Capital disclosure requirements

Basel III (Pillar 3) disclosure, BCGE consolidated accounts at 31.12.2018

Table of contents

Aucune entrée d'index n'a été trouvée.

1 Overview of risk management, key prudential indicators and risk-weighted assets (RWA)

1.1 Risk management objective and governance

In its annual report, the bank outlines its risk management governance. The objective of this risk management is to protect the bank's assets and ensure its long-term sustainability. Risk management is therefore an integral part of all levels of the organisation.

Governance regarding risk management is detailed in the risk policy and in all specific risk policies (credit risk policy, financial policy, etc.). These policies define the objectives, missions, roles and responsibilities of each department involved in risk management. They are based in particular on all FINMA circulars and SBA directives.

They are also supplemented by supranational texts such as the Basel Committee for Bank Supervision (BCBS).

The bank has three lines of defence: (1) first level control is carried out by the front office; (2) the specialised risk control and compliance departments analyse and control risks at level two; and (3) internal audit. The committees of the Board of Directors specifically monitor certain activities of the bank. In addition, the external auditor independently prepares their annual report for the Board of Directors and FINMA.

Every year, the Board of Directors reviews the institution's risk appetite by setting limits (framework concept, banks, countries, risk envelopes by type of activity). These limits are defined according to a risk profile that is consistent and proportionate to the bank's financial and operational capacities. Any violation or exceeding of these limits must be reported to the Board of Directors.

General management implements risk management validated by the Board of Directors. It issues administrative instructions, which are guidelines for the organisation and management of the bank's various activities. These administrative instructions are supplemented by processes that explain in more detail the procedure to be followed.

To this end, the bank has several risk management committees that meet monthly. The ALM Committee oversees the bank's financial management, including balance sheet management and interest rate and liquidity risks. The Risk Committee analyses the status of all risks and incorporates information from the other committees. Other committees specifically analyse certain activities (GCF Risk Subcommittee, BCGEF Risk Subcommittee, etc.).

The control departments are responsible for identifying, assessing, controlling and reporting the bank's risks, verifying that the limits defined by the Board of Directors are respected and ensuring risk reporting to the committees. In addition, the Risk Control department is in charge of producing the Basel III regulatory statements for senior management, external auditors and FINMA.

Compliance defines the internal regulatory framework and ensures compliance with regulations concerning client relations, the fight against money laundering and terrorist financing, cross-border activities and the internal regulatory framework.

Several times a year, the Control Committee of the Board of Directors meets, in particular with the Internal Audit Department, to assess the functioning of the control system set up by general management.

1.2 Risk reporting

Risk policies define risk reports, their production frequencies, recipients and content.

Risk reporting is based on an IT architecture tailored to each type of risk (credit, market, operational). The data can be used to produce analyses on the parent company or the consolidated group. The aggregated indicators can be audited and it is possible to return to the most granular level (counterparty, transaction,...).

Risk reports periodically disclose the bank's risk position for the various types of risks (credit, market, operational, compliance and legal). These reports verify the adequacy of the business model within the limits set by the board of directors or the regulator.

Specific reports present a projection of the bank's risk position over a three-year time horizon. These reports are based on the probable "optimal path" scenario used to build the business plan. In addition to this scenario, the bank assesses adverse scenarios (including a recession scenario and an extreme shock scenario). General management assesses the bank's risk position according to these scenarios, determines the impact on the income statement, on regulatory or internal ratios, on the bank's rating and on its refinancing capacity. Lastly, it proposes a list of countermeasures, assesses their protective effects and their speed of implementation.

The bank applies this stress test approach to its entire balance sheet at parent company and consolidated level. Impacts are measured through the different types of risks and ratios of equity capital, sensitivity of equity capital, or liquidity.

The processes for entering and controlling information in the Core Banking System are outlined in the bank's administrative instructions. Internal control, internal audit and external audit verify the adequacy of this control system.

1.3 Essential key figures

Banque Cantonale de Genève applies the International Standard Approach (AS-BRI) for regulatory credit risk disclosures and the Standard Approach for market risk and operational risk. For credit risk, the Bank applied the Swiss Standardised Approach (AS-CH) prior to 31.12.2018.

The regulatory consolidation scope is identical to the accounting consolidation scope.

The national countercyclical buffer (CAO='Capital Adequacy Ordinance' Art. 44) corresponds to the ratio of two percent of positions directly or indirectly secured by real estate pledges to all risk-weighted positions. Its impact is 0.6% on the overall regulatory capital requirement.

The group's equity ratio is 15.6%, above the regulatory minimum of 12.6% (category 3 bank). The leverage ratio is 7.3%, above the regulatory requirement of 3%.

Table 1 - KM1 - Essential regulatory key figures (in 1'000 CHF)

KM1 : Essential regulatory key figures (in 1'000 CHF)		a	e
		31/12/2018	31/12/2017
Equity taken into consideration			
1	Common Equity Tier 1 (CET1)	1'540'546	1'447'143
2	Tier 1 (T1)	1'738'936	1'645'533
3	Total capital	1'853'710	1'761'606
Risk-weighted assets			
4	RWA	11'857'663	11'723'775
4a	Minimum capital requirement	948'613	
Risk-based capital ratios (as % of RWA)			
5	CET1 ratio (%)	13.0%	12.3%
6	Tier 1 ratio (%)	14.7%	14.0%
7	Total capital ratio (%)	15.6%	15.0%
Additional CET1 buffer requirements (as percentage of RWA)			
8	Capital buffer according to Basel minimum standard (2.5% from 2019)(%)	1.9%	1.3%
9	Countercyclical buffer (art. 44a OFR4) according to Basel minimum standard (%)		
11	Total of bank CET1-specific requirements according to Basel minimum standard (%)	1.9%	1.3%
12	CET11 available to cover buffer requirements according to Basel minimum standard (after deduction of CET1 allocated to cover minimum requirements and if applicable to cover TLAC requirements)(%)	7.6%	7.0%
Target capital ratios according to Annex 8 CAO (as percentage of RWA)			
12a	Capital buffer according to Annex 8 CAO (%)	4.0%	4.0%
12b	Countercyclical buffer (art. 44 and 44a CAO)(%)	0.6%	0.5%
12c	Target CET1 ratio (%) according to Annex 8 CAO with addition of countercyclical buffer according to art. 44 and 44a CAO	8.4%	8.3%
12d	Target T1 ratio (%) according to Annex 8 CAO with addition of countercyclical buffer according to art. 44 and 44a CAO	10.2%	10.1%
12e	Total target capital ratio according to Annex 8 CAO with addition of countercyclical buffer according to art. 44 and 44a CAO	12.6%	12.5%
Basel III leverage ratio			
13	Total Basel III leverage ratio exposure measure	23'760'340	23'815'753
14	Basel III leverage ratio	7.3%	6.9%
Liquidity coverage ratio (LCR)			
15	LCR numerator: total high-quality liquid assets	4'311'477	4'478'681
16	LCR denominator: total net cash outflow	3'559'103	2'863'509
17	Liquidity coverage ratio LCR (%)	121%	156%

Table OV1, "Overview of risk weighted positions" highlights the bank's risk profile according to risk type. Capital requirements are calculated to cover:

- Credit risk
- Counterparty credit risk for derivatives and REPOs / Reverse REPOs
- Credit valuation adjustment (CVA)
- Risks related to collective investments managed and held by the bank
- Settlement risk
- Risk related to securitisation positions
- Market risk
- Operational risk

The capital requirements for non-counterparty assets are included in lines 1 and 2 (see footnote 4 of FINMA Circular 16/01).

Table2 - OV1 - Overview of risk-weighted positions (in CHF 1'000)

OV1 : Overview of risk weighted assets (in 1'000 CHF)		a	c
		RWA 31/12/2018	Minimum capital requirement 31/12/2018
1	**Credit risk (excluding counterparty credit risk-CCR)**	10'915'454	873'236
2	Of which standardised approach (SA)	10'915'454	873'236
3	Of which internal rating-based (F-IRB) approach		
4	Of which supervisory slotting approach		
5	Of which advanced internal ratings-based (A-IRB) approach		
6	**Counterparty credit risk (CCR)**	51'528	4'122
7	Of which standardised approach for counterparty credit risk (SA-CCR)	39'884	3'191
7a	Of which simplified standardised approach (SSA-CCR)		
7b	Of which current exposure method (CEM)		
8	Of which internal model method (IMM)		
9	Of which other approach (CCR)	11'644	931
10	**Credit valuation adjustment (CVA)**	80'872	6'470
11	**Equity positions in bank portfolio under market-based approach**		
12	**Equity investments in funds – look-through approach**	27'097	2'168
13	**Equity investments in funds – mandate-based approach**	93'427	7'474
14	**Equity investments in funds – fall-back approach**	2	0
14a	**Equity investments in funds – simplified approach**		
15	**Settlement risk**		
16	**Securitisation exposures in bank portfolio**		
17	Of which IRB ratings-based approach (SEC-IRBA)		
18	Of which: securitisation external rating-based approach(SEC-ERBA), including internal assessment approach (IAA)		
19	Of which: securitisation standardised approach (SEC-SA)		
20	**Market risk**	17'608	1'409
21	Of which standardised approach (SA)	17'608	1'409
22	Of which: internal model approaches (IMA)		
23	**Capital charge for switch between trading portfolio and bank portfolio**		
24	**Operational risk**	649'127	51'930
25	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	22'550	1'804
26	**Floor adjustment**		
27	**Total (1+6+10+11+12+13+14+14a+15+16+20+23+24+25+26)**	**11'857'663**	**948'613**

2 Differences between accounting and regulatory scopes of consolidation

Table 3 - LI1 - Differences between accounting and regulatory scopes of consolidation (in CHF 1,000)

LI1 : Differences between accounting and regulatory scopes of consolidation (in 1'000 CHF)	a	c	d	e	f	g
	Carrying values					
	As reported in published financial statements	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to securitisation framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
ASSETS						
Liquid assets	3'410'649	3'410'649				
Amounts due from banks	464'007	454'335	9'672			
Amounts due from securities financing transactions	49'205		49'205			
Amounts due from customers	5'215'130	5'215'130				
Mortgage loans	11'387'669	11'387'669				
Trading portfolio assets	60'782	11			60'782	
Positive replacement values of derivative financial instruments	12'716		12'716		12'716	
Financial investments	1'883'422	1'874'402	468'891			
Accrued income and prepaid expenses	28'887	28'887				
Participations	61'450	53'182				8'267
Tangible fixed assets	121'878	121'878				
Other assets	338'038	338'038				
Bank's capital not paid in						
TOTAL ASSETS	**23'033'833**	**22'884'182**	**540'484**		**73'498**	**8'267**
LIABILITIES						
Amounts due to banks	2'526'459					2'526'459
Liabilities from securities financing transactions	481'086		481'086			
Amounts due in respect of customer deposits	14'644'276					14'644'276
Trading portfolio liabilities	2'379				2'379	
Negative replacement values of derivative financial instruments	4'277		4'277		4'277	
Cash bonds	2'540					2'540
Bond issues and central mortgage institution loans	3'411'255					3'411'255
Accrued expenses and deferred income	101'546					101'546
Other liabilities	277'603					277'603
Provisions	12'490					12'490
TOTAL LIABILITIES	**21'463'910**		**485'363**		**6'656**	**20'976'168**

Column b has not been indicated because the accounting scope of consolidation and the regulatory scope of consolidation are identical.

The following exposures are subject to simultaneous capital requirements in two risk categories:

- capital requirements for counterparty credit risk and credit risk are calculated for repos,
- capital requirements for counterparty credit risk and credit risk are calculated for derivatives.

Table 4 - LI2 - Differences between regulatory exposure amounts and carrying values in financial statements (in CHF 1,000)

LI2 : Differences between regulatory exposure amounts and carrying values in financial statements (annual accounts / consolidated accounts) (in CHF 1'000)						
		a	b	c	d	e
			Positions subject to :			
		Total	Credit risk framework	Securitisation framework	Counterparty credit risk framework	Market risk framework
1	Asset carrying value amount under scope of regulatory consolidation (as per table LI1)	23'498'164	22'884'182		540'484	73'498
2	Liabilities carrying value amount under regulatory scope of consolidation (as per table LI1)	492'019			485'363	6'656
3	Total net amount under regulatory scope of consolidation	23'006'145	22'884'182		55'120	66'842
4	Off-balance sheet amounts	1'851'847	1'851'847			
5	Differences in valuations	569'901			569'901	
6	Differences due to different netting rules, other than those already included in row 2					
7	Differences due to value adjustments and provisions	93'251	93'251			
8	Differences due to prudential filters					
9	Other					
10	Positions pertinent to regulatory calculations	25'521'144	24'829'280		625'022	66'842

The differences between the net book values (line 3) and the positions for regulatory calculations (line 10) are explained as follows:
For regulatory calculations,

- off-balance sheet exposures are taken into account and presented before multiplication by the credit conversion factor (CCF) (line 4),
- repo and reverse repo exposures are presented before taking into account financial securities (line 5),
- derivative exposures are the result of the calculation of the SA-CCR approach (line 5),
- default exposures are presented before deducting specific provisions (line 7).

3 Increase in shareholders' equity

Table 5 - CC1 - Presentation of the regulatory eligible capital (1'000 CHF)

CC1 : Presentation of the regulatory eligible capital (in 1'000 CHF)		a 31/12/2018
Common Equity Tier 1 (CET1)		
1	Issued fully paid-up capital, fully eligible	360'000
2	Retained earnings reserve, including reserves for general banking risks / retained earning - loss / accumulated profit - loss	891'887
3	Capital reserves / foreign currency translation reserves (+/-)	301'866
6	Common Equity Tier 1 before adjustments	1'553'753
Adjustments referring to Common Equity Tier 1		
16	Net long positions in own CET1 instruments	-13'206
28	Sum of CET1 adjustments	-13'206
29	Net CET1	1'540'546
Additional Tier 1 Capital (AT1)		
30	Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	198'390
36	Sum of additional Tier 1 capital (AT1), before adjustments	198'390
Adjustments of additional Tier 1 capital		
44	Additional Tier 1 capital (AT1)	198'390
45	Tier 1 capital (T1 = CET1 + AT1)	1'738'936
Eligible Tier 2 capital (T2)		
46	Directly issued qualifying Tier 2 instruments plus related stock surplus	110'000
50	Value adjustments; provisions and losses due to reasons of prudence; forced reserves on financial investments	4'773
51	Eligible Tier 2 capital (T2) before adjustments	114'773
Adjustments of Tier 2 capital		
58	Directly issued qualifying Tier 2 instruments plus related stock surplus	114'773
59	Total regulatory capital (TC = T1 + T2)	1'853'710
60	Total risk weighted assets	11'857'663
Capital ratio		
61	Common Equity Tier 1 (as a percentage of risk weighted assets) para 29	13.0%
62	Tier 1 (as a percentage of risk weighted assets) para 45	14.7%
63	Total capital (as a percentage of risk weighted assets) para 59	15.6%
65	Of which : capital conservation buffer according to Basel minimum standard (in % of risk weighted position)	1.9%
68	Common Equity Tier 1 available to meet buffers according to Basel minimum standards (after deduction of minimum requirements and, where applicable, TLAC requirements covered by CET1) (as a percentage of risk weighted assets)	7.6%
68b	Of which countercyclical buffer according to Art. 44 and 44a CAO (in % of risk weighted positions)	0.0%
68c	Available Common Equity Tier 1 (in % of risk weighted positions)	11.4%
68d	Total T1 requirements according to annex 8 of CAO plus countercyclical buffer according to Art. 44 and 44a CAO (in % of risk weighted positions)	10.2%
68e	Available Tier 1 (in % of risk weighted positions)	13.2%
68f	Total regulatory capital requirements according to annex 8 of CAO plus countercyclical buffer according to Art. 44 and 44a CAO (in % of risk weighted positions)	12.6%
68g	Available regulatory capital (as a % of risk-weighted positions)	15.6%
Amounts below treshold for deductions (before risk weighting)		
72	Non-qualifying holdings in financial sector and other TLAC investment types	28'539
73	Other qualifying holdings in financial sector (CET1)	9'020
Applicable caps on the inclusion of provisions in Tier 2		
77	Cap on inclusion of provisions in Tier 2 under standardised approach BIS	137'037

Table 6 - CC2 - Reconciliation of the regulatory eligible capital with the balance sheet (1'000 CHF)

CC2 : Reconciliation of the regulatory eligible capital with the balance sheet (in 1'000 CHF)	a	b
	According to accounting rules	According to the regulatory scope of consolidation
Assets		
Liquid assets	3'410'649	3'410'649
Amounts due from banks	464'007	464'007
Amounts due from securities financing transactions	49'205	49'205
Amounts due from customers	5'215'130	5'215'130
Mortgage loans	11'387'669	11'387'669
Trading portfolio assets	60'782	60'782
Positive replacement values of derivative financial instruments	12'716	12'716
Other financial instruments at fair value		
Financial investments	1'883'422	1'883'422
Accrued income and prepaid expenses	28'887	28'887
Participations	61'450	61'450
Tangible fixed assets	121'878	121'878
Intangible assets		
Other assets	338'038	338'038
Capital not paid in		
Total assets	**23'033'833**	**23'033'833**
Liabilities		
Amounts due to banks	2'526'459	2'526'459
Liabilities from securities financing transactions	481'086	481'086
Amounts due in respect of customer deposits	14'644'276	14'644'276
Trading portfolio liabilities	2'379	2'379
Negative replacement values of derivative financial instruments	4'277	4'277
Liabilities from other financial instruments at fair value		
Medium-term notes	2'540	2'540
Bond issues and central mortgage institution loans	3'411'255	3'411'255
Accrued expenses and deferred income	101'546	101'546
Other liabilities	277'603	277'603
Provisions	12'490	12'490
Total liabilities	21'463'910	21'463'910
Of which subordinated loans, eligible for Tier 2 capital (T2)		
Of which subordinated loans, eligible for additional Tier 1 capital (AT1)	198'390	198'390
Equity capital		
Reserves for general banking risks	215'000	215'000
Capital	360'000	360'000
Of which eligible for CET1	360'000	360'000
Of which eligible for AT1		
Legal reserves/Voluntary retained earnings reserve/Profit- Loss carried forward/ Profit-Loss of period	1'008'129	1'008'129
(Own shares)	-13'206	-13'206
Minority interests		
Total equity capital	**1'569'922**	**1'569'922**

Table 7 - CCA - Main characteristics of regulatory capital instruments

		Instrument 1	Instrument 2
1	Issuer 1	BCGE	BCGE
2	Identification (e.g. ISIN)	24569155 / ISIN CH0245691552	36869771 / CH0368697717
3	Law applicable to instrument	Switzerland / Geneva	Switzerland / Geneva
	Regulatory treatment		
4	Consideration in the Basel III transitional period (CET1/AT1/T2)	AT1	T2
5	Consideration after the expiry of the Basel III transitional period (CET1 / AT1 / T2)	AT1	T2
6	Eligibility at stand-alone / group stand-alone and group levels	Stand-alone and group	Stand-alone and group
7	Equity shares / debt securities / hybrid instruments / other instruments	Hybrid instrument (subordinated loan, with conditional write-off)	Debt
8	Amounts eligible for regulatory capital (according to last report submitted to SNB)	108.4 million	109.8 million
9	Instrument's nominal value	CHF 110 million	CHF 110 million
10	Accounting items	Loans	Loans
11	Original date of issue	04/07/2014	28/06/2017
12	Unlimited or w ith expiry date	Unlimited	With an expiry date
13	Original date of maturity	None	28/06/2017
14	May be cancelled by issuer (with prior approval of regulatory authorities)	Yes	Yes
15	May be terminated any time / under certain circumstances / repayment amount	04/02/2020 Redemption amount: full outstanding amount of the issue, no partial redemption	Conditional redemption possible before expiry w ith 30 days notice. Redemption amount: full outstanding amount of the issue, no partial redemption
16	Early redemption dates, if applicable	Annually at each interest maturity date on 04/02	None
	Coupons/dividends		
17	Fixed / variable / initially fixed then converted to variable / initially variable then converted tof ixed	Fixed	Fixed
18	Nominal coupon and reference indices, if any	2.875% until 04/02/2020, then re-fixed every 5 years on the basis of the 5-year CHF mid sw ap rate plus 243.7 basis points for the risk premium	1.125%
19	Existence of a payment stop for dividends (if dividends on the instrument are waived, dividends on the normal share w ill be omitted as well)	Yes	Yes
20	Payment of interest/dividends: entirely/partially discretionary/mandatory	Payment of interest entirely discretionary	Payment of interest mandatory
21	Existence of a clause for increasing the interest rate (*step up*) or another redemption incentive	None	None
22	Non-cumulative or cumulative	None	None
23	Convertible or non-convertible	None	None
24	If convertible, trigger for conversion (including PONV)	None	None
25	If convertible: in full in all cases / in full or partially / partially in all cases	None	None
26	If convertible, conversion rate	None	None
27	If convertible, conversion mandatory/optional	None	None
28	If convertible, type of instrument to be converted into	None	None
29	If convertible, issuer of instrument to be converted into	None	None
30	Depreciation characteristics	Yes	Yes
31	Trigger for depreciation	Exceeding the 5.125% threshold for CET1	Viability event
32	In full/partially	In full or partially. To get back to the trigger threshold (5.125%)	None
33	Permanent/temporary	Permanent	None
34	In case of temporary depreciation, allocation mechanism	None	None
35	Hierarchy of debt in case of liquidation (always name the instrument with the ranking immediately above)	Subordination ranking below Tier 2 instruments, pari passu with other Tier 1 instruments and above CET1. (Tier 2)	None
36	Existence of characteristics w hich could jeopardise full recognition under the Basel III regime	None	None
37	If yes, w hich ones?	None	None

		Instrument 3
1	Issuer 1	BCGE
2	Identification (e.g. ISIN)	36701398/ ISIN CH0367013981
3	Law applicable to instrument	Sw itzerland / Geneva
	Regulatory treatment	
4	Consideration in the Basel III transitional period (CET1/AT1/T2)	AT1
5	Consideration after the expiry of the Basel III transitional period (CET1 / AT1 / T2)	AT1
6	Eligibility at stand-alone / group stand-alone and group levels	Stand-alone and group
7	Equity shares / debt securities / hybrid instruments / other instruments	Debt
8	Amounts eligible for regulatory capital (according to last report submitted to SNB)	90 million
9	Instrument's nominal value	CHF 90 million
10	Accounting items	Loans
11	Original date of issue	28/06/2017
12	Unlimited or w ith expiry date	Unlimited
13	Original date of maturity	None
14	May be cancelled by issuer (w ith prior approval of regulatory authorities)	Yes
15	May be terminated any time / under certain circumstances / repayment amount	Optional early redemptiom as from First Call Date (08/02/2023). Conditional early redemption possible. Redemption amount: full outstanding amount of the issue, no partial redemption
16	Early redemption dates, if applicable	All interest maturity dates after the First Call Date (08/02/2023)
	Coupons/dividends	
17	Fixed / variable / initially fixed then converted to variable / initially variable then converted tof ixed	2% payable annually on 08/02 of the first year until 08/02/2023, First Call Date, then re-fixed every 5 years on the basis of the 5-year CHF mid-sw ap rate
18	Nominal coupon and reference indices, if any	2.00%
19	Existence of a payment stop for dividends (if dividends on the instrument are w aived, dividends on the normal share w ill be omitted as w ell)	Yes
20	Payment of interest/dividends: entirely/partially discretionary/mandatory	Payment of interest entirely discretionary
21	Existence of a clause for increasing the interest rate (*step up*) or another redemption incentive	None
22	Non-cumulative or cumulative	None
23	Convertible or non-convertible	None
24	If convertible, trigger for conversion (including PONV)	None
25	If convertible: in full in all cases / in full or partially / partially in all cases	None
26	If convertible, conversion rate	None
27	If convertible, conversion mandatory/optional	None
28	If convertible, type of instrument to be converted into	None
29	If convertible, issuer of instrument to be converted into	None
30	Depreciation characteristics	Yes
31	Trigger for depreciation	Exceeding the 5.125% threshold for CET1
32	In full/partially	In full or partially. To get back to the trigger threshold (5.125%)
33	Permanent/temporary	Permanent
34	In case of temporary depreciation, allocation mechanism	None
35	Hierarchy of debt in case of liquidation (alw ays name the instrument w ith the ranking immediately above)	Subordination ranking below Tier 2 instruments, pari passu w ith other Tier 1 instruments and above CET1 (Tier 2)
36	Existence of characteristics w hich could jeopardise full recognition under the Basel III regime	None
37	If yes, w hich ones?	None

4 Credit risk

4.1 General Information

The bank describes its organisation and management of credit risk in the annual report. The Board of Directors allocates risk envelopes by type of activity in order to limit credit risk. The credit granting process is governed by the Credit Regulations (validated by the Board of Directors). This document refers to the bank's normative scope for granting credit. It includes the criteria used to identify and measure the risks inherent in any credit. The bank's criteria are aligned with market best practices. A report on the granting of ETP (Exception To Policy) credit is produced quarterly and presented to the Risk Committee. In addition, the credit risk report includes, among other things, credit ratings (changes in the quality of the sound credit portfolio), rating migrations from one period to another, the stock of credit in ARD (Ducroire Risk Announcement = WatchList) and in default. This report is also discussed in the Risk Committee.

4.2 Credit quality of assets

Table 8 - CR1 - Credit risk: credit quality of assets (in 1'000 CHF)

CR1 : Credit risk: credit quality of assets (in 1'000 CHF)					
		a	b	c	d
		Gross carrying value of			
		Defaulted exposure	Non-defaulted exposure	Provisions / impairments	Net value (a + b - c)
1	Loans (excluding debt securities)	187'608	16'962'028	92'521	17'057'115
2	Debt securities		1'304'575		1'304'575
3	Off-balance sheet exposure		1'851'847		1'851'847
4	**TOTAL**	**187'608**	**20'118'450**	**92'521**	**20'213'537**

Table 9 - CR2 - Credit risk: changes in stock of defaulted loans and debt securities (in 1'000 CHF)

CR2 : Credit risk : changes in stock of defaulted loans and debt securities (in 1'000 CHF)		
		a
		31/12/2018
1	Defaulted loans and debt securities at end of the previous reporting period	
2	Loans and debt securities that have defaulted since the last reporting period	
3	Amounts returned to non-defaulted status	
4	Amounts w ritten off	
5	Other changes (+/-)	187'608
6	Defaulted loans and debt securities at end of the reporting period (1+2-3-4+5)	187'608

The bank is producing this table for the first time. As a result, all changes in the portfolios of defaulted loans and debt securities are shown on line 5.

The CRB tables show the exposure after deducting specific provisions and taking into account conversion factors in credit equivalent (CCF). Unmatched assets are not included in these tables.

The bank uses the definitions of "past due" and "defaulted" in accordance with the provisions of the Basel Committee (BCBS 128) and FINMA Circular 2015/1 Accounting - Banks. The methods used to determine impaired loans (also called defaulted loans) are outlined in the bank's administrative instructions. The notion of restructured positions is not used at BCGE.

Table 10 – CRB - Credit risk: additional disclosure related to the credit quality of assets (in 1'000 CHF)

CRB : Credit risk : additional disclosure related to the credit quality of assets (in 1'000 CHF)

	Segmentation of the credit risk - Regions									
	Switzerland	Oceania	North America	Liechten-stein	Latin America	Europe	Caribbean	Asia	Africa	Total
Assets										
Liquid assets	3'342'158	75	2'651		9	65'366		387	2	**3'410'649**
Amounts due from banks	313'606	2'561	2'024			75'578		60'068	500	**454'335**
Amounts due from customers	3'087'661	575	45'818	2	9'140	1'709'908	127'809	192'229	42'720	**5'215'861**
Mortgage loans	11'033'050					354'619				**11'387'669**
Trading portfolio assets	11									**11**
Financial investments	1'265'084	13'758	70'251			418'784		9'750		**1'777'627**
Accrued income and prepaid expenses	27'026					1'861				**28'887**
Participations	29'563		170			23'449				**53'182**
Other assets	243'096					692				**243'788**
Total assets	**19'341'254**	**16'968**	**120'914**	**2**	**9'149**	**2'650'257**	**127'809**	**262'434**	**43'222**	**22'572'008**
Off Balance sheet										
Contingent liabilities	109'332		5'936			35'845	21'150	56'628	2'171	**231'062**
Irrevocable commitments	114'730		2'427			84'745		384	1'029	**203'316**
Contingent liability for calls and Margin liabilities	153'518									**153'518**
Commitment credits	230		461			1'905	2'262	10'940		**15'798**
Total Off Balance sheet	**377'810**		**8'824**			**122'494**	**23'412**	**67'952**	**3'200**	**603'693**
Total	**19'719'065**	**16'968**	**129'738**	**2**	**9'149**	**2'772'751**	**151'221**	**330'386**	**46'422**	**23'175'702**
of which Defaulted exposure (net)	35'845		1			48'854	3'427	6'958	3	**95'087**
Defaulted exposure (gross)	90'886		78			86'110	7'486	13'099	8	**197'666**
Provisions	55'041		76			37'257	4'059	6'141	5	**102'579**

CRB : Credit risk : additional disclosure related to the credit quality of assets (in 1'000 CHF)

	Segmentation of the credit risk - Asset classes							
	Central governments and Central banks	Institutions	Banks and Securities dealers	Corporates	Retail	Equity	Other exposures	Total
Assets								
Liquid assets	3'385'558		15'324				9'766	**3'410'649**
Amounts due from banks			429'791	24'544				**454'335**
Amounts due from customers	163'980	1'076'482	7'469	3'499'826	467'722		381	**5'215'861**
Mortgage loans	20	253'902		3'613'391	7'520'357			**11'387'669**
Trading portfolio assets						11		**11**
Financial investments	478'713	224'800	132'235	937'718		4'161		**1'777'627**
Accrued income and prepaid expenses	113	37		29'298	-561			**28'887**
Participations						53'182		**53'182**
Other assets	13'139	228'437	844	1'056	309		3	**243'788**
Total assets	**4'041'523**	**1'783'657**	**585'664**	**8'105'831**	**7'987'828**	**57'355**	**10'150**	**22'572'008**
Off Balance sheet								
Contingent liabilities		172	24'377	193'894	12'619			**231'062**
Irrevocable commitments			16'399	171'562	15'355			**203'316**
Contingent liability for calls and Margin liabilities			450			153'068		**153'518**
Commitment credits			2'796	12'991	11			**15'798**
Total Off Balance sheet		**172**	**44'022**	**378'446**	**27'985**	**153'068**		**603'693**
Total	**4'041'523**	**1'783'829**	**629'686**	**8'484'278**	**8'015'813**	**210'422**	**10'150**	**23'175'702**
of which Defaulted exposure (net)		3'701		54'235	37'151			**95'087**
Defaulted exposure (gross)		3'777		114'129	79'760			**197'666**
Provisions		76		59'893	42'610			**102'579**

CRB : Credit risk : additional disclosure related to the credit quality of assets (in 1'000 CHF)

Segmentation of the credit risk - Duration

	At sight	Cancellable	≤ 3 months	> 3 months ≤ 1 year	> 1 year and ≤ 5 years	> 5 years	No maturity	Total
Assets								
Liquid assets	3'410'649							**3'410'649**
Amounts due from banks	91'975		285'092	76'757	512			**454'335**
Amounts due from customers	1'233'817	163'711	1'402'574	263'795	1'193'165	958'799		**5'215'861**
Mortgage loans	3'477	1'969'062	648'413	586'339	3'088'704	5'091'674		**11'387'669**
Trading portfolio assets	11							**11**
Financial investments	24'622		18'008	230'440	807'881	696'675		**1'777'627**
Accrued income and prepaid expenses	16'020			401	12'466			**28'887**
Participations	42'011					11'171		**53'182**
Other assets	243'788					0		**243'788**
Total assets	**5'066'370**	**2'132'773**	**2'354'087**	**1'157'732**	**5'102'728**	**6'758'320**		**22'572'008**
Off Balance sheet								
Contingent liabilities	36'499		157'465	16'260	18'077	2'760		**231'062**
Irrevocable commitments	43'509		6'249	7'260	143'210	3'088		**203'316**
Contingent liability for calls and Margin liabilities	153'518							**153'518**
Commitment credits			14'961	836				**15'798**
Total Off Balance sheet	**233'526**		**178'675**	**24'357**	**161'287**	**5'848**		**603'693**
Total	**5'299'895**	**2'132'773**	**2'532'762**	**1'182'088**	**5'264'015**	**6'764'168**		**23'175'702**
of w hich Defaulted exposure (net)	66'038		460	688	5'326	22'575		**95'087**
Defaulted exposure (gross)	161'412		460	760	8'255	26'779		**197'666**
Provisions	95'373			72	2'929	4'204		**102'579**

CRB : Credit risk : additional disclosure related to the credit quality of assets (in 1'000 CHF)

	Segmentation of the credit risk - Risk Weight							
	0%	**20%**	**35%**	**50%**	**75%**	**100%**	**150%**	**Total**
Assets								
Liquid assets	3'410'649							**3'410'649**
Amounts due from banks		282'849		51'369		115'215	4'902	**454'335**
Amounts due from customers	267'107	348'338	343'480	861'747	165'159	3'176'553	53'476	**5'215'861**
Mortgage loans	4'973	20'338	8'727'808	31'536	486'220	2'109'495	7'299	**11'387'669**
Trading portfolio assets	11							**11**
Financial investments	462'529	1'091'989		159'739		61'095	2'274	**1'777'627**
Accrued income and prepaid expenses	113	37			77	28'659		**28'887**
Participations							53'182	**53'182**
Other assets	241'576	844				1'368		**243'788**
Total assets	**4'386'958**	**1'744'395**	**9'071'288**	**1'104'391**	**651'457**	**5'492'386**	**121'133**	**22'572'008**
Off Balance sheet								
Contingent liabilities	13'205	19'308		10'647	6'490	181'355	56	**231'062**
Irrevocable commitments		13'480		3'448	8'300	177'984	104	**203'316**
Contingent liability for calls and Margin liabilities						153'518		**153'518**
Commitment credits		1'477		427	11	13'882		**15'798**
Total Off Balance sheet	**13'205**	**34'265**		**14'522**	**14'800**	**526'739**	**161**	**603'693**
Total	**4'400'163**	**1'778'660**	**9'071'288**	**1'118'914**	**666'257**	**6'019'125**	**121'294**	**23'175'702**
of which Defaulted exposure (net)	354	3'701				45'721	45'311	**95'087**
Defaulted exposure (gross)	10'349	3'701				136'349	47'267	**197'666**
Provisions	9'995					90'628	1'956	**102'579**

CRB : Credit risk : additional disclosure related to the credit quality of assets (in 1'000 CHF)

Segmentation of the credit risk - Credit risk mitigation techniques

	Secured by financial guarantees	Secured by guarantees	Mortgage-backed	Secured by other types of collateral	Unsecured	Total
Assets						
Liquid assets					3'410'649	**3'410'649**
Amounts due from banks					454'335	**454'335**
Amounts due from customers	100'922	409'805	984'075	2'384	3'718'674	**5'215'861**
Mortgage loans	4'953	1'101	11'198'431		183'184	**11'387'669**
Trading portfolio assets					11	**11**
Financial investments					1'777'627	**1'777'627**
Accrued income and prepaid expenses					28'887	**28'887**
Participations					53'182	**53'182**
Other assets					243'788	**243'788**
Total assets	**105'875**	**410'906**	**12'182'506**	**2'384**	**9'870'337**	**22'572'008**
Off Balance sheet						
Contingent liabilities	13'205	6'086			211'771	**231'062**
Irrevocable commitments		528			202'788	**203'316**
Contingent liability for calls and Margin liabilities					153'518	**153'518**
Commitment credits					15'798	**15'798**
Total Off Balance sheet	**13'205**	**6'614**			**583'874**	**603'693**
Total	**119'080**	**417'520**	**12'182'506**	**2'384**	**10'454'211**	**23'175'702**
of w hich Defaulted exposure (net)	354	3'701	45'046		45'986	**95'087**
Defaulted exposure (gross)	357	3'701	51'066		142'542	**197'666**
Provisions	4		6'020		96'556	**102'579**

CRB : Credit risk : additional disclosure related to the credit quality of assets (in 1'000 CHF)

	Segmentation of the credit risk - Rating							
	1	2	3	4	5	6	No Rating	Total
Assets								
Liquid assets							3'410'649	**3'410'649**
Amounts due from banks	9'886	65'777	92'418	3'679	9'027	29'434	244'115	**454'335**
Amounts due from customers							5'215'861	**5'215'861**
Mortgage loans							11'387'669	**11'387'669**
Trading portfolio assets							11	**11**
Financial investments	541'548	317'237	134'645				784'197	**1'777'627**
Accrued income and prepaid expenses							28'887	**28'887**
Participations							53'182	**53'182**
Other assets							243'788	**243'788**
Total assets	**551'434**	**383'014**	**227'062**	**3'679**	**9'027**	**29'434**	**21'368'359**	**22'572'008**
Off Balance sheet								
Contingent liabilities							231'062	**231'062**
Irrevocable commitments							203'316	**203'316**
Contingent liability for calls and Margin liabilities							153'518	**153'518**
Commitment credits							15'798	**15'798**
Total Off Balance sheet							603'693	**603'693**
Total	**551'434**	**383'014**	**227'062**	**3'679**	**9'027**	**29'434**	**21'972'052**	**23'175'702**
of which Defaulted exposure (net)							95'087	**95'087**
Defaulted exposure (gross)							197'666	**197'666**
Provisions							102'579	**102'579**

CRB : Credit risk : Defaulted exposures by default date (en 1'000 CHF)

	Default date before 2011	2011	2012	2013	2014	2015	2016	2017	2018	Total
Defaulted exposure (net)	**31'766**	4'551	1'228	5'982	3'042	13'520	9'917	16'022	9'059	**95'087**
Defaulted exposure (gross)	97'339	15'761	1'935	11'139	6'436	17'094	13'405	24'203	10'353	**197'666**
Provisions	65'573	11'210	707	5'157	3'395	3'574	3'488	8'181	1'294	**102'579**

4.3 Mitigation of credit risk

In accordance with the CAO (Capital Adequacy Ordinance), the bank uses the global approach for Credit Risk Mitigation and regulatory discounts for financial collateral and the substitution method for guarantees. Collateral (guarantees, financial collateral, real estate) recognised under the global approach is valued conservatively by the bank and according to the valuation methods described in the credit regulation. There is no netting on or off the balance sheet. The use of this collateral to reduce credit risk does not create a significant concentration on an issuer or guarantor.

Table 11 - CR3 - Credit risk: overview of mitigation techniques (in 1'000 CHF)

CR3 : Credit risk : overview of mitigation techniques (in 1'000 CHF)						
		a	**b1**	**b**	**d**	**f**
		Exposures unsecured (carrying amount)	Exposures secured (carrying amount)	Of which exposures secured by collateral	Of which exposures secured by financial guarantees	Of which exposures secured by credit derivatives
1	Loans (without debt securities)	4'196'975	12'860'140	12'449'234	410'906	
2	Debt securities	1'304'575				
3	**Total**	**5'501'550**	**12'860'140**	**12'449'234**	**410'906**	
4	of which defaulted	142'542	55'124	51'423	3'701	

Table CR4 shows the exposure after deducting specific provisions and before taking into account credit conversion factors (CCF). Unmatched assets are included in the "Other positions" category (line 7).

Table 12 - CR4 - Credit risk: exposure and credit risk mitigation (CRM) effects under the standardised approach (in 1'000 CHF)

CR4 :	Credit risk : exposure and credit risk mitigation (CRM) effects under the standardised approach (in 1'000 CHF)						
		a	**b**	**c**	**d**	**e**	**f**
		Exposure pre-CCF and pre-CRM		Exposure post-CCF and post-CRM			
		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
1	Governments and their central banks	3'877'543		4'041'344		3'237	0%
2	Banks and securities traders	578'194	203'614	579'369	43'664	236'745	38%
3	Public-sector entities and multilateral developments banks	1'732'581	198	1'555'220	75	654'054	42%
4	Corporate	8'317'001	1'432'407	8'073'620	369'280	5'906'979	70%
5	Retail	7'999'565	62'560	7'918'635	24'402	3'751'742	47%
6	Equity securities	57'355	153'068	57'343	153'068	238'139	113%
7	Other assets	216'780		216'780		124'558	57%
8	**TOTAL**	**22'779'020**	**1'851'847**	**22'442'312**	**590'488**	**10'915'454**	**47%**

4.4 Use of external ratings

In accordance with the CAO and the credit risk circular 2017/7, the bank uses external ratings to benefit from favourable risk weights in its calculation of minimum capital requirements. The two external rating agencies used by the bank are Standard & Poor's and Fitch.

The positions that benefit from these external ratings are:

- The portfolio of financial investments
- Banks
- Insurances
- Pledged securities

The bank retrieves the external ratings of the two rating agencies for the scope of the positions concerned and inputs these into its system for calculating minimum capital requirements.

4.5 Risk weightings by asset classes

Table 13 - CR5 - Credit risk: exposure by asset classes and risk weights under the standardised approach (in 1'000 CHF)

CR5 : Credit risk : exposures by asset classes and risk weights under the standardised approach (in 1'000 CHF)		a	c	d	e	f	g	h	j
		0%	20%	35%	50%	75%	100%	150%	Total credit exposure (post-CCF and post-CRM)
1	Governments and their central banks	4'025'160	16'185						4'041'344
2	Banks and securities traders	15'324	394'014		116'461		92'275	4'958	623'033
3	Public-sector entities and multilateral developments banks		412'345	202'501	878'809	1'339	60'300		1'555'295
4	Corporate		956'116	2'601'957	123'644	154'930	4'564'655	41'597	8'442'900
5	Retail			6'266'830		509'988	1'146'937	19'282	7'943'037
6	Equity securities						154'954	55'457	210'411
7	Other assets	92'222					124'558		216'780
8	**TOTAL**	**4'132'706**	**1'778'660**	**9'071'288**	**1'118'914**	**666'257**	**6'143'680**	**121'294**	**23'032'800**

5 Counterparty credit risk

The bank mainly handles OTC derivatives transactions under ISDA or CSA netting contracts. The limits are set annually by the Board of Directors based on a proposal from the Executive Board. These limits may be reviewed during the year if the situation so requires. These netting contracts allow a margin exchange between the bank and its counterparties based on the Mark-to-Market valuation of listed derivatives and Mark-to-Model for OTC derivatives. As stipulated by the CAO, the credit equivalent of derivatives is calculated according to SA-CCR. As at 31.12.2018, the bank had no exposure to a central counterparty.

Table 14 - CCR3 - Counterparty credit risk: standardised approach to CCR exposure by asset classes and risk weights (in 1'000 CHF)

CCR3 : Counterparty credit risk: exposures by asset classes and risk weights under the standardised approach (in 1'000 CHF)									
		a	c	d	e	f	g	h	i
		0%	20%	50%	75%	100%	150%	Others	Total credit exposure
1	Governments and their central banks								
2	Banks and securities traders	487'405	96'243	18'563		129			602'340
3	Public-sector entities and multilateral developments banks								
4	Corporate					8'478	375		8'852
5	Retail					13'829			13'829
6	Equity securities								
7	Other assets								
8									
9	**TOTAL**	**487'405**	**96'243**	**18'563**		**22'436**	**375**		**625'022**

Table 15 - CCR5 - Counterparty credit risk: composition of collateral for CCR exposure (in 1'000 CHF)

CCR5 : Counterparty credit risk: composition of collateral for CCR exposure (in 1'000 CHF)						
	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Non-Segregated	Segregated	Non-Segregated		
Cash in CHF		105'542		FALSE	FALSE	
Cash in other currencies		33'425		2'097	481'086	49'205
Sw iss government debt					361	165'958
Other government debt		3'105				45'056
Government agency debt		318				42'049
Corporate bonds		65'632			50'982	215'534
Equity securities		78'290				
Other collateral		56'445				
TOTAL		**342'758**		**10'422**	**532'429**	**517'802**

6 Market risk

Given its very low exposure to market risk, the bank refrains from publishing the relevant information, in accordance with circular 2016/1 Disclosure - banks Mn 14.2.

7 Interest rate risk in the bank portfolio

Interest rate risk in the bank's portfolio represents the possibility that the bank's profitability or the value of its equity capital may be affected by changes in interest rates.

The interest rate risk of trading activities falls within the scope of market risk.

7.1 Strategy and procedures

The Board of Directors establishes the bank's principles for managing risk and decides on the risk strategy it will pursue with regard to interest rate risks in the bank's portfolio. The target interest-rate risk profile is defined in the Financial Policy and described in more detail in the Bank's ALM and Liquidity Policy. Exposure to interest rate risks in the bank's portfolio is subject to limits which are validated and revised each year by the Board of Directors. The limits are expressed as:

- limits on the sensitivity of the economic value of equity (value effect)
- limits on the sensitivity of the net interest margin over a year (revenue effect)

7.2 Structure and organisation

The Executive Board is responsible for organising and implementing interest rate risk management in the bank's portfolio. The Executive Board delegates management of this type of risk to its Asset and Liability Management Committee (CALM). The committee meets monthly, is chaired by the CEO and comprises four other Executive Board members, including the CFO.

Within the Finance and Risk Control division, the control of interest rate risk in the bank's portfolio is carried out by the Risk Control department which reports to the CFO. Its tasks include:

- Producing the monthly interest rate risk management report for the bank's portfolio and presenting it to the CALM
- Producing monthly reports on opportunity interest rates
- Defining and maintaining the models and management principles used to manage interest rate risk management in the bank's portfolio, in compliance with the ALM and Liquidity Policy.

7.3 Risk assessment and measurement

The bank assesses the interest rate risk in the bank's portfolio on a monthly basis for the parent company and on a quarterly basis for the group. Interest rate risks are measured using two approaches: a static approach and a dynamic approach.

The static approach measures the effect on the current value of the bank's portfolio on the basis of the following indicators:

- The economic value of equity capital
- The sensitivity of the economic value of equity capital
- The key rate durations

In the static approach, the sensitivity of the economic value of equity capital and key rate durations are assessed using two interest rate scenarios:

- A parallel increase in interest rates of 100 basis points
- A parallel decrease in interest rates of 100 basis points

The dynamic approach measures the effect on revenue in the bank's portfolio based on the sensitivity of the net interest margin. The sensitivity of the net interest margin is assessed over a three-year horizon by taking into account interest rate scenarios and balance sheet evolution scenarios.

The interest rate scenarios used by the bank are as follows:

- A parallel increase in interest rates of 100 basis points
- A parallel decrease in interest rates of 100 basis points

- The bank's interest rate outlook scenario
- A +300 basis point increase in 10-year interest rates over a 6-month horizon
- A flattening of the interest rate curve related to a movement in long-term interest rates
- An inversion of the interest rate curve
- A parallel increase in interest rates of 200 basis points

Additional scenarios are implemented on an ad hoc basis, in particular for reverse stress tests as defined in FINMA circular 2019/2 Interest rate risks - banks Cm 31.

Scenarios for the evolution of the balance sheet:

- Are dependent on the level of short-term interest rates and in particular on the LIBOR interest rate fluctuation band for three-month deposits in Swiss francs published by the Swiss National Bank;
- Client behaviour in the context of specific simulations;
- Regulatory constraints on liquidity and minimum capital requirements

The main differences in approaches between the internal approach to measuring interest rate risk and the approach planned for the publication of the results of the IRRBB1 table are as follows:

- To measure the sensitivity of the economic value of equity (ΔEVE), the margin cash flows:
    - Are taken into account for the internal assessment of interest rate risk. The internal approach is in line with the continuity of a proven system of limits defined in the "ALM and Liquidity Policy" and the need to conduct historical analyses
    - Are not taken into account for the IRRBB1 publication to reflect a consistent approach to interest rate risk exposure and to complement internal interest rate risk assessment approaches

- To measure the sensitivity of the economic value of equities (ΔEVE), the interest rate shocks applied in the internal scenarios differ from those prescribed for the IRRBB1 publication, in particular because of the need to conduct historical analyses
- To measure the sensitivity of the net interest income (ΔNII), the rate and balance sheet scenarios used internally differ from those prescribed for IRRBB1 publication in that:
    - The rate shocks applied in the internal scenarios gradually evolve over a given time horizon, whereas the prescribed rate shocks are instantaneous
    - In internal scenarios, the balance sheet is not systematically simulated on the basis of an assumption of constant outstanding amounts

7.4 Reduction of risks

Implementation of the policy applied in terms of hedging or mitigating the risks of interest rate changes is delegated to the ALM financial sub-committee (SCALM-F) chaired by the Bank's CFO. SCALM-F is responsible for implementing and following up on the CALM's decisions, monitoring market conditions on an ongoing basis; it is involved, among other things, in the management of strategic hedging operations for the bank's portfolio.

The most commonly used hedging instruments are interest rate swaps. The bank may use options to hedge interest rate risk in the bank's portfolio. The optional positions in the bank's portfolio generated by the commercial activity are generally hedged with a direct hedge.

The bank implements a macro-hedging strategy of the "fair value hedge" type. The effectiveness of the macro hedge is monitored on a monthly basis.

7.5 Key modelling and parametric assumptions used to calculate ΔEVE and ΔNII (IRRBBA1 and IRRBB1 tables)

The bank implements the principles defined by FINMA in circulars 2016/1 Publication - Banks and 2019/2 Interest Rate Risk - Banks. The main assumptions and parameters used are outlined in the following paragraphs.

7.6 Fluctuation in economic value (ΔEVE)

For transactions for which the rate redefinition date is defined, the bank does not take margin cash flows into account in calculating the sensitivity of the economic value (ΔEVE). To this end, the bank implements the "internal interest rate perspective" as defined in the Interest Rate Risk Announcement (SNB).

The cash flow mapping procedure is carried out in accordance with the maturity ranges prescribed by FINMA in accordance with Circular 2019/2 Interest Rate Risks - Banks Annex 2.

The benchmark portfolio method is the bank's approach for transactions where the rate redefinition date is not defined. The bank calibrates and revises the replication portfolios annually by combining several market interest rates in order to minimise margin variance between the rate applied to clients and the yield on the benchmark portfolio. The main assumptions used to determine risk of interest rate changes on outstanding non-maturing deposits are the following:

- Savings due to clients are assumed to be stable.
- The liquid and volatile components of demand deposits from corporations or financial institutions are based on a conservative proportion of short-term interest rate components from the relevant benchmark portfolios.

The cash flow discount rate is measured on the basis of a zero coupon yield curve corresponding to the original currency of the cash flow. The zero coupon yield curves are evaluated by a bootstrapping approach based on the IBOR-Swap market yield curves. Interim discount rates are measured by linear interpolation of the ad-hoc "zero coupon" yield curve.

7.7 Fluctuation in interest income (ΔNII)

For the renewal of fixed-rate transactions, the following assumptions are applied, taking into account the specific features of each product:

- The duration of the simulated transactions is determined by product type and on the basis of an in-depth inventory analysis over a one-year period in order to take into account the "recent" behaviour of clients
- The interest rates of the simulated transactions consist of the following elements:
  - Market interest rates: they depend on simulated market rates based on prescribed rate shocks
  - Additional refinancing costs of the bank at the start date of the simulation to take into account the bank's refinancing cost
  - Commercial margins: they are determined by product type and on the basis of an in-depth inventory analysis over a one-year period in order to reflect the level of commercial margin of "recent" production

For floating rate positions, the simulated interest rates applied to clients are determined for each product on the basis of a time projection that takes into account:

- Maturity profiles of benchmark models (interest rate combinations)
- Interest rate levels prevailing in each of the scenarios over a given time horizon

7.8 Automatic and behavioural options

The bank does not implement early repayment or early withdrawal assumptions related to client behaviour to the extent that the bank applies a penalty to the client equivalent to the replacement cost of the market transaction, thus not giving rise to any financial loss. It should be noted that the phenomenon of early repayment and early withdrawal is marginal in the recent past.

Positions relating to automatic rate options are revalued.

Linear and non-linear derivative positions are mainly used to hedge interest rate risk in the bank's portfolio.

7.9 Currencies

At 31 December 2018, the breakdown by currency of the parent company's total liabilities is as follows: Swiss Franc 75.4%, Euro 11.6%, US Dollar 12.1%, other currencies 0.9%. As part of the interest rate risk in the bank's portfolio, the significant currencies are the Swiss franc, the euro and the US dollar.

For calculations relating to the change in the current economic value of equity (ΔEVE), the impacts are determined for all positions, whether denominated in a significant or non-significant currency.

For calculations relating to the change in expected net interest income (ΔNII), only the impacts of transactions denominated in a significant currency are determined.

Table 16 - IRRBBA1 - Interest rate risk: quantitative information on the structure of positions and repricing maturities

Table IRRBBA1: Interest rate risk: quantitative information on the structure of positions and repricing maturities		Volume in CHF millions			Average repricing maturity (in years)		Maximum repricing maturity (in years) assigned to non-maturity positions	
		Total	Of which CHF	Of which other significant currencies representing more than 10% of the assets or liabilities of the balance sheet total	Total	Of which CHF	Total	Of which CHF
Determined repricing maturity	Amounts due from banks	1'105	196	909	0.5	0.2		
	Amounts due from customers	3'960	1'963	1'982	2.3	3.5		
	Money market mortgage loans	1'868	1'777	91	0.0	0.0		
	Fixed-rate mortgage loans	9'552	9'499	53	5.8	5.8		
	Financial investments	1'679	1'326	354	4.6	5.2		
	Other assets	159	109	50	8.9	13.0		
	Receivables on interest rate derivatives	7'391	4'946	2'365	1.5	1.8		
	Amounts due to banks	-2'666	-12	-2'654	0.3	1.0		
	Amounts due in respect of customer deposits	-993	-93	-867	0.1	0.0		
	Cash bonds	-3	-3	-	2.6	2.6		
	Bond issues and central mortgage institution loans	-3'115	-3'103	-12	8.0	8.0		
	Other liabilities	-639	-200	-438	0.3	0.0		
	Liabilities on interest rate derivatives	-7'385	-6'583	-778	3.3	3.6		
Undetermined repricing maturity	Amounts due from banks	218	92	68	0.1	0.1	0.1	0.1
	Amounts due from customers	1'425	287	1'124	0.2	0.4	5.0	5.0
	Variable-rate mortgage loans	261	260	1	1.6	1.6	5.0	5.0
	Other sight receivables	234	1	233	0.1	0.0	0.1	0.0
	Sight liabilities in personal and current accounts	-8'603	-6'620	-1'881	1.1	1.3	5.0	5.0
	Other sight liabilities	-811	-537	-206	0.7	1.0	5.0	5.0
	Liabilities from client deposits, callable but not transferable (savings)	-5'109	-4'954	-153	2.1	2.1	5.0	5.0
	Total	-1'472	-1'649	239	2.2	2.9	-	-

It should be noted that interest rate derivatives composed of a receivables leg and a payables leg appear under both the headings "Receivables on interest rate derivatives" and "Liabilities on interest rate derivatives".

Table 17 - IRRBB1 - Interest rate risk: quantitative information on economic value of equity and net interest income

Table IRRBB1: Interest rate risk: quantitative information on economic value of equity and net interest income				
In CHF	ΔEVE (change in economic value of equity)		ΔNII (change in net interest income)	
Period	**31/12/2018**	**31/12/2017**	**31/12/2018**	**31/12/2017**
Parallel up	-193'138'781	-126'603'547	-4'944'418	-1'053'898
Parallel down	230'805'604	160'851'451	-22'636'077	-24'749'187
Steepener	-116'828'824	-87'501'667		
Flattener	80'813'179	64'022'928		
Short rate up	-1'123'399	9'439'176		
Short rate down	600'373	-9'057'505		
Maximum	-193'138'781	-126'603'547	-22'636'077	-24'749'187
Period	**31/12/2018**		**31/12/2017**	
Tier 1 capital	1'738'936'421		1'645'533'317	

The economic value of equity is mainly exposed to a parallel increase in interest rates.

In this scenario, exposure has increased compared to the situation at 31 December 2017.

The net interest income is mainly exposed to a decrease in interest rates. Exposure is stable in both scenarios compared to 31 December 2017.

8 Liquidity

8.1 Strategy and procedures

The Board of Directors sets out the principles for managing liquidity risk and determines the liquidity risk tolerance. Liquidity risk tolerance is expressed in the form of limits and thresholds based on the Short-Term Liquidity Ratio (SRT). These limits are reviewed annually within the framework of the Bank's "ALM and Liquidity Policy" review.

8.2 Structure and organisation

The Executive Board is responsible for organising and implementing liquidity risk management. The Executive Board delegates management of this type of risk to its Asset and Liability Management Committee (CALM). The committee meets monthly, is chaired by the CEO and comprises four other Executive Board members, including the CFO.

Within the Finance and Risk Control division, liquidity risk control is carried out by the Risk Control department of the CFO. Its tasks include:

- Producing a monthly management report on liquidity risk and presenting it to the CALM
- Defining and maintaining the methods, models and management principles as regards liquidity risk management, within the framework defined in the ALM and Liquidity Policy
- Communicating daily to the Treasury department the parent company's Liquidity Coverage Ratio (LCR).

8.3 Risk assessment

In accordance with the principles set out in FINMA circular 2015/2, the approaches adopted by the Bank to assess the liquidity risk are:

- the Liquidity Coverage Ratio (LCR) assessed on a daily basis for the parent company and on a monthly basis for the Group and the parent company
- the Net Stable Funding Ratio (NSFR) assessed on a quarterly basis
- stress tests mainly based on:
  - approaches comparable to those adopted in the context of the liquidity coverage ratio
  - the survival horizon principle

The stress tests are designed for systemic and/or idiosyncratic scenarios. They take into account the Bank's specificities and foreign currency refinancing.

8.4 Liquidity Coverage Ratio (LCR)

The Liquidity Coverage Ratio (LCR) is an international regulatory standard for liquidity risk management set out in the Basel III Accord. It became mandatory on 1 January 2015. The minimum requirement is 90% for the year 2018 and 100% from 1 January 2019. The LCR ratio is an international standard which seeks to ensure that a bank has sufficient unencumbered outstanding High Quality Liquid Assets (HQLA), in the form of cash or other assets which can be converted into cash to cover its liquidity requirements to withstand a 30-calendar-day liquidity crisis.

For 2018, the BCGE Group's all-currency liquidity coverage ratio remained stable overall and moves around an average of 122%. The variability of the BCGE Group's all-currency liquidity coverage ratio is caused mainly by the variability of net cash outflows.

More than 70% of the high quality liquid assets (HQLA) are made up of assets deposited in clearance accounts with the Swiss National Bank (SNB). The rest is mainly in securities of issuers rated AAA to AA- (Swiss Confederation, Central Mortgage-Bond Institution, etc.) eligible for refinancing operations with the SNB and in cash held by the Bank.

With regard to the concentration of financing sources, the main source of the Bank's refinancing is the individual and diversified deposits of clients. As at 31.12.2018, the Bank's refinancing was essentially based on:

- client deposits representing more than 60% of liabilities
- bank loans and loans from the Central Mortgage-Bond Institution representing nearly 15% of liabilities.

Liquidity outflows as a result of "potential" margin calls are mainly attributable to derivative-based interest rate risk hedging operations under CSAs (Credit Support Annex) with bank counterparties.

The LCR level in CHF is significantly higher than that of the LCR for all currencies combined, firstly because the HQLA are principally CHF-denominated and, secondly, because the BCGE Group must ensure centralised financing for its French subsidiary (mainly in euros) and financing for the global commodity finance business (mainly in USD).

8.5 Information regarding the short-term liquidity coverage ratio (LCR)

Table 18 - LIQ1 - Liquidity: information on the liquidity ratio (in CHF 1,000,000)

		Q1 2018		Q2 2018		Q3 2018		Q4 2018	
		Unweighted values	Weighted values	Unweighted values	Weighted values	Unweighted values	Weighted values	Unweighted values	Weighted values
	High-Quality Liquid Assets (HQLA)								
1	**Total high-quality liquid assets**		**4'225**		**3'973**		**4'232**		**4'311**
	Cash outflows								
2	Retail deposits	10'039	733	10'129	721	10'249	702	10'280	707
3	▪ of which stable deposits	2'787	139	3'172	159	3'898	195	3'890	194
4	▪ of which less stable deposits	7'253	593	6'957	563	6'351	507	6'390	512
5	Unsecured wholesale funding	5'182	3'110	4'925	2'960	5'049	3'014	5'441	3'283
6	▪ of which operational deposits (all counterparties) and deposits in networks of cooperative banks	842	205	847	206	863	210	896	218
7	▪ of which non-operational deposits (all counterparties)	4'280	2'846	4'042	2'717	4'183	2'801	4'456	2'976
8	▪ of which unsecured debt	59	59	36	36	3	3	89	89
9	Secured wholesale funding and collateral swaps		0		0		0		0
10	Other cash outflows	2'190	1'497	2'129	1'380	2'210	1'366	2'604	1'665
11	▪ of which cash outflows related to derivative exposure and other transactions	1'376	1'355	1'248	1'227	1'223	1'202	1'506	1'485
12	▪ of which cash outflows associated with losses on asset-backed securities financing, covered bonds, other structured instruments, asset-backed money market paper, special purpose vehicles, securities investment vehicles and other similar financing facilities	0	0	0	0	0	0	0	0
13	▪ of which cash outflows related to credit and liquidity facilities	814	142	881	153	987	164	1'098	180
14	Other contractual financing obligations	223	62	69	57	169	157	175	36
15	Other contingent financing obligations	3'054	50	3'227	52	3'509	60	3'703	53
16	**Total cash outflows**		**5'452**		**5'171**		**5'300**		**5'743**
	Cash inflows								
17	Secured lending (e.g. reverse repos)	375	0	67	0	202	0	243	0
18	Cash inflows from fully performing exposure	1'835	923	1'458	674	1'354	587	1'628	767
19	Other cash inflows	1'287	1'287	1'150	1'150	1'091	1'091	1'418	1'418
20	**Total cash inflows**	**3'497**	**2'210**	**2'674**	**1'824**	**2'647**	**1'679**	**3'288**	**2'184**
	Adjusted values								
21	**Total HQLA**		**4'225**		**3'973**		**4'232**		**4'311**
22	**Total net cash outflows**		**3'241**		**3'347**		**3'621**		**3'559**
23	**Liquidity Coverage Ratio (as %)**		**130%**		**119%**		**117%**		**121%**

9 Operational risk

The bank uses the standard approach to calculate minimum capital requirements for operational risk.

The objective of operational risk management is to limit losses related to operational risks. To this end, the Board of Directors validates the internal control and operational risk policy. In order to limit operational risks (and in particular major risks), executive management implements the internal control system, which identifies all control structures and processes at all levels of the bank.

The Risk Control department determines the architecture, defines the methodology and ensures consistency in the implementation of the internal control system across all the bank's activities.

On a monthly basis, the Risk Committee analyses the overall position of operational risks and proposes solutions and makes recommendations to management. On a quarterly basis, the Risk Committee submits its report to the Executive Board and the Board of Directors. The Risk Control Department prepares an annual CIROP report for General Management and the Board of Directors on the assessment of operational risks and internal control for the year.

The internal audit department prepares its annual audit plan based on its assessment of the bank's operational risk, internal control system and corporate governance.

Lastly, the Control Committee (Commission of the Board of Directors) reports to the Board of Directors on the functioning of the internal control system based on the reports of the Executive Board, the Internal Audit and the External Audit.

10 Leverage ratio

Table 19 - LR1 - Leverage ratio: comparison between balance sheet assets and total leverage ratio exposure (in CHF 1,000)

LR1 :	Leverage Ratio: comparison between accounting assets and total leverage ratio exposure measure (in 1'000 CHF)	
		a
		31/12/2018
1	**Total assets as per published financial statements**	23'033'833
1a	Differences betw een published financial statements and the basis of calculation for the determination of the total commitments	
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting but outside the scope of regulatory consolidation (Cm 6 Circ.-FINMA 15/3), as w ell as adjustment for assets deducted from Tier 1 capital (Cm 16 and 17 Circ.-FINMA 15/3)	
3	Adjustment for fiduciary assets recognised on the balance sheet for accounting purposes, but excluded from the leverage ratio exposure measure (Cm 15 FINMA Circ.15/3)	
4	Adjustments for derivative financial instruments (Cm 21 to 51 Circ.-FINMA Circ. 15/3)	-12'716
5	Adjustment for securities financing transactions (SFT) (Cm 52 to 73 FINMA-Circ.15/3)	-293
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures) (Cm 74 to 76 FINMA-Circ.15/3)	739'517
7	Other adjustments	
8	Leverage ratio exposure (sum of row s 1-7)	**23'760'340**

Table 20 - LR2 - Leverage ratio: detailed presentation (in CHF 1'000)

LR2 : Leverage ratio: detailed presentation (in 1'000 CHF)		a 31/12/2018
On-balance sheet exposure		
1	On-balance sheet items (excluding derivatives and SFTs, but including collateral) (Cm 14 and 15 FINMA-Circ. 15/3)	22'503'021
2	Assets that must be deducted in determining the eligible Tier 1 capital (Cm 7, 16 and 17 FINMA-Circ. 15/3)	
3	Total on-balance sheet exposure w ithin the leverage ratio framew ork, excluding derivatives and SFTs (sum of row s 1 and 2)	22'503'021
Derivative exposure		
4	Replacement values associated w ith all derivatives transactions, including those w ith CCPs, taking into account the margin payments received and netting agreements (ie net of eligible cash variation margin) (according to Cm 22 and 23, 34 and 35 FINMA-Circ. 15/3)	7'285
5	Add-on amounts for PFE associated w ith all derivatives transactions (Cm 22 and 25 Circ.-FINMA 15/3)	43'482
6	Gross-up for derivatives collateral provided w here deducted from the balance sheet assets pursuant to the operative accounting framew ork (Cm 27 FINMA-Circ. 15/3)	
7	Deduction of receivables assets for cash variation margin provided in derivatives transactions, according to cm 36 FINMA-Circ. 15/3)	-50'766
8	Deduction relating to exposures to QCCPs if there is no obligation to reimburse the client in the event of the QCCP defaulting) (Cm 39 FINMA-Circ. 15/3)	
9	Adjusted effective notional amount of w ritten credit derivatives, after deduction of negative replacement values (Cm 43 FINMA-Circ. 15/3)	
10	Adjusted effective notional offsets of bought/w ritten credit derivatives (Cm 44 to 50 FINMA-Circ. 15/3) and add-on deductions for w ritten credit derivatives (Cm 51 FINMA-Circ. 15/3))	
11	Total derivative exposure (sum of row s 4-10)	
Securities financing transaction exposure		
12	Gross SFT assets w ith no recognition of netting (except in the case of novation w ith a QCCP as per cm 57 FINMA Circ. 15/3) including sale accounting transactions (cm 69 FINMA Circ. 15/3), less the items specified in cm 58 FINMA Circ. 15/3)	517'802
13	Netted amounts of cash payables and cash receivables relating to SFT counterparties (Cm 59 to 62 FINMA-Circ. 15/3)	
14	CCR exposure for SFT assets (Cm 63 to 68 FINMA-Circ. 15/3)	
15	Agent transaction exposure (Cm 70 to 73 FINMA-Circ. 15/3)	
16	Total securities financing transaction exposure (sum of row s 12-15)	517'802
Other off-balance sheet exposure		
17	Off-balance sheet exposure at gross notional amount before application of credit conversion factors	3'210'082
18	Adjustments for conversion to credit equivalent amounts (Cm 75 and 76 FINMA-Circ. 15/3)	-2'470'565
19	Total off-balance-sheet items (sum of row s 17-18)	739'517
Eligible capital and total exposure		
20	Tier 1 capital (Cm 5 FINMA-Circ. 15/3)	1'738'936
21	Total exposure (sum of row s 3, 11, 16 and 19)	23'760'340
Leverage ratio		
22	Leverage ratio (Cm 3 to 4 FINMA-Circ. 15/3)	7.3%