AXA Bank Belgium

Risk Disclosure Report 2020

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1 Introduction

The purpose of this Risk Disclosure report is to provide full transparency on AXA Bank Belgium's risk profile as required by the global regulatory framework for capital and liquidity, established by the Basel Committee on Banking Supervision, also known as Basel III. On European level these are implemented in the disclosure requirements as laid down in Part Eight of the "Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms" (Capital Requirements Regulation, or "CRR") and with the "Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" (Capital Requirements Directive 4, or "CRD4").

This report contains information on all subjects included in the directives, insofar as they apply to ABB:

- EBA Guidelines for Pillar 3 Disclosures (EBA/GL/2017/11)
- Disclosure of Own funds (EU No 1423/2013)
- Disclosure of Countercyclical buffer (EU No 2015/1555)
- Disclosure of Leverage ratio (EU No 2017/200)
- Disclosure of Encumbered assets (EBA/DR/2018/2295)
- Disclosure of Remuneration (2013/36/EU Art. 74(3) and 75(2)
- Disclosure on Liquidity (EBA/GL/2018/01)
- Guidelines on disclosure of non-performing and forborne exposures (EBA/GL/2018/10)
- Part Eight of the CRR

In addition, AXA Bank Belgium (ABB) is closely monitoring future disclosure requirements and will apply these requirements when they become applicable.

This 2020 risk report covers the period starting on 1 January 2020 and ending on 31 December 2020. Information is disclosed on a consolidated level. All amounts in the templates are expressed in thousands of Euros. Only relevant tables and templates are shown in this report and its annexes.

1.1 AXA Bank Belgium

The business model of ABB is structured around one core business line: retail banking in Belgium, transforming deposits into loans to retail customers and SMEs. ABB carved-out its intermediation activities during 2020, which predominantly provided derivatives to different entities within the AXA Group.

The retail banking activity of ABB is supported by:

- ALM & Treasury;
- Issuance of EMTNs by AXA Belgium Finance;
- Issuance of Covered bonds by SCF Europe Bank;
- Issuance of RMBS by Royal Street;

- Issuance of RMBS with Significant Risk Transfer (SRT) by CASPR.

On top of this conservative business model by design, ABB further safeguards the interests of its clients, shareholders and markets through prudent risk management policies:

- Its retail credit portfolio, which mainly consists of mortgage loans, shows a low risk profile;
- Its wholesale credit exposures are restricted to first class issuers and counterparties within a tight limit framework;
- Its market activities focus on hedging market risks emerging from its core business;
- Its liquidity risk is managed within conservative standards.

1.2 Diversity policy

AXA is committed to promoting Diversity and Inclusion (D&I) by creating a work environment where all employees are treated with dignity and respect and where individual differences are valued. AXA is committed to equal opportunity in all aspects of employment. We oppose all forms of unfair or unlawful discrimination and will not tolerate discrimination based on age, nationality, ethnic origin, gender, sexual orientation, gender identity or expression, religion, marital status, or disability. AXA is dedicated to cultivate a diverse and inclusive environment where all employees feel fully engaged and included in our business and strategy to become the "Preferred Company".

To ensure the AXA Group had the necessary infrastructure to deliver its D&I strategy, the AXA Group D&I Advisory Council (GDIAC) was set up in 2012. The aim was to involve leadership and gather support from key functions, leveraging talent and knowledge. D&I executive sponsors from several entities are members of GDIAC chaired by AXA Group CEO, Thomas Buberl – who is also the D&I executive sponsor. They meet three times a year to discuss entity best practices and overall progress.

As part of the D&I strategy roll-out, the D&I leads from each entity meet regularly to share good practices.

In June 2019, ABB's Board of Directors approved the banks' diversity policy. The aim of this policy is to ensure, over time, the maintenance of a gender-diverse Board of Directors. More specifically, ABB has set a target of minimum of 40% directors of each gender. Currently, the Board of Directors consists of 13 members of which 1 woman. The directors are appointed for 3 years, a period which is renewable. To achieve the 40% goal, at least one man and one woman will be selected in case a director's position becomes vacant. To do this, the Nomination Committee can count on the services of external advisors to assist in identifying candidates

who meet the criteria. Afterwards, it makes recommendations to the Board of Directors. The principles of ABB's diversity policy are in accordance with those of AXA Group as stipulated in its 2020 Annual Report.

1.3 Disclosure policy and validation

For purposes of Article 431 of the CRR, ABB has adopted a formal Public Disclosure policy aiming to support a conclusion that our risk disclosures are compliant with applicable regulatory risk disclosure standards and are compiled based upon a set of internally defined principles and related processes. Domain Managers and Process Owners from Finance, Risk and Human Resources assume responsibility for our risk disclosures and govern our respective risk disclosure processes.

The information provided in this document has not been subject to an external audit. As an overall principle, the Risk Disclosure report and its templates are signed off by AXA Bank Belgium's Chief Risk Officer. The report is challenged and validated by the Risk Committee and the Board of Directors. Based upon their assessment and verification we believe that our risk disclosures appropriately and comprehensively convey our overall risk profile.

In line with its Public Disclosure policy, ABB aims to be as open as possible when communicating to the market about its exposure to risk. Risk management information is therefore provided in a separate section of the 2020 Annual Accounts of ABB and – more extensively – in this publication.

The required information with regard to our Corporate Governance and Remuneration Policy can be found in the Management report in annex of the 2020 Annual Accounts of ABB and is also disclosed in this document.

Both reports can be found on AXA Bank Belgium's corporate website at http://www.axabank.be.

If information is already available in the public domain (e.g. Annual Accounts, Management Report) and if AXA Bank Belgium believes it is equivalent in nature and scope to the disclosure requirements, the Risk Disclosure report clearly refers to it. For this purpose, a disclosure map is established (see 1.4).

If ABB does not intend to disclose specific information, under the circumstances set out in Article 432(1) and (2) of the CRR, i.e. where (i) the information is not material or (ii) the information is regarded as proprietary or confidential, a specific statement will be made, as well as the reason for non-disclosure, in the Risk Disclosure report, validated by the Board of Directors.

As EBA encourages institutions to disclose the quantitative templates in an editable format, the Public Disclosure policy foresees the publication of these templates in a separate Excel referred to as the **annex** of the Risk Disclosure report (**Risk Disclosure Report 2020 Annex.xlsx**).

Quarterly and semi-annual reports can be found on the same website under the heading "Quarterly tables". The Risk Disclosure Report and its quantitative templates will be available in English on ABB's website.

1.4 Mapping with Pillar 3 requirements

For a number of topics, we refer to other reports in order to avoid too much overlap or duplication of information. Quantitative templates can be found in the Excel in annex. To improve the readability of the report, a table containing the references to other documents is shown below:

Article CRR	Disclosure requirement	Disclosure	Annual Accounts (AA) / Management report (MR)
435	Risk management objectives and policies	1.2 Diversity policy	Management bodies and corporate governance (MR)
		2 Risk Management, objectives and policies	Remuneration policy (MR)
		3.1 Capital management	4.1.2 Risk Management Framework (AA)
		By risk type, the sections:	4.2 Solvency Risk (AA)
		◦ Governance	
		◦ Risk policy, framework and reporting	
436	Scope of application	1.7 Scope	1 General (AA)
			2 Accounting principles (AA)
			25 Investments in associates, subsidiairies and joint ventures (AA)
437	Own funds	3.2 Own funds	35 Equity (AA)
438	Capital requirements	3.3 Capital requirements	4.2.4 Regulatory Capital Requirements
439	Exposure to counterparty credit risk	5.6 Counterparty credit risk	4.4.1.2 Non-Retail credit risk (AA)
			4.4.2.2.2 Counterparty credit risk (AA)
			22 Derivatives (AA)
			30 Repos and reverse repos (AA)
			33 Off-setting (AA)
440	Capital buffers	1.5 Regulatory environment	
		3.4.3 Countercyclical buffer	
441	Indicators of global systemic importance	Not applicable as ABB is not considered as an institution with global systemic importance	
442	Credit risk adjustments	5.2 Credit risk exposures	2.2.2.5 Impairment (AA)
		5.3 Credit Quality	4.4 Credit risk (AA)
			15 Impairment (AA)
			21 Financial assets at amortised cost (AA)
443	Unencumbered assets	8 Assets encumbrance	
444	Use of ECAIs	5.7 Use of ratings from external credit assessment institutions (ECAIs)	4.4.2.2.2 Counterparty credit risk (AA)
445	Exposure to market risk	6.2 Market risk Trading book	4.5.2 Market risk Trading Book (AA)
		6.3 Currency risk	4.5.3 Currency risk (AA)
446	Operational risk	9 Operational risk	4.6 Operational risk (AA)
447	Exposures in equities not included in the trading book	5.4.2.2 Participations	20 Financial Assets at Fair Value through OCI (AA)
448	Exposure to interest rate risk on positions not included in the trading book	6.1 Interest Rate Risk Banking Book	4.5.1 Interest Rate Risk Banking Book (AA)
449	Exposure to securitisation positions	5.8 Exposure to securitisation positions	4.2.5 Securitisation - Significant Risk Trannsfer
450	Renumeration policy	11 Remuneration risk	Remuneration policy (MR)
451	Leverage	4 Leverage ratio	4.2.8 Leverage Ratio (AA)
452	Use of the IRB Approach to credit risk	5.5 Internal Ratings Based approach	4.4.2.1 Retail Credit Risk (AA)
453	Use of credit risk mitigation techniques	5.3.7 Credit risk mitigation	33 Off-setting (AA)
		5.6.4 Policies for hedging and risk mitigation	34 Contingent Assets and Liabilities (AA)
454	Use of the Advanced Measurement Approaches to operational risk	Not applicable for ABB	
455	Use of Internal Market Risk models	6.2 Market risk Trading book	
		6.4 Prudent valuation	

Figure 1: Mapping table

1.5 Regulatory Environment and Key Metrics

The EU introduced stricter rules around capital requirements for banks in the aftermath of the financial crisis that are based on the Basel III accords. The requirements for banks are set out in the 'Capital Requirements Regulation' (CRR) and the 'Capital Requirements Directive' (CRD IV). The CRR/CRD IV was gradually introduced since 1 January 2014 and will be fully in force by 1 January 2023.[1] In order for banks to fully commit their resources to respond to the impact of COVID-19, the original 2022 implementation deadline of Basel III is postponed to 2023.

The European Central Bank (ECB) is the competent authority for prudential supervision of ABB. This supervision was effectively carried out by the Joint Supervisory Team (JST) that consists of members of the ECB and the national competent authority (NBB). Regular consultation took place with the relevant supervisors by means of on-site inspections, workshops, interviews and reports.

The **minimum capital ratios** (Pillar 1 requirements) which are to be met by all banks according to CRR/CRD IV are 4.5% for the common equity tier 1 ratio (CET1), 6.0% for the tier 1 capital ratio and 8.0% for the total capital ratio.

In its supervising role, the ECB performs a yearly 'Supervisory Review and Evaluation Process' (SREP), led by the JST.

In 2020, in the context of the coronavirus (COVID-19) the ECB has adopted a pragmatic approach towards the Supervisory Review and Evaluation Process (SREP) for the 2020 cycle. As a consequence, capital requirements resulting from SREP 2019 continue to apply. This means a Pillar 2 requirement (P2R) at 2.75%.

Besides the minimum own funds requirements of the CRR, ABB should also comply with the various buffers that can be imposed in accordance with CRD IV:

- **Capital conservation buffer**: 2.5% CET1
- Other Systemically Important Institution **(O-SII) buffer** of 0.75% CET1.
- **Counter-cyclical capital buffer**: can vary between 0 and 2.5% depending on the jurisdictions to which ABB has credit exposure. Currently we end-up with an average exposure weighted buffer of 0.001%.

AXA Bank Belgium's regulators (ECB and NBB) have taken measures in order to support banks in COVID-19 times.[2] The table below presents the applicable capital limits. Coloured elements are subject to temporary relaxation in COVID-19 context.[3]

[1] Press release BIS of 27 March 2020: www.bis.org/press/p200327.htm
[2] Press release ECB of 12 March 2020: www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200312~43351ac3ac.en.html
[3] AXA Bank Belgium does not make use of these capital relaxation measures that the supervisory authorities have agreed on.

	CET1	Tier 1 capital	Total capital
Pillar 1 requirement (P1R)	4.50%	6.00%	8.00%
Pillar 2 requirement (P2R)		2.75%	
Total SREP Capital Requirements (TSCR) 2020	**7.25%**	**8.75%**	**10.75%**
Capital concervation buffer		2.50%	
Other Systemic Important Institutions (O-SII) buffer		0.75%	
Countercyclical buffer		0.001%	
Overall Capital Requirements (OCR) 2020	**10.50%**	**12.00%**	**14.00%**

Table 1: Applicable Capital limits

Key figures can be found below:

		31/12/2020	31/12/2019
in '000 EUR	**Code**	**a**	**e**
Available capital (amounts)			
Common Equity Tier 1 (CET1)	**001**	1,102,168	1,036,593
Fully loaded ECL accounting model	**001a**		
Tier 1	**002**	1,192,168	1,126,593
Fully loaded ECL accounting model Tier 1	**002a**		
Total capital	**003**	1,193,111	1,131,202
Fully loaded ECL accounting model total capital	**003a**		
Risk-weighted assets (amounts)			
Total risk-weighted assets (RWA)	**004**	5,995,224	6,323,875
Risk-based capital ratios as a percentage of RWA			
Common Equity Tier 1 ratio (%)	**005**	18.38%	16.39%
Fully loaded ECL accounting model Common Equity Tier 1 (%)	**005a**		
Tier 1 ratio (%)	**006**	19.89%	17.81%
Fully loaded ECL accounting model Tier 1 ratio (%)	**006a**		
Total capital ratio (%)	**007**	19.90%	17.89%
Fully loaded ECL accounting model total capital ratio (%)	**007a**		
Additional CET1 buffer requirements as a percentage of RWA			
Capital conservation buffer requirement (2.5% from 2019) (%)	**008**	2.50%	2.50%
Countercyclical buffer requirement (%)	**009**	0.001%	0.016%
Bank G-SIB and/or D-SIB additional requirements (%)	**010**	0.75%	0.75%
Total of bank CET1 specific buffer requirements (%) (row 8 + row 9 + row 10)	**011**	3.25%	3.27%
CET1 available after meeting the bank's minimum capital requirements (%)	**012**	7.88%	5.63%
Basel III leverage ratio			
Total Basel III leverage ratio exposure measure	**013**	30,900,193	28,288,201
Basel III leverage ratio (%) (row 2 / row 13)	**014**	3.86%	3.98%
Fully loaded ECL accounting model Basel III leverage ratio (%) (row 2a / row13)	**014a**		
Liquidity Coverage Ratio			
Total HQLA	**015**	4,150,120	3,395,814
Total net cash outflow	**016**	2,110,256	1,714,418
LCR ratio (%)	**017**	196.66%	198.07%
Net Stable Funding Ratio			
Total available stable funding	**018**	28,279,462	24,695,709
Total required stable funding	**019**	21,282,606	18,635,675
NSFR ratio	**020**	132.88%	132.52%

Table 2: Key figures

The regulatory minimum solvency targets were exceeded throughout the entire financial year (see template **KM1** in annex). The increase in risk-based capital ratios is mainly due to the inclusion of the net profit in CET1 and lower Risk Weighted Assets. This decrease in RWA is mainly driven by the origination of the RMBS with Significant Risk Transfer (SRT) and the carve out of the intermediation activities of ABB in 2020.

The leverage ratio decreases slightly over the year, mainly due to an increase in the leverage exposure caused by retail growth and higher cash balance due to PELTRO funding.

The liquidity position of ABB remained at a comfortable level in 2020 mainly thanks to a stable deposit base and ABB's covered bond program. LCR at consolidated level was at 197% at the end of 2020.

In the following Table an evolution is given of the Return on Assets during the past year according to Article 90 of CRD IV.

	31/12/2020	31/12/2019
	a	e
Return on Assets		
Return on Assets (RoA)	0.2%	0.2%

Table 3: Return on Assets

At the end of 2020, ABB's return on assets stood at 0.2%. This level of return is partially inherent to the low risk profile of the bank's assets. The vast majority of ABB's loan portfolio is made up of real estate loans on which the real estate property serves as a guarantee (€ 22.7 billion as of 31/12/2020). In addition, ABB strengthens its liquidity thanks to its higher cash position (above € 3.7 billion as of 31/12/2020) and high-quality government bonds and bonds issued by supra-national authorities (€ 0.8 billion as of 31/12/2020). Profitability is and remains a key focus of ABB's management team that is continuously working at strengthening the margins on the core assets of the bank, developing low capital-intensive fee business and improving the bank's efficiency.

1.6 Significant events in 2020

1.6.1 COVID-19

In 2020, the COVID-19 pandemic severely affected macro-economic conditions and caused significant turmoil in financial markets. As the stress situation unfolded throughout 2020, it was important to respond in a timely and appropriate manner. Unlike the financial crisis, banks were now part of the solution.

1.6.1.1 Internal Governance

In the light of the fast-evolving crisis, AXA Bank Belgium's management has taken multiple actions in 2020 in order to steer the bank during these challenging times. This includes:

- The activation of AXA Bank Belgium's Crisis Management Team (CMT) which deals with the operational component of the crisis. The health and safety of ABB's staff, agents and clients was priority number one. Furthermore, the operational resilience of the bank was key to guarantee the continuity of our services to agents and clients on the one hand and to stakeholders like the regulator on the other hand. AXA Bank Belgium showed a good operational resilience throughout the whole crisis period.
- A joint task force reporting to the Chief Credit Officer (CCO) and Chief Risk Officer (CRO) has been created to govern all credit risk action regarding the COVID-19 crisis. The task force oversees actions in six domains (listed below) which enables AXA Bank Belgium to play its role in this unprecedented crisis and keep the right balance by providing support to viable clients and by managing risk in an effective way.
    - Proactive client monitoring and preventive loan management;
    - Monitoring of ABB's loan portfolio with special attention to the moratorium portfolio;
    - Forecasting and financial impact: updating of the macro-economic scenarios under IFRS 9 and assessing the resulting impact with a challenger model, implementation of a management overlay to compensate for the accuracy of forecasted losses;
    - Implementing changes relating to governmental measures, e.g. production of loans under state guarantee, payment suspension under moratorium;
    - Decisioning and treatment: temporary revision of IFRS 9 staging criteria for loans with payment suspension, revised classification into forbearance and UTP using additional risk indicators to supplement the bank's rating system;
    - IT changes in the front- and back-office.
- On top of the normal risk governance and the crisis management governance (CMT), AXA Bank Belgium has also put in place a financial risk cockpit meeting two times a week to discuss the evolution of the crisis during the first weeks and months of the crisis. The cockpit was active until mid-July when the crisis became more stable, and discussed:
    - The scenarios that should further be explored and the resulting impact of those scenarios on capital and liquidity indicators;
    - The capital and liquidity measures taken by the supervisory authorities (ECB and JST) and their integration in the ICAAP/ILAAP exercise;
    - Reassessment of capital and liquidity management actions and recovery options under a COVID-19 pandemic scenario.
- A regular follow-up of all aspects of the COVID-19 pandemic was put in place via a COVID-19 dashboard. This dashboard focuses both on operational resilience (physical security, business continuity management and financial crime) and financial resilience (assessment of AXA Bank Belgium's liquidity and capital position and the follow-up on loan management and credit losses). The dashboard served as the reporting to the Management Board, Risk Committee, AXA group Risk and to the JST. Recurrent meetings with AXA Bank Belgium's supervisors were organised throughout 2020 where this evolution of the COVID-19 crisis was discussed.
  During this time of crisis, AXA Bank Belgium kept its continuous focus on clients via:
    - Ensuring the continuity of the payment system;
    - Providing support and reassurance to clients;
    - Enhancing accessibility for clients via the contact center and network (via appointment only).

From an operational point of view, AXA Bank Belgium successfully transferred to a full telework regime under COVID-19. A return to office strategy has been put in place but is conditional on the evolution of the COVID-19 crisis. Extra attention is given to the monitoring of the well-being of staff.

From a financial risk point of view, the crisis rather boiled down to a credit risk event. AXA Bank Belgium's quality of portfolio remains high so far. Expected losses are higher than the last years with exceptionally low credit losses; yet still rather moderate thanks to the rather low-risk portfolio which is well collateralized with immovable assets (mainly residential properties). The focus is currently installed towards certain riskier segments to further quantify and mitigate risks. No material evolution in monthly delinquency rates can be seen yet. From a liquidity point of view, AXA Bank Belgium does not face material deposit outflows. AXA Bank Belgium is able to project adequate capital ratios under plausible macro-economic scenarios.

1.6.1.2 External Measures

In order to safeguard the strong liquidity and solvency position of the bank in times of crisis, a constant monitoring of the liquidity and solvency situation and an estimation of the impact of the crisis on credit losses is essential. ABB does this by a constant follow-up of the evolving situation and an assessment of all government and supervisory measures and their impact on the clients and the financial situation of the bank. In order to respond to the pandemic and its adverse economic effects, multiple authorities have taken measures. The two most important measures for AXA Bank Belgium that were taken by the Belgian government were the instalment of payment deferrals via a moratorium and loans under state guarantee for professional loans (liquidity lines partially covered by a government guarantee).

As from April 2020, Belgian banks provide payment deferrals to individual and business clients that are affected by the COVID-19 crisis. Initially, payments could be deferred for up to six months (until 31 October at the latest) for mortgage and professional loans. Clients requesting suspension after 30 April could only benefit until 31 October (e.g. not a full 6 months). This first Charter for business and mortgage credit deferral was extended until the end of 2020. By the end of 2020, ABB supported 9,100 families and 2,200 companies impacted by the crisis by providing payment suspensions. At the end of 2020, most of the payment suspensions were already terminated and 99% of the clients were already able to correctly meet the monthly instalment. More details can be found in template **Covid1** and **Covid2** in annex.

In December 2020, it was decided to allow general payment deferrals to mortgage and professional clients once again. This with the condition that the combined deferrals granted under both Charters never exceeds 9 months. The second Charter for business and mortgage credit deferral started as of January 1st, 2021 although requests were already possible in December 2020. This second Moratorium could be requested up to the end of March and is limited to payment deferrals of maximum 3 months. The payment deferrals on mortgage and consumers loans included an interest payment deferral. Due to this interest deferral ABB recognized a modification loss for a total amount of € 3.4 million over 2020. Next to the moratorium for mortgage and professional loans, ABB also granted moratorium for consumer loans. This had a non-material impact on AXA Bank Belgium.

Next to the payment deferrals, ABB also provided credit facilities to their professional clients partially covered by a state guarantee. There were 2 different payment guarantee schemes installed after the outbreak of the crisis. At the end of December 2020, AXA Bank Belgium granted 398 loans under the state guarantee for an exposure of € 14.5 million of which 322 (€ 9.8 million) type I and 76 (€ 4.8 million) type II. The first scheme entails newly originated loans under state guarantee that have a maximum maturity of 12 months. Loans under state guarantees type II comprises loans under state guarantee with a maturity between one and five years to provide liquidity to professionals that are in financial difficulties due to the COVID-19 crisis. Details can be found in template **Covid3** in annex.

Regarding COVID-19 impact on the different types of risks AXA Bank Belgium incurs, we refer to those type of risk dedicated sections of this document.

1.6.2 Securitisation – Significant Risk Transfer

In Q4 2020, AXA Bank Belgium has set up a synthetic securitisation on its mortgage loan portfolio, to optimise ABB's risk-return balance, and to support the growth of the loan portfolio while maintaining the envisaged solvency levels (as set in the risk appetite framework of the bank).

The transaction consists of a balance sheet synthetic securitisation of a pool of residential mortgage loans. A significant portion of the credit risk of the underlying loans was "tranched" and transferred to external parties via a "significant risk transfer" (SRT). It is via this transfer of economic credit risk that AXA Bank Belgium has been able to generate some RWA relief over its mortgage loan portfolio.

In terms of setup, the first-loss tranche was structured to mitigate the expected credit losses on the underlying portfolio. Then, the mezzanine tranches were defined to absorb any unexpected credit losses, thereby protecting the senior tranche. AXA Bank Belgium has retained the Senior and First-Loss tranches and transferred the risk associated to the mezzanine tranches to external parties. AXA Bank Belgium has also retained a 5% vertical interest in the entire structure (across all tranches). Furthermore, additional structural features were included in the transaction to help mitigate the credit risk of the underlying mortgages, which include the synthetic excess spread, the tranche amortisation mechanism (including performance triggers) and the definition of credit events.

The "synthetic" nature of the securitisation relates to the fact that the risk was not transferred through the outright sale of the underlying assets, but rather by the means of funded credit protection contracts used to absorb the credit losses associated to the mezzanine tranches. In this sense, the loans have remained on the bank's balance sheet, but the risk associated to the mezzanine tranches of the securitised loan portfolio has been transferred via the funded credit protection.

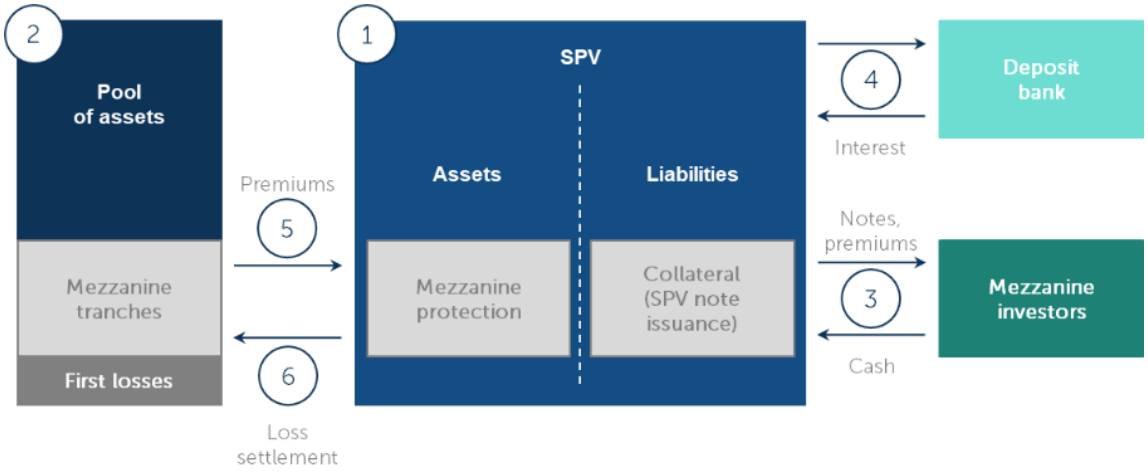

Figure 2: set up of securitisation transaction

The transaction was set up in different components listed below (Figure 2):

1. A Luxembourg-based SPV (CASPR) was created to act as an intermediary between the external investors (the protection sellers) and AXA Bank Belgium (the protection buyer).

2. The underlying pool of residential mortgage loans was selected (total exposure value of € 752 million). The credit risk of the underlying pool was segregated into different tranches, with AXA Bank Belgium retaining the First-Loss and senior tranches (as well as a 5% vertical interest in the entire structure). The mezzanine tranches were transferred to investors. Without a change in legal ownership, the underlying assets have remained on AXA Bank Belgium's balance sheet.

3. CLNs were issued by the SPV to investors and the cash received was used to fund the collateral, which stayed in CASPR. Being a form of funded credit protection, the collateral will be used to cover credit losses on the pool of underlying mortgages and for the redemption of the CLNs (event driven). All CLNs started amortising at the initiation of the transaction.

4. The proceeds from the CLNs (i.e., the funded amount) were deposited with an external bank (BNYM).

5. In order to transfer the credit risk attributable to the mezzanine tranches, AXA Bank Belgium pays premiums to the CASPR entity, which are subsequently passed on to the investors in the form of floating (Euribor-based) interest payments on the CLNs. For this purpose, a CDS is used as the designated risk transfer instrument and is mirrored in the CLNs.

6. In the case of default on any of the underlying mortgages, the incurred losses will initially be born by AXA Bank Belgium until the first-loss tranche is wiped out. Afterwards, the losses will be passed on to the mezzanine tranches held by

investors, with CASPR absorbing the losses and reducing further the nominal of the CLNs.

The capital structure and tranche sizing of the securitisation are listed in the table below, with the monetary values based on the transaction at its origination.

Tranche	Size in %	Size in € million
Senior	91.4	653
Mezzanine A	3.3	24
Mezzanine B	2.5	18
Mezzanine C	2.2	16
Mezzanine D	0.3	2
First loss	0.3	2
Total	**100.0**	**715**

Table 4: Tranche sizing

As stated above the purpose of the transaction was to generate RWA reduction. As per Basel's securitisation framework only the retained Senior and First-Loss tranches are subject to a capital charge for AXA Bank Belgium, as the mezzanine tranches are presently covered via funded credit protection. The Senior tranche RWA was measured according to the SEC-IRBA, as all underlying exposures are IRB exposures. With regards to the First-Loss tranche RWA, AXA Bank Belgium had a choice between two options, either to risk weight it, or to directly deduct the tranche's EAD amount from CET1 capital (the "deduction option" as per Article 253 of the CRR). Although both options are meant to achieve the same outcome, since the capital requirements are in both cases set at 100% of the tranche's EAD amount, the deduction option was selected as the preferred approach

Finally, the securitisation of the underlying mortgage portfolio has led to RWA relief amount of € 283 million, which is a result of the risk transfer that took place with the transaction. The RWA relief amount is computed as the difference between the RWA associated with the retail credits before securitisation, minus the RWA linked to the retained Senior tranche and the RWA resulting from the CLNs proceeds. As to the retained First-Loss tranche, it is not to be included in the RWA relief calculation since it is directly deducted from CET1 capital. The combined effect of the RWA relief and the capital deduction has led to an increase of AXA Bank Belgium's capital ratios with 84 bps end December 2020.

Templates **SEC1**, **SEC3** and **SEC5** in annex cover information on ABB's securitisation exposures in the non-trading book and the associated regulatory capital requirements.

1.6.3 Sale of AXA Bank Belgium

On the 25th of October 2019 AXA SA and Crelan announced an agreement to have the intention to sell AXA Bank Belgium to Crelan, as part of a strategic long-term partnership.

We are still in the period between the signing of the intention (signing) and the official transaction of shares (closing). The closing is conditional on approval of the regulators. It is at that moment that the modalities of the agreement enter into force and the migration can start.

During this period between signing and closing both banks continue to operate independently from each other so that for the time being there is no impact on the financial results of AXA Bank Belgium.

1.6.4 Carve-out of the intermediation activity

The intermediation activity provided a set of execution and reporting services in derivatives to AXA Group companies, most of them hedging variable annuities products. It allowed the bank to diversify risks and revenues, while leveraging on its competences in derivatives necessary for the management of the balance sheet. In the course of 2020, ABB finalised the execution of the plan to carve-out its intermediation activity.

The carve-out of the Cassius scope was finalised by the end of July. € 79.3 billion of transactions were done, of which € 70.5 billion IRS, € 4.75 billion of swaptions, € 3.52 billion of total return swaps and € 0.5 billion of equity derivatives.

In the last quarter of 2020, ABB compressed and transferred the remaining intermediation clients and the IRS legacy portfolio (AXA Banque France, AXA Belgium, AXA Switzerland, AXA China and AXA Bank Germany) for approximately € 33 billion. A very limited amount of legacy deals remain in 2021, which are expected to mature or to be unwound before the sale of AXA Bank Belgium to Crelan.

1.7 Scope

1.7.1 Differences in the measurement of exposures

In this section we highlight differences in scope between the regulatory and accounting frameworks in order to enhance comparison of reported information for our stakeholders.

Templates **LI1**, **LI2** and **LI3** in annex cover information on the differences in the scope of consolidation and the measurement of exposure. They provide supplementary information on items deducted from own funds, elements that have an impact on the difference in the exposure value between the regulatory and the accounting frameworks (netting, provisions, prudential filters…).

As there is no difference in the basis of consolidation for accounting and prudential purposes, column (a) and (b) of template **LI1** were merged.

Template **LI1** gives a break down on how the amounts reported in the financial statements (a) are to be allocated to the different risk frameworks. The sum of the amounts disclosed under the different frameworks does not equal the amounts disclosed in column (a), as some items are subject to capital requirements for more than one risk framework (e.g. derivatives in the trading book are part of both the counterparty credit risk framework and the market risk framework).

Following items are not subject to capital requirements or are subject to capital deductions:

- Intangible assets: starting from Q4 2020, intangible assets are partially deducted from CET1 and partially subject to capital requirements.
- Deferred tax assets (DTA): they are subject to special treatment and are netted with deferred tax liabilities by tax entity. Net DTA that do not rely on future profitability and net DTA that rely on future profitability and do not arise from temporary differences are subject to capital deduction. Net DTA that rely on future profitability and arise from temporary differences below the 10% threshold are risk weighted.
- Defined benefit pension fund assets: subject to capital deduction. After the reduction by the amount of obligations under the same plan (Article. 4 (109) of the CRR), they amount to zero.
- Liabilities are not in scope, except some derivative and securities financing transactions (SFT) items, some provisions and DTL.

Template **LI2** provides information on the main sources of the differences between the financial statements' carrying values and the exposure amounts used for regulatory purposes (gross carrying values).

1.7.1.1 Main drivers of differences in the credit risk framework

- Off-balance amount: this mainly concerns undrawn credit lines subject to a credit conversion factor
- Differences due to consideration of provisions: re-integration of the provisions in the exposure value.

1.7.1.2 Main drivers of differences in the counterparty credit risk framework

- Off-balance amounts: potential future exposure, calculated according to the mark-to-market method, is added as well as off-balance collateral for Securities Financing Transactions (SFTs)[4].
- Difference due to different netting rules
- Only positive market values are taken into account, meaning that the negative amounts are adjusted to zero. Negative market values are in this way removed from the calculations. This also includes the reduction of the collateral received if this exceeds the market value.
- The Own funds requirements for pre-funded contribution to the Default Fund (DFC) of a qualifying central counterparty (QCCP) is part of counterparty credit risk, but risk-weighted assets are calculated separately according to article 308 of CRR. They appear under a separate line in the different reports.

[4] SFTs are transactions where securities are used to borrow cash, or vice versa. This includes repurchase agreements (repos), securities lending activities and sell/buy-back transactions.

1.7.1.3 Main drivers of differences in the market risk framework

There are 2 main drivers of differences in the market risk framework:

- Difference due to different netting rules: no netting applied in market risk framework
- Differences due to prudential treatment: concerns the definition of the long and the short position in the market risk framework according to the CRR.

1.7.2 Scope of consolidation

At 31 December 2020, AXA Bank Belgium, a limited company under Belgian law, with registered office at 1000 Brussels, Troonplein 1 is a subsidiary 100% owned by AXA SA.

The scope of consolidation for AXA Bank Belgium includes the following companies: AXA Bank Belgium SA, Royal Street SA, AXA Belgium Finance BV and AXA Bank Europe Société de Crédit Foncier (SCF) and CASPR S.à.r.l. These entities are fully consolidated (see template **LI3** in annex).

AXA Bank Belgium SA and AXA Bank Europe SCF are the group entities that are subject to prudential supervision on a consolidated basis in accordance with Regulation (EU) No. 575/2013.

In Belgium, **AXA Bank Belgium** provides a broad range of financial products to individuals and small businesses and has a network of exclusive independent bank agents who can also provide insurance solutions as a broker (for example from AXA Belgium).

The product range is easy to understand and covers elementary banking needs.

The Belgian retail banking activity remains the primary activity of the bank and is offering daily banking solutions and a broad range of products that can help the client in his financing needs (consumer loans, mortgage loans and professional loans) and his saving and investment needs. AXA Bank Belgium has the ambition to grow both in number of clients per employee as in volume per client. We want to achieve this by making a difference in the way we treat our clients. “Customer first”, is a core value.

The activities of **AXA Belgium Finance** consist of issuing notes under programs that are unconditionally and irrevocably guaranteed by its sole shareholder ABB S.A. /N.V. The notes issued by the Company are mainly placed among European investors. The net proceeds of these notes are lent to ABB that uses the proceeds for general corporate purposes.

An assessment of the risk profile of the Company is described in the annual AXA Belgium Finance (NL) B.V audited financial report published on the AXA bank website.[5]

[5] https://www.axabank.be/nl/over-axa-bank/investor-relations-financial-information/notes-issuance-programme

Royal Street is a Special Purpose Vehicle (SPV) created to securitise a part of ABB's residential mortgage portfolio. As an SPV, Royal Street does not engage in any commercial activity. More information on this company can be found in section 5.8 of this report.

AXA Bank Europe SCF, a French law governed Société de Crédit Foncier, is a wholly owned subsidiary of ABB and legally bankruptcy-remote from ABB. It is created for the purpose of issuing covered bonds for the benefit of ABB.

ABE SCF must meet the minimum capital requirements imposed by the competent authority. It has no commercial activity as such. It only maintains activities that support ABB's covered bonds program done for liquidity management.

CASPR S.à.r.l, a Luxemburg law governed Special Purpose Vehicle (SPV) is an SPV created to securitise a part of ABB's residential mortgage portfolio. As an SPV, CASPR does not engage in any commercial activity. More information on this company can be found in section 1.6.2 and 5.1.1.5 of this report.

There are, outside the legal restrictions, no other current or foreseen material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities among ABB and its subsidiaries.

1.7.3 IFRS 9

Until now ABB has decided not to apply the transitional arrangement to limit the impact of the introduction of IFRS 9 on own funds. The implementation of IFRS 9 is done at once (fully loaded) and no transition is applied. Therefore all "Fully loaded ECL accounting model" lines were removed from the templates in annex.

As a response to the COVID-19 pandemic the regulator gave the possibility to extend by 2 years the transitional arrangements. For the moment ABB did not revise its decision not to apply these arrangements. For more information on the implementation of IFRS 9, we refer to the Annual Accounts chapter 3.2.

2 Risk Management, objectives and policies

2.1 General risk governance structure and organization

As part of its responsibilities, ABB's **Board of Directors** defines the strategic objectives and the risk appetite framework, approves and oversees the implementation of the bank's capital adequacy assessment process (ICAAP), capital and liquidity plans and compliance policies. ABB's Board of Directors is also responsible for reviewing and approving at least annually the recovery plan and validates the final output of the stress test exercises and potential subsequent management actions. They will use the SREP decision and the outcome of internal risk analyses to define strategic objectives and risk appetite.

To increase efficiency and allow deeper focus in specific areas, the Board of Directors has established the following specialised Board Committees:

The **Risk Committee** assists the Board of Directors' by means of:
- proposing an adequate and effective risk strategy and appetite to actual or future risks;
- providing assistance to assess the implementation of that strategy;
- they met 6 times in 2020.

The **Audit committee** assists the Board of Directors' oversight of the:
- adequacy and effectiveness of internal control and risk management framework;
- financial reporting process and the integrity of the publicly reported results and disclosures made in the financial statements;
- effectiveness, performance and independence of the internal and external auditors.
- they met 6 times in 2020.

The **Remuneration Committee** assists the Board of Directors by means of:
- overseeing the compensation system's design and operation;
- ensuring that the compensation system is appropriate and consistent with the bank's culture, long term business, risk appetite, performance and control environment and any legal and regulatory requirements.
- in 2020, they met 2 times

The **Nomination Committee** assists the Board of Directors by means of:
- recommending candidates, for approbation by the General Assembly, suitable to fill vacant seats on the Board of Directors;
- elaborating and proposing a policy with regards to recruiting, assessments and resigning of non-executive administrators, members of the Board of Directors and responsible of independent control functions;
- examining all concrete propositions of nomination or resigning and by formulating an advice to the Board of Directors;

- evaluating periodically, at least once a year, the structure, the size, the composition and the performance of the Board of Directors, in order to give recommendations for potential changes.
- they met 2 times in 2020.

ABB's **Management Board** develops, supported by the Enterprise Risk Management team and the CRO, a proposal to the Board of Directors for the bank's risk appetite, taking into account the competitive and regulatory landscape, short and long-term strategy, stress testing results, exposure to risks, and the ability to manage risks effectively. Moreover, ABB's Management Board is responsible for ensuring that the bank's risk appetite framework[6] is respected.

The Management Board is also responsible for monitoring and applying specific strategies for all risks of the bank as well as the review of consolidated risk reports.

However, for efficiency purposes, the Management Board may delegate some risk management governance tasks to certain specialised risk committees (see below). In that case, the Management Board remains nonetheless responsible for monitoring and endorsing / reversing (when required) the key decisions of the committees. In 2020, the Management Board met on a weekly basis.

Specific **Risk Committees** are responsible to monitor and apply the specific risk strategies set by ABB Management Board (in line with the plans and targets set by ABB's Board of Directors). In particular, the specific Risk Committees:

- Can make decisions related to risk management. These decisions must remain within their delegated scope. However, they must inform the Management Board of their decisions (by endorsement of the minutes) and need to put strategic decisions/frameworks to the Management Board;
- Monitor and analyse consolidated risk reports;
- Validate and endorse risk indicators and models;
- Monitor the adequacy of ABB's risk infrastructure and risk models (validation, stress testing, back testing and calibration).

Their specific roles and responsibilities are described within ABB's specific Risk Management Charters and in the charters of the committees. Below you will find a list of ABB's specific Risk Committees with their frequencies:

[6] The risk appetite framework consists of all processes, controls, limits and systems through which the risk appetite is established, communicated and monitored.

Risk Committees and their scope			
Committees	**Risk Scope**	**Risk Charters**	**Frequency**
Retail Risk Committee (RRC)	Retail risks	Retail Risk Management Charter	Monthly or ad hoc
Wholesale Risk Committee (WRC)	Non-retail credit risk Counterparty risk Market risk Risks generated by the intermediation activity (market, liquidity, operational risk)	Non Retail Credit Risk Management Charter Market Risk Management Charter	Monthly
Assets & Liabilities Committee (ALCO)	Interest rate risk Liquidity risk	Interest Rate Risk Management Charter Liquidity Risk Management Charter	Monthly or ad hoc
Capital Management Committee (CMC)	Capital Management	Capital Management Charter	Monthly
Information Risk Committee (IRC)	Security	Information Risk Committee Charter	Monthly or bi-monthly
Customer Invest Risk Committee (CIRC)	Investment Risk	Customer Invest Risk Committee Charter	Monthly
Operational Risk, Internal Control, Compliance & Internal Audit Committee (ARC)	Operational Risk Compliance Risk	Operational Risk Management Charter Compliance Charter	Monthly

Figure 3: Risk committees and their scope

As an independent control function (independent from the business lines) sitting on ABB's Management Board and reporting to its CEO, ABB's CRO and the **Risk Management** department assists ABB's Board of Directors, the specialised Board Committees, Management Board and specialised risk committees to manage the bank's risks. It acts as the second line of defence in terms of risk management, after the business lines who are frontline and therefore first responsible to manage their risks.

2.2 Risk Management

2.2.1 General

In the exceptional conditions of 2020, AXA Bank Belgium ensured a coherent and prudent risk management by applying its risk management framework. The bank has broadly implemented robust strategies, policies, processes and systems for identifying, measuring, managing and monitoring its risks.

The Risk Management framework and the Risk Appetite framework are regularly updated and adjusted because of changes in regulation, processes and strategies.

ABB has regularly adapted risk policies in order to stay on track in this constantly changing environment. ABB believes its risk management arrangements are adequate with regard to the bank's profile and strategy.

2.2.2 Declaration on the adequacy of risk management arrangements (pursuant to Article 435 of the CRR)

The Risk Disclosure report gives a detailed description of the risks that AXA Bank Belgium faces and of the Risk Management Framework.

The risk management policy and its organizational structure are designed in such a way that, in our opinion, the known risks are sufficiently identified, analysed, measured, monitored and managed.

Risk management distinguishes the following risk categories: solvency risk, liquidity risk, credit risk, counterparty risk, market risk (interest rate risk and other market risk), operational risk, remuneration risk and other risks (business risk, model risk, political and regulatory risk, reputation risk, ESG risk, pension risk and securitisation risk).

The risk management framework and control systems are based on a risk identification process that is combined with prevention and control measures. A strategic risk appetite is determined for the main areas (capital, profitability, liquidity and non-financial risks). This risk appetite model was approved by the Board of Directors and is used as a central tool for managing the risks in the bank.

ABB's risk data and systems support regulatory reporting and disclosures as well as internal management reporting on a regular or ad hoc basis for the different risk types. The various reports are presented to the appropriate committees as indicated in the General risk governance structure section.

These reports show that the financial result was achieved within AXA Bank Belgium's risk appetite for 2020 and within the legal requirements.

This provides a reasonable degree of certainty that the risk reporting does not contain material misstatements and that the internal risk management and control systems worked well in the 2020 financial year.

As required in Article 435 of the CRR, the Management Board declared that it is of the opinion that the risk management measures taken, are necessary and appropriate for ABB's profile and strategy.

This declaration is also approved by the Board of Directors.

2.2.3 Risk Appetite

The permanent identification and quantification of the bank's material risks are at the heart of the ABB's risk policy. These risks are measured, limited and constantly tracked using an internal **Risk Appetite Framework** (RAF).

In 2020, ABB further updated the RAF so that it continues to be a real strategic tool. A strategic risk appetite is determined for the main areas (capital, profitability, liquidity and non-financial risk), taking the stress sensitivity of these domains into account and in line with the guidelines

of the AXA Group. This strategic risk appetite is translated into functional risk limits and forms a guide for the daily activities in the various risks and product lines. The risk appetite framework and limits are annually updated and approved by the Board of Directors and is used by this management body and the Management Committee as a central tool for managing the risks in the bank.

All material risks are translated into relevant indicators, summarised in the 'risk dashboard'. This includes both regulatory and internal indicators. Different levels of severity are defined for each indicator, so management is warned early enough if an indicator approaches its maximum risk appetite. The risk dashboard also serves as a link between the Risk Appetite Framework and the Recovery Plan.

This 'risk dashboard' forms an integral part of the general risk monitoring process and is followed-up on and reported to the Management Board, AXA Group and the Board of Directors on a quarterly basis. These risks are also followed up in more detail by the relevant ABB risk committees.

Every year, ABB conducts an integrated strategic planning process which lays out the development of our future strategic direction as a whole and for our business lines. This process translates our long-term strategic targets into measurable short- to medium-term financial targets and enables intra-year performance monitoring and management.

The projections in the strategic plan and the budget are checked against the RAF limits. The strategic plan undergoes multiple iterations until equilibrium is reached between both profitability and risks. The strategic plan was designed so that all risks fall within the risk appetite and the regulatory limits, while taking new and existing regulations into account to meet the regulatory requirements.

The risks are also subject to an economic capital model that generates forecasts covering different horizons. The economic capital capacity is then distributed to all activities of the bank, and this based on the ABB risk objectives. The management of ABB imposes a limit on the total economic capital applied to ensure that the bank has sufficient financial resources at all times. ABB's risk appetite framework must set the appropriate governance, reporting requirements, limits, controls and decision processes to drive management decisions.

ABB's risk appetite is documented and reported in various reports for internal and external use (supervisor, AXA Group Risk Management, external and internal audit). Any breach of alerts or limits must be escalated to the members of the Management Board or the Board of Directors in order to, if needed, take corrective actions.

2.2.4 Risk management framework

The business model and strategy of ABB is supported by a comprehensive risk management framework. The risk management framework is built around five components:

1. risk governance structure and risk management department;
2. risk assessment processes: risk identification, risk measurement, risk mitigation and risk reporting;

3. review and validation;
4. stress testing framework;
5. risk data, aggregation and IT systems.

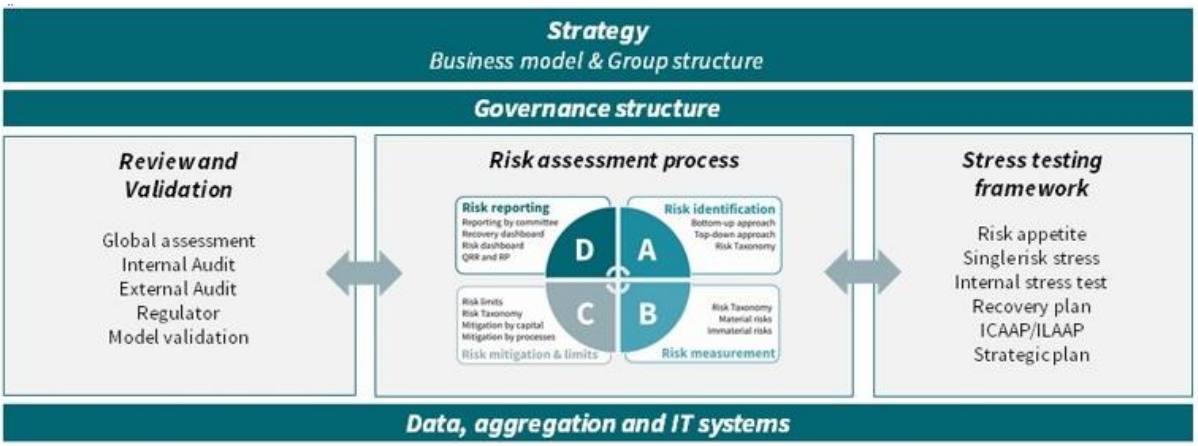

Figure 4: Risk management framework

The following section describes the different components of the risk management framework.

2.2.4.1 Risk governance structure and risk management department

I. RISK GOVERNANCE STRUCTURE

An effective risk governance structure requires the correct understanding and awareness of risks at all levels of the organization, facilitated by an efficient monitoring, reporting and communication structure. ABB's general risk management governance structure is described in section 2.1 (General risk and governance structure and organization).

II. RISK MANAGEMENT DEPARTMENT

This section provides additional information on the organisations and tasks of the risk management department.

- Mission
  The overall risk management of ABB consists of 3 lines of defence:
  - Business is the first line of defence. They are in the frontline and are firstly responsible to acknowledge and manage risks. They are responsible for the daily monitoring, management and control of risks.
  - The Risk Management, Compliance and Security are the second line of defence (LoD). The mission of the Risk department is to identify, assess and control risk as to maximize the realization of business opportunities and

minimize potential losses. This is achieved on an independent basis and in cooperation with different management bodies and committees.
    - The Audit department acts as third LoD. It ensures the efficient and accurate transfer of information on risk monitoring and reporting from the first and the second line of defence to the Board of Directors.

- Roles and responsibilities
  The main role of the Risk Management department consists in assisting ABB's Board of Directors, the specialized Board Committees, Management Board and specialized risk committees to manage the bank's risks.

2.2.4.2 Risk Assessment Process

Risks must be identified before they can be analysed, assessed/measured and mitigated. ABB's risk identification is performed once a year with the review of ABB's risk taxonomy. This review is performed in the framework of the so-called Global Assessment exercise. A review can nonetheless be triggered by other events such as a product approval analysis, regulatory survey, stress tests, audit review or comments received from the regulator.

Simultaneously with this risk identification, the materiality of the potential risks is assessed. Risk assessment methods may vary from quantitative models to qualitative expressions of expert opinions.

For all identified material risks, ABB defines a treatment. All known identified material risks must be mitigated by adequate mitigation techniques and/or processes to keep them within the defined limits. Mitigation techniques include setting a capital buffer, setting a liquidity buffer, hedging, netting, guarantees and collateralization. Mitigation processes include setting indicators that are monitored at Risk Committee level, annual assessments and independent model validation.

Furthermore, ABB's Risk Management department must ensure that proper limits are defined and monitored for all material risks. Appropriate escalation procedures in case of breach of limits or modification of the hypotheses on which the limits have been defined must also be in place. Finally, mitigation techniques and limits must be identified and documented.

The final step of the risk management process corresponds to the risk monitoring and reporting. Monitoring involves communication both upstream and downstream and across the organization. It includes periodic reporting and follow-up on the risks by various levels of management and risk committees. The reporting of risks includes the comparison of all material risk exposures against limits.

Our risk data systems support regulatory reporting and external disclosures, as well as internal management reporting for credit, market, operational and liquidity risk. The risk infrastructure incorporates the relevant legal entities and business lines and provides the basis for reporting on risk positions, capital adequacy and limit utilisation on a regular basis.

2.2.4.3 Review and validation

A sound risk attitude requires the risk management framework of a bank to be regularly reviewed by both internal and external parties. The objective of these reviews is to assess whether the risk framework is still appropriate and sufficient for managing the risks a bank faces.

The external reviews are performed by the regulators (i.e. the National Bank of Belgium, the FSMA and the ECB). Internal reviews are performed by AXA Group's internal audit, as well as ABB's own internal audit. An internal Validation Team is also in place to control the models developed for assessing or quantifying the risks. In their analysis, they are supported by specialists of external teams to get their insights. The Management Body is responsible for the final validation via the specific risk committees.

In addition to these reviews, ABB has put in place the so-called Global Assessment exercise. This is a yearly exercise performed by the Risk Management department. Its aim is to specifically (self-) assess the risk management framework of the bank, and by this way identify potential weaknesses to remediate.

To achieve this objective, the Global Assessment is structured around 2 pillars.

First, top-down and bottom-up risk identifications are executed. Their aim is to ensure that the current risk taxonomy is still in line with the risks ABB encounters, as well as to assess the materiality/immateriality of risks considered as such.

Secondly, a self-assessment of the management of all the risks identified as material is performed. This assessment is the result of 2 internal complementary analyses: a quantitative and a qualitative one. The quantitative analysis rests upon the conclusion of validation missions as well as the outcome of back testing exercises of economic capital models. By nature, this analysis only focuses on those risks which are mitigated by capital and on dimensions pertaining to models. Therefore, a complementary qualitative analysis is also performed. In this step, the opinion of all relevant stakeholders (risk managers, business representatives and Audit) are gathered in order to outline the strengths and weaknesses of the management of the risks. Dimensions and inputs that cannot be addressed in the quantitative analysis are thus tackled. Finally results of both analyses take part in the final evaluation and the subsequent definition of an action plan for the following year.

2.2.4.4 Stress testing framework and program

Stress testing forms an integral part of ABB's overall governance and risk management culture and is an important building block of our ICAAP & ILAAP.

Stress testing is an analysis based on unfavourable economic scenarios or assumptions which is designed to identify the bank's vulnerabilities and to determine whether the bank has enough capital and/or liquidity to withstand the impact of adverse developments. These tests are meant to detect weak spots in the bank at an early stage, so that preventive actions can be taken by the bank itself. It plays an important role in:

- providing a forward-looking assessment of risk
- challenging the business model and strategic planning
- overcoming limitations of models and/or historical data
- feeding into capital and liquidity planning procedures
- informing the setting of a banks' risk tolerance/appetite
- facilitating the development of contingency plans
- informing supervisors for the annual SREP assessment

ABB has put in place a **stress testing framework** that aims at providing the methodology and process for the performance of stress testing as part of the risk management process, taking into account the applicable regulation. It describes the types of stress testing, their main objectives and dimensions, the internal governance regime, the relevant data infrastructure, the stress testing process and the evaluation process. It gives also an overview of all currently performed and future stress test exercises in the bank.

The stress testing program aims at understanding the impact of different sources of risk on ABB's main financial indicators so ABB can take the necessary actions where needed.

ABB implemented a comprehensive stress testing program in line with the latest EBA guideline. It comprises various types of stress tests:

- **Single risk dimension stress test**
  Several risk dimensions perform their own stress testing, in most cases these are simple sensitivity analyses. The aim is to identify the risk factors, to reveal nonlinearities and threshold effects, to challenge historical data, to detect interdependencies, etc.

- **Multiple risk dimensions stress test**
  - **Risk Appetite Framework**
    The risk appetite framework sets the appetite ABB wants to bear on the different risk exposures. The functional risk appetite limits are fixed once a year and the strategic risk appetite limits are recalculated on a quarterly basis. The RAF is built around a 1-in-20-year stress: ABB should be able to resist a 1-in-20-year financial shock while keeping all its capital and liquidity ratios above its regulatory limits and keeping its earnings positive.

  - **Internal stress test**
    The internal stress test exercise tests various scenarios on the bank as a whole in which multiple risk factors are affected and looks at the influence of these scenarios on ABB's financial soundness.

  - **Recovery plan**
    In the recovery plan the bank uses reverse stress testing to develop "near-default" scenarios. A list of recovery actions is identified and their effectiveness in restoring financial strength and viability when the bank comes under such severe stress is tested.

  - **ICAAP (Internal Capital Adequacy Assessment Process)**
    ABB assesses via the ICAAP the bank's capital adequacy and risks in a normal and adverse market environment. It summarizes to which extent the bank

intends to mitigate risks through processes or capital, and in case necessary steer capital by implementing management actions. Thus, it emphasizes ABB's ability to maintain adequate capitalisation in various market environments by having a strong capital position and supported by suitable internal (risk) processes, governance, strategy, robust data and information.

- **ILAAP (Internal Liquidity Adequacy Assessment Process)**
  Similarly as for ICAAP, ILAAP is an adequacy assessment of the bank. ILAAP focuses on liquidity, by evaluating if a bank has an adequate liquidity position (defined by using both internal and regulatory metrics) in both normal and adverse market environments. In case an adverse market environment leads to a deteriorating liquidity position, ABB demonstrates in its ILAAP that there are sufficient liquidity actions in order to restore the liquidity position to comfortable levels.

- **Regulatory stress tests**
  Periodically a global stress testing program, applicable to all banks or to a selection of banks, is launched by the supervisor (e.g. ECB/EU wide stress testing), to test the resilience of banks' solvency to adverse macroeconomic shocks. The supervisor will use the outcome of the different stress tests in their SREP.

- **Strategic plan stress testing**
  The strategic plan is tested against the main risk indicators containing a stress test element to guarantee that those risks remain within their appetite over the duration of the plan horizon.

Below you will find an overview of the risk stress testing program:

Risk Type\Stress type	Single risk dimension stress	Multiple risk dimension stress							
		RAF	Internal stress test	ICAAP - Normative	ICAAP - Economic	Recovery plan	ILAAP	Regulatory	Strategic plan
Retail credit risk	x	x	x	x	x	x		x	
Non-retail credit risk	x	x	x	x	x	x		x	
Liquidity risk	x	x	x			x	x		x
Market risk - non IRRBB, FX	x	x	x	x	x	x	x	x	
Market risk - IRRBB	x	x	x	x	x	x		x	x
Market risk - FX risk	x	x	x	x	x	x		x	
Market risk - liquidity		x	x	x		x			
Operational risk	x	x	x	x	x	x		x	
Business risk	x		x	x	x	x			x
Pension risk	x	x	x	x		x		x	

Figure 5: Risk Stress Test Overview

Stress testing is an iterative process. The figure below gives an overview of the Stress testing process:

Figure 6: Internal Stress Testing Process

In 2020 ABB focused on the further improvement of its stress test framework and applied this in the multiple risk dimension stress tests.

ABB has measured the impact of market, idiosyncratic and combined multiple dimension stress scenarios on ABB's risk appetite statements. The scenarios are based on historical data observations (mainly assumptions of AXA Group). ABB computed the most realistic impact of these scenarios over a one year horizon, using own internal models.

Internal stress tests do not only stress the solvency requirements but also the liquidity requirements. Results are calculated for solvency, leverage, liquidity, asset encumbrance and minimum requirement for own funds and eligible liabilities (MREL).

For the multi risk dimension stress tests, 7 scenarios were defined:

- **Scenario 1a: European economic crisis with increasing interest rates**

  There is a severe European economic crisis leading to a drop of GDP, increasing unemployment and decreasing house prices. Investors are fire-selling the sovereign debt of European countries. Interest rates and counterparties' spreads increase.

- **Scenario 1b: European economic crisis with decreasing interest rates**

  This scenario is similar to scenario 1 but with decreasing interest rates, as seen in some European countries over the last years.

- **Scenario 2: Reputational crisis at AXA Group level**

  A sudden negative event not linked directly with AXA Bank Belgium damages AXA Group's position. The reputation crisis triggered extends to AXA Bank Belgium and causes significant withdrawals on its retail deposits. AXA Bank Belgium is downgraded.

- **Scenario 3: European economic crisis combined with a general banking crisis**

  This scenario is similar to scenario 1 but combined with a general banking crisis. Several financial institutions stumble or even fall. The banking crisis causes retail clients to withdraw important sums from their banking accounts.

- **Scenario 4: Cyberattack scenario**

  This scenario can be distinguished in three separate events. Firstly, a virus attack causes a breach of availability. Secondly, a cyberattack results in a confidentiality breach of data by stealing customer records. Thirdly, the checkpoint firewalls are disabled by the initiation of a corrupt firewall migration process.

- **Scenario 5: Business risk scenario (COVID-19 scenario)**

  ABB's strategic plan puts forth several commercial ambitions. The strategic plan entails two very concrete ambitions on growth in credits and on fee income from invest. These targets will not be reached in this scenario due to adverse EUR/worldwide economy (COVID-19 pandemic is a good example):

  - All economic indicators involve negatively: decrease of GDP, increase of unemployment, drop of the house prices and interest rates and governmental spreads increase;
  - Due to this negative evolution the credit losses on the existing loan portfolio increase;
  - Beside that the ambition to defend and slightly grow ABB's market share in mortgages at a limited margin cost is not reached. Also the ambition to increase the professional loan production is not reached;
  - The ambition to accelerate funds production, deliver new money and increase the stock significantly will not be reached neither;
  - On the other hand, all customers are very cautious and keep their money on saving accounts.

- **Scenario 6: Rising protectionism and economic downturn**

  Political tensions between countries reaches an all-time high leading to protectionism and trade wars. As a secondary bank to Belgian retail clients and small businesses, money is transferred away from the G-SIBS (reputationally damaged) to local national banks, such as ABB. The influx of liquidity and liabilities significantly increase ABB leverage exposures.

- **Scenario 7: Environmental scenario**

  Belgium is being hit by a severe flood in several areas of the country. A significant part of collateral for the mortgages at ABB is affected. The damage to the real estate is in Belgium covered by the fire insurance, but a lot of damage is not covered: damage to outside furniture, garden houses, car, alternative housing in case the house is uninhabitable. A part of the damage is also covered by the government

2.2.4.5 Risk data, aggregation and IT systems

As from 2017 on, ABB included in its strategy the ambition to evolve towards a data driven organization. This will not be achieved by a big bang project, but rather by focussing on four main areas:

- Data driven commercial actions,
- Trusted operational data insight,
- Regulatory & Financial reporting,
- Data privacy & protection),

The supervisory reporting stream (Regulatory & Financial reporting) started off before the launch of the overall Data stream and before the launch of ABB's Data Board in response to the BCBS239 directive and its translation in Belgian regulation (circular NBB_2017_27). The principles of both the BCBS239 directive and the NBB circular have been integrated in the overall data principles of the bank. This guarantees that overall data management in the bank applies best practices while assuring the data is accurate and reliable.

During 2018 and 2019 ABB's data governance was strengthened further with the introduction of an Information model defining ownership of information and the installation of a Prudential- and Financial reporting and Risk Aggregation Governance which inscribes itself in the overall Information Governance Policy Framework which was approved beginning 2020. Both policies entail the principles, the organization and processes necessary for achieving and maintaining data quality in a structured and efficient way.

As a result of the Prudential and Financial reporting Governance there is the organization of a monthly Operational and quarterly Tactical council which invokes data quality dashboards in order to discuss on a regular basis the quality of the key supervisory reports being FINREP and COREP. Since 2020 the concept of the Supervisory Reporting Catalogue was introduced which defines the supervisory reports in scope of the Governance. By explicitly defining the scope ABB pushes for continuous investment in data culture and reporting solutions. This Catalogue will be reviewed and validated with an annual frequency by both the Operational and Tactical Councils. Moreover, this Catalogue was used as a basis for the roll-out of the Internal Control Supervisory Reporting framework mid-2020. Uniform requirements and controls were defined covering several data quality dimensions (going from documentation to validation procedures). All supervisory reports in scope of the catalogue were scored on these dimensions resulting in a gap assessment which serves now as a input to determine the actions needed in the upcoming years.

Beginning 2020 the governance was further extended with the introduction of the Data Quality Incident Management Tool to support the continuous improvement of the quality of the supervisory reports and the monitoring of the incidents backlog. Finally, ABB also introduced a resubmission policy this year. This policy provides a framework to the different report owners on what actions are expected after the identification of a quality issue.

The progress on the full application of the underlying BCBS239 principles is monitored by a yearly self-assessment exercise. A self-assessment was performed in the 4th quarter of 2020. This self-assessment showed progress on various domains compared to the self-assessment made in the 4th quarter of 2019 and the results of this assessment serve as an input to determine the priorities in ABB's data roadmap for 2021 and further.

3 Own funds and Capital Requirements

3.1 Capital Management

Under the EU Capital Requirements Regulation and Directive (CRR/CRD IV) as well as the Basel accords, ABB must maintain a minimum level of own funds to cover their credit, market and operational risks. This obligation is known as the "Pillar 1 Minimum Regulatory Capital Requirement". Banks must also have in place sound, effective and complete strategies and processes to assess and maintain on an ongoing basis the amounts, types and distribution of internal capital that they consider adequate to cover the nature and level of the risks to which they are or might be exposed to. This obligation is known as the "Pillar 2 Economic Capital Requirement" and is assessed in the context of the supervisory review. In addition to the Pillar 1 and Pillar 2 requirements, ABB also adheres to combined buffer requirements, comprising of the capital conservation buffer, the countercyclical capital buffer and the other-systemic important institution buffer. These capital requirements lead to the overall capital requirements of the bank. Next to the requirements, ABB also received a capital guidance level (see section 1.5).

The **capital risk** is the risk that the bank has or may have insufficient capital to cover the risks to which the bank is exposed. In practice, this is translated into a cross-check of the capital base against the minimum regulatory capital requirements and capital guidance.

The bank reports the required economic capital to the supervisor in an annual ICAAP file. The ICAAP is the internal review process of the institution itself, which allows it to assess the adequacy of its capital in light of its risk profile and its organization. ABB considers its capital adequate if:

- In a normal market environment, the capital risk metrics are above the alert level of the risk appetite framework and the profit generating capacity is sufficient in order to restore the risk metrics above the monitoring level in a 3 year time horizon. If this is not the case, realistic management actions can be applied;
- In an adverse market environment, the capital risk metrics are above the regulatory thresholds (Pillar 1 and Pillar 2) and can be restored above alert level by realistic management actions in a 3 year time horizon.

The adequacy of capital is defined on a normative and an economic level. The normative approach is a forward looking approach that starts from the multi-year projections made in the strategic plan. The strategic plan projections are translated into a regulatory capital plan. In addition, the general stress test framework of ABB provides alternative scenarios under which the adequacy of capital is assessed. Next to the normative approach, ABB developed economic capital models as an alternative and complementing methodology to assess the adequacy of its capital. In this approach, risks are assessed from an economic point of view, and sensitivity analyses on the parameters of the economic models are performed.

In both approaches, a risk assessment is performed where capital indicators are tested against the risk appetite framework of ABB. ABB developed a risk appetite framework where limits

are put in place on multiple levels: monitoring (early warning indicator) and alert. The governance framework of ABB states that in case of an alert level breach, the Management Board presents an action plan containing management actions to the Board of Directors. Therefore, the ICAAP also contains a non-exhaustive list of management actions that can be taken in case there is an alert level breach of the risk appetite framework (RAF).

The capital base is carefully monitored by the 'Asset & Liability Committee' (ALCO). The committee is supported in this mission by a working group: the Capital Management Committee (CMC). The CMC oversees new regulations ('regulatory watch'), follows up on the current and projected solvency ratios and anticipates and manages the economic and regulatory capital requirements.

The calculations for regulatory capital are reported to the supervisor (COREP) on a quarterly basis.

3.2 Own Funds

The own funds for solvency requirements are different from the equity in the financial statements. Equity as reported in the Annual Accounts of ABB is determined on the basis of IFRS.

The reconciliation of the accounting equity based on IFRS with the own funds for solvency requirements can be found in template **CC1** in annex.

AXA Bank Belgium is allowed to include the consolidated net profit for 2020 (€ 65,627 thousand) in the core Tier 1 capital. This strengthened the equity of the Bank. The evolution of CET1 is further determined by the movements in deferred tax assets, intangible assets, securitisation, IRB shortfall, other deductions and the value adjustments.

The accounting capital will be adjusted with prudential filters, deductions and transitional adjustments.

3.2.1 Prudential filters

The CRR specifies a number of prudential filters (articles 32 to 35 of the CRR) which lead to an exclusion of certain items of CET1 capital. The following prudential filters apply to ABB:

- **Changes in the value of own credit risk on fair valued liabilities and related to derivative liabilities**. At the end of 2020, € 3,953 thousand was included this way compared to € 7,807 thousand at the end of 2019. The decrease is mainly due to the increase in DVA rates for fair valued liabilities. Average credit spreads have decreased making the revaluation credit spreads deviate more from the initial ones.
- Value adjustments as result of the requirements for **prudent valuation**: this is a specific requirement concerning the financial instruments measured at market value in the IFRS balance sheet to ensure that prudent valuation is reflected in the calculation of own funds.

The amount of € 327 thousand was deducted at the end of 2020, compared to € 388 thousand at the end of 2019.

3.2.2 Deductions

A certain number of items have to be deducted from CET1 capital (articles 36 to 49 of the CRR):

- **Intangible assets**: the deduction of intangible assets (mainly software) already existed under Basel I (and II). Starting from Q4 2020, 'prudently valued software' or software (intangible) assets can be partially excluded from capital deductions and risk-weighted at 100%. As a results, the deduction for end of 2020 equals € -9,863 thousand, while the deduction at the end of 2019 amounted to € -16,700 thousand. This difference is due to the € 8,555 thousand intangible assets that are since Q4 2020 risk weighted at 100% and as a result not deducted from the CET1 capital.

- **Deferred tax assets** (DTA) that rely on future profitability and do not arise from temporary differences net of associated tax liabilities: at the end of 2020 € 0 thousand was deducted from CET1.

- **IRB shortfall:** when the IRB approach is applied to calculate credit risk, banks are required to compare their actual provisions with their expected losses. Any shortfall should be deducted from CET1 while an excess will be eligible for inclusion in Tier 2 capital subject to a cap. A shortfall of € 9,252 thousand was deducted at the end of 2020.

- **Securitisation:** in Q4 2020 the synthetic securitisation transaction was set up as an RWA reduction measure as explained in section 1.6.2. The capital deduction is the consequence of the retained risk related to the first loss tranche. In this case, the deduction equals € 3,303 thousand.

- **Other deductions**: these concerns the bank tax booked on the balance sheet and comes to € 10,826 thousand. To anticipate the upcoming non-performing exposures (NPEs) regulation AXA Bank Belgium started applying prudential provisions for the stock of NPEs. For Q4 2020 these prudential provisions amount to € 5,659 thousand. This amount was added under the category ‘Other deductions’. Resulting in an evolution of other deductions of € -4,288 thousand at the end of 2019 to € -10,826 thousand at the end of 2020.

All items that are not deducted (i.e. amounts of net DTA below the threshold) are subject to a risk weighting of 250%.

3.2.3 Transitional adjustments

With the introduction of the CRR, transitional measures are provided in order to gradually include **unrealised gains and losses** measured at fair value in determining the Core Tier 1

capital. In 2018 this transition period ended meaning that 100% of the Other Comprehensive Income (OCI) of the available-for-sale portfolios is included in the Own funds. The deduction of the **deferred taxes** was also subject to the phase-in which ended in 2018.

With the implementation of IFRS 9 (as of 1/1/2018), the unrealised gains and losses of the portfolios that will be valued at FV OCI (Fair Value through OCI) will be different as there will be another classification and measurement depending on the business models and SPPI tests.

Capital instruments that no longer qualify as AT1 or T2 capital under the CRR/CRD 4 are subject to **grandfathering rules** during a transitional period and are phased out from 2013 to 2022 with their recognition capped at 20% in 2020 and the cap decreasing by 10% each year.

3.2.4 Own funds for solvency requirements

The CET1 amounts to € 1,102,168 thousand in 2020 versus € 1,036,593 thousand in 2019.

AXA Bank Belgium is allowed to include the consolidated net profit for 2020 (€ 65,627 thousand) in the core Tier 1 capital. The evolution of CET1 is further determined by the movements in deferred taxes, accumulated other comprehensive income and the value adjustments.

The total own funds for solvency requirements include:

- CET1
- additional Tier 1 capital consisting of convertible bonds;
- Tier 2 capital, consisting of the useful value of the subordinated loans, perpetual subordinated loans including Basel III transitional measures

TOTAL OWN FUNDS FOR SOLVENCY REQUIREMENTS	31/12/2020	31/12/2019
Common Equity Tier 1 Capital	1,102,168	1,036,593
Additional Tier 1 Capital	90,000	90,000
Tier 1 Capital	**1,192,168**	**1,126,593**
Subordinated debt	176	1,116
Perpetuals grandfathered	2,558	*11,645*
Perpetuals phase out	-1,791	*-8,151*
Eligible Perpetual Subordinated debt	767	3,493
Tier 2 Capital	**943**	**4,609**
TOTAL OWN FUNDS FOR SOLVENCY REQUIREMENTS	**1,193,111**	**1,131,202**

Table 5: Total Capital

The total own funds evolved from € 1,131,202 thousand in 2019 to € 1,193,111 thousand in 2020.

Key driver of this increase of € 61,909 thousand is the inclusion of the net profit of € 65,627 thousand in 2020.

Basel III established certain high-level disclosure requirements to improve transparency of regulatory capital.

Capital instruments' main features can be found in template **CC2** in annex. The Own funds disclosure template, including transitional provisions, is in template **CC3** of the annex.

3.3 Capital Requirements

3.3.1 Key Metrics

An overview of the most important capital and liquidity requirements at the end of 2020 can be found in template **KM1**, compared to the previous four quarters.

3.3.2 Regulatory capital requirements

The regulatory requirements are based on the concept of Risk Weighted Assets (RWA) as described in CRD IV.

ABB measures its regulatory capital requirements using the following methods:

Risk Category		Regulatory Capital Method
Credit risk	Retail Credit Risk (Mortgages, Consumer & Professional loans)	Internal Rating Based Approach
	Retail Credit Risk (Other loans)	Standardised Approach
	Non-Retail Credit Risk	Standardised Approach
	Counterparty Credit Risk (Derivatives)	Mark-to-market Method
	Counterparty Credit Risk (SFT)	Financial Collateral Comprehensive Method
Market risk	Market Risk Traded debt instruments	Standardised Approach
	Market Risk Foreign exchange	Standardised Approach
Operational risk		Basic Indicator Approach

Figure 7: Regulatory capital methods

The regulatory requirements are based on the concept of Risk Weighted Assets (RWA).

The Pillar 1 minimum regulatory capital requirements foresee in different calculation methods, which are defined specifically in the regulation. The risk weighted assets are calculated according to the specific Basel calculation rules for weighted risks for which ABB has received approval.

In most cases the Standardised Approach (SA) or Basic Indicator Approach (BIA) for operational risk, is used by the bank. The Internal Rating Based Approach (IRB) is applied to the retail loan book.

The RWA for ABB under the Basel III rules amounted to € 5,995,224 thousand on December 2020.

Template **OV1** in annex shows the RWA and the capital requirements according to Basel III pillar 1. The other risk exposure amount refers to the additional stricter prudential requirements based on Art 458 of the CRR. The Belgian regulator has requested[7], for all Belgian banks using IRB models, an **add-on of 5 %** from all Belgian mortgage loans. This additional capital requirement, calculated as a 5% add-on on the IRB exposure value for mortgages covering residential real estate in Belgium, is represented in this amount.

A new additional add-on was approved by Belgian government and took effect in the first half year of 2018. This additional capital requirement is calculated by **applying a factor 1.33 (33% add-on)** to the IRB RWA for mortgages covering residential real estate in Belgium.

The decrease in RWA from € 6,323,875 thousand in 2019 to € 5,995,224 thousand in 2020 is mainly driven by the origination of the RMBS with Significant Risk Transfer (SRT) and the decrease in market risk and Credit Value Adjustment (CVA) as a result of the carve out of the intermediation activity during 2020.

3.3.3 Economic capital requirements

Under Basel III principles, the measurement of economic capital requirements must take into account all identified material risks (hedged through capital).

It must also take into account planned (expected) business growth. In order to assess capital requirements on a forward looking basis, ABB's strategic plan is tested versus the risk appetite framework. Therefore, capital requirements are forecasted over the full horizon of the plan for every business line/activity by using the assumptions embedded in the strategic plan.

As some risks are correlated to others, the measurement of economic capital requirements may also be adjusted (and reduced) for diversification benefits between risks. ABB's correlation matrix aims at estimating correlations between business lines as well as correlations between risk types.

ABB may also adjust (i.e. increase when relevant) its capital requirements based on its analysis of stress testing exercises. From an economic perspective, ABB's excess capital can be measured by subtracting from ABB's available internal capital its total economic capital requirement as defined above. The available capital must always exceed ABB's total economic capital requirements.

[7] This law, published on 8/12/2013 and applicable as of 31/12/2013, results in an additional own funds requirement for ABB's mortgage portfolio.

ABB measures its economic capital requirements by using the methods described in the table below:

Risk Category		Economic Capital Method
Credit risk	Retail Credit Risk (Mortgages, Consumer & Professional loans)	Asymptotic Single Risk Factor model
	Retail Credit Risk (Other loans)	Standardised Approach
	Non-Retail Credit Risk	CreditRisk + model adjusted
Market risk	Market Risk Trading Book (Non-structural interest rate and FX risks, credit spread risk)	Monte Carlo VAR
	Market Risk Banking Book (Structural interest rate and basis risk)	Monte Carlo VAR
Operational risk		Monte Carlo VAR
Business risk		Scenario Approach

Figure 8: Economic capital methods

3.4 Capital Adequacy

3.4.1 ABB's capital adequacy objectives

ABB's capital objective is to respect the following minimal capital requirements at any time under current and stressed market conditions:

- **Minimum Regulatory Capital Requirement (regulatory capital vs. own funds)**

  Maintain sufficient own funds to exceed minimum regulatory capital requirements. In addition, in a normal market environment the regulatory solvency ratio should be above the alert level of the RAF and the profit generating capacity should be sufficient in order to restore above the monitoring level. In an adverse market environment, it should be possible to restore the capital ratios above the alert level of the RAF.

- **Economic Capital Requirement (economic capital vs. internal capital)**

  ABB's main Pillar 2 objective is to remain sufficiently capitalised to be able to cover at all times all of its material risks hedged through economic capital calculated with a 99.9% confidence interval over a defined time horizon[8]. This obligation is above AXA SA's Head Office requirement (99.5%). A similar link is made with the RAF as for minimum regulatory capital requirements.

3.4.2 Regulatory capital Adequacy

The regulatory solvency ratios compare the own funds of the Bank to its RWA. AXA Bank Belgium shows high solvency during 2020 thanks to its prudent investment and credit underwriting strategy, the further derisking of the bank (carve-out of the intermediation business) and the successful SRT securitisation.

[8] Important to note: The standard time horizon that ABB uses to measure its risks is one year. Some risks are evaluated on a shorter horizon since their exposures are easier to hedge or sell in time of stress

The Common Equity T1, T1 and total capital ratio consider the transitional provisions of Basel III.

All solvency ratios increased over the year. This is largely explained by the reduction in RWA over 2020. As per 31 December 2020, AXA Bank Belgium's Tier 1 ratio stands at 19.89% (17.81% in 2019) and total capital ratio at 19.90% (17.89% in 2019).

These same ratios fully loaded, i.e. calculated as if Basel III is already in full force, amounted to 19.89% and 19.90% respectively (17.81% and 17.89% in 2019), very well above requirements, demonstrating that the bank has anticipated the implementation of Basel III.

AXA Bank Belgium comfortably meets all minimum capital requirements.

Regulatory capital (in '000 EUR)	31/12/2020	31/12/2019
CET1	1,102,168	1,036,593
TIER 1	1,192,168	1,126,593
TOTAL CAPITAL	1,193,111	1,131,202
RISK WEIGHTED ASSETS	5,995,224	6,323,875
CET1 ratio	18.38%	16.39%
T1 ratio	19.89%	17.81%
Capital ratio	19.90%	17.89%
Fully loaded CET1 ratio	18.38%	16.39%
Fully loaded T1 ratio	19.89%	17.81%
Fully loaded total capital ratio	19.90%	17.79%

Table 6: ABB's regulatory capital ratio at consolidated level

3.4.3 Countercyclical Capital buffer (CCyB)

In template **CCyB1** in annex, the geographical distribution of the bank's credit exposures relevant for the CCyB calculation for December 2020 is shown. European countries with a total exposure below € 100 million and Non-European countries with an exposure below € 35 million are allocated to "Other countries".

Almost 99% of total relevant exposure (all exposures excluded the ones treated as governments and exposures to institutions) is related to Belgium. The NBB has set the countercyclical buffer percentage for credit risk exposures to counterparties established on Belgian territory at 0 % for each quarter of 2020.

The countries in which ABB has relevant exposures that have a countercyclical buffer rate above 0% are Bulgaria, Czech Republic, Hong Kong, Norway and Slovakia. ABB's exposures to these countries represent only 0.01% of the total exposures and this impact is negligible in the CCyB calculation.

Details can be found in template **CCyB2** in annex.

3.4.4 Economic Capital Adequacy

ABB's risk appetite statement as defined by the Board of Directors limits the total economic capital consumption in order to ensure that ABB is sufficiently capitalised to resist a major unexpected loss (calibrated at a confidence level of 99.9% over a 1-year horizon).

Economic capital (in '000 EUR)	31/12/2020	31/12/2019
Total Economic Capital Consumption	408,547	415,240
Available Capital	1,196,059	1,131,202
Capital excess	787,512	715,962

Table 7: Economic Capital Consumption

With respect to retail credit risk, ABB performed an annual review in the beginning of 2020. As the review was performed after Q4 2019, in the table above the results of the review is not yet incorporated in the figures for 31/12/2019.

The available capital in 2020 largely exceeds the consumed economic capital after diversification.

The evolution in economic capital consumption in 2020 remains quite stable. The increase is mainly explained by a new methodology applied for business risk.

The figure below illustrates the different components of ABB's economic capital buffer.

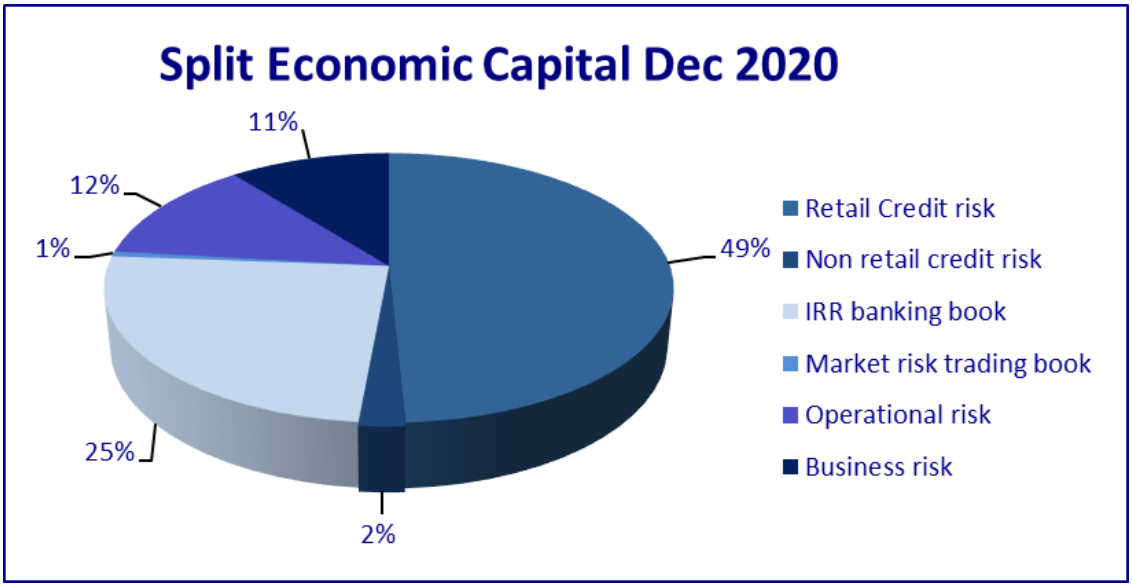

Figure 9: ABB's Capital Consumption

ABB's economic capital covers 6 types of risks:

1. The most important one is the economic capital for **Retail Credits** (49%). This relatively low consumption for a portfolio of around € 22 billion of loans underlines the good quality of the portfolio.

2. The **Interest Rate Risk of the Banking book** consumes 25% of the Bank's total economic capital. It covers the interest rate risk which is inherent in the Bank's retail activities. The interest rate risk position in 2020 remained low due to the continued period of very low (or even negative) interest rates in 2020 and the hedging of new production of fixed rate mortgages.

3. **Wholesale credit risk** accounts for 2% of the economic capital. As the Bank applies a conservative investment strategy which is incorporated in a strict limit framework, the bank decreased its investment portfolio and reduced its positions in GIIPS-countries significantly over the last years. Furthermore, due to the carve-out of its intermediation activity, the risk linked to derivatives decreased.

4. **Operational Risk** represents 12% of the economical capital consumptions. The economic capital model for Operational Risk incorporates the mitigation actions already implemented at the different departments of the Bank.

5. **Market Risk in the Trading Book** (1%) reflects the very conservative approach of ABB towards this risk.

6. **Business Risk** accounts for 11% of the economic capital.

Below you will find the evolution of ABB's economic capital over the last year:

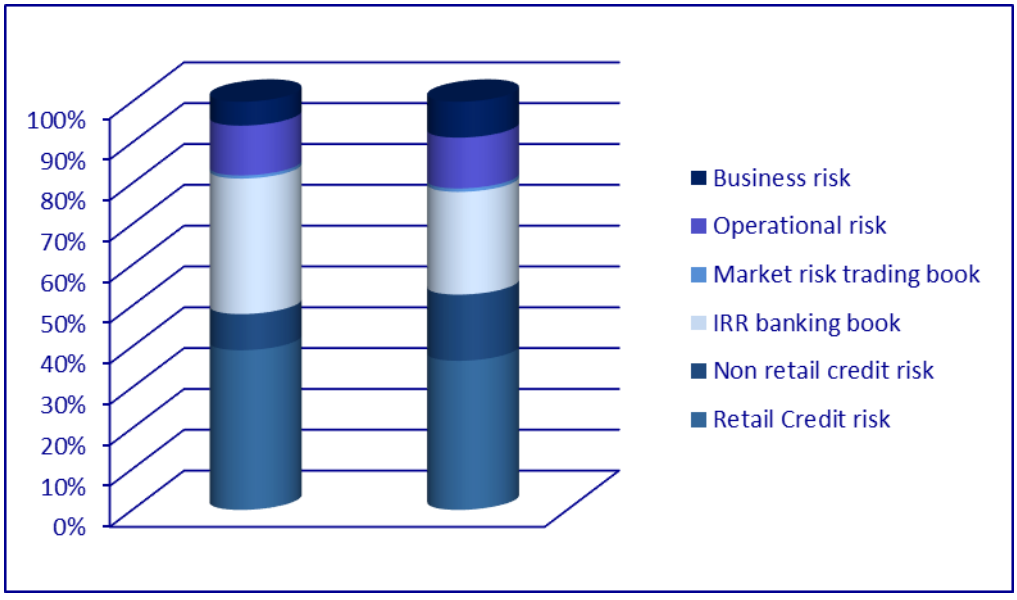

Figure 10: Comparison economic capital

4 Leverage ratio

The leverage ratio is a supplementary measure to the Basel framework. It is defined as **Tier 1 capital** over the bank's total **leverage exposure** measure, which consists of both on- and off-balance sheet items. The aim is to constrain excessive leverage and to bring institutions' assets more in line with their capital.

In connection with the contemplated implementation of the non-risk based leverage ratio, the bank has further put effort in a sustainable growth level of its balance sheet in accordance with the strategic plan. Tier 1 capital slightly increased. The bank's leverage ratio according to current CRR legislation ('Delegated Act') decreased in 2020 to 3.86% at the end of December 2020 (3.98% in 2019) or 3.86% (3.98% in 2019) when fully loaded this is primarily due to the increase in leverage exposure that increased by € 2,611,992 thousand mainly caused by retail growth and higher cash balance due to PELTRO funding.

In light of the low risky assets of AXA Bank Belgium, this level offers a comfortable buffer.

Indeed, our assets essentially include loans with mortgage guarantees, bonds issued by governments and supra-national bodies and to a lesser extent, financial instruments fully collateralised by cash or high quality bonds.

Template **LRSum** in annex shows the reconciliation with the financial statements, while **LRCom** gives a detailed overview of the different components of the leverage ratio. A split up of the other on-balance sheet exposures can be found in annex **LRSpl**.

A comparison of the different Leverage ratio components with the previous year at consolidated level can be found in the table below.

Leverage Ratio Components (in '000 EUR)	31/12/2020	31/12/2019
Total SFTs	22,608	582,449
Total Derivatives	156,574	629,677
Total Other assets	30,181,543	26,653,876
Total On-balance	30,360,726	27,866,001
Total Off-balance	567,547	464,797
Deducted from T1 fully loaded	-28,080	-42,597
Deducted from T1 transitional	-28,080	-42,597
Total leverage exposure fully loaded	**30,900,193**	**28,288,201**
Total leverage exposure transitional	**30,900,193**	**28,288,201**
T1 capital fully loaded	1,192,168	1,126,617
T1 capital transitional	1,192,168	1,126,617
Leverage Ratio fully loaded	**3.86%**	**3.98%**
Leverage Ratio transitional	**3.86%**	**3.98%**

Table 8: Leverage ratio components at consolidated level

4.1 Description of the processes used to manage the risk of excessive leverage

The Leverage Ratio is a measure of the capital risk so that the risk of excessive leverage is covered by ABB's capital risk management governance. Capital risk management involves the Board of Directors, advised by the Risk Committee, the Management Board, and the Risk Management and Finance departments.

ABB's Board of Directors defines the strategic objectives of the bank, and the subsequent risk appetite, i.e. the aggregated level and types of risks ABB's business lines and branches are willing to assume to achieve these objectives. This risk appetite is defined within ABB's risk capacity, which is the maximum level of risk that ABB can assume given its current level of resources before breaching regulatory constraints in terms of capital, including leverage, and liquidity requirements.

To increase efficiency and allow deeper focus in specific areas, the Board of Directors has established specialised Board Committees. The **Risk Committee** is one of them, and, with regard to capital risk, is responsible for assisting the Board of Directors in defining the adequate level of capital that fits both the risk strategy and the risk appetite. This Committee provides assistance to the Board of Directors in assessing the implementation of that strategy. Finally, this Committee monitors both the actual and forecasted solvency ratios, including the leverage ratio, which should be presented to it at each of its occurrence.

ABB's Management Board develops, along with senior management and the CRO, the bank's risk appetite, taking into account the competitive and regulatory landscape, short and long-term strategy, exposure to risks and the ability to manage risks effectively. Moreover, ABB Management Board is responsible for ensuring that the bank's risk appetite framework is respected. This framework includes limits based on the Leverage Ratio.

The **Risk Management department** is responsible for supporting the Management Board for defining, implementing, monitoring and regularly reviewing ABB's risk appetite framework (e.g. by translating ABB's risk appetite intro operational indicators and limits). In particular, the department should determine the capital at risk, which is a measure that determines the necessary excess capital under the most stringent regulatory capital constraint to absorb a 1/20 years shock.

ABB's capital adequacy objective is to respect minimal capital requirements (economic and regulatory, including leverage ratio) at any time, under current and stressed market conditions. To ensure the permanent fulfilment of these requirements over the coming years, ABB has fully integrated capital requirements (including Leverage ratio) into its Risk Appetite Framework against which the strategic plan is tested in order to ensure the compliance to the stricter regulation and internal risk appetite statements over the full horizon of the plan. To ensure the fulfilment of these requirements in case of stress, they are stress tested in the framework of:

- the strategic plan via (i) alternative rate scenarios, (ii) sensitivity analyses on the main assumptions of the plan (iii) and conservative investment yields for the ALM portfolio.
- the SREP stress tests and AXA Bank Belgium internal stress testing program
- the recovery plan (including reverse stress tests).

These scenarios, sensitivity analyses, stress test and reverse stress tests results are scrutinised to assess all potential risks that may interfere with the fulfilment of all legal and internal requirements.

On a regular basis, and at least twice a year, **Finance department** reports the relevant solvency ratios and aligns with AXA Group teams on any necessary capital action.

Finance department is also responsible for monitoring financial figures and to detect unexpected punctual loss of such significance that it would harm the capital of the bank and, as such ABB's solvency ratios, including leverage ratio.

4.2 Description of the factors that had an impact on the leverage ratio

Main drivers of the leverage ratio are changes in:

(1) Tier 1 capital slightly increased as explained in section 3.2.4.

(2) Leverage exposure evolution mainly driven by an increase in the retail portfolio and higher cash balance due to PELTRO funding.

5 Credit risk

ABB defines credit risk as the negative consequences associated with the default[9] or deterioration in credit quality[10] of counterparties in lending operations.

The goal of credit risk management is to ensure that a (set of) credit event(s) would not significantly threaten the bank's solvency nor profitability. In order to reach this objective, credit risk exposures are maintained within strict boundaries. The effective management of credit risk is a critical component of a comprehensive approach to risk management and is essential to the long term success of any banking organization.

5.1 Credit Risk Management and Governance

Within ABB, credit risks are categorised as either retail credit risks or non-retail credit risks and managed accordingly. Non-retail credit risks comprise mainly credit risk from derivatives and bonds. These two risk types are further discussed underneath.

5.1.1 Retail credit risk

ABB's main business is to provide loans and credit facilities to private individuals, professionals and small businesses. These products are offered in Belgium only.

The management of ABB's retail credit risk is formalised by a Retail Risk Management Charter. It sets the organisation, risk appetite framework, product approval processes and modelling requirements that must be followed internally to mitigate ABB's retail credit risk exposures. It is completed by business & credit policies which provide the procedures for the day to day management of retail credit risks.

The Belgian loan portfolio consists mainly of mortgages, consumer loans and professional loans, with mortgage loans representing the most important share.

Given the good collateral coverage and the low probability of default of this loan portfolio, the risk profile of the total retail credit portfolio is low.

5.1.1.1 COVID-19 impact

The COVID-19 crisis implicates an increase in retail credit risk as ABB's clients might be impacted by the worsened macro-economic conditions and thus have a higher chance of defaulting on their loans. The Belgian governments have taken supporting measures for

[9] Counterparty not able to fulfil contractually agreed financial obligations.
[10] Potential loss due to changes in the fair value of credit exposures as a result of rating transitions of counterparties.

companies, self-employed and temporary unemployed workers as well as installing a framework for payment suspensions on loans, i.e. the moratorium. Thanks to these supporting measures as explained in 1.6.1.2, ABB did not encounter a significant increase in loans with payment problems. Nevertheless, increased losses in the coming years become more likely which is reflected in an increased level of expected credit losses for stage 1 and stage 2 loans. Measures are put in place at ABB to deal with this increased credit risk appropriately. These additional measures are explained in more detail in the next paragraphs.

- **New stage 2 classification rules and manual UTP classification for payment suspended loans**

As discussed in 1.6.1.2, a moratorium was introduced by the regulator implying that days past due counting was stopped for those loans and that COVID-19 payment suspended loans were not automatically flagged as forborne. Consequently, to further guarantee a qualitative risk segmentation during the COVID-19 crisis, ABB applied additional risk indicators based on internal data and data from external data providers. This enables ABB to make a distinction between on the one hand viable clients with only short term liquidity issues due to the crisis and clients with more structural financial difficulties on the other hand. Additionally, these extra indicators enable better monitoring and risk management of these loans. More details can be found in the Annual Accounts section 4.4.1.1.1.2.

- **Revision management overlay**

Within the IFRS 9 framework, ABB has internal macro-economic models that estimate how the credit portfolio will behave under certain macro-economic conditions. The unprecedented shock of the COVID-19 crisis on the macro-economic environment in combination with important state interventions makes it extremely challenging to forecast how the credit portfolio will behave in the future. It was considered that the outcome of the existing internal portfolio models did not completely capture the effect of the COVID-19 crisis on the future credit portfolio. To assure an adequate level of expected credit losses in line with the current macro-economic outlook, a management overlay on IFRS 9 impairments was installed at the end of 2020.

On top of this general management overlay that covers the systemic risks within the credit portfolio, an in-depth analysis was performed on economic sectors which have been hit exceptionally hard by the COVID-19 crisis and the subsequent lockdowns imposed by the government. Based on an analysis of lockdown measures and public surveys, vulnerable economic sectors were defined see table underneath.

Covid-19 vulnerable sectors
Beauty
Events
Horeca
Public venues
Retail store: non-essential resources
Sport: activities & venues
Tourism
Whole-sale: non essential resources

Table 9: COVID-19 vulnerable sectors

A methodology was developed to estimate the default rate for these sectors given the lockdown measures based on a combination of external data and the internal risk models. It is possible that for these economic sectors 20% of the credit portfolio might default in the upcoming years and therefore an additional sectoral impairment was installed.

The above measures have globally increased our expected credit losses with € 11.3 million at year-end 2020. More details can be found in the Annual Accounts section 4.4.1.1.1.4.

It is to be noted that the actually incurred credit losses remained low in 2020.

5.1.1.2 Governance

The governance of ABB's retail credit risk management can be summarised as follows:

- **ABB' Board of Directors** and **ABB's Management Board** assume the responsibilities described in chapter 2.1 of this report.

- **ABB's Retail Risk Committee** oversees the bank's credit strategies defined by ABB's Board of Directors and instructed and implemented by ABB's Management Board. It reviews and approves retail credit risk policies. It monitors and analyses consolidated retail credit risk reports. It validates credit risk indicators and models. It monitors the adequacy of ABB's retail credit risk infrastructure and risk models (stress testing, back testing and calibration). It decides on the provisioning levels of the bank.

- **Credit business lines** are responsible for the acquisition, management and recovery of retail credits. They act as the first line of defence in the management of retail credit risk. They are responsible to propose (or amend) retail credit products and policies.

- As a control function (independent from the business lines), **ABB's Risk Management** department assumes the responsibilities described in section 2.1. They also act as Credit Risk Controlling Unit (CRCU).
  ABB's modelling team sets up and maintains the appropriate risk indicators and models described below.

5.1.1.3 Risk policy, limit framework and reporting

The purpose of credit risk management is to correctly identify and measure the credit risk on the balance sheet, to monitor the credit risk and to take the necessary actions to keep the credit risk within the risk appetite so preventing one or more credit events to materially affecting the solvency or profitability of the bank.

To achieve this objective, loan portfolios must remain within certain predetermined limits. These limits are determined by a previously elaborated risk appetite framework (RAF), in which functional limits are defined. These functional limits are translated into operational limits and these limits are used on a daily basis to ensure the credit activity operates within the

risk appetite defined by the Board of Directors. Risk Management produces regular risk reports for monitoring the evolution of the risk profile of the Belgian retail loan portfolio.

The risks on ABB's Belgium mortgage loans, personal loans and professional credits are managed in four phases (acquisition, management, remedy and recovery) based on retail credit policies.

Retail credits are accepted on the basis of a set of acceptance standards and policy rules. Acquisition scoring models are internally developed and regularly reviewed to assess the validity of these internal risk models. Moreover, Risk management set up a risk-adjusted return on capital (RAROC) framework for the main lending activities (mortgage loans, professional loans and consumer loans). This RAROC framework has become an essential element in the risk-return analysis of the retail activities.

Template **NPL1** in annex shows the credit quality of forborne exposures, while **NPL3** gives a detailed overview of the credit quality of performing and non-performing exposures by past due days. Performing and non-performing exposures and related provisions can be found in annex **NPL4**. Finally, Template **NPL9** shows the collateral obtained by taking possession and execution processes.

Since 2018, a methodology for determining the lifetime expected credit loss is used within the Risk and Finance department as foundation for the accounting rules under IFRS9. This methodology enables ABB in quantifying the lifetime credit risk as from the origination moment and helps further evolving credit risk management.

An essential part of the credit risk policy is formed by the non-performing loan (NPL) strategy of the bank. Given ABB's retail loan portfolio is characterized by a low NPL ratio, there is no supervisory requirement for creating a detailed NPL strategy aiming for a structural reduction of the NPL ratio. Nevertheless, the strategy was officialised in 2019 and additional efforts were done to further strengthen ABB's capabilities to manage non-performing loans. For example, to anticipate the upcoming non-performing exposures (NPEs) regulation ABB started applying prudential provisions for the stock of NPEs as from Q4 2020 as discussed in 3.2.2.

In the current adverse macro-economic environment ABB's non-performing loan ratio increased in 2020 but remained at a low level.

ABB's NPL strategy can be summarized in the following principles:

- controlled risk intake at credit acquisition moment in line with Risk Appetite Framework
- accompanying ABB's client in good and bad financial moments
    - invest time and effort to accompany clients before loans can even become non-performing
    - if a loan is non-performing, a sustainable solution for the client with financial problems is searched within a reasonable timeframe
    - if no sustainable solution could be found, the commercial relationship is ended and a recovery process is launched
        - the recovery process on loans for which a collateral is available is done internally
        - the recovery process on unsecured loans is done externally given the current appetite in the market for non-performing loans

- NPL management is characterized by expertise creation, sufficient FTE's and an adequate technical infrastructure

In compliance with regulatory expectations, ABB performs stress testing for retail credit risk. The main goal is to assess the sensitivity of credit losses for the existing credit portfolio as well as to assess the solvency of the bank under stressed situations.

The evolution of credit risk is actively tracked as part of the reporting for the Retail Risk Committee which reviews the risk on a regular basis. All these principles lead to a highly effective risk management system with control processes that prevent undesired manipulations. This system is strongly integrated into the operations of the "Retail Credits" division and is subject to continuous monitoring.

5.1.1.4 Portfolio

The Belgian loan portfolio consists mainly of mortgages, consumer loans and professional loans, with mortgage loans representing the most important share.

Given the good collateral coverage and the low probability of default, the risk profile of the total credit portfolio is low.

Despite the COVID-19 crisis, the mortgage portfolio has once more risen strongly in 2020 (+5.6%) thanks to the high new production of mortgages which proofs to be of good quality. After the years 2015 and 2016 with a high volume of refinancing, 2017 until 2019 were characterised by a more moderate level of refinancing and in 2020 this moderate level is maintained. For the consumer loan portfolio, we noticed an increase in 2020 (+5.2%). The production did more than compensated for the natural erosion of the portfolio despite not being a strategic product.

As from 2016, the professional loans portfolio of AXA Bank Belgium is growing. In 2017, 2018 and 2019 the portfolio increased significantly, for 2020 the evolution was 12%. This is in line with AXA Bank Belgium's strategic initiatives to intensify the relationship in the professional segment.

5.1.1.5 Securitisation – Significant Risk Transfer

As explained in section 1.6.2, AXA Bank Belgium has successfully set up a synthetic securitisation on its mortgage loan portfolio in Q4 2020. This was done to support the growth of the loan portfolio while maintaining the envisaged solvency levels (as set in the risk appetite framework of the bank). This securitisation of the underlying mortgage portfolio has led to RWA relief amount of € 283 million in Q4 2020, which contributed to comfortable solvency ratios at the end of 2020 as mentioned in 3.2.4.

5.1.2 Non-retail credit risk

Besides retail related credit risk, ABB incurs credit exposure to high quality counterparties and issuers through its treasury and asset & liability management activities.

AXA Bank Belgium engages in different types of derivates in order to hedge the market risk of its balance sheet (e.g. to hedge the interest rate risk on mortgages) and incurs counterparty credit risk on these derivatives. The second area where credit risk is incurred is the investment portfolio under management of the ALM department. Lastly, AXA Bank Belgium is exposed to credit risk through its repo activity, performed by the treasury department.

These activities are further described in section 5.4.2.1 (Investment portfolio) and section 5.6 (Counterparty credit risk).

5.1.2.1 Governance

The management of ABB's non-retail credit risk is centralised at its head office. The key governing bodies being:

ABB's Board of Directors and **ABB's Management Board** assume the responsibilities described in section 2.1 towards the management of non-retail credit risk.

ABB's Wholesale Risk Committee (WRC) receives a delegation from ABB's Management board to manage ABB's non-retail credit risk. Among others, it monitors the compliance with the extended limit framework concerning the credit quality of non-retail counterparties. The limit framework assesses exposures to counterparties at different levels (country, sector, type of instrument and counterparty) and prescribes limits at these different levels to limit both the individual counterparty risk as well as the concentration risk. The Wholesale Risk Committee works within the risk appetite context that has been approved by the AXA Bank Belgium Board of Directors.

It meets on a monthly basis and its members are the CRO, CEO, Deputy CEO/CFO, the Head of ALM, Treasury & Long Term Funding, Head of non-retail Risks management and relevant specialists from the ABB Risk department and other departments. The committee also monitors adherence to risk appetite framework for non- retail credit risks, as well as the market risk incurred on ABB's trading book. It takes decisions regarding the issuer's eligibility concerning proposed investments and disinvestments.

The WRC has also integrated the responsibilities of the Impairment Committee for the non-retail business. Given the introduction of IFRS 9, the governance was changed to integrate the credit risk aspect in the committee best suited for it. The Impairment Committee no longer exists.

ABB's Financial Services Department, consisting of Asset and Liabilities Management (ALM) , Treasury and Long Term Funding, is the first line of responsibility for the management of non-retail credit risks. They must respect ABB's non-retail credit risk mitigation measures.

As a monitoring & control function (independent from the business lines), **ABB's Risk Management** department assists the bank's Board of Directors, Management Board and Wholesale Risk Committee in managing the bank's non-retail credit risk.

5.1.2.2 Risk policy, limit framework and reporting

- **Strategies and processes**

It is ABB's strategy to optimise the risk/return relationship in its non-retail activities, as well as making sure it fits within AXA Group's risk appetite. We explain how this translates into the 2 axes of the non-retail credit risk: investment portfolio and derivatives/repo activities.

The investment portfolio of AXA Bank Belgium serves as a liquidity buffer as well as a way to capture the interest rate and credit risk premium to generate profits. To make sure this remains within ABB's risk appetite, risk management monitors its investment portfolio in terms of:

1) Adequacy of securities for calculation of the liquidity coverage ratio (see chapter 7 Liquidity Risk), where ABB limits itself exclusively to assets of the highest liquidity class as defined by Basel III.
2) Adequacy of securities for calculation of the solvency ratio, where ABB limits itself almost exclusively to assets of 0% risk weight as defined by Basel III.
3) Adherence to AXA Group limits and ABB's own concentration limits

- **Non-Retail credit risk framework**

In 2020 the Wholesale credit risk framework and the Wholesale credit risk charter were fully reviewed and approved.

The basis is the Risk Appetite Statement (RAS) set by the Board of Directors. Further concentration limits and minimum quality requirements are set by the Management Board. A regular follow up and management is done by the WRC.

Investment portfolio

The Board of Directors defines the Risk Appetite by allocating available Capital@Risk.

Risk Appetite Statements drive the investment portfolio limit framework:

- RAS 1: **OCI** impact caused by 95% CI shocks should not exceed Capital@Risk allocated to the portfolio.
- RAS 2: **Unexpected Credit Losses** under 95% CI should not exceed Capital@Risk allocated to the portfolio.

Management Board imposes a limit per issuer relative to ABB's total capital depending on the issuer's rating. They also impose a maximum of 25% of total portfolio for one issuer (for new investments only). There is an exception for OLO's, as these may be needed to avoid basis risk in mortgage hedges.

The CRO has a veto right at Management Board level for these decisions.

The WRC approves individual issuers from the eligible universe and takes decisions on investments that fall out of the universe (e.g. downgrade to BBB-) and reports to the Risk Committee through the QRR. They also set limits per issuer and ensure compliance with AXA GRM and regulatory large exposure framework.

ALCO approves individual (dis)investments within the framework set by WRC/MB.

5.2 Credit risk exposures

In the application of Article 442(c), total and average net amount of exposures can be found in template **CRB-B** in Annex.

For the vast majority of Belgian credit loans credit risk measurement is done by means of Internal Rating Based (IRB) models. A residual proportion of loans are measured by the Standardised Approach.

AXA Bank Belgium applies the Standardised approach for non-retail credit risk exposures.

The credit risk exposures are risk-weighted for 18% according to the Standardised Approach and for 82% according to the IRB. When only looking at the Retail portfolio, 99% is risk-weighted following IRB.

For on-balance sheet items, the net value is the gross carrying value of the exposure less allowances/impairments. For off-balance sheet items, the net value is the gross carrying value (nominal amount) of the exposure less provisions.

The average net exposure value is calculated based as the average of the end of the four previous quarters.

In the application of Article 442(d), a geographical breakdown of the net value of the exposures by exposure class is provided in template **CRB-C** in annex. For the determination of the significant countries a threshold of € 100 million is applied for countries within the European geographical area and a threshold of € 50 million for countries outside this area. These significant countries cover 98.3% of the total credit risk exposure. Exposures with supranational organisations (1.7% of the total credit risk exposure) are assigned to the geographical area “Other geographical areas”. Besides this area, two significant areas are defined: Europe and North America. Only 1.2% of the credit risk exposure is allocated to “Other countries” in the different areas.

Information on the industry or counterparty type of exposures is provided in template **CRB-D**, in accordance with Article 442(e). For reasons of consistency, the breakdown by industry sector for “Non-financial Corporates” has been completed with “Households” and “Other industries”.

Obviously, ABB’s retail portfolio is mainly concentrated towards households. These households are serviced by ABB by means of mortgage loans, consumer loans and credit facilities to current accounts. Furthermore, ABB has some exposure towards non-financial and financial corporations. These exposures correspond to our professional loan portfolio targeting self-employed clients, independents and micro enterprises. A diverse mix of industry sectors

are served by ABB. ABB's commercial network consists of independent branches and these branches have also some financing needs explaining a larger share of the professional loan portfolio exposed to other financial corporations.

Following Article 442(f), net exposures are broken down by residual maturity and exposure classes in template **CRB-E** in annex.

Approximately 78% of ABB's portfolio has a maturity of more than 5 years. Since ABB's retail portfolio is mainly focused on mortgage loans, a high maturity is in line with expectations.

5.3 Credit quality

Article 442(g) and (h) require institutions to disclose a number of credit quality templates. Templates **CR1-A** to **CR1-E** in annex provide information on this topic.

5.3.1 Definition of default

AXA Bank Belgium's definition of default on the retail loan portfolio is fully in line with the European Regulation (EU) No 575/2013 and other regulations of the EBA. AXA Bank Belgium has chosen to implement a very strict definition of default which has been reflected in an increase of the amount of "unlikely to pay" loans and the relevant provision amounts without the quality of the underlying portfolios being changed.

AXA Bank Belgium considers a client/facility to be in default if and only if one or more of the following conditions is fulfilled:

- The client / facility is "unlikely to pay": The client will probably not be able to fully satisfy its credit payment without possible claim on guarantees.
- The client / facility is ">90 days past due": The client has more than 90 days payment arrears.
- The client / facility is in pre-litigation: The client has more than 90 days payment arrears and is subjected to a recovery plan.
- The client / facility is in litigation: The client is in pre-litigation for more than 9 months or the credit has been closed.

In case a client/facility is categorised under one of the first two categories in the above list, but is not doubtful, it is also referred to as "possible loss".

An important change in 2020 was the introduction of the new EBA definition of default , which impacts the figures, as some credits that were in Stage 3 are currently in Stage 2 and vice versa. The main changes in this default concept, are the following:

- Counting of the number of days past due, which will only start when an absolute and relative materiality threshold has been breached (respectively € 100 and 1% of the

balance amount). Flagging of defaults due to 90 days past due will therefore not happen at the same moment as before.
- The application of a 3 month probation period for all defaulted loans, which means the credits remain in default for 3 months after curing (whereas it was 6 months in the past).

When a client/facility becomes defaulted, it is considered to be impaired and thus a specific (collectively or individually assessed) provision has to be accounted for. At that moment an evaluation should always be made if this default has an impact on the estimated future cash flows of the financial asset, and if accordingly, an impairment loss should be recognised.

Furthermore, the default status is fully aligned with the 'non-performing' and 'impaired' statuses.

5.3.2 Acceptance policy

In 2013 it was decided to implement a more selective acceptance policy for retail loans and even today the consequences of that decision are still visible. In 2020 the new production was again characterised by a high quality and the entire credit portfolio showed a good credit quality despite the COVID-19 crisis.

An overall increase of the observed default rates[11] (over a one year horizon) in the Belgian portfolio was observed in 2020 which was caused by the COVID-19 UTP flagging as described in 5.1.1.1.

The 2020 evolution of the 12M default rate is described underneath:

- The 12M default rate[12] for mortgage loans increased from 0.75% in December 2019 under the new definition of default to 1.02% in December 2020. This increase in 12M default rates for mortgage loans is due to COVID-19 UTP flagging.
- The 12M default rate for loans to professionals and small businesses increased from 1.78% in December 2019 to 2.42% in December 2020 under the new definition of default. The 12-month default rate is significantly impacted by AXA Bank Belgium's COVID-19 UTP flag.
- For consumer loans the 12M default rate was 2.15% under the new definition of default in December 2019. In December 2020 the 12M default rate for consumer loans was 2.07% under the new definition of default. This corresponds to a stable default rate in this COVID-19 crisis and demonstrates that AXA Bank Belgium has a prudent credit risk intake for this product type.

The credit losses amounted to a total of € 16.7 million in 2020, compared to € 6.3 million in 2019. The incurred credit losses remain relatively low as the credit portfolio continued to show a high quality. The increase in credit loss is explained by a strong increase in the expected

[11] 'one-year default rate' means the ratio between the number of defaults occurred during a period that starts from one year prior to a date T (observation date) and the number of obligors assigned to this grade or pool one year prior to that date (sample date).
[12] Compared to 2019 the definition of default was revised in 2020. This concept includes forbearance and intra-month defaults. Figures for reporting 2019 have been recalculated based on the new definition.

credit losses due to the impact of COVID-19 and a significant deterioration of macro-economic outlook as mentioned in section 5.1.1.1.

5.3.3 Credit quality stages

5.3.3.1 Performing – Stage 1

Under IFRS 9, within the segment of performing loans, a distinction is made between loans without any significant increase in credit risk since origination on the one hand and loans with a significant increase in credit risk since origination on the other hand. Loans that are in the performing segment without any significant increase in credit risk are categorised as Stage 1. For Stage 1, the impairments are recognized for a 12-month expected credit loss. If none of the qualitative or quantitative triggers as described in Stage 2 and 3 are triggered, a loan is categorised in Stage 1.

5.3.3.2 Underperforming – Stage 2

AXA Bank Belgium considers the following conditions, both quantitative as qualitative, to attribute to a significant increase in credit risk (SICR) and therefore the loans are categorized as Stage 2 (underperforming):
Qualitative triggers:

- Days past due greater or equal to 30
- Negative listed in CKP[13] database
- Forbearance measures on credit
- Current PD rating in bucket 9

Quantitative triggers:

- Current PIT[14] PD is above a factor 3 times PD at origination and absolute difference is above 67 BPS
- Difference in current PIT PD to PD at origination is greater or equal than 2%-points

If a single one of the qualitative or quantitative triggers conditions is met, the loan will be classified as Stage 2.

During the COVID-19 crisis clients could request payment deferrals as explained in 1.6.1.2. In normal times payment deferrals are only granted to clients in financial difficulties and hence these loans would be classified as forborne and placed in IFRS stage 2. However, following the EBA guidelines, it was decided to not automatically flag COVID-19 payment suspended loans as forborne. Nonetheless, additional risk indicators based on internal data and data from external data providers were applied to classify additional loans as forborne and as stage 2 in case those indicators point to more structural financial difficulties as discussed in 5.1.1.1.

5.3.3.3 Non-performing – Stage 3

Stage 3 contains all loans in default. See section 5.3.1 for its definition

[13] Database at the National Bank of Belgium listing all credits a natural person has across all financial institutions and companies that grant credit facilities.
[14] Point-in-time

5.3.3.4 Impairments split by internal rating

When a client/facility becomes defaulted, it is considered to be impaired and thus a specific (collectively or individually assessed) provision must be accounted for. At that moment an evaluation should always be made if this default has an impact on the estimated future cash flows of the financial asset, and if accordingly, an impairment loss should be recognised.

Furthermore, the default status is fully aligned with the 'non-performing' and 'impaired' statuses.

In the table underneath the impairments of AXA Bank Belgium are split by internal rating. The largest part of impairments in Stage 2 had an internal rating between 7 and 9 at the end of 2020. This corresponds to impairments linked with credits having experienced a significant increase in credit risk.

Quality of the portfolio ('000 EUR)	Stage 1: 12-month expected credit losses	Stage 2: lifetime expected credit losses	Stage 3: credit-impaired financial assets (lifetime expected credit losses)
Internal rating 1 to 4	2,141.31	1,499.19	
Internal rating 5 to 6	2,026.53	5,047.11	
Internal rating 7 to 9	2,222.15	15,591.73	
Internal rating 10			57,237.41

Table 10: Impairments split by internal rating (in EUR thousands)

5.3.4 Specific and General credit risk adjustments

Based on the CRR definition, credit risk adjustments are the amount of specific and general loan loss provisions for credit risk that has been recognised in the financial statements in accordance with the applicable accounting framework. The Consolidated Financial Statements of AXA Bank Belgium are drawn up in compliance with the International Financial Reporting Standards (IFRSs) – including the International Accounting Standards (IASs) and interpretations as accepted within the European Union.

Under IFRS 9 the credit risk and the potential associated credit losses are captured through the expected credit losses principles and all credit risk adjustments are categorised as specific. There is no general loss allowance as defined under the Bank Accounts Directive (Council Directive 86/635/EEC).

All expected credit losses calculated through internally developed statistical models and other historical data are considered being collectively measured allowances. Only loans having a 'CX' status within AXA Bank Belgium as part of the credit-impaired loans portfolio are individually measured allowances.

AXA Bank Belgium calculates expected credit losses starting from the initial recognition of the loan on the balance sheet. For loan commitments, the date that AXA Bank Belgium becomes party to the irrevocable commitment is considered to be the date of initial recognition for the purposes of applying the impairment requirements.

Based on the following key inputs:

- Exposure at default
- Loss given default
- Probability of default

expected credit losses are calculated as a probability-weighted outcome probably based on 3 scenarios: a medium up-turn scenario, a base scenario and a medium down-turn scenario.

ABB uses a separate provision account, which reflects the impairment special depreciation, undergone by the underlying financial asset as a result of credit losses. The calculation of the expected losses also takes into account the impact of the time value and the related adjustment is recognised through the interest yield.

Negative differences between the calculated recoverable amounts and the carrying amount are recognised in the income statement as an impairment loss.

Each increase due to a downswing is recognised through the addition for impairment accounts in the income statement.

Each decrease due to objective indicators that show that the recoverable amount increases as a result of an improvement in the assessed recoverable cash flow is accounted for through the write-back of impairments in the income statement account. However, it shall never lead to an amortised cost, which would be higher than the amortised cost if no impairment depreciation had taken place.

The provisions are directly booked against the receivables if there is no possibility of recovery.

5.3.5 Definition of Past due

A client or facility is regarded past due if it is totally or partially past-due.

The definition of days past due reflects the number of days between the date of reporting and the oldest unpaid date.

5.3.6 Definition of Forbearance

Forborne exposures are debt contracts for which forbearance measures have been taken. Forbearance measures consist of concessions towards a borrower facing or about to face financial difficulties. Forbearance measures can be taken only if there is a mutual agreement between the borrower and the bank on these measures.

The debt contract enters forbearance when one of the following measures has been taken:

- A modified facility was or would have been classified as default in the absence of modification. A modification means a change of terms and conditions to an existing contract.
- The use of embedded forbearance clauses in a credit contract for a borrower who is or would be considered as default without the use of these clauses.
- A refinancing, meaning the granting of new credits, used simultaneously with or close in time for the partial or total payment of principle or interest in other credits for which the borrower is unable to comply with under the current terms.

In case the forborne facility is considered non-default, the PD assigned by the model will be applied. However, it is expected that the assigned PD is higher than the PD assigned to borrowers/files with similar credits but without forbearance measures, reflecting the higher risk on default of the forborne facility.

In case the forborne facility is considered or becomes default, the PD has to be assigned according to the rules set out in the Definition of Default.

In case a facility is classified as forborne, a "forbearance flag" has to be attached to this facility. A facility is categorised for its entire amount and without taking into account the existence of any collateral.

In accordance with ABB's IFRS 9 provisioning policy a facility tagged as "forborne" will always be allocated to Stage 2. This only applies to non-defaulted exposures, since defaulted exposures are always classified as Stage 3. It is to be noted that payment suspended loans taken under a moratorium were not automatically considered as forborne. Nonetheless, additional risk indicators based on internal data and data from external data providers were applied to classify additional loans as forborne and as stage 2 in case those indicators point to more structural financial difficulties as discussed in 5.1.1.1.

If a facility has been assigned the defaulted status (before or at the time of forbearance measures are granted), the forborne facility must remain defaulted for at least one year. Only upon strict conditions the facility can be reclassified as non-defaulted.

A forborne facility with a non-defaulted status will be tagged as forborne for at least two years after the forbearance measure has been granted, or after the facility becomes non-defaulted. This forborne tag can only be removed when strict extra criteria have been met.

At the end of 2020, forborne loans accounted for 1.82% of our total loan portfolio. Compared to the end of 2019 (1.34%), the forborne loan exposure increased slightly. This increase in forborne exposures results from the actions taken to pro-actively identify potential future credit losses due to the COVID-19 crisis.

5.3.7 Credit Risk Mitigation (CRM)

ABB defines in its credit policies the need to establish collaterals to mitigate the credit risk (Article 453).

5.3.7.1 Policies and processes for collateral valuation and management

At the moment of establishing a mortgage inscription/mandate, a valuation of the underlying real estate is done.

Two types of valuations are allowed. On the one hand, the valuation of the real estate is done by means of an independent external assessment. On the other hand, the valuation can be done by relying on official sales agreements. The latter method is only allowed for financing projects where the risk for an incorrect valuation is mitigated. Once the collateral is established, a yearly revaluation of the underlying real estate is done based on the statistics how Belgian's real estate market is evolving (so called indexation process).

This valuation technique is applied on residential as well as commercial real estate, yet the valuation of commercial real estate is done in a more prudent way given the higher volatility.

For non-retail credit risk only high-quality sovereign securities or cash are accepted as collateral. For the non-retail side, a daily valuation takes place combined with daily margin calls to and from counterparties.

5.3.7.2 Main types of collateral received

Based on the product there are different types of collaterals given.

- **Collateral for mortgage loans**
  The credit is typically secured by a mortgage (inscription or mandate) on immovable property (full ownership) in Belgium. The property should be normally marketable.

  The mortgage that must be provided can be reused in the context of potential subsequent mortgage loans (and even used for other loans).

  All collaterals complementing mortgage must be provided before the official registration of the loan (this also, therefore applies to additional movable guarantees).

- **Collateral for professional loans**
  These collaterals are the following:

  - Tangible collaterals concern a property, movable or immovable, with an intrinsic value, in most of the cases a mortgage inscription or mandate
  - **Personal guarantees** consist of claims against a person.
  - **Moral undertakings** provide no means of enforcement to the bank and rely on the honesty of those that have issued them.

  A list of collaterals regularly used for professional credits at AXA Bank Belgium appears below:

  - Mortgage and mortgage mandate

- Authentic pledging of business
- Subrogation to the benefit of the seller of movable property
- Securities collateral
- Pledging of account balance
- Transfer of all "traditional life insurance" rights
- Transfer of all insurance policy rights Branch 21, 23
- Transfer of salary
- Security
- Irrevocable commitment by a third party

- **Collateral for consumer loans**
  For consumer credits only one type of collateral is used:

  - Transfer of debt collection or act of relinquishment of wages and other income.

- **Valuation policy for non-performing loans**

Clients with loans in arrears are a limited part of ABB's portfolio, but applying an indexation approach might not be appropriate for these loans as the assessment of potential losses more heavily rely on property values at this stage. AXA Bank Belgium therefore performs an external valuation at the moment of becoming doubtful for those properties for which no recent (i.e. ≤ 3 year) individual valuation is available. A yearly verification will be performed to ensure the last external valuation is less than 3 years old. In case of older external valuations, a (new) valuation will be performed.

5.3.7.3 CRM techniques

An overview of unsecured and secured exposures can be found in template **CR3** in annex. As from Q4 2020, ABB has € 682,605 thousand exposure secured by credit derivatives, this is a result of the synthetic securitisation as explained in 1.6.2.

5.3.8 Changes in the stock of credit risk adjustments

Since the start of IFRS 9 at the beginning of 2018, all credit risk adjustments are categorised as specific. The evolution of credit risk adjustments for impaired exposures, required by Article 442(i) are shown in template **CR2-A**. As from 2018, provisions for off-balance sheet items are added to the stock.

An evolution of defaulted exposures in 2020 can be found in template **CR2-B**. In 2020 the stock of defaulted and impaired loans increased where inflow was determined by new defaults and the outflow was determined by a return of defaulted loans to a non-defaulted status, a part that is written-off and a final part that was partially recovered in 2020. In 2020 the outflow was smaller than the inflow resulting in an increase of the stock of defaulted loans. As a result of the COVID-19 crisis and to avoid any cliff effects in potential future credit losses some credits were pro-actively flagged as Unlikely-To-Pay resulting in an increase in the amount of non-performing loans.

5.4 Standardised approach (SA)

5.4.1 Portfolios under the standardised approach

AXA Bank Belgium uses the standardised approach for determining credit risk for a small part of its retail credit risk and for its non-retail credit risk. The standardised approach measures credit risk either pursuant to fixed risk weights, which are predefined by the regulator, or through the application of external ratings.

STA scope exists of:

- Investment portfolio
- Participations
- Other small portfolios

5.4.2 Exposures under the standardised approach

Credit risk exposures presented before and after CCF/CRM can be found in template **CR4** in annex.

The credit conversion factor converts the notional amount of credit lines and other off-balance sheet items to an exposure at default.

Exposures under the standardised approach broken down by risk weight can be found in template **CR5** in annex.

5.4.2.1 Investment portfolio

The investment portfolio of ABB serves as a liquidity buffer as well as a way to capture the interest rate and credit risk premium to generate profits. To make sure this remains within ABB's risk appetite, risk management monitors its investment portfolio in terms of:

1) Adequacy of securities for calculation of the liquidity coverage ratio (see chapter: Liquidity Risk), where ABB limits itself exclusively to assets of the highest liquidity class as defined by Basel III.

2) Adequacy of securities for calculation of the solvency ratio, where ABB limits itself almost exclusively to assets of 0% risk weight as defined by Basel III.

3) Adherence to AXA Group limits and ABB's own concentration limits

The market value of the investment portfolio dropped further, from € 1.9 billion at end 2019 to € 0.8 billion in December 2020 due to bond maturities.

The investment portfolio of ABB mainly consists of high-quality sovereign and sovereign alike bonds (54%) and supra-national bonds (42%).

The next graph illustrates the exposures in ABB's investment portfolio.

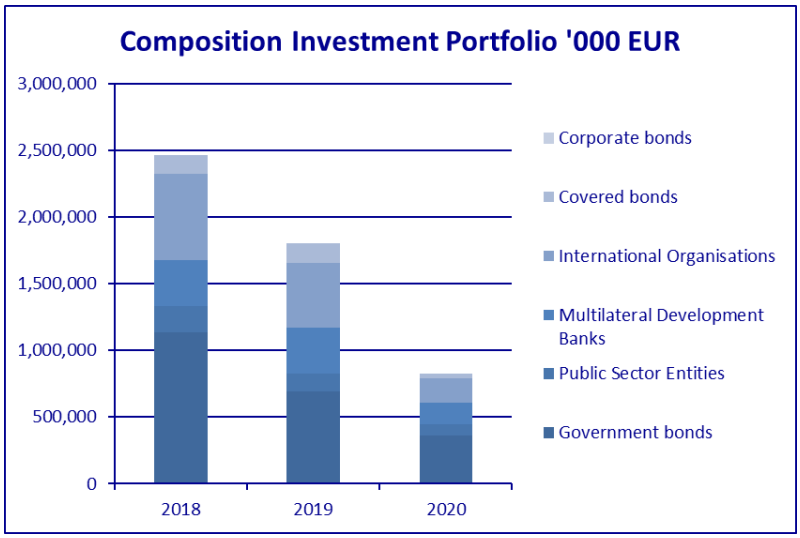

Figure 11: Composition of the Investment portfolio

Moreover, the credit ratings and market price changes of ABB' positions are being carefully monitored to examine the vulnerability of the credit portfolio to a number of adverse developments. There is no single position with a rating below investment grade.

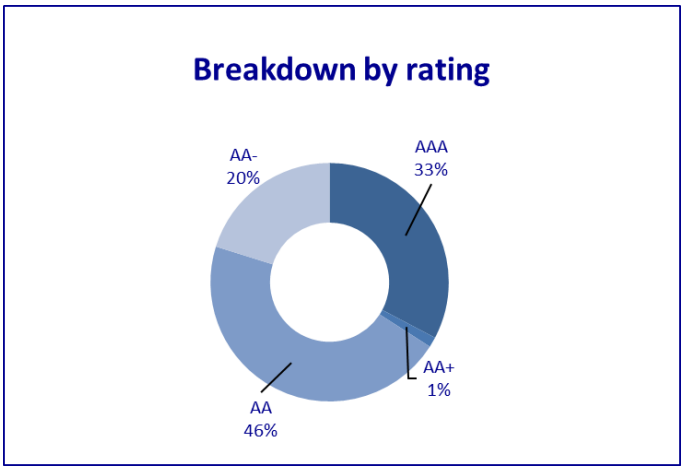

Figure 12: Investment portfolio – Breakdown by rating

Geographically, the investment portfolio credit risk is limited to countries that are members of the European Union.

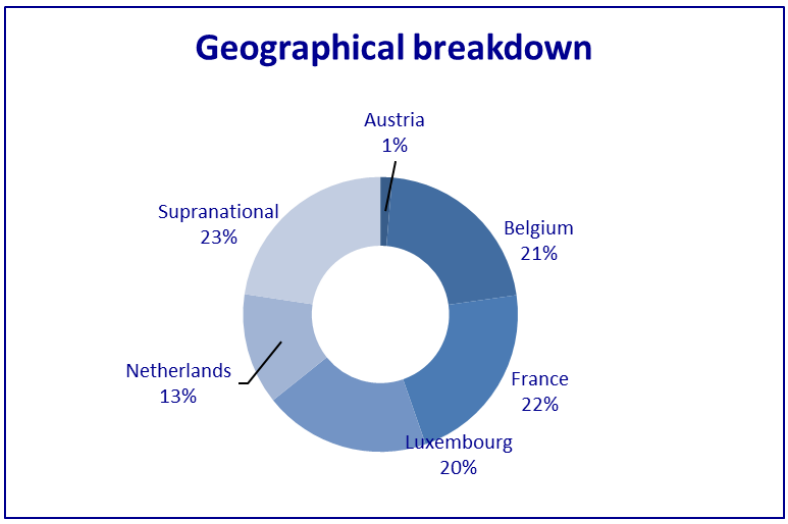

Figure 13: Investment portfolio – Geographical breakdown

AXA Bank Belgium no longer has an exposure on PIIGS countries in 2020 as it sold its Italian government bonds in Q4 2019.

5.4.2.2 Participations

AXA Bank Belgium has a very small participations portfolio. These shares mainly represent participating interests in non-consolidated subsidiaries, such as Beran NV. Furthermore, ABB has some shares in financial intermediary entities, such as Visa Belgium and Payconiq/Bancontact. As it concerns non-listed shares, this portfolio is allocated to the exposure class "Items associated with particular high risk". More details can be found in chapter 25 of the Annual Accounts.

5.4.2.3 Other small portfolios

Some other small portfolios are treated under the Standardised Approach. It concerns among others tangible assets and other receivables.

A very small part of the retail credits that because of their size do not longer qualify as "Retail" is allocated to the exposure class "Corporate" and treated following the Standardised Approach. Small retail portfolios such as fiscal credits, guarantees and negative current accounts are also treated under the Standardised Approach.

Deferred tax assets that rely on future profitability and arise from temporary differences below threshold is also part of the Standardised Approach.

5.5 Internal ratings based approach (IRB)

5.5.1 General

AXA Bank Belgium received the approval from the NBB to apply the (F)IRB approach to the retail positions as from 2008[15]. However, for retail exposures this corresponds with the (A)IRB approach. This is the most sophisticated approach available under the regulatory framework for credit risk and allows ABB to make use of internal credit rating models and subsequent internal estimates of risk parameters. These methods and parameters represent key components of ABB internal risk management and process supporting the credit approval process, the economic capital, provisions and expected loss calculation and the internal monitoring and reporting of credit risk. The approval to use the IRB approach was reconfirmed by the ECB after the Targeted Review of Internal Models (TRIM) in 2017.

5.5.2 Internal credit rating models

To apply the IRB approach, ABB has developed internal predictive models in compliance with Basel's III Internal Rating Based Approach. The relevant parameters include the:

- Probability of Default (PD) of retail credits;
- Loss Given Default (LGD);
- Exposure At Default (EAD), including Credit Conversion Factor (CCF).

Those models are developed for three product groups: consumer loans, professional loans and mortgage loans[16]. PD modelling is also further sub-segmented depending on the level of information available on the exposure (*i.e.* if exposure is related to existing or new clients[17], and whether the loan is in its acquisition process or not), so that it increases accuracy of estimates.

The input data of these models consist of product characteristics, socio-demographic data of applicants, financial data and external data that must meet certain quality criteria, as well as historical data concerning the actual annual loss.

PD models assign a score to each loan, based on product characteristics and borrower criteria. Based on these scores, PD classes are formed and a long-run PD is attached to each class. This long-run PD is the historic average default rate, corrected for being 'forward looking'. This way, 10 PD classes are created, 1 being the class with the lowest risk and 9 with the highest risk. The 10th class contains defaulted loans.

[15] ABB receives a Permanent Partial Use (PPU) of the IRB approach. Indeed, exposures to corporates, central governments, central banks and institutions are excluded from the scope. In the same way, some specific retail products are also in PPU approach. Those products are the Biznes Fisc and the Budget +. They are capitalised in the standardised approach. For a view on the materiality of the scope of application of the IRB approach see template **CRB-B**. .

[16] Models for the mortgage and professional loans portfolio are mainly used for the exposure class "retail secured by retail estate" (both SME and non-SME). The professional loans models are also used for the exposure class "other retail exposures SME". The exposure class "other retail exposures non-SME" is mainly rated thanks to the models for consumer and professional loans.

[17] Only for consumer loans.

The LGD models estimate the size of the loss for loans that default. A workout LGD approach is taken for that purpose. Levels of losses are discriminated thanks to several characteristics such as *e.g.* the value of the guarantee that backs the loan. LGD is constructed based on two separate elements: the probability of cure and the loss given recovery. The combination of both elements results in a final LGD grade, to which a correction is done to take into account downturn conditions. Each loan is allocated to a specific LGD grade and is assigned the average LGD rate for the LGD grade. ABB has defined 6 LGD grades.

The EAD is the amount due by the borrower at the time of default. This amount includes the outstanding capital at the time of default, past due capital repayments and interests and fines. For unused credit lines and offers in the pipeline, CCF models have been developed based on historical data. These models estimate the proportion of the off-balance sheet that will be drawn by the customer at time of default.

The combination of the 10 PD classes with the 6 LGD grades, results in 60 pools (or obligor grade). Based on a number of characteristics, each loan is allocated to one of the 60 pools.

As part of the model development, there is a calibration process, linking the rating and the PD/LGD. This calibration is revised and adjusted during the model review process.

5.5.3 Expected losses (EL)

This are the expected value of losses due to default over a specified horizon. EL is typically calculated by multiplying the Probability of Default (percentage) by the Loss Given Default (percentage) and the Exposure at Default (amount). It is considered as an expectation due the Probability of Default factor.

However, for the defaulted portfolio, the best estimate expected loss is equal to the impairments/provisions of this defaulted portfolio.

PD, LGD, EAD and EL form the building blocks for calculating the capital requirements for credit risk under IRB approach.

5.5.4 Impairments

As of 2018, impairment losses are recorded according to IFRS 9 requirements (calculated on a lifetime expected credit loss (ECL) for defaulted loans and on a 12-month or lifetime ECL basis for non-defaulted exposures, depending on whether there has been a credit risk deterioration an a corresponding shift from Stage 1 to Stage 2. Specific IFRS 9 models are used for this purpose which are in fact extension of the existing rating models. (see section 5.3.3 for more information on the impairment stages).

5.5.5 Control mechanisms for rating systems

The 3 lines of defence principle is applied on the rating system. The Retail Credit Risk team is responsible for the development, maintenance and performance monitoring of the models in the IRB approach. Next to that, the Validation team acts as second line of defence, controlling and validating in accordance with internal guidelines the modelling activities performed by the Retail Credit risk team. Finally, ABB internal audit is the third line of defence, performing internal audit on models following the audit process in place.

5.5.5.1 Retail Credit Risk team

The Retail Credit Risk team performs the modelling work related to the IRB rating system (*e.g.* model development). The team also controls its quality by performing a set of qualitative and quantitative controls on its performance. They can be grouped into 2 broad categories: model monitoring and stress testing.

A quantitative model monitoring is performed by the modelling team on a quarterly basis. This monitoring focuses on the quality of the estimates and compares them to the observations. Once a year, a qualitative part is added and the results of both the qualitative and the quantitative parts are extensively discussed: this is called the "*yearly model review*". In case of sub-optimal performance, actions are taken to remediate the identified issue. This exercise and its outcomes are independently validated (see 5.5.5.2 below) and should be endorsed by both the CRO and the RRC.

Stress testing covers both stressing of the model and comparison of model outputs to stress losses. The outputs of the model might be examined under conditions of stress, where model inputs and model assumptions might be stressed. This process can reveal model limitations or highlight capital constraints that might only become apparent under stress. Through a complementary programme of stress testing, the bank may be able to quantify the likely losses that the firm would confront under a range of stress events. Comparison of stress losses against model-based capital estimates may provide a degree of comfort of the absolute level of capital.

5.5.5.2 Validation

The model validation covers all ABB's models. Peripheral modelling activities such as risk aggregations, time horizon scaling, model monitoring, model's stress testing and model's calibration also fall into the scope of the model validation. They ensure an adequate and proper level of independent control on the IRB rating systems.

The guidelines for model validation ensure compliance with regulatory requirements. Model validations take place in the case of a new model, model redevelopment or model significant changes.

A model monitoring validation also took place with different frequencies, depending on the model. For Pillar 1 models, the model monitoring is validated on a yearly basis.

The internal validation function is part of the Enterprise Risk Management team directly reporting to the CRO of ABB. The model development of the IRB models is done by the Retail

Risk team which is also reporting to the CRO. Model development and internal validation have then two different reporting lines to the CRO. This is crucial in order to safeguard independence of the internal validation function.

The Validation Manager is responsible for the independent validation of models, but also peripheral modelling activities. The Validation Manager also sets up the validation process and criteria for models. The Validation Manager can be supported in the analysis of the different models by external specialists.

5.5.5.3 Audit

Internal Audit is an independent function that acts as third line of defence. The Team performs audits on the IRB rating framework following the audit process and reviewing the compliance of the rating system with applicable requirements. Audit adds then an additional level of controls on the rating systems, as well as on the stakeholders involved (*i.e.* Retail Credit Risk team and Validation team). Complementary to these tasks, internal audit also permanently monitors the information on the directories of the Retail Credit Risk Team, as well as of the yearly self-assessment that is performed in the framework of the ICAAP. Internal Audit performs a follow-up of recommendations issued by supervisors.

5.5.6 Exposures using the IRB approach

The main outcome of internal rating models is that each credit exposure ends up in a rating class. In ABB's rating system 10 rating classes exist where rating classes 1 to 9 correspond to performing exposures and rating class 10 corresponds to the non-performing category. Each rating class regroups all credit exposures with a similar level of default risk for the upcoming 12 months. Each month this regrouping is done for the complete credit portfolio by relying on the most recent information. In the figure below, we show how the credit portfolio was distributed over the 10 rating classes on EOY 2020 and EOY 2019.

In 2020 the supervisor approved the new PD model for mortgage loans as explained in 5.3.1, this led to an updated rating distribution. The distributions in Figure 14 confirms the good overall quality of the portfolio as less exposure is situated in the higher rating classes (corresponding to a higher level of default risk). In 2020, 4.3% of the retail portfolio is situated in rating classes 8 to 10, for 2019 this amounted to 5.3%. Next to that, 74.7% is situated in the first four rating classes which remained stable compared to 2019 (70%).

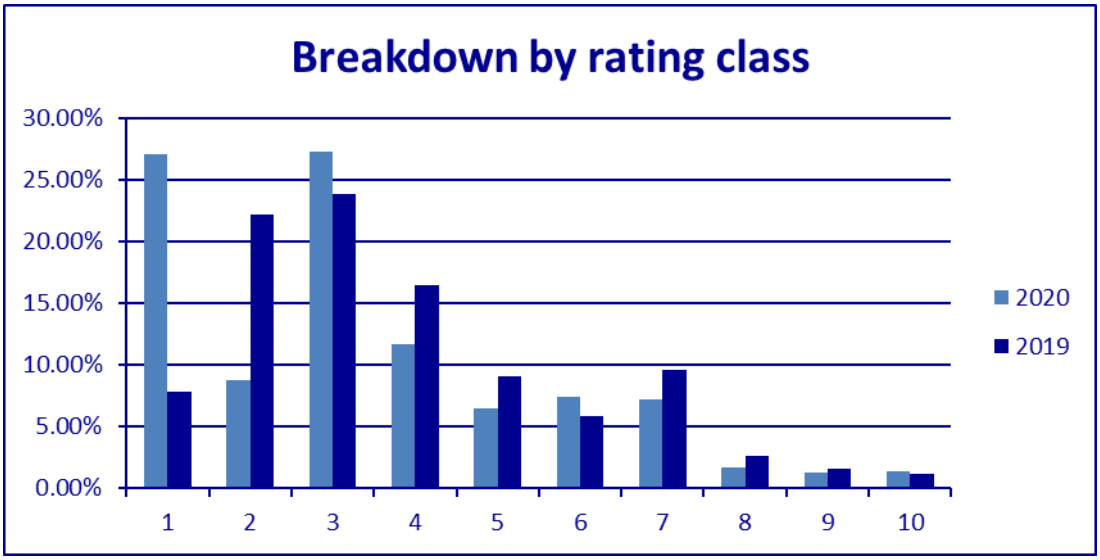

Figure 14: Rating class distribution of the retail portfolio

In template **CR6** in annex, a more detailed view is given of how ABB's retail portfolio is distributed over the 10 rating classes including information required for the calculation of risk-weights. In ABB's internal rating system the rating class is the main driver to allocate a credit exposure in an EL grade (which combines PD and LGD parameter) as the LGD outcomes show less variation compared to the PD outcomes.

For retail exposures, the option included in Article 452(f) of the CRR allows us to provide a breakdown by a minimum relevant number of EL bands instead of the PD-scale proposed by the guidelines. The PD-scale presented in the template corresponds to the one used for regulatory calculations.

The exposure class 'retail' is split into "Retail secured by real estate property" and "Other Retail", identifying separately each of the categories of exposures to which the different correlations in Article 154(1) to (4) correspond.

In template **CR7** in annex, the effect of the synthetic SRT on ABB's RWA is shown. In Q4 2020 ABB issued a synthetic securitisation with Significant Risk Transfer as explained in 1.6.2 to support the growth of the loan portfolio while optimising the risk-return balance. After securitisation retail RWA decreased with € 218 million.

According to article 452(j) of the CRR, institutions using own LGD estimates for the calculation of risk-weighted exposure amounts, should disclose the exposure-weighted average LGD and PD in percentage for each relevant geographical location of credit exposures for all exposure classes specified in Article 147 and for each category of exposure to which the different correlations in Article 154 (1) to (4) correspond. As 99.2% of all IRB exposures are Belgian, AXA Bank Belgium decided not to disclose this data because of its immateriality.

Template **CR8** explains the main drivers of the evolution of RWAs compared to the previous period.

The internal rating models are also used for the determination of the value adjustments/provisions of our IRB credit portfolio; yet with a Point-in-Time (PIT) calibration with all conservatism and downturn assumptions removed. Only for the doubtful professional loans and mortgage loans the provisions are determined in an expert manner at loan by loan level by the recovery department. In the period EOY 2019 – EOY 2020 the provision levels have increased for the different portfolios. This is due to COVID-19 related management overlays that were installed in 2020

Following articles 112 and 147(2) of the CRR, requiring that each asset shall be assigned to one of the exposure classes, a risk weight should also be calculated for the changes in fair value of hedged instruments included in macro fair value hedge operations.

Therefore, fair value changes of the hedged items in the portfolio hedge of interest rate risk" were added in the mortgage exposures for an amount of € 1,101,248 thousand for which RWA have been calculated.

5.5.7 Estimates against actual outcome

Each year, all internal models are profoundly reviewed and if the performance of the models is no longer in line with ABB's quality levels model adjustments/redevelopments are done to ensure an appropriate quality level for the models used for credit risk management.

The results of the back-testing of PD per exposure class can be found in template **CR9** in annex. The exposure class 'retail' identifies separately each of the categories of exposures to which the different correlations in Article 154(1) to (4) correspond, namely "Retail secured by real estate property" and "Other retail".

ABB's 2020 back-testing exercise demonstrated that the internal rating system produces PD estimates as historical default rates that are above the predicted PD values which are used for the determination of ABB's minimum capital requirements. As a result, the average PD levels used for RWA calculation were lower than the observed default rates in 2020.

5.5.8 Regulatory floors

ABB applies the regulatory 10% LGD floor for its mortgage loans.

5.5.9 Belgian specific regulations

Based on Art 458 of the CRR, the Belgian regulator has requested[18], for all Belgian banks using IRB models, an **add-on of 5 %** calculated on the IRB exposures for mortgages covering residential real estate in Belgium.

[18] This law, published on 8/12/2013 and applicable as of 31/12/2013, results in an additional own fund requirement for ABB's mortgage portfolio.

An additional Belgian add-on for retail mortgages under IRB, entered into force in 2018. This 33% **add-on** is calculated **by applying a factor 1.33 on the** of IRB RWA for mortgages covering residential real estate in Belgium.

For reasons of comparability between countries, these additional capital requirements are represented in "Other risk amounts".

5.6 Counterparty credit risk

5.6.1 General

Besides retail related credit risk, ABB incurs credit exposure to high quality counterparties and through its treasury and asset & liability management activities.

AXA Bank Belgium engages in different types of derivatives in order to hedge its balance sheet risks and incurs counterparty credit risk on these derivatives. Asides derivatives, AXA Bank Belgium occasionally trades repurchase agreement. However, no repurchase agreements were outstanding on 31/12/2020. Until 2020, AXA Bank Belgium acted as centralised platform to provide AXA Group entities access to financial markets. This activity was fully carved-out in 2020.

Risk weighted assets of derivatives are calculated according to Chapter 6 of the CRR, using the mark-to-market method. Securities Financing Transactions are risk-weighted following the Chapter 4 of the CRR using the Financial Collateral Comprehensive method.

Template **CCR1** in annex gives an overview of the exposures by approach.

5.6.2 Governance

The management of ABB's non-retail credit risk is centralised at its head office. The key governing bodies are described in section 5.1.2.1.

5.6.3 Risk policy, limit framework and reporting

5.6.3.1 Strategies and processes

It is ABB's strategy to optimise the risk/return relationship in its non-retail activities, as well as making sure it fits within AXA Group's risk appetite.

As for the derivatives and repo activities, it is ABB's strategy to minimise credit risk by collateralising as much as possible to reduce the loss given default, which is the potential negative market evolution of positions in case of a counterparty default. At the same time, only well rated counterparties are used in order to reduce the probability of default. The increasing use of a QCCP fits in this strategy as well. All counterparties need to be approved by AXA Group.

Exposures to CCPs can be found in template **CCR8** in annex.

5.6.3.2 Limit framework

The basis is the **Risk Appetite Statement** (RAS) set by the Board of Directors. Further concentration limits and minimum quality requirements are set by the Management Board. A regular follow up and management is done by the WRC.

The Board of Directors defines the Risk Appetite by allocating available Capital@Risk.

Risk Appetite Statements drive the wholesale credit risk framework:

- RAS 1: Increase in **CVA** caused by 95% CI shocks should not exceed Capital@Risk allocated to it.
- RAS 2: **Unexpected Credit Losses** under 95% CI should not exceed Capital@Risk allocated to wholesale credit exposure.

RAS only would allow for unwanted concentration and sub-par counterparties. Therefore, additional conditions and limits are set. The MB (with CRO veto right) sets ABB's credit risk framework.

The WRC approves individual counterparties and decides on the maximum time to maturity per product/counterparty. It sets limits per issuer and product and ensure compliance with AXA GRM and regulatory large exposure framework.

5.6.3.3 Reporting and measurement systems

ABB maintains two complementary reporting and measurement systems: regulatory and internal management.

- **Regulatory measurement and reporting**

ABB is subject to the large exposures limit framework described in part IV of the CRD/CRR regulation. On a quarterly basis, a large exposure report is submitted to ABB's regulator. ABB measures its minimum regulatory requirements for non-retail credit risk according to the Standardised Approach (SA) on a quarterly basis.

- **Internal measurement and reporting**

Besides the regulatory measures, ABB measures its counterparty credit risk exposures with a method developed by AXA Group. In particular for derivatives and repos, this method represents a different view on the exposure as it is based on measuring the sensitivity of all positions per counterparty to market shocks rather than the simple use of add-on per position as done in the regulatory stream. The exposure under this method is measured twice per day across all instrument classes and is reported to the Wholesale Risk Committee on a monthly basis and to the Board of Directors on a quarterly basis.

Besides being followed locally, credit and concentration risks are also supervised at the AXA Group level. ABB reports on a monthly basis all of its positions to the Central Risk Management Department of AXA Group to ensure compliance with this second set of limits.

5.6.4 Policies for hedging and risk mitigation

ABB applies a two-step approach to achieve maximum mitigation of counterparty credit risk:

1. Implementing the legal framework to net opposite exposures
2. Collateralising the remaining net exposure

The impact of netting and collateral can be found in template **CCR5-A** in annex.

5.6.4.1 Netting

In the contractual documentation with all of its counterparties, ABB has ensured it is allowed to reduce positions with positive market value by deducting those with negative value and only exchange the net amount. The netting that ABB applies, is recognised from a regulatory perspective and we consider it to be sufficient as a risk mitigant on all counterparties. It should be noted that the scope of netting as risk mitigant Is broader than the scope of 'accounting offsetting' under IAS 32 – *Financial Instruments – Presentation*, which requires more conditions to be fulfilled.

5.6.4.2 Collateral

- **Policies and processes for collateral valuation and management**

  In order to further mitigate the counterparty credit risk exposure on the derivatives and repo activity, ABB has foreseen in the exchange of collateral in the contracts with its counterparties. It is ABB's policy (respecting also AXA Group's policy) to implement collateral agreements with the following properties:

  - Cash collateral (EUR, GBP, USD, JPY, CHF) or high-quality government/covered bonds (with application of haircuts). This ensures ABB's

ability to quickly realise the collateral with a minimum of loss upon counterparty's default.
- Daily measurement of exposure and exchange of collateral.
- No threshold and a minimum transfer amount of maximum € 1 million.
- Re-use of collateral is allowed, which greatly reduces the burden on ABB's liquidity.

ABB's back office manages the collateral valuation and margin call process using the integrated front-to-back IT application. It issues margin calls, reviews margin calls received by counterparties and involves middle office and risk management in case of more complex valuation discussions. Front, middle and back office meet together with risk management on a monthly basis to discuss any issues around the collateralisation process and decide on an action plan. The WRC is informed on a monthly basis on the most significant points.

- **Main types of collateral**

ABB receives mostly cash collateral under derivative contracts, avoiding any concentration issues on that side. For repo/reverse repo transactions the bond leg of the transactions is restricted to high quality government or covered bonds in EUR. This strict policy in terms of eligible collateral may result in some concentration risk but ABB believes this is acceptable given the quality of the issuers. We also note that all collateral is "eligible financial collateral" as defined by the Basel committee.

- **Composition of collateral**

Template **CCR5-B** in annex presents the composition of collateral for counterparty credit risk exposures.

- **Impact given a credit rating downgrade**

The impact in terms of the amount of collateral that AXA Bank Belgium would be required to provide given a credit rating down grade of 3 notches, amounts to € 15 million. The full amount is linked to collateral ABB would have to pay to its subsidiary Royal Street upon ABB's downgrade.

5.6.5 Policies establishing credit reserves

The Impairment Committee for non-retail transactions has been integrated in the Wholesale Risk Committee (WRC). This committee is responsible for the model of expected credit losses of the non-retail portfolio including the management overlay. This committee discusses model design documents and model validation documents and takes model decisions (including

staging logic). More information related to IFRS9 can be found in the Annual Accounts 2020 chapter 3.

5.6.6 Exposures to counterparty credit risk

AXA Bank Belgium engages in different types of derivatives in order to hedge its balance sheet risks. In order to measure the counterparty credit risk of these derivatives, we take into account the possible future evolution of the derivative value in case of counterparty default. To achieve this, the derivatives are valued after applying market shocks. The losses that are caused by these market shocks should stay under the allowed limit for the counterparty.

Asides derivatives, AXA Bank Belgium occasionally trades repurchase agreements To measure the counterparty credit risk on repos, a similar method as for derivatives is used: market shocks are applied on all securities posted and received. These shocks reflect the possible future fluctuations of the securities in case of counterparty default. Furthermore, an additional haircut is applied in case wrong-way risk is incurred.

Exposure of AXA Bank Belgium to derivatives and money market transactions, which are described in the previous paragraph, is limited via a very strict policy regarding collateral requirements. Exposures to such transactions are subject to a daily credit risk monitoring and collateralised on a daily basis with both market counterparties and central clearing counterparties. Collateral exchanged is limited to cash and high quality securities in order to ensure adequate limitation of credit exposures.

Until 2020, AXA Bank Belgium acted as centralised platform to provide AXA Group entities access to financial markets. However, this intermediation activity was fully carved-out in 2020.

A breakdown by exposure class and by risk weight is provided in template **CCR3** in annex.

5.6.6.1 Exposure at default

In this section, we give an overview of our exposure at default of a counterparty related to derivatives and (reverse) repos. The regulatory definition is used, that takes into account the nature of the instruments and simulates the exposure amount in case of counterparty default. This exposure is used to calculate the risk weighted assets and the capital requirements.

Repo & reverse repo

The regulatory exposure of the repo activity is calculated in the following manner:

a) All transactions are grouped per netting set. The collateral received under the netting set is deducted from the exposure.
b) Supervisory volatility adjustments are applied to non-cash securities received/posted under the repo transaction. These haircuts reflect the possible negative evolution of the securities exchanged.

The exposure of the repo activity was zero at the end of 2020 as no repos were outstanding on 31 December 2020.

Derivatives

The regulatory method to determine exposure at default for derivative counterparties includes the following steps:

a) Transactions are grouped in 'netting sets', in which it is legally possible to net positive and negative market values, collateral received, and collateral given. The outcome of this calculation is the net replacement cost, capped at zero in case of a negative sum;
b) For each transaction a risk factor is determined, which reflects the possible negative evolution of the transaction value in case of counterparty default;
c) (a) and (b) are added. The outcome of this calculation gives the exposure at default per counterparty.

Furthermore, we split the exposure between exposure on bilateral counterparties and exposure on central clearing platform (CCP) for interest rate swaps which we access via clearing brokers, HSBC and Credit Suisse International.

The aggregated results as at 31 December 2020 are displayed step by step below.

a) The sum of all positive market values amounts to € 442,073 thousand. These positive market values amounts are neutralised by negative market values of (€ 1,372,437 thousand of negative market values). AXA Bank Belgium emphasises here that this neutralisation goes beyond purely accounting netting of off-balance sheet items that is discussed in chapter 33 of the Annual Accounts Report of 2020, based on legally enforceable netting rights. In total, AXA Bank Belgium pledged € 1,218,101 thousand of collateral and received € 38,875 thousand of collateral. This leads to a net replacement cost of € 259,166 thousand.
b) The sum of the risk factors amounts to € 172,322 thousand. To clarify: this is the regulatory prescribed calculation of a negative evolution of the derivatives portfolio at the simultaneous default by all counterparties in stressed market conditions.
c) We arrive at a total exposure at default of € 431,488 thousand in stressed market conditions and at the simultaneous default by all counterparties. Under stable conditions, this exposure still amounts to € 259,166 thousand. It is important to note that € 256,194 thousand in these figures stems from the high collateral requirements of the central counterparty LCH Clearnet.

As AXA Bank Belgium has very high standards regarding the quality of its counterparties, none of the derivatives is past due or impaired.

5.6.6.2 Concentration risk

AXA Bank Belgium follows the regulatory requirements regarding the limitation of large exposures, where exposure to a group of affiliated counterparties may not exceed 25% of the eligible capital. Due to the diversification of counterparties, the exposure to AXA Group was the only exposure that exceeded 10% of the eligible capital. However, due to the carve-out of the intermediation activity, the exposure on AXA Group reduced to 0.8% of eligible capital in Q4 2020.

5.6.6.3 Credit quality step per product

In the table below we show the split per credit quality step as defined in the capital requirement regulation by exposure after collateral of the transactions by product. The credit quality step is a function of the rating assigned to the counterparty. We show transactions with the QCCP separately as they are treated differently in capital regulations as well.

Product	Quality step	Exposure after Collateral
		31/12/2020
Derivatives	1st step	1,915,088
	2nd step	36,539,085
	3rd step	2,463,344
	Not rated	0
	QCCP (2% RW)	395,294,902
SFTs	1st step	0
	2nd step	0
	QCCP (2% RW)	0

Table 11: Credit quality step Counterparty Credit Risk

5.6.6.4 Wrong way risk exposures

Wrong way risk arises when the exposure on a counterparty is positively correlated with the likelihood of default of that same counterparty, i.e. the exposure on a counterparty will increase when the credit quality of the counterparty decreases.

Two types of wrong way risk can be distinguished:

(i) Specific wrong way risk
(ii) General wrong way risk

Specific wrong way risk can arise from the structure of the transaction, for example when the exposure on a counterparty is collateralised by securities issued by the same counterparty. ABB

incurs no specific wrong way risk on its derivative portfolio as only cash collateral is exchanged.

General wrong way risk arises when general market factors influence the exposure and creditworthiness of counterparties. ABB limits general wrong way risk by taking into account negative market scenarios in the calculation of exposure amounts and limits. This translates into a risk add-on which covers the potential negative evolution of the transaction under stressed market circumstances. It is a more stringent add-on than the regulatory add-on used in the regulatory exposure calculation (see above). These exposure amounts and limits are governed by the Wholesale Risk Committee. For more information on the risk governance of ABB, see section 5.1.2.1.

5.6.7 Credit valuation adjustments

Credit valuation adjustment or CVA is the risk of loss caused by changes in the credit spread of a counterparty of derivative transactions due to changes in its credit quality.

Since the implementation of Basel III in 2014, the capital requirement for this risk is integrated in the risk volumes (see template **CCR2** in annex).

On the 31 December 2020, ABB measured its own funds requirements for CVA risk according to the Standardised method (article 384 of the CRR). CVA RWA decreased from € 151,355 thousand in 2019 to € 18,758 thousand in 2020 as ABB finalized the carve-out of the intermediation activity for AXA Group.

All derivatives trades are executed with market counterparties with a minimum rating of A-. ABB monitors counterparty ratings on a daily basis and follows a strong and clear limit framework.

5.6.8 Default fund contribution (DFC)

The ‘risk exposure amounts for contributions to the default fund of a CCP’ refers to the own funds requirements for the exposures arising from its trade exposures to a central counterparty and its default fund contribution. The calculation is based on Art 308 of the CCR.

As ABB is not a direct clearing member for derivatives and executes it trades through clearing brokers HSBC and Credit Suisse, it does not need to contribute to the default fund. On the other hand, ABB does pay a default fund contribution for repos for which it acts as a direct clearing member of LCH. Although ABB had no repos outstanding at the end of 2020, it is still required to post a minimum default contribution amount. The risk exposure on default fund contributions decreased slightly compared to 2019. This decrease was not caused by a change in repo volume but by other input factors such as the sum of pre-funded contributions of all clearing members.

Default fund contribution in '000 EUR	31/12/2020	31/12/2019
Exposures with CCP	395,295	555,477
RWA DFC	441	1,107

Table 12: Default Fund Contribution

5.7 Use of ratings from external credit assessment institutions (ECAI)

Retail credit risk weights are determined based on Articles 123 to 127 of the CRR.

Risk weights for non-retail credit risk exposures are determined based on external ratings. In order to apply the Standardised Approach, ABB uses the external ratings assigned by the following rating agencies: Fitch and Standard & Poor's. The lower of the available ratings is used to determine the risk weight. If no external rating is available, the STA provides specific risk weights. External ratings are applied to the exposure classes "Institutions" and "Corporate (financial)".

Exposures to institutions for which there is no rating available shall be assigned the risk weight according to the quality step to which exposures to the central government of the jurisdiction in which the institution is incorporated are assigned in accordance with Article 121. For exposures to unrated institutions with an original effective maturity of three months or less, the risk weight shall be 20%.

The ratings of all listed securities are systematically monitored by Risk Management as part of the tracking of credit risk. Exposure classes involved are: "Central governments or central banks", "Public sector entities" "Multilateral Development Banks", "International organisations", "Institutions" and "Covered bonds". The non-retail risk charter and the RAF set minimum limits for the ratings. If the ratings fall below the limits, this is systematically reported and, where necessary, a decision is taken whether or not to continue to hold the security.

In terms of use of the ECAIs, ABB follows the standard classifications published by the EBA.

ABB also uses ratings from ECAIs in setting its wholesale credit risk framework. In terms of eligibility for investments, one of the criteria is that the rating should be minimum BBB. The higher the rating, the higher the amount that can be invested. Besides the investment policy, ABB uses ratings from ECAIs as an eligibility criterion for derivatives or repo transactions, where a minimum of A- is required. It is important to note that ABB does not rely solely on ECAIs: it also follows the market news and market indicators such as CDS spreads to follow up on its investments and counterparties.

The counterparties for the dealing room activity of treasury and derivatives are selected based on external ratings of two rating agencies (Fitch and Standard & Poor's) which results in an internal AXA-rating. In order to qualify as an active partner, counterparties should have an AXA-rating of at least A-.

There are also "passive" counterparties which have a rating of at least BBB+. With these counterparties, there are still open positions from the past, but no new trades are allowed unless new trades actively reduce exposure. These counterparties are monitored closely.

For all derivatives, it is mandatory to enter into an 'ISDA Master Agreement' and a 'Collateral Service Agreement' (CSA). These CSAs should be compliant with the EMIR regulation. New trades are not allowed with counterparties with whom no EMIR compliant CSA was signed. For repo transactions, it is mandatory to enter into a 'Global Master Repurchase Agreement'. Each new counterparty should be presented to and approved by the Wholesale Risk Committee. The exposure classes concerned are "Institutions" and "Corporate".

5.8 Exposure to securitisation position

5.8.1 ABB as investor

ABB has no investments in external securitisation positions in 2020.

5.8.2 ABB as originator

SPV Royal Street and AXA Bank Europe SCF are two entities that are used by AXA Bank Belgium to attract structural long term funding. Additionally, as from Q4 2020 ABB uses CASPR S.à.r.l, a Luxemburg SPV, to generate some RWA relief over its mortgage loan portfolio. All three entities are fully integrated in the AXA Bank Belgium consolidation scope.

Even if governance and risk policies for these activities are integrated in the overall ABB risk framework, ABE SCF, being a credit institution, has its own risk charter, CRO, committees and risk reporting.

In December 2017, AXA Bank Belgium performed a restructuring of its securitisation entities in order to cope with a change in legislation in Europe which does not allow ABE SCF to hold more than 10% Retail Mortgage Backed Securities (RMBS) issued by SPV Royal Street as collateral for the issued covered bonds. Since this date ABE SCF buys mortgage loans to be used as a collateral for the covered bonds. As an alternative to buying loans from ABB, ABE SCF can also grant a secured loan to ABB (backed by a pool of mortgages on ABB's balance sheet) and use that asset as collateral to issue covered bonds.

- **Securitisation**

ABB acts as the originator of a series of securitisations named Royal Street, a Belgian Securitization vehicle and CASPR S.à.r.l, a Luxemburg law governed Special Purpose Vehicle.

Since the transformation of ABE SCF only 1 compartment remains in Royal Street.

Royal Street 1 (RS-1)

RS acting through its Compartment RS-1 has purchased in October 2008 a portfolio of Belgian prime residential mortgage loans from ABB. At 31 of December 2020, the outstanding principal amount was € 170,973 thousand Senior class A notes, € 105,000 thousand mezzanine Class B&C notes and 45,000 thousand junior class D notes, which are all due in 2040.

The initial objective of the first securitisation was to provide ABB with a liquidity buffer. The senior note issued by RS-1 has a AAA rating. The key purpose for using an ECAIs for this bond is to make the bond eligible with the ECB.

The compartment is amortizing on a monthly basis. Principal reimbursements of the underlying mortgages serve, in a proportional matter, to steadily reimburse the senior class A Notes. The other notes will be reimbursed after class A is totally reimbursed.

Class A notes are pledged at BNB/ECB in order to get short term funding in cash via a tender mechanism while the other notes are retained on ABB assets side.

The underlying assets have been originated by ABB in the regular course of lending business to retail. Only performing assets are included in the securitisations operations.

Assets are held as regular assets on the consolidated balance sheet of ABB and treated accordingly for capital adequacy calculation purposes (the 'rating-based approach'). Therefore, the credit risk within RS is fully in line with ABB's credit risk policy.

Before a mortgage loan can become eligible for securitisation purposes, the initial pooling analysis as well is based on strict selection criteria on both individual loan level and compartment level. All these criteria combined ensures that the level of credit risk within RS remains sufficiently low and ensures the SPV to get an AAA notation for class A RMBS.

The amortization profile of the securities issued being equal or longer than the amortization profile of the mortgage loans held, there's no liquidity shortage there either.

CASPR S.à.r.l

In December 2020, ABB orginated a synthetic securitisation transaction. This was done to support the growth of the loan portfolio while maintaining the envisaged solvency levels (as set in the risk appetite framework of the bank). This is covered in Section 1.6.2.

- **Covered Bonds**

ABB created ABE SCF for the purpose of issuing covered bonds. Its principal business activity is to issue covered bonds to refinance residential mortgage loans.

ABE SCF has bought a portfolio of Belgian residential mortgage loans directly from ABB (the "Spot Sale"). Given that the balance of a portfolio of residential mortgage loans typically decreases every month because of scheduled redemptions and prepayments, ABE SCF will need to buy on a monthly basis additional residential mortgage loans (the "Forward Sales") in order to keep the balance of the Belgian residential mortgage loans at the required amount.

The required amount is the one requested in order to maintain at minima the 105% regulatory level as defined in the French law + 2% as buffer .

In order for ABE SCF to mitigate the prepayment and interest rate risk arising from the Belgian mortgage pool now directly owned, several Asset Swaps were set up between ABB and ABE the asset side of SCF. There are as many Asset Swaps as there are Covered Bonds Series and Subordinated OC Loans outstanding against the Belgian residential mortgage loans.

Covered bonds are sold on the market to investors or subscribed by ABB (retained on ABB's balance).

As of December 2020,the stock of covered bonds amounted to € 8,250,000 thousand of which € 5,500,000 thousand are placed in the market and € 2,750,000 thousand are retained by AXA Bank Belgium and hence eliminated in the consolidated balance sheet.

The strong underlying quality of ABB's retail mortgage portfolio in Belgium is the ideal collateral for a covered bond program. This program enables the bank to manage its liquidity risk. It provides ABB with diversification in funding sources and minimises funding concentrations in time buckets. The covered bond program gives ABB access to the covered bond market, allowing ABB to reduce the cost of long-term institutional funding. This program offers the bank access to funding markets that remain open in times of market stress.

Disclosures on Royal Street and ABE SCF covered bond issuance can be found on the bank's website[19].

These disclosures detail the structure of the securitisation and covered bonds issuance, the risk factors, ABB's involvement in them and its governance. A quarterly investor report completes the information in the above disclosure, by providing the markets with relevant quantitative information.

All covered bonds are rated AAA by Moody's.

[19] https://www.axabank.be/nl/over-axa-bank/investor-relations-financial-information/

6 Market Risk

For market risk, ABB differentiates between the market risk that is related to the 'trading book' (regulatory classification), and interest rate risk related to the 'banking book'.

The trading book includes all financial instruments that are used in the context of specific trading activities. AXA Bank Belgium does not carry out any trading activities for its own account. The financial instruments falling under the 'trading book', mainly concern the derivatives activity for AXA entities. The banking book includes all other financial instruments that do not belong to the trading book. These mainly concern the bank's retail business.

6.1 Interest Rate Risk Banking Book (IRRBB)

Interest rate risk in the banking book is defined as the risk of a decrease in economic value or net interest income of the banking book as a result of changes in interest rates and spreads.

Interest rate risk at ABB arises mainly from the following products/activities:

- As a primarily retail bank, ABB attracts retail deposits (mainly saving and sight accounts) and grants retail loans (mainly mortgage loans); the former typically with shorter maturities than the latter. The mismatch in maturities of those products gives rise to interest rate risk; more specifically yield curve risk.
- The bulk of ABB's retail deposits are non-maturing with rates, although discretionary by nature, linked indirectly to market rates as a result of a strongly competitive banking environment. Furthermore, regulated saving accounts in Belgium benefit from a legal floored rate of 11 bps. These features are captured in dedicated models which are incorporated in ABB's overall yield curve risk management but which, in turn, give rise to model risk.
- Belgian mortgage loans, which constitute the bulk of ABB's retail loans, all feature a legal, for the customer rather inexpensive prepayment option. This feature translated into important prepayment waves in the period 2014-2017. This prepayment risk is also captured in dedicated models which are incorporated in AXA Bank Belgium's overall interest rate risk management.
- Another specificity of the Belgian mortgage loans market is that variable rate mortgage loans are legally capped and indexed on OLO rates. Those features do create both basis risk and option risk.

6.1.1 IRR Management and Governance

6.1.1.1 Governance

The interest rate risk for AXA Bank Belgium and its subsidiaries is measured and managed at the AXA Bank Belgium head office level.

- The **Board of Directors** defines ABB's risk appetite. **ABB's Management Board** ensures that ABB's risk appetite is respected and delegates to ALCO the day-to-day management of the Bank's interest rate risk position.
- **ABB's ALCO** manages the transformation result within the risk appetite limits set by ABB's Management Board. It takes decisions to manage the interest rate risk exposures and allocates various envelopes to manage this risk.
- **ABB's ALM team** acts as first-line of defence and reports on the Bank's structural interest rate risk to its senior management. It ensures that ALCO decisions pertaining to the management of structural interest rate risk are implemented. It also develops, calibrates and maintains ABB's interest rate risk indicators[20].
- **ABB's Treasury & Intermediation team** takes assets and liabilities positions, by executing ALCO's decisions.
- **ABB's Risk Management department** independently ensures that all sources of interest rate risk are identified, analysed, reported and managed. It acts as a second autonomous line of defence. Risk management also performs all processing in the IRRBB tool to calculate the internal and regulatory metrics.

6.1.1.2 Risk Policy, limits framework and reporting

Risk framework

Interest Rate Risk in the banking book is extensively covered in ABB's risk appetite framework:

- ABB's most strategic risk appetite statements on solvency, earnings and value defined the buffer to be held above regulatory requirements in function of, amongst others, the sensitivity of ABB's net interest income.
- A dedicated functional risk appetite statement sets a limit on the net interest income sensitivity of ABB's banking book.
- On top of the above limit, operational limits are set on the sensitivity of the economic value of the banking book and on all other subcomponents of interest rate risk (basis, option and spread risks).

On top of those limits, Treasury activities included in ABB's banking book are also subject to sensitivities and VAR limits monitored on a daily basis.

Risk reporting

ABB's main reporting on interest rate risk in the banking book is included in the monthly ALCO book and quarterly risk report. These reports include the following risk indicators:

[20] Short term interest rate positions are managed by AXA Bank Belgium's Treasury department in application and execution of ALCO decisions.

- Sensitivity of the economic value of the banking book to various rate scenarios: parallel shifts from -200bps to +300bps, steepening and flattening scenarios.
- Sensitivity of the net interest income of the banking book to various rate scenarios: parallel shifts from -200bps to +300bps, steepening and flattening scenarios.
- Repricing gaps.
- Regulatory economic and net interest income sensitivity indicators. Since December 2019, ABB's interest rate risk is followed up by the regulator using the EBA Supervisory Outlier Tests (SOT).
- 99.9% Monte-Carlo Value at Risk (VAR) analysis.
- Dedicated indicators for cap risk, model risk, OLO basis risk and Euribor basis risk.

This set of indicators provides the ALCO with a comprehensive view of all sub-components of IRRBB. They are produced by a dedicated IRRBB management tool (QRM) managed in coordination between the ALM and Risk Management departments.

6.1.1.3 Policies for hedging and risk mitigation techniques

ABB applies the following hedging policies to mitigate the interest rate risk in its banking book:

- To keep the interest rate sensitivities within the regulatory and internal limits, the bank is actively managing a portfolio of derivatives within its banking book activities. Monthly production of retail assets and liabilities (including pipeline) is hedged systematically to keep ABB's exposure levels within the desired range.
- ABB closely monitors the effectiveness of the portfolio fair value hedge of interest rate risk of fixed rate mortgage loans to ensure that there are still sufficient mortgage loans in all interest buckets compared to the interest rate swaps concluded to hedge the interest rate risk on those mortgage loans.
- Cap risk embedded in variable rate mortgage loans is hedged via an active purchasing policy of market caps and swaptions.
- OLO basis risk embedded in variable rate mortgage loans is hedged via the maintenance of an OLO portfolio: declining OLO spreads generating lower revenues on mortgage loans are then compensated by capital gains on OLOs.
- Prepayment risk is managed via a dedicated model including natural and rate-driven prepayments and a permanent adjustment of ABB's overall interest rate risk position to the desired level (delta hedging).

6.1.2 Exposure to IRR in the banking book

The banking book of ABB including its branches mainly consists of retail loans and investments on the asset side, retail savings and deposits and non-retail long term funding including covered bonds and EMTNs on the liability side.

The largest share of retail loans are Belgian mortgage loans, of which 76% have a fixed interest rate and 24% a floating interest rate. The interests of the variable rate mortgages are linked to

the evolution of the OLO rates. The Belgian law imposes a cap on the variable interest rates of these loans. Given the historically low OLO rates, the embedded value for the client of this cap and the corresponding risk for the Bank are currently small.

The following table lists the values for 2 internal indicators: the Bank SI ('Solvency Indicator') and the Bank NII ('Net Interest Income').

The absolute Bank SI gives the impact of a parallel 1%-point rise in market interest rates on the economic value of the banking book. The relative Bank SI expresses this impact as a percentage of the regulatory capital.

The Bank NII gives the impact of a parallel 10 basis points upward and downward shift in market interest on the interest result of the banking book.

In the table below a comparison with last year is made of the Interest rate risk indicators:

Interest Rate Risk Indicators (kEUR)	31/12/2020	31/12/2019
Bank SI (absolute)	31,868	-32,379
Bank SI (relative)	3.1%	-3.2%
Bank NII (up 10 bps)	2,162	706
Bank NII (down 10 bps)	-10,688	-6,585

Table 13: IRR indicators

To calculate the internal indicators shown above, ABB uses a number of behavioural assumptions. These assumptions change the contractual cash flows of retail loans and deposits based on observed client behaviour and product pricing characteristics. The most important ones are prepayment rates used for retail loans and runoff profiles for non-maturing deposits (current accounts and savings accounts).

Prepayment rates for retail loans differ by product type:

- For fixed rate mortgages, which account for the largest part of prepayments, the prepayment rates used are rate-driven: they depend on the difference between existing client rates and new client rates in the market. The larger this difference, the larger the incentive for the client to prepay.
- For other retail loan types, the prepayment rates used are fixed.

The runoff profiles for non-maturing deposits stem from internal replication portfolio models. These models look for a maturity profile that replicates the historical pricing sensitivity of the non-maturing deposits.

6.2 Market Risk Trading Book

The market risk in ABB's trading book is the risk of loss arising from adverse movements in interest rates, market prices or exchange rate fluctuations of the trading book.

6.2.1 Description of trading activities and policies of hedging and risk mitigation techniques

6.2.1.1 Description of trading activities

ABB's dealing desks serve internal or external clients. None of the activities these dealing desks conduct is intended to profit, from short term movement in the markets or from bid-offer spreads. ABB has the following dealing desks:

Intermediation activities EMTN/Performance swaps: Previously, ABB issued EMTNs for its own retail clients but also for retail clients of some AXA Group entities (e.g. AXA Belgium). Intermediation activities fully hedged these EMTNs' payoffs in the market via performance swaps. However, some residual positions can come to exist after the issuance, during the lifetime of these EMTNs. This occurs when clients sell their EMTNs back to ABB before its maturity. Positions bought back from clients are unwound in the market when the total open position per strategy reaches a tradable amount. As of 2020, ABB has reorganized its EMTN activities. Namely, ABB is now is offering externally issued EMTNs to its retail clients.

Intermediation activities derivatives: Since the intermediation activity has been carved out, the trading activities of ABB have been significantly reduced.

Eurobond sale desk: make primary and secondary Eurobonds emissions available to retail customers via their home banking.

6.2.1.2 Policies for hedging and risk mitigation techniques

Moreover, , the trading book is subject to materiality thresholds that have been introduced by the National Bank of Belgium (NBB) in 2015 in the framework of the new Belgian bank legislation. The 'Non Risk-Based Ratio' for ABB, which is based purely on volume, is well below the threshold defined by the NBB. The 'Risk-Based Ratio', which reflects the underlying risks, is also remarkably lower for ABB than the regulatory threshold. This can be explained by the limited market risk strategy for its trading book resulting in low Market Risk Weighted Assets.

Furthermore, ABB's risk limit framework ensures that the VaR with a 99% confidence level and a holding period of 1 day does not exceed 0.25% of T1 capital as requested as well by the Belgian banking law.

6.2.2 Market Risk Management and Governance

6.2.2.1 Governance

ABB manages its trading room activities from its head office. Its subsidiaries are not allowed to take market risk exposures.

- **ABB's Board of Directors** defines the risk appetite and other key metrics that set the levels of acceptable market risk that can be engaged by ABB's business lines and branches. It also provides the final validation for any proposed organizational and reporting structures setup for the management of this risk. Although it regularly reviews risk reports, ABB's Board of Directors delegates its day to day management of market risks to ABB's Management Board.

- **ABB's Management Board** is also responsible for ensuring that market risk management strategies are implemented and followed. It ensures that the bank's market risk appetite is respected. It reviews and coordinates the work done by the various departments and committees involved in the management of all risks, including market risks.

- **ABB's Asset & Liability Committee (ALCO) and Wholesale Risk Committee (WRC)** receive a delegation from ABB's Management Board and are both responsible for ensuring that market risk management strategies are applied. These committees review market risk reports, monitor compliance with agreed risk appetite limits, guarantee the adequacy of the risk infrastructure and pre-validate and maintain risk indicators and models. Afterwards, the reports and main conclusions are sent for validation and endorsement to ABB's Management Board and Board of Directors. The ALCO focuses on the banking book activities and the WRC focuses on the trading book activities.

- **ABB's Financial Services Business Lines (Intermediation activities, Eurobond Sales and Treasury)** form the first line of responsibility for the management of market risk (respect market risk vs. PARP charter). Treasury falls under the supervision of the ALCO and Intermediation activities and Sales is supervised by the WRC.

- **ABB's Risk Management department** also independently ensures that all sources of market risk are identified, analysed, reported and managed on a daily basis

- **Middle office & OTFM** departments must assure the feasibility of market transactions and of WRC/ALCO decisions. OTFM also plays an important role in ensuring data quality processes.

- **Audit** has a standing invitation to all ALCO meetings. It is the responsibility of the Internal Audit Department to periodically review the entire market risk management.

6.2.2.2 Risk Policy, limits framework and reporting

ABB maintains a very conservative approach to market risk of its trading book. As part of the intermediation carve-out strategy, market risk on intermediation activity has declined in 2020.

Market risk exposures are the object of a continuous follow-up. These exposures are compared to an overall economic capital limit covering all of ABB's market risks. This risk appetite limit is completed by different VaR and sensitivity limits. Alert triggering and escalation processes are also used by ABB's Risk Management department to ensure that ABB remains within its conservative risk appetite for market risk.

To meet the Basel III minimum regulatory capital requirements, ABB uses the Standardised Approach defined in Title IV of the CRD/CRR regulation to measure, monitor, report and manage its market risks. This approach measures the following components of market risks:

- General interest rate risk
- Specific interest rate risk
- Foreign exchange risk

The standardised approach for foreign exchange risk applies to all bank positions meaning positions from both ABB's trading and banking books.

Template **MR1** in annex provides the capital requirements for market risk end December 2020.

6.2.3 Exposures to market risk

ABB's market risk consists mainly of interest rate risk. In addition, the equity risk arising from the emission of Euro Medium Term Notes (EMTN) is low, since ABB hedges this exposure in the financial markets. Furthermore, ABB is not involved in any trading activities related to commodities.

As of 2020 ABB is offering externally issued EMTNs towards retail clients. During the period of commercialization ABB bears the market risk as Front office agrees on a forward sale with the external issuer 6-8 weeks before the issuance of the note. ABB currently calculates the VaR for third party EMTN issuances in a conservative way.

The activities mentioned in the previous paragraph are closely monitored by the Risk Management department from ABB within a very strict limit framework. The VaR for all activities related to the trading book is limited to € 5.8 million. The VaR with a confidence level of 99.5% and a time horizon of 10 days is calculated daily using 5000 Monte Carlo simulations. The VaR for all trading book activities at the end of 2020 is equal to € 0.56 million and therefore well below the predefined limit. Finally, this model is subject to the appropriate yearly back testing and validation by an external auditor to preserve the accuracy and relevance of the model.

6.2.4 Procedure and methodologies used for the classification of the transaction in the regulatory categories

Risk Management is responsible for the prudential definition of the boundary between trading and banking book.

The Market Risk Charter details the content of the trading book (which meets prudential definition of the boundary (see CRR Article 4 (85), (86)). Any changes to it need to be approved by the ALCO committee via a charter update and a dedicated presentation.

Furthermore, all new products, instruments and services or modifications to existing products, instruments of services are covered by the product approval process, which includes the analysis of the product sponsor, Compliance department as well as Risk Management. Those analyses ensure that all new trading activities, services or instruments launched comply with law, regulation and internal risk framework. Middle office is responsible for the daily valuation (MTM) of all the products in the trading book and must ensure together with OTFM the feasibility of market transactions and of WRC/ALCO decisions.

ABB has no proprietary trading activities, only "client servicing" trading activities as detailed above.

Furthermore, ABB holds some positions booked in 'held-for-trading' by the accounting. Those positions have a presumption to be part of the trading book due to their 'held-for-trading' accounting classification but were not included in the trading book because they all hedge banking book positions (see Art. 2 § 2, ii of the Royal Decree).

Trading/Banking Book	ABB's Financial Services activities
Trading Book	- Execution Desk (Derivatives intermediation and EMTN) - Eurobonds sales (Treasury)
Banking Book	Treasury (excl. Eurobonds), ALM activities

Figure 15 Trading Book vs Banking Book

6.3 Currency Risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument fluctuates due to changes in exchange rates. AXA Bank Belgium operates a policy to minimise exposure to currency risk. Any material residual positions are hedged systematically. This risk was followed up and hedged on a monthly basis in ALCO in 2020.

If foreign exchange positions capital requirements do not exceed 2% of the bank's total own funds, no own funds requirements for foreign exchange risk need to be calculated (Article 351 of the CRR). During 2020, ABB never exceeded this 2%.

6.4 Prudent valuation

6.4.1 Regulation

Article 34 of the Regulation 575/2013 states that all assets measured at fair value have to be taken into consideration for applying the standards of Article 105 which refers to the prudent valuation.

Hence, the Regulatory Technical Standards applies to all fair valued positions regardless of whether they are held in the trading book or banking book.

In this regards ABB has developed a governance structure that screens all current procedures, policies, calculations, methodologies, etc. and makes sure that these are in line with the provisions set out by the European Union in light of the Prudent Valuation standards.

6.4.2 Framework

Due to the role of the Middle Office (MO) within the calculation, monitoring, etc. of the Prudent Valuation, it is this unit that is responsible to review and eventually update the governance documentation at least on a yearly basis.

On top of this responsibility, it is MO's task to make sure that all actions related to the Prudent Valuation are executed within the governance framework. In case additional actions need to be taken to alter policies, calculations, etc. within the governance framework and within the scope of MO's tasks, they will be updated accordingly.

6.4.2.1 Applied methodologies

AXA Bank Belgium uses the core approach to calculate the additional value adjustments for all the valuation positions in the scope of the regulatory standards for prudent valuation. These valuation positions include all financial instruments or commodities or portfolios of financial instruments or commodities held in both trading and non-trading books, which are measured at fair value. More specifically for AXA Bank Belgium this comprises all positions in derivatives, fixed income instruments and EMTNs.

The above mentioned is correct for those AVA's calculated within the scope of MO (i.e. Market Uncertainty and Close-Our-Cost AVAs), except for the AVA for operational risk. The latter is determined as being 10% of the sum of the Market Uncertainty (MU) and Close-Out-Cost (CoC) AVA.

6.4.2.2 Use of market data

ABB makes use of the following market data providers: Bloomberg and Tradeweb.

On the one hand Bloomberg and Tradeweb are used as data source for the calculation of the market uncertainty adjustment for derivatives. On the other hand, the close-out cost adjustment is calculated based on data coming from Bloomberg only. The market uncertainty adjustment for fixed income positions is also calculated based on data coming from Bloomberg only.

6.4.2.3 Review and approval process

The documents related to the prudent valuation are reviewed at least on an annual basis. This review and update process mainly focusses on the business-as-usual processing within the Prudent Valuation framework.

Any significant changes to the applied methodology will be validated by Risk Management and be approved by the Wholesale Risk Committee (WRC). This review and approval process for specific changes runs alongside the yearly review process but is more based on an ad-hoc approach.

6.4.3 Systems and controls requirements

6.4.3.1 Independency

Market prices and marking to model inputs are regularly verified for accuracy and independence by MO at least on a monthly basis. This verification is done independent from Front Office who benefit directly from the trading book. The latter guarantees the requirement with regard to the independent price verification process linked to the fair-value of each position taken into account for the prudent valuation calculation.

Next to this, any changes executed by MO within the independent price verification process that imply changes in the models (i.e. marking to model) or relevant market data (i.e. direct or indirect market data that affect mark to market or marking to model) proposed by MO run through a verification and validation process with the approval by Risk Management before putting it into production. Presentation of these results are also discussed and presented to the WRC.

On top of that, the effective monitoring, AVA calculation execution and reporting is as well done by Middle Office as an independent control unit.

6.4.3.2 Controls, valuation and processing

An overview of the validated pricing models and market data for each product type is maintained on a regular basis.

The performance of the model is monitored by Middle Office on a regular basis and at least on a half-yearly basis a report including an analysis and conclusion of this performance has to be sent to Risk Management for approval.

This official half-yearly review is subject to external audit and Risk Management approval. Middle Office also conducts this Valuation check on a more frequent basis for internal use.

This check also guarantees that the valuations provided by ABB, which are valued with certain pricing models, are in line with the market. This gives a good view on potential valuation model and/or market data issues which can then result in a model improvement, methodology changes or another transformation of market data to improve the ABB valuations. This valuation check will therefore also include a market data and valuation model assessment, next to the above stated goals.

It is therefore Risk Management's responsibility to provide their opinion on the numbers, the used market data and the suitability of the valuation models and techniques. This will be included in their validation report. After the formulation of this opinion, either positive of negative, this will be presented to the Wholesale Risk Committee (or its proceeding governing body) for approval.

In the end, it will hence be a Middle Office task to transform these opinions into actions to improve the valuation either by more accurate market data or a new/changed valuation model. The latter may not only be derived from this official half-yearly review, but as well from the non-official and more frequent review executed by Middle Office.

A risk framework including ABB's risk appetite for positions subject to valuation uncertainty is already implemented. This risk appetite is reviewed on a yearly basis and presented to the Wholesale Risk Committee for approval.

7 Liquidity Risk

The 'Basel Committee on Banking Supervision' (BCBS) defines the liquidity risk as the risk of not being able to quickly and easily increase the cash position to absorb shocks as a result of financial and economic stress.

ABB's Risk Taxonomy considers the following two aspects of liquidity risk which all fall within the scope of liquidity risk management:

- **Short Term Liquidity Risk** defined as the risk that ABB cannot meet its financial liabilities when they come due (within a month), at a reasonable cost and in a timely manner. It results from short term cash and collateral positions (intra-day, overnight, one day to one month)
- **Structural Liquidity Risk** defined as the risk that ABB cannot meet its financial liabilities when they come due on a medium- and long-term horizon (more than one month), at a reasonable cost and in a timely manner.

7.1 Liquidity Risk management and Governance

7.1.1 Governance

The governance of ABB's liquidity risk can be summarised as follows:

- ABB's **Board of Directors** and ABB's Management Board assume the responsibilities described in section 2.1 for the management of liquidity risk.

- ABB's **Asset & Liability Committee** (ALCO) manages the structure of the Bank's balance sheet, aiming to optimise its liquidity position. Consequently, it applies and implements liquidity risk management strategies. It reviews liquidity risk reports and monitors compliance within agreed limits by following relevant liquidity indicators.

- ABB's **ALCO** is assisted in this work by ABB's Asset & Liability Management department (ALM), Treasury & Portfolio Management, Financial Control and Risk Management departments.

- The functional management of ABB's structural liquidity belongs to its **ALM** department. ALM reports on the Bank's structural liquidity risk to its senior management. It ensures that ALCO decisions pertaining to the management of structural liquidity risk are implemented. It also develops, calibrates and maintains ABB's liquidity risk

indicators.

- The Treasury Department is responsible for the liquidity of the bank up to one year. This department also acts as the central team in the liquidity management of ABB's group units (SCF, RS, etc.)

- ABB's **Risk Management** department independently ensures that all sources of liquidity risk are identified, analysed, reported and managed.

7.1.2 Declaration on the adequacy of liquidity risk management arrangements (pursuant to Article 435 of the CRR)

AXA Bank Belgium ("ABB") has concluded its annual Internal Liquidity Adequacy Assessment Process ("ILAAP") and the view of the management body is that ABB has an adequate level of liquidity, both from a normative and economic point of view. ABB shows throughout the ILAAP that it has a strong liquidity risk framework which allows to identify, measure, mitigate, monitor and report liquidity risks. This will allow ABB to pursue its intended business strategy while at the same time ensuring a sound liquidity position, even under a prolonged period of adverse developments.

In a normal market environment, all internal and regulatory indicators are expected to remain above the Risk Appetite Framework alert level over the next 3 years. This confirms that the strategic plan, which foresees a strong increase in retail loan production over the next years, is feasible from a liquidity risk perspective. Under the severe stress scenarios of the ILAAP stress test, the LCR drops below the internal and regulatory limits. However, there are sufficient reliable mitigating actions available to restore the LCR above the limits in a timely fashion.

The COVID-19 pandemic is severely affecting macro-economic conditions and is causing significant turmoil in financial markets. This is particularly challenging for banks, as a long-term pandemic will put the business model of the bank under severe stress. Moreover, the moratorium measures introduced by the Belgian government will impact the liquidity position of banks. However, ABB's management body is of the view that its liquidity buffer is sufficient to absorb these negative impacts. ABB started the crisis with comfortable liquidity buffers (€ 1,277 mln excess liquidity at the end of March 2020) and ended the year 2020 with an LCR at 197% (€ 2,040 mln excess liquidity).

This declaration is also approved by the Board of Directors.

7.1.3 Risk policy, limit framework and reporting

In recent years, liquidity management was one of the key priorities of ABB. It has resulted in a suitable framework for liquidity risk which is based on both regulatory and internal indicators.

In order to evaluate and manage its consolidated liquidity risk, ABB's ALCO monitors 2 kinds of indicators:

1. Internal indicators: Internal Liquidity Stress indicator (ILS) and Short-Term Liquidity Framework (STeLF)
2. Regulatory indicators: LCR, NSFR and ALMM

All these indicators are underpinned by a common approach: guarantee that ABB's liquidity buffer is sufficient to cope with a range of stress events. More specifically, ABB's own Internal Liquidity Indicator has been designed to ensure that ABB maintains an adequate liquidity cushion to be able to withstand combined idiosyncratic and market stresses over a one year horizon.

Those key liquidity indicators have been used to define ABB's risk appetite statements.

ABB Risk Appetite Statements for Liquidity (in '000 EUR)					
Indicator	Strategic or functional RAS	Standard	Monitoring	Alert	Recovery
LCR	Strategic	> €750 mln	< €750 mln	< €500 mln or < 125%	< 110%
NSFR	Functional	> €3000 mln	< €3000 mln	< €2000 mln or < 110%	< 105%
ILS	Strategic	> €750 mln	< €750 mln	< €500 mln or < 125%	N/A
STeLF	N/A (operational limit)	N/A	N/A	< €850 mln in stress scenario < €1350 mln in BAU scenario	N/A

Figure 16: Risk appetite statements Liquidity

➢ Internal Liquidity Stresses (ILS)

ABB has developed two tailor-made stress scenarios in order to assess the adequacy of Bank's liquidity buffer. The stress scenarios are developed in collaboration with AXA Group risk management. The internal scenarios are more restrictive than the LCR scenarios, which results in a higher amount of net outflows.
The ILS scenarios cover multiple time horizons (overnight, 1 week, 1 month, 3 month, 6 month and 1 year) and the indicators are expressed in term of liquidity excess in euro after the scenario. The stock of liquid assets under the ILS indicators only retains ECB eligible assets. The liquidity excess is the difference between the stock of liquid assets minus the stressed in- and outflows under both scenarios.

Scenario 1 assumes a parallel downshift of interest rates while scenario 2 assumes an upward shift of the interest rates. Both scenarios imply a credit spread increase for the Bank and a downgrade of the Bank's rating.

The Excess Liquidity indicator is defined as the worst liquidity position, over all time horizons and stress scenarios.

in '000 EUR	ILS	Limit	Buffer
End of December 2020	1,527,170	500,000	1,027,170
End of December 2019	2,053,683	500,000	1,553,683

Table 14: ILS

- **Short Term Liquidity Framework (STeLF)**

To complement the regulatory liquidity framework and the Internal Liquidity Stress calculations, AXA Bank Belgium has created a liquidity indicator computed on a daily basis which assesses the liquidity position over the next 5 business days. This indicator is called the Short-Term Liquidity Framework (STeLF).

It measures the liquidity buffer defined as the sum of unencumbered ECB eligible securities and EUR cash balances and is calculated for two scenarios. In the business-as-usual scenario, the STeLF liquidity buffer takes inflows and outflows into account for the next five business days. While in the stress scenario only the outflows are taken into account along with an extra stress outflow on top of that.

- **Regulatory Indicators**

ABB monitors the LCR and NSFR of the Basel III framework.

LCR (Liquidity Coverage Ratio) became binding in October 2015 while NSFR (Net Stable Funding Ratio) will become binding with the introduction of the CRR II in June 2021.

ALMM (Additional Liquidity Monitoring Metrics) is reported to the regulator since April 2016.

- **ILAAP (Internal Liquidity Adequacy Assessment Process)**

ABB is required to produce, at least once per year, a clear and formal statement on the assessment of the liquidity adequacy named the Internal Liquidity Adequacy Assessment Process (ILAAP) exercise. The ILAAP contains all the qualitative and quantitative information necessary to underpin the risk appetite, including the description of the systems, processes and methodology to measure and manage liquidity and funding risks and is part of the Supervisory Review and Evaluation Process (SREP). The qualitative part mainly consists of a self-assessment template scoring all activities by means of 13 ‘sound principles of liquidity risk management’ as published by the BCBS. Multiple supporting documents (Liquidity Risk Charter, Risk Appetite Statements, etc.) are required to provide the SSM with insight in the management of Liquidity Risk within ABB.

7.1.4 Policies for hedging and risk mitigation techniques

The Bank's liquidity contingency plan has been adapted and the Bank established a special task force which, during systemic or idiosyncratic liquidity crises, must immediately intervene and take appropriate action. This has led to a stronger awareness of liquidity risk at all management levels, as well as a more rigorous follow-up. Regular forward-looking projections of the main liquidity ratios support the active management of the liquidity risk within AXA Bank Belgium.

7.2 Liquidity Buffer assessment

ABB enjoys a very robust liquidity position as demonstrated by its strong liquidity buffer that clearly exceeds regulatory and internal limits.

Both BIII indicators are well above the minimum requirements at the end of 2020 (100% limit) thanks to a comfortable stock of liquid assets and a solid financing structure.

Ratio	31/12/2020	31/12/2019	Limit
LCR	197%	198%	100%
NSFR	133%	133%	100%

Table 15: Liquidity ratios

AXA Bank Belgium has successfully adapted its strategy to meet these required indicators. This strategy includes the bank's investment policy that is limited to quite liquid assets and attracting long-term stable funding.

ABB has subscribed to a series of refinancing operations of the European Central Bank (ECB) at 31 December 2020, the total targeted longer-term refinancing operations (TLTRO) amounts to € 1,151,000 thousand and the pandemic emergency longer-term refinancing operations (PELTRO) amounts to € 1,400,000 thousand. Aside from the ECB funding, ABB also managed to issue € 1,500,000 thousand public covered bonds into the market. Lastly, ABB has seen an increase in the amount of retail deposits, bringing the total to € 18,697,149 thousand.

7.2.1 LCR

The LCR disclosure template (see template **LIQ1** in annex) gives an overview of the calculation of the LCR buffer and ratios.

The information disclosed states the values and figures contained therein for each of the two calendar quarters (July-September, October-December) preceding the December 2020 for which enough observations are available to calculate averages. These values and figures are calculated as the simple averages of month-end observations over the twelve months preceding

the end of each quarter. The LCR disclosure template lists all figures in EUR, as ABB has no other significant currencies.

7.2.2 NSFR

7.2.2.1 Funding and liquidity sources

The main sources of stable funding for the Bank are Retail deposits (€ 18,697,149 thousand on 31 December 2020) and covered bonds (€ 5,537,564 thousand on 31 December 2020). AXA Bank Belgium also participated to the long term refinancing operations of the ECB in the form of PELTRO and TLTRO funding for € 2,551,000 thousand on 31 December 2020. This funding is received by pledging retained covered bonds as collateral at the ECB. More detail can be found in the table below:

Date as of 31/12/2020 (in '000 EUR)	< 3 months	< 12 months	> 12 months	Total
Central Bank financing	-	-	2,551,000	2,551,000
Loans from financial customers	411,974	262,223	59,551	733,747
Unsecured funding (savings & current accounts of 'other financial corporates' + CIFP)	91,761	30	255	92,046
Repurchase Agreements	-	-	-	-
Secured loans	320,212	262,193	59,296	641,702
Retail funding	17,621,902	134,346	940,901	18,697,149
Non maturing retail funding (savings and current accounts)	17,539,206	-	-	17,539,206
Maturing retail funding (deposits with agreed maturity, EMTN for retail, customer saving certificates)	82,696	134,346	940,901	1,157,942
AXA Group Financing	-	43,062	341,066	384,128
EMTN	-	43,062	341,066	384,128
Other counterparties	287,839	-	5,537,694	5,825,533
Unsecured funding from non-financial customers	287,839	-	130	287,969
Covered bonds	-		5,537,564	5,537,564
Total	**18,321,714**	**439,632**	**9,430,211**	**28,191,557**

Table 16: Maturity analysis

In the table above the fair value of derivatives is not included since we do not consider these derivatives as "funding", given the fact that they are mostly part of AXA Bank's 'back-to-back" activities.

The main sources of liquidity for ABB are cash and an LCR Level 1 investment portfolio. End of December 2020 this portfolio consists of 44% of European sovereign bonds (including bond guaranteed by sovereign), 42% of supranational, 10% of bond issued by public sector entities, and 4% of AAA-rated covered bonds issued under legislative framework: of The Netherlands. An overview can be found in the table below:

Issuer	Type	Rating	Portfolio %
Belgium	Sovereign	AA-	20.17%
The Netherlands	Sovereign	AAA	9.05%
France	Sovereign	AA	12.36%
Austria	Sovereign	AA+	1.38%
EFSF	Supranational	AA	22.64%
EIB	Supranational	AAA	19.61%
CADES	Public Sector Entity	AA	9.54%
Flanders	Regional	AA	1.21%
ABN & ING	Dutch Covered	AAA	4.04%
Total			**100.00%**

Table 17: LCR Level 1 Investment portfolio

7.2.2.2 Covered Bond

AXA Bank Belgium created AXA Bank Europe SCF for issuing covered bonds, whereby AXA Bank Europe SCF directly purchases mortgage loans from AXA Bank Belgium. The interest payments of the mortgage loans held by AXA Bank Europe SCF are transferred with yield-maintenance swaps between AXA Bank Belgium and AXA Bank Europe SCF. This will also allow executing a secured loan transaction between AXA Bank Belgium and AXA Bank Europe SCF with mortgages as underlying collateral to issue covered bonds with a shorter time to market.

The strong underlying quality of ABB's retail mortgage portfolio in Belgium is the ideal collateral for a covered bond program. This program enables the bank to manage its liquidity risk. It provides ABB with diversification in funding sources and minimises funding concentrations in time buckets. The covered bond program gives ABB access to the covered bond market, allowing ABB to reduce the cost of long-term institutional funding. This program offers the bank access to funding markets that remain open in times of market stress. The bank launched its first covered bond in November 2010. The covered bond program amounts to € 8.25 billion in 2020 of which € 5.5 billion remains on a consolidated level: € 5.5 billion are placed in the market, and € 2.75 billion of these covered bonds are retained by AXA Bank Belgium and were eliminated in the consolidated balance sheet.

7.2.2.3 Collateral and downgrade of credit rating of the institution

In the calculation of the LCR ratio, both the additional collateral needs resulting from an adverse market scenario as well as downgrade triggers have to be accounted for as additional outflows.

ABB adds an additional outflow corresponding to collateral needs that would result from the impact of an adverse market scenario on the credit institution's derivatives transactions,

financing transactions and other contracts if material. This additional outflow is calculated based on the application of the Historical Look-back Approach.

On the other hand, ABB also adds an additional outflow corresponding to the additional collateral needs or cash outflows resulting from a material deterioration in the credit quality of the credit institution corresponding to a downgrade in its external credit assessment by three notches.

In the Internal Liquidity Stress ratio, only the downgrade triggers are taken into account, since this ratio already includes a market stress scenario.

8 Assets Encumbrance

Disclosure of encumbered and unencumbered assets for ABB on 31/12/2020 is done in accordance with the disclosure templates foreseen in the EBA Guidelines released in December 2017.

This disclosure templates (**AE-A** to **AE-C**) can be found in annex.

The figures represent the median of Q1, Q2, Q3 and Q4 of 2020 for ABB consolidated.

8.1 Sources of encumbrance of assets:

The total amount of encumbrance of assets increases from € 7 billion in 2019 to € 9.2 billion € in 2020 and the 4 sources of encumbrance are:

- Repos: decreases from € 800 million in Q1 2020 to zero in Q4 2020. ABB used mainly retained covered bonds to cover the repo transactions.
- Funding from ECB (TLTRO, LTRO, MRO and PELTRO) covered by debt securities, retained AAA note RMBS Royal Street 1 and retained covered bonds
- Derivatives mainly covered by cash
- Issuance of Covered bonds sold to the market covered by mortgages. The total portfolio sold covered bonds evolves between € 5.8 billion and € 7.3 billion in 2020.
  Royal street notes: on conso balance only the small part of Royal street AAA notes sold to the group (+/- € 5 million) covered by mortgages

In Q4 2020 ABB issued a synthetic securitisation. The cash hold by ABB that securitised the sold CLNs is considered as encumbered.

8.2 Significant evolution in 2020

The repos for AXA Belgium and the derivative intermediation activity for entities of the AXA group decreased in 2020 and are stopped by the end of 2020.

ABB has still a stable pool of bonds available for encumbrance, but this pool decreased due to contractual maturity dates and ABB no longer receives bonds to reuse as collateral.

The ECB funding increased during 2020 from € 691 million to € 2,551 million and consists out of TLTRO and PELTRO

ABB relies more on Covered bond funding which increased to € 8.3 billion, but a big part is retained (€ 2.8 billion) and is used as collateral for ECB funding. These covered bonds are fully covered by mortgages (117% overcollateralization - since November 2020 120 % overcollateralization).

8.3 Unencumbered assets

ABB has around € 20,901 million unencumbered of which € 780 million debt securities available to use as collateral and that can be easily encumbered.

The other unencumbered assets mainly consist out of mortgages (€ 15,313 million), which could be encumbered if needed (new RMBS, new Covered bonds...).

Only a small part of other assets is not available for encumbrance: tangible assets (property, plant and equipment), goodwill, tax assets, accounting specific amounts (fair value of the hedged items for interest rate risk).

9 Operational Risk

AXA Bank Belgium defines operational risk, as the risk of loss resulting from inadequate or failed internal processes, or from employees or systems. The failure or inadequacy may result from both internal and external causes.

In the Basel framework, operational risk is divided into 7 categories:

i. **Internal Fraud**: fraudulent financial reporting, improper of fraudulent financial activity as well as misappropriation of assets and other internal frauds
ii. **External Fraud**: theft and fraud as well as information system fraud
iii. **Employment Practices and Workplace Safety**: employee relations, diversity and discrimination, safe environment, loss of key staff and talent management
iv. **Clients, Products and Business Practices**: suitability, disclosure and fiduciary, improper business or market practices, incl. advisory activities, breach of regulation and legislation, unauthorized activity, product flaws
v. **Damage to Physical Assets**: natural disasters, vandalism, terrorism, etc.
vi. **Business Disruption and Systems Failures**: system disruptions and breach of information security
vii. **Execution, Delivery and Process Management**: data entry errors, accounting errors, failed mandatory reporting, negligent loss of client assets, etc.

For AXA Bank Belgium, the definition of Operational Risk also includes Compliance Risk[21]; which is defined as the risk of loss resulting from the failure of an institution to adopt appropriate policies, procedures or controls, to comply with its legal obligation arising from laws, regulations, or any other type of binding contracts.

For AXA Bank Belgium, the definition of Operational Risk excludes Reputation Risk and Strategic Risk. However, when assessing the impacts of operational risks, the potential damages to AXA's reputation[22] are considered by a qualitative indicator while major damages are followed by the Group.

9.1 Risk management and Governance

9.1.1 Governance

[21] See section 9.4 'Compliance'
[22] Using the framework of the Group: no impact, impact (not yet assessed), insignificant (minor isolated stakeholder concerns/impacts), minor (serious segmented stakeholder concerns/incidents), moderate (broader and more vocalized concerns within the industry), major (negative public exposure with significant impact), and severe (dramatic loss of stakeholder confidence – extensive negative public exposure).

ABB's management uses an annual recurring Operational Risk Management cycle ("ORM cycle") to identify, quantify, decide on and mitigate its material operational risks. The four steps are: risk identification, risk quantification, risk aggregation, risk validation & mitigation. ABB measures its economic capital using a Monte Carlo VaR, which is similar to the Basel II Advanced Measurement Approach (AMA) under Pillar 1. For the regulatory capital calculation for Operational Risk, the Basic Indicator Approach (BIA) is used.

The ORM Cycle provides ABB's senior management with an indication on the most significant operational risks faced by ABB.

ABB's Management Board delegated to the Operational Risk, Internal Control, Compliance and Internal Audit Committee (ARC) the following responsibilities with regards to operational risk: the implementation of the operational risk management framework, giving guidelines to embed it in ABB's business-as-usual activities and reviewing and validating all important decisions or information relating to ABB ORM Cycle (ORM Charter, economic capital results, new methodology, processes, reporting, documentation, etc.).

All business lines and entities within ABB have full ownership of the operational risks they face in the practice of their activities.

The Operational Risk management team, the Compliancy team and the Security & Privacy team ensure that the non-financial Risks are identified, assessed, measured and mitigated in accordance with the AXA Group standard.

9.1.2 Risk policy, limit framework and reporting

For the regulatory capital AXA Bank Belgium applies the Basis Indicator approach (i.e. equals to 15% * of the mathematical average of the sum of all positive operational results over the last 3 annual exercises) and is only updated at the end of each year.

For its economic capital, AXA Bank Belgium has implemented an internal model that has been developed by AXA Group. This model is rather similar to an Advanced Measurement Approach (AMA). The economic capital calculation is an annual process based on risk assessments, that identify and quantify the relevant and material operational risks faced by AXA Bank Belgium in the coming year.

Just as in past years, the focus for 2020 remained on detecting and preventing fraud and cyber risks (hacking, phishing and cyber/virus-attacks), regulatory risks (related to MIFID, AML, GDPR, ...) and people risks (key employee exposure, loss of staff, ...).

The team of Operational Risk continuously works on 'risk awareness' within the entire organisation (by organising training courses for the different business lines, participating in major projects and product launches, by establishing a network of risk correspondents). In 2020, efforts continued for further optimisation of both the 'Loss Data Collection' process and the 'Operational Risk Cycle' process, with a specific focus on a structural framework for 'risk responses' (action plans, risk acceptance). The team of operational risk has also developed a risk appetite framework, in which the playing field for operational risk in AXA Bank Belgium's processes is defined and monitored.

9.1.3 Operational risk mitigation

Decisions regarding risk topics are made in the ARC. Different options are possible:

- Accept the risk as the current situation already balances control cost and efficiency with desirable risk level
- Transfer the risk (e.g.: insurance contract establishments for fire incidents, cyber incidents and agent fraud).
- Mitigate the risk with action plans to strengthen the process and to reduce the risk to a lower/acceptable level. These action plans are defined by the business, challenged and monitored by the operational risk team and reported quarterly to Management.
- Avoid the risk by eliminating the activity that carries the risk (if possible)

The team of Internal Control performs 2nd line monitoring of the key controls, covering the main risks in our processes. Note that in 2017, AXA Group has started the roll out of an IC program. AXA Bank Belgium has started the implementation of this program in March 2018 and continued the effort in 2020. Goal is to identify key risks for each process within the bank, to define the required control objectives and assess the controls in place or required to mitigate these risks. End of 2020, all core processes of AXA Bank Belgium are reviewed and controls structurally documented and tested. The last processes are foreseen to be handled in 2021.

9.1.4 Operational risk monitoring and control

Monitoring of Operational Risk is performed by:

- The quarterly creation of an operational risk dashboard in which KRI's are measured against pre-defined thresholds. This dashboard is presented to the ARC. An annual review is performed to ensure the link with 1) the risk appetite of AXA Bank Belgium (to challenge the defined "monitoring" and "alert" levels) and 2) the major operational risks identified in the yearly ORM cycle
- Incident report review and communication of important events towards the ARC on a monthly basis
- The Overall Risk dashboard of the bank contains a KRI on operational risk, linked to the operational risk dashboard.
- Regular reporting to the Risk Committee

9.2 Information, security and business continuity Risks

Information, security and business continuity risks at ABB are applicable to the information and people assets of ABB in order to manage confidentiality, integrity, availability, and the security risks. The Risk Management of these risks can be considered as a specialized domain

of Operational Risk Management (ORM). As such, it follows the same methodology, governance and framework as other operational risks.

Specific attention to these topics is paid because ABB offers it services in an information driven market, where service delivery depends on the availability, stability, user-friendliness and security of its applications and platforms. To ensure an accurate follow up, a dedicated 2nd line team 'security & privacy' takes the responsibility on the scope of security, privacy and business continuity. The governance is enriched by the IRC, the Information Risk Committee. With the CRO as chairman.

Risk appetite, monitoring and methodology of Operational risk is used. For the monitoring of the risks a separate view on the Information Risks is followed up.

The COVID-19 crisis revealed that AXA Bank was well prepared on the topic of business Continuity, see section 9.6.

9.3 Vendor Risk

Vendor risk at AXA Bank Belgium aims to ensure all relevant risks, regarding the use of a vendor, are assessed and documented, a decision on the vendor use is in place and frequent vendor assessment on service delivery is performed and reported on. It can be considered as a specialized domain of Operational Risk Management (ORM) and encompasses the full lifecycle of the vendor, going from needs definition and vendor selection, to exit strategies when ending relations with the vendor. Vendor Risk Management (VRM) brings together the different domains required to complete this aim, namely Legal, Compliance, Risk, Security and Procurement.

It follows the same methodology, governance and framework as other operational risks, but has a transversal approach in the application of the framework as it must be tuned to the vendor specific services and lifecycle. AXA Group developed a Vendor Risk Framework to allow for the split between critical or non-critical suppliers, where critical suppliers will have specific onboarding requirements, risk assessment and performance reviews executed to ensure the risks for the vendor are covered.

2020 was marked by the local development and roll-out of the Vendor Risk Management Framework to ensure the existing pool of suppliers was classified. Assessment and review is started for the EBA critical outsourcing contracts and will be finished in 2021, within the timeline relevant for legislation[23] and internal risk requirements.

9.4 Compliance Risk

Compliance risk is defined as "Risk that a legal, administrative or regulatory sanction is imposed on an institution and/or on its staff member(s) because of the non-compliance with the legal and regulatory integrity rules and rules of conduct, resulting in a loss of reputation

[23] Such as, for example, the EBA Guidelines on outsourcing arrangements

and possible financial damage. This loss of reputation can also result from non-compliance with the relevant internal policy and with the internal values and rules of conduct regarding the integrity of the institution's activities. A loss of reputation has a harmful effect on the credibility of the institution and its staff members. Credibility is a basis for being active in the financial sector".

The compliance risk is hedged via processes. Indeed, the central dedicated compliance team, has implemented several procedures in order to mitigate that risk. From operational point of view, first line departments are required to have implemented the necessary processes to mitigate the compliance risks embedded in their activity.

First, Compliance risk is mitigated with a procedural framework consisting of Group policies and Local policies. Three general policy documents focus on all applicable compliance domains. These policy documents are the Group Compliance & Ethics Guide, the ABB Compliance Charter and the ABB Integrity Policy:

- The Compliance Charter is a regulatory required document that protects the compliance function, ensures its independent position in the company and describes the rights and duties of the compliance function. Performing an annual compliance risk assessment is one of the duties of compliance.
- The Integrity Policy on the other hand, describes the basic principles and obligations for each compliance domain. In that respect it is the minimum standard to be respected by each employee of the bank. The domains explained in the Integrity Policy are also the domains that are assessed during the annual compliance assessment.
- Closely linked to the ABB Integrity Policy is the ABB Whistleblowing Policy that offers each employee the possibility to report breaches on Compliance and Integrity domains in a discreet and protected way to a Designated Complaint Recipient.

These general policies are further implemented by domain specific policies such as the Policy on the fight against money laundering (AML) and the financing of terrorism (CFT) and sanctions compliance; the Personal Account Dealing rules, the Conflicts of Interest Policy; etc…

As second mitigation measure, the Compliance team has implemented a compliance monitoring program. This program consists of a framework of second line controls with a purpose of monitoring the effectiveness of the first line monitoring program and identifying the gaps in the first line monitoring program. The second line monitoring program is both structural and ad hoc, consisting of recurring controls, such as the monitoring controls on duty of care and thematic deep dive controls focussing on one specific theme, e.g. the implementation of the MiFID suitability rules in the GPS 2 investment tool. Findings out of the monitoring program lead to structural feedback to the operational departments in the form of compliance recommendations. These recommendations are addressed to the responsible director of the impacted operational department. Each recommendation has a rating depending on the regulatory impact. A high rating is systematically used for recommendations given by compliance as consequence of a regulatory breach. A low rating is used when a recommendation is a nice to have improvement to be considered upon the first procedural or process review.

A third mitigation measure is the annual compliance risk assessment. This annual exercise involves both stakeholders from the operational departments and the central compliance team. It allows ABB to identify compliance risks, their level and the efficiency of the existing mitigation measures for individual compliance risks. The outcome of the compliance risk assessment and the action plan determined based upon the assessment are subject for information and approval by the ABB Management Board.

9.5 Requirements for Operational risk

AXA Bank Belgium uses the Basic Indicator Approach for calculating capital requirements for operational risk. Under this approach the 'Relevant Indicator' (RI) is calculated for the last three years (based on the details in the operational result). The 3-year average of the RI is than multiplied with an alpha factor of 15%. This requirement is multiplied with 12.5 to get the RWA.

In the table below a comparison is made of the RWAs for operational risk.

Operational risk (in '000 EUR)	31/12/2020	31/12/2019
RWA	699,118	658,421

Table 18: Operational risk

For the requirement in 2020, the relevant indicator is based on the year-ends 2018 to 2020. For the calculation of 2019, the year-ends 2017 to 2019 were taken into account.

The stable RWA is due to the fact that the results of 2020 were comparable to the results of 2017.

9.6 COVID-19

COVID-19 impacted highly the year 2020.

On the level of Operational Resilience and Business Continuity AXA Bank Belgium managed very well. The lead was in the hands of the CMT (Crisis Management Team) with a very regular update and consultation if needed from the MB. Since the pandemic outbreak in March 2020, the head office teams could turn immediately into 100% telework what resulted in a continuity of the services. As in March the focus was on the continuity of the services, it shifted in April /May to the consequence of the remote working on the processes: some more processes were digitalised and fraud attention was increased for internal as well as external fraud. From May/June on we faced a shift to pay more attention to emotional and physical health of the people. A number of initiatives were taken to make the full remote working modus acceptable for everybody : skype video possible for all staff , roll-out Teams, thank you present

(chocolates) sent at home , CEO vlogs, resilience toolbox for all staff and people managers, …

The outbreak of COVID-19 resulted in an increased uncertainty concerning the repayment capacity of retail clients (i.e. reduced income due to technical unemployment) and professional clients (i.e. dependency on measures taken by government), what resulted in specific guidelines regarding to our acquisition policy (i.e. focus on helping existing clients, limitation of professional loans to prospects in risky sectors given uncertain times, granting capital /payment suspensions towards our customers). It also created a lot of extra work/controls and adaptations to the processes and systems.

The COVID-19 crisis was actively monitored and recurrent information exchange with the JST was done.

10 Other Risks

Solvency risk, liquidity risk, credit risk, interest rate risk, market risk, and operational risks are the main risks faced by ABB. However, the bank also faces other types of risks. They are identified through a risk identification process. This section describes, briefly, the management of these risks. More specifically, this section deals with the management of the following risks: business risk, model risk, reputation risk, political and regulatory risk, ESG risk and pension risk. Securitisation risk has been covered in previous sections.

10.1 Business Risk

ABB defines business risk as the risk due to potential changes in general business conditions, such as market environment, client behaviour and technological processes. This can affect results if the bank fails to adjust quickly to these changing conditions. The definition includes Strategic risk and Technology risk.

Several processes take part in the mitigation of this specific risk. First, targets for volumes and margins for the year are defined by both ABB's Management Board and Board of Directors. Sensitivity analyses are performed on these targets based on scenarios whose business risk is one. Then, there is a close monitoring of the objectives that leads, if necessary, to their review by ABB's Management Board. This review also takes into account competitors thanks to benchmarking exercises performed on a regular basis. In addition to this follow-up, the more specific Asset and Liability Committee (ALCO) regularly monitors and manages from an ALM perspective the margins of all the assets and lilities of the bank.

ABB has also implemented strong governance regarding the commercial products. ABB's Management Board has delegated the management of specific risks to specialised sub-committees. The launch of a product or a significant modification to an existing one should go through a rigorous Product Approval and Review Process (PARP), where the business risk is taken into account through an in-depth analysis of commercial margins and potential adverse events that can affect them.

Economic capital is calculated based on a scenario approach (e.g. deterioration of margins or miss of a technology).

Business risk is also subject to stress testing via the CRO 2nd opinion on the financial plan: ABB measured the impact of deviations from the strategic plan on ABB's risk appetite statements. The deviations tested are the following:

- Lower mortgage production
- Lower investment production
- Higher retail deposits outstanding

10.2 Model risk

AXA Bank Belgium defines model risk as the risk of losses arising from decisions based on incorrect or misused model outputs and reports. It is a material risk, hedged by processes.

Model risk is mitigated thanks to processes and indirectly by capital through add-ons in the IRB retail credit risk and as well in economic capital model for IRRBB since 2018 (In 2019, a review of the economic capital model for interest rate risk in the banking book (IRRBB) resulted in a new € 20 million model risk add-on). Therefore, it is indirectly part of the ECAP computation. In order to better mitigate model risk, AXA Bank Belgium put in place a model risk management framework in 2019. AXA Bank Belgium's model risk management framework is documented in a model risk management policy and is closely aligned to the overall risk management framework of the bank

The main improvement point of the model risk management framework is the addition of a model ranking methodology. A process was developed to assess whether or not a quantitative methodology is a model or not. The ranking also defines the model review frequency and the level of testing to be performed by the modelling (monitoring) and the validation team. The methodology is based on an assessment of model complexity and model materiality and is explained in more detail in the model risk management framework. AXA Bank Belgium's IRB models receive the highest scoring and therefore require independent testing to be performed by the validation team

10.3 Reputation risk

The reputation risk is the risk that an event will negatively influence stakeholders' perceptions of AXA Bank Belgium.

The responsibility of this risk belongs to ABB's Board of Directors and Management Board. They are assisted in this task by various departments among which the Bank's head office Communication department, AXA Group's communication teams, as well as the Compliance and Risk Management departments. A specific Reputation ambassador has also been appointed, within ABB's Communication team.

ABB has defined processes to handle the reputation risk. These processes are designed to target the specific audiences on which material reputation risk have been identified (*i.e.* the general public, the financial market, retail customers and the distribution network, and the regulators). They are supported by standards and guidelines that ensure a prompt and appropriate reaction in case of materialization of the risk. A Key Risk Indicators follow-up process, and subsequent governance that includes a strict escalation procedure to Top Management, are also in place.

10.4 Political and Regulatory risk

AXA Bank Belgium mitigates this risk through a political monitoring in all countries where it is active by the local senior management. The non-retail credit risk team monitors closely all countries in which AXA Bank Belgium or one of its subsidiaries has an exposure due to investment portfolio, derivative activities, repo activities, ….

Brexit can have an impact with respect to exposures towards financial counterparties, exposure to clients and service providers.

- With respect to client exposure, AXA Bank Belgium currently has no material exposure towards UK corporate or retail clients. Regarding the indirect impact (which is especially relevant if the transition period ends without proper arrangements between the EU and the UK), there might be a negative impact on some Belgian enterprises (and hence on the Belgian economy) which may lead to a limited negative impact on the loan portfolio. This indirect impact is reflected in ABB's macro-economic outlook where in 2020 the outlook is revised significantly downward mainly driven by the COVID-19 crisis.
- Regarding service providers:
    - AXA Bank Belgium uses certain UK service providers, but none considered as essential.
    - There are no UK insurance contracts

The main impact is therefore coming from exposure towards financial counterparties (central counterparties and banks). For central counterparty exposures (cleared derivatives), AXA Bank Belgium has a significant exposure towards LCH Swapclear (UK based CCP) via its two clearing members (HSBC and Credit Suisse):

For the CCP direct exposure, the European Commission grants temporary equivalence to the UK CPPs until 30/06/2022. LCH Swapclear can continue to offer clearing services to its EU clients. Alternatively, AXA Bank Belgium could use Eurex (EU based CCP). The access to this CCP was prepared in 2018/2019 but this has not been finalised due to the recognition of LCH Swapclear.

For the exposure to the clearing members (brokers):

- HSBC: all deals were transferred to an EU HSBC branch in 2019
- Credit Suisse: AXA Bank Belgium is currently finalising the transfer of deals to CS Madrid, which will be done before the end of the year

For the institutional non-CCP exposure, AXA Bank Belgium has the following instruments:

- Listed derivatives: all listed derivatives are traded with CS (UK based). These trades are also transferred to CS Madrid before year end.
- OTC derivatives: AXA Bank Belgium is repapering the required UK counterparty deals and is expected to have this completed by year-end.

As a conclusion, all necessary preparations have been made with respect to Brexit and AXA Bank Belgium only faces limited Brexit risk.

To ensure a clear view on the regulatory environment AXA Bank Belgium has defined a Regulatory Watch framework, which mainly consists of a Regulatory Watch inventory and its respective correspondents.

10.5 Environmental, Social and Governance (ESG) Risk

Sustainable finance and related ESG risks are a top priority for regulators. Sustainable finance refers to the process of taking due account of environmental and social considerations when making investment decisions, leading to increased investment in longer-term and sustainable activities.

While ESG focuses on environmental, social and governance related matters, the main focus of ESG risks is currently linked to the management of climate-related and environmental risks. This is evidenced by regulatory publications focusing mainly on these aspects.

As an important financial intermediary, ABB recognizes its societal role with respect to the management of ESG risk. Part of a worldwide insurance group, ABB is contributing to AXA Group ambitious goals and KPIs. In addition, ABB acknowledges the specific banking context in which it operates resulting in strategic decisions. Overall, ABB's ESG strategy is to be compliant with all regulatory expectations, to support AXA Group in the execution of its ESG strategy and to acknowledge ABB's banking context within an insurance group.

ABB is currently focusing on the implementation of the EBA Guidelines on loan origination and performing a self-assessment and making an action plan to comply with ECB's expectations regarding climate and environmental risk.

ABB does not invest in or does not provide investment advice on financial products that is linked to an economic activity that is classified as not-sustainable

10.6 Pension Risk

ABB defines pension risk as the risk of facing additional contributions to pension schemes owned by ABB and risk of variation in IAS19 results, and subsequently in solvency.

Key mitigation processes for pension risk are:

- **Governance**
  - Risk is discussed at the quarterly ABB cost committee.
  - AXA Group is involved through requirements regarding the management of the risk. Assumptions are discussed between AXA Belgium, Finance and Risk on a bi-yearly basis.

- **Sensitivity analysis**
  Sensitivity analysis of IAS19 results to interest rates and credit spread shocks are performed and fully embedded in ABB risk dashboard. The impact of a stress on the funding gap between pension assets and liabilities is tested on a yearly basis. In case of an increasing interest rate, liabilities decrease and the impact on the capital is consequently positive.

- **Risk Appetite Framework (RAF)**

The results of the sensitivity analysis serve as input in the RAF. In the table below the impact of the pension plans in the 2 scenarios of the RAF are shown:

RAF 12/2020		Scenario assumptions		Impact on capital (in thousands of Euros)		
Scenario #	Scenario explanation	Interest rates	CDS spreads	From interest	From CDS	Total
Scenario 1	Macro economic crisis with increasing rates	+ 65 bps	+ 80 bps	11,266	14,132	25,398
Scenario 2	Macro economic crisis with decreasing rates	- 35 bps	+ 80 bps	-14,008	14,132	124

Table 19: Pension risk

11 Remuneration risk

ABB defines its remuneration risk as the risk that its overall remuneration policy does not support its business strategy, risk tolerance objectives, values, long-term interests or that it encourages excessive risk-taking. It is a material risk hedged through processes.

11.1 Remuneration policy

11.1.1 Remuneration of the members of the Board of Directors

All the members of the Board of Directors are considered as “Identified Staff” (Category 1). As a consequence, the principles set out under point 2 hereunder apply to them in full.

NON-EXECUTIVE DIRECTORS

For the remuneration of the independent, non-executive AXA Bank Belgium directors, their contribution to the work of the Board of Directors and of the committees within the Board of Directors will be considered. This is in accordance with the market standards.

The Directors concerned are reimbursed in the form of allowances and benefits in kind laid down by the Board of Directors for both the exercise of their mandates in the Board of Directors, and for their mandates in the committees which have been set up within the Board of Directors.

The mandate within the AXA Bank Belgium Board of Directors of the non-independent, non-executive directors who are part of an AXA Group entity, do not entitle them to any additional compensation.

Non-executive directors do not receive any variable compensation.

EXECUTIVE DIRECTORS

The remuneration policy applied by AXA Bank Belgium rests on the AXA Group's remuneration policy, and is in accordance with the Law relating to articles of association and monitoring credit institutions of 25 April 2014, known as the Banking Act. The main objective involves aligning the principles and structure of AXA Bank Belgium’s remunerations with sound and efficient management of the company (including risk monitoring).

So as to guarantee conformity with the remuneration policy, this is regularly reviewed by the Remuneration and Governance Committee of the Group, and by the Remuneration Committee of the Executive Board concerned.

The policy concerning the remuneration of the directors should make it possible:

- to attract, develop, retain and motivate talent,
- to encourage and reward the best performance,
  - both on an individual and collective level, and

  - in the short, medium and long term
- to align the remuneration level with the results of the company,
- to guarantee adequate and efficient risk management.
- The Remuneration Guidance follows three main guiding principles:
  - the competitiveness and market consistency of remunerations,
  - coherence and internal equity, based on individual and collective performance, in order to ensure fair and balanced remuneration reflecting employee's individual quantitative and qualitative achievements and impact; and
  - the results and the financial capacity of the company.

11.1.2 Remuneration of the "identified staff"

Taking into account Article 67 of the law of 25 April 2014 on the status and supervision of credit institutions and the implementing decrees and the Delegated Regulation, and subject to additional criteria, the Board of Directors of AXA Bank Belgium has determined the scope of the Identified Staff as follows:

- Category 1: The members of the Board of Directors;
- Category 2: The members of senior management;
- Category 3: The staff members with a position that implies risk-taking determined in accordance with the Delegated Regulation and other regulations;
- Category 4: The control functions that are responsible for the operational independent control functions;
- Category 5: The staff members determined in accordance with the Delegated Regulation, whose total remuneration places them on the same remuneration level as the senior management and the persons with a position that implies risk-taking.

Structure of the remuneration of Identified Staff

The remuneration policy is structured in such a way that the total remuneration package is divided in a balanced way between the fixed component and the variable component.

The composition of the total package aims not to encourage any excessive risk-taking. The fixed component of the total remuneration package is significant enough to reward the staff members for their work, seniority, expertise and professional experience and to guarantee a totally versatile variable remuneration policy being set out, and notably the policy of not paying any variable remuneration.

More details about the fixed and variable remuneration of Identified Staff are part of the Remuneration Chapter in the Management Report.

11.2 Governance of the remuneration policy

AXA Bank Belgium has a long-term remuneration plan, the rules of which are determined by the remuneration policy. These rules may be adapted regularly, notably depending on decisions taken at the level of the AXA Bank Board of Directors and the evolution of the (inter)national regulatory framework.

The Executive Board has decision-making competence concerning the establishment of the remuneration policy and decision-making relating to the individual remuneration of the persons affected. In this domain, it is assisted by 2 committees: the Remuneration Committee and the Risk Committee.

The Remuneration Committee actively contributes to implementing the remuneration policy. It consists of non-executive directors, at least one of whom is independent within the meaning of the Companies Code. It is composed so as to allow it to exercise pertinent and independent judgment on remuneration policies and practices, and on the incentives created regarding the control of risks, equity requirements and the liquidity position.

The work of the Remuneration Committee consists in proposing, in the form of advice and in accordance with the remuneration policy, decisions to be taken by the Executive Board relating to remuneration principles and procedures. It is also entrusted with preparing decision to be taken by the Executive Board, taking into account the repercussions on the company's risk and risk management on the one hand and the long-term interests of shareholders, investors and other stakeholders in the institution on the other, as well as the public interest.

The remuneration policy may be revised by decision of the Executive Board on a proposal from the Remuneration Committee at any time, and notably in the event of legislative amendment associated with labour, accounting and tax law, as well as in the event of the rules of governance changing.

Its implementation is subject, at least once a year, to an internal assessment aiming to verify whether it respects the remuneration policies and procedures adopted by the Executive Board. If need be, the Remuneration Committee will make any necessary adaptation proposals.

The Risk Committee, consisting of non-executive directors, at least one of whom is independent within the meaning of the Companies Code, examines whether the incentives provided by the remuneration system take into account the appropriate manner of risk control, equity requirements and the liquidity position of AXA Bank Belgium, as well as the probability and staggering of profits, so as to ensure sound and efficient management of risk, preventing risk-taking exceeding the level tolerated by AXA Bank Belgium.

11.2.1 The Remuneration Committee

This committee actively contributes to implementing the remuneration policy. It consists of non-executive directors, at least one of whom is independent in the sense of the Companies Code. It is composed so as to allow it to exercise pertinent and independent judgement on remuneration policies and practices, and on the incentives created regarding the control of risk, equity requirements and the liquidity position.

They propose, in the form of advice and in accordance with the remuneration policy, decisions to be taken by the Executive Board relating to remuneration principles and procedures.

The remuneration policy may be revised by decision of the Executive Board on a proposal from the Remuneration Committee at any time, and notably in the event of legislative amendment

associated with labour, accounting and tax law, as well as in the event of the rules of governance changing.

Its implementation is subject, at least once a year, to an internal assessment aiming to verify whether it respects the remuneration policies and procedures, adopted by the Executive Board.

11.2.2 The Risk Committee

This committee, consisting of non-executive directors, at least one of whom is independent in the sense of the Companies Code, examines whether the incentives provided by the remuneration system take into account the appropriate manner of risk control, equity requirements and the liquidity position of the bank, as well as the probability and staggering of profits, so as to ensure sound and efficient management of risk, preventing risk-taking exceeding the level tolerated by AXA Bank Belgium.

12 Tables and Figures