

# Qualitative Disclosure of RZB Credit-Institution Group 2013

Qualitative Disclosure of Raiffeisen Zentralbank Österreich Aktiengesellschaft  
pursuant to Article 26 Austrian Banking Act (BWG) in accordance with Disclosure  
Regulation (OffV) as of 31/12/2013



# Introduction

With this document, Raiffeisen Zentralbank Österreich Aktiengesellschaft (RZB) fulfils one part of its disclosure requirements under § 26 Austrian Banking Act (BWG) in connection with the Disclosure Regulation (Offenlegungsverordnung, OffV). This part basically covers the **qualitative** information that is needed for understanding how the Standardised Approach and the Internal Ratings-based Approach for Credit Risk are implemented.

All other disclosure requirements, particularly those of a **quantitative** nature, are covered in an own document "Quantitative disclosure of RZB Credit Institution Group". This document is available as a bound document and can be viewed at or downloaded from the RZB homepage ([www.rzb.at](http://www.rzb.at)). It is published at the time of the official release of RZB's Annual Reports.

The information is based on the valid regulations on a consolidated basis for the RZB Credit Institution Group at the time this document has been published. The information is simultaneously valid for the credit institution group of Raiffeisen-Landesbanken-Holding GmbH, Vienna, as requested in § 26a (2) of the Austrian Banking Act. This financial holding is the ultimate parent of RZB.

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## Qualitative Disclosure of the RZB Credit Institution Group Version 1.0

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### **Supervisory Authorities:**

As a credit institution, Raiffeisen Zentralbank Österreich AG is subject to supervision by the Austrian Federal Ministry of Finance, the Austrian National Bank (OeNB) and the Austrian Financial Market Authority (FMA) and must comply with pertinent legal regulations, in particular the Austrian Banking Act (Bankwesengesetz, BWG) and the Austrian Securities Supervision Act (Wertpapieraufsichtsgesetz, WAG)

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# § 2 OffV – Risk Management

Active risk management is a core competency of RZB. In order to effectively identify, measure, and manage risks the Group continues to develop its comprehensive risk management system. Risk management is an integral part of overall bank management. In particular, in addition to legal and regulatory requirements, it takes into account the nature, scale, and complexity of the business activities and the resulting risks. The risk report describes the principles and organization of risk management and explains the current risk exposures in all material risk categories.

## Risk Management Principles

RZB has a system of risk principles and procedures in place for measuring and monitoring risk, which is aimed at controlling and managing material risks at all banks and specialist companies in the Group. The risk policies and risk management principles are laid out by the Management Board of Raiffeisen Zentralbank. The principles include the following risk policies:

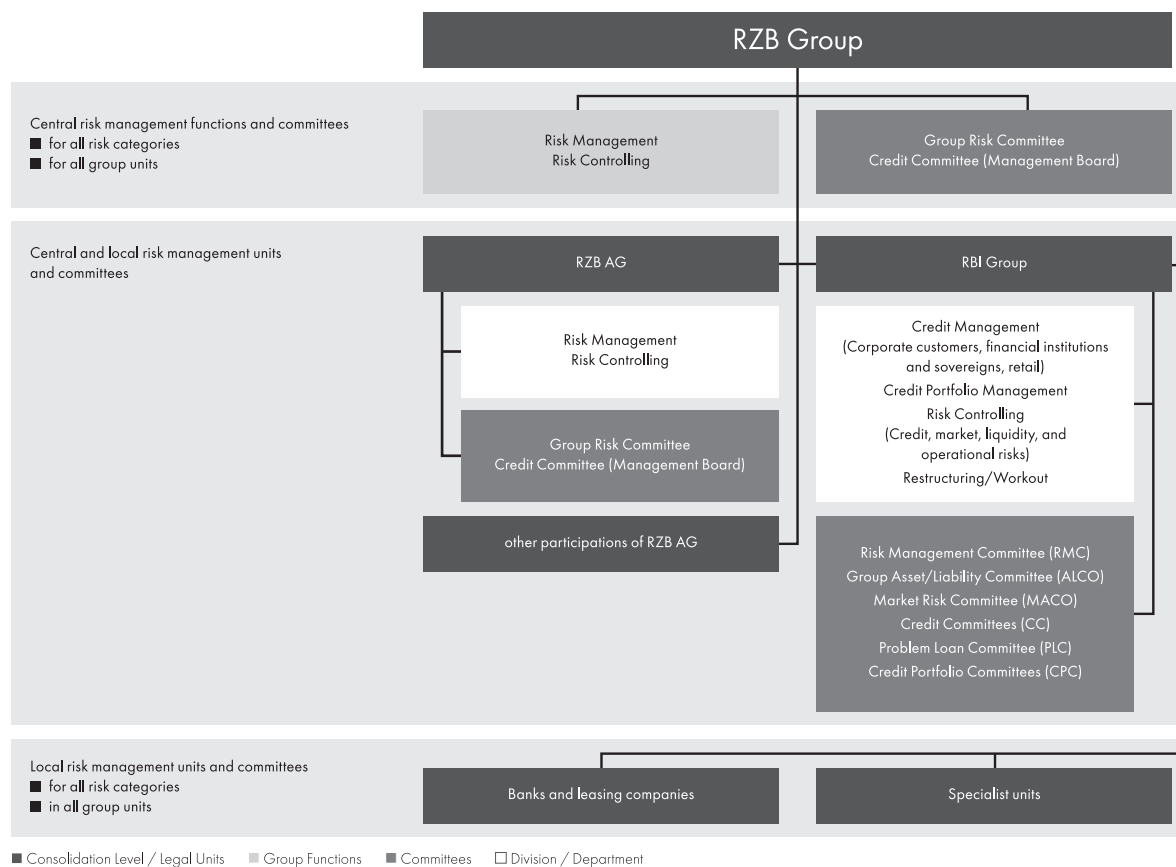
- Integrated risk management: Credit and country risks, participation, market, liquidity, and operational risks are managed as main risks on a Group-wide basis. For this purpose, these risks are measured, limited, aggregated, and compared to available risk coverage capital.
- Standardized methodologies: Risk measurement and risk limitation methods are standardized Group-wide in order to ensure a consistent and coherent approach to risk management. This is efficient for the development of risk management methods and it forms the basis for consistent overall bank management across all countries and business segments.
- Continuous planning: Risk strategies and risk capital are reviewed and approved in the course of the annual budgeting and planning process, whereby special attention is also paid to preventing risk concentrations.
- Independent control: A clear personnel and organizational separation is maintained between business operations and any risk management or risk controlling activities.
- Ex ante and ex post control: Risks are consistently measured within the scope of product selling and in risk-adjusted performance measurement. Thereby it is ensured that business in general is conducted only under risk-return considerations and that there are no incentives for taking high risks.

Individual risk management units of the Group create detailed risk strategies, which set more concrete risk targets and specific standards in compliance with these general principles. The overall Group risk strategy is derived from the Group's business strategy and adds risk relevant aspects to the planned business structure and strategic development. These aspects include e.g. structural limits and capital ratio targets which have to be met in the budgeting process and which frame upcoming business decisions. More specific targets for individual risk categories are set in detailed risk strategies. The credit risk strategy of RZB, for instance, sets credit portfolio limits for individual countries and segments and defines the credit approval authority for limit applications.

## Organization of risk management

The Management Board of Raiffeisen Zentralbank ensures the proper organization and ongoing development of risk management. It decides which procedures are to be employed for identifying, measuring, and monitoring risks, and makes steering decisions according to the created risk reports and analyses. The Management Board is supported in implementing these tasks by independent risk management units and special committees.

Basically, risk management functions are performed on different levels in the Group. Raiffeisen Zentralbank as the parent credit institution concluded several Service Level Agreements with risk management units of RBI AG which develop and implement the relevant concepts in coordination with the subsidiaries of the Group. The central risk management units are responsible for the adequate and appropriate implementation of the Group's risk management processes. In particular, they establish common Group directives and set business-specific standards, tools, and practices for all Group entities.



In addition, local risk management units are established in the different Group entities. They implement the risk policies for specific risk types and take active steering decisions within the approved risk budgets in order to achieve the targets set in the business policy. For this purpose, they monitor resulting risks using standardized measurement tools and report them to central risk management units via defined interfaces.

The central Risk Controlling division assumes the independent risk controlling function required by banking law. Amongst others, this division is responsible for developing the Group-wide framework for overall bank risk management (integrating all risk types) and preparing independent reports on the risk profile for the Management Board and the heads of individual business units. It also measures required risk coverage capital for different Group units and calculates the utilization of the allocated risk capital budgets in the internal capital adequacy framework.

## Risk committees

The Group Risk Committee is the highest decision-making body for all risk-relevant issues at RZB. It determines the risk management methods and steering concepts to be implemented for the Group as a whole and its key parts. These include risk tolerance, various risk budgets, limits at overall Bank level and monitoring the current risk situation, with appropriate management measures. The Risk Management Committee is responsible for ongoing development and implementation of methods and parameters for risk quantification models and for refining steering instruments. The committee also analyzes the current risk situation with respect to internal capital adequacy and the corresponding risk limits. It approves risk management and controlling activities (like the allocation of risk capital) and advises the Management Board in these matters.

The Market Risk Committee controls market risks of trading and banking book transactions of RZB and establishes corresponding limits and processes. In particular, it relies on profit and loss reports, the amount of risks taken and the limit utilization, as well as the results of scenario analyses and stress tests with respect to market risks for controlling.

The Credit Committees are staffed by front office and back office divisions with different participants depending on the customer segment (corporate customers, financial institutions, sovereigns and retail). They decide upon the specific lending criteria for different customer segments and countries. And they approve all credit decisions concerning them according to the credit approval authority (depending on rating and exposure size).

The Group Asset/Liability Committee assesses and manages statement of financial position structure and liquidity risks and performs in this context key functions relating to refinancing planning and determining measures for safeguarding against structural risks.

The Credit Portfolio Committees define the credit portfolio strategies for different customer segments. In these committees, representatives from business and risk management divisions together discuss the risks and opportunities of different customer segments (e.g. industries, countries, retail products). Based on the discussion, credit portfolio management then develops lending policies and sets limits steering the future credit portfolio.

The Problem Loan Committee (PLC) is the most important committee in the judgment and decision-making process concerning problem loans. It comprises first-class decision making bodies (members of the Management Board of RBI and RZB) and its chairman is the Chief Risk Officer (CRO) of RBI. Further members with voting rights are those members of the Management Board responsible for the customer divisions, the Chief Financial Officer (CFO) and the relevant division and department managers from risk management and workout.

The Operational Risk Management Committee comprises representatives of the business divisions (retail, market and corporate customers) and representatives from Compliance, Fraud Management, Internal control system (IKS), Operations, Human Resources, Security and Risk Controlling, under chairmanship of the CRO. This committee is responsible for controlling operational risk of RZB. It derives and sets the operational risk strategy from the risk profile and the business strategy and also makes decisions regarding measures and risk acceptance.

## Quality assurance and auditing

Quality assurance with respect to risk management refers to ensuring the integrity, soundness, and accuracy of processes, models, calculations, and data sources. This should make sure that the Group adheres to all legal requirements and that it can achieve the highest standards in risk management related operations.

All these aspects are coordinated by the central division Organization & Internal Control System which continuously analyzes the internal control system and – if actions are necessary for closing any deficiencies – is also responsible for tracking their implementation.

Two very important functions in assuring independent oversight are performed by the divisions Audit and Compliance. Independent internal auditing is a legal requirement and a central pillar of the internal control system. Audit periodically assesses all business processes and contributes considerably to securing and improving them. It sends its reports directly to the Management Board of Raiffeisen Zentralbank which discusses them on a regular basis in its board meetings.

The Compliance Office is responsible for all issues concerning compliance with legal requirements in addition to and as integral part of the internal control system. Therewith, the compliance of existing regulations in daily operations is monitored.

Moreover, an independent and objective audit, free of potential conflicts, is carried out during the audit of the annual financial statements by the auditing companies. Finally, RZB is continuously supervised by the Austrian Financial Markets Authority and by local supervisors in those countries, where RZB is represented by branches or subsidiaries.

## Overall bank risk management

Maintaining an adequate level of capital is a core objective of risk management at RZB. Capital requirements are monitored regularly based on the actual risk level as measured by internal models, and in choosing appropriate models the materiality of risks is taken into account. This concept of overall bank risk management provides for capital requirements from a regulatory point of view (sustainability and going concern perspective) and from an economic point of view (target rating perspective). Thus it covers the quantitative aspects of the internal capital adequacy assessment process (ICAAP) as required by Basel II (Pillar 2) regulations. The full ICAAP process of RZB is audited during the supervisory review process for RZB credit institution group (RZB-Kreditinstitutsgruppe) by the Austrian Financial Markets Authority on an annual basis.

Objective	Description of risk	Measurement technique	Confidence level
<b>Target rating perspective</b>	Risk of not being able to satisfy claims of the Group's senior debt holders	Unexpected losses on an annual basis (economic capital) must not exceed the present value of equity and subordinated liabilities	99.95 per cent as derived from the target rating
<b>Going concern perspective</b>	Risk of not meeting the regulatory capital requirement	Risk-taking capacity (projected earnings plus capital exceeding regulatory requirements) must not fall below the annualized value-at-risk of the Group	95 per cent reflecting the owners' willingness to inject additional own funds
<b>Sustainability perspective</b>	Risk of falling short of a sustainable core capital ratio over a full business cycle	Capital and loss projection for the three-year planning period based on a severe macroeconomic downturn scenario	70-90 per cent based on the management decision that the Group might be required to temporarily reduce risks or raise additional core capital

### Target rating perspective

Risks in the target rating perspective are measured based on economic capital which represents a comparable measure across all types of risks. It is calculated as the sum of unexpected losses stemming from different Group units and different risk categories (credit, participation, market, liquidity, macroeconomic and operational risk as well as risk resulting from other tangible assets). In addition, a general buffer for other risks not explicitly quantified is held.

RZB uses a confidence level of 99.95 per cent for calculating economic capital. This confidence level is derived from the probability of default implied by the target rating. The objective of calculating economic capital is to determine the amount of capital that would be required for servicing all of the claims of customers and creditors even in the case of such an extremely rare loss event.

During the year, the economic capital of RZB decreased to € 8,745,239 thousand. The highest decreases were reported due to methodical changes in credit risk of the asset class private individuals and in credit risk of the asset class sovereigns. The highest risk of RZB is now in credit risk of the asset class corporate customers which accounts for around 32 per cent (2012: 26 per cent) of total risk. In total, credit risk is responsible for about 66 per cent (2012: 65 per cent) of economic capital. Market risk accounts for 7 per cent (2012: 8 per cent) and operational risk for 8 per cent (2012: 9 per cent). In addition, a general risk buffer for other risks of unchanged 5 per cent of the calculated economic capital is added.

The economic capital is compared to internal capital, which mainly denotes equity and subordinated capital of the Group. This capital form serves as a primary provision for risk coverage for servicing claims of senior debtors if the bank should incur losses. Total utilization of available risk capital (the ratio of economic capital to internal capital) was 64.5 per cent at year-end (2012: 71 per cent).

Economic capital is an important instrument in overall bank risk management. Economic capital limits are allocated to individual business segments during the annual budgeting process and are complemented for day-to-day management by volume, sensitivity, or value-at-risk limits. This planning is done on a revolving basis for the upcoming three years and incorporates the future development of economic capital as well as available internal capital. Economic capital thus substantially influences the plans for future lending activities and the overall limit for taking market risks.

Risk-adjusted performance measurement also is based on this risk measure. The profitability of business units is set in relation to the amount of economic capital attributed to these units (risk-adjusted return on risk-adjusted capital, RORAC), which yields a comparable performance measure for all business units of the Group. This measure is used in turn as a key figure for overall bank management, for future capital allocations to business units, and influences the compensation of the Group's executive management.

### Going-concern perspective

Parallel to the target rating perspective, internal capital adequacy also is assessed with focus on the uninterrupted operation of the Group on a going concern basis. In this perspective, risks again are compared to risk taking capacity – now with a focus on regulatory capital and minimum capital requirements. Already during the year 2012, the calculation was updated with regard to the regulations of Basel III.

In line with this target, risk taking capacity is calculated as the amount of expected profits, expected impairment losses, and the excess of own funds (taking into account various limits on eligible capital). This capital amount is compared to the overall value-at-risk (including expected losses). Quantitative models used in the calculation thereof are mostly comparable to the target rating perspective, (albeit on a lower 95 per cent confidence level). Using this perspective the Group ensures adequate regulatory capitalization (going concern) with the given probability. In 2013 this objective has been continuously met on Group level.

### Sustainability perspective

The main goal of the sustainability perspective is to ensure that RZB can maintain a sufficiently high core capital ratio at the end of the multi-year planning period also in a severe macroeconomic downturn scenario. This analysis is based on a multi-year macroeconomic stress test where hypothetical market developments in a severe but realistic economic downturn scenario are simulated. The risk parameters considered are amongst others: interest rates, foreign exchange rates and securities prices, as well as changes in default probabilities and rating migrations in the credit portfolio.

The main focus of this integrated stress test is the resulting core capital ratio at the end of the multi-year period. It should not fall below a sustainable level and thus neither requires the bank to substantially increase capital nor to significantly reduce business activities. The current minimum amount of core capital thus is determined by the size of the potential economic downturn. In this downturn scenario the need for allocating loan loss provisions, potential pro-cyclical effects that increase minimum regulatory capital requirements, the impact of foreign exchange fluctuations as well as other valuation and earnings effects are incorporated.

This perspective thus also complements traditional risk measurement based on the value-at-risk concept (which is in general based on historic data). Therefore it can incorporate exceptional market situations that have not been observed in the past and it is possible to estimate the potential impact of such developments. The stress test also allows for analyzing risk concentrations (e.g., individual positions, industries, or geographical regions) and gives insight into the profitability, liquidity situation, and solvability under extreme situations. Based on these analyses risk management in RZB enhances portfolio diversification, for example via limits for the total exposure of individual industry segments and countries and through ongoing updates to its lending standards.

## Risk categories

### Credit risk

In RZB, credit risk stems mainly from default risks that arise from business with retail and corporate customers, other banks and sovereign borrowers. It is by far the most important risk category in RZB, as also indicated by internal and regulatory capital requirements. Credit risk thus is analyzed and monitored both on an individual loan and customer basis as well as on a portfolio basis in the Group. Credit risk management and lending decisions are based on the respective credit risk policies, credit risk manuals, and the corresponding tools and processes which have been developed for this purpose.

The internal control system for credit risks includes different types of monitoring measures, which are tightly integrated into the workflows to be monitored – from the customer's initial credit application, to the bank's credit approval, and finally to the repayment of the loan.

### Limit application process

No lending transaction is performed in the non-retail segments without running through the limit application process beforehand. This process is also consistently applied – besides new lending – to increases in existing limits, roll-overs, overdrafts, and if changes in the risk profile of a borrower occur (e.g., with respect to the financial situation of the borrower, the terms and conditions, or collateral) compared to the time the original lending decision was made. In addition it is used when setting counterparty limits in treasury and investment banking operations, other credit limits, and for equity participations.

Credit decisions are made within the context of a hierarchical competence authority scheme depending on the type and size of a loan. It always requires the approval of the business and the credit risk management divisions for individual limit decisions or when performing regular rating renewals. If the individual decision-making parties disagree, the potential transaction will have to be decided upon by the next higher-ranking credit authority.

The whole limit application process is based on defined uniform principles and rules. Account management for multinational customers doing business simultaneously with more than one member of RBI, is supported by the Global Account Management System, for example. This is made possible by Group-wide unique customer identification in non-retail asset classes.

The limit application process in the retail division is stronger automated due to the high number of applications and lower exposure amounts. Limit applications often are assessed and approved in central processing centers based on credit score cards. This process is facilitated by the respective IT systems.



## Credit portfolio management

Credit portfolio management in RZB is, amongst others, based on the credit portfolio strategy. This strategy limits the exposure amount in different countries, industries or product types and thus prevents undesired risk concentrations. On top of that, analyzing the long-term potential of different markets is a routine activity. This allows for an early strategic repositioning of future lending activities.

A more detailed credit portfolio analysis is based on individual customer ratings. Ratings are performed separately for different asset classes using internal risk classification models (rating and scoring models), which are validated by a central organization unit. Default probabilities assigned to individual rating grades are estimated for each asset class separately. As a consequence the default probability of the same ordinal rating grade (e.g., corporates 1.5, financial institutions A3, and sovereigns A3) is different between these asset classes.

Rating models in the main non-retail asset classes – corporates, financial institutions, and sovereigns – are uniform in all Group units and rank creditworthiness in 27 grades for corporate customers and 10 grades for financial institutions and sovereigns. For retail asset classes, country specific scorecards are developed based on uniform Group standards. Customer rating, as well as validation is supported by specific software tools (e.g., for business valuation, rating and default database).

Problem loans (where debtors might run into material financial difficulties or a delayed payment is expected) need special treatment. In non-retail divisions, problem loan committees in individual Group units make decisions on problematic exposures. If the need for intensified treatment and workout is identified, then problem loans are assigned either to a designated specialist or to a restructuring unit (workout department). Employees of the workout units are specially trained and have extensive experience. They typically handle medium-sized to large cases and are assisted by in-house legal departments or by external specialists as well. Workout units play a decisive role in accounting and analyzing as well as booking provisions for impairment losses (write-offs, value adjustments or provisioning). Their early involvement can help reduce losses resulting from problem loans.

Problem loan management standards in the retail area comprise the whole restructuring and collection process for private individuals and small and medium-sized entities. A restructuring guideline defines the Group's restructuring framework including uniform strategy, organization, methods, monitoring and controlling. In the workout process customers are classified into three categories "early," "late," and "recovery," for which a standardized customer handling process is defined.

## Country risk

Country risk includes transfer and convertibility risks as well as political risk. It arises from cross-border transactions and direct investments in foreign countries. RZB is exposed to this risk due to its strong business activities in the Central and Eastern European markets. In these markets political and economic risks to some extent are still seen as comparatively significant.

Active country risk management in RZB is based on the country risk policy which is set by the Management Board. This policy is part of the credit portfolio limit system and sets a strict limitation on cross-border risk exposure to individual countries. Consequently, in day-to-day work, business units have to submit limit applications for the respective countries for all cross-border transactions in addition to the limit applications for a customer. The limit size for individual countries is set by using a model which takes into account the internal rating for the sovereign, the size of the country, and RZB's own capitalization.

Country risk also is reflected via the internal funds transfer pricing system in product pricing and in risk-adjusted performance measurement. Business units therefore can benefit from country risk mitigation by seeking insurance (e.g. from export credit insurance organizations) or guarantors in third countries. The insights gained from the country risk analysis are not only used for limiting the total cross-border exposure, but also for limiting the total credit exposure in each individual country (i.e. including the exposure that is funded by local deposits). Thereby RZB realigns its business activities according to the macro-economic development within different markets and enhances the broad diversification of its credit portfolio.

Stress tests finally simulate the impact of severe crises in selected countries and regions on the Group's financial performance. These stress tests underline the special importance of this topic in risk management in RZB.

## Participation risk

The banking book also contains risks arising from listed and unlisted equity participations. They are described separately under this risk heading. Risks stemming from subsidiaries that are strategically and operatively controlled by RZB are not considered in this risk category because these risks are precisely measured and reported under the other risk headings during consolidation. Most of the direct and indirect participations of RZB are fully consolidated in the Group's statement of financial position (e.g. network banks, network leasing companies) and therefore subject to the 'look through' approach. Risks arising from such participations are managed by applying controlling-, measurement-, and monitoring-tools as described for the other risk categories.

Participation risk and counterparty credit risk have similar roots: a deteriorating financial situation on equity participations is mostly reflected in a rating downgrade (or default) of the respective entity. The methodology of RZB used for measuring value-at-risk and internal capital requirements of equity participations nonetheless is comparable to the methodology used to measure price risk arising from positions in stocks. However, in the light of the longer-term strategic nature of equity participations, annual volatilities based on observation periods of several years (instead of daily price changes) are used in the calculation.

More information on this risk category is provided in chapter Article 13 OffV Equity exposures not held in the trading book.

## Market risk

Organisation and management of market risks is explained in detail in chapters Article 11 OffV Internal models for limiting market risks and Article 14 OffV Interest rate risk in the banking book.

## Liquidity risk

Banks perform maturity transformation as an important role for international financial markets. The need for maturity transformation arises from the needs of depositors to access their funds within short notice and the opposite need of borrowers for long-term loans. This function constantly results in positive or negative liquidity gaps for different maturities that are managed through transactions with other market participants under normal market conditions.

Liquidity management, i.e. ensuring that the Group maintain its ability to pay at all times, is performed both centrally by the Treasury division in Vienna and on a decentralized basis by local banking subsidiaries. Cash flows are calculated and analyzed by currency on a periodical basis in an internal monitoring system. Based on this data, the Group creates liquidity balances, and analyzes whether the Group conforms to legal regulations on liquidity positions and defined internal liquidity limits. Liquidity analyses also include simulations on defined market or name specific liquidity crises in scenario-based cash flow forecasts. All these analyses are discussed in the Group Asset/Liability Committee. RZB possesses all instruments for liquidity risk management required by the liquidity risk management directive (amongst others a sufficiently large liquidity buffer, stress tests based on different scenarios, and liquidity contingency plans).

The Austrian liquidity risk management directive, which implements the principles developed by the Committee of European Banking Supervision (CEBS) in Austria, became effective on 31. December 2011. RZB had already established the now mandatory instruments for liquidity risk management (amongst others a sufficiently large liquidity buffer, stress tests based on different scenarios, and liquidity contingency plans). Additional regulatory changes in the liquidity risk area will be defined in Basel III. As far as it is possible to estimate the new liquidity ratios based on the still preliminary rules, RZB appears to be well prepared for the new regulations.

Internal limits have been established in each Group unit in order to limit liquidity risk. They require a positive short-term liquidity gap based on the internal liquidity model. The Group holds sizeable amounts of liquid securities and favors assets eligible in tender transactions in the lending business in order to ensure liquidity in various currencies. In the case of a liquidity shortage in the Group, contingency plans would come into force. Such prioritized action lists for handling short-term liquidity needs (also with regard to the publicity impact) exist for all major Group units.

Funding liquidity risk is mainly driven by changes in the risk strategy of lenders or by a rating downgrade of a bank that needs external funding. Funding rates and supply rise and fall with credit spreads, which change due to the market- or bank-specific situation.

As a consequence, long-term funding depends on restoring confidence in banks and the increased effort in collecting customer deposits. RZB funds itself's by money and capital market transactions, on the one hand, and from the network banks' retail business. RZB is the central liquidity clearing unit for the Austrian Raiffeisen Banking Group and for the local Group units in Central and Eastern Europe.

In RZB's funding plans, special attention is paid to a diversified structure of funding to mitigate funding liquidity risk. In the Group, funds are not only raised by RBI AG as the largest single institution, but also individually by different banking subsidiaries. Those efforts are coordinated and optimized through a joint funding plan. Moreover, RZB arranges medium-term and long-term funding

for its subsidiaries through syndicated loans, bilateral funding agreements with banks, and financing facilities of supranational institutions. These funding sources are based on long-term business relationships.

For managing and limiting liquidity risks, the targets for loan-/deposit ratios (the ratio of customer loans to customer deposits) in the individual network banks take into account the planned future business volumes as well as the feasibility for increasing customer deposit in different countries. On the one hand, this initiative reduces external funding requirements. On the other hand, it also reduces the need for internal funding operations and the risk associated with such liquidity transfers.

## Operational risk

Operational risk is defined as the risk of unexpected losses resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk. In this risk category internal risk drivers like unauthorized activities, fraud or theft, execution and process errors, or business disruption and system failures are managed. External factors such as damage to physical assets or consciously conducted human fraud are managed and controlled as well.

This risk category is analyzed and managed on the basis of own historical loss data and the results of self-assessments. Another management tool is the incentive system implemented in internal capital allocation. This system rewards high data quality and active risk management. Generally speaking, RZB implements a centralized and also decentralized system for operational risk management. In this process, a central operational risk management function defines all basic principles and minimum requirements, which then are implemented risk type specific in the individual local units.

As with other risk types the principle of firewalling between risk management and risk controlling is also applied to operational risk in RZB. Operational risk controlling units are mainly responsible for the implementation and refinement of methods for operational risk management in different Group units (e.g. performing self-assessment, defining and monitoring key risk indicators, etc.) and for reporting to the central operational risk controlling function. Business line managers are responsible for controlling and mitigating operational risks. They decide on pro-active operational risk steering actions, such as buying insurance, and the use of further risk mitigating instruments.

### Risk identification

Identifying and evaluating risky areas that might endanger the Group's existence if a loss occurs (but where losses are highly unlikely to be realized) and also areas where losses are more likely to happen frequently (but cause only smaller losses) are important tasks for controlling operational risks.

Operational risk self-assessment is executed in a structured and Group-wide uniform manner according to risk categories such as business processes and event types. Moreover, risk assessment applies to new products as well. All Group units grade the impact of high probability/low impact events and low probability/high impact incidents according to their estimation of the loss potential for the next year and in the next ten years in relation to profits. Low probability/high impact events are quantified by a Group-wide analytical tool with specific scenarios. Individual Group units furthermore run additional scenarios depending on their individual risk profile and local specifics.

### Monitoring

In order to monitor operational risks, key risk indicators (KRIs) are used that allow promptly identifying and mitigating operational risks. These are also specifically tailored to individual Group units. A common catalog of key risk indicators, which is defined by the Group head office for internal benchmarking purposes, is mandatory for all Group units.

Loss data is collected in a central database called ORCA (Operational Risk Controlling Application) in a structured manner and on a Group-wide basis according to the event type and the business line. Collecting losses stemming from operational risks is a prerequisite for implementing a statistical loss distribution model and a minimum requirement for implementing the regulatory Standardized Approach. Furthermore, loss data is used to create and validate operational risk scenarios and for exchange with international data pools to further develop advanced operational risk management tools as well as to track further on measures and control efficiency. Since 2010, RZB has been participant in the ORX data pool, whose data are currently used for internal benchmark purposes and analyses. The results of the analyses as well as events resulting from operational risks are reported in a comprehensive manner to the Group Risk Committee on a regular basis.

**Quantification and mitigation**

RZB currently calculates regulatory capital requirements for operational risks according to Basel II using the Standardized Approach (STA). This approach applies to all major Group units.

Operational risk reduction is initiated by business managers who decide on preventive actions like risk mitigation or risk transfer. Progress and success of these actions is monitored by risk controlling. The former also define contingency plans and nominate responsible persons or departments for initiating the defined actions if losses in fact occur. In addition, several dedicated organizational units provide support to business units for reducing operational risks. An important role is taken on by fraud management which reduces potential fraud related losses through proactive monitoring and preventive actions. RZB also executes an extensive staff training program and has different emergency plans and back-up systems in place.

# § 8 OffV – Use of the standardised Approach for Credit Risk

RZB Group utilises the external sovereign ratings from **Standard and Poor's, Moody's and Fitch Corporation** for the calculation under the standardised approach. For all other exposure classes, if available, the ratings of Standard and Poor's are applied.

In the case of securities items, external issuer ratings are applied for the equity calculation. If securities items are held to mitigate risk, the issue ratings are applied to determine the haircuts.

The external ratings applied are mapped to the credit quality steps (rating notches) defined in the standardised approach for credit risk in accordance with standard mapping pursuant to § 21b para 6 BWG and § 31 SolvaV:

Rating notch	Rating		
	Standard & Poor's	Moody's	Fitch
1	AAA	Aaa	AAA
1	AA+	Aa	AA+
1	AA	Aa1	AA
1	AA-	Aa2	AA-
1		Aa3	
2	A+	A1	A+
2	A	A2	A
2	A-	A3	A-
3	BBB+	Baa1	BBB+
3	BBB	Baa2	BBB
3	BBB-	Baa3	BBB-
4	BB+	Ba1	BB+
4	BB	Ba2	BB
4	BB-	Ba3	BB-
5	B+	B1	B+
5	B	B2	B
5	B-	B3	B-
6	CCC+	Caa1	CCC+
6	CCC	Caa2	CCC
6	CCC-	Caa3	CCC-
6	CC	Ca	CC
6	C	C	C
6	D		D
7	NR	NR	NR

# § 15 OffV – Securitisation

## The goals which the bank pursues with respect to its securitisation activities

As an originator, RZB Group concludes securitisation transactions with the aim to reduce regulatory or economic capital as well as to obtain funding. If RZB Group acts as arranger the generation of fee income is the aim. When also investing in securitisation exposure, RZB Group seeks to obtain interest income while achieving an attractive risk-/return profile.

## The roles of the Bank under a securitisation transaction

RZB Group acts as Originator and Servicer, Arranger, Investor Investor and Swap Counterparty

## The approaches used by the Bank to calculate the weighted exposure amount in relation to its securitisation activities

In those cases in which a member of the RZB Group invests into tranches of its own portfolios, such member uses the approach which is applied by the originating unit (irrespective of the general approach used by the booking unit). This rule is supported by respective information in the data loads. In cases when a securitization does not lead to effective risk transfer, the weighted exposure amount in relation to such transaction is not calculated.

Tranches which are not externally rated and which relate to portfolios, with respect to which the originating group unit uses the **IRB approach**, may be calculated using the Supervisory Formula Approach (SFA). Under this approach, the tranche will be either fully deducted from capital (where  $X \leq KIRB$ ) or, if  $X > KIRB$ , such tranche will be weighted with a risk weight which is derived by using the SFA-Formula and which amounts to at least 7%.

For all tranches, rated by two recognized ECA (according to EC-Directive 462/2013 of the European Parliament and of the Council of 21 May 2013) the ratings based approach is used. In this respect, all such tranches which carry a rating below the legal minimum rating, which are not rated or for which no alternative approach can be used will be deducted from capital.

For securitisation transactions, the RZB Group applies the respective regulations in accordance with International Financial Reporting Standards (IFRS), in particular SIC 12 together with IAS 27 concerning the possible consolidation of SPVs and IAS 39 for the applicable balance sheet reporting. IAS 39 governs in particular the approach regarding (de-)recognition of assets which are subject to true sale securitisations. In case of synthetic securitisations the instruments involved are financial guarantees or credit derivatives whereby the respective definitions are included in IAS 39. In this respect, received guarantees which represent financial guarantees will not be reported in the balance sheet of the originator whereby transactions which have, in substance, the form of a credit derivative, need to be reported in the IFRS balance sheet with their respective market values.

The following conclusions can be drawn in case of true sale securitisation transactions:

- Considering the inclusion of the SPV under the consolidated IFRS balance sheet, all transactions concluded so far have been treated on-balance-sheet (i.e. remaining in the group's consolidated total assets like a quasi funding transaction), no profit from sale of assets under the consolidated financial reports has been reported so far;
- As a further consequence of item a), any group unit which has invested into securitisation tranches of portfolios of other group units reports such tranches as intragroup receivables which are subject to consolidation of intercompany positions (i.e. on the liability side, the group reports a lower amount of securitisation debt)
- The synthetic securitisation transactions which have been entered into so far are reported as financial guarantees for the underlying loan receivables and are reflected in the IFRS financial statements in so far as no individual loan loss provisions are booked for receivables to the extent that such receivables are covered by the received guarantees (i.e. received collateral).

## Names of acknowledged Rating Agencies which are used for Securitisation Transactions

Moody's Investor Service, Fitch Ratings, DBRS, and Standard & Poor's.

# § 16 OffV – Disclosure applicable to the Internal Rating Based Approach

## 1. Approaches or Transition Arrangements Approved by the Competent Authorities

### 1.1. Approved Approaches

#### 1.1.1. Members of the Credit Institution Group that calculate Risk-weighted Exposure Amounts Using the Internal Ratings Based Approach at the consolidated and solo level

- Raiffeisen Zentralbank Österreich Aktiengesellschaft, Vienna(A)
- Raiffeisen Bank International AG, Vienna(A)
- RB International Finance (USA) LLC, New York (US)
- Raiffeisenbank a.s., Prague (CZ)
- Raiffeisen Bank Zrt., Budapest (H)
- Raiffeisen Malta Bank plc, Sliema (M)
- Tatra banka a.s., Bratislava (SK)
- Raiffeisen Bank S.A. (RO)

#### 1.1.2. Members of the Credit Institution Group that calculate Risk-weighted Exposure Amounts Using the Internal Ratings Based Approach at the consolidated level

- Raiffeisenbank Austria d.d., Zagreb (HR)
- ZAO Raiffeisenbank, Moscow (RU)

#### 1.1.3. Members of the Credit Institution Group and Exposure Classes for which Permanent Partial Use has been applied

1.1.3.1. Exposure classes referred to in point § 22b para. 2 items 1 and 2 BWG [Art. 86(1) (a) and (b) Dir. 2006/48/EC], where the number of material counterparties is limited and it would be unduly burdensome for the credit institution to implement a rating system for these counterparties – pursuant to § 22b para. 9 item 1 BWG [Art. 89 (1) (a) Dir. 2006/48/EC].

That includes the following exposures:

- Exposures to local and regional governments and public sector entities established in Austrian territories pursuant to § 22b para 2 item 1 BWG [Art. 86 (2) Dir. 2006/48/EC]

1.1.3.2. Exposures in non-significant business units that are immaterial in terms of perceived risk profile as well as exposure classes that are immaterial in terms of size – pursuant to § 22b para. 9 item 2 BWG [Art. 89 (1) (c) Dir. 2006/48/EC and Art. 89 (2) Dir 2006/48/EC].

That includes the following exposures:

- Exposures to churches and religious communities constituted under legal law and treated as exposures to institutions pursuant to § 22b para. 2 item 2b BWG.
- Exposures to other administrative bodies and non-commercial organisations in accordance with § 22b para. 2 item 2b BWG.
- Exposures to private individuals, to a group of private individuals or small and medium enterprises (Micro) that are treated as exposures to corporates pursuant to § 22b para. 2 item 3 BWG [Art. 86 (3) (c) Dir. 2006/48/EC]
- Exposures to collective investment undertakings in Raiffeisenbank a.s., Prague (CZ) and Tatra Banka a.s., Bratislava (SK) in accordance with § 22b para. 9 item 2 BWG [Art. 89 (1) (c) Dir. 2006/48/EC].
- Retail exposures in Tatra Banka a.s., Bratislava (SK) to:
  - private individual customers belonging to the “qualifying revolving retail exposure” class, except from the credit cards and package overdrafts
  - private individual customers belonging to the “other” class
- Micro customers (non private individuals)

- Retail exposures in Raiffeisen Bank, S.A. Bucharest (RO):
- Letter of credit/guarantee to Private Individuals
- Car loans to Private Individuals

That includes the following institutions:

- Subsidiaries of Raiffeisen Leasing International Gesellschaft m.b.H., Vienna(A) excluding Raiffeisen Leasing Polska S.A., Warsaw (PL) and Raiffeisen Lizing Zrt., Budapest (H) – For detailed listings, see Annex A.
- Subsidiaries of Raiffeisen-Leasing Gesellschaft m.b.H., Vienna(A)
- Kathrein & Co. Privatgeschäftsbank Aktiengesellschaft, Vienna(A)
- Raiffeisen Centrobank AG, Vienna(A)
- Priorbank JSC, Minsk (BY)
- Raiffeisen Banka d.d., Maribor (SLO)
- Other subsidiaries of RZB Credit Institution Group, which are ancillary services undertakings and immaterial in terms of size or risk profile. – For detailed listings see Annex A.

1.1.3.3. Exposures to central governments, central banks (where it is applicable according with local law) regional and local governments and public sector entities, provided that exposures to central government are assigned a 0% risk-weight under the standardised approach as provided in § 22a BWG [Subsection 1 2006/48/EC], in accordance with § 22b para. 9 item 3 BWG [Art. 89 (1) (d) Dir. 2006/48/EC]. For relevant exposures to EU Member States other than the home Member State for Raiffeisen Zentralbank Österreich AG, Raiffeisen Bank International AG and Raiffeisenbank Austria, d.d., Zagreb (HR).

1.1.3.4. Exposures of a credit institution to a counterparty which is its parent undertaking, its subsidiary, a subsidiary of its parent undertaking or an undertaking linked by a relationship within the meaning of Article 12(1) of Directive 83/349/EC established in the same country within the same banking group pursuant to § 22 para 9 item 4 BWG [Art. 89 (1) (e) Dir. 2006/48/EC] can be assigned a 0% risk-weight under the conditions of § 22a para. 8 [Art. 80 (7) 2006/48/EC] (intra-group exposures within the same country). This will not apply to:

- intra-group exposures to foreign credit institutions within the same banking group or in those countries where this regulation pursuant to § 22b para. 9 item 4 BWG [Art. 89 (1) (e) Dir. 2006/48/EC] is not applicable.
- intra-group exposures with Raiffeisen Bank s.a., Prague (CZ) and Raiffeisen Bank S.A., Bucharest (RO).

1.1.3.5. Exposures to institutions pursuant to § 22a para. 4 item 6 BWG [Art. 79 (1) (f) Dir. 2006/48/EC] in form of minimum reserves with the European Central Bank or a central bank of an EU Member State and fulfilling the requirements of § 22a para. 7 BWG [Annex VI, Part 1, item 40, Dir. 2006/48/EC], in accordance with § 22b para. 9 item 6 [Art. 89 (1) (h) Dir. 2006/48/EC].

1.1.3.6. Equity exposures to entities whose credit obligations qualify for a 0% risk-weight under the standardised approach [Subsection 1 Dir. 2006/48/EC], in accordance with § 22b para. 9 item 9 BWG [Art. 89 (1) (f) Dir. 2006/48/EC].

1.1.3.7. State guarantee and state-reinsured guarantees in accordance with § 22b para. 9 item 7 BWG [Art. 89 (1) (i) Dir. 2006/48/EC] in Raiffeisen Bank S.A. (RO)

## 1.2. Approved temporary partial use

### 1.2.1 Members of the Credit Institution Group for which temporary partial use was applied for

A stepwise implementation of the IRB approach pursuant to § 21a para. 7 BWG [Art. 85 (1) and (2) Dir. 2006/48/EC] is applied for all institutions using the IRB approach at a later stage. Until then, the calculation of the minimum capital requirements is carried out according to the standardised approach for credit risk based on § 22a BWG [Subsection 1 Dir. 2006/48/EC]. For following institutions the temporary partial use is used:

- Raiffeisen Bank Polska S.A., Warsaw (PL)
- Raiffeisen Leasing Polska S.A., Warsaw (PL)
- Raiffeisenbank (Bulgaria) EAD, Sofia (BG)
- Raiffeisen Bank Sh.a., Tirana (AL)
- Raiffeisen Bank d.d. Bosna i Hercegovina, Sarajevo (BA)
- Raiffeisen Bank Kosovo J.S.C., Prishtina (XK)
- Raiffeisen Banka a.d., Beograd (RB)
- Raiffeisen Bank Aval JSC, Kiev (UA)
- Raiffeisen Lizing Zrt., Budapest (HU)



### 1.2.2 Asset classes which the temporary partial use was applied for

A stepwise implementation of the IRB approach pursuant to § 21a para. 7 BWG [Article 85 (1) and (2) Dir. 2006/48/EC] is applied for asset classes for which the capital requirements are calculated in the IRB approach at a later stage. With the exception of Tatra banka a.s., Bratislava (SK), Raiffeisen Bank Zrt., Budapest (H) and Raiffeisenbank a.s. Pragueue (CZ), which units calculate risk-weighted exposure amounts using the IRB Approach, the calculation of the minimum capital requirements is carried out according to the standardised approach for credit risk based on § 22a BWG [Subsection 1 Dir. 2006/48/EC]. For following asset classes the temporary partial use is used:

- Exposures to Retail customers that are secured by residential real estate
- Qualifying revolving Retail exposures
- Other exposures to Retail customers

## Annex A

### Subsidiaries of Raiffeisen-Leasing International Gesellschaft m.b.H., Vienna, Raiffeisen-Leasing Gesellschaft m.b.H., Vienna and other subsidiaries with small business portfolios and low risk profiles

The subsidiaries of Raiffeisen Leasing International (RLI) conduct leasing operations in Central and Eastern Europe countries. In the retail portfolio the core business is vehicle (car) leasing, while in the corporate portfolio the main product is real estate leasing. Almost in every country, local Raiffeisen Network Units own 50% of the leasing company, while the remaining 50% belongs to RLI. In some countries, Network Leasing Units (NWL) have further subsidiaries (such as real estate leasing agencies, project finance companies etc). All these subsidiaries of leasing units are listed in the following table.

Other subsidiaries of RZB Credit Institution Group are entities or small banks providing ancillary banking services or financial holdings. Based on the low number of transactions, a direct data loading to the central group data warehouse would be unduly burdensome. All entities grouped as other subsidiaries report Basel II relevant data in a separate application (KI-Light).

Subsidiaries of der Raiffeisen-Leasing International Gesellschaft m.b.H., Vienna	
Country	Company
CZ	Raiffeisen-Leasing, spolnost s.r.o., Prague(CZ)
SK	Tatra Leasing spol. s r.o., Bratislava (SK)
BG	Raiffeisen Leasing Bulgaria OOD, Sofia (BG)
BG	Raiffeisen Auto Leasing Bulgaria EOOD, Sofia (BG)
HR	Raiffeisen-Leasing d.o.o., Zagreb (HR)
RO	Raiffeisen Leasing IFN S.A. Bucharest (RO)
RS	Raiffeisen Leasing d.o.o., Beograd (RS)
RS	Raiffeisen Rent doo., Beograd (RS)
AL	Raiffeisen Leasing sh.a. , Tirane (AL)
BA	Raiffeisen Leasing d.o.o., Sarajevo (BA)
SI	Raiffeisen Leasing d.o.o., Ljubljana (SI)
RU	ООО Raiffeisen-Leasing, Moscow (RU)
KZ	Raiffeisen Leasing Kazakhstan LLP, Almaty (KZ)
XK	Raiffeisen Leasing Kosovo LLC, Pristina (XK)
BY	JV "Raiffeisen-leasing", Minsk (BY)
LT	Raiffeisen-Leasing Lithuania UAB Vilnius (LT)
UA	Raiffeisen Leasing Aval LLC, Kiev (UA)

<b>Subsidiaries of Raiffeisen-Leasing Gesellschaft m.b.H., Vienna</b>	
<b>Country</b>	<b>Company</b>
DE	Abade Immobilienleasing GmbH & Co Projekt Lauterbach KG, Grünwald (DE)
DE	Abakus Immobilienleasing GmbH & Co Projekt Leese KG, Grünwald (DE)
DE	Abura Immobilienleasing GmbH & Co. Projekt Seniorenhaus Boppard KG, Frankfurt am Main (DE)
DE	Abutilon Immobilienleasing GmbH & Co. Projekt Autohof Ibbenbüren KG, Frankfurt am Main (DE)
DE	Achat Immobilienleasing GmbH & Co. Projekt Hochtaunus-Stift KG, Frankfurt am Main (DE)
DE	Acridin Immobilienleasing GmbH & Co. Projekt Marienfeld KG, Frankfurt am Main (DE)
DE	Adagium Immobilienleasing GmbH, Frankfurt am Main (DE)
DE	Adamas Immobilienleasing GmbH & Co. Projekt Pflegeheim Werdau KG, Frankfurt am Main (DE)
DE	Adessentia Immobilienleasing GmbH, Frankfurt am Main (DE)
DE	Adiantum Immobilienleasing GmbH & Co. Projekt Schillerhöhe Weimar KG, Frankfurt am Main (DE)
DE	Adritura Immobilienleasing GmbH & Co. Projekt Eiching KG, Eschborn (DE)
DE	Adular Immobilienleasing GmbH & Co. Projekt Rödermark KG, Frankfurt am Main (DE)
AT	AELLO Aello Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
DE	Agamemnon Immobilienleasing GmbH & Co. Projekt Pflegeheim Freiberg KG, Frankfurt am Main (DE)
AT	AGIOS Raiffeisen-Immobilien Leasing GmbH., Vienna (AT)
AT	AGITO Immobilien-Leasing GmbH., Vienna (AT)
AT	AKRISIOS Raiffeisen-Immobilien-Leasing, Vienna (AT)
DE	AL Tausensteiner Grundstücks-GmbH & Co KG, Frankfurt am Main (DE)
IT	A-Leasing SpA., Treviso (IT)
AT	ALTHAIA Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	Am Hafen Sutterlüty GmbH & Co KG, Vienna (AT)
AT	APUS Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	Arcana Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
IT	A-Real Estate SpA., Bozen (IT)
AT	ARTEMIA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	AURIGA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
DE	Austria Leasing GmbH & Co. Immobilienverwaltung Projekt Hannover KG, Vienna (AT)
DE	Austria Leasing GmbH & Co. KG Immobilienverwaltung CURA, Frankfurt am Main (DE)
DE	Austria Leasing GmbH & Co. KG Immobilienverwaltung Project Eberdingen, Frankfurt am Main (DE)
AT	Baumgartner Hoehe RBI Leasing-Immobilien GmbH, (AT)
AT	Blumau Beteiligungen GmbH, Villach (AT)
AT	BRISEIS Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	BRL Raiffeisen-Immobilien-Leasing GmbH., Eisenstadt (AT)
AT	Burgenländische Kommunalgebäudeleasing GmbH., Eisenstadt (AT)
AT	CADO Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	Canopa Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
DE	CARNUNTUM Immobilienleasing GmbH, Frankfurt a. M. (DE)
AT	CERES Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	COL Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	CUPIDO Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	CURO Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	DANAE Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	DOROS Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	ETEOKLES Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	FEBRIS Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	First Leasing Service Center GmbH, Vienna (AT)
AT	Geno Leasing GmbH., Vienna (AT)
AT	HABITO Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	HERMIONE Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	HESTIA Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	Hietzinger-Spitz Projektentwicklung GmbH, Vienna (AT)
AT	IGNIS Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	ISIS Raiffeisen Immobilien Leasing GmbH, Vienna (AT)
AT	JUNO Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
SF	Kiinteistö Oy Rovaniemen tietotekniikkakeskus, Helsinki (SF)
SF	Kiinteistö Oy Seinäjoen Joupinkatu 1, Helsinki (SF)

<b>Subsidiaries of Raiffeisen-Leasing Gesellschaft m.b.H., Vienna</b>	
<b>Country</b>	<b>Company</b>
DE	Laomedon Immobilienleasing GmbH, Frankfurt am Main (DE)
DE	Lentia Immobilienleasing GmbH & Co. Albert-Osswald-Haus KG, Frankfurt am Main (DE)
AT	LIBRA Raiffeisen Immobilien Leasing GmbH, Vienna (AT)
AT	Liegenschaftsverwaltung der Therme Blumau GmbH&CoKG, Villach (AT)
AT	LT Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	LYRA Raiffeisen Immobilien Leasing GmbH, Vienna (AT)
AT	LYSSA Raiffeisen Immobilien Leasing GmbH. (AT)
AT	MELIKERTES Raiffeisen-Mobilien-Leasing GmbH, Vienna (AT)
AT	MIRA Raiffeisen Immobilien Leasing GmbH, Vienna (AT)
AT	MIRUS Raiffeisen Immobilien Leasing GmbH, Vienna (AT)
AT	MOBIX Raiffeisen-Mobilien-Leasing AG, Vienna (AT)
AT	MOBIX VermögensverwaltungsGmbH., Vienna (AT)
AT	NÖ Landes-Landwirtschaftskammer Errichtungs- und BetriebsGmbH., Vienna (AT)
AT	OCTANOS Raiffeisen Immobilien Leasing GmbH., Vienna (AT)
DE	Orestes Immobilienleasing GmbH & Co. Projekt Wiesbaden KG, Frankfurt (DE)
AT	ORION Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
DE	Ostarrichi Immobilienleasing GmbH & Co. Projekt Langenbach KG, Frankfurt am Main (DE)
AT	PALADIOS Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	PARO Raiffeisen Immobilien Leasing GmbH., Vienna (AT)
AT	PEGA Raiffeisen-Immobilien Leasing GmbH., Vienna (AT)
AT	PELIAS Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	PLANA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
CY	Pointon Investment Limited, Limassol (CY)
DE	Priamos Immobilienleasing GmbH, Frankfurt am Main (DE)
AT	PROPRIA Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	Raiffeisen Leasing-Projektfinanzierung GmbH., Vienna (AT)
AT	Raiffeisen-Anlagenvermietung GmbH., Vienna (AT)
AT	Raiffeisen-Gemeindegebäudeleasing GmbH., Vienna (AT)
AT	Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	Raiffeisen-Kommunalgebäudeleasing GmbH., Vienna (AT)
AT	Raiffeisen-Leasing Bank Aktiengesellschaft, Vienna (AT)
AT	Raiffeisen-Leasing GmbH. & Co KG, Vienna (AT)
AT	Raiffeisen-Leasing GmbH., Vienna (AT)
AT	Raiffeisen-Leasing Liegenschaftsverwaltung Kraußstraße GmbH., Vienna (AT)
AT	Raiffeisen-Leasing Österreich GmbH., Vienna (AT)
AT	Raiffeisen-Leasing Wärmeversorgungsanlagenbetriebs GmbH, Vienna (AT)
AT	Raiffeisen-Rent Vermögensberatung und Treuhand GmbH., Vienna (AT)
AT	RAN elf Raiffeisen-Anlagenvermietung GmbH., Vienna (AT)
AT	RAN vierzehn Raiffeisen-Anlagevermietung GmbH, Vienna (AT)
AT	RAN zehn Raiffeisen-Anlagenvermietung GmbH., Vienna (AT)
AT	REMUS Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	RIL IV Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	RIL VI Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	RIL VII Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	RIL XIII Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	RIL XIV Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	RILREU Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
DE	RL Anlagenvermietung GmbH., Frankfurt am Main (DE)
AT	RL DANTE Mobilien-Leasing GmbH, Vienna (AT)
AT	RL Flussschiffahrts GmbH & Co KG, Vienna (AT)
AT	RL Grundstückverwaltung Klagenfurt-Süd GmbH, Vienna (AT)
AT	RL Hotel Palace Vienna Besitz GmbH, Vienna (AT)
DE	RL Leasing GmbH., München/Munich (DE)
AT	RL Parkgaragen GmbH, Vienna (AT)
AT	RL Retail Holding GmbH., (AT)
AT	RLAIR Raiffeisen-Leasing Aircraft Finance GmbH, Vienna (AT)

<b>Subsidiaries of Raiffeisen-Leasing Gesellschaft m.b.H., Vienna</b>	
<b>Country</b>	<b>Company</b>
AT	RLALPHA Holding GmbH, Vienna (AT)
AT	RLBETA Holding GmbH, Vienna (AT)
SE	RL-Moerby AB, Stockholm (SE)
SE	RL-Nordic AB, Stockholm (SE)
SE	RL-Nordic Finans AB, Stockholm (SE)
FI	RL-Nordic OY, Helsinki (SF)
PL	RL-Pro Auxo Sp.z.o.o., Gdansk (PL)
AT	RUBRA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	SAMARA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
HU	SCTE Elsö Ingatlanfejlesztő és Ingatlanhasznosító Kft., Budapest (H)
AT	SF HotelerrichtungsGmbH., Vienna (AT)
AT	SINIS Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	SOLAR II Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	SOLIDA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	SPICA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
DE	Styria Immobilienleasing GmbH & Co. Projekt Ahlen KG, Grünwald (DE)
AT	THETIS Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	THYMO Raiffeisen-Leasing GmbH., Vienna (AT)
AT	TRITON Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
AT	UNIQA Immobilien-Projektentwicklungs GmbH, Vienna (AT)
AT	Unterinntaler Raiffeisen-Leasing GmbH & Co KG, Vienna (AT)
AT	URSA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	VANELLA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	VERUS Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)
DE	Vindobona Immobilienleasing GmbH & Co. Projekt Autohaus KG, Grünwald (DE)
AT	WEGA Raiffeisen-Immobilien-Leasing GmbH., Vienna (AT)
AT	ZETES Raiffeisen-Immobilien-Leasing GmbH, Vienna (AT)

<b>Other subsidiaries with small business portfolios and low risk profiles</b>	
<b>Country</b>	<b>Company</b>
RS	Building Business Center doo Novi Sad, Novi Sad (RS)
RS	Bulevard Centar BBC Holding d.o.o., Beograd (RS)
HU	BUTÁR Gazdasági Szolgáltató Kft., Érd (HU)
CZ	Chronos Property, s.r.o., Prague (CZ)
AT	CINOVA RBI Leasing-Immobilien GmbH., Vienna (AT)
RU	CJSC Mortgage Agent Raiffeisen O1, Moscow (RU)
CZ	Cristal Palace Real Estate s.r.o., Prague (CZ)
HU	DAV Holding Ltd., (HU)
CZ	Dione Property s.r.o., Prague (CZ)
SK	Doplnková dôchodková spoločnosť Tatra banky, a.s., Bratislava (SK)
AT	Eastern European Invest GmbH, Vienna (AT)
AT	Eastern European Invest Holding GmbH, Vienna (AT)
PL	EGF Leasing Polska Sp.z.o.o., Warsaw (PL)
SK	ELIOT spol.sr.o., Bratislava (SK)
HU	Floreasca City Center Verwaltung Kft., Budapest (HU)
VG	Golden Rainbow International Limited, Tortola (VG)
HU	Harmadik Vagyonkezelő Kft., Érd (HU)
CZ	Hotel Maria Prague Besitz s.r.o., Prague (CZ)
AT	HYPO Capital Management AG Vienna (AT)
HR	Inprox Split d.o.o.; Zagreb (HR)
HR	Inprox Zagreb Sesvete d.o.o., Zagreb (HR)
CZ	Iris Property, s.r.o., Prague (CZ)
BY	JLLC Raiffeisen-Leasing, Minsk (BY)
AT	Julius Baer Multiflex SICAV-SIF Verto Recovery Fund Wien (AT)
AT	Kathrein & Co. Vermögensverwaltung GmbH, Vienna (AT)
CZ	Konevova s.r.o., Prague (CZ)
AT	Lexus Services Holding GmbH, Vienna (AT)
RU	LLC "ARES Nedvizhimost", Moscow (RU)
RU	LLC "R1", Novosibirsk (RU)
RU	LLC "R2", Novosibirsk (RU)
RU	LLC "R3", Novosibirsk (RU)
RU	LLC Immobilien Invest (RU)
RU	LLC Tkatskoy, Moscow (RU)
RU	LLC Vneshleasing, Moscow (RU)
CZ	Lucius Property, s.r.o., Prague (CZ)
RU	OOO RB Obligatsii, Moscow (RU)
RS	Park City Real Estate Holding d.o.o., (RS)
RO	Promenada Mall S.R.L., Bucharest (RO)
AT	R.L.H. Holding GmbH, Vienna (AT)
RO	Raiffeisen Banca pentru Locuinte S.A., Bucharest (RO)
AT	Raiffeisen Bausparkasse GmbH., Vienna (AT)
AT	Raiffeisen Bausparkassen Holding GmbH, Vienna (AT)
HU	Raiffeisen Biztosításközvetítő Kft., Budapest (HU)
HR	Raiffeisen Bonus Ltd., Zagreb, (HR)
AT	Raiffeisen Burgenland Leasing GmbH, Vienna (AT)
HR	Raiffeisen Business Premises d.o.o., Zagreb (HR)
HR	Raiffeisen consulting Ltd., Zagreb (HR)
AT	Raiffeisen Factor Bank AG, Vienna (AT)
AT	Raiffeisen Factoring Holding GmbH, Vienna (AT)
AT	Raiffeisen Immobilien Kapitalanlage-GmbH.,Vienna (AT)
HU	Raiffeisen Ingatlan Vagyonkezelő Kft., Budapest (HU)
PL	Raiffeisen Insurance Agency Sp.z.o.o, Warsaw (PL)
BG	RAIFFEISEN INSURANCE BROKER EOOD, Sofia (BG)
KO	Raiffeisen Insurance Broker Kosovo L.L.C., Pristina (XK)
AT	Raiffeisen International Beteiligungs GmbH, Vienna (AT)
AT	Raiffeisen International Fund Advisory G.m.b.H., Vienna (AT)

<b>Other subsidiaries with small business portfolios and low risk profiles</b>	
<b>Country</b>	<b>Company</b>
AT	Raiffeisen International Invest Holding GmbH, Vienna (AT)
BA	Raiffeisen Invest Društvo za upravljanje fondovima d.o.o Sarajevo, Sarajevo (BA)
AT	Raiffeisen Investment Aktiengesellschaft, Vienna (AT)
AT	Raiffeisen Investment Financial Advisory Services Ltd. Co. Istanbul (TR)
RU	Raiffeisen Investment Ltd., Moscow (RU)
AT	Raiffeisen Kapitalanlage-Gesellschaft mit beschränkter Haftung, Vienna (AT)
MD	Raiffeisen Leasing s.r.l, Chisinau (MD)
HR	Raiffeisen Mandatory Pension Fund Management d.d., Zagreb (HR)
RU	Raiffeisen Non-State Pension Fund, Moscow (RU)
RO	Raiffeisen Pensii - Broker de Pensii Private SRL, Bucharest (RO)
HR	Raiffeisen Pension Insurance d.o.o., Zagreb (HR)
AL	Raiffeisen Pensions Sh.A., Tirana (AL)
AT	Raiffeisen RS Beteiligungs GmbH, Vienna (AT)
AT	Raiffeisen Salzburg Invest Kapitalanlage GmbH, Salzburg (AT)
AT	Raiffeisen SEE Region Holding GmbH, Vienna (AT)
RO	Raiffeisen Services SRL, Bucharest (RO)
HR	Raiffeisen stambena stedionica d.d., Zagreb (HR)
CZ	Raiffeisen stavebni sporitelna, a.s., Prague (CZ)
AT	Raiffeisen Vermögensverwaltungsbank AG, Vienna (AT)
AT	Raiffeisen Wohnbaubank Aktiengesellschaft, Vienna (AT)
AT	Raiffeisen-Leasing International GmbH., Vienna (AT)
CZ	Raiffeisen-Leasing Real Estate, s.r.o., Prague (CZ)
AT	Raiffeisen-RBHU Holding GmbH, Vienna (AT)
AT	RALT Raiffeisen-Leasing GmbH. & Co. OHG, Vienna (AT)
AT	RALT Raiffeisen-Leasing GmbH., Vienna (AT)
MY	RB International Investment Asia Limited, (CY)
HU	Rb Kereskedőház Kft, Budapest (HU)
DE	RBI Deutschland Branch, Frankfurt am Main (DE)
CN	RBI Hong Kong, (CN)
AT	RBI LEA Beteiligungs GmbH, Vienna (AT)
AT	RBI Leasing GmbH, Vienna (AT)
AT	RBI IGG Holding GmbH, Vienna (AT)
UA	REC Alpha LLC, Kiev (UA)
SK	Regional Card Processing Center s.r.o., Bratislava (SK)
UA	REH Limited, Limassol (CY)
SK	Rent Impex s.r.o. Bratislava (SK)
SK	Rent Impex, s.r.o., Bratislava (SK)
NL	RI Eastern European Finance B.V., Amsterdam (NL)
JE	RI FINANCE (JERSEY) PCC, St. Helier (JE)
AT	RI-RBHU Holding GmbH, Vienna (AT)
AT	RIRE Holding GmbH., Vienna (AT)
BA	RI Assistance Member of Raiffeisen Group d.o.o., Sarajevo (BA)
AT	RL Retail Holding GmbH, Vienna (AT)
AT	RLI Holding GmbH., Vienna (AT)
CZ	RLRE Beta Property, s.r.o., Prague (CZ)
CZ	RLRE Eta Property, s.r.o., Prague (CZ)
CZ	RLRE Hotel Ellen, s.r.o., Prague (CZ)
CZ	RLRE Jota Property, s.r.o., Prague (CZ)
CZ	RLRE Lyra Property s.r.o., Prague (CZ)
CZ	RLRE Orion Property s.r.o., Prague (CZ)
CZ	RLRE Raines Property, s.r.o.; Prague (CZ)
CZ	RLRE Ypsilon Property, s.r.o., Prague (CZ)
BG	ROOF Consumer Bulgaria - I B.V., Amsterdam (NL)
RU	Roof Russia DPR Finance Company S.A., Luxemburg (LU)
RU	Roof Russia S.A, Luxemburg (LU)
AT	RSC Raiffeisen Daten Service Center GmbH, Vienna (AT)

<b>Other subsidiaries with small business portfolios and low risk profiles</b>	
<b>Country</b>	<b>Company</b>
JE	RZB Finance (Jersey) II Ltd, St. Helier (JE)
JE	RZB Finance (Jersey) III Ltd, St. Helier (JE)
JE	RZB Finance Jersey IV Ltd, St. Helier (JE)
AT	RZB IB Beteiligungs GmbH, Vienna (AT)
AT	RZB Invest Holding GmbH, Vienna (AT)
AT	RZB KI Beteiligungs GmbH, Vienna (AT)
AT	RZB Sektorbeteiligung GmbH, Vienna (AT)
RO	S.A.I. Raiffeisen Asset Management S.A., Bucharest (RO)
RO	S.C. PLUSFINANCE ESTATE 1 S.R.L., Bucharest (RO)
AT	SALVELINUS Handels- und Beteiligungsgesellschaft m.b.H, Vienna (AT)
HU	SCT Kárász u. Kft., Budapest (HU)
HU	SCT Tündérvért Kft., Budapest (HU)
HU	SCTAI Angol Iskola Kft, Budapest (HU)
HU	SCTF Szentendre Kft., Budapest (HU)
HU	SCTJ Real Estate Development Kft., Budapest (HU)
CZ	Sirius Property, s.r.o., Prague (CZ)
BA	'S-SPV' d.o.o., Sarajewo (BA)
SK	Tatra Asset Management sprav.spol., a.s., Bratislava (SK)
SK	Tatra Group Finance, s.r.o., Bratislava (SK)
SK	Tatra Reality s.r.o., Bratislava (SK)
AT	Taurus Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna (AT)
CZ	Themis Property, s.r.o., Prague (CZ)
UA	Ukrainian Processing Center, JSC, Kyiv (UA)
PL	Vela Sp z o.o., Warsaw (PL)
CY	Vindalo Properties Limited, Limassol (CY)
AT	ZHS Office- & Facilitymanagement GmbH, Vienna (AT)
AT	ZUNO BANK AG, Vienna (AT)

## 2. Structure of the Internal Rating Systems

External ratings are applied directly only for securitisation items.

For all other items, an already existing external rating does not replace an internal rating and thus does not cancel the general obligation to create an internal rating. External ratings are not used as a model input factor in any rating model; they are solely used for the purpose of comparing them with internal ratings. When a rating is determined, external ratings and their documentation are viewed solely as additional information.

The comparison of external ratings against internal ratings in mapping tables is a central element particularly in the validation of low-default portfolios.

Below is a summary table on the exposure classes and the rating methods used for each:

Exposure Classes	Rating Model								
	CORP	LCO	SMB	SLOT	INS	SOV	LRG	FIN	CIU
Central banks and central governments						X			
Local and regional governments							X		
Public sector entities and non-commercial organisations	X	X				X	X		
Multilateral development banks								X	
International organisations						X			
Financial institutions								X	
Corporate	X	X	X		X			X	X
Project financing				X					
Private (non retail)	X	X							
Equity exposures	X	X		X	X			X	

CORP: Corporate/Companies, LCO: Large Companies, SMB: Small and medium business, SLOT: Project financing, INS: Insurance companies, SOV: Sovereigns, LRG: Local and regional governments, FIN: Financial institutions, CIU: Collective Investment Undertakings

## 2.1 Use of Internal Estimates

Under the IRB Approach, internal risk-parameter estimates are used not only to calculate equity but also to determine standard risk costs and economic capital (Internal Capital Adequacy Assessment Process (ICAAP))

## 2.2 Control Mechanism for Rating Systems

The non-retail rating models are centrally validated at RBI AG for all members of the RZB Credit Institution Group by a unit which reports to the head of the division "Risk Controlling". Therefore the unit is independent from risk origination units. The rating systems are reviewed using defined validation systems comprising essentially the following methods:

- Assessment of the documentation of the rating models
- Assessment of the assumptions underlying the rating models (model design)
- Assessment of the data used for validation (data quality)
- Assessment of the application of rating results
- Distribution analyses
- Review of the discriminatory power of the final rating
- Assessment of the discriminatory power of the individual rating inputs and rating sub-results
- Comparison of the estimated rate and observed rate of default
- Assessment of the stability of the rating model
- Calculation of the migration matrices and their analysis
- Review of the relationship between internal and external ratings

## 2.3 Description of the Internal Rating Process

### 2.3.1. General Information

A client is assigned to a certain rating method based on the exposure class at the time the rating is determined. This mapping between the client's exposure class and the adequate rating model is a fixed part of the rating databases, which document the individual steps in the creation of a rating along with the rating process itself.

In all RZB models, the strict "four-eye principle" (dual control) applies to the determination of the rating. Compliance is documented in the rating databases. All individuals and committees involved in the rating process must be recorded in that database.



Clients classified as equity exposures are subject to the same rating model as clients classified as corporate or institutional exposures depending on client type. Weighted exposure amounts are determined for these items using the PD/LGD method.

## 2.3.2. Rating Corporates

### Scope of Application

Corporate clients are allocated to either the Large Corporates, the Corporates or the SMB rating model. The split between the Corporates and the SMB model is based on country specific thresholds for two criteria: “corporate client’s sales revenues” and “exposure to bank”.

### Development and Objective

The SMB rating model was developed by RBI based on groupwide dataset. Quantitative, qualitative and behavioral parameters are systematically combined to obtain a comprehensive assessment of an SMB client’s creditworthiness.

The rating model is designed as a statistical model. Quantitative and behavioural parameters are delivered and calculated automatically, while the rating expert must critically assess the relevant soft facts and bears final responsibility for the SMB’s client rating.

### Rating Model

The SMB rating model has three components:

- Quantitative analysis (“hard facts”)

The model is based on the assessment of the corporate client’s financial data. The quantitative variables as well as their weights have been estimated statistically with the aim to maximize discriminatory power over a one year horizon. The quantitative score also takes into account current trends and forecasts of the customer’s financial status.

- Qualitative analysis (“soft facts”)

The qualitative model uses a set of key questions, which are answered by the analyst. The questions are operationalized to a high extent so as to assure an objective assessment. The qualitative variables and their weights as well as the weights of the answers have been statistically estimated to maximize predictive power over a one year horizon.

The corporate client’s rating ultimately emerges from the optimal combination of the quantitative and qualitative assessments and possible warning signals. The Corporates rating model differentiates risk depending on the industry sector and the country of residence of the customer.

### Rating Output

The corporates rating model results in a rating grade on a 25 grade scale which is assigned a certain probability of default.

This client rating is an essential factor in the loan decision and significantly influences the terms granted to the customer. The rating subsequently serves as the basis for determining capital adequacy.

### Rating Process

The rating is determined by experienced SMB relationship managers and small-business credit-risk staff with in-depth knowledge of this segment. The SMB relationship manager is only allowed to propose a rating, which is subsequently reviewed by an SMB credit analyst in the risk department and thoroughly researched again. As a final step, the rating is confirmed by the risk department of the network unit (NWU) in keeping with the “four-eye principle” (dual control).

Ratings created in this manner are then documented in the rating database.

## 2.3.3. Rating Large Corporates

### Scope of application

Corporate clients are allocated to the Large Corporates, the Corporates or the SMB rating model. The split between the Corporates and the SMB model is based on country specific thresholds for two criteria: “corporate client’s sales revenues” and “exposure to bank”. The split between Corporate and Large Corporate customers is based on thresholds for “total revenues” and “total assets”, both of which have to be exceeded by Large Corporates.

### Development and Objective

The large corporates rating model was developed by RBI experts using external rating and balance sheet data as well as internal data from all units of the Group and state-of-the-art statistical methods as well as expert opinions by rating analysts from RBI Vienna and several RBI units.

Quantitative and qualitative factors are combined to obtain a comprehensive assessment of the client’s creditworthiness.

Even though the rating model is a statistical model, the rating analyst bears final responsibility for the rating and must critically assess the corporate client’s financial data as well as relevant soft facts. Where necessary, the rating expert can adjust the rating to ensure a correct and fair assessment of the corporate client’s creditworthiness.

### Rating Model

The large corporates rating model has essentially two components:

- Quantitative analysis

The model is based on the assessment of the corporate client’s financial data. The quantitative variables as well as their weights have been estimated statistically with the aim to maximize discriminatory power over a one year horizon.

- Qualitative analysis (“soft facts”)

The qualitative model uses a set of key questions, which are answered by the analyst. The questions are operationalized to a high extent so as to assure an objective assessment.

The large corporate client’s rating ultimately emerges from the combination of the quantitative and qualitative assessments but also takes into account recent trends and forecasts and possible warning signals. The Large corporates rating model differentiates risk depending on the industry sector and the country of residence of the customer.

### Rating Output

The Large Corporate rating model results in a rating grade on a 25 grade scale, which is assigned a certain probability of default.

This client rating is an essential factor in the loan decision and significantly influences the terms granted to the customer. The rating subsequently serves as the basis for determining capital adequacy.

### Rating Process

The customer relationship manager obtains the financial data and supplementary information required for the rating. He then forwards these documents to the rating expert along with a request that the expert determines a rating. From this point on, the customer relationship manager has no direct influence on the determination of the rating.

The input data are recorded and processed in the corporates rating model solely by the rating expert. The process outcome is the issuance of a rating and thus an assignment of the client to an internal risk class. Ratings created in this manner are then documented in the rating database.

### 2.3.4. Small and Medium Business (SMB) Rating Model

#### Scope of Application

Corporate clients are allocated to either the corporates or the SMB rating model according to the given country's threshold and based on two criteria: "corporate client's sales revenues" and "exposure to bank".

#### Development and Objective

The SMB rating model was devised by RBI Credit Management Retail in collaboration with RBI Credit Management Corporates. Quantitative and qualitative parameters are systematically combined to obtain a comprehensive assessment of an SMB client's creditworthiness.

The rating process is designed as an expert model. The rating expert bears final responsibility for the rating and must critically assess the SMB client's financial data as well as relevant soft facts. Where necessary, the rating expert can make adjustments to ensure an accurate assessment of the SMB client's creditworthiness.

#### Rating Model

The SMB rating model has mainly two components:

- Quantitative analysis ("hard facts")

This rating model is based on the client's financial data. The quantitative rating is determined from financial ratios selected statistically based on strong predictive power.

- Qualitative analysis ("soft facts")

The client's qualitative evaluation is based on 31 criteria, which are subdivided into six main individual categories. Following a statistical selection and evaluation, the definition of the individual factors incorporates also the experiences of experts in SMB banking.

The SMB client's rating ultimately emerges from the combination of the quantitative and qualitative assessments, plus an estimate of current trends, existing forecasts and possible warning signals.

- Behavioral analysis

In the behavioral component, information from SMB clients' current accounts, loans and leasing products are evaluated. Data is delivered automatically and in a monthly frequency for rating evaluation.

The SMB client's rating ultimately emerges from the combination of the quantitative, qualitative and behavioral assessments, and allocates the client to the correct rating grade.

#### Rating Output

The SMB model has a total of 12 rating notches for non-defaulted clients. This client rating is an essential factor in the loan decision and significantly influences the terms granted to the customer.

#### Rating Process

The rating is determined by experienced SMB relationship managers and small-business credit-risk staff with in-depth knowledge of this segment. The SMB relationship manager is only allowed to propose a rating, which is subsequently reviewed by an SMB credit analyst in the risk department and thoroughly researched again. As a final step, the rating is confirmed by the risk department of the network unit (NWU) in keeping with the "four-eye principle" (dual control). Ratings created in this manner are then documented in the rating database.

### 2.3.5. Sovereign Risk Rating (Country Rating)

#### Scope of application

The country rating is applied as:

- A counterparty rating for the central bank and central governments and administrative entities directly answerable to the sovereign.
- A country rating to estimate the country risk when country limits are set up for cross-border transactions.
- A country ceiling for the estimation of transfer risks.

If applied as a counterparty rating, the rating is used for local and foreign currency exposures.

#### Development and Objective

The RZB country rating model was first introduced in December 1999 as a result of the Asia crisis in 1997/98. The model underwent a revision in 2002 to comply with the Basel II requirements. With the RZB country rating model, RZB Group can evaluate the country risk of any country based on publicly accessible data on the economic and political situation prevailing in that country.

The total score is mapped to a rating class, which corresponds to a given probability of default. The model correlates highly with external ratings.

Within the RZB Group, the rating is determined centrally by a specialised department at RBI AG and made available to all entities of the RZB Group. The RZB country rating is the only rating allowed to be used for applications for sovereign counterparties and country risks.

#### Rating Model

The rating model distinguishes between industrialised countries and developing countries. This distinction is made because foreign debt, debt servicing and external liquidity are all extremely important factors for estimating the country risk of development countries yet of only subordinate importance for the evaluation of industrialised countries.

The country rating model for industrialised countries is modeled on the Maastricht criteria.

The rating model for developing countries has 15 quantitative and 12 qualitative indicators. The indicators chosen deliver sound explanations for changes in a country's economic and external positions.

#### Rating Process

The country ratings are created centrally by RBI AG in a specialised analysis department that works independently of any front office department. In a final step, the rating is created and archived in an internal rating database and then made available to all Group entities from there. The country rating from this rating database is also automatically used as a country ceiling in other rating models.

The quantitative analysis is carried out using publicly available data from reliable sources such as the IMF, the World Bank, national statistics offices, IIF (Institute of International Finance) and EIU (Economist Intelligence Unit). The qualitative analysis is carried out by country analysts based on information from the press, specialised risk reports and discussions with on-site managers.

A rating is done for all countries for which RZB Group entities have a country limit and thus not only in the case of counterparty exposures with a sovereign or central bank. That means the number of countries is greater than the number of active exposures to sovereigns or central banks.

The client departments initiate country ratings when new country limits are to be set or applications are submitted for new sovereign counterparties.

Ratings are usually determined at least twice a year and reviewed constantly by analysts to take into account any possible negative trends.

In all RZB models, the strict "four-eyes" principle (dual control) applies to the determination of the rating. Compliance is documented in the rating databases.

## 2.3.6. Banks and Financial Institutions

### Scope of Application

The RZB rating model for banks and bank-like institutions is applied when the creditworthiness of FI counterparties is assessed within the RZB Banking Group. The rating is a central element in the decision on whether or not to grant credit.

### Development and Objective

RZB devised the model in the mid-1990s and has further developed it since. The model was most recently adapted in 2001. That model version has been used ever since then. The model is applied uniformly for all banks and bank-like institutions worldwide.

Peer group comparison is a central element of the model, i.e. banks in the same economic region and with similar business models are compared with each other. The model is an expert model.

The resulting internal ratings correlate highly with the corresponding external ratings.

### Rating Model

The rating model for banks is subdivided into the following sections: the quantitative section, the qualitative section, risk estimation and evaluation of the quality of the information.

The following parameters are reviewed in the quantitative section:

- Profitability (based on various profitability ratios, an assessment of the income structure and the income trend)
- Capitalisation (based on capital and capital trend, capital structure, capital adequacy ratio (Tier 1 ratio))
- Funding structure and liquidity (based on the funding structure and trend and on liquidity ratios)
- Credit quality (on assets and credit structure, their growth, the level of non-performing loans and their cover)

The qualitative section assesses the company's environment and background information based, for example, on the following parameters:

- Owners and their creditworthiness
- Probability of internal and external support
- Bank sector risk in general
- Position of the bank within its banking sector
- Evaluation of the strategy and the management

To estimate risk, the risk of the activities of the financial institution are assessed based on activity type, the balance sheet and income structure for the activities, and the dependence of the activities on the economic and social environment.

The bank rating is limited by a country ceiling defined by the RZB internal country rating.

### Rating Output

The model has ten notches (nine non-default notch and one default notch).

Parallel to scoring, the analyst writes an analysis text containing the essential background details, basic information and qualitative assessments of the counterparty.

### Rating Process

The ratings for banks and bank-like institutions are created centrally by RBI AG in a specialised analysis department that works completely independently of any front office department. In a final step, the rating is created and archived in an internal rating database and made available to all Group entities from there.

The first rating is done when a relationship is established with a new client. Every active client is rated once a year and/or after circumstances that lead to a rating change become known.

Neither the analyst nor any other authority in the Group has the power to overrule the final rating.

## 2.3.7. Insurance Companies

### Scope of Application

The RZB rating model for insurance companies and undertakings similar to them is applied within the entire RZB Banking Group to assess the creditworthiness of said companies and undertakings and is a central element in the decision on whether or not to grant credit.

### Development and Objective

The model was developed in-house in 2002 based on the experience gained in the banking model already in use since the mid-1990s. The model is applied uniformly worldwide to all insurance companies and undertakings similar to them.

The quantitative section of the model is based on a benchmark system and qualifies as an expert model.

### Rating Model

The rating model for insurance companies is divided into the following sections: the quantitative section, the qualitative section and risk assessment. The ratios applied to life and to non-life insurance differ, as do the weightings. The following parameters are reviewed in the quantitative section:

- Income
- Premium structure
- Capitalisation and solvency
- Actuarial provisions
- Liquidity

The qualitative section assesses the company's environment and background information based, for example, on the following parameters:

- Owners and their creditworthiness
- Probability of internal and external support
- Changes in the legal environment
- General economic risk in the local market and in the local insurance market
- The position of the insurance company within the insurance sector

To estimate risk, the risk of the activities conducted by the insurance carrier is assessed based on activity type, the balance sheet and income structure for the activities, and the dependence of the activities on the economic and social environment.

### Rating Output

The model has ten notches (nine non-default notches and one default notch). Parallel to scoring, the analyst produces an analysis text containing the essential background details, basic information and qualitative assessments of the client.

### Rating Process

The rating for insurance companies is done centrally by RBI AG in a specialised analysis department that works completely independently of any front office department.

The rating is created and archived in an internal rating database and made available to all Group entities from there.

The first rating is done when a relationship is established with a new client. Every active client is rated once a year and/or after circumstances that lead to a rating change become known. Neither the analyst nor any other authority in the Group has the power to overrule the final rating.

## 2.3.8. Collective Investment Undertakings/Investment Funds CIUs

### Scope of Application

The RZB rating model for CIUs is applied when the creditworthiness of Fund counterparties is assessed within the RZB Banking Group. The rating is a central element in the decision on whether or not to grant a credit.

### Development and Objective

RZB devised the CIU rating model in 2006. The model is applied uniformly for funds worldwide, taking especially into consideration the special regulations for funds regulated via EU directive (UCITS funds).

The CIU rating developed in RZB is a credit risk rating, not an investment rating. The objective of the rating is to estimate the credit risk of counterparties which are organized in the legal or organizational structure of a Collective Investment Unit.

### Rating Model

The model has two components: quantitative scoring and qualitative scoring. In quantitative scoring, the scores are automatically calculated for the individual indicators based on benchmarks. The analysts assign qualitative scores manually with the aid of a scoring manual.

The quantitative indicators are calculated from the statements of accounts and – if available – statistical databases. These indicators assess the earning power, budgetary flexibility and indebtedness of an LRG based on a variety of key figures (ratios). The qualitative indicators allow soft facts to be taken into account in the rating, facts not contained in the statements of accounts, e.g. overall economic environment, political factors, infrastructure, etc.

The rating outcome is limited by a country ceiling defined by the RZB internal country rating.

### Rating Output

The model has ten notches (nine non-default notch and one default notch). Parallel to scoring, the analyst writes an analysis text containing the essential background details, basic information and qualitative assessments of the counterparty.

### Rating Process

The ratings for CIUs are created centrally by RBI AG in a specialized analysis department that works completely independently of any front office department. In a final step, the rating is created and archived in an internal rating database and made available to all Group entities from there.

The first rating is done when a relationship is established with a new client. Every active client is rated once a year and/or after circumstances that lead to a rating change become known.

Neither the analyst nor any other authority in the Group has the power to overrule the final rating.

## 2.3.9. Local and Regional Governments (LRG)

### Scope of Application

The RZB rating model for local and regional governments (LRG) is used to assess the creditworthiness of LRGs and administrative entities associated with them. The rating is a central element in the decision on whether or not to grant credit.

### Development and Objective

The LRG rating model was developed in 2003 and 2004 by RZB in consultation with the RZB subsidiary banks and has been in use ever since. In cooperation with the RZB subsidiary banks, national adaptations of the model were developed where necessary, for example, due to different accounting regulations or legal conditions in Eastern European countries. The model is designed as an expert model.

### Rating Model

The model has two components: quantitative scoring and qualitative scoring. In quantitative scoring, the scores are automatically calculated for the individual indicators based on benchmarks. The analysts assign qualitative scores manually with the aid of a scoring manual.

The quantitative indicators are calculated from the statements of accounts and – if available – statistical databases. These indicators assess the earning power, budgetary flexibility and indebtedness of an LRG based on a variety of key figures (ratios).

The qualitative indicators allow soft facts to be taken into account in the rating, facts not contained in the statements of accounts, e.g. overall economic environment, political factors, infrastructure, etc.

The rating outcome is limited by a country ceiling defined by the RZB internal country rating.

### Rating Output

The outcome of quantitative and qualitative scoring is mapped to ten rating notches, the last notch being used for default.

### Rating Process

An analyst from the RZB Group entity that has the business relationship with the client rates the LRG in a decentralised process. The rating is created and archived in the internal rating database and made available to all Group entities from there.

The first rating is done when a relationship is established with a new client. Every active client is rated once a year and/or after circumstances that lead to a rating change become known.

Neither the analyst nor any other authority in the Group has the power to overrule the final rating.

## 2.3.10. Rating Specialised Lending

### Scope of Application

The term “specialised lending” as used in the EU Directive refers to structured financing and is a segment in the “Corporates” client class. This segment is differentiated from corporates in the narrower sense using the criteria defined in the EU Directive:

- Financing of assets
- Control over and access to the cash flow generated by the asset
- Control over and access to the asset itself.

Takeover financing therefore does not fall under the specialised lending subsegment according to the above definition; it is classified under corporates in the narrower sense.

The model developed by RZB covers the following subcategories:

- Real estate finance
- Object finance (movable assets such as airplanes, ships, etc.)
- Project finance in the narrower sense (immovable assets such as industrial plants, power stations, etc.).

### Development and Objective

The rating model for specialised lending was developed in-house by RZB experts and incorporates market experience from all markets of the RZB Group.

The model applies what is referred to as the “slotting criteria” approach. That means the projects are classified in five risk classes specified under law. These risk classes do not substantively denote probabilities of default but rather a combination of economic performance (PD) and the situation of the bank as regards collateral (LGD).



### Rating Model

In accordance with the EU Directive, the specialised lending rating model consists of two components: the economic performance of the project and the situation of the bank as regards collateral.

Economic performance is measured by hard facts and soft facts, which are combined into a single economic score (“grade”):

- Hard facts grade:  
The model is based on an assessment of the economic performance of the project over the maximum acceptable loan term in relation to debt service. The maximum acceptable loan term is geared to the risk policy practised by the bank. The assessment revolves around the “average cover ratio for debt service” over this term, which is valued using certain benchmarks.
- Qualitative analysis (“soft facts grade”)  
Essential parameters of project success are evaluated in the qualitative analysis, e.g.:
- Management and sponsor (experience specifically related to the project, reference projects)
- Basic project conditions (location, technical equipment)
- Structure of the financing (amortising loan or bullet loan, residual value).

Collateral valuation is the second component of the rating and is done largely according to market criteria.

### Rating Output

The economic score and collateral evaluation are combined to allocate the project to the individual risk classes (in this case: slots) according to Solvency Regulation Article 74 (3).

### Rating Process

The product advisor/customer relationship manager proposes a rating. The “four-eye principle” (dual control) applies, so the risk manager with rating responsibility is entitled to confirm the rating suggested by the advisor or to suggest another one. The rating tool shows both suggestions: the product advisor’s and the risk manager’s.

If the product advisor and risk manager suggested different ratings and fail to reach agreement on the rating, the rating suggested by the risk manager applies. However, the product advisor can initiate an “escalation process”, which can culminate in an overruling of the rating by the CRO.

## 2.4. Comparison of the Estimates of the Credit Institution and the Actual Results

The quality of the process and results of PD estimation is checked during validation by comparing the observed default rates per rating notch. The binomial test and what is referred to as the “traffic light” approach (as developed by D. Tasche) are applied to determine the significance of any deviations. The results of these quantitative tests are then subject to a qualitative causal analysis.

## 2.5. Definitions Methods and Data for the Estimation and Validation of Probability of Default (PD)

The probabilities of default to be estimated for each rating notch indicate the probability with which clients assigned to a given rating notch will default over the following 12 months.

The probabilities of default (PDs) are estimated internally for the following non-retail rating models: Corporates, Large Corporates, SMB, sovereign, financial institutions, insurance companies, local and regional governments and Collective Investment Undertakings (CIU).

The “slotting criteria” approach was selected for the specialised lending segment and covers the economic situation and collateral situation of the bank. The specialised lending rating model results in an assignment of the client to one of the five risk classes under supervisory law in Article 74 (3) Solvency Regulation (four non-default categories and one default category).

The probabilities of default refer to a period of 12 months and contain an adequate margin of conservatism.

The estimation of the 12-month PD is based on the RZB definition of default, which is a bank specific implementation of the Basel II definition of default. The following factual elements of a default apply:

- Initiation of insolvency proceedings
- Write-off of an exposure (partial or complete)
- Call of an exposure (partial or complete)
- Distressed restructuring of the loan
- Waiving of interest payments (partial or complete)
- Sale of an exposure with loss
- Material obligation being overdue for more than 90 days
- Revocation of banking license (applicable to financial institutions only)
- Payment moratorium (applicable to sovereigns only)
- Expected economic loss

The output of the statistical rating models (corporate, large corporate and SMB) is an individual PD, on a scale of 0 to 1, allocated to each customer. These PDs are recalibrated to long-term average default rates. A margin of conservatism is added to get the final parameters. Based in that PD, customers are allocated to a grade on a rating scale. For each rating grade, there is a lower and upper PD limit defined. In the consecutive processes (for example for RWA-calculation or margins) one representative PD per rating grade is used.

The low-default portfolios for Sovereign, FI and Insurance have such a small number of defaults that the default data from Moody's Credit Risk Calculator were applied, beginning with the time series in January 1983 and scaled to a portfolio default rate representative of RZB Group's default experience yet still conservative.

For the low-default portfolio LRG, the one-year PD is estimated using a weighted combination of the internally estimated sovereign-PD and the probabilities of default calculated according to the Pluto & Tasche method, which is also scaled to a conservative portfolio default rate.

For the Low-Default Portfolio CIU the Estimation of the one-year default probability is based on credit-risk related external ratings and on internal analysis of the leverage-related probability of uncovered debt.

With all low-default portfolios, direct collateral haircuts in accordance with §47 (4) and §47 (6) may also be applied, where appropriate, to the final PD estimation as an additional conservative haircut depending on the method of estimation involved.

## 2.6. Description of Major Deviations from the Definition of Default

The definition of default corresponds to the definition of default set forth in §22b para 5 item 2 BWG, so that no information has to be given as per § 16 (2) line 3 as regards deviations and as regards affected segments.

# § 17 OffV – Disclosure Applicable to Credit Risk Mitigation

## 1. Management and Recognition of Credit Risk Mitigation

The following document outlines the policies and processes for collateral valuation and management within the RZB Group according to §§ 22g and 22h BWG, as well as §§ 83 ff SolvaV. Besides the collateral mentioned herein, other collateral is also recognised on a single case basis as eligible according to §§ 83 ff SolvaV if the minimum requirements of the SolvaV are fulfilled. Furthermore other types of collateral than mentioned herein are recognised for internal risk calculations

For specialised lending, where the risk weight is calculated according to § 74 para 3 SolvaV (Project Rating), the value of the collateral from the project itself is already included in the classification of the project within the risk categories of § 74 para 3 SolvaV.

Collateral is only used for credit risk mitigation purposes, if the following conditions are fulfilled:

- the collateral is legally enforceable under the applicable jurisdiction
- sustainable market value of the collateral
- possibility of realisation and will to realise
- there is no significant correlation between the quality of the secured exposure and the value of the collateral, i.e. the collateral value is not linked to the creditworthiness of the borrower

In case the currency of the collateral – that is the currency of the proceeds of the realisation – is not identical with the currency of the exposure (currency mismatch), a volatility adjustment will automatically be calculated according to §§ 134, 137 SolvaV.

In case the maturity of the collateral is shorter than the maturity of the collateralised exposure (maturity mismatch), the credit protection – according to § 151 SolvaV – shall not be recognised for credit risk mitigation purposes if the original maturity of the protection is less than one year or the residual maturity of the collateral is less than three months. In case the protection provider has an option to terminate the protection, the maturity of the protection shall be the time to the earliest date at which the collateral contract may be terminated. The calculation of maturity mismatches is done automatically according to the criteria of §§ 152, 153 SolvaV.

After a check of the legal validity of the collateral provided, it is entered into a special system for collateral management. The collateral valuation is done by staff members who are independent from the credit decision process.

Regular evaluations make sure, that the revaluation of the collateral is done at least once a year. Minimum revaluation frequency for financial collateral is 6 months. If required (e.g. change of market situation) a revaluation is done more often. Regarding financial collateral a revaluation at current market prices is done automatically on a daily basis. A longer revaluation interval leads to higher discounts according to § 133 SolvaV.

## 2. Financial Collateral

Financial collateral is used for credit risk mitigation purposes if the minimum requirements according to § 102 SolvaV are fulfilled.

### 2.1 Type of Collateral and Valuation

#### 2.1.1 Cash on Deposit

As cash on deposit all kinds of accounts (fixed deposit, saving accounts, etc.) as well as savings books and cash assimilated instruments, like certificates of deposit, are taken into account.

#### Cash deposit held by the lending credit institution

The market value is the pledged amount in the relevant currency of the cash deposit. The revaluation is done automatically by the collateral management system. No haircut is applied for this collateral type. Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

### **Cash deposit held by a third party bank**

The market value is the pledged amount in the relevant currency of the cash deposit. Up to this pledged amount the probability of default (PD) of the borrower is replaced by the PD of the third party bank. Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

### **2.1.2 Netting**

#### **On balance sheet netting agreements**

In case of reciprocal balances with a counterparty (e.g. credit balances on some accounts and debit balances on others) and if a standardized contract is used, the credit balance is used for credit risk mitigation purposes and therefore is linked to the exposure in calculations, if the minimum requirements according to § 100 SolvaV are fulfilled.

#### **Master netting agreements covering repurchase transactions, securities or commodities lending or borrowing transactions and other capital market driven transactions**

Transactions according to § 85 SolvaV – especially repo and securities lending transactions – are managed in a department especially responsible for this kind of transactions using a special electronic data processing-system. In order to recognize transactions for netting, only standard contracts fulfilling the minimum requirements according to § 101 SolvaV are used. Collateral provided within the scope of such transactions and borrowed securities or commodities fulfil the criteria of §§ 87 to 89 SolvaV.

### **2.1.3 Gold**

The market value is the current market price of gold. The revaluation is done once a month using the haircut determined in § 133 SolvaV. Any maturity mismatch of the protection is considered automatically when linked to the secured exposure.

### **2.1.4 Debt Securities**

For the purpose of credit risk mitigation debt securities of the following issuers are taken into account:

- Central governments or central banks, which have been rated by a recognised rating agency or export credit agency, if the rating is equal or better than credit quality step 4 of the Standardised Approach
- Institutions, which have been rated by a recognised rating agency if the rating is equal or better than credit quality step 3 of the Standardised Approach
- Other issuers, which have been rated by a recognised rating agency if the rating is equal or better than credit quality step 3 of the Standardised Approach
- Debt securities rated with a short term rating by a recognised rating agency if the rating is equal or better than credit quality step 3 for short term claims of the Standardised Approach
- Debt securities issued by institutions which are not rated by an recognised rating agency, if the criteria according to § 88 SolvaV are fulfilled

The market value is the current market price on the stock exchange, which is updated automatically in the collateral management system. The haircut according to § 134 SolvaV is applied automatically. Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

### 2.1.5 Equities and Convertible Bonds

Equities and convertible bonds listed on a recognised stock exchange (§ 2 Z 32 BWG) are taken into account for credit risk mitigation purposes.

The market value of equities and convertible bonds is the current market price on the stock exchange. A revaluation is done automatically. The volatility adjustment for equities and convertible bonds listed on a recognised stock exchange is not based on external ratings. According to § 134 SolvaV the eligibility and the haircut depend on the fact being listed on a recognised exchange and being included in a main index. Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

### 2.1.6 Investment funds

Units in collective investment undertakings are recognised as eligible collateral if they have a daily public price quote and the collective investment undertaking is limited to investments in instruments that are listed in §§ 87 f SolvaV.

If a maximum limit for investments of not eligible instruments is defined in the regulation for investments, the fund is eligible up to the defined part in which the fund must invest in eligible titles (i.e. those listed in §§ 87 f SolvaV). The value of the shares in the investment fund which are provided as collateral has to be reduced by the respective percentage, before calculating the haircut according to § 134 SolvaV.

If the single positions/investments of the collective investment undertaking are known (through at least monthly delivery of the single positions), the weighted haircut of the single position haircuts (the positions in which the collective investment undertaking is actually invested) is taken. If the single eligible positions/investments of the collective investment undertaking are unknown, the haircut equals the highest haircut of the position, in which the collective investment undertaking is allowed to invest (concerning eligible positions).

The market value is the published value/market price of the single certificates. Revaluation is done automatically. The haircut is calculated according to § 134 SolvaV once the collateral is entered into the collateral management system. The haircut is reviewed on a regular basis according to the single investment positions. In case the single investments are unknown or can not be delivered on a monthly basis, the haircut is calculated upon the basis of the collective investment undertaking prospectus. Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

## 2.2 Effect on Credit Risk Mitigation

Apart from cash deposit held by a third party bank, all financial collateral provided as security reduce the LGD (Loss Given Default) to 0% for the respective collateral market value reduced by the haircut according to the above described criteria. Regarding cash deposit held by a third party bank, the PD (Probability of Default) of the borrower is replaced by the PD of the third party bank.

## 3. Real Estate Collateral

For the purpose of credit risk mitigation residential real estate (i.e. real estate which is or will be occupied or let by the owner for residential purposes) and commercial real estate are used if the criteria of § 92 SolvaV and the minimum requirements of § 103 SolvaV are fulfilled.

### 3.1 Valuation

Real estate property is evaluated either at the market value or at the mortgage lending value, which is to be reduced according to the results of the evaluation, the pledged amount in the contract or prior-ranking charges, if necessary.

Market value is defined as the estimated amount for which the property could be sold on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion. Mortgage lending value is defined as the value of the property as determined by a prudent assessment of the future marketability of the property taking into account long-term sustainable aspects of the property, normal and local market conditions, the current use and alternative appropriate uses of the property. Speculative elements shall not be taken into account in the assessment of the mortgage lending value.

The property valuation is based either on appraisal reports by external independent appraisers or on internal valuations done by competent staff members who are independent from the credit decision process.

The valuation is done according to generally recognised appraisal methods, mostly using the Income Capitalisation Approach; if applicable on an individual basis the valuation is done using the Sales Comparison Approach or Cost Approach.

Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

### 3.2 Effect of Credit Risk Mitigation

Up to the amount of the collateral value after deduction of a necessary over collateralisation level of 140% and evaluated upon the above mentioned criteria, the LGD (Loss Given Default) is reduced for senior claims to 35% (until 31.12.2012 to 30%). In case no full collateralisation exists, the exposure is split into a collateralised part (considering the 140% over collateralisation level) and an uncollateralised part. In case the collateral value is below 30% of the exposure no LGD reduction is applied.

As an alternative to the LGD reduction described above a 50% risk weight can be assigned to the part of the exposure fully collateralised by residential or commercial real estate property situated in Austria. This approach is also applied for real estates situated in a member state of the EU where this approach is permitted in the local regulation. The term “fully collateralized” means up to the amount of 140% regarding residential real estate property and 200% regarding commercial real estate property.

## 4. Receivables

Account receivables are used for credit risk mitigation purposes, if they are linked to a commercial transaction or transactions with an original maturity of less than or equal to one year. Receivables in connection with securitisations, sub-participations or credit derivatives or receivables of affiliated companies are not taken into account. All receivables must fulfil the minimum requirements of § 105 SolvaV.

### 4.1 Valuation

Market value is the receivables amount derived from the list of receivables submitted by the accounting department of the borrower on a regular basis. Those lists of receivables are subject to regular reviews.

Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

### 4.2 Effect of Credit Risk Mitigation

The LGD (Loss Given Default) of the collateral value, evaluated upon the above mentioned criteria, is reduced for senior claims to 35% in case of an over collateralisation of 125%. In case no full collateralisation exists, the exposure is split into a collateralised part (considering the 125% over collateralisation level) with a LGD of 35% and an uncollateralized part with a LGD of 45%.

## 5. Other Physical Collateral

The following movable objects are used for credit risk mitigation purposes, if the minimum requirements according to § 107 SolvaV are fulfilled:

- motor vehicles (especially cars, busses, trucks, motorbikes)
- ships
- airplanes
- trains (locomotives, wagons)
- commodities
- machinery
- containers

## 5.1 Valuation

Such physical collateral is only valued for credit risk mitigation purposes if there is a liquid market for realisation of the collateral in an expeditious and economically efficient manner.

Valuation is based on the market value, i.e. the estimated amount for which the movables can be sold on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction. On a single case basis the market value is reduced by the risks resulting from e.g. obsolescence or special equipment.

Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

## 5.2 Effect of Credit Risk Mitigation

The LGD (Loss Given Default) of the collateral value, evaluated upon the above mentioned criteria, is reduced for senior claims to 40% in case of an over collateralisation of 140%. In case no full collateralisation exists, the exposure is split into a collateralised part (considering the 140% over collateralisation level) and an uncollateralized part. In case the collateral value is below 30% of the exposure no LGD reduction is applied.

# 6. Unfunded Credit Protection

All kinds of personal liabilities given by the below mentioned protection providers and fulfilling the minimum requirements according to §§ 111, 114 SolvaV are considered as unfunded credit protection.

## 6.1 Protection Providers

For the purpose of credit risk mitigation liabilities of the following protection providers are taken into account:

- Central governments and central banks
- Regional governments
- Multilateral development banks
- International organisations, claims on which are treated with a risk weight of 0 under the Standardised Approach
- Public sector entities, claims on which are treated as claims on institutions or central governments under the Standardised Approach
- Institutions
- Other corporate entities, including parent companies and subsidiaries as well as affiliated companies, if there is a valid internal rating of at least credit quality step 2 according to the Standardised-Approach.

The most important protection providers in this regard are central governments, institutions and other corporate entities.

## 6.2 Valuation

The value of the unfunded credit protection is the guaranteed amount that is the amount the protection provider has to pay if an event of default occurs. An accurate review of the economic capacity of the protection provider is a precondition for the valuation.

Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

## 6.3 Effect of the Credit Risk Mitigation

For the guaranteed amount the PD (Probability of Default) of the protection provider is taken into account for risk weighted asset calculation instead of the PD of the borrower.

## 6.4 Unfunded Credit Protection with a counter guarantee

In case an exposure is secured by an unfunded credit protection, which itself is counter guaranteed by another unfunded credit protection of one of the following protection providers, the PD of the counter guarantor is taken into consideration for RWA (Risk Weighted Assets) calculation, if all requirements of § 113 para 2 SolvaV are fulfilled. The same applies to a counter guarantee of another credit protection provider (other than the below mentioned), if this counter guarantee is directly counter guaranteed by one of the following protection providers and the requirements of § 113 para 2 SolvaV are fulfilled:

- Central governments and central banks
- Regional governments or local authorities
- Multilateral development banks
- International Organisations
- Public sector entities, claims on which are treated as claims on institutions or central governments under the Standardised Approach

## 7. Credit Derivatives

Credit Default Swaps, Total Return Swaps and Credit Linked Notes (to the extent of their cash funding) and instruments that are composed of such credit derivatives or that are economically effectively similar, are recognised as eligible for the purpose of credit risk mitigation if the minimum requirements according to § 111, 116 SolvaV are fulfilled.

Counterparties are the credit protection providers mentioned in Clause 6.1., thereof primarily institutions.

### 7.1 Valuation

The value of the credit derivative is the guaranteed amount, that the counterparty has to pay, if an event of default/credit event occurs. An accurate review of the economic capacity of the protection provider is a precondition for the valuation. Any maturity or currency mismatch of the protection is considered automatically when linked to the secured exposure.

### 7.2 Effect of Credit Risk Mitigation

The effect of credit risk mitigation corresponds to the effect of unfunded credit protection, except for Credit Linked Notes, which are treated like cash collateral.