

**AXA BANK EUROPE**  
Risk Disclosure Report  
2016



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# 1 Introduction

## 1.1 Risk disclosure policy

The Basel III accords require banks to disclose a complete risk report to the market at least once a year. This obligation is known as the “market discipline” Basel III Pillar 3 transparency obligation. It is based on the assumption that well informed market participants will reward risk-conscious management strategies and will correspondingly penalise riskier behaviours. It is believed that this gives credit institutions additional incentives to monitor and efficiently manage their risks.

In compliance with the above transparency requirements, AXA Bank Europe’s (ABE) Board of Directors and Management Board communicate to the market a complete risk disclosure report once a year, after the publication of its audited annual accounts. This yearly frequency is believed to offer sufficient information to allow third parties to form an opinion regarding ABE’s risk profile.

This 2016 risk report covers the period starting on 1 January 2016 and ending on 31 December 2016. Information is disclosed on a consolidated level.

The information provided in this document has not been subject to an external audit. However, the disclosures have been checked for consistency with other existing risk reports and were subject to a final screening by authorised risk management representatives to ensure quality. In addition, the 2016 Risk Report was distributed to the Management Board to ensure the appropriate approval of the management body as requested under Basel III.

ABE’s management pays a special attention to the bank’s obligation of confidentiality. If a situation would arise where private clients’ information could be inferred from some element legally required to be disclosed, the bank would seek guidance from its regulators in order to omit the publication of such information.

The required information with regard to our Corporate Governance and Remuneration Policy can be found in the Management report in annex of the 2016 Annual Report of ABE. The Annual report also contains additional information to the topics covered in this report.

Both reports can be found on AXA Bank corporate website at <http://www.axabank.be>.

## 1.2 Executive summary

Key figures	31/12/2016	31/12/2015
<b>CAPITAL RATIOS</b>		
CET1	21,2%	18,2%
T1 ratio	23,1%	20,0%
Capital ratio	23,5%	21,2%
Fully loaded CET1 ratio	21,8%	20,6%
Fully loaded T1 ratio	23,7%	22,4%
Fully loaded total Capital ratio	23,9%	23,1%
<b>LEVERAGE RATIOS</b>		
Phase-in ratio	4,1%	3,4%
Fully loaded ratio	4,2%	3,8%
<b>LIQUIDITY RATIOS</b>		
Liquidity Coverage Ratio	169%	139%
Net Stable Funding Ratio	139%	139%

Table 1: Key figures

In pursuing the realization of the strategic objectives, AXA Bank Europe is exposed to a wide range of risks. The main risks are credit risk, interest rate risk of the banking book, liquidity risk and operational risk. These risks are managed within a risk appetite framework annually defined by the Board of Directors.

During 2016, the Belgian mortgage loan market continued to experience a high refinancing rate due to the low interest rate environment. While this has put pressure on margins and revenues, AXA Bank has been able to temper the impact with the significant production of mortgage loans of strong credit quality.

AXA Bank also pursued its derivatives intermediation activities, providing added-value services to AXA entities by processing and managing their derivatives in the market, all within a very strict risk appetite. In 2016 AXA Bank continued to actively compress its stock of derivatives allowing to neutralize the net new production and keep, overall, the total derivatives off balance outstanding broadly unchanged. Back loading derivatives to a central clearing platform and active management of counterparty credit exposure has allowed for a reduction of the counterparty credit exposure to AXA Bank's main derivative counterparts.

AXA Bank has further reduced its credit risk by materializing the sale of its Hungarian branch. Indeed, the complete retail business in Hungary has been transferred to OTP Bank Plc on October 31st. This transaction is the final step to reposition AXA Bank as a retail bank exclusively present on the Belgian market and operating jointly with AXA Insurance in Belgium.

Liquidity for AXA Bank Europe remained at a comfortable level throughout 2016. As per 31 December 2016, the Liquidity Coverage Ratio (LCR) is at 169% (139% in 2015) and Net Stable Funding Ratio (NSFR) at 139% (139% in 2015). This position is based on a combination of funding sources such as deposits from retail customers and covered bonds for the institutional market.

AXA Bank Europe shows high solvency further strengthened over 2016 thanks to its derisking and its continued prudent credit underwriting strategy. All solvency ratios improved over the year. As per 31 December 2016, AXA Bank Europe's Tier 1 ratio stands at 23.1% (20.0% in 2015) and total capital ratio at 23.5% (21.2% in 2015). These ratios significantly exceed the regulatory requirements.

In connection with the contemplated implementation of the non-risk based leverage ratio, basically comparing Tier1 capital to unadjusted total assets, the bank has further decreased its balance sheet. As a consequence, the bank's leverage ratio lands at 4.1%. In light of the low risky assets of AXA Bank, this level offers a comfortable buffer.

The significant risk reduction has been reflected in AXA Bank's results to the European Union-wide banking stress test, which have fed the 2016 round of Supervisory Review and Evaluation Processes (SREP) under which the European authorities decided the appropriate capital resources that AXA Bank has to hold.

### 1.3 Scope

At 31 December 2016, AXA Bank Europe, a limited company under Belgian law, with its registered office at 1170 Brussels, Vorstlaan/boulevard du Souverain 25 was a subsidiary 100% owned by AXA SA.

The scope of consolidation for AXA Bank Europe included the following companies: AXA Bank Europe SA, including branch in Hungary, Royal Street SA, AXA Belgium Finance BV and AXA Bank Europe SCF (Société de crédit foncier). The activities regarding the Hungarian branch were terminated in 2016.

The subsidiary AXA Belgium Finance BV, the SPV Royal Street NV and the SCF AXA Bank Europe are fully consolidated. There is no difference in the basis of consolidation for accounting and prudential purposes.

AXA Bank Europe 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 Europe provides a broad range of financial products to individuals and small businesses and has a network of exclusive independent bank agents who also support the sale of AXA Insurance and AXA Investment Managers' products. 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 the leading products of AXA Bank Europe in Belgium are St@rt2bank (a free current account and related savings account), mortgage loans, consumer loans and professional loans.

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 programmes that are unconditionally and irrevocably guaranteed by its sole shareholder ABE 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 ABE 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.<sup>1</sup>

Royal Street is an SPV (Special Purpose Vehicle) created to securitize a part of ABE'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 5.6 of this report.

ABE SCF, a French law governed Société de Crédit Foncier, is a wholly-owned subsidiary of ABE and legally bankruptcy-remote from ABE. It is created for the purpose of issuing covered bonds / obligations foncières for the benefit of ABE and, to a limited extent, AXA Banque France. ABE SCF must meet the minimum capital requirement imposed by the competent authority. ABE SCF has no commercial activity as such. It only maintains activities that support ABE's covered bonds program done for liquidity management.

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<sup>1</sup><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, ABE **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, capital and liquidity plans and compliance policies. ABE'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 specialized 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.



ABE **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, ABE Management Board is responsible for ensuring that the bank's risk appetite framework<sup>2</sup> 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 specialized 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 ABE Management Board (in line with the plans and targets set by ABE'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 ABE's risk infrastructure and risk models (validation, stress testing, back testing and calibration).

Their specific roles and responsibilities are described within ABE's specific Risk Management Charters and in the charters of the committees.

A list of ABE's specific Risk Committees can be found in the following table.

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<sup>2</sup> The risk appetite framework consists of all processes, controls, limits and systems through which the risk appetite is established, communicated and monitored.

Risk Committees and their scope		
Committees	Risk Scope	Risk Charters
Retail Risk Committee	Retail risks	Retail Risk Management Charter
Wholesale Risk Committee	Non retail credit risk, Securitization 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
ALCO	Interest rate risk Liquidity risk	Interest Rate Risk Management Charter , Liquidity Risk Management Charter
Management Board*	Risk Appetite Framework Operational Risk Other risks	Operational Risk Management Charter, Other Risk Management Charter
* Acting as a risk Committee		

Table 2: Risk committees and their scope

As an independent control function (independent from the business lines) sitting on ABE's Management Board and reporting to its CEO, ABE's **Risk Management** department assists ABE's Board of Directors, the specialized Board Committees, Management Board and specialized 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.

## 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 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 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 Europe, women represent 33% of the Management Board and 23% of the Board of Directors.<sup>3</sup>

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<sup>3</sup> Composition of the management bodies can be found in the 'Management Report 2016' on the AXA bank corporate website

## 2.2 Risk Management

### 2.2.1 General

In 2016, AXA Bank Europe 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 Europe has continuously adapted risk policies in order to stay on track in a constantly changing environment. ABE 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 Europe. 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 2016, AXA Bank Europe 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 2017, as well as a number of qualitative recommendations with which the bank will have to comply in the future.

The bank's credit risk dropped further in 2016 with the realisation of the sale of its Hungarian branch. All retail activities in Hungary were transferred to OTP Bank in the last quarter of 2016. The official closure of the branch in Hungary is planned for 2017.

The Belgian mortgage market continued to suffer from a high degree of refinancing in 2016 as a result of low interest rates. AXA Bank Europe 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 Europe 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 2016 with entities in the AXA Group, the balance on AXA Bank Europe off-balance remained relatively stable due to the usual practice of compression in derivatives, mostly to LCH (central counterparty). In addition, fewer derivatives were needed to cover the interest rate risk in the bond portfolio since the portfolio has been significantly reduced.

The liquidity position of AXA Bank Europe remained at a comfortable level in 2016.

The bank's solvency position remains high, benefiting from derisking and a prudent credit underwriting strategy. The balance sheet total has dropped further in part due to a

significant decrease in our investment portfolio, resulting in a positive impact on our leverage ratio.

AXA Bank Europe has further developed an internal stress testing program in 2016. This program describes the different stress test exercises, the risks that are stressed on a regular basis, the use and reporting of the stress test results. The program covers all material risks affecting AXA Bank Europe and performs different types of stress testing (per risk, based on scenarios, reverse stress testing).

## **2.2.2 Risk Appetite**

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

In 2016, AXA Bank Europe has developed this so-called RAF further into a strategic tool. A strategic risk appetite was 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, summarized in the 'risk dashboard'. This includes both regulatory and internal indicators. Different levels of severity are defined for each indicator, so management is warned in good time 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 monthly, and quarterly to the Board of Directors. These risks are also followed up in more detail by the relevant AXA Bank Europe risk committees.

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 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 Europe risk objectives. The management of AXA Bank Europe imposes a limit on the total economic capital applied so as to ensure the bank has sufficient financial resources at all times. ABE's risk appetite framework must set the appropriate governance, reporting requirements, limits, controls and decision processes to drive management decisions.

ABE'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 member of the Management Board in order to, if needed, take corrective actions.

### **2.2.3 SREP Stress testing**

In 2016 AXA Bank Europe was submitted to SREP stress test exercise (SREP = 'Supervisory Review and Evaluation Process') of the European Central Bank (ECB). AXA Bank Europe wasn't part of the group of banks selected by the European Banking Authority (EBA) whose results were made public at the end of July, but of the group whose resilience was tested as input for the SREP exercise. Firstly, the quantitative results of the stress test were used as input to determine the ECB Pillar 2 capital guidelines (P2G), while the qualitative aspects were invoked to determine the Pillar 2 capital requirements. The qualitative aspects not only include an assessment of the extent to which AXA Bank Europe manages to deliver the required information in a timely manner, but also an assessment of the notion held by AXA Bank Europe of the risks contained in its business model.

The 2016 stress test was more extensive than the exercise of 2014 because the operational risk and CVA risk were also taken into account, among others. The solvency ratios were significantly higher than the results of the 2014 stress test, and there were two reasons for this. The test date was set at the end of 2015. At that time, the important risk mitigation measures were already fully implemented and there were no ABS or MBS present on the balance sheet any more. In addition, the solvency ratios at the end of 2015 – the starting point for the exercise – were significantly higher than in the previous stress test in 2014. Most important, the exercise confirmed the sources of AXA Bank Europe's vulnerabilities. AXA Bank Europe's main risk exposure concerns possible fluctuations in interest rates and government spreads that have an immediate impact due to the size of its investment portfolio. It should however be noted that the investment portfolio has already been reduced by more than a third since the end of 2015. The second biggest risk factor concerns the retail credit risk due to the concentration of mortgage loans and therefore, de facto, the exposure to risks from the residential real estate market. In addition, the stress test confirmed the bank's exposure to interest rate fluctuations, which could lead to a decrease in net-interest revenue in the income statement.

The SREP stress test not only allowed AXA Bank Europe to correctly estimate the risks contained in its business model, but also provided valuable material to improve its own internal stress test framework.

This internal framework will be further discussed in paragraph 2.2.4.2.

## 2.2.4 Risk management framework

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

### 2.2.4.1 *Risk Assessment Process*

Risks must be identified before they can be analysed, assessed/measured and mitigated. ABE's **risk identification** is performed once a year with the review of ABE'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, the enquiry into unexpected losses, audit review or comments received from the regulator.

Simultaneously to 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 ABE'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 organisation. 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.

### 2.2.4.2 *Stress testing framework and program*

Stress testing forms an integral part of ABE'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

ABE 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.

ABE 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 ABE'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 programme, 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.

#### 2.2.4.3 *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 ABE own internal audit. An internal Validation Team is also in place to control the models developed for assessing or quantifying the risks.

In addition to these reviews, AXA Bank Europe 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 ABE 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.

## 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, ABE 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<sup>4</sup> and the scope of the risks that are covered<sup>5</sup>.

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 organisation.

### 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

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<sup>4</sup> Under Pillar 1, the methods are defined by the regulator whilst the methods are defined by ABE under Pillar 2.

<sup>5</sup> Only three risks are covered under Pillar 1, whilst all material risks must be covered under Pillar 2.

Requirements Directive' (CRD IV). The CRR/CRD IV was gradually introduced since 1 January 2014 and will be fully in force in 2019.

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

Besides the minimum own funds requirements of the CRR, AXA Bank Europe 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. In times of an economic boom, this can be up to 2.5%. 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 applied to the bank in 2016.

AXA Bank Europe 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.

The Belgian regulator has appointed AXA Bank Europe 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 0.25% was imposed on AXA Bank Europe in 2016, which will be increased by 0.25% in 2017 and again in 2018.

In addition to the Basel III capital requirements, AXA Bank Europe must also comply with the solvency ratio of Basel I and this until December 2017. 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.

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

### **3.3 Own Funds**

The own funds for solvency requirements is slightly different from the equity in accounting.

The accounting core capital will be adjusted with:

- prudential filters, which exclude certain items of own funds, such as changes in the value of own credit risk and additional value adjustments in the context of prudent valuation;
- and other deductions, such as intangible fixed assets, the deferred tax assets which are based on future profitability, deficits in terms of provision of 'Internal Rating Based approach' (IRB). When the IRB approach is applied to calculate the credit risk, banks are required to compare their actual provisions with their expected losses. Any shortfall should be deducted from Tier 1 while an excess will be eligible for inclusion in Tier 2 capital subject to a cap.

The reconciliation of the accounting equity based on IFRS with the own funds for solvency requirements can be seen in the table below.

<b>COMPOSITION OF USEFUL CAPITAL</b>	<b>31/12/2016</b>	<b>31/12/2015</b>
( in '000 Eur)		
Paid in capital instruments	681.318	681.318
Reserves (including retained earnings)	266.141	239.864
Result of the current year	95.335	27.228
Other reserves	1.125	1.120
Accumulated other comprehensive income	47.915	134.175
<b>ACCOUNTING CORE TIER 1 CAPITAL</b>	<b>1.091.835</b>	<b>1.083.706</b>
Prudential filters	(26.221)	(13.266)
<i>Value adjustment of own credit risk</i>	<i>(18.672)</i>	<i>(11.503)</i>
<i>Value adjustment of prudent valuation</i>	<i>(7.550)</i>	<i>(1.763)</i>
Deductions of Core Tier 1 capital	(71.919)	(180.088)
<i>Regulatory adjustments accumulated other comprehensive income</i>	<i>(35.518)</i>	<i>(137.814)</i>
<i>Intangible fixed assets</i>	<i>(8.537)</i>	<i>(6.885)</i>
<i>Deferred tax assets that rely on future profitability</i>	<i>(11.073)</i>	<i>(13.584)</i>
<i>IRB provision shortfall</i>	<i>(16.791)</i>	<i>(21.806)</i>
<b>USEFUL CAPITAL CORE TIER 1 (CET1)</b>	<b>993.695</b>	<b>890.352</b>

Table 3: CET1

The CET1 amounts to EUR 993,7 million in 2016 versus EUR 890,3 million in 2015.

AXA Bank Europe is allowed to include the consolidated net profit for 2016 (EUR 95,3 million) in the core Tier 1 capital. The evolution of CET1 is further determined by the movements in accumulated other comprehensive income and the value adjustments.

The total own funds for solvency requirements include:

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

<b>TOTAL OWN FUNDS FOR SOLVENCY REQUIREMENTS</b>	<b>31/12/2016</b>	<b>31/12/2015</b>
<b>Core Tier 1 capital</b>	<b>993.695</b>	<b>890.352</b>
<b>Additional Tier 1 capital</b>	<b>90.000</b>	<b>90.000</b>
<b>TIER 1</b>	<b>1.083.695</b>	<b>980.352</b>
<b>TIER 2</b>	<b>21.202</b>	<b>57.781</b>
Subordinated debts	11.636	31.116
Perpetual subordinated debts	9.566	26.665
	<i>Perpetuals</i>	<i>15.943</i>
	<i>perpetuals phase out</i>	<i>38.093</i>
		<i>(6.377)</i>
		<i>(11.428)</i>
<b>TOTAL OWN FUNDS FOR SOLVENCY REQUIREMENTS</b>	<b>1.104.897</b>	<b>1.038.133</b>

Table 4: Total Capital

The total own funds evolves from EUR 1.038,1 million in 2015 to EUR 1.104,9 million in 2016.

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

ABE published a set of disclosure templates in order to ensure the uniform application of Regulation (EU) No 575/2013.

These disclosure templates can be found in Annex 1 of this document.

## 3.4 Capital Requirements

### 3.4.1 Regulatory capital requirements

ABE measures its regulatory capital requirements using the following methods:

	Risk Category	Regulatory Capital Method
Credit Risk	Retail Credit Risk - Belgium (Mortgages, Consumer & Professional loans)	Internal Rating Based Approach
	Retail Credit Risk - Belgium (Other loans)	Standardized Approach
	Retail Credit Risk - Hungary	Standardized Approach
	Non-Retail Credit Risk - Securitization (Residential Mortgage Backed Securities)	Internal Rating Based Approach
	Non-Retail Credit Risk - Securitization (Not Residential Mortgage Backed Securities)	Standardized Approach
	Non-Retail Credit Risk - (Governments, Financial, Institutions, Corporates)	Standardized Approach
	Non-Retail Credit Risk - Counterparty	Standardized Approach
Market Risk	Market Risk Trading Book (Non-structural interest rate and FX risks, credit spread risk)	Standardized Approach
Operational Risk		Basic Indicator Approach

Figure 1: Regulatory capital methods

Pillar 1 minimum regulatory capital requirements calculation methods are defined specifically in the regulation. In most cases the Standardized Approach (SA) or Basic Indicator Approach (BIA) for operational risk, is used by the bank. The Internal Rating Based Approach (IRB) is only applied for the Belgian retail activity.

ABE doesn't hold any securitisation exposure anymore except its own securitisations (Retain RMBS) where the look through approach is used, meaning that the bank considers the mortgages instead of the Residential Mortgage Backed Securities.

The regulatory requirements are based on the concept of Risk Weighted Assets (RWA). The RWA for ABE under the Basel III rules amounted to EUR 4.692,2 million on December 2016.

The table below shows the RWA and the capital requirements according to Basel III pillar 1.

in Eur Million	RWA	RWA	Minimum Capital Requirements
	31/12/2016	31/12/2015	31/12/2016
<b>RISK WEIGHTED EXPOSURE AMOUNTS FOR CREDIT, COUNTERPARTY CREDIT</b>	<b>2.908,1</b>	<b>3.187,5</b>	<b>232,6</b>
<b>Standardised Approach (SA)</b>	<b>849,7</b>	<b>1.154,8</b>	<b>68,0</b>
Central governments or central banks	30,3	-	2,4
Institutions	252,4	187,7	20,2
Corporates	251,0	310,7	20,1
Retail	83,8	83,1	6,7
Secured by mortgages on immovable property	40,2	271,1	3,2
Exposures in default	4,5	133,8	0,4
Items associated with particular high risk	11,6	10,1	0,9
Covered bonds	23,1	23,2	1,8
Other items	152,8	135,1	12,2
<b>Internal ratings based Approach (IRB)</b>	<b>2.057,6</b>	<b>2.025,1</b>	<b>164,6</b>
Retail - Secured by real estate SME	149,1	77,2	11,9
Retail - Secured by real estate non-SME	1.509,3	1.547,0	120,7
Retail - Other SME	54,7	26,8	4,4
Retail - Other non-SME	344,5	374,3	27,6
<b>Risk exposure amount for contributions to the default fund of a CCP</b>	<b>0,8</b>	<b>7,6</b>	<b>0,1</b>
<b>TOTAL RISK EXPOSURE AMOUNT FOR POSITION, FOREIGN EXCHANGE AND COMMODITIES RISKS</b>	<b>135,6</b>	<b>111,6</b>	<b>10,8</b>
<b>under standardised approaches (SA)</b>	<b>135,6</b>	<b>111,6</b>	<b>10,8</b>
Traded debt instruments	135,6	90,2	10,8
Foreign Exchange	-	21,5	-
<b>TOTAL RISK EXPOSURE AMOUNT FOR OPERATIONAL RISK (OpR )</b>	<b>736,4</b>	<b>731,9</b>	<b>58,9</b>
OpR Basic indicator Approach (BIA)	736,4	731,9	58,9
<b>TOTAL RISK EXPOSURE AMOUNT FOR CREDIT VALUATION ADJUSTMENT</b>	<b>86,7</b>	<b>98,1</b>	<b>6,9</b>
Standardised method	86,7	98,1	6,9
<b>TOTAL RISK EXPOSURE AMOUNT RELATED TO LARGE EXPOSURES IN THE TRADING BOOK</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>OTHER RISK EXPOSURE AMOUNTS</b>	<b>825,4</b>	<b>761,9</b>	<b>66,0</b>
Of which: Additional stricter prudential requirements based on Art 458			
Of which: due to modified risk weights for targeting asset bubbles in the residential and commercial property	825,4	761,9	66,0
<b>Total Risk Pillar 1</b>	<b>4.692,2</b>	<b>4.891,0</b>	<b>375,4</b>

Table 5: Risk 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<sup>6</sup>, 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.

The decrease in RWA from EUR 4.891 million in 2015 to EUR 4.692,2 million in 2016 is mainly driven by the credit risk in the Standardized Approach due to the closing of the Hungarian branch.

<sup>6</sup> This law, published on 8/12/2013 and applicable as of 31/12/2013 results in an additional own fund requirement for ABE's mortgage portfolio.

### 3.4.2 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, ABE'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. ABE's correlation matrix aims at estimating correlations between business lines as well as correlations between risk types.

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

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

	Risk Category	Economic Capital Method
Credit Risk	Retail Credit Risk - Belgium (Mortgages, Consumer & Professional loans)	Asymptotic Single Risk Factor model
	Retail Credit Risk - Belgium (Other loans)	Standardized Approach
	Retail Credit Risk - Hungary	Compounded V@R (Direct credit risk (V@R) + Indirect credit risk (Stress scenario))
	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 risk and basis risk)	Monte Carlo VAR
Operational Risk		Monte Carlo VAR

Figure 2: Economic capital methods



## 3.5 Capital Adequacy

### 3.5.1 ABE's capital adequacy objectives

ABE'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)**  
ABE's main Pillar 2 objective is to remain sufficiently capitalized 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<sup>7</sup>. This obligation is above AXA SA's Head Office requirement (99.5%).

### 3.5.2 Regulatory capital Adequacy

AXA Bank Europe shows high solvency further strengthened over 2016 thanks to its derisking strategy and a prudent credit underwriting strategy.

All solvency ratios improved over the year. As per 31 December 2016, AXA Bank Europe's Tier 1 ratio stands at 23.1% (20.0% in 2015) and total capital ratio at 23.5% (21.2% in 2015).

These ratios significantly exceed the regulatory requirements. These same ratios fully loaded, i.e. calculated as if Basel III were already in full force, amounted to 23.7% and 23.9% respectively (22.4% and 23.1% in 2015), demonstrating that the bank has anticipated the implementation of Basel III.

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<sup>7</sup> Important to note: The standard time horizon that ABE 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 EUR million)	31/12/2016	31/12/2015
CET1	993,7	890,4
TIER 1	1083,7	980,4
TOTAL CAPITAL	1104,9	1038,1
RISK WEIGHTED ASSETS	4692,2	4891,0
CET1 ratio	21,2%	18,2%
T1 ratio	23,1%	20,0%
Capital ratio	23,5%	21,2%
Fully loaded CET1 ratio	21,8%	20,6%
Fully loaded T1 ratio	23,7%	22,4%
Fully loaded total capital ratio	23,9%	23,1%

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

As stated in the Basel III text, the required capital is subject to the Basel I floor<sup>8</sup> until 2017. ABE'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 12.7% in Dec 2016 ABE is well above the minimum requirement of 8%.

Regulatory capital ( in EUR million)	31/12/2016	31/12/2015
Required capital (BI floor)	709,3	693,9
CRD ratio ( BI floor)	12,7%	12,2%

Table 7: ABE's Basel I floor at consolidated level

### 3.5.3 Countercyclical Capital buffer

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

In the table below, the geographical distribution of the bank's credit exposures relevant for the CCB calculation for December 2016 is shown.

<sup>8</sup> Basel I floor is defined as : 80% \* Basel I Risk weighted assets

Country	Total relevant exposures ( in € M)	% of total
BE	19.409,4	97,63%
FR	176,5	0,89%
CH	76,0	0,38%
NL	48,3	0,24%
LU	36,2	0,18%
US	34,7	0,17%
JP	33,9	0,17%
IE	14,6	0,07%
DE	6,9	0,03%
GB	6,5	0,03%
HK	4,0	0,02%
SE	0,3	0,00%
NO	0,0	0,00%
Rest of the world	32,8	0,17%

Table 8: CCB country breakdown

Almost 98% of total exposure 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 2016.

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

Date as of 31/12/2016	CCB
Total risk exposure amount ( in Eur Million)	4.692,20
Institution specific countercyclical buffer rate	0,00%
Institution specific countercyclical buffer requirement	-

Table 9: CCB rate

Details can be found in a template in annex 2 in the document.

### 3.5.4 Economic Capital Adequacy

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

Economic capital ( in Eur million)	Dec-16	Dec-15
Total Economic Capital Consumption	331,6	490,9
Available Capital	1.104,9	1.038,1
Capital excess	773,3	547,3

Table 10: Capital Consumption

The available capital in 2016 largely exceeds the consumed economic capital after diversification.

The evolution in economic capital consumption in 2016 is mainly driven by disappearance of the Hungarian portfolio and the lower Interest Rate Risk.

Figure 3 illustrates the different components of ABE's economic capital buffer

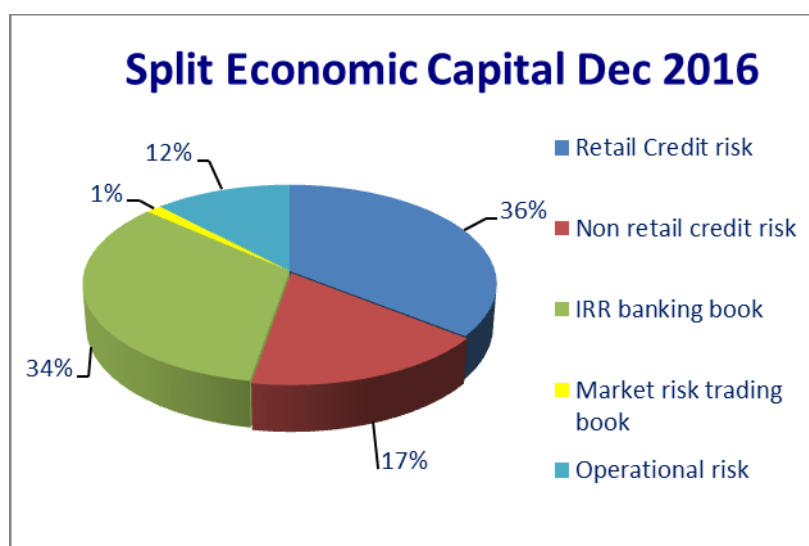


Figure 3: ABE's Capital Consumption

ABE's economic capital covers 5 types of risks.

The most important one is the economic capital for Retail Credit (36%). This relatively low consumption for a portfolio of EUR 18 billion of loans underlines the good quality of the portfolio.

The Interest Rate Risk of the Banking book consumes 34% of the Bank's total economic capital. It covers the interest rate risk which is inherent in the Bank's retail activities.

Then, the non-retail credit risk accounts for 17% 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.

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

## 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 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 be binding on 1 January 2018 but 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 significant reduction of the bond portfolio, also taking the opportunity of the low interest rates throughout 2016 and the closing of the Hungarian activity. As a consequence, the bank's leverage ratio according to current CRR legislation ('Delegated Act') has significantly improved in 2016 to 4.1% at the end of December 2016 (3.4% in 2015) or 4.2% (3.8% in 2015) 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 collateralized by cash or high quality bonds.

The different Leverage ratio components at consolidated level can be found in table 11.

<b>Leverage Ratio Components (in EUR millions )</b>	<b>31/12/2016</b>	<b>31/12/2015</b>
Total Derivatives	661,8	568,0
Total repos	977,5	1.043,0
Total other assets	24.557,7	26.942,4
<b>Total on balance</b>	<b>26.197,0</b>	<b>28.553,3</b>
Total off balance	334,2	288,7
Deducted from T1 fully-fledged	-43,8	-64,4
Deducted from T1 transitional	-71,9	-181,9
<b>Total exposure fully-fledged</b>	<b>26.487,4</b>	<b>28.777,7</b>
<b>Total exposure transitional</b>	<b>26.459,3</b>	<b>28.660,2</b>
T1 capital fully-fledged	1.111,8	1.097,8
T1 capital transitional	1.083,7	980,4
<b>Leverage Ratio fully-fledged</b>	<b>4,20%</b>	<b>3,81%</b>
<b>Leverage Ratio transitional</b>	<b>4,10%</b>	<b>3,42%</b>

Table 11: leverage ratio components at consolidated level

More information on the leverage can be found in the template 3 in annex of this document.

## 5 Credit risk

ABE defines credit risk as the negative consequences associated with the default<sup>9</sup> or deterioration in credit quality<sup>10</sup> 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 ABE, credit risks are categorized as either retail credit risks or non-retail credit risks and managed accordingly.

#### 5.1.1 Retail credit risk

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

As per February 2<sup>nd</sup> 2016, AXA Bank Europe signed a business transfer agreement for the sale of its Hungarian branch with OTP Bank. The Hungarian branch was sold in October 2016. With the sales agreement for these activities, the credit risk relating to this portfolio disappeared in 2016.

The management of ABE's retail credit risk is formalized by a Retail Risk Management Charter. It sets the organization, risk appetite framework, product approval processes and modelling requirements that must be followed internally to mitigate ABE'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.

##### 5.1.1.1 Governance

The governance of ABE's retail credit risk management can be summarized as follows:

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

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<sup>9</sup> Counterparty not able to fulfil contractually agreed financial obligations.

<sup>10</sup> Potential loss due to change in the fair value of credit exposures as a result of rating transitions of counterparties.

- **ABE's Retail Risk Committee** oversees the bank's credit strategies defined by ABE's Board of Directors and instructed and implemented by ABE'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 ABE'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), **ABE's Risk Management** department assumes the responsibilities described in chapter 2.1 ABE'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 prevent 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. One can get a good understanding of the risk-evolutions because of these and other extensive reports by Risk Management on risk factors in the Belgian retail loan portfolio.

The risks on ABE'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 in 2015 a risk-adjusted return on capital (RAROC) framework for mortgage lending activity. In 2016, the RAROC framework was extended to the professional and consumer lending activities. This RAROC framework has become an essential element in the profitability analysis of the retail activities.

An essential part of the credit risk policy is formed by the Bank Collection Department. The department adopts measures to minimize the bank's risk depending on the nature and



severity of the problem. Moreover, the department determines the amount of monthly provisions to make for write-downs.

In compliance with regulatory expectations, ABE 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 Risk mitigation techniques

ABE defines in its credit policies the need to establish collaterals to mitigate the credit risk.

#### 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.

#### Main types of collateral received

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

**(i) 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).

**(ii) 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 Europe appears below.

Tangible collaterals:

- 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

Personal or moral guarantees

- Security
- Mortgage mandate
- Irrevocable commitment by a third party

**(iii) 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

## 5.1.2 Non retail credit risk

Besides retail related credit risk, ABE 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, ABE 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, ABE 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, ABE provides the insurance entity in Belgium with liquidity via standardized money market transactions (reverse repos).

### **5.1.2.1 Governance**

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

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

**ABE'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 Europe Board of Directors.

It meets on a monthly basis and its members are the CRO, CEO, Deputy CEO/CFO, the Head of European Treasury & Intermediation and Head of non-retail Risks management and relevant specialists from the ABE 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 ABE's intermediation activity. It takes decisions regarding the issuer's eligibility concerning proposed investments and disinvestments.

**ABE's Impairment Committee** receives a delegation from ABE's Management Board to set appropriate provisions with regards to ABE's non-retail credit exposures.

**ABE'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 ABE's non-retail credit risk mitigation measures.

As a monitoring & control function (independent from the business lines), ABE'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 ABE'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 Europe 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 ABE'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 ABE limits itself almost exclusively to assets of the highest liquidity class as defined by Basel III.
- 2) Adequacy of securities for calculation of the solvency ratio, where ABE limits itself almost exclusively to assets of 0% risk weight as defined by Basel III.
- 3) Adherence to AXA Group limits and ABE's own concentration limits

As for the derivatives and repo activities, it is ABE'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 central counterparty fits in this strategy as well. Counterparties need to be approved by AXA Group as well.

### **Reporting and measurement systems**

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

#### **(i) Regulatory measurement and reporting**

ABE 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 ABE's regulator. ABE measures its minimum regulatory requirements for non-retail credit risk in the Standardized Approach (SA) on a quarterly basis.

#### **(ii) Internal measurement and reporting**

Besides the regulatory measures, ABE 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 the Board of Directors on a quarterly basis. It also forms the basis of the counterparty credit limit framework for derivatives and repo counterparties.

Besides being followed locally, credit and concentration risks are also supervised at the AXA Group level. AXA Bank Europe 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.

### **5.1.2.3 Policies for hedging and risk mitigation**

ABE 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.

- **Netting**

In the contractual documentation with all of its counterparties, ABE 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 ABE applies, is recognized from a regulatory perspective and we consider it to be sufficient as a risk mitigant on all counterparties.

- **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, ABE has foreseen in the exchange of collateral in the contracts with its counterparties. It is ABE’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 ABE’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 ABE’s liquidity.

ABE does have a limited number of cases which divert from the above principles: one collateral agreement allows for a threshold and one collateral agreement has a daily exposure monitoring but only weekly exchange of collateral as long as the exposure remains below a certain level.

ABE’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

ABE 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 ABE 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.

#### *5.1.2.4 Policies establishing credit reserves*

The Impairment Committee meets on a semi-annual basis and reviews the non-retail portfolio for any positions that require establishing credit reserves. Based on a number of parameters a first review is conducted, which may trigger a more in depth review by Risk Management. The result of the analysis is then presented to the committee with a proposal for impairment and/or the establishment of credit reserves.

## 5.2 Credit Risk Exposure

### 5.2.1 Overview

- Breakdown credit risk exposure by Approach and Exposure class

Data as of 31/12/2016 ( in Eur Million)	Net Exposure Value	Average net exposure value over the period
<b>CREDIT, COUNTERPARTY CREDIT RISK</b>	<b>25.638</b>	<b>27.030</b>
<b>Standardised approach (SA)</b>	<b>6.796</b>	<b>8.724</b>
Central governments or central banks	3.231	4.236
Regional governments or local authorities	0	0
Public sector entities	208	227
Multilateral Development Banks	360	427
International Organisations	810	1.113
Institutions	1.019	1.069
Corporates	350	384
<i>of which SME</i>	61	58
Retail	249	251
<i>of which SME</i>	18	19
Secured by mortgages on immovable property	114	522
<i>of which SME</i>	3	4
Exposures in default	4	40
Items associated with particular high risk	8	8
Covered bonds	231	233
Claims on institutions and corporates with a short-term credit assessment	0	0
Collective investments undertakings (CIU)	0	0
Equity	0	0
Other items	212	213
<b>Internal ratings based Approach (IRB)</b>	<b>18.838</b>	<b>18.299</b>
Retail - Secured by real estate SME	840	819
Retail - Secured by real estate non-SME	16.538	16.018
Retail - Other SME	354	347
Retail - Other non-SME	1.107	1.116
<b>Risk exposure amount for contributions to the default fund of a CCP</b>	<b>4</b>	<b>6</b>

Table 12: Net exposure value

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 based on Art 308 of the CCR.

- Geographical breakdown of all credit risk exposures by country

Data as of 31/12/2016 ( in Eur Million)	Net Exposure Value							Total
	BE	FR	LU	NL	IT	GB	Other	
<b>Standardised approach (SA)</b>	<b>2.489</b>	<b>1.259</b>	<b>1.171</b>	<b>644</b>	<b>332</b>	<b>322</b>	<b>580</b>	<b>6.797</b>
Central governments or central banks	1.610	351	0	605	332	0	333	3.231
Public sector entities	0	208	0	0	0	0	0	208
Multilateral Development Banks	0	0	360	0	0	0	0	360
International Organisations	0	0	810	0	0	0	0	810
Institutions	46	549	0	1	0	322	101	1.019
Corporates	82	122	1	0	0	0	145	350
Retail	247	1	0	0	0	0	1	249
Secured by mortgages on immovable property	114	0	0	0	0	0	0	114
Exposures in default	4	0	0	0	0	0	0	4
Items associated with particular high risk	8	0	0	0	0	0	0	8
Covered bonds	166	27	0	38	0	0	0	231
Other items	212	0	0	0	0	0	0	212
<b>Internal ratings based Approach (IRB)</b>	<b>18.702</b>	<b>27</b>	<b>35</b>	<b>10</b>	<b>3</b>	<b>6</b>	<b>55</b>	<b>18.838</b>
Retail - Secured by real estate SME	840	0	0	0	0	0	0	840
Retail - Secured by real estate non-SME	16.411	23	32	9	2	6	54	16.538
Retail - Other SME	354	0	0	0	0	0	0	354
Retail - Other non-SME	1.097	4	3	1	0	0	1	1.107

Table 13: Geographical distribution of exposures<sup>11</sup>

- Breakdown of the credit risk exposure by business line retail and non retail

Data as of 31/12/2016 ( in Eur Million)	Net Exposure Value	Exposure at default (EAD)	Of which		
			Retail	Non retail	Other
<b>Standardised approach (SA)</b>	<b>6.796</b>	<b>6.647</b>	<b>165</b>	<b>5.445</b>	<b>1.037</b>
Central governments or central banks	3.231	3.231	0	2.653	578
Public sector entities	208	208	0	208	0
Multilateral Development Banks	360	360	0	360	0
International Organisations	810	810	0	810	0
Institutions	1.019	1.011	7	905	99
Corporates	350	343	67	272	4
Retail	249	115	84	0	31
Secured by mortgages on immovable property	114	114	4	0	110
Exposures in default	4	4	3	0	1
Items associated with particular high risk	8	8	0	7	1
Covered bonds	231	231	0	231	0
Other items	212	212	0	0	212
<b>Internal ratings based Approach (IRB)</b>	<b>18.838</b>	<b>18.853</b>	<b>18.853</b>	<b>0</b>	<b>0</b>
Retail - Secured by real estate SME	840	843	843		
Retail - Secured by real estate non-SME	16.538	16.503	16.503		
Retail - Other SME	354	368	368		
Retail - Other non-SME	1.107	1.139	1.139		

Table 14: Credit risk exposure by business line

<sup>11</sup> Geographical distribution is based on the residence of the obligor



## 5.2.2 Retail credit Risk

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.

As it can be seen in the table below, 99% of the portfolio is calculated according to IRB.

Date as of 31/12/2016 (in Eur million)	EAD		
	STA	IRB	Total
<b>By product</b>			
Mortgage loans	6	16.553	16.558
Consumer loans	0	826	826
Professional loans	97	1.475	1.572
Other loans	62	0	62
<b>Total retail</b>	<b>165</b>	<b>18.853</b>	<b>19.018</b>

Table 15: Retail portfolio

The Exposure at Default (EAD) is the outstanding amount at default time. It is the sum of the exposure of the day of default and the sum of the additional drawings:

- The exposure of the day of default is the outstanding amount when the default is recorded. It contains the drawn capital and the interest not paid (on the drawn capital and the reservation interests on the undrawn capital).
- The additional drawings contain the capital drawn between the day of default and the last observed situation of default. The delinquent situation ends up in two different cases: back to normal or end of credit.

### 5.2.2.1 Portfolio

The Belgian loan portfolio consists mainly of mortgages, consumer loans and professional loans, with mortgage loans representing the most important share. (+/-87% of the credit portfolio at EAD). Given the good collateral coverage and low probability of default of this loan portfolio, the risk profile of the total credit portfolio is low.

The mortgage portfolio has risen strongly in 2016 by more than EUR 1 billion thanks to the high new production of mortgages which was of excellent quality, partially offset by a high volume of refinancing in the Belgian market.

For the consumer loan portfolio we noticed a decrease of EUR 15 million in 2016. The production was not sufficient to compensate for the natural erosion of the portfolio. This decrease was however lower than in 2015, where a decrease of EUR 64 million was observed.

In contrast to 2015, the professional loans portfolio has increased with EUR 51 million. This is in line with ABE's strategic initiatives to intensify the relationship in the professional segment.

### 5.2.2.2 Portfolio quality

In 2013 it was decided to implement a more selective acceptance policy and even today the consequences of that decision are still visible. In 2016 the new production was again characterized by a high quality and the entire credit portfolio showed an improved credit quality.

An overall decrease of the observed default rates<sup>12</sup> (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 12M default rate for mortgage loans decreased from 0.8% in Dec 2015 to 0.5% observed in Dec 2016. 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 when economic conditions remain unchanged.

The 12M default rate for loans to professionals and small businesses dropped from 1.9% observed in Dec 2015 to 1.7% in Dec 2016 reflecting the defensive approach of recent years.

Also for consumer loans a decrease in the 12M default rate is observed (from 1.3% in Dec 2015 to 1.2% in Dec 2016) thanks to a better risk selection and an evolution of the product mix to loans with a particular purpose.

### 5.2.2.3 Exposures

#### Exposures by industry/counterparty type

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<sup>12</sup> '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).

Date as of 31/12/2016 (in Eur million)		EAD	
		IRB	STD
<b>Other financial corporations</b>		<b>351</b>	<b>33</b>
<b>Non-financial corporations</b>		<b>928</b>	<b>52</b>
A	Agriculture, forestry and fishing	10	0
B	Mining and quarrying	0	0
C	Manufacturing	39	7
D	Electricity, gas, steam and air conditioning supply	1	0
E	Water supply; sewerage, waste management and remediation activities	1	0
F	Construction	148	4
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	149	9
H	Transportation and storage	20	4
I	Accommodation and food service activities	60	3
J	Information and communication	31	3
L	Real estate activities	147	9
M	Professional, scientific and technical activities	116	5
N	Administrative and support service activities	64	5
P	Education	1	0
Q	Human health and social work activities	108	3
R	Arts, entertainment and recreation	11	0
S	Other service activities	21	0
<b>Households</b>		<b>17.574</b>	<b>80</b>

Table 16: Exposure by industry/counterparty type

Obviously, ABE's retail portfolio is mainly concentrated towards households. These households are serviced by ABE by means of mortgage loans, consumer loans and credit facilities to current accounts. Furthermore, ABE has some exposure towards non-financial and financial corporations. These exposures correspond to our professional loan portfolio. A diverse mix of industry sectors are served by ABE. ABE'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.

## Residual maturity breakdown

Date as of 31/12/2016 (in Eur million)	EAD				
	By counterparty credit risk	On demand	≤ 1 year	> 1 year ≤ 5 years	> 5 years
Retail - Secured by real estate	6	58	458	15.853	128
Retail - Secured by real estate (SME)	23	8	90	715	7
Retail - other	22	42	585	484	6
Retail - other SME factor	39	12	157	157	3
<b>Total IRB</b>	<b>89</b>	<b>120</b>	<b>1.291</b>	<b>17.210</b>	<b>144</b>
Retail - Secured by real estate	0	0	0	0	0
Retail - Secured by real estate (SME)	0	0	0	3	0
Retail - other	61	4	0	4	0
Retail - other SME factor	2	5	0	8	0
Corporate	0	0	0	8	0
Corporate - SME factor	0	0	5	53	0
Institutions	2	0	0	5	0
Past due	3	0	0	0	0
<b>Total STD</b>	<b>68</b>	<b>10</b>	<b>5</b>	<b>81</b>	<b>1</b>

Table 17: Residual maturity breakdown

Approximately 91% of ABE's portfolio has a maturity of > 5 years. Since ABE's retail portfolio is mainly focused on mortgage loans, a high maturity is in line with expectations.

### 5.2.3 Non retail credit risk

The table below shows the total non-retail exposure broken down by product types.

Date as of 31/12/2016 (in Eur million)		EAD
<b>STANDARDIZED APPROACH</b>		
By product	Investment portfolio	4.297
	Derivatives	511
	Repo	52
	Other	578
	Equities	7
<b>Total non retail</b>		<b>5.445</b>

Table 18: Non retail exposure breakdown

*Note: The "Other" exposures mainly consist of a promissory note (EUR 450 million) issued by AXA Banque France secured by retail mortgage loans and a credit line drawn to AXA SA (EUR 122 million).*

In the following sections, the credit risk on derivatives, repos and the investment portfolio is discussed more into detail.

### 5.2.3.1 Investment portfolio

The book value of the investment portfolio (including non-realised capital gains and losses) dropped from EUR 7,4 billion at end of 2015 to EUR 4 billion in Dec 2016 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 ABE mainly consists of high quality government bonds (67%) and supra-national bonds (29%).

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

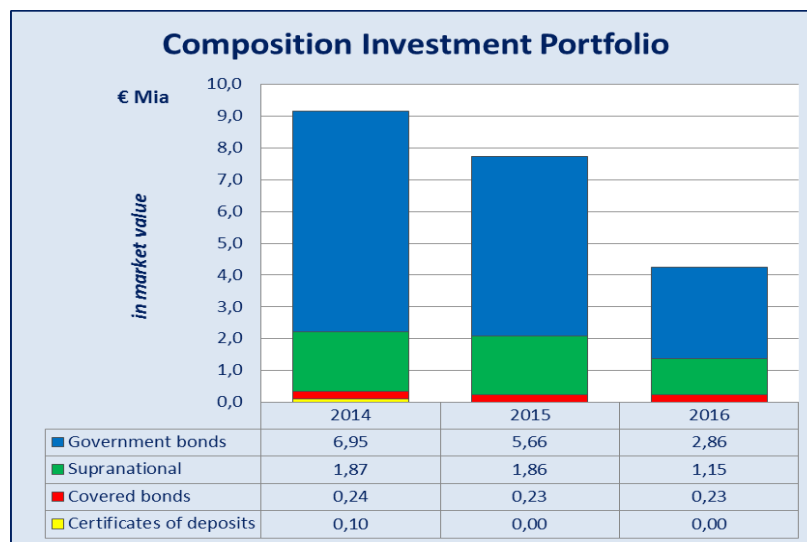


Figure 4: Investment portfolio

Moreover, the credit ratings and market price changes of positions of ABE 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. Geographically, the investment portfolio credit risk is limited to countries that are members of the European Union.

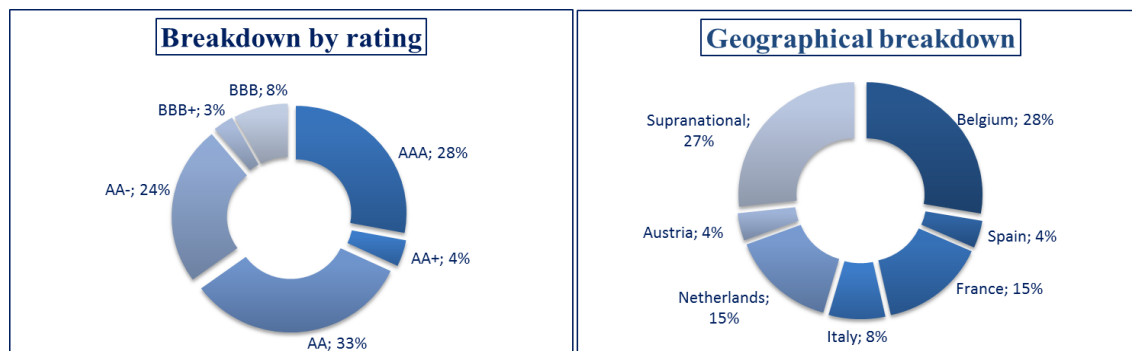


Figure 5: Breakdown of the government portfolio by rating and country (Dec 2016)

ABE maintained the close monitoring of its exposure to GIIPS countries. As several GIIPS government bonds matured in 2016 and were not reinvested in, the total exposure to these GIIPS countries dropped with EUR 72,7 million.

The exposure to Spain has decreased (from EUR 197 million to EUR 150 million), the exposure to Italy has remained stable and the exposure to Portugal (EUR 15 million end 2015) has disappeared. ABE's exposure is now limited to government bonds of Spain and Italy. The table below shows the market value (in '000') of the exposure to GIIPS countries on 31 December 2016.

Country	Instrument type	Market value 2015	Market value 2016	% Change
Spain	Government bonds	197.077	151.155	-23%
Italy	Government bonds	340.062	328.758	-3%
Portugal	Government bonds	15.491	0	-100%

Table 19: GIIPS

### 5.2.3.2 Counterparty credit risk of the dealing room activity

AXA Bank Europe 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 Europe 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 Europe provides liquidity to AXA Belgium (insurance company) via standardized money market transactions ('reverse repos') in which AXA Bank Europe buys high-quality government bonds and commits to sell these bonds again at a specific future date and price. The volume of this activity amounted to EUR 926 million end 2016, 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 Europe 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 collateralized on a daily basis with both market counterparties and AXA Group counterparties (exceptions to this policy are mentioned in chapter 5.1.2.3) Guarantees exchanged are limited to cash and high quality securities in order to ensure adequate limitation of credit exposures.

## Use of External Credit Assessment Institutions (ECAIs)

In terms of use of the ECAIs, ABE 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'. 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.

## 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.

### (i) Repo & reverse repo

On 31/12/2016 AXA Bank Europe traded with two counterparties for its (reverse) repo activity. AXA Belgium and LCH Clearnet Ltd, the ideal counterparty for these transactions. On the AXA Belgium side (reverse repo) there is no exposure at default as AXA Bank Europe receives sufficient collateral to cover the exposure on AXA Belgium. On LCH Clearnet side (repo) there is exposure (EUR 51,9 million) considering that LCH Clearnet requires additional collateral from all its members.

### (ii) 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 add positive and negative market values;
- 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 to the collateral that is given to a counterparty (if (a) is negative) or received from a counterparty (if (a) is positive). 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 of 31 December are displayed in the following table.

Date as of 31/12/2016 (in Eur million)	EAD Derivatives
<i>Exposure on bilateral counterparties</i>	
<b>Gross exposure</b>	<b>3.601</b>
<i>of which sum of positive market values</i>	2.960
<i>of which gross add-on<sup>1</sup></i>	641
<b>Neutralization of netting<sup>2</sup></b>	<b>-2.541</b>
<b>Net exposure</b>	<b>1.060</b>
<i>of which risk add-on</i>	259
<i>of which market value</i>	801
<b>mitigation collateral received<sup>3</sup></b>	<b>-804</b>
<b>Exposure from overcollateralization</b>	<b>54</b>
<b>Net exposure after collateral</b>	<b>310</b>
<i>Exposure on central clearing platform via clearing brokers</i>	
<b>Gross exposure</b>	<b>2.007</b>
<i>of which sum of positive market values</i>	1.857
<i>of which gross add-on<sup>1</sup></i>	151
<b>Neutralization of netting<sup>2</sup></b>	<b>-1.945</b>
<b>Net exposure</b>	<b>62</b>
<i>of which risk add-on</i>	21
<i>of which market value</i>	41
<b>mitigation collateral received<sup>3</sup></b>	<b>0</b>
<b>Exposure from overcollateralization</b>	<b>139</b>
<b>Net exposure after collateral</b>	<b>201</b>
<b>TOTAL EXPOSURE</b>	<b>511</b>

Table 20: EAD Derivatives

<sup>1</sup> This add-on is derived from the regulatory calculation of the negative evolution of the derivatives portfolio at a simultaneous default by all counterparties in stressed market conditions.

<sup>2</sup> This neutralization goes beyond the purely accounting netting

<sup>3</sup> All collateral received is eligible financial collateral

As AXA Bank Europe has very high standards regarding the quality of its counterparties, none of the (reverse) repos and derivatives is past due or impaired.



## Concentration risk

AXA Bank Europe 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. This exposure still remains significantly below the limit which indicates a low concentration risk.

### 5.2.3.3 Residual maturity per exposure class

#### **(i) Derivatives**

We show the split of residual maturity weighted by the notional of the derivative transactions as a proportion of the total notional of derivatives.

1Y	17%
2-5Y	25%
5-10Y	18%
10-15Y	13%
15-20Y	5%
20-30Y	10%
30-40Y	9%
40-50Y	3%

#### **(ii) (Reverse) Repo**

We show the split of residual maturity weighted by the notional of the (reverse) repo transactions as a proportion of the total notional of (reverse) repos.

1 month	58%
2-3 months	10%
4-6 months	18%
7-10 months	14%

#### **(iii) Fixed income**

We show the split of residual maturity weighted by the notional of the fixed income positions as a proportion of the total notional of the fixed income portfolio.

1Y	13%
2Y	8%
2-5Y	62%
5-10Y	15%
10-15Y	2%
15-17Y	1%

**(iv) Other**

We show the split of residual maturity weighted by the notional of the other exposure positions as a proportion of the total notional of the other exposures<sup>13</sup>.

<1 Y	Credit line AXA SA	21%
2-3Y	Promissory note ABF	79%

**5.2.3.4 Credit quality step per exposure class**

**(i) Derivatives**

We show the split per credit quality step as defined in the capital requirement regulation weighted by the notional of the derivative transactions as a proportion of the total notional of derivatives. The credit quality step is a function of the rating assigned to the counterparty. We show transactions with the CCP separately as they are treated differently in capital regulations as well.

1 <sup>st</sup> step	12%
2 <sup>nd</sup> step	53%
3 <sup>rd</sup> step	3%
CCP (RW of 2%)	32%

**(ii) (Reverse) Repo**

We show the split per credit quality step as defined in the capital requirement regulation weighted by the notional of the (reverse) repo transactions as a proportion of the total notional of (reverse) repos. The credit quality step is a function of the rating assigned to the counterparty. We show transactions with the CCP separately as they are treated differently in capital regulations as well.

1 <sup>st</sup> step	48%
CCP (RW of 2%)	52%

**(iii) Fixed income**

We show the split per credit quality step as defined in the capital requirement regulation weighted by the notional of the (reverse) repo transactions as a proportion of the total notional of (reverse) repos. The credit quality step is a function of the rating assigned to the counterparty.

1 <sup>st</sup> step	87%
3 <sup>rd</sup> step	13%

<sup>13</sup> Only the promissory note issued by AXA Banque France and the credit line to AXA SA is shown here. The rest of the "other" exposure category consists of share certificates to other ABE entities but are not shown due to insignificance of the amounts



**(iv) Other**

We show the split per credit quality step as defined in the capital requirement regulation weighted by the notional of the other exposure positions as a proportion of the total notional of the other exposures<sup>14</sup>. The credit quality step is a function of the rating assigned to the counterparty.

1 <sup>st</sup> step	Promissory note ABF	79%
2 <sup>nd</sup> step	Credit line AXA SA	21%

**5.2.3.5 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 collateralized by securities issued by the same counterparty. ABE mitigates this risk by only allowing cash collateral or government paper to collateralize its exposures.

General wrong way risk arises when general market factors influence the exposure and creditworthiness of counterparties. ABE 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 ABE, see section 5.1.2.

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<sup>14</sup> Only the promissory note issued by AXA Banque France and the credit line to AXA SA is shown here. The rest of the "other" exposure category consists of share certificates to other ABE entities but are not shown due to insignificance of the amounts.

## 5.3 Credit Risk adjustments

The scope of this chapter is limited to the retail loan portfolio.

### 5.3.1 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.

Date as of 31/12/2016 (in Eur million)	EAD	
	Total IRB	Total STD
<b>By days past due</b>		
≤ 30 days	18.470	161
> 30 days ≤ 60 days	142	1
> 60 days ≤ 90 days	50	0
> 90 days ≤ 180 days	35	0
> 180 days ≤ 1 year	31	0
> 1 year	125	2
<b>Total</b>	<b>18.853</b>	<b>165</b>

Table 21: Breakdown by days past due

### 5.3.2 Definition of Forbearance

Date as of 31/12/2016 (in Eur million)	EAD	
	Total IRB	Total STD
<b>By forbearance measures</b>		
<b>Defaulted exposures</b>	<b>338</b>	<b>3</b>
of which forborne	66	0
of which non-forborne	272	3
<b>Non-defaulted exposures</b>	<b>18.515</b>	<b>162</b>
of which forborne	147	3
of which non-forborne	18.368	159
<b>Total</b>	<b>18.853</b>	<b>165</b>

Table 22: Breakdown by forbearance measures

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.

With every decision on forbearance measures, also the PD has to be decided upon.

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 categorized for its entire amount and without taking into account the existence of any collateral.

### **5.3.3 Definition of Default**

In 2015, ABE implemented a new definition of default on our retail loan portfolio. AXA Bank Europe’s default definition is fully in line with the European Regulation (EU) No 575/2013 and other regulations of the EBA. AXA Bank Europe 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 Europe 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 categorized 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.

### 5.3.4 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.

Date as of 31/12/2016 (in Eur million)	EAD					
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustments	General credit risk adjustments	Accumulated write-offs	Net values
By counterparty credit risk						
Retail - Secured by real estate	248	16.255	33	3	21	16.445
Retail - Secured by real estate (SME)	24	820	5	0	3	835
Retail - other	52	1.086	32	4	22	1.081
Retail - other SME factor	14	354	11	0	10	347
<b>Total IRB</b>	<b>338</b>	<b>18.515</b>	<b>81</b>	<b>7</b>	<b>56</b>	<b>18.709</b>
Retail - Secured by real estate	0	1	0	0	0	1
Retail - Secured by real estate (SME)	0	3	0	0	0	3
Retail - other	0	69	0	0	0	69
Retail - other SME factor	0	15	0	0	0	15
Corporate	0	8	0	0	0	8
Corporate - SME factor	0	58	0	0	0	58
Institutions	0	7	0	0	0	7
Past due	3	0	6	0	5	-8
<b>Total STD</b>	<b>3</b>	<b>162</b>	<b>6</b>	<b>0</b>	<b>5</b>	<b>153</b>

Table 23: Credit risk adjustments

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

AXA Bank Europe 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 original actual 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 booked 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):

1. 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.
2. 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. Each impairment is booked individually per file.

The following rules apply to **instalment loans**:

1. 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.
2. 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:

1. 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.
2. 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.



## 5.4 Use of IRB approach to credit risk

The approval of the competent authority to use the IRB models was granted in 2008.

### 5.4.1.1 General

The Bank uses an advanced model based on internal ratings (IRBA) for its Belgian retail loans portfolio. Internal rating models are developed for this purpose. Apart from calculating requirements for minimum capital, they are also used for acceptance, retail credit management and calculating provisions (be it with another calibration).

These internal predictive models are developed in compliance with Basel's III Internal Rating Based Approach, which is mainly split in:

- Probability of default (PD) of retail credits (incl. acquisition and behavioural model)
- Loss given default (LGD)
- Exposure at default (EAD).

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

The risk-weighted volume for the credit risk on the Belgian retail credit portfolio is calculated according to the internal ratings based approach (IRB). At the end of 2013, the NBB decided to apply an additional risk weight of 5% on IRB loans secured by residential real estate for all Belgian banks using IRB models.

### 5.4.1.2 Control mechanisms for rating systems

#### **Validation**

The model validation covers all ABE's models: Pillar I, Pillar II and pricing models. Peripheral modelling activities such as risk aggregations, time horizon scaling, model's back testing, model's stress testing and model's calibration also fall into the scope of the model validation.

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.

The internal validation function is part of the Risk Reporting & Validation team directly reporting to the CRO of AXA Bank Europe. The model development of the IRB models is done by the Retail Risk team which is also reporting to the CRO. In order to safeguard independence of the internal validation function, it is crucial that model development and internal validation are two different reporting lines to the CRO.

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 validator abstains from participation during the model development process to ensure a complete independence. Only non-binding advice could be provided by the validator in order to ensure a quicker alignment with the modellers.

### **Back testing**

Quantitative back-tests are performed by the modelling team on a quarterly basis. Once a year, a qualitative part is added and the results of both the qualitative and the quantitative parts are commented: this is called the “yearly model review”.

Moreover, all back testing or stress testing of models should be validated independently, i.e. either by the internal validation or by external consultants.

### **Stress testing**

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 modest degree of comfort of the absolute level of capital.

## **5.4.2 Exposures using the IRB approach**

The main outcome of internal rating models is that each credit exposure ends up in a rating class. In ABE’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, we show how the credit portfolio was distributed over the 10 rating classes on EOY 2015 and EOY 2016. These distributions confirm that the overall quality of the portfolio improved as less exposure is situated to the higher rating classes (corresponding to a higher level of default risk).

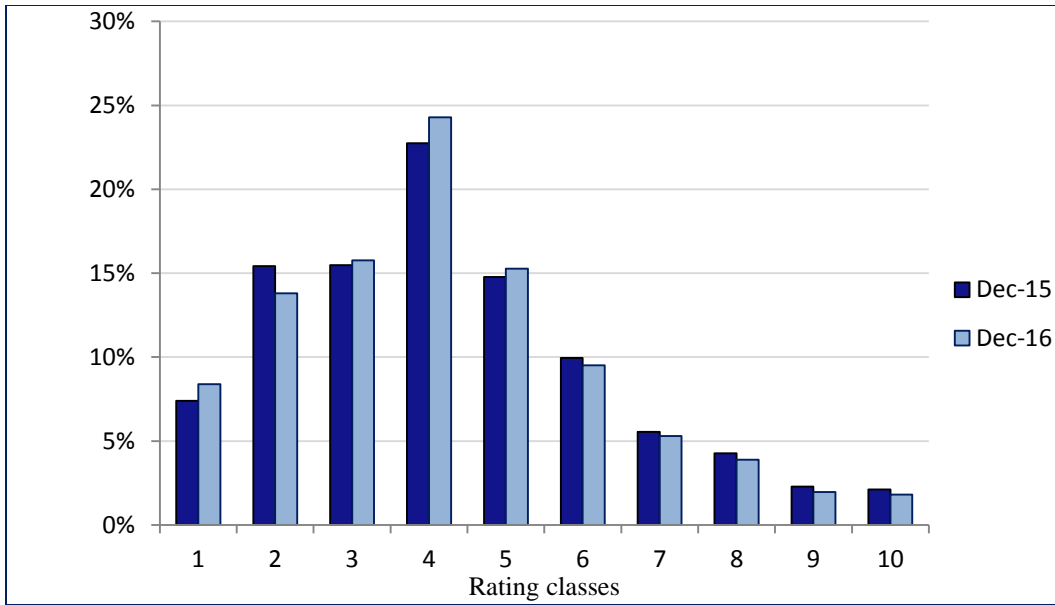


Figure 6: Rating class distribution of the retail portfolio

In the next table a more detailed view is given of how ABE’s retail portfolio is distributed over the 10 rating classes including information required for the calculation of risk-weights. In ABE’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.

Date as of 31/12/2016 (in Eur million)	Observations	Rating class	on balance exposure	off balance exposure	CCF	EAD	average LGD	RWA	EL	Provision
<b>By counterparty credit risk</b>										
<b>Retail - Secured by real estate</b>	29.029	1	1.431	10	92%	1.440	9%	16	0	0
	32.794	2	2.450	16	91%	2.465	9%	41	0	0
	34.481	3	2.748	31	93%	2.777	10%	68	0	0
	43.435	4	3.959	99	91%	4.050	10%	161	1	0
	26.329	5	2.261	160	92%	2.408	11%	187	1	0
	14.536	6	1.245	188	94%	1.422	12%	212	2	0
	8.571	7	699	126	91%	813	12%	214	2	0
	8.202	8	503	96	82%	582	12%	250	4	1
	3.793	9	289	9	78%	296	11%	197	8	2
	2.641	10	250	0	84%	250	15%	164	31	30
<b>Retail - Secured by real estate ( SME )</b>	812	1	54	4	104%	58	17%	1	0	0
	383	2	37	2	91%	38	18%	1	0	0
	733	3	49	3	105%	53	18%	2	0	0
	2.180	4	192	6	96%	198	17%	10	0	0
	1.626	5	140	7	98%	147	16%	13	0	0
	1.411	6	131	12	94%	142	16%	22	0	0
	621	7	63	12	95%	74	17%	21	0	0
	600	8	60	6	96%	65	16%	30	1	0
	412	9	39	3	100%	41	16%	31	2	0
	278	10	26	0	165%	26	19%	19	5	4
<b>Retail other</b>	4.307	1	60	0	102%	61	27%	2	0	0
	6.003	2	84	1	91%	85	30%	5	0	0
	8.627	3	118	4	100%	122	32%	10	0	0
	18.378	4	238	4	103%	242	37%	35	0	0
	20.832	5	251	10	105%	261	41%	70	0	0
	12.181	6	149	6	105%	156	41%	68	1	0
	5.606	7	73	3	95%	76	41%	43	1	0
	4.953	8	58	3	91%	60	43%	41	1	0
	2.299	9	23	0	85%	23	42%	24	2	1
	3.010	10	52	0	278%	52	47%	46	31	30
<b>Retail other SME factor</b>	885	1	18	4	114%	22	20%	0	0	0
	466	2	13	2	108%	15	22%	0	0	0
	711	3	18	3	114%	21	24%	1	0	0
	3.020	4	85	5	114%	90	21%	6	0	0
	2.172	5	56	6	113%	62	22%	7	0	0
	2.446	6	64	6	109%	71	22%	12	0	0
	1.202	7	31	3	106%	35	23%	9	0	0
	838	8	23	2	103%	25	23%	7	0	0
	670	9	10	1	108%	11	26%	5	1	0
	601	10	15	0	125%	15	47%	6	11	10
<b>Total</b>	<b>312.074</b>		<b>18.067</b>	<b>852</b>		<b>18.853</b>		<b>2.058</b>	<b>105</b>	<b>81</b>

Table 24: Breakdown of exposures measured by IRB Approach

The internal rating models are also used for the determination of the value adjustments/provisions of our credit portfolio. In Table 25 the evolution of the value adjustments/provisions of the credit portfolio are shown. 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 2015 – EOY 2016 the provision levels have decreased for the three loan portfolios. This is in line with the fact that all risk indicators indicate that the quality of the credit portfolio is continuously improving.

in Eur million		Date as of 31/12/2016			Date as of 31/12/2015		
IRB Portfolio	status	EAD	Provision	Prov %	EAD	Provision	Prov %
Consumer loans	performing	805	1	0,16%	816	1	0,18%
	non-performing	2	0	17%	3	0	17%
	non-performing (doubtful)	18	7	40%	25	10	41%
	<b>Total</b>	<b>826</b>	<b>9</b>	<b>1,09%</b>	<b>844</b>	<b>12</b>	<b>1,45%</b>
Professional loans	performing	1.424	2	0,15%	1.340	2	0,16%
	non-performing	18	2	10%	20	2	9%
	non-performing (doubtful)	33	19	58%	39	20	52%
	<b>Total</b>	<b>1.475</b>	<b>23</b>	<b>1,57%</b>	<b>1.399</b>	<b>24</b>	<b>1,74%</b>
Mortgage loans	performing	16.286	3	0,02%	15.043	5	0,03%
	non-performing	167	8	5%	173	11	6%
	non-performing (doubtful)	100	37	37%	108	39	36%
	<b>Total</b>	<b>16.553</b>	<b>49</b>	<b>0,29%</b>	<b>15.324</b>	<b>54</b>	<b>0,35%</b>

Table 25: Evolution of value adjustments/provisions of the credit portfolio

### 5.4.3 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 ABE's quality levels model adjustments/redevelopments are done to ensure an appropriate quality level for the models used for credit risk management. In the table below, a comparison is done between the observed default rate in 2016 and the probability of default for 2016 produced by our internal PD models. The portfolio is split in the three main product groups as ABE developed different PD models for each product group. In 2016 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.

Date as of 31/12/2016 (in Eur million)	EAD	Observed 1-year default rate	Average model PD
<b>By product</b>			
Consumer Loans	826	1,2%	1,5%
Professionals loans	1.475	1,7%	2,3%
Mortgage Loans	16.553	0,5%	0,8%

Table 26: PD models used under IRB approach

Besides the PD models, the LGD models are also essential for RWA calculation. The LGD models are constructed based on two separate elements: the cure rate and the loss given recovery. The combination of both elements results in a final LGD value. The table below shows for each of the retail LGD models the average value of the LGD for non-defaulted exposures as well as for the defaulted exposures.

Date as of 31/12/2016 (in Eur million)	EAD	Average LGD non-defaulted exposures	Average LGD defaulted exposures	Average LGD doubtful exposures
<b>By product</b>				
Consumer Loans	826	45%	46%	53%
Professionals loans	1.475	22%	20%	45%
Mortgage Loans	16.553	9%	11%	32%

Table 27: LGD models used under IRB approach

## 5.5 Credit valuation adjustments

Credit valuation adjustment or CVA is the risk of loss caused by changes in the credit spread of a counterparty on derivatives 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 table 5 in this document).

On the 31 December 2016, ABE measured its own funds requirements for CVA risk with 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. ABE monitors on a daily basis these ratings and follows a strong and clear limit framework.

In 2016, ABE's exposure under the CVA methodology decreased by 12% as more interest rate swaps had their bilateral counterparties replaced with the CCP resulting in lower counterparty credit risk.

in Eur Million	RWA	RWA
	31/12/2016	31/12/2015
CVA Risk	86,7	98,1

Table 28 : CVA

## 5.6 Exposure to securitization position

### 5.6.1 ABE as investor

ABE has no investments in securitisation positions in 2016.

### 5.6.2 ABE as originator

SPV Royal Street and AXA Bank Europe SCF are two entities that are used by AXA Bank Europe 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 Europe consolidation scope.

Governance and risk policies for these activities are integrated in the overall ABE risk framework .

- **Securitisation**

ABE acts as the originator of a series of securitizations named Royal Street, a Belgian Securitization vehicle. ABE (seller) sells the loans for securitization to the SPV Royal Street (the “Issuer”).

Royal Street consists of 3 compartments:

#### 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 ABE. RS-1 has financed the purchase through the issuance of a series of rated Senior class A notes (EUR 2.850 million), mezzanine Class B&C notes (EUR 105 million) and junior notes class D (EUR 45 million), all due 2040.

The initial objective of the first securitization was to attract new funding with a view to provide ABE with a liquidity buffer.

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 ABE assets side.

#### Royal Street 2 (RS-2)

RS acting through its Compartment RS-2 has purchased in November 2010 a portfolio of Belgian prime residential mortgage loans from ABE financed through the issuance of a series of rated senior Class A notes (EUR 1.500 million) and unrated Junior notes (EUR 300 million).



### Royal Street 3 (RS-3)

RS acting through its Compartment RS-3 has purchased in December 2011 a portfolio of Belgian prime residential mortgage loans from ABE financed through the issuance of a series of rated senior notes, and unrated Junior notes for the total principal amount of EUR 2.100 million. In July 2013, RS-3 issued additional notes comprising EUR 1.000 million Class A and B to be consolidated with the original notes. The aggregate principal amount outstanding of the notes is then EUR 2.712,5 million class A notes and EUR 387,5 million class B notes.

Contrary to the first compartment of the SPV, RS 2 and 3 are revolving structures. The Class A notes are sold to the SCF in order to issue the covered bond.

The underlying assets have been originated by ABE 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 ABE and treated accordingly for capital adequacy calculation purposes (the 'rating-based approach'). Therefore, the credit risk within RS is fully in line with ABE'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 table below shows the current EAD of the underlying mortgages at the ABE balance sheet.

Date as of 31/12/2016 (in Eur million)	Type of underlying exposure	EAD of underlying
RS-1	Mortgage loans	734,2
RS-2	Mortgage loans	1.754,9
RS-3	Mortgage loans	3.028,1
<b>Total</b>		<b>5.517,2</b>

Table 29: RS

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**

ABE 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 currently takes 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.

The General Covered bond issuance process is the following:

- ABE sells a portfolio of retail mortgage loans to Royal Street. Royal Street acting through one of its compartments RS2 or RS3, purchases them by issuing different classes of Residential Mortgage Backed Securities (RMBS notes):
  1. RMBS AAA senior notes sold to the ABE SCF
  2. and RMBS – Class B non-rated notes, purchased by ABE.
- ABE SCF purchases the RMBS AAA senior notes by issuing the covered bonds and the RMBS AAA notes being the collateral of covered bonds. In respect of the over-collateralization principle, the RMBS notes nominal amount is higher than the nominal amount of the Covered bonds. This over-collateralization can be financed by a senior loan granted by ABE to ABE SCF.
- Covered bonds are sold on the market to investors or subscribed by ABE (retained on ABE's balance)

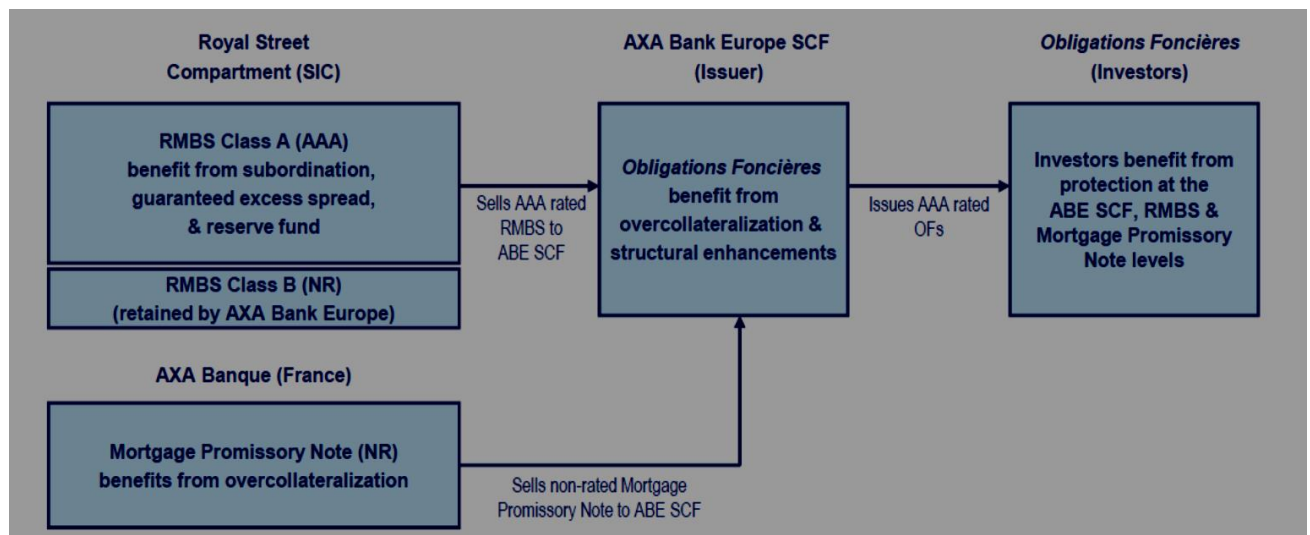


Figure 7: Covered bond proces

The covered bond program amounted EUR 4.150 million in 2016 of which EUR 3.400 million remains on a consolidated level: 3.000 million are placed in the market, 400 million are retained by AXA Banque France and 750 million are retained by AXA Bank Europe and eliminated in the consolidated balance sheet.

The strong underlying quality of ABE'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 ABE with diversification in funding sources and minimises funding concentrations in time buckets. The covered bond program gives ABE access to the covered bond market, allowing ABE 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<sup>15</sup>.

These disclosures detail the structure of the securitisation and covered bonds issuance, the risk factors, ABE'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.

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<sup>15</sup> <https://www.axabank.be/nl/over-axa-bank/investor-relations-financial-information/>

## 6 Market Risk

For market risk, AXA Bank Europe differentiates between the market risk that is related to the ‘trading book’ (accounting 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 Europe does not carry out any trading activities for its own account. The financial instruments falling under the ‘trading book’ accounting classification, 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

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 Europe arises mainly from the following products/activities:

- As a primarily retail bank, AXA Bank Europe 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 Europe’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 Europe’s overall yield curve risk management but which, in turn, give risk to model risk.
- Belgian mortgage loans, which constitute the bulk of ABE’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 Europe’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 Europe and its subsidiaries is measured and managed at the AXA Bank Europe head Office level.

- The **Board of Directors** defines ABE's risk appetite. **ABE's Management Board** ensures that ABE's risk appetite is respected and delegates to ALCO the day-to-day management and optimization of the Bank's interest rate risk position.
- **ABE's ALCO** optimises the transformation result within the risk appetite limits set by ABE's Management Board. It takes decisions to manage the interest rate risk exposures and allocates various envelopes to manage this risk.
- **ABE'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 ABE's interest rate risk indicators<sup>16</sup>.
- **ABE's Treasury & Intermediation department** takes assets and liabilities positions, by executing ALCO's decisions.
- **ABE'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.
- **Strategic Planning and Performance Management**, acting as a process control unit, is responsible for generating and reconciling ABE's balance sheet. As such, it provides its figures and various relevant reports to ABE's ALM and ABE's Risk Management departments.

### 6.1.1.2 Risk Policy, limits framework and reporting

#### **Risk framework**

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

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<sup>16</sup> Short term interest rate positions are managed by AXA Bank Europe's Treasury department in application and execution of ALCO decisions; See section 4, Interest Rate Risk banking book.

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

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

## **Risk reporting**

ABE'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 +200bps, steepening and flattening scenarios.
- Sensitivity of the net interest income of the banking book to various rate scenarios: parallel shifts from -200bps to +200bps, 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**

ABE 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 ABE's exposure levels within the desired range.
- Cap risk embedded in variable rate mortgage loans is hedged via an active purchasing policy of market caps.
- 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 ABE's overall interest rate risk position to the desired level (delta hedging).

## 6.1.2 Exposure to IRR on positions not included in the trading

The banking book of ABE 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 68% have a fixed interest rate and 32% floating interest rate. The interests of the variable rate mortgages are linked to the evolution of the OLO<sup>17</sup> 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 rise in market interest rates by 1% 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 upward and downward shift in market interest rates by 10 basis points on the interest result of the banking book. This indicator corresponds to a new definition developed in the course of 2016 and wasn't available at the end of 2015.

Indicators ( in Eur million)	31/12/2016	31/12/2015
Bank SI (absolute )	-241	-343
Bank SI (relative )	-22%	-33%
Bank NII (up 10 bps)	5,0	
Bank NII (down 10 bps)	-6,4	

Table 30: IRR indicators

<sup>17</sup> OLO stands for "Obligation Linéaire/Lineaire Obligatie" which is the abbreviation of Belgian Government Bonds

## 6.2 Market Risk Trading Book

The market risk in ABE'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 Market Risk Management and Governance

#### 6.2.1.1 Governance

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

The governance of ABE's market risk can be summarized as follows:

- **ABE's Board of Directors** defines the risk appetite and other key metrics that set the levels of acceptable market risk that can be engaged by ABE'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.
- **ABE'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.
- **ABE's Asset & Liability Committee (ALCO)** and **Wholesale Risk Committee (WRC)** 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 ABE's Management Board and Board of Directors. The ALCO focuses on the banking book activities and the WRC focuses on the trading book activities
- **ABE's Execution Desk, Sales and Treasury** are responsible for managing the market risk exposure they generate. Treasury falls under the supervision of the ALCO and Execution Desk and Sales is supervised by the WRC.
- **ABE's Risk Management department** also independently ensures that all sources of market risk are identified, analysed, reported and managed on a daily basis

#### 6.2.1.2 Risk Policy, limits framework and reporting

ABE maintains a very conservative approach to market risk of its trading book. The trading activities of ABE derive mainly from its role as centralized 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 ABE's market risks. This risk appetite limit is completed by different VaR and sensitivity limits. Alert triggering and escalation processes are also used by ABE's Risk Management department to ensure that ABE remains within its conservative risk appetite for market risk.

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

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

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

### **6.2.1.3 Policies for hedging and risk mitigation techniques**

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 Europe, 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 Europe 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, ABE'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 Exposures to market risk**

ABE'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 immaterial, since ABE hedges this exposure in the financial markets. Furthermore, ABE 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 ABE within a very strict limit framework. The VaR for all activities related to the trading book is limited to EUR 2,17 million. 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 2016 is equal to EUR 1,36 million and therefore well below the predefined limit. In addition, this result is representative of the entire 2016. Finally, this model is subject to the appropriate yearly back testing and validation by the team Risk Reporting & Validation in order to preserve the accuracy and relevance of the model.

### **6.3 Currency Risk**

Currency risk is the risk that the fair value or future cash flows of a financial instrument fluctuate due to changes in exchange rates. AXA Bank Europe 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 2016. In addition, there is a capital charge for this risk when the total net position represents more than 2% of the equity. Finally, the currency risk in relation to the activities in Hungary disappeared with the completion of the sale of the Hungarian entity during 2016.

## 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.

ABE'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 ABE 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 ABE 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 ABE's liquidity risk can be summarized as follows:

- ABE's **Board of Directors** and ABE's Management Board assume the responsibilities described in section 2.1 for the management of liquidity risk.
- ABE'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.
- ABE's **ALCO** is assisted in this work by ABE's Asset & Liability Management department (ALM), Treasury & Portfolio Management, Financial Control and Risk Management departments.
- The functional management of ABE'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 ABE's liquidity risk indicators.

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

## 7.1.2 Risk policy, limit framework and reporting

In recent years, liquidity management was one of the key priorities of AXA Bank Europe. 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, ABE's ALCO monitors 2 kinds of indicators:

1. Internal indicators : Internal Liquidity Stress indicator
2. Regulatory indicators : LCR and NSFR

All these indicators are underpinned by a common approach: guarantee that ABE's liquidity buffer is sufficient to cope with a range of stress events. More specifically, ABE's own Internal Liquidity Indicator has been designed to ensure that ABE 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 ABE's risk appetite statements.

2016 ABE Risk Appetite Statements		Limit	Alert
L1	(ILS*) The available liquidity resources for the internal liquidity indicator under all time horizons (1W, 1M, 3M, 6M and 1Y) should always be higher than the stressed requirements + EUR 500m	EUR 500m	EUR 1bn
L2	(LCR) The excess available high quality liquid assets resources for the Basel III Liquidity Coverage Ratio (LCR) (1M horizon) must be above EUR 500m and above the supervisory requirement to be communicated by ECB	EUR 500m	EUR 750m
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 bn	EUR 1bn	EUR 1.5 bn

Figure 8: Risk appetite statements Liquidity

### ➤ Internal Liquidity Stresses (ILS)

ABE 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 (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 EUR million	End of Dec 2016	Limit	Buffer
Internal Liquidity Stress indicator	1.415	500	915

Table 31: ILS

### ➤ Regulatory Indicators

ABE 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 be binding as from 2018 or later.

### ➤ 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 ABE.

## 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 Europe.

## 7.2 Liquidity Buffer assessment

ABE 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 2016 (100% limit) thanks to a comfortable stock of liquid assets and a solid financing structure.

Ratio (consolidated )	31/12/2016	31/12/2015	Limit
<b>LCR</b>	169%	139%	100%
<b>NSFR</b>	139%	139%	100%

Table 32: Liquidity ratios

AXA Bank Europe 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.

### ➤ Funding

The main sources of stable funding for the Bank are Retail deposits (EUR 18,2 billion on 31 December 2016) and covered bonds (EUR 3,4 billion on 31 December 2016). More detail can be found in table 33 below.

Date as of 31/12/2016 (in EUR million )	< 3 months	< 12 months	> 12 months	Total
Central Bank financing	200,00	0,00	150,00	350,00
Loans from financial customers	1.176,68	2,10	1,31	1.180,10
Unsecured funding (savings & current accounts of 'other financial corporates' + CIFP)	135,47	2,10	1,31	138,89
Repurchase Agreements	1.041,21	0,00	0,00	1.041,21
Secured loans	0,00	0,00	0,00	0,00
Retail funding	15.965,51	354,06	1.900,82	18.220,40
Non maturing retail funding (savings and current accounts)	15.650,08	0,00	0,00	15.650,08
Maturing retail funding (deposits with agreed maturity, EMTN for retail, customer saving certificates)	315,44	354,06	1.900,82	2.570,32
AXA Group Financing	102,46	7,25	698,97	808,69
Unsecured financing	98,57	0,00	0,00	98,57
EMTN	3,89	7,25	698,97	710,11
Other counterparties	3,30	1.000,00	2.413,04	3.416,34
Unsecured funding from non-financial customers	3,30	0,00	0,13	3,43
Covered bonds	0,00	1.000,00	2.412,91	3.412,91
<b>Total</b>	<b>17.447,96</b>	<b>1.363,41</b>	<b>5.164,15</b>	<b>23.975,52</b>

Table 33: Maturity analysis

In this table 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 .

➤ **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. ABE 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, ABE 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

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

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

For ABE, 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<sup>18</sup> are considered by a qualitative indicator while major damages are followed by the Group.

### 8.1 Risk management and Governance

#### 8.1.1 Governance

ABE's management uses an annual recurring Operational Risk Management cycle ("ORM cycle") to identify quantify and mitigate its material operational risks. The four

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<sup>18</sup> Using the framework of the Group: no impact, impact (not yet assessed), insignificant (minor isolated stakeholder concerns/impacts), minor (serious segmented stakeholder concerns/incidents), moderate (broader and more vocalized concerns within the industry), major (negative public exposure with significant impact), and severe (dramatic loss of stakeholder confidence – extensive negative public exposure).



steps are: risk identification, risk quantification, risk aggregation, risk validation & mitigation. ABE 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 ABE's senior management with indications on the most significant operational risks faced by ABE (both at its head office level and within its branch and subsidiary levels).

ABE's Management Board follows the implementation of the operational risk management framework, gives guidelines to embed it in ABE's business-as-usual activities and reviews and validates all important decisions or information relating to ABE ORM Cycle (ORM Charter, economic capital results, new methodology, processes, reporting, documentation, etc.).

All business lines and entities within ABE 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 ABE applies the Basis Indicator approach (i.e. equals to 15% \* of the mathematical average of the sum of all positive operational results over the last 3 annual exercises) and is only updated at the end of each year.

For its economic capital, ABE 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 ABE.

Just as in past years, there was also a major focus in 2016 on detecting and combating fraud and cyber risks (hacking, phishing and cyber-attacks). The cooperation with the other control lines (Audit, Compliance, Information Security) was further strengthened and more work was done on the 'risk awareness' throughout the entire organization (organisation of training courses for the different business lines, participation of the Operational Risk service in major projects and product launches)..

In 2017, the focus will be on structural formalising, implementing and following up of actions to mitigate the greatest risks and incidents. The 'Loss Data Collection' process will be further optimized and formalized to ensure uniformity and maturity throughout the organization. Work will also be done on the 'Operational Risk Framework' to clearly define the borders and the playing field for all services and processes in AXA Bank Europe.

## 9 Other Risks

Credit, market, liquidity and operational risks are the main risks faced by ABE. 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

ABE defines business risk as the risk arising from the deterioration of its margins on its commercial products - retail and non-retail products - due to adverse events, including the competitive environment.

Several processes take part in the mitigation of this specific risk. First, targets for volumes and margins for the year are defined by both ABE'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 ABE'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.

ABE has also implemented strong governance regarding the commercial products. ABE's Management Board has delegated the management of specific risks to specialized 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.

### 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 ABE'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 ABE. The models are also stress-tested with the objective of understanding their limitations and take proper decisions.

### 9.3 Strategic risk

ABE defines strategic risk as the risk that the bank's main objectives (in terms of profitability, solvency, liquidity and creating value) may not be realized due to wrong decisions, inappropriate resource allocation or not responding correctly to changes in the environment. It refers to decisions that are needed to adapt to the external business environment, to improve the internal organisation or exploiting new strategic opportunities.

This material risk is mitigated through a strong governance structure. Different governance bodies/structures are in place to advise the Management Board on ABE's strategy and so mitigate strategic risk. These governance bodies/structures include: AXA Group and NORCEE Region, ABE strategic plan & performance management, ABE Risk Management, ABE Business and Product development. The monitoring of the strategic risk can be split in two types of processes: general strategic processes and specific strategic processes:

- General strategic processes: the general strategic processes occur on a regular basis, through strategic reviews and the implementation of operational and functional business objectives fitting this strategy. Moreover, the prospects in the strategic plan and the budget are checked against the RAF limits, ensuring then a strict control of the risks taken by the bank, and an alignment between strategy and risk appetite;
- Specific Strategic Processes: Strategic decisions are taken on an *ad-hoc* basis when new products or projects are launched/or significantly modified. Such decisions should go through a strong Product Approval Process (see also 9.1 above).

### 9.4 Reputation risk

The reputation risk is the risk of loss resulting from a decrease in the number of clients, transactions and funding opportunities arising from the adverse perception of the image

of the financial institution on the part of customers, counterparties, shareholders, investors or regulators.

The responsibility of this risk belongs to ABE'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 ABE's Communication team.

ABE 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.

## 9.5 Remuneration risk

ABE 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.

ABE's remuneration policy for the Board of Directors, Management Board, Internal Control and Trading room functions is described in the "*Politique de Remuneration*" which can be found in ABE's Memorandum of Governance. It explains the philosophy and structure behind ABE'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 ABE'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 ABE staff (not included in ABE's remuneration policy described above) are in line with local labour agreements at ABE and entity level and with AXA Group's remuneration policies.

## 9.6 Political and Regulatory risk

Political and regulatory risk is defined within ABE 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.

ABE 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 ABE 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.

## 9.7 Pension Risk

ABE defines pension risk as the risk of facing additional contributions to pension schemes owned by ABE and risk of variation in IAS19 results, and subsequently in solvency.

Key mitigation processes for pension risk are:

**(i) Governance**

- Risk is discussed at the quarterly ABE 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.

**(ii) Sensitivity analysis**

Sensitivity analysis of IAS19 results to interest rates and credit spread shocks are performed and fully embedded in ABE risk dashboard.

## 10 Unencumbered Assets

Disclosure of encumbered and unencumbered assets for ABE on 31/12/2016 is done in accordance with the disclosure templates foreseen in the EBA Guidelines released in June 2014.

This disclosure template can be found in annex 4

# 11 Annexes

## 11.1 Capital

### (i) Reconciliation of own funds items to audited financial statements

Disclosure according to Article 2 of Regulation (EU) N° 1423/2013

at 31 December 2016 , in millions of euros	IFRS balance sheet	Row in transitional own funds template (Annex VI)
<b>Assets</b>		
Cash and balances with central banks	<b>657</b>	
<i>of which: Negative amounts resulting from the calculation of expected loss amounts</i>		12
Financial assets held for trading	<b>1.644</b>	
<i>of which: Value adjustments due to the requirements for prudent valuation</i>		7
Loans and receivables	<b>20.651</b>	
<i>of which: Negative amounts resulting from the calculation of expected loss amounts</i>		12
Intangible assets		
Other intangible assets	<b>9</b>	8
Tax assets		
Deferred tax assets	<b>11</b>	
<i>of which: Deferred tax assets that rely on future profitability excluding those arising from temporary differences</i>		10
<b>Liabilities</b>		
Financial liabilities held for trading	<b>1.104</b>	
<i>of which: Gains or losses on liabilities valued at fair value resulting from changes in own credit standing</i>		14
Financial liabilities designated at fair value through profit or loss	<b>1.484</b>	
<i>of which: Gains or losses on liabilities valued at fair value resulting from changes in own credit standing</i>		14
Financial liabilities measured at amortised cost		
Subordinated liabilities	<b>89</b>	
<i>of which: Tier 2 capital instruments and the related share premium accounts</i>		46, 47
<b>Equity</b>		
Share capital		
Paid-in capital	<b>681</b>	1
Other equity		
Equity component of combined financial instruments	<b>90</b>	30
Other	<b>1</b>	2
Non-realised results		
<i>of which: Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468</i>		26a
Cash flow hedges (effective portion)	<b>-22</b>	3
Available for sale financial assets	<b>94</b>	3
Actuarial gains and losses on defined benefit plans	<b>-24</b>	3
Reserves (including retained earnings)	<b>362</b>	2

## (ii) Description of the capital instruments' main features

Disclosure according to Article 3 in Commission implementing regulation (EU) No 1423/2013

### ABE Capital instruments' main features at 31 December 2016

1	Issuer	AXA BANK EUROPE	AXA BANK EUROPE	AXA BANK EUROPE	AXA BANK EUROPE
2	Unique identifier (eg CUSIP, ISIN or Bloomberg identifier for private placement)	BE6271761320	Grouped certificates	Grouped certificates	Grouped certificates
3	Governing law(s) of the instrument	English	Belgian	Belgian	Belgian
	<i>Regulatory treatment</i>				
4	Transitional CRR rules	Additional Tier 1	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Additional Tier 1	Tier 2	Tier 2	Tier 2
6	Eligible at solo/(sub-)consolidated/solo & (sub-)consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated	Solo and Consolidated
7	Instrument type (types to be specified by each jurisdiction)	Additional Tier 1 as published in Regulation (EU) No 575/2013 article 52	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63	Tier 2 as published in Regulation (EU) No 575/2013 article 63
8	Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	EUR 90m	EUR 4,789m	EUR 6,847m	EUR 9,566m
9	Nominal amount of instrument	EUR 90m	EUR 19,753m	EUR 16,225m	EUR 15,943m
9a	Issue price	100%	100%	100%	100%
9b	Redemption price	At their prevailing principal amount	At par	At par	At par
10	Accounting classification	Equity	Liability	Liability	Liability
11	Original date of issuance	24-Sep-2014			
12	Perpetual or dated	Perpetual	Dated	Dated	Perpetual
13	Original maturity date	No fixed maturity date	8 Years after issuance	10 Years after issuance	Perpetual
14	Issuer call subject to prior supervisory approval	Yes	Yes	Yes	Yes
15	Optional call date, contingent call dates, and redemption amount	First Call date (24 September 2019), Taxation Reasons and Regulatory Events	In case of modification of the tax treatment or modification of the regulation on the issuer's capital requirements	In case of modification of the tax treatment or modification of the regulation on the issuer's capital requirements	10 years after Issue Date and in case of modification of the tax treatment or modification of the regulation on the issuer's capital requirements
16	Subsequent call dates, if applicable	Any Interest Payment Date after 24 September 2019	n/a	n/a	any Interest Payment Date after 10 Years existence
	<i>Coupons / dividends</i>				
17	Fixed or floating dividend/coupon	Fixed and from (and including) the First Call Date and thereafter, at a fixed rate per annum reset on each Reset Date, based on the prevailing Euro 1-Year Mid Swap Rate plus 4.09 per cent	Fixed	Fixed	Fixed and from (and including) the First Call Date and thereafter, at a variable rate per annum reset on each Interest Payment Date
18	Coupon rate and any related index	4.603% per annum To be reset on every Reset Date	Fixed rate determined at each Monthly Issue Date	Fixed rate determined at each Monthly Issue Date	Fixed rate determined at each Monthly Issue Date
19	Existence of a dividend stopper	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary and Mandatory	Mandatory	Mandatory	Partly discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary and Mandatory	Mandatory	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Cumulative
23	Convertible or non-convertible	Convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger (s)	Solo CET1 ratio < 5.125% and Group CET1 ratio < 7%	n/a	n/a	n/a
25	If convertible, fully or partially	fully convertible	n/a	n/a	n/a
26	If convertible, conversion rate	Conversion Price = 1.43 Eur per ordinary share subject to adjustment	n/a	n/a	n/a
27	If convertible, mandatory or optional conversion	Mandatory	n/a	n/a	n/a
28	If convertible, specify instrument type convertible into	CET1 Ordinary Shares	n/a	n/a	n/a
29	If convertible, specify issuer of instrument it converts into	AXA BANK EUROPE	n/a	n/a	n/a
30	Write-down features	No	No	No	No
31	If write-down, write-down trigger (s)	n/a	n/a	n/a	n/a
32	If write-down, full or partial	n/a	n/a	n/a	n/a
33	If write-down, permanent or temporary	n/a	n/a	n/a	n/a
34	If temporary write-down, description of write-up mechanism	n/a	n/a	n/a	n/a
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	The Issuer's obligations under the Securities are unsecured and deeply subordinated, and will rank junior in priority of payment to unsubordinated creditors of the Issuer and to ordinarily subordinated indebtedness of the Issuer (Tier 2 Capital Instruments).	Junior to Senior debt	Junior to Senior debt	Junior to Senior debt
36	Non-compliant transitioned features	No	No	No	No
37	If yes, specify non-compliant features	No	n/a	n/a	n/a

(1) 'N/A' inserted if the question is not applicable



### (iii) Disclosure of nature and amounts of specific items on own funds during the transitional period

ABE capital at 31 december 2016 ( on million Eur)		Regulation (EU) no 575/2013 article reference	Amount at disclosure date	Amount subject to pre-regulation treatment or prescribed residual amount of regulation (EU) No 575/2013
<b>Common Equity Tier 1 (CET1) capital: instruments and reserves</b>				
1	Capital instruments and the related share premium accounts	26 (1), 27, 28, 29, EBA list 26 (3)	681	
	of which: instruments of type 1	EBA list 26 (3)		
	of which: instruments of type 2	EBA list 26 (3)		
	of which: instruments of type 3	EBA list 26 (3)		
2	Retained Earnings	26 (1) c	363	
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	26 (1)	48	
3a	Funds for general banking risk	26 (1) (f)		
4	Amount of qualifying items referred to Article 484 (3) and the related share premium accounts subject to phase out from CET1	486 (2)		
	Public sector capital injections grandfathered until 1 Januari 2018	483 (2)		
5	Minority interest (amount allowed in consolidated CET1)	84, 479, 480		
5a	Independently received interim profits net of any foreseeable charge of dividend	26 (2)		
6	<b>Common Equity Tier 1 (CET1) capital before regulatory adjustments</b>		<b>1.092</b>	
<b>Common Equity Tier 1 (CET1) capital: regulatory adjustments</b>				
7	Additional value adjustments (negative amount)	34, 105	-8	
8	Intangible assets (net of related tax liability) (negative amount)	36 (1) (b), 37, 472 (4)	-9	
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	36 (1) c, 38, 472 (5)	-18	
11	Fair value reserves related to gains or losses on cash flow hedges	33 (a)		
12	Negative amounts resulting from the calculation of expected loss amounts	36 (1) (d), 40, 159,472 (6)	-17	
13	Any increase in equity that results from securitised assets (negative amount)	32 (1)		
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	33 (b)	-19	
15	Defined-benefit pension fund assets (negative amount)	36 (1) (e), 41, 472 (7)		
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	36 (1) (f), 42, 472 (8)		
17	Holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	36 (1) (g), 44, 472 (9)		
18	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	36 (1) (h), 43, 45, 46, 49 (2) (3), 79, 472 (10)		
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) to (3), 79, 470, 472 (11)		
20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	36 (1) (k)		
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in 38 (3) are met) (negative amount)	36 (1) (c), 38, 48 (1) (a), 470, 472 (5)		
22	Amount exceeding the 15% threshold (negative amount)	48 (1)		
25a	Losses for the current financial year (negative amount)	36 (1) (a), 472 (3)		
25b	Foreseeable tax charges relating to CET1 items (negative amount)	36 (1) (l)		
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment		-28	-47
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468		-36	-58
	Of which: prudential filter for unrealised gains on Investment Property valued at fair value	468		
	Of which: prudential filter for unrealised gains on Available for Sale Equity Securities	468		
	Of which: prudential filter for unrealised gains on Available for Sale Debt Securities	468	-42	-62
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre CRR	481		
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	36 (1) U)		
28	<b>Total regulatory adjustments to Common equity Tier 1 (CET1)</b>		<b>-98</b>	<b>-47</b>
29	<b>Common Equity Tier 1 (CET1) capital</b>		<b>994</b>	<b>-47</b>
<b>Additional Tier 1 (AT1) capital: Instruments</b>				
30	Capital instruments and the related share premium accounts	51, 52	90	
31	of which: classified as equity under applicable accounting standards		90	
32	of which: classified as liabilities under applicable accounting standards			
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	486 (3)		
	Public sector capital injections grandfathered until 1 January 2018	483 (3)		
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	85, 86, 480		
35	of which: instruments issued by subsidiaries subject to phase out	486 (3)		
36	<b>Additional Tier 1 (AT1) capital before regulatory adjustments</b>		<b>90</b>	

ABE capital at 31 december 2016 ( on million Eur)		Regulation (EU) no 575/2013 article reference	Amount at disclosure date	Amount subject to pre-regulation treatment or prescribed residual amount of regulation (EU) No 575/2013
<b>Additional Tier 1 (AT1) capital: regulatory adjustments</b>				
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital		0	
44	Additional Tier 1 (AT1) capital		90	
45	Tier 1 capital (T1 = CET1 + AT1)		1.084	-47
<b>Tier 2 (T2) capital: Instruments and provisions</b>				
46	Capital instruments and the related share premium accounts	62, 63	12	
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	486 (4)	10	6
	Public sector capital injections grandfathered until 1 January 2018	483 (4)		
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	87, 88, 480		
50	Credit risk adjustments	62 (c) & (d)		
51	Tier 2 (T2) capital before regulatory adjustments		21	6
<b>Tier 2 (T2) capital: regulatory adjustments</b>				
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	63 (b) (i), 66 (a), 67,477 (2)		
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	66 (b), 68, 477 (3)		
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	66 (c), 69, 70, 79, 477(4)		
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	66 (d), 69, 79, 477 (4)		
56	Regulatory adjustments applied to tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)			
56a	Residual amounts deducted from Tier 2 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No 575/2013	472 , 472(3)(a), 472(4), 472 (6), 472 (8)(a), 472 (9), 472 (10)(a), 472 (11) (a)		
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tier 1 capital during the transitional period pursuant to article 475 of Regulation (EU) No 575/2013	475, 475 (2) (a), 475(3), 475 (4) (a)		
56c	Amount to be deducted from or added to Tier 2 capital with regard to additional filters and deductions required pre CRR	467, 468, 481		
57	Total regulatory adjustments to Tier 2 (T2) capital		0	
58	Tier 2 (T2) capital		21	6
59	Total capital (TC = T1 + T2)		1.105	-41
59a	Risk weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/ 2013(i.e. CRR residual amounts)		4.692	
60	Total risk weighted assets		4.692	
<b>Capital ratios and buffers</b>				
61	Common Equity Tier 1 (as a percentage of risk exposure amount)	92 (2) (a), 465	21,18%	
62	Tier 1 (as a percentage of risk exposure amount)	92 (2) (b), 465	23,10%	
63	Total capital (as a percentage of risk exposure amount)	92 (2) (c)	23,55%	
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements , plus systemic risk buffer, plus the systemically important institution buffer (G-SII or 0-SII buffer), expressed as a percentage of risk exposure amount)	CRD 128, 129, 130	5,38%	
65	of which: capital conservation buffer requirement		0,63%	
66	of which: countercyclical buffer requirement			
67	of which: systemic risk buffer requirement			
67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (0-SII) buffer	CRD 131	0,25%	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	CRD 128	15,80%	
<b>Capital ratios and buffers</b>				
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	36 (1) (b), 45, 46, 472 (10),56 (c), 59, 60, 475 (4), 66 (c), 69, 70, 477 (4)		
73	Direct and indirect holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	36 (1) (i), 45, 48, 470,472 (11)		
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	36 (1) (c), 38, 48, 470,472 (5)	12	
<b>Applicable caps on the Inclusion of provisions in Tier 2</b>				
76	Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)	62		
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	62		
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	62		
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	62		
<b>Capital Instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)</b>				
80	Current cap on CET1 instruments subject to phase out arrangements	484 (3), 486 (2) & (5)		
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	484 (3), 486 (2) & (5)		
82	Current cap on AT1 instruments subject to phase out arrangements	484 (4), 486 (3) & (5)		
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	484 (4), 486 (3) & (5)		
84	Current cap on T2 instruments subject to phase out arrangements	484 (5), 486 (4) & (5)	16	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	484 (5), 486 (4) & (5)		

## 11.2 Countercyclical buffer

### Exposure breakdown by country

ABE at 31 december 2016	General credit exposures		Trading book exposures		Securitisation exposures		Own funds requirements				Own funds requirements weights	Countercyclical capital buffer rate
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book exposures for SA	Value of trading book exposures for internal models	Exposure value for SA	Exposure value for IRB	of which: General credit exposures	of which: Trading book exposures	of which: Securitisation exposures	Total		
	010	020	030	040	050	060	080	090	100	070	110	120
<b>Breakdown by country:</b>												
BELGIUM	692.128.094	18.717.230.346	0				192.921.646	0		192.921.646	0,9188	0,00%
FRANCE	149.632.299	26.878.475	26				5.450.526	0		5.450.526	0,0260	0,00%
GERMANY	53.188	6.862.358	8.142				50.439	651		51.090	0,0002	0,00%
HONG KONG	2.728.670	1.228.191	0				112.331	0		112.331	0,0005	0,63%
IRELAND	13.012.961	1.552.162	0				526.359	0		526.359	0,0025	
JAPAN	33.170.959	773.176	0				2.655.316	0		2.655.316	0,0126	0,00%
LUXEMBOURG	1.063.861	35.084.796	4.595				513.680	0		513.680	0,0024	0,00%
NETHERLANDS	38.378.524	9.920.537	17				391.198	0		391.198	0,0019	0,00%
NORWAY	743	0	0				44	0		44	0,0000	1,50%
SWEDEN	529	252.461	0				500	0		500	0,0000	1,50%
SWITZERLAND	63.955.929	12.049.681	0				4.479.115	0		4.479.115	0,0213	0,00%
UNITED KINGDOM	17.034	6.460.313	0				34.186	0		34.186	0,0002	0,00%
UNITED STATES	31.932.886	2.766.717	2.770				2.564.419	222		2.564.641	0,0122	0,00%
REST OF THE WORLD	601.739	32.226.066	0				261.359	0		261.359	0,0012	
<b>Total</b>	<b>1.026.677.415</b>	<b>18.853.285.278</b>	<b>15.550</b>				<b>209.961.118</b>	<b>874</b>		<b>209.961.991</b>	<b>1,0000</b>	

## 11.3 Leverage ratio

CRR Leverage Ratio - Disclosure Template	
Reference date	31/12/2016
Entity name	AXA Bank Europe
Level of application	Consolidated

Table LRSum: Summary reconciliation of accounting assets and leverage ratio exposures		Applicable Amounts
1	Total assets as per published financial statements	27.994.508.124
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013 "CRR")	
4	Adjustments for derivative financial instruments	- 1.181.287.714
5	Adjustments for securities financing transactions "SFTs"	51.932.320
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	334.225.582
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	
EU-6b	(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013)	
7	Other adjustments	- 740.065.060
8	<b>Total leverage ratio exposure</b>	<b>26.459.313.251</b>
Table LRCom: Leverage ratio common disclosure		CRR leverage ratio exposures
<b>On-balance sheet exposures (excluding derivatives and SFTs)</b>		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	26.440.103.502
2	(Asset amounts deducted in determining Tier 1 capital)	- 71.918.944
3	<b>Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)</b>	<b>26.368.184.558</b>
<b>Derivative exposures</b>		
4	Replacement cost associated with <i>all</i> derivatives transactions (ie net of eligible cash variation margin)	232.537.270
5	Add-on amounts for PFE associated with <i>all</i> derivatives transactions (ienet of eligible cahs variation margin)	429.270.260
EU-5a	Exposure determined under Original Exposure Method	
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	- 1.882.441.521
8	(Exempted CCP leg of client-cleared trade exposures)	
9	Adjusted effective notional amount of written credit derivatives	
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	
11	<b>Total derivative exposures (sum of lines 4 to 10)</b>	<b>- 1.220.633.991</b>
<b>Securities financing transaction exposures</b>		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	925.604.784
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	
14	Counterparty credit risk exposure for SFT assets	51.932.318
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Article 429b (4) and 222 of Regulation (EU) No 575/2013	
15	Agent transaction exposures	
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	
16	<b>Total securities financing transaction exposures (sum of lines 12 to 15a)</b>	<b>977.537.102</b>
<b>Other off-balance sheet exposures</b>		
17	Off-balance sheet exposures at gross notional amount	1.120.349.309
18	(Adjustments for conversion to credit equivalent amounts)	- 786.123.727
19	<b>Other off-balance sheet exposures (sum of lines 17 to 18)</b>	<b>334.225.582</b>
<b>Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)</b>		
EU-19a	(Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	
<b>Capital and total exposures</b>		
20	<b>Tier 1 capital</b>	<b>1.083.694.654</b>
21	<b>Total leverage ratio exposures (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)</b>	<b>26.459.313.251</b>
<b>Leverage ratio</b>		
22	<b>Leverage ratio</b>	<b>4,10%</b>
<b>Choice on transitional arrangements and amount of derecognised fiduciary items</b>		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Transitional
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) NO 575/2013	

Table LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)		
		CRR leverage ratio exposures
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	24.557.661.981
EU-2	Trading book exposures	1.552.317
EU-3	Banking book exposures, of which:	24.556.109.664
EU-4	Covered bonds	230.970.361
EU-5	Exposures treated as sovereigns	4.608.123.960
EU-6	Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	
EU-7	Institutions	1.064.751.762
EU-8	Secured by mortgages of immovable properties	16.430.353.881
EU-9	Retail exposures	1.443.179.623
EU-10	Corporate	193.481.828
EU-11	Exposures in default	267.198.205
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	318.050.045

## Table LRQua: Free format text boxes for disclosure on qualitative items

### 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 Europe's capital risk management governance. Capital risk management involves the Board of directors, advised by the Risk Committee, the Management Board, the Risk Management and Finance departments.

ABE Board of Directors defines the strategic objectives of the bank, and the subsequent risk appetite, i.e. the aggregated level and types of risks ABE's business lines and branches are willing to assume to achieve these objectives. This risk appetite is defined within ABE's risk capacity, which is the maximum level of risk that ABE 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 specialized 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.

ABE 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, ABE 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 ABE's risk appetite framework (e.g. by translating ABE's risk appetite into 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.

ABE'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, ABE 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, these 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 2016 SREP stress tests and AXA Bank Europe internal stress testing program

(\*) the recovery plan (including reverse stress tests).

These scenarios, sensitivity analyses, stress test and reverse stress tests results are scrutinized 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 ABE's solvency ratios, including leverage ratio.

### 2. Description of the factors that had an impact on the leverage Ratio during the period to which the disclosed leverage Ratio refers

Main drivers of the leverage ratio are changes in

(1) Tier 1 capital mainly thanks to the Net Income of the year and the gradual eligibility of unrealized gains/ losses on the available for sale portfolio and

(2) Leverage exposure mainly driven by decrease in the bonds portfolio, transfer of Hungarian assets partially compensated by the increase of loans to retail clients.

## 11.4 Unencumbered assets

Disclosure on asset encumbrance					
<b>Template A-Assets</b>					
		Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
		010	040	060	090
<b>010</b>	<b>Assets of the reporting institution</b>	7.827.576.912		22.308.618.569	
030	Equity instruments	0	0	9.739.410	9.739.410
040	Debt securities	1.910.338.352	1.910.338.352	3.764.005.161	3.764.005.161
120	Other assets	5.966.240.202		18.824.092.328	
<b>Template B-Collateral received</b>					
		Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance		
		010	040		
<b>130</b>	<b>Collateral received by the reporting institution</b>	766.955.020	513.707.029		
150	Equity instruments	0	0		
160	Debt securities	766.955.020	513.707.029		
230	Other collateral received	0	0		
<b>240</b>	<b>Own debt securities issued other than own covered bonds or ABSs</b>	0			
<b>Template C-Encumbered assets/collateral received and associated liabilities</b>					
		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered		
		010	030		
<b>010</b>	<b>Carrying amount of selected financial liabilities</b>	8.265.450.579	8.783.265.821		
				Not to be filled in any case	
<b>D - Information on importance of encumbrance</b>					
These figures represent the median of Q1, Q2, Q3 and Q4 of 2016 for ABE conso.					
<b>Sources of encumbrance of assets:</b>					
- Repos mainly covered by debt securities issued by governments					
- Funding from ECB (TLTRO+MRO) covered by debt securities, retained AAA note RMBS Royal Street 1 and retained covered bonds					
- Derivatives covered by cash					
- Issuance of Covered bonds and RMBS Royal Street notes covered by mortgages					
<b>Significant evolution in 2016:</b>					
The repo and derivative intermediation activity for entities of the AXA group remains stable in 2016, after a significant reduction in 2015.					
A big part of the investment portfolio is sold: the repos amount is reduces accordantly.					
<b>Unencumbered assets:</b>					
ABE has around 4 bln EUR unencumbered debt securities available to use as collateral and that can be easily encumbered.					
The other unencumbered assets mainly consists out of mortgages, which could be encumbered if needed (new RMBS, new Covered bonds...).					
Only a smal 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)					

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