Landwirtschaftliche Rentenbank

Disclosure Report for
Landwirtschaftliche Rentenbank as of
31 December 2018 in accordance with CRR

rentenbank

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1. General Information

The Basel Committee on Banking Supervision has defined internationally accepted banking supervision for banks' risk-appropriate capital base and liquidity. These regulations are intended to strengthen the security and solidarity of the financial system. The Basel framework agreement contains three mutually reinforcing pillars: the minimum capital requirements (pillar 1), the banking supervision process (pillar 2) and the extended disclosure requirements (pillar 3).

The aim of pillar 3 is to strengthen market discipline by increasing transparency of the banks' risk position. The latter must regularly publish qualitative and quantitative information about their base capital situation, the risks assumed, the risk measurement procedures and the risk management.

At European level, the implementation of the pillar 3 disclosure requirements according to part 8, Article 431 to 455 Regulation (EU) No. 575/2013 (CRR) has been taking place since January 1, 2014. In Germany, the extended disclosure requirements were transposed into national law through Section 26a of the German Banking Act *(Kreditwesengesetz (KWG))*.

The disclosure required by part 8 of CRR or, as the case may be, section 26a KWG in conjunction with section 64r (15) KWG of qualitative and quantitative information is provided with this Disclosure Report in consideration of the guidelines of the European Banking Authority (EBA) about the disclosure obligations according to part 8 CRR (EBA/GL/2016/11).

Rentenbank produces the disclosure report in an aggregated format at group level in its role as the top level institution. The figures shown in this report are from the group of companies consolidated for regulatory purposes. The calculation of the figures is made using accounting methods in keeping with the German Commercial Code *(Handelsgesetzbuch (HGB))*.

In line with the requirements of article 431 (3) CRR, Rentenbank has set up proper processes using the applicable regulations which have been laid down in writing to guarantee the completeness, suitability and accuracy of the information disclosed.

As part of the process of producing the disclosure report, the organizational units concerned are subject to a review of the reporting contents being worked on and the qualitative and quantitative information is updated at the reporting date. Information, which is geared toward the data contained in the supervisory reports, is generated directly from the reporting software and/or has to be reconciled with the data reported.

The preparation of the disclosure report is carried out in line with the standard banking checking and monitoring procedures. After the divisions concerned have completed their quality assurance, it is signed off by the heads of the Finance and Legal & Human Resources divisions.

Following this, the Disclosure Report and the description of the process is approved by a decision taken by Rentenbank's Management Board.

The disclosure report is published according to article 434 (1) CRR on Rentenbank's website under About us/Publications/Disclosure Report.

Rentenbank does not avail itself of the option conceded in Art 432 (1) CRR to refrain from publishing non-essential information.

Pursuant to Article 432 (2) CRR, institutions may omit items of proprietary and confidential information. As of the 2018 reporting year, Rentenbank had not identified any proprietary and confidential information in the sense of Article 432 (2) CRR.

The disclosure report is produced and published in line with the provisions of the European Banking Authority (EBA) on a quarterly basis in conjunction with the BaFin circular dated 05/2015 (BA) and in consideration of the EBA guidelines (EBA/GL/2016/11). The information to be published is subject to varying frequency cycles in accordance with these provisions.

The figures shown in the Disclosure Report were rounded according to standard commercial practice. In the summation, there may therefore be differences which are due to rounding. Lines or columns without content in the tables were blanked out in order to make them more legible. Where there are cells in the tables with a nil value, the item exists but is less than EUR 1 million. Blank cells in the tables mean that this item did not exist at the balance sheet date.

Material changes in the reporting period are explained accordingly. Unless a different reporting date is indicated, all tables were produced for the reporting date of December 31, 2018.

The disclosure report refers to matters which are not relevant to Rentenbank and where no disclosure can therefore be made due to the bank's existing business activities.

2. Risk Management, Aims and Provisions (Art 435 Capital Requirements Regulation (CRR), Art 439)

The processes, the structure and the organization of risk management as well as the processes for managing, quantifying and supervising the individual types of risk are described as part of the framework of the financial reporting approved by the Management Board in 2018 within the Management Report in the sections entitled ‘Outlook and Opportunities report’ and ’Risk Report’. Rentenbank’s general risk profile and important key figures and information about the risk profile and risk tolerance are illustrated in these sections.

All material risks relating to the subsidiaries rest with Rentenbank which manages them overall. Direct and indirect subsidiaries are: LR Beteiligungsgesellschaft mbH (LRB), DSV Silo- und Verwaltungsgesellschaft mbH (DSV) and Getreide-Import-Gesellschaft mbH (GIG). The business activities of the subsidiaries are strictly limited. The subsidiaries obtain their funding exclusively from Rentenbank. Rentenbank provides the facilities and HR staff. Rentenbank has prepared a comfort letter for LR Beteiligungsgesellschaft mbH.

At federal level, Rentenbank is a promotional bank. According to its Governing Law, Rentenbank has a mandate to promote agriculture and the associated upstream and downstream industries as well as rural areas. The bank’s business activity is geared toward this development responsibility. The business model is primarily defined by the framework set out in Rentenbank’s Governing Law and the bank’s statutes.

Rentenbank pursues the following goals as part of its business strategy:

- Performing a self-supporting promotional activity,
- whose sustainability is secured through appropriate net interest income from diversified sources as part of a prudent risk policy,
- with the possibility of adjusting the promotional activity at any time to account for changed requirements.

The objectives are firmed up in nine measures which have been assigned corresponding quantitative metrics. The main accounting-related metrics are translated into key performance indicators.

The financings made by Rentenbank are based on Rentenbank’s Governing Law. The segments are broken down as follows:

- Promotional business

Within Promotional business, the Bank promotes investments in the agricultural sector and rural areas. This is achieved through funding with special purpose loans which are extended to end borrowers via local banks. The loans are granted in accordance with the terms and conditions applicable to our special promotional loans for supporting agriculture-related projects in Germany. Through monitoring interest rate terms, we promote our preferred promotional targets, such as animal welfare, environmental protection or investments made by young farmers.

In addition, the bank fulfills its promotional mandate by acting as a funding partner to banks with business activities in agribusiness and rural areas as well as to local authorities which are connected to rural areas. This is effected though the provision of different forms of capital (loans, registered bonds, promissory notes and securities). To some extent, these transactions also contribute to complying with the regulatory liquidity requirements. Rentenbank manages the business volume as well as the risk structure. Funding, which is mainly maturity-matched, is also allocated to the Promotional Business segment. The bank does not hold securities, receivables or other exposures with structured or derivative credit risks, such as ABSs (asset-backed securities), CDOs (collateralized debt obligations) or CDSs (credit default swaps).

- Capital Investment

The Capital Investment segment includes the investments of capital reported in the balance sheet and of long-term provisions. The investments are principally made in securities and promissory notes and registered bonds issued by banks and public-sector issuers.

- Treasury Management

Short-term liquidity and short-term interest rate risks are monitored within the Treasury Management segment.

2.1 Risk Management Process

2.1.1 Risk Statement

The Management Board declares that Rentenbank‘s risk management processes with regard to type, scope, complexity and risk content are appropriate and ensures that the established risk management systems correspond to Rentenbank‘s risk profile and strategy. This comprises the liquidity risk strategy, which aims to secure constant financial solvency, the optimization of the funding structure and the coordination of the Bank’s own issuances on the money and capital markets.

The Management Board also declares that a transparent picture of all material risks to solvency and funding based on the risk reports and/or event-related escalation processes is always available. This corresponds with the provisions within the business and risk strategy.

The risk-bearing capacity was always intact in accordance with both the normative and economic approaches as of the reporting date of December 31, 2018 (see chapter 2.3). Based on capital plan and stress tests, there is nothing to indicate that the risk-bearing capacity will be at risk in the future. All limits and regulatory indicators are complied with on a continuous basis. Overall, the Management Board is of the view that Rentenbank has very good access to the money and capital markets and an appropriate liquidity provision.

Within the framework of the financial reporting approved by the Management Board, the risk profile, important indicators and the risk tolerance are illustrated within the management report in the sections entitled, 'Outlook and Opportunities Report' and 'Risk Report'.

In addition to the Management Board, the guarantor is involved, represented by members of the supervisory board and/or the risk committee, in determining the business and risk strategy. The risk strategy also contains statements regarding the monitoring of the risk-bearing capacity and the liquidity risk. Furthermore, the risk committee is kept informed about internal and regulatory indicators and compliance with the limits on a quarterly basis.

2.1.2 Organization of Risk Management

The Management Board, which was expanded to include the position of Chief Risk Officer (CRO) as of May 1, 2018, has the overall responsibility for the RMS. The CRO is responsible for Risk Controlling and Operations Financial Markets departments and for the Credit division. The Management Board is kept informed on a regular basis about the risk situation.

The Audit and Risk Committees, established by the Supervisory Board, are informed about the risk situation on a quarterly basis. Furthermore, the Supervisory Board is kept informed about material risk risk-related events by the Management Board and at its two regular meetings and on an ad hoc basis respectively.

In accordance with the Minimum Requirements for Risk Management (MaRisk), the bank has delegated the management of the Risk Controlling function (RCF) to the head of the Risk Controlling department. He is responsible for monitoring and communicating the risks and is involved in all important management decisions regarding risk policy. The Risk Controlling department carries out all the tasks for the RCF. They include the drafting of the risk strategy and the regular monitoring of the limits within the risk-bearing capacity. In addition, the department regularly monitors the maximum limit for all credit risk and the blank upper limit, the risk reporting, the daily valuation of the financial instruments, the risk assessment within the New Product Process (NPP) and the drawing up of the recovery plan. The monitoring and reporting of the risks takes place independently from the front office functions according to the provisions of MaRisk.

The back office functions are performed by the Credit and Collateral & Participations divisions. The Credit division has an independent second vote in credit decisions and processes transactions involving purchased promissory notes and registered bonds. It also develops the credit risk strategy in coordination with the Risk Controlling department. The Collateral & Participations division evaluates the collateral and administers payment instructions within special promotional loans business. It was integrated into the Credit division as of January 1, 2019. The Credit division is also responsible for the intensive monitoring and management of non-performing loans. Any necessary measures are taken here in consultation with the Management Board.

As part of the loan portfolio management, the Credit division also monitors compliance with the credit risk limits. In addition, the Credit division analyzes credit and country risks, inter alia. Business partners and types of transactions are allocated using Rentenbank's own rating categories. In addition, this division prepares proposals for credit decisions according to MaRisk and monitors the aggregate lending portfolio on an ongoing basis.

As front office functions, the Promotional Business and Treasury divisions are responsible for new promotional business. The Treasury division manages market and liquidity risks within the defined strategic framework. This combines the risk strategy with the risk appetite statement and the funding and hedging strategy. As processing and controlling units, the Operations Financial Markets department and the Loan Transactions department of the Credit division monitor trading transactions in accordance with MaRisk.

An independent risk assessment and monitoring is ensured by the role-oriented and organizational separation of the Promotional Business and Treasury front office functions from the Risk Controlling and Operations Financial Markets departments and the

Credit, Finance, and Collateral & Participations divisions (incorporated into the Credit division as of January 1, 2019).

The Internal Audit department reviews and assesses the appropriateness of activities and processes as well as the appropriateness and effectiveness of the RMS and the Internal Control System (ICS) on a risk-based and process-independent basis. It reports directly to Rentenbank's Management Board and carries out its duties in an independent and autonomous way. The Management Board may issue instructions to perform additional audits. The members of the Audit Committee as well as the chairmen of the Administrative and Risk Committees may request information directly from the head of Internal Audit.

In the context of MaRisk compliance, Rentenbank's compliance function, a part of the ICS, acts in collaboration with the other organizational units to avoid risks that may arise from non-compliance with the relevant legislation (compliance risk). It encourages the implementation of effective procedures to ensure compliance with the relevant legislation with corresponding mechanisms for control. It reports directly to Rentenbank's Management Board and carries out its duties in an independent and autonomous way. In terms of risk to assets, the risk indicators to determine materiality comprise sanction risk (imminent sanctions and fines under criminal law), other financial risk (e.g. nullity or rescission of contracts) and the reputational risk in case of non-compliance with a standard.

The Regulatory working group *(Arbeitskreis regulatorische Themen (ART))* is primarily responsible for tracking and evaluating regulatory and other legal initiatives as well as for strengthening the compliance structure. It addresses the regulatory issues identified as relevant and ensures that unambiguous responsibilities are defined for the implementation within the bank and that the issues are dealt with in a timely manner.

2.1.3 Business and Risk Strategy

The Management Board determines the bank's sustainable business strategy on the basis of the company mission derived from the relevant legislation. Rentenbank's business strategy is primarily defined by its promotional mandate and the measures taken to fulfill it. Rentenbank is a non-trading book institution. The business activities of Rentenbank are not geared toward generating profits, but toward fulfilling its statutory promotional mandate in a competitively neutral way.

Rentenbank provides its special promotional loans for agribusiness and rural areas via local banks on a competitively neutral basis (on-lending procedure) and has to comply with the applicable regulatory requirements at all times.

In particular, this applies to capital which can be strengthened through the retention of profits.

Rentenbank's risk strategy is derived from and is consistent with its business strategy. It comprises an overarching risk strategy as well as sub-strategies that focus on each specific type of risk.

The business and risk strategy are discussed with the Supervisory Board every year.

In the risk strategy and the risk appetite statement, the Management Board defines the core framework for the bank's risk management.

Rentenbank's activities in terms of risk policy are based on the following principles:

- Rentenbank has a low risk appetite across all material risk types.
- Credit risks are only assumed within the framework of fulfilling the promotional mandate.
- Rentenbank seeks to achieve sustainably appropriate and stable earnings.
- Rentenbank does not enter into open derivatives positions. Furthermore, foreign currency positions are generally closed.
- Rentenbank follows a buy-and-hold strategy and does not conduct any trading book activities.
- Rentenbank does not engage in strategic maturity transformation and only takes risks with interest rates to a limited extent.

Rentenbank's Risk Appetite Framework comprises all strategies and guidelines, methods, processes, responsibilities, controls and systems from which the bank derives, communicates and monitors its risk appetite. Apart from the minimum target values, alert thresholds and limit systems, this also includes soft factors such as appropriate compliance and an active risk culture.

Rentenbank defines risk appetite as the overall risk which it is willing to assume within the scope of the allocated risk coverage potential in order to achieve its strategic objectives. It is determined on the basis of quantitative requirements and qualitative assertions. The quantitative requirements are specified mainly through the definition of limits and alert thresholds within the scope of the risk-bearing capacity. They are also set out in the requirements in relation to products and markets as well as in the funding and hedging strategy.

The credit risk strategy is influenced by the promotional mandate. Funds for the promotion of the agricultural sector and rural areas are primarily granted to banks in the Federal Republic of Germany or in other EU member states. A further prerequisite is that the banks are engaged in business activities with companies in the agricultural sector or in the associated upstream or downstream industries or in rural development. Special promotional loans, in which the credit risk of the end borrower is borne by the end borrower's local bank, are limited to Germany as an investment location.

In addition, the bank acquires participations and provides funding via promissory notes or bearer securities to the German federal states *(Länder)*. Accordingly, Rentenbank's lending business is limited to the funding of banks and institutions as defined in Art. 4 CRR and to the provision of capital to regional authorities. In accordance with the credit risk strategy, loans may be granted to companies only as part of the direct loan business with the subsidiaries of Rentenbank. No corresponding new business was transacted in 2018.

Furthermore, Rentenbank may carry out all transactions directly related to the fulfillment of its tasks within the limits of Rentenbank's Governing Law and its statutes. This also includes the purchase of receivables and securities as well as measures to monitor and safeguard the financial liquidity as well as all transactions required for risk management.

Derivatives are only used as hedging instruments for existing or expected market risks. Furthermore, they are only entered into with counterparties where there is a collateral agreement in place.

Rentenbank's risk strategy requires a prudent selection of business partners and products in all business activities although it focuses on banks and public sector borrowers in accordance with its core competencies. The average credit quality of the total loan portfolio, an indicator of the bank's risk profile, is supposed to be at least A+.

The market risk strategy prescribes that interest rate risks are strictly limited by using derivatives and that foreign currency risks are generally hedged. Market risks are limited within the framework of the risk-bearing capacity.

This comprises liquidity risk strategy, which aims to secure constant financial solvency, the optimization of the funding structure and the coordination of the bank's own issuances on the money and capital markets.

The management of operational risks focuses on preventing damages and, to this end, on ensuring the quality of all bank processes. Compliance with regulatory requirements as well as the minimization of reputational risk by means of appropriate communications management and a code of conduct are also components of the risk strategy.

All material risks are limited within the defined risk appetite as part of the risk-bearing capacity calculation.

2.1.4 Risk Culture

Rentenbank's risk culture is characterized by its understanding of dealing with risks in day-to-day business. It comprises all company standards, attitudes and behavioral patterns in relation to risk awareness, risk appetite and risk management.

2.1.5 Risk Inventory

A risk inventory is used to obtain a structured overview of all risks that have a negative impact on Rentenbank's net assets, capital resources, results of operations, or liquidity situation. This overview also comprises risk concentrations both among and between risk types.

In addition, material risks are identified using indicators based on quantitative and qualitative risk characteristics and are detected at an early stage as part of an internal review or 'self-assessment'. Further identification takes place within NPP, ICS key controls, as well as the daily control and monitoring activities.

Rentenbank's risk profile encompasses the following as material types of risk: credit risks, market risks, liquidity risks, operational risks, as well as strategic risks. In terms of market risks, Rentenbank distinguishes between interest rate risks, spread and other risks as well as CVA risks. The material types of risk within strategic risks are reputational risk, regulatory risk and pension risk.

2.1.6 Risk-Bearing Capacity

Rentenbank's risk-bearing capacity is the central element of its Internal Capital Adequacy Assessment Process (ICAAP) and the basis for the operational implementation of the risk strategy. The risk-bearing capacity concept aims to comply with regulatory requirements regarding minimum own funds to safeguard the bank's capital in the long term, and to protect creditors from losses from an economic perspective. The objective of the risk-bearing capacity concept is to ensure the continued existence of the bank (as a going concern) and to fulfill the promotional mandate. The risk management processes are geared towards meeting these objectives and requirements equally.

The objectives are reflected in the two perspectives of Rentenbank's risk-bearing capacity concept, which includes a normative approach and an economic approach.

Stress tests supplement the monitoring of the limits within the risk-bearing capacity. Risk concentrations are also taken into account.

2.1.7 ECB Stress Tests

Rentenbank participated in the ECB's SREP stress test in 2018. The regulatory indicators were complied with at a comfortable level also under stress assumptions.

2.1.8 Recovery Plan

Rentenbank has established a recovery plan pursuant to the regulatory requirements and has defined recovery indicators, including early warning thresholds as well as warning and recovery thresholds. Under the recovery plan, Rentenbank shows in various stress scenarios that the bank is capable of remedying the recovery situation by taking appropriate recovery measures. The governance processes of the recovery plan are integrated into the risk management processes. This primarily includes regular risk reporting on the recovery indicators.

2.2 Risk Categories – Material Individual Risks

Credit risk, market risk, liquidity risk and operational risks as well as strategic risks are all ranked as material risks for the Group.

Appropriate precautionary measures have been taken to deal with risks that are not classified as material, i.e. are minor risks for the bank. These precautionary measures are in principle documented in operational and organizational guidelines.

2.2.1 Credit Risks

Definition

Counterparty risk, issuer risk, and original country risk refer to losses due to defaults or deteriorations in the credit quality of business partners (i.e. counterparties, issuers, and countries), taking into account the valuation of collateral. Derived country risk results from the general economic and political situation in the debtor's country of incorporation. Derived country risks are divided into country transfer risks and redenomination risks. Country transfer risk refers to the inability of a solvent foreign borrower to make interest and principal payments when they are due as a result of economic or political instability. Redenomination risk refers to the risk of converting the nominal amount of a receivable into another currency. Structural risks (e.g. cluster or concentration risks) result from the concentration of the lending business in regions, sectors or on borrowers. Collateral risk arises from the lack of recoverability of loan collateral during the loan term or from an incorrect valuation of an item of collateral. Participation risks are risks of a loss being incurred due to negative performance within the portfolio of participations.

Rentenbank's lending business is mostly limited to the funding of banks and institutions or credit institutions as defined in Art. 4 CRR as well as to other interbank transactions. The credit risk on the part of the end borrower is borne by the end borrower's local bank.

Quantification and Management

The calculation of credit risk is based on the risk parameters' probability of default, loss given default, exposure at default, and the correlations between business partners.

The risk exposure values for credit risk in the risk-bearing capacity calculation are determined using a credit portfolio model. The bank also calculates a risk contribution for concentration risks which takes higher exposures with business partners into account in the risk value at an above-average rate.

Our business partners' credit ratings determine their probability of default. Rentenbank applies an internal risk rating system for this purpose. This involves allocating individual business partners or types of transactions to one of twenty credit rating categories. The ten best rating categories AAA to BBB- are assigned to business partners who are subject to low credit risk (investment grade). The seven other rating categories (BB+ to C) denote latent or increased latent risks and the final three rating categories (DDD to D) are reserved for non-performing loans or business partners in default.

Our business partners' credit ratings are reviewed at least once a year based on the assessment of their annual financial statements and their financial position. In addition to the key performance indicators, the analysis also takes into account qualitative characteristics, the background of the company, and other relevant factors, such as protection schemes or state guarantees. In addition, country risks pertaining to our business partners' country of incorporation are reflected in which credit rating is determined. In the case of certain products, such as mortgage bonds *(Pfandbriefe)*, the associated collateral or cover assets are regarded as an additional criterion for determining the product rating. If new information concerning a deterioration in the financial position or in the economic prospects of a business partner becomes available, the Credit division reviews the credit rating and, if necessary, adjusts the rating.

The loss given default rate quantifies the proportion of the credit claim that is not recoverable after the default of a business partner and the liquidation of collateral provided. Rentenbank uses loss given default rates that are specific to products and types of transactions to quantify credit risk; these are determined using an analytical and expert-based procedure. In this regard, the liquidation chain related to the promotional loans (which are granted within the scope of the on-lending procedure) are specifically taken into account in measurement and parameterization. The bank also uses external data sources for individual transaction types since Rentenbank's credit portfolio does not have a sufficient number of defaults for a statistical estimate of the loss given default rates.

The exposure at default corresponds to the balance as of the reporting date plus off-balance-sheet transactions of individual debtors. In the case of loans, this is the residual value of the receivable, and the current market value for securities. The exposure value of derivatives is based on the mark-to-market method, taking into account contractual netting and collateral. The method described enables Rentenbank to assess and monitor its risks within the framework of risk management. Negative developments as well as portfolio concentrations can thus be identified at an early stage and countermeasures may be initiated.

Validation

The internal risk rating system, the procedure for the quantification of the loss given default rates, and the credit portfolio model are refined on an ongoing basis and reviewed annually. All measurement parameters are also subject to an annual validation. This involves taking into account in particular the sector-specific aspects as well as the portfolio concentrations due to the promotional mandate.

Limitation and Reporting

A maximum limit for all credit risk limits as well as a blank upper limit are determined by the Management Board. In this way, they limit the total number of limit utilizations. Concentration risks are managed and effectively limited within the bank on various levels by means of targeted concepts. In addition, country exposure limits and country transfer risk limits have been established.

A limit system manages the level and the structure of all credit risks. Limits are defined for all borrowers, issuers, and counterparties and, if applicable, subdivided by product and maturity. Rentenbank's risk rating system forms the basis for decisions on granting limits. Furthermore, a certain minimum credit quality is required for certain types of business or limits.

The limitation of credit risks within the context of risk-bearing capacity takes into account the characteristics of the model and the parameters as well as volatilities as of the reporting date. Risk premiums due to concentration risks are included in this limitation. Under the normative approach, the limit amounts to EUR 700 million (EUR 700 million in 2017) and, under the economic approach, to EUR 1,400 million (EUR 1,400 million in 2017).

In addition, risk and recovery indicators provide an indication of potential risk increases or of risk transfers within the overall bank portfolio at an early stage. Warning thresholds ensure that higher limit utilizations are identified early on and that appropriate measures can be taken. These measures may encompass reducing internal limits or intensifying monitoring of risks.

Additional limits are monitored daily by the Credit division. The Management Board is notified immediately if the limits are exceeded.

Credit risks are managed, monitored, and reported for individual transactions at borrower level as well as at the level of the group of connected clients, at country level, and the level of the total loan portfolio. Accordingly, the bank will be in the position to identify and assess risks at an early stage.

Total Loan Portfolio

The bank has received collateral for the vast majority of its risk exposures in the form of assignments of the refinanced receivables of end borrowers, guarantor liability, and state guarantees. The remaining risk exposures mostly include collateralized products such as German mortgage bonds *(Pfandbriefe)*. Unsecured risk exposures mainly refer to loans and advances to credit institutions which are members of joint liability schemes in Germany *(Haftungsverbünde)*.

2.2.2 Market Risk

Definition

Market risk is the potential loss resulting from changes in market variables. It comprises interest rate risks, CVA risks from derivatives as well as spread and other market risks. Other price risks include currency and volatility risks which, however, are relevant only to a very small extent (e.g. foreign currency risks).

The interest rate risk is the risk from unexpected changes in the economic value or the present value as well as in net interest income due to changes in interest rates. The interest rate risk in terms of the present value is subsumed under the regulatory term Economic Value of Equity (EVE), while the interest rate risk in terms of net interest income is subsumed under the term Net Interest Income (NII). The interest rate risk resulting from the banking book is summarized under the term 'Interest Rate Risk' in the Banking Book (IRRBB). As a non-trading book institution, Rentenbank has allocated all transactions to the banking book and calculates interest rate risk from the EVE and NII perspective.

The CVA risk is the risk of a potential decline in the market value of derivative financial instruments due to a deterioration of the credit quality of the counterparty.

Spread risks are classified as credit spread risks, cross-currency basis swap risks, and basis swap risks.

Open currency exposures only result from small balances on nostro accounts. The market values of hedged items and hedging transactions differ due to the different valuation parameters, mainly in terms of credit spreads and cross-currency basis swap spreads. In the case of foreign currency exposures, the market value differences may result in exchange rate-related market value risks.

Market risks that are subject to only temporary valuation losses are neutralized until the maturity of the relevant financial instruments due to the buy-and-hold strategy. These valuation losses, particularly those from credit spread risks, would only be realized if the buy-and-hold strategy was breached or, in the case of a business partner's default, if collateral was insufficient.

Further market risks, such as share price and commodity transaction risks, are not relevant due to Rentenbank's business model.

Quantification and Management

Interest Rate Risks

The interest rate risks are calculated daily for the transactions made within the Treasury Management segment. The calculation is based on a parallel shift in the interest rate curves, taking into account a confidence level of 99 %. Under the economic approach, interest rate risks are also calculated using a parallel shift in the interest rate curve, while taking into account a confidence level of 99.9 %. Risks from negative interest rates are taken into account under both the normative approach and the economic approach. In particular, this involves taking into account the risks from variable-yield transactions with 0% floors in terms of present value and income. The interest rate risk of the Capital Investment segment, which comprises the invested capital, is included in both risk-bearing capacity approaches. The income-related interest rate risk is calculated under the normative approach, while the interest rate risk in terms of present value is determined under the economic approach. There is no modeling with a risk-reducing effect of the funding of the capital investment through available equity. Accordingly, equity is not taken into account pursuant to the regulatory calculation method.

The bank limits its exposure to interest rate risk, especially through the use of derivatives. Derivatives are entered into on the basis of micro or macro relationships. The effectiveness of micro hedges is monitored daily using valuation units.

Generating material income by taking interest rate risks does not constitute part of Rentenbank's business strategy. Gains or losses from maturity transformations are only realized from money market transactions and from special promotional loans business. Special promotional loans are hedged on the basis of macro hedges.

CVA risk from Derivatives

The CVA risk is the risk of a potential decline in the market value of derivative financial instruments due to a deterioration of the credit quality of the counterparty. Apart from the credit risk parameters probability of default and loss given default rate, potential changes in the market value are calculated using a value-at-risk (VaR) model.

Spread and other Risks

Rentenbank quantifies spread risks using a VaR model based on a historical simulation. The present value sensitivities regarding the spreads of the included transactions are taken into account in the VaR calculation. The maximum loss for the defined confidence level is calculated on the basis of historical market data that goes back up to seven years. Credit spread risks are calculated for securities and highly liquid promissory notes from German federal states.

Risk Buffer

Model inaccuracies and simplifications are given appropriate consideration by means of a risk buffer.

Limitation and Reporting

A limit of EUR 151.0 million (EUR 70.0 million in 2017) has been allocated to market risk under the normative approach and EUR 1,885.0 million (EUR 1,969.4 million in 2017) under the economic approach. This limit is allocated to interest rate risk, CVA risk from derivatives, spread and other risks as well as to the risk buffers.

Compliance with the limits for interest rate risks within the Treasury Management segment is monitored daily and reported to the Management Board. CVA risk from derivatives as well as spread and other risks are monitored on a monthly basis as well as within the scope of the quarterly risk report.

Validation

The methods used to assess market risks, the essential assumptions and parameters as well as the stress scenarios are validated at least annually. The validation of the VaR model for the measurement of spread risks comprises the review of the limitations of the procedure, the updating of the data history, as well as the model parameters.

The scenario parameters used to measure interest rate risks of the Treasury Management segment are validated daily using historical interest rate trends.

2.2.3 Liquidity Risks

Definition

Rentenbank defines liquidity risk as the risk that the bank is not able to meet its current or future payment obligations without restrictions.

Market liquidity risk is defined as the risk that the bank may not be able to sell assets, or at least not instantaneously, or that they can only be sold at a loss.

Quantification and Management

Rentenbank's open cash balances are limited by an amount defined by the Management Board on the basis of the funding opportunities available to Rentenbank. The utilization of the liquidity position and the limits is monitored on a daily basis.

Instruments available for managing the short-term liquidity position include interbank funds, the issuance of ECP, and open-market transactions with the Deutsche Bundesbank. It may also borrow funds with terms of up to two years via the Euro Medium Term Note programme (EMTN programme) or by issuing promissory notes, global bonds, and domestic financial instruments.

The appropriateness of the stress scenarios as well as the underlying assumptions and methods to assess the liquidity position are reviewed at least once a year.

Under the risk-bearing capacity concept, liquidity risks are not covered by the risk coverage potential, but by counterbalancing capacity or liquid assets. Rentenbank's triple-A ratings and because of the statutory guarantee of the Federal Republic of Germany allow the bank to raise liquidity on the market at any time. In addition, any collateral held at Deutsche Bundesbank may be pledged.

Concentration of Funding and Liquidity Sources

Essentially, the medium and long-term funding to match maturities results from the issuing of unsecured bonds. In accordance with the LCR, the bonds issued by Rentenbank are classified as liquid assets in the EU. Our bonds also qualify as highly liquid assets in other jurisdictions, such as the United States and Canada. Furthermore, Rentenbank issuances denominated in euros and listed in the European System of Central Banks (ESCB) are recognized as securities which are eligible for funding. Comparable regulations apply in Australia and New Zealand. Also on the regulated Repo markets such as Eurex Clearing AG, the Bank's bonds are accepted as securities.

Rentenbank's sources of liquidity in the liquidity coverage ratio (LCR) liquidity buffer are essentially comprised of central bank assets and high-quality liquid assets (HQLA). As regards the assets of step 1 (assets of the utmost high liquidity and credit quality) public sector bonds and multi-lateral development banks, promissory notes from the *Länder* are prevalent as well as covered bonds of the utmost high quality. The assets of step 2 (assets of high liquidity and credit quality) consist for the most part of covered bonds of a high quality.

Liquidity Stress Scenarios

Stress scenarios are intended to examine the effects of unexpected events on Rentenbank's liquidity position and the market liquidity risk. The liquidity stress scenarios developed for this purpose are an integral part of the internal control model. They are calculated and monitored monthly. The scenario analyses comprise price declines for securities (market liquidity), simultaneous drawdowns of all irrevocable credit commitments, defaults by major borrowers, and calls of cash collateral. A scenario mix is used to simulate the cumulative occurrence of liquidity stress scenarios. Liquidity stress tests are also performed on an ad hoc basis if risk-related events occur.

Liquidity Ratios pursuant to the CRR

The regulatory liquidity ratios LCR and NSFR (Net Stable Funding Ratio) are used to limit short-term as well as medium to long-term liquidity risks. The objective is to enable banks to remain liquid even during periods of stress by holding a liquidity buffer and maintaining stable funding. The LCR (i.e. the ratio of high-quality liquid assets to total net cash outflows under stress scenarios) must be at least 100%.

The minimum requirement for the NSFR (i.e. ratio of the amount of available stable funding relative to the amount of required stable funding) is 100%. The introduction is planned for 2021 at the earliest in connection with the entry into force of CRR II.

The minimum LCR and the currently expected minimum NSFR were complied with in the reporting years 2018 and 2017.

Limitation and Reporting

The liquidity requirement up to one month is limited under stress assumptions by the liquid assets pursuant to the Liquidity Coverage Ratio (LCR) or the freely available funding potential.

For terms of one month to two years, the imputed liquidity requirement is limited to the freely available funding potential.

In addition, for the purpose of calculating medium and long-term liquidity, expected cash inflows and outflows over the next 2 to 15 years are aggregated into quarterly segments and carried forward. The cumulative net cash outflows may not exceed a limit set by the Management Board.

The Management Board is provided with a daily risk report on the short-term liquidity projection and a monthly liquidity risk report on the medium and long-term liquidity. The latter also includes the results of the scenario analyses, the liquidity ratios LCR and NSFR, and the calculation of the liquidity buffer pursuant to MaRisk. The Audit Committee and the Risk Committee of the Supervisory Board are kept informed on a quarterly basis.

2.2.4 Operational Risks

Definition

Operational risks arise from failed or inadequate systems and processes, people, or external events. Operational risks also include legal risks, risks from money laundering, terrorist financing or other criminal acts, behavioral risks, risks from outsourcing, operating risks, and event or environmental risks. In the bank's view, they do not comprise entrepreneurial risks, such as business risks, regulatory risks, reputational risks, or pension risks.

Quantification and Management

As part of the risk-bearing capacity concept for the normative approach, operational risks are quantified using a process based on the regulatory basic indicator approach. The risk assumed under the economic approach is twice the number of incidents assumed under the normative approach.

All loss events and close calls are recorded in a loss event database by operational risk officers on a decentralized basis. The Risk Controlling function is accountable for the analysis and aggregation of the incidents as well as for the methodological development of the instruments used.

Furthermore, Rentenbank also carries out self-assessments in the form of workshops. Significant operational risk scenarios related to specific business operations are analyzed and evaluated from a risk-oriented perspective. This also involves defining subsequent measures (e.g. regarding fraud prevention).

All operational risks are aggregated and analyzed on a centralized basis by the Risk Controlling function. It is responsible for the use of instruments and the methodological development of risk identification, assessment, management and communication. Operational risks are managed by the relevant organizational unit.

Legal risks are managed and monitored by the Legal and Human Resources division. It informs the Management Board about the current or potential legal disputes both on an ad hoc basis as well as in the form of semi-annual reports. Legal risks from business transactions are reduced by the bank by largely using standardized contracts. The Legal department is involved at an early stage in decision-making and significant projects are to be carried out in collaboration with the Legal & Human Resources division. Legal disputes are recorded immediately in the loss event database. They are monitored using a defined risk indicator for the purpose of early risk identification.

In addition, Rentenbank has set up a compliance department and a central unit for the prevention of money laundering, terrorist financing, and other criminal acts. Such risks, which could put the bank's assets at risk, are identified on the basis of a risk analysis in accordance with Section 25h KWG. Organizational measures are then derived from the risk analysis to optimize risk prevention. For this purpose, the bank also analyzes whether general and bank-specific requirements for an effective organization are being complied with.

Risks associated with outsourcing are classed as operational risks. Rentenbank has introduced a centralized outsourcing management for outsourcing arrangements, while outsourcing arrangements are monitored on a decentralized basis. This central outsourcing management comprises risk management and risk monitoring. A distinction is made between significant and insignificant outsourcing based on a standardized risk analysis. Significant outsourcing is subject to special requirements, in particular with respect to the contracts, the intervals of the risk analyses, and reporting.

Operating risks as well as event-related or environmental risks are identified throughout the bank. They are managed and monitored based on their materiality.

The bank has appointed an Information Security Officer (ISO) and implemented an Information Security Management System (ISMS). The ISO monitors compliance with the requirements defined by the ISMS and ensures confidentiality, availability, and integrity of the IT systems. The ISO is involved in the event of critical IT-related incidents.

An emergency manual describes the disaster prevention measures and the emergency procedures in the event of a disaster. Further emergency plans govern the handling of potential business disruptions. The outsourcing of time-critical activities and processes is also included in these plans.

Limitation and Reporting

The limits for operational risks of EUR 46 million (EUR 55 million in 2017) and EUR 92 million (EUR 110 million in 2017) for the normative approach and the economic approach, respectively, are derived from the modified regulatory basic indicator approach. Reports are prepared on a quarterly basis within the scope of the risk report.

2.2.5 Strategic Risks

Definition

Regulatory risk, reputational risk and pension risk, as material risk types, are allocated to the strategic risks.

Regulatory risk is the risk that a change to the regulatory environment could adversely affect the bank's business activities or operating profit or that regulatory requirements are being not sufficiently met. Reputational risks arise from damage to the bank's reputation and can have a negative effect on its business operations. Transactions that result in reputational risk for Rentenbank are not entered into. In addition to that, no business is done with shadow banks. The calculation of pension provisions is based on various assumptions (e.g. interest rate development and mortality tables). The pension risk consists of changing assumptions causing a requirement to increase the pension provisions which are recognized as an expense.

Quantification and Management

Regulatory and reputational risks are quantified using a corresponding scenario within the context of the medium-term planning (capital plan). To this end, regulatory and reputational risks are assumed to have monetary effects (e.g. increased funding costs or unexpected operating and HR expenses) on the implementation of regulatory requirements. Pension risks are calculated on the basis of sensitivities and assumed parameter changes from an external actuarial opinion.

The risk exposures in the calculation of the risk-bearing capacity are derived from the scenario of the capital plan.

Losses incurred are monitored in the loss event database as well as in the monthly target/actual comparisons made by the Finance division in the income statement.

Regulatory risks are managed through active monitoring of regulatory projects as well as other legal initiatives affecting Rentenbank, the identification of which may have implications for Rentenbank. The Regulatory working group (ART) plays a central role in this process. In particular, it is responsible for monitoring and evaluating regulatory and other legal initiatives, as well as for strengthening the compliance function. To this end, the Regulatory working group initiates and monitors implementation projects. It reports to the Management Board on a regular basis.

A code of conduct and professional external corporate communications contribute to the management of reputational risks.

The calculation of pension provisions always takes current external parameters such as interest rates, inflation and life expectancy as their basis (guideline tables from Prof. Dr Klaus Heubeck). In this case, interest rate risks are taken into account within the interest rate risks in the banking book (IRRBB).

Limitation and Reporting

The risk limit determined for strategic risks amounted to EUR 67 million (EUR 50 million in 2017) under the normative approach and to EUR 134 million (EUR 100 million in 2017) under the economic approach. Reports are prepared on a monthly basis.

2.3 Risk-Bearing Capacity

2.3.1 Normative Approach

The risk management objective of the normative approach is to meet all regulatory minimum capital requirements and regulations at all times, even under adverse conditions. Another goal related to this objective is to achieve appropriate and stable earnings.

Due to new regulatory requirements, the normative approach was enhanced. In doing so, a significant part of the requirements was already implemented. This expansion comprises the strict alignment of the risk coverage potential to regulatory own funds as well as the determination of a base scenario (planning view) and an adverse scenario over a time horizon of three years. In the adverse scenario, the effect of a severe economic downturn on the regulatory indicators is calculated and compared to the base scenario.

The following table shows the risk coverage potential under the normative approach as of the reporting date as well as the prior-year figures. The risk coverage potential was changed from an individual institution level to group level and corresponds to regulatory own funds.

Table 1: Risk-bearing capacity under the normative approach

	Dec. 31, 2018 EUR million	Dec. 31, 2017 EUR million
Subscribed capital	163.6	135.0
Retained earnings	1,082.5	1,114.8
Fund for general banking risks	3,069.5	3,195.6
Intangible assets	– 17.4	–
Tier 2 capital	214.0	–
Available operating profit	–	149.1
Hidden liabilities in securities	–	– 14.1
Exposures with risk coverage potential	**4,512.2**	**4,580.4**

The changes in the risk coverage potential line items result primarily from the changeover within subscribed capital to group level view, the fact that available operating profit was not taken into account as well as the inclusion of tier 2 capital.

The regulatory minimum requirements under the normative risk-bearing capacity is defined by Rentenbank as the own funds requirement according to the total capital, tier 1 capital and Common Equity Tier 1 capital ratios as well as with regard to the leverage ratio. The following table presents the regulatory indicators in the base and adverse scenarios.

Table 2: Regulatory indicators in the base and adverse scenarios

	Basic scenario			Adverse scenario		
	2019	2020	2021	2019	2020	2021
Total capital ratio in %	31.2	31.0	30.8	21.7	18.2	17.6
Tier 1 capital ratio in %	29.9	30.2	30.4	20.8	17.7	17.4
Common Equity Tier 1 capital ratio in %	29.9	30.2	30.4	20.8	17.7	17.4
Leverage Ratio in %	5.1	5.2	5.2	5.0	5.0	4.9

The regulatory indicators are met at a comfortable level even in the adverse scenario. In order to limit losses recognized in the financial statements, risks are limited under the normative approach which might have a negative effect on the income statement under accounting in accordance with the German Commercial Code (HGB).

The following table presents the risk exposures.

Table 3: Risk-bearing capacity under the normative approach

	Dec. 31, 2018 EUR million	Dec. 31, 2017 EUR million
Credit risk	317.6	356.4
Market risk	48.3	45.5
of which interest rate risks	*17.5*	*4.5*
of which CVA risk from derivatives	*15.8*	–
of which risk buffer	*15.0*	*41.0*
Operational risk	45.7	52.4
Regulatory and reputational risk	66.6	46.0
Overall risk	**478.2**	**500.3**

The CVA risk from derivatives is taken into account as a separate risk type versus the previous year and was part of the risk buffer in the previous year.

Under the normative approach, 37.8 % of the available risk coverage potential was allocated to limits to curb risk. The overall utilization of the limits was 49.6 % as of the reporting date. The risk-bearing capacity under the normative approach was maintained at a comfortable level in 2018.

The most significant risk to Rentenbank is credit risk. It is calculated using a credit portfolio model. Within the scope of this approach, spread and other market risks do not result in valuation losses that affect profit or loss under HGB accounting.

Capital Plan

Rentenbank's medium-term planning extends over a period of five years and includes both capital and risk-bearing capacity planning. The planning also ensures compliance with minimum own funds requirements based on the assumption of stress scenarios.

2.3.2 Economic Approach

The objective of the economic approach is to safeguard the bank for the long term and to protect creditors from losses from an economic perspective.

Under the risk coverage potential, hidden reserves and liabilities from securities and promissory notes from the German federal states, including related hedging transactions, are taken into account. Unplanned or unrealized profits (available operating result) are not taken into account. Subordinated liabilities are no longer taken into account in the risk coverage potential. The risks are calculated using the economic approach, while taking a confidence level of 99.9 % into account.

The risk coverage potential under the economic approach was changed from individual institution level to group level. It is illustrated below as of the reporting date compared to the prior year:

Table 4: Risk coverage potential under the economic approach

	Dec. 31, 2018 EUR million	Dec. 31, 2017 EUR million
Subscribed capital	163.6	135.0
Retained earnings	1,131.3	1,114.8
Fund for general banking risks	3,115.0	3,195.6
Hidden reserves and liabilities*	776.5	459.8
Subordinated liabilities	–	405.7
Risk coverage potential	**5,186.4**	**5,310.9**

* only in securities and promissory notes of German Federal states as well as contingency reserves Section 340f HGB

Under the economic approach, risks from all exposures are analyzed irrespective of their accounting method. The decrease in the risk exposure amount for credit risk primarily results from the modification of the credit portfolio model. To measure credit spread risks, a Value at Risk (VaR) model is used based on a historical simulation. As regards operational risks and strategic risks, we assume a risk exposure that is twice as high as under the normative approach.

The following table shows the risk exposures under the economic approach:

Table 5: Risk exposures under the economic approach

	Risk value Dec. 31, 2018 EUR million	Risk value Dec. 31, 2017 EUR million
Credit risk	790.1	914.4
Market risk	1,085.6	1,290.3
of which interest rate risks	*288.9*	*295.0*
of which CVA risk from derivatives	*155.7*	–
of which spread and other risks	*621.0*	*890.9*
of which risk buffer	*20.0*	*104.4*
Operational risk	91.4	104.8
Strategic risks	133.2	92.0
Overall risk	**2,100.3**	**2,401.5**

The CVA risk from derivatives is taken into account as a separate risk type and was part of the risk buffer in the previous year.

On the basis of the economic approach, 67.7 % of the risk coverage potential was allocated to the limits to mitigate risk. The overall utilization of the limits was 40.5 % as of the reporting date. The risk-bearing capacity under the economic approach was maintained at a comfortable level in 2018.

2.3.3 Stress Tests

The objective of the stress tests is to analyze whether the risk-bearing capacity of Rentenbank is guaranteed even in exceptional though plausible scenarios across various risk types. This involves a simulation by Rentenbank of hypothetical as well as historical scenarios and observes the markets and aspects concerning Rentenbank in the following three scenarios:

- severe economic downturn,
- financial market crisis and subsequent sovereign debt crisis,
- reputational and regulatory crisis.

Using an inverse stress test, Rentenbank also examines which events could lead to a situation whereby the risk-bearing capacity is no longer being maintained.

These stress tests are used to analyze the effects of the risks under the normative and economic approaches with a one-year horizon. In particular, the effects of the scenarios on risk-weighted assets are also simulated under the normative approach. The material risk parameters, on which the stress scenarios are based, include a deterioration of the creditworthiness as well as changes to interest rates and spreads. Furthermore, the stress test also takes into account the impact of increased capital requirements due to regulatory changes.

The predominant risk we are monitoring under the normative approach is credit risk. Under the economic approach, credit risk and market risk are of equal importance.

The results of the stress tests are taken into account when deriving the risk appetite. They are also a major factor for deriving and allocating risk coverage potential.

The risk-bearing capacity was maintained even under stress scenarios, which affirms the bank's comfortable capital situation.

2.4 Information about the Regulations for Corporate Governance and Control

The number of executive or supervisory directorships held by members of the management body is disclosed in Appendix 1.

The appointment of the members of the Management Board is incumbent upon Rentenbank's Supervisory Board. If a position on the Management Board becomes available, the nominations committee then assists the Supervisory Board with identifying applicants. Since the change to the statutes of Landwirtschaftliche Rentenbank and the Supervisory Board's rules of procedure at the meeting in autumn 2018, the nominations committee (Section 25d. (11) KWG) – has assumed the responsibilities of the former Administrative Committee with the exception of the responsibilities of the Remuneration Committee (Section 25d (12) KWG). In line with the Supervisory Board's rules of procedure, the Nominations Committee develops a job description with an applicant profile. Here the criteria regarding the selection of the candidates is specified. While these criteria are generally based on the vacant Board position to be filled, they can be expanded by suitable additional attributes, i.e. experience in public sector mandates. Furthermore, diversity is taken into account, including, among other things, the balance and diversity of knowledge, skills and experience of all members of the Management Board.

The selection of Management Board members is largely based on section 25c KWG, which requires that the Management Board members of an institution must have the necessary professional qualifications and be reliable. Further, they must dedicate sufficient time to carrying out their responsibilities. A prerequisite for the professional qualifications of Management Board members is that they have adequate theoretical and practical knowledge of the businesses concerned as well as managerial experience. Upon the approval of a member of the Management Board, the banking supervisory authorities confirm the candidate's subject-specific qualification and reliability based on the comprehensive documentation of skills, capabilities, and experience.

At least once a year, the Supervisory Board assesses the organization, size, composition and performance of the Management Board. The Supervisory Board assesses the Management Board's knowledge, skills, and experience as well. The summary of each Board member's professional career is published on Rentenbank's website.

The selection of members for Rentenbank's Supervisory Board is prescribed in Section 7 (1) of Rentenbank's Governing Law. This is, to a large extent, not the responsibility of the Supervisory Board, but the responsibility of the associations and authorities defined in Rentenbank's Governing Law and/or it is defined by virtue of office. At the same time, these legal provisions also meet diversity requirements since, due to legal requirements, Rentenbank's Supervisory Board has to consist of members from various stakeholder groups relevant to Rentenbank. This ensures that the subject-specific capabilities are broadly diversified, ranging from financial expertise in managing companies to experience in supervisory matters related to banking. Since the Supervisory Board comprises representatives of the agricultural sector, the German Federal Ministry of Food and Agriculture, the German Federal Ministry of Finance, and credit institutions, the interests of all of Rentenbank's stakeholders are taken into account.

Moreover, the Federal and State ministries that appoint representatives to Rentenbank's Supervisory Board are obligated, based on the applicable Federal and State laws, to seek to achieve equal representation of women and men as well as to take into account additional diversity criteria within the scope of these requirements. Therefore, strict quotas or targets have not been defined.

The members of the Supervisory Board draw on their broad experience and skills from their activities over many years at various credit institutions, from management positions at banks, savings banks and companies, from leading positions in Federal and State ministries as well as from key managing functions in associations and industrial sectors relevant to Rentenbank's promotional lending business. A yearly training session is held to maintain and increase the professional knowledge of the members of the Supervisory Board. Members of the Management Board also participate in the training session. Training sessions, in particular in relation to the principles of accounting, risk management, and supervisory law, are generally held for new members of the Supervisory Board. Long-standing members are also encouraged to make use of the option of taking individual training courses if required.

Aspects prescribed by law relating to selection and diversity are expanded upon in Section 7 (1) No 6 of Rentenbank's Governing Law. It prescribes that the other members of the Supervisory Board elect three representatives from credit institutions or other credit experts based on a proposal made by the German Federal Government. The preparation of the election proposals by the Nominations Committee is governed by the rules of procedure of the Supervisory Board, taking the balance and diversity of all of its members' knowledge, skills, and experience into account.

In addition, at its meeting on March 26, 2015, the Supervisory Board's Administrative Committee discussed the setting of a target to encourage the representation of the underrepresented sex on the Supervisory Board as well as a strategy to meet that target in accordance with Section 25d (11) sentence 2 No 2 KWG. Since there is no possibility of directly influencing the composition of the Supervisory Board as its composition is prescribed in Section 7 of Rentenbank's Governing Law, the Administrative Committee decided to advance the issue of the underrepresented sex by writing to the relevant associations and authorities approximately one year prior to the next constituent meeting in 2019 (they suggested considering the under-represented sex in the appointment procedure).

In 2014, Rentenbank's Supervisory Board appointed a Risk Committee that generally meets twice a year. Accordingly, ten meetings have taken place as of November 23, 2018 (two meetings per year in 2014, 2015, 2016, 2017 and 2018 respectively).

3. Information on the Scope of Application of the Regulation (Art 436 CRR)

Rentenbank is a public law institution with its registered office in Frankfurt am Main. It has no branch offices. Pursuant to Section 26a (1) sentence 2 KWG, the Group discloses relevant information within the scope of country-by-country reporting in appendix 41 to the annual financial statements. The annual report is available on Rentenbank's website under the heading 'About us'.

As a promotional bank for agribusiness and rural areas, Rentenbank provides funds for a variety of investments. Rentenbank grants its special promotional loans to projects in Germany via local banks in a competitively neutral way (on-lending procedure). The range of products is geared towards businesses in the agricultural, horticultural, viticultural and forestry sectors, as well as in the aquaculture sector. Rentenbank also finances projects in the food industry and agriculture-related upstream and downstream industries. Further, the bank promotes investments in renewable energy and rural infrastructure. In addition, Rentenbank provides funding for other banks, savings banks, and local authorities related to rural areas through registered bonds, promissory notes, and securities.

Taking into account the exemption as set out in Section 290 (5) in conjunction with Section 296 (2) HGB, Rentenbank is not required by law to prepare consolidated financial statements in accordance with the German Commercial Code *(Handelsgesetzbuch, HGB)*. Voluntary consolidated financial statements of Rentenbank were not prepared.

The regulatory scope of consolidation of Rentenbank for the fiscal year 2018 includes Rentenbank as the parent company of the Group as well as its subsidiary 'LR Beteiligungsgesellschaft mbH (LRB)', Frankfurt am Main (cf. Table 8: EU LI3). The subsidiary DSV Silo- und Verwaltungsgesellschaft mbH (DSV), Frankfurt am Main was deconsolidated during the course of the fiscal year.

The business activities of LRB comprise the administration of participations, possible new investments made as part of the promotional mandate, as well as the investment of cash funds at Rentenbank.

Institutions that do not need to publish any consolidated accounts only have to publish columns b to g as part of EU LI1 (cf. Table 6). Consequently, the explanation of the differences between the carrying amounts that are shown in the consolidated financial statements and are drawn up according to commercial law and the carrying amounts according to the regulatory scope of consolidation are omitted.

Table 6: EU LI1 – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

	b	c	d	e	f	g
	Carrying values under scope of regulatory consolidation	Carrying values of items				
		Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitization framework	Subject to the market risk framework	Not subject to capital requirements or subject to deduction from capital
	EUR million	EUR million	EUR million	EUR million	EUR million	EUR million
Assets						
Cash and balances with central banks	18	18				
Loans and advances to banks	60,138	59,539	599			
Loans and advances to customers	6,486	6,435	51			
Bonds and other fixed-income securities	16,520	16,493				27
Shares and other variable-yield securities	0	0				
Participations	173	173				
Investments in affiliated companies	8	8				
Assets held in trust	110					110
Intangible assets	14					14
Property and equipment	14	14				
Other assets	4,705	4,705				
Prepaid expenses	1,778	1,540	238			
Total assets	**89,965**	**88,926**	**888**			**151**
Liabilities and Equity						
Liabilities to banks	2,460		616			2,460
Liabilities to customers	3,407		54			3,407
Securitized liabilities	76,577					76,577
Liabilities held in trust	110					110
Other liabilities	305					305
Deferred income	1,828		1,593			1,828
Provisions	477					477
Subordinated liabilities	375					375
Fund for general banking risks	3,115					3,115
Equity	1,311					1,311
Total liabilities and equity	**89,965**		**2,263**			**89,965**

Table 7: EU LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements

		a	b	c	d	e
			Items subject to			
		Total EUR million	Credit risk framework EUR million	CCR framework EUR million	Securitization framework EUR million	Market risk framework EUR million
1	**Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)**	**89,965**	**88,926**	**888**		
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	89,965		2,263		
3	Total net amount under the regulatory scope of consolidation	–				
4	Off-balance-sheet amounts	717	717			
5	Differences in valuations	116	116			
6	Differences in methodology for derivatives transactions	−3,711	−4,611	900		
7	No own capital requirements / capital deductions	−151				
10	**Exposure amounts considered for regulatory purposes**	**86,936**	**85,149**	**1,788**		

Table 8: EU LI3 – Outline of the differences in the scopes of consolidation (entity by entity)

	a	b	c	d	e	f
		Method of regulatory consolidation				
Name of the entity	Method of accounting consolidation	Full consolidation	Proportional consolidation	Neither consolidated nor deducted	Deducted	Description of the entity
Landwirtschaftliche Rentenbank	–	X	–	–	–	Credit institution
LR Beteiligungsgesellschaft mbH	–	X	–	–	–	Financial institution

There are no impediments to the prompt transfer of own funds or repayment of liabilities among Rentenbank and its subsidiaries in accordance with Art 436 lit c) CRR.

The Group makes use of the derogation to the application of reporting obligations in relation to own funds, solvency, large exposures, leverage, and disclosures pursuant to Article 7 (3) CRR in conjunction with Section 2a (1) KWG on an individual basis (waiver rule).

As of the reporting date, all the companies within the financial sector which are subsidiaries of Rentenbank Group have been factored into the regulatory scope of consolidation according to Art 18 (1) CRR. To that extent, there was no shortfall in regulatory capital requirements according to Art 436 lit d) CRR.

4. Own Funds (Art 437 CRR)

The regulatory own funds of the group of institutions were determined on the basis of the provisions of Article 72 CRR. As the parent company of the Landwirtschaftliche Rentenbank Group of institutions, Rentenbank is responsible for the calculation of own funds on an aggregate basis pursuant to Section 10a (1) KWG in conjunction with Article 11 et seq. CRR. Own funds are calculated using the aggregation method pursuant to Article 18 (1) CRR in conjunction with Section 10a (4) KWG on the basis of the HGB annual financial statements. The disclosure of own funds is effected in accordance with appendix IV of the Implementing Regulation (EU) No. 1423/2013 of the European Commission.

Rentenbank Group's common equity Tier 1 capital is comprised of subscribed capital, retained earnings and the fund for general banking risks according to Section 340g HGB. There are no instruments for additional Tier 1 capital. Consequently, the capital requirements (common equity Tier 1 capital and additional Tier 1 capital) have to be fully met with common equity Tier 1 capital.

The common equity Tier 1 capital and/or the Tier 1 capital in the amount of EUR 4,298 million exceeds the requirements of Art 465 CRR (4.5 % and/or 6 % of the total risk amount in the amount of EUR 14,475 million) by EUR 3,647 million and/or EUR 3,430 million.

Rentenbank Group's subscribed capital of EUR 164 million is fully recognized as Common Equity Tier 1 capital within the meaning of Article 26 (1) point (a) in conjunction with Article 28 CRR in accordance with the list 'Capital instruments in EU member states qualifying as Common Equity Tier 1 instruments by virtue of Article 26 (3) of Regulation (EU) No 575/2013', published by the EBA on December 23, 2014.

Retained earnings at group level amount to EUR 1,082 million and the fund for general banking risks amounts to EUR 3,069 million. Retained earnings and the fund for general banking risks were reduced due to the effects of consolidation.

Tier 2 capital of EUR 214 million consisted exclusively of subordinated liabilities. This included EUR 40 million for subordinated loans eligible as Tier 2 capital within the meaning of Article 62 point (a) in conjunction with Article 63 CRR. The remaining contracts with an eligible volume of EUR 174 million were included in accordance with the grandfathering provisions laid down in Article 484 (2) and (5) CRR. The associated interest rates are in the range of up to 5.0 % for maturities due before February 9, 2024. The subordinated liabilities are structured as promissory notes, loan agreements, and bearer securities issued in the form of global certificates.

The main features of Rentenbank's capital instruments are presented on our website under 'about us/publications/disclosure reports' as is the publication of the conditions of issue for 'freely tradable' capital instruments.

Table 9 shows the composition of Rentenbank Group's own capital in accordance with part 2 of the CRR on the reporting day of December 31, 2018.

Table 9: Composition of regulatory own funds

		(A)	(B)	(C)
		Amount on the day of disclosure EUR million	Regulation (EU) No 575/2013 Article Reference	Amounts under-lying regulations prior to (EU) No 575/2013 or mandatory residual amounts according to regulation (EU) No 575/2013 EUR million
Common Equity Tier 1 (CET1) capital: Instruments and reserves				
1	Capital instruments and the related share premium accounts	164	26 (1), 27, 28, 29, EBA list 26 (3)	
2	Retained earnings	1,082	26 (1) (c)	
3a	Funds for general banking risk	3,069	26 (1) (f)	
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	4,315		
Common Equity Tier 1 (CET1) capital: Regulatory adjustments				
8	Intangible assets (net of related tax liability) (negative amount)	–17	36 (1) (b), 37, 472 (4)	
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	–17		
29	Common Equity Tier 1 (CET1) capital	4,298		
Additional Tier 1 (AT1) capital				
44	Additional Tier 1 (AT1) capital	0		
45	Tier 1 capital (T1 = CET1 + AT1)	4,298		
Tier 2 (T2) capital: Instruments and provisions				
46	Capital instruments and the related share premium accounts	40	62, 63	
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	174	486 (4)	
51	Tier 2 (T2) capital before regulatory adjustments	214		
Tier 2 (T2) capital: Regulatory adjustments				
57	Total regulatory adjustments to Tier 2 (T2) capital	0		
58	Tier 2 (T2) capital	214		
59	Total capital (TC = T1 + T2)	4,512		
60	Total risk weighted assets	14,475		

		(A)	(B)	(C)
		Amount on the day of disclosure EUR million	Regulation (EU) No 575/2013 Article Reference	Amounts underlying regulations prior to (EU) No 575/2013 or mandatory residual amounts according to regulation (EU) No 575/2013 EUR million
Capital ratios and buffers				
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	29.69%	92 (2) (a), 465	
62	Tier 1 (as a percentage of total risk exposure amount)	29.69%	92 (2) (b), 465	
63	Total capital (as a percentage of total risk exposure amount)	31.17%	92 (2) (c)	
64	Institutions specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and coutercyclical buffer requirements, plus systemic risk buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	6.70%	CRD 128, 129, 130, 131, 133	
65	*of which: capital conservation buffer*	*1.88%*		
66	*of which: countercyclical buffer*	*0.33%*		
67	*of which: system risk buffer*			
67a	*of which: buffer for global systemically important institutions (G-SII) or other systemically important institutions (O-SII)*			
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	25.19%	CRD 128	
Amounts below the thresholds for deduction (before risk weighting)				
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	168	36 (1) (h), 45, 46, 472 (10), 56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)	
Applicable caps on the inclusion of provisions in Tier 2				
77	Cap on inclusion of credit risk adjustments in T2 under standardized approach	164	62	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022)				
84	Current cap on T2 instruments subject to phase out arrangements	298	484 (5), 486 (4) and (5)	

Table 10 contains the items relating to the Tier 1 capital, Tier 2 capital and the deductions from own funds with Rentenbank's respective balance sheet values in accordance with the audited statements and Rentenbank Group's balance sheet value.

Table 10: Transition of capital reported in the balance sheet to regulatory own funds

	Balance Sheet item according to Rentenbank's Financial Statements Dec. 31, 2018 EUR million	Balance Sheet item according to Regulatory Group Dec. 31, 2018 EUR million	Own funds pursuant to CRR Dec. 31, 2018 EUR million
Subscribed capital	135	164	164
Retained earnings	1,163	1,131	1,082
Fund for general banking risks	3,241	3,115	3,069
CET 1 capital before regulatory adjustments			4,315
Regulatory adjustments			
Intangible assets	*14*	*14*	*–17*
CET 1 capital			4,298
Tier 1 capital			4,298
Tier 2 capital			
Subordinated liabilities	*375*	*375*	*40*
Subordinated liabilities (grandfathered)			*174*
Tier 2 capital before regulatory adjustments			214
Tier 2 capital			214
Total capital			**4,512**

5. Capital Requirements (Art 438 CRR)

The regulatory capital requirements for credit risks are determined for Rentenbank Group by applying the Credit Risk Standardized Approach (CRSA). The counterparty credit risk is calculated using the mark-to-market method. The basic indicator approach is applied to operational risk. The calculation of the risk for the credit valuation adjustment (CVA risk) is carried out using the standardized approach.

The following table shows the risk-weighted assets (RWA) and the capital requirements for credit risk, counterparty risks and operational risk. The requirements for minimum own funds amount to 8 % of the risk-weighted assets in accordance with CRR.

Table 11: EU OV1 – Overview of RWA

			RWAs Dec. 31, 2018 EUR million	RWAs Sept. 30, 2018 EUR million	Minimum capital requirements Dec. 31, 2018 EUR million
1		Credit risk (excluding CCR)	12,591	12,570	1,007
2	*Art. 438 (c) (d)*	*Of which the standardised approach*	*12,591*	*12,570*	*1,007*
6	Art. 107, Art. 438 (c) (d)	CCR	1,229	1 251	98
7	*Art. 438 (c) (d)*	*Of which mark to market*	*515*	*541*	*41*
12	*Art. 438 (c) (d)*	*Of which CVA*	*714*	*710*	*57*
23	Art. 438 (f)	Operational risk	655	655	53
24		*Of which basic indicator approach*	*655*	*655*	*53*
27	Art. 437 (2), Art. 48, Art. 60	Amounts below the thresholds for deduction (subject to 250% risk weight)	0	0	0
29	**Total**		**14,475**	**14,476**	**1,158**

The differentiated illustration of the RWA in accordance with the provisions of EBA/GL/2016/11 is expanded upon by the breakdown of receivable classes to fully meet the requirements of Art 438 CRR:

Table 12: RWA Overview of exposure classes

Exposure classes	RWAs Dec. 31, 2018 EUR million	RWAs Sept. 30, 2018 EUR million	Capital requirements Dec. 31, 2018 EUR million
Central governments or central banks	0	0	0
Regional governments or local authorities	0	0	0
Public sector entities	0	0	0
Multilateral development banks	0	0	0
International organizations	0	0	0
Institutions	11,044	11,143	884
Corporates	1	1	0
Covered bonds	1,301	1,194	104
Collective investments undertakings	0	0	0
Equity exposures	181	178	14
Other exposures	64	54	5
Total standardized approach CRSA (excluding CRR)	**12,591**	**12,570**	**1,007**

6. Countercyclical Capital Buffer (Art 440 CRR)

The countercyclical capital buffer is calculated as a weighted average from the set countercyclical capital buffer ratios for countries in which the relevant risk exposures of the institution exist.

In accordance with Art 140 (4) CRD IV, the countercyclical capital buffer does not contain any risk exposures of the classes in accordance with Art 112 lit a) through lit f) CRR.

The required disclosure of the institution-specific countercyclical capital buffer in line with Art 440 CRR as well as the calculation of material credit risk exposures is effected in accordance with appendix I of Delegated Regulation (EU) 2015/1555.

The countercyclical capital buffer and the geographical distribution of Rentenbank Group are illustrated as follows as of December 31, 2018:

Countercyclical capital buffer in accordance with Section 10 d KWG	**0.3297**
of which Norway	*0.1447*
of which Sweden	*0.1485*
of which UK	*0.0365*

Table 13: Disclosure of the geographical distribution of the material credit risk exposures relevant to the calculation of the countercyclical capital buffer

		General credit exposures	Own funds requirements			
10	Breakdown by country	Exposure value for SA EUR million	Of which: General credit risk exposures EUR million	Total EUR million	Own funds requirement weights %	Countercyclical capital buffer rate %
		010	070	100	110	120
	Germany	6,015	61	61	49.27	
	France	1,869	15	15	12.08	
	Netherlands	394	4	4	3.26	
	Denmark	537	6	6	5.18	
	Belgium	91	1	1	0.59	
	Luxembourg	0	0	0	0.01	
	Norway	1,119	9	9	7.23	2.00
	Sweden	1,149	9	9	7.43	2.00
	Finland	528	4	4	3.41	
	Austria	1,214	10	10	7.89	
	United Kingdom	565	5	5	3.65	1.00
20	**Total**	**13,481**	**124**	**124**	**100.00**	

Table 14: Amount of the institution-specific countercyclical capital buffer

		010
010	Total risk exposure amount	14,475 EUR million
020	Institution-specific countercyclical buffer rate	0.33 %
030	Institution-specific countercyclical buffer requirement	48 EUR million

7. Credit Risk and General Information about Credit Risk Mitigation (Art 442 CRR, Art 453 CRR)

7.1 General Qualitative Information about Credit Risks

The general treatment of non-performing loans is governed by the business credit risk strategies. The non-performing loans (NPL) ratio is monitored monthly using a key financial indicator. The threshold value for the NPL ratio is <0.1% of the total loan portfolio. Monitoring and reporting of this key financial indicator is included in the monthly report on credit risk development. Provisions as regards the granting of forbearance measures are set out in the organizational instructions on the credit risk analysis.

Rentenbank records obligations as being overdue if the borrower is in arrears with a major portion of their obligations to Rentenbank by more than 5 bank working days. The materiality limit is EUR 500 and/or 1 % of the open receivable/or framework (the lower limit is always crucial here).

Identifiable risks in the lending business are accounted for by specific valuation allowances and provisions. General valuation allowances (GVA) and contingency reserves pursuant to Section 340f HGB exist for latent (credit) risks in addition to the fund for general banking risks reported in the balance sheet.

Specific Valuation Allowance

As of each balance sheet date, Rentenbank assesses whether there is any objective evidence that not all interest and principal payments may be made in accordance with the contractual terms. For accounting purposes, the bank uses the following criteria to determine whether the recognition of a specific valuation allowance for a receivable is required:

- Internal credit rating as non-investment grade
- Non-performing, deferred or restructured exposures
- Material deterioration in the business partner's creditworthiness
- Material deterioration in the creditworthiness of the business partner's country of incorporation

Rentenbank assesses the recoverability of both significant individual receivables and securities and receivables of amounts of minor significance on an individual basis. If there is objective evidence of impairment, the allowance is determined as the difference between the carrying amount and the present value of the expected cash flows. The expected cash flows are determined on the basis of qualified estimates. They take into account the business partner's financial position as well as the liquidation of collateral and other relevant factors, such as protection schemes or state guarantees. The original effective interest rate is used as a discount rate for fixed-interest receivables as well as securities. The current effective interest rate is used for floating rate loans and advances as well as securities. The current market rate of return for a comparable financial asset is used for participations and valued at acquisition cost. Specific valuation allowances are recognized through profit or loss.

As in the previous year, Rentenbank has not recognized any specific valuation allowances as of the balance sheet date.

General Valuation Allowance

General valuation allowances are calculated using the total loan volume subject to risks pursuant to Section 19 (1) KWG, the probability of default, and the loss given default rate.

Due to the historically low number of defaults at Rentenbank, probabilities of default are determined using a long-term average of the 1-year probabilities of default published by the rating agencies Fitch, Moody's, and Standard & Poor's. The probabilities of default are allocated on the basis of the creditworthiness of the respective business partner.

The loss given default rates for specific products and types of business transactions are determined using an analytical and expert-based procedure, taking into account the respective collateralization.

In accordance with Article 442 point (h) CRR, institutions are required to disclose the amount of impaired and past due exposures, each provided separately, and, if appropriate, to provide a breakdown by significant geographical area and industry. In addition, both specific and general credit risk adjustments have to be disclosed, broken down by geographical area and industry.

Rentenbank has recognized general valuation allowances (specific credit risk adjustments) amounting to EUR 3.3 million (EUR 3.6 million in 2017) for receivables, securities and irrevocable loan commitments.

7.2 General Quantitative Information about Credit Risks

The following tables contain risk exposures by GVA broken down by risk exposure classification at the reporting date as well as the average risk exposure in the reporting period in accordance with Art 442 lit c)

CRR, the risk exposures broken down by country in accordance with Art 442 lit d) CRR, the risk exposures broken down by sector in accordance with Art 442 lit e) CRR and the balance sheet risk exposures broken down by residual maturity in accordance with Art 442 lit f) CRR.

Derivatives (counterparty credit risk exposures) are shown in separate tables in chapter 9 of this report.

Table 15: EU CRB-B: Total and average net amount of exposures

		a	b
		Net value of exposures at the end of the period EUR million	Average net exposures over the period EUR million
16	Central governments or central banks	4,602	5,105
17	Regional governments or local authorities	7,072	7,191
18	Public sector entities	15,961	17,008
19	Multilateral development banks	2,260	2,290
20	International organizations	10	10
21	Institutions	41,762	41,864
22	Corporates	1	1
30	Covered bonds	12,101	11,508
32	Collective investment undertakings	0	0
33	Equity exposures	181	176
34	Other exposures	1,198	1,159
35	***Total standardized approach***	***85,148***	***86,312***
36	**Total**	**85,148**	**86,312**

Table 16: EU CRB-C: Geographical breakdown of exposures

		a	b	c	d	e
				Net value		
		Germany EUR million	Europe EUR million	International Organisation EUR million	OECD (without EU) EUR million	Total EUR million
7	Central governments or central banks	4,602				4,602
8	Regional governments or local authorities	7,072				7,072
9	Public sector entities	15,841	120			15,961
10	Multilateral development banks			2,260		2,260
11	International organizations			10		10
12	Institutions	37,233	2,196		2,333	41,762
13	Corporates	1				1
18	Covered bonds	4,634	7,467			12,101
20	Collective investment undertakings		0			0
21	Equity exposures	181				181
22	Other exposures	1,198				1,198
23	***Total standardized approach***	***70,762***	***9,783***	***2,270***	***2,333***	***85,148***
24	**Total**	**70,762**	**9,783**	**2,270**	**2,333**	**85,148**

Table 17: EU CRB-D: Concentration of exposures by industry or counterparty types

		a	b	c	d	e	f	u
		Wholesale and retail trade EUR million	Information and communication EUR million	Finance and Insurance EUR million	Public administration and defence, compulsory social security EUR million	Real estate activities EUR million	Other services EUR million	Total EUR million
7	Central governments or central banks			4,518	84			4,602
8	Regional governments or local authorities				7,072			7,072
9	Public sector entities			15,961				15,961
10	Multilateral development banks			2,260				2,260
11	International organizations			10				10
12	Institutions			41,762				41,762
13	Corporates			1				1
18	Covered bonds			12,101				12,101
20	Collective investment undertakings	0					0	0
21	Equity exposures	8	0	168		5		181
22	Other exposures						1 198	1,198
23	***Total standardized approach***	***8***	***0***	***76,781***	***7,156***	***5***	***1 198***	***85,148***
24	**Total**	**8**	**0**	**76,781**	**7,156**	**5**	**1 198**	**85,148**

Off-balance-sheet transactions are not contained in the following table in accordance with the provisions of EBA/GL/2016/11.

Table 18: EU CRB-E: Maturity of exposures

		a	b	c	d	e	f
		Net exposure value					
		On demand EUR million	≤ 1 year EUR million	> 1 year ≤ 5 years EUR million	> 5 years EUR million	No stated maturity EUR million	Total EUR million
7	Central governments or central banks	4,518	27	57			4,602
8	Regional governments or local authorities	1	440	1,197	5,434		7,072
9	Public sector entities	188	1,167	4,757	9,797		15,909
10	Multilateral development banks		23	335	1,902		2,260
11	International organizations			10			10
12	Institutions	950	2,474	10,324	27,349	0	41,097
13	Corporates		1				1
18	Covered bonds		1,164	5,951	4,986		12,101
20	Collective investment undertakings					0	0
21	Equity exposures		173			8	181
22	Other exposures	2	22	154	1,020		1,198
23	***Total standardized approach***	***5,659***	***5,491***	***22,785***	***50,488***	***8***	***84,431***
24	**Total**	**5,659**	**5,491**	**22,785**	**50,488**	**8**	**84,431**

Table 19: EU CR1-A: Credit quality of exposures by exposure class and instrument

		a	b	c	d	e	f	g
		Gross carrying values of					Credit risk adjustment charges of the period	Net values
		Defaulted exposures EUR million	Non-defaulted exposures EUR million	Specific credit risk adjustment EUR million	General credit risk adjustment EUR million	Accumulated write-offs EUR million	EUR million	(a+b-c-d) EUR million
16	Central governments or central banks		4,602	0				4,602
17	Regional governments or local authorities		7,072	0				7,072
18	Public sector entities		15,961	0				15,961
19	Multilateral development banks		2,260	0				2,260
20	International organizations		10	0				10
21	Institutions		41,765	3			0	41,762
22	Corporates		1					1
30	Covered bonds		12,101	0				12,101
32	Collective investments undertakings		0					0
33	Equity exposures		181					181
34	Other exposures		1,198					1,198
35	***Total standardized approach***		***85,151***	***3***				***85,148***
36	**Total**		**85,151**	**3**				**85,148**
37	Of which: Loans		67,818	2				67,816
38	Of which: Debt securities		16,616	1				16,615
39	Of which: Off-balance-sheet exposures		717	0				717

The following table corresponds with table EU CR1-A in terms of content. The risk exposures are broken down by sector. This was expanded upon by the sector of Finance and Insurance Services which is extremely important to the bank and which was not included in the template.

Table 20: EU CR1-B: Credit quality of exposures by industry or counterparty types

		a	b	c	d	e	f	g
		Gross carrying values of						Net values
		Defaulted exposures EUR million	Non-defaulted exposures EUR million	Specific credit risk adjustment EUR million	General credit risk adjustment EUR million	Accumulated write-offs EUR million	Credit risk adjustment charges EUR million	(a+b-c-d) EUR million
7	Wholesale and retail trade		8					8
10	Information and communication		0					0
10a	Finance and Insurance		76,784	3				76,781
11	Real estate activities		5					5
14	Public administration and defence, compulsory social security		7,156	0				7,156
18	Other services		1,198					1,198
19	**Total**		**85,151**	**3**				**85,148**

Table EU CR1-C corresponds with Table EU CR1-A in terms of content. The structure of the risk positions is made according to geographical area.

Table 21: EU CR1-C: Credit quality of exposures by geography

		a	b	c	d	e	f	g
		Gross carrying values of						Net values
		Defaulted exposures EUR million	Non-defaulted exposures EUR million	Specific credit risk adjustment EUR million	General credit risk adjustment EUR million	Accumulated write-offs EUR million	Credit risk adjustment charges EUR million	(a+b-c-d) EUR million
1	Germany		70,765	2				70,763
2	Europe		9,783	1				9,782
3	International Organizations		2,270	0				2,270
4	OECD (without EU)		2,333	0				2,333
11	**Total**		**85,151**	**3**				**85,148**

There are no impaired, overdue or deferred exposures. The illustration according to the provisions

- EU CR1-D – maturities structure for overdue risk exposures
- EU CR1-E – impaired and deferred risk exposures and
- EU CR2-B – changes in the stock of defaulted and impaired loans and debt securities

are therefore omitted.

In the year under review, the general valuation allowance only slightly changed through dissolution of prescribed amounts for losses on loans. An illustration of a transition of the opening portfolio in the amount of EUR 3.6 million to the closing portfolio at EUR 3.3 million according to table EU CR2-A (changes to the portfolio of the general and specific credit risk adjustments) is not being provided.

7.3 General Qualitative Information about Loan Mitigations

To reduce credit risk, collateral and netting agreements are used. Netting agreements exist exclusively for derivatives by way of netting agreements (see section 9.1). Rentenbank generally accepts all kinds of collateral commonly accepted by banks. Receivables covered through institutional liability mechanisms, guarantor liability and separate cover funds, used for example in the case of *Pfandbriefe* (mortgage bonds), can also be accepted as collateral. The Promotional Business, Credit, and Collateral & Participations divisions (as of January 1, 2019 merged with the Credit division) as well as the Operations Financial Markets department are responsible for collateral management. The stock of collaterals provided to Rentenbank is reviewed for each business partner at least once a year depending on the type of collateral. The collateral is managed in Rentenbank's collateral system. The bank performs routine, non-event-driven reviews on the use of funds earmarked within special promotional business. The reviews are conducted on a random basis, using local banks' credit documentation. The recoverability of all collateral held is regularly reported in an annual collateral report or on an ad hoc basis upon the occurrence of extraordinary events.

From a regulatory perspective, only warranties, especially guarantees and sureties, as well as financial collateral from collateral agreements are used by Rentenbank to reduce the capital charge on the basis of the Financial Collateral Simple Method. Only European countries, the German federal government, the *Länder* and local authorities are recognized as eligible guarantors. There are no credit risk concentrations within the credit risk mitigation taken.

7.4 General Quantitative Information about Credit Risk Mitigation

As of December 31, 2018 Rentenbank uses the following collateral as credit risk mitigation techniques. The statement of the risk position is made taking GVA into account.

Table 22: EU CR3: CRM techniques – overview

		a	b	c	d	e
		Exposures unsecured – Carrying amount EUR million	Exposures secured – Carrying amount EUR million	Exposures secured by collateral EUR million	Exposures secured by financial guarantees EUR million	Exposures secured by credit derivatives EUR million
1	Total loans	67,776	40		40	
2	Total debt securities	16,610	5		5	
	Off balance sheet positions	717				
3	**Total exposures**	**85,103**	**45**		**45**	
4	*Of which defaulted*					

8. Credit Risk and Credit Risk Mitigating Techniques within the Standardized Approach (Art 444 CRR, Art 453 CRR)

8.1 Qualitative Information on using the Standardized Approach

Only external ratings from Moody's Investors Service are applied to calculate regulatory capital requirements for credit risks using the Credit Risk Standardized Approach (CRSA). Rentenbank has appointed Moody's Investors Service for risk position classes with countries and banks. The process of transferring credit ratings from issuers and issuances to positions corresponds with the requirements prescribed in articles 136 and 138 et seq. CRR. Credit ratings are not transferred from issuers and issues to items that are not part of the banking book.

If available, a transaction rating is used instead of the business partner rating. In the absence of a transaction or business partner rating, the risk weight is determined on the basis of the country of incorporation. The external ratings are allocated to credit quality steps exclusively in accordance with the Commission Implementing Regulation (EU) 2016/1799.

No value from receivables is deducted from own funds.

8.2 Quantitative Information on using the Standardized Approach

In the table below the credit risk mitigation effects are illustrated by receivable class (columns a-d). In column e the risk assets are disclosed. Column f contains the RWA density as a ratio of RWA and receivables by credit conversion factor and CRM.

Table 23: EU CR4: Standardized approach – credit risk exposure and CRM effects

		a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	Exposure classes	On-balance-sheet amount EUR million	Off-balance-sheet amount EUR million	On-balance-sheet amount EUR million	Off-balance-sheet amount EUR million	RWAs EUR million	RWA density %
1	Central governments or central banks	4,602	0	4,606	0		
2	Regional government or local authorities	7,072	0	7,112	0		
3	Public sector entities	15,909	52	15,909	26	0	0.00
4	Multilateral development banks	2,260		2,260			
5	International organizations	10		10			
6	Institutions	41,097	665	41,053	333	11,044	26.68
7	Corporates	1	0	1	0	1	100.00
12	Covered bonds	12,101		12,101		1,301	10.75
14	Collective investment undertakings	0		0		0	100.00
15	Equity	181		181		181	100.07
16	Other items	1,198		1,198		64	5.37
17	**Total**	**84,431**	**717**	**84,431**	**359**	**12,591**	**14.85**

The table below shows both the Rentenbank Group credit risk exposures (by CCF and GVA) as of December 31, 2018 by risk exposure class and risk weight in accordance with Art 444 lit e) CRR both before and after credit risk mitigation without counterparty credit risk exposures.

Table 24: EU CR5: Standardized approach before CRM

		Risk weight							
	Exposure classes	0 % EUR million	10 % EUR million	20 % EUR million	50 % EUR million	100 % EUR million	250 % EUR million	Total EUR million	Of which unrated EUR million
1	Central governments or central banks	4,602						4,602	
2	Regional government or local authorities	7,072						7,072	
3	Public sector entities	15,935				0		15,935	775
4	Multilateral development banks	2,260						2,260	2,260
5	International organizations	10						10	10
6	Institutions			32,210	9,220			41,430	13
7	Corporates					1		1	1
12	Covered bonds		11,197	904				12,101	
14	Collective investment undertakings					0		0	0
15	Equity					181	0	181	181
16	Other items	838	207	137		16		1,198	1,198
17	**Total**	**30,717**	**11,404**	**33,251**	**9,220**	**198**	**0**	**84,790**	**4,438**

Table 25: EU CR5: Standardized approach after CRM

	Exposure classes	Risk weight 0% EUR million	10% EUR million	20% EUR million	50% EUR million	100% EUR million	250% EUR million	Total EUR million	Of which unrated EUR million
1	Central governments or central banks	4,606						4,606	
2	Regional government or local authorities	7,112						7,112	
3	Public sector entities	15,935				0		15,935	775
4	Multilateral development banks	2,260						2,260	2,260
5	International organizations	10						10	10
6	Institutions			32,166	9,220			41,386	13
7	Corporates					1		1	1
12	Covered bonds		11,197	904				12,101	
14	Collective investment undertakings					0		0	0
15	Equity					181	0	181	181
16	Other items	838	207	137		16		1,198	1,198
17	**Total**	**30,761**	**11,404**	**33,207**	**9,220**	**198**	**0**	**84,790**	**4,438**

Substitution effects which emerge due to the use of the simple approach as part of CRM techniques cause the risk exposures originally with higher risk weights to be recorded in exposures with 0% risk weight.

9. Counterparty Credit Risk (Art 439 CRR, Art 444 CRR)

9.1 Qualitative Information on Counterparty Credit Risk

Derivatives are only entered into to hedge existing or expected market risks. In order to reduce risk, Rentenbank has concluded collateral agreements with all counterparties, with whom derivative transactions are effected (i.e. Credit Support Annex according to ISDA or collateral annex in accordance with the German Master Agreement for Financial Derivatives Transactions (DRV)). The positive market value from derivatives transactions is only to be collateralized by counterparties using cash contributions in euros. In return, Rentenbank undertakes to provide cash deposits denominated in euros in the event of negative fair values. New derivatives transactions are generally effected only based on a collateral agreement.

Netting agreements are used exclusively for derivatives. The use of netting arrangements from standardized netting agreements as well as from netting agreements recognized by regulatory authorities with all counterparties gives rise to reduced positive replacement values.

The limitation of derivative risk exposures per counterparty is effected as part of the processes to monitor and observe counterparty-related credit risk. The basis for the calculation of internal capital and the upper limits for the securitization of counterparty credit risk is the measurement basis in accordance with the mark-to-market method pursuant to Article 274 CRR, while taking collateral into account.

Correlation between market and counterparty risks

Diversification effects through correlations between credit risks and market risks that are designed to mitigate risk are taken into account in the risk-bearing capacity concept in a non-risk mitigating way. Instead, risk values are added conservatively.

Wrong Way Risk (WWR)

The specific WWR is the risk through correlations between the credit rating of the counterparty and the security received. As the collateral is only made in cash contributions, there is no specific WWR.

CVA Risk in the Risk-Bearing Capacity

Rentenbank takes account of the CVA risk in the risk-bearing capacity calculation. The CVA risk is calculated at the level of the netting pool using the following formula: EAD (exposure at default) x PD (probability of default) x LGD (loss given default).

In addition to the anticipated exposure, the Potential Future Exposure based on a Value-at-Risk calculation is factored into the risk-bearing capacity (economic approach). The lower limit of the regulatory add-on in accordance with Article 274 CRR is taken into consideration here.

The probabilities of default are derived from liquid credit default swap quotas from counterparties. If there is any data missing, the probabilities of default from measuring credit risk based on the ratings are used.

9.2 Quantitative Information on Counterparty Credit Risk

Information regarding counterparty credit risk is disclosed in the following table. At Rentenbank the value from receivables for the counterparty credit risk according to the mark-to-market method is calculated in accordance with Art 274 CRR.

Table 26: EU CCR1: Analysis of CCR exposure by approach

		a	b	c	d	e	f	g
		Notional EUR million	Replacement cost/current market value EUR million	Potential future credit exposure EUR million	EEPE EUR million	Multiplier EUR million	EAD post CRM EUR million	RWAs EUR million
1	Mark-to-market		290	1,498			1,788	515
11	**Total**							**515**

For risk exposures from OTC derivatives, requirements to own funds are to be taken into account in accordance with Art 381 et seq. CRR in the event of an adjustment to the credit rating (CVA risk). A CVA risk is deemed to be the risk of a change in value from derivatives transactions due to a downgrading in the rating of counterparties. Rentenbank calculates the CVA risk in line with the standard method in accordance with Art 384 CRR.

Table 27: EU CCR2: CVA capital charge

		a	b
		Exposure value EUR million	RWAs EUR million
4	All portfolios subject to the standardized method	1,488	714
5	Total subject to the CVA capital charge	1,488	714

Rentenbank does not enter into any transactions with a key counterparty. A disclosure of table EU CCR8 is not being provided.

9.3 Information according to the Supervisory Risk Weight Approach

In the table below, risk exposure values are illustrated (after applying conversion factors and credit risk mitigation techniques) by receivable class and counterparty risk weight.

Table 28: EU CCR3: Standardized approach – CCR exposures by regulatory portfolio and risk

	Exposure classes	Risk weight 0% EUR million	Risk weight 20% EUR million	Risk weight 50% EUR million	Total EUR million	Of which unrated EUR million
1	Central governments or central banks	300			300	0
3	Public sector entities	0			0	
6	Institutions		763	725	1,488	
11	**Total**	**300**	**763**	**725**	**1,788**	**0**

9.4 Additional Information about Counterparty Credit Risk

Eligible netting agreements and cash collateral are taken into account in a manner which mitigates risk in accordance with Art 298 CRR. In the following table, information is disclosed about the impact of the netting and securities held on the receivable value of derivatives and securities financing transactions (SFTs) in accordance with Art 439 lit e) CRR.

After netting including taking securities into account, a net credit risk position of EUR 9 million remains which means that acquiring credit reserves (provision for pending losses for derivatives) is not necessary.

Table 29: EU CCR5-A: Impact of netting and collateral held on exposure values

		a	b	c	d	e
		Gross positive fair value or net carrying amount EUR million	Netting benefits EUR million	Netted current credit exposure EUR million	Collateral held EUR million	Net credit exposure EUR million
1	Derivatives	2,573	2,283	290	281	9
4	**Total**	**2,573**	**2,283**	**290**	**281**	**9**

In the following table, collateral provided and held in conjunction with the counterparty credit risk are disclosed. Rentenbank only accepts EURO cash contributions as collateral for derivatives transactions. Columns e and f are blank because SFTs are not effected by Rentenbank.

Rentenbank's triple-A ratings are due to the guarantee issued by the triple-A rated Federal Republic of Germany for Rentenbank's liabilities. The scenario involving a downgrade of Rentenbank's triple-A ratings and the associated provision of additional collateral relating to collateral agreements is regularly validated and is currently of minor relevance. The collateral agreements with derivative counterparties generally do not obligate Rentenbank to provide additional collateral in the event of a rating downgrade. Accordingly, Rentenbank does not expect to provide any additional collateral in a rating downgrade scenario.

Table 30: EU CCR5-B: Composition of collateral for exposures to CCR

	a	b	c	d
	Collateral used in derivative transactions			
	Fair value of collateral received		Fair value of posted collateral	
	Segregated EUR million	Unsegregated EUR million	Segregated EUR million	Unsegregated EUR million
Cash collateral	0	4,670	0	300
Total	**0**	**4,670**	**0**	**300**

As at the reporting date of December 31, 2018 the bank did not have any derivative loans. Accordingly, a disclosure of Table EU CCR6 is not being provided.

10. Unencumbered Assets (Art 443 CRR)

As regards the disclosure of unencumbered and encumbered assets in accordance with Article 443 CRR, Rentenbank follows the delegated regulation (EU) 2017/2295 dated September 4, 2017 in conjunction with the BaFin circular 06/2016 (BA 52-QIN 4300-2014/0001) on the implementation of the EBA Guidelines on Disclosure dated August 30, 2016 (EBA/GL/2014/03) dated 27 June 2014.

In accordance with the EBA definition, assets are treated as encumbered if they cannot be freely used by the institution to raise funds in an alternative way. This is always the case when assets are pledged or lent, i.e. when they are used to collateralize own loans and to secure potential obligations from derivative transactions (collateral agreements) in the context of on and off-balance-sheet transactions and therefore are not freely available. Assets are also considered as being subject to restrictions on withdrawal when they require prior approval before withdrawal or replacement.

The disclosure of quantitative information is based on median data compiled on a quarterly basis throughout the 2018 fiscal year.

Within the Rentenbank Group, the transactions mentioned below are almost exclusively allocated to the parent company.

10.1 Quantitative Information

Table 31: Encumbered and unencumbered assets

		Carrying amount of encumbered assets 010 EUR million	Fair value of encumbered assets 040 EUR million	Carrying amount of unencumbered assets 060 EUR million	Fair value of unencumbered assets 090 EUR million
010	**Assets of the reporting institution**	5,164		85,169	
030	Equity instruments	0		172	172
040	Debt securities	0	0	16,034	16,907
050	*of which: covered bonds*	*0*	*0*	*8,362*	*8,561*
060	*of which: asset-backed securities*	*0*	*0*	*0*	*0*
070	*of which: issued by general governments*	*0*	*0*	*729*	*756*
080	*of which: issued by financial corporations*	*0*	*0*	*15,305*	*16,152*
090	*of which: issued by non-financial corporations*	*0*	*0*	*0*	*0*
120	Other assets	0		2,365	

Table 32: Collateral received

			Unencumbered
		Fair value of encumbered collateral received or own debt securities issued 010 EUR million	Fair value of collateral received or own debt securities issued available for encumbrance 040 EUR million
130	Collateral received by the reporting institution	207	1
140	Loans on demand	0	0
150	Equity instruments	0	0
160	Debt securities	0	0
170	*of which: covered bonds*	*0*	*0*
180	*of which: asset-backed securities*	*0*	*0*
190	*of which: issued by general governments*	*0*	*0*
200	*of which: issued by financial corporations*	*0*	*0*
210	*of which: issued by non financial corporations*	*0*	*0*
220	Loans and advances other than loans on demand	0	1
230	Other collateral received	207	0
240	Own debt securities issued other than own covered bonds or asset-backed securities	0	28
241	Own covered bonds and asset-backed securities issued and not yet pledged		0
250	**Total assets, collateral received and own debt securities issued**	**5,419**	

Table 33: Sources of encumberance

		Matching liabilities, contingent liabilities or securities lent 010 EUR million	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered 030 EUR million
010	Carrying amount of selected financial liabilities	19	119

10.2 Qualitative Information

Of the assets on the balance sheet in the amount of EUR 90.3 billion (median value) 6.0 % (EUR 5,164 billion) are encumbered. The major portion (around 98 %) of the encumbered assets results from the provision of collateral for derivative transactions as well as from receivables included in the cover funds for covered bonds (cover pool). A general description of the collateral agreements is given in chapter 9.1.

The basis for the cover pool is Rentenbank's Governing Law as well as the references included therein to the German Mortgage Bond Act (*Pfandbriefgesetz, PfandBG*), as amended. In accordance with Section 13 (2) of Rentenbank's Governing Law, the covered bonds issued by Rentenbank must be covered up to the amount of their nominal value and the interest at all times. The trustee's review as of the balance sheet date identified a security excess cover of 99 % of the notional amount of covered bonds (including the guarantee reserve pursuant to Section 2 (3) of Rentenbank's Governing Law in the amount resolved by the Supervisory Board in 2018) and a multiple over-collateralization in relation to interest. The over-collateralization was certified by the appointed trustee on January 17, 2019.

Other encumbered assets refer to the minimum reserve held at Deutsche Bundesbank.

Beyond that, there were no further collateral agreements at Rentenbank as of December 31, 2018.

Assets reported as other assets are not used for collateralization purposes. They only include unencumbered assets, such as property and equipment, intangible assets, assets held in trust, and prepaid expenses.

As of December 31, 2018, there were no off-balance-sheet transactions covered by assets other than derivatives.

Collateral received primarily includes the cash collateral received from derivative transactions.

11. Market Risk (Art 445 CRR, Art 448 CRR)

To determine the capital requirements for foreign currency risks, we calculate the total currency exposure on the basis of the standardized approach. This amounts to EUR 0.1 million as of December 31, 2018 (EUR 0.1 million in 2017) in line with the standardized approach. The threshold pursuant to Article 351 CRR was not exceeded so there was no need to use own capital for foreign currency risks. Table EU MR1 'Market risk in accordance with the standardized approach' is therefore not being provided.

There are no exposures to commodity, trading book and settlement risks or other market risks. Rentenbank does not apply its own risk models.

12. Remuneration Policy and Practice (Art 450 CRR)

Rentenbank is required to disclose its remuneration policy pursuant to Section 16 (1) of the German Regulation on the Requirements for Institutions' Remuneration *(Instituts-Vergütungsverordnung, InstitutsVergV)* in conjunction with Article 450 CRR. In the following section, Rentenbank complies with this disclosure obligation for 2018.

Rentenbank's risk-averse business model, its public law status, its statutory promotional mandate and its competitive neutrality are also reflected in the bank's remuneration system.

In 2016, Rentenbank migrated all variable remuneration elements for employees exempt from collective pay agreements and for those who are covered by collective pay agreements as well as the Management Board to a model of fixed remuneration. The remuneration system does not contain any incentives to undertake any transactions or to take any risks outside Rentenbank's existing statutory framework. The priority is the fulfillment of the promotional mandate.

As of September 30, 2018 Rentenbank's risk bearers were identified in accordance with Section 18 (2) *InstitutsVergV*. Over and above the members of the Supervisory Board, this comprises the three members of the Management Board and 37 exempt employees.

The Supervisory Board members' remuneration corresponds with their remuneration arrangement and is published every year as an appendix to Rentenbank's Financial Statements.

The members of the Management Board are responsible for the configuration of the remuneration system. The members are listed in appendix 2. The Supervisory Board meets at least twice a year. In the year under review, the Supervisory Board established a Remuneration Committee in accordance with Section 15 *InstitutsVergV* in conjunction with Section 25d (12) KWG. The committee consists of the chairman of the Supervisory Board, his deputy, a representative of the Federal Ministry of Finance and four additional members of the Supervisory Board. It meets at least twice a year. The Remuneration Committee's remit consists of the monitoring of the appropriate configuration of the remuneration system for the members of the Supervisory Board as well as the drafting of the resolutions of the Supervisory Board regarding the remuneration of members of the Management Board. The remuneration is reviewed annually (usually at the spring meeting of the Supervisory Board) and revised if appropriate. Furthermore, the Remuneration Committee monitors and observes the appropriate configuration of the staff remuneration system.

12.1 Management Board

The remuneration for the Management Board consists of a pensionable fixed remuneration paid monthly and a non-pensionable fixed remuneration of which a portion is paid monthly and another portion semi-annually on 1 April and 1 November each year. The amount of the fixed remuneration is to be determined by the roles and responsibilities.

A variable remuneration component (bonus) was set for the 2015 fiscal year for the last time. 13.33 % of the variable remuneration for the 2015 fiscal year was paid in 2018.

Each member of the Management Board has a company car, the value of which is determined by tax rules. In addition, the members of the Management Board are covered by company accident insurance and each of them has an individual pension agreement. Within the context of the guideline on deferred compensation, members may waive portions of the semi-annual fixed remuneration and may convert these into retirement benefit entitlements of an equivalent value.

Payments to members of the Management Board in the fiscal year 2018 (excluding any other remunerations):

	Fixed remuneration EUR	Variable remuneration for the 2015 fiscal year (payout of 13.33 %) EUR
Dr Horst Reinhardt	730,000	26,666.67
Hans Bernhardt	730,000	26,666.67
Dietmar Ilg*	320,000	–

* Start of contract on May 1, 2018

12.2 Employees covered by Collective Pay Agreements

The members of the Management Board are responsible for how the staff remuneration system is configured. Every year they monitor the appropriateness of the business strategy against this background.

12.2.1 Exempt Employees

There is a remuneration system for exempted employees, including identified risk bearers. The exempt employees receive a pensionable annual basic salary. The amount of the annual basic salary, which is paid in monthly instalments, is largely determined according to the following criteria:

- professional experience,
- organizational responsibility,
- level of education,
- seniority,
- expertise,
- skills,
- restrictive conditions (such as social, economic, or cultural factors),
- workplace experience,
- general business activity and pay level in the geographical area of Frankfurt am Main.

The amount of the individual remuneration of the employees is reviewed, and adjusted if necessary, as part of the annual salary review. The increase in the total remuneration volume is limited by its own economic circumstances, the sustainable financial performance of Rentenbank and the expected salary adjustments prior to the beginning of the annual salary review process.

In addition, non-dynamic, non-pensionable allowances and a fixed one-off payment, which is paid out in April and November in equal instalments, may be components of the remuneration.

Rentenbank also provides voluntary fringe benefits such as subsidies for commuting by public transportation or subsidized gym memberships. Each member of the senior management team may have the use of a company car, the value of which is determined by tax rules.

Each employee receives pension benefits from one of Rentenbank's pension plans applicable to him/her. Within the context of the guideline on deferred compensation, members may waive portions of the semi-annual fixed remuneration and may convert them into retirement benefit entitlements of an equivalent value. Moreover, employee-financed deferred compensation for pensions may be arranged through the BVV pension fund or a direct insurance scheme.

12.2.2 Employees covered by Collective Pay Agreements

Employees covered by collective pay agreements receive a pensionable monthly collectively agreed salary and a pensionable one-off payment in line with the respectively applicable collective pay agreement for the private banking sector and public banks. Employees covered by collective pay agreements who have permanent contracts also receive a fixed, dynamic one-off payment which is 50 % pensionable.

Furthermore, fixed non-dynamic and non-pensionable bonuses can be elements of the remuneration.

The fringe and pension benefits mentioned under 12.2.1 also apply to employees covered by collective pay agreements.

12.2.3 Quantitative Data for exempt Employees and Employees covered by Collective Pay Agreements

Fixed remuneration of the employees in 2018 (excluding other remunerations):

Organizational Units	Fixed remuneration (all employees) EUR million	Of which risk bearers EUR million	Number of risk bearers in FTE*
Treasury Promotional Business Banks Collateral and participations	7.16	3.55	21.0
Staff departments and services	18.64	2.62	15.7

* Full Time Equivalent

A total remuneration of EUR 1 million or more was not awarded to any employee, including the members of the Management Board in the reporting year.

As a result of a commitment from 2017, a settlement was paid to a risk bearer in January 2018 (no information can be provided regarding the amount of the settlement for confidentiality reasons). The relevant supervisory bodies were apprised of this matter. No further settlements were agreed or paid out in 2018. In principle, bonuses to new starts were not paid out. This also applies to the reporting year.

13. Leverage Ratio (Art 451 CRR)

The leverage ratio is calculated on a monthly basis and monitored. In addition the risk of an excessive leverage ratio is addressed as part of the bank's multi-year planning through the planning of the balance sheet total and of the capital.

The bank continually follows the current regulatory developments and therefore the review and calibration of the leverage ratio by the EBA as well. Within the framework of the introduction of CRR II, we expect a binding introduction as part of Pillar 1.

The introduction of indicators will allow the bank to further develop its processes for monitoring the leverage ratio.

The following information is based on Commission Implementing Regulation (EU) 2016/200 as of February 15, 2016.

Table 34: LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

		Applicable amounts EUR million
1	Total assets as per published financial statements	**90,161**
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	–
3	(Adjustment for fiduciary assets recognized on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013)	–110
4	Adjustments for derivative financial instruments	–3,198
5	Adjustment for SFT	
6	Adjustment for off-balance-sheet items (ie conversion to credit equivalent amounts of off-balance-sheet exposures)	–358
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(7) of Regulation (EU) No 575/2013)	
EU-6b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)	–17
7	Other adjustments	–198
8	**Leverage ratio total exposure measure**	**86,280**

Table 35: LRCom: Leverage ratio common disclosure

		CRR leverage ratio exposures EUR million
	On-balance-sheet exposures (excluding derivatives and SFTs)	
1	On-balance-sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	89,136
2	(Asset amounts deducted in determining Tier 1 capital)	–17
3	Total on-balance-sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	**89,119**
	Derivative exposures	
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	9
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	1,498
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	–4,705
11	Total derivatives exposures (sum of lines 4 to 10)	**–3,198**
	Other off-balance-sheet exposures	
17	Off-balance-sheet exposures at gross notional amount	717
18	(Adjustments for conversion to credit equivalent amounts)	–358
19	Other off-balance-sheet exposures (sum of lines 17 and 18)	**359**
	Capital and total exposure measure	
20	Tier 1 capital	4,298
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	**86,280**
	Leverage ratio	
22	Leverage ratio	4.98
	Choice of transitional arrangements and amount of derecognized fiduciary items	
EU-23	Choice on transitional arrangements for the definition of the capital measure	yes = transitional
EU-24	Amount of derecognized fiduciary items in accordance with Article 429 (11) of Regulation (EU) No 575/2013	

Rentenbank's promotional business is a significant influencing factor on the leverage ratio.

Table 36: LRSpl: Split-up of on-balance-sheet exposures (excluding derivatives, SFT, and exempted exposures)

		CRR leverage ratio exposures EUR million
EU-1	Total on-balance-sheet exposures (excluding derivatives, SFT, and exempted exposures), of which:	84,431
EU-3	Banking book exposures, of which:	84,431
EU-4	Covered bonds	12,101
EU-5	Exposures treated as sovereigns	29,898
EU-7	Institutions	41,052
EU-10	Corporate	1
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	1,379

In the last quarter, there were no changes to the leverage ratio compared with September 30, 2018.

14. Indicators of Global Systemic Importance (Art 441 CRR)

Rentenbank is not a global systemically important institution.

15. Operational Risk (Art 446 CRR)

During the year under review, the operational risk for supervisory purposes was calculated based on the basic indicator approach in accordance with Art 315 CRR. The risk-weighted assets for the operational risk as at December 31, 2018 amounted to EUR 655 million (EUR 663 million in 2017).

16. Exposures in Participations not included in the Trading Book (Art 447 CRR)

The participations we hold are in line with Rentenbank's promotional mandate. The investment strategy focus is on promotional lending, not on profit maximization. The strategic participations are established by acquiring capital interests. Due to the fact that the business activities of its subsidiaries are very limited and because of the letter of comfort issued to LR Beteiligungsgesellschaft mbH, all material risks rest with Rentenbank which manages them at group level.

Participations are carried at acquisition costs less any possible write-downs at the lower fair value in the event of anticipated permanent value mitigation. In the event of write-downs to participations, the requirement to reverse write-downs when the reasons for them no longer exist according to section 253 (5) sentence 1 HGB will be observed: if the reasons for write-downs in previous years no longer exist at the reporting date, the write-back on the participation is implemented at an amount that is no more than the acquisition costs.

A reliable calculation of the fair value of the participations and investments in affiliated companies is not possible and/or are of minor significance due to uncertain forecasting of future cash flows and/or lack of specific market values.

Rentenbank holds participations in the amount of EUR 173 million and investments in affiliated companies in the amount of EUR 8 million. Participations and investments in affiliated companies do not include marketable securities.

In the year under review, there were no realized gains or losses from disposals and liquidation. Unrealized gains from participations in the amount of EUR 1 million. These amounts are not included in the Common Equity Tier 1 capital.

17. Exposure to Interest Rate Risk on Positions not included in the Trading Book (Art 448 CRR)

Rentenbank discloses information on interest rate risks in the banking book pursuant to Section 25 (2) KWG and/or Section 6 (3) of the German Regulation on Financial Information and Information on the Risk-Bearing Capacity (Annex 13 to *Finanz- und Risikotragfähigkeitsinformationenverordnung, FinaRisikoV)*. Rentenbank applies the group waiver rule pursuant to Article 7 (3) CRR.

As a non-trading book institution, Rentenbank has allocated all transactions to the banking book. The bank calculates the interest rate risk in the banking book in accordance with the regulatory requirements. This involves examining whether the negative change of the present value exceeds 20% of total own funds. Rentenbank is already monitoring and complying with the reporting threshold of 15 % under the amended EBA procedure which will be applicable from June 2019.

Furthermore, the bank calculates the impact of six standardized interest rate shock scenarios on the net interest income (NII) over the coming 12 months. In this instance, the risk of the bank having a surplus in interest with a change to the interest rate curve of – 200 BP is at its highest.

The relevant exposures are allocated to maturity bands, separately for assets and liabilities. A net position is determined for each maturity band. The respective net positions are subsequently multiplied using weighting factors determined by the German Federal Financial Supervisory Authority (BaFin) for each maturity band and the net positions are summed to give a weighted total net position. The result represents the estimated change in the present value. Existing capital is not taken into account pursuant to the regulatory requirements. Early repayments of loans are taken into account for the period up to the contractual maturity. No further assumptions were made as to early repayments of loans. Non-maturity customer deposits are not of material significance to Rentenbank and are not taken into account. The calculation of the present value does not take into account items that are not subject to interest rate risks, such as participations, property and equipment, intangible assets, other assets, and other liabilities.

As of the reporting date, a risk value in the event of interest rates rising by 200 bps amounted to EUR 425 million (EUR 345 million in 2017). The ratio based on regulatory own funds amounted to 9.4 % (7.7 % in 2017). At no point during 2018 or 2017 did the ratio or early warning indicator exceed 20 % or 15 % respectively.

A breakdown of the results by currency from the above-mentioned interest rate risks in the banking book is not provided as the bank generally does not enter into open currency positions. Open currency exposures only result from small balances on nostro accounts. Exchange rate risks from foreign currency loans or issues of securities denominated in foreign currencies are hedged through currency derivatives or offsetting transactions recognized in the balance sheet. No material risk was identified for any currency.

18. Exposure to Securitization Positions (Art 449 CRR)

As of the reporting date of December 31, 2018 the bank does not have holdings in securitization positions.

19. Liquidity Risk (Art 435 CRR)

The disclosure tables below are based on the EBA guidelines on liquidity coverage ratio (LCR) disclosure (EBA/GL/2017/01) in conjunction with the BaFin circular on disclosing LCR to complement the disclosure of the liquidity management under Article 435.

The illustration is effected on a quarterly basis as a simple average of the previous 12 months based on the unweighted and weighted amounts of the respective reports.

Table 37: EU LIQ1-LRC: Disclosure template

		Total unweighted value (average)				Total weighted value (average)			
Scope of consolidation (consolidated) Currency and units EUR million									
Quarter ending on		Mar. 31, 2018	June 30, 2018	Sept. 30, 2018	Dec. 31, 2018	Mar. 31, 2018	June 30, 2018	Sept. 30, 2018	Dec. 31, 2018
Number of data points used in the calculation of averages		12	12	12	12	12	12	12	12
High-Quality Liquid Assets									
1	Total high-quality liquid assets (HQLA)					23,655	24,190	26,496	25,116
Cash – Outflows									
2	Retail deposits and deposits from small business customers, of which:								
3	*Stable deposits*								
4	*Less stable deposits*								
5	Unsecured wholesale funding	4,540	4,682	4,376	4,235	4,416	4,557	4,264	4,116
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks								
7	Non-operational deposits (all counterparties)	258	257	232	253	133	132	120	133
8	Unsecured debt	4,283	4,425	4,144	3,982	4,283	4,425	4,144	3,982
9	Secured wholesale funding								
10	Additional requirements	4,296	3,979	3,737	3,729	2,181	1,958	1,750	1,812
11	Outflows related to derivative exposures and other collateral requirements	1,946	1,733	1,529	1,599	1,946	1,733	1,529	1,599
12	Outflows related to loss of funding on debt products								
13	Credit and liquidity facilities	2,351	2,246	2,208	2,129	235	225	221	213
14	Other contractual funding obligations	34	33	36	46	34	33	36	46
15	Other contingent funding obligations	1	1	1	1	1	1	1	1
16	**Total cash outflows**					**6,631**	**6,549**	**6,051**	**5,975**
Cash – Inflows									
17	Secured lending (e.g. reverse repos)	13	3	2	0	13	3	2	0
18	Inflows from fully performing exposures	985	829	699	577	983	827	697	575
19	Other cash inflows	740	588	651	658	740	588	651	658
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)								
EU-19b	(Excess inflows from a related specialised credit institution)								
20	**Total cash inflows**	**1,739**	**1,420**	**1,352**	**1,235**	**1,737**	**1,418**	**1,350**	**1,233**
EU-20a	Fully exempt inflows								
EU-20b	Inflows subject to 90 % cap								
EU-20c	Inflows subject to 75 % cap	1,739	1,420	1,352	1,235	1,737	1,418	1,350	1,233
						Total adjusted value			
21	**Liquidity Buffer**					**23,655**	**24,190**	**26,496**	**25,116**
22	**Total net cash outflows**					**4,894**	**5,130**	**4,701**	**4,742**
23	**Liquidity coverage ratio (%)**					**483**	**471**	**564**	**530**

Inflows from special promotional loans and outflows from ECPs and global bonds primarily give rise to significant fluctuations in the bank's ratio.

The bank takes account of additional outflows from derivatives in line with the historical look-back approach (HLBA). In 2018, it was at EUR 1,593 million on average.

Liquidity risks are fully hedged in securities in foreign currencies.

Appendices to the 2018 Disclosure Report

Appendix 1: Number of executive or supervisory directorships held by members of the management body (as of 1 April 2019)

Number of executive or supervisory directorships held by members of the Management Board

	Number of managerial roles	Number of supervisory roles
Dr Horst Reinhardt	1	3
Hans Bernhardt	1	1
Dietmar Ilg	1	1

Number of executive or supervisory directorships held by members of the Supervisory Board

	Number of managerial roles	Number of supervisory roles
Joachim Rukwied	0	9
Julia Klöckner	0	2
Udo Folgart	1	1
Werner Hilse	0	1
Bernhard Krüsken	0	4
Brigitte Scherb	0	2
Werner Schwarz	0	5
Manfred Nüssel	0	5
Dr Werner Hildenbrand	0	2
Dr Till Backhaus, Member of the *Landtag* (State Parliament)	0	2
Priska Hinz, Member of the *Landtag* (State Parliament)	0	3
Barbara Otte-Kinast	0	2
Harald Schaum	0	5
Dr Hermann Onko Aeikens	0	1
Dr Marcus Pleyer	0	2
Michael Reuther	1	4
Dr Birgit Roos	1	4
Dr Caroline Toffel	1	1

The statements also contain mandates

- which fall under the privileged status of section 25c (2) sentence 3 KWG and/or section 25d (3) sentence 3 ad 6 KWG or
- which enjoy grandfathering according to section 64r (13) sentence 1 and/or (14) sentence 1 KWG

and which are therefore not taken into account when calculating the maximum number of mandates permitted.

Appendix 2: Supervisory Board (as of 1 April 2019)

The members of the Remuneration Committee (RC) are identified as such with RC after their names.

Chairman:

Joachim Rukwied (RC Chairman)
President of the German Farmers' Association (DBV), Berlin

Deputy chairwoman:

Julia Klöckner (RC deputy chairwoman)
Federal Minister for Food and Agriculture, Berlin

Representatives of the German Farmers' Association:

Udo Folgart
Honorary President of the Farmers' Association of Brandenburg, Teltow/Ruhlsdorf

Brigitte Scherb
President of the German Rural Women's Association, Berlin

Werner Hilse
The Farmers' Association of Lower Saxony, Hanover

Werner Schwarz (RC)
President of the Farmers' Association of Schleswig-Holstein, Rendsburg

Bernhard Krüsken (RC)
Secretary General of the German Farmers' Association, Berlin

Representative of the German Raiffeisen Association:

Manfred Nüssel (RC)
Honorary President of the German Raiffeisen Association, Berlin

Representative of the Food Industry:

Dr Werner Hildenbrand
Deputy Chairman of the Federation of German Food and Drink Industries, Berlin

State Ministers of Agriculture:

Mecklenburg-Western Pomerania:
Dr Till Backhaus, Member of the Landtag (State Parliament)
Minister for Agriculture and the Environment, Schwerin

Lower Saxony:
Barbara Otte-Kinast
Minister for Food, Agriculture and Consumer Protection, Hanover

Hesse:
Priska Hinz, Member of the Landtag (State Parliament)
Minister for the Environment, Climate Protection, Agriculture and Consumer Protection, Wiesbaden

Representative of the Trade Unions:

Harald Schaum (RC)
Deputy Federal Chairman of the Industrial Union for Construction, Agriculture and Environment (IG BAU), Frankfurt am Main

Representative of the Federal Ministry of Food and Agriculture:

Dr Hermann Onko Aeikens
State Secretary, Berlin

Representative of the Federal Ministry of Finance:

Dr Marcus Pleyer (RC)
Head of Directorate, Berlin

Representatives of credit institutions or other lending experts:

Michael Reuther
Member of the Management Board of Commerzbank AG, Frankfurt am Main

Dr Birgit Roos
Chief Executive Officer of the Management Board of Sparkasse Krefeld, Krefeld

Dr Caroline Toffel
Member of the Management Board of Berliner Volksbank eG, Berlin

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