Bank of China (Luxembourg) S.A.

Pillar 3 disclosure Report

List of Acronyms

ALCO	Assets & Liabilities Committee
AM	Authorized Management
BAC	Board Audit Committee
BCBS	Basel Committee on Banking Supervision
BIA	Basic Indicator Approach
BOD	Board of Directors
Branch	Bank of China Limited – Luxembourg Branch
CAR	Capital Adequacy Ratio
CBD	Corporate Banking Department
CCR	Counterparty Credit Risk
CCO	Chief Compliance Officer
CET 1	Common Equity Tier 1
CRD IV	Capital Requirements Directive IV
CRR	Capital Requirements Regulation
CSSF	Commission de Surveillance du Secteur Financier
EBA	European Banking Authority
ECAI	External Credit Assessment Institution
ECL	Expected Credit Loss
EMIR	European Market Infrastructure Regulation
EVA	Economic Value Added
GDPR	the General Data Protection Regulation
FD	Financial Department
FMID	Financial Market and Institution Department
H.O.	Head Office
ICAAP	Internal Capital Adequacy Assessment Process
ILAAP	Internal Liquidity Adequacy Assessment Process
IRRBB	Interest Rate Risk on the Banking Book
KRI	Key Risk Indicator
LCR	Liquidity Coverage Ratio
LDC	Loss Data Collection

L/G	Letter of Guarantee
L/C	Letter of Credit
MiFID II	Markets in Financial Instruments Directive 2014/65
NSFR	Net Stable Funding Ratio
PSD II	Payment Services Directive 2015/2366
OPRC	Operational Risk Concentration
RACA	Risk and Control Assessment
RMD	Risk Management Department
RMICC	Risk Management and Internal Control Committee
SFR	Short Form Report
VAR	Value at Risk
PVBP	Price value of a Basis Point

EBA tables and templates[1]

Templates	Reference	Name	CRR articles	Reference
1	EU OVA	Institution risk management approach	Article 435 (1)	Section 4.1 & 4.2
2	EU CRA	General qualitative information about credit risk	Article 435 (1)	Section 4.3.1
3	EU CCRA	Qualitative disclosure requirements related to CCR	Article 435 (1)	Section 4.3.7
4	EU MRA	Qualitative disclosure requirements related to market risk	Article 435 (1)	Section 4.3.2
5	EU LIA	Explanations of differences between accounting and regulatory exposure amounts	Article 436 (b)	Section 2.7
6	EU CRB-A	Additional disclosure related to the credit quality of assets	Article 442 (a)-(b)	Section 4.3.1
7	EU CRC	Qualitative disclosure requirements related to CRM techniques	Article 453 (a) - (e)	Section 4.3.1.3
8	EU CRD	Qualitative disclosure requirements on institutions' use of external credit ratings under the standardised approach for credit risk	Article 444 (a) - (d)	Section 4.3.1.4
9	EU CRE	Qualitative disclosure requirements related to IRB models	Article 452 (a) - (c)	N/A. The Bank uses the standardised
10	EU MRB	Qualitative disclosure requirements for institutions using the IMA	Article 455	N/A. The Bank uses the standardised

Templates	Reference	Name	CRR articles	Reference
1	EU LI1	Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories	Article 436 (b	Section 2.7
2	EU LI2	Main sources of differences between regulatory exposure amounts and carrying values in financial statements	Article 436 (b)	N/A
3	EU LI3	Outline of the differences in the scopes of consolidation (entity by entity)	Article 436 (b)	N/A
4	EU OV1	Overview of RWAs	Article 438 (c)-(f)	N/A
5	EU CR10	IRB (specialised lending and equities)	Article 153 (5) or 155 (2) Article 438	N/A. The Bank uses the standardised
6	EU INS1	Non-deducted participations in insurance undertakings	Article 438 (c)-(d) & article 49 (1)	N/A
7	EU CRB-B	Total and average net amount of exposures	Article 442 (c)	N/A
8	EU CRB-C	Geographical breakdown of exposures	Article 442 (d)	N/A
9	EU CRB-D	Concentration of exposures by industry or counterparty types	Article 442 (e)	N/A
10	EU CRB-E	Maturity of exposures	Article 442 (f)	N/A
11	EU CR1-A	Credit quality of exposures by exposure class and instrument	Article 442 (g)-(h)	N/A
12	EU CR1-B	Credit quality of exposures by industry or counterparty types	Article 442 (g)	N/A
13	EU CR1-C	Credit quality of exposures by geography	Article 442 (g)	N/A
14	EU CR1-D	Ageing of past-due exposures	Article 442 (g)	N/A
15	EU CR1-E	Non-performing and forborne exposures	Article 442 (g)-(i)	N/A
16	EU CR2-A	Changes in the stock of general and specific credit risk adjustments	Article 442 (i)	N/A
17	EU CR2-B	Changes in the stock of defaulted and impaired loans and debt securities	Article 442 (i)	N/A
18	EU CR3	CRM techniques – Overview	Article 453 (f) - (g)	Section 4.3.1.3
19	EU CR4	Credit risk exposure and CRM effects	Article 453 (f) - (g)	Section 4.3.1.4
20	EU CR5	Standardised approach	Article 444 (e)	Section 4.3.1.4
21	EU CR6	Qualitative disclosure requirements related to IRB models	Article 452 (e) - (h)	N/A
22	EU CR7	Effect on the RWAs of credit derivatives used as CRM techniques	Article 453 (g)	N/A
23	EU CR8	RWA flow statements of credit risk exposures under the IRB approach Article 43	Article 438 (d) & Article 92 (3)	N/A
24	EU CR9	IRB approach – Backtesting of PD per exposure class	Article 452 (i)	N/A
25	EU CCR1	Analysis of CCR exposure by approach	Article 439 (e), (f), (i) & article 92 (3)	Section 4.3.7
26	EU CCR2	CVA capital charge	Article 439 (e) - (f)	N/A
27	EU CCR8	Exposures to CCPs	Article 439 (e) - (f)	N/A
28	EU CCR3	Standardised approach – CCR exposures by regulatory portfolio and risk	Article 444 (e	Section 4.3.7
29	EU CCR4	IRB approach – CCR exposures by portfolio and PD scale	Article 452 (e)	N/A
30	EU CCR7	RWA flow statements of CCR exposures under the IMM	Article 92 (3) - (4) & Article 438 (d)	N/A
31	EU CCR5-A	Impact of netting and collateral held on exposure values	Article 439 (e)	N/A
32	EU CCR5-B	Composition of collateral for exposures to CCR	Article 439 (e)	N/A
33	EU CCR6	Credit derivatives exposures	Article 439 (g) - (h)	N/A
34	EU MR1	Market risk under the standardised approach	Article 445	N/A
35	EU MR2-A	Market risk under the IMA	Article 455 (e)	N/A. The Bank uses the standardised
36	EU MR2-B	RWA flow statements of market risk exposures under the IMA	Article 455 (e)	N/A. The Bank uses the standardised
37	EU MR3	IMA values for trading portfolios	Article 455 (d)	N/A. The Bank uses the standardised
38	EU MR4	Comparison of VaR estimates with gains/losses	Article 455 (g)	N/A. The Bank uses the standardised

[1] In accordance with the publication EBA/GL/2016/11,version2

1. Introduction

1.1. Background

As per the transparency obligations under the circular CSSF 06/273 as amended, part XIX "Disclosure by Credit Institutions", this Pillar 3 report complements the capital adequacy assessment and the supervisory review process of Bank of China (Luxembourg) S.A. (hereinafter "the Bank"[2]). Its aim is to encourage market discipline by developing a set of disclosure requirements which allow market participants to assess certain specified information on the scope of application of Basel II capital, particular risk exposures and risk assessment processes, and hence the capital adequacy of the institution. Disclosures consist of both quantitative and qualitative information and are provided at the individual level as per RCSSF 15-02 Article 3.

The Pillar 3 disclosure have been enhanced with the implementation of Basel III, through Regulation EU No. 575/2013 on prudential requirement for credit institutions and investment firms ("CRR") as well as Directive 2013/36/EU on access to the activity of credit institutions, the prudential supervision of credit institutions and investment firms ("CRD IV"). The above mentioned legal framework is effective from 1st January 2014.

Under Part 8 of CRR, the Bank is required to publish quantitative and qualitative information on own fund, the risks taken, and the risk management processes applied, the risk mitigation tool, encumbered and unencumbered assets and remuneration policy.

The pillar 3 report as at 31st December 2018 is prepared using the latest standards on Pillar 3 disclosure requirements framework published by Basel Committee in March 2017.

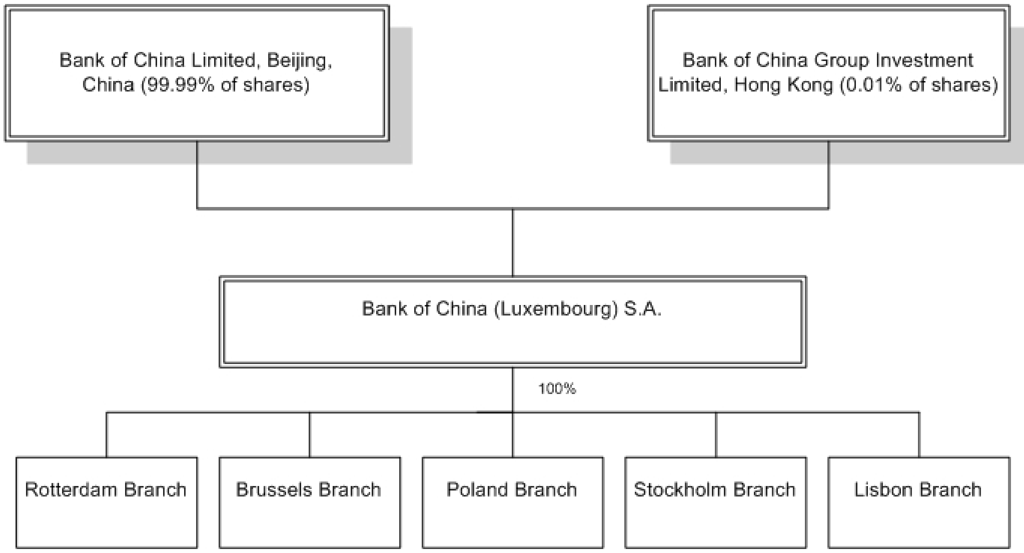
1.2. Bank of China (Luxembourg) S.A.

Bank of China (Luxembourg) S.A. is a wholly owned of Bank of China Limited, Beijing, P.R. of China, though 0.01% is indirectly held by Bank of China Group Investment Limited, Hong Kong.

As at 31st December 2018, the Bank comprised of 5 sub-branches:

[2] For purposes of this report, unless the context otherwise requires, the terms "the Bank", "we", "us" and "our" mean Bank of China (Luxembourg) S.A., including its Rotterdam Branch, Brussels Branch, Poland Branch, Stockholm Branch and Lisbon Branch, namely Bank of China (Luxembourg) S.A. Rotterdam Branch, Bank of China (Luxembourg) S.A. Brussels Branch, Bank of China (Luxembourg) S.A. Poland Branch, Bank of China S.A. (Luxembourg) Stockholm Branch and Bank of China S.A. (Luxembourg) Lisbon Branch.

Chart 1.2.1: Organizational structure



1.3. Key Events in 2018

Subordinated Loan Project:

At the beginning of July 2018, the Luxembourgish regulator CSSF approved the Bank's 106 million EUR subordinated loan as Tier II capital. The subordinated loan project was launched in view to support the Bank's continuous corporate credit business. The subordinated loan was granted by Bank of China Limited-Luxembourg Branch on behalf of H.O. Beijing.

Implementation of Emir Framework:

The Bank issued the 'Emir Policy', 'Collateral procedure for OTC derivatives transaction', 'Daily valuation procedure for OTC derivatives' to actively support the Bank's strategy to develop the "capital light" businesses, which include the OTC derivatives on behalf of client.

Enhancement of the new product development management framework:

Introduction of a new product could significantly modify the Bank's risk profile, and as a consequence impact capital and liquidity requirements, IRRBB, accounting method, regulatory compliance as well as IT systems and human resource allocation.

In 2018, the Bank reviewed and developed a more comprehensive 'new product development management policy'. The new framework enhances and enlarges significantly the preliminary risk assessment of the new product and improves the collaboration of various departments, with involvement of the Compliance Department and the Risk Management Department of the Bank. The post-evaluation review is also required to include a back-looking of the profitability of the product, the market and client feedback, so as to decide whether to continue offering the product.

Deployment of operational risk management:

In view to improve the granularity of the operational risk management and prepare for the upcoming change regarding operational risk impacts on capital allocation, the Bank allocated an additional human resource to deploy the Bank's operational risk management, more specifically in LDC (Loss Data Collection) and RACA (Risk and Control Assessment).

IFRS 9 implementation

In accordance with IFRS9 requirements, the Bank implemented a centrally managed program by H.O. as from 1st January 2018, which includes the methodology, data sourcing and modelling, IT processing and reporting. The overall governance of the implementation was reviewed by the H.O.'s expert team and the Bank's designated work group. Guidance and training of IFRS9 was delivered across all businesses and functions, any specific process and business control relating to this new framework continues throughout 2018. Governance over the Expected Credit Loss (ECL) calculation analysis is shared between FD and RMD. The Bank implemented the new requirements successfully and smoothly.

Risk Data Aggregation Project

Regarding to the risk data aggregation, the Bank followed up BCBS 'Principles for effective risk data aggregation and risk reporting' and implementation schedule of the regulatory authorities in Luxembourg, European and China.

Data architecture and IT infrastructure of the Bank has been consistent with the BOC Group, and data of the bank stored in Luxembourg, in compliance with the local general data protection regulations, both in Luxembourg and at a European level. The governance structure of the bank, as well as the duties of risk management and control, have defined clear boundaries of duties and responsibilities, presented an effective operation mechanism to ensure the aggregation of risk data and comprehensive risk reports.

2. Scope

2.1. Application of Disclosure Requirement (Art. 13 CRR)

The Bank, as an affiliated entity of a parent institution located in a third country, provides regulatory reporting to the CSSF on an individual basis as a credit institution established under Luxembourg Law. It complied with all requirements of Regulation EUR No. 575/2013 and Directive 2013/36/EU.

Frequency and Means of Disclosure (Art. 433 and 434 CRR)

The Bank publishes the Pillar 3 Report in accordance with Art. 433 CRR on an annual basis. The report is available according upon request.

2.2. Scope of application (Art. 436 CRR)

The report includes the Bank and its five branches.

2.3. Supervisory Review and Evaluation Process (SREP) buffer requirement

As per CSSF regulation 17-04, the Bank is not considered a systemically important credit institution in Luxembourg. As a consequence, the systemically important buffer for the Bank is 0%.

2.4. Capital Conservation Buffer

As per the requirement in Art 129 of CRD IV, the Bank maintained a capital conservation buffer of 2.5% of its total exposures, under the form of Common Equity Tier 1.

2.5. Countercyclical Buffer

The institution-specific countercyclical buffer calculated was 0.21%.

2.6. Reconciliation Short Form Report vs. FINREP

The differences assessed between the Short Form Report (Published Financial Statements) and the regulatory consolidated accounts are mainly the following:

- The unrealized gain/loss which is accounted in the FINREP but not recognized in SFR,
- The accrued interest receivable/payable is accounted separately in SFR, but incorporated in the principal in FINREP.
- ECL adjustments were made pursuant to the new IFRS9 implementation. In FINREP the adjustment resulted in a decrease in Retained Earnings; and in SFR in a decrease of profit for 2018.
- Other differences are due to the consideration of the tax provision.

TABLE 2.7.1 Reconciliation table Short Form Report vs. Finrep

	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Difference
Assets			
Cash in hand	134,582,238	134,582,238	-
Loans and advances to credit instit	1,257,278,818	1,259,161,846	(1,883,028)
a. repayable on demand	612,278,818	612,278,818	(0)
b. other loans and advances	645,000,000	646,883,027	(1,883,027)
Loans and advances to customers	3,451,457,858	3,462,041,498	(10,583,640)
Debt securities	282,852,317	285,709,204	(2,856,887)
a. issued by public bodies	282,852,317	285,709,204	(2,856,887)
Participating interests	31,000	31,000	-
Tangible assets	3,909,587	3,909,587	-
Intangible assets	184,981	184,981	-
Other assets	2,771,230	3,169,588	(398,358)
Prepayments and accrued income	12,764,757	-	12,764,757
Total asset	5,145,832,786	5,148,789,943	(2,957,157)
Liabilities and Equity			
Amounts owed to credit institutions	1,569,248,827	1,681,312,469	(112,063,642)
a. repayable on demand	4,146,531	4,146,531	0
b. with agreed maturity dates or periods of notic	1,565,102,296	1,677,165,938	(112,063,642)
Amounts owed to customers	2,439,010,185	2,440,920,822	(1,910,637)
a. repayable on demand	294,951,935	294,952,117	(182)
b. with agreed maturity dates or periods of notic	2,144,058,250	2,145,968,705	(1,910,455)
Debt evidenced by certificates	499,742,802	500,089,902	(347,100)
Other liabilities	5,146,251	5,891,697	(745,446)
Accruals and deferred income	24,959,820	26,821,435	(1,861,615)
Provisions	12,099,256	2,078,400	10,020,856
a. provision for taxation	5,151,440	1,065,554	4,085,886
b. other provisions	6,947,816	1,012,846	5,934,970
Subordinated liabilities	106,000,000		106,000,000
Subscribed capital	400,000,000	400,000,000	-
Legal reserve	3,836,377	-	3,836,377
Other reserve	50,307,856	51,312,142	(1,004,286)
Currency translation reserve	645,431	645,431	0
Profit for the financial year	34,835,981	39,717,646	(4,881,665)
Total liabilities and Equity	5,145,832,786	5,148,789,943	(2,957,157)

3. Own funds

3.1.Structure of Own funds

The Bank's own funds are calculated in compliance with Art. 72 CRR: Own funds consist of the sum of Tier I capital (Common Equity Tier 1 (CET1) + Additional Tier I capital) and Tier 2 Capital.

Table 3.1.1

Bank of China (Luxembourg) S.A.				
(in 000'EUR)	**12/31/2018**	**12/31/2017**	**Difference**	**%**
Capital	400,000	400,000	0	0.00%
Reserve & Retained Earning	51,927	21,280	30,646	144.01%
Revaluation & Intangible Assets	-185	688	-873	-126.89%
Tier 1 capital	451,742	421,968	29,773	**7.06%**
Tier 2 capital	106,437	8,349	98,088	1174.85%
Subordinated loans	106,437	8,349	98,088	1174.85%
Own funds (tier 1 + tier 2)	**558,179**	**430,317**	**127,862**	**29.71%**

The Bank's own regulatory funds as at 31st December 2018 are composed of:

- Tier 1 capital consists of paid-up capital and eligible reserves (including reported profit/loss and valuation spread, subject to prudential filter). The subscribed capital of the Bank is fixed at €400 million, represented by fifty thousand shares without any par value since 28th November 2016. The Bank has Tier 1 capital of €451.74 million as at 31st December 2018.
- Tier 2 capital consists mainly of a subordinated loan of €106 million granted by Bank of China Luxembourg Branch, in compliance with CRR art 63. The Bank has total Tier 2 capital of €106.44 million as at 31st December 2018.

3.2.Leverage Ratio

As at 31st December 2018, the Leverage Ratio amounts to 7.51%, using the fully phased-in definition of Tier 1. This exceeds the discussed regulatory minimum requirement of 3%.

Table 3.2.1 LR1 - Summary comparison of accounting assets vs. leverage ratio exposure measure

1	Total consolidated assets as per published financial statements	5,145,832,786.00
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	0
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	0
4	Adjustments for derivative financial instruments	15,948,056.62
5	Adjustment for securities financing transactions (ie repos and similar secured lending)	0
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	836,136,325.48
7	Other adjustments	20,527,662.33
8	**Leverage ratio exposure measure**	**6,018,444,830.43**

Table 3.2.2: LR2 - Leverage ratio common disclosure template

		a	b
		2018	2017
On-balance sheet exposures			
1	On-balance sheet exposures (excluding derivatives and securities financing transactions (SFTs), but including collateral)	5,166,545,430	4,828,707,521
2	(Asset amounts deducted in determining Basel III Tier 1 capital)	0	0
3	**Total on-balance sheet exposures** (excluding derivatives and SFTs) (sum of rows 1 and 2)	**5,166,545,430**	**4,828,707,521**
Derivative exposures			
4	Replacement cost associated with *all* derivatives transactions (where applicable net of eligible cash variation margin and/or with bilateral netting)	15,948,057	12,295,781
5	Add-on amounts for PFE associated with *all* derivatives transactions	0	0
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	0	0
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	0	0
8	(Exempted CCP leg of client-cleared trade exposures)	0	0
9	Adjusted effective notional amount of written credit derivatives	0	0
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	0	0
11	**Total derivative exposures (sum of rows 4 to 10)**	**15,948,057**	**12,295,781**
Securities financing transaction exposures			
12	Gross SFT *assets* (with no recognition of netting), after adjusting for sale accounting transactions	0	0
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	*0*	*0*
14	CCR exposure for SFT assets	*0*	*0*
15	Agent transaction exposures	0	0
16	**Total securities financing transaction exposures (sum of rows 12 to 15)**	**0**	**0**
Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	836,136,325	563,240,834
18	(Adjustments for conversion to credit equivalent amounts)	0	0
19	**Off-balance sheet items (sum of rows 17 and 18)**	**836,136,325**	**563,240,834**
Capital and total exposures			
20	**Tier 1 capital**	451,741,591	421,968,314
21	**Total exposures (sum of rows 3, 11, 16 and 19)**	6,018,629,812	5,404,244,136
Leverage ratio			
22	**Basel III leverage ratio**	7.51%	7.81%

Source: LR C47

During 2018, the main factors that impacted the leverage ratio are the on-balance-sheet exposure of loans and the off-balance-sheet exposure of loan commitments.

The Finance Department is responsible for calculating the leverage ratio in accordance with Article 429 of CRR and to report it on a quarterly basis to the AM, to RMD as well as to the CSSF.
RMD is responsible for monitoring the leverage ratio via the Bank's Key Risk Indicators, reporting on a quarterly basis. An internal limit has been set:

- Leverage ratio ⩾ 4% Green Zone
- 3.5% ⩽ Leverage ratio < 4% Amber Zone
- Leverage ratio < 3.5% Red Zone

The Bank considers that there is excessive leverage risk when the leverage ratio falls below 3.5%.
In case of an internal breach, a meeting should be convened by the Risk Management Department, together with the Finance Department and other relevant Departments. The reason of the breach and the remediation action are then analyzed and reported promptly to the Management Body and to the Board of Directors, as appropriate.
The mitigation measures may include, but are not limited to:

- Adjusting the Balance sheet and Off-Balance sheet structure
- Increasing the Tier 1 capital by capital injection, incorporation of previous profit etc.

3.3. Capital Adequacy

The Bank uses the standardised approach for credit risk, market risk and uses the basic indicator approach for operational risk to determine its minimum capital requirements, in accordance with CRR.

3.3.1. Internal Capital Adequacy Assessment Process ("ICAAP)

The Bank conducts an annual ICAAP exercise to measure the appropriateness between the risk the bank takes and the adequacy of its capital over a three-year forecast.
The ICAAP report serves two key purposes:

- It informs the Bank's Board of Directors on how the Bank assesses its risks; how the Bank intends to mitigate those risks, and how much current and future capital is deemed necessary to support the Bank's operations in light of those risks.
- It represents the means by which the Bank evidences its internal capital adequacy assessment to the CSSF.

The fact that the ICAAP report is regularly reviewed at the highest levels of the firm's organization structure means that the Bank's risk management policies and processes are regularly being challenged. Within an institution's internal governance framework, the ICAAP is a process to ensure that the AM:

- Adequately anticipates, identifies, measures, aggregates and monitors the Bank's risks;
- Ensures that the Bank holds adequate internal capital in relation to the Bank's risk profile;

- Uses sound risk management systems and develops them further.

Maintaining and continuously reviewing the Bank's ICAAP helps to ensure that the Bank keeps focusing on the risks it faces.

3.3.2. Regulatory Requirement for Credit Risk (Art. 438c CRR)

The Bank uses the standardised approach for credit risk to determine its minimum capital requirement, in accordance with the CRR. A risk weight is assigned according to the external rating of the clients, the nature of the exposure.

The Bank relies on External Credit Assessment Institutions' (ECAI) ratings to assign a risk weight to each asset class. The Bank has elected Moody's, Standard & Poor's, Fitch, Kroll Bond Rating Agency, CERVED as ECAIs.

The Bank laid down the ECAI's rating guideline for this purpose, which specifies:

- The mapping process of the credit assessment.
- The correspondence of the rating categories of each ECAI with the credit quality.
- The risk weight assigned to the exposure of each asset class, according to the rating category.

3.3.3. Regulatory Requirement for Market Risk (Art. 445 and 438e CRR)

The Bank has adopted the Standardised Approach to evaluate its risk exposures to the foreign exchange positions. As per CRR, the foreign exchange risk exposure of the Bank shall be subject to a capital requirement if the overall net currency position[3] exceeds 2% of the credit institution's own funds. Since the net currency position of the Bank is €15,035,487 at 31st December 2018, which exceeds 2% of its eligible own funds, we have calculated that the regulatory capital requirement for the foreign exchange risk amounted to € 1,202,838.96 as at 31st December 2018.

3.3.4. Regulatory Requirement for Operational Risk (Art. 446 CRR)

The Bank uses the Basic Indicator Approach for operational risk to determine its minimum capital requirements, in accordance with the CRR.

The calculation of the Basic Indicator Approach is based on the simple arithmetic average over three years of the sum of net interest income and net non-interest income of the Bank as illustrated in the table below.

Table 3.3.1: Capital requirement for operational risk as at 31st December 2018

[3] Net short and long positions in each currency other than the capital currency shall be translated at spot rates into the capital currency. The higher of these two totals, regardless of its sign, shall constitute the credit institution's overall net currency position.

	Operational Risk - 2018	YEAR 2017	YEAR 2016	YEAR 2015
5.2	Interest income (+)	79,059,492.00	46,291,332.34	39,135,038.39
5.3	Interest expenses (-)	- 22,060,735.00	- 17,797,575.78	- 17,866,235.28
5.5	Dividend income (+)	-	-	-
5.6	Fee and commission income (+)	25,275,869.00	17,990,709.04	9,997,657.24
5.7	Fee and commission expenses (-)	- 3,684,340.00	- 2,105,342.99	- 1,263,518.95
5.9	Gains (losses) on financial assets and liabilities held for trading, net (+/-)		1,262,747.41	3,503,107.42
5.1	Gains (losses) on financial assets and liabilities designated at fair value through profit or loss, net (+/-)		-	-
5.11	Gains (losses) from hedge accounting, net (+/-)		-	-
5.12	Exchange differences, net	7,878,080.00	- 1,022,290.98	- 3,512,799.10
5.14	Other operating income (+)	63,885.00	289,779.78	299,931.32
	Gross Income as of Dec 2016	**86,532,251.00**	**44,909,358.82**	**30,293,181.04**
	Average	**53,911,596.95**		
	Own fund requirement	**8,086,739.54**		
	Total operational risk exposure amount	**101,084,244.29**		

Sources: Capital Requirement_ Op Risk

3.3.5. Total Regulatory Capital Requirements

The overall regulatory capital requirement for all risk types of Pillar I in accordance with Art. 92 CRR are illustrated as follows:

Table 3.3.2: Total regulatory capital requirement as at 31st December 2018

Risk type	Risk Weighted Exposure amounts in EUR	Capital Requirement in EUR
Credit risk	3,564,910,100.92	285,192,808.07
of which Standardized approach (SA)	3,564,910,100.92	285,192,808.07
Market Risk	15,035,487.00	1,202,838.96
of which Standardized approach	15,035,487.00	1,202,838.96
Operational risk	101,084,244.29	8,086,739.54
of which Basic Indicator Approach	101,084,244.29	8,086,739.54
Total Regulatory Requirement	3,681,029,832.21	294,482,386.58

3.3.6. CET Tier I, Tier 1 and Total Capital Ratios and Buffers (Art. 440 CRR)

As at 31st December 2018, the capital ratio and buffers are as following:

Table 3.3.3: Capital Ratios and Buffers

Common Equity Tier 1 (as a percentage of risk exposure amount)	12.27%
Tier 1 (as a percentage of risk exposure amount)	12.27%
Total capital ratio	15.16%
Institution specific buffer requirement (CET 1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements,plus systemic risk buffer, plus the systemcially important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	2.71%
of which: capital conservation buffer requirement	2.50%
of which: countercyclical buffer requirement	0.21%
of which: systemic risk buffer requirement	0
of which: Global Systemically Important Institution (G-SII) or other Systemically Important Institution (O-SII) buffer	0

4. Risk Management

4.1.Structure and Organization of Risk Management (Art. 435 CRR)

4.1.1. Board of Directors (BOD)

The Bank is headed by an effective BOD which meets regularly, directs and controls the Bank. The BOD, with 6 Board members as at 31st December 2018, is the Bank's senior "governing body", and bears the responsibility for assessing, reviewing, and approving the Bank's risk appetite framework, plans and performance targets, appointing senior officers, delegating authority for credit and other risks and establishing effective control processes.

The Board Members are selected in consideration on their in-depth experience and professional background: Out of six, one of them has prominent roles at H.O. level, the Chairman (and member of Board) is also the General Manager of the BoC Branch, one is a member of the Authorized Management of the Bank and three are independent non-executive members (including two directors with prominent roles in the financial sector). All board members are regularly trained on new regulations and technical matters. The BOD exercises its functions and powers in accordance with the "BOD Procedural Rules, Duties and Responsibilities". During the year, a total of 5 Board of Directors' meetings, 4 Board Audit Committee meetings and 4 Board Risk Committee were carried out, which deliberated on a broad range of topics, in consultation with Authorized Management and internal control functions as appropriate.

The BOD has the overall responsibility for the Bank. It ensures the deployment of the Bank's business strategy according to the risk appetite and preserves business continuity by implement a sound central administration and internal governance arrangements.

For this purpose, the BOD is involved and bears the final responsibility for the Bank's strategy, and the validation of the Bank's internal policies. It also ensures the compliance of the above documents with local regulatory requirements.

Furthermore, the BOD receives on a quarterly basis the overall risk assessment of the Bank, based on the previous quarter activity. These quarterly risk reports to the BOD (also in collaboration with the FD) include a systematic dashboard where all the Key Performance Indicators and limits are indicated, as well as stress testing results on liquidity. The risks are also viewed as a whole, considering their interaction (Market risk analysis for interests rate risk and foreign exchange risk, liquidity risk based on the inflow and outflows activity of the Bank).

All material matters which would affect the Bank's overall risk profile and any breaches on the internal limits are promptly reported to the BOD. There were no significant deficiencies or breaches in 2018 to be reported.

As per 31st December 2018, the BOD was supported by two specialised committees for assisting its oversight: The Board Audit committee and the Board Risk Committee.

The Board Audit Committee is responsible assisting the BOD in fulfilling its oversight responsibilities for the financial reporting process, the system of internal control, the audit process, and the Bank's process for monitoring compliance with laws and regulations and the code of conduct. Three members of the BOD are also members of BAC, which also draws on the assistance of an external expert. The BOD nominations are reported to CSSF.

During the year 2018, four BAC meetings were held.

The BAC discharged their responsibilities, as outlined in the revised Audit Committee charter during the year, such as:

- Supervision of the external auditor by:

- Reviewing the annual financial statements, Management Letter…;
- Debriefing with the external auditor;
- Following up of the Management Letter points;
- Recommending the external auditor reappointment to the BOD.

- Supervision of the internal audit function by :

- Reviewing the internal audit reports;
- Approving the internal audit plan and all major changes to the plan;

- Ensuring the appropriate follow-up of the recommendations of the internal audit function.

The BAC reported to the BOD on the different topics it discussed.

The **Board Risk Committee** is responsible to assist the BOD in effective supervision of the risk associated to the Bank's activity. The BRC is composed of two non-executive directors and benefits from one independent external adviser. It also assesses the adequacy between the risks incurred and the Bank's ability to manage these risks as well as the internal and regulatory own funds and liquidity reserves.

The BRC has been fully effective since January 2018. Four meetings were held during the year; Regular risk function reports, annual ICAAP/ILAAP report, and KRI dashboard monitoring, etc., were reviewed. The BRC participated actively on the Bank's internal risk policies/regulations elaboration and approval.

4.1.2. General Management

Composed of the General Manager and Deputy General Managers, the AM is in charge of daily business management as delegated to it by the Board of Directors:

- To ensure the activities of the Bank are in compliance with the existing law;
- To ensure the implementation of strategies and guiding principles lay down by BOD through internal written policies and procedures;
- To implement promptly and effectively the corrective measures to address the weaknesses identified by second/third line of defence as well as regulators;
- To oversee and manage the Bank's risks, including the compliance with requirements for internal and regulatory own funds and for liquidity.

4.1.3. Management Committees

Different committees are set up for the management of various risks, to which the Bank is exposed. In 2018, the Bank had the following committees:

Committee	Responsibilities
Assets & Liabilities Committee	Responsible for the review of the Bank's current assets and liabilities situation, the reporting to the General Management on issues raised regarding assets/liabilities mismatch, shortfall of funding, etc. It aims at harmonizing asset/liability match on currency, term and interest rate. It bears also the responsibility of the liquidity risk management, including liquidity stress test and contingency funding plan.
Risk Management and Internal Control Committee	Responsible for deliberating and evaluating the various operational risk-controlling objectives and managing means of the Bank, including but not limited to the credit risk, market risk, interest rate risk on banking book, liquidity risk, and operational risk exposures. RMICC also bears the responsibility for the subsequent appraisal of risks control and implementation.
Credit Review Committee	Responsible for appraising the credit risk on the Bank's loan project.
New Product Committee	Takes the responsibilities to ensure that new product development adhere to the local regulatory requirements, including approval by the General Management, prior risk assessment and analysis carried out by relevant departments, pricing and risk control etc.
Compliance Committee	Is responsible to strengthen the overall compliance risk management, a Compliance Committee was formed in 2014 which replaced the Anti-Money Laundering Group (AML Group), and the scope of the Compliance Committee encompasses that of the AML Group and includes all Compliance matters. The objective of the Committee is to ensure that there is an effective Compliance framework within the Bank and compliance risks are adequately managed.
Bulk Purchase Committee	Is responsible for appraising and approving on the Bank's bulk acquisition of products or services above € 30,000 (excluding VAT) through purchase, lease and / or other methods of assignment.
Investment Committee	Is responsible for constructing, implementing and monitoring the investment policy, model portfolios, and the selection of products that customers' assets will be invested in, chaired by the Deputy General Manager in charge of Banking Department and composed of all investment advisers, a member of the Risk Management Department and a member of the Financial Department.
Personal Data Protection Committee	The roles of PDPC are to support Data Protection Officer in carrying his tasks and providing oversight and guidance on data protection matters of the Bank.

4.1.4. Additional information on internal governance

As stated in article 9 of the CSSF Circular 12 / 552 as amended, Internal Governance shall ensure in particular sound and prudent business management, including the risks inherent in them. In order to achieve this objective, the institutions shall establish internal governance arrangements which are consistent with the three-lines-of-defence model.

The first line of defence consists of the business units that take or acquire risks under a predefined policy and limits, operating the first level of control to mitigate risks.

The second line is formed by the support functions, including the financial and accounting function, as well as the IT function and the compliance and risk control functions, which contribute to the independent risk control.

The third line consists of the internal audit function which provides an independent, objective and critical review of the first two lines of defence.

First-line- of defence

The Bank's first line of defence consists of the **Front Office and Operational units**, which are directly involved in the daily operational work. The operating staff carry out day-to-day work on a four-eye's principal to prevent the errors and omissions that may occur during the processing of the transactions.

The **Finance Department** maintains appropriate controls over accounting and record-keeping processes for all business activities on a daily basis. It is also responsible for effective management and control of all its operations as well as for financial and regulatory reporting to the head office and regulators. Finance Department bears the responsibility to formulate and monitor processes of the liquidity risk management, and to allocate and manage the regulatory capital and large risk exposure of the Bank.

The **IT Department** is responsible for the reliability and security of processed data. The Bank has in place physical access controls, environmental controls, logical security controls, and controls over access to information systems. The Bank has a well-documented and regularly tested Disaster Recovery Plan and a documented Business Continuity Plan covering all critical business processes and activities.

<u>Second-line-of defence</u>

Risk Management Department has the responsibility of the day-to-day management pertaining to credit risk, market risk, and operational risk of the Bank. It is responsible for performing risk assessment, informing and reporting on any major changes, monitoring all categories of risks and reviewing the efficiency of the Bank's risk management framework. It is also responsible for drafting risk management policies and procedures, developing risk management techniques, and coordinating the anticipation, identification, measurement, monitoring, control and reporting of various risks which the Bank is exposed to. It is in charge of the management, review and supervision of all entities regarding risk management.

The **Legal and Compliance Department** is an independent function with the objective of anticipating, identifying and evaluating the compliance risks within the Bank. It organizes, coordinates and structures compliance-related centralized controls, as well as controls and monitors all measures taken to manage the compliance risks, reporting accordingly to Authorized Management and the Board of Directors, as appropriate, and acts as an adviser in compliance matters within the Bank.

The Chief Compliance Officer ("CCO") has direct access to the Chairman of the Board or the members of the Audit / Compliance Committees (if applicable) as well as to the CSSF, when necessary. The CCO's responsibilities are detailed in CCO job description. The CCO is the contact person with regard to the competent authorities in matters relating to compliance, including AML and the prevention of terrorist financing, and market abuse. The CCO is responsible for the transmission of information or declarations to these authorities.

<u>Third-line-of defence</u>

Internal Audit Department is an independent, objective supervision and evaluation activity which helps the organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate the adequacy and effectiveness of risk management and internal control.

The internal audit function reviews and assesses whether central administration and internal governance arrangements are adequate and operate effectively, as set out in the Internal Audit Charter approved by the Board of Directors, including the efficiency and effectiveness of internal controls, sthe afeguarding of securities and assets, the adequacy of the segregation of duties and the execution of transactions, as well as the adequacy of the risk and capital management.

The Internal Auditor reports functionally to the Audit Committee and the Board, administratively to the AM and is under the supervision of the Parent Bank's internal audit department.

4.1.5. Risk Reporting

The risk situation of the Bank is communicated via a comprehensive reporting system to the Management and other relevant persons and any significant events or material risks are escalated to the Board of Directors.

Reporting to the management includes:

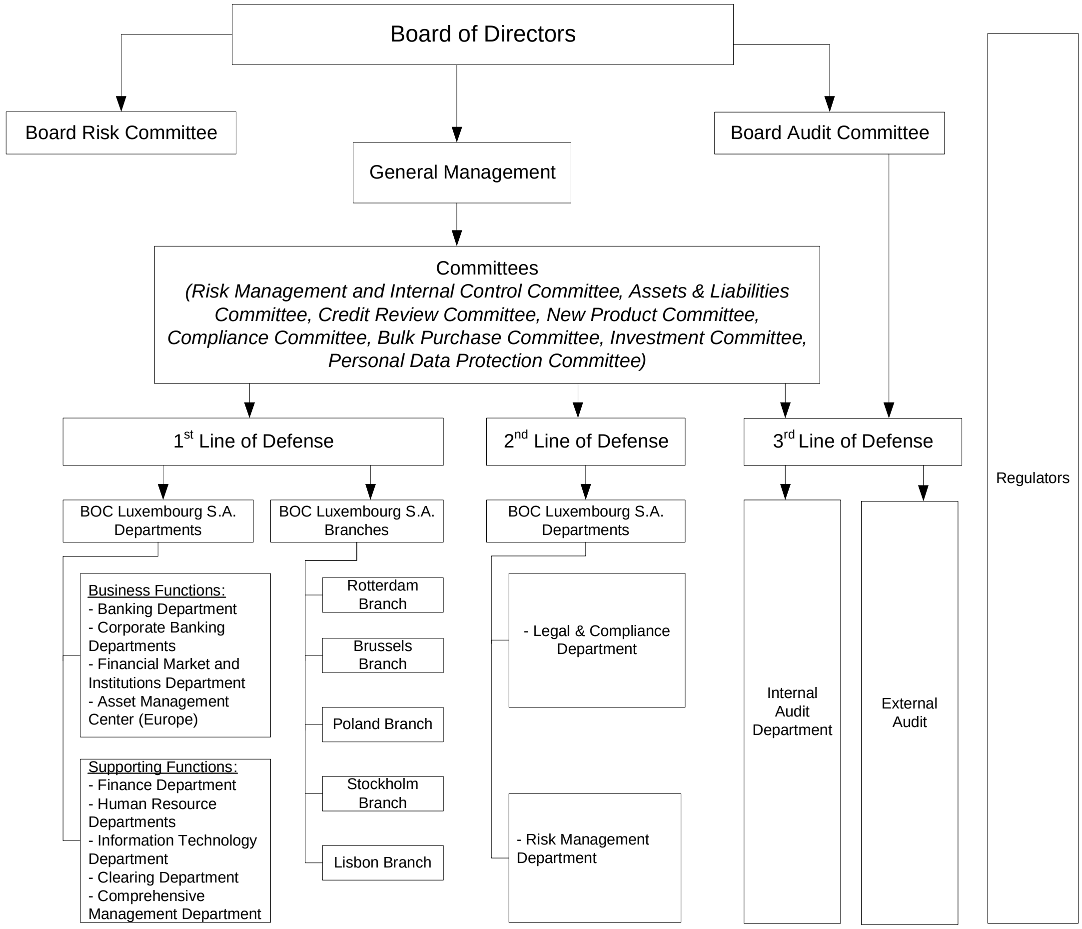
- Risk management report;
- Compliance report;
- Internal audit report;
- Common reporting (COREP) and Large Exposures reports;

4.2. Risk Management Strategy and framework

The Bank's Risk Management Policy ensures the implementation of an effective risk management framework and internal control environment, which is in line with the Bank's risk strategy and risk appetite. In doing so, it follows Luxembourg laws and regulations, Head Office procedures and guidelines, as well as standards adopted by other financial peers.

Risk Management is an integral part of the management function in the organization. It has the vocation to evaluate the Bank's risk profile, to set up appropriate internal controls and to monitor the effectiveness of these controls. The aim is to ensure that the risk management is embedded in the Bank's processes and culture, thus contributing to the achievement of the Bank's core objectives. This process is supplemented with a review by the BOD, AM and RMICC.

Table 4.2.1: Risk Management Framework



Sources: Three lines of defence assessment 2018

4.2.1. Risk identification and Quantification

The Bank assesses its material risks and non material risks by taking into consideration of the size and complexity of the Bank's business. See more details in section 4.3.

The quantification of the risks is through the standardised method defined in the CRR. Moreover, the Bank performs various stress tests to assess the financial viability and the adequacy of capital and liquidity.

4.2.2. Risk appetite approach

The Bank's Risk Appetite Statement defines the aggregate level of all types of risks, which the Bank is willing to take to achieve its strategic objectives and business plan. Driven by risk strategy, the Bank has assessed its material risks and set up an overall approach for its risk appetite.

Risk appetite is typically expressed in risk measures (value at risk), nominal measures (e.g. amount of credit outstanding) or outcomes (capital level).

At the Bank's level, we developed a comprehensive set of KRIs and high-level tolerances for all risk categories, so as to closely monitor the risk appetite. The BOD and AM review and approve both risk appetite and the tolerance for selected KPIs. The branches have been assigned separate credit risk, market risk and operational risk indicators.

4.2.3. Stress and Scenario Testing

In accordance with the Circular CSSF 11/506, the Bank performs stress tests covering all material risks exposed. With the validation of AM, we performed a scope analysis on stress tests, elaborated the stress test method and integrated the results into Pillar 2 capital requirement considerations.

The AM is regularly informed on the stress test results and decides on corrective measures. In 2018, a set of stress tests were performed on:

- Liquidity Risk
- Interest rate Risk on Banking book
- Interest rate Risk on Investment portfolio
- Concentration Risk
- Counterparty Credit Risk
- Operational Risk

4.3. Relevant Risk Type

4.3.1. Credit risk

4.3.1.1. Credit risk identification

On-balance-sheet credit risk

Credit risk is defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms, including the counterparty credit risk, concentration credit risk and country credit risk. Credit risk exists in all activities where success depends on counterparty, issuer or borrower performance. The Bank's credit risk can be found in the traditional lending activities (both on the balance sheet and off the balance sheet), and in financial market activities where a money market or derivatives contract is concluded. More widely, credit risk can be accentuated by the concentration factor and by country risk. Among the risks the Bank takes in the normal course of business, credit risk is the most important and generates the largest regulatory capital requirement.

Off-balance-sheet credit risk

As at 31st December 2018, the Bank's off-balance-sheet exposure consisted of:

- Undrawn loan commitments (EUR 614.56 million)
- Guarantee letters issued (EUR 222.59 million)
- Other commitments related to the office lease of Luxembourg premises and the five branche offices (EUR 16.11 million)

4.3.1.2. Credit risk exposure

Exposures to Credit Institutions and Customers

Total loans and receivables grew by 6.89% in 2018 to €4,853.29 million (2017: €4,540.46. million), in which loans and advances to credit institutions decreased by 6.82% and loans and advances to customers increased by 13.61%.

Table 4.3.1 Breakdown of Loans and receivables as at 31st December 2018

	2018	% to Total	2017	Diff in Two Years	Diff % in Two Years
Loan and advance to credit institution	**1,391,243,563.07**	***28.67%***	**1,493,142,659.76**	**(101,899,096.69)**	**-6.82%**
Group	**1,235,528,554.81**	**25.46%**	**1,129,772,849.84**	**105,755,704.97**	**9.36%**
Entity Mainland China	***25,969.49***	***0.00%***	***42,408.30***	***(16,438.81)***	***-38.76%***
A. Trade Finance	-	0.00%	-	-	
A.1 Interest accrued on trade Finance	-	*0.00%*	-	-	
B. Non Trade Finance	25,969.49	0.00%	42,408.30	(16,438.81)	-38.76%
B.1 Interest accrued	-	*0.00%*	-	-	
Entity Outside of Mainland China	***1,235,502,585.32***	***25.46%***	***1,129,730,441.54***	***105,772,143.78***	***9.36%***
C. Bank of China Luxembourg Branch	1,221,927,715.34	25.18%	1,064,686,333.72	157,241,381.62	14.77%
C.1 Interest accrued	*32,732.07*	*0.00%*	*671,978.60*	*(639,246.53)*	*-95.13%*
D. Bank of China rest of the world	13,574,869.98	0.28%	65,044,107.82	(51,469,237.84)	-79.13%
NON Group	**155,715,008.26**	**3.21%**	**363,369,809.92**	**(207,654,801.66)**	**-57.15%**
E.Exposure to the Central Banks	133,997,476.71	2.76%	326,932,463.01	(192,934,986.30)	-59.01%
F.Exposure on Credit Instituion Outside of Group (Nostro)	21,717,531.55	0.45%	36,437,346.91	(14,719,815.36)	-40.40%
G.Exposure on Credit Institution Outside of Group	-	0.00%	-		
Loan and advance to customer	**3,462,041,498.41**	***71.33%***	**3,047,314,546.01**	**414,726,952.40**	**13.61%**
H.Loans to corporates	3,458,575,840.86	71.26%	3,043,440,070.04	415,135,770.82	13.64%
H.1 Interest accrued on loans	*10,581,525.42*	*0.22%*	*9,305,446.47*	*1,276,078.95*	*13.71%*
I. Loan to personals	3,465,657.55	0.07%	3,874,475.97	(408,818.42)	-10.55%
I.1 Interest accrued on retail loans	*2,114.61*	*0.00%*	*7,173.28*	*(5,058.67)*	*-70.52%*
Total	**4,853,285,061.48**	***100.00%***	**4,540,457,205.77**	**312,827,855.71**	**6.89%**

Customer Exposures by Geographic Area

The table below shows the total exposure expressed in terms of credit assets broken down by geographic area as at 31st December 2018. The majority of the loans are concentrated in Europe (77.28% of total outstanding loan balance), while the Mainland China and Hong Kong portion has decreased to 19% of total customer exposures. The Bank's credit activities are more and more oriented towards European clients.

Table 4.3.2 Customer Exposures breakdown as per Geographic Region

(€million)	12/31/2018	% to Total
China & Europe	**3,329.84**	**96.28%**
China	657.20	19.00%
Europe	2,672.65	77.28%
Africa	**21.68**	**0.63%**
Asia	**28.89**	**0.84%**
North America	**65.62**	**1.90%**
South America	**12.54**	**0.36%**
Grand Total	**3,458.58**	**100.00%**

Sources: Key Risk Exposure_ Credit Risk

Customer Exposures by Economic Sector

A refinement of industry classification was conducted in 2018, in close collaboration with H.O. *Retail Trade*, a subcategory of the *Selective Increase* category, occupied the first place in loan volumes (11.50%), followed by *Real Estate* (8.81%) and *Motor Vehicle Manufacturing* (8.20%). The RMD strictly implemented control requirements of the H.O. for overcapacity industries, sent the "Notice on Enhancing Risk Management" of *Industries with Severe Overcapacity* to the entire bank, and formulated rules and regulations to define specific industry control measures and types of business to be avoided. The diversification of the portfolio is monitored quarterly and risk limits have been set up defining the maximum exposure to a given industry (See detail in section 3.4.3 Concentration Risk).

Table 4.3.3 Customer Exposures breakdown as per Economic sector

(€million)	12/31/2018	% to Total
Active increase	**562.16**	**16.25%**
Fuel Gas Generation and Distribution	79.68	2.30%
Internet and Related Services	72.56	2.10%
Pharmaceutical and Medicine Manufacturing	168.35	4.87%
Specialty Equipment Manufacturing	0.88	0.03%
Telecommunications, Broadcasting and Satellite	168.36	4.87%
Water Production and Distribution	55.14	1.59%
Water Transportation	17.18	0.50%
Selective increase	**2,193.63**	**63.43%**
Accommodation	69.63	2.01%
Air Transportation	102.07	2.95%
Alcohol, Beverage and Refined Tea Manufacturing	44.63	1.29%
Business Service	118.20	3.42%
Capital Market Services	19.93	0.58%
Chemical Raw Material and Chemical Product	110.87	3.21%
Civil Engineering Construction	74.42	2.15%
Construction	19.02	0.55%
Ecology Protection and Environment Management	29.93	0.87%

Electrical Equipment and Appliance Manufacturing	107.19	3.10%
Food Manufacturing	24.65	0.71%
Food Services	10.07	0.29%
General Equipment Manufacturing	12.02	0.35%
Hygiene Services	40.88	1.18%
Monetary and Financial Services	13.80	0.40%
Motor Vehicle Manufacturing	283.57	8.20%
Other Finance	36.22	1.05%
Petroleum Processing, Coking and Nuclear Fuel Processing	99.99	2.89%
Professional Technology Services	20.01	0.58%
Real Estate	304.71	8.81%
Rental and Leasing Services	176.65	5.11%
Research and Experiment Development	57.20	1.65%
Retail Trade	397.80	11.50%
Software and Information Technology Services	20.16	0.58%
Prudent support	**702.79**	**20.32%**
Air Transportation	26.35	0.76%
Culture and Education, Art and Craft, Sporting, Entertainment Goods Manufacturing	18.02	0.52%
Electric and Heating Power Generation and Distribution	108.71	3.14%
Leather, Fur, Feather, Allied Product and Footwear Manufacturing	6.92	0.20%
Non-Ferrous Metal Ore Mining	15.02	0.43%
Other Manufacturing	73.21	2.12%
Paper and Paper Product Manufacturing	64.55	1.87%
Road Transportation	2.46	0.07%
Rubber and Plastic Product Manufacturing	8.01	0.23%
Textile Mills	34.16	0.99%
Water Transportation	167.53	4.84%
Wholesale Trade	177.87	5.14%
Grand Total	**3,458.58**	**100.00%**

Customer Exposures by Residual Maturity

The table below shows the total exposure broken down by residual maturity as at 31st December 2018. The proportion of tenor in Middle and Long Term exposures increased due to development of longer term loans to the local market (bilateral and syndicated loans), as well as a downtrend in trade finance which is typically shorter term.

Table 4.3.4 Customer Exposures breakdown as per Residual Maturity

(€million)	12/31/2018	% to Total
<1Y	841.29	24.32%
>1Y	2,617.28	75.68%
1-3Y	588.22	17.01%
3-5Y	1,217.94	35.21%

>5Y	811.13	23.45%
Grand Total	**3,458.58**	**100.00%**

Sources: Key Risk Exposure_ Credit Risk

4.3.1.3. Credit risk mitigation

In order to mitigate credit risk, various tools are implemented in the Bank: the third-party guarantee on the one hand, and mortgages and other pledges on the other.

As an important part of credit risk management, the management of mortgage and pledges permeates the whole credit process, including pre-lending collateral survey, valuation and review, in-process contract signing, collateral examination, execution of legal formalities and collateral insurance, as well as post-lending collateral handover, safekeeping, inspection and verification, value monitoring and reappraisal, risk information processing, collateral change and unfreezing, collateral disposal, etc.

In addition, a set of credit risk limits was established as a function of country, client rating, industry and tenor, in order to mitigate concentration risk. The off-balance-sheet credit risk is subject to regular review and monitoring.

Table 4.3.5 EU CR3 CRM techniques- Overview

		a	b	c	d	e
		Exposures unsecured - Carrying amount	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total loans	4,705,879,741	1,292,893,844	423,661,208	869,232,635	0
2	Total debt securities	0	0	0	0	0
3	**Total exposures**	4,705,879,741	1,292,893,844	423,661,208	869,232,635	0
4	Of which defaulted	0	0	0	0	0

source: corep C07

4.3.1.4. Standardised approach

The Bank uses the standardised approach for credit risk to determine its minimum capital requirement in accordance with the CRR. The standardised approach provides weighted risk figures based on external ratings given by External Credit Assessment Institutions (ECAI's) as indicated in the CRR. In order to apply the standardised approach for risk weighted exposure, the Bank uses external ratings assigned by the following rating agencies: Standard & Poor, Moody and Fitch.

The rating used for regulatory capital calculation is the lowest amongst the three ratings. If no external rating is available, the standardised approach provides specific risk weights defined by the regulator.

Table 4.3.6 Credit rating agencies and credit quality step under the standardised approach

Standard & Poor's	Moody's	Regulatory credit quality step
AAA to AA-	Aaa to Aa3	1
A+ to A-	A1 to A3	2
BBB+ to BBB-	Baa1 to Baa3	3
BB+ to BB-	Ba1 to ba3	4
B+ to B-	B1 to B3	5
CCC+ and below	Caa and below	6

Risk weights are mainly determined in relation to the credit quality step and the exposure class.

The following table shows credit risk exposure before credit conversion factor (CCF) and credit risk mitigation (CRM) and the exposure-at-default (EAD) broken down by exposure classes and split into on- and off-balance sheet exposures under the standardised approach.

Table 4.3.7 EU CR4 Standardised approach - credit risk exposure and credit risk mitigation (CRM) effects

		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
	Asset classes	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Cff-balance sheet amount	RWA	RWA density
1	Central governments or central banks	419,706,681		419,706,681		0	0
2	Insitutions	1,257,246,086	55,275,564	2,127,132,999	55,275,564	623,067,116	29%
3	Corporates	3,038,365,528	796,808,819	2,169,132,893	489,924,111	2,723,637,765	102%
4	Retail	669,040		14,762		11,072	75%
5	Secured by mortgages on immovable property	423,006,931		423,006,931		211,083,973	50%
6	Other assets	7,694,937		7,694,937		7,110,175	92%
7	**Total**	**5,146,689,203**	**852,084,382**	**5,146,689,203**	**545,199,674**	**3,564,910,101**	**63%**

source: corep C07

In the application of Article 444(e), the following table shows the exposure-at-default post conversion factor and risk mitigation broken down by exposure classes and risk weights, under the standardised approach.

Table 4.3.8 EU CR5 – Standardised approach

Exposure classes	Risk weight							Total	Of which unrated
	0%	20%	35%	50%	75%	100%	150%		
Central governments or central banks	419,706,681							419,706,681	0
Institutions		1,312,521,650						1,312,521,650	0
Corporates						3,696,458,488	138,715,859	3,835,174,346	2,500,612,743
Retail					669,040			669,040	11,072
Secured by mortgages on immovable property			2,796,618	420,210,313				423,006,931	211,083,973
Equity								0	
Other assets	584,762					7,110,175		7,694,937	7,110,175
Total	**420,291,442**	**1,312,521,650**	**2,796,618**	**420,210,313**	**669,040**	**3,703,568,663**	**138,715,859**	**5,998,773,585**	**2,718,817,963**

4.3.1.1. Impairment, forbearance exposure and non-performing loans

Definition of Default

A default is defined as a debtor not meeting its legal obligations according to the debt contract.

The Bank has a granular risk classification on its assets taking into account specific characteristics. The five loan quality categories are:

- Performing
- Special Mention
- Substandard
- Doubtful
- Loss

The “performing” and “special mention” categories are considered as non-impaired loans, while the “substandard”, “doubtful” and “loss” categories are classified as nonperforming loans (NPL), for which impairment should be recognized.

“Past due” loan: A “past due” loan is a loan for which contractual payments are not being made in time. Loans are placed in non-accrual status when they become 90 days past due.

Expected Credit Loss (ECL) under IFRS9 standard

In July 2014, the International Accounting Standards Board (IASB) modified impairment requirements related to the accounting of expected credit losses of an entity's financial assets and commitments. This new accounting standard for credits is called “International Financial Reporting Standard 9 Financial Instruments” (IFRS 9). The new requirements eliminate the IAS 39 threshold for the recognition of credit losses. Under the impairment approach of IFRS 9, it is no longer necessary for a credit event to have occurred for credit losses to be recognised. Instead, an entity always accounts for expected credit losses. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition; consequently, more timely information is provided about expected credit losses.

- IFRS 9 implementation

As per Commission Regulation (EU) 2016/2067 of 22 November 2016, the Bank implemented the new accounting standard IFRS 9 Financial Instruments, replacing IAS 39 from the commencement date of the first financial year starting on 1st January 2018. The full deployment was centrally managed program by H.O. from early October 2017 which consisted of system testing and data parallel run. The methodology, data sourcing and modelling, IT processing and reporting were overseen by H.O. Overall governance of the implementation was accompanied by an expert team from H.O.’s and the Bank’s designated work group. Guidance and training of IFRS 9 was delivered across all businesses and functions. Specific process and business controls relating to this new framework continued throug 2018. Governance of the Expected Credit Loss (ECL) calculation analysis is shared between Finance and Risk management departments. The Bank has implemented the new requirements successfully and smoothly.

- ECL recognition

At 31st December 2018, the total on- & off-balance amount of ECL (SA Consolidated) was € 20.87 million, of which €19.85 million (95.12%) for corporate loan reserves on the balance sheet, together with € 794.12 thousand (3.81%) for corporate loan commitment reserve off the balance sheet.

Forborne exposure and non-performing loans

- Forborne exposures

Forborne exposures are debt contracts in respect of which forbearance measures have been extended. Forbearance measures consist of concessions towards a debtor facing or about to face difficulties in meeting their financial commitments. Those measures include in particular the granting of extensions, postponements, renewals or changes in credit terms and conditions, including the repayment plan.

Once certain forbearance criteria are met, the credit files are re-classified as restructured loans and are added to a forbearance list closely followed by RMD. In order to comply with the regulatory standard, the Bank has set up a special committee called the Asset Disposal Committee which (i) identifies the criteria leading to the forborne classification including updating client's rating, (ii) deploys a strategy for changing loan terms and conditions, such as determine the new repayment interest rate and extension period, (iii) promotes the regulation and compliance of asset disposal and write-offs.

As at end of 2018, the Bank's forborne exposures amounted to EUR31.67 million.

- Non-performing exposures

According to EBA definition, non-performing exposures correspond to the loan in default, or overdue period > 90 days.
As at end of 2018, the Bank had no non-performing exposures.

4.3.2. Market Risk

Identification

Market risk is the risk of an adverse changes in market price (interest rate, exchange rate, stock price and commodity price), which cause loss to a bank's on- and off-balance-sheet businesses. According to the New Basel Capital Accord, market risk under the first pillar includes interest rate risk and stock price risk in the trading book, as well as the exchange rate risk and commodity price risk faced by a bank. Market risk is directly linked to a bank's regulatory capital for market risk. Market risk under the second pillar includes interest rate risk in the banking book, and mainly refers to the negative impact caused by interest rate changes on a bank's net interest income or on the value of its equity.

Market risk management covers the market risk under the first pillar and the second pillar.

In the Bank, the market risk exists mainly in the area of Interest Rate Risk in the Banking Book (hereafter "IRRBB") risk and exchange rate risk. However, the equity, fixed income and commodity price fluctuation and liquidity shortfall may have an interaction with the Bank's market risk.

Regarding exchange rate risk management, a clear coordination and division of responsibility among Front Office, Middle Office and Back Office is in place. An overall FX risk limit on the Banking Book and on the Trading Book was set up.

In the aspect of interest rate risk management in the Banking Book, the Bank has established a new internal governance and stress test pursuant the CSSF circular 16/642. The overall market risk limits and tolerances are set out and validated by the BOD. Specific risk limits are set up separately for banking and trading[4] functions. Any breach of limits are reported and managed promptly. In case of limit breaching, the involved departments provide reporting that explain the cause of the breach and suggest remedial actions to both the AM and to the RMD.

[4] The trading function refers to the trading activities on behalf of client.

Furthermore, a set of market risk management tools is in place to effectively measure and mitigate market risk. The IRRBB is measured by the ratio of Economic Value of Equity versus Own Funds. The exchange rate risk is calibrated by the foreign exposure limit. Market risk measurement tools such as VAR5 and PVBP6 were implemented and the results are monitored daily against internal limits. In conclusion, the market risk management framework in place allows the Bank to prepare and anticipate remedial actions in case of adverse market movements.

Mitigation

In the aspect of exchange rate risk management, a clear coordination and division of responsibility among Front Office, Middle Office and Back Office was set up, a series of higher-level requirements on the foreign exchange position are operational, and the whole risk management module of the bank for exchange rate risk is in place.

Regarding interest rate risk management, regular IRR monitoring and stress tests came into effect. The Bank has no trading activities (except for its HQLA bond portfolio to ensure a proper Liquidity Coverage Ratio). Therefore the interest rate risk on the trading book is not considered.

Aligned with the Bank's activities, a set of market risk management tools are in place. The IRRBB risk is measured by both Net Interest Income and Economic Value. The exchange rate risk is calibrated by the foreign exposure limit, the Daily VAR on trading book, and PVBP on both the investment portfolio and the trading book.

Measurement

The market risk is quantified (Art. 352 CRR) through Pillar I capital requirement assessment. A Pillar II capital allocation is also performed according to the result of IRRBB stress test as at 31st December 2018.

4.3.3. Operational Risk

Identification

Operational risk is the risk of loss resulting from inadequate or failed internal processes, staff and IT system, or from external events. It includes legal risk but excludes strategic and reputation risk. It is relevant to every aspect of the Bank's business and covers a wide spectrum of issues. Losses arising through fraud, unauthorized activities, errors, omission, inefficiency, systems failure or from external events all fall within the definition of operational risk.

Mitigation

In order to mitigate such risk at an acceptable level, a sound methodology is implemented. Based on an exhaustive inventory of the Bank's processes/activities, the inherent risk is calculated for each of these processes taking into account the potential impact of the specified activity and its likelihood of occurrence. In order to obtain the residual risk, a mitigation factor is calculated based on the quality of the controls in place (control design and effective implementation, systems supporting the activity,

[5] VAR: Value at Risk

[6] PVBP: Price Value of a Basis Point

documentation and human resources). If the residual risk (final result) is not acceptable, remediation/action plans have are initiated to reduce the identified risk to the required level. High residual risks are prioritized.

The Operational Risk Management framework was established using three tools: LDC, KRI and RACA. At the same time, the Bank monitors the operational risk alerts generated by the in-house operational risk system called G-map. Key risk models related to the main business line are monitored by the system. In case one of the models is triggered by an "abnormal transaction", an alert appears in the system. Investigations and supporting documents are required for each alert in order to exclude the operational risk factor.

In 2018, the Bank completed its annual RACA review which involved all sub-branches and 10 business lines. As at 31st December 2018 the Bank has monitored 56 risk indicators which are based on requirements from local regulations and H.O. The risk indicator dashboard reflects a more dynamic monitoring of various risk areas and offers an efficient overview to the management body the level of the risks. All system alerts were business exceptions with reasonable explanations. They had no impact of operational risk behind these transactions. 11 incidents occurred in 2018. The total loss caused by operational incidents amounted to € 18,167.

Measurement

The Bank adopted the Basic Indicator Approach to calculate the regulatory capital requirement. An internal capital assessment to cover the operational risk is described in ICAAP by means of scenario and stress test. The amount allowanced largely exceeded the actual operating loss.

4.3.4. Concentration Risk

Identification

Concentration risk refers to the losses an institution could suffer from a group of exposures or activities whose intrinsic value depends on a common set of risk factors. All approved borrowing limits are subject to credit analysis and assessment as set out in the Bank's lending policies and procedures and the large exposures policy.

Mitigation

The Bank is exposed to a concentration of risks due to the fact that a certain volume of business is conducted with few clients. The Bank monitors the concentration risk on a dynamic basis.

- *Credit Concentration Risk*

In 2018, the Bank, adhering to the moderate risk appetite, issued corporate credit portfolio management scheme to control concentration risk by monitoring the limit on Industry, Region, Term, Currency and Customer dimensions.
Moreover, the concentration risk is calibrated by large exposure scheme.

- *Liability Concentration Risk*

The Bank analyzed liability concentration risk. The funding source is mainly intergroup finance and corporate client deposit. Taking into consideration the diversification and number of the clients, the funding concentration risk is medium.

- *Operational Concentration Risk*

Operational risk concentration (OPRC) means any single operational risk exposure or group of operational risk exposures with the potential to produce losses large enough to worsen the Bank's overall risk profile so that its financial health or its ability to maintain its core business is threatened. It may not always be apparent that multiple risk factors are correlated as this may only be revealed under stressed market conditions.

- *Credit-Liquidity Concentration Risk*

Failure of material counterparties impairs the Bank's cash flow and its ability to meet commitments. Its liquidity management process (including compliance with the liquidity coverage ratio, the Bank's recovery plan, …) ensures that the Bank's cash flow will not suffer to the point where the institution cannot fulfil its obligations in terms of liquidity.

- *Credit-Market Concentration Risk*

Counterparties may be closely related, or identical, or where unsystematic or un-diversifiable risk (i.e. the part of the market risk which derives not from general price movements but from specific ones due to, for example, changes in the perception of the inherent credit risk of an issuer) may exist. We believe that this type of inter-risk concentration is unlikely to occur as we do not grant credit facilities in addition to investing in the equity of a company. We have strict exposure limits on our clients.
Lending in foreign currency to domestic borrowers is exposed to both market (FX rate) and credit risk. When the domestic currency depreciates, the value of the loan in the domestic currency increases which (by increasing the cost of instalments) may reduce the ability of borrowers to repay. Our portfolio is increasingly Euro denominated and therefore less subject to this type of risk.

- *Market-Liquidity Concentration Risk*

Interruptions, increased volatility, rapid changes in value or the drying up of markets for certain instruments may negatively affect the liquidity of a given institution. This risk is also considered in our preventive control framework at the Bank level and therefore does not require a capital allocation in addition to the capital already determined. The scenario of a combined market-liquidity risk occurrence is well considered in the Bank's recovery plan.

Another cause of market risk concentration is a change in the risk preference of market participants. Greater uncertainty about the economic outlook could lead to reluctance to buy risky positions. Risk premiums on all risky products will rise and their prices will fall. This increases the correlations between different asset classes. Some markets will possibly dry up completely because market participants are no longer willing to buy those products. The Bank, although holding a diversified portfolio, could theoretically suffer losses. The risk concentration caused by a change in the risk premium and the accompanying change in correlations ("correlation breakdown") is immaterial to the Bank as its activity is limited to low-risk countries.

Rise in risk premium could be one of the sources of an inter-risk concentration between market risk and liquidity risk. The Bank can generate less liquidity by selling assets because of the lower prices. It is possible that some assets cannot be sold at acceptable prices if the markets are illiquid as a consequence of market participants' risk aversion. The Bank has no authorization to sell the asset at discount price, if certain portfolio is about to exceed internal set limit, the Bank are normally sell assets to other sister branch within BOC group and therefore no premiums are therefore considered.

<u>Measurement</u>

The quantification of concentration risk is performed through stress test which is part of ICAAP process.

4.3.5. Liquidity Risk

Identification

Liquidity risk is a bank's capacity to fund increase in assets and meet both expected and unexpected cash and collateral obligations at a reasonable cost and without incurring unacceptable losses.
It also arises from the Bank's failure to recognize or address changes in market conditions that affect the ability to liquidate assets quickly and with minimal loss in value. Liquidity risk exposure is present in various funding situations, but primarily deposit and lending activities. Again, interest rate and market risks may have a close correlation to the Bank's liquidity position. This type of risk may affect the Bank's ability to establish new relationships or services or to continue servicing existing relationships. It can expose the Bank to litigation, financial loss, or damage to its reputation.

Mitigation

The Bank has purchased an asset portfolio on its own account to constantly respect the liquidity management requirement (HQLA buffer). The Bank's liquidity risk mainly comes from the liquidity funding (liability side) and has the following mitigation funding sources:

- Client deposits ;
- BOC group interbank lending (money market tool);
- Bond issuance (capital market tool).

Measurement

As at 31st December 2018, the LCR stands as follows:

Table 4.3.9 LCR

		a	b
		Total unweighted value (average)	Total weighted value (average)
High-quality liquid assets			
1	Total HQLA		**386,454,619**
Cash outflows			
2	**Retail deposits and deposits from small business customers, of which:**	**50,784,344**	**7,938,748**
3	Stable deposits	0	0
4	Less stable deposits	50,784,344	7,938,748
5	**Unsecured wholesale funding, of which:**	**1,300,853,415**	**913,045,325**
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	0	0
7	Non-operational deposits (all counterparties)	1,293,890,937	908,057,443
8	Unsecured debt	6,962,478	4,987,881
9	**Secured wholesale funding**	**0**	**0**
10	**Additional requirements, of which:**	**613,772,555**	**120,066,510**
11	Outflows related to derivative exposures and other collateral requirements	3,139	3,139
12	Outflows related to loss of funding on debt products	0	0
13	Credit and liquidity facilities	613,769,416	120,063,371
14	**Other contractual funding obligations**		
15	**Other contingent funding obligations**	222,855,633	0
16	**TOTAL CASH OUTFLOWS**	**2,188,265,946**	**1,041,050,583**
Cash inflows			
17	**Secured lending (eg reverse repos)**	**0**	**0**
18	**Inflows from fully performing exposures**	**976,734,861**	**952,843,055**
19	Other cash inflows	0	0
20	**TOTAL CASH INFLOWS**	**976,734,861**	**780,787,937**
			Total adjusted value
21	**Total HQLA**		**386,454,619**
22	**Total net cash outflows**		**260,262,646**
23	**Liquidity Coverage Ratio (%)**		**148.49%**

The LCR of 148.49% is significantly above the 100% of regulatory requirements.

4.3.6. Interest risk in the Banking Book

Identification

Interest Rate Risk means the risk of losses to the Bank in terms of the net interest income and economic value due to the change of interest rates. At this stage, the Bank only has interest rate risk in the banking book. Defined in IRRBB Policy, the sources of Interest Rate Risk include the repricing risk, yield curve risk, basis risk and option risk. Following the EBA Guideline GL/2015/08 transposed in Luxembourg via update of CSSF circular 12/552 and 16/642, the Bank has significantly enhanced the internal governance of IRRBB management. A new stress test framework was also adopted taken into account the size, complexity and business model of the Bank.

According to the business activities of the bank, the Bank identifies the IRRBB mainly from gap risk and measures it through regulatory stress scenarios (standard shock).

Mitigation

The Bank categorizes its interest-sensitive assets and liabilities into a series of repricing time bands resulting in a maturity/reprising schedule gap forming the basis of the calculation. Separate maturity ladders are used for each material currency[7].

Table 4.3.10 Behavioural parameter of NMDs

	Fixed proportion Core deposits	Average Maturity / Cash flow slotting Core deposit
Retail Deposits	80%	4 Years
Wholesale deposits	50%	4 Years

The net interest income actualized with the zero coupon rate constitutes the estimated economic value fluctuation. The estimated economic value fluctuation under the two standard shocks versus own fund should not exceed 20%. An internal early warning level of 15% was defined.

Measurement

Table 4.3.11 stress test as at 31st December 2018

Interest rate stress test scenario		Result	
Direction	Shock	Economic value of Equity movement	Ratio
Increased by	200 bps	47,111,128	8.44%
Decreased by	200 bps	- 16,821,424	-3.01%

Table 4.3.12 IRRBB1 - Quantitative information on IRRBB

In reporting currency	ΔEVE		ΔNII	
Period	**2018.12**	**2018.06**	**2018.12**	**2018.06**
Parallel up	10.95%	-7.56%	13.27%	11.86%
Parallel down	-3.91%	-2.12%	-13.27%	-11.86%
Steepener	-0.13%	-0.28%		
Flattener	-0.14%	0.29%		
Short rate up	1.51%	1.22%		
Short rate down	-1.57%	0.33%		
Maximum	10.95%	-7.56%		
Period	2018		2018	
Tier 1 capital	451.742 million		451.742 million	

Sources: IRRBB stress test

4.3.7. Counterparty Credit Risk

Identification

Counterparty credit risk (hereafter "CCR") means the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flow.

CCR exists in the Bank's OTC derivatives transactions, such as interest rate swap, foreign exchange swaps, interest rate options, etc.

[7] Material currencies are defined currencies which represent more than 5% of total assets or liabilities.

As at 31st December, the Bank's counterparty exposure consists of three OTC derivatives – 2 Cap Interest Rate Option with a real estate developer and 1 FX forward with a commercial company. The OTC derivatives contracts are entered into for hedging purposes. The Bank has assessed the general wrong-way risk and specific-wrong way risk and concluded that the Bank do not expose to such risk exist due to our limited product range.

Mitigation

The selling of the option is an attached product with the loan granted to this client. The Bank does a back-to-back operation with the Head Office of Beijing.

The FX forward was dealt against a total amount of cash pledge. As a consequence, the risk exposure on this product is very limited. The Bank has also defined in its internal policy that only a cash deposit blocked in a margin account is acceptable as collateral for the OTC derivatives business.

Measurement

In order to determine exposure value, the Bank has decided to apply the original exposure method with option of original maturity as per article 275 of CRR.

In the application of Article 439(f) in CRR, the following table shows the methods used for calculating the regulatory requirements for CCR exposure including the main parameters for each method.

Table 4.3.13 EU CCR1 - Analysis of CCR exposure by approach

		a	b	c	d	e	f	g
		Notional	Replacement cost/current market value	Potenstial future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market							
2	Original exposure	15,948,056.62					4,189,611.31	4,189,611.31
3	Standardised approach							
4	IMM (for derivatives and SFTs)							
5	*Of chich securities financing transactions*							
6	*Of which derivatives and long settlement transactions*							
7	*Of which from contracual cross-product netting*							
8	Financial collateral simple method (for SFTs)							
9	Financial collateral comprehensive method (for SFTs)							
10	VaR for SFTs							
11	Total							4,189,611.31

Pursuant to Article 444 (e) in the CRR, the following table provides the counterparty credit risk exposures under the standardised approach, broken down by risk weights and regulatory exposure classes. “Unrated” includes all exposures for which a credit assessment by a nominated ECAI is not available, and they therefore receive the standard risk weight according to their exposure classes as described in CRR.

Table 4.3.14 EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk

	CCR3 - Standardised approach of CCR exposures by regulatory portfolio and risk weights										
		Risk weight								Total	Of which unrated
	Exposure classes	0%	10%	20%	50%	75%	100%	150%	Others		
1	Central governements or central banks										
2	Institutuions			14,698,057						14,698,057	14,698,057
3	Corporates						1,250,000			1,250,000	1,250,000
4	Retail										
5	Instituions and corporates with a short-term credit assessment										
6	Other items										
	Total	**0**	**0**	**14,698,057**	**0**	**0**	**1,250,000**	**0**	**0**	**15,948,057**	**15,948,057**

4.3.8. Encumbered Assets

According to the provision of the Guidelines, an asset should be considered as encumbered if it has been pledged or if it is subject to any form of arrangement to secure, collateralize or credit-enhance any on-balance-sheet or off-balance-sheet transaction from which it cannot be freely withdrawn (for instance, to be pledged for funding purposes).

The Bank has assessed one type of encumbered asset as at 31st December 2018: Central bank reserves which are part of the Bank's own funds cannot be withdrawn in time of stress. The amount reached 33.83 million EUR at year end.

Table 4.3.15 Encumbrance asset as at 31st December 2018 (in EUR)

Carrying amount of encumbered assets		
Total amount of encumbered assets	**of which: issued by other entities of the group**	**of which: central bank's eligible**
33,836,824		33,836,824

4.3.9. Business/Strategy Risk

Identification

Business/Strategic risk results from adverse business decisions or the improper implementation of those decisions. This risk is a function of the compatibility of an organization's strategic goals, the business strategies developed to achieve those goals, the resources deployed to support achievement of those goals, and the quality of implementation. Strategic risk includes the misalignment of business and technology strategic plans, the failure to achieve economies of scale in scale-driven businesses or improper market positioning and pricing of products and services.

Properly managing these risks is not only critical to the conduct of safe and sound banking activities, but also crucial to the success of the Bank.

Mitigation

The overall business strategy is defined by HO Beijing and readjusted each year. However, the Bank has the ability to adapt and elaborate its own strategy by incorporating the specificity of the Bank's business profile and the local business environment features (e.g. commercial, legal, culture etc).

Management and monitoring of these risks are performed through various means across the Bank and the oversight of the BOD.

The business/strategy risk is managed through early identification of future business/product exposure and related implementation of risk mitigation tools. These processes are facilitated by the New Product Committee, which provides a dialogue platform for the various departments involved.

Measurement

Both business and strategy risks are subject to the internal capital assessment process. An additional amount is allocated to the capital requirement regarding these risks.

4.3.10. Reputational Risk

Identification

Reputation risk is the potential that negative publicity regarding an institution's business practices, whether true or not, will cause a decline in the customer base, costly litigation, or revenue reductions, often as a result of poor earnings, regulatory censure, significant fraud or litigation and failure to provide services or products in conformity to the local market. This type of risk is often closely linked to operational risk and would affect the Bank's ability to establish new relationships or services or to continue servicing existing relationships.

Mitigation

A regular assessment of reputational risk is performed, including collecting information on the reputational risk issues and the loss occurred, preventing future occurrence by improving the existing procedures and services.

Regarding a confirmed reputational issue, a complete evaluation is done by identifying the exact cause, the degree of impact (from 1- 5) on the following aspects:

1) Public image and market position;
2) External rating and share price (if applicable);
3) Legal and supervision;
4) Comprehensive management and procedure flow;
5) Enterprise culture and deontology.

The probability to transfer to other types of risk is also evaluated.

Measurement

The reputational risk is subject to the internal capital assessment. An additional amount is allocated to the capital requirement regarding this risk.

5. Remuneration Policy and Practices

5.1. Remuneration policy and practices - Key pillars

The Policy aims at regulating the remunerations of employees whose activity has a material impact on the risk profile of Bank of China (Luxembourg) S.A. and its activities, and adhering to the principle of effective risk management and sound business practices in line with the long-term interests of the Bank. The provisions set out hereinafter shall, in general, outline the principle of implementing sound remuneration practices, and shall, in particular, apply the performance criteria and assessment process as defined and annually revised by BANK OF CHINA HO. This current Policy was approved by the Board of Directors (BoD) and is effective within Bank of China (Luxembourg) S.A. To both reflect Bank of China (Luxembourg) S.A.'s core values and comply with the regulatory requirements in terms of remuneration policy and principle, the Policy was defined around the following pillars:

- Maintain a sound and effective risk management framework: The Policy and its associated practices aim at defining the remuneration within Bank of China (Luxembourg) S.A. with a view to protect the interests of Bank of China (Luxembourg) S.A.'s clients, providers, employees, shareholders as well as Bank of China (Luxembourg) S.A.'s financial sustainability in a long-term perspective. The Policy is consistent with and promotes sound and effective risk management, does not induce excessive risk-taking and is fully aligned with Bank of

China (Luxembourg) S.A.'s aim to efficiently manage conflicts of interests and promote best banking practices.

- Attract and retain talent with competitive remuneration packages: Client satisfaction and protection remain at the heart of the philosophy of Bank of China (Luxembourg) S.A. Bank of China (Luxembourg) S.A. wishes to attract, retain and motivate highly qualified professionals in their respective domains. Therefore, Bank of China (Luxembourg) S.A. offers remuneration packages that, while in line with market practices, are attractive and competitive, both in terms of amounts and structure. The remuneration components granted by Bank of China (Luxembourg) S.A. to its staff are regularly benchmarked through market studies performed by internal or external consultants, in order to verify the positioning of its remuneration packages in comparison to any given reference market. The remuneration analyses may be carried out at local or international level and aim to provide a benchmark of Bank of China (Luxembourg) S.A.'s position against comparable financial institutions. By decision of the BoD, *ad hoc* measures may be envisaged in certain entities of Bank of China (Luxembourg) S.A. when significant distortions are observed, with a view to enable Bank of China (Luxembourg) S.A. to attract the talent it needs and keep those already in position. Although remuneration must be kept attractive, it must respect the budgetary framework set by the BoD and not jeopardize the financial situation of Bank of China (Luxembourg) S.A..
- Link between performance and remuneration: Variable remuneration is part of the standard compensation package offered by Bank of China (Luxembourg) S.A.. To protect the interests of all stakeholders, variable remuneration must be aligned with short, mid and long-term collective and individual performance. Effective performance is therefore subject to strict assessment rules that primarily aim at preventing excessive risk-taking behaviour. More generally, Bank of China (Luxembourg) S.A. does not reward failure.
- Comply with the regulatory framework: The Policy complies with the requirements on remuneration policy and practices in the financial sector that has been defined by applicable rules and competent regulators, including the CSSF.
- Foster transparency: Transparency is a keystone of the Policy. Detailed information on the Policy's rules and practices is made available both internally and externally. It is essential for Bank of China (Luxembourg) S.A.'s employees to have clarity about the rules governing their remuneration and it is Bank of China (Luxembourg) S.A.'s responsibility to inform its staff members in a timely and appropriately way about any amendments which might affect them.
- Ensure group consistency: BANK OF CHINA (LUXEMBOURG) S.A. has established and maintained this Policy at Group level to ensure a group-wide consistency in its remuneration practices. In this context, the Policy is applied as such throughout all BANK OF CHINA (LUXEMBOURG) S.A. subsidiaries and branches in Luxembourg and in all other countries where Bank of China (Luxembourg) S.A. is present. The Boards of Directors of these entities are responsible for its implementation locally. Local adaptations are however at times introduced in order to (i) face local market demands or (ii) apply potentially more restrictive regulatory provisions imposed by the local regulators. Bank of China (Luxembourg) S.A. regularly carries out internal audits in entities in Luxembourg and abroad to verify the compliance by such entities with the Policy.

Designated Identified Staff ("Material Risk Takers")

According to the Delegated regulation (EU) No 604/2014, this Policy provides details on the remuneration of persons who fall within the scope, individually identified by Bank of China (Luxembourg) S.A. as "Material Risk Takers "and as further specified in Section 1.3 below.
The Policy refers, in particular, to the following Executive Members and Control Functions:

- Executive Members (3 persons):
  - General Manager/CEO (1 person)
  - Deputy General Manager (2 persons)

- Other Executive Members (5 persons):
  - Rotterdam Branch: General Manager (1 person)
  - Brussels Branch: General Manager (1 person)
  - Poland Branch: General Manager (1 person)
  - Stockholm Branch: General Manager (1 person)
  - Lisbon Branch: General Manager (1 person)

- Control Functions (3 persons):
  - Head of Risk Management – Chief Risk Officer (CRO) (1 person)
  - Head of Internal Audit – Chief Audit Officer (CAO) (1 person)
  - Head of Compliance – Chief Compliance Officer (CCO) (1 person)

The above roles delegate some functions to their direct subordinates. This delegation is very carefully made through proper approval procedure of the Bank.

5.2.Board of Directors

The Bank is headed by an effective Board of Directors which meets regularly, directs and controls the Bank. As at 31/12/2018, the BOD was composed of six board members including 2 non-executive Directors (one located in Luxembourg acting as a Chairman and one located in Beijing occupying a prominent position with Bank of China Limited), 3 independent non-executive members and the General Manager of the bank. It is the Bank's senior "governing body". Non- executive Directors who are not compensated through a variable remuneration for their role as Directors at the Bank and are therefore not subject to the specific requirements for variable remuneration applicable to staff whose professional activities have a material impact on the institution's risk profile (Material Risk Takers). During the year, a total of 4 Board of Directors' meetings were carried out, which deliberated on various topics with the consultation of Authorized Management and the internal control functions. The Remuneration Policy is adopted by the BOD. It will be reviewed on an annual basis by the Human Resource Department with the support of the control functions. Any update related to the strategy made to the Policy will be subject to the authorization of the BOD.
The Bank's BOD handles the following responsibilities:

- Defining the general principles of this Policy;
- Approving this Remuneration Policy;
- Ensuring the supervision of the implementation of this Policy;
- Reviewing this Policy as well as any future change made to it, as suggested by the Authorized Management accordingly within the applicable guidelines;

- Ensuring, on a regular basis, that the Bank has the appropriate remuneration procedures in place.
- There is no remuneration committee.

5.3.Authorized Management

The Authorized Management (conducting persons) of the Bank is responsible for the implementation of the present remuneration policy by:

- Taking all necessary measures for implementing the present Remuneration Policy and keep the present policy and the remuneration falling within its scope under review in the light of legislative, regulatory and market developments;
- Reporting as often as it deems necessary, but at least once a year, to the Board of Directors about the implementation of the present Remuneration Policy;
- Proposing for approval to the Board of Directors the global amount to be allocated to the increase of the fixed remuneration and to the variable remuneration (budgeting phase);
- Defining the people and the amounts of the discretionary salary increases once the global amounts are approved;
- Defining the people and the amounts for the discretionary bonuses once the global amounts are approved;
- Defining the people and the target amounts of the standard bonus in line with the approved budget.

5.4.Control Functions

In accordance with the provisions set out in the Circulars, all competent control functions are involved in the design, ongoing oversight of the Bank's remuneration policy, as well as conducting a yearly internal review of the Policy. The Policy is reviewed on an annual basis.

The Head of Chief Risk Officer is responsible for:

- Assessing whether the variable remuneration structure affects the risk profile of the Bank. The CRO will also determine the capital allocation associated with the Remuneration Policy and the annual ICAAP report.

The Chief Compliance Officer is responsible for:

- Assessing if the remuneration structure is compliant with legislation, regulations and internal policies.

The Chief Internal Auditor function is responsible for:

- Assessing the Remuneration Policy according to article 38-5 d) of the law of 23 July 2015.

5.5.Human Resource Function

The Policy is updated by Human Resource Department under the review of the Authorized Management to include any changes which would be introduced by the Board of Directors and by updating the appendices to the Remuneration Policy if necessary, the updated Policies then reported to and adopted by the Board of Directors. A copy of the Policy must be transmitted to the Chief Internal Auditor and can be consulted by the CSSF upon request.

Others

- Remuneration of the senior staff responsible for heading the control functions is available for the oversight of the Board of Directors.
- The remuneration structure of control functions personnel does not compromise their independence or create conflicts of interest in their advisory role to Board of Directors.
- Variable remuneration for control functions is therefore based on function-specific objectives and not determined directly by the Bank-wide performance criteria.

a) Disclosure of Remuneration strategy and procedure internally:

The Human Resource Department is in charge of disclosure of Remuneration strategy and procedure internally through the release of policy, website, statement etc., ensuring that:

- The member of staff concerned should know in advance the criteria that will be used to determine their remuneration;
- The information regarding the policy which is disclosed internally should reveal at least the details which are disclosed externally;
- Confidential quantitative aspects of the remuneration of staff members shall not be subject to internal disclosure;
- The information of Annex 2, regarding the remuneration policy and practices of the institution for those categories of staff whose professional activities have a material impact on its risk profile.

b) Disclosure of Remuneration strategy and procedure externally:

Disclosure of the Remuneration strategy and procedure is included in the Bank's financial statements. According to the article 450 of CRR and the proportionality aspect that applicable to Bank of China (Luxembourg) S.A. The following information is disclosed for Bank of China (Luxembourg) S.A.:

- information concerning the decision-making process used for determining the remuneration policy, as well as the number of meetings held by the main body overseeing remuneration during the financial year, including, if applicable, information about the composition and the mandate of the remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders;
- information on link between remuneration and performance;
- the most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria;
- the ratios between fixed and variable components of the remuneration set in accordance with Article 94(1)(g) of Directive 2013/36/EU;
- Information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based;
- The main parameters and rationale for any variable component scheme and any other non-cash benefits;
- Aggregate quantitative information on remuneration broken down by business area;

- Aggregate quantitative information on remuneration, broken down by senior management and members of staff whose actions have a material impact on the risk profile of the institution, indicating the following:
- The amounts of remuneration for the financial year split into fixed and variable remuneration, and the number of beneficiaries
- (i) The amounts and forms of variable remuneration, split into cash, shares, share-linked instruments and other types;
- (ii) The amounts of outstanding deferred remuneration split into vested and unvested portions;
- (iii)The amounts of deferred remuneration awarded during the financial year, paid out and reduced through performance adjustments.
- (iv) The bank does not offer any guaranteed payment.
- (v) The Bank does not offer any severance payment
- Upon demand from the Member State or competent authority, the total remuneration for each member of the management body or senior management.

c) With reference to the article 38-10 of the Law of 23 July 2015 and the article 450 of the CRR, the following information about individuals in the EUR 1 million pay brackets would be annually communicated to the CSSF: number of individuals, business area involved, and main elements of salary, bonus, long-term award and pension contribution. For the financial year 2018, the Bank has no individual staff whose remuneration equals to or has exceeded the amount of EUR 1 million.
Pursuant to the 38-11 of the Law of 23 July 2015, Bank of China (Luxembourg) S.A. will set out a statement on website and relevant means that will be maintained regularly to explain how the Bank complies with the requirements of articles 38-1 to 38-9 of the Law.

5.6. Variable Remuneration components

The Bank's employees are eligible for an annual variable remuneration, which is granted in accordance with the applicable performance criteria and assessment process. The assessment of performance is not only on the basis of the Bank's financial results, but also on other non-quantifiable factors, including but not limited to the staff's improvement that positively contributes to the long-term benefits of the Bank.
Employees engaged in control functions are remunerated in accordance with the achievements of the objectives linked to their functions, independent of the performance of the business areas they control. The remuneration of the senior officers in the risk management and compliance functions is available for the oversight of the Board of Directors.
Remunerations are linked to the Bank's business performance which is reflected through its overall key performance indicator. The score of the indicator is calculated by using a multi-year roll-over weighted formula fixed by the HO, ensuring that the assessment process is based on longer-term performance spreading over the business cycle.
Based on the score according to the indicator, remunerations are calculated using the formula and coefficients fixed by the HO, and revised on a yearly basis. Maximum limits (where applicable) on the percentage of A-rated individual performance are also set by HO according to the Bank's performance, while in line with the local policy, CSSF circular 15/622, the total amount of the variable remuneration

allocated to a person falling in the category of “Identified staff”, may not exceed maximum of 100% of the total fixed remunerations. For higher ratios, approval of the shareholders is required, but limited to a ratio of 200%. Any approval should be notified to the CSSF with standard templates as provided by circular CSSF 15/622.

The following indicative settings may apply to the maximum variable remuneration. The AM retains discretion to decide other settings which should be flagged to Board of Directors.

Position	Maximum variable remuneration(as % of the total remuneration)
Executive members	Up to 50%
Other Executive members	Up to 50%
Control functions	Up to 45%
Additional management personnel	Up to 50%
Staff	Up to 45%

The Bank's Key Performance Indicator（KPI）

The Bank’s KPIs for 2018 are based on the financial results, business development and risk management & compliance objectives.

Guaranteed Variable Remuneration (cash-based compensation)

The Bank does not offer guaranteed payments (e.g. material retention, exit and welcome packages). If this is used in exceptional circumstances, it will be subject to strict internal review and governance and allowed to the extent that risk alignment requirements are properly applied. Fixed component will need to represent a sufficiently high proportion of the total remuneration in line of education, degree of seniority, level of expertise and skills required. Variable remuneration should be based on performance achieved over time and decrease as a result of negative performance and can be reduced to zero as necessary. Welcome packages if used will be limited to the first year of employment.

Bonus Withholding

In cases where the performance criteria are not met by the individual concerned, or where business operation of the Bank deteriorates, the Bank shall reserve the rights to withhold remunerations, whether in whole or in part, as it sees fit.

Claw Back

The Bank also reserves the rights to demand full or partial repayment from the individual who has been awarded remunerations based on data which is subsequently found to be fraudulent.

Severance Pay

The Bank does not offer guaranteed retention or exit packages. In cases of early termination of a contract, the Bank will only make severance payments which are in accordance with the provisions of the applicable employment law and contract law. In addition any severance payment should reflect performance achieved over time and should not reward failure.

Other fixed Benefits to all staff

- Lunch vouchers;
- Birthday allowance;
- Festival allowance;

Non applicable benefits

- Stock option
- Company car
- Pension plan

Aggregate quantitative information on remuneration, broken down by senior management and members of staff whose actions have a material impact on the risk profile of the institution indicating the following:

The amounts of remuneration for the financial year 2018 split into fixed and variable remuneration and the number of beneficiaries.

Senior Management and Risk Takers	**Fixed Remuneration in EURO yearly**	**Total Variable Remuneration 2018 in EURO**	**No. of Beneficiaries**
Total	4,861,851.78	2,084,973.08	33

The amounts and forms of variable remuneration, split into cash, shares, share-linked instruments and other types

Total Variable Remuneration in 2018				
Senior Management and Risk Takers	**Cash (EUR)**	**Shares**	**Share-linked Instruments**	**Other types**
Total	2,084,973.08	0.00	0.00	0.00

The amounts of outstanding deferred remuneration split into vested and unvested portions

Senior Management and Risk Takers	**Outstanding Deferred Remuneration 2018 (EUR)**	**Vested Portions**
Total	981,218.31	0.00

Amounts of deferred remuneration awarded during the financial year 2018 in EUR

Senior Management and Risk Takers	**Paid Out (Deferred 2015+2016+2017)**	**Reduced**
Total	846,718.22	0.00

New sign-on and severance payments made during the financial year 2018, and the number of beneficiaries of such payments

Senior Management and Risk Takers	**New sign-on and severance payments**	**Number of beneficiaries**
Total	0.00	0

The amounts of severance payments awarded during the financial year, number of beneficiaries and highest such award to a single person

Senior Management and Risk Takers	**Amounts of severance payments awarded 2018**	**Number of beneficiaries**	**Highest such award to a single person**

Total	0.00	0	0.00

Based on the current version of the remuneration policy, we came to the opinion that no capital should be allocated to the risk associated with the remuneration of the Bank.