RISK REPORT 2019

Belfius
Bank & Insurance

Content

Summary of risk profile

Resilient risk profile despite a more difficult environment

Belfius has been able to maintain a resilient risk profile in 2019, despite the turnaround in the macroeconomic environment and the challenging context of volatile financial markets marked by geopolitical stress and regulatory interventions. Non-financial risks have gained importance but did not have significant negative impact on Belfius in 2019.

High asset quality and strong risk profile

Sound risk management and good credit quality of commercial assets continue to translate into strong asset quality ratios. The asset quality ratio was at a historically low level of 1.96% in 2019 (2018: 2.05%) and the coverage ratio was still a high 62.3% (2018: 61.6%). The evolution of non-performing loans has continued its declining trend or stabilized at a low level in most segments (Public & Social, Mortgages and Business banking). We see however some deterioration, at a still very comfortable level, for Corporates.

2019 was also marked by further de-risking, namely an additional pruning wave on shipping assets (EUR -31.7 million, remaining exposure on non-core shipping year-end 2019: EUR 14.2 million), opportunistic sale of ex-Legacy bonds (EUR -82.1 million; remaining exposure year end-2019: EUR 3.6 billion, average rating A) and a strong management of our derivatives portfolio through unwinds and compression of derivatives (EUR -28 billion, remaining nominal exposure year end 2019: EUR 298 billion).

The overall market value of the portfolio of the insurance company increased in 2019 as a result of the continuous growth of the mortgage production, a good market performance on equity, tight credit spreads and decline of the interest rates (except for the last quarter). This balance sheet evolution was strictly monitored through a sound risk management.

In terms of asset management, the asset allocation of the insurance company is bound by limits to absorb severe stresses as foreseen by the approved risk appetite of the company. The specific limits applied on the assets are defined in the investment risk framework and the counterparty limit framework (which is aligned with that of the bank in the context of the conglomerate) and are regularly monitored. This resulted in a high asset quality with an average credit rating at A-. Fluctuations of the interest rate were well managed through the duration gap and the basis point value of the insurance company.

In light of the weakening economic conditions, Belfius will continue to closely monitor the asset quality to quickly identify possible deterioration and (pro)actively manage assets and non-performing loans in the balance sheet.

Strong and sound liquidity & capital positions

Belfius maintains strong and sound liquidity and capital positions. Based on its 2019 solvency metrics, Belfius continues to rank amongst the best capitalized European banks with a CET 1 ratio of 15.9% end of December 2019[1], slightly down from 31/12/2018, as the result of an increase in CET 1 capital (+EUR 0.6 billion) more than offset by the increasing total risk exposure (+EUR 4.3 billion).

The increasing risk exposure (EUR +4.3 billion to EUR +56.4 billion) is mainly due to increasing volumes in commercial franchise and regulatory requirements, partly mitigated by management actions and ex-legacy attrition. Management actions include the above-mentioned sale of ex-Legacy bonds, CVA hedging strategies, compression exercise on derivatives and data quality review.

As far as insurance is concerned the Solvency II ratio settles at a solid 212%. The Solvency II ratio evolution can be mainly explained by a negative market effect driven by the interest rate, the change in corporate tax rate, the positive effect of the EIOPA Solvency II review and the absence of dividend payment.

Liquidity and funding profiles remain strong with a Liquidity coverage ratio (LCR) of 130% and a Net stable funding ratio (NSFR) of 116%. Liquid assets represent 4.9x one year wholesale refinancing needs and loan to deposit ratio (for commercial balance sheet) remained stable at 94%.

These strong solvency and liquidity positions, respecting all regulatory minima, put Belfius in a position to cope with current economical, geo-political and regulatory uncertainties and allow for an active growth strategy in the coming years.

Since the World Health Organization (WHO) declared the COVID-19 outbreak a public health emergency of international concern in January, it has spread across the globe. The WHO has continuously raised its global risk outlook and announced more new cases outside of China than within for the first time on February 26th. The outbreak is a major shock weighing on global financial markets and is now expected to heavily impact global economic growth. It is expected that there is significant disruption to economic activity, particularly a slowdown in production and a reduction in domestic and foreign demand, and may consequently have an impact on the financial position of Belfius (amongst others solvency, liquidity, interest margin, fee income, fair value results as well as cost of risk).

(1) Based on the proforma calculation 'limited to interim dividend' – see chapter III

Non-financial risks under control

Since the financial crisis, the nature of the events that could hit financial institutions has changed drastically. When after the crisis, financial risks were the main point of attention, the nature of the risks has changed as a result of the altering social, economic and technological context. Management of non-financial risks has been integral part of the Belfius risk management for years. In 2019, we further strengthened the approach through further integration into a strong and efficient governance and risk framework including strong lines of defence, risk appetite framework, taxonomy, policies, guidelines and generalised risk awareness culture. The New Product Approval Process (NPAP), as formal ex-ante risk assessment, ensures that Belfius strategy remains in line with its risk appetite and that potential risks are managed adequately.

Special attention has been given to the main non-financial risks. Fraud risk assessment and management has been enhanced and Belfius is continuously taking mitigation actions and adapting its internal controls to new fraud schemes. In particular, Belfius has a good control over phishing risk – an acute threat for the financial sector. Specific attention has also been attributed to data privacy and procedures have been adapted to be fully efficient in responding to exercise of rights by customers. Regarding information security, a full Disaster Recovery Plan test took place successfully, in the context of increasing challenges in terms of IT resilience.

Compliance risks are increasing. As a consequence, Belfius is reinforcing the AML & Compliance management, namely through the enhancement of the AML framework and processes introducing new technologies and automation, an update of the client scoring system and the development of a risk appetite framework based on AML-risk indicators. In parallel, continuous care is devoted to updating policies, procedures and internal instructions taking into account monitoring results, the common development of standards within the Belfius group as well as new regulations and the evolving interpretation thereof by regulators.

Given Belfius' low risk appetite for risk with respect to compliance risks, and in order to continue to comply with regulatory developments, additional developments are foreseen for 2020.

Further improvement of the risk governance

Belfius is continuously working on improving risk management efficiency. In 2019, this translated into the set-up of a new risk management organization, a review of the three lines of defence model, a deep review of the Risk Appetite framework and development of tools and processes to support an innovative and future-proof risk management.

The new organization's main objectives are to further improve the transversal approach ("Belfius together" project strengthening the bank & insurance collaboration), reinforce the conglomerate approach and increase the risk management forward-looking and strategic view to better anticipate market evolutions and steer the group' strategic orientations.

The Risk Mapping has been updated in 2019, integrating all newly identified risk categories in accordance with the revised Belfius' Risk Taxonomy. As part of this process, roles and responsibilities within the three lines of defence model have been further clarified and adjustments have been brought for better risk management and coverage.

A fundamental review of the Risk Appetite Framework has been conducted with a broader risk coverage and a new governance process. A wide range of new indicators have been introduced to enhance risk measurement of existing or developing risks (e.g. concentration, asset quality, model risk, non-financial risks, anti-money laundering, etc.). Governance has been adjusted in such a way that the highest level boards are promptly notified of any deviation from the targeted risk appetite.

Regarding tools and processes, Belfius continues to work on different initiatives in order to further improve the quality of data and increase efficiency of risk processes. Amongst those, the project aiming at the creation of a common data platform with specific attention for Risk and Finance data concepts will enable further automation within Risk and Finance. On the other hand, Belfius pursues the implementation of a broad Core Banking Renewal program, a first release will address the credit risk processes from an end-to-end perspective and the risk engines.

All these steps put Belfius in a position to better face complex and evolving risks and possible deteriorations of the economic and financial environment.

Strengths confirmed by SREP assessment and rating agencies

The strong asset quality, risk management and capital and liquidity profiles are reflected in the rating agencies' views on Belfius' credit risk profile and decrease in SREP capital requirements.

The 2019 SREP assessment translated into a 25 bp decrease of pillar II requirement to 2.0% (from 2.25%). This will be applied in 2020.

The rating agencies view positively the group's credit quality as reflected by the rating actions taken during 2019, namely the decision by Moody's to upgrade Belfius' long-term ratings from A2 to A1 in May 2019 and Fitch's decision to upgrade Belfius' short-term rating from F2 to F1 in November 2019. Moody's upgrade "reflects the bank's improved asset quality, while tail risks stemming from legacy assets are contained". Fitch's upgrade to F1, "the higher of the two options for a A- Long-Term IDR, reflects Fitch's 'a' score for funding and liquidity and the expectation that liquidity buffers will be maintained at high levels".

Regulatory developments

In order to make capital levels more comparable and to reduce variability in banks' internal models, the European Central Bank (ECB) introduced the Targeted Review of Internal Models (TRIM) in June 2017 to assess the reliability and comparability between banks' models. This project is now nearing completion. The exercise did not reveal major weaknesses in terms of underestimation of capital requirements. Main recommendations deal with governance improvement, data quality framework and model documentation.

During the same period, the European Banking Authority (EBA) set up a roadmap focused on credit risk models. Guidelines and technical standards covering the definition of default, the treatment of defaulted assets and the estimation of probability of default (PD) and loss given default (LGD) have been finalised. These new requirements will be gradually implemented by Belfius from 2020 onwards.

Regulatory developments also include the National Bank of Belgium supervisory expectations regarding the lending standards of mortgage loans, requiring banks to strengthen their underwriting criteria. These measures, which enter into force in 2020, have been translated into a specific Risk Appetite Framework that applies since 1 January 2020.

Main challenges from the EU banking reform entail the new method for the measurement of counterparty credit risk (SA-CCR), the revised market risk framework (Fundamental Review of the Trading Book) and the minimum loss coverage mechanism for new non-performing exposures (Backstop provisioning). All these topics are addressed actively and we expect no material obstacles to the implementation of the new regulatory requirements.

Besides, Belfius is preparing for upcoming regulatory developments from Basel III finalisation and the EU Banking reform. Based on current assessments, Belfius expects a moderate impact from the Basel III finalisation package on its solvency and considers the solvency position as sufficiently robust in normal market circumstances to successfully comply with the requirements of this new regulatory landscape in 2023. Yet, this estimate is subject to some uncertainties, such as the transposition of the international agreements in the EU legal framework, the discretion of the macro prudential authority to adjust some measures and the Belfius' on- and off-balance sheet structure and risk profile at the time of the entry into force of the revised standards (2023).

During 2019 several regulatory changes and reporting requirements were implemented by the insurance company. Amendments to the Solvency II delegated acts were published in June 2019 and were applicable as from 2019 Q3. The most important amendments, which have a positive impact on its Solvency II ratio, are the regional government and local authorities guarantees and the long-term equity. The first implied a 0% spread shock for fixed income guaranteed by regional governments or local authorities. The second introduced a new solvency capital requirement calibration of 22%. A new reporting on mortgage loans for insurance companies with a significant portfolio was required by the NBB via a circular letter. This report collects information on the risk profile of the mortgage loans portfolio.

The insurance company is also actively preparing the upcoming regulatory and accounting developments. On the one hand the EIOPA Solvency II 2020 review is currently focusing on the calibration of the Solvency II, while on the other hand IFRS 17 will bring an entirely new system of accounting for insurance contracts.

For the macro-economic environment in 2019, we refer to the dedicated section in the chapter "Risk management" of Belfius' Management report.

I. Regulatory framework and pillar 3 disclosure

I.1. Regulatory framework

The capital adequacy regulations consist of three pillars.

- The first pillar – minimum capital requirements – defines the way banking institutions calculate their regulatory capital requirements in order to cover credit risk (including counterparty credit risk), market risk, operational risk and credit valuation adjustment (CVA). The framework provides different approaches for calculating credit risk (3 approaches: Standardised, Foundation Internal Rating-Based and Advanced Internal Rating-Based), market risk (2 approaches: Standardised Approach and Internal Model Approach), operational risk (3 approaches: Basic Indicator Approach, Standardised Approach and Advanced Measurement Approach) and CVA (2 approaches: Standardized Approach and Internal Model Approach). The Pillar 1 encompasses also the leverage requirement which is a non-risk based ratio serving as backstop to the risk-based capital requirements.

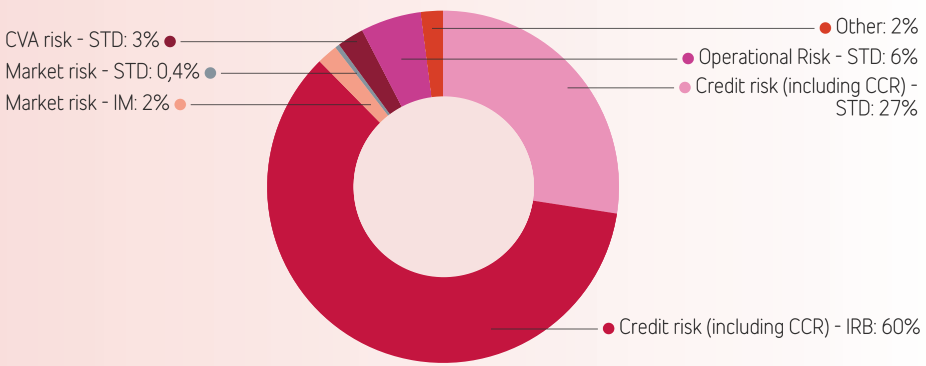
- The second pillar – supervisory review – provides the European regulators acting under the Single Supervisory Mechanism (SSM) with a framework to help them in assessing the adequacy of banks' capital to be used to cover either risks identified in the first pillar but not sufficiently covered by the Pillar 1, or other risks such as e.g. concentration risk or interest rate risk.

- The third pillar – market discipline – develops a set of qualitative and quantitative disclosures allowing market participants to make a better assessment of capital, risk exposure, risk assessment processes, and hence the capital adequacy of the institution. The requirements of the third pillar are met by this publication.

I.1.1. Pillar 1 implementation

Belfius uses different approaches for the determination of its regulatory capital requirements under Pillar 1.

Reporting methods used



I.1.1.1. Credit Risk

Since 1 January 2008, Belfius has been authorised to use the Advanced Internal Rating-Based Approach (AIRB Approach) for the determination of its regulatory capital requirements (see as well IV.2.2.1).

Belfius has also decided to maintain a Standardised Approach for some portfolios for which this approach is specifically authorised by the Basel framework, such as small business units, non-material portfolios, portfolios corresponding to activities in run-off or to be sold or portfolios and entities for which Belfius has adopted a phased rollout of the AIRB Approach.

I.1.1.2. Counterparty Credit Risk and CVA risk

Belfius calculates its exposures on the basis of the Mark-to-market method (also known as Current Exposure Method). Capital requirements are calculated according to the same principles as for credit risk.

The additional charge to cover the risk of mark-to-market losses on the expected counterparty risk, the CVA risk, is calculated according to the Standardised Method.

I.1.1.3. Market Risk

Since 25 June 2013, Belfius has been authorized to use its historical VaR model for the determination of its regulatory capital requirements. This Internal Model Approach is currently granted for general interest rate risk and foreign exchange risk. Belfius applies the Standardised Approach for specific interest rate risk, equity risk and commodity risk (see as well V.3.6.).

I.1.1.4. Operational Risk

For operational risk, Belfius Bank applies the Standardised Approach.

I.1.2. Pillar 2 implementation

The Internal Capital Adequacy Assessment Process (ICAAP), applicable since the end of 2008, requires banks to demonstrate to the regulators the adequacy of their risk profile and their capital and aims at providing an overview of the internal consolidated Belfius process for assessing its Capital Adequacy in relation to its risk profile and organisation. In this context, appropriate governance has been put in place for the calculation and management of the risks and the assessment of the economic capital needs from a Risk Appetite perspective and a Capital Adequacy Statement (CAS) endorsed and signed by the management body has been communicated to regulators. Next to this ICAAP, an ILAAP (Internal Liquidity Adequacy Assessment Process) describing how Belfius monitors and assesses the adequacy of its liquidity and funding risk management has been designed. Similarly, a Liquidity Adequacy Statement (LAS) endorsed and signed by the management body demonstrating that Belfius Bank has an adequate management and monitoring of its liquidity and funding position and risk has also been communicated to the regulators. A detailed description of the Belfius Liquidity and funding risk management framework can be found in the chapter Risk management of the Belfius' Management Report (see section on liquidity risk).

I.1.3. Pillar 3 – Disclosure policy & disclosure map

I.1.3.1. Pillar 3

The current report contains information about risk management, risk measurement and capital adequacy in accordance with the Capital Requirement Regulation (CRR) and the Capital Requirement Directive (CRD IV) of the European Union.

The current report contains information on all subjects included in the directives and implementing regulations, insofar as they apply to Belfius Bank SA:

- Part eight of CRR;
- EBA guidelines for pillar 3 disclosures (EBA/GL/2016/11);
- Disclosure of own funds requirements (EU No. 1423/2013);
- Disclosure of countercyclical capital buffer (EU No. 2015/1555);
- Disclosure of the leverage ratio (EU No. 2017/200);
- Disclosure of encumbered and unencumbered assets (EU No. 2017/2295);
- Disclosure of liquidity coverage ratio (LCR) (EBA/GL/2017/01);
- Disclosure of remuneration policy (EBA/GL/2015/22);
- Disclosure of NPL (EBA/GL/2017/10).

The pillar III disclosures under the CRD IV/CRR framework only deal with parent companies, subsidiaries and associated companies in the financial sector, and exclude insurance companies. This means that disclosure on and reference to capital requirement for Belfius Insurance are generally not included in this report. Belfius Insurance prepares its own Solvency Report, which will be published on 19 May 2020.

However, in order to give a representative view of Belfius' risk profile, Belfius Insurance figures have been included in some sections, when relevant. In this case, the reporting scope is clearly indicated.

The information provided in this report has not been subject to an external audit, but the quality of information is guaranteed by a strong process of validation within the Belfius Bank SA Management Board.

The Risk report 2019 and its templates have been signed off by Belfius' Chief Risk Officer. The report was also presented to the Risk Committee and Audit Committee (in joint session) on 26 March 2020 and to the Board of Directors on 2 April 2020.

The decision not to disclose specific information, under circumstances set out in article 432 (1) and (2) of the CRR, i.e. where the information is regarded as not material, proprietary or confidential is finally taken by the Board of Directors.

The Risk report is presented in euros (EUR), which is Belfius' presentation currency, rounded to the nearest million (unless otherwise stated). Certain figures in this report may not tally exactly due to rounding. Furthermore, certain percentages in this document have been calculated using rounded figures.

The Risk report is released on an annual basis. The next report's update is scheduled for April 2021. Nevertheless, intermediate updates will be published if considered relevant by Belfius due to significant changes in its risk profile.

This Risk report and the Risk report annex are published in English on the Belfius website *www.belfius.be*.

I.1.3.2. Pillar 3 disclosure map

If information is already available in the Management report of Belfius or Belfius Insurance and if Belfius believes it is equivalent in nature and scope to the disclosure requirements, the Risk report 2019 clearly refers to it, without repeating this information. For this purpose, a Disclosure map is established.

Mapping with Pillar III disclosure

Article CRR	Disclosure requirement	Reference to the chapter in present document		Risk report annex (see I.1.3.3)	Reference to external documents: Management report (MR)/Financial statements (FS)
435	Risk Management objectives and policies	II.	Risk management governance		Corporate governance (MR)
436	Scope of application	I.	Regulatory framework and Pillar III disclosure	■	
437	Own funds	III.	Equity and capital adequacy	■	
438	Capital requirements	III.	Equity and capital adequacy	■	
439	Exposure to counterparty credit risk	IV.4.	Counterparty credit risk	■	
440	Capital buffers	III.	Equity and capital adequacy	■	
441	Indicators of global systemic importance			Not applicable for Belfius	
442	Credit risk adjustments	IV.3. X.1.4.	Credit risk management and governance IFRS9 impairment methodology	■	Accounting policies - section 6.5. Impairment of financial instruments
443	Unencumbered assets	VI.3.	Encumbered assets	■	Risk management - Section Liquidity Risk (MR)
444	Use of ECAIs	IV.2.3.	Standardised approaches		
444	Use of ECAIs	IV.2.3.	Standardised approaches	■	
446	Operational risk	VII.2.	Non-financial risk - Operational risk		
447	Exposures in equities not included in the trading book	IV.5.	Focus on Equity exposure	■	Accounting policies - section 6.2.3. Financial assets measured at fair value through other comprehensive income (FS)
448	Exposure to interest rate risk on positions not included in the trading book				Risk management - Section Market Risk (MR)
449	Exposure to securitisation positions	IV.6. VI.2.	Securitisation risk Securitisation activity as originator		
450	Remuneration policy				Corporate governance (MR)
451	Leverage	III.	Equity and capital adequacy	■	
452	Use of the IRB Approach to credit risk	IV.2.2. X.1.	Internal rating based approaches Risk methodology	■	
453	Use of credit risk mitigation techniques	IV.3.3.	Credit risk mitigation techniques	■	
454	Use of the Advanced Measurement Approaches to operational risk			Not applicable for Belfius	
455	Use of Internal Market Risk Models	V.3.	Trading market risk	■	

I.1.3.3. Pillar 3 - Risk report annexes with all tables

As EBA encourages institutions to disclose the quantitative templates in an editable format, the tables listed in the Reference table are not included in the Risk report itself but published in a separate excel file referred as the annex of the Risk report (Risk report Annex.xls) published on the same level as the Risk report itself. You will find this reference table here beneath.

Risk report annex reference table

Disclosure reference	Title
GROUP STRUCTURE AND SCOPE OF APPLICATION	
EU LI1	Differences between accounting and regulatory scopes of consolidation and mapping of financial statements with regulatory risk categories
EU LI2	Main sources of differences between regulatory exposure amounts and carrying values in financial statements
EU LI3	Outline of the differences in the scopes of consolidation (entity by entity)
CAPITAL BASE AND CAPITAL REQUIREMENTS	
CCA	Capital instruments main features Disclosure according to article 3 in the Commission implementing regulation (EU) No 1423/2013
CC1	Own Funds: disclosure template Disclosure according to article 5 in the Commission implementing regulation (EU) No 1423/2013
LRSum	Summary reconciliation of accounting assets and leverage ratio exposures
LRCom	Leverage ratio common disclosure
LRSpl	Split-up of on balance sheet exposures
KM1	Key metrics
EU OV1	Overview of RWAs
EU INS1	Non-deducted participations in insurance undertakings
CCyB1	Geographical distribution of credit exposures used in the countercyclical capital buffer
CREDIT RISK AND CREDIT RISK MITIGATION GENERAL INFORMATION	
Template 1	Credit quality of forborne exposure (formerly CR1-E)
Template 3	Credit quality of performing and non-performing exposures by past due days (formerly CR1-D)
Template 4	Performing and non-performing exposures and related provisions
EU CR1-A	Credit quality of exposures by exposure class and instrument
EU CR1-B	Credit quality of exposures by industry or counterparty types
EU CR1-C	Credit quality of exposures by geography
EU CR2-A	Changes in the stock of credit risk adjustments
EU CRB-B	Total and average net amount of exposures
EU CRB-E	Maturity of exposures
EU CR3	CRM techniques – Overview
CREDIT RISK AND CREDIT RISK MITIGATION STANDARDISED APPROACH	
EU CR4	Standardised approach – Credit risk exposure and CRM effects
EU CR5	Standardised approach

Disclosure reference	Title
CREDIT RISK AND CREDIT RISK MITIGATION IRB APPROACH	
EU CR6	IRB approach – Credit risk exposures by exposure class and PD range
EU CR7	IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques
EU CR8	RWA flow statements of credit risk exposures under the IRB approach
EU CR9	IRB approach – Backtesting of PD per exposure class
EU CR10	IRB (specialised lending and equities)
COUNTERPARTY CREDIT RISK	
EU CCR1	Analysis of CCR exposure by approach
EU CCR8	Exposures to CCPs
EU CCR3	Standardised approach – CCR exposures by regulatory portfolio and risk
EU CCR4	IRB approach – CCR exposures by portfolio and PD scale
EU CCR5-A	Impact of netting and collateral held on exposure values
EU CCR5-B	Composition of collateral for exposures to CCR
EU CCR6	Credit derivatives exposures
EU CCR2	CVA capital charge
MARKET RISK	
EU MR1	Market risk under the standardised approach
EU MR2-A	Market risk under the IMA
EU MR3	IMA values for trading portfolios
(UN)ENCUMBERED ASSETS	
Template A	Encumbered and unencumbered assets
Template B	Collateral received
Template C	Source of encumbrance
LIQUIDITY REQUIREMENTS DISCLOSURE	
LIQ1	Quantitative disclosure on LCR
LIQ2	Qualitative disclosure on LCR
SECURITISATION	
SEC 1	Securitisation exposures in the banking book
SEC 3	Securitisation exposures in the banking book and associated capital requirements

I.2. Declaration approved by the management body on the adequacy of risk management arrangements

Belfius Bank is a Belgian banking and insurance group fully owned by the Belgian Federal State through the Federal Holding and Investment Company (FHIC). Belfius Bank shares are not listed.

Belfius Bank is a locally anchored autonomous banking and insurance group serving individuals, professionals, companies, social profit institutions and public authorities in Belgium.

With a mainly Belgian balance sheet in its commercial Businesses and customers from all segments, Belfius is committed to deliver value-added products and services through a modern proximity model. It aims at a healthy financial profile, reflected in a prudent investment strategy and a carefully managed risk profile, resulting into sound liquidity and solvency positions.

The Belfius risk management framework is based on the 3 Lines of Defence (3 LoD) model with a set of adapted and effective guidelines, policies and internal controls. Belfius Bank has centralised risk data and systems supporting regulatory reporting and disclosures as well as internal management reporting on a regular or ad hoc basis for the various risk types (credit risk, market risk, liquidity risk, non financial risk…). The various reports are presented to the appropriated committees as indicated in the risk governance structure. The most relevant key ratios and figures are incorporated in the "Summary of risk profile".

In accordance with Article 435 of Regulation (EU) No. 575/2013, the Management Board is of the opinion that the risk management system is adequate with regard to Belfius' profile and strategy.

The Management Board considers that this Risk report demonstrates the assurance of the adequacy of the risk management system.

This declaration is also approved by Belfius Bank's Board of Directors of 2 April 2020.

II. Risk management governance

II.1. Governance arrangements

For the global governance arrangements at Belfius Bank and Belfius Insurance, we refer to the respective Annual Reports (see chapter Corporate governance).

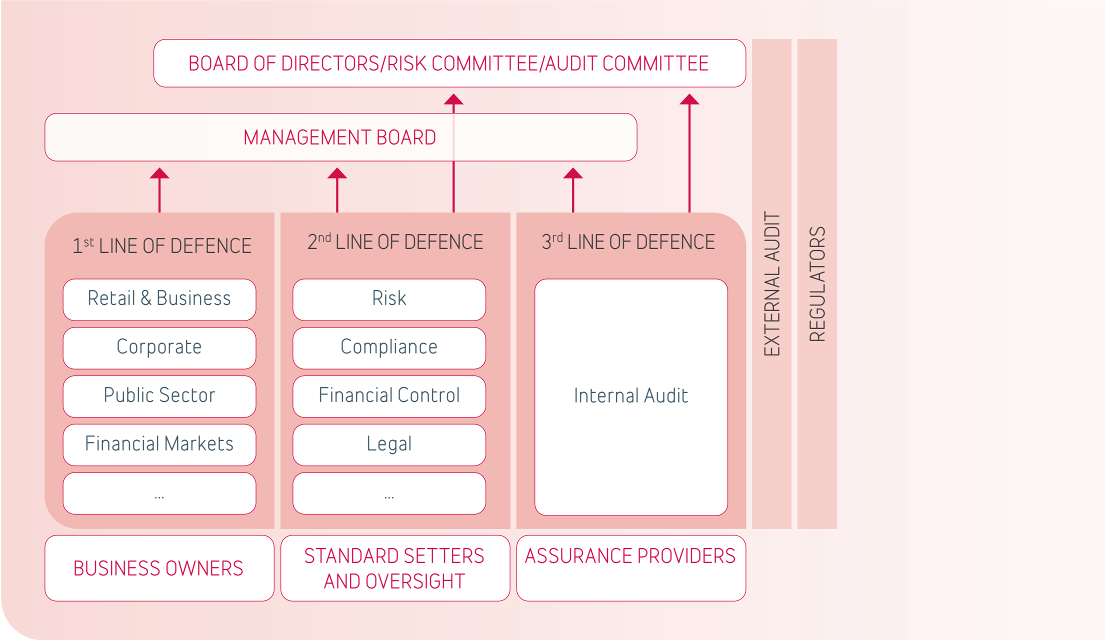
II.2. Risk governance model at Belfius Bank

II.2.1. Three lines of defence model

The Belfius risk management framework is based on the 3 Lines of Defence (3 LoD) model with a set of adapted and effective internal controls.

The first line of defence is the responsibility of the business (& support lines when applicable) and their management as this is where the risks are taken (handled) or where the risks occur and where risks are potentially mitigated. Team members have a (direct) impact on the risk profile by respecting the control environment and internal controls.

The second line of defence is the responsibility of the (transversal) control functions assured mainly but not exclusively by Risk and Compliance, which are independent from the business. The third line of defence is the responsibility of the internal audit function, which provides an independent review of the first two lines of defence.



In concrete, the different roles are:

- 1st LoD: own, manage and control risk (Business Lines/Front) within the framework designed by the 2nd LoD
- 2nd LoD: define the risk management framework (policies, guidelines, Risk Appetite Framework…), monitor and control risk in support of the 1st line (Risk, Financial control, Legal, Compliance) and keep global risk oversight
- 3rd LoD: provide independent assurance to the Board of Director and the Management Board of the effectiveness of Risk Management and Control (Internal audit)

With regards to the 3 LoD model, the Risk Mapping enables a good risk coverage as well as an enhanced ability to spot gaps and define action plans. This risk mapping has been updated in 2019, integrating all newly identified risk categories in accordance with the adapted Belfius' Risk Taxonomy.

II.2.2. Risk management framework

The risk management framework aims to implement sound, prudent and effective risk management and corporate governance (see figure on the right). It aims to cover in a coherent way all elements needed for sound risk management. It mainly defines the interactions between the Risk department and Business.

II.2.2.1. The Risk Appetite Framework (RAF)

(see also Equity and Capital Adequacy – III.3.3.1. Risk Appetite)

The RAF is the expression, at the highest consolidated level, of the risks Belfius is prepared to take or not to take as a stand-alone group pursuing its own strategy and financial targets. It applies group-wide and all (sub-)limits and risk guidelines have to be consistent with it. It is composed of 3 levels:

- Level 1 includes high level risk indicators and qualitative statements. Their scope is group-wise;
- Level 2 includes more detailed KRI's on a broad range of key risks;
- Level 3 concerns the operational limit book (we refer to II.2.2.10.).

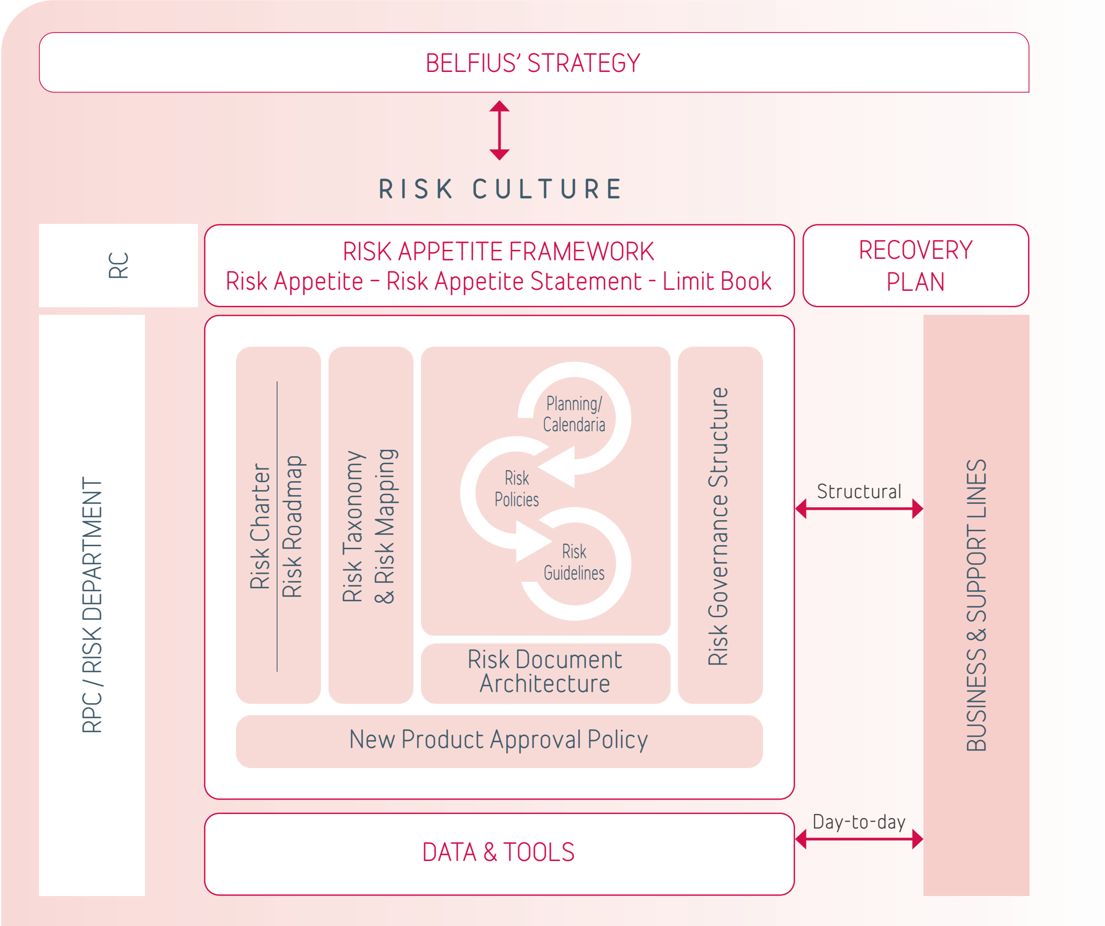
The Risk Appetite Framework is coherent with strategy and financial targets. The construction of the RAF is an iterative process where Key Risk Indicators (KRI's) and limits are checked against business strategies to see if it allows to meet financial targets. One of the key process is to ensure that the Financial Plan, which translates bank strategies into financial figures, respects the RAF limits, both in base case and in case of stress scenarios.

II.2.2.2. The Risk Charter

Belfius Bank has encoded the main risk principles and guidance for all stakeholders and departments involved, and more specifically for Belfius risk management in a Risk Charter. This Risk Charter forms the backbone on which to address adequately customer needs, in order to:

- provide a continuous qualitative service in a "sound partnership" (timely and adapted to the customer's needs);
- within an acceptable and desired risk profile; and
- taking into account legislation, regulation and the prescriptions of the prudential authorities.

It is an essential part of a bigger picture that, based on sound risk management and corporate governance, is completed inter alia with policies and guidelines, a complete Risk Governance Structure as well as a Risk Appetite Framework (RAF) and a yearly updated Risk Roadmap document.



It gives guidance permitting management and staff members to prepare/take decisions, even when specific and adapted policies, guidelines or procedures have not yet been worked out.

The Belfius Risk Charter is summarised in "10 commandments":

II.2.2.3. The Risk Roadmap

Via its risk roadmap, Belfius Bank sets and communicates the overall objectives for the Risk department, its team members and its main stakeholders (Finance & Business).

The risk roadmap expresses the overall and the risk management objectives, actions and priorities of the Risk department with a focus on their implementation during the strategic/tactical plan (1-2 years time horizon).

It builds a strong and responsible risk culture as the main challenge and opportunity. Strong risk management and fostering risk awareness throughout Belfius in a pragmatic way while respecting risk, business and regulatory expectations and new regulatory compliance strategy remains the core mission.

II.2.2.4. The Risk Taxonomy and Risk Mapping

The Risk Taxonomy is a common set of risk categories, used within Belfius, applied in a tree structure in which risks higher up in the hierarchy are decomposed into more specific risk categories. The Belfius Risk Taxonomy is integrated and standardized:

- 1 basic classification: same risk types and classification
- 1 description for each risk category & risk type

The Belfius Risk Mapping:

- defines clear roles and responsibilities for all risk types and tasks in the Bank;
- ensures better Risk, Compliance and Audit coordination based on common risk assessment and coordinated roadmap;
- constitutes an optimised framework, guaranteeing full risk coverage and redundancy avoidance;
- enhances the ability to spot gaps and optimise risk coverage through increased stakeholder confidence and better targeted resources on key risks (while avoiding redundancy);
- is reviewed regularly to cover all risks.

The Belfius Risk Mapping breaks down silos to create value: a more interconnected and consistent approach across Internal Control Functions and 3 Lines of Defence (3 LoD).

The Risk Taxonomy & Risk Mapping have been updated in 2019.

II.2.2.5. The Risk Governance Structure

The Risk Governance Structure

- defines a robust set-up of Risk Committees incorporating effective communication and reporting lines with clear and consistent assignment of responsibilities and authority;
- consistently assigns roles and responsibilities to both Risk/Risk & Business Committees;
- positions decision taking (and their monitoring) at an adequate management level in a coherent way (Strategic/Tactical - Operational Committees) and
- optimises committees and encourages a double signature process where possible.

II.2.2.6. Risk Policies & Guidelines

The Risk Policies and Guidelines

- constitute an aggregated set of specific risk policies and guidelines to concretize the desired global risk management governance and culture;
- define strategies, roles and responsibilities, concepts and objectives of an activity and
- give clear instructions for stakeholders to be applied in a day-to-day business context.

II. 2.2.7. Risk Document Architecture

The Risk Document Architecture describes the main Risk types of document on a high level, together with the responsible issuer, the validation instance and the frequency of update.

II.2.2.8. New Product Approval Policy (NPAP)

The process of developing a "product, activity, process or system" involves a number of steps that must be completed before the new (or changed) function can be implemented. The policy establishes the overall process and the accountability of the parties involved in this process. Therefore, it defines the governance and describes the new product approval process.

The objectives of the process are the following:

- ensure that the development of a "product, activity, process or system" fits within the strategy of Belfius;
- ensure the risk acceptance (in function of the risk tolerance/appetite);
- ensure that necessary resources are available;
- ensure customer satisfaction;
- avoid unknown or unwanted risks in the future.

We also refer to VII.2.3.3. of this report.

II.2.2.9. The Recovery Plan

Following the implementation of the Bank Recovery and Resolution Directive (BRRD) and the Belgian Banking Law, Belfius Bank has to prepare a recovery plan, which is updated on a yearly basis. As part of the crisis management framework, the recovery plan outlines how the Bank can react to a financial stress to avoid resolution. In this context, it aims at preparing the Bank to develop recovery measures to restore the financial strength under various types of stress scenarios. The plan is fully integrated in Belfius' Risk management framework.

The current plan includes a.o:

- various stress scenarios which cover a wide range of vulnerabilities (idiosyncratic and systemic risks or both);
- identification of impediments for the recovery and preliminary actions needed to allow for the recovery;
- a list of recovery measures to restore liquidity, capital and profitability. It also encompasses an in-depth impact assessment on Belfius.

The recovery plan is approved by the Management Board and the Board of Directors.

II.2.2.10. The Limit Handbook

The Limit Handbook aims to gather all major limits applicable within Belfius Bank in one sole document.

II.2.2.11. The Risk Culture

The Risk Culture

- is a policy approved by Belfius Bank which sets out the vision, strategy and responsibilities;
- is about standards, attitudes, behaviours and judgements, playing an important role in influencing the actions and decisions taken by individuals within the Bank, related to risk awareness, risk taking and risk management all within a strong risk governance;
- determines the collective ability to identify and understand, openly discuss and act on the current and future risks.

Everyone in the Bank has a role and responsibility and should be aware of and consider risk in his/her daily business (first line of defence). Issues related to risk culture are of interest to all stakeholders: from Board of Directors, Management Board and senior management to middle management and all individuals who are active in the Bank. By making risk responsibilities more transparent within the various levels and by holding every employee accountable for his acts, risk culture and awareness are embedded in the Bank.

II.2.2.12 Data & Tools

The risk management sets in place a data quality framework to ensure completeness,... of the data. A robust data architecture is key for risk management.

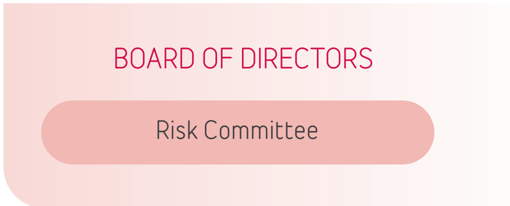
In addition, robust tooling is key to exploit the data.

Different projects are ongoing to enhance the data quality framework and tooling, and therefore to enhance risk management governance & efficiency.

II.2.3. Risk governance structure

A performant risk governance structure is considered as a central cornerstone to sound risk management. A robust risk committee set-up incorporates effective communication and reporting lines and a clear delineation of responsibilities and competences. Such a set-up ensures a two-way process of risk management instructions and feedback enabling senior management to execute its management and supervisory obligations.

II.2.3.1. Risk Committee operating within the Board of Directors: Risk Committee (RC)



For a more extensive description of the Risk Committee (including remit and functioning), we refer to the Belfius Management report, chapter Corporate governance.

The Risk Committee (RC) is one of the advisory committees operating within the Board of Directors. It has been established in accordance with Article 27 and Article 29 of the Belgian Banking law.

When deemed necessary and without restrictions, the CRO can directly access the chairman of the Risk Committee and/or the Audit Committee.

II.2.3.2. Risk Committees on strategic level operating within the Management Board

Three risk committees have been set up within the Management Board of Belfius Bank, prepared by the Risk department and meeting 2 to 4 times[1] a year:

- the **Risk Policy Committee (RPC)** surveys the definition and the implementation of the Bank's principal risk management and measurement policies, processes and methodologies, and supervises their validation status. Its prime responsibility is to provide a risk governance that is commensurate with the risk appetite and strategy ("Risk Appetite Framework or RAF") of the Bank compliant with regulatory requirements and is in line with best practices;
- the **Risk Appetite Committee (RAC)** surveys Belfius' risk appetite, capital adequacy and capital allocation. It manages the economic capital and stress test framework, ensures the adequacy of this framework against the nature and complexity of the risk and business composition and supervises its practical implementation;
- the **Non-Financial Risks (NFR) Committee** ensures a well-governed and coordinated non-financial risk framework for an effective Non-financial risk management. NFR covers a.o. operational risks (including fraud, HR, IT, IT security, business continuity, outsourcing, data-related risks, privacy…) but also reputational, compliance and legal risks.

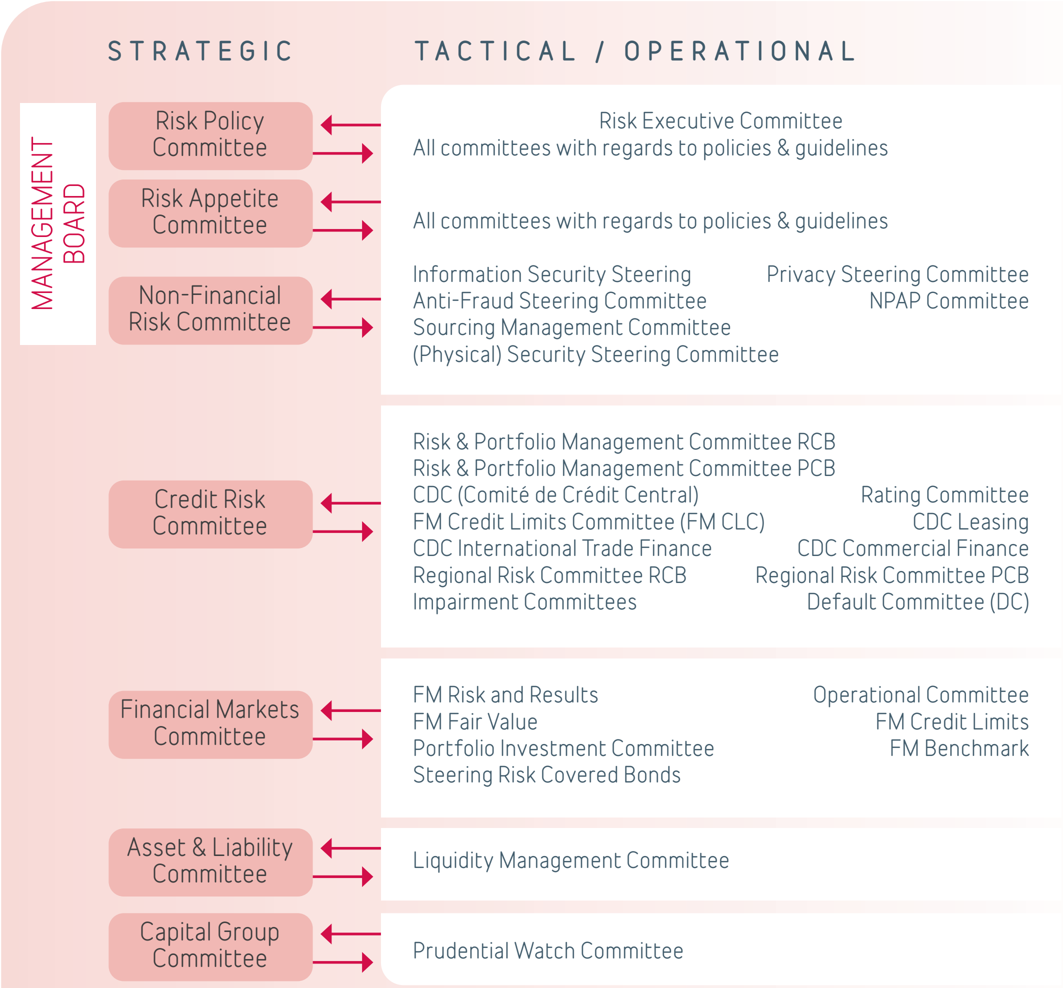
In addition to these three risk committees, four functional areas also report to the Management Board without a separate committee being set up for them. These four areas deal with credit- and financial markets-related topics, ALM and capital management:

- the **Credit Risk Committee (CRC)** centralizes, in a strategic and end-to-end process view, all credit risk related topics (origination, monitoring, impairment) into one committee with presence of the Management Board members who are directly involved (CRO, Head of RCB & PCB).
- the **Financial Markets Committee (FMC)** has as prime function the effective risk management oversight and steering of the Financial Markets activities. This includes reviewing business, risk and P/L reports and providing for an appropriate risk management and governance framework aligned to the risk appetite and business objectives set forward by the Management Board. It is held once a month with a strict quorum including members of the Management Board (CRO, CFO and Head of PCB).
- the **Assets & Liabilities Committee (ALCo)**: while the Management Board and the Board of Directors have the ultimate responsibility for setting the strategic risk appetite and business objectives, they delegate to the ALCo the effective ALM management within the regulatory framework. The Liquidity Management Committee has been mandated by the ALCO to take care of all aspects relating to liquidity management and steering as well as the reporting on the liquidity situation.

(1) This is not a fixed number. As the composition of these committees is equal to the Management Board, the specified topics may be presented in a management board without the specific set-up of these dedicated committees.

- the **Capital Group Committee (CGC)** anticipates, understands, prepares, analyses & monitors all capital aspects on a conglomerate level (Bank, Insurance & related subsidiaries) in compliance with regulatory, legal and economic constraints. It also acts as Prudential Watch Committee (PwaC) to enable Belfius to anticipate, to understand, to steer and to follow-up on prudential reforms, guidelines, proposals and evolutions thereof impacting Belfius and its entities. Prudential Watch will propose alignment between Bank/Belins, Risk/finance… of the positions towards the regulator on key prudential issues.

II.2.3.3. Risk Committees on tactical/operational level



The Management Board delegates certain decisions to a tactical/operational level. The details of this delegation are set out in the applicable committee charters. For matters that fall outside this delegation, the tactical/operational level provides information or puts forward opinions to the Management Board, which then decides.

The committees that are part of the tactical/operational level are committees on which the Risk department generally participates alongside business divisions. Risk committees which are steered by the Risk department focus mainly on risk appetite and methodology. Risk/Business committees which are steered jointly by the Risk department/Business focus mainly on guidelines, transactions and risks on counterparty risks. The Risk department has a veto right in many of these committees, as well as the right to bring files for decision to a higher governance level.

II.2.3.3.1. At a general level

The **Risk Executive Committee (Risk ExCom)** is responsible for the day-to-day deployment of the Risk Appetite Framework of Belfius Bank as defined by the Board of Directors (RC) and/or the Management Board (RPC, RAC, Regulatory Steering Committee & Non-Financial Risk Committee) and bears the ultimate responsibility of the implementation of Belfius Bank's risk roadmap.

The **Investment Committee** gives advice to the Management Board regarding the acquisition of participations (equity investments) by the business lines PC, RC and FM.

II.2.3.3.2. Financial Markets Risk Management

As mentioned above, the **Financial Markets Committee (FMC)** - at strategic level - has as prime function the effective risk management oversight and steering of the Financial Markets activities. This includes reviewing business, risk and P/L reports and providing for an appropriate risk management and governance framework aligned to the risk appetite and business objectives set forward by the Management Board.

This committee is the main committee for Financial Markets Management. The committee is divided into sub-committees which are responding to the main FMC. It is led once a month with a strict quorum including members of the Management Board. The subjects that are under the scope of the main FMC are chosen executive summaries coming from the sub-committees leading to a final level of decision. Other ad-hoc topics can be proposed to the agenda if they are eligible for one of the sub-committees.

The sub-committees are:

- **FM Risk and Results (FM RR)** reviewing business, risk and P/L reports and providing for an appropriate risk management and governance framework aligned to the risk appetite and business objectives set forward by the Management Board;
- **FM Fair Value (FM FV),** in its capacity of Fair Value assessor, acts as a body in charge of "Fair Value Validation" with a focus on validation of market parameters and models. It then acts as the assessing/challenging forum regarding the Fair Value of the Financial Instruments;
- **FM Benchmark**: follow-up of obligations of the Bank as panel bank for the contribution of Euribor and €STR following the Code of Conduct of Panel Banks and the internal policy;
- **Operational Committee (FM OC)** makes the follow up of operational issues;
- **FM Credit Limits (FM CLC)** approves credit limits requests related to all FM activities, Belins and PCB Trade Finance and monitors the associated credit risk for all the counterparties in the scope of FM RM – Research Analysis;
- **Portfolio Investment Committee (PIC)** acts as the central supervisory and decision body on all matters regarding the portfolio management of legacy portfolios (ALM Yield portfolio and Credit Derivatives portfolio). The PIC also receives delegation from the Alco for the follow-up of the ALM Liquidity portfolio;
- **Steering Risk Covered Bonds (SRCB)**: common Risk forum in order to communicate and to discuss regarding the Covered Bonds programs.

II.2.3.3.3. Credit Risk Management

Besides the **Credit Risk Committee (CRC)** - at strategic level - the following committees at tactical/operational level cover credit risk:

- The **Risk & Portfolio Management Committee RCB** is a platform for structural consultation and dialogue, in order to increase the involvement of all stakeholders in the strategy and the functioning of risk management RC. This includes the discussion of general and transversal items such as inter alia governance, watch list and impairment cycle, analysis and decision making process, risk projects, and so on;
- The **Risk Portfolio Management Committee & PCB** is a platform for structural consultation and dialogue, in order to increase the involvement of all stakeholders in the strategy and the functioning of risk management PC. This includes the discussion of general and transversal items such as inter alia governance, watch list and impairment cycle, analysis and decision making process, risk projects, and so on;
- The **CDC (Comité de Crédit Central)**: the main Credit Committee, the CDC Central (specific delegations have been given to various lower credit committees):
  - approves new credit transactions PC and RC and annual reviews of existing credit files (based on updated financial statements, i.e. without any adjustment of the current risk), that do not exceed its delegation limits and/or that do not lead to an exceeding of the prevailing credit limits;
  - advises on new deals or limits that must be presented to the Management Board.
- The **FM Credit Limits Committee (FM CLC)** is described above under the Financial Market Risk Committees;
- The **CDC International Trade Finance** makes decisions with regard to transactions managed by the International Trade Finance department of Distribution ITF;

- The **Rating Committee:** the main aim of the Rating Committee is to supervise the correct and coherent application of the various Internal Rating Systems within Belfius Bank and its subsidiaries, together with an assessment of their performance;
- The **CDC Leasing** handles new credit applications, extension of lines with a specific duration as well as the periodic review of files;
- The **CDC Commercial Finance** handles new credit applications, extension of lines with a specific duration as well as the periodic review of files;
- The **Regional Risk Committee RCB** monitors the regional loan portfolio, with a special focus on the counterparties whose credit profile is weakened (watch list). Organised by region (NO, NW, SE, SO and Centrum-West & Branches);
- The **Regional Risk Committee PCB** monitors the regional loan portfolio, with a special focus on the counterparties whose credit profile is weakened (watch list). Organised by region (NO, NW, SE, SO and Centrum);
- The **Default Committee (DC):** the objective of the DC is to decide on and follow up the default status of counterparties, i.e. being a necessary condition for an impairment to be recognised;
- The **Impairment Committees:** the need of Belfius to oversee and govern IFRS 9 impairments resulted in a committee structure, consisting of one Expert Panel and three dedicated Impairment Committees (Stage 1, Stage 2 & Stage 3).

II.2.3.3.4. Non-Financial Risk Management

Besides the **Non-Financial Risks Committee (NFRC)** - at strategic level - the following committees at tactical/operational level cover specific NFR risk:

- The **Information Security Steering (ISS)** ensures a well governed and coordinated information security strategy whereby an adequate "prevention", "detection", "protection" and "reaction" in line with regulatory requirements towards information security is guaranteed;
- The **Anti-Fraud Steering Committee** is a platform for the internal control functions (Risk/Compliance/Internal Audit) and a forum to reflect and organize a dialogue between the internal control functions and all the stakeholders (mainly operating in the decentralised expert units) regarding fraud risk management;
- The **Privacy Steering Committee** ensures a well governed and coordinated privacy strategy in line with regulatory requirements regarding privacy and personal data protection;
- The **(Physical) Security Steering Committee** oversees the (physical) security risk management in order to prevent and provide appropriate protection for all organizational assets of Belfius, with focus on people, from crime incidents and damaging natural elements such as fire;
- The **NPAP Committee** oversees the New Product Approval Process (NPAP) management, implementation and execution in order to ensure appropriate risk analysis to any new or changed function. In particular, the committee delivers a final opinion based on the advices of risk experts about the continuation of the function (or not);
- The **Outsourcing Management Committee** defines and monitors Outsourcing Management. It is organised by Strategic Planning and Performance Management.

II.3. Risk governance model at Belfius Insurance

For the Risk Governance model at Belfius Insurance, we refer to the Belfius Insurance Annual Report, chapter Risk management.

II.4. Risk department organisation, role and responsibilities

II.4.1. General mission

The mission and role of the Risk department is to define and implement a robust risk management framework based inter alia on the following cornerstones:

- an acceptable risk appetite in line with the commercial and financial objectives;
- a set of independent and integrated risk measures for different types of risk (credit, concentration, market, liquidity, operational and other non-financial risks), enhanced by internal limits that are themselves consistent with the approved risk appetite;
- an effective process to identify, measure, monitor, assess or mitigate risks to which Belfius Bank is or might be exposed, enhanced by timely and accurate reporting to make management aware of all the material risks and the overall risk profile, in order to ensure appropriate decision-taking.

The Risk department has the responsibility to establish a set of risk policies and guidelines defining the risk governance structure and management including an adequate committee set-up with clear and consistent assignment of responsibilities.

The overall objective of the Risk department is to ensure the implementation of sound, prudent and effective risk management based on the basis of a full understanding of the risks and based on a swift and proactive identification of and alerting to potential risks.

II.4.2. Risk organisation

II.4.2.1. At Belfius' level

In line with Art. 194 of the Banking Law, Belfius is managing risks based on a group-wide[1], consolidated and integrated risk management framework. The overall objective is to have a risk management coordination, ensuring consistency while respecting the entities' specificities, responsibilities and legal/regulatory obligations. The main pillars of this risk management are an appropriate risk governance structure, a robust and aligned risk framework, risk monitoring and decision taking process.

In terms of risk governance structure Belfius implements:

- a similar Committee governance and decision taking process for Bank and Insurance: Board of Directors, Risk Committee (Belfius Bank) - Risk & Underwriting Committee (Belfius Insurance);
- the presence of Belfius Bank Board of Directors' members in Belfius Insurance Committees assuring enhanced coherence;
- the possible organisation of a common Belfius Bank Risk Committee/Belfius Insurance Risk & Underwriting Committee;
- a group committee with the management board of the Bank and the CEO of the insurance company.

The 3 entities have a similar risk policies & guidelines framework and approach:

- risk policies with focus on risk drivers, governance and decision making process;
- risk policies decided at Management Board level (with the formal approval of the Belfius Insurance Board of Directors and the BIP Board of Directors);
- steered by the Risk department;
- the aim is to implement best practices: mutual exchange & implementations.

The 3 entities use similar and/or common tools ensuring consistency and enabling coherence as well as an integrated management of risks and internal controls:

- Risk Appetite Framework: defined and validated group-wide by Belfius Bank and cascading down to subsidiaries;
- Risk Management & Control executed through the "Senior Management Report on the Assessment of the Internal Control";
- ICAAP (Belfius Bank & BIP) & Recovery Plan (Belfius Bank) and ORSA (Own Risk and Solvency Assessment; Belfius Insurance).

More information regarding the risk governance of Belfius Insurance can be found in the Annual Report of Belfius Insurance, chapter Risk management.

II. 4.2.2. Belfius together

Through "Belfius Together", the Risk department has further enhanced the conglomerate dimension in the Risk department, in line with the strategy of the Group (Bank & Insurance).

As from January 2019, the Risk Management implemented organisational changes , following the "Belfius Together" approach. This new Risk Management organisation takes more systematically a conglomerate vision while ensuring quality, efficiency and expertise in both entities at all times. The expected benefits from this reorganisation between Belfius Bank and Belfius Insurance are:

- better management of risks by both entities and on conglomerate level;
- a better aligned culture: frameworks, methods and harmonized best practices;
- better deployment of the existing pool of talents; and
- more efficient use of means.

3 new departments were created for a future-proof Risk Management: Strategic Risk Management, Non-Financial Risk Management and Services:

- the Strategic Risk Management team enhances the strategic dimension of risk management, increases consistency within the group and ensures relevant and consistent risk/reward approach;
- the Operational Risk Management team evolved towards Non-Financial Risk Management on a group level;
- Services ensures a lean and efficient Risk Management with a centralisation of
  - IT & projects and
  - production of standardized reporting (regulatory…) and including
  - a corporate office.

While synergies between Belfius Bank & Belfius Insurance are increased and centralised teams are created when feasible and while the competences on conglomerate are enhanced, Risk Management's sound governance principles ensure independence of both CRO's and respect legal structure of the Group with existing internal committees remaining and existing decision making processes unchanged.

Furthermore, besides the new organisation, there were more collaboration and exchanges over the teams and entities e.g. sharing best practices. The efforts will be continued in 2020.

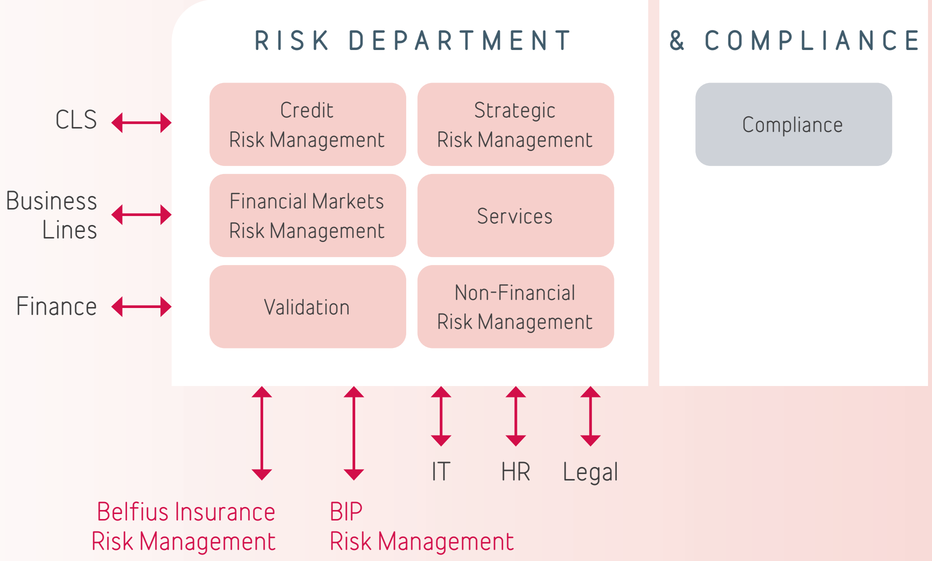
(1) Belfius Bank, Belfius Insurance, Belfius Investment Partners.

II.4.2.3. At Belfius Bank's level

This risk organisation takes into account:

- Belfius as a major actor in the Belgian financial sector/context serving Belgian society/economy;
- the size of Belfius;
- the strategic objectives of Belfius;
- the needed cooperation between methodological and operational risk teams;
- the extension and reinforcement of regulations (Basel III and beyond) and additional (inter) national regulatory control;
- the liquidity, solvency and profitability challenges;
- the necessary promotion of a risk culture at Belfius.

As mentioned above, the Risk department has been reorganised at the beginning of 2019, in the context of Belfius Together. These are the main missions of the various divisions of the Risk department:



II.4.2.3.1. Credit Risk Management

The goal pursued by Credit Risk Management is the development and maintenance of an efficient and robust risk management framework for the RC and PC credit activities, based on proactive risk control and risk-challenger view.

II.4.2.3.2. FM Risk Management

The focus of FM Risk Management is to develop and maintain an efficient and robust risk management framework for treasury, portfolio and financial markets activities including advice, supervision and support in terms of risk assessment (credit/counterparty, market and portfolio), in strict compliance with the risk appetite and the business strategy of Belfius Bank.

II.4.2.3.3. Strategic Risk Management

The Strategic Risk Management team enhances the strategic dimension of risk management, increases consistency within the group and ensures relevant and consistent risk/reward approach.

Strategic Risk Management is in charge of establishing a consolidated and forward-looking view of risks and emerging risks, their interdependencies (credit, market, liquidity, business and non-financial risks) and define/manage the framework for risk appetite. Strategic Risk Management is in charge of stress-testing as well.

Strategic Risk Management is also in charge of proposing strategies and tools to help optimise the financial balance (risk capital vs. return vs. liquidity) while meeting the objectives of appetite for risk as well as the objectives of Belfius.

Strategic Risk Management includes the Regulatory watch team: this team closely monitors regulatory environment in order to assure a holistic view on new regulations and requirements. It also assures that actions and decisions are taken for a timely implementation with regard to regulatory changes. The team supports the business lines and other departments with regulatory implementation. The team also manages strategic transversal projects and risk items.

Strategic Risk Management includes the "Rate & Liquidity" team (Risk –ALM) , exercising the second line of defence on the ALM function.

Strategic Risk management works in a "Belfius Together" mode for bank and insurance (except for the Risk-ALM part).

II.4.2.3.4. Validation

The primary task of Validation is to ensure quality, reliability, proper functioning and adequate use of the models developed by Belfius Bank as well as their compliance with regulatory requirements during their entire life cycle.

Validation also plays an important role in the assessments/communication of the strengths and weaknesses of models to help all stakeholders to improve their use and understanding.

II.4.2.3.5. Risk Services

The Risk Services division is responsible for the calculation, analysis and reporting of risk figures consistent with Finance in view of both internal and external communication.
The Risk Services ensures a lean and efficient Risk Management with a centralisation of IT & projects and production of standardized reporting (regulatory…) and includes the Risk management - corporate office.

The Risk Services team acts on behalf of Bank and Insurance entities.

II.4.2.3.6. Non Financial Risk

The Non Financial Risks department acts as the 2nd line of defence for the main NFR risks and acts as a corporate crisis, BCP manager within Belfius.

The division includes a Transversal NFR team, the DPO (Data Privacy Officer) as well as the CISO (Chief Information Security Officer).

The Non Financial Risks team acts on behalf of Bank and Insurance entities.

II.4.2.4. At Belfius Insurance level

More information regarding the risk organisation of Belfius Insurance can be found in the Annual Report of Belfius Insurance, chapter Risk management.

II.5. Belfius Risk Cartography

			Pillar 1	Pillar 2	Covered by Capital
Financial Risks	Credit Risk	Solvency Risk	■	■	Yes
		Country Risk	■	■	Yes
		Counterparty Credit Risk	■	■	Yes
		Residual/Recovery Risk		■	Yes
		Settlement Risk		■	Yes
	Structural Market and ALM Risk	Interest Rate Risk		■	Yes
		Price Risk(1)	■	■	Yes
		Currency Risk		■	Yes
		Spread Risk		■	Yes
		Liquidity Risk		■	No
		Funding Risk		■	Yes
	Trading Market Risk	Interest Rate Risk	■	■	Yes
		Spread Risk	■	■	Yes
		Price Risk	■	■	Yes
		Currency Risk	■	■	Yes
		Liquidity Risk		■	No
		Other Market Risks(2)		■	Yes
	Other Risks(2)	Insurance Specific Risks (incl. Life, Non-Life and Health)		■	Yes
		Behavioural Risk (incl. Prepayment Risk)		■	Yes
		Pension Plan Risk		■	Yes
		Model Risk		■	Yes
Non Financial Risks	Operational Risk	Operational Risk	■	■	Yes
	Other Risks	Business Risk		■	No
		Strategic Risk		■	No
		Execution Risk		■	No
		Reputation Risk		■	No
		External Risk		■	No
		Compliance Risk		■	No
		Legal Risk		■	No
Conglomerate risk		Conglomerate Risk		■	No

(1) Price risk includes risk on Equity exposure and Property exposure in the Banking Book
(2) Including volatility/correlation, carbon and commodities risks

The RICAP (Risk Identification and Cartography Assessment Process) was implemented in 2011. The RICAP consists of a series of meetings with key business representatives to ensure all risks are identified.

The table illustrates the risk identification process within Belfius. It represents the risk cartography of Belfius as at 31 December 2019, which aims at screening all risks to ensure they are identified, quantified and/or monitored.

All risk types are classified in Financial, Non-Financial and Conglomerate risks.
Financial risks are capitalised with the exception of Liquidity Risk for which no capital is set aside as Belfius perceives that capital is not the adequate answer to cover it. It is actively monitored and managed through gap limits and stress tests.
Most of Non-financial risks are not capitalized but will generally be contained by adequate procedures and monitored through appropriate processes.

Business Risk, even if not covered by capital will be considered through Earnings at Risk and Stress Testing framework.

Conglomerate risk can be further broken down into financial and non-financial risks.

Credit risk, market risk and operational risk are subject to the Pillar 1 framework and are also included in the Pillar 2 framework.

The Pillar 1 and Pillar 2 approaches to the same risks might differ at four levels:
- the perimeter;
- the methodology;
- the risk parameters used;
- the level of severity.

The perimeter of Pillar 2 risks is larger as Pillar 2 aims at exhaustiveness. Other risks than those included in the Pillar 1 framework are then specifically included in the Belfius Pillar 2 framework i.e. settlement risk, residual/recovery risk, interest rate risk (Structural Market and ALM Risk), currency risk (Structural Market and ALM Risk), funding risk (Structural Market and ALM Risk), liquidity risk, behavioural risk, insurance specific risks, model risk, pension plan risk, business risk, strategic risk, execution risk, compliance risk, reputation risk, external risk and legal risk.

Methodologies and risk parameters used by Belfius lead to the calculation of economic capital. It is defined as the potential deviation of the Group's economic value from its expected economic value at a determined interval of confidence and time horizon. The choice made by Belfius is to estimate its risks at a severity level of (99.94%, 1-year) instead of (99.9%, 1-year) for Credit and Operational and (99%, 10-day) for Market as required by the Pillar 1.

Several risks such as business, reputation, strategic, liquidity, compliance, execution, conglomerate, external and legal risks are part of the Pillar 2 but are not capitalised, either because they are considered as non-material (currency risk) or because they are managed through appropriate processes other than quantification.

III. Equity and capital adequacy

III.1. Equity

III.1.1. Prudential supervision

Belfius Bank reports on its solvency position on consolidated level and on statutory level in line with CRR/CRD IV regulations:

- the minimum capital requirements ("Pillar 1 requirements") as defined by Article 92 of Regulation (EU) No 575/2013 (CRR);
- the capital requirements that are imposed by the decision following the SREP in application of Article 16(2)(a) of Regulation (EU) No 1024/2013 and which go beyond the Pillar 1 requirements ("Pillar 2 requirements");
- the combined buffer requirement as defined in Article 128(6) of Directive 2013/36/EU (CRD IV).

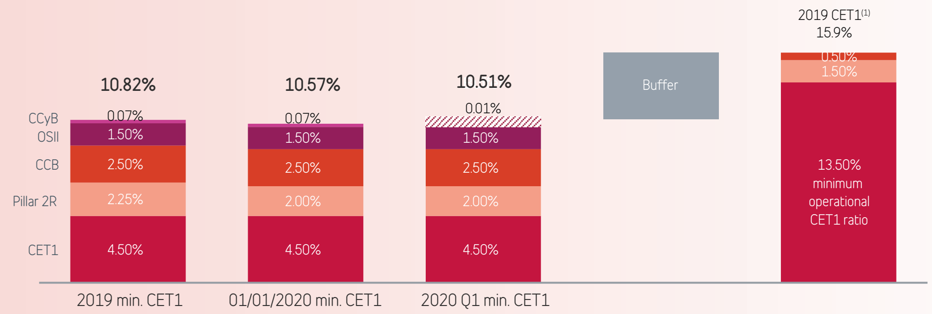
As a result of the annual "Supervisory Review and Evaluation Process" (SREP) finalized by the ECB in the beginning of 2019, Belfius had to comply for 2019 with a minimum CET 1 ratio of 10.82% (including the countercyclical capital buffer), composed of:

- a Pillar 1 minimum of 4.5%;
- a Pillar 2 Requirement (P2R) of 2.25%;
- a capital conservation buffer (CCB) of 2.5%;
- a buffer for (other) domestic systemically important institutions (O-SII buffer) of 1.5% (imposed by the National Bank of Belgium). and
- a countercyclical capital buffer (CCyB) of 0.07%.

Belfius has to respect the full combined buffer requirements (capital conservation buffer, countercyclical capital buffer, buffer for systemically important institutions and systemic risk buffer) and the Pillar 2 buffer requirements. Note that the ECB has also notified Belfius of a Pillar 2 Guidance (P2G) of 1% CET 1 ratio for 2019, a recommended buffer to be held over the minimum requirements set forth above.

The consolidated CET 1 ratio of Belfius stood at 15,9% at the end of 2019, well above the above-mentioned 2019 applicable CET 1 capital requirement[1].

Belfius' minimum CET1 requirements vs.Belfius' 2019 CET1 capital position and target



As a result of the annual "Supervisory Review and Evaluation Process" (SREP) finalized by the ECB at the end of 2019, Belfius must comply for 2020 with a minimum CET 1 ratio of 10.57% (including the countercyclical capital buffer) from 1 January 2020 onwards, down 0.25% following the lowering of the Pillar 2 Requirement (P2R) from 2.25% to 2%.

On 11 March 2020, the Financial Policy Committee (FPC) of the Bank of England has reduced the UK countercyclical buffer rate to 0% of banks' exposures to UK borrowers with immediate effect, to support further the ability of banks to supply the credit needed to bridge a potentially challenging period due to the economic shock from Covid-19.

For similar reasons, on 11 March 2020, the National Bank of Belgium has decided to reduce the Belgian countercyclical buffer rate of banks' exposures to Belgian borrowers, formerly set at 0.5% and announced on 28 June 2019 for implementation as from 1 July 2020 onwards, to 0% till further notice.

(1) Based on the proforma calculation 'limited to interim dividend' - see section III.1.2 for more details

Following the measure of the FPC of the Bank of England, as from 11 March onwards, the countercyclical buffer rate stands at 0.01% for Belfius, a countercyclical buffer rate stemming from the applicable countercyclical capital buffer rates for banks' exposures to French[1] and Luxembourg borrowers.

For Q1 2020, Belfius must thus comply with a minimum CET 1 ratio of 10.51% that is composed of:
→ a Pillar 1 minimum of 4.5%;
→ a Pillar 2 Requirement (P2R) of 2%;
→ a capital conservation buffer (CCB) of 2.5%;
→ a O-SII buffer of 1.5%
→ a total countercyclical capital buffer of 0.01%

Further details on the countercyclical buffer are provided in the Risk report annex (Table CCyB1).

The ECB has again notified Belfius of a Pillar 2 Guidance (P2G) of 1% CET 1 ratio for 2020.

Further to these regulatory requirements, in normal market circumstances and under stable regulations, Belfius had defined a minimum operational CET 1 ratio of 13.5%, on solo and consolidated levels. This ratio is intended to maintain Belfius' distribution assessment and decision autonomy under stressed financial environments. In addition, Belfius' Risk Appetite Framework end 2019 stated that it will manage, in normal market circumstances and stable regulations, with a target CET 1 ratio range of 15% to 15.5%, higher than this minimum operational level to take into account additional unforeseeable elements. Belfius intends to manage its solvency in line with this target ratio in normal times and on a steady state basis, unless the above mentioned buffer is (partially or entirely) used, and as long as regulations on statutory and/or consolidated capital ratios would not materially change.

III.1.2. Regulatory own funds

CET 1 capital amounted to EUR 8,780 million, compared with EUR 8,329 million at the end of 2018. The increase in CET 1 capital of EUR 451 million results mainly from the inclusion of the net prudential result and the increase of the "gains and losses not recognized in the statement of income", partially offset by the correction for foreseeable dividend of EUR 164 million (calculated with an additional dividend based on a 40% pay-out ratio).

Please note that the World Health Organization (WHO) has declared the COVID-19 outbreak as a public health emergency of international concern in January 2020, weighting on global financial markets and global economic growth which may consequently have an impact on the financial position of Belfius.

As a consequence, Belfius has decided not to pay out an additional dividend of EUR 161 million but to integrate this result in retained earnings, available for distribution once the impacts of the economic crisis following COVID-19 are more clear. Note that an amount of EUR 100 million was paid in August 2019 as interim dividend over 2019 results.

As a result, a proforma calculation "limited to interim dividend" of the solvency metrics at the end of 2019 is performed; resulting in a CET 1 capital of EUR 8 941 million at the end of 2019 as only the remaining AT1 instrument coupon cost after tax is considered as foreseeable dividend.

The deductions and prudential filters have decreased with EUR 30 million mainly following:
→ a positive evolution of EUR 21 million in the additional valuation adjustment and
→ the sale of a remaining ABS position of EUR 21 million.

Tier 1 capital amounted to EUR 9,277 million, compared to EUR 8,826 million at the end of 2018 as it includes the additional Tier 1 issue of EUR 500 million (nominal value) in February 2018. The Tier 1 capital in the proforma "limited to interim dividend" amounts to EUR 9,438 million at the end of 2019.

Tier 2 capital decreased from EUR 1,404 million to EUR 1,391 million. This decrease is mainly related to the decrease of EUR 22 million of the useful prudential value of subordinated Tier 2 instruments. There is no impact on the Tier 2 capital in the proforma "limited to interim dividend" exercise at the end of 2019.

At the end of 2019, the total regulatory own funds amounted to EUR 10,669 million, compared to EUR 10,230 million at the end of 2018. The total regulatory own funds in the proforma "limited to interim dividend" amounts to EUR 10,830 million at the end of 2019.

The composition of capital is detailed further in the Risk report annex (Table CC1)

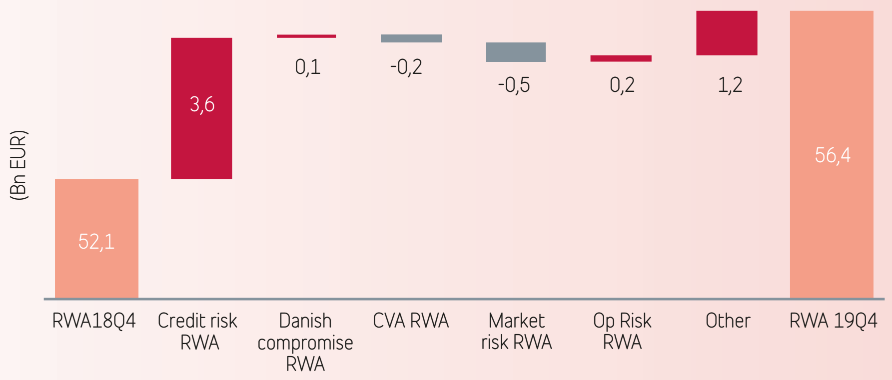
For more information on regulatory own funds on consolidated level, please refer to the capital management section of the Annual Report.

(1) In France, the High Council for Financial Stability (Haut Conseil de Stabilité Financière) fully released the countercyclical buffer. As from 2 April 2020 and until further notice, this rate amounts to 0%.

III.2. Capital requirements by type of risk

The regulatory risk exposure[1] includes risk-weighted exposures for credit risk including counterparty credit risk, CVA risk, market risk and operational risk. Each of the underlying risks is detailed further on in this report. Risk-weighted exposure also stems from the Danish Compromise, whereby the capital instruments issued by Belfius Insurance and held by Belfius Bank are included in the regulatory risk exposure via a weighting of 370%.

RWA evolution by type of risk



End 2019, regulatory risk exposure of Belfius amounted to EUR 56,398 million, an increase with EUR 4,333 million compared to EUR 52,065 million at the end of 2018.

The regulatory credit risk exposure including counterparty credit risk increased by EUR 3,611 million to EUR 42,543 million. This increase is mainly linked to an increasing stock of loans to the corporate and business banking segments as well as the increase in mortgage loans, especially in the second half of 2019.

The regulatory risk exposure for Danish Compromise slightly increased at EUR 6,868 million, mainly due to the variations of the exposure value of the underlying Tier 2 instruments of Belfius Insurance, subscribed by Belfius Bank.

(1) Regulatory Risk Exposure (RRE) also known as Risk Weighted Assets (RWA)

The regulatory CVA exposure decreased with EUR 224 million thanks to additional hedges and market evolutions.

The regulatory market risk exposure declined by EUR 486 million as a result of market evolutions.

Regulatory operational risk exposure slightly increased (EUR +165 million) over the period, in line with the increase in revenue.

In anticipation of a more stringent regulatory framework applicable from 2020 onwards, Belfius has - in accordance with article 3 of the CRR – included an additional regulatory risk exposure of EUR 1,150 million in its end 2019 solvency requirements.

There is no impact on the regulatory risk exposure in the proforma "limited to interim dividend" exercise at the end of 2019.

Further details are provided in the Risk report annex (Tables OV1, INS1, MR1, MR2-A, MR3, CCR2) .

III.3. Capital adequacy

III.3.1. Belfius Bank

III.3.1.1. Solvency ratios for Belfius Bank on consolidated level

At the end of 2019, CET 1 ratio amounted to 15.6%, a decrease of 43 bps compared to the end of 2018. Note that this CET 1 ratio takes into account a prudential deduction for foreseeable dividend of EUR 164 million. In the proforma "limited to interim dividend" calculation, the CET 1-ratio amounts to 15.9%, the Tier 1-ratio amounts to 16.7% and the total capital ratio amounts to 19.2%.

The decrease in CET 1 ratio to 15.6% is the result of positive effects in CET 1 capital (+87 bps) offset by negative effects in total risk exposure (-130 bps). We refer to the comments above for further information. In the proforma "limited to interim dividend" calculation the CET 1-ratio decreases with 14 bps, the result of positive effects in CET 1-capital (+109 bps) offset by negative effects in total risk exposure (-123 bps).

At the end of 2019, Tier 1 capital ratio amounted to 16.4%, a decrease of 50 bps compared to the end of 2018. This decrease is following the evolution of the CET 1 ratio. In the proforma "limited to interim dividend" calculation the Tier 1-ratio decreases with 22 bps.

The total capital ratio amounted to 18.9%, a decrease of 73 bps compared to the end of 2018. In the proforma "limited to interim dividend" calculation the total capital ratio decreases with 45 bps.

III.3.1.2. Leverage ratios on consolidated level

In December 2010, the Basel Committee on Banking Supervision (BCBS) published guidelines for calculating the leverage ratio as a non-risk based ratio which primarily intends to restrict the size of the Bank balance sheet and consequently the use of excessive leverage.

The leverage requirement became a binding requirement with CRR 2, published in the EU Official Journal on 7 June 2019 and is applicable from June 2021. The CRR 2 integrates the leverage ratio in the Pillar I requirement and sets the level of minimum requirement at 3%. A surcharge for banks considered as G-SIB or O-SIB has also been introduced, the EBA has fixed this surcharge for G-SIB and has a mandate to analyze whether some O-SIB should get this buffer requirement.

The leverage ratio is defined as the Tier 1 capital (the numerator) divided by the exposure measure (the denominator), computed as balance sheet assets after certain restatements on derivatives, securities financing transactions, off-balance-sheet items and prudential adjustments (for items already deducted from the numerator).

In order to be consistent with the calculation of the regulatory Tier 1 capital (numerator), the calculation of the leverage exposure (denominator) is based on the prudential consolidation perimeter, i.e. for Belfius without consolidation of the Belfius Insurance group.

Policies have been put in place at Belfius to manage excessive leverage, including a description of the main sensitivity drivers of the denominator.

At the end of 2019, the Belfius leverage ratio – based on the current CRR/CRD IV legislation - stood at 5,85%, a decrease of 10 bps compared to the end of 2018 and well above the minimum pillar 1 requirement of 3%, applicable from June 2021 onwards. In the proforma "limited to interim dividend" calculation at the end of 2019, the leverage ratio amounts to 5,95%.

The decrease is the result of positive effects (+30 bps) from the higher level of Tier 1 capital (see above), partially offset by negative effects (-40 bps) from the higher total leverage exposure measure mainly due to the increasing exposure value mainly from higher volumes of loans to customers and an increase in securities financing transactions exposures due to increased reverse repurchase agreements to credit institutions. In the proforma "limited to interim dividend" calculation the positive effects (+41 bps) from the higher level of Tier 1-capital are offset by the negative effects (-41 bps) from the unchanged total leverage exposure measure.

Further details are provided in the Risk report annex (Tables LRSum LRSpl LRCom).

III.3.1.3. Minimum requirement for own funds and eligible liabilities

On 17 April 2019, the National Bank of Belgium (NBB) has notified Belfius Bank of the MREL requirement imposed by the Single Resolution Board (SRB).
The Single Resolution Board (SRB) determines the consolidated MREL requirement for Belfius Group at the level of 10.56% of Total Liabilities and Own Funds (TLOF), to be met at all times and taking into account an evolving balance sheet. Based upon data as of 31 December 2019, Belfius' MREL of EUR 17.04 billion exceeds the MREL requirement of EUR 14.38 billion.

Following the current SRB methodology, Belfius Group already exceeded the MREL requirement based on data as of 31 December 2017, and hence no transitional period has been defined by the SRB for Belfius.

According to the latest SRB MREL policy, a subordinated MREL floor of (14% + CBR) of Total Risk Exposures has been put forward as benchmark for O-SIIs. Applying this benchmark, using current CBR applicable to Belfius, would lead to a benchmark level of subordinated MREL of 18.07% of the Total Risk Exposures as of 31 December 2019. Based upon data as of 31 December 2019, Belfius' subordinated MREL level amounts to 22% of Total Risk Exposures and hence already exceeds the benchmark.

The SRB has indicated that it intends to publish its "MREL policy 2020" by end of April 2020 and that it will form the basis for MREL setting under BRRD2/SRMR2. If such timing is respected, the SRB expects to communicate the BRRD2 MREL decisions to banks early 2021. Until end 2020, SRB MREL decisions continue to be based on SRMR1/BRRD1.

Following the publication of the RRM Package in the Official Journal of the EU on 7 June 2019 and the CRR2 that came into force on 27 June 2019, it is to note that Belfius will be impacted by a change in MREL eligibility as "liabilities should be directly issued and should not be owned by an undertaking in which the institution has a participation of more than 20%". As a consequence, Belfius will have to exclude liabilities issued by Belfius Financing Company, i.e. Belfius' Luxembourg based issuance vehicle for CP and Retail Bonds (that are currently partly accounted for as MREL eligible instruments). Excluding these retail senior securities Belfius remains compliant with its 10.56% MREL requirement as of December 2019.

III.3.1.4. Impact of upcoming regulatory reforms

In the coming years, different regulatory reforms are still expected with an impact on the financial position of the Banks.

III. 3.1.4.1. EU Banking reform

On 7 June 2019, the Risk Reduction Measure package (RRM) was published in the EU Official Journal.

The RRM package (BRRD2 – SRMR2 – CRR2 – CRD5) foresees among others:

- → a binding leverage ratio, including a surcharge for the Banks considered as G-SIBs and O-SII;
- → a binding NSFR ratio;
- → a new method for the measurement of counterparty credit risk (SA-CCR);
- → a broader application of the SME supporting factor;
- → a reporting requirement to supervisory authorities under a revised market risk framework (Fundamental Review of the Trading Book);
- → an enhanced framework for the interest rate risk in the Banking book;
- → a revision of the treatment of large exposures;
- → a comprehensive framework covering Minimum Requirement for own funds and Eligible Liabilities (MREL) including cap for subordination and sanctions to MREL breaches and links with the bail-in rules;
- → a minimum loss coverage mechanism for new non-performing exposures (Backstop provisioning)

Most of the CRR2 new requirements will become fully applicable in June 2021

III. 3.1.4.2. Internal model review program

In order to make capital levels more comparable and to reduce variability in banks' internal models, the European Central Bank (ECB) introduced the Targeted Review of Internal Models (TRIM) in June 2017 to assess the reliability and comparability between banks' models. This project is now nearing completion. From the information received till date, no major immediate impact on Belfius' solvency figures has been identified.

During the same period, the European Banking Authority (EBA) set up a roadmap to face the same concerns, but focused on credit risk models only. Guidelines and technical standards covering the definition of default, the treatment of defaulted assets and the estimation of probability of default (PD) and loss given default (LGD) have been finalised. These new requirements will be gradually implemented by Belfius from 2020 onwards, in accordance with the ECB roadmap.

III. 3.1.4.3. Basel III finalisation

The Basel Committee on Banking Supervision (BCBS) announced on 7 December 2017 its revised capital standards. The adjustments aims at ensuring:

- → sufficient robustness and risk-sensitivity of the standardized approaches;
- → a restored confidence in internal models by a reduction of model risks (risk underestimation) and a reduction of the undue variability of model outcomes among banks;
- → the finalization of the design and calibration of the leverage ratio and output floor.

The reform, also referred as "finalisation of Basel III", includes:

- → a revision of the standardized approaches for credit and operational risks, and for credit valuation risk;
- → additional constraints in the use of internal models;
- → an aggregate floor based on 72.5% of standardized regulatory risk exposures for banks using internal models;
- → a surcharge in the leverage ratio for the largest institutions;
- → a revision - finalised in January 2019 - of the Fundamental Review of the Trading Book.

In its initial version, these revised capital standards would become applicable from 1 January 2022 onwards, at the exception of the output floor for which a phasing period has been foreseen, at 50% in 2022 and increasing gradually up to 72.5% in 2027. In a response to the COVID 19 crisis, the Basel Committee announced on 27 March 2020 that the implementation date has been deferred by one year to 1 January 2023. The accompanying transitional arrangements for the output floor has also been extended by one year to 1 January 2028.

The monitoring of the changing regulatory landscape forms a fundamental part of Belfius capital planning, risk appetite and strategy.

Belfius continues to monitor the potential impacts of the Basel III finalisation package on its solvency. Based on most recent assessments and current balance sheet, Belfius expects an impact on its CET 1 ratio in the range of 100 to 125 basis points and considers that its solvency will be sufficiently robust in normal market circumstances to successfully comply with the provisions of this new regulatory landscape in 2023. However, this estimate is still subject to uncertainties related among others to:

- → the transposition of the international agreements in EU legal framework (including use of national discretions foreseen in the international agreement and the maintenance of current EU specificities);

- the possibility of the macro prudential authority (for Belfius, the NBB) to mitigate positive impacts of different measures foreseen in the final Basel agreement (e.g. LGD floor for mortgage loans); and
- the risk profile and the structure of the balance sheet and off-balance sheet of Belfius at the time of the entry into force of the finalisation of the revised standards (2023).

III.3.2. Belfius Insurance

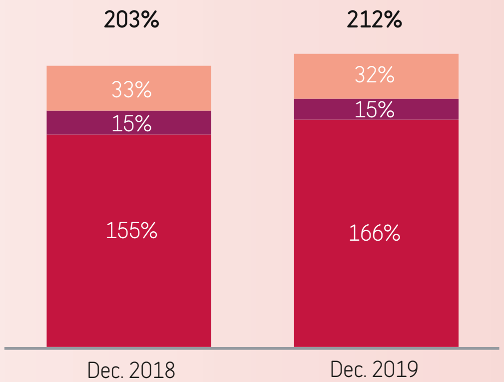
III.3.2.1. Prudential supervision

Belfius Insurance reports to its regulator, the NBB. Amongst others a quarterly report concerning its solvency margin and liquidity is required, both at a consolidated and at a statutory level.
As part of prudential supervision over systemic insurers, highly detailed information is also provided to the NBB about the company's strategy, its ALM policy and the sufficiency of its technical provisions.

III.3.2.2. Regulatory own funds

Available Financial Resources and Solvency Capital Requirement

(in millions of EUR)	Dec. 2018	Dec. 2019
Tier 1	1.699	1.925
Restricted Tier 1	170	171
Tier 2	362	371
AFR	2.231	2.466
SCR	1.097	1.162



The risks that Belfius Insurance faces are reflected in the "Solvency II requirements" which are applicable to all EU-Member States. The own funds of Belfius Insurance available to cover the requirements are determined according to the valuation and eligibility principles defined in the Solvency II regulation, Directive 2009/38/EU.

The regulatory own funds of Belfius Insurance amounted to EUR 2,466 million at the end of December 2019 and are composed for 85% of the highest quality capital Tier 1. Tier 2 capital equals EUR 371 million and consists mainly of two subordinated loans granted by Belfius Bank.

Compared to December 2018, the regulatory own funds of Belfius Insurance have increased by EUR 235 million. The continuous decline of the interest rates led to an increasing Best Estimate of Technical Provisions, but this was more than offset by the increasing market value of our investments, backed by a strong stock market at year end. A further reduction of our deferred tax liabilities can be observed too and no foreseeable dividend is expected due to the COVID-19 crisis..

III.3.2.3. Solvency requirement

The Solvency II Capital Requirement (SCR) is calculated based on the consolidated asset and liability portfolio of Belfius Insurance, Corona and those investment entities that are fully consolidated for Solvency II purposes.
The SCR for Belfius Insurance is determined using the "Standard Formula" as defined in the Solvency II regulation, taking into account a volatility adjustment and making use of the transitional measure for equities and it includes the application of the restriction on the use of Loss Absorbing Capacity of Deferred Taxes as prescribed by the NBB.

Decomposition of Solvency Capital Requirement

	Dec. 2018	Dec. 2019	Delta %
Market risk	1,024	917	-10%
Credit risk	170	188	11%
Insurance risk	640	667	4%
Diversification	511	528	3%
BSCR	1,322	1,244	-6%
Operational risk	94	97	3%
Adjustments(1)	318	178	-44%
SCR	1,097	1,162	6%

(1) Loss absorbing capacity of technical provisions and deferred taxes.

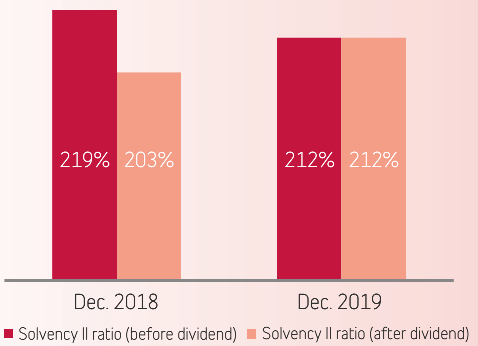
Belfius Insurance's SCR amounted to EUR 1,162 million at the end of December 2019, an increase of EUR 65 million compared to the end of 2018.

The slight increase is due to the declining positive effect of the Loss Absorbing Capacity of Deferred Taxes (LACDT), partially offset by the positive effect of the revision of the treatment of guarantees by the regional governments and local authorities (RGLA) and the treatment of long-term and unlisted equities (LTE).

Market Risk is still the main contributor to the SCR due to the spread risk and equity risk. The SCR linked to the interest rate risk is rather limited thanks to the practice of strictly limiting the gap between the duration of assets and that of liabilities on the balance sheet of Belfius Insurance.

III.3.2.4. Solvency ratios at Belfius Insurance

Available Financial Resources and Solvency Capital Requirement



The Solvency II ratio (before dividend) of Belfius Insurance stood at 212% at the end of December 2019, slightly lower than the ratio as of December 2018.

This decrease is the consequence of the increase in SCR which was not fully compensated by a same proportionate increase in regulatory own funds.

Note that the Solvency II ratio previously communicated in the press release of Belfius Bank on 21 February 2020, amounted to 199% and included a proposed dividend of EUR 120 million. However, following outbreak of the COVID-19 crisis, the Board of Directors of Belfius Insurance proposed to the General Assembly to integrate the dividend over FY 2019 in retained earnings pending the analysis of all impacts of the COVID-19 crisis on the financial position; apart from the dividend pay-out following the contractual profit allocation amounting to EUR 4.6 million.

Further to the minimum regulatory requirements of 100%, Belfius Insurance has, in current market circumstances and under current regulations, defined a minimum operational Solvency II ratio of 160% both on solo and on consolidated level.

In addition to the establishment of a complete risk framework, the Solvency II regulations also require a self-assessment in which, taking the business plan into account, the future capital buffers are highlighted and a number of sensitivity analyses are performed. It shows from these analyses that Belfius Insurance has the appropriate capital margins required to absorb shocks, as stated in the risk appetite approved by the Board of Directors.

III.3.3. Internal capital adequacy

III.3.3.1. Risk appetite

Risk appetite is the level of risk that an institution is prepared to take given the expectations of the main stakeholders (shareholders, creditors, regulators, rating agencies, customers, employees…), in order to ensure the safeguard of a sound risk and financial profile in the context of the strategy 2020-2025. This risk appetite is defined by the Board of Directors, on proposals from the Management Board. The Risk Department prepares the Management Board's proposals and the Board of Directors' decisions, and also sets the rules and the framework for implementation of those rules.

Based on a holistic approach, risk appetite is a central reference point:
→ for guiding strategy and planning;
→ for framing performance in terms of growth and value creation;
→ for facilitating day-to-day operating and commercial decisions.

The Bank's risk appetite consists of a series of quantitative elements (target Key Risk Indicators or KRI) and qualitative elements (statements) that are designed to express the risk levels and types that are not acceptable, that are tolerated and targeted in order to achieve business strategy. The quantitative framework is based on a mix of accounting ratios (gearing), regulatory ratios (solvency, liquidity) and economic ratios (economic capital, earnings at risk) and internal KRIs. The different metrics cover a wide range of risks (credit risks, solvency, liquidity, market risks, concentration risks, non financial risks, compliance risks, model risks…). Next to the quantitative part, qualitative statements consisting of guiding rules aim at defining the risk appetite that cannot be expressed through quantitative ratios. The RAF is composed of 3 levels:
→ Level 1 includes high level risk indicators and qualitative statements. Their scope is group-wise;
→ Level 2 includes more detailed KRI's on a broad range of key risks;
→ Level 3 concerns the operational limit book.

Limits have been defined on each of these ratios with different zones, which lead to different governance and measures in case of breach. They are validated each year by the competent bodies. The Risk and Finance departments are responsible for monitoring these ratios and, if there are discrepancies, for proposing measures to the Management Board to ensure the limits are met.

The Risk Appetite Framework (RAF) has been updated and approved by the Board of Directors in December 2019. The updated RAF includes a broader coverage with new detailed quantitative ratios for Financial risks (sector concentration, asset quality), Non-Financial risks, Compliance and Model Risk.

III.3.3.2. Economic Capital

III.3.3.2.1. Definition

The economic capital is defined as the potential deviation of Belfius' economic value from its expected economic value at a given confidence interval and time horizon. The confidence threshold (99.94%) chosen for scenarios involving losses in value corresponds to the Bank's targeted senior unsecured debt rating at a horizon of one year (A rating for 2019).

The economic capital quantification process is organised in three phases: identifying the risks (risk inventory definition and cartography, reviewed on an annual basis, in collaboration with the various business lines), assessing (measuring) the risks (mainly on the basis of statistical methods and/or scenarios) and aggregating the risks based on an inter-risks correlation matrix.

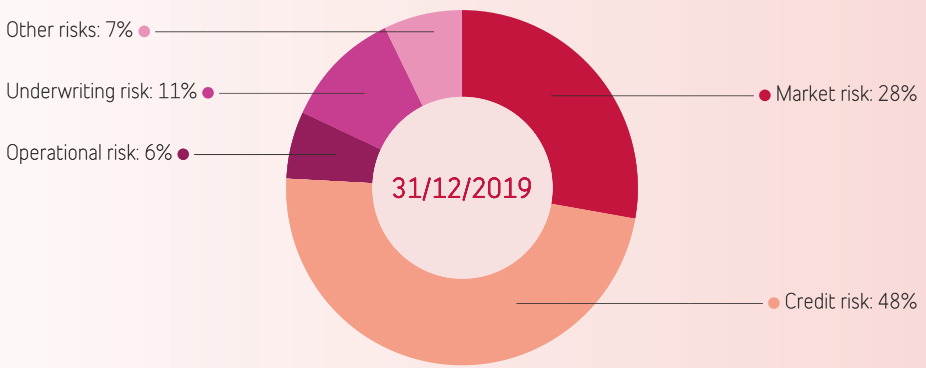
Most risks are capitalised based on measuring the unexpected loss. However, if alternative management techniques (limits, other buffers than capital, governance) are considered more appropriate to cover them, some risks are not capitalised.

Next to regulatory capital and solvency metrics, the economic capital is also central in the context of Belfius' risk appetite and is complementary to Stress Tests framework for Internal Capital Adequacy Assessment Process (ICAAP) purposes. Economic Capital is also key in Belfius pricing and profitability assessment.

III.3.3.2.2. Economic Capital Adequacy

The Management Board, which also acts as the Risk Appetite Committee (RAC), is responsible for managing the capital level and allocation process and has authority in all matters relating to economic capital. The RAC analyses the various models involved in calculating the economic capital and also monitors the (regulatory and economic) ratios, limits and triggers.

Breakdown of economic capital by type of risk

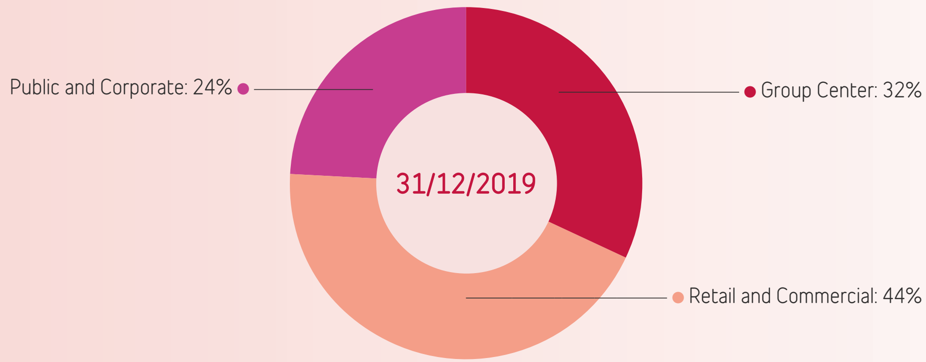


Belfius' economic capital was EUR 5,486 million at the end of 2019 (against EUR 5,319 million at the end of 2018).

In 2019, the ranking between the main categories of risks remained the same as in 2018: credit risk represented approximately 48% of the economic capital and was the main contributor; market risk (inter alia including interest rate risk, foreign exchange rate risk and equity risk) was 28%, underwriting risk 11%, operational risk 6% and other risks (prepayment, funding …) 7%.

Compared to 2018, the weight of credit risk slightly increased (from 47% to 48%) whereas market risk share decreased (from 30% to 28%). Underwriting risk, operational risk and other risks remain stable.

Breakdown of economic capital by business line



By business line, the economic capital was allocated as follows: Retail and Commercial (RC) and Public and Corporate (PC) represented 44% (44% in 2018) and 24% (22% in 2018) respectively of Belfius' economic capital; the balance was made up of 32% (34% in 2018) allocated to the Group Center (mainly for the Belfius' general balance sheet management in terms of interest and funding risks including the ALM Bond portfolio and the bonds, derivatives and credit guarantees run-off portfolios).

III.3.3.2.3. Stress Tests

Stress tests are part of the ICAAP and are designed to measure the Bank's sensitivity, in terms of losses, additional weighted risks, liquidity needs or equity capital requirements that could impact Belfius in scenarios featuring significant unexpected shocks on the financial markets and/or in the own financial situation of Belfius.

Belfius performed an internal stress testing programme with its financial Plan 2020-2025. The Bank developed a set of alternative and severe macroeconomic scenarios designed to anticipate the Bank's main weaknesses and to simulate how Belfius might be affected under these circumstances. These different stress tests measure the potential deviations from the "base case" Financial Plan and from Risk Appetite targets set by the management in terms of solvency, liquidity and profitability. These stress tests were submitted to the Management Board as well as to the Board of Directors. Mitigating actions and recommendations were proposed for each of the stress test.

III.3.3.2.4. Recovery plan

An update of Belfius Recovery Plan has been submitted to the ECB during the second half of 2019. This plan provides a set of recovery measures that would be taken to restore the Bank's long-term viability in the event of a significant deterioration of its financial situation due to severe general macroeconomic and/or idiosyncratic stress situations.

III.3.3.2.5. Resolution

Resolution is defined as the restructuring of a bank within the Single Resolution Mechanism (SRM) issued by the Single Resolution Board (SRB) through the use of resolution tools. The objective of the SRB is therefore to ensure an orderly resolution of failing banks with minimum impact on the real economy and on public finances of the participating Member States and beyond.

Belfius, being considered as significant financial institution in Belgium, has to ensure that all necessary information will be provided to the SRB, responsible for preparing a resolution plan that would be available in case of a severe crisis leading to an hypothetical failure of the Bank.

Belfius resolution therefore consists of the application of identified resolution tool(s) to the Bank which best achieve resolution objectives.

IV. Credit risk

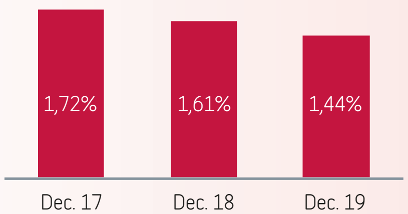
IV.1. Fundamentals of credit risk in 2019

The world economy decelerated sharply in 2019 on the back of trade policy uncertainty and geo-political tensions. Nevertheless, growth in Belgium remained remarkably robust and contracted only slightly, coming down from 1.5% in 2018 to 1.4%. Inflation lowered by the strong deceleration in energy prices. Employment growth decelerated slightly compared to the peak in job creation in 2017. In 2019, according to Graydon, 11,817 Belgian companies were forced to cease business, an increase of 10.29% compared with 2018. This strong increase in bankruptcy, however, is not related to a possible waning economic climate, but rather a consequence of the application of recent legislation (e.g. the new law on ghost companies).

IV.1.1. Banking activities in retail and commercial

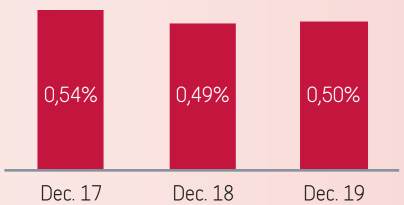
Against this background, lending to the Retail and Commercial business line remained at a high level, and this based on a stable lending policy in general, albeit adjusted for some elements (see further).

Asset Quality ratio, RCB



Ratio between impaired loans and the commercial outstanding loans.

Asset Quality ratio, mortgages

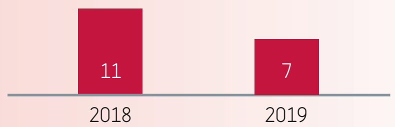


Ratio between impaired RCB mortgage loans and the commercial RCB mortgage outstanding loans.

The production of mortgage loans reached a record high in 2019, with a volume 43% above the 2018 level (EAD end 2019: EUR 34.042 billion). This substantial increase is explained by the decision of the Flemish government to terminate the tax benefits on mortgage loans and potentially the communication by the NBB of "supervisory expectations regarding the lending standards of mortgage loans" obliging banks to strengthen their underwriting criteria. The anticipation on these measures, which enter into force in 2020, in combination with the low interest rates has boosted the production in the 2nd half of the year. The share of loans with a longer maturity combined with a slightly higher LTV in the portfolio continued to increase. Notwithstanding this evolution, the overall credit quality of the mortgage portfolio remained excellent and even slightly improved (as illustrated by the average probability of default). The historical low risk level of the mortgage portfolio is also reflected by the cost of risk that remains at a very low level. The Risk Department continued its monitoring of the potential higher risk segments of mortgage loans. In addition to this, in the course of 2019 measures were taken to strengthen the underwriting criteria, in particular for Buy-to-Let transactions regarding retail clients with low savings. Also a specific Risk Appetite Framework was installed which consists of a strengthening of the overall underwriting framework and a close follow-up of the production.

The production of consumer loans in 2019 was 7% lower than the previous year (EAD end 2019: EUR 2.421 billion). The share of loans via mobile channels remained unchanged in 2019; around 13% of the consumer loans were contracted by using the Belfius App. The criteria used for granting consumer loans have been reviewed in 2019, a.o. taking into account stronger limits for repayment capacity and net available income in order to remain completely aligned with the "Responsible Lending" charter of the Belgian Financial Sector Federation (Febelfin).

Credit Cost ratio, RCB (in basis points)



Calculated as cost of risk divided by average gross outstanding loans and advances to customers.

Belfius offers self-employed persons, liberal professions (.i.e. doctors, lawyers, etc.) and SMEs a comprehensive range of retail, commercial, private banking, wealth management and insurance products and services, through its integrated omni-channel distribution network (EAD end 2019: EUR 18. 661 billion). Belfius Bank's approach to have lending decisions for business loans taken by local teams working close to the customer was further intensified in 2019. This strategy contributes to a better customer service while numerous tests and realised statistics indicate that the risk remains under control. The continuous fine-tuning of the decision-making logic and the enhanced and quickly reactive monitoring on deteriorating risk profiles is bearing fruit. Through the continuation of the "Go4Credits" project, Belfius enhanced also in 2019 the efficiency of its credit approval process for the Commercial Business line.

Belgian SMEs generally remained in good shape after their economic and financial situation already substantially improved in 2018, and this despite the fact that they were more and more confronted with a changing consumer pattern (e.g. e-commerce). Overall, the cost of business loans at Belfius Bank remained at a good risk/return level and within the target levels. Belfius therefore intends to keep supporting the production of business loans, also in relation to start-ups. At the same time, the Risk department continues the improvement of the process of early warning indicators in order to keep permanently the risks in this market segment well under control.

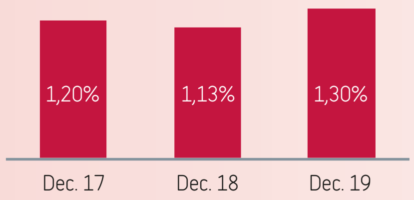
IV.1.2. Banking activities in public and corporate

In 2019, Belfius kept offering services to the Belgian public and social sectors (including hospitals, schools, universities and retirement homes). It provides these clients with a wide and integrated range of products and services, including credit lending (EAD end 2019: EUR 39.187 billion).

The Public Sector loans portfolio maintained its very low risk profile. The balance of payments of the majority of Belgian municipalities showed in 2019 an equilibrium, or even a surplus. Local authorities continue in such a way their positive collective contribution to the budgetary exercise of the country as a whole. The decline of indebtedness of municipalities, driven by a still low level of investment, continued in 2019 together with the decrease of interest charges. However, the new municipal legislature that started in 2019 will have to cope with a very difficult financial context, confronting constantly rising expenditures (social welfare, security) with ever more slowly growing revenues. These conflicting budgetary tensions will burden local authorities with a difficult task. They must indeed continue to offer a good service while safeguarding a budgetary balance. During the current legislation e.g. the pension bill will end up in full force at the local authorities. Most of them will struggle with the pension costs related to their statutory staff, because the number of active staff members is getting smaller and smaller compared to their retired colleagues. This pension challenge has been figured out years ago and meanwhile some measures have been taken, but they are insufficient to keep the current bill acceptable. For some municipalities, especially the cities, this will imply that taxes must be raised, investments postponed and services reduced, if no action is undertaken by other government levels.

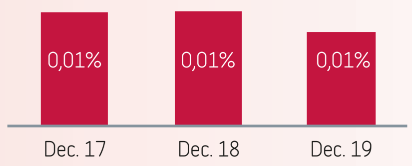
From a risk management point of view, the hospital sector remains a focus of attention. Hospitals have in general an acceptable financial structure, built up over years through a fair equity base accompanied by government subsidies. Nevertheless profitability remains often vulnerable. One third of the hospitals are making a loss. Their repayment capacity is by consequence reduced. But the activity level of hospitals, and consequently their revenues recently grew thanks to the introduction of innovative treatments and/or pharmaceuticals. Day hospitalisation keeps gaining importance. The main challenge however remains that patient care for an aging population has to be realized within a challenging budgetary context, and this in a future proof and technical environment. That's why the hospital sector is currently undergoing a structural transformation. The Minister of Public Health indeed launched a long-range Care reform plan in order to reshape the hospital landscape. A law voted in February 2019, imposes general hospitals to regroup into 25 hospital networks from January 1st, 2020 onwards: 13 in Flanders, 8 in Wallonia and 4 in Brussels. Network proposals are currently in the process of recognition by the respective Regions. The new networks will be responsible for the definition of their care supply and internal organization. Every member of a hospital network will still offer general care, but must also specify how it will organize more specialized services (e.g. maternity, emergency...) throughout the network. In this way the new hospital networks may become an essential step for the improvement of health services and for the financial health of the sector.

Asset Quality ratio, PCB



Ratio between impaired loans and the commercial outstanding loans.

Asset Quality ratio, Public & Social

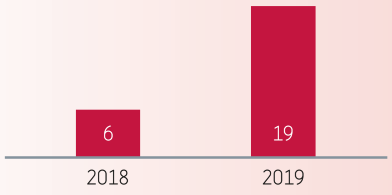


Ratio between impaired Public & Social sector loans and the commercial outstanding Public & Social sector loans.

Belfius' corporate banking activities (EAD end 2019: EUR 25.812 billion) are focused on large- and medium-sized corporates which have a decision-making centre in Belgium as well as corporates offering services to the public sector. The Belgian economy is heavily dependent on international trade and most of its economic sectors are geared towards exporting products. The framework underpinning international trade became steadily more uncertain and riskier in 2019. For firms focused on international business, it became hard to navigate in this new context and to form clear expectations on the future profitability of this type of activities. However Belfius has taken the necessary measures to ensure that her growth strategy in this segment goes hand in hand with a good creditworthiness and acceptable risk concentrations. And so the credit profile of the corporate lending remained fairly stable during 2019. Our cost of risk in the corporate segment however raised, not in general, but due to some specific and limited number of files in Stage 3 or that migrated from Stage 2 to Stage 3 in 2019. It concerns Belgian companies with business operations in an international context: they were directly or indirectly impacted by evolutions in the global economy, having an impact on their trade flows.

Belfius monitors sector risks in a proactive way and defined specific measures with regard to a limited number of more vulnerable sectors.

Credit Cost ratio, PCB (in basis points)



Calculated as cost of risk divided by average gross outstanding loans and advances to customers.

Real estate financing (EAD end 2019: EUR 46.421 billion), related to both residential and commercial real estate, is an important business activity within Belfius. Also on industry level, the Bank's lending activity in the real estate sector continues to increase considerably. The evolution of real estate financing over the last years is to be evaluated in the context of the following factors: the sustaining low interest rate environment, the fact that Belgian banks have a large deposit base and are confronted with a search for yield, the gross debt ratio of Belgian households that has increased and has recently slightly exceeded the average EUR area ratio. This combination of elements induces a concern at NBB level about an overvaluation of the Belgian (residential) property and about the threat of strong volume growth with potentially lower credit standards, lower margins and low provisioning levels. Belfius is aware of these potential pitfalls and has traditionally applied strict origination and acceptation criteria (LTV, maturity, collateral valuation) on new transactions and a solid monitoring of projects, in both residential and commercial real estate financing. The afore-mentioned origination and acceptation criteria for that matter will be further reinforced due to new prudential expectations established by the National Bank. Belfius real estate credit exposure is considered as being correctly diversified in terms of underlying asset types, individual name concentration and geographical spread.

Finally, it is worth mentioning that active portfolio management keeps playing an important role within Belfius, in the first place through the gradual sale of higher risk exposures and/or exposures that are no longer considered as being core business (the shipping-related business without a commercial relationship meanwhile has been reduced to a negligible level), but also by developing risk hedging and risk sharing programs.

IV.1.3. Financial markets

The mission of Financial Markets, aligned with the mission of Belfius Bank, is to serve its clients and the Belgian economy with essential financial services. Next to this general objective, Financial Markets operates as a competence and service center with regard to Belfius business lines. In this context, the risk and return generated by Financial Markets are reallocated to the business lines Retail, Commercial, Public and Corporate. As such, Financial markets completes the business lines' offering towards clients in order to ensure a long term relationship and ensure a quick and efficient time to market for new products .An innovative Financial Markets also contributes to the liquidity profile of the Bank through the management of Short Term and Long Term wholesale funding and through the management of the investment portfolios: both the ALM Liquidity and Yield portfolios (run-off management of the portfolio inherited from the past).

Credit risks in relation to Financial Markets activities are monitored by the Credit Risk Limit Framework which is part of the Risk Appetite Framework. Counterparty and country limits are monitored by FM Risk Management in order to limit risk concentrations.

Credit risk in financial markets remained relatively stable during 2019. Nevertheless, the fear of a hard Brexit, the global trade conflicts and the persistence of low rates weighted on the markets and generated volatility. Our main concentrations remain British inflation-linked corporate bonds and Italian sovereign bonds, which are of satisfactory credit quality and are continuously monitored.

The money market activity has continued to be influenced by the persisting low interest rate environment, the volatility of collateral and the challenging yield environment for the reinvestment of the liquidity buffer.

IV.2. Credit risk exposure

IV.2.1. Overview

The tables in the following chapter provide an overview of the overall credit risk. As prescribed in the EBA guideline[(1)], different metrics are used referring either to accounting or to risk concepts.

The following metrics are used in this Risk report:

- gross carrying value: the exposure at default (EAD), before application of credit conversion factors (CCF);
- net carrying value: gross-carrying value less the exposure at default of credit risk adjustments;
- exposure value for counterparty credit risk: the exposure at default (EAD) after Credit Risk Mitigation Techniques;
- exposure amount: gross carrying value less the physical collateral.

In addition to these metrics, Belfius uses also the term of Full EAD or FEAD.

Full Exposure At Default (FEAD) is determined as follows:

- for balance sheet assets (except for derivatives): the gross carrying amounts (before credit risk adjustments);
- for derivatives: the fair value of derivatives after netting, increased with the potential future exposure calculated under the current exposure method (add-on);
- for Securities Financing Transactions:
  - for reverse repo's: the amount of collateral up to the amount lent;
  - for repo's: the collateral value in excess of the amount borrowed;
- for off-balance sheet commitments: either the undrawn part of credit facilities or the maximum commitment of Belfius for guarantees granted to third parties.

FEAD for instance provides a consistent metric to present a combined view of the Bank and Insurance respective exposures to credit risk.

(1) EBA/GL/2016/11

IV.2.1.1. Contribution Belfius Bank – Belfius Insurance

(FEAD, in EUR million)	31/12/2018	31/12/2019	Of which Bank	Of which Insurer
Central Governments	20.488	18.094	12.076	6.018
of which Government bonds	9.625	9.967	4.162	5.804
Public sector entities	45.694	44.342	42.526	1.816
Corporates	32.904	36.438	35.038	1.400
Monoline insurers	4.519	4.718	4.718	0
ABS/MBS	840	749	658	91
Project Finance	2.222	2.426	2.426	0
Individuals, self-employed and SME's	47.917	52.220	48.194	4.026
Financial Institutions	12.145	13.415	12.370	1.045
Others	0	0	0	0
TOTAL	166.729	172.401	158.005	14.396

The figures in the above table are after elimination of intra-group exposures and exclusion of equity positions and other assets not qualified as credit exposure, but with inclusion of credit exposure of trading activities and counterparty credit risk.

Exposures are allocated to the final counterparty, with the exception of ABS/MBS for which the exposure to the original counterparty is used.

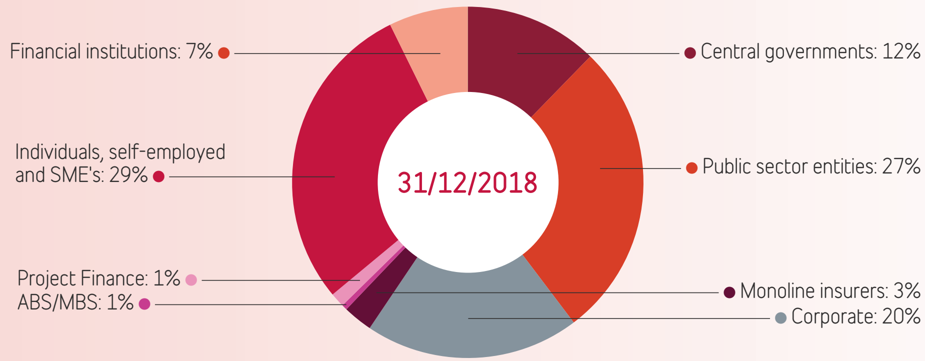
As at 31 December 2019, the total credit risk exposure, within Belfius reached EUR 172.4 billion, an increase of EUR 5.7 billion or 3.4% compared to the end of 2018.

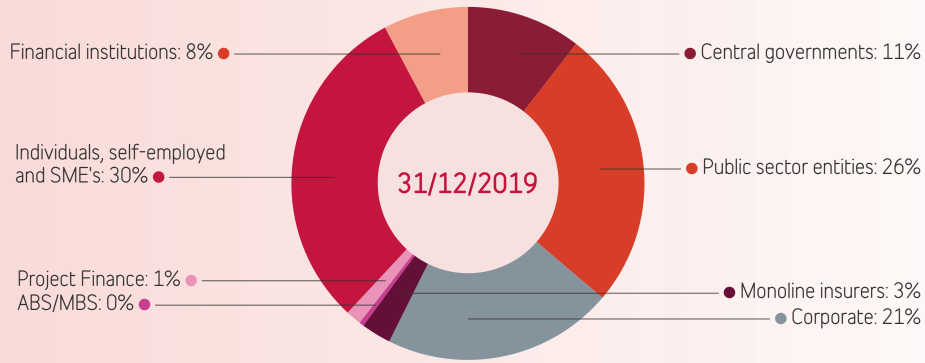
The credit risk exposure increased with 3.4% to EUR 158.0 billion at bank level. At the level of Belfius Insurance, the credit risk exposure increased by 3.1% to EUR 14.4 billion at the end of 2019.

The credit risk exposure on public sector entities and institutions that receive guarantees of these public sector entities (26% of the total) and on individuals, self-employed and SMEs (30% of the total) constitute the two main categories.

- The credit risk exposure on public sector entities decreased with EUR 1.4 billion while the credit risk exposure on individuals, self-employed and SMEs increased by 4.3 billion due to increasing commercial activities.
- The expansion of Belfius' corporate activities is also reflected in higher credit risk exposure (+EUR 3.5 billion) for this segment leading to an increase of its relative proportion from 20% by the end of 2018 to 21% by the end of 2019.

Breakdown of credit risk by counterparty

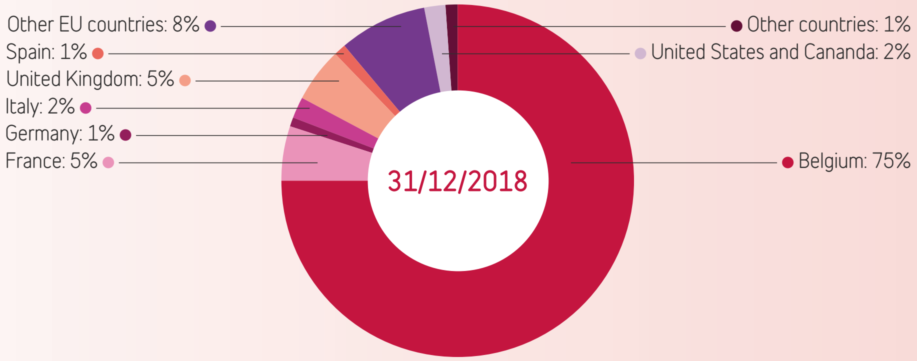


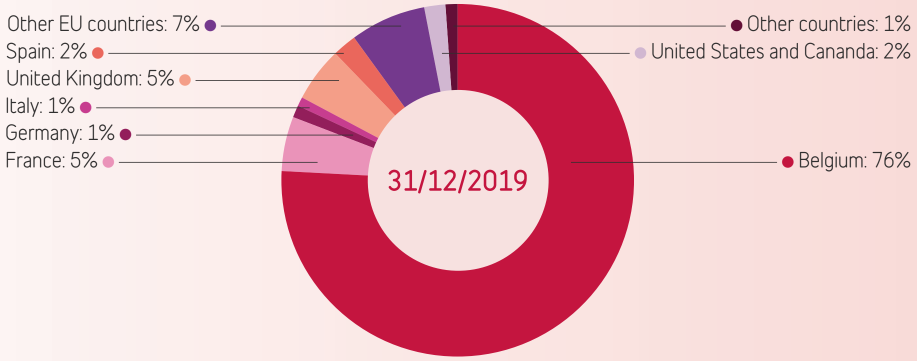


- The relative proportion of the segment central governments declined from 12% end 2018 to 11% end 2019. Inside this segment, the credit risk on government bonds increased by EUR 0.3 billion to EUR 10.0 billion at the end of 2019. Nearly 50% of the government bonds portfolio is invested in Belgian government bonds. While at bank level the Belgian government bonds represents 40% of the total government bond portfolio, the relative proportion at Belfius Insurance stood at 57%.
- The credit risk exposure on financial institutions increased in 2019 by EUR 1.3 billion and stood at 8% at the end of 2019 against 7% at the end of 2018, This increase is mainly due to an higher activity in securities financing transactions

- The credit risk on monoline insurers is predominantly an indirect risk arising from credit guarantees written by Belfius Bank and reinsured with monoline insurers, mainly on bonds issued by infrastructure companies and utilities. During 2019, the relative proportion of the monoline insurers remained stable at 2.7%

Breakdown of credit risk by geographical region



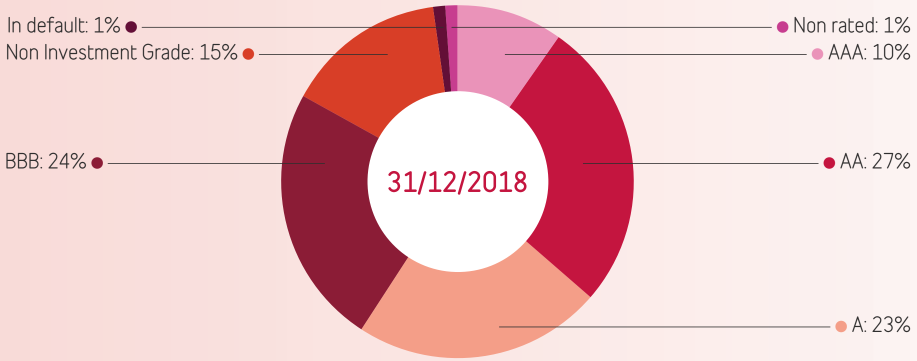


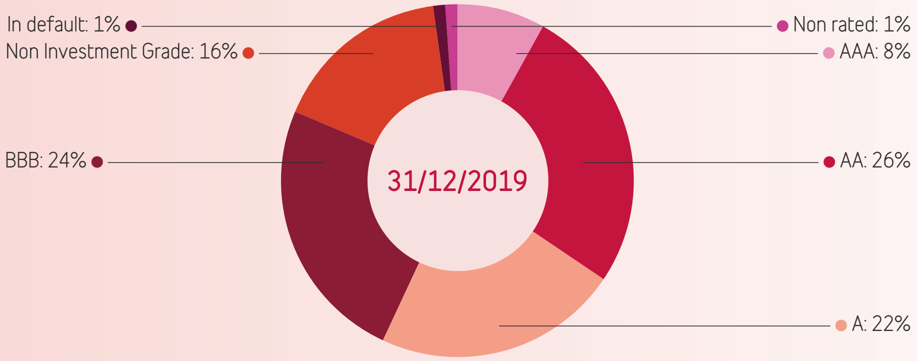
Belfius' positions are mainly concentrated in the European Union: 95% or EUR 150.8 billion at bank level and 98% or EUR 14.1 billion for Belfius Insurance. 76% of the total credit risk exposure is on counterparties categorised in Belgium country exposures, 5% in the United Kingdom and in France, 2% in Spain and in the United States and Canada and 1% in Italy and Germany.

The credit risk exposure to counterparties in the United Kingdom amounted to EUR 9.5 billion. About half of this credit risk exposure concerns bonds, of which close to two-third are inflation-linked, issued by utilities and infrastructure companies in the United Kingdom that operate in regulated sectors such as water, gas and electricity distribution. These bonds are of satisfactory credit quality (100% investment grade), and moreover the majority of the outstanding bonds are covered with a credit protection issued by a credit insurer that is independent from the bond issuer. The remainder concerns the bond portfolio of Belfius Insurance, a short-term credit portfolio for treasury management of Belfius Bank and receivables on clearing houses. The credit risks on those portfolios are also of satisfactory credit quality.

At the end of December 2019, 81% of the total credit risk exposure had an internal credit rating investment grade (IG).

Breakdown of credit risk by rating





IV.2.1.2. Overview credit risk under the prudential scope of consolidation

The differences between the accounting and regulatory scopes of reporting are described in the Risk report annex (Tables LI1 LI2 and LI3).

Bank	Credit risk		Counterparty credit risk			Total
FEAD (in millions)	On-balance-sheet amount	Off-balance-sheet amount	Securities Financing Transactions	Derivatives	Default fund Contribution	
IRB EXPOSURE CLASSES						
Central governments and central banks	13.377	8.368	113	568		22.426
Institutions	19.421	2.650	4.111	3.033		29.215
Corporates	27.791	11.660	3.102	1.179		43.733
of which Corporates- SME	8.726	1.906	21	44		10.697
Retail	40.248	6.586	0	0		46.834
of which secured on RE SME	7.214	322				7.535
of which secured on RE non-SME	23.462	1.283				24.745
of which Qualifying Revolving		19				19
of which other retail SMEs	7.344	1.997				9.341
of which other retail non-SMEs	2.228	2.965				5.193
Equity	261					261
Securitisation	486					486
TOTAL IRB APPROACH	**101.584**	**29.264**	**7.326**	**4.780**	**0**	**142.954**
STANDARDISED EXPOSURE CLASSES						
Central governments or central banks	6.220	0		58		6.277
Regional government or local authorities	535	0		109		644
Institutions	795	276	625	373		2.069
Corporates	4.497	2.590		96		7.183
Retail	641	79				720
Secured by mortgages onreal estate	199	17				216
Other[(1)]	8.947	134			84	9.165
TOTAL STD APPROACH	**21.833**	**3.097**	**625**	**636**	**84**	**26.274**
TOTAL	**123.417**	**32.361**	**7.951**	**5.415**	**84**	**169.228**

(1) includes exposure classes past due items, items belonging to regulatory high-risk categories,or other items and equity.

- At year-end 2019, 84% of the total credit risk exposures were calculated using the IRB approach. IRB exposures mainly consist of retail and corporate exposures.
- As for the previous table, exposures are allocated to the final counterparty and expressed in gross carrying values.
- Figures on counterparty credit risk do not take into consideration the financial collateral received.

Total and average exposures of the credit portfolio are further detailed in the Risk report annex (table CRB-B).

For further details on the credit quality of exposures by geography, economic sector or maturity, please refer respectively to the Risk report annex (tables CR1-C, CR1-B and CRB-E).

IV.2.2. Internal rating based approaches

IV.2.2.1. Competent Authority's Acceptance of Approach

By letter sent on 21 December 2007 by the Banking, Finance and Insurance Commission (CBFA), the Belgian Regulator, Dexia SA was authorised to use the Advanced Internal Rating-Based Approach (AIRB Approach) for the calculation and the reporting of its capital requirements for credit risk starting from 1 January 2008. This acceptance was applicable to all entities and subsidiaries consolidated within the Dexia Group, which are established in a Member State of the European Union and are subject to the Capital Requirement Directive, and among them Belfius Bank (formerly Dexia Bank Belgium). The teams at the Bank have also been among the main contributors of this approval, and its risk management is in perfect continuity with the know-how developed so far.

IV.2.2.2. Internal Rating Systems

The internal rating systems used by Belfius Bank are set up to evaluate the three Basel parameters: Probability of Default (PD), Loss Given Default (LGD) and Credit Conversion Factor (CCF). For each counterparty type in the advanced method, a set of two models, one for PD and one for LGD, has been developed. Regarding the CCF parameter, Belfius makes a distinction between retail and Non-retail counterparties: an advanced model is applied for retail counterparties, while non-retail counterparties use the regulatory values.

The PD models estimate the one-year probability of default on a through-the-cycle basis. Each model has its own rating scale and each rating on the scale corresponds to a probability of default used for regulatory and reporting purposes. The correspondence between rating and PD for each scale is set during the calibration process, as part of the model development, and is reviewed during the yearly back testing and adjusted when necessary. The number of ratings on each scale depends on the characteristics of the underlying portfolio (the number of counterparties, their homogeneity, whether it is a low default portfolio or not) and varies between 6 and 17 non-default classes. In addition each scale has been attributed two default classes (named D1 and D2).

For non-retail, LGD models estimate the ultimate loss incurred on a defaulting counterparty before taking the credit risk mitigants into account. The unsecured LGD depends on various factors such as the product type, the level of subordination or the rating of the counter-party. The granularity of the estimate is a function of the quantity and quality of data available. For retail, LGD is mainly determined by product type and based on workout recoveries. Professional loans are segmented in 5 classes subject to collateral value.

CCF models estimate the portion of off-balance-sheet commitments that would be drawn should a counterparty go into default. The regulation authorises the use of CCF models only when CCF under the Foundation Approach is not equal to 100% (as it is for credit substitutes for instance). CCF granularity also depends on availability of data.

Internal estimates of Basel parameters are widely used within Belfius Bank. They are notably used in the decision-making process, credit risk management and monitoring, internal limit determination, and pricing, in addition to the calculation of the regulatory risk weighted exposure amounts.

The control mechanisms for Internal Rating Systems (IRS) are organised on two levels:

→ Validation, that encompasses both Model Validation and Operational Control, is an independent Direction within the Risk department. It reports directly to the CRO and is not involved in any model development in order to guarantee its objectivity. Validation performs a global control on all the aspects of the production of results by the models, from a methodological but also an operational (implementation, usage) viewpoint. It intervenes prior to the first use of the models and afterwards performs a regular monitoring of their functioning.

→ Audit is responsible for auditing the general consistency and compliance with the regulation of the IRS. According to the CRD minimal requirement 131, Annex VII Part 4, Internal Audit has to include in its plan, at least once a year, a review of the IRS and its functioning, including credit scoring and estimation of PD, LGD, expected loss (EL) and CCF. Compliance with all the minimum requirements has also to be verified. Within Belfius Bank, this annual review has been delegated to the Validation Direction. Audit acts then as an additional level of control, given that the correct functioning of Validation is included in its Audit plan.

We refer to Appendix X.1.2 to X.1.3 for more details regarding Internal Rating Systems.

IV.2.2.3. Back testing

The purpose of the back test is to assess the performance of the internal rating system ensuring an appropriate balance between capital and risk. As the formulas to calculate the Bank's capital are provided by the Basel Committee on Banking Supervision, the internal back test relating to Pillar 1 rating systems is based on the back test of the input parameters PD, LGD and CCF in the Basel credit risk portfolio model. Please note that even if the non-retail CCF parameters are not the result of a dedicated model, they are subject to a monitoring in order to ensure the used values are suited.

The back test is the evaluation of the predictive power of the rating system and the assessment of its time evolution to detect any reduced performance in an early Stage. Decreased performance of the rating system may reduce the Bank's profitability and will impact the risk assessments of the defined risk buckets. The performance is tracked by analysing the ability to discriminate between high and low risk and the stability of the data inputs into the rating system.

The back test procedure aims at assessing the following:

→ **Calibration**
The calibration normally denotes the mapping of the Probability of Default (PD) to the rating grades. A rating system is well calibrated if the estimated PDs (or LGDs) deviate only marginally from the actual default rates (or loss) and show an adequate level of conservatism.

→ **Discriminatory Power**
The discriminatory power of rating systems denotes their ex-ante ability to identify borrowers in danger of defaulting. A rating system with maximum power would be able to classify all borrowers such that defaulters would be ranked strictly worse than all Non-defaulters. In practice, however, such perfect rating systems do not exist. A rating system demonstrates a high discriminatory power if the "good" grades subsequently turn out to contain only a small percentage of defaulters and a large percentage of non-defaulters, with the converse applying to the "poor" grades. Regarding LGD model, discriminatory power relates to its ability to recognise between high and low loss levels in case of default.

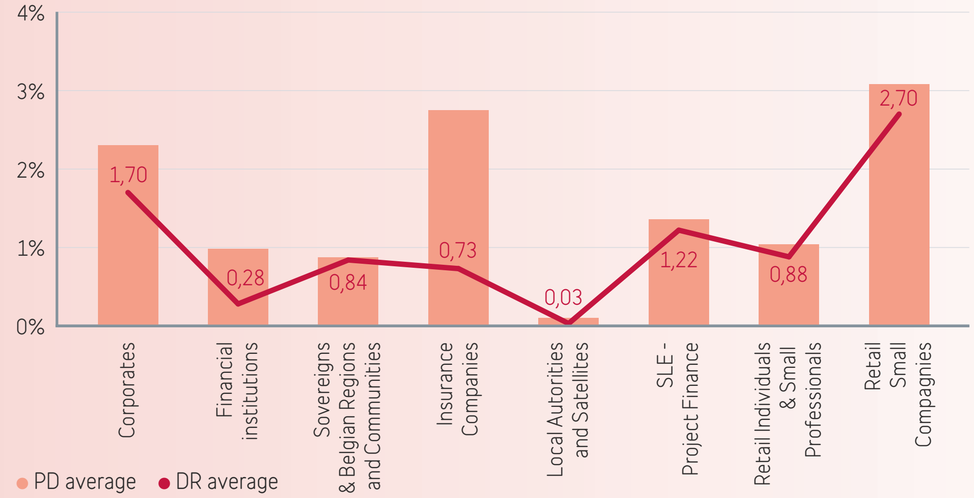
→ **Stability**
The stability of the population and its data characteristics are analysed in order to make sure that the model applied is in line with the reference data sets used for construction, and that the population characteristics do not change significantly over time.

The results of the back testing are assessed using statistical significance tests. The outcome of the significance tests will drive required action plans.

The additional part of the back test procedure is related to the impact of judgemental aspects i.e. the importance of judgemental qualitative variables in the final rating and the effect of expert overruling.

The following table gives an overview of the Probability of Default (PD) and the Default Rates (DR) on the Bank's main portfolio under advanced method. It is based on an at least 5 year history of our advanced portfolios. As can be expected it shows the PD values are greater than the DR.

Backtesting of internal models



The following table shows an overview of the relation between IRB models as used above and the implicated asset classes:

	Corporates	Financial Institutions	Sovereigns & Belgian Regions and Communities	Insurance Companies	Local Authorities & Satellites	Retail Individuals & Small Professionals	Retail Small Compagnies
ASSET CLASSES							
Central governments and central banks			■				
Institutions		■			■		
Corporates	■			■	■		
Corporates - SME	■				■		
Retail - SME						■	■
Retail - non-SME						■	

For the relevant classes, the weighted average PD and arithmetic PD by obligors at year-ends 2018 and 2019 by PD range are further detailed in the Risk report annex (table CR9).

IV.2.2.4. Stress Testing

Pillar 1 stress tests are defined within Basel to deal with minimum capital requirements. They assess how the risk parameter levels may vary in the credit portfolio during periods of stress, in order to draw conclusions on individual asset classes and portfolios, as well as on the whole portfolio itself.

The focus of the stress testing Pillar 1 lies on a univariate analysis and the application of realistic and meaningful expert scenarios.

During the univariate analysis, the distribution of the model variables is investigated in order to detect if a significant part of the portfolio gets a value equal to the cap or floor. When this is the case, conclusions must be drawn in terms of the capability of the model to perform in such a scenario.

Expert scenarios can essentially be designed in two distinct ways:

- testing the robustness of the model by computing PD/LGD in an alternative (stressed) manner and comparing the results to the model outputs: the purpose is to challenge the model;
- stressing model results: this measures the impact on risk measures given the assumption that the model is correct.

These stress tests are performed on an annual basis on a group-wide basis. Stress test reports are presented initially to the Validation Direction. After validation of the overall process of the stress test implementation, a report on the main portfolio weaknesses and strengths is produced in order to allow proposals for management actions. The final files are submitted to the Risk ExCom.

Validation presents a report on the models twice a year to the Management Board and once a year to the Risk and Audit Committees.
This report provides an overview of the main topics related to the models: strengths and weaknesses, performances, foreseen evolutions, recent developments, realization and outcomes of the regulatory controls (Backtests, Stress Tests, Operational Controls).

IV.2.3. Standardised approaches

IV.2.3.1. Introduction

Belfius Bank uses the Advanced Internal Rating-Based Approach (AIRB Approach) to calculate its capital requirements for credit risk. Nevertheless, it applies the Standardised Approach for some portfolios corresponding to cases specifically authorised by regulation such as:

- small business units;
- non-material portfolios;
- portfolios corresponding to activities in run-off or to be sold;
- portfolios for which it has adopted a phased roll-out of the AIRB Approach.

IV.2.3.2. Roll-Out Plan

Within the Basel homologation process, Belfius Bank informed the regulator of the models to be developed or changed in the coming years on business segments and Basel parameters.

The majority of models have been validated internally and have already been sent to the regulator. In the meantime, Belfius Bank maintains the corresponding exposures under the Basel Standardised Approach, except for the CCF calculation for the non-retail segment where the regulator agreed in 2014 on continuing the use of the Foundation IRB approach.

IV.2.3.3. Nominated External Credit Assessment Institutions (ECAI)

The Standardised Approach provides weighted risk figures based on external ratings. In order to apply the Standardised Approach for risk weighted exposure, Belfius Bank uses the external ratings assigned by the following rating agencies: Standard & Poor's, Moody's and Fitch.

If two ratings are available, the rating used for the regulatory capital calculation is the lower of the two ratings. If three ratings are available, Belfius will take the lower of the best two ratings. If no external rating is available, the Standardised Approach provides specific risk weights.

Belfius applies the correspondence defined by EBA to map the ECAI's ratings to the credit quality steps used for regulatory capital calculation

IV.3. Credit risk management and governance

Credit risk represents the potential loss (decrease of asset value or payment default) which Belfius may incur as a result of deterioration in the solvency of any counterparty.

IV.3.1. Governance and committees

Belfius has a structure of credit committees, which is organised hierarchically. The delegation of powers is contained in detailed procedures. It implies that as the amount of the credit transaction increases and/or the rating quality of the counterparty declines, decisions are made by a senior committee level (we refer as well to II.2.3.3.3.)

The LMTR (Limite Maximale Théorique de Risque, or Maximum Theoretical Risk Limit) is the main instrument to concretize the limitation of risk concentrations and forms the backbone of the counterparty limit framework, which is a part of the global Risk Appetite Framework (RAF).

By its directive character, Belfius' counterparty limit framework is also contributory to the delegation rules in the Belfius group. The Maximum Theoretical Risk Limit serves as a reference point to determine the risk levels for which the Management Board and the Board of Directors are qualified, and consequently establish the delegation limits of the credit committees.

The assignment of counterparty limits exceeding the LMTR is the responsibility of the Management Board and/or the Board of Directors, based on the opinion of the Risk Committee.

The general principle is that credit committees have equal numbers of Risk or Credit department and Business representatives. The credit committees are chaired by a Risk or Credit department team member. Mainly for the credit decisions in the Retail and Commercial segment (RC), Belfius relies increasingly on an advanced and automated decision-taking process with behavioural or financial indicators as cornerstones. The parameters leading to decisions in these systems are determined by Risk.

In addition, a very important role is assigned to the risk control function. Once Belfius has credit commitments on a counterparty, it is essential to monitor and control the risk evolution, possibly to take the necessary corrective measures in case of quality deterioration and, where appropriate, to establish provisions for foreseen credit losses.

To this end, Belfius has a system of early warning signals based on behavioural or financial indicators. Counterparties showing signs of weakness are followed by the Watchlist Committees. Their main task is to detect emerging risks as quickly as possible and to monitor them. The business units play a very important role because they maintain the closest contact with customers. In this sense, they fulfil the role of first line risk controller.

Belfius also applies the EBA formulated directives regarding Forbearance. Loans giving rise to application of this principle are those where the borrower, in serious financial difficulties, asks for a concession regarding the credit liabilities which the Bank agrees by adapting the contractual credit conditions.

If a counterparty fails seriously to meet its obligations towards the Bank, it is put in a default status. The formal decision is the competence of the Default Committee, composed of Risk team members. The default status is laid down, by a series of automatic criteria, such as the Bankruptcy of the counterparty, but also by a discretionary decision on the basis of qualitative criteria. The Impairment Committees decide on the adequate impairment levels for Stages 1 (performing exposures), 2 (performing exposures with significant credit deterioration since inception) and 3 (default files).

Methodological committees have a special place in the functioning of Belfius. Their main aim is to validate the internal rating systems and to ensure the quality control. The description of the internal rating process and the main control mechanism are described in the Appendix X.1.2. and X.1.3.

IV.3.2. Focus on forbearance, watchlist and default

IV.3.2.1. Forbearance

Forbearance measures boils down to the granting of concessions towards a debtor facing or about to face difficulties in meeting its financial commitments . They apply to all loans and debt securities that are on-balance sheet and some off-balance sheet commitments. They do not apply to debts held for trading exposures.

These concessions may take the form of modifications to the loan contract or some refinancing.

Specific criteria are established for each business segment. These provide a practical interpretation of the concepts of "financial difficulties" and "concession". When granting a concession, the Bank is always led by a number of mainly business-related and economic factors. The fact that concessions are made is one of the Watchlist indicators at Belfius.

At the end of 2019, an amount of EUR 757 million of loans at Belfius Bank complied with the forbearance definition. EUR 442 million or 58% of these forborne exposures are still performing. The most relevant contributors to the Forbearance are Corporate (EUR 336 million) and Business customers (EUR 302 million).

More details on forborne exposures are provided in the Risk report annex (Table Template 1)

IV.3.2.2 Watchlist

The Watchlist Guideline defines internal and external indicators to identify an increase of credit risk that may lead to an intensive follow-up and/or management of credit files.
This is also reflected in the provisioning policy by applying a Stage 2 for the majority of these exposures. On a quarterly basis, dedicated Risk Committees identify the files requiring a higher level of monitoring. In the current environment, the Watchlist is showing an increasing trend.

IV.3.2.3. Default

IV.3.2.3.1. Current definition of default

A transversal default definition is applied within the entire Belfius Group and on all market segments.

A default status is assigned to the debtors who satisfy either one or both of the following criteria:

- The debtor has material exposures which are more than 90 days past due;
- The debtor is assessed as unlikely to pay its credit obligations in full without realization of collateral, regardless the existence of any past due amount or the number of days past due.

Belfius Default guideline provides in-depth description of indicators used to categorize an exposure in default. The default committee within the Risk department is competent to define the default status.

More details on the definition of default used in the internal models forborne are provided in the Appendix X.1.1.

IV.3.2.3.2. Project New Definition of Default

Based on regulatory evolutions, Belfius is preparing the implementation of the EBA updated definition of default. The aim of the EBA guideline is to harmonize the definition of default across the EU prudential framework.

Belfius is expecting to migrate to the new definition of default in 2020 and is therefore finalizing the roll out of its updated default calculation engine. Its internal guidelines will accordingly be updated.

IV.3.2.4. Impairment, Past-Due and Related Provisions

The impairment methodology is described in the Appendix IX.1.4.

Past-due exposures amounted to EUR 1.3 billion at the end of 2019. 84% of the total past-due loans are in the bucket of more than 1 year, while on the other side 6% are within the interval of at most 90 days.

More details on the ageing of past-due exposures are provided in the Risk report annex (Table Template 3).

The total net value exposure et year-end 2019 amounted to EUR 151,374 million, of which EUR 127,888 million (or 84%) was treated under the IRB approach and EUR 23,486 million (or 16%) under standardised approach. Defaulted exposures amounted to EUR 1.8 billion at the end of 2019. Defaulted exposures were mainly registered in the corporate portfolio (EUR 903 million) and more specifically in the corporate SME portfolio (EUR 584 million).

More details on the credit quality by exposure classes are provided in the Risk report annex (Table CR1 A).

At the end of 2019, the accumulated Stage 3 credit risk adjustment had a closing balance of EUR 1,135 million (-1.0%).

The Stable amount of Stage 3 credit risk adjustments is also the result of two effects: entrance of a limited number of files partially offset by a decrease of the Stage 3 stock due to write off and/or work out of files.

The stable amount of Stage 1 and 2 credit risk adjustments hides two compensating effects: an increase in Stage 1 impairment (+ EUR 34 Million) relating to commercial franchise assets on one hand and a transfer from Stage 2 to Stage 3 Impairment leading to a global decrease of the Stage 2 Impairment at the end of the year (- EUR 34 Million). The first one is mainly driven by the production. The second one relates to a limited number of files mainly situated in the Corporate portfolio that were transferred to Stage 3.

More details on the changes in the stock of credit risk adjustments are provided in the Risk report annex (Table CR2 A)

IV.3.3. Credit risk mitigation techniques

IV.3.3.1. Description of the Main Types of Credit Risk Mitigants (CRM)

A Credit Risk Mitigant (CRM) is a technique used to protect or mitigate the credit risk associated with one or more risk exposures. Based on the regulation, CRMs can be classified into two main categories:

1. **Funded CRMs, encompassing:**
   - On balance-sheet netting;
   - Netting agreements (covering repo-style transactions or OTC derivatives);
   - Collaterals:
     - cash, debt securities, equities, gold, ...,
     - immovable property collateral,
     - receivables,
     - leasing,
     - other physical collateral (e.g. on floating charge).
2. **Unfunded CRMs, encompassing:**
   - Guarantees;
   - Credit derivatives.

Immovable property collateral can be in the form of mortgages or mortgage mandates on physical assets such as homes, commercial property or vessels. In addition, loan agreements may contain a negative pledge clause prohibiting the customer from pledging assets to other lenders.

Guarantees can be given by private individuals, companies, national or regional governing bodies, municipalities, guarantee institutes and banks. As is the case for the original obligor, the guarantor will be attributed a rating taking into account its debt-servicing capacity and financial wealth to intervene when the former goes into default. The rating of the guarantor is subject to an annual review in order to capture recent and forward-looking evolutions of his financial performance and his financial strength. Legal restrictions to use a guarantee as CRM are taken into account as well.

The main principle for valuing collateral is to use the expected realisation value at the time of a possible future default when the Bank might have to realise the collateral. Valuations of collateral must be done in connection with all new credit applications, and periodically during the credit life cycle in a risk-based and proportional manner (depending on the type of collateral, remaining level of credit exposure and evolution of the credit quality of the obligor), and are part of the basis for credit decisions and the credit review process. Credit requests for residential or commercial real estate are considered on the basis of the property's market value, external appraisals or internal value estimates as set out in Belfius' internal credit risk guidelines. Financial collateral are considered based on their market value with haircuts for market volatility, correlation with obligor and holding period. In order to reduce the risk, margin calls can be added to the loan or the pledge agreement. The use of financial collateral (except for cash in the case of derivatives transactions) is rather limited.

For Corporate and Specialized Lending credit files, in addition to the credit quality assessment and the credit risk mitigation techniques, moral commitments may be added e.g. in the form of financial covenants in order to monitor the evolution of the financial performance of the obligor and to take precautionary actions in case of non-respect. Examples of financial clauses are requirements for Net Debt/Ebitda (leverage) and minimum level of equity (solvency).

IV.3.3.2. Policies and Processes

Within Belfius, managing the CRM involves the following tasks:
- analysis of the eligibility of all CRM under the Standardised and Advanced Approaches;
- collateral valuation in mark-to-market;
- description of all CRM characteristics in internal Risk Systems, such as:
  - mortgage: rank, amount and maturity;
  - financial collateral: valuation frequency and holding period;
  - guarantee/credit derivative: identification of the guarantor, analysis of the legal mandatory conditions, check whether the credit derivative covers restructuring clauses;
  - security portfolio: description of each security.

Detailed procedures for collateral eligibility, valuation and management are documented and applied in line with the Basel III standards.

At an operational level, various IT tools are used to manage collateral. These IT tools are used to record any relevant data needed precisely to identify collateral characteristics, eligibility criteria and estimated value, in accordance with the Basel III framework.

Belfius applies prudent collateral valuation rules integrating adequate haircut layers based on the relevant items influencing the value of the collateral for the Bank. Depending on the nature of the collateral, revaluation procedures based on automated information flows, on indexes or expert analysis are in place .
Regarding on and off-balance sheet netting, Belfius does not make use of these types of CRMs for regulatory purposes, except for over-the-counter (OTC) derivative products and securities financing transactions (SFT). For these products, internal policies document the eligibility criteria and minimum requirements that netting agreements need to meet in order to be recognised for regulatory purposes under Basel III. Appropriate internal procedures and minimum requirements have been implemented in the internal management process.

IV.3.3.3. Regulatory Treatment

For derivatives and securities financing transactions netting agreements, Belfius recognises their impact (subject to eligibility conditions) by applying the netting effect of these agreements on the calculation of the Exposure at Default (EAD).

For guarantees and credit derivatives, Belfius recognises the impact by substituting the PD, LGD and risk weight formula of the guarantor to those of the borrower (i.e. the exposure is considered to be directly towards the guarantor) if the risk weight of the guarantor is lower than the risk weight of the borrower.

For collateral (both financial and physical), Belfius methodology relating to eligible CRM depends on the approach:

- → IRB Approach:
  - for retail exposures, CRM are incorporated into the calculation of LGD based on internal loss data and calculated by the AIRB Approach models;
  - for non-retail exposures, an unsecured LGD is used, CRM (after regulatory haircuts) are taken into account directly through the EAD.
- → Standardised Approach: eligible CRM (after regulatory haircuts) are directly taken into account in the EAD.

An overview of the credit mitigation techniques is provided in the Risk report annex (Table CR3).

For exposures under the standardised approach, details on the effect of credit risk mitigation techniques and the decomposition in risk weight bands are provided in the Risk report annex (Tables CR4 and CR5).

For exposures under the IRB approach, the same information is provided for the significant portfolios in Risk report annex (Table CR6).

Further details on the specialised lending activity under the slotting approach are available in the Risk report annex (Table CR10).

IV.4. Counterparty credit risk

IV.4.1. Management of the risk

A counterparty credit risk on derivatives exists in all Over-The-Counter (OTC) transactions such as interest rate swaps, foreign exchange swaps, inflation or commodity swaps, credit default swaps and securities financing transactions.

Counterparty credit risk is measured and monitored according to the general principles described in Belfius credit risk policies.

The exposure at default for derivative transactions is based on the mark-to-market value of the derivatives plus the application of an add-on, which is a regulatory percentage of the notional amount of the derivative (percentage depending of maturity and type of derivative).

To reduce the counterparty risk, Belfius OTC derivatives are in most cases concluded within the framework of a master agreement (taking into account the general rules and procedures set out in Belfius credit risk policies). Collateral exchanges for derivative contracts are regulated by the terms and rules stipulated in the Credit Support Annex (CSA).

The exposure at default for securities financing transactions is based on the cash or securities given, reduced by the collateral received (cash or securities) taking into account regulatory haircuts of the financial collateral comprehensive method. Also, Belfius applies netting where agreements (GMRA or GMSLA) are in place and eligible

All OTC transactions are monitored within the credit limits set up for each individual counterparty. Sub-limits may be put in place per type of product.

An adjustment, called Credit Value Adjustment (CVA) reflecting the market value of the counterparty credit risk, is calculated on all non-collateralised derivatives (concluded with a limited number of counterparties, such as local authorities, project SPVs, some corporates or monoline insurers), as well as on collateralised derivatives (although limited in credit risk amount due to the daily exchange of collateral). This adjustment is updated, monthly, on the basis of the evolution of the value of the derivatives and the credit quality of the counterparty. Note also that, along the credit value adjustment, other types of adjustments are applied on derivatives (funding value adjustment, debit value adjustment,...).

IV.4.2. Counterparty credit risk exposures

Exposures to counterparty credit risk, including exposures to central counterparties are detailed in the Risk report annex (tables CCR1, CCR3, CCR4 and CCR8).

IV.4.3. Counterparty credit risk mitigation

The impact of credit risk mitigation techniques is illustrated in the Risk report annex (tables CCR1, CCR5-A and CCR5-B).

The current net credit exposure at year-end 2019 was EUR 6,537 million.

Concentration limits are an essential part of the Risk Appetite Framework of Belfius and are monitored on a continuous basis. This also includes concentrations that might arise following credit risk mitigation techniques. As of Q4 2019 there are no concentrations arising from credit mitigation which exceed the maximum limits of the Risk Appetite Framework.

IV.4.4. Credit derivatives exposures

Exposures to credit derivatives transactions in the trading portfolio, are detailed in the Risk report annex (Table CCR6).

The portfolio contains:

- Single-name CDS: portfolio of back-to-back or open derivatives where protection is sold to banking counterparts and protection is bought from an A+ rated insurance counterpart. The sold derivatives are collateralized while the bought derivatives are not;
- Index CDS are used as mitigants of the CVA risk;
- Total return swaps: back-to-back portfolio of derivatives where protection is bought from an A rated banking counterpart and sold to an SPV. The bought derivatives are collateralized while the sold derivatives are not.

IV.4.5. Credit valuation adjustment

The Credit Valuation Adjustment (CVA) is the price of the default risk for a derivative or portfolio of derivatives with a particular counterparty considering the effect of offsetting collateral. In other words, it is the difference between the risk-free portfolio value and the true portfolio value that takes into consideration the possibility of a counterparty's default.

As such, the CVA represents an estimate of the adjustment to fair value that a market participant would make to incorporate the credit risk of the counterparty due to any failure to perform on contractual agreements.

The capital charge for CVA risk is calculated according to the standardised approach.

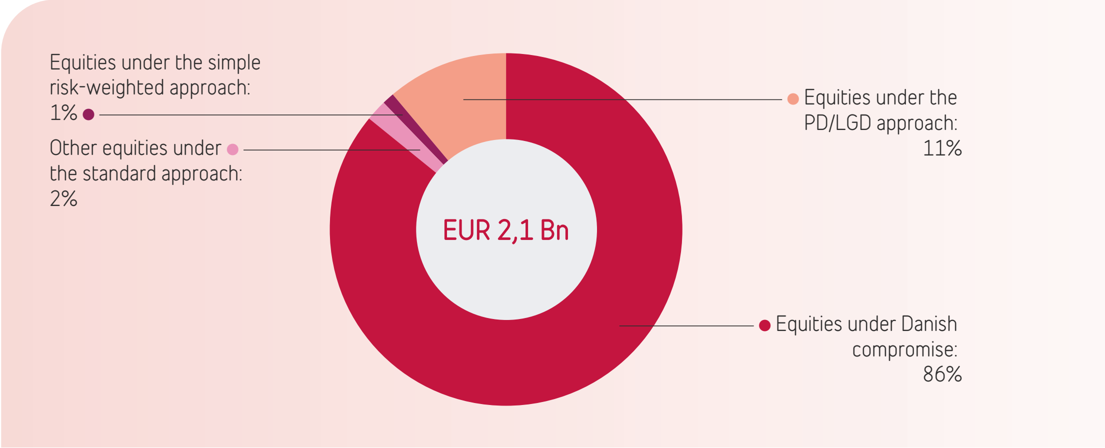
The exposure subject to regulatory CVA increased as a consequence of the interest rate decline. However, the regulatory CVA decreased in 2019 with EUR 224 million thanks to the implementation of new hedging strategies

CVA capital charge is detailed further in the Risk report annex (Table CCR2).

IV.5. Focus on equity exposure

For the calculation of the capital requirement for equity exposure, Belfius Bank applies the PD/LGD method. If the PD/LGD method can not be applied (e.g. no ratings), the simple risk weight method is used.

Besides:
- at the beginning of 2014, the NBB granted the Danish Compromise option (financial conglomerate) to Belfius allowing a new prudential treatment for Belfius Insurance participation and subordinated debts (370% risk weight);
- items classified as significant investments according to Article 48 of Regulation 575/2013 are weighted at 250%.



Further details are provided in the Risk report annex (Tables CR10_B, INS1 and CR5).

IV.6. Securitisation risk

Depending on the role played by Belfius Bank regarding securitisation transactions, the objectives can vary from bringing differentiation in the long-term funding mix, reduction of the economic capital requirement, to improvement of the risk-return ratio.

Belfius Bank currently has two kind of transactions. Belfius Bank has retained asset-backed securities which can for instance be used as collateral for secured funding agreements. In other transactions, the senior tranches were placed with external investors to raise long-term funding.

IV.6.1. Objectives and roles of Belfius Bank

Belfius Bank as Originator: as originator, Belfius Bank carries out securitisation transactions related to various asset classes: mainly residential mortgage loans, public finance loans and loans to SMEs. These transactions are in general carried out with a view to optimising the liquidity and funding profile.

The securitisation activity as originator is described in the Section VI.2.

Belfius Bank as Servicer: In transactions where Belfius Bank is the originator, Belfius Bank in general continues to service the assets being securitised.

Belfius Bank as Arranger of Securitisation Transactions for Customers: Belfius Bank acts as arranger or advisor on securitisation transactions for customers. In these instances, Belfius Bank will structure or advise on the securitisation transaction (or part of a transaction), and could take up other roles such as hedging counterparty, account bank or liquidity provider at arm's length market rates. In general, Belfius Bank receives fees for structuring or advising on transactions.

Belfius Bank in another Role: depending on the specific details of a transaction, Belfius Bank may undertake various roles in securitisation transactions ranging from account bank to hedging provider or liquidity facility provider. Belfius Bank may also act as calculation agent, paying agent or corporate services provider.

Belfius Bank does not act as a sponsor for ABCP, third party assets or multi-seller programmes, and it does not provide liquidity facilities to such programmes.

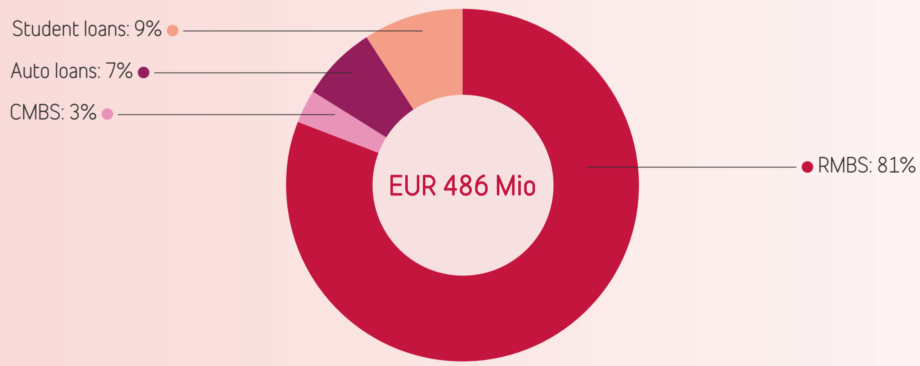
IV.6.2. Securitisation activity as investor

At the end of 2019, the Belfius Bank's investment portfolio was EUR 486 million, compared to EUR 545 million at the end of 2018.
The decrease is the result of selective purchase of STS securitisations (EUR +84 million) to compensate the amortising profile of existing portfolio (EUR -90 million) in combination with active balance sheet management of the former legacy portfolio (EUR -53 million).

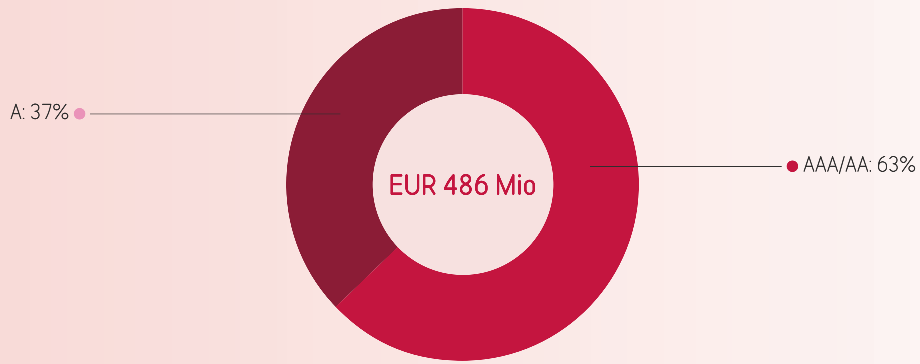
The portfolio is only composed of senior granular ABS transactions.

Further details on underlying assets and capital requirements are provided in the Risk report annex (Tables SEC1 and SEC3).

Activity as investor - by underlying



Activity as investor - by rating



V. Market risk

V.1. Overview

V.1.1. Market Risk Definition

Overall, market risk can be understood as the potential adverse change in the value of a portfolio of financial instruments due to movements in market price levels, to changes of the instrument's liquidity, to changes in volatility levels for market prices or changes in the correlations between the levels of market prices.

Management of market risk within Belfius encompasses all Financial Markets activities of the Bank and focuses on interest rate risk, spread risk and associated credit risk/liquidity risk, foreign-exchange risk, equity risk (or price risk), inflation risk and commodity price risk. In the Risk report we make the distinction between the Structural & ALM risk on the one hand and Trading Market Risk on the other hand.

Market risk of Belfius Insurance is separately managed by its ALCo's. Belfius Insurance's strategic ALCo makes strategic decisions affecting the balance sheets of the insurance companies and their financial profitability taking into consideration the risk appetite pre-defined with the Belfius Bank and Insurance group (i.e. directional ALM position in interest rate risks, equity and real estate risks, volatility and correlation risks).

V.1.2. Risk types

The sources of market risk are changes in the levels of:

- interest rates;
- credit spreads (specific interest rate risk) and liquidity;
- inflation;
- foreign-exchange rates;
- equity prices;
- commodity prices;

and their related risk factors like volatility or correlation for example.

Interest rate risk may be understood as the variation of the value of assets or liabilities of the Bank following changes in interest rates quoted on the markets. It is most pronounced in debt instruments, derivatives that have debt instruments as their underlying reference asset and other derivatives whose values are linked to market interest rates.

Credit spread and liquidity risks are the risks that the value of a certain portfolio can change as the result of movements in credit spreads even if the credit quality (rating) remains the same. The spread of a position is that single spread that has to be added to the whole zero-coupon curve (swap) in order to obtain discount factors that lead to a present value of expected cash flows equal to the current fair value of the position.

Foreign-exchange risk is the potential risk that movements in exchange rates may adversely affect the value of a financial instrument or portfolio. Despite exchange rates being a distinct market risk factor, the valuation of foreign-exchange instruments generally requires knowledge of the behaviour of both spot exchange rates and interest rates.
Equity price risk is the potential risk for adverse changes in the value of an institution's equity-related holdings. Price risks associated with equities are often classified into two categories: general (or non diversifiable) equity risk and specific (or diversifiable) equity risk.

Commodity price risk is the potential risk for adverse changes in the value of an institution's commodity-related holdings. Price risks associated with commodities differ considerably from other market risk factors since most commodities are traded on markets in which the concentration of supply can magnify price volatility. Belfius only has some commodity price risk on CO_2 certificates holdings.

V.2. Structural & ALM risk

For the structural & ALM risk, we refer to the section on market risk in chapter Risk management of Belfius Management report.

V.3. Trading market risk

Financial Markets activities encompass client-oriented activities and hedge activities at Belfius Bank. No Financial Markets activities are undertaken at Belfius Insurance. For their needs in Financial Markets products, they turn to Belfius Bank or other banks.

V.3.1. Fundamentals of market risk in 2019

Despite the increasing level of volatility of the financial market in 2019 (Brexit, US-China trade ware, …), the P&L volatility has been well-managed.

Proactive management actions were realised in order to contain the P&L volatility and improve the RWA level. The following actions were taken:
- opportunistic sale of ex-Legacy bonds further reducing the exposure;
- a strong reduction of the derivatives portfolio through unwinds and compression of derivatives;
- additional hedging actions to reduce both the P&L volatility and the CVA RWA.

With regards to the regulatory Internal Model and the back-testing, seen the volatility of the financial markets, 2019 was characterized by 5 negative back-testing exceptions. The multiplicator factor moved from 4 to 4.4 between August and November, but dropped back to 4 in December as the first back-testing exception of early January dropped out of the range of 250 trading days.

V.3.2. Market risk governance

With the purpose of effectively managing the market risks Belfius Bank is facing, FM Risk Management has identified the following cornerstones as key pillars of the risk management of the risks Belfius Bank is confronted with for its Financial Market (FM) activities:
- An efficient organisation fostering an accurate identification, analysis and reporting of the different risks Belfius Bank is bearing, as well as a continued training of people in order to remain up to date with the latest evolutions in theories, regulatory issues, metrics or market changes.
- A robust limit framework with differentiated limits by activity or risk factor that is to be respected by all parties involved in market activities. On top of the VaR limits or P&L triggers, several other metrics have been identified as key controlling tools in the risk management process:
  - limits on notional amounts;
  - limits on maturities;
  - limits on type of products;
  - limits on sensitivities (known as "Greeks": delta, etc.);
  - back testing;
  - stress tests.
- Finally, this framework is regularly submitted for revision to the FM Committee in order to be commensurate to the risk appetite defined by the Board of Directors of Belfius Bank.

Committees

The Financial Markets Committee (FMC) is the main committee for Financial Markets Management. Its main objective is to provide effective risk management oversight and steering of the Financial Markets activities. This includes reviewing business, risk and P&L reports, and providing an appropriate risk management and governance framework aligned with the RAF and business objectives set forward by the Management Board. As a consequence, the FMC is responsible for determining market risk limits consistently with the Market Risk Appetite.

The Risk Policy Committee validates all major changes in risk governance. For the sub-committees, we refer to II.2.3.3.2.

V.3.3. Market risk measures

The Value-at-Risk (VaR) concept is used as the principal metric for proper management of the market risk Belfius Bank is facing. The VaR measures the maximum loss in Net Present Value (NPV) the Bank might be facing in normal and/or historical market conditions over a period of 10 days with a confidence interval of 99%. The following risks are monitored at Belfius using a VaR computation:
- The interest rate, inflation and foreign exchange (forex) rate risk: this category of risk is monitored via a historical VaR based on an internal model approved by the National Bank of Belgium.
  The historical simulation approach consists of managing the portfolio through a time series of historical asset yields. These revaluations generate a distribution of portfolio values (yield histogram) on the basis of which a VaR (% percentile) may be calculated.
  The main advantages of this type of VaR are its simplicity and the fact that it does not assume a normal but a historical distribution of asset yields (distributions may be non-normal and the behaviour of the observations may be non-linear).

- The general and specific equity risks are measured on the basis of a historical VaR with full valuation based on 300 scenarios.
- The spread risk is measured via a historical approach, applying 300 observed variations on the sensitivities.

Since the end of 2011, Belfius has computed a Stressed Value-at-Risk (SVaR) on top of its regular VaR, which also enters into the computation of weighted risks for Market Risk. This SVaR measure consists of calculating a historical VaR on a 250 consecutive business days observation period which generates the largest negative variations of Net Present Value in the Bank's current portfolio of financial instruments.

V.3.4. Market risk exposure

The overall average VaR of Financial Markets activities decreased at EUR 12.9 million in 2019 vs EUR 18.1 million in 2018.

Evolution of global VaR in 2019

Value at Risk by activity

VaR (99%, 10 days) (1)	31/12/2018				31/12/2019			
(in millions)	IR(2) & FX(3)	Equity	Spread	Other risks(4)	IR(2) & FX(3)	Equity	Spread	Other risks(4)
By activity								
Average	9,0	5,6	2,5	1,0	6,8	4,8	0,7	0,7
End of Year	9,2	6,8	0,5	0,8	6,0	4,4	0,3	0,4
Maximum	15,5	7,6	6,1	2,2	11,6	7,6	2,2	1,5
Minimum	4,2	4,4	0,2	0,4	3,5	3,7	0,2	0,4
Global								
Average	18,1				12,9			
End of Year	17,3				11,2			
Maximum	29,5				18,4			
Minimum	10,9				9,1			
Limit	26,5				26,5			

(1) The Value at Risk (VaR): is a measure of the potential change in market value with a probability of 99% and over a periode of 10 days.
(2) IR: interest rate risk and inflation risk
(3) FX: forex risk
(4) CO_2 risk

IR markets during the first quarter resulted in a volatile VaR with regular changes needed in the hedging positions..

A steady evolution during the second quarter of the year was followed by a significant increase in the IR FX VaR in September due to the very volatile financial markets which produced some extreme negative scenarios. The rest of the year the VaR returned to a low and stable level.

V.3.5. Stress testing

Although the VaR is a very useful risk management tool for controlling day-to-day loss-risk exposures, it does not fully withstand the test of abnormal market movements, and it does not always give a total accurate picture of market exposure. Stress tests reveal sometimes better such information by gauging Belfius' vulnerability of the market position to exceptional events and hence by providing additional information about market risks alongside the information embedded in the VaR. These risks include those associated with extreme price movements and those associated with scenarios not reflected in recent history or implied by the parameters used to compute the VaR. Consequently, Belfius Bank uses stress tests in addition to the VaR approach.

The stress testing framework applied to Financial Market activities of Belfius Bank can be described as follows:

→ Sensitivity tests are run on the following risk factors: interest rates, foreign exchange risk, volatilities, credit spreads, IR basis (difference between the Eonia rate and the Euribor 3-month rate) and dividends/share prices.
→ Historical scenarios, which consist of simulations mirroring simultaneous significant historical market movements on several risk factors. More specifically, the following scenarios are applied:
  - equity crash of 1987;
  - monetary crisis of 1992;
  - market movements of 2001;
  - financial crisis of 2008.
→ Combined scenarios where shocks on interest rates and credit spreads are simultaneously applied.

The stress tests are presented at least on a quarterly basis to the FMRR.

V.3.6. Regulatory internal model and back testing

Belfius Bank uses its internal VaR model for the regulatory capital requirement calculation on foreign exchange risk and general interest rate risk within the trading scope.

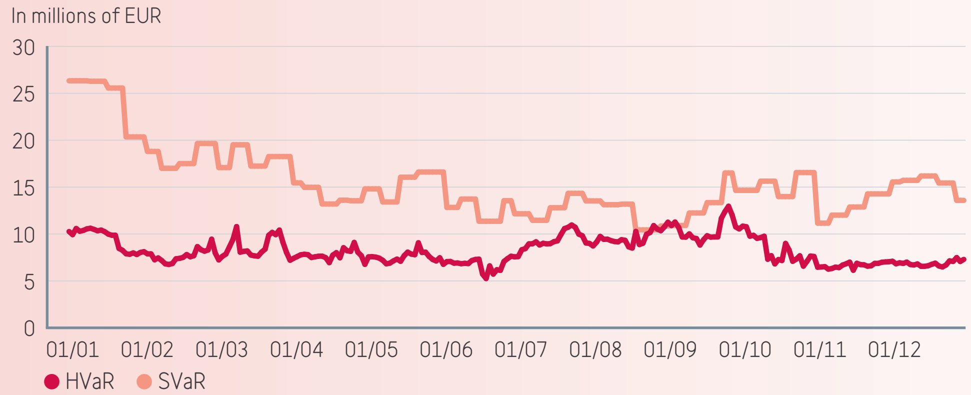
Beside the VaR described above, Belfius Bank calculates a Stressed VaR (SVaR). The SVaR is computed on a weekly basis using 250 historical daily evolutions of parameters from the period May 2008-June 2009.

The regulatory capital is calculated by using both the VaR and the SVaR. In 2019, the Internal Model VaR amounted to EUR 8.3 million on average versus EUR 15.7 million for the SVaR.

The other market risks are treated under the Basel Standardized approach.

Further details are provided in the Risk report annex (Tables MR1 , MR2-A, MR3 and OV1)

Evolution HVaR and SVaR in 2019



The aim of back testing is to test the accuracy and the mathematical soundness of the internal market risk measurement methodologies by comparing the calculated market risk figures with the volatility of the actual results. Back testing is a prerequisite for Belfius Bank since we use internal models to calculate the regulatory capital requirement for market risks.

The result of the back test is the number of actual market losses greater than their corresponding VaR figures (i.e. "the number of exceptions"). According to this number, the regulators among others will also decide on the multiplier to be applied for determining the regulatory capital requirement for market risks.

Currently, two types of back testing are processed at Belfius Bank:

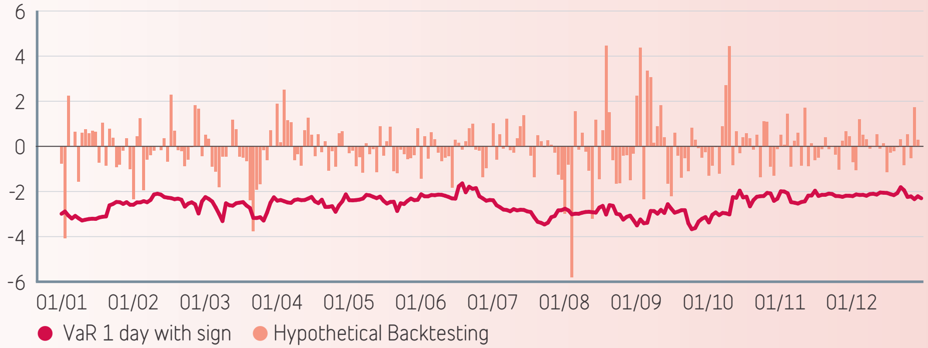
→ Hypothetical back testing compares the hypothetical results of the portfolio's end-of-day value and, assuming unchanged positions, its value at the end of the subsequent day. This result is therefore without any provisions adjustments and other non-involved risk factors. The holding period is one day. During 2019, there were 5 negatives exceptions to the hypothetical back testing.
→ Real back testing compares the portfolio's end-of-day value and its actual value at the end of the subsequent day excluding fees, commissions, and net interest income. In 2019, there were 3 exceptions to the real back testing.

The back testing processes provide therefore a view of the number of (hypothetical and real) exceptions. The maximum between these two numbers is taken into account to adjust the VaR & SVaR multiplier used for calculating the Bank's risk capital requirements for market risk under the internal model approved by the regulator. As there were 5 negative back-testing exceptions observed in 2019, the multiplicator factor moved from 4 to 4.4 between August and November, but dropped back to 4 in December as the first backtesting exception of early January dropped out of the range of 250 trading days.
At the end of 2019, the RWA for market risk under the internal model approach was EUR 1,080 million.

The following charts show real and hypothetical back testing in 2019 on interest rate and foreign exchange perimeters:

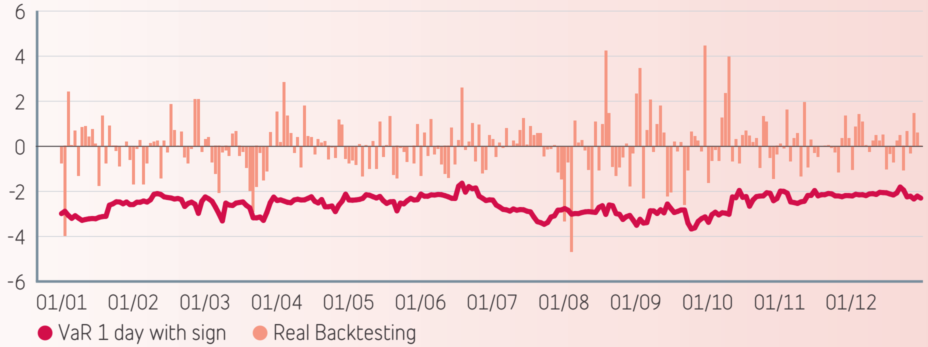
Hypothetical Back Testing

In millions of EUR



Real Back Testing

In millions of EUR



V.3.7. Validation

Validation is responsible for the overall assessment of the market risk and valuation models. The process set up to endorse the validation of models deployed within Belfius Bank is multi-layered, ensuring compliance with regulatory requirements. Validation controls the models from a methodological but also an operational (implementation, usage) viewpoint. It intervenes prior to or shortly after the first use of a new model or of any significant change of an existing model. It also reviews periodically the performance of the models. Validation works are summarised in reports indicating the controls that were performed, their findings, proposed corrective actions and a validation status.

The decisions regarding the Market models are taken by the FM Committee, composed of the CRO, the CFO, the Board Member in charge of Financial Markets and their direct reports in charge of Market activities:

- green light to put new models or model updates in production;
- endorsement of the corrective action plans recommended by Validation.

Twice a year the FM Committee decisions are further presented to the Management Board.

V.3.8. Systems and controls

On a daily basis, FM Risk Management follows up, analyses and reports the risks and results of the FM desks. On a monthly basis, the FM Committee (FMC) meets to discuss the risks and results, the market limits, procedures, guidelines and policies and approves or amends new valuation methodologies.

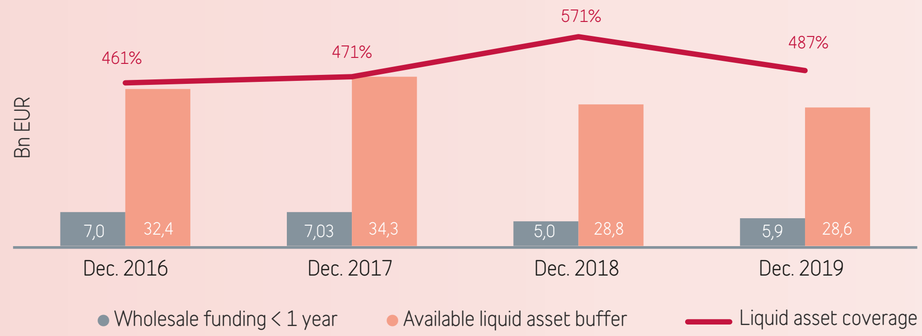
All market activities are backed by specific guidelines describing the objectives, the authorised products, sensitivity, VaR and/or outstanding limits. The systems and controls that are established within Belfius are described in various procedures to ensure a complete and formal framework that is established to support all market risk responsibilities.

VI. Liquidity risk

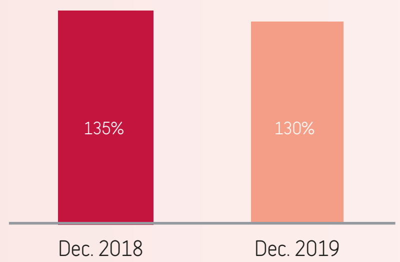
Belfius Bank manages its liquidity with a view to comply with internal and regulatory liquidity ratios. In addition, limits are defined for the balance sheet amount that can be funded over the short term and on the interbank market. These limits are integrated in the Risk Appetite Framework (RAF) approved by the Board of Directors and reported on a quarterly basis. Available liquidity reserves also play a key role regarding liquidity: at any time, Belfius Bank ensures it has sufficient quality assets to cover any temporary liquidity shortfalls, both in normal markets and under stress scenarios. Belfius Bank defined specific guidelines for the management of LCR eligible bonds and non LCR eligible bonds, both approved by the Management Board.

For the liquidity risk in general, we refer to the the section Liquidity risk in the chapter Risk management of Belfius' Management report. We provide some additional focuses here below.

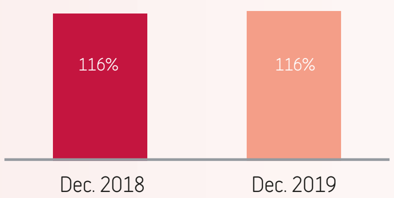
Strong liquidity profile



LCR



NSFR



VI.1. Covered bond activity

Belfius Bank has set up two programmes for the continuous offer of Belgian pandbrieven (Belgische pandbrieven/lettres de gage belges) in accordance with the legal framework for Belgian covered bonds, i.e. a Mortgage Pandbrieven and a Public Pandbrieven programme.
The main asset class of the special estate of the Mortgage Pandbrieven programme consists of residential mortgage loans that were originated by Belfius Bank. The main asset class of the special estate of the Public Pandbrieven programme consists of public sector loans that were originated by Belfius Bank.

Ernst & Young has been appointed as cover pool monitor for both programmes.

The pandbrieven constitute direct, unconditional, unsubordinated and unsecured obligations of the Bank and rank at all times pari passu, without any preference among themselves, with all other outstanding unsecured and unsubordinated obligations of the Bank, present and future.

THE BELGIAN MORTGAGE PANDBRIEVEN PROGRAMME

Over the course of 2019, no Mortgage Pandbrieven have been issued.

The Belfius Mortgage Pandbrieven were rated AAA (stable outlook) by Fitch and AAA (stable outlook) by S&P at the end of 2019.

THE BELGIAN PUBLIC PANDBRIEVEN PROGRAMME

Over the course of 2019, Belfius Bank issued a nominal amount of EUR 500 million of Public Pandbrieven.

The Belfius Public Pandbrieven were rated AAA (stable outlook) by S&P and Aaa by Moody's at the end of 2019.

The main characteristics of those 2 programmes are provided in Appendix X.2.2. and X.2.3.

VI.2. Securitisation activity as originator

The steering of the set-up for securitisation transactions is performed by the FIG & Structured Finance department with the support of the dedicated organisation/project management departments. As such, both prior to and after the closing of a transaction, transversal task forces are set up including all relevant departments, such as accounting, asset and liability management, credit risk, market risk, back-office, transaction processing, etc.

Post closing, the transaction follow-up concerns the efficiency and effectiveness of the servicing, the appropriate monitoring of the transaction from a credit, market and liquidity risk perspective as well as the reliability of the reporting being produced.

All outstanding transactions were carried out with a view of obtaining long-term funding or establishing a liquidity buffer.

No assets have been originated with the intention to securitise. The underlying assets have been originated in the regular course of lending business to retail, public and corporate customers of Belfius Bank. Hence no assets on the balance sheet awaiting securitisation can be identified as such. Only performing assets are included in the securitisation transactions. No profit or losses are realised upon sale of the assets to the SPV.

Engaged ECAIs include Moody's, Fitch Ratings, Standard & Poor's and DBRS.

The table shows the securitisation activity (Belfius Bank as originator): amount of exposure securitised, and gains and losses on sales during the period, the amount of underlying assets (amount of defaulted assets disclosed separately) originated by Belfius Bank by nature of securitisation and type of underlying assets.

Belfius Bank has not yet securitised any revolving exposures or liquidity facilities which are shared between investors and Belfius Bank as originator. The main changes impacting 2019 in comparison to 2018 relate to the amortisation in the underlying portfolios of assets securitised.

31/12/2019 (in millions of EUR)	Residential mortgage loans	Public sector loans	Corporate & SME exposures	Total
TRADITIONAL SECURITISATIONS				
Underlying assets	4,685	809	1,071	6,565
Defaulted assets(1)	4	0	16	20
of which exposures securitised in 2019(2)	0	0	0	0
Gains and losses on sales in 2019	0	0	0	0
SYNTHETIC SECURITISATIONS				
Underlying assets				
Defaulted assets(1)				
of which exposures securitised in 2019(2)				
RELATED SPVs	Penates Funding (Penates-5, Penates-6)	Dexia Secured Funding Belgium (DSFB-2)	Mercurius Funding, (Mercurius-1)	

(1) Amount of defaulted assets (as of the date of default) using the definitions used in the securitisation transaction.
(2) Gross amount of exposure (as of year-end based on reference obligations).

31/12/2018 (in millions of EUR)	Residential mortgage loans	Public sector loans	Corporate & SME exposures	Total
TRADITIONAL SECURITISATIONS				
Underlying assets	5,504	885	1,373	7,762
Defaulted assets(1)	3	1	15	19
of which exposures securitised in 2018(2)	0	0	0	0
Gains and losses on sales in 2018	0	0	NA	NA
SYNTHETIC SECURITISATIONS				
Underlying assets				
Defaulted assets(1)				
of which exposures securitised in 2018(2)				
RELATED SPVs	Penates Funding (Penates-5, Penates-6)	Dexia Secured Funding Belgium (DSFB-2)	Mercurius Funding, (Mercurius-1)	

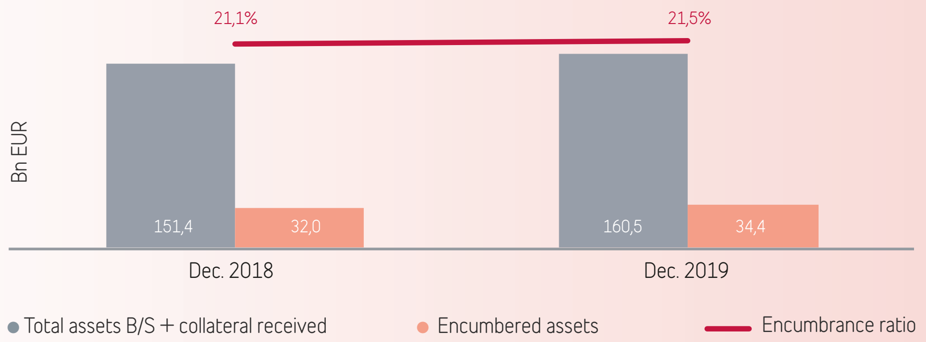
(1) Amount of defaulted assets (as of the date of default) using the definitions used in the securitisation transaction.
(2) Gross amount of exposure (as of year-end based on reference obligations).

VI.3. Encumbered assets

The regulatory consolidation scope used for the purpose of the disclosures on asset encumbrance is the same as the scope retained for the application of the liquidity requirements on a consolidated basis as defined in Part II, Chapter 2 of Regulation (EU) No. 575/2013.

Following the EBA instructions, the unused part of pledged assets (i.e. the part above the minimum amount required by the counterparty) should not be considered as encumbered. It is the case, for instance, for the collateral pledged to the ECB.

According to the EBA guideline based on the median values of the encumbrance reportings of the last four quarters,, the encumbered assets at Belfius Bank amounted to EUR 34.4 billion end 2019. This represents an increase with EUR 2.4 billion compared to end 2018 (following median values calculation). The Asset Encumbrance Ratio based on the median values results in 21.5% end of 2019, which is a slight increase with 0.4% compared to the end of 2018.



The encumbered assets are located within Belfius Bank, which is the only banking entity of the group generating encumbrance. The main sources of encumbrance is linked to collateral pledged (gross of collateral received) for the derivatives exposures for EUR 14.3 billion (increase of EUR 1.7 billion compared to end 2018), under the form of cash or securities. A significant part of collateral is financed through collateral received from other counterparties with whom the Bank concluded derivatives in the opposite direction.
Other main sources of encumbrance for funding purposes are loans in cover pools underlying covered bonds issues (EUR 10.1 billion median) and assets blocked for ECB funding (EUR 4.7 billion median).

Seen there is no currency representing more than 5% of total Belfius liabilities, all encumbrance figures are computed in EUR only.

Further details are provided in the Risk report annex (Tables AE).

VI.4. Liquidity risk at Belfius Insurance

For the liquidity risk at Belfius Insurance, we refer to the the dedicated section in the Belfius' Management report, chapter Risk management.

VII. Non-financial risk

VII.1. Fundamentals of non-financial risk in 2019

Since the financial crisis, the nature of the events that could hit financial institutions has changed drastically. When after the crisis, financial risks were the main point of attention, the nature of the risks has changed as a result of the altering social, economic and technological context. Non-Financial Risk Management is growing in importance given evolutions of risks and threats (VUCA world) combined with an ambitious business strategy. The term Non-Financial Risk (NFR) has to be understood as a broad umbrella covering all risks except "financial risks" and are not only complex and cross-dependent but also unbounded due to regularly emerging risks.

The environment for non-financial risk and compliance is not expected to improve. Some examples in the general environment: an increase of IT security concerns everywhere in the world; swift changing in public opinion and regulatory scrutiny about AML and fiscal fraud requiring strong management practices; statistics on external frauds in Belgian banks showing a strong increase in number and amount in 2018 & 2019 - the modus operandi also evolving (increased phishing), ...

Whereas for Belfius, non-financial risks are on the rise as well, especially with regards to IT security and IT resilience and compliance, operational losses in 2019 remained relatively low.

The management of non-financial risks has been integral part of the Belfius risk management for years. In 2019, the NFR approach has been further strengthened:

- → Both the risk governance as well as the risk framework have been reinforced and strengthened:
  - Roles and responsibilities within the 3 Lines of Defence (3LoD) model, have been further clearly defined and implemented (especially, DPO, CISO, Anti-Fraud Officer, outsourcing) in the overall NFR management;
  - A performant NFR governance structure has been setup to ensure a well-coordinated NFR framework with sub committees to cover specific NFRs (see chapter II.2.3.3.4.);
  - The NFR Risk Appetite Framework has been reviewed in depth to build progressively a comprehensive framework and to cover new risks areas. It provides a structured approach to frame the risk profile, the control environment and the tolerance for losses of the current situation as well as the future strategic evolutions;
  - Regarding the organization, the NFR team is a joint team for Belfius Bank and Belfius Insurance. Synergies and convergences are made to provide a coherent and harmonized risk management.
- → Efforts have been made to improve risk analysis, monitoring and reporting:
  - Transversal processes such New Product Approval Process (NPAP), as formal ex-ante risk assessment, have been reviewed;
  - Forward-looking and risk opinions have been key to get a better impact on the Belfius strategy;
  - Belfius has continued efforts to improve a risk awareness culture.
- → Special attention has been given to the main NFR risks:
  - With regard to fraud risk, the reporting has been enhanced providing relevant information to senior management to review and assess the fraud risk and its evolution. The Anti-Fraud Expert Panel has been harnessed for assessing/challenging concrete action plans in response to the challenge to respond to new fraud schemes;
  - With regard to data privacy, Belfius has implemented adapted procedures to be able to respond within the maximum time to all exercise of rights by clients (data subjects)), to continue to raise internal awareness and to analyze risks;
  - With regard to Information security, a large DRP test (fail back and fail over between data centres) took place and has been successful.

VII.2. Non-financial risk - operational risk

VII.2.1. Non-financial risk management framework

The operational risk management framework has been extended to "Non-Financial Risk" since 2018. The term Non Financial Risk (NFR) is covering all risks except "financial risks" (such as market, ALM, liquidity, credit and insurance risks). NFR covers among others operational risks (including fraud, HR, IT, IT security, business continuity, outsourcing, data-related risks, privacy ...) as well as reputational, compliance, legal risks, etc..Consequently, NFRs are not independent, and do not constitute a predefined list of risks, resulting in the need for a regular review of the scope of these risks in light of emerging risks and new regulations.

The NFR management framework determines the principles that ensure an effective management of the non-financial risks by Belfius. These general principles are in compliance with the applicable legal requirements.

The framework is based on four axis:

- Establish a risk mapping and taxonomy in order to ensure consistency within the organization, including a regular review of this mapping and taxonomy to identify emerging risks;
- Enforce clear roles and responsibilities, as well as a well-defined way of working together for all the risks following a decentralised responsibility in accordance with the "Three Lines of Defense" ("LoD") model;
- Set up a strong governance/committee structure involving the appropriate level of management; and
- Transversal risk processes and related policies, such as: self assessment of risks and internal controls, incident management, Risk reporting, new product approval process, risk appetite definition and follow up, business continuity and crisis management.

Specific attention is also paid to more recent or evolving types of risks, such as cyber risk, conduct risk, sourcing risk, cloud risk, privacy risk, reputation risk, compliance risk, ...

VII.2.2 Risk appetite

The formal definition of a Risk Appetite Framework (RAF) is the key reference for the group Risk Management practice and it covers both financial and non-financial risks.

The RAF for NFR contains quantitative elements (target values or ratios) and qualitative elements (statements) and is articulated around three concepts on which limits are defined:

- "Risks": What are the risks? How to appreciate the risk level (past and forward looking)?
- "Risk management capacity": What is the capacity to manage the risks?
- "Loss tolerance": What are the potential P&L and future RWA impacts we tolerate?

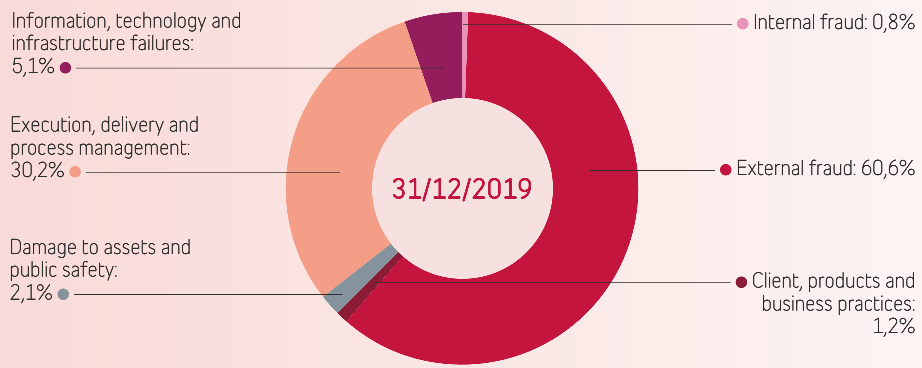
VII.2.3. Transversal risk processes

VII.2.3.1. Incident management.

The systematic collection and control of data on operational incidents is one of the main requirements of the Basel Committee regarding operational risk management, whatever the approach adopted for capital calculation ("Standardised Approach" or "Advanced Measurement Approach") may be.

The reporting mechanisms ensure that the responsible parties are notified quickly if incidents occur. Major incidents are also reported to the CRO/Management Board, and these reports always include an action plan for avoiding, mitigating or limiting risks in the future. This is developed under the responsibility of the relevant line management.

Breakdown op potential net losses by standard category of incidents over the past three years at Belfius Bank



For the period 2017-2019, Belfius Bank's average annual potential net losses stemming from operational incidents amounted to EUR 3.05 million.

The main areas of operational losses were essentially due to incidents associated with external fraud and incidents in relation to execution, delivery and process management. Other categories remain limited in amount but not necessarily in number of events.

The most important part of the financial impact resulting from operational incidents comes from the Bank's Retail business.

For Belfius Insurance and Belfius Investment Partners, the establishment of an overview of the operational incidents is also crucial to achieve a better understanding of the operational risk associated with each activity. This constitutes a relevant source of information for management (for example, the annual loss). The major operational incidents are investigated thoroughly and are subject to a specific action plan and appropriate follow-up.

VII.2.3.2. Self- Assessment of Risks and Internal Controls

Another important task of risk management is the analysis of the overall main potential risks and related key controls for Belfius, performed at Belfius Bank, Belfius Insurance and Belfius Investment Partners. This is achieved through a bottom-up Self Assessment of Risks and Internal Controls held in all departments and subsidiaries at Belfius, using the COSO methodology. These exercises may result in additional action plans being developed to limit potential risks further and they provide an excellent overview of the main risk areas in the various businesses. These self-assessments are conducted annually and use the same methodology both for the Risk Control Self Assessment (RCSA) and for the yearly reports submitted to the respective Boards of Directors regarding the assessment of internal control. The identified top risks 2019 relate to DRP continuity (availability of data, applications and communication channels is a central concern for the business lines), resources risk (shortage of appropriate FTEs, both qualitatively and quantitatively) and compliance risk (MiFID and AML are still the main compliance risk domains).

VII.2.3.3. New Product Approval Policy

The process of developing a function (product, activity, process, system …) involves a number of steps that must be completed before the new (or changed) function can be implemented.

The NPAP policy establishes the overall process and the accountability of the parties involved in this process. Therefore, it defines the governance and describes the new product approval process (NPAP).

The objectives of the process are the following:

- new or changed functions are in line with the Belfius Strategy;
- all risks related to new or changed functions are identified;
- all risks related to new or changed functions fall within the Risk Appetite Framework;
- potential risks related to new or changed functions are adequately addressed (measured, monitored, controlled, mitigated and reported);
- any new risk related to new or changed functions is effectively managed.

NPAP governance was strengthened by the establishment of an NPAP committee.

VII.2.3.4. Managing insurance policies

The possible financial impact of Belfius' operational risks are also mitigated by taking out insurance policies, principally covering professional liability, fraud, theft and interruption of business and for cyber risk. This is standard practice in the financial services' industry.

VII.2.3.5. Business continuity

Belfius is committed to its clients, counterparties and regulators to put in place, maintain and test viable alternative arrangements that, following an incident, allow the continuation or the resumption of critical business activities at the agreed operational level and entirely compliant with the Belgian Regulation. Moreover Belfius considers itself to be in line with ISO 22301.

The supporting process, Business Continuity Management (BCM), is in a uniform way applied at all Belfius entities (Bank, Insurance, Investment Partners, Lease …) It consists of:

- A **Policy**, which sets the framework and ensures that responsibilities and roles are clearly assigned and communicated within the organization, that appropriate resources are attributed.
- A **Threat Analysis** (so measures can be considered to lower the likelihood or to decrease the impact of disruption) and a **Business Impact Analysis** (BIA) which assesses the impact in time of a loss, interruption or disruption of business activities according to multiple criteria. The Recovery Time objective (RTO) depends on the criticality of the business activity (2 hours, 4 hours, 2 days, 1 week).
- The design of appropriate **relocation strategies** to provide continuity for its critical Business Activities. The main relocation strategies are the following:
  - "Dual Office" & "remote work", which implies that all very critical and systemically critical important activities are always organized at two geographically different locations and also performed by collaborators working at home. This means that if one of the buildings of Belfius becomes unavailable, the activity simply continues in other places.
  - "internal relocation sites" for the Dealing Room and a limited number of other activities that demand some specific prerequisites at critical moments in time, only available in Belfius' premises; the internal relocation site in Brussels is mainly used for crisis coordination.

- The implementation by means of a **Business Continuity Plan** which is a set of procedures, scenarios, call lists and tools. Thanks to its automation, the BC Plan can be very quickly rolled out.
- A flexible **Crisis Management** process which considers also elements of communication, HR, facility management, IT, legal & insurance. Belfius has a mass notification tool at his disposal to inform all stakeholders.
- An **exercise** and **maintenance** program which validates previous elements and gives rise to lessons-learned with the intention to further improve the resilience of Belfius. Recently the exercise program has been extended to be in line with the more complex and disruptive risk landscape.
- A **Management Reporting** covering the strategy realizations, lessons learned, budget and projects, which confirms the active executive involvement on Business Continuity.

Final comments:

- At each exercise in 2019, the BC Plan was successfully deployed and all KPI's were compliant with the risk appetite.
- In 2019 no real crisis triggered Belfius to roll out the BC Plan.

VII.2.4. Focus on key non-financial risks/domains

VII.2.4.1. Information Security

For Belfius, the purpose of information security is to protect Belfius' information that has a value for the organization:

- the information generated by the business;
- the information belonging/pertaining to our clients;
- the information, derived from freely accessible or publicly available data, which has acquired a value as a result of the treatment carried out by or on behalf of Belfius

The threats against data and the information are:

- their loss of integrity;
- their loss of confidentiality;
- their unplanned unavailability.

The mission of information security, is to guard against these threats. Belfius also considers that the objective regarding information security extends to managing the risks linked to the consequences of these threats if they have materialized:

- loss of customers' confidence;
- loss of money;
- loss of reputation within the customers and shareholders;
- loss of peer confidence (regulators, financial markets);
- loss of confidence of our business partners.

These principles were approved by the Board of Directors and are now applied by, the organization in all the information security axes.

In 2019, a major project, Core Banking Renewal, has started. Best-in-class information security is a key objective for tis project as our data and the information derived from them will leave the perimeter of Belfius assets and will be stored outside for the first time in Belfius history. The support to this project has been one our priorities in 2019.

The new security roadmap has been aligned for the first time with the information security objectives and strategy approved by the Board of Directors last year. This helps to make sure all dimensions were taken into account without weak link.

Governance and Strategy

In order to guarantee the information security within Belfius, the Information Security Steering (ISS) ensures a well governed and coordinated information security strategy whereby an adequate system of "prevention", "detection", "protection" and "reaction" is put in place, in line with regulatory requirements towards information security.

11 sessions of this committee have taken place in 2019 and have led to strategic reflections and actions to improve the information security strategy within Belfius. The ISS is chaired by the Chief Risk Officer (CRO) and the quorum ensures that executives stakeholders (CIO, CRO, CISO) are present at each session.

VII.2.4.2. Data privacy

Respect for privacy and customer satisfaction

The respect for privacy and the protection of personal data is a key commitment at Belfius. GDPR conformity is integrated into every process to offer (existing, adapted and new) products, innovative digital tools, services and information sharing to its clients. GDPR is a focus in approval processes. The Data Protection Officer (DPO), the Chief Information Security Officer (CISO), the Digital Security Officer (DSO), the Non-Financial Risk Department (NFR), the Legal Department and the Compliance Department work together with as aim the respect of GDPR.

The regulatory framework relating to personal data continues to evolve and Belfius is closely monitoring these developments.

Exercises of rights by data subjects

98.71% of the total number of exercises of rights, 16,566 in number, were exercises of the of right to access. 99.93% of those were digital requests which Belfius processed and answered automatically, always within the maximum period of one month.

Internal awareness
A GDPR e-learning, which has been followed by more than 90.53% of staff (head office, branch network and agencies), translates Belfius' commitment, as indicated above, into an increased GDPR-awareness on behalf of its employees and the privacy correspondents active in all management teams.

Infringements
With respect to personal data breaches, we have not identified any significant data breaches. Only 3 facts were reported to the Data Protection Authority in 2019. In each case, there was no significant impact due to a rapid response and appropriate measures.

VII.2.4.3. Fraud risk
Together with the Internal Audit and Compliance, the NFR Department has formulated a global anti-fraud policy for Belfius. In line with the overall commitment to deliver value-adding products and services, the qualitative statements of the Belfius Risk Appetite Framework stresses (1) that a zero-tolerance line of policy is applicable for all forms of fraud (internal, external as well as mixed frauds) and (2) that Belfius implements an extremely severe line of policy to achieve its anti-fraud objectives, taking into account practical capacities.

The roles and responsibilities have been clearly defined. Business/Support Lines are the first risk managers. The CRO/Risk NFR team with the Anti-Fraud Officer as expert has a clear 2nd LoD role. The CRO is in general, as for all risks, responsible for the sound management within the 3 LoD model.

The Fraud Steering Committee, acting as a sub-committee of the Non Financial Risk Committee, is defining and monitoring the fraud risk management on strategic and tactical level. It is the platform to reflect on and organize a dialogue between the internal control functions and the stakeholders mainly operating in the decentralized expert units (handling specific types of fraud.

The Anti-Fraud Officer, acting in its 2nd LoD challenger role is key to steer and coordinate, harmonize, monitor and challenge, and consolidate the knowledge of the decentralized expert units.

In this context the processes and internal controls are continuously screened to prevent fraud protecting the interests of Belfius and its employees, customers, suppliers and other stakeholders.

A fraud report is submitted to the Management Board (acting as NFR Committee) and Audit Committee.

VII.2.4.4. Outsourcing risk
Belfius is aware that the risks associated with outsourcing need to be managed adequately and fully assumes its responsibilities in that regard, including but not limited to overseeing and managing the outsourcing arrangements and the risks involved.

The Outsourcing risk policy has been fully reviewed in compliance with the "Final Report on EBA Draft Guidelines on Outsourcing Arrangements". In particular, the policy provides the appointment of the outsourcing function and the set up of the Outsourcing Management (steering) Committee ("OMC"), whose mission consists in ensuring a well governed and coordinated outsourcing in line with Belfius strategy, risk appetite and regulatory requirements.

VII.2.4.5. Employment Practices (HR) & Workplace Safety, Damage to Assets & Public Safety
Concerning physical security & workplace safety, Belfius has a very low appetite for risk. Belfius strives to provide a secure environment for its staff, clients, visitors and assets by ensuring its physical security measures & procedures meet high standards. To obtain this goal a Security Steering Committee constituted of all stakeholders, monitors systematically the overall situation by means of a dashboard. It also acts as a forum to reflect and to dialogue on actual incidents, and on action plans to reduce these to acceptable levels.

VII.3. Business, strategic & execution risk

VII.3.1. Business risk

Definition

Business risk is the risk arising from changes in external factors (the macroeconomic environment, regulations, client behaviour, competitive landscape, socio-demographic environment, climate, etc.). Business risk reflects the unexpected decrease of profitability from the expected (or budgeted) one resulting from deviations from Financial Plan, changes in competitive environment, lack of responsiveness to changes in the business environment or adverse/ improper implementation of business decisions.

Organisation and management of the Risk

The business risk is at the heart of the daily management of the Bank. Indeed, management control as an independent department is responsible for the consolidation of data necessary to calculate income, expenses and profitability, as well as related reporting.

Capitalisation

Business risk is not capitalized through Economic Capital but treated through Earnings at Risk and Stress Testing frameworks.

VII.3.2. Strategic risk

Definition

Strategic risk is defined as the current or prospective loss of value arising from adverse business decisions or the lack of responsiveness to changes in the business environment. Strategic risks often focus on the risk opportunity, "there is no return without risk."

Organisation and management of the Risk

The steering of future profitability as well as the strategic vision and strategic risks are operated through the various business line committees, by the Management Board and ultimately by the Board of Directors: the latter defines strategic decisions to achieve the levels of expected profitability as announced to the market and ensure the survival of the Group and its business lines.

Capitalisation

Strategic risk is not covered by capital but is handled and managed through an appropriate governance process at Belfius.

VII.3.3. Execution risk

Definition

Execution Risk corresponds to the risk of not being able to fully execute the decided strategy or the improper implementation of decisions. Examples of execution risk are insufficient resources (HR, IT, ...), failing new product introductions or rolling out complex new systems, etc.

Capitalisation

Execution risk is not covered by capital but is handled and monitored through an appropriate reporting and follow-up at Belfius.

VII.4. Reputation risk

Definition

For Belfius, reputation risk is created when the performance of the Bank is perceived by its stakeholders as lower than the expectations. Therefore managing performance and perceptions are key to managing the reputation.

Organisation and management of the Risk

Reputation risk (mainly image and branding) is steered by the Communication and Customer Experience Department in direct line with the CEO (and the Chair of the BoD).

The CRO is an active partner in this specific risk management field, on the one hand in her role as responsible for the Risk Department and on the other hand as general risk owner of Non Financial Risks and of the crisis management process.

The existence of the reputation risk policy, the integration of the reputation risk in the RAF, and in general the Risk Charter, Risk Culture, Risk Roadmap, Ethical codes and codes of conduct applicable in the businesses and for experts cover reputation risk and are proof that all team members are handling reputation risk as it is an overall and common responsibility.

The reputation strategy aims to implement sound, prudent and effective risk management and is based on three pillars: prevention, detection and mitigation:

- → prevention: transparency regarding the reputation risk governance, combined with well-defined processes, guidelines and procedures, mainly to identify sources of reputation risk;
- → detection: an early warning indicators reporting ensures a proactive detection of factors affecting reputation risk and stimulates the alertness and speed of response both having a significant Impact on the level of reputational damage;
- → mitigation: tactical and operational mitigation actions are top-down driven with adapted short decision & communication lines assuring a clear and univocal response to incidents or crises. The emphasis is amongst others on effective response to press, interaction on social media, sound complaint management and crisis communication.

These key internal control actors have set up appropriate risk management frameworks and policies to prevent, detect and monitor potential reputation impacts on the risks of which they are primarily in charge.

They each assess risks relating to their areas of expertise on a regular basis, in order to identify areas that might not yet be sufficiently covered and accordingly define corrective actions. This exercise is performed on a consolidated basis within the Bank using harmonised methodologies and tools.

Meetings between the different departments are organised on a regular basis in order to share information and to ensure a consistent and exhaustive risk management approach within the Bank.

Capitalisation

The risk is not capitalised and is managed through strong corporate governance and compliance rules within Belfius as described above

VII.5. Compliance risk

Definition

Compliance risk is associated to any financial institution's failure to comply with laws, regulations, rules, ..that can result in financial sanctions or loss of reputation.

Organisation and management of the Risk

Compliance is organised around a central Compliance department based on 3 pillars: Business Advisors (advisory function), the Compliance Risk Control team (control function) and the anti-money laundering unit. These three teams are supported by a specific unit which frames projects at an IT and an organisational level.

The central Compliance department may also call on the services of a large network of Compliance Correspondents within the Bank's various divisions, as well as a network of Compliance Managers with the branch network. This network plays an important role, particularly in the introduction of Compliance policy and procedures as well as training and awareness in that regard.

A Compliance Officer recognised by the FSMA and NBB is at the head of the Compliance organisation. The Compliance Officer reports directly to the Chief Risk Officer and to the Audit Committee, and if necessary may directly approach the Chairman of the Board of Directors, the external auditor and the Regulator.

As provided by the regulations, the department also has a Anti-Money Laundering Compliance Officer

The Anti-Money Laundering Compliance Officer (AML CO) is head of the anti-money laundering team, which combats money laundering practices. Belfius does all it can not to be involved in laundering money from illegal activities, the organisation of tax fraud, financing terrorism or circumventing international embargos. To underline this commitment, the AML CO has established preventive measures and broadened controls. Proper knowledge of the customer and their identification, verification of the origin of financial flows on accounts and detection of dubious transactions are all vital elements in the prevention of such practices.

The Compliance Officer of Belfius Bank ensures that a coherent and effective Compliance policy is applied within all the subsidiary companies of Belfius Group. Belfius Bank traces out the group policy and defines the Compliance methodology to be used. Each regulated subsidiary company disposes of a Compliance Officer who is responsible for the application of the adapted policy within his/her company. These Compliance officers report functionally to the Compliance Officer of Belfius Bank.

Capitalisation

This risk is not covered by capital. The reasons behind the absence of quantification of Compliance risk are primarily driven by the absence of data and/or history to support robust quantification. In that context, capital is not the adequate answer to cover Compliance risk. We therefore consider more relevant to monitor this risk through procedures and processes and to set aside 'ad hoc' provisions for this type of specific events which are most of the time characterized by long term procedures.

VII.6. Legal risk

Definition

Belfius' legal risk results from the following risks:

- Risks relating to the regulatory framework:
  - Non-compliance with the regulatory framework: the risk of not applying, in whole or in part, applicable laws or regulations;
  - Incorrect application of the regulatory framework: the risk of incorrectly applying a law or regulation, which could be challenged by a third party;
  - Non-optimal use of the regulatory framework: the risk of not providing the appropriate or optimal legal support, or of not benefiting from an advantage resulting from the regulatory framework, due to a lack of knowledge of that framework;
  - Breach of the general duty of care: the risk of a behaviour, fact or decision adopted in violation of the general duty of care, which may involve Belfius' non-contractual civil liability.
- Risks relating to the contractual framework:
  - Inadequate drafting of contracts: the risk of not protecting Belfius' interests in its contracts with any third party (contracts with terms that are either inadequate, unfair or unenforceable).
  - Ignorance of the contractual framework: the risk of not taking into account all of the commitments Belfius has made with or towards any third party (failure to keep track of and meet or enforce its contractual obligations or right).

The materialization of the legal risk may entail the following consequences for Belfius: (i) a financial impact; (ii) a reputational impact; (iii) litigation, liability (civil or criminal) of Belfius or an employee, sanctions (administrative or criminal) imposed on Belfius or an employee, or measures imposed on Belfius by a supervisory authority; and/or (iv) an impact on customer satisfaction.

Organisation and management of the Risk

In order to control legal risks, a Legal & Tax Risk Framework (also know as Legal Risk Policy - including a Risk Assessment Matrix) has been set-up and approved by Belfius' Executive Committee. This Legal & Tax Risk Framework is being implemented and a risk measurement & management process is applied.

This process involves successively:

- a risk assessment, in terms of impact and probability of occurrence;
- a risk taxonomy & risk appetite; and
- the implementation of risk management measures.

A Legal & Tax report, including a dashboard of the most important Legal & Tax Risk is submitted to the Risk and Audit Committees on a half-yearly basis.

Capitalisation

This risk is not covered by capital. The reasons behind the absence of quantification of Legal risk are primarily driven by the absence of data and/or history to support robust quantification. In that context, capital is not the adequate answer to cover Legal risk. We therefore consider more relevant to monitor this risk through procedures and processes and to set aside "ad hoc" provisions for this type of specific events which are most of the time characterized by long term procedures.

VII.7. External risk

Definition

External Risk relates to the risks that arise from events outside the company and are beyond its influence or control. These risks can offer negative and/or positive benefits. Organizations cannot influence the likelihood of these risk events, but can reduce the cost of an impact. Sources of these risks include natural and political disasters and major macroeconomic shifts

Capitalisation

External risk is not covered by capital but is handled and monitored through appropriate processes at Belfius.

VIII. Other financial risks

VIII.1. Settlement risk

Definition
Settlement risk is defined as the risk that the credit institution will deliver the sold asset or cash to the counterparty, and will not receive the purchased asset or cash as expected.

This risk is not to be confused with the operational risk classified under "Execution, delivery and process management risk". The settlement risk only refers to the situation where the delivery process fails because of a solvency issue.

Organisation and management of the Risk
The most general way to reduce the settlement risk is to proceed through an intermediary performing Delivery Versus Payment (DVP). For Forex in particular, there is one main agent: Continuous Linked Settlement (CLS). With DVP one can say that the risk becomes negligible. Belfius intends to generalise the recourse to DVP.

Historically, there has been no instance of loss related to this risk at Belfius and very few externally. In fact, losses would only occur if Belfius simultaneously faces a mismatch in the delivery against settlement process and the default of the counterparty bearing the resulting temporary exposure. Of course both events can be strongly correlated: a bank close to bankruptcy is much more likely to fail in its settlement duties.

Capitalisation
Settlement risk capital is currently not computed via a statistical model but rather results from the occurrence of a single settlement problem (a presumably very rare event). It therefore consists of a fixed amount set a priori on the basis of a judgemental assessment.

VIII.2. Funding risk

Definition
Funding risk is the risk that the refinancing cost for Belfius increases.

Organisation and management of the Risk
For more details regarding the Organisation and Management of funding risk, please refer to Risk Management Governance - II.4.2.3.3. .Risk organisation.- Strategic Risk Management

Capitalisation
Funding risk capital is not computed via a statistical model. Its calculation is based on a scenario analysis, with a severe liquidity Stress Test considering a combined systemic and severe lack of confidence of the market about Belfius solvency during a global liquidity crisis and affecting its income statement.

This liquidity stress scenario will generate a funding risk which can be defined as the sum of P&L impacts resulting from, on the one hand, the cost linked to the replacement of the existing funding that left the balance sheet by funding obtained through pledging the assets from liquidity buffer at ECB and, on the other hand, the capital losses due to sales of non-ECB-eligible bonds to close the potential liquidity gap.

In line with economic capital standards, the loss incurred over one year is measured and the confidence interval of the considered scenario (a presumably very rare event) is assumed to be 99.94%.

Note that the various outflow scenarios included within the liquidity stress test scenario materialise the outflow risk which is considered to be integrated within the funding risk calculation.

VIII.3. Behavioural risk

Definition

Behavioural risk is defined as the potential change of exposure to interest rate and funding risks due to the uncertain behaviour of customers.
On the liability side, it includes the uncertain amortization of non maturing liabilities, such as deposits, and the uncertain rate of termination of insurance contracts (also referred to as "lapse" risk within Solvency 2). On the asset side, it includes uncertain mortgages prepayment schedules.

The uncertain amortisation of non-maturing liabilities, such as certain types of deposits, forms the outflow risk and is integrated within the funding risk approach. For example, customers may decide to reduce their savings or their sight accounts impacting the Bank's interest rate position.

Organisation and management of the Risk

Behavioural risk is managed through sensitivity and convexity measures in reporting to the members of the Belfius ALM Committee. In addition, this risk is included in the Belfius Economic Capital reporting.

Capitalisation

Behavioural risk is capitalised through a prepayment risk capital approach which consists of a statistical model.

VIII.4. Pension plan risk

Definition

Pension risk is the risk stemming from commitments on employee pensions plans (i.e. pension and post-employment employee benefits).

These commitments and the related assets are externalized to an insurance company or an OFP (pension fund). Belfius Bank pays premiums to the insurance company or pays contributions to the OFP. The contributions in the OFP are invested in assets (equity and bonds). Belfius Bank remains the ultimate responsible for the commitments.

The risk for a pension plan is the risk that the net present value of its liabilities (commitments to employees) is higher than the net present value of its assets (investments in the OFP or the value of the commitments of the insurance company).

As a result, pension risk is a set of risks. The most important risks are: market risk (interest rate risk, equity risk, inflation risk), credit risk and behavioural risk (turnover, mortality).

Organisation and management of the Risk

The OFP grants an investment mandate to the pension fund asset manager. This investment mandate establishes clear investment objectives for the pension fund consistent with the characteristics and the risk appetite of the pension fund.

The approach for achieving these objectives takes into account the need for proper risk management, diversification needs, liquidity requirements and asset allocation limitations.

The ALCo evaluates the risks in the OFP and insured pension plans and decides if further mitigation is required.

Capitalisation

Pension plan risk is capitalised. The risk capital is based on the different risk factors.

VIII.5. Model risk

Definition

Model risk is defined as the potential risk assessment errors resulting from inadequate methodology and models, and/or data uncertainty or from the inappropriate use of models.

The major issues that should be addressed by model risk are the following:

- risk of poor model development;
- risk of incorrect model calibration;
- wrong data use and/or data problems;
- inadequate model usage;
- risk of population and/or performance non-stationarity.

Organisation and management of the Risk

In addition to the Economic Capital assessment that is carried out for model risk, the risk of each issue described above is mitigated by a process-oriented handling of model risk.

Without being exhaustive, the following practices are considered for containing model risk:

- allocating experienced professionals to the development of risk models;
- providing a systematic "four eyes approach" via model validation;
- monitoring and capitalising model risk within the Belfius Economic Capital framework.

Capitalisation

For each risk type and each economic capital calculation methodology, the potential increase (not decrease) of economic capital resulting from model risk is assessed using a unified scorecard approach. It includes the result of quantitative and qualitative assessments of the models, and is also linked to the outstanding validation recommendations. This judgement results in an "uncertainty coefficient" depending on the perceived comfort "with which the model has been developed and implemented, and is being fed and used".

VIII.6. Conglomerate risks

Definition

A distinction is made between:

- "Group consolidated risk" which is the risk inherent to a "group" i.e. a company owning and consolidating other companies, whatever the sector the company and its affiliates belong to; and
- "Conglomerate risk" which the risk arising from a group of companies - a financial conglomerate - composed of credit institutions, insurance undertakings and investment firms.

Conglomerate risk comes on top of "group consolidated risk" as the financial conglomerate will be submitted to "group consolidated risk" and to "conglomerate risk" as the conglomerate manages financial companies regulated under at least two different prudential frameworks (Banks and Insurance).
Conglomerate Risk is defined as the risk arising from a group of companies - a financial conglomerate - composed of credit institutions, insurance undertakings and investment firms.

A distinction is made between financial risks on the one hand, and non-financial risks on the other hand. The following conglomerate risks are defined at Belfius:

Financial Risk

- Regulatory inconsistency: regulatory inconsistency could lead to 'double gearing', where the same capital, issued by the conglomerate, is being counted twice, to satisfy both banking and insurance capital requirements. Another result of inconsistency is 'excessive leveraging', which can occur when debt is issued by the conglomerate and the proceeds are given as equity to the regulated subsidiary. Because of regulatory inconsistency a financial conglomerate could shift activities from one of its banks to one of its insurance firms, or vice versa, if the respective capital requirements are lower.
- Intragroup insurance contracts are contracts between the insurance. These will not be effective at conglomerate level (e.g. property risk).

Non Financial Risk

- Contagion/reputation: financial difficulties in one subsidiary in one sector could have contagion and/or reputation effects on another subsidiary in a different sector, especially when using the same brand name. In that case, the conglomerate may be more vulnerable than its stand alone subsidiaries.
- Moral hazard – subsidiarie: subsidiaries themselves may assume help from the holding company in cases of financial stress and behave more risky in a financial conglomerate than as a stand-alone institution.
- Moral hazard – conglomerate level: at conglomerate level may exist the moral hazard risk associated with the 'too big to fail' position.
- Size & complexity: it becomes more difficult to manage and understand the operation of a firm as the organization grows. Both these issues are not unique to financial conglomerates but arise because financial conglomerates tend, in most case, to be larger than pure sectorial players.
- Governance and conflict of interest: as financial conglomerates run activities in different sectors (Bank, Insurance, Investment services …) they may be more exposed to conflict of interest. These may arise from subsidiaries vs mother company, from promoting banking products vs insurance or investment products, confidentiality conflicts, etc.
- Concentration between sectors linked to outsourcing (same service providers, back office services, …), continuity (BCP, DRP, workplace safety, employment,…), business practices (products, new business, CSR, ….), strategic risk, legal, tax and compliance risks and IT risk.

Organisation and management of the Risk

With regards to conglomerate risks, Belfius has put in place several mitigating actions. We refer to some of them (not exhaustively) here below:

- The Belfius Capital Group committee in charge of monitoring of adequacy of capital management at conglomerate and sector level.
- Stress Tests are designed and run at Group level but also at bank and insurance levels.
- ECAP and EaR are computed at group level giving an exhaustive view of the capital needed to cover all major risks.
- FICOD test give a view of the regulatory capital needed to cover risks in each part of the conglomerate.
- A cartography of intragroup insurance contracts has been set up and monitoring takes place on a regular basis.
- There are reinsurance rules above specific thresholds.
- There is a common communication and reputation follow up at Group level.
- There exist a capital and dividend policy at Group level with consistency at entity level.
- At Group level, several joint committees are in place at the highest level: Joint RC/RUC Committee, Joint AC Committee, Joint Management Committee (Group Management Board), potential conflicts between Bank and Insurance BoD are dealt at the level of the Group Mediation Committee
- …

Capitalisation

The conglomerate risks are not covered by capital seen the multitude of mitigating actions in place.

IX. Belfius insurance’s risks

For more information regarding the the Belfius Insurance risks we refer to the chapters Risk management of the Annual Report 2019 of Belfius Insurance, Risk Management and the Belfius’ Management report (see dedicated section on insurance risks).

X. Appendices

X.1. Risk methodology

X.1.1. Description of the internal rating process

General Organisation of the Internal Rating Process

The internal rating process is organised in three Stages: the model development, the maintenance and the control of the internal rating.

The model manager is responsible for the entire process of developing and maintaining a model, whereas the control of the internal rating is dispatched through several control functions within the Bank (validation, audit, quality control, ...).

Development of the Models

The model management process is coordinated by the Model Management team within Belfius Bank. Model managers perform the model management activities enhancing both consistency and efficiency.

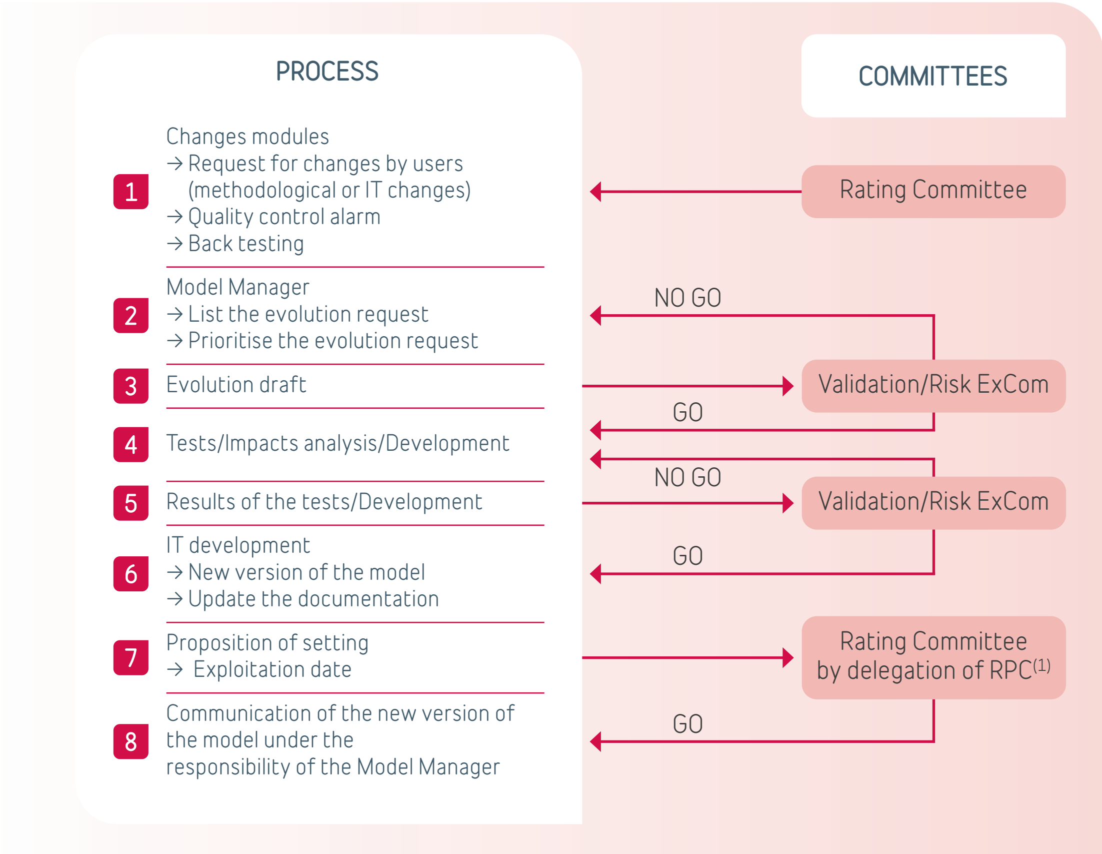
The various steps are:

- defining the scope of the counterparties concerned;
- identifying and gathering the most relevant available data (financial data, data on defaults of the segment concerned, institutional framework);
- building a database if needed;
- defining a broad list of financial ratios and qualitative criteria;
- testing these ratios (repetitive processes between statisticians and analysts);
- building the score function. A score function is the mathematical function that allows determination of the counterparty (or exposure) PD, LGD or CCF on the basis of its characteristics. Score function is established by the modelling team on the basis of statistical analysis and modelling techniques;
- testing the score function;
- developing IT tools;
- validating and implementing the model;
- adjusting risk policies to take internal risk systems into account;
- documentation (user guide, documentation for the regulator, notes concerning the building of the model). Nevertheless, some steps in the development process detailed above (such as building the score function, testing the function, etc.) are not applied for some specific models:
  - models based on an expert approach (such as the model used for Regions and Communities) do not include a score function. They are based on internal experience and qualitative knowledge and not on statistical data (which may not be available due to very low number of defaults for instance);
  - models based on a derivation approach are derived from an existing model;
  - models based on an assimilation approach are not stricto sensu models due to the fact that counterparties treated by assimilation simply inherit the rating of their “master” counterparty.
- assimilations and derivations are applied when it is neither financially intuitive nor statistically relevant to develop, adapt or use an existing model. Such cases occur typically for low default portfolios with a low number of observations, limited data availability (both for design and for model use) and for portfolios where strong relations exist between the “master” counterparty and the “assimilated” or “derived” counterparty. These relations can be legally bound or based upon long-term past experience and practice.

Maintenance of the Models

As mentioned above, the model manager is responsible for the entire process linked to the model developed, including the maintenance of the model.

The model maintenance process is detailed in the diagram hereafter.



(1) RPC: Risk Policy Committee

Regarding the pillar 1 models, important facts in 2019 are related to TRIM missions. Indeed there was 2 TRIM missions in the first semester of 2019, respectively on Corporate and Bank models. These missions raised findings and attention points (to be confirmed in the final report) that will be solved in a comprehensive IRB upgrade program. This program was anyway needed given the new EBA productions as new default definition and guidelines on PD, LGD.

An important point to be mentioned: at this Stage we did not receive any explicit add on, nor at parameters level nor at global level as a RWA add on.

Internal Rating Process by Broad Exposure Class

Type of Exposure included in Each Exposure Class

Belfius has developed a wide range of models to estimate PD, LGD and CCF of the following types of counterparties:

Sovereigns

Sovereigns

The scope of the model encompasses sovereign counterparties, defined as central governments, central banks and embassies (which are an offshoot of the central government), and all debtors of which liabilities are guaranteed irrevocably and unconditionally by central governments or central banks.

Assimilations to Sovereigns

The in-depth analysis of some public sector counterparties (such as some public institutions, like the National Social Security Office or Buildings Agency) shows that they share the same credit risk as the "master" counterparties to whom they are assimilated (usually local authorities or sovereigns). They are consequently assimilated to these "master" counterparties and benefit from the same PD and LGD as their "master" counterparties.

Retail

Retail – Individuals (Ripar)

These models encompass retail customers (individuals). Individuals are defined as retail counterparties without a self-employed activity or a liberal profession and are not linked to the activity of a legal entity.

Retail – Small Professionals (Ribus)

These models encompass small professional retail customers defined as individuals with a self-employed activity or a liberal profession (i.e. doctors, lawyers, etc.) or small companies generating a turnover lower than a certain threshold. A split is made between individuals with self-employed activity or liberal profession and small companies.

Retail – Small Companies (RSC)

The models encompass small companies which are defined as companies generating a turnover higher than a certain threshold, but that are still considered as retail counterparties on the basis of distinctive criteria (i.e. not considered as mid-corporate or corporate counterparties).

Project Finance (Specialised Lending)

This model encompasses the project financing activity of Belfius on all segments of activity in which Belfius intervenes (which are actually mainly Energy and Infrastructure). The specialised lending portfolio is a subgroup of the corporate portfolio which has the following characteristics: the economic objective is to finance or acquire an asset; the flows generated by this asset are the sole or practically the sole source of repayment; this financing represents a significant debt in respect of the liabilities of the borrower; the main distinguishing criterion of risk essentially being the variability in flows generated by the financed asset, much more than the borrower's ability to repay.

Insurance Companies (including Monoliners)

Insurance companies are legal entities having insurance activities as their usual profession. The insurance activity consists of covering the potential damage from an uncertain event against the receipt of premiums from policyholders. The received premiums are invested and used as a source of profit by the insurance company. When an event covered by the insurance contract occurs, the policyholder sends a claim to the insurance company, and the claim is paid using the pool of premiums from all policyholders.

Financial Institutions

Banks

The scope of the model encompasses worldwide bank counterparties, defined as legal entities which have banking activities as their usual profession. Banking activities consist of the receipt of funds from the public, credit operations and putting these funds at the customers' disposal, or managing means of payment. Bank status is gained by the delivery of a banking license given by the supervisory authority.

Corporates

Two models have been designed for corporate counterparties: corporate and mid-corporate models.

Corporates

The scope of the model encompasses worldwide corporate counterparties. Belfius Bank defines a corporate as a private or a publicly-quoted company with total annual sales higher than EUR 50 million or belonging to a group with total annual sales higher than EUR 50 million which is not a bank, a financial institution, an insurer or a satellite.

Mid-Corporates

This model encompasses mid-corporates from Belgium. Belfius Bank defines a mid-corporate as a private company with a total turnover lower than EUR 50 million and belonging to a group with a consolidated total turnover lower than EUR 50 million and with total assets higher than EUR 5 million. This company is not a bank, a financial institution, an insurer or a satellite.

NB: for Belgian and Luxembourg companies the frontier is set at a EUR 250 million turnover.

Public Sector Entities

Public sector entities represent a large proportion of the Belfius Bank portfolio. Some differences between counterparties have been noticed within this portfolio, and this explains the number of models.

Local Authorities

This model encompasses Belgian local authorities, namely municipalities and provinces.

Belfius defines local authorities as sub-sovereign governmental elected bodies empowered by the legislation with specific responsibilities in providing public services and with certain resources and a capacity to decide their own practical organisation in terms of administrative procedures, personnel, buildings, equipment, etc.

Belgian Regions and Communities

An expert methodology has been developed to rate the five Belgian regions and communities which are the French Community, German Community, Flemish Community (including Flemish Region), Walloon Region and Brussels Capital Region.

Assimilations to Public Sector Entities

The in-depth analysis of some public sector counterparties (such as church companies, municipalities' Social Service Departments, intermunicipal police zones) shows that they share the same credit risk as the "master" counterparties to which they are assimilated (usually local authorities or sovereigns). They are consequently assimilated to these "master" counterparties and benefit from the same PD and LGD as their "master" counterparties.

Other Satellites
The model encompasses Belgian non-public satellites.

Satellites are entities:
- for whom main activity - i.e. the one generating a very large proportion of their income – is a Public Authority's commitment which has been delegated to the concerned entity; and
- for whom most of the "shareholders" – i.e. those who have the power of final decisions within the entity - are not-for-profit entities; and
- for whom these two main characteristics are not likely to be changed within a year.

Among all the "satellites", the "Public Satellites" are those:
- whose strategic decisions (including financial) are made (or approved) by the Public Authority; and
- whose business cannot be closed down:
  - in particular the entity cannot be declared bankrupt;
  - or if so, either a public authority gets Assets and Liabilities back, or an equivalent entity does.

The "satellites" which do not correspond to this definition are the "other satellites" and are (Belgian perimeter) or will be covered by a specific Internal Rating System.

Equity and Securitisation Transactions
No internal models have been developed specifically for equity or securitisation transactions which follow a different regulatory approach. Securitisation risk weighting is based on external and not internal ratings (see IV.6.) equities do not require the development of specific models (see IV.5.).

Default Definition Used in the Models
The "default" notion is uniform, covering all business segments with some minor exceptions due to special characteristics.

The notion of default has been harmonised from the beginning of the Basel II project with the impairment notion used in IFRS. All loans in default and only those flagged as in default give rise to an impairment test (that can or cannot eventually lead to an impairment).

The notion of default is not automatically related to the notion of potential loss (for instance, a loan may present unpaid terms but may be totally collateralised and consequently present a nil expected loss) or to the notion of denunciation (which is decided upon on the basis of the interest the Bank may have to do so).

Main Principles Used for Estimating the PD

Types of Counterparties	Through the Cycle Models	Through the Cycle Models	Time Series Used	Internal/ External Data
Sovereigns	Models are forward looking and through the cycle.They are designated to be optimally dicriminative over the long term. The through the cycle aspect of the rating is also addressed in a conservative calibration of the PD.	Default at first day	> 10 years	External
Banks		Default at first day	> 10 years	External
Insurance Companies		More than 90 days past due or unlikely to pay criteria	> 10 years	External
Corporates		More than 90 days past due or unlikely to pay	> 10 years	Internal + External
Local Public Sector		More than 90 days past due or unlikely to pay	> 10 years	Internal + External
Specialised Lending		More than 90 days past due or unlikely to pay	6 years	Internal
Mid-Corporates		More than 90 days past due or unlikely to pay	6 years	Internal + External
Other Satellites		More than 90 days past due or unlikely to pay	5 years	Internal
Public Satellites		More than 90 days past due or unlikely to pay	5 years	Internal
Retail		More than 90 days past due or unlikely to pay	2 years	Internal
Equity	Specific approach: PD/ LGD Approach	N/A	N/A	N/A
Securitisation	Specific approach: Rating-Based Approach	Default if related ABS is classified as impairment 1 (loss probability > 50%)or impairment 2 (loss probality = 100%)	N/A	N/A

In order to harmonize risk identification and hence reduce unwanted RWA difference between institutions, EBA has released a new default definition with new thresholds. This material change will be implemented this year accordingly to ECB expectations. The models recalibrations will be done after, in line with ECB's 2 step approach process.

Definition, Methods and Data for Estimating PD, LGD and CCF

Main Principles Used for Estimating the PD

Types of Counterparties	Through the Cycle Models	Time Series Used	Internal/ External Data
Sovereigns	Expert score function on the basis of Fitch country loss risk methodology and internal expert knowledge to discriminate between high and low loss risk.	> 10 years	Internal + External
Banks	Statistical model derived from LGD corporate model and integrating additional risk factors adapted to banking counterparties (country of residence, business profile, etc).	> 10 years	Internal + External
Insurance Companies Corporates	Statistical model based on external rating agencies loss data. The LGD depends on counterparty rating, exposure seniority level, geographic region and macro-economic factors.	> 10 years	Internal + External
Local Public Sector	Statistical model based on the internal existing default cases observed which were related to French municipalities. Final LGD are segmented on the basis of the number of inhabitants and on an economic parameter.	> 10 years	Internal
Specialised Lending	This model belongs to the 'Workout LGD' type: the LGD computation was developed according to the workout of the bank during a 10-year period concerning internal Project Finance default facilities. Cash flows are estimated on the basis of the observed historical recovery process, and LGD is computed by means of discounted cash flows.	10 years	Internal
Mid-Corporates	The LGD model is a white box model with explanatory variables: number of workout years. The LGD is calculated as the multiplication of the LGD unsecured (LGD when the loans are not collateralised) and of the haircut factor taking into account the collateralisation of the loan.	7 years	Internal
Other Satellites Public Satellites	On the basis of internal observation and expert judgement.	5 years	Internal
Retail	LGD determined by product type based on workout recoveries flows. Huge number of counterparts, individual valorization of collateral impossible. Professional loans are segmented in 5 classes based on value of collateral.	7 years	
Equity	Specific approach: PD/LGD Approach.	N/A	N/A
Securitisation	Specific approach: Rating-Based Approach.	N/A	N/A

X.1.2. Control mechanisms for rating systems

Belfius is organized to meet the requirements expressed by the Basel regulation regarding the control of the internal rating systems. The controls cover the whole chain of production of the regulatory parameters under all its aspects, e.g. (non-exhaustively):

→ the data input
- are they correctly loaded and up-to-date?
- are the counterparties addressed to the right model?

→ the models
- do they meet regulatory requirements?
- are they meaningful?
- are they sufficiently discriminating?
- are they stable and robust?
- are they correctly implemented?
- are they sufficiently conservative?

→ • the work of the analysts
- do they use the models correctly?
- are the final ratings sufficiently motivated?
- are the rating procedures respected?
- are they auditable?
- are the (re)ratings performed in a timely manner?

→ • the usage of the model and its outcomes
- are the parameters used in credit and risk management decisions?
- are they correctly stored in the systems?
- do all the users master correctly the model?

and during the whole life cycle of each IRS:

→ before its first use or any update
- in-depth control of methodological and operational issues

→ on an annual basis while being used
- back testing aimed at checking whether the IRS continues to perform well
- audit of the whole production process

→ on a quarterly basis for the work of the analysts
- endorsement of the rating overrides above a tolerance threshold
- control of the respect of the rating procedures

Responsibilities and Decision Process

The controls are performed by the Validation department(1). Validation also confirms the degree of significance of the model changes, in order to determine the decision process to follow with the ECB (approval required, ex-ante or ex-post notification).

Audit acts as an additional level of control, included in its audit plan(2).
- The market models are reviewed globally (on 3 years basis);
- Regarding the credit models, Audit decided to conduct each year a dedicated mission by credit activity segment/type (Retail, Corporate, Public) that aims at assessing the origination and the servicing of the credit activity line including the related models;
- Audit also decided to conduct on yearly basis a high level assessment on credit and market models in order to provide the Oversight bodies with reasonable assurance with regards to the evolution of the models, the material changes, the validation process (respect of planning, the evolution of the major recommendation raised by the Validation department).

(1) Annual back tests are performed by the Credit Modelling team and validated by Model Validation.
(2) According to the CRD minimal requirement 131, Annex VII Part 4, "Internal Audit has to include in its plan, at least once a year, a review of the IRS and its functioning, including credit scoring and estimation of PD, LGD, EL and CCF. Also compliance with all the minimal requirements has to be verified". At Belfius Bank, this annual verification has been delegated to the Validation and Quality Control department.
(3) Dedicated "Overrides Committees" are regularly organized for that purpose.

The decisions regarding the IRS are taken by two Committees.

The Risk Executive Committee

Composed of the CRO and of his direct reports, it takes the decisions regarding the models:
- green light to submit models or model updates for approval to the ECB (or to put them in production if prior ECB approval is not required);
- endorsement of the validation reports on the recurrent model follow-ups (annual back testing and operational audit);
- endorsement of the corrective action plans recommended by Validation.

The Risk ExCom decisions are further presented to the Risk Policy Committee.

The Rating Committee

The key role of the Rating Committee is to monitor the appropriate use of internal rating systems within the Bank as a whole and to ensure that these IRS are effective. For these reasons, the Rating Committee:
- validates overrides, above tolerance threshold, proposed by analysts(3);
- monitors the homogeneous application within the Bank of the rating and derogation principles;
- validates operational establishment of the models once they are validated by the Risk ExCom.

Validation

Validation is a direction within the Risk department. It reports directly to the CRO and is not involved in any model development in order to guarantee its independence. Its main missions are:
- to guarantee the reliability of the model outcomes used within Belfius and to verify their compliance with the regulation;
- to highlight their possible weaknesses and to communicate them to all stakeholders (from analysts to top management).

It focuses primarily on regulatory models (Pillar 1 and 2), ALM and market models (post-trade valuations, market risk management) but it can also intervene on other topics.

Validation controls all the aspects of the production of results by the models, from a methodological but also an operational (implementation, usage) viewpoint. It intervenes prior to the first use of the models and afterwards regularly reviews their functioning.

Validation works are summarised in reports indicating the controls that were performed, their findings, proposed corrective actions and, when required, a validation status.

X.1.3. Business integration of internal estimates

Internal estimates of Basel parameters are used within Belfius Bank, at present covering a large number of applications in addition to the calculation of the regulatory risk-weighted exposure amounts. They are notably used in the following fields:
- decision-making process;
- credit risk management and monitoring;
- internal limit determination;
- provisioning methodology;
- capital allocation;
- pricing.

Decision-Making Process

Basel parameters are key elements considered by the Credit Committee in assessing the opportunity to accept or reject a transaction. Credit guidelines have been updated in order to integrate Basel parameters while assessing credit proposals.

Credit Risk Management and Monitoring

Basel parameters are actively used in periodic credit Risk reporting and also for the individual follow-up of distressed transactions and counterparties within Watch List Committees.

Belfius Bank integrates the Basel parameters to define new internal reporting on the basis of a unique and common reporting credit risk data warehouse and uniform concepts. The counterparty internal ratings, the LGD, the level of EL and the regulatory weighted risks are the key Basel parameters used within the new internal reporting and the credit risk portfolio review.

A central database registers internal ratings and keeps them available for all relevant needs.

Internal Limit Determination

Basel parameters have been integrated for fine-tuning the Belfius Bank credit limit system and determining delegation levels for credit acceptance.

Provisioning Methodology

The implementation of Basel parameters has made it possible to develop more synergies between accounting and prudential issues (IFRS/Basel), while relying on the processes, data and tools of the Basel project.

The Basel notion of default and the accounting notion of impairment have converged in relation to Stage 3 impairments.

As a consequence, only defaulted assets identified as such in the Basel compliant risk management systems are identified as impaired assets for both accounting and risk management purposes. However, some exceptions to this general principle exist in relation to some specific Asset Class such as Asset-Backed Securities (ABS). For these types of products, the notion of default cannot be applied due to their characteristics; hence the sole notion of impairment prevails.

Capital Allocation

Belfius performs its internal capital allocation to its businesses as part of the budget process which will include an "optimisation" phase, based on strategic, competitive and risk-reward considerations of the Business Lines on the one hand and the liquidity, funding and balance-sheet profile of Belfius on the other hand. Completion of the budget process including capital allocation is a preliminary requirement of the Capital Adequacy process.

More specifically, a financial plan including capital allocation and analysis of the evolution of both the results of activity lines and capital supply is performed by the Belfius Finance division. This financial plan is challenged from a risk and capital point of view jointly by Risk/Finance teams and surveyed by the dedicated RAC Committee.

The RAROC pricing tool enables control by all business units of their Normative Regulatory Equity (NRE) capital consumption on a transaction by transaction basis through RoNRE (Return on Normative Regulatory Equity) calculation. Based on this information, business units are able to assess the impact of a particular transaction on their budgeted capital consumption.

Pricing

To support the credit decision process, a RAROC (Risk Adjusted Return on Capital) based on Economic Capital and a RoNRE (Return on Normative Regulatory Equity) based on Normative Regulatory Equity are calculated, to measure the expected profitability of the credit transaction and/or even the full credit relationship with the customer. Not only the expected income in the form of interest margins is taken into account, however also, inter alia, the operational costs and losses which might be statistically expected on loans are also considered. As a consequence, the Basel parameters are therefore integrated in the pricing.

X.1.4. IFRS 9 impairment methodology

X.1.4.1. Introduction

X.1.4.1.1 Scope

Belfius Bank, and all its subsidiaries, recognise loss allowances for Expected Credit Losses (ECL) on the following financial instruments that are not measured at Fair Value through profit and loss:

- investments in debt instruments (loan and securities) measured at amortized cost;
- investments in debt instruments measured at fair value through other comprehensive income (FVOCI);
- all loan commitments not measured at fair value through profit or loss;
- financial guarantee contracts to which IFRS 9 is applied and that are not accounted for at fair value through profit or loss;
- lease receivables that are within the scope of IAS 17, Leases (IFRS 16 starting 1/1/2019); and
- trade receivables or contract assets within the scope of IFRS 15.

No impairment loss is recognised on investments in equity.

Belfius has translated this scope in its Chart of Account through the flagging of the relevant accounting classes on and off-balance for which the ECL calculation is executed.

X.1.4.1.2 Accounting principles

With the exception of purchased or originated credit-impaired (POCI) financial assets, ECLs are required to be measured through a loss allowance at an amount equal to:

- A 12-month ECL, i.e. the ECL that results from those default events on the financial instrument that are possible within 12 months after the reporting date, (referred to as Stage 1); or
- The Lifetime ECL that results from all possible default events over the expected life of the financial instrument, (referred to as Stage 2 and Stage 3).

ECL are a probability-weighted estimate of credit losses over the expected life of the financial instrument. This is expressed as the present value of cash shortfalls i.e. the difference between the cash flows that are due to the entity in accordance with the contract and the cash flows that the entity expects to receive. Because ECL consider the amount and the timing of payments, a credit loss arises even if the entity expects to be paid in full, but later than when contractually due.

The guiding principle of the ECL model is to reflect the general pattern of deterioration or improvement in the credit quality of financial instruments. The amount of ECLs recognised as a loss allowance or provision depends on the extent of credit deterioration since origination.

X.1.4.1.2.1 Purchased or originated credit-impaired financial assets

POCI financial assets are treated differently because the asset is credit-impaired at initial recognition.

At initial recognition, POCI assets do not carry a loss allowance for 12-month expected losses but lifetime expected credit losses are incorporated into the calculation of the effective interest rate. The amount recognised as a loss allowance for such assets is not the total amount of lifetime expected credit losses, but instead the change in lifetime expected credit losses since initial recognition of the financial asset, which may be a negative or positive amount.

For these assets, Belfius recognises all changes in lifetime ECL since initial recognition as a loss allowance with any changes recognised in profit or loss.

X.1.4.1.2.2 Modification and derecognition of financial assets

A modification of a financial instrument occurs when the contractual terms governing the cash flows of a financial asset are renegotiated or otherwise modified between initial recognition and maturity of the financial asset. A modification affects the amount and/or timing of the contractual cash flows either immediately or at a future date.

When a derecognition occurs it is followed by the recognition of the new financial instrument and will therefore follow the regular impairment process and staging determination.

X.1.4.1.2.3 Write-Off

Belfius endorses the importance of timely writing off uncollectable loans.
Debt instruments are written off when there are no reasonable expectations of recovering the debt instrument. Belfius only applies full write offs and exposures in Stage 1 and 2 are always transferred to Stage 3 before being written off.

A write-off constitutes a derecognition event and the stock of loss allowance is not reversed but used against the reduction of the gross carrying amount of the instrument written off. Any additional loss is reported in the statement of income in the line item XVI. "Impairment on financial instruments and provisions for credit commitments".

Nevertheless, an automatic and systematic write-off of files with a default status after a certain period of time elapsed would entail several risks taking into account Belgian regulation, and this as well from an accounting, legal as tax point of view.

For this reason, Belfius books write-offs only in the following cases:

- Debt forgiveness;
- The sale of the receivable;
- The closing of the insolvency proceedings, or the receipt of a written statement evidencing that no more recoveries can be expected. Note that bankruptcy trustees, or other insolvency officers such as liquidators, are encouraged to close insolvency proceedings as soon as possible, or, at least, to send Belfius an attest of "un-recoverability" without any delay, once it appears that no recoveries can be expected;
- There is an objective evidence that the file is uncollectable, and, therefore, Belfius' Stage 3 Impairment Committee decides – based on an individual assessment, case by case, and only in exceptional and limited cases – not to pursue any longer an active recovery and/or enforcement strategy.

X.1.4.1.3 Accounting treatment of impairments

X.1.4.1.3.1. Debt instruments carried at amortised cost and lease receivables

At each reporting date, changes in the amount of impairment losses are recognised in the statement of income under the line item XVI. "Impairment on financial instruments and provisions for credit commitments". Impairment losses are reversed through the same line item of the statement of income. The impairment loss is recorded as a deduction of the gross carrying amount of the asset (allowance) in the statement of financial position.

X.1.4.1.3.2. Debt instruments measured at fair value through other comprehensive income (FVTOCI)

Debt instruments measured at fair value through other comprehensive income are governed by the same accounting principles in respect of impairment applicable to debt instruments measured at amortised cost.

However, the loss allowance shall be recognised in other comprehensive income as part of the revaluation amount in the line item XIX. "Fair value changes of debt instruments measured at fair value through other comprehensive income" and shall not reduce the carrying amount (i.e. fair value) of the financial asset in the statement of financial position.

X.1.4.1.3.3. Calculation and recognition of interest income

The underlying basis for calculating the effective interest depends on the status of the financial instrument:

→ The gross carrying amount (amortised cost before deducting any expected loss allowances) for non-credit impaired financial assets (Stage 1 and 2);

→ The net carrying amount (gross carrying amount less expected loss allowances) for credit-impaired financial assets (Stage 3).

Interest income for originated or purchased credit-impaired financial assets is recognised by applying the credit-adjusted effective interest rate to the amortised cost of the financial asset. Lifetime expected credit losses are incorporated in the credit-adjusted effective interest rate.

X.1.4.1.3.4. Loan commitments and financial guarantees not measured at fair value through profit or loss

Off-balance-sheet exposures such as credit substitutes (e.g. guarantees and standby letters of credit) and loan commitments are usually converted into on-balance-sheet items when called. However, these off-balance-sheet exposures are subject to 12-month or lifetime expected losses. The expected loss is recognised as a provision in the balance sheet and the date that Belfius becomes a party to the irrevocable commitment is considered as the date of initial recognition for applying the impairment requirements.

X.1.4.1.3.5. Loan commitments

At the end of each reporting period a provision based on 12-month expected losses calculated on the expected portion of the loan commitment to be drawn down within the next 12 months is recognised. In case of a significant increase in the risk of default of the underlying loan, lifetime expected credit losses are recognised on the expected portion to be drawn down over the remaining life of the loan commitment.

The expected credit loss is the present value of the difference between the contractual cash flows if the holder of the loan commitment draws down the loan and the cash flows that are expected to be received if the loan is drawn down. The remaining life of the loan commitment is the maximum contractual period during which there is an exposure to credit risk. In case of arrangements that include both a loan and an undrawn commitment component (such as credit cards), the period for estimating expected credit losses is beyond the contractual date on which repayment could be demanded but the period over which the lender is exposed to credit risk. In practice, the expected loss horizon is a minimum of 1 year and credit risk mitigations could be additional guarantees or reducing the loan commitment.

X.1.4.1.3.6. Financial guarantees

For financial guarantee contracts changes in the risk that the specified debtor will default on the contract are considered. At each reporting period, the amount of the loss allowance equals the 12-month expected credit loss unless there has been a significant increase in the risk of default, in which case the loss allowance is calculated for lifetime expected credit losses. Expected losses reflect the cash shortfalls equal to the difference between the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that are expected to be received from the holder, the debtor or any other party.

X.1.4.2 Credit Risk Principles

During the 2008 financial crisis, the delayed recognition of credit losses associated with loans and other financial instruments was identified as a weakness in the accounting standards at that time. This was primarily due to the fact that impairment requirements under IAS 39 were based on an «incurred loss model» meaning that a credit impairment was not recognised until a credit loss event occurred. This gave room to postpone losses and this is why the impairment requirements in the new accounting standard IFRS 9 are based on an «expected credit loss model». This model requires an entity to recognise ECL at all times, and to update the amount of ECL at each reporting date to reflect changes in risk.

Belfius' impairment calculation under IFRS 9 is based on a twofold building block approach. First, determining the appropriate stage per exposure ("staging") and second calculating the expected loss per contract.

The methodology developed for both building blocks to obtain IFRS 9 compliant parameters is based on the existing Risk Architecture and Basel processes, methodologies and models to which appropriate adaptations were made. The fundamental changes with regards to Basel models involve different time horizons and a point-in-time (PIT) approach using forward-looking macro-economic information, rather than a through-the-cycle (TTC, for PD) or downturn calibrated (for LGD) approach.

X.1.4.2.1 Basel Internal Rating Systems

The internal rating systems used by Belfius in the prudential Framework are set up to evaluate the three Basel parameters: Probability of Default (PD), Loss Given Default (LGD) and Credit Conversion Factor (CCF). For each counterparty type in the advanced method, a set of two models, one for PD and one for LGD, has been developed. Regarding the CCF parameter, Belfius makes a distinction between retail and non-retail counterparties: an advanced model is applied for retail counterparties, while non-retail counterparties use the regulatory values.

The PD models estimate the one-year probability of default on a through-the-cycle (TTC) basis. Each model has its own rating scale and each rating on the scale corresponds to a probability of default used for regulatory and reporting purposes. The correspondence between rating and PD for each scale is set during the calibration process, as part of the model development, and is reviewed and adjusted during the yearly back testing when applicable. In addition, each scale has been attributed two default classes (named D1 and D2).

For non-retail, LGD models estimate the ultimate loss incurred on a defaulting counterparty before considering the credit risk mitigants. The unsecured LGD depends on various factors such as the product type, the level of subordination or the rating of the counterparty. The granularity of the estimate is a function of the quantity and quality of data available. For retail, LGD is mainly determined by product type based on workout recoveries.

CCF models estimate the portion of off-balance-sheet commitments that would be drawn should a counterparty go into default. The regulation authorizes the use of CCF models only when CCF under the Foundation Approach is not equal to 100% (as it is for credit substitutes for instance). CCF granularity also depends on availability of data.

Internal estimates of Basel parameters are widely used within Belfius Bank. They are notably used in the decision making process, credit risk management and monitoring, internal limit determination, provisioning methodology and pricing, in addition to the calculation of the regulatory risk weighted exposure amounts.

X.1.4.2.2 Transformation of Basel parameters to IFRS 9 parameters

The Basel models serve as a starting point for the IFRS 9 parameters. This is possible because the same definition of default is used.

In order to compute point-in-time PDs, we base ourselves on through-the-cycle PDs, expected rating migration behavior and macro-economic information that is common to a whole portfolio. Consequently, two counterparts with the same rating within the same model will have the same point-in-time PD term structure. A more granular approach can be added through judgment calls outside the model. For segments that are treated in standardized approach for regulatory capital computations, a mapping to Basel models is defined.

LGD is an estimate of the loss conditional to default. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, taking into account cash flows from any collateral. The LGD models use explanatory variables that are asset class and product specific. Whereas LGD is calibrated to an economic downturn in the Basel context, best estimates are applied for IFRS 9. These parameters are computed using the most recent workout observations and forward-looking estimates of collateral values.

EAD (Exposure at default) is an estimate of the exposure at a future default date, taking into account expected changes in the exposure after the reporting date, including repayments of principal and interest, and expected drawdowns on committed facilities. Belfius approach for EAD reflects expected changes in the balance outstanding over the lifetime of the loan exposure that are permitted by the current contractual terms, such as amortization profiles, early prepayment, changes in use of undrawn commitments and credit mitigation actions taken before default. Belfius uses EAD models that reflect the characteristics of the portfolios.

X.1.4.2.3 Incorporation of Forward Looking information

Within Belfius, an Expert Panel is in charge of the definition of the different macro-economic scenarios incorporating forward looking information. These scenarios are built upon information delivered by Belfius' chief economist, who uses external and internal information to generate a "Neutral" scenario of future forecast of relevant economic variables along with a representative range of other possible forecast scenarios. The external information used includes economic data and forecasts published by governmental bodies and monetary authorities.

Belfius attributes probabilities to the forecast scenarios identified. The base case scenario is the most-likely outcome and consists of information used by Belfius for strategic planning and budgeting. Belfius has identified and documented key drivers of credit risk and credit losses for each portfolio of financial instruments and, using a statistical analysis of historical data, has estimated relationships between macro-economic variables and credit risk and credit losses. Belfius has not made changes neither in the estimation techniques nor in the significant assumptions made during the reporting period.

The forward-looking information in our PD models is performed according to four scenarios:

1. Neutral Scenario
2. Optimistic Scenario
3. Pessimistic Scenario
4. Stress Scenario

X.1.4.2.4 Time lag

The calculation of ECL for exposures in Stages 1 & 2 requires the processing of a huge number of records. Belfius assumes that concentrating these calculations on the reporting date itself would imply as well an operational as a technical risk. In addition, there is a clear need to work with stabilized accounting and risk data, and several IFRS 9 governance steps have to be gone through.

For all these reasons, Belfius applies a time lag, and uses thus the exposure data of the previous reporting date for its ECL calculations, with exception of the Bond portfolio for which no time lag is applied.

Nevertheless, significant credit events post observation date are taken into account for ECL calculation.

X.1.4.2.5 Management judgement

ECL estimation is complex and to a certain extent judgmental. It depends on a wide range of data that may not be immediately available, including forward-looking estimates of key macro- and micro-economic factors as well as management's assumptions on the relationship between forecasts, amounts and timing of recoveries.

ECL computation may have substantial impacts on the financial statements as well as regulatory metrics. It is thus important that ECLs are determined in a well governed environment. To that extent the Impairment Committee is in charge of including potential ECL effects from forward looking (macroeconomic) evolutions not captured by the mechanical calculation

To address this, a "management call" layer can be accounted. This layer can be positive or negative and aims to include all elements entering in the ECL calculation that were not taken into account by the mechanical computation on individual level or (sub)portfolio level.

X.1.4.3 Staging

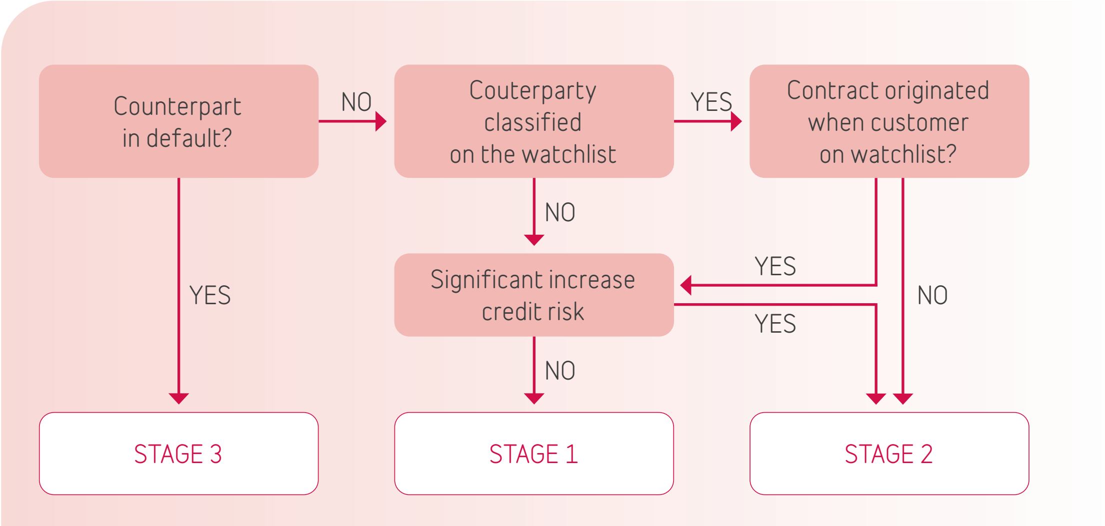
X.1.4.3.1 Definition

IFRS 9 distinguishes 3 Stages:

- Stage 1: Performing credit exposures, i.e. exposures for which there has not been a significant increase in credit risk since origination;
- Stage 2: Under-performing credit exposures, i.e. exposures for which there has been a significant increase in credit risk between the moment where the entity originated or purchased the financial instrument and the reporting date;
- Stage 3: Non-Performing credit exposures, i.e. exposures that become credit impaired.

This process is applied at each reporting date and results in a Stage allocation for each contract.

The staging definition within Belfius can be synthetized as follows:



X.1.4.3.2 Significant increase in Credit Risk

To assess whether a significant increase in credit risk occurred since origination, Belfius compares lifetime PDs at the date of origination with lifetime PDs at reporting date. As previously detailed, the PD term structure viewed at a given date is a function of rating, client segment or product type, macro-economic conditions at that given date and remaining maturity. The PDs used for staging purpose are fully consistent with the PDs used for measuring loss allowances for ECL.

For staging purposes, Belfius approximates the (change in) lifetime PD as the (change in) three-year point-in-time PD, such that with an unchanged rating and unchanged macro-economic conditions, evaluation of PD change cannot lead to an increase or a decrease in credit risk. The time horizon of three years allows to capture all that affect the entire PD term structure within Belfius PD models.

Note that for exposures with a shorter maturity than 3 years, Belfius uses a 1 year PIT PD for staging purpose.

The PD change is compared to a threshold. The threshold has been calibrated to match a three-notch downgrade for as many ratings as possible given unchanged macro-economic conditions.

Some counterparts do not have a rating at inception and/or at reporting date. In such a case it is not possible to determine any change in credit risk since origination. Belfius took a prudent approach and reports therefore unrated exposures by definition as Stage 2 exposures.

Belfius classifies automatically all exposures figuring on the Watchlist in Stage 2 since the presence of the customer on the Watchlist is considered as a signal of increased credit risk since origination. There is however one exception: a new contract may be classified in Stage 1 if, when originating the contract, the customer already figures on the Watchlist. In two situations, there will be a mandatory classification on the Watchlist:
- If one or more credit products of the counterpart received a "Forbearance flag";
- If an exposure is overdue for more than 30 days, unless one can clearly prove that it concerns an operational past due or that the overdue is not a sign of a significant increase of credit risk since initial recognition.

X.1.4.3.3 Alignment of the Default, Stage 3 and Impairment concepts

Under IFRS 9 all financial assets, which have an objective evidence of impairment at reporting date, should be transferred to Stage 3. A financial asset is considered to be credit-impaired when one or more events – that have an unfavorable impact on its estimated cash flows – have occurred.

At Belfius, the definition of default and the Stage 3 "allocation" are fully aligned, since Belfius only books a specific impairment for counterparts/products with a default status. This implies that:
- All individual exposures on a counterpart will be transferred to Stage 3 as soon as the latter receives a default status;
- All exposures classified in Stage 3, i.e. exposures treated as credit-impaired under IFRS 9, will be treated as defaulted.
- The lifting of the default status by Belfius' Default committee implies by definition a reclassification of the related exposures, to either Stage 2 (if there is still a clear indication of increased credit risk since origination) or Stage 1.

X.1.4.4 Expected Credit Loss

X.1.4.4.1 Impact of the Staging

To the exception of POCI financial assets (see point IV.3.2.1.2.1.), ECLs are required to be measured through a loss allowance at an amount equal to:
- 12-month ECL, i.e. ECL that result from those default events on the financial instrument that are possible within 12 months after the reporting date (referred to as Stage 1); or
- Lifetime ECL that result from all possible default events over the life of the financial instrument (referred to as Stage 2 and Stage 3).

To calculate a 12-month ECL for a credit exposure figuring in Stage 1, Belfius applies the formula described on next page with a time horizon of one year. To calculate a lifetime ECL for a credit exposure figuring in Stage 2, Belfius applies this formula with the residual maturity of the exposure as time horizon.

X.1.4.4.2 Reference formula

Belfius uses the following formula in order to calculate its expected credit losses:

$$\sum_{t} \frac{(1-CPR(t))*PD(t)*EAD(t)*LGD(t)}{(1+EIR)^{t-1}}$$

Where

1-CPR(t) is the proportion of the portfolio that will not be prepaid in year t, or the ECL parameter that reflects the expected value of the proportion of the exposure that will still be existing at that moment.

PD(t) is the probability of default in year t, taking into account macro-economic conditions and forward looking information.

EAD(t) is the exposure at default in year t, or the ECL parameter that reflects the estimation of the extent to which a bank may be exposed to a counterparty in the event of, and at the time of that counterparty's default. Belfius calculates the EAD component (Credit Conversion Factor included) as the sum of all cash flows between t and the maturity date of the financial instrument.

LGD(t) is the loss given default in year t, or the ECL parameter that reflects the share of an asset that is lost if the borrower defaults. LGD is based on the difference between the contractual cash flows due and those that the lender would expect to receive.

EIR is the Effective Interest Rate of the contract, i.e. the rate that exactly discounts the estimated cash payments or receipts through the expected life of the financial asset to the amortized cost of a financial asset that is a purchased or originated credit-impaired asset.

t is the yearly discretization.

X.1.4.5 Governance

X.1.4.5.1 Introduction

ECL estimation is complex and to a certain extent judgmental. It depends on a wide range of data which may not be immediately available, including forward-looking estimates of key macro- and micro-economic factors and management's assumptions about the relationship between these estimates, the amounts and timing of recoveries.

The changes brought by IFRS 9 to the ECL calculation and subsequent staging have significant impacts on the financial statements and regulatory metrics requiring a well governed environment. The need of Belfius to oversee and govern IFRS 9 Impairments resulted in a modified committee structure, consisting of one Expert Panel and two dedicated Impairment Committees.

X.1.4.5.2 Expert Panel IFRS 9 Impairment

The Expert Panel IFRS 9 Impairment has a transversal character and acts for Belfius Bank and all its subsidiaries.

Membership to the Expert Panel is reserved to representatives of the Front Office, Risk Management and Finance (chief economist function included) and meets quarterly.

The main mission of the Expert Panel is to monitor the evolution of the macro-economic environment and, thereupon, to formulate proposals for scenario's allowing the derivation of the Point-in-Time (PIT) parameters needed to calculate the ECL under IFRS 9.

In addition, the Expert Panel discusses the possible evolutions of the parameters used and assesses frequently the appropriateness of the (portfolio specific) Staging thresholds.

Finally, the Expert Panel also formulates portfolio and/or sector outlooks, and can assess individual exposures with shared credit risk characteristics in order to determine whether there has been a significant increase of credit risk.

Note that all proposals formulated by the Expert Panel are submitted subsequently to the Stage 1 & 2 Impairment Committee for decision.

X.1.4.5.3 Stage 1 & 2 Impairment Committee

The Stage 1 & 2 Impairment Committee has a transversal character and acts for Belfius Bank and all its subsidiaries.

Membership is reserved to representatives of Risk Management and Finance. The Stage 1 & 2 Impairment Committee meets quarterly.

The Stage 1 & 2 Impairment Committee challenges and/or decides the input received from the Expert Panel and decides on the ECL accounted for in Stage 1 & 2, as well on their ventilation.

X.1.4.5.4 Stage 3 Impairment Committee

Belfius has two Stage 3 Impairment Committees, one at the level of Belfius Bank and one at the level of Belfius Insurance. Please note that the Stage 3 Impairment Committee of Belfius Bank acts as well for all other subsidiaries except Belfius Insurance. This committee meets on a quarterly basis.

The Stage 3 Impairment Committee of Belfius Bank is organized at a transversal and at a local level, with competences linked to the amount of the individual impairment amount. Membership is reserved to representatives of Risk Management, Finance, Customer Loan Services and Front Offices.

The Stage 3 Impairment Committee determines and decides the Stage 3 specific (individual) impairment amounts, before these figures are communicated to Finance for transcription in the financial accounts.

Finally, the Expert Panel also formulates portfolio and/or sector outlooks, and can assess individual exposures with shared credit risk characteristics in order to determine whether there has been a significant increase of credit risk.

Note that all proposals formulated by the Expert Panel are submitted subsequently to the Stage 1 & 2 Impairment Committee for decision.

X.2. Additional disclosures on the liability side

X.2.1. Belfius Bank originations

Belfius currently has three traditional securitisation vehicles: Dexia Secured Funding Belgium, Penates Funding and Mercurius Funding. The total assets of these companies amount to EUR 6,565 million at 31 December 2019 compared to EUR 7,762 million at 31 December 2018.

According to the definition of control under IFRS 10, Dexia Secured Funding Belgium, Penates Funding and Mercurius Funding are included in the consolidated financial statements. Belfius has:
- full power over its securitisation vehicles;
- exposure to their variable returns; and
- the ability to use its power to affect the amount of the returns.

Dexia Secured Funding Belgium (DSFB) is a Belgian securitisation vehicle (société d'investissement en créances (SIC) under Belgian Law) with currently six compartments, one of which with activity, namely DSFB-2.

DSFB-2 (using the second ring-fenced compartment of DSFB) is a securitisation transaction of loans granted to Belgian entities (public and other). All the loans are 100% guaranteed by one of the three Belgian regions. This EUR 1,621 million transaction was launched on 28 April 2008. One tranche of floating rate notes, rated at closing AA/Aa1/AA+ by respectively S&P, Moody's and Fitch, was issued. Belfius Bank has guaranteed the full and timely payment of principal and interest on the notes. As at 31 December 2019, EUR 809 million were still outstanding. The notes had a rating of A-sf/Aa3/A-sf at 31 December 2019. The DSFB-2 Notes are held by Belfius Bank and its subsidiary Belfius Ireland.

Penates Funding is a Belgian securitisation vehicle with currently ten compartments, two of which with activity, namely, Penates-5 and Penates-6.

On 16 November 2015, Belfius closed a EUR 1,030 million RMBS securitisation transaction. The SPV, Penates Funding acting through its compartment Penates-5, securitised Belgian residential mortgage loans originated by Belfius Bank and issued EUR 350 million Class A1 Mortgage-Backed Floating Rate Notes due 2049 (Fitch AAAsf/Moody's Aaa(sf)); EUR 450 million Class A2 Mortgage-Backed Floating Rate Notes due 2049 (Fitch AAAsf/Moody's Aaa(sf)); EUR 200 million Class B Mortgage-Backed Floating Rate Notes due 2049 (unrated); EUR 30 million Class C Floating Rate Notes due 2049 (unrated).

The Class A1 Notes were redeemed in full over the course of 2018. The outstanding amount of the Class A2 Notes stood at EUR 248 million at 31 December 2019, while the outstanding amounts of the other classes of notes were still at their initial amount. Hence there was EUR 478 million outstanding under Penates-5 at 31 December 2019. The ratings on the Class A2 Notes were unchanged from their initial rating. The Class A2 Notes are held by institutional investors. The Class B Notes and Class C Notes are held by Belfius Bank.

On 15 May 2017, Belfius closed a EUR 6,030 million RMBS securitisation transaction. The SPV, Penates Funding acting through its compartment Penates-6, securitised Belgian residential mortgage loans originated by Belfius Bank and issued EUR 2,490 million Class A1 Mortgage-Backed Floating Rate Notes due 2051 (DBRS AAAsf/Moody's Aaa(sf)); EUR 2,490 million Class A2 Mortgage-Backed Floating Rate Notes due 2051 (DBRS AAAsf/Moody's Aaa(sf)); EUR 1,020 million Class B Mortgage-Backed Floating Rate Notes due 2051 (unrated); EUR 30 million Class C Floating Rate Notes due 2051 (unrated).

As at 31 December 2019, these ratings were unchanged from their initial rating. The outstanding amount of the Class A1 Notes was EUR 576 million, while the outstanding amounts of the other classes of notes were still at their initial amount. Hence there was EUR 4,116 million outstanding under Penates-6 at 31 December 2019. The notes are held by Belfius Bank and its subsidiary Belfius Insurance Invest. The Penates-6 senior notes can be used as collateral in agreements with the European Central Bank or other counterparties.

Mercurius Funding is a Belgian securitisation vehicle with currently six compartments. It was established in 2012. One compartment, Mercurius-1, had outstanding notes at the end of 2019.

On 7 May 2012, Belfius Bank closed a EUR 4,124 million SME (Small & Medium Enterprises) CLO securitisation transaction. The SPV, Mercurius Funding acting through its compartment Mercurius-1, securitised Belgian SME loans originated by Belfius and issued two classes of notes: EUR 3,200 million Class A SME Loan-Backed Fixed Rate Notes due 2035; EUR 924 million Class B SME Loan-Backed Fixed Rate Notes due 2037.

On 12 May 2014, the Mercurius-1 issued new notes: EUR 3,200 million Class A SME Loan-Backed Fixed Rate Notes due 2035 (Fitch A+(sf)/Moody's A1(sf)/DBRS A(high) (sf)); EUR 924 million Class B SME Loan-Backed Fixed Rate Notes due 2037 (not rated). The proceeds were used to purchase an additional portfolio of SME loans and to redeem the old notes.

On 25 June 2018, the Mercurius-1 transaction was restructured. The main modifications were on the Interest Rates, the Reserve Fund and the Principal Priority of Payments. The rating of Fitch was also discontinued.

At the end of 2019, the ratings on the Class A Notes were AA(sf) at DBRS and Aaa(sf) at Moody's. The outstanding balance of the Class A Notes and the Class B Notes decreased to respectively EUR 549 million and EUR 561 million. Hence there was EUR 1,110 million outstanding under Mercurius-1 at 31 December 2019.

The Mercurius notes are held by Belfius Bank and its subsidiary Belfius Ireland. The notes can be used as collateral in agreements with the European Central Bank or other counterparties.

X.2.2. Belfius mortgage pandbrieven programme

Total Amount Outstanding (in EUR)	5,617,000,000
Current Weighted Average Fixed Coupon	1.300%
Weighted Average Remaining Average Life	5.51

Characteristics of Cover Assets as at 31 December 2019

a/ Residential Mortgage Loans	
Outstanding balance of residential mortgage loans	6,628,076,029
Number of borrowers	88,345
Number of loans	157,370
Average outstanding balance per borrower	75,025
Average outstanding balance per loan	42,118
Weighted average original loan to initial value	77.53%
Weighted average current loan to current value	44.33%
Weighted average seasoning (in months)	65.56
Weighted average remaining maturity (in years, at 0% CPR)	11.91
Weighted average initial maturity (in years, at 0% CPR)	17.46
Remaining average life (in years, at 0% CPR)	6.37
Remaining average life (in years, at 2% CPR)	5.84
Remaining average life (in years, at 5% CPR)	5.07
Remaining average life (in years, at 10% CPR)	4.09
Remaining average life to interest reset (in years, at 0% CPR)	5.67
Percentage of fixed-rate loans	84.04%
Percentage of resettable-rate loans	15.96%
Weighted average interest rate	2.425%
Weighted average interest rate fixed rate loans	2.689%
Weighted average interest rate resettable-rate loans	0.962%

b/ Registered Cash	
Registered cash proceeds under the residential mortgage loans	359,693,425

c/ Public Sector Exposure	
ISIN	FR0010347989
Issuer name	CAISSE D'AMORTISSEMENT DE LA DETTE SOCIALE MINISTÈRE DE L'ECONOMIE
Currency	EUR
Nominal amount	81.000.000

X.2.3. Belfius public pandbrieven programme

Total Amount Outstanding (in EUR)	2,461,000,000
Current Weighted Average Fixed Coupon	0.476%
Weighted Average Remaining Average Life	5.67

Characteristics of Cover Assets as at 31 December 2019

a/ Public Finance Assets

Outstanding Balance of Public Sector Assets	3,271,338,730
Number of borrowers	808
Number of loans	28,012
Average Outstanding Balance per borrower	4,048,687
Average Outstanding Balance per loan	116,783
Weighted average seasoning (in months)	97.32
Weighted average remaining maturity (in years, at 0% CPR)	12.48
Weighted average initial maturity (in years, at 0% CPR)	20.62
Remaining average life (in years, at 0% CPR)	6.85
Remaining average life (in years, at 1% CPR)	6.55
Remaining average life (in years, at 3% CPR)	5.90
Remaining average life (in years, at 5% CPR)	5.34
Remaining average life to interest reset (in years, at 0% CPR)	6.13
Percentage of Fixed Rate Loans	87.65%
Percentage of Resettable Rate Loans	12.35%
Weighted average interest rate	2.899%
Weighted average interest rate Fixed Rate Loans	3.079%
Weighted average interest rate Resettable Rate Loans	1.621%

b/ Registered Cash

Registered cash proceeds under the residential mortgage loans	70,278,297

c/ Public Sector Exposure

ISIN	FR0010347989
Issuer name	CAISSE D’AMORTISSEMENT DE LA DETTE SOCIALE MINISTÈRE DE L’ECONOMIE
Currency	EUR
Nominal amount	14,000,000

X.3. Glossary

ABS *Asset-Backed Securities*
Securities issued by a vehicle created for the purpose of buying assets from a bank, a company or a state, like trade receivables or inventories, and to provide the seller with cash and the buyer with a financial product that is characterised by a certain risk profile and a rate of return.

AIRB *Advanced Internal Rating-Based Approach*
Institutions using the AIRB approach are allowed to determine borrowers' probabilities of default and to rely on own estimates of loss given default and exposure at default on an exposure-based on an internal model approved by the supervisor. These risk measures are converted into risk weights and regulatory capital requirements by means of risk weight formulas specified by the Basel Committee.

ALM *Asset and Liability Management*
Managing of the net risk position between assets and liabilities, particularly with respect to imbalances generated by the evolutions of interest rates, currencies and inflation, but also maturity mismatch, liquidity mismatch, market risk and credit risk.

BRRD *Bank Recovery and Resolution Directive*
The Bank Recovery and Resolution Directive (BRRD) provides the authorities with comprehensive and effective arrangements to deal with failing banks at national level and with cooperation arrangements to tackle cross-border banking failures. The directive requires banks to prepare recovery plans to overcome financial distress. It also grants national authorities powers to ensure an orderly resolution of failing banks with minimal costs for taxpayers. The directive includes rules to set up a national resolution fund that must be established by each EU country.

CBFA *Commission bancaire, financière et des assurances*
The Belgian Banking, Finance and Insurance Commission is the former Belgian Financial Institutions regulator, since April 2011 succeeded by the FSMA.

CCF *Credit Conversion Factor*
The ratio of the currently undrawn amount of a commitment that will be drawn and outstanding at default to the currently undrawn amount of the commitment. The extent of the commitment will be determined by the advised limit, unless the unadvised limit is higher.

CDS *Credit Default Swap*
Swap contract in which the buyer of the CDS makes a series of payments to the seller and, in exchange, receives a pay-off if a credit instrument (typically a bond or loan) undergoes a defined "Credit Event", often described as a default (fails to pay).

CRD *Capital Requirements Directive*
The Capital Requirements Directive (CRD) for the financial services industry introduces a supervisory framework in the EU which reflects the Basel II and Basel III rules on capital measurement and capital standards.

CRM *Credit Risk Mitigant*
Range of techniques whereby a bank can, partially, protect itself against counterparty default (for example by taking guarantees or collateral, or buying a hedging instrument).

CRR *Capital Requirements Regulation*
The CRD is the legal framework for the supervision of credit institutions, investment firms and their parent companies in all Member States of the European Union and the EEA. The CRR came into force on 27 June 2013, while the supervised entities within its scope are subject to it as of 1 January 2014.
The CRR-Regulation is directly applicable to anyone in the European Union and is not transposed into national law. Much of the CRR is derived from the Basel III standards issued by the Basel Committee on Banking Supervision (BCBS). It includes most of the technical provisions governing the prudential supervision of institutions.

CSA *Credit Support Annex*
A credit support annex provides credit protection by setting forth the rules governing the mutual posting of collateral.

CVA *Credit value adjustment*
Market CVA is the difference between the risk-free portfolio value and the true value portfolio value that takes into consideration the possibility of a counterparty's default.
In addition to default risk capital requirements for counterparty credit risk, Basel III introduced an additional capital charge to cover the risk of mark-to-market losses.

DR *Default Rate*
The rate of borrowers who fail to remain current on their loans.

DVP *Delivery Versus Payment*
A settlement practice stipulating that cash payment must be made prior to or simultaneously with the delivery of the security.

EAD *Exposure At Default*
Estimate of the amount outstanding (drawn amounts plus likely future drawdowns of yet undrawn lines) in case the borrower defaults.

EAD *post CRM*
Refers to the amount relevant for the capital requirements calculation having applied CRM techniques; including financial collateral

EBA *European Banking Authority*
The European Banking Authority (EBA) is an independent EU Authority which works to ensure effective and consistent prudential regulation and supervision across the European banking sector. Its overall objectives are to maintain financial stability in the EU and to safeguard the integrity, efficiency and orderly functioning of the banking sector.
The main task of the EBA is to contribute to the creation of the European Single Rulebook in banking whose objective is to provide a single set of harmonised prudential rules for financial institutions throughout the EU. The Authority also plays an important role in promoting convergence of supervisory practices and is mandated to assess risks and vulnerabilities in the EU banking sector.

ECAI *External Credit Assessment Institutions*
Under the Basel II agreement of the Basel Committee on Banking Supervision, banking regulators can allow banks to use credit ratings from certain approved Credit Rating Agencies when calculating the risk weight of an exposure. Competent authorities will recognise an ECAI as eligible only if they are satisfied that its assessment methodology complies with the requirements of objectivity, independence, ongoing review and transparency, and that the resulting credit assessments meet the requirements of credibility and transparency.

ECB *European Central Bank*
The ECB is the central bank for Europe's single currency, the euro. The ECB's main task is to maintain the euro's purchasing power and thus price stability in the euro area. The euro area comprises the 19 European Union countries that have introduced the euro since 1999.

EL *Expected Loss*
The amount expected to be lost on an exposure from a potential default of a counterparty or dilution over a one-year period.

FEAD *Full Exposure At Default*
FEAD is the total exposure at default (EAD), including the total amount of a free credit line and other off-balance-sheet transactions (with the exception of derivatives), before application of credit conversion factors (CCF). EAD is hence seen in this report as an estimation of the maximum extent to which a bank may be exposed to a counterparty in the event of, and at the time of, that counterparty's default.

FRTB *Fundamental Review of the Trading Book*
FRTB is the commonly used denomination of the revised market risk framework. The final version was published by the Basel Committee of Banking Supervision (BCBS) on 14 January 2016. According to BCBS, national supervisors are expected to issue final regulations by January 2019, with banks required to report under the new standards by year-end 2023.

FSMA *Financial Services and Markets Authority*
The FSMA is the successor to the former Banking, Financial and Insurance Commission (CBFA), which on 1 April 2011 changed its name as a consequence of the changes in its mandate, in particular its exclusive competence for the supervision of rules of conduct. The FSMA is responsible for supervising the financial markets and listed companies, authorising and supervising certain categories of financial institutions, overseeing compliance by financial intermediaries with codes of conduct and supervising the marketing of investment products to the general public, as well as for the "social supervision" of supplementary pensions. The Belgian government has also tasked the FSMA with contributing to the financial education of savers and investors.

G-SIB *Globally Systemically Important Banks*
G-SIBs are defined as institutions whose failure would have a significant impact on the financial system or the real economy. The Financial Stability Board in consultation with the Basel Committee on Banking Supervision and national authorities reviews each year the list of G-SIBs based on a common methodology that takes into consideration a.o. the size, complexity and interconnectedness of those institutions. G-SIBs are subject to higher capital buffer requirements, Total Loss-Absorbing Capacity (TLAC) requirements and higher supervisory expectations in terms of risk management and governance, risk data aggregation capabilities and resolvability.

HVar *Historical VaR*
HVaR corresponds to the VaR measurement based on the historical market conditions for the bank, putting them in order from worst to best. It then assumes that history will repeat itself, from a risk perspective.

ICAAP *Internal Capital Adequacy Assessment Process*
The ICAAP file describes how a bank monitors and assesses the adequacy of its minimum capital level regarding the risk it is taking. The file is accompanied by a series of appendices that describe in details the various Ecap models and stress tests methodologies, the complete Risk Appetite policy, Ecap and stress tests policies, Risk Cartography (RICAP) procedure and the Recovery and Resolution Plan (RRP).

ISDA *International Swap and Derivative Association*
Trade organisation of participants in the market for over-the-counter derivatives. Its headquarters are in New York, and it has created a standardised contract (the ISDA Master Agreement) to enter into derivatives transactions.

LCR *Liquidity Coverage Ratio*
The Liquidity Coverage Ratio forces financial institutions to maintain a sufficient stock of quality liquid assets to withstand a crisis that puts their cash flows under pressure. The assets to hold must be equal to or higher than their net cash outflow over a 30-day period under stress (having at least 100% coverage). The parameters of the stress scenario are defined under Basel III.

LGD *Loss Given Default*
The ratio of the loss on an exposure due to the default of a counterparty to the amount outstanding at default.

MBS *Mortgage-Backed Securities*
Asset-backed securities or debt obligations representing a claim on the cash flows from mortgage loans.

MDA *Maximum Distributable Amount*
The MDA is an amount calculated by the banks in line with article 141 of the CRR. In case banks fall under the MDA, dividend payment, AT1 coupon and variable remuneration will be restricted.

NBB *National Bank of Belgium*
The National Bank of Belgium is the current Belgian Financial Institutions regulator. The NBB is in charge of prudential supervision of the less significant institutions and of the insurance sector. However, some tasks are performed in close cooperation with ECB under the Single Supervision Mechanism.

Netting amount
Is the reduction in exposure due to the use of legally enforceable netting agreements, including the effect on potential future exposure in accordance with Article 298 of the CRR.

NSFR *Net Stable Funding Ratio*
NSFR is defined as the amount of available stable funding relative to the amount of required stable funding. This ratio should be equal to at least 100% on an on-going basis. "Available stable funding" is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. The amount of such stable funding required of a specific institution is a function of the liquidity characteristics and residual maturities of the various assets held by that institution as well as those of its off-balance-sheet (OBS) exposures.

ORSA *Own Risk and Solvency Assessment*
ORSA is an internal process undertaken by an insurer or insurance group to assess the adequacy of its risk management and current and prospective solvency positions under normal and severe stress scenarios.

O-SII *Other Systematically Important Institutions*
O-SII is the term used in the EU legislation to designate domestically important banks. National authorities (NBB for Belgium) reviews each year the list of O-SIIs in accordance with the methodology specified by the EBA. Belgian O-SIIs are subject to a capital surcharge.

OTC *Over-The-Counter*
Over-the-counter (OTC) or off-exchange trading is carried out directly between two parties, negotiating bilaterally and privately without any supervision of an exchange.

PD *Probability of Default*
The probability of default of a counterparty over a one-year period.

PFE *Potential future exposure*
Potential future exposure (PFE) is the product of the notional amounts or underlying values as applicable by specific percentages set out in Article 274 of the CRR (Gross Add-on).

RAROC *Risk Adjusted Return On Capital*
Risk-based profitability measurement framework for analysing risk-adjusted financial performance and providing a consistent view of profitability across businesses.

RC *Replacement cost*
The Replacement cost (RC) is the current exposure value, meaning the larger of zero and the fair value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in insolvency or liquidation.

RMBS *Residential Mortgage-Backed Securities*
RMBS are securities for which the primary source of payments is a mortgage loan or a pool of mortgage loans secured mostly on residential real property. Investors receive payments of interest and principal that are derived from payments received on the underlying mortgage loans.

RRE *Regulatory Risk Exposure*
Regulatory risk exposure (RWA) is the total risk exposure calculated as the sum of: risk-weighted exposures for credit risk, market risk, counterparty risk and operational risk.

SFT *Securities Financing Transactions*
SFTs are transactions where securities are used to borrow cash (or other higher investment-grade securities), or vice versa – this includes repurchase transactions, securities lending and sell/buy-back transactions.

SPV *Special Purpose Vehicle*
Separate legal entity created specially to handle a venture on behalf of a company. In many cases, the SPV belongs from a legal standpoint to banks or to investors rather than to the company. The IASB has however stipulated that the company should consolidate the SPV if it enjoys the majority of the benefits or if it incurs the residual risks arising from the SPV even if it does not own a single share of the SPV.

SRB *Single Resolution Board*
The SRB has been operational as an independent EU Agency since 1 January 2015. The SRM started its work on developing resolution plans for banks from January 2015 and became fully operational, with a complete set of resolution powers, on 1 January 2016. The SRB is the resolution authority for banks which are considered significant or in relation to which the ECB has decided to exercise directly all of the relevant supervisory powers, and other cross-border groups, where both the parent and at least one subsidiary bank are established in two different participating Member States of the Banking Union.

SREP *Supervisory Review and Evaluation Process*
The key purpose of SREP is to ensure that institutions have adequate arrangements, strategies, processes and mechanisms as well as capital and liquidity to ensure a sound management and coverage of their risks, to which they are or might be exposed, including those revealed by stress testing and risks the institution may pose to the financial system.

SRM *Single Resolution Mechanism*
The Single Resolution Mechanism entered into force on 19 August 2014 and is directly responsible for the resolution of the entities and groups directly supervised by the European Central Bank as well as other cross-border groups.

SSM *Single Supervision Mechanism*
The SSM operates as a system of common bank supervision in the EU that involves national supervisors and the European Central Bank. From 4 November 2014, banks deemed "significant" are supervised directly by the ECB. Smaller banks, called less significant, continue to be directly monitored by their national authorities, though the ECB has the authority to take over direct supervision of any bank.

SVar *Stressed VaR*
SVaR corresponds to the VaR measurement based on the worse historical market conditions (stressed period) for the bank.

UCITS *Undertakings for Collective Investment in Transferable Securities*
Set of European Union directives that aim to allow collective investment schemes to operate freely throughout the EU on the basis of a single authorisation from one member state. In practice many EU member nations have imposed additional regulatory requirements that have impeded free operation with the effect of protecting local asset managers.

VaR *Value at Risk*
VaR represents an investor's maximum potential loss on the value of an asset or a portfolio of financial assets and liabilities, based on the investment timeframe and a confidence interval. This potential loss is calculated on the basis of historical data or deduced from normal statistical laws.