Habib Bank AG Zurich

(Incorporated in Switzerland 1967)

Habib Bank AG Zurich

Capital adequacy and liquidity disclosure requirements

Disclosure as of 31 December 2019

Purely for ease of reading, the masculine form used in this document is intended to refer to both genders.
This concolidated regulatory disclosure report is published in English only.
Due to rounding, the numbers presented in this report may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

Capital adequacy and liquidity disclosure requirements (consolidated)

Habib Bank AG Zurich is providing this information as of 31 December 2019 in accordance with the provisions of the Capital Adequacy Ordinance (CAO) and the disclosure requirements set out in FINMA Circular 2016/1 "Disclosure - banks".

1. Scope of consolidation

Scope of consolidation for capital adequacy purposes

The scope of consolidation for capital adequacy purposes consist of the following companies (hereafter referred to as "the Group"):

• Habib Bank AG Zurich	(hereafter referred to as "the Bank")
• Habib Canadian Bank, Canada	(100% ownership)
• HBZ Bank Ltd., South Africa	(100% ownership)
• Habib Metropolitan Bank Ltd., Pakistan	(51% ownership)
• Habib Bank Zurich (Hong Kong) Ltd., Hong Kong	(51% ownership)
• Habib Bank Zurich Plc, United Kingdom	(100% ownership)
• Habib Metropolitan Financial Services Ltd., Pakistan	(51% ownership)
• Habib Metropolitan Modaraba Management Company Ltd., Pakistan	(51% ownership)
• First Habib Modaraba Ltd., Pakistan	(5% ownership)
• Habib Metro Modaraba, Pakistan	(36% ownership)

Scope and method of consolidation according to FINMA Circular 2015/1 "Accounting - Banks"

The Group's method of capital consolidation follows the purchase method. The scope of consolidation according to FINMA Circular 2015/1 "Accounting - banks" additionally includes the subsidiary HBZ Services FZ-LLC, United Arab Emirates (100% ownership), Habib Europe Limited, Isle of Man (100%), HBZ Services (Private) Ltd., Pakistan (100%) and HBZ Services AG, Switzerland (100%). HBZ Services FZ-LLC, HBZ Services AG and HBZ Services (Private) Ltd. act as service providers for the Group and do not operate in the financial sector (please refer to the Annual Report 2019, page 43). Habib Europe Limited (former Habib European Bank Ltd.) is in liquidation.

2. Group risk principles

Risk & Control Framework

The Group’s Risk & Control Framework is the cornerstone for risk management and control. It provides the basis to identify, assess and effectively manage risks within the Group. Furthermore, the Risk & Control Framework assigns the overall responsibility for a particular risk class, defines who manages risk and who performs independent risk control.

Risk organisation

The Board of Directors’ responsibilities are the following:

- The Board of Directors is responsible for the strategic direction, supervision and control of the Group, and for defining its overall risk tolerance by means of a risk appetite statement and overall risk limits;
- The Risk & Control Committee supports the Board of Directors in fulfilling its oversight responsibilities by providing guidance regarding risk governance and the Group’s risk profile, including the regular review of major risk exposures and overall risk limits;
- The Audit Committee supports the Board of Directors in fulfilling its oversight responsibilities by monitoring General Management’s approach with respect to financial reporting, internal controls and accounting. Additionally, the Audit Committee is responsible for ensuring independence and monitoring the performance of Group Internal Audit and the external auditors.

On an operational level, the Group operates with a three lines of defence model, whereby business and revenue generation, risk management oversight and risk control are performed by functions independent of one another.

Furthermore, a clear distinction is made between "risk owners", "risk managers" and "risk controllers":

- Risk owners keep oversight and bear the overall responsibility for the management of specific risk classes or risk types;
- Risk managers focus on the monitoring and proactive management of risk. They initiate risk management measures and can change the risk profile;
- Risk controllers independently monitor and assess risk as well as highlight deviations from target risk parameters and non-compliance with policies.

Risk management principles

The following general principles are applied to maintain an appropriate balance between risk and return to:

- Assure the financial strength of the Group by monitoring the risk exposures and avoiding potential risk concentrations at individual exposure levels, at specific portfolio levels and at an aggregate Group-wide level across all risk types;
- Protect the reputation through a sound risk culture characterised by a holistic and integrated view of risk, performance and reward, and through full compliance with the Group's standards and principles;
- Systematically identify, classify and measure risks applying best practice;
- Thereby a Group risk assessment is performed, which encompasses all risk classes and subsequently allows Management to focus on significant risk exposures;
- Ensure management accountability, whereby business line management owns all risks assumed and is responsible for the active management of all risk exposures to ensure that risk and return are balanced;
- Set up independent risk control functions or units, which monitor the effectiveness of risk management and oversee risk-taking activities;
- Disclose risks to the Board of Directors, regulators and other stakeholders in a comprehensive and transparent manner.

Internal controls

Internal controls are processes and instruments used to monitor and control operational and other business risks. In order to continuously enhance the Group's internal control system and the effectiveness of controls, results of actual control processes are reviewed and the outcome of the Group's operational risk management processes is taken into account. The organisational units responsible for internal controls work closely with other organisational units within the Group.

Credit risk

Credit risk arises from the possibility that a counterparty (i.e. private and corporate clients, financial institutions as well as issuers or sovereigns) does not fulfil contractual obligations or the credit quality deteriorates. In order to manage potential default risk and other prevailing credit risks as effectively as possible, it is divided into the following risk types: client credit risk, issuer credit risk, counterparty credit risk, country risk (including cross-border / transfer risk), settlement risk and credit concentration risk.

The Group Credit Management Committee is responsible for credit risks and credit decisions, which may be delegated to the respective Country Credit Management Committees. The Group manages its credit risk within a conservative framework by evaluating the creditworthiness of the borrowing counterparties, setting appropriate credit limits and obtaining collateral as deemed necessary. For each collateral type a minimum haircut is defined in order to account for the volatility in market values according to the nature and liquidity of the collateral. More than 41% of the Group's credit exposure is secured by property and only 11% is unsecured.

The Group's credit risk appetite is defined and monitored through a comprehensive system of credit limits.

The Group has its own rating system for corporate clients. Each credit is assessed as to the borrower's creditworthiness, collateral coverage and collateral quality, as well as the underlying transaction rationale, business potential and any additional risk mitigations. Personal credits are usually only granted on a fully collateralised basis. Collateral coverage is monitored on a regular basis and according to the prevailing market conditions.

An adequate and clear segregation of duties is established among the various organisational units involved in the acquisition of credit business, the analysis and approval of a credit request, and the subsequent administration.

Bank counterparties, issuers and sovereigns are analysed according to their financial performance and their external rating. Over 65% of the credit exposure to financial institutions is of investment grade quality and the remaining 35% consists mainly of short-term trade finance exposure in emerging markets, to which the Group has close links, and monitors the portfolio with a set of country limits.

Regarding non-performing loans, the Group is in a comfortable position. After taking the collateral at market value and the specific value adjustments for default risks into account, the net unsecured and unprovided position at the end of December 2019 was only CHF 0.2 million.

The Group has adopted IFRS 9 in six out of eight country operations and the remaining two will also be integrated over time. Therefore, the concept of providing for latent credit risks is now established and will be perfected in 2020 and 2021. During 2019 CHF 5 million of latent credit risk provisions were added, reaching a total of CHF 128 million of ECL coverage. The Group has also undertaken an extensive external validation of all the existing models and will address all findings during 2020.

Country risks are monitored quarterly and are either protected by guarantees obtained from the World Bank (MIGA) or provided for in accordance with the guidelines of the Swiss Bankers Association using international ratings.

Liquidity Risk

The Group applies a prudent approach to liquidity risk management. The Group Asset & Liability Management Committee oversees liquidity and market risks regularly.

The Group grants advances and loans to clients both on a short-term basis and with tenors generally up to five years. Funding is primarily obtained through deposits, which are mainly at sight or short term deposits. Wholesale funding is not significant and deposits are well diversified. No single depositor accounts for more than 5% of the Group's total deposits. Excess liquidity is held as bank placements or financial investments. The latter primarily consist of bond portfolios of sovereign issuers or other issuers of high quality.

The contractual maturities of the Group's financial assets exceed the contractual maturities of the financial liabilities. However, when determining maturity gaps, the stickiness of deposits or economic maturities needs to be considered, which significantly reduces the contractual gaps. Furthermore, individual client groups in different countries will not act in the same way and at the same time.

In general, the Group is exposed to potential larger deposit outflows and sudden adverse market developments. Therefore, related scenarios have been analysed as part of three liquidity stress tests performed throughout the Group. The stress test results showed that the liquid assets available could absorb projected outflows in all cases.

The Group maintains a strong liquidity position, which is further supported by established repo functionalities. In addition, liquidity coverage ratio targets have been defined for all operating Group companies. Both funding and liquidity management is performed on a decentralised basis. The short-term liquidity disposition and liquidity situation of individual countries are monitored by the respective country treasury functions. In addition, liquidity reserves are held both at the Group and at the country level, and contingency funding plans are in place for the Group as well as all branches and subsidiaries.

Market risk

The Group is exposed to interest rate risk, foreign exchange risk and, to a very limited extent, to equity and commodity risk.

The Group's market risk appetite is defined and monitored through a comprehensive system of market risk limits by the Group Asset & Liability Management Committee. Furthermore, the Group regularly performs scenarios and stress tests for interest rate, foreign exchange and equity risks based on prevailing risk exposures.

The Group is exposed to interest rate risk due to interest periods set for advances made to clients exceeding the interest periods for client deposits taken. To limit interest rate risk, most client advances are agreed on a three or six month base rate plus a credit spread.

In addition, branches and subsidiaries have placed excess liquidity in bank placements or in financial investments with tenors usually up to three to five years. The long-term fixed income instruments included in the financial investment portfolio create interest rate risk exposure given the absence of long-term wholesale financing.

The Group pursues limited trading activities only. They relate to short-term purchases and sales of local governmental securities in the local currency of a Group entity for profit generation.

The Group introduced the Interest Rate Risk in the Banking Book (IRRBB) approach in 2019 and considers both the value and the earnings perspective. For both IRRBB and the combined trading book and banking book, Economic Value of Equity (EVE) sensitivity limits have been defined by the Board of Directors. EVE sensitivity limits are in place for all countries and limit adherence is monitored by the Group Asset & Liability Management Committee.

For foreign exchange transaction risks, the Group pursues a risk-averse approach and aims to keep the potential foreign exchange losses to a minimum. The Group does not pursue proprietary foreign exchange trading activities.

Profits earned in the Bank's branches are subject to exchange rate risk up to their remittance to Habib Bank AG Zurich, Zurich. These risks are monitored at Head Office, and projected profits hedged as deemed appropriate. Capital and reserves held at the branches are also subject to foreign exchange risk when they are held in local currencies. Any foreign exchange translation gain or loss on these capital and reserves is taken to the income statement in the year in which it occurs.

The Group analyses the foreign exchange translation exposure which arises from its investments in foreign subsidiaries. The exchange rate movements on the net asset exposure of the subsidiaries give rise to revaluation gains and losses, which are included in consolidated equity. In general, the Group does not hedge net asset translation exposures with derivative financial instruments.

Operational risk

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people, systems or from external events.

The Group makes use of six operational risk management processes, which consist of key risk indicators, change risk assessment, risk self-assessment, scenario analysis, risk event management and issue management and action tracking.

Furthermore, several types of risk mitigation measures are used and comprise control enhancement, model risk management, business continuity management and other mitigation measures (risk avoidance, risk reduction and risk transfer).

To pro-actively address risks related to potential business disruptions, business impact analyses, crisis management teams and business continuity plans have been established for the Group as well as for all branches and subsidiaries.

The Group has developed a risk-based cyber risk strategy. The Chief Information Security Officer and his dedicated team of cyber specialists monitor cyber risk, perform risk assessments, vulnerability and penetration tests as well as run an information security campaign to raise employee awareness.

3. Disclosure

KM1: Key metrics

	in CHF 1'000 (unless stated otherwise)	**31.12.19**	**31.12.18**
	Eligible Capital		
1	Common equity Tier 1 (CET1)	1'131'290	1'078'713
2	Tier 1 capital (T1)	1'131'290	1'078'713
3	Total capital	1'192'587	1'138'240
	Risk weighted assets (RWA)		
4	RWA	6'061'712	5'822'666
4a	Minimum capital requirements	484'937	465'813
	Risk-based capital ratio (in % of RWA)		
5	CET 1 ratio	18.7%	18.5%
6	Tier 1 capital ratio	18.7%	18.5%
7	Total capital ratio	19.7%	19.5%
	CET1 buffer requirements (in % of RWA)		
8	Capital conservation buffer requirement as per the Basel minimum standards (2,5% from 2019)	2.5%	1.9%
9	Countercyclical capital buffer (Art. 44a CAO) as per the Basel minimum standards	0.0%	0.0%
11	Total of bank CET1 specific buffer requirements	2.5%	1.9%
12	CET1 available after meeting the bank's minimum capital requirements	11.7%	11.5%
	Capital target ratio as per Annex 8 of the CAO (in % of RWA)		
12a	Capital conservation buffer according Annex 8 of the CAO	3.2%	3.2%
12b	Countercyclical capital buffer (Art. 44 and 44a CAO)	0.0%	0.0%
12c	CET1 total requirement according Annex 8 of the CAO plus the countercyclical capital buffer as per Art. 44 and 44a CAO	7.4%	7.4%
12d	T1 target ratio according Annex 8 of the CAO plus the countercyclical capital buffer as per Art. 44 and 44a CAO	9.0%	9.0%
12e	Total capital target ratio according Annex 8 of the CAO plus the countercyclical capital buffer as per Art. 44 and 44a CAO	11.2%	11.2%
	Basel III Leverage Ratio		
13	Total Basel III leverage ratio exposure measure	12'163'269	11'139'447
14	Basel III leverage ratio (Tier 1 capital in % of leverage ratio exposure measure)	9.4%	9.7%

	in CHF 1'000	Quarter 4 2019 Weighted values	Quarter 3 2019 Weighted values	Quarter 2 2019 Weighted values	Quarter 1 2019 Weighted values	Quarter 4 2018 Weighted values
	Liquidity Coverage Ratio (LCR)					
15	LCR numerator: total high-quality liquid assets (HQLA)	2'874'083	2'469'197	2'879'794	2'414'453	2'133'338
16	LCR denominator: total net outflows of funds	-3'147'679	-3'362'872	-2'995'624	-2'989'319	-2'772'600
17	Liquidity coverage ratio (LCR) (in %)	120.6%	123.0%	125.7%	118.2%	122.3%

The "Total capital" increased by CHF 54.3 million, which is driven by a 14.9% higher Group profit and a lower devaluation foreign currency, specially of Pakistan Rupee. Consequently the "Total capital ratio" increased from 19.5% to 19.7%. Due to the 8.3% increase of the total assets, the risk weighted assets, the minimum capital requirements respectively consequently increased by 4.1%. Overall the banks have a CET1 buffer of 11.7% compared to 11.5% in the previous year.

OV1: Overview of risk-weighted assets (partial disclosure)

			a	b	c
			RWA	RWA	Minimum capital requirements
	in CHF 1'000		**31.12.19**	**31.12.18**	**31.12.19**
1	Credit risk	SA-BIZ approach	4'983'138	4'843'858	398'651
20	Market risk	Standardised approach	359'988	260'594	28'799
24	Operational risk	Basic indicator approach	650'825	633'812	52'066
25	Amounts below the thresholds for deduction (subject to 250% risk weight)		67'763	84'403	5'421
27	**Total (1 + 20 + 24 + 25)**		**6'061'712**	**5'822'666**	**484'937**

LIQA: Liquidity: management of liquidity risks

Please find detailed information regarding the management of liquidity in the section "Liquidity risk" on page 3 of this document. As indicated the Group maintains a strong liquidity position, which results in a average liquidity coverage ratio over the year 2019 between 118.2% and 125.7%. The devaluation of the foreign currencies, specially the Pakistan Rupee, affected the total "High quality liquid assets" (HQLA) as well as the "Total net outflow of funds" over the course of the year 2019.

The Group's total HQLA of CHF 2.9 billion in Quarter 4 2019 includes mainly balances with central banks in countries where the Group is active, investments in local government bonds in Pakistan and bond investments in Switzerland. Moreover, HQLA government bonds in Pakistan are only be considered up to the net cash outflow of the entity, which is in line with the FINMA Circular 2015/2 "Liquidity risks - banks", margin no. 161.

CR1: Credit risk: credit quality of assets

		a	b	c	d
	31.12.19 in CHF 1'000	Gross carrying values of defaulted exposures	Gross carrying values of non-defaulted exposures	Value adjustments / impairments	Net values (a + b - c)
1	Loans (excluding debt securities)	270'651	3'509'150	165'719	3'614'082
2	Debt securities		4'003'716	4'279	3'999'438
3	Off-balance-sheet exposures		1'705'660	1'584	1'704'076
4	**Total**	**270'651**	**9'218'526**	**171'581**	**9'317'596**

Value adjustments for default and latent credit risks

Please refer for further information regarding "Value adjustments for default and latent credit risks" to the Annual Report 2019 page 29.

CR2: Credit risk: changes in stock of defaulted loans and debt securities

	31.12.19 in CHF 1'000	a
1	Defaulted loans and debt securities at end of the previous reporting period	277'270
2	Loans and dept securities that have defaultet since the last reporting period	26'321
3	Returned to non-defaulted status	12'506
4	Amounts written off	14'281
5	Other changes (+ / -)	-1'045
6	**Defaulted loans and debt securities at end of the reporting period (1 + 2 - 3 - 4 + 5)**	**275'759**

CRB: Credit risk: additional disclosures related to the credit quality of assets

31.12.19 in CHF 1'000	Carrying values
Breakdown of exposures by geographical area	
Switzerland	374'383
Rest of Europe	1'195'079
Americas	581'559
Asia and Oceania	8'173'780
Africa	657'161
Total exposures	**10'981'962**

31.12.19 in CHF 1'000	Carrying values
Breakdown of exposures by industry	
Agriculture	14'706
Manufactoring	1'611'786
Services	5'770'977
Individuals and others	3'584'493
Total exposures	**10'981'962**

31.12.19 in CHF 1'000	Carrying values
Breakdown of exposures by residual maturity	
Up to 3 months	3'360'486
Due between 3 and 12 months	3'235'593
Due between 1 and 5 years	2'721'520
After more than 5 years	518'679
No maturity	1'145'685
Total exposures	**10'981'962**

31.12.19 in CHF 1'000	Impaired exposures (gross debt)	Specific value adjustments
Breakdown of impaired exposures by geographical area		
Switzerland	6'747	6'747
Rest of Europe	11'239	4'825
Americas	11'257	971
Asia and Oceania	234'466	153'016
Africa	12'050	4'437
Total impaired exposures	**275'759**	**169'997**

31.12.19 in CHF 1'000	Impaired exposures (gross debt)	Specific value adjustments
Breakdown of impaired exposures by industry		
Agriculture		
Manufacturing	154'322	107'729
Services	64'842	41'374
Individuals and others	56'595	20'894
Total impaired exposures	**275'759**	**169'997**

Non-performing loans / receivables

Non-performance of a credit exposure is considered with regard to a particular obligor when either or both of the two following events have taken place:

- The Group considers that the obligor is unlikely to pay its credit obligations to the Group in full, without recourse by the Group to actions such as realizing collateral (if held)
- The obligor is 90 days or more past due on any material credit obligation to the Group. Overdrafts will be considered as being past due once the client has breached an advised limit or been advised of a limit smaller than current outstandings.

The assessment as to whether a credit exposure is non-performing is made on an entity level entailing all exposures of the respective entity.

31.12.19 in CHF 1'000	Past due exposures (gross debt)	Specific value adjustments
Ageing analysis of accounting past-due exposures		
Up to 3 months	174'944	42'271
Due between 3 and 12 months	30'669	10'189
Due between 1 and 5 years	64'923	47'553
After more than 5 years	90'016	61'869
No maturity	2'931	2'820
Total past due exposures	**363'484**	**164'700**

Restructured credits

A restructuring of a credit agreement is generally defined to be a breach of contract under the initially agreed terms and conditions. Regardless of the interest and amortization payments, it is only possible in exceptional cases to keep restructured advances in the normal credit category and not to flag it as heightened or impaired credit risk.

A restructuring flag is set in the system showing the inability of the borrower to continue servicing its debt without relief in terms and conditions.

	Gross debt		
31.12.19 in CHF 1'000	Impaired	Not impaired	**Total**
Breakdown of restructured exposures			
Restructured exposures	90'118	32'904	**123'023**

CR3: Credit risk: overview of mitigation techniques

	a	c	e & g
31.12.19 in CHF 1'000	Unmitigated credit exposures	Exposures mitigated by collateral, of which: mitigated amount	Exposures mitigated by financial guarantees or credit derivatives, of which mitigated amount
Claims (including debt securities)	10'207'022	826'403	1'003
Off-balance sheet transactions	542'504	229'706	
Total	**10'749'526**	**1'056'109**	**1'003**
- of which defaulted	169'097		

CR5: Credit risk: exposures by exposure category and risk weights under the standardised approach

		a	b	c	d	e	f	g	h	i	j
	31.12.19 in CHF 1'000	0%	10%	20%	35%	50%	75%	100%	150%	Other	Total credit exposures amount (post-CCF and post-CRM)
1	Central governments and central banks	4'461'338		3'009		2'904		165'902			**4'633'153**
2	Banks and securities firms			1'304'910		710'875		179'664	36		**2'195'485**
3	Non-central government public sector entities and multilateral development banks	144'431		31'190				90'166			**265'787**
4	Corporates	276'897		99'937	74'469	157'521	24'666	2'920'720	36'091		**3'590'301**
5	Retail	135'443		15'377	157'428	102'067	475'191	87'685	10'531		**983'722**
6	Equity							26'652	3'185		**29'837**
7	Other exposures	20'462				530		72'390		13'939	**107'321**
8	**Total**	**5'038'571**		**1'454'423**	**231'897**	**973'897**	**499'857**	**3'543'179**	**49'843**	**13'939**	**11'805'606**
9	- of which covered by mortgages						44'793				**44'793**
10	- of which past-due loans							60'140	46'622		**106'762**

IRRBBA : Objects and policies of the interest rate risk in the banking book

a) **Description of how the bank defines IRRBB for the purpose of managing and measuring risk**
As no positions are classified as held for trading, Interest Rate Risk in the Banking Book (IRRBB) includes all of the Group's interest rate sensitive positions. For interest rate risk management and control purposes, the Group considers both value and earnings impact. It thereby focuses on two measures: Economic Value of Equity (EVE) as well as Net Interest Income (NII) sensitivity.

b) **Description of the overall strategy of the bank to manage and mitigate IRRB**
For IRRBB management and risk reduction purposes, EVE and NII sensitivities are reported to the Group Asset & Liability Committee (GALC) and the respective Country Asset & Liability Committee (CALC). In addition, several IRRBB stress tests are performed (see paragaph d below). Furthermore, a front-independent unit checks that the worst case regulatory IRRBB stress test result is within the defined risk limits.

Models used for IRRBB computation purposes form part of the Group's model inventory, require a model description and undergo a periodic model validation process. Model validation results are reported to the Group Risk & Control Committee (GRCC).

c) **Frequency of calculation of the bank's IRRBB metrics and description of the specific metrics the bank uses to estimate its sensitivity to IRRBB**
The Group focuses on two measures: EVE sensitivity (EVE change / EVE) as well as the NII sensitivity (NII change / NII).
IRRBB data is computed on a quarterly basis.

d) **Description of the interest shock and stress scenarios the bank uses to estimate in economic value and earnings**
The Group performs several IRRBB stress tests (parallel up / down, flattener / steepener, short term up / down) based on regulatory required as well as internally defined stress factors.

e) **Differences between the model assumptions used in the bank's internal interest risk measurement system and the model assumptions prescribed to disclosure in Table IRRBB1**
For internal IRRBB computations, other stress factors are applied for individual Emerging Markets currencies to better reflect recent developments and economic realities.

f) **Overall description of how the bank hedges its IRRBB and the associates accounting treatment**
At present, the Group does not employ interest rate derivatives to hedge its IRRBB exposure. When deemed necessary, EVE sensitivity is reduced by changing the duration of the Group's fixed income portfolio through purchase and sale of securities as well as changing the composition of repurchase / reverse repurchase positions.

g)	**Key modelling assumptions and calculation parameters used to calculate ΔEVE and ΔNII in Table IRRBB1 with refeence to the items and currencies shown in Table IRRBBA1**		
1)	Change in net present value of capital (ΔEVE)	Calculation of cash flows: Recognition of interest rate margins and other components	Interest cash flows used for EVE change computation include customer credit spreads.
2)		Mapping: Description of the cash flow mapping used	Interest cash flows and repricing positions are included in the respective time bucket in accordance with the date of the interest payment or the date of repricing, respectively. However, for EVE change computations, actual payment or repricing dates are applied.
3)		Discount rates: Description of the (product-specific) discount rates or interpolation assumptions	For discounting purposes, the risk-free yield curve in the respective currency plus a credit spread by asset class is used. This ensures an economically consistent computation in line with the chosen approach under 1 above.
4)	Changes to planned income (ΔNII)	Description of the procedure and central assumptions in the model for calculating future income	NII change is computed based on NII resulting from prevailing contractually agreed positions (run-off balance sheet) and future transactions, which fall into the defined 12-month horizon. Given the constant volume, lifetime and margin assumption, actual transactions reaching maturity are rolled over or "re-newed" and modelled as future transactions. For the NII change computation, new interest rates for floating rate positions, fixed rate instruments and Non Maturing Balances (NMB) are determined based on the prevailing risk free yield for the currency, the respective forward adjustment and the defined interest rate stress factors for the currency (parallel shift up and down).
5)	Variable exposures	Description of the procedure and central assumptions and parameters for determining the interest rate reset date and cash flows of variable exposures	For Non Maturing Balances (NMB), the interest repricing dates are determined based on internal models.
6)	Exposures with repayment options	Description of the assumptions and procedures for recognising behaviour-related early repayment options	The Group has no material asset positions with early repayment features. Most loans are granted as floating rate loans. Therefore, no related optionalities are considered.
7)	Term deposits	Description of the assumptions and procedures for recognising behaviour-related early withdrawals	Early withdrawals of deposits are not very frequent. In addition, a penalty payment applies in most cases when an early deposit repayment is made. This largely compensates for potential unrealized gains foregone. Therefore, early withdrawal options are not considered for the Group's IRRBB computation.
8)	Automatic interest rate options	Description of the assumptions and procedures for recognising automatic, behaviour-independent interest rate options	Except for very few bonds held with a prepayment option by the issuer, there are no automatic interest rate options. The prepayment options are not modelled for IRRBB purposes in view of immateriality.
9)	Derivative exposures	Description of purpose, assumptions and procedure for linear and non-linear interest rate derivatives	The Group does not make use of interest rate derivatives at the present time.
10)	Other assumptions	Description of other assumptions and procedures affecting the calculation of figures in Tables IRRBBA1 and IRRBB1, e.g. aggregation across currencies and correlation assumptions for interest rates	The EVE change results by currency are simply added up based on regulatory requirements (FINMA Circular 2019/2 "Interest rate risk - Banks"). This aggregation does not consider correlations and will tend to overstate results.

IRRBBA1: Interest rate risk: Quantitative information on the structure of positions and repricing of interest rates*

31.12.19	Amounts in CHF 1'000			Average time to resetting of interest rates (in years)	
	Total	- of which in CHF	- of which in other significant currencies**	**Total**	- of which in CHF
Defined resetting date of interest rates					
Due from banks	2'193'086	3'134	1'877'233	0.18	0.56
Due from customers	1'479'413	4'333	1'370'577	0.58	0.14
Fixed-term mortgages	403'026		282'864	1.16	
Financial investments	4'707'308	321'858	3'942'060	1.58	3.04
Other assets	41'139		40'503	0.07	
Receivables on derivatives	3'457'860	361	3'235'632	0.23	0.02
Due to banks	-927'110	-19'988	-899'655	0.04	0.04
Due to customers	-3'227'676	-9'798	-2'440'108	0.40	0.05
Liabilities on derivatives	-3'483'266	-87'788	-3'218'177	0.23	0.09
Non-defined resetting date of interest rates					
Due from banks	204'845	105	100'135	0.00	0.00
Due from customers	1'824'006	10'282	1'078'956	0.15	0.35
Liabilities in personal and current accounts at sight	-3'679'173	-31'018	-2'957'738	1.44	1.78
Other liabilities at sight	-214'598	-1'918	-195'920	0.00	0.00
Liabilities from client deposits, callable but not transferable (savings)	-1'773'937	-35'343	-1'535'783	0.36	0.11
Total	**1'004'923**	**154'220**	**680'579**	**2.96**	**5.75**

Maximum repricing period of interest rates for positions with model-based interest rates	5 years

* The table shows quantitative information of positions by including principal amounts and interest cash flows.

** Representing more than 10% of total balance sheet.

Comment:
The net position above does not include sight deposits with the Swiss National Bank, clearing houses regulated by FINMA and foreign central banks.

IRRBB1: Interest rate risk: Quantitative information on the economic value of equity and net interest income

	ΔEVE (change in the economic value of equity)		ΔNII (change in net interest income)	
in CHF 1'000	**31.12.19**	**30.6.19**	**31.12.19**	**30.6.19**
Paralellel up	-16'721	22'169	40'219	57'318
Paralellel down	37'066	-12'991	-35'156	-54'128
Steepener (1)	8'182	-1'296		
Flattener (2)	-6'597	7'928		
Short rate up	-12'787	14'741		
Short rate down	22'470	-10'143		
Worst scenario	-16'721	-12'991	-35'156	-54'128
Tier 1 capital	1'131'290	1'050'152		

(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 combined with a reduction of long term rates.

Comment:
EVE changes for emerging market currencies continue to exceed the EVE changes for western currencies.

ORA: Operational risks: general duties

Please find detailed information regarding the management of operational risks in the section "operational risk" on page 4 in this document. Habib Bank AG Zurich applies the basic indicator approach for operational risks.