15	28,479
Savings Banks	48,683	6,321	801	1,891	57,696
Group Corporate Center	54	109	90	1	254
<b>Total</b>	<b>200,788</b>	<b>16,904</b>	<b>2,207</b>	<b>6,273</b>	<b>226,172</b>
<b>As of 31 December 2016</b>					
Retail	46,061	5,428	512	1,971	53,972
Corporates	53,019	4,906	438	3,048	61,411
Group Markets	14,839	664	36	4	15,542
Asset/Liability Management and Local Corporate Center	27,234	260	173	16	27,682
Savings Banks	46,827	6,384	849	2,062	56,122
Group Corporate Center	51	91	65	1	208
<b>Total</b>	<b>188,031</b>	<b>17,733</b>	<b>2,072</b>	<b>7,102</b>	<b>214,938</b>

### Credit risk exposure by geographical segment and risk category

in EUR million	Low risk	Management attention	Substandard	Non-performing	Total credit risk exposure
<b>As of 31 December 2017</b>					
<b>Austria</b>	<b>111,426</b>	<b>9,675</b>	<b>1,352</b>	<b>3,397</b>	<b>125,849</b>
Erste Bank Oesterreich & Subsidiaries	35,681	2,523	444	681	39,329
Savings Banks	48,683	6,321	801	1,891	57,696
Other Austria	27,062	830	106	825	28,823
<b>Central and Eastern Europe</b>	<b>84,561</b>	<b>7,120</b>	<b>766</b>	<b>2,851</b>	<b>95,298</b>
Czech Republic	41,616	2,741	254	575	45,186
Romania	11,411	1,753	182	729	14,076
Slovakia	15,641	1,110	63	507	17,320
Hungary	7,094	461	105	215	7,875
Croatia	7,433	961	154	792	9,341
Serbia	1,365	94	7	33	1,500
<b>Other</b>	<b>4,801</b>	<b>109</b>	<b>90</b>	<b>25</b>	<b>5,025</b>
<b>Total</b>	<b>200,788</b>	<b>16,904</b>	<b>2,207</b>	<b>6,273</b>	<b>226,172</b>
<b>As of 31 December 2016</b>					
<b>Austria</b>	<b>109,040</b>	<b>10,272</b>	<b>1,362</b>	<b>3,616</b>	<b>124,291</b>
Erste Bank Oesterreich & Subsidiaries	35,090	2,713	394	827	39,025
Savings Banks	46,827	6,384	849	2,062	56,122
Other Austria	27,123	1,174	119	727	29,144
<b>Central and Eastern Europe</b>	<b>71,867</b>	<b>7,364</b>	<b>645</b>	<b>3,453</b>	<b>83,329</b>
Czech Republic	33,144	2,509	146	747	36,546
Romania	11,071	1,937	81	1,010	14,097
Slovakia	14,032	1,035	132	525	15,723
Hungary	5,660	544	111	396	6,711
Croatia	7,167	978	164	717	9,025
Serbia	794	362	12	59	1,227
<b>Other</b>	<b>7,124</b>	<b>96</b>	<b>65</b>	<b>33</b>	<b>7,318</b>
<b>Total</b>	<b>188,031</b>	<b>17,733</b>	<b>2,072</b>	<b>7,102</b>	<b>214,938</b>

## Non-performing credit risk exposure and credit risk provisions

For the definition of credit risk exposure classified as non-performing, please refer to the description of risk categories in the subsection 'Internal rating system'. Credit risk provisions include specific and collective allowances and provisions for guarantees.

Credit risk allowances (specific and collective allowances) and provisions for guarantees covered 68.7% (2016: 69.9%) of the reported non-performing credit risk exposure as of 31 December 2017. For the portion of the non-performing credit risk exposure that is not covered by allowances, Erste Group assumes there are sufficient levels of collateral and expected other recoveries.

During 2017, the non-performing credit risk exposure decreased by EUR 829 million, or 11.7%, from EUR 7,102 million to EUR 6,273 million. The substantial improvement of asset quality resulted on the one side from a strong decline of new non-performing loans, and on the other side from high recoveries and write-offs, including from sales of non-performing loans. The credit risk allowances for loans and advances together with provisions for guarantees decreased by EUR 653 million, or 13.2%, from EUR 4,963 million as of 31 December 2016 to EUR 4,310 million as of 31 December 2017. This development resulted in a decrease of 1.2 percentage points in the coverage of the non-performing credit risk exposure by credit risk provisions.

The following tables show the coverage of the non-performing credit risk exposure by credit risk provisions (without taking into consideration collateral) as of 31 December 2017 and 31 December 2016. The differences in provisioning levels between the reporting segments result from the risk situation in the respective markets, different levels of collateralisation as well as the local legal environment and regulatory requirements.

The non-performing exposure ratio (NPE ratio) is calculated as the non-performing credit risk exposure divided by total credit risk exposure while the NPE coverage ratio (excl. collateral) is computed as the credit risk provisions divided by non-performing credit risk exposure. Collateral or other recoveries are not taken into account.

## Non-performing credit risk exposure by business segment and credit risk provisions

in EUR million	Total credit risk exposure			Specific allowances & provisions	Collective allowances & provisions	NPE ratio	NPE coverage ratio (excl. collateral)
	Non-performing	Total credit risk exposure	Total credit risk provisions				
<b>As of 31 December 2017</b>							
Retail	1,723	59,708	1,349	1,081	267	2.9%	78.3%
Corporates	2,641	64,114	1,798	1,421	377	4.1%	68.1%
Group Markets	3	15,921	7	2	5	0.0%	266.0%
Asset/Liability Management and Local Corporate Center	15	28,479	44	12	32	0.1%	302.3%
Savings Banks	1,891	57,696	1,112	923	188	3.3%	58.8%
Group Corporate Center	1	254	0	0	0	0.3%	16.8%
<b>Total</b>	<b>6,273</b>	<b>226,172</b>	<b>4,310</b>	<b>3,440</b>	<b>870</b>	<b>2.8%</b>	<b>68.7%</b>
<b>As of 31 December 2016</b>							
Retail	1,971	53,972	1,489	1,195	294	3.7%	75.5%
Corporates	3,048	61,411	2,201	1,843	358	5.0%	72.2%
Group Markets	4	15,542	12	2	10	0.0%	300.0%
Asset/Liability Management and Local Corporate Center	16	27,682	33	7	26	0.1%	206.3%
Savings Banks	2,062	56,122	1,225	1,033	192	3.7%	59.4%
Group Corporate Center	1	208	4	0	4	0.5%	400.0%
<b>Total</b>	<b>7,102</b>	<b>214,938</b>	<b>4,963</b>	<b>4,080</b>	<b>884</b>	<b>3.3%</b>	<b>69.9%</b>

## Non-performing credit risk exposure by geographical segment and credit risk provisions

in EUR million	Total credit risk exposure			Specific allowances & provisions	Collective allowances & provisions	NPE ratio	NPE coverage ratio (excl. collateral)
	Non-performing	Total credit risk exposure	Total credit risk provisions				
<b>As of 31 December 2017</b>							
<b>Austria</b>	<b>3,397</b>	<b>125,849</b>	<b>1,917</b>	<b>1,602</b>	<b>316</b>	<b>2.7%</b>	<b>56.5%</b>
Erste Bank Oesterreich & Subsidiaries	681	39,329	400	329	71	1.7%	58.7%
Savings Banks	1,891	57,696	1,112	923	188	3.3%	58.8%
Other Austria	825	28,823	406	350	56	2.9%	49.2%
<b>Central and Eastern Europe</b>	<b>2,851</b>	<b>95,298</b>	<b>2,375</b>	<b>1,826</b>	<b>549</b>	<b>3.0%</b>	<b>83.3%</b>
Czech Republic	575	45,186	518	381	137	1.3%	90.0%
Romania	729	14,076	663	505	158	5.2%	90.9%
Slovakia	507	17,320	380	298	82	2.9%	75.1%
Hungary	215	7,875	198	126	72	2.7%	92.1%
Croatia	792	9,341	577	493	84	8.5%	72.8%
Serbia	33	1,500	39	23	16	2.2%	119.5%
<b>Other</b>	<b>25</b>	<b>5,025</b>	<b>17</b>	<b>12</b>	<b>5</b>	<b>0.5%</b>	<b>69.4%</b>
<b>Total</b>	<b>6,273</b>	<b>226,172</b>	<b>4,310</b>	<b>3,440</b>	<b>870</b>	<b>2.8%</b>	<b>68.7%</b>
<b>As of 31 December 2016</b>							
<b>Austria</b>	<b>3,616</b>	<b>124,291</b>	<b>2,211</b>	<b>1,854</b>	<b>357</b>	<b>2.9%</b>	<b>61.1%</b>
Erste Bank Oesterreich & Subsidiaries	827	39,025	504	419	85	2.1%	60.9%
Savings Banks	2,062	56,122	1,225	1,033	192	3.7%	59.4%
Other Austria	727	29,144	482	402	80	2.5%	66.3%
<b>Central and Eastern Europe</b>	<b>3,453</b>	<b>83,329</b>	<b>2,714</b>	<b>2,195</b>	<b>519</b>	<b>4.1%</b>	<b>78.6%</b>
Czech Republic	747	36,546	603	482	121	2.0%	80.7%
Romania	1,010	14,097	844	697	147	7.2%	83.6%
Slovakia	525	15,723	355	255	100	3.3%	67.6%
Hungary	396	6,711	324	269	55	5.9%	81.8%
Croatia	717	9,025	531	450	81	7.9%	74.1%
Serbia	59	1,227	58	42	16	4.8%	98.3%
<b>Other</b>	<b>33</b>	<b>7,318</b>	<b>39</b>	<b>32</b>	<b>7</b>	<b>0.5%</b>	<b>118.2%</b>
<b>Total</b>	<b>7,102</b>	<b>214,938</b>	<b>4,963</b>	<b>4,080</b>	<b>884</b>	<b>3.3%</b>	<b>69.9%</b>

The general principles and standards for credit risk provisions within Erste Group are described in the internal policies. Credit risk provisions are calculated:

- \_ for financial assets carried at amortised cost (loans and receivables, 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 provisions are created in a process performed on customer level. The process includes the identification of default and impairment and the type of assessment (individual or collective) to be applied. 'On customer level' means in this context that if one of the customer's exposures is classified as defaulted, 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 two types of allowances:

- \_ specific allowances calculated for exposures to defaulted customers that are deemed to be impaired and
- \_ collective allowances (allowances 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 calculation of specific allowances, the discounted cash flow method 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 allowance 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 in the calculation of the NPV of the expected cash flows.

The calculation of specific allowances is performed either on an individual basis or as a collective assessment (rule-based approach). In the 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 allowance.

Under this approach, specific allowances are calculated as the product of carrying amount and loss given default (LGD), where LGD depends on relevant characteristics such as time in default or the stage of the workout process.

Collective allowances are calculated on 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 gross carrying amount, the probability of default (PD), the loss given default (LGD), the credit conversion factors (CCF) in case of off-balance-sheet exposures, and the loss identification period (LIP). The LIP 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 present values 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 IAS/IFRS standards necessitate this.

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

Erste Group regularly reviews its specific and collective allowances. These exercises comprise the parameters and methodologies used in its provision calculation. In 2017, adjustments took place in the context of changes in underlying processes (e.g. local implementation of Group Default Definition policy) and routine maintenance of parameters (e.g. regular calibration) or rating models.

### Composition of credit risk provisions

in EUR million	Dec 16	Dec 17
Specific allowances	3,889	3,274
Collective allowances	736	713
Provisions for guarantees	338	323
<b>Total</b>	<b>4,963</b>	<b>4,310</b>

### Restructuring, renegotiation and forbearance

Restructuring means contractual modification of any of the customer's loan repayment conditions including tenor, interest rate, fees, principal amount due or a combination thereof. Restructuring can be business restructuring (in the retail segment), commercial renegotiation (in the corporate segment), or forbearance (e.g. concession due to financial difficulties) in line with EBA requirements in both segments.

#### Restructuring and renegotiation

Restructuring as business restructuring in the retail segment or as commercial renegotiation in the corporate segment is a potential and effective customer retention tool involving re-pricing or the offering of an additional loan or both in order to maintain the bank's valuable, good clientele.

#### Forbearance

The definition of 'forbearance' is included in Regulation (EU) 2015/227. A restructuring is considered 'forbearance' if it entails a concession towards a customer facing or about to face financial difficulties in meeting their contractual financial commitments. A borrower is in financial difficulties if any of the following conditions are met:

- \_ the customer was more than 30 days past due in the past 3 months;
- \_ the customer would be 30 days past due or more without receiving forbearance;
- \_ the customer is in default;
- \_ the modified contract was classified as non-performing or would be non-performing without forbearance;
- \_ the contract modification involves total or partial cancellation by write-off of the debt on any of the customer's credit obligations while at customer level open credit exposure still remains.

Forborne exposure is assessed at loan contract level and means only the exposure to which forbearance measures have been extended and excludes any other exposure the customer may have, as long as no forbearance was extended to these.

Concession means that any of the following conditions are met:

- \_ modification/refinancing of the contract would not have been granted, had the customer not been in financial difficulty;
- \_ there is a difference in favour of the customer between the modified/refinanced terms of the contract and the previous terms of the contract;
- \_ the modified/refinanced contract includes more favourable terms than other customers with a similar risk profile would have obtained from the same institution.

Forbearance can be initiated by the bank or by the customer (on account of loss of employment, illness etc.). Components of forbearance can be instalment reduction, tenor extension, interest reduction or forgiveness, principal reduction or forgiveness, revolving exposure change to instalment and/or others.

Forbearance measures are divided and reported as:

- \_ performing forbearance (incl. performing forbearance under probation that was upgraded from non-performing forbearance) and
- \_ non-performing forbearance (incl. non-performing forbearance and defaulted/impaired forbearance).

Forborne exposures are considered performing when:

- \_ the exposure did not have non-performing status at the time the extension of or application for forbearance was approved and
- \_ granting the forbearance has not led to classifying the exposure as non-performing or default.

Performing forborne exposures become non-performing when during the monitoring period of a minimum of two years one of the following forbearance classifications is fulfilled:

- \_ an additional forbearance measure is extended and in the past the customer was in the non-performing forbearance category;
- \_ the customer becomes more than 30 days past due on forborne exposure and in the past the customer was in the non-performing forbearance category;
- \_ the customer meets any of the default event criteria defined in the default definition;
- \_ for corporate customers, when a final restructuring agreement cannot be concluded within 18 months after the first forbearance measure.

The performing forbearance classification can be discontinued and the account can become a non-forborne account when all of the following conditions are met:

- \_ a minimum of two years have passed from the date of classifying the exposure as performing forbearance (probation period);
- \_ under the forborne payment plan, at least 50% of the original (pre-forbearance) instalment has been regularly repaid at least during half of the probation period (in the case of retail customers);
- \_ regular repayments in a significant amount during at least half of the probation period have been made (in the case of corporate customers);
- \_ none of the exposure of the customer is more than 30 days past due at the end of the probation period.

The non-performing forbearance classification can be discontinued and reclassified as performing under probation when all of the following conditions are met:

- \_ one year has passed from the date of classifying the exposure as non-performing forbearance;
- \_ the forbearance has not led the exposure to be classified as non-performing;
- \_ retail customers: the customer has demonstrated the ability to comply with the post-forbearance conditions by either of the following:
  - \_ the customer has never been more than 30 days past due during the last 6 months and there is no delinquent amount;
  - \_ the customer has repaid the full past due amount or the written-off amount (if there was any).
- \_ corporate customer: analysis of the financial development, which leaves no concern about future compliance with post-forbearance terms and conditions. Furthermore, the customer has never been more than 30 days past due during the monitoring period and there is no delinquent amount.

In the corporate segment, recognition of forbearance measures typically leads to the involvement of the responsible local workout unit. The largest part of the forbearance measures are set within the responsibility of the local workout units and the affected clients are managed and monitored according to the internal regulations and standards for the workout involvement. Forbearance measures are defined as trigger events for carrying out impairment tests according to the internal regulations and standards based on the IFRS requirements.

## Credit risk exposure, forbearance exposure and credit risk provisions

in EUR million	Loans and receivables	Financial assets	Other balance-sheet positions	Contingent liabilities	Total
<b>As of 31 December 2017</b>					
<b>Gross exposure</b>	<b>152,642</b>	<b>37,990</b>	<b>5,245</b>	<b>30,295</b>	<b>226,172</b>
thereof gross forborne exposure	3,033	0	0	178	3,210
Performing exposure	146,863	37,985	5,244	29,807	219,899
thereof performing forborne exposure	1,188	0	0	36	1,224
Credit risk provisions for performing exposure	710	3	0	141	854
thereof credit risk provisions for performing forborne exposure	42	0	0	0	43
Non-performing exposure	5,778	5	2	488	6,273
thereof non-performing forborne exposure	1,845	0	0	142	1,986
Credit risk provisions for non-performing exposure	3,274	0	0	181	3,455
thereof credit risk provisions for non-performing forborne exposure	929	0	0	14	944
<b>As of 31 December 2016</b>					
<b>Gross exposure</b>	<b>138,745</b>	<b>41,528</b>	<b>7,181</b>	<b>27,484</b>	<b>214,938</b>
thereof gross forborne exposure	3,370	0	0	123	3,493
Performing exposure	132,064	41,527	7,176	27,068	207,836
thereof performing forborne exposure	1,356	0	0	43	1,399
Credit risk provisions for performing exposure	703	4	0	131	838
thereof credit risk provisions for performing forborne exposure	48	0	0	1	49
Non-performing exposure	6,680	1	5	416	7,102
thereof non-performing forborne exposure	2,014	0	0	79	2,094
Credit risk provisions for non-performing exposure	3,918	0	0	208	4,126
thereof credit risk provisions for non-performing forborne exposure	990	0	0	13	1,003

## Types of forbearance exposure

in EUR million	Gross forborne exposure	Modification in terms and conditions	Refinancing
<b>As of 31 December 2017</b>			
Loans and receivables	3,033	2,730	302
Financial assets	0	0	0
Contingent liabilities	178	159	18
<b>Total</b>	<b>3,210</b>	<b>2,890</b>	<b>321</b>
<b>As of 31 December 2016</b>			
Loans and receivables	3,370	3,066	304
Financial assets	0	0	0
Contingent liabilities	123	105	17
<b>Total</b>	<b>3,493</b>	<b>3,171</b>	<b>322</b>

## Credit quality of forbearance exposure by geographical segment

in EUR million	Gross forbore exposure	Neither past due nor impaired	Past due but not impaired	Impaired	Collateral	Credit risk provisions
<b>As of 31 December 2017</b>						
<b>Austria</b>	<b>1,847</b>	<b>771</b>	<b>51</b>	<b>1,025</b>	<b>914</b>	<b>488</b>
Erste Bank Oesterreich & Subsidiaries	371	188	12	171	207	74
Savings Banks	1,041	481	39	521	581	250
Other Austria	434	102	0	332	126	164
<b>Central and Eastern Europe</b>	<b>1,364</b>	<b>513</b>	<b>56</b>	<b>795</b>	<b>391</b>	<b>498</b>
Czech Republic	160	53	8	98	43	60
Romania	633	311	12	310	123	223
Slovakia	294	72	12	211	141	109
Hungary	71	37	8	26	34	18
Croatia	189	37	15	137	46	78
Serbia	17	3	1	14	4	10
<b>Other</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>3,210</b>	<b>1,283</b>	<b>107</b>	<b>1,820</b>	<b>1,304</b>	<b>986</b>
<b>As of 31 December 2016</b>						
<b>Austria</b>	<b>1,910</b>	<b>880</b>	<b>58</b>	<b>973</b>	<b>998</b>	<b>516</b>
Erste Bank Oesterreich & Subsidiaries	410	226	13	171	236	101
Savings Banks	1,041	521	45	475	645	220
Other Austria	460	133	0	327	117	195
<b>Central and Eastern Europe</b>	<b>1,583</b>	<b>697</b>	<b>58</b>	<b>828</b>	<b>701</b>	<b>536</b>
Czech Republic	224	86	0	138	69	85
Romania	657	346	19	292	309	201
Slovakia	332	130	15	187	206	117
Hungary	142	76	8	58	48	47
Croatia	205	55	14	136	62	73
Serbia	23	4	2	17	6	12
<b>Other</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>3,493</b>	<b>1,577</b>	<b>116</b>	<b>1,801</b>	<b>1,699</b>	<b>1,052</b>

## Collaterals

### Recognition of collateral

The Collateral Management department is a staff unit within the Group Workout division. The Group Collateral Management Policy defines, among other things, uniform valuation standards for credit collateral across the entire group. It ensures that the credit risk decision processes are standardised with respect to accepted collateral values.

All collateral types acceptable within the group are contained in the Group Collateral Catalogue. Locally permitted collateral is defined by the respective bank in accordance with applicable national legal provisions. The valuation and revaluation of collateral is done according to the principles defined in the Group Collateral Catalogue broken down by collateral type and based on the internal work instructions in accordance with the individual supervisory requirements. Whether a type of collateral or a specific collateral asset is accepted for credit risk mitigation is decided by Enterprise-wide Risk Management after determining if the applicable regulatory requirements are met. Credit underwriting monitors adherence to the standard work processes stipulated for assigning the acceptable collateral assets to the categories available.

### Main types of collateral

The following types of collateral are accepted:

- \_ real estate: residential and commercial real estate;
- \_ financial collateral: securities, cash deposits and life insurance policies;
- \_ guarantees: given by sovereigns, public sector entities, financial institutes, companies and individuals. All guarantors must have a minimum credit rating, which is reviewed annually.
- \_ movables: equipment, investment goods, machineries and motor vehicles;
- \_ claims and rights: account receivables of trade, leasehold rights and shares in a company's capital.

Protection by credit default swaps is only marginally used in the banking book.

### Collateral valuation and management

Collateral valuation is based on current market prices while taking into account an amount that can be recovered within a reasonable period. The valuation processes are defined and their IT-supported technical application is performed by Collateral Management at group

level and by authorised staff in each country with the assistance of software applications. The allocated collateral values are capped by the amount of the secured transaction. Therefore, imputed excess collateral values are not possible. Only independent appraisers not involved in the lending decision process are permitted to conduct real estate valuations, and the valuation methods to be applied are defined. For quality assurance purposes, the real estate evaluation mechanism and real estate valuations itself are validated on an ongoing basis.

The methods and discounts used for valuations are based on empirical data representing past experience of the workout departments and on the collected data on recoveries from realising collateral. The valuation methods are adjusted regularly – at least once a year – to reflect current recoveries.

The revaluation of collateral is done periodically and is automated as far as possible. In the case of external data sources, the appropriate interfaces are used. The maximum periods for the revaluation of individual collateral assets are predefined and compliance is monitored by risk management using software applications. Apart from periodic revaluations, collateral is assessed when information becomes available that indicates a decrease in the value of the collateral for exceptional reasons.

Concentration risks resulting from credit risk mitigation techniques may affect a single customer, but also a portfolio defined by region, industry, or type of collateral. Erste Group is a retail bank, and, due to its customer structure and the markets in which it operates, it does not have any concentrations with respect to collateral from customers. All guarantee liabilities and loans of a corporate guarantee provider are taken into consideration in the credit application process in order to prevent possible concentrations. Guarantees provided by sovereigns, a public sector entity or financial institutions have to lie within the approved limit of the guarantor. Concerning other areas of a potentially detrimental correlation of risks, the collateral portfolios are analysed using statistical evaluations for, among other things, regional or industry-specific concentrations within the scope of portfolio monitoring. The response to those risks identified includes, above all, the adjustment of volume targets, setting of corresponding limits and modification of the staff's discretionary limits for lending.

Collateral obtained in foreclosure proceedings is made available for sale in an orderly fashion, with the proceeds used to reduce or repay the outstanding claim. Generally, Erste Group does not occupy repossessed properties for its own business use. The main part of assets taken onto its own books is commercial land and buildings. In addition, residential real estate properties and transport vehicles are taken into Erste Group's possession. As of 31 December 2017, the carrying value of these assets amounted to EUR 167 million (2016: EUR 142 million).

The following tables compare the credit risk exposure broken down by business and geographical segments to the allocated collateral. The amount of allocated collateral corresponds to the accepted value after internal haircuts capped by the exposure amount.

### Credit risk exposure by business segment and collateral

in EUR million	Total credit risk exposure	Collateral total	Collateralised by			Credit risk exposure net of collateral
			Guarantees	Real estate	Other	
<b>As of 31 December 2017</b>						
Retail	59,708	33,829	1,199	30,236	2,393	25,879
Corporates	64,114	23,122	4,794	14,246	4,082	40,992
Group Markets	15,921	5,578	631	31	4,916	10,343
Asset/Liability Management and Local Corporate Center	28,479	4,366	741	2	3,624	24,112
Savings Banks	57,696	27,302	1,418	22,503	3,381	30,394
Group Corporate Center	254	18	0	0	18	235
<b>Total</b>	<b>226,172</b>	<b>94,215</b>	<b>8,783</b>	<b>67,018</b>	<b>18,414</b>	<b>131,957</b>
<b>As of 31 December 2016</b>						
Retail	53,972	31,430	1,180	28,098	2,152	22,542
Corporates	61,411	23,773	4,962	14,103	4,708	37,638
Group Markets	15,542	3,476	496	56	2,924	12,066
Asset/Liability Management and Local Corporate Center	27,682	809	686	2	121	26,873
Savings Banks	56,122	26,222	1,396	21,361	3,466	29,900
Group Corporate Center	208	19	0	2	16	189
<b>Total</b>	<b>214,938</b>	<b>85,729</b>	<b>8,720</b>	<b>63,622</b>	<b>13,387</b>	<b>129,209</b>

## Credit risk exposure by geographical segment and collateral

in EUR million	Total credit risk exposure	Collateral total	Collateralised by			Credit risk exposure net of collateral
			Guarantees	Real estate	Other	
<b>As of 31 December 2017</b>						
<b>Austria</b>	<b>125,849</b>	<b>60,060</b>	<b>5,620</b>	<b>43,962</b>	<b>10,478</b>	<b>65,789</b>
Erste Bank Oesterreich & Subsidiaries	39,329	23,358	2,224	18,520	2,614	15,972
Savings Banks	57,696	27,302	1,418	22,503	3,381	30,394
Other Austria	28,823	9,401	1,978	2,940	4,483	19,423
<b>Central and Eastern Europe</b>	<b>95,298</b>	<b>33,773</b>	<b>2,830</b>	<b>23,056</b>	<b>7,887</b>	<b>61,525</b>
Czech Republic	45,186	16,935	811	10,083	6,041	28,251
Romania	14,076	4,075	1,138	2,365	571	10,001
Slovakia	17,320	7,279	92	6,898	289	10,041
Hungary	7,875	2,078	170	1,604	305	5,797
Croatia	9,341	2,976	605	1,766	605	6,365
Serbia	1,500	430	15	340	75	1,070
<b>Other</b>	<b>5,025</b>	<b>382</b>	<b>333</b>	<b>0</b>	<b>49</b>	<b>4,643</b>
<b>Total</b>	<b>226,172</b>	<b>94,215</b>	<b>8,783</b>	<b>67,018</b>	<b>18,414</b>	<b>131,957</b>
<b>As of 31 December 2016</b>						
<b>Austria</b>	<b>124,291</b>	<b>57,465</b>	<b>5,455</b>	<b>42,450</b>	<b>9,560</b>	<b>66,825</b>
Erste Bank Oesterreich & Subsidiaries	39,025	22,386	2,159	17,798	2,429	16,639
Savings Banks	56,122	26,222	1,396	21,361	3,466	29,900
Other Austria	29,144	8,858	1,900	3,292	3,665	20,286
<b>Central and Eastern Europe</b>	<b>83,329</b>	<b>27,766</b>	<b>2,898</b>	<b>21,169</b>	<b>3,699</b>	<b>55,563</b>
Czech Republic	36,546	10,294	817	8,604	874	26,252
Romania	14,097	4,949	989	2,426	1,533	9,148
Slovakia	15,723	6,974	116	6,617	241	8,749
Hungary	6,711	2,156	249	1,576	331	4,555
Croatia	9,025	2,998	697	1,673	628	6,027
Serbia	1,227	395	30	273	92	832
<b>Other</b>	<b>7,318</b>	<b>497</b>	<b>368</b>	<b>2</b>	<b>127</b>	<b>6,821</b>
<b>Total</b>	<b>214,938</b>	<b>85,729</b>	<b>8,720</b>	<b>63,622</b>	<b>13,387</b>	<b>129,209</b>

### Credit risk exposure by financial instrument and collateral

in EUR million	Total credit risk exposure	Collateralised by				Credit risk exposure net of collateral	Neither past due nor impaired	Past due but not impaired	Impaired
		Collateral total	Guarantees	Real estate	Other				
<b>As of 31 December 2017</b>									
Cash and cash balances – other demand deposits	1,028	193	0	0	193	835	1,021	7	0
Loans and receivables to credit institutions	9,133	6,862	207	0	6,654	2,271	9,121	10	2
Loans and receivables to customers	143,509	80,383	6,335	64,893	9,155	63,126	135,165	2,777	5,566
Financial assets - held to maturity	19,804	362	362	0	0	19,442	19,790	14	0
Financial assets - held for trading	2,887	71	47	0	23	2,817	2,887	0	0
Financial assets - at fair value through profit or loss	403	19	19	0	0	384	403	0	0
Financial assets - available for sale	14,896	766	766	0	0	14,130	14,891	0	5
Positive fair value of derivatives	4,217	1,453	0	0	1,453	2,764	4,216	0	1
Contingent liabilities	30,295	4,107	1,046	2,125	935	26,188	29,780	194	320
<b>Total</b>	<b>226,172</b>	<b>94,215</b>	<b>8,783</b>	<b>67,018</b>	<b>18,414</b>	<b>131,957</b>	<b>217,275</b>	<b>3,002</b>	<b>5,895</b>
<b>As of 31 December 2016</b>									
Cash and cash balances – other demand deposits	1,282	320	0	0	320	961	1,274	7	0
Loans and receivables to credit institutions	3,478	952	137	0	815	2,526	3,470	5	3
Loans and receivables to customers	135,267	77,187	6,466	61,567	9,155	58,080	126,141	2,850	6,276
Financial assets - held to maturity	19,274	248	230	8	10	19,026	19,273	1	0
Financial assets - held for trading	3,396	194	45	0	150	3,202	3,396	0	0
Financial assets - at fair value through profit or loss	336	22	22	0	0	314	336	0	0
Financial assets - available for sale	18,522	855	855	0	0	17,667	18,521	1	1
Positive fair value of derivatives	5,899	1,713	0	0	1,713	4,186	5,896	0	3
Contingent liabilities	27,484	4,237	966	2,047	1,224	23,247	27,086	119	279
<b>Total</b>	<b>214,938</b>	<b>85,729</b>	<b>8,720</b>	<b>63,622</b>	<b>13,387</b>	<b>129,209</b>	<b>205,395</b>	<b>2,982</b>	<b>6,561</b>

In the case of contingent liabilities, the impaired credit risk exposure corresponds to positions for which provisions for credit risks were created.

**Credit risk exposure past due and not covered by specific allowances by financial instrument and collateralisation**

in EUR million	Total credit risk exposure									
	Total					Thereof collateralised				
	Thereof 1-30 days past due	Thereof 31-60 days past due	Thereof 61-90 days past due	Thereof 91-180 days past due	Thereof more than 180 days past due	Thereof 1-30 days past due	Thereof 31-60 days past due	Thereof 61-90 days past due	Thereof 91-180 days past due	Thereof more than 180 days past due
<b>As of 31 December 2017</b>										
Cash and cash balances – other demand deposits	7	7	0	0	0	0	0	0	0	0
Loans and receivables to credit institutions	10	6	0	0	3	0	0	0	0	0
Loans and receivables to customers	2,777	2,197	317	156	76	1,068	165	80	13	38
Financial assets - held to maturity	14	0	14	0	0	0	0	0	0	0
Financial assets - held for trading	0	0	0	0	0	0	0	0	0	0
Financial assets - at fair value through profit or loss	0	0	0	0	0	0	0	0	0	0
Financial assets - available for sale	0	0	0	0	0	0	0	0	0	0
Positive fair value of derivatives	0	0	0	0	0	0	0	0	0	0
Contingent liabilities	194	186	5	1	1	35	0	1	0	0
<b>Total</b>	<b>3,002</b>	<b>2,396</b>	<b>336</b>	<b>157</b>	<b>80</b>	<b>1,103</b>	<b>166</b>	<b>81</b>	<b>13</b>	<b>38</b>
<b>As of 31 December 2016</b>										
Cash and cash balances – other demand deposits	7	7	0	0	0	0	0	0	0	0
Loans and receivables to credit institutions	5	4	0	0	0	0	0	0	0	0
Loans and receivables to customers	2,850	2,096	385	208	71	1,101	232	144	42	60
Financial assets - held to maturity	1	0	0	0	1	0	0	0	0	0
Financial assets - held for trading	0	0	0	0	0	0	0	0	0	0
Financial assets - at fair value through profit or loss	0	0	0	0	0	0	0	0	0	0
Financial assets - available for sale	1	0	0	0	1	0	0	0	0	0
Positive fair value of derivatives	0	0	0	0	0	0	0	0	0	0
Contingent liabilities	119	112	6	1	0	32	2	0	0	0
<b>Total</b>	<b>2,982</b>	<b>2,220</b>	<b>391</b>	<b>209</b>	<b>71</b>	<b>1,133</b>	<b>234</b>	<b>144</b>	<b>42</b>	<b>60</b>

In the case of contingent liabilities, the impaired credit risk exposure corresponds to positions for which provisions for credit risks were created.

All claims presented in the table above were classified as non-performing if they were more than 90 days past due. Allowances are, as a rule, established for assets that are more than 90 days past due. However, specific allowances are not established if the loans and other receivables are covered by adequate collateral.

## Loans and receivables to customers

This section presents the customer loan book excluding loans to financial institutions and commitments. The results depicted in the tables below are divided by reporting segment and risk category.

### Breakdown of loans and receivables to customers

On the following pages the loans and receivables to customers are categorized as:

- \_ business segment and risk category;
- \_ geographical segment and risk category;
- \_ Non-performing loans and receivables to customers by business segment and coverage by loan loss allowances and collateral;
- \_ Non-performing loans and receivables to customers by geographical segment and coverage by loan loss allowances and collateral;
- \_ business segment and currency;
- \_ geographical segment and currency.

### Loans and receivables to customers by business segment and risk category

in EUR million	Low risk	Management attention	Substandard	Non-performing	Gross customer loans
<b>As of 31 December 2017</b>					
Retail	45,516	5,025	501	1,691	52,734
Corporates	40,790	3,729	417	2,312	47,249
Group Markets	933	231	5	0	1,169
Asset/Liability Management and Local Corporate Center	111	30	51	14	206
Savings Banks	34,551	5,159	654	1,758	42,122
Group Corporate Center	20	4	5	1	30
<b>Total</b>	<b>121,921</b>	<b>14,179</b>	<b>1,633</b>	<b>5,776</b>	<b>143,509</b>
<b>As of 31 December 2016</b>					
Retail	41,013	5,034	487	1,946	48,480
Corporates	37,692	3,956	334	2,738	44,720
Group Markets	975	285	5	0	1,265
Asset/Liability Management and Local Corporate Center	97	23	38	13	171
Savings Banks	32,504	5,417	710	1,980	40,611
Group Corporate Center	15	1	2	1	19
<b>Total</b>	<b>112,297</b>	<b>14,715</b>	<b>1,577</b>	<b>6,678</b>	<b>135,267</b>

## Loans and receivables to customers by geographical segment and risk category

in EUR million	Low risk	Management attention	Substandard	Non-performing	Gross customer loans
<b>As of 31 December 2017</b>					
<b>Austria</b>	<b>74,809</b>	<b>7,960</b>	<b>1,019</b>	<b>3,112</b>	<b>86,900</b>
Erste Bank Oesterreich & Subsidiaries	28,681	2,181	294	631	31,787
Savings Banks	34,551	5,159	654	1,758	42,122
Other Austria	11,578	620	71	723	12,991
<b>Central and Eastern Europe</b>	<b>46,934</b>	<b>6,214</b>	<b>609</b>	<b>2,639</b>	<b>56,396</b>
Czech Republic	22,481	2,298	183	525	25,487
Romania	5,452	1,559	116	632	7,759
Slovakia	10,514	1,014	62	458	12,048
Hungary	3,038	416	103	209	3,766
Croatia	4,601	849	138	783	6,371
Serbia	848	79	6	32	965
<b>Other</b>	<b>179</b>	<b>4</b>	<b>5</b>	<b>25</b>	<b>212</b>
<b>Total</b>	<b>121,921</b>	<b>14,179</b>	<b>1,633</b>	<b>5,776</b>	<b>143,509</b>
<b>As of 31 December 2016</b>					
<b>Austria</b>	<b>71,069</b>	<b>8,668</b>	<b>1,003</b>	<b>3,447</b>	<b>84,186</b>
Erste Bank Oesterreich & Subsidiaries	27,705	2,316	244	781	31,046
Savings Banks	32,504	5,417	710	1,980	40,611
Other Austria	10,859	936	48	686	12,529
<b>Central and Eastern Europe</b>	<b>41,159</b>	<b>6,047</b>	<b>572</b>	<b>3,198</b>	<b>50,975</b>
Czech Republic	19,067	2,046	130	695	21,939
Romania	5,297	1,594	71	928	7,890
Slovakia	9,028	948	102	475	10,552
Hungary	2,552	476	111	339	3,478
Croatia	4,563	870	147	704	6,285
Serbia	653	111	12	56	832
<b>Other</b>	<b>70</b>	<b>1</b>	<b>2</b>	<b>33</b>	<b>105</b>
<b>Total</b>	<b>112,297</b>	<b>14,715</b>	<b>1,577</b>	<b>6,678</b>	<b>135,267</b>

In the following tables, the non-performing loans and receivables to customers divided by reporting segment are contrasted with allowances for customer loans (specific and collective allowances) and the collateral for non-performing loans (NPL). The NPL ratio, the NPL coverage ratio (excl. collateral), and the NPL total coverage ratio are also included. The NPL total coverage ratio specifies the coverage of non-performing loans by specific and collective allowances as well as by collateral for non-performing loans.

## Non-performing loans and receivables to customers by business segment and coverage by loan loss allowances and collateral

in EUR million	Non-performing	Gross customer loans	Allowances for customer loans	Specific allowances	Collective allowances	NPL ratio	NPL coverage ratio (excl. collateral)	Collateral for NPL	NPL total coverage ratio
<b>As of 31 December 2017</b>									
Retail	1,691	52,734	1,319	1,075	244	3.2%	78.0%	714	120.2%
Corporates	2,312	47,249	1,605	1,310	294	4.9%	69.4%	807	104.3%
Group Markets	0	1,169	2	0	2	0.0%	>500.0%	0	>500.0%
Asset/Liability Management and Local Corporate Center	14	206	25	12	14	6.6%	187.7%	0	190.5%
Savings Banks	1,758	42,122	1,026	875	151	4.2%	58.3%	850	106.7%
Group Corporate Center	1	30	0	0	0	2.3%	16.5%	1	115.5%
<b>Total</b>	<b>5,776</b>	<b>143,509</b>	<b>3,977</b>	<b>3,272</b>	<b>705</b>	<b>4.0%</b>	<b>68.8%</b>	<b>2,372</b>	<b>109.9%</b>
<b>As of 31 December 2016</b>									
Retail	1,946	48,480	1,463	1,190	273	4.0%	75.2%	849	118.8%
Corporates	2,738	44,721	1,979	1,698	281	6.1%	72.3%	1,094	112.2%
Group Markets	0	1,265	3	0	3	0.0%	0.0%	0	0.0%
Asset/Liability Management and Local Corporate Center	13	171	18	6	12	7.6%	138.5%	1	146.2%
Savings Banks	1,980	40,611	1,150	993	157	4.9%	58.1%	967	106.9%
Group Corporate Center	1	19	0	0	0	5.3%	0.0%	1	100.0%
<b>Total</b>	<b>6,678</b>	<b>135,267</b>	<b>4,613</b>	<b>3,887</b>	<b>726</b>	<b>4.9%</b>	<b>69.1%</b>	<b>2,913</b>	<b>112.7%</b>

## Non-performing loans and receivables to customers by geographical segment and coverage by loan loss allowances and collateral

in EUR million	Non-performing	Gross customer loans	Allowances for customer loans	Specific allowances	Collective allowances	NPL ratio	NPL coverage ratio (excl. collateral)	Collateral for NPL	NPL total coverage ratio
<b>As of 31 December 2017</b>									
<b>Austria</b>	<b>3,112</b>	<b>86,900</b>	<b>1,749</b>	<b>1,503</b>	<b>246</b>	<b>3.6%</b>	<b>56.2%</b>	<b>1,437</b>	<b>102.4%</b>
Erste Bank Oesterreich & Subsidiaries	631	31,787	360	310	50	2.0%	57.1%	324	108.4%
Savings Banks	1,758	42,122	1,026	875	151	4.2%	58.3%	850	106.7%
Other Austria	723	12,991	363	318	44	5.6%	50.2%	263	86.6%
<b>Central and Eastern Europe</b>	<b>2,639</b>	<b>56,396</b>	<b>2,214</b>	<b>1,757</b>	<b>457</b>	<b>4.7%</b>	<b>83.9%</b>	<b>935</b>	<b>119.3%</b>
Czech Republic	525	25,487	486	381	105	2.1%	92.5%	120	115.3%
Romania	632	7,759	586	449	137	8.1%	92.7%	222	127.8%
Slovakia	458	12,048	365	290	75	3.8%	79.7%	200	123.3%
Hungary	209	3,766	186	125	61	5.5%	89.3%	122	147.5%
Croatia	783	6,371	556	490	66	12.3%	70.9%	262	104.3%
Serbia	32	965	36	22	14	3.3%	112.0%	10	143.4%
<b>Other</b>	<b>25</b>	<b>212</b>	<b>14</b>	<b>12</b>	<b>2</b>	<b>11.7%</b>	<b>56.6%</b>	<b>1</b>	<b>59.4%</b>
<b>Total</b>	<b>5,776</b>	<b>143,509</b>	<b>3,977</b>	<b>3,272</b>	<b>705</b>	<b>4.0%</b>	<b>68.8%</b>	<b>2,372</b>	<b>109.9%</b>
<b>As of 31 December 2016</b>									
<b>Austria</b>	<b>3,447</b>	<b>84,186</b>	<b>2,052</b>	<b>1,769</b>	<b>283</b>	<b>4.1%</b>	<b>59.5%</b>	<b>1,599</b>	<b>105.9%</b>
Erste Bank Oesterreich & Subsidiaries	781	31,046	463	401	62	2.5%	59.3%	366	106.1%
Savings Banks	1,980	40,611	1,150	993	157	4.9%	58.1%	967	106.9%
Other Austria	686	12,529	438	375	63	5.5%	63.8%	266	102.6%
<b>Central and Eastern Europe</b>	<b>3,198</b>	<b>50,975</b>	<b>2,529</b>	<b>2,086</b>	<b>443</b>	<b>6.3%</b>	<b>79.1%</b>	<b>1,281</b>	<b>119.1%</b>
Czech Republic	695	21,939	575	482	93	3.2%	82.7%	220	114.4%
Romania	928	7,890	792	660	132	11.8%	85.3%	329	120.8%
Slovakia	475	10,552	343	254	89	4.5%	72.2%	240	122.7%
Hungary	339	3,478	254	203	51	9.7%	74.9%	177	127.1%
Croatia	704	6,285	510	447	63	11.2%	72.4%	299	114.9%
Serbia	56	832	56	42	14	6.7%	100.0%	16	128.6%
<b>Other</b>	<b>33</b>	<b>105</b>	<b>32</b>	<b>32</b>	<b>0</b>	<b>31.4%</b>	<b>97.0%</b>	<b>33</b>	<b>197.0%</b>
<b>Total</b>	<b>6,678</b>	<b>135,267</b>	<b>4,613</b>	<b>3,887</b>	<b>726</b>	<b>4.9%</b>	<b>69.1%</b>	<b>2,913</b>	<b>112.7%</b>

The NPL ratio in this section (loans and receivables to customers) is calculated by dividing non-performing loans and receivables by total loans and receivables to customers. Consequently, it differs from the NPE ratio in section 'Credit risk exposure'. Collaterals for non-performing loans mainly consist of real estates.

## Loans and receivables to customers by business segment and currency

in EUR million	EUR	CEE-local currencies	CHF	USD	Other	Gross customer loans
<b>As of 31 December 2017</b>						
Retail	29,642	21,228	1,466	18	380	52,734
Corporates	34,500	9,164	405	2,269	911	47,249
Group Markets	706	306	0	156	1	1,169
Asset/Liability Management and Local Corporate Center	147	57	0	1	1	206
Savings Banks	38,853	392	2,237	83	557	42,122
Group Corporate Center	11	19	0	0	0	30
<b>Total</b>	<b>103,858</b>	<b>31,166</b>	<b>4,107</b>	<b>2,528</b>	<b>1,849</b>	<b>143,509</b>
<b>As of 31 December 2016</b>						
Retail	27,227	19,162	1,858	20	213	48,480
Corporates	33,240	8,050	501	2,413	517	44,721
Group Markets	809	271	6	176	3	1,265
Asset/Liability Management and Local Corporate Center	137	31	0	1	2	171
Savings Banks	36,662	0	2,988	80	881	40,611
Group Corporate Center	0	19	0	0	0	19
<b>Total</b>	<b>98,075</b>	<b>27,533</b>	<b>5,353</b>	<b>2,690</b>	<b>1,617</b>	<b>135,267</b>

## Loans and receivables to customers by geographical segment and currency

in EUR million	EUR	CEE-local currencies	CHF	USD	Other	Gross customer loans
<b>As of 31 December 2017</b>						
<b>Austria</b>	<b>78,985</b>	<b>0</b>	<b>4,005</b>	<b>2,147</b>	<b>1,763</b>	<b>86,900</b>
Erste Bank Oesterreich & Subsidiaries	30,040	0	1,590	46	112	31,787
Savings Banks	38,853	0	2,237	83	949	42,122
Other Austria	10,093	0	178	2,018	702	12,991
<b>Central and Eastern Europe</b>	<b>24,697</b>	<b>31,135</b>	<b>102</b>	<b>375</b>	<b>86</b>	<b>56,396</b>
Czech Republic	3,392	21,866	1	164	64	25,487
Romania	3,413	4,202	0	143	0	7,759
Slovakia	12,004	0	0	28	16	12,048
Hungary	886	2,850	27	3	0	3,766
Croatia	4,264	2,005	63	33	6	6,371
Serbia	738	212	11	4	0	965
<b>Other</b>	<b>176</b>	<b>31</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>212</b>
<b>Total</b>	<b>103,858</b>	<b>31,166</b>	<b>4,107</b>	<b>2,528</b>	<b>1,849</b>	<b>143,509</b>
<b>As of 31 December 2016</b>						
<b>Austria</b>	<b>75,200</b>	<b>0</b>	<b>5,205</b>	<b>2,261</b>	<b>1,521</b>	<b>84,187</b>
Erste Bank Oesterreich & Subsidiaries	28,729	0	2,089	86	142	31,046
Savings Banks	36,662	0	2,988	80	881	40,611
Other Austria	9,810	0	128	2,095	497	12,529
<b>Central and Eastern Europe</b>	<b>22,823</b>	<b>27,487</b>	<b>149</b>	<b>421</b>	<b>96</b>	<b>50,976</b>
Czech Republic	2,846	18,930	1	96	65	21,939
Romania	3,807	3,875	0	208	0	7,890
Slovakia	10,487	0	0	42	23	10,552
Hungary	638	2,765	52	24	0	3,478
Croatia	4,405	1,744	82	45	8	6,285
Serbia	641	172	14	5	0	832
<b>Other</b>	<b>51</b>	<b>46</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>105</b>
<b>Total</b>	<b>98,075</b>	<b>27,533</b>	<b>5,353</b>	<b>2,690</b>	<b>1,617</b>	<b>135,267</b>

### Securitisations

As of 31 December 2017, Erste Group held a further reduced residual portfolio of securitisations; there were no new investments undertaken and all repayments were made as scheduled in 2016.

As of year-end 2017, the carrying amount of Erste Group's securitisation portfolio totalled EUR 69.2 million. The entire exposure is investment-grade rated.

EUR 63.6 million consist of US student loans. All securitisations have been issued and bought before the financial crisis.

### 44.5 Market risk

Market risk is the risk of loss that may arise due to adverse changes in market prices and to the parameters derived from them. These market value changes might appear in the profit and loss account, in the statement of comprehensive income or in hidden reserves. At Erste Group, market risk is divided into interest rate risk, credit spread risk, currency risk, equity risk, commodity risk, and volatility risk. This concerns both trading and banking book positions.

#### Methods and instruments employed

At Erste Group, potential losses that may arise from market movements are assessed using the value at risk (VaR). The calculation is done according to the method of historic simulation with a one-sided confidence level of 99%, a holding period of one day and a simulation period of two years. The VaR describes what level of losses may be expected as a maximum at a defined probability – the confidence level – within a certain holding period of the positions under historically observed market conditions.

Back-testing is used to constantly monitor the validity of the statistical methods. This process is conducted with a one-day delay to monitor if the model projections regarding losses have actually materialised. At a confidence level of 99%, the actual loss on a single day should exceed the VaR statistically only two to three times a year (1% of around 250 workdays).

This shows one of the limits of the VaR approach: on the one hand, the confidence level is limited to 99%, and on the other hand, the model takes into account only those market scenarios observed in each case within the simulation period of two years, and calculates the

VaR for the current position of the bank on this basis. In order to investigate any extreme market situations beyond this, stress tests are conducted at Erste Group. These events include mainly market movements of low probability.

The stress tests are carried out according to several methods: stressed VaR (SVaR) is derived from the normal VaR calculation. But instead of simulating only over the two most recent years, an analysis of a much longer period is carried out in order to identify a one-year period that constitutes a relevant period of stress for the current portfolio mix. According to the legal framework, that one-year period is used to calculate a VaR with a 99% confidence level. This enables Erste Group on the one hand to hold sufficient own funds available for the trading book even in periods of elevated market volatility, while on the other hand also enabling it to incorporate these resulting effects into the management of trading positions.

Standard scenarios are calculated in which the individual market factors are exposed to extreme movements. Such scenarios are calculated at Erste Group for interest rates, stock prices, exchange rates and volatilities. Historic scenarios are a modification of the concept of standard scenarios. In this case, risk factor movements after certain events such as '9/11' or the 'Lehman bankruptcy' form the basis of the stress calculation. In order to calculate historical probabilistic scenarios, the most significant risk factors for the current portfolio are determined and their most adverse movement during the last years is applied. For the probabilistic scenarios, shifts of important market factors are determined for various quantiles of their distributions, and these values are then used to calculate stress results. These analyses are made available to the management board and the supervisory board within the scope of the monthly market risk reports.

The implemented market risk model was approved by ECB in December 2016 as an internal model to determine the own funds requirements for the trading books of Erste Group Bank AG and Česká spořitelna, a.s. on an individual level and additionally for the trading books of Slovenská sporiteľňa a.s., Erste Bank Hungary Zrt., and Erste Befektetési Zrt. on consolidated basis. The infrastructure brought significant improvements with regards to flexible shift methodologies of historical scenarios, product- and market data coverage, and the reporting infrastructure.

#### Methods and instruments of risk mitigation

At Erste Group, market risks are controlled in the trading book by setting several layers of limits. The overall limit on the basis of VaR for the trading book is allocated by the management board in the Risk Appetite Statement while taking into account the risk-bearing capacity and projected earnings. A further breakdown is done by the Market Risk Committee (MRC) on the basis of a proposal from the Trading Book Risk Management unit.

All market risk activities of the trading book are assigned risk limits that are statistically consistent in their entirety with the overall VaR limit. The VaR limit is assigned in a top-down procedure to the individual trading units. This is done down to the level of the individual trading groups or departments. Additionally, in a bottom-up procedure, sensitivity limits are assigned to even smaller units all the way down to the desk level. These are then aggregated and applied as a second limit layer to the VaR limits.

Limit compliance is verified at two levels: by the appropriate local decentralised risk management unit and by the Trading Book Risk Management unit. The monitoring of sensitivity limits is performed on both intraday and end of day basis. On demand, limit reports can also be triggered by individual traders or chief traders on an ad hoc basis.

The VaR is calculated every day at group level and made available to the individual trading units as well as to the superior management levels all the way up to the management board.

Banking book positions are subjected to a monthly VaR analysis. In this manner, the total VaR is determined with exactly the same methodology as for the trading book. In addition to VaR, a long-horizon risk measure is used to gauge the interest rate risk; credit spread risk of the banking book, and foreign exchange risk of equity participations. For this purpose, a historical simulation approach looking back ten years and with a one-year holding period was chosen. The result of these calculations is presented in the monthly Group ALCO to the management board.

#### Analysis of market risk

The following tables show the VaR amounts at the 99% confidence level using equally weighted market data and with a holding period of one day:

## Value at Risk of banking book and trading book

in EUR million	Total	Interest	Currency	Shares	Commodity	Volatility
<b>As of 31 December 2017</b>						
Erste Group	21,050	20,531	701	1,039	656	411
Banking book	16,066	16,066	0	0	0	0
Trading book	4,984	4,465	701	1,039	656	411
<b>As of 31 December 2016</b>						
Erste Group	18,460	18,147	998	1,358	287	344
Banking book	15,069	15,163	118	0	0	0
Trading book	3,391	2,984	880	1,358	287	344

The method used is subject to limitations that may result in the information not fully reflecting the fair value of the assets and liabilities involved. This restriction applies to the inclusion of credit spreads in the calculation of the VaR. Credit spreads are only applied to sovereign issuers. For all other positions, only the general market risk is considered.

### Interest rate risk in the banking book

Interest rate risk is the risk of an adverse change in the fair value of financial instruments caused by a movement in market interest rates. This type of risk arises when mismatches exist between assets and liabilities, including derivatives, in respect of their maturities or of the timing of interest rate adjustments.

In order to identify interest rate risk, all financial instruments, including transactions not recognised on the balance sheet, are grouped into maturity bands based on their remaining terms to maturity or terms to an interest rate adjustment. Positions without a fixed maturity (e.g. demand deposits) are included on the basis of modelled deposit rates that are determined by means of statistical methods.

To the low or even negative interest rate environment since 2015, which poses a challenge for the interest rate risk measurement and management of banks, Erste Group responded in the last years by adjusting its methodologies for measuring the interest rate risk. No floor on interest rates is applied for internal risk calculations. For the regulatory interest rate risk measure, the result of the downward shock is floored at the level of the current negative rate or at zero in case the current rate is positive (in line with EBA requirements).

The following tables list the open fixed-income positions held by Erste Group in the four currencies that carry a significant interest rate risk: EUR, CZK, HUF and RON.

Only the open fixed-income positions that are not allocated to the trading book are presented. Positive values indicate fixed-income risks on the asset side, i.e. a surplus of asset items; negative values represent a surplus on the liability side.

### Open fixed-income positions not assigned to the trading book

in EUR million	1-3 years	3-5 years	5-7 years	7-10 years	Over 10 years
<b>As of 31 December 2017</b>					
Fixed-interest gap in EUR positions	-2,317.2	-3,777.9	-2,540.8	-2,322.4	2,136.9
Fixed-interest gap in CZK positions	3,138.4	1,017.7	-656.8	-2,795.9	150.0
Fixed-interest gap in HUF positions	-164.2	514.4	18.0	-460.5	1.0
Fixed-interest gap in RON positions	470.6	521.2	46.7	100.6	0.4
<b>As of 31 December 2016</b>					
Fixed-interest gap in EUR positions	-1,368.1	-1,575.1	-1,080.8	208.7	2,583.3
Fixed-interest gap in CZK positions	3,367.0	-357.3	-1,265.7	-2,594.3	49.2
Fixed-interest gap in HUF positions	-164.6	310.3	96.8	-341.2	-0.3
Fixed-interest gap in RON positions	318.0	596.5	-2.4	-99.2	87.0

### Credit spread risk

Credit spread risk is the risk of an adverse movement in the fair value of financial instruments caused by a change in the creditworthiness of an issuer perceived by the market. Erste Group is exposed to credit spread risk with respect to its securities portfolio, both in the trading as well as in the banking book.

For the trading book, credit spread risk for government bonds is part of the general market risk covered by VaR and SVaR. Corporate bonds are allocated to benchmark spread curves depending on sector, rating, and currency as part of the general risk covered by VaR and

SVaR. The issuer specific risk is covered by the standardized approach for Pillar 1 of regulatory capital requirements. For the issuer specific risk of the trading book in Pillar 2, the spread risk is decomposed in a systematic and a residual part risk and reported on aggregated.

The quantification of the credit spread risk of the securities in the banking book is based on a historical simulation. The maximum (hypothetical) drawdown that can be attributed to credit related risk factors over one-year horizon is calculated. It is based on credit spread sensitivities (CR01) and the risk factors used are mainly asset swap spreads for sovereigns and iTRAXX CDS indices for financials and corporates. The resulting amount is used as part of the Pillar 2 calculations to determine the capital consumption of the banking book portfolio.

### Exchange rate risk

The bank is exposed to several types of risks related to exchange rates. These concern risks from open foreign exchange positions and others.

Risk from open foreign exchange positions is the risk related to exchange rates that derives from the mismatch between assets and liabilities, or from currency-related financial derivatives. These risks might originate from customer-related operations or proprietary trading and are monitored and managed on a daily basis. Foreign currency exposure is subject to regulatory and internal limits. The internal limits are set by the Market Risk Committee.

Erste Group separately measures and manages other types of risks relating to the group's balance sheet and earnings structure. The translation risk related to the valuation of the balance sheet items, earnings, dividends and participations/net investments in local currency or foreign exchange has an impact on consolidated earnings and consolidated capital. Erste Group is also reducing the negative impact related to volatility of foreign exchange rates on asset performance (for example as a result of foreign exchange lending in the CEE countries that was stopped for clients not having sufficient regular income in the respective loan currency).

In order to manage its multi-currency earnings structure, Erste Group regularly discusses hedging opportunities and takes decisions in the Group Asset Liability Committee (ALCO). Asset Liability Management (ALM) uses as the usual source of information the current financial results and the financial budget prepared for the upcoming period to obtain as much information as possible on the future foreign currency cash flows. The proposal, which mainly includes the volume, hedging level, hedge ratio and timeline of the hedging, is submitted by ALM to ALCO. The impact of translation on consolidated capital is monitored and reported to ALCO. The ALCO decisions are then implemented by ALM and the implementation status is reported on a monthly basis to ALCO.

The following table shows the largest open foreign currency positions of Erste Group as of 31 December 2017 and the corresponding open positions of these currencies as of 31 December 2016 (excluding foreign currency positions arising from equity participation).

### Open foreign currency positions

in EUR thousand	Dec 16	Dec 17
US Dollar (USD)	27,555	79,473
Czech Koruna (CZK)	-170,654	40,548
Hungarian Forint (HUF)	-4,862	-26,170
Romanian Leu (RON)	6,387	19,270
British Pound (GBP)	2,291	-10,685
Polish Zloty (PLN)	527	-5,424
Serbian Dinar (RSD)	6,824	5,397
Swedish Krona (SEK)	166	3,505
Japanese Yen (JPY)	109	-3,308
Norwegian Krone (NOK)	396	1,607

### Hedging

Banking book market risk management consists of optimising Erste Group's risk position by finding the proper trade-off between the economic value of the balance sheet and forecasted earnings. Decisions are based on the balance sheet development, economic environment, competitive landscape, fair value of risk, effect on net interest income and appropriate liquidity position. The steering body responsible for interest rate risk management is ALCO. ALM submits proposals for actions to steer the interest rate risk to ALCO and implements ALCO's decisions.

In order to achieve the goals of risk management, hedging activities focus on the two main control variables: net interest income and market value of equity risk. In a broader sense, hedging refers to an economic activity that mitigates risk but does not necessarily qualify for hedge accounting under IFRS rules. IFRS hedge accounting is applied, if possible, to avoid accounting mismatches due to hedging activity. Within the scope of IFRS-compliant hedge accounting, cash flow hedges and fair value hedges are used. If IFRS-compliant hedge

accounting is not possible, the fair value option is applied, where appropriate, for the hedging of market values. Most of the hedging within Erste Group concerns hedging of interest rate risk. The remainder is hedging of foreign exchange rate risk.

#### 44.6 Liquidity risk

The liquidity risk in Erste Group is defined in line with the principles set out by the Basel Committee on Banking Supervision as well as the European and 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.

#### Liquidity strategy

In 2017, client deposits remained the primary source of funding for Erste Group: the volume of client deposits increased to EUR 150.9 billion as of year-end 2017 (2016: EUR 138.0 billion), amounting to 68% (2016: 66%) of the balance sheet total. Due to the fact that client deposits inflows surpassed the growth of loan production, the loan-to-deposit ratio was further decreasing to 92% (2016: 95%). The increased excess liquidity was placed to central banks.

With regards to own issuance, Erste Group Bank AG issued EUR 2.1 billion in bonds in 2017 (2016: EUR 2.0 billion) which in net terms was in accordance with the size of the budgeted figure. EUR 750 million (2016: EUR 750 million) was collected via a mortgage covered bond in benchmark size. EUR 577 million (2016: EUR 578 million) was collected by issuing senior unsecured bonds via private placements or the retail network. Tier 2 subordinated debt issuance was in the size of EUR 273 million (2016: EUR 219 million). This was offset by repurchases of EUR 147 million (2016: EUR 219 million). Erste Group Bank AG issued its second Additional Tier 1 (AT1) transaction (EUR 500 million benchmark) (2016: EUR 500 million) which is compliant with CRD IV (Capital Requirements Directive IV) and CRR (Capital Requirements Regulation). The average tenor of all new issues in 2017 is approximately 7.5 years (2016: 6.5 years).

Since 2014, the ECB supports bank lending to the non-financial sector through a series of targeted longer-term refinancing operations (TLTROs) with a maturity of up to four years and an early repayment option. Erste Group's total TLTRO participation increased in 2017 to EUR 3.5 billion (2016: EUR 2.3 billion).

#### Liquidity ratios

With the implementation of the CRR at the beginning of 2014, new liquidity ratios, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) have been introduced as ratios relevant for reporting purposes. For the LCR, the European Commission released a Delegated Regulation (EU) 2015/61 of 10 October 2014 (LCR DA), published in the Official Journal of the European Union on 17 January 2015, specifying details on the ratio and setting a binding minimum requirement for the ratio as of 1 October 2015. Since 30 September 2016 the LCR has to be reported according to the LCR DA. The LCR represents a ratio of highly liquid assets vis-à-vis net cash outflows over a 30 day time horizon. The minimum ratio has been set at 60% for 2015 (from 1 October), 70% for 2016, 80% for 2017 and 100% from 2018. The NSFR remains for the time being a reporting requirement only, with a binding minimum requirement potentially introduced from 2018. The NSFR represents a ratio of available stable funding vis-à-vis required stable funding within a 12 month time horizon. Both, LCR according LCR DA and NSFR have been implemented within Erste Group.

#### Methods and instruments employed

Short-term insolvency risk is monitored by calculating the survival period for each 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 collateralised 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.

Erste Group successfully implemented a new software solution for the calculation of the Liquidity Coverage Ratio according to the delegated regulation (EU) 2015/61 and is reporting this ratio on a monthly basis to the authorities on solo and group level. Additionally, Erste Group is calculating the Net Stable Funding Ratio (NSFR) according to the CRR based on the weights of the ‘Basler Ausschusses für Bankenaufsicht’ (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. Since 2014 the LCR (from 2014 to 2016 LCR according to CRR, since 2017 LCR according to the delegated LCR DA) is part of the internal Risk Appetite Statement, targeting to be above the future regulatory requirement. Erste Group is reporting the NSFR according to the CRR in the quarterly Short Term Exercise to the regulator.

Legal lending limits exist in all CEE countries where Erste Group is represented. As they restrict liquidity flows between Erste Group’s subsidiaries in different countries they are taken into account for the assessment of liquidity risk in the survival period model as well as in the calculation of the Liquidity Coverage Ratio at group level.

Additionally, the traditional liquidity gaps (depicting the going concern maturity mismatches) of the subsidiaries and the group as a whole are reported and monitored regularly. Concentration risks in the ‘Counterbalancing Capacity’ (CBS), in terms of funds and assets are regularly monitored and reported to the regulator. Erste Group’s funds transfer pricing (FTP) system has also proven to be an efficient tool for structural liquidity risk management.

In 2017, Erste Group successfully enhanced the new reporting system and thus ensures a further improvement of the granularity and flexibility in the reporting of many aspects of the liquidity risk besides the reporting of regulatory requirements. New liquidity measures and limits such as a short term liquidity limit and structural liquidity limits will be valid from 2018 onwards. Updated regulatory requirements, such as the reporting of the maturity ladder in the Additional Liquidity Monitoring Metrics are currently in the focus of further improvements in the reporting framework.

#### Methods and instruments of risk mitigation

Short-term liquidity risk is managed by limits resulting from the survival period model, internal stress testing and by internal LCR targets at both entity and group level. Limit breaches are reported to the Group Asset Liability Committee (ALCO). Another important instrument for managing the liquidity risk within Erste Group Bank AG and in relation to its subsidiaries is the FTP system. Important information for liquidity management can be obtained by the process of planning funding needs. Therefor a detailed overview of funding needs is prepared on a quarterly basis for the planning horizon across Erste Group.

The Comprehensive Contingency Plan of the Erste Group ensures the necessary coordination of all parties involved in the liquidity management process in case of crisis and is reviewed on a regular basis. The contingency plans of the subsidiaries are coordinated as part of the plan for Erste Group Bank AG.

#### Analysis of liquidity risk

In Erste Group, the liquidity risk is analysed by the following methods.

#### Liquidity coverage ratio

Erste Group uses the regulatory liquidity coverage ratio according the delegated regulation (EU) 2015/61 (LCR according LCR DA) for internal monitoring and steering of the liquidity position as well. In order to keep the LCR according LCR DA above both limits, the regulatory limit and the internal limit, Erste Group closely monitors its short-term liquidity inflows and outflows as well as its available counterbalancing capacity.

The following table shows the LCR DA as of 31 December 2017:

#### Liquidity coverage ratio

in EUR million		Dec 17
Liquidity buffer		39,849
Net liquidity outflow		27,439
Liquidity coverage ratio		145.2%

## Liquidity gaps

The long-term liquidity position is managed using liquidity gaps on the basis of expected cash flows. This liquidity position is calculated for each material currency and based on the assumption of ordinary business activity. Fulfilment of the internal and regulatory liquidity risk requirements as well as the current and expected market environment is also taken into account.

Expected cash flows are broken down by contractual maturities in accordance with the amortisation schedule and arranged in maturity ranges. All products without contractual maturities (such as demand deposits and overdrafts) are shown in the first time bucket, irrespective of the statistically observed client behaviour.

The following table shows the liquidity gaps as of 31 December 2017 and 31 December 2016:

### Liquidity gap

in EUR million	< 1 month		1-12 months		1-5 years		> 5 years	
	Dec 16	Dec 17	Dec 16	Dec 17	Dec 16	Dec 17	Dec 16	Dec 17
Liquidity gap	-25,550	-36,581	-12,049	-7,183	9,220	14,336	28,379	29,428

An excess of assets over liabilities is indicated by a positive value, while an excess of liabilities over assets is indicated by a negative value. The callable own issues are modelled to their next call dates. The cash inflows from liquid securities amounting to EUR 33.9 billion (2016: EUR 37.2 billion), which are accepted as collateral by the central banks to which Erste Group has access, are taken into account in the first time bucket rather than considering them at their contractual maturity.

## Counterbalancing capacity

Erste Group regularly monitors its counterbalancing capacity, which consists of cash, excess minimum reserves at the central banks as well as unencumbered central bank eligible assets and other liquid securities, including impacts from repos, reverse repos and securities lending transactions. These assets can be mobilised in the short term to offset potential cash outflows in a crisis situation. The term structure of the group's counterbalancing capacity as of year-end 2017 and year-end 2016 are shown in the tables below:

### Term structure of counterbalancing capacity

in EUR million	< 1 week	1 week-1 month	1-3 months	3-6 months	6-12 months
<b>As of 31 December 2017</b>					
Cash, excess reserve	10,651	-224	0	-63	0
Liquid assets	33,289	-2,704	-270	302	703
Other central bank eligible assets	5,184	0	463	0	0
Thereof retained covered bonds	3,579	0	463	0	0
Thereof credit claims	1,605	0	0	0	0
<b>Counterbalancing capacity</b>	<b>49,124</b>	<b>-2,929</b>	<b>193</b>	<b>239</b>	<b>703</b>
<b>As of 31 December 2016</b>					
Cash, excess reserve	15,370	-119	0	0	0
Liquid assets	29,120	185	-1,029	-710	248
Other central bank eligible assets	5,474	48	465	367	367
Thereof retained covered bonds	3,245	0	465	367	367
Thereof credit claims	2,229	48	0	0	0
<b>Counterbalancing capacity</b>	<b>49,964</b>	<b>114</b>	<b>-564</b>	<b>-343</b>	<b>616</b>

The figures above show the total amount of potential liquidity available for the group in a going concern situation, taking into account the applicable central bank haircuts. In a crisis situation adverse market movements and legal transfer restrictions among group members can decrease this amount. Taking into account these effects, the initial counterbalancing capacity available at group level is reduced by additional haircuts and liquidity transfer constraints (e.g. legal lending limits). Negative figures are maturing positions of the counterbalancing capacity. Positive figures after 1 week are positions not immediately available as counterbalancing capacity.

## Financial liabilities

Maturities of contractual undiscounted cash flows from financial liabilities as of 31 December 2017 and 31 December 2016 respectively, were as follows:

### Financial liabilities

in EUR million	Carrying amounts	Contractual cash flows	< 1 month	1-12 months	1-5 years	> 5 years
<b>As of 31 December 2017</b>						
<b>Non-derivative liabilities</b>	<b>192,424</b>	<b>195,823</b>	<b>112,336</b>	<b>32,193</b>	<b>36,506</b>	<b>14,788</b>
Deposits by banks	16,349	16,455	7,602	1,563	5,897	1,393
Customer deposits	150,921	151,746	104,232	26,800	16,837	3,877
Debt securities in issue	19,337	20,929	477	3,070	10,107	7,275
Subordinated liabilities	5,817	6,692	25	760	3,664	2,243
<b>Derivative liabilities</b>	<b>2,937</b>	<b>3,406</b>	<b>229</b>	<b>947</b>	<b>1,719</b>	<b>511</b>
<b>Contingent liabilities</b>	<b>0</b>	<b>30,295</b>	<b>30,295</b>	<b>0</b>	<b>0</b>	<b>0</b>
Financial guarantees	0	6,985	6,985	0	0	0
Irrevocable commitments	0	23,310	23,310	0	0	0
<b>Total</b>	<b>195,362</b>	<b>229,523</b>	<b>142,860</b>	<b>33,140</b>	<b>38,225</b>	<b>15,299</b>
<b>As of 31 December 2016</b>						
<b>Non-derivative liabilities</b>	<b>179,821</b>	<b>184,429</b>	<b>95,548</b>	<b>35,032</b>	<b>37,448</b>	<b>16,402</b>
Deposits by banks	14,631	14,717	7,015	1,951	4,601	1,151
Customer deposits	137,939	138,750	87,632	28,755	18,978	3,385
Debt securities in issue	21,153	23,927	409	3,945	10,882	8,691
Subordinated liabilities	6,098	7,036	492	381	2,987	3,175
<b>Derivative liabilities</b>	<b>4,185</b>	<b>4,566</b>	<b>282</b>	<b>1,182</b>	<b>2,387</b>	<b>714</b>
<b>Contingent liabilities</b>	<b>0</b>	<b>27,484</b>	<b>27,484</b>	<b>0</b>	<b>0</b>	<b>0</b>
Financial guarantees	0	6,577	6,577	0	0	0
Irrevocable commitments	0	20,907	20,907	0	0	0
<b>Total</b>	<b>184,005</b>	<b>216,479</b>	<b>123,314</b>	<b>36,215</b>	<b>39,835</b>	<b>17,116</b>

As of year-end 2017, the currency composition of the non-derivative liabilities consisted of approximately 70% EUR, 18% CZK, 4% RON, 4% USD, and 4% in other currencies (2016: 72% EUR, 16% CZK, 4% RON, 4% USD, 4% in other currencies).

Besides the contingent liabilities from unused credit lines and guarantees, material potential cash outflow is estimated from the collateralised derivative transactions for the stress testing, which amounted to EUR 406.1 million (2016: EUR 474.1 million) in the worst-case scenario as of 31 December 2017.

As of 31 December 2017, the volume of customer deposits due on demand amounted to EUR 93.8 billion (2016: EUR 77.0 billion). According to customer segments, the customer deposits are composed as follows: 63% private individuals, 15% large corporates, 14% small and medium-sized enterprises, 5% public sector, and 3% non-banking financial institutions (2016: 68% private individuals, 15% large corporates, 9% small and medium-sized enterprises, 4% public sector, and 4% non-banking financial institutions). The deposits by banks include the top five providers of funds.

## 44.7 Operational risk

In line with Article 4 Section 52 of regulation (EU) 575/2013 (CRR), Erste Group defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events, including legal risks. Both quantitative and qualitative methods are used to identify operational risks. Consistent with international practice, the responsibility for managing operational risk rests with the line management.

### Methods and instruments employed

The quantitative measurement methods are based on internal loss experience data, which is collected across Erste Group using a standard methodology and entered into a central data pool. Additionally, in order to be able to model losses that have not occurred in the past but are nonetheless possible, scenarios and external data are also used. Erste Group sources external data from a leading non-profit risk-loss data consortium.

Erste Group has the regulatory approval for the Advanced Measurement Approach (AMA). AMA is a sophisticated approach to measuring operational risk. Pursuant to AMA, the required capital is calculated using an internal VaR model, taking into account internal data, external data, scenario analysis, business environment and internal risk control factors. Additionally, Erste Group received the approval to use insurance contracts for mitigation within the AMA pursuant to Article 323 CRR.

### Methods and instruments of risk mitigation

In addition to quantitative methods, qualitative methods are also used to determine operational risk, such as risk assessment surveys. The results and suggestions for risk control in these surveys, which are conducted by experts, are reported to the line management and thus help to reduce operational risks. Furthermore, to ensure early detection of changes in risk potential that may lead to losses, Erste Group periodically assesses a number of key risk indicators like, system availability, staff turnover, or customer complaints.

Erste Group uses a group-wide insurance program which has reduced the cost of meeting Erste Group's traditional property insurance needs and made it possible to buy additional insurance for previously uninsured bank-specific risks. This program uses a captive reinsurance entity as a vehicle to share losses within the group and access the external market. The quantitative and qualitative methods used, together with the insurance strategy and the modelling approaches described above, form the operational risk framework of Erste Group. Information on operational risk is periodically communicated to the management board via various reports, including the quarterly top management reports, which describe the recent loss history, loss development, qualitative information from risk assessments and key risk indicators as well as the operational VaR for Erste Group.

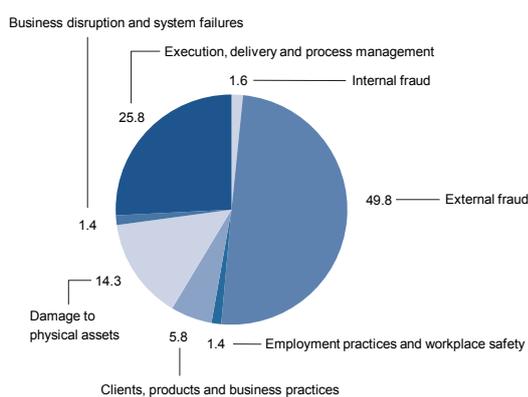
### Distribution of operational risk events

Detailed below is the percentage composition by type of event of operational risk sources as defined by Article 324 CRR. The observation period is from 1 January 2013 to 31 December 2017.

The event type categories are as follows:

- \_ internal fraud: Losses due to acts of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversity or discrimination events that involve at least one internal party.
- \_ external fraud: Losses due to acts by a third party of a type intended to defraud, misappropriate property or circumvent the law.
- \_ employment practices and workplace safety: Losses arising from acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, or from diversity or discrimination events.
- \_ clients, products and business practices: Losses arising from unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements) or from the nature or design of a product.
- \_ damage to physical assets: Losses arising from loss of or damage to physical assets caused by natural disaster 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. Losses pertaining to relationships with trading counterparties and vendors or suppliers.

### Event type categories in %, 1.1.2013 – 31.12.2017



### 45. Hedge accounting

The interest rate risk of the banking book is managed by Group ALM. Preference in managing interest rate risk is given to using bonds, loans or derivatives, with hedge accounting for derivatives usually applied in accordance with IFRS. The main guideline for interest rate risk positioning is the Group Interest Rate Risk Strategy that is approved by the Group ALCO for the relevant time period.

Fair value hedges are employed to reduce interest rate risk of issued bonds, purchased securities, loans or deposits on the Erste Group balance sheet. In general, Erste Group policy is to swap all substantial fixed or structured issued bonds to floating items and as such to manage the