# QUALITATIVE DISCLOSURE OF RZB CREDIT-INSTITUTION GROUP 2012.

Qualitative Disclosure of Raiffeisen Zentralbank Österreich Aktiengesellschaft pursuant to Article 26 Austrian Banking Act (BWG) in accordance with Disclosure Regulation (OffV) as of 31/12/2012



2 Introduction

# 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 Ratingsbased 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). 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.

#### © 2012

# Qualitative Disclosure of the RZB Credit Institution Group Version 4.0

#### Raiffeisen Zentralbank Österreich AG

Registered office (also mailing address): Am Stadtpark 9, A-1030 Vienna, Austria Telephone No.: +43-1-71707-0; Fax: +43-1-71707-1715

#### Editorial deadline

March 27, 2013

#### Editor

RBI Group Financial Reporting (Editor) supported by RBI Credit Risk Control, RZB Risk Controlling, RBI Securitisation and RBI Credit & Limit Control

#### 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).

3

# Content

§ 2 OftV - Risk Management	4
1. Risk Management Principles	4
2. Organization of risk management	
3. Overall bank risk management	
4. Risk categories	
§ 8 OffV – Use of the standardised Approach for Credit Risk	
§ 15 OffV – Securitisation	
§ 16 OffV - Disclosure applicable to the Internal Rating Based Approach	14
1. Approaches or Transition Arrangements Approved by the Competent Authorities	14
2. Structure of the Internal Rating Systems	26
2.1 Use of Internal Estimates	26
2.2 Control Mechanism for Rating Systems	26
2.3 Description of the Internal Rating Process	27
2.4. Comparison of the Estimates of the Credit Institution and the Actual Results	
2.5. Definitions Methods and Data for the Estimation and Validation of Probability of Defa	ılt (PD)34
2.6. Description of Major Deviations from the Definition of Default	35
§ 17 OffV - Disclosure Applicable to Credit Risk Mitigation	
1. Management and Recognition of Credit Risk Mitigation	35
2. Financial Collateral	
3. Real Estate Collateral	37
4. Receivables	38
5. Other Physical Collateral	38
6. Unfunded Credit Protection	
7. Credit Derivatives	40

# § 2 OffV - Risk Management

Active risk management is one of the core competencies of RZB. In order to effectively identify, measure, and manage risks the Group has implemented a comprehensive risk management system in the past and continues to develop it. Risk management constitutes an integrated 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. Risk management in RZB controls the exposure to and ensures professional management of all material risks.

## 1. Risk Management Principles

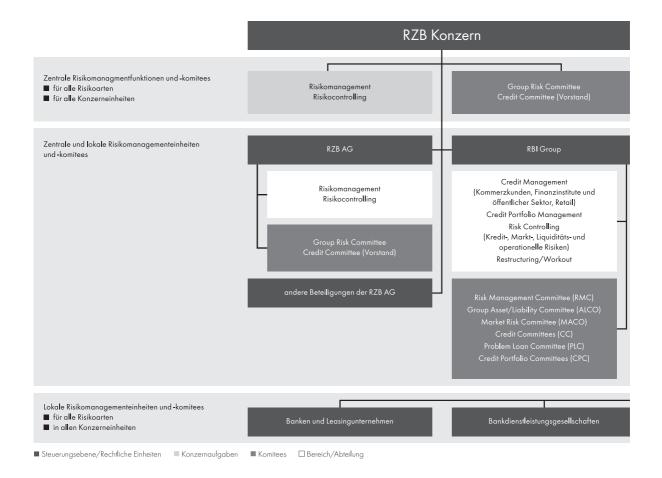
RZB has a system of risk principles and procedures in place for measuring and monitoring risk, with the aim of controlling and managing risks at all banks and specialist companies in the Group. The risk policies and risk management principles are laid out by the Managing Board of Raiffeisen Zentralbank. The following risk policies highlight some of the principles:

- Integrated risk management: Credit, country, market, liquidity, participation and operational risks are managed as main risks
  throughout the Group. For this purpose, risks are measured, limited, aggregated, and compared to available risk coverage
  capital.
- Standardized methodologies: Risk measurement and risk limitation methods are standardized in order to ensure a consistent
  and coherent approach to risk management. This is efficient for the implementation of risk management methods. And it is the
  basis for consistent overall bank management across all countries and business segments in RZB.
- 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 risk concentrations.
- Independent control: Clear personal and functional firewalls are in place 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 done 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 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 risk related 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.

## 2. Organization of risk management

The Managing Board of Raiffeisen Zentralbank ensures the proper organisation 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 Managing Board is supported in implementing these tasks by independent risk management units and specially appointed committees.



Basically, risk management functions are performed on different levels in the Group. Raiffeisen Zentralbank Österreich Aktiengesellschaft as the parent credit institution of the Group is responsible for the adequate and appropriate implementation of the Group's risk management process. In particular, it establishes common risk management principles and set business-specific standards, tools, and practices. Raiffeisen Bank International mostly develops and implements these concepts (in close cooperation and coordination with its subsidiaries) for Raiffeisen Zentralbank as agreed upon in service level agreements.

Local risk management in individual Group members thus is steered centrally. Local risk management units 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 they send them to central risk management units via defined reporting 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 Managing Board and the heads of individual business units. It also measures required risk coverage capital for different business units and calculates the utilization of the allocated risk capital budgets in the internal capital adequacy framework.

#### Risk committees

Different committees for managing risks with Group-wide competencies have been established in Raiffeisen Zentralbank and Raiffeisen Bank International.

The Group Risk Committee in Raiffeisen Zentralbank secures coherent regulations within the Group which regulate the definition and/or measurement of risk. It approves methods and parameters for risk quantification models and risk management processes, analyzes the Group's risk situation, recommends risk management/controlling activities like allocation of risk coverage capital, and advises the Managing Board of Raiffeisen Zentralbank in these matters.

Furthermore, the Group Risk Committee discusses and reviews relevant topics that are treated in Raiffeisen Bank International in the Risk Management Committee and the following committees.

The Group Asset/Liability Committee assesses and manages balance sheet risks and liquidity risk. In this context it plays an important role for the Group's long-term funding planning and hedging of structural risk positions.

The Market Risk Committee controls market risks of trading and banking book transactions and establishes corresponding limits and processes. In particular, it uses treasury results, the amount of risks taken and the limit utilization, as well as the results from scenario analyses and stress tests for market risks 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 and sovereigns, and retail). They approve limit applications according to the credit approval authority (depending on rating and exposure size) and vote on all credit decisions.

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.

#### 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 ensure 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 Organisation & Internal Control System (in Raiffeisen Bank International as defined by an SLA), which continuously analyses the internal control system and keeps it up to date. If actions are necessary for closing any deficiencies this division is also responsible for tracking the closure of any open issues.

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

The Compliance Office is responsible for all issues concerning compliance with legal requirements. It is supplementary to and at the same time an integral part of the internal control system and is responsible for preventing any shortcomings in daily operations. 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.

## 3. Overall bank risk management

Maintaining an adequate level of capital is a core objective of risk management at RZB. Capital adequacy is monitored on a quarterly basis based on the actual risk level, which is measured by internal models, taking into account the materiality of risks for choosing appropriate models. This capital adequacy framework incorporates both, capital requirements from a regulatory point of view (sustainability and going concern perspective) and from an economic point of view (target rating perspective).

Objective	Description of risk	Measurement technique	Confidence level
Target rating perspective	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
Going concern perspective	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	99 per cent reflecting the owners' willingness to inject additional own funds
Sustainability perspective	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

This concept for overall bank risk management also satisfies the requirement for an internal capital adequacy assessment process (ICAAP) as required by Basel II (Pillar 2) regulations.

#### Target rating perspective

Risks in the target rating perspective are measured as economic capital presenting 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 incl. country risk, market, participation, and operational risk). In addition, a general buffer for other risks not explicitly quantified is held on Group level.

RZB uses a confidence level of 99.95 per cent for calculating unexpected losses for a 1 year horizon. This confidence level is based on the probability of default implied by the target rating. The purpose of calculating economic capital is to determine the amount of capital that would be required for servicing the claims of customers and creditors even in the case of such an extremely rare event. The overall risk amount is compared to internal capital, which mainly denotes equity and subordinated capital. It serves as a cushion for servicing claims of senior debtors if losses are incurred.

Economic capital is an important instrument in overall bank risk management and is used for allocating risk budgets. Economic capital budgets are allocated to business segments during the annual budgeting process and are complemented for day-to-day management by volume, sensitivity, or value-at-risk limits. In RZB this sort of 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 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 it is used in turn as a key figure for overall bank management, for future capital allocations to business units, and influences performance-oriented compensation of the Group's executive management.

#### Going-concern perspective

Parallel to that procedure, 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 focus on regulatory capital and minimum capital requirements.

According to this target, risk taking capacity is calculated as the amount of planned profits, expected risks costs, 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 are mostly comparable to the target rating perspective, (albeit on a lower 99 per cent confidence level). Using this perspective the Group ensures adequate regulatory capitalization (going concern) with the given probability.

In this process, regulatory capital requirements are calculated on Group level according to Austrian regulations. Local regulatory capital requirements for individual Group units can be met by adequate structural balance sheet measures. Internal targets for regulatory capital ratios are intentionally set higher than the legal minimum, in order to be able to fulfil regulatory capital requirements at all times and to account for other risks, which are not considered in the regulatory requirements.

#### Sustainability perspective

The main goal of the sustainability perspective is to ensure that RZB can maintain a sufficiently high core capital ratio for the three year planning period also in a severe macroeconomic downturn scenario. This analysis of the sustainability perspective 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 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 for a multi-year period. The minimum amount of core capital is thus determined by the size of the potential economic downturn. In this analysis the need for allocating loan loss provisions, potential procyclical effects that increase minimum regulatory capital requirements, the impact of foreign exchange fluctuations as well as other valuation and earnings effects resulting from the downturn scenario 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 items, industries, or geographical regions) and gives insight into the profitability, liquidity situation, and solvability under extreme situations.

## 4. Risk categories

#### Credit risk

Credit risk within RZB stems mainly from default risks that arise from business with retail and corporate customers, other banks and sovereign borrowers. Default risk is defined as the risk that a customer will not be able to fulfil contractual financial obligations. Also migration risks (caused by deteriorations in customers' creditworthiness), concentration risks of creditors, risks in credit risk mitigation techniques, and country risk are also considered.

Credit risk is by far the most important risk category in RZB, as also indicated by internal and regulatory capital requirements. In the Group it is analyzed and monitored both on an individual loan and customer-by-customer basis as well as on a portfolio basis. 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 work flow - from the customer's initial credit application, to the bank's credit approval, and finally to the repayment of the loan. 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, extensions, 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 decision-making level.

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

The limit application process in the retail segment is more highly automated due to the high number of applications and lower exposure amount. Limit applications often are assessed and approved in central processing centers based on credit score cards. This process is facilitated by the respective IT system for retail customers in the Group.

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, analysing the long-term potential of different markets is a routine activity. This allows for an early strategic repositioning of future lending activities.

Collateralization is one of the main strategies and an actively pursued measure for reducing potential credit risks. The value of collateral and the effect of other risk mitigation techniques are determined within each limit application. The risk mitigation effect taken into account is the value that RZB expects to receive when selling the collateral within a reasonable liquidation period. Eligible collaterals are defined in the Group's collateral catalogue and evaluation guidelines for collateral. The collateral value is calculated according to specified methods, which include standardized calculation formulas based on market values, predefined minimum discounts, and expert assessments.

The credit portfolio and individual borrowers are subject to constant monitoring. The main purpose of monitoring is to ensure that the borrower meets the terms and conditions of the contract as well as following the obligor's economic development. A review is conducted at least once annually in the non-retail asset classes corporates, financial institutions, and sovereigns. This includes a rating review and the re-evaluation of financial and tangible collaterals.

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 the 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 and/or by external specialists as well. Work-out units play a decisive role in accounting and analysing as well as booking provisions for impairment losses (write-offs, value adjustments, provisioning). Their early involvement can help reducing losses resulting from problem loans.

Default and workout standards in the retail area comprise the whole restructuring and collection process for private individuals and small enterprises. A restructuring guideline defines the Group's restructuring framework including uniform strategy, organization,

methods, monitoring and controlling. In the collection process customers are classified into three categories 'early', 'late' and 'recovery', for which a standardized customer handling process is defined each.

#### 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 convergence markets. In these markets political and economic risks to some extent are still seen as significant.

As country risk is closely associated with the risk of sovereign institutions, it is measured based on the same ten-class rating model. This rating model includes a quantitative analysis of the macro-economic risk of a particular country and a qualitative analysis of the political risk in a particular country. Country risk management in RZB is based on the country risk policy which is approved semi-annually by the Managing Board. This policy sets a strict limitation on risk exposure to foreign countries.

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. Country risk also is reflected in product pricing as well as in risk-adjusted performance management. Business units therefore can benefit from country risk mitigation by seeking insurance (e.g. from export credit insurance organizations) or guarantors in third countries.

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 Global Treasury division in Viennaand on a decentralized basis by local banking subsidiaries. Cash flows are calculated and analysed by currency on a weekly basis in an internal monitoring system. Based on this data, the Group creates liquidity balances, and analyses whether the Group always 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's Asset/Liability Committee.

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. In addition the Group holds sizeable positions in 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 appetite 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's banking activities are refinanced by combining wholesale funding and the retail franchise of deposit-taking network banks. RZB is the central liquidity balancing agent for the Austrian Raiffeisen Banking Group and local Group members 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 Raiffeisen Bank International as the larges single bank, but also individually by different banking subsidiaries. Those efforts are coordinated and optimized through a joint funding plan. Moreover, Raiffeisen Bank International as member of the Group enables medium-term and long-term borrowing activities of 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 medium term targets for loan-/deposit ratios (the ratio of customer loans to customer deposits) have been revised for individual network banks taking into account expected Basel III regulations. The limits incorporate 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 low expected operational risk costs of individual business units. Generally speaking, RZB implements a centralized - 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

An important task for controlling operational risks is 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).

Operational risk self-assessment is executed in a structured and Group-wide uniform manner, where all operational risk categories and business functions are assessed in a two-dimensional matrix (per business line or product group). This 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 scenario analysis framework that includes the simulation of up to ten 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 as measurable indicators that allow promptly identifying and mitigating operational risks. They are specifically tailored to individual Group units as well. A common catalogue of key risk indicators, which is defined by the 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 for each 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 (and near misses) is used to create and validate operational risk scenarios and for exchange with inter national data pools to develop advanced operational risk management tools. In 2011 RZB became a member of the ORX consortium, a reputable international data pool.

Operational risks are reported in a comprehensive manner to the Group Risk Committee on a quarterly basis. 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 these events occur. In addition, several dedicated organizational units provide support to business units for reducing operational risks. An important role, for instance, plays 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:

12 § 15 OffV - Securitisation

		Rating	
Rating notch	Standard & Poor's	Moody's	Fito
1	AAA	Aaa	AAA
1	AA+	Aa	AA+
1	AA	Aal	AA
1	AA-	Aa2	AA-
1		Aa3	
2	A+	Al	A+
2	A	A2	А
2	A-	A3	A-
3	BBB+	Baa 1	BBB+
3	BBB	Baa2	BBB
3	BBB-	Baa3	BBB-
4	BB+	Bal	BB+
4	ВВ	Ba2	ВВ
4	BB-	ВаЗ	BB-
5	B+	B1	B+
5	В	B2	В
5	В-	В3	B-
6	CCC+	Caal	CCC+
6	CCC	Caa2	CCC
6	CCC-	Caa3	CCC-
6	CC	Са	CC
6	С	С	С
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 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 and Investor.

# The approaches used by the Bank to calculated 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 securitzation does not lead to effective risk transfer, the weighted exposure amount in relation to such transaction is not calculated.

§ 15 OffV - Securitisation

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  $X \le KIRB$ ) or, if  $X \ge KIRB$ , 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 rated tranches, 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.

#### Accounting guidelines applied by the Bank to securitisation transactions

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:

- a) 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).
- b) Further to item a) above, no profit from sale of assets under the consolidated financial reports has been reported so far;
- c) 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)
- d) 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, Standard & Poor's and Creditreform..

# § 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)

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)

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

- 1.1.2.1. 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)
- 1.1.2.2 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., Pragueue (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)

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.
- 1.1.2.3 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).
- 1.1.2.4 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., Pragueue (CZ) and Raiffeisen Bank S.A., Bucharest (RO).
- 1.1.2.5 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].
- 1.1.2.6 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].
- 1.1.2.7 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 (BiH)
- Raiffeisen Bank Kosovo J.S.C., Prishtina (RKS)
- Raiffeisen Banka a.d., Beograd (SRB)
- Raiffeisen Bank Aval JSC, Kiev (UA)
- Raiffeisen Lízing Zrt., Budapest (H)

#### 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., Viennaand 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	Subsidiaries of Raiffeisen-Leasing International Gesellschaft m.b.H., Vienna		
Country	Company		
CZ	Raiffeisen-Leasing, spolecnost 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 S.R.L., Bucharest (RO)		
RS	Raiffeisen Leasing d.o.o., Belgrade (SRB)		
RS	Raiffeisen Rent doo., Belgrade (SRB)		
AL	Raiffeisen Leasing sh.a. , Tirane (AL)		
ВА	Raiffeisen Leasing d.o.o., Sarajevo (BiH)		
SI	Raiffeisen Leasing d.o.o., Ljubljana (SLO)		
RU	OOO Raiffeisen-Leasing, Moscow (RUS)		
KZ	Raiffeisen Leasing Kazakhstan LLP, Almaty (KZ)		
XK	Raiffeisen Leasing Kosovo LLC, Pristina (SRB)		
BY	JV "Raiffeisen-leasing", Minsk (BY)		
ВН	Raiffeisen Leasing d.o.o., Sarajevo (BiH)		
LT	Raiffeisen-Leasing Lithuania UAB Vilius (LT)		
UA	Raiffeisen Leasing Aval LLC, Kiev (UA)		

Subsidiarie	Subsidiaries of Raiffeisen-Leasing Gesellschaft m.b.H., Vienna		
Country			
AT	Raiffeisen-Leasing Gesellschaft m.b.H., Vienna(A)		
AT	Raiffeisen-Leasing Bank Aktiengesellschaft, Vienna(A)		
AT	RL DANTE Mobilien-Leasing GmbH, Vienna(A)		
DE	Abade Immobilienleasing GmbH & Co Projekt Lauterbach KG, Grünwald (D)		
DE	Abakus Immobilienleasing GmbH & Co Projekt Leese KG, Grünwald (D)		
DE	Abutilon Immobilienleasing GmbH & Co. Projekt Autohof Ibbenbüren KG, Frankfurt am Main (D)		
DE	Abura Immobilienleasing GmbH & Co. Projekt Seniorenhaus Boppard KG, Frankfurt am Main (D)		
DE	Achat Immobilienleasing GmbH & Co. Projekt Hochtaunus-Stift KG, Frankfurt am Main (D)		
DE	Acridin Immobilienleasing GmbH & Co. Projekt Marienfeld KG, Frankfurt am Main (D)		
DE	Adagium Immobilienleasing GmbH, Frankfurt am Main (D)		
DE	Adamas Immobilienleasing GmbH & Co. Projekt Pflegeheim Werdau KG, Frankfurt am Main (D)		
DE	Adessentia Immobilienleasing GmbH, Frankfurt am Main (D)		
DE	Adiantum Immobilienleasing GmbH & Co. Projekt Schillerhöhe Weimar KG, Frankfurt am Main (D)		
DE	Adrittura Immobilienleasing GmbH & Co. Projekt Eiching KG, Eschborn (D)		
DE	Adular Immobilienleasing GmbH & Co. Projekt Rödermark KG, Frankfurt am Main (D)		
AT	AELLO Aello Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)		
DE	Agamemnon Immobilienleasing GmbH & Co. Projekt Pflegeheim Freiberg KG, Frankfurt am Main (D)		
AT	AGIOS Raiffeisen-Immobilien Leasing Ges.m.b.H., Vienna(A)		
AT	AGITO Immobilien-Leasing GesmbH, Vienna(A)		
AT	AKRISIOS Raiffeisen-Immobilien-Leasing, Vienna(A)		
DE	Austria Leasing GmbH & Co. KG Immobilienverwaltung CURA, Frankfurt am Main (D)		
AT	ALTHAIA Raiffeisen-Immobilien-Leasing GmbH, Vienna[A]		
AT	APUS Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)		
AT	Arcana Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)		
AT	ARTEMIA Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)		
AT	AURIGA Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)		
DE	Austria Leasing GmbH GmbH& Co. KG Immobilienverwaltung Project Eberdingen, Frankfurt am Main (D)		
DE	Austria Leasing GmbH & Co. Immobilienverwaltung Projekt Hannover KG, Vienna(A)		
DE	AL Taunussteiner Grundstücks-GmbH & Co KG, Frankfurt am Main (D)		
AT	Burgenländische Kommunalgebäudeleasing Gesellschaft m.b.H., Eisenstadt (A)		
AT	Blumau Beteiligungen GmbH, Villach (A)		
AT	Liegenschaftsverwaltung der Therme Blumau GmbH&CoKG, Villach (A)		
AT	BRISEIS Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)		
AT	BRL Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Eisenstadt (A)		
AT	CADO Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)		
AT	Canopa Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)		
DE	CARNUNTUM Immobilienleasing GmbH, Frankfurt a. M. (D)		

Country	Company
AT	CERES Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	COL Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	CUPIDO Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	CURO Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	DOROS Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	ETEOKLES Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	FEBRIS Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	Geno Leasing Ges.m.b.H., Vienna(A)
AT	HABITO Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	HERA Raiffeisen Immobilien Leasing GmbH, Vienna(A)
AT	HERMIONE Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	HESTIA Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	Hietzinger-Spitz Projektentwicklung GmbH, Vienna(A)
AT	IGNIS Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	ISIS Raiffeisen Immobilien Leasing GmbH, Vienna(A)
AT	First Leasing Service Center GmbH, Vienna(A)
AT	JUNO Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
SF	Kiinteistö Oy Rovaniemen tietotekniikkakeskus, Helsinki (SF)
SF	Kiinteistö Oy Seinäjoen Joupinkatu 1, Helsinki (SF)
DE	Laomedon Immobilienleasing GmbH, Frankfurt am Main (D)
DE	Lentia Immobilienleasing GmbH & Co. Albert-Osswald-Haus KG, Frankfurt am Main (D)
AT	LIBRA Raiffeisen Immobilien Leasing GmbH, Vienna(A)
AT	LT Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
AT	LYRA Raiffeisen Immobilien Leasing GmbH, Vienna(A)
AT	MANDRIA Raiffeisen Immobilien Leasing GmbH, Vienna(A)
AT	MELIKERTES Raiffeisen-Mobilien-Leasing GmbH, Vienna(A)
AT	MIRA Raiffeisen Immobilien Leasing GmbH, Vienna(A)
AT	MIRUS Raiffeisen Immobilien Leasing GmbH, Vienna(A)
AT	MOBIX Raiffeisen-Mobilien-Leasing AG, Vienna(A)
AT	MOBIX Vermögensverwaltungsges.m.b.H., Vienna(A)
AT	NÖ Landes-Landwirtschaftskammer Errichtungs- und Betriebsges.m.b.H., Vienna(A)
FI	RL-Nordic OY, Helsinki (SF)
AT	OCTANOS Raiffeisen Immobilien Leasing Ges.m.b.H., Vienna(A)
DE	Orestes Immobilienleasing GmbH & Co. Projekt Wiesbaden KG, Frankfurt (D)
AT	ORION Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
DE	Ostarrichi Immobilienleasing GmbH & Co. Projekt Langenbach KG, Frankfurt am Main (D)
AT	PALADIOS Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	PARO Raiffeisen Immobilien Leasing Ges.m.b.H., Vienna(A)
AT	PEGA Raiffeisen-Immobilien Leasing Gesellschaft m.b.H., Vienna(A)
AT	PELIAS Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)

Country	Company
AT	PLANA Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
DE	Priamos Immobilienleasing GmbH, Frankfurt am Main (D)
AT	PROPRIA Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)
CY	Pointon Investment Limited, Limassol (CY)
AT	PYGRA Raiffeisen Immobilien Leasing Ges.m.b.H., Vienna(A)
AT	Raiffeisen-Gemeindegebäudeleasing Gesellschaft m.b.H., Vienna(A)
AT	Raiffeisen-Kommunalgebäudeleasing Gesellschaft m.b.H., Vienna(A)
AT	RAN elf Raiffeisen-Anlagenvermietung Ges.m.b.H., Vienna(A)
AT	RAN zehn Raiffeisen-Anlagenvermietung Ges.m.b.H., Vienna(A)
AT	RAN vierzehn Raiffeisen-Anlagevermietung GmbH, Vienna(A)
AT	Raiffeisen-Anlagenvermietung Ges.m.b.H., Vienna(A)
AT	REMUS Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)
AT	Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	RIL IV Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)
AT	RILREU Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)
AT	RIL VI Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)
AT	RIL VII Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)
AT	RIL XIII Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)
AT	RIL XIV Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)
AT	RLAIR Raiffeisen-Leasing Aircraft Finance GmbH, Vienna(A)
DE	RL Anlagenvermietung Gesellschaft m.b.H., Frankfurt am Main (D)
AT	RL Flussschifffahrts GmbH & Co KG, Vienna(A)
DE	RL FUEGO Immobilienleasing GmbH, Frankfurt am Main (D)
AT	RL Grundstückverwaltung Klagenfurt-Süd GmbH, Vienna(A)
AT	RL Hotel Palace ViennaBesitz GmbH, Vienna(A)
PL	RL-Pro Auxo Sp.z.o.o., Gdansk (PL)
AT	Raiffeisen-Leasing Gesellschaft m.b.H. & Co KG, Vienna(A)
AT	Raiffeisen-Leasing Liegenschaftsverwaltung Kraußstraße Gesellschaft m.b.H., Vienna(A)
DE	RL Leasing Gesellschaft m.b.H., Munich (D)
AT	RL Parkgaragen GmbH, Vienna(A)
AT	Raiffeisen Leasing-Projektfinanzierung Gesellschaft m.b.H., Vienna(A)
AT	Raiffeisen-Leasing Wärmeversorgungsanlagenbetriebs GmbH, Vienna(A)
AT	"Raiffeisen-Rent" Vermögensberatung und Treuhand Gesellschaft m.b.H., Vienna(A)
AT	RUBRA Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	SAMARA Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)
AT	SF Hotelerrichtungsgesellschaft m.b.H., Vienna(A)
AT	SINIS Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	SOLAR II Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	SOLIDA Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)
AT	SPICA Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)

Subsidiaries of Raiffeisen-Leasing Gesellschaft m.b.H., Vienna		
Country	Company	
AT	"Am Hafen" Sutterlüty GmbH & Co KG, Vienna(A)	
AT	THETIS Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)	
AT	THYMO Raiffeisen-Leasing Gesellschaft m.b.H., Vienna(A)	
AT	TRITON Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)	
AT	UNIQA Immobilien-Projekterrichtungs GmbH, Vienna(A)	
AT	Unterinntaler Raiffeisen-Leasing GmbH & Co KG, Vienna(A)	
AT	URSA Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)	
AT	VANELLA Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)	
AT	VERUS Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)	
DE	Vindobona Immobilienleasing GmbH & Co. Projekt Autohaus KG, Grünwald (D)	
AT	WEGA Raiffeisen-Immobilien-Leasing Gesellschaft m.b.H., Vienna(A)	
AT	ZETES Raiffeisen-Immobilien-Leasing GmbH, Vienna(A)	
AT	Raiffeisen-Leasing Österreich Gesellschaft m.b.H., Vienna(A)	
SE	RL-Nordic AB, Stockholm (S)	
SE	RL-Nordic Finans AB, Stockholm (S)	
SE	Moerby AB, Stockholm (S)	
HU	SCTE Első Ingatlanfejlesztő és Ingatlanhasznosító Kft., Budapest (H)	

Other subsidiaries with small business portfolios and low risk profiles		
Country	Company	
RS	Bulevard Centar BBC Holding d.o.o., Beograd (RS)	
RS	Building Business Center doo Novi Sad, Novi Sad (RS)	
AT	Kathrein & Co. Vermögensverwaltung GmbH, Vienna(A)	
AT	Raiffeisen Investment Aktiengesellschaft, Vienna(A)	
AT	Raiffeisen-RBHU Holding GmbH, Vienna(A)	
NL	Central Eastern European Finance Agency B.V., Amsterdam (NL)	
AT	Eastern European Invest GmbH, Vienna(A)	
AT	Eastern European Invest Holding GmbH, Vienna(A)	
PL	EFG Poldystrybucja Sp. z o.o., Warswa (PL)	
PL	EGF Property Services Polska Sp.z.o.o., Warswa (PL)	
PL	EGF Leasing Polska Sp.z.o.o., Warswa (PL)	
AT	HYPO Capital Management AG Vienna(A)	
AT	Julius Baer Multiflex SICAV-SIF Verto Recovery Fund	
AT	Lexxus Services Holding GmbH, Vienna(A)	
RS	Park City real estate Holding d.o.o., (RS)	
RU	000 RB Obligatsii, Moskau (RU)	
UA	REH Limited, Limassol (CY)	
NL	RI Eastern European Finance B.V., Amsterdam (NL)	
AT	RIRE Holding GmbH., Vienna(A)	
AT	Raiffeisen Investment Financial Advisory Services Ltd. Co. Istanbul (TR)	
PL	Vela Sp z o.o., Warsow (PL)	
RU	Roof Russia DPR Finance Company S.A., Luxemburg (LU)	
RU	Roof Russia S.A, Luxemburg (L)	
AT	ZUNO BANK AG, Vienna(A)	
AT	Raiffeisen International Invest Holding GmbH, Vienna(A)	
AT	RI-RBHU Holding GmbH, Vienna(A)	
AT	Raiffeisen-Leasing International Gesellschaft m.b.H., Vienna(A)	

Other subsi	Other subsidiaries with small business portfolios and low risk profiles		
Country			
AT	RLI Holding Gesellschaft m.b.H., Vienna(A)		
AT	Raiffeisen RS Beteiligungs GmbH, Vienna(A)		
AT	Raiffeisen SEE Region Holding GmbH, Vienna(A)		
BG	ROOF Consumer Bulgaria 2007 - I B.V., Amsterdam (NL)		
RO	ROOF Consumer Romania 2008 - 1 B.V., Amsterdam (NL)		
VG	Golden Rainbow International Limited, Tortola (VG)		
AT	RZB KI Beteiligungs GmbH, Vienna(A)		
AT	RZB Invest Holding GmbH, Vienna(A)		
AT	RZB Sektorbeteiligung GmbH, Vienna(A)		
AT	RZB IB Beteiligungs GmbH, Vienna(A)		
AT	RALT Raiffeisen-Leasing Gesellschaft m.b.H., Vienna(A)		
AT	RALT Raiffeisen-Leasing Gesellschaft m.b.H. & Co. OHG, Vienna(A)		
JE	RZB Finance (Jersey) II Ltd, St. Helier (GBJ)		
JE	RZB Finance (Jersey) III Ltd, St. Helier (GBJ)		
JE	RZB Finance Jersey IV Ltd, St. Helier (GBJ)		
AT	Raiffeisen International Beteiligungs GmbH, Vienna(A)		
JE	RI FINANCE (JERSEY) PCC, St. Helier (GBJ)		
AT	RSC Raiffeisen Daten Service Center GmbH, Vienna(A)		
AT	Taurus Raiffeisen-Immobilien-Leasing Ges.m.b.H., Vienna(A)		
AT	ZHS Office- & Facilitymanagement GmbH, Vienna(A)		
CZ	Raiffeisen-Leasing Real Estate, s.r.o., Prague (CZ)		
CZ	RLRE Alpha Property s.r.o., Prague (CZ)		
CZ	RLRE Beta Property, s.r.o., Prague (CZ)		
CZ	Cristal Palace Real Estate s.r.o., Prague (CZ)		
CZ	Dione Property s.r.o., Prague (CZ)		
CZ	RLRE Hotel Ellen, s.r.o., Prague (CZ)		
CZ	RLRE Eta Property, s.r.o., Prague (CZ)		
CZ	Gaia Property, s.r.o., Prague (CZ)		
CZ	Iris Property, s.r.o., Prague (CZ)		
CZ	RLRE Jota Property, s.r.o., Prague (CZ)		
CZ	Lucius 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 Perseus Property, s.r.o.; Prague (CZ)		
CZ	RLRE Raines Property, s.r.o.; Prague (CZ)		
CZ	Sirius Property, s.r.o., Prague (CZ)		
CZ	Themis Property, s.r.o., Prague (CZ)		
CZ	RLRE Ypsilon Property, s.r.o., Prague (CZ)		
CZ	Chronos Property, s.r.o., Prague (CZ)		
HU	BUTÁR Gazdasági Szolgáltató Kft., Érd (H)		
. 10	Son in Catalogic Stalgando And Ed Ed		

Other subs	Other subsidiaries with small business portfolios and low risk profiles		
Country	Company		
HU	Rb Kereskedhöház Kft, Budapest (H)		
HU	Raiffeisen Biztosításközvetítö Kft., Budapest (H)		
HU	SCT Tündérkert Kft., Budapest (H)		
HU	SCTAI Angol Iskola Kft, Budapest (H)		
HU	Harmadik Vagyonkezelö Kft., Érd (H)		
HU	SCT Kárász u. Kft., Budapest (H)		
HU	Raiffeisen Ingatlan Vagyonkezelö Kft., Budapest (H)		
HU	T+T 2003 Kereskedelmi és Szolgáltató Kft, Budapest (H)		
PL	Raiffeisen Insurance Agency Sp.z.o.o, Warswa (PL)		
SK	ELIOT spol.sr.o., Bratislava (SK)		
SK	Tatra Reality s.r.o., Bratislava (SK)		
SK	Doplnková dôchodková spoločnosť Tatra banky, a.s., Bratislava (SK)		
SK	Regional Card Processing Center s.r.o., Bratislava (SK)		
SK	Tatra Asset Management sprav.spol., a.s., Bratislava (SK)		
SK	Tatra Group Finance, s.r.o., Bratislava (SK)		
BG	RAIFFEISEN INSURANCE BROKER EOOD, Sofia (BG)		
HR	Raiffeisen Mandatory Pension Fund Management d.d., Zagreb (HR)		
HR	Raiffeisen Pension Insurance d.o.o., Zagreb (HR)		
HR	Raiffeisen Business Premises d.o.o., Zagreb (HR)		
HR	Raiffeisen Bonus Ltd., Zagreb, (HR)		
HR	Raiffeisen consulting Ltd., Zagreb (HR)		
RO	S.A.I. Raiffeisen Asset Management S.A., Bucharest (RO)		
RO	S.C. PLUSFINANCE ESTATE 1 S.R.L., Bucharest (RO)		
RO	Raiffeisen Pensii - Broker de Pensii Private SRL, Bucharest (RO)		
RO	Raiffeisen Services SRL, Bucharest (RO)		
AL	Raiffeisen Pensions Sh.A., Tirana (AL)		
ВА	"S-SPV" d.o.o., Sarajewo (BiH)		
ВА	RL Assistance d.o.o., Sarajevo (BiH)		
BY	JLLC Raiffeisen-Leasing, Minsk (BY)		
MD	Raiffeisen Leasing s.r.l, Chisinau (MD)		
RU	Raiffeisen Investment Ltd., Moskau (RUS)		
RU	Raiffeisen Non-State Pension Fund, Moskau (RUS)		
RU	LLC Vneshleasing, Moskau (RUS)		
RU	LLC "ARES Nedvizhimost", Moskau (RUS)		
RU	LLC "R1", Novosibirsk (RUS)		
RU	LLC Immobilien Invest (RUS)		
RU	LLC "R2", Novosibirsk (RUS)		

Other subsidie	Other subsidiaries with small business portfolios and low risk profiles	
Country	Company	
RU	LLC Tkatskoy, Moskau (RUS)	
RU	LLC "R3", Novosibirsk (RUS)	
AT	RBI LEA Beteiligungs GmbH, Vienna(AT)	
AT	RBI Leasing GmbH, Vienna(AT)	
AT	RBI LGG Holding GmbH, Vienna(AT)	
UA	REC Alpha LLC, Kiev (UA)	
UA	Ukrainian Processing Center, JSC, Kyiv (UA)	
CY	Vindalo Properties Limited, Limassol (CY)	

# 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	SMB	SLOT	INS	SOV	LRG	FIN	CIU
Central banks and central governments					Χ			
Local and regional governments						Χ		
Public sector entities and & non-commercial organisations	Х				Х	Х		
Multilateral development banks							Χ	
International organisations					Χ			
Financial institutions							Χ	
Corporate	Х	Х		Χ			Χ	Х
Project financing			Х					
Private (non retail)	Х							
Equity exposures	Х		Х	Χ			Χ	

# Key Companies (corporates) COI Small and medium business SME Project financing SLO Insurance companies INS Sovereigns SON Local and regional governments LRG Financial institutions FIN Collective Investiment Undertakings CIU

### 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 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 corporates rating model was developed by a working group made up of high-ranking experts in corporate analysis at the Raiffeisen Banking Group.

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

This rating approach was designed as an expert model. The rating expert 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 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 rating is calculated using ratios with discriminatory power.
  - The corporates rating model also distinguishes the sector (industry) and the accounting regulations applied in the preparation of the corporate client's financial statements.
- Qualitative analysis ("soft facts")
  - In addition to the mathematical assessment of the corporate client based on annual financial statements, it is imperative that the client be evaluated in terms of strengths and weaknesses and sector-specific opportunities and risks. This assessment of future-oriented factors is recorded in a standard and traceable manner.

The corporate 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.

#### **Rating Output**

The corporates rating model has 10 rating notches, to each of which is assigned a certain probability of default.

This client rating is an essential factor in the loan decision and greatly 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 determine 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 issuing 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.

#### 2.3.3. 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
  - This rating model is based on an evaluation of the client's financial data. The quantitative rating is determined from selected ratios. The six financial ratios are identical to the quantitative factors used in the corporates rating model. The SMB rating model distinguishes the sectors (industry) and the accounting regulations applied in the preparation of the SMB client's annual financial statements. In the RZB Group, all small business clients required to do double-entry accounting are evaluated using this rating system.
- Qualitative analysis ("soft facts")
   The client's qualitative evaluation is based on 23 criteria, which are subdivided into five individual categories: Owner/management, sector, business environment, financial flexibility and account relations. The definition of the individual factors incorporates 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.

#### Rating Output

The SMB model has a total of ten rating notches. The client's rating is not only an integral part of the loan decision, it also heavily influences loan terms and margins.

#### **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.

#### 2.3.4. 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.

#### 2.3.5. 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.

#### 2.3.6. 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.

#### 2.3.7. 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 rating model for CIUs is subdivided into the following sections: the qualitative section, the quantitative section and the risk estimation

The qualitative section in the rating has very high significance, as the legal background of the CIU significantly defines the risk the creditor is exposed to.

The qualitative section assesses the legal regulations under which the CIU is entitled to act and its own regulatory framework. As the own regulatory framework normally defines the parameters under which the fund is allowed to invest, these parameters – i.e. mainly types of assets are being evaluated as to their potential riskiness.

- In the quantitative section the CIU's leverage, usage of derivatives, performance over the past 5 years
- is being evaluated and compared to the market performance.
- In case of unregulated funds additional parameters which evaluate the operative and fraud risk are
- being taken into consideration.

In addition the analyst is entitled to give a final estimation on his evaluation on the overall riskiness of the fund.

#### Rating Output

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

Parallel to scoring, the 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.

#### 2.3.8. 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.

#### 2.3.9. 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 valuated 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, 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 must be sufficiently conservative.

The estimation of the 12-month PD is based on the RZB definition of default, which is modeled closely on the Basel II definition of default yet has a more operational orientation. 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 one-year PD is estimated using the "moving windows" method. This method entails calculating the realised 12-month rates for overlapping 12-month observation periods. The advantage of this method over consecutive (instead of overlapping) observation periods is that it is independent of the defined validation reference date and takes into account all rating migrations. The internal default data for PD estimation were applied to the corporates and SMB portfolios and a conservative haircut was applied using confidence intervals.

The low-default portfolios for *Sovereign, Fl 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

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 fulfill 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 knowledgea-

bly, 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 valuated 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  $\S\S$  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
- Mulitlateral 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.