

Swiss FINMA Circ. 2016/1 Pillar 3 disclosures 30 June 2019

#### Introduction

## **Background**

The main activities of EFG Bank European Financial Group SA ("the Bank") and the companies in which it holds a significant direct or indirect equity interest are private banking, asset management and related financial services.

The Swiss Financial Market Supervisory Authority ("FINMA") requires the Bank to report on a "consolidated" basis its 43.7% shareholding in EFG International AG for Swiss regulatory supervision purposes in accordance with FINMA Circ. 2016/1. This "consolidated" Pillar 3 report includes, therefore, EFG International on a consolidated basis.

#### Scope

The scope of this capital adequacy report is the same as that of "consolidated" financial statements prepared in accordance with section VI of FINMA Circular 2015/1 (Swiss Accounting Rules for Banks "ARB") in the context of regulatory supervision.

As it includes various regulated banks in different countries, each of these countries has regulations limiting the transfer of regulatory capital (and in some instances cash balances) between jurisdictions (local capital requirements).

## **Basis of preparation**

This document was prepared in accordance with the disclosure requirements set forth in FINMA Circular 2016/1. Tables referred to in this document are numbered as per the FINMA circular.

## **Capital and liquidity**

The main regulatory objective when managing regulatory capital is to comply with the capital requirements set by regulators of the jurisdictions in which entities operate and to safeguard their ability to continue as a going concern as well as to comply with FINMA Circular 2016/1 on a "consolidated" basis.

Capital adequacy and liquidity are continually monitored and reported periodically to the Executive Committee and Board of Directors, applying the rules defined by the Swiss Financial Market Supervisory Authority (FINMA).

Monitoring capital adequacy and liquidity is a key component of financial strategy. Potential impact on capital and liquidity ratios are carefully considered before making any major decisions about operations and business orientation.

## **Key ratios**

FINMA's capital ratio requirement is based on Article 41 of the Swiss Capital Adequacy Ordinance (CAO). The minimum required total capital ratio is 12.0% (at 30 June 2019), which is the permanent minimum requirement for category 3 banks as defined by the FINMA. In addition, a countercyclical buffer is required, from time to time, by the Swiss Federal Council upon the recommendation of the Swiss National Bank, which translates into an additional 0.1% capital ratio.

The "consolidated" total capital ratio was 18.8% at 30 June 2019 and the common equity tier 1 (CET1) ratio was 15.2%, versus requirements of 12.1% and 7.9% respectively.

The leverage ratio was 3.8% at 30 June 2019. This ratio is significantly above the regulatory requirement of 3%. The "consolidated" liquidity coverage ratio (LCR) was 174% at 30 June 2019, above the regulatory requirement of 100%.

## 1. KM1: Key Metrics

|  | a              | С              | е              |
|--|----------------|----------------|----------------|
| (All figures in millions of CHF unless otherwise indicated)                                  | June 30, 2019  | Dec. 31, 2018  | June 30, 2018  |
| Available capital  |                |                |                |
| 1 Common equity Tier 1 capital (CET1)  | 1,531.5        | 1,681.5        | 1,748.7        |
| 2 Tier 1 capital (T1)  | 1,636.8        | 1,788.8        | 1,863.7        |
| 3 Total Capital  | 1,893.7        | 2,061.1        | 2,144.9        |
| Risk Weighted Assets (RWA)   |                |                |                |
| 4 Total risk-weighted assets (RWA)   | 10,069.4       | 10,178.6       | 10,806.8       |
| 4a Minimum required capital based on risk-based requirements                                 | 805.6          | 814.3          | 864.5          |
| Risk-based capital ratio as a percentage of RWA)   |                |                |                |
| 5 Common Equity Tier 1 ratio (%)   | 15.2%          | 16.5%          | 16.2%          |
| 6 Tier 1 ratio (%) 7 Total capital ratio (%)   | 16.3%<br>18.8% | 17.6%<br>20.2% | 17.2%<br>19.8% |
|  | 10.076         | 20.2%          | 19.0%          |
| Additional CET1 buffer requirements as a percentage of RWA                                   |                |                |                |
| 8 Capital conservation buffer requirement (2.5% from 2019) (%)                               | 2.5%           | 1.9%           | 1.9%           |
| 11 Total of bank CET1 specific buffer requirements (%)                                       | 2.6%           | 2.0%           | 2.0%           |
| 12 CET1 available after meeting the bank's minimum capital requirements (%)                  | 10.3%          | 11.6%          | 11.2%          |
| Target capital ratios according to Annex 8 of the Capital Adequacy Ordinance (CAO (% of RWA) |                |                |                |
| 12a Capital buffer as per Annex 8 CAO  | 4.0%           | 4.0%           | 4.0%           |
| 12b National countercyclical buffer (art. 44 and 44a CAO) (%)                                | 0.1%           | 0.1%           | 0.1%           |
| CET1 capital target per Annex 8 CAO plus countercyclical buffer as per art. 44               |                |                |                |
| 12c and 44a CAO  | 7.9%           | 7.9%           | 7.9%           |
| T1 capital target per Annex 8 CAO plus countercyclical buffer as per art. 44                 |                |                |                |
| 12d and 44a CAO  | 9.7%           | 9.7%           | 9.7%           |
| Total capital target per Annex 8 CAO plus countercyclical buffer as per art. 44              |                |                |                |
| 12e and 44a CAO  | 12.1%          | 12.1%          | 12.1%          |
| Basel III Leverage ratio   |                |                |                |
| 13 Total Basel III leverage ratio exposure measure   | 42,647         | 41,375         | 42,627         |
| 14 Basel III Leverage ratio (%)  | 3.8%           | 4.3%           | 4.4%           |
| Liquidity Coverage Ratio   |                |                |                |
| 15 Total HQLA  | 12,666         | 11,279         | 12,136         |
| 16 Total net cash outflow  | 7,280          | 6,779          | 6,971          |
| 17 LCR ratio (%)   | 174%           | 166%           | 174%           |

## 2. Risk Management – measurement approach

Basel III gives room to banks to apply several approaches for computing the capital charge. Below are details of regulatory approach applied for each risk category managed.

#### **Credit risk**

The International Standardised Approach (SA-BIS) is used to determine which risk weights to apply to credit risk. Additionaly, the Comprehensive method was adopted to deal with the collateral portion of a credit transaction. In the SA-BIS approach, ratings assigned by rating agencies can be used to the risk weighted positions: the second worst rating between Standard and Poor, Fitch Ratings and Moody's ratings are used for securities and for bank placements.

## Non-counterparty risk

For non-counterparty related assets the SA-BIS approach is applied.

#### **Operational risk**

The Standardised Approach is applied to calculate the capital charge for operational risk. The capital requirement under this method is based on the last three year average amount of the Operating Income split by business lines.

#### Market risk

The Standardised Approach is used for market risk. This approach requires capital for the following positions:

- i) Interest rate instruments held in the trading book,
- ii) Equity securities held in the trading book,
- iii) Foreign exchange positions, and
- iv) Gold & commodity positions.

General market risk associated with interest rate risk instruments are calculated using the Maturity Method. The Delta-plus method is used for options.

## 3. OVA: Risk Management Approach

The Bank and EFG International have established a comprehensive risk supervision framework, taking into consideration relevant regulatory requirements. As part of this risk supervision framework, they have established policies and procedures in order to ensure that various categories of risk, such as credit, country, market, liquidity, operational, compliance, legal and reputational, can be identified and managed in an effective and consistent manner.

The Bank's and EFG International's primary activities are or reflect the execution of client transactions, with the clients carrying the risk. Within the risk appetite framework agreed and approved by EFG International's Board of Directors and its related Risk Committee, EFG International also maintains proprietary positions in a number of selected areas. The Bank takes limited proprietary positions in its Asset and Liability Management under Board oversight.

Consequently, the Bank and EFG International take limited credit, market and liquidity risks, with most credit risk being limited to margin loans and other secured exposures to clients as well as exposures to banks and financial institutions, and with market risk being mainly restricted to foreign exchange, interest rate gapping and life insurance settlement (EFG International only) positions maintained within defined parameters. They are also exposed to operational and reputational risks.

At EFG International level, where the vast majority of the risks are, ultimate responsibility for the supervision of risk management lies with EFG International's Board of Directors, which defines the risk appetite of the organisation and sets policies. EFG International's Board of Directors has delegated certain supervision and approval functions to its Risk Committee and Audit Committee.

EFG International is also exposed to certain financial risks that may impact adversely its portfolio of life insurance policies, in the form of increases in the cost of insurance charges and longevity risk. Monitoring changes in cost of insurance and longevity expectations of the insureds is based on periodic studies done by expert actuaries retained by EFG International. Typical financial information submitted for monitoring and approval includes financial forecasts, impairment reviews, cash flow projections, sensitivity analysis using different scenarios and results of actuarial studies. Management utilises all information available to determine the assumptions used in the valuation of this portfolio. This information is submitted to key management personnel on a periodic basis and is reviewed by EFG International's Executive Committee.

The main risks EFG International is exposed to are credit, market and operational risks as detailed below. Monitoring of credit risk is based on ratings, diversification and evolution; that of market risk is based on average positions over the year to date and on the calculation of Value at Risk ("VaR") and stress scenario analyses; that of operational risk is based on an inventory of identified risks with an indication of their probability of occurrence and their estimated potential financial impact. In

addition, mitigation measures and the internal control framework (including internal procedures) are taken into account with a focus on a constant monitoring and evaluation of these risks, as well as the measurement of the potential impact of these risks on the financial statements. A Risk Management Framework and Risk Policies have been established on this basis.

## Risk Governance and organisation at EFG Bank European Financial Group level

At EFG Bank European Financial Group SA, risk oversight and control is ensured by the Chief Risk Officer, who is a member of the Bank's Executive Committee, reporting to the Bank's Chief Executive Officer and Board of Directors. An assessment of the Bank's risks is made annually. In addition, through its Board of Directors and Executives, the Bank monitors EFG International's consolidated risk through reports covering all risk categories and via attendance by a representative at EFG International's Risk Committee and through the quarterly consolidated risk report issued by EFG International's Chief Risk Officer.

## Risk governance and organisation at EFG International level

The EFG International Board of Directors determines the overall group risk appetite. It has delegated responsibilities for risk oversight activities as follows:

- The Risk Committee of EFG International's Board of Directors is responsible for overseeing Executive Management's implementation of the Group Risk Appetite policy, reporting on the state of risk culture in the group, and interacting with and overseeing the Chief Risk Officer and the Chief Compliance Officer. The Committee's work includes oversight of the strategies for capital and liquidity management as well as the management of all relevant risks, such as credit, market, liquidity, operational and reputational risks, in order to ensure they are consistent with the stated risk appetite.
- The Audit Committee of EFG International's Board of Directors is responsible for the oversight of: (i) the financial and business reporting processes, including the selection and application of appropriate accounting policies, (ii) the integrated internal control systems for financial reporting as well as the internal controls of areas beyond financial reporting, (iii) tax risks, and (iv) the internal and external audit processes.

At the EFG International management level, the ultimate responsibility for the implementation of policies and compliance with procedures lies with the Executive Committee and delegated committees it has established:

- EFG International's Executive Committee has responsibility for the implementation of, and compliance with, risk related policies, procedures and internal regulations which also include operational, legal and reputational risks.
- EFG International's Asset and Liability Committee is responsible for the management of EFG International's consolidated balance sheet. In particular, it is responsible for the management of EFGI market risk exposure and liquidity, as well as to ensure effective liquidity contingency planning.
- EFG International's Operational and Regulatory Compliance Committee is responsible for the oversight of matters relating to operational, regulatory and compliance risks as well as corporate governance matters. It includes responsibility for the monitoring of the regulated asset management businesses associated with the discretionary management of assets. The Regulatory and Advisory Compliance team ensures through a network of Fiduciary and Suitability Committees that the holdings of discretionary and advisory portfolios managed or advised adhere to the mandate in place, to the Group Limits Directive and to the strategy that applies to the relevant model portfolio. These committees also ensure that whatever is purchased for clients is suitable for them, conforming to the head office Suitability Directive. The same team also ensures through a network of Local Product Committees that all products or securities sold to clients or bought for them have been through the appropriate approval process. Fiduciary and Suitability Committees and Local Product Committees report their findings respectively to the Fiduciary and Suitability Committee and the Group Product Committee, which in turn send their minutes to the Executive Committee and the Risk Committee.
- EFG International's Financial Risk Committee is responsible for the review of incurred market, credit, concentration and liquidity & funding risk exposures and the structures in place for monitoring and reporting them, including compliance with policies and procedures, as well as

exposures relative to limits. The Financial Risk Committee is also responsible for the overall stress test program encompassing trading and banking book portfolios.

- EFG International's Executive Credit Committee has responsibility for the management of client credit risk, including insurance companies and corporate names.
- EFG International's Country and Counterparty Subcommittee of the Executive Credit Committee is responsible for correspondent banking broker and custodian relationships and for counterparty credit risk for banks and financial institutions as well as country limits within approved guidelines and parameters.
- EFG International's Chief Risk Officer is responsible for the management and oversight of credit, market, liquidity and operational risks. In achieving this, further to the appointment of global risk officers within Risk Management responsible for each of these risks, he also collaborates with other central group functions that also undertake risk oversight activities for their respective area of responsibility, such as the Chief Financial Officer, Chief Operating Officer and Group Head of Legal & Compliance. Each business region has its own designated Regional Risk Officer who is responsible for the oversight of Risk Management in the region and reports to local senior management and to EFG International's Chief Risk Officer.
- EFG International's Chief Financial Officer is also responsible for the consolidated financial regulatory reporting, balance sheet and capital management, i.e. the maintenance of a sound capital adequacy ratio.
- EFG International's Chief IT & Operating Officers are, among other respectively, responsible for the oversight of IT-cyber security matters, operational integration of new businesses, business continuity management and insurance cover policies.
- EFG International's Group Chief Compliance Officer heads the Compliance function and is responsible for providing efficient support with regards to the management of compliance, regulatory and reputational risk. In addition, the Compliance function is also responsible for monitoring compliance with anti-money laundering/know-your-customer and cross-border activity rules, as well as adherence to product suitability, product selling restrictions and the Code of Conduct.
- EFG International's Group Head of Legal & Compliance is responsible for the management and oversight of legal risk, together with the Head of Litigations and Head of Legal International & Group Regulatory Affairs.

Independent assurance to EFG International's Board of Directors, Risk Committee, Audit Committee and Executive Committee on the implementation of and adherence to head office's policies and procedures by business units, as well as the effectiveness of the organisation's risk management framework, is provided by both internal and external auditors, or by other external providers when mandated.

#### **Credit risk**

Credit risk refers to the possibility that a financial loss will occur as a result of a borrower's or counterparty's deteriorating creditworthiness and/or inability to meet its financial obligations. Credit risk exposure is comparatively low because primary credit exposures relate to loans collateralised by securities portfolios and by mortgages, or to rated financial institutions, sovereign and corporates.

## **Credit risk management**

a) Loans and advances

A basic feature of the credit approval process is a separation between the firm's business origination and credit risk management activities. Credit requests are initiated by Client Relationship Officers and must be supported by Regional Business Heads and are thereafter analysed and submitted to the competent credit approval bodies and processed by the credit departments.

Credits granted by EFG Bank European Financial Group SA are under the approval responsibility of its own Credit Committee and Board as relevant.

EFG International's Executive Credit Committee has overall responsibility for EFG International's client credit business, including the implementation of credit policies and procedures defined by EFG International's Board of Directors. Certain duties, including monitoring of day-to-day operations, have been delegated to the various Credit Departments within the EFG International group under the supervision of the Credit Department of EFG Bank AG. The approval of loans, ceilings and other exposures has been delegated, based on certain defined risk and size criteria, to senior members of the credit departments, certain credit committees of international units and to the Executive Credit Committee of EFG International. Within the EFG International group, the approval of large and higher risk profile exposures is centralised in Switzerland, in compliance with local regulatory and legal requirements of the individual international business units.

Management insists on thoroughly understanding the background and purpose of each loan (which is typically for investment in securities, funds or investment related insurance policies) as well as the risks of the underlying collateral of each loan.

The internal grading system assigns each client credit exposure to one of ten rating categories. The rating assesses the borrower's repayment ability and the value, quality, liquidity and diversification of the collateral securing the credit exposure. The credit policy and the nature of the loans ensure that the loan book is of high quality. Consequently, an overwhelming majority of the credit exposures are rated within the top three categories.

#### Risk limit control and mitigation policies

The largest part of credits is secured by securities or other liquid assets pledged as collateral. To qualify as collateral for such loans, a client's securities portfolio must be well diversified with differing margins applied depending on the type of risk profile and liquidity of the security. Additional margins are applied if the loan and the collateral are not in the same currency or diversification criteria are not fully met. Within the EFG International group, mortgages are mainly booked in Switzerland and at EFG Private Bank Ltd, London. They are related predominantly to properties in Switzerland and in London prime locations.

Credit loans guaranteed by real estate is treated in conformity with the regulatory authorities directives pertaining to examination, valuation and treatment of credits guaranteed by real estate and with the internal directives (regulations, procedures) on mortgage loans in relation to different geographical areas. All the real estate provided as collateral must be evaluated by internal appraisers or by selected external surveyors. External valuations are accepted, as long as the competence and the independence of the external professional have been verified.

Credit departments monitor credit exposures against approved limits and security pledged as collateral. If necessary, they initiate rectification steps. Most collateral is valued daily (but may be valued more frequently during periods of high market volatility). However, structured notes, certain mutual and hedge funds are valued monthly, whereas insurance policies are valued at least quarterly.

Management of exposure to financial institutions is based on a system of counterparty limits coordinated centrally, subject to country limits. Limits for exposure to counterparties are granted based upon internal analyses. The limits are set and supervised by EFG International's Executive Credit Committee depending on each counterparty's S&P or Moody's ratings (with reference to individual and support ratings). At EFG Bank European Financial Group SA level, the limits are approved by its Executive Committee and Board of Directors as relevant. Limits are set within regulatory limits.

Other specific control and mitigation measures are outlined below.

#### a) Collateral

A range of policies and practices are used to mitigate credit risk. The most traditional of these is the taking of security for credit exposures. Guidelines on the acceptability of specific classes of collateral for credit risk mitigation have been implemented. The principal collateral types for loans and advances are:

- Financial instruments such as debt securities, equities and funds;
- Cash and cash equivalent;

- Mortgages over residential and to a limited extent commercial properties;
- Bank guarantees;
- Assignment of guaranteed cash surrender value of life insurance policies.

#### b) Derivatives

Strict monitoring of credit risk exposure induced by over-the-counter derivatives transactions vs. dedicated limits granted is performed. Credit risk exposure considers the current credit risk exposure through the marking-to-market of the transactions and the potential future exposure through dedicated add-on factors applied to the notional of the transactions. While being ignored in the computation of credit risk, business units have signed mitigating agreements with its most important financial institutions counterparties; collateral paid or received being taken into consideration.

#### c) Credit related commitments

Credit related commitments include the following:

- Guarantees, forward rate agreements and standby letters of credit these carry the same credit risk as loans.
- Commitments to extend credit these represent unused portions of authorisations to extend credit in the form of loans, guarantees or letters of credit, meaning being potentially exposed to loss in an amount equal to the total unused commitments. However, commitments to extend credit are contingent upon customers maintaining specific credit standards.

For all the above, the same standards apply regarding approval competences, collateral requirements and monitoring procedures as outlined under paragraph Credit risk management.

The guarantees and irrevocable lines of credit can be drawn by the customers only if the client has adequate collateral pledged. Should the guarantees and irrevocable lines of credit be drawn, the majority of the facilities would be rated with a rating of 1 to 3.

#### **Market risk**

Market risk is the risk of losses arising from unexpected changes in interest rates, exchange rates, share prices or the prices of precious metals and commodities, as well as the corresponding expected volatility. Market risk can have an impact on the Statement of Income and the value of its assets.

Risks related to the balance sheet structure (interest rate and foreign exchange rate) are managed by EFG International's Asset and Liability Committee and monitored by EFG International's Group Market Risk, in accordance with the principles and maximum limits stipulated by EFG International's Group Risk Policy. The Board delegated Risk Committee of EFG International sets sensitivity risk limits for the economic value of equity and the net interest income, which are monitored by the EFG International's Group Risk Control. Derivative financial products are used for Asset and Liability Management (ALM) and for trading purposes.

Trading operations are carried out both for clients and on own account using all financial products and their derivatives. The trading portfolio is governed by a dedicated Market Risk Policy, which defines the organisational structure, responsibilities, limit systems and maximum acceptable risk. The trading activities are monitored on a daily basis by EFG International's Market Risk.

In addition to trading portfolios, investment portfolios exist, which allow to diversify balance sheet assets and optimise any excess liquidity. The investment portfolios comprise a range of portfolios on the basis of the type of product and strategy. The risks of the investment portfolio are under the supervision of EFG International's Asset and Liability Committee and monitored by EFG International's Market Risk.

#### **Interest rate risk**

The Bank's and EFG International's Boards set limits for the interest repricing gap or mismatch, which is monitored by the Market Risk Management Unit. The management of interest rate risk exposure is performed in accordance with the risk appetite based on the impact of various interest rate scenarios on economic value and interest income sensitivity.

## Foreign exchange risk

Foreign currency transactions are carried out both on behalf of clients and on a proprietary basis. Foreign exchange risk arises from on or off-balance sheet assets and liabilities denominated in foreign currencies. The overall net nominal positions per currency are monitored against overnight limits. In addition 10 sliding days stop loss limits are in place for VaR stress test. Entities use derivative contracts, such as forward or option contracts, to offset customer transactions or to hedge their balance sheet.

The Bank's and EFG International's Boards set limits on the level of exposure.

Apart from the exposure to foreign currencies which relates to banking and trading activities, exposure also arises at EFG International level from foreign currency fluctuations because most of foreign entities use local currencies as their reporting currencies.

## Liquidity risk

Liquidity risks arise when financing activities are difficult or expensive as a result of liquidity crisis on the markets or reputational issues. They also arise when it is difficult to meet own commitments in a timely manner due to a lack of very liquid assets. Liquidity risk is managed in such a way as to ensure that ample liquidity is available to meet commitments to customers, both in demand for loans and repayments of deposits, and to satisfy business entities' own cash flow needs.

Funding operations aim to avoid concentrations in funding facilities. The liquidity management process in place includes liquidity contingency plans, encompassing repo borrowing and liquidation of marketable securities. Stress tests are undertaken monthly as part of the reporting requirements established within General Directives relating to risk.

Customer deposit base, capital and liquidity reserves position and a conservative gapping policy when funding customer loans ensure that only limited liquidity risk is run.

## Fund transfer pricing

The pricing of assets and credit business is based on the current liquidity situation. EFG International applies a liquidity transfer pricing model which enables the management of the balance sheet structure and the measurement of risk-adjusted profitability, taking into account liquidity risk, maturity transformation and interest rate risk. The liquidity allocation mechanism allows credit providers of funds for the benefit of liquidity and to charge users of funds.

#### **Liquidity risk management process**

Concentrations of funding facilities are avoided. Liquidity situation is monitored and pricing of assets and credit business is determined accordingly. The liquidity management process in place includes liquidity contingency plans. These contingency measures include the activation of repo transactions with prime counterparties, the liquidation of marketable securities and/or draw downs on lines of credit (Lombard facility) with the Swiss National Bank.

Compliance with regulatory requirements are ensured, including overnight liquidity limits in the various countries in which the banks operate. The daily liquidity situation is reported to management. Stress tests are undertaken monthly, or as necessary.

The liquidity risk management process is carried out by EFG International's central Treasury department and monitored by EFG International's Market Risk. It includes:

- Day-to-day funding, managed by monitoring future cash flows to ensure that requirements can be met. This includes replenishment of funds as they mature or are borrowed by customers
- Maintaining a portfolio of highly marketable assets that can easily be liquidated (repaid or sold) as protection against any unforeseen interruption to cash flow
- Monitoring balance sheet liquidity ratios against internal and regulatory requirements
- Managing the concentration and profile of debt maturities.

Monitoring and reporting take the form of cash flow measurement and projections for the next day, week and month respectively, as these are key periods for liquidity management. The starting point for those projections is an analysis of the contractual maturity of the financial liabilities, and the expected collection date of the financial assets.

EFG International's central Treasury also monitors unmatched medium-term assets and the usage of overdraft facilities.

## **Funding approach**

Sources of liquidity are regularly reviewed by Financial Markets to maintain a wide diversification by currency, geography, provider, product and term.

#### **Summary of Liquidity**

EFG International's central Treasury manages the liquidity and financing risks on an integrated basis. The liquidity positions of entities are monitored and managed daily and exceed the regulatory minimum, as required by the market risk framework and policy. Overall, business entities enjoy a favourable funding base with stable and diversified customer deposits which provide the vast majority of the funding. Together with capital resources, the surplus of stable customer deposits over loans to customers is placed with the relevant treasury units where funding and liquidity are managed to ensure this complies with the different local regulatory requirements. In addition, all entities operate within central liquidity policies and guidelines.

#### **Concentration risk**

Concentration risk is monitored through the following mechanisms:

- At EFG International level, the overall level of market and credit exposures are tightly monitored by means of specific risk parameters and indicators approved by EFG International's Board of Directors and/or its delegated Risk Committee in line with the group's overall committed level of risk appetite and avoidance of any concentration risk and, at EFG Bank European Financial Group SA level, by the Board of Directors, the Credit Committee and/or the Executive Committee.
- These exposures and corresponding limits are proactively reviewed through the Financial Risk Committee and/or EFG International's Board delegated Risk Committee, respectively the Bank's Board of Directors in respect of EFG Bank European Financial Group SA, in order to ensure full consideration is given to both market and liquidity conditions, the overall risk framework and to avoid any possible concentration risk in light of changing market environments.

#### Operational risk

Operational risk is the risk of financial loss or business discontinuity resulting from inadequate or failed internal processes, human errors or systems, or from external causes (or a combination of the foregoing) occurring as a result of an operational loss event falling within one of the following operational risk event categories:

- -Internal frauds
- -External frauds
- -Physical asset and/or operating site damages or destructions
- -Input, processing, execution and/or delivery failures
- -Technological failures and/or disruptions
- -Client, product and/or business practices failures
- -Employment practice and workplace safety failures

Significant operational risk inherently run is aimed at being mitigated to a level considered appropriate and commensurate with the size, structure, nature and complexity of the service/product offerings, thus adequately protecting assets and shareholders' interests.

#### Organisational structure and governance

The Boards of Directors and senior managements strive to set the operational risk culture through, among others, the definition of the overall operational risk appetite of the organisation (expressed in quantitative thresholds and qualitative statements), which is embedded in the organisation's risk management practices.

The primary responsibility for managing operational risk on a daily basis rests with the line managements of the various business entities, which mitigate operational risk through the establishment of an adequate internal control system and strong risk culture.

At the EFG International risk management level, operational risk oversight and guidance, including the development of an operational risk management framework, are under the responsibility of the Operational Risk Management Function headed by the Global Head of Operational Risk Management.

The Operational Risk Management Function works in collaboration with the Operational Risk Officers of the local business entities, including in respect of EFG Bank European Financial Group SA under an outsourcing agreement, the Regional Risk Officers within the EFG International group as well as certain central functions that also undertake operational risk oversight for their respective area of responsibility, such as the Chief Financial Officer, Chief Operating Officer, Group Head of Legal and Compliance. The principal aim of the Operational Risk Management Function is to ensure that an appropriate operational risk management framework and program are in place for identifying, assessing, mitigating, monitoring and reporting operational risk. The Global Head of Operational Risk Management reports to the EFG International Chief Risk Officer who in turn reports to the Risk Committee. EFG Bank European Financial Group SA exercises supervision over its own activity at the level of its Executive Committee and Board of Directors.

## Operational risk management framework

The operational risk management framework codifies the approach to identifying, assessing, mitigating, monitoring and reporting operational risk and also incorporates the standards defined by the Basel Committee for Banking Supervision. This framework comprises the philosophy, scope, definitions, operational risk boundaries, key operational risk areas, operational risk mitigation/transfer alternatives, approach for operational risk capital charge, principles for the management of operational risk, operational risk appetite, governance and organisation, role and responsibilities of the constituent parts of the governance structure, and operational risk management processes and tools.

Internal controls and monitoring mechanisms are designed and implemented in order to mitigate key operational risks inherently run in conducting business, in areas such as front-office activities, trading and treasury, IT-cyber security and data confidentiality, product approval and selling practices, cross-border business activities, asset management, transaction processing, accounting and financial reporting, and regulatory compliance activities (e.g. anti-money laundering, product suitability, etc.).

Business continuity management is in place in order to ensure continuity of critical operations in the event of a major disruptive event. Business continuity management encompasses backup operating facilities and IT disaster recovery plans, which are in place and tested regularly.

Where appropriate, operational risk transfer mechanisms are established; in particular, all entities of the EFG International group (and EFG Bank European Financial Group SA) are covered by insurance to hedge (subject to defined exclusions) certain potential low-frequency high-severity events. Three layers of insurance cover are administered centrally, being comprehensive crime insurance, professional indemnity insurance and Directors' and Officers' liability insurance. Other insurances such as general insurances are managed locally.

#### **Compliance risk**

Regulatory and compliance risk is the risk of financial or reputational loss resulting from a breach of applicable laws and regulations or the departure from internal or external codes of conduct or market practice.

The Group Compliance function is responsible for ensuring EFG International's observance of applicable rules and regulations. In line with the development of the regulatory environment of the industry, EFG International continuously invests in personnel and technical resources to ensure adequate compliance coverage. A Compliance risk framework is in place, complemented by a comprehensive set of policies and procedures and regular specialised training sessions delivered to all staff to raise their awareness and understanding of the compliance risks.

A major focus of regulators around the world is the fight against money laundering and terrorism financing. A comprehensive policy on anti-money laundering and know your customer, as well as on anti-bribery and corruption, is in place, to detect, prevent and report such risks.

Group Compliance ensures adherence of the policy with regular reportings, on-site visits and monitoring programmes.

A set of standards governing the cross-border services are defined, and country-specific manuals have been developed for the major markets where EFG operates. A mandatory staff training and education concept is in place to ensure observance of the standards and compliance with the country manuals. They are complemented by a tax compliance framework, the purpose of which is to prevent the unlawful acceptance of untaxed assets.

Conduct risk is managed centrally by the Regulatory and Advisory Compliance team, which maintains the relevant policies and reports on their checks the Operational, Regulatory and Compliance Committee, which is responsible for compliance monitoring of the asset management and discretionary management activities. The same team also ensures through a network of Local Product Committees that all products or securities sold to clients or bought for them have been through the appropriate approval process. Fiduciary and Suitability Committees and Local Product Committees are overseen by Operational, Regulatory & Compliance Committee and the Group Product Committee.

Changes in the regulatory environment are monitored and directives and procedures are adapted as required. Compliance is centrally managed with local compliance officers situated in all booking centres around the world. Developments in laws and regulation are monitored locally and centrally to assess the requirement to adapt the control framework.

#### Legal risk

The Legal and Litigation functions ensure that EFG International adequately manages and controls its legal risks. This includes supervising and giving strategic direction to all outside counsel advising EFG International on civil, regulatory and enforcement matters.

The Legal function is responsible for providing legal advice to the head office management and front and back officers as well as handling client complaints and assisting federal and local authorities in their criminal and administrative investigations. The Litigation function has principal responsibility for overseeing and advising management on significant civil litigation and all government enforcement matters globally.

#### Reputational risk

EFG International considers its reputation to be among its most important assets and is committed to protecting it. Reputational risk for EFG International inherently arises from:

- -potential non-compliance with increasingly complex regulatory requirements.
- -its dealings with politically exposed persons or other clients with prominent public profiles.
- -its involvement in transactions executed on behalf of clients other than standard investment products.
- -potential major incidents in the area of IT-cyber security and data confidentiality.
- -potential malfeasance by its employees.

EFG International manages these potential reputational risks through the establishment and monitoring of the risk appetite of the Board of Directors, its transaction reputation risk policy and established policies, control procedures and monitoring mechanisms in areas such as know-your customer and anti-money laundering, IT-cyber security and data confidentiality, and staff selection and recruitment.

## Three-lines-of-defence model

Risk management and control is based on the concept of the three lines of defence, as follows:

## 1st line (front office/ business):

Risk ownership

- Perform business activities to satisfy strategic objectives, in line with the risk appetite
- Accountable for risk incurred in discharging these activities
- Design and operate effective controls and procedures in line with established framework, policies and directives

#### 2nd line (risk control and compliance):

Independent risk oversight

- Support the establishment of an effective risk management framework and definition of a risk appetite
- Monitor risk profile and escalate as appropriate
- Provide the first line of defense with advisory support and challenge it.

#### 3rd line (internal audit):

Assurance

- Independent review of adherence to the framework, policies and general directives
- Ensure integrity of decisions and information flows
- Periodic review of activities across the 1st and 2nd lines of defence to identify areas for improvement as required

#### **Performance of risk assessments**

The Bank performed its annual risk assessment, which was tabled and discussed by its Board of Directors at its meeting of December 2018, in addition to regular risk reports tabled four times a year at the Board (and once a month at the Executive Committee). At EFG International level, risk reports and other risk assessments are tabled to the Risk Committee of the Board, at least four times a year, including in 2018.

## 4. OV1: Overview of the Risk Weighted Assets (RWA)

|  | a        | b        | C<br>Minimum<br>Capital |         |
|--|----------|----------|-------------------------|---------|
|  | RWA      | RWA      | Requirements            |         |
|  |          |          |                         | RWA     |
|  | June 30, | Dec. 31, | June 30,                | Changes |
| (All figures in millions of CHF)                       | 2019     | 2018     | 2019                    | in %    |
| 1 Credit risk (including non-counterparty credit risk) | 6,915.5  | 7,008.8  | 553.2                   | (1.3)   |
| 2 Of which stantardised approach (SA)                  | 6,915.5  | 7,008.8  | 553.2                   | (1.3)   |
| 6 Counterparty Credit risk (CCR)                       | 352.5    | 288.3    | 28.2                    | 22.3    |
| 9 Of which other approach                              | 352.5    | 288.3    | 28.2                    | 22.3    |
| 10 Credit Valuation Adjustment (CVA)                   | 73.0     | 72.3     | 5.8                     | 0.9     |
| 15 Settlement risks                                    | 0.7      | 0.7      | 0.1                     | (5.3)   |
| 20 Market risk   | 688.6    | 804.9    | 55.1                    | (14.5)  |
| 21 Of which standardised approach                      | 688.6    | 804.9    | 55.1                    | (14.5)  |
| 24 Operational risk                                    | 2,036.1  | 2,001.3  | 162.9                   | 1.7     |
| Amounts below the thresholds for deduction (subject    |          |          |                         |         |
| 25 to 250% risk weight)                                | 3.1      | 2.3      | 0.2                     | 32.9    |
| 27 Total   | 10,069.4 | 10,178.6 | 805.6                   | (1.1)   |

## 5. LIQA: Liquidity risk management

For detailed explanation see section 3 Risk Management Approach.

## LIQ1: Information about the liquidity coverage ratio

The LCR is an international regulatory standard. The LCR ensures that a bank has enough liquidity to withstand a 30-calendar-day liquidity stress scenario. It is the ratio between the amount of high-quality liquid assets (HQLA) available and potential net cash outflows over a 30-day period. The term net cash outflows is defined as the total potential cash outflows (such as withdrawals from sight deposits and non-renewals of borrowings with a maturity of less than 30 days) less the total potential cash inflows (such as the repayment of receivables with a maturity of less than 30 days) in a stress situation. For banks that, like EFG, are not systemically important, the minimum requirement for the LCR is 100% in 2019.

| (All figures in millions of CHF)        | June 30, 2019   | Dec. 31, 2018   |
|---|-----------------|-----------------|
|   | Weighted values | Weighted values |
| Total high-quality liquid assets (HQLA) | 12,666          | 11,279          |
| Total cash outflows                     | 10,588          | 10,703          |
| Total cash inflows                      | 3,308           | 3,924           |
| Total net cash outflows                 | 7,280           | 6,779           |
| Liquidity Coverage Ratio                | 174%            | 166%            |

The LCR has increased to 174 % as at 30 June 2019 in comparison to 166% reported as at 31 December 2018. The main driver to this increase has been an increase in cash held with central banks. The Bank's SNB account makes up 45% of the HQLA. The remaining HQLA are primarily US, Hong Kong and Singaporean-issued securities that have a credit rating of between AAA and AA.

Withdrawals from retail and corporate client deposits account for around 80% of total potential cash outflows. This reflects the fact that client deposits are the primary source of funding and therefore the primary source of potential fund outflows in the event of a liquidity stress.

Other cash outflows relate mainly to:

- Derivatives maturing within 30 days and margin calls relating to credits;
- The undrawn part of credit facilities granted to clients;
- Contingent liabilities (e.g. guarantees and letters of credit).

Loans to clients and banks maturing within 30 days account for around 93% of potential cash inflows. The remaining cash inflows primarily come from derivatives maturing within 30 days. The LCR in Swiss francs is 436%, a large percentage of HQLA are denominated in Swiss francs (cash deposited at the SNB).

The tables below show the average position for the two first quarter of 2019.

|    |   | Q2 2019<br>3-month     | _               | Q1 2019<br>3-month     | _               |
|----|---|------------------------|-----------------|------------------------|-----------------|
|    | Amounts in millions of CHF  | Values not<br>weighted | Weighted values | Values not<br>weighted | Weighted values |
| A. | <b>High quality liquid assets (HQLA)</b><br>Total of high quality liquid assets   |                        |                 |                        |                 |
| 1  | (HQLA)  |                        | 12,546          |                        | 11,899          |
| B. | Cash outflows   |                        |                 |                        |                 |
| 2  | Deposits from retail clients  | 14,251                 | 2,049           | 14,243                 | 2,049           |
| 3  | of which stable deposits  | -                      | -               | -                      | -               |
| 4  | of which less stable deposits   | 14,251                 | 2,049           | 14,243                 | 2,049           |
| 5  | Unsecured wholesale funding   | 13,424                 | 6,854           | 13,837                 | 7,123           |
| 6  | of which, operational deposits (all<br>counterparties) and deposits in networks<br>of cooperative banks   | _                      | _               | -                      | -               |
|    | of which non-operational deposits (all  |                        |                 |                        |                 |
| 7  | counterparties)   | 13,421                 | 6,851           | 13,835                 | 7,121           |
| 8  | of which unsecured debt instruments   | 3                      | 3               | 2                      | 2               |
| 9  | Secured wholesale funding and collateral swaps  | 268                    | 265             | 261                    | 244             |
|    | ·   |                        |                 |                        |                 |
| 10 | Other cash outflows   | 598                    | 532             | 588                    | 531             |
|    | of which cash outflows related to<br>derivative exposures and other   |                        |                 |                        |                 |
| 11 | transactions  | 503                    | 503             | 494                    | 494             |
|    | of which, outflows related to loss of<br>funding on asset-backed securities,<br>covered bonds and other structured<br>financing instruments, asset-backed |                        |                 |                        |                 |
| 12 | commercial papers, conduits, securi-ties investment vehicles and other such financing facilities  | -                      | -               | -                      | -               |
| 13 | of which cash outflows from committed<br>credit and liquidity facilities  | 95                     | 28              | 94                     | 37              |
| 14 | Other contractual funding obligations   | 884                    | 877             | 1,035                  | 1,030           |
| 15 | Other contingent funding obligations  | 351                    | -               | 398                    | -               |
| 16 | Total cash outflows   |                        | 10,576          |                        | 10,977          |
| c. | Cash inflows  |                        |                 |                        |                 |
| 17 | Secured lending (e.g. reverse repos)  | 33                     | 33              | 25                     | 25              |
| 18 | Inflows from fully performing exposures   | 4,816                  | 3,205           | 6,189                  | 4,034           |
| 19 | Other cash inflows  | 198                    | 198             | 218                    | 219             |
| 20 | Total cash inflows  | 5,047                  | 3,436           | 6,432                  | 4,278           |
|    |   |                        | Net values      |                        | Net values      |
| 21 | Total high quality liquid assets (HQLA)   |                        | 12,546          |                        | 11,899          |
| 22 | Total net cash outflow  |                        | 7,141           |                        | 6,699           |
| 23 | Liquidity coverage ratio (LCR) in %   |                        | 176%            |                        | 178%            |
| 23 | Enquirity Coverage ratio (LCR) iii 76   |                        | 1/0/6           |                        | 1/070           |

## 6. IRRBB Interest rate risk in the banking book

## 6.1 IRRBBA: Interest rate risk: Risk Management objective and policies

#### a. Risk management and risk assessment purposes

Interest rate risk in the banking book (IRRBB) is an important risk that arises from banking activities, because business typically involves intermediation activity that produces exposures to maturity mismatch (e.g. long-maturity assets funded by short-maturity liabilities), rate mismatch (e.g. fixed rate loans funded by variable rate deposits) and basis risk (e.g. different basis reference rates and frequencies). In addition, optionality embedded in many of the common banking products (e.g. non-maturing deposits, term deposits, fixed rate loans) are triggered in accordance with changes in interest rates.

Different risk metrics are used to assess interest rate risk in the banking book, considering the complementary nature of present value and earnings-based measures. These measures are assessed with both deterministic (sensitivity analysis and stress tests) and probabilistic (value-atrisk, earning-at-risk) methodologies.

Through economic value of equity measures (EVE), a change in the net present value of assets, liabilities and off-balance sheet items, subject to specific interest rate shock and stress scenarios, is computed. Through earnings-based measures on net interest income (NII), focus is made on changes to future profitability within a given time horizon, that could eventually affect future levels of own equity capital.

Economic value measures reflect changes in value over the remaining life of assets, liabilities and off-balance sheet items (i.e. until all positions have run off); earnings-based measures cover the short to medium term period, typically a one year period.

The economic value measures consider the net present value of repricing cash flows of instruments on the balance sheet or accounted for as an off-balance sheet item (i.e. a run-off view). Earnings measures assume, in addition to a run-off view, the rollover of maturing items (i.e. a constant balance sheet view) or assess the scenario-consistent impact on the future earnings inclusive of future business (i.e. a dynamic view).

#### b. Risk management and risk assessment strategies

Interest rate risks related to the balance sheet structure are managed by the Asset & Liability Management Committee and monitored by the Financial Risk Committee, in accordance with the principles and maximum limits stipulated by the market risk policy. The risk policy defines the organisational structure, responsibilities, limit systems and maximum acceptable risk set by the Board of Directors.

Interest rate risk is managed in line with predefined interest rate limits and risk appetite to generate profits. The interest rate risk appetite is approved by the Board of Directors and refers both to economic value of equity and net interest income views.

Interest rate risk in banking book is assessed centrally by the Group Risk function, with strategic management done by the Asset & Liability Management Committee and risk monitoring done by the Financial Risk Committee.

Interest rate risk measurement is performed with a system, which has embedded data quality checks and best-practice evaluation methodologies. Models for interest rate risks are appropriately documented, controlled and reviewed at least on an annual basis or when deemed necessary due to changing conditions. Both system and models are subject to independent validation.

### c. Risk assessment frequency and key indicators

IRRBB is assessed at least daily with simple risk indicators, such as repricing gap and one-year equivalent exposure. On a monthly basis, more complex interest rate risk indicators are assessed, analysing both EVE and NII impact of shock and stress scenarios, based on static and dynamic simulations

#### d. Interest rate shocks and stress scenarios

Vulnerability to loss under stressful market conditions is measured. IRRBB assessment accommodates the calculation of the impact on economic value and earnings of multiple scenarios, in line with FINMA and BIS regulations:

- i. Internally selected interest rate shock scenarios addressing the Group's risk profile
- ii. Historical and hypothetical interest rate stress scenarios, which tend to be more severe than shock scenarios
- iii. Six regulatory prescribed interest rate shock scenarios

An effective stress testing framework has been developed and implemented for IRRBB as part of its broader risk management and governance processes. This feeds into the decision-making process at the appropriate management level, including strategic decisions (e.g. business and capital planning decisions). In particular, IRRBB stress testing is considered in the internal capital assessment, with rigorous, forward-looking stress testing that identifies events of severe changes in market conditions which could adversely impact the bank's capital or earnings.

## e. Model assumptions deviations

Impact on cash placed at central banks due to market interest rate changes is analysed through internal risk indicators. Following FINMA prescriptions, such impact is not included in EVE and NII exposures shown in table IRRBB1 (refer to paragraph 6.3).

The NII values in table IRRBB1 are computed assuming a constant balance sheet. Internal risk indicators consider, besides this static view, also dynamic simulations that allow to take into consideration how customers' behaviour affect interest rate risk exposures.

Internal risk indicators consider different risk aggregation rules across currencies and correlation assumptions of interest rates (refer to g.10. Other assumptions).

### f. Hedging strategies and accounting treatment

IRRBB hedging decisions are taken by the Asset & Liability Management Committee and executed in the market by Treasury. Interest rate risk hedging strategies are implemented that are designated either as fair value hedges or as cash flow hedges.

Fair value hedge is used when a derivative financial instrument hedges the exposure to changes in the fair value of the hedged item, in order to mitigate interest rate risks of its assets and liabilities.

Cash flow hedges are used when a derivative financial instrument hedges the exposure to variability in the cash flows from a hedged item, in order to mitigate a particular risk associated with an asset or liability or highly probable forecast transaction.

## g. Modelling and parameter assumptions used when calculating $\Delta$ EVE and $\Delta$ NII in table IRRBB1 (paragraph 6.3)

## g.1. Changes in the present value of capital (AEVE) - Determination of payment streams

The EVE is computed under the assumption that existing exposures in the banking book will be amortised and not replaced with new interest business. Nominal and interest cash flows are determined at single position level both for on- and off-balance sheet instruments. Amortising plans are considered when computing both nominal and interest cash flows. When projecting interest cash flows the Bank includes both cost of funding and commercial margins (i.e. client rate).

## g.2. Changes in the present value of capital (ΔΕVΕ) - Mapping approach

Cash flows are slotted into the appropriate time band using the effective payment or repricing date. Floating rate instruments are assumed to reprice fully at the first repricing date. Hence, the entire principal amount is slotted into the bucket in which that date falls, with no additional slotting of notional repricing cash flows to later time buckets (other than the spread components which are considered as a fixed rate cash flows).

Forward starting deals are slotted with dual deposit inflow/outflow with opposite sign, equal in magnitude to the original balance at value date.

### g.3. Changes in the present value of capital (AEVE) - Discounting and interpolation methods

Cash flows are discounted using risk-free rate curves. Zero-coupon rates and discount factors are derived from market rates through the bootstrapping process. The exponential interpolation method is used.

The discounting of cash flows, which include margin payments, with risk-free discount rates could lead to a slightly overestimated interest rate risk position.

#### g.4. Changes in the expected income (ANII)

The Net Interest Income is computed under the assumption of a constant balance sheet, where payment streams due or new are replaced by payment streams from new interest business with identical characteristics in regard to volume, reset frequency and spread component that depend on creditworthiness. The earning-based approach measures interest rate risk for non-discounted cash flows over a one year period. Expected payment streams, including margin payments and other spread components, which arise from interest rate sensitive assets, liabilities and off-balance sheet items in the banking book, are taken into account.

#### g.5. Non-maturing exposures

Non-maturing products are modelled using replicating portfolios, considering behavioural characteristics for significant currencies and companies. Significant non-maturing products are replicated, so that they can be assigned a synthetic maturity and transformed into fixed income instruments.

Non-maturity products assumptions are built around the following three analysis steps:

- i) Correlation to market rates magnitude of deposits rate shifts, in response to market rates changes
- ii) Volume stability estimate of the stability of outstanding volume, and
- iii) Volume decay rate at which balances are being reduced from the account outstanding volume

Based on the above steps, behavioural models are defined and allow quantifying the interest rate risk of the non-maturing products.

In particular, a distinction is made between the stable and non-stable volume for significant non-maturing products.

When analysing the stable component, non-maturing products are segmented into retail and wholesale categories, up to the defined volume and maturity caps (as per BIS IRRBB framework). The stable portion is expected to remain undrawn with a high degree of likelihood. The separation of stable and non-stable parts is done using observed historical volume trend.

Non maturing products are slotted into the appropriate time bucket:

- i. Non-stable volume is considered at overnight and accordingly placed into the shortest/overnight timebucket
- ii. Stable volume is slotted to the suitable mid-to-long term maturity

### g.6. Exposures with pay-back options

Term loans lock in a rate for a fixed term and would usually be hedged on that basis. However, such loans may be subject to the risk of early repayment, also called prepayment risk.

Economic cost of early repayment on loans is charged to borrowers. As a general rule, customers wishing to pay off their loans before maturity must pay an early repayment fee that is calculated using a rate equal to the difference between interest rate on the loan and interest that can be obtained on the market if a replacement transaction was entered into for the remaining period until maturity, this rate being applied to the remaining amount due. The application of penalty fees prevents from incurring losses from early repayments.

Prepayments, for which the economic cost is not charged to the borrower, are referred to as uncompensated prepayments. For term loan products where the economic cost of prepayments is not charged, the baseline conditional prepayment rate is determined and a scenario multiplier is applied, depending on the upward or downward movement of the market interest rates (as per BIS IRRBB framework).

## g.7. Term deposits

Term deposits lock in a fixed rate for a fixed term and would usually be hedged on that basis. However, term deposits may be subject to the risk of early withdrawal, also called early redemption risk

As a general rule, early withdrawal of term deposits is not allowed. In any case the economic cost of early redemption is charged to depositors. According to Swiss Liquidity Risks - Banks Circular, customers wishing to early-redeem their term deposits before maturity must pay an early redemption fee that is calculated adding at least 2% to the compensation for the lower interest rate since the deposit was made.

The early redemption penalty prevents from incurring losses from early reimbursements; and as a result, such a risk is deemed not to be significant. For this reason, no model for early redemptions is applied.

## g.8. Automatic interest rate options

Embedded options in banking products, such as loans, deposits, structured products, fiduciary placements and issued bonds, are considered.

For structured products, the analysis considers the embedded bonds/deposits or interest rate derivative that encompass the interest rate risk component of the product.

Concerning embedded options in loans, floor options are captured and optional cash flows are generated using a deterministic model.

#### g.9. Derivative exposure

Hedging instruments mainly consist of linear derivatives such as interest rate swaps, cross currency swaps, futures, FX swaps. Derivatives instruments are used both for fair value and cash flow hedging purposes.

## g.10. Other assumptions

Interest rate risk exposure is monitored using different aggregation methods:

- i. Aggregation of risk exposures considering perfect correlation between different currencies (positive and negative changes can offset each other)
- ii. Aggregation of risk exposures where only negative exposures are considered (as per BIS IRRBB approach), where positive exposures cannot compensate negative ones
- iii. Aggregation of negative and positive exposures applying a 50% weighting to positive ones (as per EBA IRRBB approach).

In table IRRBB1, the aggregation rule as per approach i. is considered. In this currency aggregation approach the EVE risk measure corresponds to the worst across all interest rate shock scenarios. The EVE exposures are aggregated under a given interest rate shock scenario considering both positive and negative exposure for each single currency, as being market practice in Switzerland for IRRBB disclosure purposes.

# **6.2.** IRRBBA1 Quantitative information on the exposure's structure and repricing date

The below table IRRBBA1 shows the interest sensitive positions volume and repricing maturities.

Swap positions, such as for example interest-rate swaps, cross-currency swaps and FX swaps, are reported with two legs – a receivables leg and a payables leg – and are recorded, therefore, under both "Receivables from interest rate derivatives" and "Liabilities from interest-rate derivatives". Fixed income securities are reported in terms of nominal values (interest rate risk view).

Sight deposits at the Swiss National Bank, sight deposits at clearing houses recognised by FINMA and sight deposits at a foreign central bank are not included in the table, as being considered as positions without repricing maturity, as per FINMA requirement.

The column "Of which other significant currencies" refers to positions in other currencies that account for more than 10% of balance-sheet assets or liabilities.

|              |             | _   | Volum    | nes in mio o |                      | Average re<br>maturies ( |          | re <sub>l</sub><br>mat<br>years<br>to non | ongest<br>oricing<br>urity (in<br>) assigned<br>I-maturing<br>sitions |
|--------------|-------------|---|----------|--------------|----------------------|--------------------------|----------|---|---|
|              |             |   |          |              | Of which             |                          |          |   |   |
|              |             |   |          | Of which     | other<br>significant |                          | Of which |   | Of which  |
|              |             |   | Total    | CHF          | currencies           | Total                    | CHF      | Total                                     | CHF   |
| Determined   | 5           | Receivables from banks                          |          |              |                      | 0.8                      |          | Totat                                     |   |
| repricing    | Receivables |   | 1,645    | 159          | 1,437                |                          | 0.6      | _   |   |
| maturity     |             | Receivables from clients                        | 8,849    | 387          | 6,707                | 0.4                      | 0.5      | _   |   |
|              |             | Money-market mortgages                          | 3,071    | 72           | 2,853                | 0.2                      | 0.7      | _   |   |
|              |             | Fixed-rate mortgages                            | 2,492    | 1,579        | 910                  | 1.3                      | 1.8      | _   |   |
|              |             | Financial investments                           | 6,808    | 220          | 5,544                | 1.0                      | 2.7      | _   |   |
|              |             | Receivables from interest                       |          |              |                      |                          |          |   |   |
|              |             | rate derivatives                                | 16,989   | 1,377        | 13,924               | 0.4                      | 0.7      | _   |   |
|              | Liabilities | Liabilities to banks                            | (8)      | -            | (8)                  | 0.7                      | -        | _   |   |
|              |             | Liabilities from client                         |          |              |                      |                          |          |   |   |
|              |             | deposits  | (11,978) | (3)          | (10,307)             | 0.1                      | 0.0      | _   |   |
|              |             | Bonds and mortgage-<br>backed bonds             | <b>\</b> | <b>/\</b>    | ( · - )              |                          |          |   |   |
|              |             | Liabilities from Interest                       | (4,573)  | (787)        | (3,715)              | 0.9                      | 1.4      | _   |   |
|              |             | rate derivatives                                | (47,000) | (F (40)      | (0.242)              | 0.8                      | 0.7      |   |   |
| Undetermined |             | rate derivatives                                | (17,008) | (5,410)      | (9,242)              | 0.8                      | 0.7      | _   |   |
| repricing    | Receivables | Receivables from banks                          | 2,149    | 125          | 1,603                | -                        | -        |   |   |
| maturity     |             | Receivables from clients                        | 2,786    | 255          | 2,274                | -                        | 0.1      | _   |   |
| ,            |             |   |          |              |                      |                          |          | _   |   |
|              |             | Variable mortgage claims                        | 412      | 411          | 1                    | 0.4                      | 0.4      |   |   |
|              |             | Other receivables                               | 1,158    | -            | 1,158                | 6.5                      | -        |   |   |
|              |             | Sight liabilities in personal and current       |          |              |                      |                          |          |   |   |
|              | Liabilities | accounts  | (19,990) | (3,325)      | (15,305)             | 0.5                      | 1.0      |   |   |
|              |             | Other liabilities                               | (780)    | (41)         | (664)                | 2.0                      | -        | _   |   |
|              |             | Liabilities from clients deposits, call but not |          | . ,          | · •                  |                          |          | _   |   |
|              |             | transferable (savings)                          | (261)    | (260)        | (1)                  | 0.7                      | 0.7      | _   |   |
|              | <u>-</u>    | Total   | (8,239)  | (5,241)      | (2,831)              | 0.2                      | 0.6      | 6.5                                       | 5.0   |

## 6.3 IRRBB1 Quantitative information on economic value of equity and net interest income

The values in table IRRBB1 below are computed in accordance to FINMA Circular 2016/1 "Disclosure – Banks"

The six interest-rate scenarios and currency shifts are defined in Circular 2019/2 "Interest rate risks – Banks".

The following impacts are assessed for each of the prescribed interest rate shock scenarios:

- (i) the change in the economic value of equity ( $\Delta EVE$ ), using a run-off balance sheet and an instantaneous shock; and
- (ii) the change in net interest income (ΔNII) over a forward looking rolling 12-month period, using a constant balance sheet assumption and an instantaneous shock.

A general description of significant modelling, parameter assumptions and aggregation rules used when calculating  $\Delta$ EVE and  $\Delta$ NII in the below table is provided in section 6.1 g.  $\Delta$  EVE

|                                  | ∆<br>EVE (change in ec | onomic value) | ▲ NII (change in net interest income) |               |  |
|----------------------------------|------------------------|---------------|---------------------------------------|---------------|--|
| (All figures in millions of CHF) | June 30, 2019          | Dec. 31, 2018 | June 30, 2019                         | Dec. 31, 2018 |  |
| Parallel up                      | 54                     | 79            | 127                                   | 179           |  |
| Parallel down                    | 93                     | 54            | (107)                                 | (162)         |  |
| Steepener                        | 12                     | (6)           |                                       |               |  |
| Flattener                        | 8                      | 29            |                                       |               |  |
| Short rate up                    | 24                     | 44            |                                       |               |  |
| Short rate down                  | 32                     | (1)           |                                       |               |  |
| Worst scenario                   | 8                      | (6)           | (107)                                 | (162)         |  |
| Tier 1 capital                   | 1,637                  | 1,789         |                                       |               |  |

The EVE worst scenario derives from a curve flattening and remains well below the regulatory threshold corresponding to 15% of Tier 1 capital. The NII worst scenario derives from the curve parallel down shift. As per FINMA requirement, sight deposits at the Swiss National Bank, sight deposits at clearing houses recognised by FINMA and sight deposits at a foreign central bank are treated as non-interest sensitive for the purpose of this disclosure.

Stress scenarios outcomes are highly affected by optional elements embedded in banking products, especially on loans (floors) and other financial products (including behavioural options). Optional elements play an important role, especially in today's negative interest rates environment (mainly CHF and EUR).

The FINMA stress scenarios activate optional elements, in particular when shocked rates are below zero. As a consequence, the EVE and NII sensitivities are not symmetric and, applying the aggregation rules described in section 6.1 g.10, the resulting net EVE exposure remains positive across all stress scenarios.

The EVE and NII sensitivities variations in respect to previous period are mainly due to FX derivatives and to yield enhancement strategies.