AXA Bank Belgium

Risk Disclosure Report 2017

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1 Introduction

The purpose of this Risk Disclosure report is to provide Pillar 3 disclosures of AXA Bank Belgium 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 AXA Bank Belgium:

- EBA Guidelines for Pillar 3 Disclosures (EBA/GL/2016/11)
- Disclosure of Own funds (EU No 1423/2013)
- Disclosure of Countercyclical buffer (EU No 2015/1555)
- Disclosure of Leverage ratio (EU No 2016/200)
- Disclosure of Encumbered assets (EBA/GL/2014/03)
- Disclosure of Remuneration (2013/36/EU Art. 74(3) and 75(2)
- Disclosure on Liquidity (EBA/GL/2017/01)
- Part Eight of the CRR

This 2017 risk report covers the period starting on 1 January 2017 and ending on 31 December 2017. Information is disclosed on a consolidated level. All amounts in this report and 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

With a clear focus on 2 core activities, AXA Bank Belgium (ABB) takes a very conservative stance on risk matters:

- Retail banking in Belgium, transforming deposits into loans to retail customers and SMEs;
- Low-risk financial services to AXA Group, consisting mainly of derivative intermediation on a back-to-back basis and liquidity provision via reverse repurchase agreements.

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 businesses;
- Its liquidity risk is managed within very 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".

Diversity and inclusion (D&I) is tightly linked to AXA's values and culture, based on respect for employees, customers, and communities around us. A diverse workforce helps AXA effectively meet diverse market and customer needs globally and locally, as well as improve its competitiveness through innovation. It also helps attract the most talented people in all populations and foster internal morale and employee engagement, as well as enhanced people management.

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.

At AXA Bank Belgium, women represent 20% of the Management Board and 18% of the Board of Directors.[1]

[1] Composition of the management bodies can be found in the 'Management Report 2017' on the AXA bank corporate website

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 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 2017 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 2017 Annual Accounts of ABB.

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, e.g. the Remuneration Policy in the Management Report, 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 2017 Q4.xlsx**).

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 2 Risk Management, objectives and policies 3.1 Capital management By risk type, the sections: ◦ Governance ◦ Risk policy, framework and reporting	Corporate Governance (MR) Remuneration policy (MR) 4.1 General (AA) 4.7 Capital management (AA)
436	Scope of application	1.5 Scope	1 General (AA) 2 Accounting principles (AA) 25 Investments in associates, subsidiairies and joint ventures (AA)
437	Own funds	3.3 Own funds	35 Equity (AA)
438	Capital requirements	3.4 Capital requirements	
439	Exposure to counterparty credit risk	5.6 Counterparty credit risk	4.2.1.2 Non-Retail credit risk (AA) 4.2.2.2.2 Counterparty credit risk (AA) 22 Derivatives (AA) 30 Repos and reverse repos (AA) 33 Off-setting (AA)
440	Capital buffers	3.2 Regulatory environment 3.5.3 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 5.3 Credit Quality	2.3 Financial Instruments - Loans and 4.2 Credit risk (AA) 15 Impairment (AA) 21 Loans and receivables (AA)
443	Unencumbered assets	10. Assets encumbrance	
444	Use of ECAIs	5.4.2 Use of ratings from external credit assessment institutions (ECAIs) 5.6.7 Use of ratings from external credit assessment institutions (ECAIs)	
445	Exposure to market risk	6.2 Market risk Trading book 6.3 Currency risk	4.3 Market risk (AA) 4.4 Currency risk (AA)
446	Operational risk	8 Operational risk	4.6 Operational risk (AA)
447	Exposures in equities not included in the trading book	5.4.3.3 Exposures in equities not included in the trading book	20 Available-for-sale Financial Assets (AA)
448	Exposure to interest rate risk on positions not included in the trading book	6.1 Interest Rate Risk Banking Book	
449	Exposure to securitisation positions	5.7 Exposure to securitisation positions	
450	Renumeration policy		Remuneration policy (MR)
451	Leverage	4 Leverage	
452	Use of the IRB Approach to credit risk	5.5 Internal Ratings Based approach	
453	Use of credit risk mitigation techniques	5.3.6 Credit risk mitigation 5.6.4 Policies for hedging and risk mitigation	33 Off-setting (AA) 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 Scope

1.5.1 Differences in the measurement of exposures

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: they are deducted from own funds.
- Deferred tax assets (DTA): they are subject to special treatment and are netted with deferred tax liabilities. 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 (Art. 4 (109) of the CRR), they amount to zero.
- Except some derivative and securities financing transactions (SFT) items, liabilities are not in scope.

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).

1.5.1.1 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.
- Differences due to prudential filters: DTA below threshold is subject to risk-weighting

1.5.1.2 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.
- 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.
- Other differences: the Default fund contribution is calculated separately of which only the RWAs are reported

1.5.1.3 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.

1.5.2 Scope of consolidation

At 31 December 2017, AXA Bank Belgium, a limited company under Belgian law, with its 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). These subsidiaries 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 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 our core value.

The intermediation activity provides a set of execution and reporting services in derivatives to AXA Group companies hedging Variable Annuities products. It allows the bank to diversify risks and revenues while leveraging its competences in derivatives necessary for the management of its balance sheet and its EMTN issuance.

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.[2]

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 5.7 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 / obligations foncières for the benefit of ABB and, to a limited extent, AXA Banque France.

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.

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 AXA Bank Belgium and its subsidiaries.

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

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 resolution and recovery plan and validates the final output of the stress test exercises and potential subsequent management actions.

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.

- 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.

- 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.

- 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.

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, 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[3] 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.

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 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.

A list of ABB's specific Risk Committees can be found in the following table:

Risk Committees and their scope		
Committees	**Risk Scope**	**Risk Charters**
Retail Risk Committee (RRC)	Retail risks	Retail Risk Management Charter
Wholesale Risk Committee (WRC)	Non-retail credit risk Securitisation 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
Assets & Liabilities Committee (ALCO)	Interest rate risk Liquidity risk	Interest Rate Risk Management Charter Liquidity Risk Management Charter
Information Risk Committee (IRC)	Information Security	Information Risk Committee Charter
Customer Invest Risk Committee (CIRC)	Investment Risk	Customer Invest Risk Committee Charter
Management Board*	Risk Appetite Framework Operational risk Other risks	Operational Risk Management Charter Other Risk Management Charter
* Acting as a Risk Committee		

Figure 2: Risk committees and their scope

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

As an independent control function (independent from the business lines) sitting on ABB's Management Board and reporting to its CEO, ABB's **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.

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: credit risk, counterparty risk, market risk, interest rate risk, operational risk, liquidity risk and other risks.

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, economic values and liquidity). 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.

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 2017 financial year.

As required in Article 435 of the CRR, the Management Board 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 Risk Management

2.2.1 General

In 2017, AXA Bank Belgium has continued to build towards coherent and prudent risk management. The bank has broadly implemented robust strategies, policies, processes and systems for identifying, measuring, managing and monitoring its risks.

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

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

In 2017, AXA Bank Belgium also took part in a 'Supervisory Review and Evaluation Process' (SREP), led by the JST. During this process, the supervisor assessed the bank's risks and decided on minimum capital requirements for the bank in 2018, as well as a number of qualitative recommendations with which the bank will have to comply in the future.

In 2018, AXA Bank will perform the ECB stress test exercise where the resilience of the bank to economic shocks will be assessed. The result of this exercise will serve as input to the Supervisory Review Evaluation Process where the additional 'capital guidance' for the bank will be set.

In 2017, the degree of refinancing of Belgian mortgages returned to a more moderate level after 2 years of high volumes of refinancing. AXA Bank Belgium managed to reduce the pressure on profitability by achieving a significant new production of good quality mortgage loans.

In addition to retail business, AXA Bank Belgium acted as an intermediary in providing financial services, mainly derivatives to various entities in the AXA Group. Although a large volume of derivatives was traded in 2017 with entities in the AXA Group, the balance on AXA Bank Belgium off-balance remained relatively stable due to the usual practice of compression in derivatives, mostly to LCH (central counterparty).

The liquidity position of AXA Bank Belgium remained at a comfortable level in 2017.

The bank's solvency position remains high, benefiting from a prudent investment and credit underwriting strategy. The balance sheet total remained stable, resulting in a small impact on our leverage ratio.

ABE SCF, subsidiary of ABB created for the purpose of issuing covered bonds for the benefit of the bank, was transformed in December 2017. The new structure is more efficient and allows SCF to issue covered bonds by directly buying mortgages from ABB, without Royal Street as an intermediary anymore.

2.2.2 Risk Appetite

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

In 2017, AXA Bank Belgium updated the RAF so that it became a real strategic tool. A strategic risk appetite is determined for the main areas (capital, profitability, economic values and liquidity), 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. This risk appetite model was 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. This 'risk dashboard' forms an integral part of the general risk monitoring process and is reported to the Management Board and AXA Group monthly, and quarterly to the Board of Directors. These risks are also followed up in more detail by the relevant AXA Bank Belgium risk committees.

Annually we conduct 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 prospects 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 is then distributed to all activities of the bank, and this based on the AXA Bank Belgium risk objectives. The management of AXA Bank Belgium imposes a limit on the total economic capital applied so as to ensure 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.

2.2.3 Risk Reporting and Measurement Systems

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 SREP Stress testing

ABB participated in the "Sensitivity analysis of IRRBB – Stress test 2017" conducted by the ECB. The results were taken into account in the SREP (Supervisory Review and Evaluation Process).

In 2018 we are invited to participate in the ECB Stress testing. The results will be part of the yearly SREP (Supervisory Review and Evaluation Process) executed by the JST (Joined Supervisory Team).

2.2.5 Risk management framework

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

2.2.5.1 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.

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.

2.2.5.2 Stress testing framework and program

Stress testing forms an integral part of ABB's overall governance and risk management culture.

Stress testing is an analysis conducted under unfavourable economic scenarios or assumptions which is designed 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 assessments of risk
- 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

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**
  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)**
  The ICAAP allows assessing the level of capital that adequately supports all relevant current and future risks in their business (Pillar 2 of CRD IV requirements).

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

  The ILAAP allows checking if the bank has enough liquidity resources to adequately support all relevant current and future risks in their business.

- **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	Recovery plan	ICAAP (Economic capital)	ILAAP	Regulatory stress tests	Strategic plan
Retail credit risk	X	X	X	X		X	
Securitisation				X			
Non-retail credit risk	X	X	X	X		X	
Liquidity risk	X	X	X		X		X
Market risk	X	X	X	X	X	X	
Interest risk	X	X	X	X		X	X
Concentration risk	X	X	X	X	X	X	
Operational risk	X	X		X		X	
Business risk				X			X
FX-risk	X	X		X		X	

Figure 3: Risk Stress Test Overview

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

Figure 4: Internal Stress Testing Process

In 2017 ABB focused on multiple risk dimension stress tests and on Business risk.

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 MREL.

For the multi risk dimension stress tests, 4 scenarios were defined:

- **Scenario 1: 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 2: 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 3: 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 4: 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.

2.2.5.3 Review

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.

In addition to these reviews, AXA Bank Belgium 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.

End 2017, the Belgian supervisor (NBB) has sent a circular to all credit institutions and insurance companies concerning this topic. It should be no surprise that NBB attaches considerable importance to the quality of reported prudential and financial data. Attention is drawn to the different quality tests that reported data should comply with.

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. The Internal Capital Adequacy Assessment Process also known as "the ICAAP" (which also quantifies the economic capital requirement) participates to the Pillar 2 requirements.

Both for regulatory and economic capital, the "available capital" of banks is compared to measured "capital requirements". The differences between the two pillars are due to their measurement methodologies[4] and the scope of the risks that are covered[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 (Pillar 1) and the economic capital requirements (Pillar 2).

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 the new regulations ('regulatory watch'), follows up on the current and projected solvency ratios, anticipates and manages the economic and regulatory capital requirements.

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

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.

[4] Under Pillar 1, the methods are defined by the regulator whilst the methods are defined by ABB under Pillar 2.
[5] Only three risks are covered under Pillar 1, whilst all material risks must be covered under Pillar 2.

3.2 Regulatory Environment

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 2022.

The **minimum capital ratios** (Pillar 1 requirements) which are to be met 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.

Following its 'Supervisory Review and Evaluation Process' review, (SREP), the competent supervisory authority (the European Central Bank for AXA Bank Belgium) may impose higher minimum ratios (= Pillar 2 requirements), because, for example, not all risks are properly reflected in the regulatory Pillar 1-calculations.

Following the SREP of 2017, the ECB formally notified ABB of its decision to set a **pillar 2 requirement** (P2R) of 3% CET1.

Besides the minimum own funds requirements of the CRR, AXA Bank Belgium should also comply with the various buffers that can be imposed in accordance with CRD IV.

The CRD IV provides for a **capital conservation buffer**. The premise is to reserve additional capital in times of financial prosperity. In times of financial stress, the institution will be able to use this capital. The condition is then that the institution may not pay out a dividend to shareholders. This buffer is subject to a phase-in, 1.25% in 2017, and is to increase yearly with 0.625% to end up with 2.50% in 2019. This buffer applied to the bank in 2017.

AXA Bank Belgium may also be obliged to build a **counter-cyclical capital buffer** representing an additional core Tier 1 capital requirement. This buffer's aim is to protect the bank against risks arising from the financial cycle and can be up to 2.5%, possibly higher. This requirement came into effect in 2016. As far as Belgium is concerned, the national bank (NBB) kept the countercyclical buffer rate at 0%. As the largest part of the relevant portfolios is in Belgium, ABB is not impacted by this buffer.

The Belgian regulator has appointed AXA Bank Belgium as O-SII or 'Other Systemically Important Institution' and therefore subject to an additional core Tier 1 capital requirement (**O-SII buffer**) of 0.75%. The introduction of this buffer is phased in over a period from 1 January 2016 until 1 January 2018. This means that an additional capital requirement of 0.50% was imposed on AXA Bank Belgium in 2017, which will be increased by 0.25% in 2018.

In addition to the Basel III capital requirements, AXA Bank Belgium must also comply with the **Basel I floor**. In other words, the capital that the bank must hold must at all times be greater than or equal to 80% of the total minimum amount of capital that the bank would be required to hold in accordance with the Basel I rules.

Taking into account the phased-in basis, the CET1 requirement for 2017 amounts to 9.25% (4.5% (pillar 1) + 3% (P2R) + 1.25% (capital conservation buffer) + 0.5% (O-SII buffer)).

The fully loaded CET1 requirement for 2017 amounts to 10.75% (4.5% (pillar 1) + 3% (P2R) + 2.5% (capital conservation buffer) + 0.75% (O-SII buffer)).

The regulatory minimum solvency targets were exceeded throughout the entire financial year (see template **KM1** in annex).

3.3 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 2017 (EUR 41,437 thousand) in the core Tier 1 capital. This result strengthens the equity of the Bank compensating the reduction of capital of EUR 45,000 thousand realised during the year. This capital reduction - partially - reflects the reduction of the exposures of commercial activities of AXA Bank abroad. The core Tier 1 figures of December 2017 increased also due to the correction of deferred tax liabilities, as referred to in chapter 42 of the Annual Accounts 2017. The evolution of CET1 is further determined by the movements in accumulated other comprehensive income, the deferred tax assets and the value adjustments.

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

3.3.1 IFRS 9

Because of the early adoption of a part of IFRS 9, the DVA of own credit risk (EMTN's) has been booked through OCI instead of P&L. This action had no impact on the solvency of the bank.

3.3.2 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 2017, EUR 16,937 thousand was included this way;

  During 2017 ABB has implemented an internal model for CVA/DVA methodology. The development is mainly linked to the use of a VaR model in order to estimate the potential future exposure and the use of JP Morgan model to compute the probabilities of default.

  This development, implemented during Q2 2017, was enhanced during Q4 by using historical observations to best estimate the current exposures after the margin period of risk.

  As a result, ABB's exposure under the CVA methodology decreased by 76% in 2017 (EUR 6,560 thousand in EOY 2017 versus EUR 27,873 thousand EOY 2016).

- 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 EUR 5,931 thousand was deducted at the end of 2017.

3.3.3 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). At the end of 2017, this amounted EUR 11,835 thousand.
- **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 2017, the deductible DTA was completely netted with DTL.
- **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 EUR 18,032 thousand was deducted at the end of 2017.
- **Other deductions**: these concerns the bank tax booked on the balance sheet and comes to EUR 2,965 thousand.

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

3.3.4 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 2017, 80% of the Other Comprehensive Income (OCI) of the available-for-sale portfolios can be included in the Own funds. The remaining 20% is removed from the Own funds via transitional adjustments. As from 2018, no transitional phase-in applies anymore.

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.

Transitional adjustments to be deducted from CET1 capital amounts to EUR 9,559 thousand in 2017.

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 50% in 2017 and the cap decreasing by 10% each year.

3.3.5 Own funds for solvency requirements

The CET1 amounts to EUR 1,041,808 thousand in 2017 versus EUR 993,695 thousand in 2016.

AXA Bank Belgium is allowed to include the consolidated net profit for 2017 (EUR 41,437 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 and including Basel III transitional measures

TOTAL OWN FUNDS FOR SOLVENCY REQUIREMENTS	31/12/2017	31/12/2016
Common Equity Tier 1 Capital	1,041,808	993,695
Additional Tier 1 Capital	90,000	90,000
Tier 1 Capital	**1,131,808**	**1,083,695**
Subordinated debt	5,829	11,636
Perpetuals grandfathered	15,943	*15,943*
Perpetuals phase out	-7,972	*-6,377*
Eligible Perpetual Subordinated debt	7,972	9,566
Tier 2 Capital	**13,801**	**21,202**
TOTAL OWN FUNDS FOR SOLVENCY REQUIREMENTS	**1,145,609**	**1,104,897**

Table 1: Total Capital

The total own funds evolve from EUR 1,104,897 thousand in 2016 to EUR 1,145,609 thousand in 2017.

Key drivers of this positive evolution of EUR 40,712 thousand:

- Capital upstream of EUR 45,000 thousand
- Inclusion of the net profit of EUR 41,437 thousand
- Increase of the retained earnings of EUR 23,647 thousand, mainly due to the correction of deferred taxes on mortgages transferred to Royal Street and ABE SCF
- Removal own credit risk for EUR 16,937 thousand
- Decrease in OCI mainly due to a decrease of OCI on the investment portfolio (EUR 20,077 thousand), compensated by an increase of the OCI on Cash Flow Hedges (EUR 21,859 thousand). OCI on the available-for-sale portfolio is phased in at 80% compared to 60% last year
- Decrease in phased-in Deductible DTA (EUR 11,073 thousand): because of the corrections of the deferred taxes on mortgages transferred to RS and SCF, the DTL can completely net the DTA, resulting in a zero deduction

- Decrease due to the deduction of bank taxes booked on the balance sheet (EUR 2,965 thousand) since 2017, on request of the JST (Other deductions)
- Decrease of Tier 2 due to run-off of eligible instruments (EUR 5,807 thousand) and phase-out of grandfathered instruments at 50% compared to 60% last year (EUR 1,594 thousand)

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.

3.4 Capital Requirements

3.4.1 Key Metrics

An overview of the most important capital and liquidity requirements at the end of 2017 can be found in template **KM1**, compared to the previous four quarters.

3.4.2 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 5: 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.

ABB doesn't hold any securitisation exposure anymore except its own securitisations (Retained RMBS) where the look through approach is used, meaning that the bank considers the underlying mortgages instead of the Residential Mortgage Backed Securities for determining the risk weight.

The RWA for ABB under the Basel III rules amounted to EUR 5,288,672 thousand on December 2017.

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[6], 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 RWA for mortgages covering residential real estate in Belgium, is represented in this amount.

NBB is working on an additional add-on of 33% on the RWA of mortgages. This new add-on needs to be approved by Belgian government and will probably take effect in the first half year of 2018.

The increase in RWA from EUR 4,692,204 thousand in 2016 to EUR 5,288,672 thousand in 2017 is mainly driven by the credit risk in the IRB Approach. In December 2017, AXA Bank decided to adjust its internal model for mortgage loans by introducing a finer segmentation of its portfolios from a risk management perspective.

As from Q3 2017, the promissory notes were transferred from "Institutions" to the exposure class "Covered Bonds" on request of the supervisor. This had an impact on credit risk and large exposure calculations.

The floor adjustment in line 28 shows the impact of the 80% B1 floor calculation. B1 floor increased due to the increase in the retail portfolio, partially offset by the transfer of the promissory notes to "Covered Bonds" at a more favourable risk weight. All explanations in the other templates are given without taking into account this floor.

3.4.3 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.

[6] 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 6: Economic capital methods

3.5 Capital Adequacy

3.5.1 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.

- **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[7]. This obligation is above AXA SA's Head Office requirement (99.5%).

3.5.2 Regulatory capital Adequacy

The regulatory solvency ratios compare the own funds of the Bank to its Risk weighted assets. AXA Bank Belgium shows high solvency during 2017 thanks to its prudent investment and credit underwriting strategy.
The Common Equity T1, T1 and total capital ratio consider the transitional provisions of Basel III.

All solvency ratios declined over the year. This is largely explained by the significant increase in weighted assets in 2017. As per 31 December 2017, AXA Bank Belgium's Tier 1 ratio stands at 21.40% (23.10% in 2016) and total capital ratio at 21.66% (23.55% in 2016).

These same ratios fully loaded, i.e. calculated as if Basel III is already in full force, amounted to 21.58% and 21.69% respectively (23.80% and 24.00% in 2016), very well above requirements, demonstrating that the bank has anticipated the implementation of Basel III.

AXA Bank Belgium meets all minimum capital requirements imposed by Basel III. The bank also complies with the guidance on Tier 1 capital imposed by SREP.

[7] 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

Regulatory capital (in '000 EUR)	31/12/2017	31/12/2016
CET1	1,041,808	993,695
TIER 1	1,131,808	1,083,695
TOTAL CAPITAL	1,145,609	1,104,897
RISK WEIGHTED ASSETS	5,288,672	4,692,204
CET1 ratio	19.70%	21.18%
T1 ratio	21.40%	23.10%
Capital ratio	21.66%	23.55%
Fully loaded CET1 ratio	19.88%	21.90%
Fully loaded T1 ratio	21.58%	23.80%
Fully loaded total capital ratio	21.69%	24.00%

Table 2: ABB's regulatory capital ratio at consolidated level

As stated in the Basel III text, the required capital is subject to the Basel I floor[8]. ABB's assets, mainly mortgage loans, have a low risk profile that is recognised in the Basel III risk weighted assets (Basel III RWA) but not reflected in the Basel I RWA. As a consequence, the Basel I floor imposes an additional buffer on top of the Basel III RWA. With a CRD ratio (incl. BI floor) of 12.4% in Dec 2017 ABB is well above the minimum requirement of 8%.

Regulatory capital (in '000 EUR)	31/12/2017	31/12/2016
Required capital (BI floor)	749,590	709,347
CRD ratio (BI floor)	12.4%	12.7%

Table 3: ABB's Basel I floor at consolidated level

3.5.3 Countercyclical Capital buffer

As of 1 January 2016, the countercyclical capital buffer (CCyB) came into effect.

In template **CCyB1** in annex, the geographical distribution of the bank's credit exposures relevant for the CCyB calculation for December 2017 is shown. European countries with a total exposure below 100 million euros and Non-European countries with an exposure below 50 million euros are allocated to "Other countries".

Almost 98% 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 2017.

Only 3 countries in which ABB has relevant exposures, have a countercyclical buffer rate above the 0% (Hong Kong, Sweden, Norway). ABB's exposures to these countries represent only 0.02% of the total exposures and this impact is negligible in the CCyB calculation.

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

[8] Basel I floor is defined as : 80% * Basel I Risk weighted assets

3.5.4 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)	31/12/2017	31/12/2016
Total Economic Capital Consumption	351,823	331,574
Available Capital	1,145,609	1,104,897
Capital excess	793,786	773,323

Table 4: Economic Capital Consumption

The available capital in 2017 largely exceeds the consumed economic capital after diversification.

The evolution in economic capital consumption in 2017 is mainly driven by a lower Interest Rate Risk, compensated by the addition of economic capital for business risk in 2017.

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

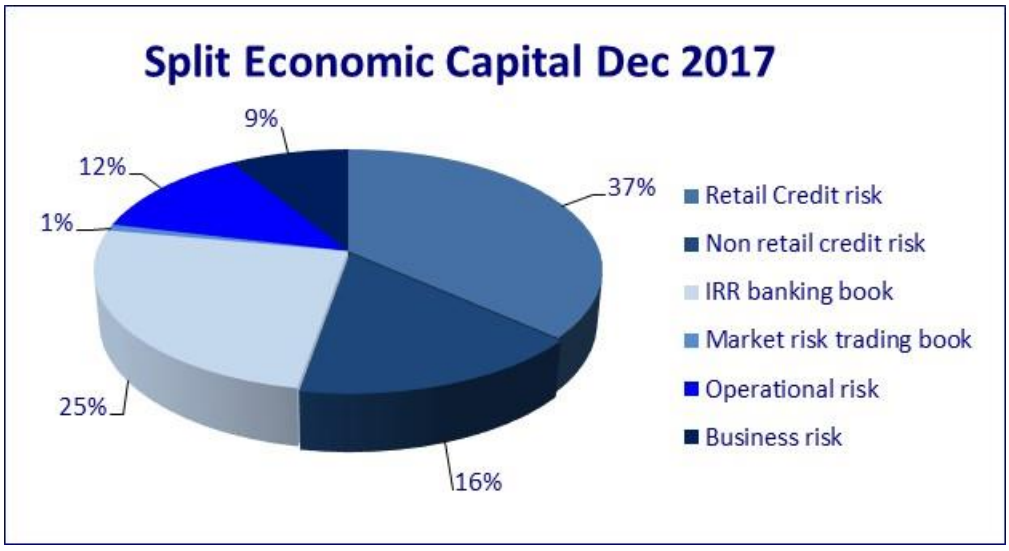


Figure 7: ABB's Capital Consumption

As from 2017, ABB's economic capital covers 6 types of risks.

The most important one is the economic capital for **Retail Credits** (37%). This relatively low consumption for a portfolio of around EUR 20 billion of loans underlines the good quality of the portfolio.

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 2017 remained low due to the continued period of very low (or even negative) interest rates in 2017 and the hedging of new production of fixed rate mortgages.

Wholesale credit risk accounts for 16% 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, derivatives and money market transactions are mitigated through a strict collateral policy, both for transactions with AXA Insurance entities and external counterparties.

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.

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

Finally **Business Risk** accounts for 9% of the economic capital. Economic capital for Business risk was calculated for the first time in 2016.

Below you will find the comparison with last year:

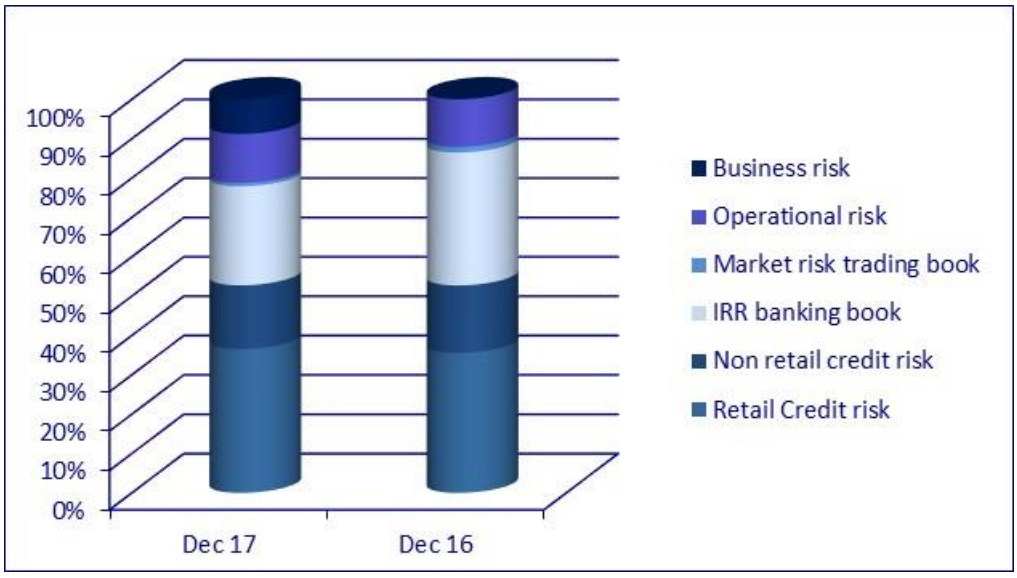


Table 5: Comparison economic capital

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.

The ratio will become binding in the coming years as it is in the process of being adopted into European legislation. The BCBS (Basel Committee on Banking Supervision) guidelines provide for disclosure of the leverage ratio and its components starting from 1 January 2015.

In connection with the contemplated implementation of the non-risk based leverage ratio, the bank has further decreased its balance sheet essentially through a reduction of the investment portfolio. As a consequence, the bank's leverage ratio according to current CRR legislation ('Delegated Act') has improved in 2017 to 4.31% at the end of December 2017 (4.10% in 2016) or 4.34% (4.20% in 2016) when fully loaded.

In light of the low risky assets of AXA Bank, 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)	31/12/2017	31/12/2016
Total SFTs	1,042,770	977,537
Total Derivatives	476,676	661,808
Total Other assets	24,463,563	24,557,662
Total On-balance	25,983,009	26,197,007
Total Off-balance	340,842	334,226
Deducted from T1 fully loaded	-29,867	-43,783
Deducted from T1 transitional	-39,425	-71,919
Total leverage exposure fully loaded	**26,293,984**	**26,487,449**
Total leverage exposure transitional	**26,284,425**	**26,459,313**
T1 capital fully loaded	1,141,366	1,111,831
T1 capital transitional	1,131,808	1,083,695
Leverage Ratio fully loaded	**4.34%**	**4.20%**
Leverage Ratio transitional	**4.31%**	**4.10%**

Table 6: 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 the AXA Bank Belgium'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 also 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 also 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 increases mainly thanks to the Net Income of the year and the deferred taxes correction.

(2) Leverage exposure mainly driven by decrease in the derivatives and exposures to Central governments and central banks, partially compensated by the increase of loans to retail clients.

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 risks comprise credit risk other than retail and counterparty credit risk.

5.1.1 Retail credit risk

ABB's main business is to provide credit facilities to private individuals, professionals and small businesses. These facilities 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.

[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.

5.1.1.1 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).

- **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.
  ABB's modelling team sets up and maintains the appropriate risk indicators and models described below.

5.1.1.2 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 from 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. The acquisition scoring models developed in the framework of Basel II play a supporting role here. 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.

In 2017, a methodology for determining the lifetime expected credit loss was developed within the Risk department as foundation for the new upcoming accounting rules under IFRS9. This new methodology which enables ABB quantifying the lifetime credit risk as from the origination moment will help further evolving credit risk management.

An essential part of the credit risk policy is formed by the non-performing loan strategy of the bank. The remedy and recovery departments adopt measures to minimise the bank's risk depending on the nature and severity of the problem. Moreover, the departments determine the credit impairments for loans managed by the recovery department.

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 the 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.

5.1.1.3 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.

The mortgage portfolio has once more grown strongly in 2017 thanks to the high new production of mortgages which was of good quality. After the years 2015 and 2016 with a high volume of refinancing, 2017 was characterised by a more moderate level of refinancing.

For the consumer loan portfolio we noticed a slight decrease in 2017. The production was not sufficient to compensate for the natural erosion of the portfolio.

As from 2016, the professional loans portfolio of ABB is increasing. Also in 2017 the portfolio significantly increased. This is in line with ABB’s strategic initiatives to intensify the relationship in the professional segment.

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, intermediation and asset & liability management activities. The first area where credit risk is incurred is the investment portfolio under management of the ALM department.

Secondly, ABB is designated by AXA Group to act as a centralised platform which provides AXA insurance entities access to financial markets. Various insurance entities within AXA Group use this platform, which provides two services. First and foremost, ABB acts as an intermediary for derivatives such as interest rate swaps, used by the insurance entities to cover the market risk of their life insurance policies. Secondly, ABB provides the insurance entity in Belgium with liquidity via standardised money market transactions (reverse repos). These activities are described in the Counterparty credit risk (section 5.6).

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) is responsible for the checks on 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 and exposure to 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 Treasury & Intermediation and Head of non-retail Risks management and relevant specialists from the ABB Risk department and other departments. The committee monitors adherence to risk appetite framework for non- retail credit risks, as well as all risks linked to ABB's intermediation activity. It takes decisions regarding the issuer's eligibility concerning proposed investments and disinvestments.

The WRC has also integrated the responsibilities of the Impairment Committee. 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 Asset and Liabilities Management (ALM)) and **Treasury & Intermediation** department are 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 buffer for liquid assets 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

- **Non-Retail credit risk framework**

In 2017 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 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 they 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.

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 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 21% according to the Standardised Approach and for 79% according to the IRB. When only looking at the Retail portfolio, 98% 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 euros is applied for countries within the European geographical area and a threshold of 50 million euros for countries outside this area. These significant countries cover 94.1% of the total credit risk exposure. Exposures with supranational organisations (4.4% 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 1.5% 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 77% 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 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 2017 the new production was again characterised by a high quality and the entire credit portfolio showed an improved credit quality.

An overall decrease of the observed default rates[11] (over a one year horizon) in the Belgian portfolio was observed which evidences the quality reinforcement and improved product mix of credits in Belgium.

The credit losses of the performing retail portfolio amounted to a total of only EUR 430 thousand in 2017, compared to EUR 3,630 thousand in 2016. Whereas 2016 was already a year with a relatively low level of credit loss, the credit loss in 2017 was even lower than the one of 2016. The credit loss in 2017 is low mainly for the following reasons:

- Since the credit restrictions in 2013 the quality of the credit portfolio improved significantly. Furthermore, the Belgian macro-economic environment, where ABB is operating, showed a positive evolution also contributing to a low level of credit losses.
- The sale of already written off credits keeps playing an additional source of income. There is an appropriate appetite within the Belgian market for this type of debts resulting in a good sales price.

The 12M default rate for mortgage loans slightly decreased from 0.5% in December 2016 to 0.45% observed in December 2017. The vintage curves (default rates within the first 12/24 months after realisation on the new production) are still decreasing and therefore it is expected that this decreasing trend continues at a more moderate speed when economic conditions remain unchanged.

The 12M default rate for loans to professionals and small businesses dropped from 1.7% observed in December 2016 to 1.5% in December 2017.This decrease shows that the growth in professional loans is done in a sustainable way where special care is taken for maintaining the quality of the total credit portfolio..

For consumer loans the 12M default rate is more stable (from 1.2% in December 2016 to 1.21 % in December 2017) thanks to a good risk selection.

[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).*

5.3.2 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".

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.

5.3.3 Specific and General credit risk adjustments

Credit risk adjustments are the amount of specific and general loan loss provision for credit risks that has been recognised in the financial statements in accordance with the applicable accounting framework.

When there is an objective indication of non-recoverability, the outstanding loan is subject to an impairment test.

AXA Bank Belgium makes use of a separate provision account, which reflects the impairment special depreciation, undergone by the underlying financial asset as a result of credit losses. This provision account also takes into account the impact of the time value.

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

The recoverable amount takes into account the time value of the funds, where the expected cash flows are updated at the contract's effective interest rate. Each decrease in provision due to the time value is recognised in the income statement as interest yield.

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.

After the impairment was recorded, the interest yield is recognised in the income statement on the basis of the actual interest of the underlying contracts.

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

The company combines collective and individual assessment.

The following rules apply to **mortgage loans, investment credits and commercial accounts** (including cash credits):

- As soon as the "uncertain trend" status is determined, the impairment loss is booked on the basis of observational data from the past. This impairment loss is calculated individually on a statistical basis, taking into account the observed losses from the past and the probability of a return to the normal trend status or the transition to a questionable and uncollectable status.
- From the uncollectable and questionable status the file is individually monitored and impairment loss is booked taking into account the development of the file and in particular the guarantees. These files are still valued on an individual basis, even if the guarantees are adequate. Every impairment is booked individually per file.

The following rules apply to **personal instalment loans (LOA)**:

- As soon as the "uncertain trend" status is determined, impairment is booked on the basis of observational data from the past. This impairment is calculated individually on the basis of statistics, which take into account the probability of a return to the "normal trend" status or a transition to the "questionable and uncollectable" status, as well as on the basis of the aforementioned model and the company's experience.
- From the "questionable and uncollectable" status, an individual assessment is applied, which still takes into account the aforementioned statistical approach.

For **private current accounts and the budget + accounts** the following rules apply:

- In the uncertain trend status impairment is booked on the basis of observation data from the past. This impairment loss is calculated individually on a statistical basis, taking into account the observed losses from the past and the probability of a return to the normal trend status or the transition to a questionable and uncollectable status.
- From the uncollectable and questionable status the bank proceeds to an individual assessment on the basis of the history of its observations and its expertise. The depreciation is booked individually, per file.

The normal trend portfolio is valued on a collective basis using latent indicators (the "losses incurred but not yet reported" model) and the company's expertise.

5.3.4 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.

5.3.5 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.

5.3.6 Credit Risk Mitigation (CRM)

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

5.3.6.1 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.

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.

5.3.6.2 Main types of collateral received

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

- **Collateral for mortgage loans**
  The credit must be secured by a mortgage (registration or mandate) on immovable property (full ownership). The property should be normally marketable.

  The mortgage that must be provided can be reused in the context of potential subsequent mortgage 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.
  - **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 registration
- 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
- Mortgage mandate
- 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

- **Collateral for promissory notes**
  ABE SCF lends in the form of promissory notes to AXA Banque France, a French sister company of ABB. Besides relying on AXA Banque's overall creditworthiness to pay back principal and interest, ABE SCF can also claim a specific pool of residential loans on AXA Banque's balance sheet. In addition to this collateral, AXA Banque France pledges collateral to ABE SCF in the form of French government securities with a credit quality step of 1. In accordance with article 224 of the CRR, a volatility adjustment is applied.

5.3.6.3 CRM techniques

An overview of unsecured and secured exposures can be found in template **CR3** in annex.

5.3.7 Changes in the stock of credit risk adjustments

The evolution of specific and general credit risk adjustments for impaired exposures, required by Article 442(i) are shown in template **CR2-A**. An evolution of defaulted exposures in 2017 can be found in template **CR2-B**.

5.4 Standardised approach (STA)

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
- Exposures to AXA Group entities
- Exposures in equity not included in the trading book
- Other small portfolios

5.4.2 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, Moody's 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.

5.4.3 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.

5.4.3.1 Investment portfolio

The investment portfolio of AXA Bank Belgium serves as a buffer for liquid assets 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 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 EUR 4,297,309 thousand at end 2016 to EUR 2,944,634 thousand in Dec 2017 mainly due to the sale and maturing of government bonds.

This further decrease of the portfolio is initiated to improve AXA Bank's leverage ratio and to partially offset (through capital gains) hedge accounting inefficiencies on the retail mortgages book (due to the severe prepayment wave).

The investment portfolio of ABB mainly consists of high quality sovereign and sovereign alike bonds (55%) and supra-national bonds (39%).

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

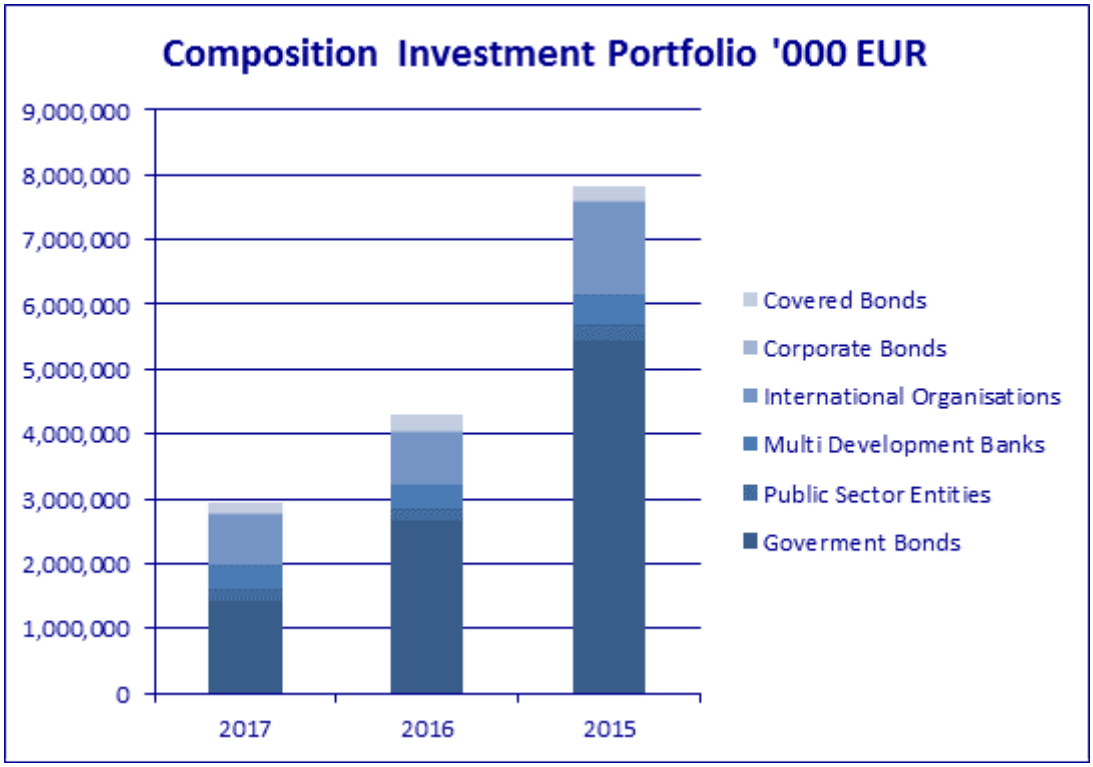


Figure 8: Composition of the Investment portfolio

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

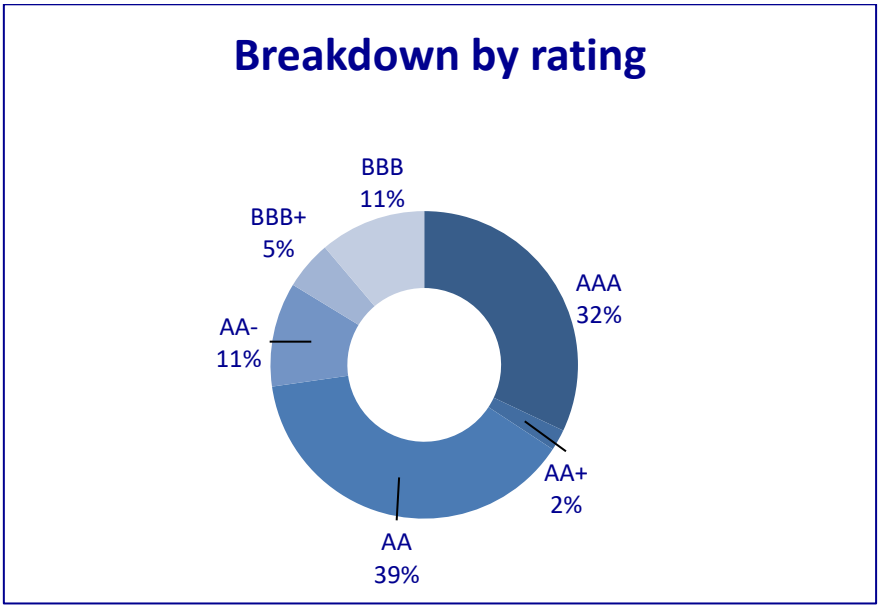


Figure 9: Investment portfolio – Breakdown by rating

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

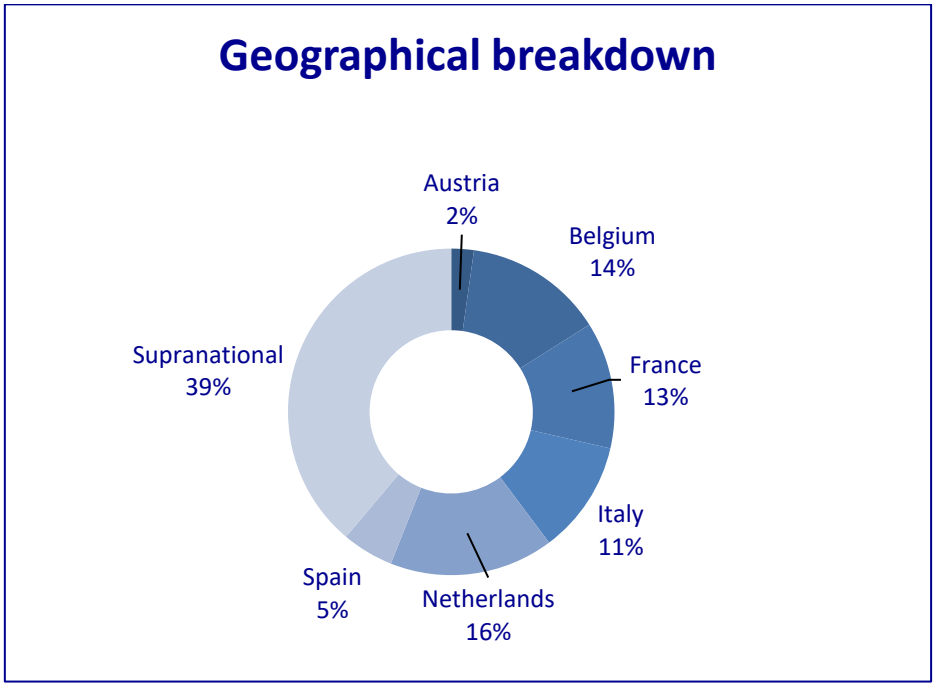


Figure 10: Investment portfolio – Geographical breakdown

ABB maintained the close monitoring of its exposure to GIIPS countries. The total exposure to these GIIPS countries remains quite stable and is now limited to government bonds of Spain and Italy.

The table below compares the exposure to GIIPS countries (in '000 EUR) at the year-end of 2017 with the year-end of 2016.

Country	Instrument type	Market Value		
		31/12/2017	31/12/2016	% Change
Italy	Sovereign bonds	329,034	331,585	-0.77%
Spain	Sovereign bonds	150,616	151,378	-0.50%

Table 7: GIIPS

5.4.3.2 Exposures to AXA Group entities

ABB runs an exposure on its French "sister" company AXA Banque France via so-called promissory notes ("*Billets à Ordre Hypthécaire"*). These are loans granted by ABB's subsidiary SCF to AXA Banque France, with recourse to a pool of residential loans on AXA Banque France's balance sheet. These loans amounted to EUR 975,517 thousand at end 2017 (before CRM).

Some small exposures to ABB-owned but non-consolidated entities remain on the balance sheet. They are treated under the Standardised Approach.

5.4.3.3 Exposures in equity not included in the trading book

AXA Bank Belgium has a very small equity portfolio. These shares mainly represent participating interests in non-consolidated subsidiaries, such as Motor Finance Company NV and Beran NV. Furthermore ABB has also some shares in financial intermediary entities, such as Visa Belgium. 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 20 of the Annual Accounts.

5.4.3.4 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 (ABB) received the approval from the NBB to apply the (F)IRB approach to the retail positions as from 2008[12]. 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.

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[13]. 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[14], 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.

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

[12] 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**. .

[13] 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.

[14] Only for consumer loans.

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.

Note that in 2017, a new LGD model for mortgage loans has been developed internally approved. This model has been reviewed by the ECB during the Targeted Review of Internal Models (TRIM) on-site inspection. ABB has not yet received the approval letter for the implementation of the new model. The introduction of the new LGD model will require about EUR 600,000 thousand additional Risk Weighted Assets. The impact is already included in the reported RWA and solvency ratios via an add-on (presented under "Other non-credit obligation assets"), yet the add-on is not included in the templates.

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 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.

5.5.3.1 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 **Error! Reference source not found.** below), and should be endorsed by both the CRO and the Management Body.

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.

5.5.3.2 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 validation also took place yearly, on the outcomes of the "yearly review".

The internal validation function is part of the Risk Reporting & Validation 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.

5.5.3.3 Audit

Internal Audit is an independent function that acts as third line of defence. The Team performs audits on the IRB models 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 monitor 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.

5.5.4 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 2017 and EOY 2016. These distributions confirm that the overall quality of the portfolio improved as less exposure is situated in the higher rating classes (corresponding to a higher level of default risk). In 2017, 65% of total retail portfolio is situated in the first four rating classes versus 62% in 2016.

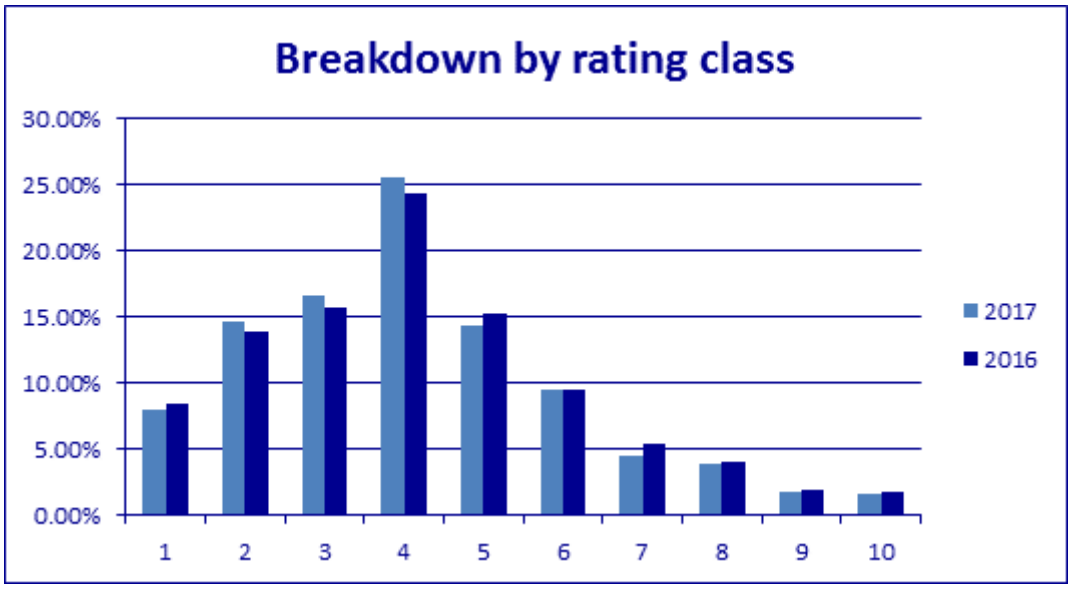


Figure 11: Rating class distribution of the retail portfolio

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.

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 2016 – EOY 2017 the provision levels have decreased for the different portfolios. This is in line with the fact that all risk indicators show that the quality of the credit portfolio is continuously improving.

In 2017, our external auditor informed AXA Bank Belgium of the point of view of the national supervisor regarding the prudential treatment of the changes in fair value of hedged instruments included in macro fair value hedge operations. Following articles 112 and 147(2) of the CRR, requiring that each asset shall be assigned to one of the exposure classes, the NBB position is that a risk weight should be calculated. 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 EUR 334,771 thousand for which RWA have been calculated.

5.5.5 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".

In 2017 the average PD levels used for RWA calculation are higher than the observed default rates. Furthermore, it was confirmed that the discriminatory power (the power to rank the credit portfolio from low to high default risk) remained at a very high level.

5.5.6 Regulatory floors

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

The 80% Basel I floor applies still applies until further notice. During 2017, ABB always fulfilled this requirement.

5.5.7 Belgian specific regulations

Based on Art 458 of the CRR, the Belgian regulator has requested[15], for all Belgian banks using IRB models, an **add-on** of 5 % calculated on the IRB RWA for mortgages covering residential real estate in Belgium. For reasons of comparability between countries, this additional capital requirement is represented in "Other risk amounts".

An additional Belgian add-on for retail mortgages under IRB, is still being discussed and will probably enter into force in 2018.

[15] 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.

5.6 Counterparty credit risk

5.6.1 General

ABB is designated by AXA Group to act as a centralised platform which provides AXA insurance entities access to financial markets.

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 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 is responsible for the checks on 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 and exposure to 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 Treasury & Intermediation and Head of non-retail Risks management and relevant specialists from the ABB Risk department and other departments. The committee monitors adherence to risk appetite framework for non- retail credit risks, as well as all risks linked to ABB's intermediation activity. It takes decisions regarding the issuer's eligibility concerning proposed investments and disinvestments.

The WRC has also integrated the responsibilities of the Impairment Committee. 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 Asset and Liabilities Management (ALM)) and **Treasury & Intermediation** department are 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.

5.6.3 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 well as possible exposure 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 qualifying central counterparty (QCCP) fits in this strategy as well. Counterparties need to be approved by AXA Group as well.

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 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. They set 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 in 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. AXA Bank Belgium 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: firstly implementing the legal framework to net opposite exposures, secondly 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. This goes beyond the scope of "accounting netting" under IAS 39, which requires more conditions to be met and which can only apply on the derivative transactions with the largest client from AXA group and the central counterparty. However, 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.

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 investment grade rated government paper (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 EUR 1 million.
  - Re-use of collateral is allowed, which greatly reduces the burden on ABB's liquidity.

  ABB does have a limited number of cases which divert from the above principles: one in terms of threshold and one in terms of collateral exchange frequency. At the end of 2017, ABB had one agreement with a threshold. However this threshold has been negotiated with the counterparty and removed from the legal documentation beginning of 2018. Two collateral agreements (AXA Life Europe and AXA Bank AG) have a daily exposure monitoring but only weekly exchange of collateral as long as the exposure remains below a certain level and one collateral agreement allows for a threshold.

  On 16th of January 2018, the Board of Directors of the NBB decided to grant partially exemptions to AXA Bank Belgium. ABB asked for a partial exemption concerning collateral requirement for intragroup derivative contracts (OTC) not compensated by a central counterparty introduced by the "EMIR" regulation. This question only concerns the exemption of initial margins and an exemption related to certain operational modalities concerning variation margins. In the specific cases of AXA Life Europe and AXA Bank AG Koln, NBB requires ABB to take the necessary measures in order to have a daily exchange of variation margin instead of a weekly one and this within 6 months after 16th of January 2018.

  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 biweekly 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 are restricted to high quality government 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, amounts to EUR 638,964 thousand. The full amount is linked to collateral ABB would have to pay to its subsidiary SCF upon ABB's downgrade by three notches.

5.6.5 Policies establishing credit reserves

Since end of 2017, the Impairment Committee has been integrated in the Wholesale Risk Committee (WRC). With the replacement of the current "incurred loss" model under IAS39 by IFRS9 as from 1st January 2018, the amount of expected credit loss calculated on the non-retail portfolio is presented to the 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 2017 section 3.3.

5.6.6 Exposures to counterparty credit risk

AXA Bank Belgium offers a centralised platform for the entities of AXA Group to access financial markets. Several insurance entities within AXA Group use this platform, which offers two services.

First of all, AXA Bank Belgium is an intermediary for pure derivatives such as interest rate swaps that the AXA Group's insurance entities use to hedge market risk on their life insurance. 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.

Secondly, AXA Bank Belgium provides liquidity to AXA Belgium (insurance company) via standardised money market transactions ('reverse repos') in which AXA Bank Belgium buys high-quality government bonds and commits to sells these bonds again at a specific future date and price. The volume of this activity amounted to EUR 1,015,494 thousand end 2017, with maturities up to maximum 1 year. The value of the bonds should be 10% above the cash value for these transactions. This protects AXA Bank Belgium from a loss due to negative price evolution of the bonds in case of a counterparty default.

Exposure of the Bank to derivatives and money market transactions, including the transactions within the AXA Group, 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 AXA Group counterparties (exceptions to this policy are mentioned in chapter 5.6.4.2). Guarantees exchanged are limited to cash and high quality securities in order to ensure adequate limitation of credit exposures.

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 the dealing room activity for both 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

On 31/12/2017 AXA Bank Belgium traded with two counterparties for its (reverse) repo activity: AXA Belgium and LCH Clearnet Ltd, the ideal central counterparty for these transactions. On the AXA Belgium side (reverse repo) there is no exposure at default as AXA Bank Belgium receives sufficient collateral to cover the exposure on AXA Belgium. On LCH Clearnet side (repo) there is an exposure of EUR 27,276 thousand considering that LCH Clearnet requires additional collateral from all its members.

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 two clearing brokers, i.e. HSBC and Credit Suisse International, given the difference in the nature of exposure.

The aggregated results as at 31 December 2017 are displayed step by step below.

a) The sum of all positive market values amounts to EUR 3,954,475 thousand. These positive market values amounts are neutralised by negative market values of EUR 4,274,934 thousand. AXA Bank Belgium emphasises here that this neutralisation goes beyond purely accounting netting off balance sheet items that is discussed in chapter 33 of the Annual Accounts Report of 2017, based on legally enforceable netting rights. In total, AXA Bank Belgium pledged EUR 1,491,999 thousand of collateral and received EUR 1,122,046 thousand of collateral. This leads to a net replacement cost of EUR 129,765 thousand.

b) The sum of the risk factors amounts to EUR 376,967 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 EUR 506,732 thousand in stressed market conditions and at the simultaneous default by all counterparties. Under stable conditions, this exposure still amounts to EUR 129,765 thousand. It is important to note that EUR 100,124 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 (reverse) repos and 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 is the only exposure that exceeds 10% of the eligible capital.

As of end of December 2017, this exposure represents 20.56% of our capital. This exposure is actively monitored and some mitigation actions are on-going in order to reach a lower level of concentration risk on AXA Group.

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 weighted by the notional of the transactions as a proportion of the total notional 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	Portion of notional amount	
		31/12/2017	31/12/2016
Derivatives	1st step	11.5%	12.6%
	2nd step	48.1%	53.3%
	3rd step	0.2%	0.1%
	QCCP (2% RW)	40.3%	33.9%
SFTs	1st step	69%	47%
	QCCP (2% RW)	31%	53%

Table 8: 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 arises from a poor transaction structure, for example when the exposure on a counterparty is collateralised by securities issued by the same counterparty. ABB mitigates this risk by only allowing cash collateral or government paper to collateralise its exposures.

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 Use of ratings from external credit assessment institutions (ECAI)

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

The counterparties for the dealing room activity of treasury and derivatives are selected based on external ratings of three rating agencies (Fitch, Moody's 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".

5.6.8 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 2017, ABB measured its own funds requirements for CVA risk according to the Standardised method (article 384 of the CRR).

The majority of the derivative positions that the Bank is taking are related to the derivatives intermediation activities with the AXA Insurance entities. The trades are executed with market counterparties with a minimum rating of A- as defined in the Credit Risk Charter. ABB monitors on a daily basis these ratings and follows a strong and clear limit framework.

In 2017, ABB's exposure under the CVA methodology has slightly increased by 3.6% (from EUR 299,267 thousand in 2016 to EUR 310,040 thousand in 2017).

5.6.9 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 the exposure with CCP decreased in 2017, RWAs for the DFC decreased as well (see table below).

Default fund contribution in '000 EUR	31/12/2017	31/12/2016
Exposures with CCP	209,909	253,117
RWA DFC	4,198	5,062

Table 9: Default Fund Contribution

5.7 Exposure to securitization position

5.7.1 ABB as investor

ABB has no investments in securitisation positions in 2017.

5.7.2 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. Both entities are fully integratedin 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 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 France which does not allow ABE SCF to hold Retail Mortgage Backed Securities (RMBS) issued by SPV Royal Street as collateral for the issued covered bonds. Therefore, part of the RMBS Royal Street structure has been dismantled and the underlying mortgage loans have been sold from ABB to ABE SCF where these are directly used as a collateral for the existing 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 securitizations named Royal Street, a Belgian Securitization vehicle.

Since the transformation of ABE SCF only 1 compartment remains in Royal Street, the other two having been dismantled in the SCF transformation.. They will be liquidated in 2018.

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. RS-1 has financed the purchase through the issuance of a series of rated Senior class A notes (EUR 2,850,000 thousand), mezzanine Class B&C notes (EUR 105,000 thousand) and junior notes class D (EUR 45,000 thousand), all due in 2040.

The initial objective of the first securitization 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 securitizations operations.

Assets are held as regular assets on the 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 securitization purposes, the initial pooling analysis as well as the replenishment process 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 a triple A notation for class A RMBS.

The current EAD of the underlying mortgages at the ABB consolidated balance sheet amounts to EUR 599,017 thousand.

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.

- **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. The refinancing until Q4 2017 took place mainly via subscription of mortgage backed securities (RMBS), issued by Royal Street as described here above, or covered by promissory notes issued by AXA Banque France and backed by French house loans.

Due to the regulatory change that forbids the use of internal RMBS into French Covered Bonds' pools as from January 1st, 2018, ABB re-structured the asset side of its Covered Bonds issuing vehicle.

In this context, ABE SCF 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 outstanding balance of the Covered Bonds and Subordinated Over Collateralisation (OC) Loans which it has issued against the assets. Each time a series of Covered Bonds comes at maturity, ABE SCF will sell a part of the residential mortgage loan portfolio back to ABB.

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).

The covered bond program amounted to EUR 5,650,000 thousand in 2017 of which EUR 4,150,000 thousand remains on a consolidated level: EUR 3,175,000 thousand are placed in the market, EUR 975,000 thousand are retained by AXA Banque France and EUR 1,500,000 thousand are retained by AXA Bank Belgium and 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[16].

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 by two ECAIs (Moody's and Fitch). These ratings are crucial to ensure keeping a broad investor base and funding costs as low as possible.

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

6 Market Risk

For market risk, AXA Bank Belgium 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 AXA Bank Belgium arises mainly from the following products/activities:

- As a primarily retail bank, AXA Bank Belgium 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 AXA Bank Belgium'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, saving accounts in Belgium benefit from a legal floored rate of 11 bps. These features are captured in dedicated models which are incorporated in AXA Bank Belgium'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 rather inexpensive for the customer prepayment option. Over the last few years, this feature translated into important prepayment waves. 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 the variable rate mortgage loans which 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 department** 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[17].

- **ABB's Treasury & Intermediation department 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 has also taken on board SPPM's responsibilities as process control unit of the tool used to measure and manage IRRBB.

[17] Short term interest rate positions are managed by AXA Bank Belgium's Treasury department in application and execution of ALCO decisions; See section 4, Interest Rate Risk banking book.

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.
- Dedicated functional risk appetite statements set limits both on the economic value and the net interest income sensitivity of ABB's banking book.

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 the monthly ALCO report. This report includes the following risk indicators:

- 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.
- 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 Finance, 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, from which 71% have a fixed interest rate and 29% floating interest rate. The interests of the variable rate mortgages are linked to the evolution of the OLO[18] rates. The Belgian law imposes a cap on the variable interest rates of these loans but, given the historical 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% 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.

[18] OLO stands for "Obligation Linéaire/Lineaire Obligatie" which is the abbreviation of Belgian Government Bonds

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

Interest Rate Risk Indicators (kEUR)	31/12/2017	31/12/2016
Bank SI (absolute)	-33,138	-240,583
Bank SI (relative)	-3.5%	-21.8%
Bank NII (up 10 bps)	1,316	5,040
Bank NII (down 10 bps)	-5,635	-6,414

Table 10: 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: ABB issues regularly EMTN for its own retail clients but also for retail clients of some AXA Group entities (e.g. AXA Belgium). Intermediation activities fully hedges the EMTNs payoffs in the market via performance swaps. Some residual positions come after the issuance when clients sell their EMTN 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. Consequently residual positions in performance swaps and EMTN are meant to be resold short term and therefore this client servicing qualifies for trading.

Intermediation activities derivatives: The trading activities of ABB derive mainly from its role as centralised platform for access to the derivatives markets for the insurance entities of AXA Group. Since mid-2009, AXA Bank Belgium's Intermediation activity handles the execution of transactions, as an agent on futures, as a counterparty in Interest Rate Swaps, Swaptions & Equity Derivatives with on one hand the AXA Insurance Companies and on the other hand the market, as a counterparty on Total Return Swaps with on one hand the AXA Insurance Companies and on the other hand a mutual fund. AXA Bank Belgium's strategy is to service AXA Group entities and to hedge itself on the market with very limited residual market risk.

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

Each trading portfolio has a list of admitted hedging instruments. The hedging strategies need to respect several constraints:

- the scope of the admitted instruments
- the risk limit framework
- a regular compression exercise as defined by EMIR and to be reported twice a year to ALCO in a report jointly made by dealing room and OTFM and controlled by risk management.

Furthermore, 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 banks legislation. The 'Non Risk-Based Ratio' for AXA Bank Belgium, 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 AXA Bank Belgium 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.

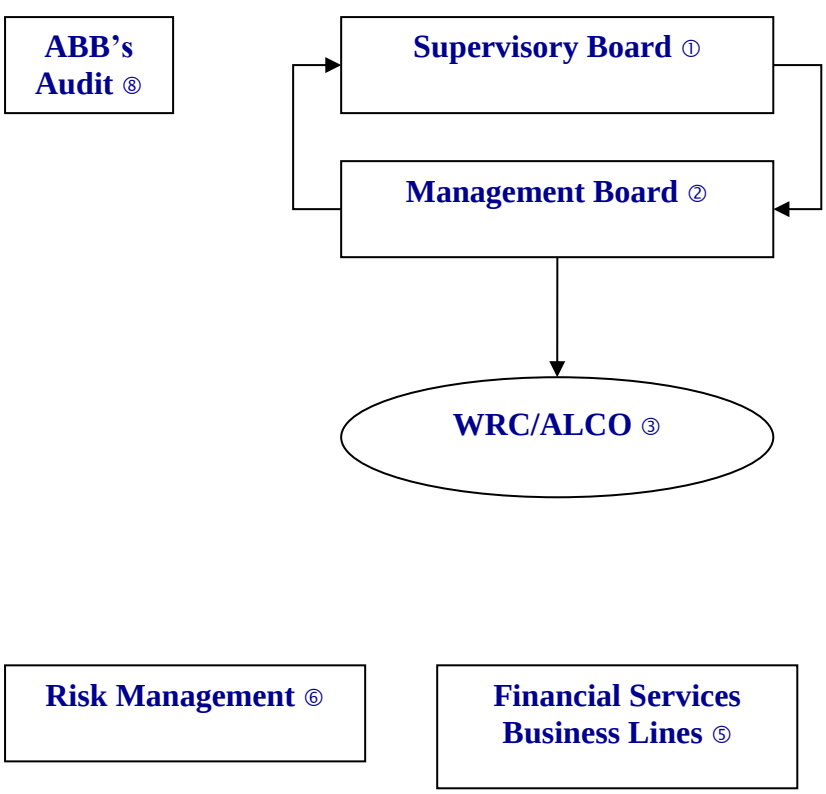
Furthermore, ABB's risk limit framework ensures that the VaR with a 99% confidence level and a holding period of 1 day does not exceed 0.25% of T1 capital as requested as well by the Belgian banking law**.**

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.

The flowchart below shows the senior governance for the management of market risk at AXA Bank Belgium. Second, the responsibilities of the committees and departments identified in the flowchart are described:



- ①**ABB's Supervisory Board** 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 Supervisory Board delegates its day to day management of market risks to ABB's Management Board.

- ②**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.

- ③**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.

- ⑤**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. PAP charter). Treasury falls under the supervision of the ALCO and Intermediation activities and Sales is supervised by the WRC.

- ⑥**ABB's Risk Management department** also independently ensures that all sources of market risk are identified, analysed, reported and managed on a daily basis

- ⑦**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.

- ⑧**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. The trading activities of ABB derive mainly from its role as centralised platform for access to the derivatives markets for the insurance entities of AXA Group. The market risk is strongly limited because all positions that are taken with entities of AXA Group are mirrored by positions with external counterparties on back-to-back basis.

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 IV/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 2017.

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.

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 EUR 2,170 thousand. The VaR with a confidence level of 99.5% and a time horizon of 10 days is calculated on a daily basis using 5000 Monte Carlo simulations. The VaR for all trading book activities at the end of 2017 is equal to EUR 691 thousand and therefore well below the predefined limit. Finally, this model is subject to the appropriate yearly back testing and validation by the Risk Management, assisted by an external party, in order 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 the following "client servicing" trading activities:

- Intermediation desk Interest rates & Equity Derivatives: this activity is considered as "matched brokering" and qualifies for client servicing trading. Moreover, those positions have an IFRS "held-for-trading" designation and are therefore part of the presumptive list of trading book instruments (Basel committee – Minimum Capital Requirement for Market Risk – January 2016).
- Eurobond: primary and secondary Eurobonds emissions available to retail customers via their home banking. The residual positions are meant to be resold short term (max 6 months). Consequently, this client servicing activity qualifies for trading.
- Intermediation EMTN/Performance swaps activity: residual positions in performance swaps and EMTN bought back from retail clients are meant to be resold short term and therefore this client servicing qualifies for trading.

Furthermore ABB holds also 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 12 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 2017.

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 2017, ABB never exceeded this 2% limit during 2017.

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 AXA Bank Belgium 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 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 Europe 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, 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

ABE 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 AXA Bank Belgium'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.

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 affirms its strong liquidity position, with an LCR of 164% and NSFR of 139% (end-'17) and the Internal Liquidity Stress indicator above the required limit. ABB maintains its structurally liquid balance sheet via strong governance. Firstly, the bank's Board of Directors sets risk appetite statements dedicated to liquidity in the overall risk appetite framework. Secondly, the strategic plan is continuously challenged against the risk appetite and the bank's fund transfer pricing system is designed to drive business lines towards building a strong funding profile for the bank. Thirdly, ABB closely monitors its liquidity indicators over different time horizons by both reporting ex-post as well as making projections to allow for adjustments if necessary. Fourthly, ABB covers extensively how its liquidity and funding profile could develop under stress scenarios in its recovery plan and internal stress-testing programme. Finally, in order to be able to react quickly in case of stress, ABB keeps its Liquidity Contingency Plan up to date.

The bank has made significant progress following last year's ILAAP submission in two aspects: the understanding and BCBS compliant reporting of intraday liquidity and the decrease in time needed for implementing ABB's key liquidity recovery option. Still, ABB's management is committed to continue improving the liquidity management across the bank. The main area identified for further improvement remains intraday liquidity management, where we will review the need for and size of an intraday liquidity buffer.

This declaration is also approved by the Board of Directors.

7.1.2 Risk policy, limit framework and reporting

In recent years, liquidity management was one of the key priorities of AXA Bank Belgium. 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)
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)				
RAS	Indicator	Description	Limit	Alert
L1	ILS	The available liquidity resources for the inter liquidity indicator under all time horizons (1W, 1M, 3M, 6M and 1Y) should always be higher than the stressed requirements + EUR 500 million.	500,000	750,000
L2	LCR	The excess available high quality liquid assets resources for the Basel III Liquidity Coverage Ratio (1M horizon) must be above 500 million and above the supervisory requirement to be communicated by ECB.	500,000	750,000
L3	NSFR	The available amount of stable funding for the Basel III Net Stable Funding Ratio (1Y horizon) should always be higher than the stressed requirements + EUR 1 billion.	1,000,000	1,500,000

Figure 13: 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 lower liquidity excess under the internal scenarios.
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 2017	2,735,000	500,000	2,235,000
End of December 2016	1,415,000	500,000	915,000

Table 11: ILS

- **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 CRD V.

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

The Joint Supervisory Team (JST) requires credit institutions to produce, at least once per year, a clear and formal statement on their 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.

7.1.3 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 2017 (100% limit) thanks to a comfortable stock of liquid assets and a solid financing structure.

Ratio	31/12/2017	31/12/2016	Limit
LCR	175%	169%	100%
NSFR	139%	139%	100%

Table 12: 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 the series of targeted longer-term refinancing operations (TLTROs) of the European Central Bank (ECB) at 31 December 2017, the total TLTRO amounts to EUR 600,000 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 2017 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 (EUR 17,878,257 thousand on 31 December 2017) and covered bonds (EUR 4,200,626 thousand on 31 December 2017). More detail can be found in the table below:

Date as of 31/12/2017 (in '000 EUR)	< 3 months	< 12 months	> 12 months	Total
Central Bank financing	-	-	600,000	600,000
Loans from financial customers	549,226	653	694	550,573
Unsecured funding (savings & current accounts of 'other financial corporates' + CIFP)	82,799	653	694	84,146
Repurchase Agreements	466,427	-	-	466,427
Secured loans	-	-	-	-
Retail funding	15,968,605	189,712	1,719,940	17,878,257
Non maturing retail funding (savings and current accounts)	15,681,998	-	-	15,681,998
Maturing retail funding (deposits with agreed maturity, EMTN for retail, customer saving certificates)	286,607	189,712	1,719,940	2,196,259
AXA Group Financing	11,646	5,519	599,440	616,605
Unsecured financing	3,691	-	-	3,691
EMTN	7,955	5,519	599,440	612,914
Other counterparties	13,475	-	4,200,756	4,214,231
Unsecured funding from non-financial customers	13,475	-	130	13,605
Covered bonds	-	-	4,200,626	4,200,626
Total	**16,542,953**	**195,884**	**7,120,829**	**23,859,666**

Table 13: 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 2017 this portfolio consists of 49% of European sovereign bonds (including bond guaranteed by sovereign), 39% of supranational, 7% of bond issued by public sector entities, and 5% of AAA-rated covered bonds issued under several legislative frameworks: French, Belgian and The Netherlands. An overview can be found in the table below:

Issuer	Type	Rating	Portfolio %
Belgium	Sovereign	AA	10.05%
The Netherlands	Sovereign	AAA	14.83%
France	Sovereign	AA	3.52%
Italy	Sovereign	BBB	11.51%
Austria	Sovereign	AA+	2.16%
Spain	Sovereign	BBB+	5.62%
EFSF	Supranational	AA	27.11%
EIB	Supranational	AAA	12.19%
CADES	Public Sector Entity	AA	6.56%
Belfius & KBC	Belgian Covered	AAA	3.00%
ABN & ING	Dutch Covered	AAA	1.20%
La Banque Postale SA	French Covered	AAA	0.94%
CCCI	Guaranteed sovereign	AA	1.31%
Total			**100.00%**

Table 14: LCR Level 1 Investment portfolio

7.2.2.2 Covered Bond

SPV Royal Street and AXA Bank Europe SCF are two entities that are used by AXA Bank Belgium to attract structural long term funding via the issuance of covered bonds. While Royal Street issues RMBSs, AXA Bank SCF uses the senior tranches of these notes to issue covered bonds. Both entities were integrally included in the AXA Bank Belgium consolidation scope.

At the end of 2017, some changes were made to the above-mentioned SPV structure. The SPV Royal Street has sold most of its mortgage loans portfolio to ABB. ABB then sold the biggest part of that portfolio back to SCF. Royal Street, consisting previously of three parts, will from now on only consist of RS 1, which still contains a small amount of RMBS's. RS 2 & 3 ceased to exist.

Originally, ABB created ABE SCF for issuing covered bonds. Its principal business activity was to issue covered bonds to refinance residential mortgage loans through Royal Street. After the so-called transformation that is described above, the new structure of the SCF will be far more efficient and flexible, in that it will allow SCF to issue covered bonds by directly buying mortgages from ABB, without Royal Street as an intermediary. The interest payments of the mortgages held by SCF are transferred with yield-maintenance swaps between ABB and SCF. This will also allow executing a secured loan transaction between ABB and SCF with mortgages as underlying collateral in order to issue covered bonds with a shorter time to market thanks to the lightweight structure.

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 (more information in section 5.7.2).

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 Operational Risk

ABB 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 ; Unauthorised 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 ABB, the definition of Operational Risk also includes Compliance Risk. Since this is an important risk, a separate section on this topic has been dedicated (see 8.2).

For ABB, 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[19] are considered by a qualitative indicator while major damages are followed by the Group.

[19] 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 vocalised concerns within the industry), major (negative public exposure with significant impact), and severe (dramatic loss of stakeholder confidence – extensive negative public exposure).

8.1 Risk management and Governance

8.1.1 Governance

ABB's management uses an annual recurring Operational Risk Management cycle ("ORM cycle") to identify quantify 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.

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

ABB's Management Board follows the implementation of the operational risk management framework, gives guidelines to embed it in ABB's business-as-usual activities and reviews and validates 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 ensures the Operational Risks are identified, assessed, measured and mitigated in accordance with the AXA Group standard.

8.1.2 Risk policy, limit framework and reporting

For the regulatory capital ABB applies the Basic 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, ABB has implemented an internal model that has been developed by AXA Group. This model is similar to AMA. The economic capital computation is then a yearly process based on risk assessments that identifies and quantifies the relevant and material operational risks faced by ABB.

Just as in past years, there was a major focus in 2017 on detecting and combating fraud and cyber risks (hacking, phishing and cyber-attacks) and regulatory risks (related to MIFID, AML, GDPR, PSDII,..). The cooperation with the other control lines (Audit, Compliance, Information Security) is well established in ABB. The team of Operational Risk works continuously on the 'risk awareness' within the entire organisation (by organising training courses for the different business lines, participating in major projects and product launches, etc.).

In 2017, a lot of effort was put both in the "Loss Data Collection" process and the "Operational Risk Cycle" process; these processes have been optimised and ensure uniformity and maturity throughout the whole organisation. In 2018, these efforts will continue, with a special focus on a structural framework for "risk responses" (action plans, risk acceptance). The team of

operational risk is also developing a risk appetite framework, in which the playing field for operational risk in ABB's processes is defined and monitored.

8.1.3 Operational risk mitigation

Mitigating actions are defined for our most important operational risks. Different options are possible:

- Transfer the risk (e.g.: we have insurance contracts for fire incidents, cyber incidents, agent fraud).
- Action plans to strengthen the process at risk, and – to reduce the risk to a lower/acceptable level. These action plans are defined by the business, challenged and monitored (quarterly) by the Operational Risk team. The Management Board is informed as well.

ABB is monitoring its operational risk by means of an operational risk dashboard in which KRI's are measured on a quarterly basis. This dashboard is presented to the Management Board each quarter.

The team of Internal Financial Control is in charge of performing 2nd line controls of the main risks in our processes. Note that in 2017, AXA Group has started the roll out of an IC program. ABB will start implementing this program as of 2018. Goal is to identify for each process in the bank the major key and killer risks, and to define and implement the required control objectives and controls to mitigate these risks.

8.1.4 Operational risk monitoring and control

Monitoring of our risks:

- We have an operational risk dashboard in which KRI's are measured on a quarterly basis. This dashboard is presented to the Management Board each quarter. A more explicit link will be made with the risk appetite of ABB (to challenge the defined "monitoring" and "alert" levels) and with the major operational risks identified in the yearly ORM cycle.
- The Risk dashboard of the bank (RAF) also contains a KRI on operational risk.

The team of Internal Financial Control is in charge of performing 2nd line controls of the main risks in our processes (linked to financial reporting). Note that in 2017, AXA Group has started the roll out of an IC program. ABB will start implementing this program as of 2018. Goal is to identify for each process in the bank the major key and killer risks, and to define and implement the required control objectives and controls to mitigate these risks.

8.2 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 and a 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, supported by a network of compliance correspondents that have a role of compliance ambassador and compliance reporting officer within the different operational departments have implemented the following processes in order to mitigate that risk.

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 ABE Compliance Charter and the ABE Integrity Policy:

- The Compliance Charter is a regulatory required document that protects the compliance function, ensures its 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 ABE Integrity Policy is the ABE 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 Anti-Money Laundering (AML) Charter only focussing on money laundering risk; the Sanctions policy, only focussing on financial sanctions risk; the Personal Account Dealing rules, only focussing on the risks related to personal transactions; etc…

As second mitigation measure, the Compliance team has implemented a compliance monitoring program. This program consists of 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 mortgage credit directive. 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 compliance correspondent and 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 ABE 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 ABE Management Board.

Compliance risk is also included in the operational risk process. In 2016, two compliance risks scenarios were identified as material and therefore, have been quantified and included in the economic capital for operational risk:

- Non-compliance with other regulations and legislations
- Money laundering with active employee involvement

8.3 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' 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)	31/12/2017	31/12/2016
RWA	675,882	736,386

Table 15: Operational risk

For the requirement in 2017, the Relevant indicator is based on the year-ends 2015 to 2017. For the calculation of 2016, the year-ends 2014 to 2016 were taken into account.

The decrease in RWAs is due to the fact that the results of 2017 were lower than the results of 2014.

9 Other Risks

Credit, market, liquidity 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. They are all considered as material and mitigated through processes. More specifically, this Section deals with the management of the following risks: business risk, model risk, strategic risk, reputation risk, remuneration risk, political and regulatory risk and pension risk.

9.1 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 liabilities 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 Process (PAP), 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

9.2 Model risk

The model risk is defined as the risk of losses arising from decisions based on incorrect or misused model outputs and reports.

The risk is fully mitigated thanks to processes. The main one is the independent validation of risk models by the Validation Team, which is part of the "*Risk Reporting & Validation"* Team. This team, which works independently from model owners and modellers, reports directly to ABB's CRO. Its objective is 1) to provide confidence in the validity of models by verifying that they are performing as expected, *i.e.* in accordance with their objectives, design and use; 2) identify limitations and assumptions in order to ensure a proper and thorough use of the models; 3) reports the validation conclusions to the CRO and to the relevant Management Board sub-committees, which gather the final model owners and users (see Chapter 1 for a list of such Committees).

Beyond model independent validation, the models used for the management of risks should also be regularly back tested. This exercise consists in testing whether the models still continue to deliver their expected benefits by keeping their initial performance and by still remaining in line with their purposes and policies. A strong governance, established through validation, back testing and modelling guidelines, is in place in that regard, and decreases in performance triggers review or redevelopment of models in order to reach the expected standards within ABB. The models are also stress-tested with the objective of understanding their limitations and take proper decisions.

9.3 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.

9.4 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.

ABB's remuneration policy for Identified staff (mainly Board of Directors, Management Board, Internal Control and senior risk taking functions) is described in the *"Politique de Remuneration"* which can be found in ABB's Memorandum of Governance. It explains the philosophy and structure behind ABB's remuneration policy and how performance for variable and non-variable remunerations is measured.

This remuneration policy is annually reviewed by AXA Group in coordination with ABB's Remuneration Committee. This Committee assists the Board of Directors by means of 1) overseeing the compensation system's design and operation; 2) 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.

Remuneration policies for all other ABB staff (not included in ABB's remuneration policy described above) are in line with local labour agreements at ABB and entity level and with AXA Group's remuneration policies.

9.5 Political and Regulatory risk

Political and regulatory risk is defined within ABB as the risk of losses due to changes that occur in a country's government or regulatory environment. More specifically, the political risk is the risk of losses due to unfavourable changes in political climate (like populism and protectionism), and the regulatory risk is the risk of losses due to the application of adverse rules and/or arbitrary changes in the regulation.

ABB mitigates this risk through a political and regulatory monitoring performed by the senior management and legal teams. This process has been strengthened thanks to the formalisation of the Legal Watch Framework.

This framework mainly consists in a Legal Watch Inventory where all legal domains that might have an influence on ABB and its activities have been listed. Each department has a correspondent who is in charge of the regulatory follow-up in his domain and reports on a quarterly basis to the Legal Watch Committee. This process falls under the supervision of the Compliance team, who reports on a quarterly basis to the Management Board.

Within this framework, Risk management department implemented a specific regulatory watch for all prudential and crisis risk management issues.

9.6 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:

Scenario #	Scenario description	Scenario assumptions		Impact on capital (in thousands of Euros)		
		Interest rates	CDS spreads	From interest rates	From CDS Spreads	Total
Scenario 1	Macro economic crisis with **increasing** rates	+ 100 bps	+ 75 bps	14,422	11,078	25,500
Scenario 2	Macro economic crisis with **decreasing** rates	- 50 bps	+ 75 bps	-9,294	11,078	1,784

Table 16: Pension risk

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10 Assets Encumbrance

Disclosure of encumbered and unencumbered assets for ABB on 31/12/2017 is done in accordance with the disclosure templates foreseen in the EBA Guidelines released in December 2016.

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 2017 for ABB consolidated.

10.1 Sources of encumbrance of assets:

The total amount of encumbrance of assets (median of the last 4 quarters) stays rather stable around EUR 6,724,740 thousand and the 5 sources of encumbrance are:

- Repos mainly covered by debt securities issued by governments, either ABB's own debt securities, either debt securities received from AXA in repo transactions
- Funding from ECB (TLTRO+MRO) covered by debt securities, retained AAA note RMBS Royal Street 1 and retained covered bonds
- Derivatives mainly covered by cash (and small part by debt securities)
- Issuance of Covered bonds sold to the market covered by mortgages or issuance of Covered Banks for AXA Banque France covered by promissory notes
- Royal Street notes: only the small part of Royal street AAA notes sold to AXA Group (± EUR 20,000 thousand) covered by mortgages remains on the consolidated balance sheet

10.2 Significant evolution in 2017

In 2017 ABB's repo portfolio decreased from EUR 1,031,061 thousand in Dec 2016 to zero in June 2017 and increased again to EUR 486,025 thousand in Dec 2017. An increase of repos does not mean a need for liquidity, but is interesting to monetize the value of the investment portfolio.

In Q1 2017 ABB subscribed to a TLTRO of EUR 600,000 thousand at the ECB, mainly covered by AAA Royal Street 1 notes and retained covered bonds.

In Q2 2017 the covered bonds issued by SCF and sold to the market have increased from EUR 3,000,000 thousand to EUR 3,250,000 thousand In that same quarter SCF issued covered bonds for a total amount of EUR 500,000 thousand for AXA Banque France covered by a promissory note.

2017 was an important year for the restructuration of SCF: the covered bonds are no longer covered by Royal street 2 and 3 notes, but directly by mortgages, sold to SCF by ABB. This transaction does not have significant influence on the encumbrance of mortgages by covered bonds, as the overall collateralisation percentage stays rather stable.

10.3 Unencumbered assets:

ABB has around 4 billion EUR unencumbered debt securities available to use as collateral and that can be easily encumbered.

The other unencumbered assets mainly consist out of mortgages, 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).

11 Tables and Figures