Risk management

The risks of the Raiffeisen banks and Raiffeisen Switzerland are closely tied together.

Risk policy
Risk management systems are based on statutory provisions and the regulations governing risk policy for the Raiffeisen Group ("risk policy" for short). The risk policy is reviewed and updated annually. The Raiffeisen Group views entering into risks as one of its core competences. Risks are only entered into with full knowledge of their extent and dynamics, and only when the requirements in terms of systems, staff resources and expertise are met. The risk policy aims to limit the negative impact of risks on earnings and protect the Raiffeisen Group against high exceptional losses while safeguarding and strengthening its good reputation. The Raiffeisen Group's risk management is organised using the three-lines-of-defence model: Risks are managed by the responsible line units (first line). Group Risk Controlling ensures that the risk policy is observed and enforced, and the Compliance unit ensures that regulatory provisions are adhered to (second line). Internal Auditing ensures the independent review of the risk management framework (third line).

Risk control
The Raiffeisen Group controls the key risk categories using special processes and overall limits. Risks that are difficult to quantify are limited by qualitative stipulations. Risk control is completed by independent monitoring of the risk profile.

Group Risk Controlling is responsible for the independent monitoring of risk. This primarily involves monitoring compliance with the limits stipulated by the Board of Directors and the Executive Board. Group Risk Controlling also regularly evaluates the risk situation as part of the reporting process.

Notenstein La Roche Private Bank Ltd conducts risk control activities of its own – within overall limits defined by the Board of Directors and the Executive Board of Raiffeisen Switzerland – which are separate from the risk control activities of the risk-taking units. Raiffeisen Switzerland monitors the risk controls and risk exposure of its subsidiaries and ensures that Raiffeisen Switzerland's Board of Directors receives integrated risk reports that include Notenstein La Roche Private Bank Ltd. Raiffeisen Switzerland is under contract to control risks for ARIZON Sourcing Ltd. The Investnet Group is monitored based on its assigned risk control level. Raiffeisen Switzerland monitors the minimum risk management requirements. There is a periodic exchange with the risk control owner.

Risk management process
The risk management process is valid for all risk categories, namely for credit, market and operational risks. It incorporates the following elements:

- Risk identification
- Risk measurement and assessment
- Risk management
- Risk limitation, through the setting of appropriate limits
- Risk monitoring

Raiffeisen Group's risk management systems aim to

- ensure that effective controls are in place at all levels and to guarantee that any risks entered into are in line with accepted levels of risk tolerance;
- create the conditions for entering into and systematically managing risks in a deliberate, targeted and controlled manner; and
- make the best possible use of risk appetite, i.e. ensure that risks are only entered into if they offer suitable return potential.

Credit risk
The business units of the Raiffeisen banks and Raiffeisen Switzerland manage their credit risk autonomously, though still in accordance with Group-wide standards. The standards may be different for Notenstein La Roche Private Bank Ltd, which enters into commitments that are immaterial to the Group's risk situation.

Credit risks are defined in the risk policy as the risk of losses caused by clients or other counterparties failing to fulfil or render contractual payments as anticipated. Credit risks are inherent in loans, irrevocable credit commitments, contingent liabilities and trading products, such as OTC derivatives. Risks also accrue from taking on long-term equity exposures that may involve losses when the issuer defaults.

The Raiffeisen Group identifies, assesses, manages and monitors the following risks in its lending activities:

- Counterparty risk
- Collateral risk
- Concentration risk
- Country risk

Counterparty risks accrue from the potential default of a debtor or counterparty. A debtor or counterparty is considered to be in default when receivables are overdue or at risk.

Collateral risks accrue from impairments in the value of collateral.

Concentration risks in credit portfolios arise from the uneven distribution of credit receivables from individual borrowers or in individual coverage categories, industries or geographic areas.

Country risk is the risk of losses caused by country-specific events.

Retail banking in Switzerland is the Raiffeisen Group's core business. In order to broaden the earnings base, spread risks more widely and cover client needs more comprehensively, the Raiffeisen Group aims to diversify its business areas based on its core business. In particular, it plans to cultivate the investment and corporate client business more intensively.

Raiffeisen banks are chiefly exposed to counterparty, collateral and concentration risks. The majority of these risks result from loans granted to private or corporate clients.

Corporate clients are mainly small and medium-sized companies that operate within the business areas of Raiffeisen banks. Credit risks are limited primarily by securing the underlying claims. This notwithstanding, creditworthiness and solvency are key prerequisites for the granting of loans. The Articles of Association of Raiffeisen banks stipulate limits for the acceptance of credit risks arising from uncovered transactions; uncovered loans to private clients are generally not possible and require the approval of Raiffeisen Switzerland. Loans to corporate clients over CHF 250,000 must be hedged with Raiffeisen Switzerland.

Like the Raiffeisen banks, the Raiffeisen Switzerland branches primarily incur counterparty, collateral and concentration risks. These branches are part of the Branches & Regions department and extend credit to private and corporate clients.

In general, the Corporate Clients department is the instance that grants larger loans to corporate clients. When the credit being increased or newly extended exceeds CHF 75 million on a risk-weighted basis, the CRO (Chief Risk Officer) issues an assessment. The CRO's assessment focuses on the concentration risk and any change in the value at risk.

The Group-wide responsibilities of the Central Bank department involve managing both domestic and international counterparty risks. These risks occur in transactions such as wholesale funding in the money and capital markets, as well as the hedging of currency, fluctuating interest rate and proprietary trading risks. The Central Bank department may only conduct international transactions when country-specific limits have been approved and established.

Notenstein La Roche Private Bank Ltd has its own access to the market and manages its banking and country risks as part of the Group's centralised limit management.

New financing transactions of KMU Capital AG are reviewed by KMU Capital AG's Investment Committee. The Investment Committee consists of six members, with Raiffeisen Switzerland providing two representatives.

Pursuant to the Articles of Association, commitments abroad may not exceed 5% of the consolidated Raiffeisen Group balance sheet total.

Internal and external ratings are used as a basis for approving and monitoring business with other commercial banks. Off-balance-sheet transactions, such as derivative financial instruments, are converted to their respective credit equivalent. The Raiffeisen Group concluded a Swiss master agreement for OTC derivative instruments with most of the Central Bank counterparties whose OTC transactions are not cleared centrally, as well as a credit support appendix for variation margins. Credit support is exchanged by transferring the margin requirement, which is calculated daily. These OTC commitments are managed and monitored on a net basis.

Raiffeisen Switzerland invests in other companies as part of strategic cooperation partnerships. Details are provided in note 7 of the information on the balance sheet.

Creditworthiness and solvency are assessed on the basis of compulsory Group-wide standards. Sufficient creditworthiness and the ability to maintain payments must be proven before any loan is approved. Loans to private individuals, legal entities and investment property financing are classified according to internally developed rating models and subject to risk monitoring based on the resulting classification. Clients' creditworthiness is defined based on eleven risk categories and two default categories. This system has proven its worth as a means of dealing with the essential elements of credit risk management, i.e. risk-adjusted pricing, portfolio management, identification and provisions. Specialist teams at Raiffeisen Switzerland are available to provide assistance for more complex financing arrangements and the management of recovery positions.

Raiffeisen Switzerland monitors, controls and manages risk concentrations within the Group, especially for individual counterparties, groups of affiliated counterparties, sectors and collateral. The process of identifying and consolidating affiliated counterparties is largely automated across the entire Raiffeisen Group. Raiffeisen Switzerland monitors the credit portfolio across the Group, evaluating the portfolio structure and ensuring proper credit portfolio reporting. An annual credit portfolio report provides responsible decision-makers with information on the economic environment, the structure of the credit portfolio and developments during the period under review. The report contains an assessment of credit portfolio risk and identifies any need for action.

Evaluating the portfolio structure involves analysing the distribution of the portfolio according to a range of structural characteristics, including, without limitation, category of borrower, type of loan, size of loan, counterparty rating, sector, collateral, geographical features and value adjustments. The Executive Board and the Board of Directors of Raiffeisen Switzerland receive a quarterly risk report detailing the risk situation, risk exposure, limit utilisation and changes in exception-to-policy loans. In addition to standard credit portfolio reporting, Group Risk Controlling also conducts ad hoc risk analyses where required. Monitoring and reporting form the basis for portfolio-controlling measures, with the main focus being on controlling new business via lending policy.

Effective tools have been implemented to proactively avoid concentrations within the entire Raiffeisen Group. Sector-specific limits have been established. Measures are defined and taken if these limits are reached or exceeded.

Cluster risks are monitored centrally by Financial Risk Control & Methods. As at 31 December 2017, the Raiffeisen Group had no reportable cluster risks. The credit volume of the Raiffeisen Group's ten largest borrowers (excluding interbank business and public-sector entities) as at 31 December 2017 was CHF 1.2 billion (previous year: CHF 1.3 billion).

Market risk

Risk associated with fluctuating interest rates: Since assets and liabilities are subject to different interest rates, fluctuations in market interest rates can have a considerable impact on the Raiffeisen Group's interest income and shareholder value. Interest rate sensitivity and value at risk are calculated to assess the assumed interest rate risk on the net present value of the equity capital. The impact on profitability is assessed using dynamic income simulations. To measure mark-to-market risk, a gap analysis is performed using all balance-sheet and off-balance-sheet items along with their contractually fixed interest rates. Loans and deposits with non-fixed interest rates and capital commitment periods are replicated on the basis of historical experience. No specific assumptions are made for premature loan repayments because early repayment penalties are generally charged. Risk associated with fluctuating interest rates is managed on a decentralised basis in the responsible units. Interest rate risks are hedged using established instruments. The Treasury of Raiffeisen Switzerland's Central Bank department is the binding counterparty concerning wholesale funding and hedging transactions for the entire Group, with the exception of Notenstein La Roche Private Bank Ltd, which accesses the market directly. The responsible members of staff are required to adhere strictly to the limits set by the Board of Directors. Group Risk Controlling monitors compliance with interest risk limits and prepares associated quarterly reports, while also assessing the Raiffeisen Group's risk situation. Monitoring and reporting is conducted more frequently for individual units.

Other market risk: Since assets in a foreign currency are generally refinanced in the same currency, foreign currency risks can be largely avoided by the Raiffeisen banks.

The financial investment portfolio is managed by the Treasury of the Central Bank department of Raiffeisen Switzerland. Financial investments are part of the cash reserves of the Raiffeisen Group and are largely high-grade fixed-income securities that meet statutory liquidity requirements. Group Risk Controlling monitors the interest rate and foreign currency risks of financial investments. In addition, Notenstein La Roche Private Bank Ltd has its own financial investment portfolio, which is managed and monitored by the relevant units at Notenstein La Roche Private Bank Ltd within the overall limits.

The Trading unit, which is part of the Central Bank department, is responsible for managing the Central Bank trading book. Neither the Raiffeisen banks nor the branches of Raiffeisen Switzerland keep a trading book. The Central Bank trades in interest rates, currencies, equities and banknotes/ precious metals. It must strictly adhere to the value-at-risk, sensitivity, position and loss limits set by the Board of Directors and the Executive Board, which Group Risk Controlling monitors on a daily basis. In addition, Group Risk Controlling conducts daily plausibility checks on the income achieved from trading and conducts daily reviews of the valuation parameters used to produce profit and loss figures for trading. Trading in derivative financial instruments is subject to risk limits and is closely monitored.

The Board of Directors of Notenstein La Roche Private Bank Ltd defines the limits for the trading and banking book based on the overall limit assigned by the Board of Directors of Raiffeisen Switzerland. Notenstein La Roche Private Bank Ltd's Treasury is responsible for managing the trading and banking book within the defined limits. Notenstein La Roche Private Bank Ltd's Financial Risk Controlling department monitors compliance with these limits in its capacity as an independent supervisory body.

Compliance with value-at-risk, sensitivity, position and loss limits and the assessment of the risk situation by Group Risk Controlling are primarily communicated via four reports:

- Daily trading limit report to the responsible Executive Board members
- Weekly interest rate risk report to responsible Executive Board members in line with FINMA Circular 2008/6
- Monthly risk report to the Head of the Finance department who then decides whether the monthly risk report should be presented to the entire Executive Board
- Quarterly risk report to the Board of Directors

Group Risk Controlling communicates any breaches of market risk limits set by the Board of Directors and Executive Board on an ad hoc basis within the scope of the respective risk reports.

Capital adequacy requirements for market risk relating to the trading book

in 1,000 CHF	31.12.2017	Ø 2017	31.12.2016	Ø 2016
Foreign exchange/precious metals	43,234	34,032	22,687	20,683
Interest rate instruments	160,765	162,391	144,161	147,891
Equities/indices	40,521	31,558	21,025	21,411
Total	**244,520**	**227,981**	**187,873**	**189,986**

Liquidity

Liquidity risks are controlled using commercial criteria and monitored by the Treasury and Group Risk Controlling in accordance with banking law. Risk controlling involves, among other things, simulating liquidity inflows and outflows over different time horizons using various scenarios. These scenarios include the impact of bank funding crises and general liquidity crises.

Monitoring is based on statutory limits and risk indicators based on the above scenario analyses.

Operational risk

At Raiffeisen, operational risks mean the danger of losses arising as a result of the unsuitability or failure of internal procedures, people or systems, or as a result of external events. They also include risks relating to cyber-attacks and information security in general. This includes not only the financial impacts, but also the reputational and compliance consequences.

Operational risk tolerance is defined using value-at-risk limits or stop-loss limits and frequencies of occurrence. Risk tolerance is approved annually by the Board of Directors. Group Risk Controlling monitors compliance with risk tolerance. If one of the defined limits or a threshold is exceeded, suitable action is defined and taken.

Each functional department within the Raiffeisen Group is responsible for identifying, assessing, managing and monitoring operational risk arising from its own activities. Group Risk Controlling is responsible for maintaining the Group-wide inventory of operational risks and for analysing and evaluating operational risk data. Risk identification is supported by capturing and analysing operational events. Group Risk Controlling is also in charge of the concepts, methods and instruments used to manage operational risks, and it monitors the risk situation. In specific risk assessments, operational risks are identified, categorised by cause and impact, and evaluated according to the probability of occurrence and the extent of losses. The risk register is updated dynamically. Risk reduction measures are defined and their implementation is monitored by the line units. Emergency and catastrophe planning measures for mission-critical processes are in place.

The results of the risk assessments, key risk indicators (KRIs), significant internal operational risk events and relevant external events are reported quarterly to both Raiffeisen Switzerland's Executive Board and Board of Directors. Value-at-risk limit violations are escalated to the Board of Directors of Raiffeisen Switzerland.

In addition to the standard risk management process, Group Risk Controlling conducts ad hoc risk analyses where required, analyses any loss events that arise and maintains close links with other organisational units that, as a result of their function, come into contact with information on operational risks within the Raiffeisen Group.

The Raiffeisen banks analyse their operational risk situation through assessments at least once a year. These analyses are approved by the Board of Directors of each bank and forwarded to Group Risk Controlling.

Group Risk Controlling monitors the operational risks of ARIZON Sourcing Ltd pursuant to a contract. Notenstein La Roche Private Bank Ltd has its own OpRisk team. The CRO of Notenstein has a dotted line reporting relationship with the CRO of the Raiffeisen Group.

Outsourcing

Raiffeisen Switzerland has outsourced the operation of the data communication network to Swisscom (Switzerland) Ltd. Furthermore, all Raiffeisen Switzerland securities administration activities are carried out by the Vontobel Group. Swiss Post Solutions AG handles the scanning processes in the paper-based payment system, while the printing and shipping of bank vouchers have been outsourced to Trendcommerce AG. ARIZON Sourcing Ltd, a joint venture of Raiffeisen Switzerland and Avaloq, provides payment and securities operations services for Raiffeisen Switzerland and Notenstein La Roche Private Bank Ltd. The platform for the online identification of new and current customers via Videostream is operated by Inventx AG.

In relation to its activities as an issuer of structured products, Raiffeisen Switzerland concluded an outsourcing agreement with Leonteq Securities Ltd. When Raiffeisen investment products are issued, Leonteq Securities Ltd performs duties in connection with structuring, processing, documenting and distributing the instruments. Leonteq Securities Ltd also manages the derivative risks and deals with the life-cycle management of the products.

Regulatory provisions

According to the FINMA ruling of 3 September 2010, the Raiffeisen banks are exempt from complying on an individual basis with the rules regarding capital adequacy, risk diversification and liquidity. The relevant legal provisions must be complied with on a consolidated basis.

The Swiss National Bank (SNB) classified the Raiffeisen Group as systemically important for purposes of the Swiss Banking Act in a ruling issued on 16 June 2014.

The Raiffeisen Group has opted for the following approaches for calculating capital adequacy requirements:

Raiffeisen uses the international standardised approach (SA-BIS) to calculate the capital adequacy requirements for credit risks.

External issuer/issue ratings from three FINMA-recognised rating agencies are used for central governments and central banks, public-sector entities, banks and securities dealers, as well as companies.

Issuer/issue ratings from an export insurance agency are used for central governments; however, rating agency ratings take precedence over ratings issued by the export insurance agency.

No changes were made to the rating agencies or export insurance agencies used in the current year.

Positions for which external ratings are used are found chiefly under the following balance sheet items:

- Amounts due from banks
- Amounts due from customers and mortgage loans
- Financial investments
- Positive replacement value

Raiffeisen started the FINMA approval process for calculating capital adequacy requirements and measuring and managing credit risk in accordance with the F-IRB approach in 2015 and was awarded "broadly compliant" status in 2016. The approval process is expected to be completed in 2019.

The capital adequacy requirements for market risk are calculated using the standard approach under supervisory law. Within this framework, the duration method is applied for general market risk with regard to interest rate instruments, and the delta-plus approach is used for capital adequacy requirements for options. An overview is provided in the "Capital adequacy requirements for market risk relating to the trading book" table.

Raiffeisen uses the basic indicator approach to calculate capital adequacy requirements for operational risks.