EFG Bank European Financial Group

Swiss FINMA Circ. 2016/1 Pillar 3 disclosures 31 December 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 31 December 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 18.5% at 31 December 2019 (31 December 2018: 20.2%) and the common equity tier 1 (CET1) ratio was 14.9% (31 December 2018: 16.5%), versus requirements of 12.1% and 7.9% respectively.

The leverage ratio was 3.8 % at 31 December 2019 (31 December 2018: 4.3%). This ratio is above the regulatory requirement of 3%. The "consolidated" liquidity coverage ratio (LCR) was 185% at 31 December 2019 (31 December 2018: 166%), above the regulatory requirement of 100% from 1/01/2019 onward.

## 1. KM1: Key Metrics

	a	e
(All figures in millions of CHF unless otherwise indicated)	Dec. 31, 2019	Dec. 31, 2018
Available capital		
1 Common equity Tier 1 capital (CET1)	1,516.1	1,681.5
2 Tier 1 capital (T1)	1,622.2	1,788.8
3 Total Capital	1,886.8	2,061.1
Risk Weighted Assets (RWA)		
4 Total risk-weighted assets (RWA)	10,193.5	10,178.6
4a Minimum required capital based on risk-based requirements	815.5	814.3
Risk-based capital ratio as a percentage of RWA		
5 Common Equity Tier 1 ratio (%)	14.9%	16.5%
6 Tier 1 ratio (%)	15.9%	17.6%
7 Total capital ratio (%)	18.5%	20.2%
Additional CET1 buffer requirements as a percentage of RWA		
8 Capital conservation buffer requirement (%)	2.5%	1.9%
11 Total of bank CET1 specific buffer requirements (%)	2.5%	1.9%
12 CET1 available after meeting the bank's minimum capital requirements (%)	9.9%	11.6%
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%
12b National countercyclical buffer (art. 44 and 44a CAO) (%)	0.1%	0.1%
12c CET1 capital target per Annex 8 CAO plus countercyclical buffer as per art. 44 and 44a CAO	7.9%	7.9%
12d T1 capital target per Annex 8 CAO plus countercyclical buffer as per art. 44 and 44a CAO	9.7%	9.7%
12e Total capital target per Annex 8 CAO plus countercyclical buffer as per art. 44 and 44a CAO	12.1%	12.1%
Basel III Leverage ratio		
13 Total Basel III leverage ratio exposure measure	43,086	41,375
14 Basel III Leverage ratio (%)	3.8%	4.3%
Liquidity Coverage Ratio		
15 Total HQLA	12,068	11,278
16 Total net cash outflow	6,519	6,779
17 LCR ratio (%)	185%	166%

## 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.

## 2.1 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.

### 2.2 Non-counterparty risk

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

## 2.3. 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.

## 2.4 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 two representatives 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 on behalf of clients under advisory agreements 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 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 Litigation 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 the 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.

### b) 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 over commercial properties;
- Bank guarantees;
- -Assignment of guaranteed cash surrender value of life insurance policies.

#### c) 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.

### d) 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 from foreign currency fluctuations because most of foreign entities use local currencies as their reporting currencies.

### <u>Liquidity risk</u>

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 Unit. 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 favorable 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, 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 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 (including Cyber Risk)
- -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 & 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 Management 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 regulated asset management businesses and discretionary management of assets. 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.

### <u>Legal risk</u>

The Legal function and Litigation function 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 the 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 defence 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 2019, 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 2019.

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

The increase in risk-weighted assets and related capital charge over the period is mainly due to market risk in particular an increase in foreign exchange and gold positions.

	a RWA	b RWA	c Minimum Capital Requirements
(All figures in millions of CHF)	Dec. 31, 2019	June, 30 2019	Dec. 31, 2019
Credit risk (excl. counterparty credit risk/incl. non counterparty credit			
1 risk)	6,938.5	6,915.5	555.1
2 Of which stantardised approach (SA)	6,938.5	6,915.5	555.1
6 Counterparty Credit risk	323.2	352.5	25.9
9 Of which other CCR approach	323.2	352.5	25.9
10 Credit Valuation Adjustment (CVA)	69.1	73.0	5.5
15 Settlement risks	0.5	0.7	0.0
20 Market risk	853.5	688.6	68.3
21 Of which standardised approach	853.5	688.6	68.3
24 Operational risk	2,008.7	2,036.1	160.7
25 Amounts below the thresholds for deduction (subject to 250% risk weight)	-	3.1	-
27 Total	10,193.5	10,069.4	815.5

## 5. LI1: Mapping of financial statements with regulatory risk categories

There are no differences between the carrying values as reported in the Swiss ARB financial statements and the carrying values under the scope of regulatory consolidation.

	а	С	d	е	f	g
				Dec. 31, 2019		
	_			Carrying values		
						Not subject
			Cubination		Cubication	to capital
	Carrying values as reported in	Subject to	Subject to	Subject to the		requirements or subject to
Assets	Swiss ARB	credit risk		securitisation		•
(All figures in millions of CHF)	financials					from capital
Cash and cash at central banks	8,685.9	8,685.9	-	-	-	-
Due from other banks	3.095.7	3,095.7	-	-	-	-
Amounts due from securities financing transactions	257.6	-	257.6	-	-	-
Amounts due from customers	12,223.1	12,190.0	-	-	-	33.1
Mortgage loans	6,075.1	6,075.1	-	-	-	-
Trading portfolio assets	874.4	-	-	-	874.4	-
Positive replacement values of derivatives financial						
statements	797.5	-	797.5	-	797.5	-
Other financial instruments at fair value	152.9	152.9	-	-	-	-
Financial investments	8,299.0	8,170.0	-	-	129.0	-
Accrued income and prepaid expenses	185.1	185.1	-	-	-	-
Tangible fixed assets	215.7	-	-	-	-	-
Intangible assets	80.0	-	-	-	-	80.0
Other assets	316.6	229.9	-	-	-	86.7
Total assets	41,258.6	38,784.6	1,055.1	-	1,800.9	199.8
Liabilities						
Amounts due to banks	527.9	-	-	-	-	527.9
Amounts due in respect of customers deposits	31,701.9	-	-	-	-	31,701.9
Trading portfolio liabilities	104.4	-	-	-	104.4	-
Negative replacement values of derivative financial						
instruments	946.4	-	-	-	946.4	-
Liabilities from other financial instruments at fair						
value	447.5	-	-	-	447.5	-
Bonds issues and central mortgage institution loans	4,856.2	-	-	-	-	4,856.2
Accrued expenses and deferred income	340.2	-	-	-	-	340.2
Other liabilities	73.0	-	-	-	-	73.0
Provisions	158.1	-	-	-	-	158.1
Total liabilities	39,155.6	-	-	-	1,498.3	37,657.3

The sum of the amounts shown in the different columns "Carrying values" does not necessarily equal the total amount shown in column "Carrying values as reported in Swiss ARB financials" as some of the assets included in these lines are subject to regulatory capital charges of different risks framework.

# 6. LI2: Difference between regulatory exposure amounts and carrying values of financial statements

The table below summarises the framework under which the assets on and off-balance sheet are assessed to determine the relevant risk weighted assets. These reflect the gross exposure.

			Dec. 31, 2	2019	
	a	b	C	d	e
		Items subject to:			
(All figures in millions of CHF)	Total	Credit risk framework	Securitisation framework		
Assets carrying value amount under regulatory scope of 1 consolidation	41,058.8	38,784.6	-	1,055.1	1,800.9
Liabilities carrying value amount under regulatory scope 2 of consolidation	1,498.3	-	-	-	1,498.3
3 Total net amount under regulatory scope of consolidation	1 <b>39,560.5</b>	38,784.6	-	1,055.1	302.6
4 Off balance-sheet amounts	1,443.3	282.9	-	-	-
Differences in valuation for securities financing 5 transaction (regulatory haircut)	59.6	-	-	59.6	-
6 Differences in valuation for derivatives (add-on)	709.9	-	-	709.9	-
7 Differences in netting rules	(2.3)	(2.3)	-	-	-
10 Exposure amounts considered for regulatory purposes	41,192.4	39,065.2	-	1,824.6	302.6

# 7. LIA: Explanation of differences between accounting and regulatory exposure amounts

The total net exposures amount considered for regulatory purposes of CHF 41'192.4 is further split in this report into:

- Exposures subject to credit risk framework of CHF 39'065.2 creating CHF 6'938.5 million of risk weighted assets including CHF 296.5 of risk weighted assets for non-counterparty credit risk
- Counterparty related risk of CHF 1'824.6 million creating CHF 323.2 million of risk weighted assets
- Net exposures of CHF 302.6 that contribute towards CHF 853.5 of risk weighted assets for market risk

## 8. CC1: Composition of regulatory capital

## CC1: Composition of regulatory capital

CC1	: Composition of regulatory capital		
		а	b
			sheet
	(All figures in millions of CHF)	Dec. 31, 2019	reconciliation References
Com	Imon equity Tier I capital (CET1)	000001,2017	References
COII	Directly issued qualifying common share (and equivalent for non-joint stock		
1	companies) capital plus related stock surplus	500.0	b)
2	Reserves and Retained earnings	662.7	
	Common share capital issued by subsidiaries and held by third parties (amount		
5	allowed in group CET1)	618.6	c)
6	Common equity Tier 1 capital before regulatory adjustments	1,781.3	
Com	mon equity Tier I capital: Regulatory adjustments		
8	Goodwill (net of related tax liability)	(31.8)	a)
9	Other intangible other than mortgage-servicing rights (net of related tax liability)	(40.3)	
	Deferred tax assets that rely on future profitability excluding those arising from	(1000)	- /
10	temporary differences (net of related tax liability)	(86.7)	e)
	Other deductions - Future expected dividends - Minority interests issued by non-		
26b	banking subsidiaries	(106.4)	I.
28	Total regulatory adjustments to common equity CET1	(265.2)	
29	Common equity Tier 1 capital (CET1)	1,516.1	
			sheet reconciliation
			References
Add	itional Tier 1 capital (AT1)		
<i></i>	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by		Λ.
34	subsidiaries and held by third parties (amount allowed in group AT1)	106.1	d)
36	Additional Tier 1 capital before regulatory adjustments	106.1	
Add	itional Tier 1 capital: regulatory adjustments	-	
43	Total regulatory adjustments to additional Tier 1 capital	-	
44	Additional Tier 1 Capital (AT1)	106.1	
45	Tier 1 Capital (T1 = CET1 + AT1)	1,622.2	
Tier	2 capital (T2)		
48	Minority interests eligible as T2	264.6	
51	Tier 2 Capital before regulatory adjustments	264.6	
			Balance
			sheet
			reconciliation
	(All figures in millions of CHF)		References
Tier	2 capital (T2): regulatory adjustments	-	
57	Total regulatory adjustments to Tier 2 Capital	-	
58	Tier 2 Capital (T2)	-	
59	Total regulatory capital (T1 + T2)	1,886.8	
60	Total risk-weighted assets	10,193.5	

## **Capital ratios and buffers**

61	Common equity Tier 1 (item 29, as a percentage of risk-weighted assets)	14.9%
62	Tier 1 (item 45, as a percentage of risk-weighted assets)	15.9%
63	Total regulatory capital (item 59, as a percentage of risk-weighted assets)	18.5%
	CET1 requirements in accordance with the Basel minimum standards (minimum	
	requirements + capital buffer + counter-cyclical buffer as per Art. 44a CAO) plus the	
	capital buffer for systemically important banks) (as a per-centage of risk-weighted	
64	assets)	7.0%
65	of which, capital buffer in accordance with Basel minimum standards (as a percent- age of risk-weighted assets)	2.5%
	of which, countercyclical buffer in accordance with the Basel minimum standards	
66	(as per Art. 44a CAO, as a percentage of risk-weighted assets)	0.0%
	CET1 available to meet minimum and buffer requirements as per the Basel mini-	
	mum standards, after deduction of the AT1 and T2 requirements met by CET1 (as a	
68	percentage of risk-weighted assets)	9.9%
	CET1 total requirement target in accord-ance with Annex 8 of the CAO plus the	
c o -	countercyclical buffer as per Art. 44 and 44a CAO (as a percentage of risk-weighted	7.00
68a	assets)	7.9%
	Of which countercyclical buffer as per Art. 44 and 44a CAO (as a percentage of risk-	
68b	weighted assets)	0.1%
68c	CET1 available (as a percentage of risk-weighted assets)	14.1%
	T1 total requirement in accordance with Annex 8 of the CAO plus the countercyclical	
68d	buffer as per Art. 44 and 44a CAO (as a percentage of risk-weighted assets)	9.7%
68e	T1 available (as a percentage of risk-weighted assets)	15.9%
	Total requirement for regulatory capital as per Annex 8 of the CAO plus the counter-	
68f	cyclical buffer as per Art. 44 and 44a CAO (as a percentage of risk-weighted assets)	12.1%
68g	Regulatory capital available (as a percentage of risk-weighted assets)	18.5%
Amo	unts below the thresholds for deduction (before risk-weighting)	
73	Other qualified participations in the financial sector (CET1)	
74	Mortages servicing rights (net of related tax liability)	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	10.6
Appl	icable caps on the inclusion of items in Tier 2	
76	Valuation adjustments eligible in T2 in the context of the SA-BIS approach	
77	Cap on inclusion of valuation adjustments in T2 in the context of the SA-BIS approach	
78	Valuation adjustments eligible in T2 in the context of the IRB approach	
79	Cap on inclusion of valuation adjustments in T2 in the context of the IRB approach	

## 9. CC2: Reconciliation of regulatory capital to balance sheet

(All figures in millions of CHF)	Dec. 31, 2019	Reference
Cash and cash at central banks	8,685.9	
	•	
Due from other banks	3,095.7	
Amounts due from securities financing transactions	257.6	
Amounts due from customers	12,223.1	
Mortgage loans	6,075.1	
Trading portfolio assets	874.4	
Positive replacement values of derivatives financial statements	797.5	
Other financial instruments at fair value	152.9	
Financial investments	8,299.0	
Accrued income and prepaid expenses	185.1	
Tangible fixed assets	215.7	
Intangible assets	80.0	
of which goodwill	31.8	a)
of which other intangible assets	48.2	f)
Other assets	316.6	
of which deferred tax assets that rely on future probability	86.7	e)
of which deferred tax assets arising from temporary difference	10.6	
Total assets	41,258.6	

## Liabilities

Amounts due to banks	527.9	
Amounts due in respect of customer deposits	31,701.9	
Trading portfolio liabilities	104.4	
Negative replacement values of derivative financial instruments	946.4	
Liabilities from other financial instruments at fair value	447.5	
Bond issues and central mortgage institution loans	4,856.2	
Accrued expenses and deferred income	340.2	
Other liabilities	73.0	
Provisions	158.1	
of which deferred tax liabilities related to other intangible assets	7.9	f)
Total liabilities	39,163.5	
of which subordinated liabilities eligible as Tier 2 Capital (T2)	264.6	
of which subordinated liabilities eligible as Additional Tier 1 Capital (T1)	106.1	

#### Shareholders' equity

Share capital	500.0	b)
of which recognized as CET1	500.0	
of which recognized as AT1	-	
Reserves for general banking risks	53.3	
Reserves and retained earnings	444.5	
Other non-controlling interests	1,105.2	
of which recognized as CET1	618.6	c)
of which recognized as AT1	106.1	d)
Shareholders' equity	2,103.0	
Total liabilities and shareholders' equity	41,266.5	
Total liabilities and shareholders' equity	41,266.5	

# 10. CCyB1: Geographical distribution of credit exposures used in the countercyclical capital buffer

			Dec. 31, 2019		
(All figures in millions of CHF)	a	b	С	d	е
		Exposures values and/or risk-weighted assets used in the computation of the countercyclical capital buffer		Bank-specific countercyclical	
Geographical breakdown	Countercyclical <sup>_</sup> capital buffer rate	Exposure values	Risk-weighted assets	capital buffer rate	Countercyclical buffer amount
Switzerland	2.5%	1,978.2	597.3	0.15%	14.9
Total		1,978.2	597.3	0.15%	14.9

# 11. LR1: Leverage ratio: comparison of accounting assets versus leverage ratio exposure measure

The leverage ratio at 31 December 2019 was 3.8% compared to the regulatory requirement of 3.0%.

The ratio is the Tier 1 capital (CHF 1'622.2 million) divided by the Total Gross Exposure (CHF 43'086.4 million). Total Gross Exposure reflects all the on-balance sheet assets at book value primarily adjusted for:

- Deducting assets already deducted from Tier 1 capital (goodwill and certain deferred tax assets)
- Grossing up securities financing transactions
- Derivatives exposure adjustments

- Other off-balance sheet exposures

This ratio is considered as being of limited value in a private banking context, as a private bank balance sheet is liability driven (primarily by the level of client deposits), and these may be placed risk free, for example at the SNB. In this instance there is no additional risk being faced, but it results in a lower leverage ratio.

(All fig	ures in millions of CHF)	Dec. 31 ,2019
1	Total consolidated assets as per published financial statements	41 258.6
2	Adjustment for investments in banks, financial companies, insurers and commercial companies which are consolidated as per accounting standards but not for regulatory purposes (margin nos. 6-7 FINMA circ. 15/3) and adjustments as regards assets which are to be deducted from Tier 1 capital (margin nos. 16-17 FINMA circ. 15/3)	(191.9)
4	Adjustment for derivatives (margin nos. 21-51, FINMA circ. 15/3)	325.9
5	Adjustment for securities financing transactions (SFT) (margin nos. 52-73, FINMA circ. 15/3)	1 413.6
6	Adjustment for off-balance sheet transactions (conversion of off-balance sheet transactions into credit equivalents) (margin nos. 74-76, FINMA circ. 15/3)	280.2
8	Total exposure for leverage ratio (sum of lines 1-7)	43 086.4

## 12. LR2: Leverage ratio: detailed presentation

	Balance sheet items	
1	On balance sheet items (excluding derivatives and SFT but including collateral) (margin nos. 14 - 15, FINMA circ. 15/3)	40 219.5
2	(Assets that must be deducted in determining the eligible Tier 1 capital)2 (margin nos. 7 and 16-17 FINMA Circ. 15/3).	(191.9)
3	Sum of balance sheet items for leverage ratio excluding derivatives and SFT (sum of lines 1 and 2)	40 027.6
	Derivatives	
4	Replacement values for derivative transactions, including those for CCPs taking into consideration received margins and netting agreements (margin nos. 22-23 and 34- 35 FINMA circ. 15/3)	775.9
<del></del> 5	Add-ons for all derivatives (margin nos. 22 and 25 FINMA circ. 15/3)	583.3
7	(Deduction of receivables caused by cash variation margins posted as per margin no. 36 FINMA circ. 15/3)	(297.3)
9	The effective notional value of written credit derivatives after deducting any negative replacement values (margin no. 43 FINMA circ. 15/3)	351.1
10	(Offsetting of effective notional values of offsetting credit derivatives (margin nos. 44-50 FINMA circ. 15/3) and deduction of add-ons for written credit derivatives as per margin no. 51 FINMA circ. 15/3)	(48.1)
11	= Total exposures from derivatives (sum of lines 4–10) Securities financing transactions (SFT)	1 365.0
	Securities financing transactions exposures	
12	Gross SFT assets with no recognition of netting (except in the case of nova-tion with a QCCP as per margin no. 57 FINMA Circ. 15/3) including sale accounting transactions (Margin no. 69 FINMA Circ. 15/3), less the items specified in margin no. 58 FINMA Circ. 15/3).	1 285.7
14	CCR exposure for SFT assets (margin nos. 63-68 FINMA Circ. 15/3).	128.0
16	= Total exposures from SFT (sum of lines 12-15)	1 413.7
	Other off-balance sheet items	
17	Off-balance sheet transactions as gross notional values prior to applying credit conversion factors	511.0
18	(Restatement of conversion to credit equivalents) (margin nos. 75-76, FINMA circ. 15/3)	(230.9)
19	Total exposures from off-balance sheet items (sum of lines 17 and 18)	280.2
	Eligible capital and total exposures	
20	Tier 1 capital (margin no. 5, FINMA circ. 15/3)	1 622.2
21	Total exposures (sum of lines 3, 11, 16 and 19)	43 086.4
	Leverage ratio	%
22	Leverage Ratio (margin nos. 3–4, FINMA circ. 15/3)	3.8

а

## 13. LIQA: Liquidity risk management

For detailed explanation see section 3 Risk Management Approach.

## 14. 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 highquality 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 was 60% for 2015 and is being increased by 10% each year, reaching 100% by 2019.

(All figures in millions of CHF)	Dec. 31, 2019	Dec. 31, 2018
	Weighted values	Weighted values
Total high-quality liquid assets (HQLA)	12 068	11 279
Total cash outflows	10 338	10 703
Total cash inflows	3 819	3 924
Total net cash outflows	6 519	6 779
Liquidity Coverage Ratio	185%	166%

The LCR remains robust at 185 % at 31 December 2019.

As at 31 December 2019, the HQLA is composed of cash deposit at SNB (42%), cash deposits at other central banks (30%) and, for the remaining, 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 84% 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 92% of potential cash inflows. The remaining cash inflows primarily come from derivatives maturing within 30 days. The LCR in Swiss francs is 295%, a large percentage of HQLA are denominated in Swiss francs (cash deposited at the SNB).

The tables below show the average position for the 2 last quarters of 2019.

		Q4 2019 Ave 3-month ave	•	Q3 2019 Av 3-month av	
		Values not	Weighted	Values not	Weighted
	Amounts in millions of CHF	weighted	values	weighted	values
A.	High quality liquid assets (HQLA)				
1	Total of high quality liquid assets (HQLA)		11 506		11 790
В.	Cash outflows				
2	Deposits from retail clients	13 392	1 891	13 778	1 966
3	of which stable deposits	-	-	-	-
4	of which less stable deposits	13 392	1 891	13 778	1 966
5	Unsecured wholesale funding	13 520	7 207	12 912	6 524
6	of which, operational deposits (all counterparties) and deposits in networks of cooperative banks	-	-	-	_
7	of which non-operational deposits (all counterparties)	13 518	7 205	12 909	6 521
8	of which unsecured debt instruments	2	2	3	3
	Secured wholesale funding and collateral				
9	swaps	249	263	238	232
10	Other cash outflows	923	551	614	518
11	of which cash outflows related to derivative exposures and other transactions	483	483	483	483
	of which, outflows related to loss of funding on asset-backed securities, covered bonds and other structured financing instruments, asset- backed commercial papers, conduits, securi- ties investment vehicles and other such		400		
12	financing facilities	-	-	-	-
13	of which cash outflows from committed credit and liquidity facilities	440	67	131	36
14	Other contractual funding obligations	623	581	709	705
15	Other contingent funding obligations	393	0	357	-
16	Total cash outflows		10 493		9 945
C.	Cash inflows				
17	Secured lending (e.g. reverse repos)	109	99	83	75
18	Inflows from fully performing exposures	5 706	3 960	4 921	3 199
19	Other cash inflows	182	182	204	204
20	Total cash inflows	5 997	4 240	5 207	3 478
			Net values		Net values
21	Total high quality liquid assets (HQLA)		11 506		11 790
22	Total net cash outflow		6 253		6 467
23	Liquidity coverage ratio (LCR) in %		184%		182%

22

## 15. CRA: General information about risk

For detailed explanation see section 3 Risk Management Approach.

## 16. CR1: Credit quality of assets

The table below summarises the composition and credit quality of the assets subject to the credit risk framework.

	Dec. 31, 2019							
	a	b	C	d				
	Gross carying v	alues of <sup>1</sup>						
(All figures in millions of CHF)	Defaulted exposures <sup>3</sup>	Non- defaulted exposures	Allowances / impairments <sup>2</sup>	Net values				
1 Loans (without debt securities)	251.8	31,628.0	(114.6)	31,765.2				
2 Debt securities	-	7,019.4	-	7,019.4				
3 Off balance-sheet amounts	-	1,443.3	-	1,443.3				
4 Total	251.8	40,090.7	(114.6)	40,227.9				

1. Gross carrying values: on- and off-balance sheet items that give rise to a credit risk exposure according to the Basel framework. On-balance sheet items include loans and debt securities. Off-balance sheet items are measured according to the following criteria: (a) guarantees given – the maximum amount that the bank would have to pay if the guarantee were called. The amount is the gross of any credit conversion factor (CCF) or credit risk mitigation (CRM) techniques. (b) Irrevocable loan commitments – total amount that the bank has committed to lend. The amounts are gross of any CCF or CRM techniques. Revocable loan commitments must not be included. The gross value is the accounting value before any allowance/impairments but after considering write-offs. They do not take into account any credit risk mitigation technique.

2. Sum of value adjustments, without taking into account, that these adjustments cover impaired credits or even deferred risks, and directly booked amortisations.

3. Under SA-BIS this includes credits past due and impaired positions.

## 17. CR2: Changes in stock of defaulted loans and debt securities

## CR2: Changes in stock of defaulted loans and debt securities

1 Defaulted loans and debt securities at December, 31 2018	550.3
2 Loans and debt securities that have defaulted since the las reporting period	58.
3 Returned to non-defaulted status	(273.1)
4 Amounts written off	(83.7)
5 Other changes	-

Defaulted loans amounted to CHF 251.8 million at 31 December 2019 and accounted for 0.6% of total exposure. Valuation adjustments of CHF 114.6 million were recognized against these loans, reflecting collateral provided on these loans.

Valuation adjustments are determined individually for each defaulted loan, taking into account the liquidation value of collateral and the characteristics of the counterparty.

Value adjustments of impaired positions

Positions written off in the current year

Defaulted exposure decreased by CHF 298.5 million over the period primarily due to the foreclosure of loans made to several entities that hold life insurance policies.

## 18. CRB: Additional disclosure related to the credit quality of assets

Assets (after netting) subject to the credit risk framework (excluding derivatives and securities financing transactions counterparties and non-counterparty risks) are geographically located as per the following table:

By country			D	ec. 31, 2019		
Assets			North mericas and			
(All figures in millions of CHF)	Switzerland	Europe	Carribean	Asia	Other	Total
Cash and cash at central banks	5,076.5	3,581.4	1.6	25.4	1.0	8,685.9
Due from other banks	1,002.4	897.7	339.3	821.5	34.8	3,095.7
Amounts due from customers	620.4	3,776.2	3,141.3	3,575.8	1,076.3	12,190.0
Mortgage loans	1,944.1	2,776.3	880.4	366.6	107.7	6,075.1
Other financial instruments at fair value	-	80.6	72.3	-	-	152.9
Financial investments	107.0	3,191.1	3,318.9	1,182.9	370.1	8,170.0
Accrued income and prepaid expenses	22.9	61.2	62.4	23.1	15.5	185.1
Other assets	108.2	94.9	10.2	3.8	10.5	227.6
Total assets	8,881.5	14,459.4	7,826.4	5,999.1	1,615.9	38,782.3
Off Balance sheet						
Contingent liabilities	55.2	49.4	78.1	5.9	27.7	216.3
Irrevocable commitments	15.6	43.4	5.4	1.7	0.5	66.6
Total off balance sheet	70.8	92.8	83.5	7.6	28.2	282.9
Grand Total	8,952.3	14,552.2	7,909.9	6,006.7	1,644.1	39,065.2
Receivables past due						
(All figures in millions of CHF)						
Receivables past due	10.8	5.5	6.0	6.0	-	28.3
Impaired loans	0.3	18.7	-	204.5		223.5

8.3

-

-

-

97.4

-

0.1

-

114.6

83.7

8.8

-

Assets (after netting) subject to the credit risk framework (excluding derivatives and securities financing transactions counterparties and non-counterparty risks) are primarily short dated as illustrated by the following table:

By remaining maturity				Dec. 31, 2019		
				Due within		
Assets				12 months to	Due after	
(All figures in millions of CHF)	At sight	Cancellable	12 months	5 years	5 years	Total
Cash and cash at central banks	8,685.9	-	-	-	-	8,685.9
Due from other banks	1,115.8	135.8	1,493.0	346.2	4.9	3,095.7
Amounts due from customers	-	2,573.8	7,506.0	1,838.7	271.5	12,190.0
Mortgage loans	-	1.2	2,741.9	2,710.7	621.3	6,075.1
Other financial instruments at fair value	-	-	-	-	152.9	152.9
Financial investments	248.6	-	3,517.4	2,883.1	1,520.9	8,170.0
Accrued income and prepaid expenses	35.7	0.2	149.0	0.2	-	185.1
Other assets	-	3.5	217.5	-	6.6	227.6
Total assets	10,086.0	2,714.5	15,624.8	7,778.9	2,578.1	38,782.3
Off Balance sheet						
Contingent liabilities	1.4	-	114.1	26.2	74.6	216.3
Irrevocable commitments	6.1	-	20.5	39.9	0.1	66.6
Total off balance sheet	7.5	-	134.6	66.1	74.7	282.9
Grand Total	10,093.5	2,714.5	15,759.4	7,845.0	2,652.8	39,065.2
Receivables past due						
(All figures in millions of CHF)						
Receivables past due	28.4	-	-	-	-	28.4
Impaired loans	223.4	-	-	-	-	223.4
Value adjustments of impaired positions	114.6	-	-	-	-	114.6
Positions written off in the current year	122.2	-	-	-	-	83.7

Assets (after netting) subject to the credit risk framework (excluding derivatives and securities financing transactions counterparties and non-counterparty risks) by industry are as detailed by the table that follows:

By sector Assets	Central governments and Central	Banks and	C	ec. 31, 2019		
(All figures in millions of CHF)		stockbrokers	Corporates	Retail	Other	Total
Cash and cash at central banks	8,622.7	-	-	-	63.2	8,685.9
Due from other banks	0.2	3,079.6	4.1	1.1	10.7	3,095.7
Amounts due from customers	-	-	2,175.6	9,974.4	40.0	12,190.0
Mortgage loans	-	1.3	1,565.7	4,503.5	4.6	6,075.1
Other financial instruments at fair value	-	-	152.3	-	0.6	152.9
Financial investments	3,637.5	2,294.7	1,415.1	157.9	664.8	8,170.0
Accrued income and prepaid expenses	17.8	22.9	33.6	49.7	61.1	185.1
Other assets	13.0	-	0.7	0.1	213.8	227.6
Total assets	12,291.2	5,398.5	5,347.1	14,686.7	1,058.8	38,782.3
Off Balance sheet						
Contingent liabilities	-	12.8	63.9	139.6	-	216.3
Irrevocable commitments	-	-	24.4	37.5	4.7	66.6
Total off balance sheet	-	12.8	88.3	177.1	4.7	282.9
Grand Total	12,291.2	5,411.3	5,435.4	14,863.8	1,063.5	39,065.2
Receivables past due						
(All figures in millions of CHF)						

Receivables past due	-	-	10.6	17.8	-	28.4
Impaired loans	-	-	221.4	2.0	-	223.4
Value adjustments of impaired positions	-	-	114.5	0.1	-	114.6
Positions written off in the current year	-	-	-	-	-	83.7

Impaired loans, defined as loans for which it is improbable that the debtor will have the capacity to honour his or her commitments, are individually valued and the depreciation in value is covered by appropriate and individual value adjustments.

A loan is considered as past due when appropriate indicators provide evidence that future contractual repayments of capital and/or interests are unlikely, or at the latest, when such payments are overdue by 90 days (referred to herein as past due).

A loan is no longer considered past due if the interest and principal payments are up-to-date and future payments are reasonably assured.

## 19. CRC: Qualitative disclosure requirements related to credit risk mitigation techniques

For detailed explanation see section 3 Risk Management Approach.

## 20. CR3: Credit risk mitigation techniques – overview

The table below summarises the assets on which the credit risk is mitigated for the purposes of RWA calculations:

			Dec. 31, 2019		
	a	b1	b	d	f
Assets (All figures in millions of CHF)	Exposures unsecured / carrying amount	Exposures secured/ carrying amount	Of which exposures secured by collateral	Of which exposures secured by financial guarantees	Exposures secured by credit derivatives
1 Loans (without debt securities)	13,296.9	18,466.0	17,785.1	714.0	-
2 Debt securities	7,019.4	-	-	-	-
3 Total	20,316.3	18,466.0	17,785.1	714.0	-
4 of which defaulted	20.2	231.6	-	-	-

There were no significant changes in the period.

Loans reported above include both Banks and Liquid Assets. Of the CHF 13'263.8 million reported in relation to exposures unsecured, the key components are liquid assets which account for 65% (mainly with central banks) and amounts due from banks that account for 23%.

# 21. CRD: Qualitative disclosures on banks' use of external credit ratings under the standardised approach for credit risk

For detailed explanation see section 3 Risk Management Approach.

# 22. CR4: Credit risk: exposure and Credit Risk Mitigation (CRM) effects under the standardised approach

The below table summarises the RWA composition for the assets on and off-balance sheet and the related average percentage these RWA comprise of the gross exposure.

	a	b	) (	d	е	f
	Exposures before Credit Conversion Factor (CCF) and Credit Risk Mitigation (CRM)		Conversion and Credit R	after Credit Factor (CCF) isk Mitigation RM)		
Assets Classes (All figures in millions of CHF)	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA Density
1 Sovereign and their central banks	12,291.2	-	12,272.8	-	128.6	1%
2 Banks and securities dealers	5,398.5	12.8	4,330.7	' 12.8	1,439.4	33%
Public sector entities and 3 multilateral development banks	661.2	-	577.8	-	46.4	8%
4 Corporate	5,347.1	88.4	3,734.7	49.7	1,720.0	45%
5 Retail	14,686.7	177.0	6,202.8	61.3	3,376.2	54%
6 Equity securities	44.3	-	36.3	-	47.6	131%
7 Other assets	353.2	4.7	7 317.2	4.7	207.0	64%
8 Total	38,782.3	282.9	) 27,472.3	128.5	6,965.2	25%

There were no significant changes in the period

## 23. CR5: Exposures by exposure category and risk weights under the standardised approach

The below table summarises the net exposure after Credit Conversion Factor (CCF) and after Credit Risk Mitigation (CRM) by the risk weighting applied to these exposures.

	Dec. 31, 2019							
Assets classes / Risk weights	a	b	d	e	f	g	h	Total credit exposures amount (post
(All figures in millions of CHF)	0%	20%	35%	50%	75%	100%	150%	CCF & CRM)
1 Sovereign and their central banks	11,792.9	397.5		82.4	-	-	-	12,272.8
2 Banks and securities dealers	<b>294.1</b>	2,759.8	2.6	1,230.1	-	55.2	1.7	4,343.5
Public sector entities and 3 multilateral development banks	538.0	31.3	4.4	3.0	-	1.1	-	577.8
4 Corporates	42.2	1,530.3	1,210.9	329.9	26.7	632.0	12.4	3,784.4
5 Retail	130.7	22.2	4,088.8	16.6	445.4	1,541.6	18.8	6,264.1
6 Equity securities	0.6	-	-	-	-	-	35.7	36.3
7 Other assets	69.1	-	-	32.0	-	220.8	-	321.9
8 Total	12,867.6	4,741.1	5,306.7	1,694.0	472.1	2,450.7	68.6	27,600.8
9 of which secured by mortages			5,274.1		104.7	404.3	2.6	5,785.7
10 of which past due loans						26.7	1.7	28.4

#### 24. CCRA: Qualitative disclosure related to counterparty credit risk

#### Counterparty credit risk

Counterparty credit risk (CCR) exposure includes securities financing transactions and derivative transactions. The risk weighted assets for counterparty credit risk is CHF 323.2 million (2018: CHF 360.6 million).

#### Securities financing transactions (SFTs)

The majority of SFTs used are repo and reverse repo agreements to manage liquidity and generate revenues.

Repo and reverse repo agreements are based on standard contracts such as the GMRA or the GMLSA. Collateral eligibility is determined by SIX when it is the triparty agent (SNB basket) or agreed upon by the counterparties when Euroclear is the triparty agent.

Collateral must meet the eligibility criteria set forth in the group risk framework.

SFT counterparties are mainly banks. They are monitored daily on an individual basis. Their quality of securities received as collateral is monitored daily using a portfolio approach, with particular attention paid to risk concentration. When calculating capital requirements, the exposure is determined using the comprehensive approach (Art. 62.1(b) of the CAO). Capital requirements are determined using the SA-BIS approach.

#### Non-centrally cleared OTC derivatives

Limits for OTC derivatives (including forward contracts) that are not centrally cleared (cleared bilaterally) are mainly granted to bank counterparties in order to carry out trading operations and interest-rate risk hedging transactions.

In principle, OTC derivative transactions are managed only on the basis of ISDA netting agreements or an equivalent agreement. For main bank counterparties in terms of pre-settlement exposure, necessary measures are taken to ensure that OTC derivative transactions can be carried out in

accordance with a credit support annex (CSA) for collateral management. Alternatively, blocked cash deposits can be set up as a risk mitigation for OTC derivative exposure.

Credit-risk exposure is measured according to the principle of "positive mark-to-market value plus add-on."

The add-on is determined by type of underlying and by maturity, on the basis of internal models. Where an ISDA netting agreement with the counterparty has been entered to, contracts with negative mark-to-market values can be taken into account to reduce credit-risk exposure. Where a CSA collateral management agreement has been entered to with the counterparty, credit-risk exposure is determined according to the same principle, taking into account the amount of the cash collateral and based on a reduced add-on, in order to take into consideration the frequency of revaluation and the option to make margin calls.

When calculating capital requirements, exposure is determined according to the current exposure method (Basel II Accord, annex IV, figures 91ff), taking account of regulatory add-ons as well as netting and collateral management agreements. Capital requirements are determined according to the appropriate approach (IRB or SA-BIS), which includes the credit valuation adjustment (CVA).

#### **Centrally cleared derivatives**

Centrally cleared derivatives include exchange-traded derivatives (ETDs) and OTC derivatives cleared by a central counterparty.

Exchange-traded derivatives whose settlement is guaranteed by a central counterparty mainly relate to transactions on behalf of clients. The contracts traded are mainly options and futures on equities and major indexes. OTC derivatives cleared by a central counterparty are interest-rate swaps used to manage the interest-rate risk.

Exposure to central counterparties results from derivative positions, initial margins, variation margins, and default fund contributions. For derivatives, the exposure is determined based on the positive mark-to-market value plus an add-on; other exposures are determined using market values. This type of exposure is subject to a credit limit if it gives rise to credit risk.

### 25. CCR2: Credit valuation adjustment (CVA) capital charge

The table that follows summarises the RWA requirement for CVA:

	<b>Dec. 31, 20</b> 1	19
	a	b
(All figures in millions of CHF)	EAD post- CRM	RWA
Total portfolios subject to the Advanced CVA capital charge		
1 VAR component (including the 3x multiplier)		-
2 Stressed VaR component (including the 3x multiplier)		-
3 All portfolios subject to the Standardised CVA capital charge	928.0	69.1
4 Total subject to the CVA capital charge	928.0	69.1

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# 26. CCR3: Counterparty (derivatives and securities financing transactions) credit risk: by exposure category and risk weights

The table below summarises the exposure subject to the counterparty credit risk calculation and reflects the exposure after CRM and CCF. These exposures multiplied by the weighting determine the RWA requirement.

	Dec. 31, 2019					
Assets classes / Risk weights	a	C	d	е	f	i
(All figures in millions of CHF)	0%	20%	50%	75%	100%	Total
1 Sovereign and their central banks	0.3	-	-	-	4.1	4.4
2 Banks and securities dealers	0.1	261.7	262.1	-	28.6	552.5
Public sector entities and						
3 multilateral development banks	1.0	-	-	-	-	1.0
4 Corporates	-	28.5	25.1	-	59.5	113.1
5 Retail	-	-	1.6	1.9	26.7	30.2
7 Other assets	-	-	-	-	0.4	0.4
9 Total	1.4	290.2	288.8	1.9	119.3	701.6
Weighted value	-	58.0	144.4	1.4	119.3	323.2

## 27. CCR5: Composition of collateral for CCR exposure

	a	b	C	d	е	f
			Dec. 31 2	2019		
	<u>Collat</u>	eral used in de	rivative transacti	<u>ons</u>	<u>Collateral u</u>	sed in SFT's
	Fair value of coll	Fair value of collateral received Fair value of posted collateral Fair value of collateral Fair value of				
(All figures in millions of CHF)	Segregated	Unsegregated	Segregated	Unsegregated	received	collateral
Cash - domestic currency	-	-	6.2	-	-	-
Cash - other currencies	142.6	-	122.8		127.1	249.2
Domestic sovereign debt	-	-	-	-	-	-
Other sovereign debt	-	-	-	-	-	-
Government agency debt	-	-	-	-	-	-
Corporate bonds	-	-	15.4	-	1622.7	1,599.5
Equity securities	-	-	38.1	-	140.4	144.5
Other collateral	-	-	-	-	1.2	45.9
Total	142.6	-	182.5	-	1,891.4	2,039.1

## 28. CCR6: Counterparty credit risk: Credit derivatives exposures

(All figures in millions of CHF)	Protection bought Pro	otection sold
Notionals		
Single-name credit default swaps	34.4	-
Index credit default swaps	10.9	555.4
Total return swaps	-	-
Credit options	-	-
Other credit derivatives	-	-
Total notionals	45.3	555.4
Fair values		
Positive fair value (asset)	0.1	-
Negative fair value (liability)	(2.0)	(14.6)

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## Non counterparty-related risk

The term "non-counterparty-related risks" denotes the risk of a loss as a result of changes in the value of or liquidation of non-counterparty related assets such as real estate and other tangible assets.

In order to cover non-counterparty-related risks with capital, the following positions must be risk-weighted at 100%:

- real estate
- other tangible assets and assets recorded in the balance sheet under "other assets", that are subject to depreciation, unless they are deducted from the Common Equity Tier 1 capital.

RWA for the above amounted to CHF 296.5 million as at December 31, 2019 and comprised the following:

- real estate requirement primarily for the land and buildings the Group operates from in Switzerland of CHF 215.2 million
- other tangible assets requirement of CHF 81.3 million for the other fixed assets.

### 29. MRA: Market risk: qualitative disclosure requirements

Market risk is the risk of losses arising from unexpected changes in interest rates, exchange rates, equity 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 assets.

#### Approach used

The Standardised Approach is used to measure the capital adequacy on its Market Risk capital adequacy calculation.

Financial instruments in the trading book are marked to market and calculated on this basis for market risk purposes.

### Interest Rate instruments in the trading book

Two components compose interest rate risk in the trading book, which must be calculated separately.

One component is based on specific risk of interest rate instruments. Specific risk includes risks that relate to factors other than changes in the general interest rate structure. These risks are calculated per issuer. These positions are based on the issuer rating and residual maturity of the instrument.

The second component is: general market risk. General market risk includes risks which relate to a change in the general interest rate structure and are therefore, calculated per currency. The maturity method is used where the total of a currency is broken down into maturity time bands per position and each specific maturity band carries its own risk weight that is applied to the total positions.

For further detailed explanation see section 3 Risk Management Approach.

## 30. MR1: Market risk: minimum capital requirements under standardised approach

The below table summarises the RWA for market risk:

	Dec. 31, 2019		
	a		
(All figures in millions of CHF)	RWA		
Outright products			
1 Interest rate risk (general and specific)	439.1		
2 Equity risk (general and specific)	42.5		
3 Foreign exchange risk	147.2		
4 Commodity risk	216.3		
Options			
5 Simplified approach	-		
6 Delta-plus method	8.4		
7 Scenarion approach	-		
8 Securitisation	-		
9 Total	853.5		

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

#### **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. long-maturity assets funded by short-maturity liabilities), 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-at-risk, 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 offbalance 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 regularly 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 IRRBB1).

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 that are designated either as fair value hedges or as cash flow hedges are implemented.

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

## g.1. Changes in the present value of capital ( $\Delta$ EVE) - 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 ( $\Delta$ EVE) - 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 (ΔEVE) - 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 ( $\Delta NII$ )

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 nonmaturing 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).

The scenario multiplier allows to reflect the expectation that term loans prepayments will generally be lower during periods of rising interest rates and higher during periods of falling interest rates.

### 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 and 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.

## 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.

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		_	Volum	es in mio of	f CHF	Average repricing maturies (in year)		Longest repricing maturity (in years) assigned to non-maturing positions	
			Total		Of which other significant currencies	Total	Of which CHF	Total	Of which CHF
Determined	Pocoivablos	Receivables from banks	1,847	250	1,581	0.6	0.3		
repricing	Receivables	Receivables from clients	9,508	418	7,042	0.5	0.5	_	
maturity		Money-market mortgages	2,820	94	2,583	0.2	0.5	_	
		Fixed-rate mortgages	2,378	1,465	913	1.3	1.8	_	
		Financial investments	7,006	205	5,688	1.2	2.7	_	
		Receivables from interest	7,000	205	5,000	1.2	2.7	_	
		rate derivatives	15,985	2,278	12,251	0.4	0.5		
	Liabilities	Liabilities to banks	(14)	-	(14)	0.2	-	_	
		Liabilities from client							
		deposits	(11,968)	(8)	(10,266)	0.1	0.1		
		Bonds and mortgage-							
		backed bonds	(4,697)	(578)	(4,033)	0.8	1.9	_	
		Other liabilities	(278)	0	(278)	6.8	0.0	_	
		Liabilities from Interest rate derivatives	(15,998)	(5,320)	(8,382)	0.1	0.5	_	
Undetermined		Receivables from banks	1,497	81	1,048	-	-		
repricing maturity		Receivables from clients	2,729	204	2,374	-	0.1	_	
ŗ		Variable mortgage claims	877	426	436	0.2	0.4		
		Other receivables	1,304	-	1,303	6.5	-		
		Sight liabilities in personal and current	<i>,</i> ,					_	
	Liabilities	accounts	(19,660)	(3,572)	(14,683)	0.6	0.9	_	
		Other liabilities Liabilities from clients deposits, call but not	(704)	(25)	(600)	2.0	-	_	
		transferable (savings)	(254)	(252)	(2)	0.7	0.7		
		Total	(7,622)	(4,334)	(3,039)	0.2	0.6	- 6.5	5.0

## 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 (ΔEVE), 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 31 g.  $\Delta$  EVE

	<b>∆</b> EVE (change in ec	onomic value)	▲ NII (change in net interest income)		
(All figures in millions of CHF)	Dec 31, 2019	June 30, 2019	Dec 31, 2019	June 30, 2019	
Parallel up	51	54	117	127	
Parallel down	126	93	(86)	(107)	
Steepener (1)	(9)	12			
Flattener (2)	34	8			
Short rate up	30	24			
Short rate down	1	32			
Worst scenario	(9)	8	(86)	(107)	
Tier 1 capital	1,622	1,637			

(1) The steepener scenario considers a reduction of short term rates combined with an increase of long term rates

(2) The flattener scenario considers an increase of short term rates combines with a reduction of long term rates

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. Negative interest rates have been since some years a feature of the Swiss and Eurozone markets. Initially only short and medium maturities were affected, but during the second half of 2019 negative interest rates extended also to long term maturities. In the US, however, yields have remaine positive for all maturities, but strongly decreased by about -1% during the second half of 2019.

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 between the upward and downward stress scenarios.

The EVE and NII sensitivities variations in respect of the to previous period are mainly due to derivatives, yield enhancement strategies and the activation of optional elements embedded in banking products, due to the lowering interest rate environment during 2019.

## 32. ORA: Qualitative disclosure requirements related to operational risks

### **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 (including Cyber Risk)
- -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.

## Approach used

The standardised approach is used as the basis for the calculation of RWA.

Based on the original Basel Accord, under the Standardised Approach, banks' activities are divided into eight business lines: corporate finance, trading & sales, retail banking, commercial banking, payment & settlement, agency services, asset management, and retail brokerage. Within each business line, gross income is a broad indicator that serves as a proxy for the scale of business operations and thus the likely scale of operational risk exposure within each of these business lines. The capital charge for each business line is calculated by multiplying gross income by a factor (denoted beta) assigned to that business line. Beta serves as a proxy for the industry-wide relationship between the operational risk loss experience for a given business line and the aggregate level of gross income for that business line. The total capital charge is calculated as the three-year average of the simple summation of the regulatory capital charges across each of the business lines in each year.

The table below summarises the capital requirement for Operational Risk converted by a 12.5 times multiplier to arrive at the RWA equivalent:

(All figures in millions of CHF)	Dec. 31, 2019	Dec. 31, 2018	Change in %
Capital requirement for Operational Rsik	160.7	160.1	0.4
Multiplier	12.5	12.5	
RWA Equivalent	2,008.7	2,001.3	0.4

The increase year on year is due to the use of the three-year average. As the EFG International group acquired the BSI group in October 2016, the operational risk capital requirement of the BSI group was added to that of the EFG International group at the date of acquisition.

For further detailed explanation see section 3 Risk Management Approach.