Risk report
2021

Belfius

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2021 – key figures

RATIOS

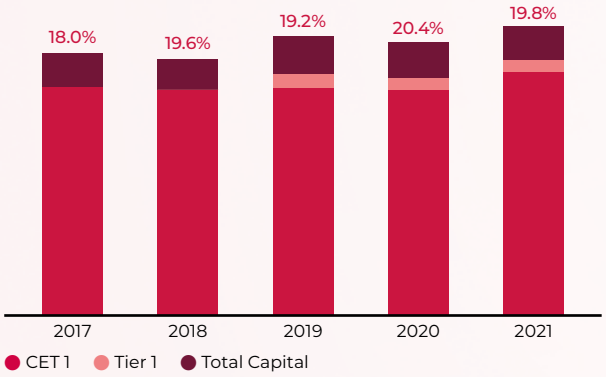
CET 1	LEVERAGE	LCR	NSFR
Percent	Percent	Percent	Percent
16.4 (17.1)	**7.13** (6.85)	**195** (158)	**136** (128)

CREDIT

COST OF RISK	ASSET QUALITY RATIO	COVERAGE RATIO
EUR Million	Percent	Percent
+1 (-453)	**1.95** (2.02)	**60.4** (60.0)

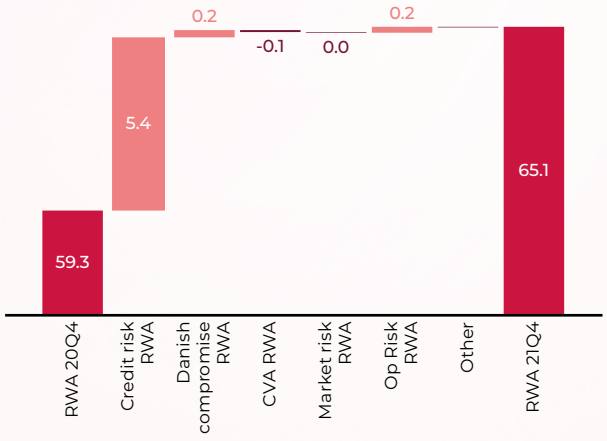
Evolution Capital ratio

Percent



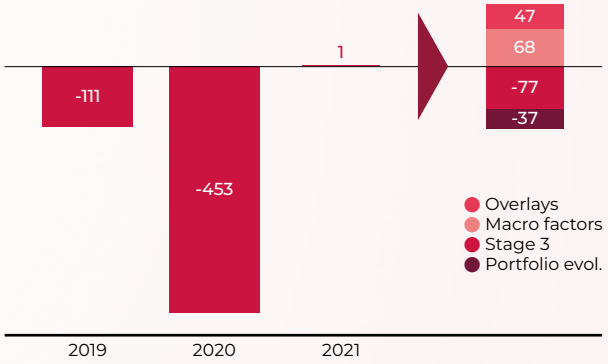
Developments in risk-weighted Assets

EUR Billion



Evolution cost of risk

EUR Million



2021 – key figures

RATINGS

MOODY'S	S&P	FITCH
A1 stable (A1 stable)	**A stable** (A- Stable)	**A- stable** (A- Stable)

MREL (TREA)

Percent

28.8 (29.7)

OPERATIONAL LOSSES (2019-2021)

EUR Million

2.93 (2.19)

VAR (average year)

EUR Million

11.1 (14.7)

NFC EXPOSURE TO CLIMATE SENSITIVE SECTORS (% of total loans & advances)

Percent

21

IMPACT EBA ST (Fully loaded CET 1 ratio)

Percent

2.70 (2.96 in 2018)

Summary of risk profile

Strong economic rebound in 2021 and expected normalization in 2022

Despite a longer than expected pandemic situation, the post-crisis recovery of the Belgian economy has been remarkably strong. 2021 was characterized with significant GDP growth (+6.1%). Yet, the economic rebound created tensions as supply is struggling to keep up with the surge in demand, which results in shortages of specific materials, lengthening delivery (and production) times and upward pressure on prices. In addition, the spectacular increase in energy prices observed in the second half of 2021 substantially raised production costs for energy-intensive manufacturing industries and pushes up headline inflation numbers to 3.2% in 2021 against 0.4% in 2020.

Geopolitical tensions could have further inflationary impacts and negatively affect the economic outlook, as do the resurgence of covid-19 cases and the reintroduction of associated restrictive measures.

The aforementioned headwinds should lead to a slowdown: the economy is expected to barely grow until the spring of 2022. Yet, we hope the next two years to be a normalisation after turbulent times. The National Bank of Belgium's GDP growth expectations are about 2.5% per year for 2022 and 2023.

In this environment, central banks have turned hawkish and first adjustments to the highly accommodative stance are expected in 2022, paving the way towards a normalization of monetary policies after a decade of extremely low interest rates.

Beyond the above-mentioned short term, and possibly temporary effects, the covid-19 pandemic has some more structural consequences that Belfius risk management is considering in order to preserve the group's long term resilience. Belfius is actively embracing these changes, see the section "Belfius is ready for the next challenges" for highlights on some of the post-covid expected lasting changes.

Belfius proves highly resilient which is key to be able to meaningfully support the Belgian society

In 2021, the resilience of Belfius has been confirmed both on the financial as on the non-financial sides. While the group diversification strategy is delivering excellent financial and commercial results, the risk profile remains sound in the transformation phase Belfius is operating in to meet its ambitious strategy. This reflects a sound risk culture within Belfius across all business lines and a sound risk framework. The very high engagement and loyalty of Belfius' employees also greatly contribute to this sound resilience, despite the potential Covid-fatigue and high ambitions set by the group.

The strong focus on risk management and on financial solidity preservation is not detrimental to commercial growth and continuous support is brought to the Belgian economy in line with the Belfius strategy 2025. In 2021 again, Belfius had strong loan growth rates in all segments and continued supporting its customers, a.o. with extended Covid-19 related moratoria whenever needed. These moratoria are now coming to an end and show strong pick up rates.

2021 was marked by severe floods affecting Belgium causing deaths and widespread damage. It is the worst natural disaster in decades. 39 people died and 40 to 50 000 houses were hit during this event. Belfius Insurance's priority has been customer care. Belfius Insurance had to deal with significant operational challenges relating to the exceptionally high number of claims in a short period of time, and reacted a.o. through strengthening of operational staff. Lessons have also been taken from this exceptional event to setup more efficient procedures and processes in order to respond quicker and better to clients' expectations in such extraordinary circumstances. The financial impact has been limited thanks to a strong reinsurance program that was initiated on purpose in 2019 and to the ad-hoc protocols signed between the three Belgian federal entities and the insurance sector.

The management of the covid-19 and of the flood events illustrate that, in dramatic moments, Belfius proves both meaningful and resilient.

Risk appetite framework

In 2021, Belfius has been able to maintain a very high compliance degree with the Risk appetite framework limits defined by the Board of directors with no material increase of risks induced by the difficult and uncertain environment. Remediation plans have allowed to quickly resume the few breaches that occurred.

2021 was marked by the deployment of the RAF in the main subsidiaries[1] allowing for increased consistency throughout the group and a closer monitoring of the risk profile by the Group Financial Conglomerate Review Committee.

The risk appetite framework has been extended in the last two years to cover emerging risks and to better frame the existing ones. With the yearly review of the Risk Appetite Framework of end 2021, new indicators have been again introduced to better capture the risk related to a.o. ESG, outsourcing, projects and resources. Also, in terms of credit risk, indicators have been refined to safeguard the current sound credit quality and portfolio diversification.

Asset quality

Thanks to favourable macroeconomic conditions and the persistence of some covid-19 related support measures, our customers have shown strong resilience in a context still marked by the resurgence of the pandemic and associated restriction measures. This translated into a limited amount of defaults and stable portfolio credit ratings. Thanks to a strong pre-covid risk management reinforced during the crisis, Belfius managed to maintain a sound asset quality ratio of 1,95% in 2021 (vs 2.02% in 2020) and a high coverage ratio of non-performing loans of 60.4% (vs 60,0% in 2020).

The Covid-19 crisis did thus not significantly impact non-performing loans so far, which is attributable to the intrinsic resilience level of the portfolio, but also to measures such as the large amount of debt moratoria provided by Belfius to their customers. These moratoria have given our clients fresh air and allowed them to move forward after a standstill period. This proved to be the right choice as most of the moratoria have now expired and loan repayments have resumed successfully (pick-up rate of 100% on mortgages and 97.1%[2] in corporate and business loans).

The cost of risk decreased to +1M in 2021 (vs -453M in 2020 and -111M in 2019). This is the result of compensating effects:

- The favourable evolution of the macroeconomic situation led to a release of the mechanic IFRS9 expected loss calculations (upward revision of macroeconomic factors, increased weight on neutral and optimistic scenarios and lower weight assigned to the year 2020 as time goes by) with an impact of +68M
- The covid overlay has been reallocated to main risk pockets (based on criteria such as covid sensitive exposure, maintain or exit of moratoria, delay and repayment pattern since moratoria exit) and has globally reduced with a provision release of +47M
- Stage 3 impairments related to defaulted exposures: -77M
- Provisions related to portfolio evolution (loan growth and rating changes) : -37M

The covid buffer that amounted to 331M at the end of 2020 has reduced to 216M at year-end 2021. Note that Belfius keeps a substantial buffer to cover possible second round effects from the pandemic, including the impacts on customers of the current surge in energy prices, the effects of higher inflation, the scarcity of resources and labor capacity in several industries, the lifting of remaining support measures, and the possible reinstatement of restriction measures in case of resurgence of the pandemic.

(1) Besides Belfius Insurance and Belfius Investment partners which already had a RAF for a long time.
(2) Business and Corporate customers/loans excluding leasing. Including leasing would yield a pick-up rate of 97.9%

As in previous years, Belfius continues to monitor potential de-risking opportunities in its run-off portfolios and large exposure concentrations. In 2021, specific actions have been conducted to further reduce the ex-Legacy positions in the trading book as well as in the banking book. This allowed to accelerate the naturally amortizing exposures to non-core business as well as to reduce the remaining P&L sensitivities. Furthermore, additional derisking transactions in the run-off portfolio have been identified and are in the pipeline for 2022.

In the core business also, some decisions allowed for portfolio deconcentration, among other on international banks.

Due to the low interest rate context of 2021, the overall market value of the insurance company portfolio decreased driven by the impact on life 21 portfolio. This balance sheet evolution is strictly monitored as part of a sound risk management.

In terms of asset management, the asset allocation of the insurance company must comply with limits set to absorb severe stresses as foreseen by the risk appetite of the company. The limits are defined in the investment risk framework and in the counterparty limit framework (which is aligned with the one of the bank) and are regularly monitored. This results in a high asset quality with an average credit rating at A- at the end of 2021.

Due to the persistent low rate environment, the duration gap at Belfius Insurance remains under active management.

Solvency and liquidity

Belfius CET 1 ratio ended at 16,4% as of end 2021. This CET 1 ratio represents a continued strong and solid level, allowing Belfius to continue to support its strong commercial franchise development.

Whereas specific and temporary covid-19-related regulatory relaxations were supporting the CET 1 ratio for an estimated net +87bp as of end 2020, this support has decreased to +51bp as of end 2021. Thanks to the increasing profit capacity (+158bp CET 1 ratio), Belfius has been able to cope with the strong commercial balance sheet growth (impacting the CET 1 ratio with -87bp), a foreseeable pay-out ratio (-0.62% on the CET 1 ratio), and the still on-going stricter regulatory impacts (-0,71%).

The solid capital base still compares very favourably with Belfius' minimum SREP requirement of 9,64% at year-end 2021 and internally defined operational target (>13.5%). The capital buffer vs SREP requirement is close to 4.4bn.

At year-end 2021, Belfius capacity in subordinated MREL and MREL was already exceeding the Single Resolution Board final targets to comply with on January 1st, 2024. Expressed in Total Risk Exposure Amount (TREA), Belfius MREL of 18.8 bn represents 28.83% to be compared with a 2024 final binding target (including a CBR of 4.01%) of 26.88%. In the same way, Belfius MREL subordination of 15.0 bn represents 23.1% of TREA to be compared with a binding targe of 19.26% (including a CBR of 4.01%). Expressed in Leverage Ratio Exposure (LRE), Belfius MREL subordination of 9.6% exceeds the 6.84% requirement.

Belfius Insurance has been able to maintain a strong risk profile too. As the end of 2021, the consolidated Solvency II ratio ended up at a strong 190% after a foreseen dividend of 130M. This remains well within Belfius Insurance's risk appetite (>160%). The slight drop (-10pp) in the course of 2021 is due to refinements in liabilities (incl. model changes and assumptions) partly offset by strong financial markets.

In an abundant ECB funding environment and a strong wholesale market, Belfius still shows very solid key liquidity metrics with a Liquidity Coverage Ratio of 195% (2019: 158%) and a Net Stable Funding Ratio of 136% (2019: 128%), both well above the minimum requirement of 100%. The loan to deposit ratio (for commercial balance sheet) decreased slightly from 87% in 2020 to 85% in 2021.

In 2021, Belfius has continued diversifying funding sources and investor base. Belfius successfully issued a EUR 500m seven year Senior Preferred benchmark in February 2021 and further diversified its funding sources by issuance of its inaugural EUR 500m six year Green Senior Non Preferred benchmark in June 2021, followed by a EUR 500m Tier 2 Benchmark in September 2021.

These strong solvency and liquidity positions, largely respecting all regulatory minima, support proactively the commercial development of Belfius and put the group in a position to cope with economic or geopolitical uncertainties, while keeping playing an active and positive role for the Belgian society in its future developments (including climate-related projects for example) and absorbing more stringent regulatory requirements (e.g. TRIM, Basel III finalization, IFRS 17).

A well-designed strategy based on a bank-insurance risk model, the revenue diversification coupled with increased focus on loans risk-based pricing and efforts towards greater efficiency gains underpinned a strong profitability despite regulatory pressure on risk weighted assets.

In 2021, the consolidated Return on Normative Regulatory Equity amounted to 11.8% vs 6.7% in 2020 (including the extraordinary impact of the covid-19 on the cost of risk) and 8.8% in 2019.

Non-financial risks

Belfius has again demonstrated a good operational resilience in 2021 like in the previous years, with no major incidents. Further progress can be noted in the development of the non-financial risks framework (such as extension of the Risk Appetite Framework at conglomerate level, new directives regarding SaaS applications, end-user computing applications and compliance with updated regulations regarding personal data transfer outside the EEA) and the reinforcement of internal controls through the set-up of the permanent control functions in the first lines of defense.

Non-financial risk management will remain a key attention point in the next years with strict monitoring required in the ongoing group transformation and growing phase and permanent vigilance required in a tough environment. Further strengthening of the risk management is planned for external fraud, IT security as well as the monitoring of the acceleration of retirements at Belfius.

Compliance

Compliance risks remain in Belfius' top priorities in order to manage the increasing number of files and increasing files complexity, to deal with evolving regulatory requirements and with ambitious internal targets set to ensure compliance risks remain within our low risk appetite.

In 2021, this translated namely into further progress in the enhancement of the AML framework and oversight (including development of artificial intelligence/machine learning models to enhance transactions detection) and further awareness and controls enhancement (KYC, KYT).

Environment, social and governance

The ESG strategy is designed at group level and declined over the different group activities. In terms of ESG risk management, convergence is sought taking into account entities' specificities. The risk management teams are collaborating actively in order to develop a consistent approach and maximize synergies in risk identification, scenario design, data collection and tooling. The execution is however described in separate roadmaps.

2021 was marked by the further design of a detailed pluriannual ESG action plan at Belfius bank covering the 13 ECB expectations and including a roadmap around the ESG strategy, governance & organization, data & reporting, risk management and disclosures.

One of the main achievements in terms of ESG risk management in 2021 was the set-up of a more robust governance with the creation of an ESG Risk competence center in charge of the deployment of a comprehensive ESG risk management framework in line with the above-mentioned action plan.

Throughout the year, progress has been made in the identification, measurement, monitoring and management of ESG risks. Several policies have been updated to include ESG risks such as the Risk Taxonomy and Risk Appetite Framework. Portfolios are being assessed through top down and bottom up analyses to better understand the ESG risks materiality and contribute to the ongoing reflections around Belfius' support to the transition and risk mitigation requirements.

The insurance company has designed its own ESG roadmap but, as mentioned above, in the perspective of a group-wide strategy and in collaboration with other risk management teams. Like on the bank side, progress made in 2021 on the Belfius Insurance execution includes further integration of ESG risks in the Risk Appetite Policy, in the Risk Taxonomy and in the Risk Identification and Control Assessment Process. Several ESG reflections have been included in the product approval process as well.

Given the challenges along the way (data is often lacking, methodologies are not mature/standardized yet, science and technologies are evolving fast as are regulations), and also in view of the balance to be found between environmental, social and governance aspects, a flexible and gradual approach is required before reaching a complete and mature integration of ESG risks in the Risk Management Framework in bank and insurance entities.

As mentioned above, the new risks stemming from increasing hazards associated with climate change have been experienced in 2021 with the unprecedented flooding that struck parts of Wallonia in July 2021. Belfius Insurance activated its crisis management framework with focus on safeguarding the health and security of its employees. Additional measures were quickly taken to support at best the impacted customers in these difficult circumstances (e.g. reachability call centers, on-site presence for claims handling, higher upfront payments when introducing a claim, etc.).

This is the worst natural disaster in decades with insured claims above 2 Bn of which a gross claim costs of 181 M for Belfius clients. The financial impact (on profitability and solvency) has been strongly mitigated for Belfius Insurance thanks to a specific reinsurance program initiated on purpose in 2019 (in the wake of an internal study about the effect of climate change) and thanks to the ad-hoc protocols signed between the three Belgian federal entities and the insurance sector.

The impact on banking activities was very limited. Requests for payment moratoria on mortgage loans were introduced for a very limited amount. Exposures on affected business and corporate customers were also negligible. Therefore, no provisioning measures were deemed necessary.

This dramatic event evidenced some limitations in the current Belgian system of compensation of CATNAT. It could be redefined to some extent in order to guarantee insurability of these events, the protection of the Belgian citizens and the resilience of the insurance sector. This is particularly true in the light of climate change aggravating the phenomenon of extreme weather.

Risk management organisation, governance, tools and processes

In the context of a growth & diversification strategy, evolving & challenging economic and social environment and stringent regulatory framework, the Risk management function needs to be continuously upgraded to remain future proof. A CRO corporate office has been created with the objective of supporting the CRO and her teams in this journey towards a more efficient and more holistic risk management.

Since January 1st, 2022, the Branch Audit department entered the CRO scope. The transfer from the 3rd to 2nd line of defense is justified by the nature of performed activities and will allow for greater collaboration with Non-financial risk and Compliance teams, a.o. sharing best practices and tools synergies. This also allows for improved consistency within the group as the insurance company has a similar structure.

Regarding tools and processes, Belfius continues to work on different initiatives to further improve the quality and real timeliness of data and increase efficiency of the risk processes. This entails tools (re)-design, simplification and automation. Some of these projects are risk specific but as much as possible and when appropriate, they are inserted into more global and centrally managed projects like the Corporate data platform and the Core Banking Renewal program.

In terms of models, Belfius is rationalizing its credit risk models and enhancing some key tools used in the financial plan/stress tests.

Risk management is also optimizing the use of data and artificial intelligence & machine learning technologies in the portfolio monitoring and Early Warning Signals tools, with the purpose of capitalizing on experience gained in anti-money laundering to extend the use of these technologies to other compliance and risk topics/departments.

Governance around these new models and technologies is also being reinforced. The scope of the Model validation team is being extended to additional models and modelling techniques and the model management framework is adjusted accordingly.

Greater attention is also put on a central repository of all regulatory reporting and associated automation processes in order to cope with the increasing regulatory requirements.

All these projects aim at putting Belfius in a position to face ever more complex and rapidly evolving risks with strong, comprehensive but also agile risk management processes and practices.

Belfius' strong risk profile is confirmed by external sources

Belfius' strong risk profile is reflected in the supervisory review and evaluation process, the results of the 2021 EU-wide stress test imposed by the European Banking Authority and the rating agencies views on the Belfius' credit risk profile.

Supervisory review and evaluation process

Due to the covid pandemic and the related unique economic and financial situation, the ECB has adopted a pragmatic approach in the SREP 2020 with a focus on the ability of supervised entities to handle the challenge of the Covid-19 crisis. Therefore, the Pillar 2 requirement (P2R) requirement was unchanged at 2% in 2021.

The P2R applicable as from March 1st, 2022 will increase to 2.13%. the slight increase of 13 bp stems from a prudential add-on for non performing exposures relating to the automatic application of the prudential backstop by the ECB on NPE stock as of March 31, 2018.

With this score, Belfius remains below the average of European bank-specific capital requirements of 2.2%. The CET 1 ratio (16.4%) is still largely in excess of the SREP CET 1 requirement (9.71%).

Stress tests 2021

The strong resilience of the Belfius business model was also evidenced by the EBA EU-wide stress test conducted on the 50 largest European banks.

In an extremely severe adverse scenario, Belfius would be able to limit the decline in its fully loaded CET 1 ratio to 2.70%. This is less than the impact of all previous stress tests in which Belfius has participated.

Starting from a strong CET 1 fully-loaded ratio of 16.36% as at January 1st, 2021 (corresponding to a CET 1 ratio of 17.11% on a transitional IFRS9 basis), Belfius has a high CET 1 fully-loaded ratio of 13.66% at the end of the stress period (corresponding to a CET 1 ratio of 14.02% on a transitional IFRS9 basis).

The outcome compares favorably to the average of the participating banks and confirms the strong solvency position of Belfius and its solid resilience in adverse scenarios. This reflects in turn the pertinence of the business model/strategy and the strong focus put on sound financial & risk management as a cornerstone of a consistent long-term diversification strategy.

Rating agencies

The rating agencies view positively the group's credit quality as reflected by the rating actions taken during 2021:

- on 24 June, S&P confirmed the long-term rating of Belfius Bank at A- with Stable outlook
- on 13 July, Moody's upgraded Belfius Junior Senior Unsecured (Non-Preferred Senior) debt to Baa1 from Baa2 and the Junior Senior Unsecured MTN rating to (P)Baa1 from (P) Baa2. They also confirmed the long-term rating of Belfius Bank at A1 with Stable Outlook
- on 28 October, Fitch confirmed Belfius Bank's long-term rating at A- with Stable outlook
- on 16 December, S&P raised the long- and short-term ICRs on Belfius Bank to A/A-1 from A-/A-2, the issue ratings on all outstanding senior instruments to A/A-1 from A-/A-2 and the long-term Resolution Counterparty Rating (RCR) to A+ from A. At the same time, S&P affirmed the short-term RCR and the issue ratings on the hybrid instruments and confirmed that the outlook is stable.

On 4 March 2022, S&P affirmed the A- long term issuer credit rating to Belfius Insurance, with Stable outlook.

Belfius is ready for the next challenges

Regulatory developments

Belfius has successfully implemented the CRR2 in June 2021, including the new method for the measurement of counterparty credit risk exposures of derivatives (SA-CCR), the minimum loss coverage mechanism for new non-performing exposures (backstop provisioning) and the revision of the large exposure framework.

The focus lies now on finalizing the review of internal credit risk models in order to meet the requirements of the newest EBA guidelines and technical standards covering the probability of default (PD) and loss given default (LGD). The roadmap of model development in on-track at end of 2021.

Besides, Belfius is also actively preparing for upcoming regulatory developments from Basel III finalisation and the EU Banking reform, including the revised market risk framework (Fundamental Review of the Trading Book) as well as the revised credit, operational and CVA risk approach. Based on current assessments, Belfius expects a moderate impact from the Basel III finalisation package on its solvency. Note however that this impact is strongly dependent on the treatment of Belfius Insurance exposure under the so-called Danish Compromise (DC). Without the review of the DC, the impact of the Basel III finalisation on the CET 1 ratio is estimated at -80 to -100 bp. This impact results from compensating effects between risk types, with operational risk exposures generating the main negative impact.

While the regulation still entails some uncertainties that would need to be clarified in the coming months, Belfius considers its solvency position as sufficiently robust, in normal market circumstances, to successfully comply with the requirements of this new regulatory landscape in 2025.

On the insurance side, as mentioned before, the floods of July 2021 in Wallonia were an unprecedented event affecting the Belgian citizens. Ad-hoc protocols between Wallonia and the insurance companies were signed for the claim payments. Discussions around the accounting and prudential treatments of the payment are still on-going.

During the year 2021, the NBB performed an analysis of the implementation of the LAC DT circular by the Belgian insurance compagnies. By the end of the year, they launched a consultation on their recommendations based on their analysis of the Belgian insurance sector.

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

On 22 September 2021, the European Commission published more insight on the legislative proposal related to the Solvency II review. The final timing and content of the review are not known yet. However in the current market conditions, the impact on the Solvency II ratio is positive but depends strongly on market conditions and Belfius Insurance risk profile.

Managing the structural consequences of the Covid-19 crisis

Although there is a tendency to look to short term impacts of the pandemic, waiting for the return to “normality”, we consider of primary importance to combine this view with a longer one encompassing some long lasting changes triggered by the pandemic.

The covid-19 impact on non-performing loans may still entail some upside risks, namely after the unwinding of pandemic-related governement and monetary policy measures and the full end of moratoria. Households and enterprises’ cash flows may also be affected by inflation and energy price increases and on a longer term by the sustainability transition challenge. The pandemic resurgence and associated restrictions are an additional risk weighting on the future non-performing loans ratio. The retention of a significant covid-related provision buffer and the reallocation performed in 2021 are in our view a prudent mitigation of these potential risks.

Long term effects from the covid-19 may more particularly affect some asset classes/activities:

- The sharp increase in sovereign (and more largely public) debt and its sensitivity to spreads and interest rates in a context of less accommodating monetary policies and huge challenges to address such as climate, ageing, etc. As we learned from the sovereign debt crisis in 2011-2012, debt sustainability issues in public bodies can lead to tensions in financial markets and knock-on effects on the financial sector.
- The real estate markets may also be structurally altered by the consequences of the pandemic. The multi-year growing importance of residential and commercial real estate loans in the banks’ balance sheets may somewhat halt as the growth was fueled by favourable financing conditions and, more recently, by the preference for more living space as people work more from home.

On top of this, the pandemic may give rise to changes in asset quality: increasing remote working and online shopping for instance is affecting the market for offices and retail properties. Residential real estate may suffer from inflation/interest rates impacts on reimbursement capacities in a context of increased household indebtedness.
Both commercial and residential real estate assets are heavily exposed to climate-related transition risks (as high contributors to greenhouse gas emissions), as well as to physical risks. This may weaken asset values or rents over time.

Belfius has a robust credit risk management framework in place to identify and mitigate these risks. Yet, continuous monitoring and framework upgrade is required.

Non-financial risk management emerged stronger after covid-19. The pandemic was one of the biggest disruptions banks have ever faced, with an overnight jump into remote work, employee health and business continuity challenges, a spike in the number and severity of fraud and cybersecurity threats. The crisis put our non-financial risk framework to the test but as demonstrated in this report, in 2021 again, Belfius could demonstrate a very high operational resilience. Bringing continuous improvement to our non-financial risk framework remains a priority.

Although already a pre-covid concern and in our DNA for years, Belfius is strongly increasing the focus on ESG matters with the aim of playing an active role in the transition towards greater sustainability in Belgium. In 2021, Belfius teams have defined a detailed roadmap covering a wide-range of topics and balancing risks and opportunities. Next years actions will be focused on the materialization of the numerous ambitions set in the action plan.

Finally, lessons learned from the covid-19 include a greater attention deserved to tail and compound risks in our stress tests scenarios considering that such events may become more likely in the future and exacerbate social and financial vulnerabilities and therefore, need to be anticipated, with a view on including most of the above long term trends and combinations thereof in our stress test exercises.

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Russia-Ukraine conflict

At the time of finalizing the drafting of this 2021 risk report, geopolitical risks rose significantly with the Russia-Ukraine conflict that started at the end of February 2022. Belfius is closely monitoring the situation and its direct and indirect impacts.

10 years ago, Belfius made a commitment to “never again” conduct business that it is not in line with its strategy, being meaningful and inspiring for the Belgian society. Belfius therefore strongly refocused its activities on the Belgian market. The result thereof is an immaterial impact of the conflict in terms of exposures on Russian, Ukrainian or Belarus counterparts.

Belfius direct exposure (Russian, Ukrainian and Belarus counteparties) is below EUR 1 Million. The indirect exposure is currently being assessed. First results tend to show that this exposure is very limited. Nevertheless, a workforce is set in place within the Group to monitor and assess the ongoing uncertainties and potential future material knock-on effects (energy prices, global economic slowdown,...).

If this conflict would turn into a more pronounced European or a worldwide crisis, Belfius can still rely on its strong solvency and liquidity position as well as prudent Covid buffers that can be partially used to absorb economic shocks.

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

The Board of Directors of Belfius has defined a clear and straightforward business model focused on the long term. A clear Risk Appetite has been defined and approved by the Board of Directors, expressing the level of risk that Belfius is prepared to take – for the various types of risk (credit risk, market risk, liquidity risk, non-financial risk…) – taking into account the expectations of the main stakeholders (shareholders, creditors, regulators, rating agencies, customers and so on), in order to achieve the strategic and financial objectives.

The Risk Appetite is a key component in the planning process with a clear articulation between the group's capacities, the strategy and the Risk appetite framework (RAF). The three components are determined in parallel in an iterative process as they are linked and influence each other. The RAF is there to support strategy definition and planning, to support analysis of value creation - integrating the risk dimension, and to help making day to day decisions on investments and financing. This leads to business plan adjustments as necessary to ensure the global risk profile derived from the financial plan is consistent with the Belfius' Risk Appetite.

This dynamic exercise is steered by Finance and Risk in collaboration with the Business Lines.

The Management Board has the responsibility to implement the decided risk appetite into the daily transactions. The process is supported by a detailed limit framework, a committee structure and a cascade of information/decision briefings to risk management stakeholders, promoting an environment of open and constructive engagement.

Through this process, risk attention points and recommendations are communicated, understood, embraced and monitored throughout the bank. The mechanism ensures that risk appetite, risk management strategy, and business strategy are effectively aligned and embedded in decision-making and operations at appropriate levels.

All risks are managed in accordance with the Group framework for risk management. Each risk type is covered in the Risk Appetite, which is then further declined in operational limits on all risk types. The compliance with the risk appetite framework is monitored and reported quarterly to the Management Board and to the Board of Directors. If a RAF indicator is exceeded, the Management Board and the Board of Directors are notified and provided with an analysis of the reasons for the breaches and , if required an action plan to ensure the return to the RAF risk level.

The key ratios and figures of Belfius Bank are integrated in the "Summary of risk profile" of this Risk Report, as well as the main risks encountered in 2021. The way risks (credit market, liquidity, non-financial, ESG risk, other financial risks) are managed is further explained in each risk section of this risk report. In general, the Belfius risk management framework is based on the 3 Lines of Defence (3 LoD's) model with a set of adequate and effective guidelines, policies and internal controls.

Belfius Bank has consolidated risk data and systems supporting regulatory reporting and disclosures as well as regular or ad-hoc internal Risk management reporting. The various internal management reports are presented to the appropriate committees as indicated in the risk governance structure as well as in the table of section II.4.2.

Intra-Group Transactions (IGT) at Belfius Group are surrounded by a sound framework. Their monitoring is executed based on approved Belfius Bank & Belfius Insurance thresholds. It is to be noted that, in recent years, no significant intragroup transactions that could be qualified as “prudential arbitrage” were recorded within the Belfius group.

In accordance with Article 435 of CRR 2, the Management Board is of the opinion that the risk management system is adequate regarding Belfius’ risk profile and strategy. The Management Board considers that this Risk report demonstrates the assurance of the adequacy of the risk management framework.

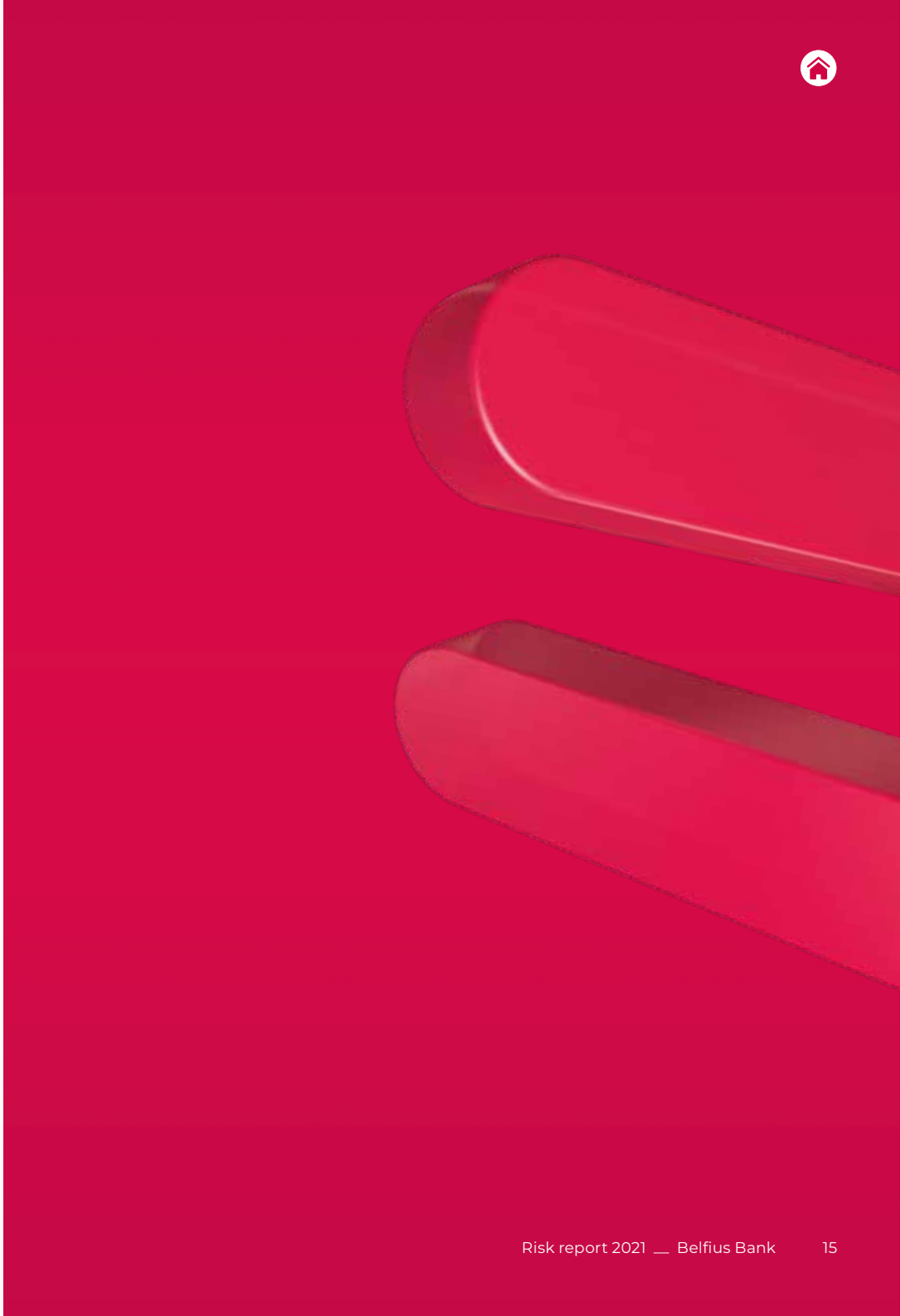
This declaration is also approved by Belfius Bank’s Board of Directors of 24 March 2022.

Alignment of our segmentation to our 2025 strategy

A new segmentation has been put in place within Belfius to better align the reporting with our strategy Inspire 2025. Our institution has evolved in terms of organization structure towards a “one bank” approach, ensuring a.o. that Individual clients are steered from one marketing and operations center apart from the marketing and operation centers of the Business and Corporate clients, even if the distribution channels are shared between both for evident synergy gain purposes.

The new segmentation used in this 2021 risk report makes therefore a split between Individuals, E&E&P (Enterprises, Entrepreneurs, Public & Social) and Group Center.

2020 figures presented in this report have been pro-formatted for this new segmentation.



I. Regulatory framework and Pillar 3 disclosure

I.1. Regulatory framework

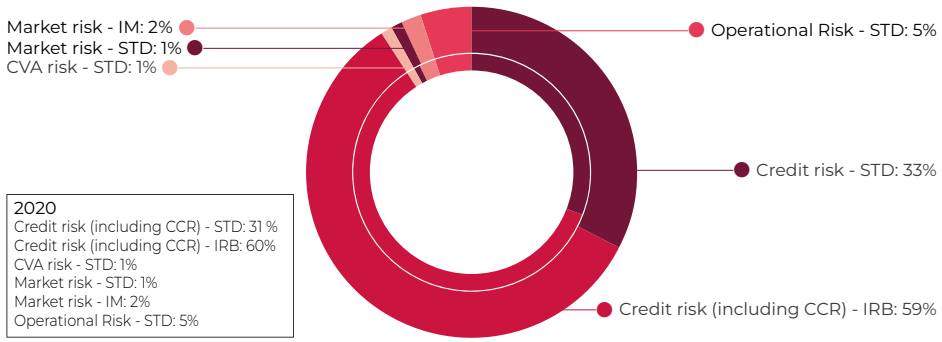
The capital adequacy regulations consist of three pillars.

- 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 also encompasses the leverage requirement which is a non-risk-based ratio serving as backstop to the risk-based minimum 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, and other risks such as among others concentration or interest rate risks.
- 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 minimum regulatory capital requirements under Pillar 1:

Reporting methods used (Outside 2021 – Inside 2020)



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 minimum 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, to be sold or portfolios and entities for which Belfius has adopted a phased roll-out of the AIRB Approach.

In total, credit risks (including CCR) capital requirements represented 92% of total risk exposure amount at the end of 2021.

I.1.1.2. Counterparty Credit Risk and CVA risk

Belfius calculates its exposures based on the standardised method for counterparty credit risk (SA-CCR). 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 due to a deterioration in the creditworthiness of the counterparties, the CVA risk, is calculated according to the Standardised Method, and represented 1% of total risk exposure amount as of end of 2021.

I.1.1.3. Market Risk

Since June 25, 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.).

In total, market risks requirements accounted for 2% of total risk exposure amount at year-end 2021.

I.1.1.4. Operational Risk

For operational risk, Belfius Bank applies the Standardised Approach, which accounts for 5% of total risk exposure amount.

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 supervisors the adequacy of their risk profile and of their capital by providing an overview of the internal consolidated Belfius Bank process for assessing Capital Adequacy in relation with risk profile and organisation.

In this context, appropriate governance has been put in place for the calculation and management of the risks and for the assessment of the economic capital needs from a Risk Appetite perspective (see section III.4.3.1.). The Capital Adequacy Statement (CAS) formalizes all the ICAAP constituting elements of Belfius' assessment process with regards to its internal capital adequacy. It provides the official and comprehensive view of Management body on the ongoing assessment of the risks Belfius faces in a holistic and forward-looking manner, along with the level of capital needed, both now and in the future, having considered all necessary management actions. The CAS, endorsed and signed by the management body, has been communicated to the supervisors.

Next to the ICAAP, an ILAAP (Internal Liquidity Adequacy Assessment Process) describing how Belfius Bank monitors and assesses the adequacy of its liquidity and funding risk management is 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 positions and risks, has also been communicated to the supervisors. 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).

The SSM imposes as well additional requirements above the first pilar. For 2021, The P2R and the P2G were respectively set at 2% and 1% (see section III.1. for more detail).

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 II) and the Capital Requirement Directive (CRD V) 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 II;
- Pillar 3 disclosure implementing regulation (EU No 2021/637);
- Disclosure of remuneration policy (EBA/GL/2021/04);
- Disclosure standards on IRRBB (EBA ITS 2021/07);
- Disclosure of NPL (EBA/GL/2018/10);
- EBA guideline on disclosures of exposures subject to measures applied in response to the Covid-19 crisis (EBA/GL/2020/07);
- EBA guideline on IFRS 9 transitional arrangements (EBA/GL/2020/12).

The pillar 3 disclosures under the CRD V/CRR II framework only deal with parent companies, subsidiaries and associated companies in the financial sector, and exclude insurance companies. This means that disclosures requirements for Belfius Insurance are generally not included in this report. Belfius Insurance prepares its own Solvency Report (SFCR report), which will be published on 20 May 2022.

However, in order to give a representative view of Belfius Group's risk profile, Belfius Insurance figures have been included in some sections, when relevant. In this case, the reporting scope is always 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 2021 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 18 March 2022 and to the Board of Directors on 24 March 2022.

All aspects for which disclosure is required under part eight of CRR II but that are not applicable to Belfius are listed in Appendix XI

No exceptions have been applied for the publication of information considered proprietary or confidential.

The Risk report is presented in euros (EUR), which is Belfius' accounting currency, rounded to the nearest million (unless otherwise stated). Due to rounding, numbers presented throughout this document may not add up precisely to the totals we provide, and percentages may not precisely reflect the absolute figures.

The Risk report is released on an annual basis. The next report's update is scheduled for April 2023. However, quantitative information will be released on a semi-annual basis in accordance with article 433 and article 433a of CRR II.

This Risk report and the Risk report annex are available in the investors section of the Belfius website (www.belfius.be), under "Results and Reports".

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 2021 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	Reference to external documents: Management report (MR) / Financial statements (FS)
435	Risk Management objectives and policies	II.	Risk management governance	●	
436	Scope of application	I.	Regulatory framework and Pillar III disclosure	●	
437	Own funds	III.	Equity and capital adequacy	●	
437A	MREL	III.	Equity and capital adequacy	●	
438	Own funds requirements and risk-weighted exposures	III.	Equity and capital adequacy	●	
439	Exposure to counterparty credit risk	IV.4	Counterparty credit risk	●	
440	Countercyclical capital buffers	III.	Equity and capital adequacy	●	
441	Indicators of global systemic importance	Not applicable for Belfius			
442	Credit risk adjustments	IV.3	Credit risk management and governance	●	Accounting policies - section 6.5 Impairment of financial instruments
443	Encumbered and unencumbered assets	VI.3	Encumbered assets	●	Risk management - Section Liquidity Risk (MR)
444	Use of ECAIs	IV.2.3	Standardised approaches		
445	Exposure to market risk	V.3	Trading market risk	●	
446	Operational risk management	VII.2	Non-financial risk - operational risk		
447	Key metrics	Summary of risk profile		●	
448	Exposure to interest rate risk on positions not included in the trading book	V.2	Structural & ALM risk	●	Risk management - Section Market Risk (MR)
449	Exposure to securitisation positions	IV.6 VI.2	Securitisation risk Securitisation activity as originator"	●	
449A	ESG risks	VIII	ESG risk management		
450	Remuneration policy			●	Corporate governance (MR)
451	Leverage	III.	Equity and capital adequacy	●	
451A	Liquidity requirements	VI	Liquidity Risk	●	
452	Use of the IRB Approach to credit risk	IV.2.2 X.2	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 time as the Risk report itself. You will find this reference table here beneath.

Risk report annex reference table: quantitative templates

CAPITAL BASE AND CAPITAL REQUIREMENTS	
KM1	Key metrics
OV1	Overview of risk weighted exposure amounts
CC1	Composition of regulatory own funds
CC2	Reconciliation of regulatory own funds to balance sheet in the audited financial statements
INS1	Non-deducted participations in insurance undertakings
INS2	Financial conglomerates information on own funds and capital adequacy ratio
CCA	Main features of regulatory own funds instruments and eligible liabilities instruments
KM2	Key metrics for MREL
LRSUM	Summary reconciliation of accounting assets and leverage ratio exposures
LRCOM	Leverage ratio common disclosure
LRSPL	Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)
IFRS9	IFRS 9 transitional arrangements
CCYB1	Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer
CCYB2	Amount of institution-specific countercyclical capital buffer
GROUP STRUCTURE AND SCOPE OF APPLICATION	
LI1	Differences between accounting and regulatory scopes of consolidation and mapping of financial statements with regulatory risk categories
LI2	Main sources of differences between regulatory exposure amounts and carrying values in financial statements
LI3	Outline of the differences in the scopes of consolidation (entity by entity)

CREDIT RISK	
CR1	Performing and non-performing exposures and related provisions
CR1-A	Maturity of exposures
CQ1	Credit quality of forborne exposures
CQ3	Credit quality of performing and non-performing exposures by past due days
CQ4	Quality of non-performing exposures by geography
CQ5	Credit quality of loans and advances by industry
CR3	CRM techniques overview: Disclosure of the use of credit risk mitigation techniques
CR4	Standardised approach -Credit risk exposure and CRM effects
CR5	Standardised approach
CR6	IRB approach – Credit risk exposures by exposure class and PD range
CR6-A	Scope of the use of IRB and SA approaches
CR7	IRB approach – Effect on the RWEAs of credit derivatives used as CRM techniques
CR7-A	IRB approach – Disclosure of the extent of the use of CRM techniques
CR8	RWEA flow statements of credit risk exposures under the IRB approach
CR9	IRB approach – Back-testing of PD per exposure class (fixed PD scale)
CR10	Specialised lending and equity exposures under the simple riskweighted approach
COVID 19 MEASURES	
TEMPLATE 2	Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria
TEMPLATE 3	Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis
COUNTERPARTY CREDIT RISK	
CCR1	Analysis of CCR exposure by approach
CCR2	Transactions subject to own funds requirements for CVA risk
CCR3	Standardised approach – CCR exposures by regulatory exposure class and risk weights
CCR4	IRB approach – CCR exposures by exposure class and PD scale
CCR5	Composition of collateral for CCR exposures
CCR6	Credit derivatives exposures
CCR8	Exposures to CCPs
SECURITISATION	
SEC1	Securitisation exposures in the non-trading book
SEC4	Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor

MARKET RISK	
MR1	Market risk under the standardised approach
MR2-A	Market risk under the internal Model Approach (IMA)
MR2-B	RWA flow statements of market risk exposures under the IMA
MR3	IMA values for trading portfolios
MR4	Comparison of VaR estimates with gains/losses
PV1	Prudent valuation adjustments (PVA)
INTEREST RATE RISK IN THE BANKING BOOK	
IRRBB1	Interest rate risks of non-trading book activities
FUNDING & LIQUIDITY RISK	
LIQ1	Quantitative information of LCR
LIQ2	Net Stable Funding Ratio
AE1	Encumbered and unencumbered assets
AE2	Collateral received and own debt securities issued
AE3	Sources of encumbrance
OPERATIONAL RISK	
OR1	Operational risk own funds requirements and risk-weighted exposure amounts
REMUNERATION	
REM1	Remuneration awarded for the financial year
REM2	Special payments to staff whose professional activities have a material impact on institutions' risk profile (identified staff)
REM3	Deferred remuneration
REM4	Remuneration of 1 million EUR or more per year
REM5	Information on remuneration of staff whose professional activities have a material impact on institutions' risk profile (identified staff)

Risk report annex reference table: qualitative templates

Qualitative information has also been included in this Annex relating directly to the quantitative elements presented in order to facilitate their interpretation.

LIA	Explanations of differences between accounting and regulatory exposure amounts
LIB	Other qualitative information on the scope of application
SECA	Qualitative disclosure requirements related to securitisation exposures
IRRBBA	Qualitative information on interest rate risks of non-trading book activities
LIQA	Liquidity management
LIQB	Qualitative information on LCR

II. Risk management governance

Risk management is rooted in Belfius' corporate governance and the principles for risk appetite are incorporated at the highest governance level.

Belfius risk profile is decided by the Board of Directors through the risk appetite, and the risk appetite framework is reviewed and updated (at least) once a year. The approved targets and limits are translated into risk management policies and guidelines, such as limits on authorisations and business activity.

The compliance with the risk appetite framework is monitored and reported quarterly to the Management Board and to the Board of Directors.

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).

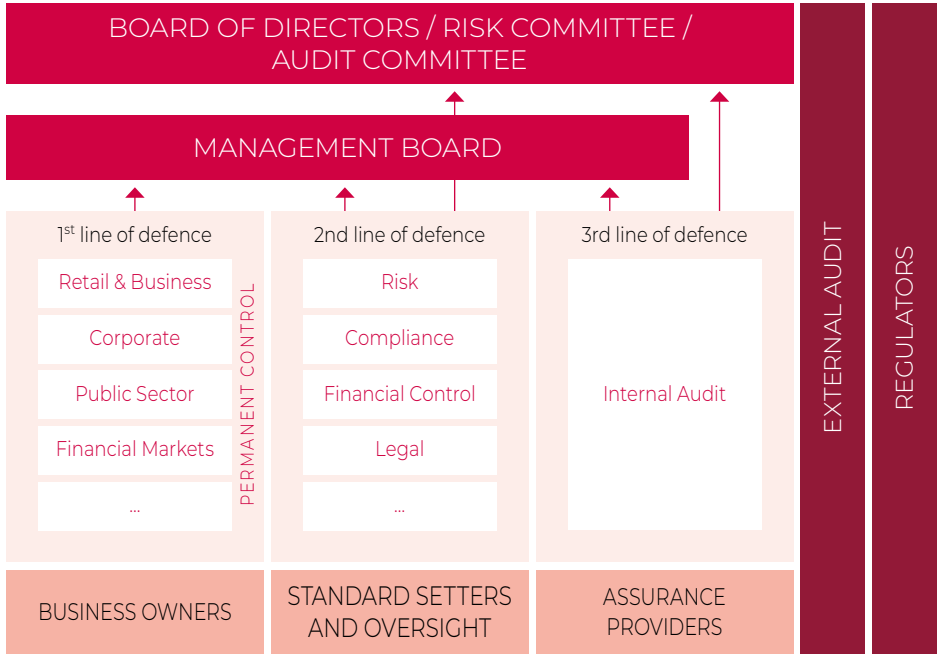
II.2. Risk governance model at Belfius Bank

II.2.1. Three lines of defence model

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

- The first line of defence is the responsibility of the business (and support lines when applicable) and their management as this is where the risks are taken (handled) and where risks are potentially mitigated : they own, manage and control risk (Business Lines/Front) within the framework designed by the 2nd LoD.
  The Permanent Control functions within the business lines play a key pillar in this respect. These have been set up in 2021 in each main business lines with the appointment of 2 new heads of Internal Control: one for PBR and one for WEP.
- 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: they define the risk management framework (policies, guidelines, Risk Appetite Framework...), monitor and control the risks in support of the 1st line (Risk, Financial control, Legal, Compliance) and keep global risk oversight. Within the 2nd line, a new head of NFR and a new head of FMR have been appointed this year and a CRO corporate office has been set-up.
- 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.

Although external parties are not formally considered to be among an organization's 3 lines of defense, groups such as external auditors and regulators play an important role regarding the organization's overall governance and control structure

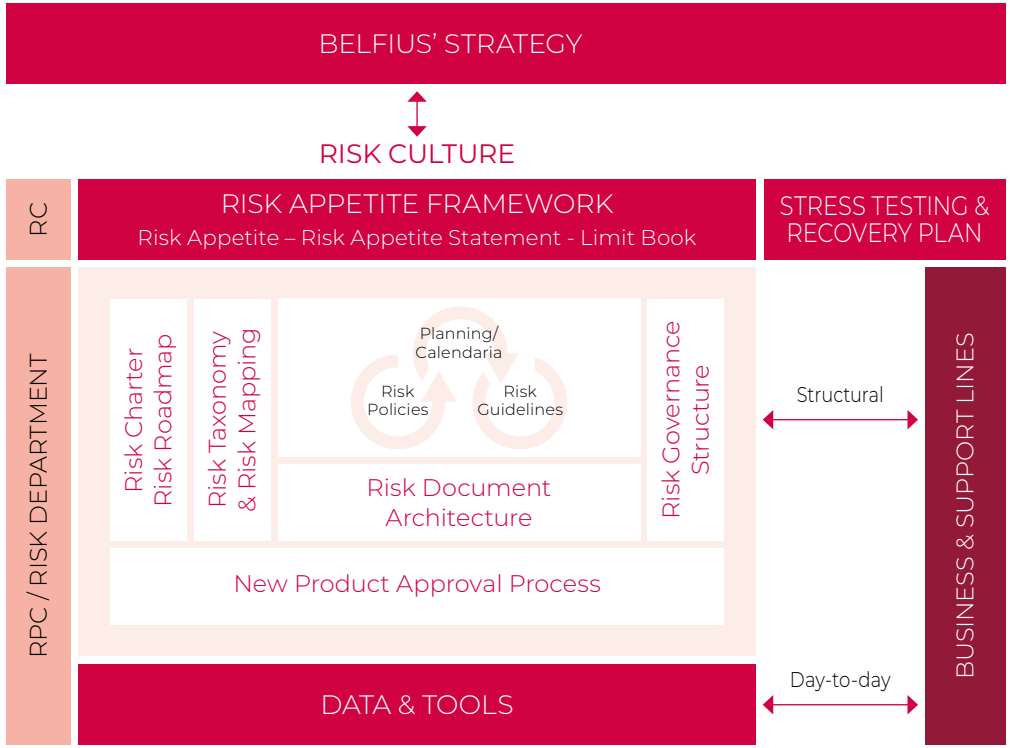


With regards to the 3 LoD model, the Risk Mapping enables a clear assignement of responsibilities and ensures a comprehensive risk coverage as well as an enhanced capacity to spot gaps and define action plans. This risk mapping is regularly updated, in order to capture all newly identified risk categories in accordance with the adjustments brought to the Belfius' Risk Taxonomy. Both the Risk Taxonomy and Risk Mapping have been revised in 2021.

The Board of Directors reviews the Senior Management Report on the Assessment of the Internal Control, which includes assessments of the principal risk areas, on a yearly basis. The review documents the quality of the internal control and risk management and identifies weaknesses and needs for improvement.

II.2.2. Risk management framework

The risk management framework aims to implement sound, prudent and effective risk management and corporate governance. It aims to cover in a consistent way all elements required for a sound risk management.



II.2.2.1. The Risk Appetite Framework (RAF)

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

The Risk Appetite Framework (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 must be consistent with it. It is composed of 3 levels:

- Level 1 includes high level risk indicators and qualitative statements;
- Level 2 includes more detailed KRI's on a broad range of key risks;
- Level 3 concerns the operational limit book and activity or entity specific risk indicators.

The RAF is consistent with the Belfius Group strategy and financial targets. The RAF must be seen as an evolutive process in which:

- risk coverage and risk level are revised on a yearly basis;
- defined key Risk Indicators (KRI's) and limits are regularly checked against business strategies with the annual check that the RAF limits are respected, both in base case and in case of stress scenarios, when designing the Financial plan.

The RAF covers both qualitative and quantitative indicators, both related to financial as non-financial risks. Qualitative indicators are embedded in the RAF under the form of statements, while quantitative indicators are based on regulatory requirements (CET 1, LCR, NFSR, MREL,...) and internal indicators deemed relevant to monitor Belfius' risk profile (EaR, operational losses, data breaches, internal fraud, compliance, ESG risks,...).

During this year's update, among others, additional ESG risk indicators have been added in view of the increasing importance of this risks.

For quantitative indicators, the Board of Directors defines tolerance levels which need to be respected at all times. In case of breaches, action plans must be submitted to the Board of Directors. The RAF report is presented to the Board of Directors on a quarterly basis.

As the RAF is the expression, at the highest consolidated level, of the risks Belfius is prepared to take or not to take, the Management Board has the responsibility to implement the decided risk appetite into the daily transactions. This is done through the implementation of a detailed limit framework, a committee structure and a cascade of information/decision briefings to all risk management stakeholders, promoting an environment of open and constructive engagement.

In order to further strengthen the conglomerate dimension, in 2021, a RAF roll-out in the subsidiaries has been realised, These RAF's are based on the RAF at group level, reflecting and monitoring the own (financial and non-financial) vulnerabilities and risks of each subsidiary.

II.2.2.2. The Risk Charter

Belfius Bank has determined the main risk principles and guidance for all stakeholders and departments involved and more specifically for Belfius risk management, in a Risk Charter.

II.2.2.3. The Risk Roadmap

Via its risk roadmap, Belfius Bank sets and communicates the overall objectives, actions and priorities for the Risk department to its team members and its main stakeholders (1 to 2-year time horizon).

II.2.2.4. The Risk Taxonomy and Risk Mapping

The Risk Taxonomy is a common set of risk categories, used within Belfius. The Belfius Risk Taxonomy is integrated and standardized: one basic classification: same risk types and classification throughout the group & one description for each risk category & risk type.

The Belfius Risk Mapping defines clear roles and responsibilities for all risk types and tasks within the Bank.

The general Risk Taxonomy & Risk Mapping have been updated in 2021 with the integration of ESG risks.

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 authorities; consistently assigns roles and responsibilities to both Risk/Risk & Business Committees and positions decision taking (and their monitoring) at an adequate management level in a coherent way.

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 document types on a high level, together with the responsible issuer, the validation instance and the frequency of update.

II.2.2.8. New Product Approval Process (NPAP)

The process of developing a “product, activity, process or system” involves several 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.

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

II.2.2.9. Stress Testing & Recovery Plan

Stress tests are designed to measure the group’ sensitivity (in terms of losses, additional weighted risks, liquidity needs or equity capital requirements) to scenarios featuring significant unexpected economic or market shocks and/or shocks affecting Belfius’s own financial situation.

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.

For further information about the Stress Testing and Recovery Plan, we refer to III.3.3.2.3. and III.3.3.2.4.

II.2.2.10. The Risk Culture

The Risk Culture is a policy approved by Belfius Bank which sets out the vision, strategy and responsibilities.

It 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 and it determines the collective ability to identify, understand, openly discuss and act on the current and future risks.

Risk culture is extremely important within Belfius. Risk culture is embedded at all levels of the Group and starts with the tone at the top. The risk culture is developed via multiple complementary processes (trainings, messages from CRO in the QRR, awareness campaigns and communication, the CORMs as risk culture ambassadors, a ‘Risk Culture’ file on the intranet, permanent controls in the first lines, different KRIs to achieve in the staff’s management contracts (for instance : compliance, audit recommendations,...)).

Risk Culture is continuously enhanced: continuously working on the awareness of the Belfius risk appetite / acceptation policy and compliance risks, together with legal and tax risks, is key to further enhance the risk culture. In this context, the planned increase in frequency of mandatory trainings and the new Intake Committee (for onboarding and higher risk transactions) implemented in 2021, together with the enhanced screening by the first line of defense, are important building blocks.

II.2.2.11 Data & Tools

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 and share a common view within the group.

Belfius also pursues the implementation of a broad Core Banking Renewal program. Belfius also contemplates RegTech solutions in order to further automate the production of regulatory reportings and Investigate opportunities to streamline the Risk and Finance calculation engines.

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.

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.

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

Two 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)** supervises the definition and the implementation of the Bank's principal risk management and measurement policies, processes and methodologies, and their validation status;
- the **Non-Financial Risks (NFR)** Committee ensures a well-governed and coordinated non-financial risk framework for an effective Non-financial risk management.

In addition to these two risk committees, four functional areas also report to the Management Board without a separate committee being set up for them:

- the **Credit Risk Committee (CRC)** centralizes all credit risk related topics (origination, monitoring, impairment) into one committee in presence of the Management Board members who are directly involved (CRO, Head of PBR & WEP);
- the **Financial Markets Committee (FMC)** has as prime function the effective risk management oversight and steering of the Financial Markets activities. It is held once a month with a strict quorum including members of the Management Board (CRO, CFO and Head of WEP);
- the **Assets & Liabilities Committee (ALCo)**: the ALCo has received mandate for realising 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;
- the **Capital Group Committee (CGC)** anticipates, 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).

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 in 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 and Business focus mainly on guidelines, transactions and risks on counterparty level. 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.

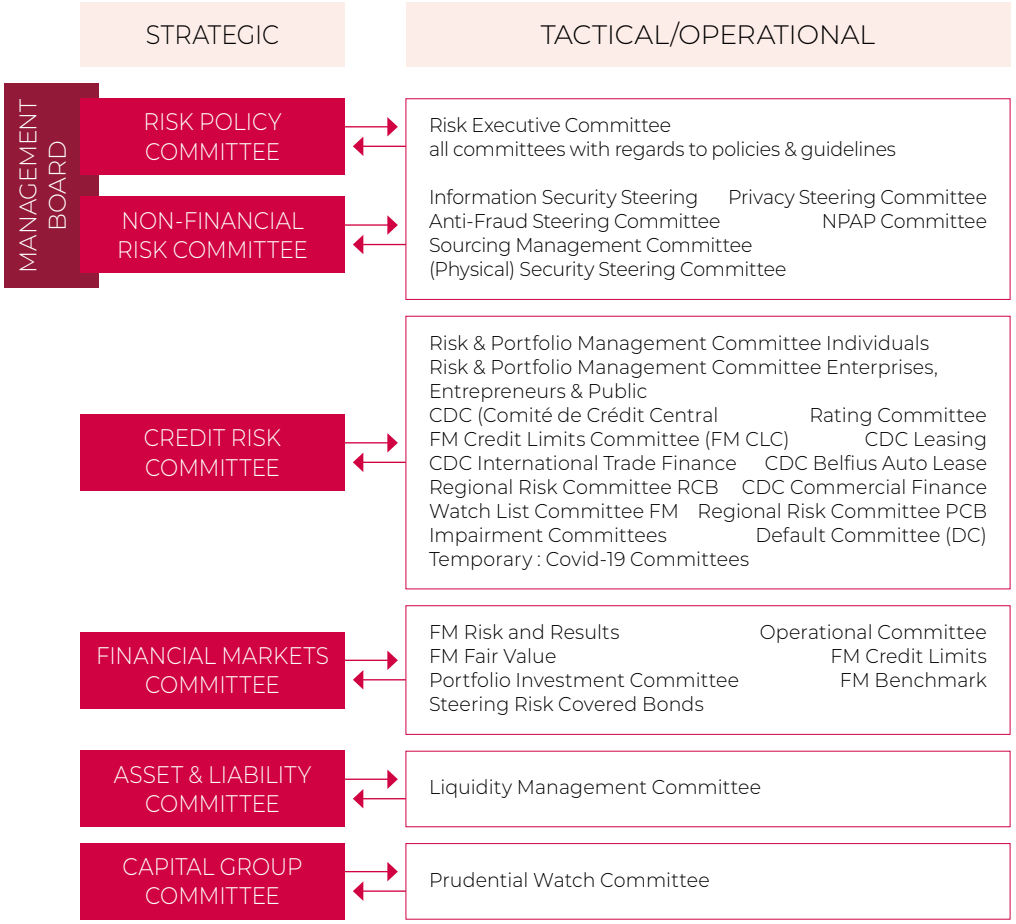
II.2.3.3.1. At a general level

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 and/or the Management and bears the ultimate responsibility for the implementation of the Belfius Bank's risk roadmap.

II.2.3.3.2. Financial Markets Risk Management

Besides the **Financial Markets Committee (FMC)** - at strategic level - several sub-committees at tactical/operational level cover financial market risk (The sub-committees are described in annex XI.4.1).

(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.



II.2.3.3.3. Credit Risk Management

Besides the **Credit Risk Committee (CRC)** - at strategic level - several sub-committees at tactical/operational level cover credit risk (The sub-committees are described in annex XI.4.1.).

II.2.3.3.4. Non-Financial Risk Management

Besides the **Non-Financial Risks Committee (NFRC)** - at strategic level - several sub-committees at tactical/operational level cover specific NFR risk (The sub-committees are described in annex XI.4.1.).

II.2.4. Risk reporting to the Boards of Directors

Belfius Risk Reporting is an essential part of the Risk Department responsibilities. Reporting should meet high standards. Timing versus reliability is the resulting balance between the level of information available and the response time available.

- Recurrent reports are based on a robust data collection, data quality and data knowledge process based on both automated and upgraded central/end-users transactions related chains.
- Ad hoc requests require tailor made solutions with adapted time-to-respond in order to support management decisions.

The internal control process ensures the completeness of reports as well as the reliability and (transversal - horizontal & vertical) overall consistency. Risk Reporting aims at making management aware of the overall risk profile and of material risks in order to ensure appropriate decision-taking process based on among others clear risk information/opinions.

The table on the next page shows the regular independent reports on risk and compliance sent to the Boards of Directors (this does not include ad hoc or specific risk reportings). In addition, the Board of Directors is informed in case of breach of risk appetite limits, threshold values in the recovery plan or other significant events or changes in the risk situation.

Intragroup transactions include all transactions which result in (financial) assets or liabilities being transferred between undertakings within the Belfius group.

The monitoring of Intra-Group Transactions (IGT) is executed following approved Belfius Bank & Belfius Insurance thresholds (capital, liquidity, concentration, leverage, MREL, encumbrance, duration gap), validated ex ante at Capital Group Committee (CGC) and reported ex-post to the regulators (FICOD reporting) on a quarterly basis.

A policy and governance is installed to identify and report intragroup transactions that could be qualified as "prudential arbitrage". Please note that in recent years, no significant intragroup transactions that could be qualified as "prudential arbitrage" were recorded within the Belfius group.

Intragroup transactions (e.g. sales between different entities of the group) are performed at market price and consolidation adjustments are required to reset to the situation before the transaction. More in particular, seeing that the transaction remains within the consolidation scope, any realized gain/loss should be eliminated.

The most important intragroup transactions are related to contributions in kind of direct property, sales of bonds and covered bonds and sales of shares and participations in order to centralize the management of participations.

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.

Reporting to the BoD

Frequency	Reporting	
QUARTERLY	The Quarterly Risk Report (QRR)	The QRR is the main quarterly report of Risk Management towards the Board of Directors. Besides a global risk executive summary on the global risk situation and the evolutioon during the last quarter, the report covers all relevant information on each risk type.
	The RAF Report	The RAF report is the quarterly reporting on the RAF and all Level 1 and Level 2 RAF indicators. In case of a breach, action plans are presented.
HALF-YEARLY	Compliance Activity report	Report on the main Compliance evolutions and activities over the past 6 month, with an overview of the main Compliance risks and the planned actions to remediate them.
YEARLY	Senior Management Report on the Assessment of the Internal Control	The yearly report on the effectiveness of the internal controls reports on the the status and effectiveness of the internal control, which includes assessments of the principal risk areas. The review documents the quality of the internal control and risk management efforts and identifies any weaknesses and needs for improvement.
	Risk Roadmap	The Risk Roadmap expresses the the risk management objectives, actions and priorities of the Risk department (1-2 years time horizon).
	ICAAP-ILAAP	The ICAAP and ILAAP documents must be reviewed at least annually by the Board. The ICAAP report contains a detailed description of Belfius' process for self-assessments of risk and the capital situation. The ILAAP report describes and assesses Belfius' liquidity situation.
	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.
	Compliance Action plan	Report with the evaluation of the Compliance action plan of the previous year and the proposed Compliance action plan for the current year.
	AML year report	Annual report by the AML Compliance Officer, on the AML governance, organization, project, activities and risks within Belfius.
	Yearly evaluation of the Compliance Function	Evaluation by the Board of directors, based on the input of the internal audit department, whether the functioning of the Compliance Function is in line with the regulatory expectations, as defined by the circular of the FSMA/NBB
	Annual Model Report of the Validation (Model Management Framework)	The report provides a global overview of the situation of the models within the bank: quality of the models, compliance with regulatory requirements, developments over the last year, planning for the coming year.

II.4. Risk department organisation, role and responsibilities

II.4.1. General mission

The mission and role of the Risk department are 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, enhanced by internal limits, themselves consistent with the approved risk appetite;
- an effective process to identify, measure, monitor, assess and 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.

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

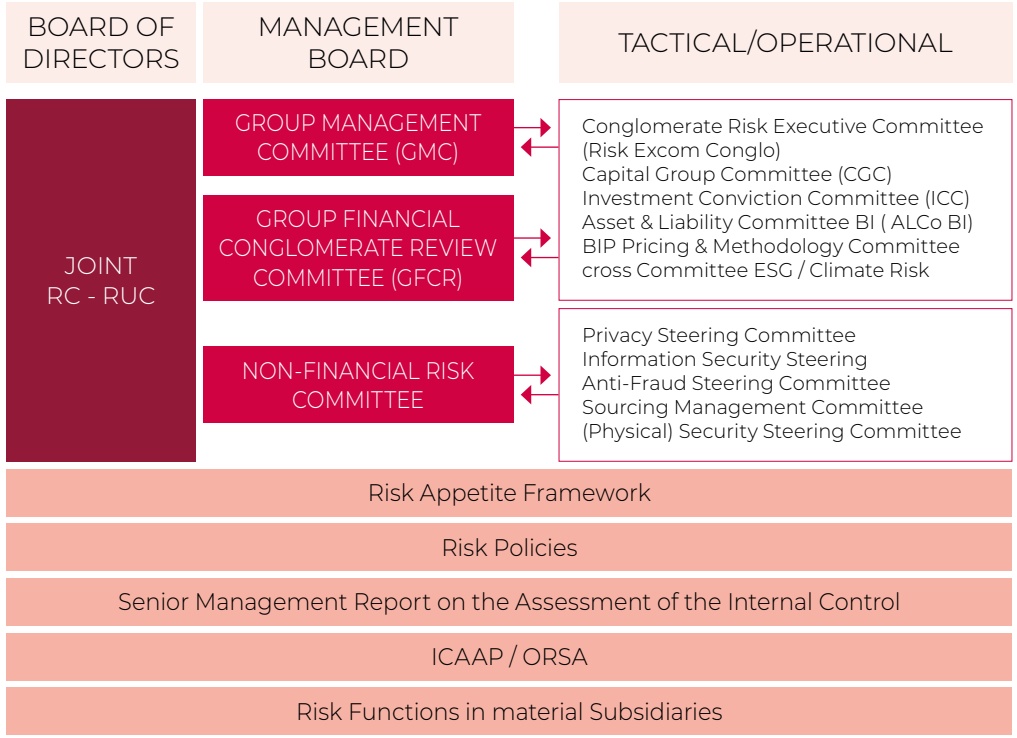
II.4.2. Risk organisation

II.4.2.1. At conglomerate 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. It assumes a risk-based approach to further strengthen the conglomerate dimension.

The overall objective is to have a risk management coordination at conglomerate level, 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.

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



The conglomerate dimension of Belfius' Risk Governance includes:

- At the level of the Board of Directors : joint RC/RUC's (Risk Committee / Risk & Underwriting Committee).
- At the level of the Management Board (strategic level):
  - A Group Management Committee (GMC), with potential conflicts dealt with at the level of Mediation Committee
  - A joint Non-Financial Risk Committee (NFRC), related to all NFR topics
  - A Group Financial Conglomerate Review Committee (GFCR), assuring an overview of all subsidiaries. It tackles amongst other the risk management framework of each subsidiary.

- At a general risk level (tactical/operational level), several committees are 'joint' or 'Belfius Together' (BB: Belfius Bank; BI: Belfius Insurance & BIP: Belfius Investment Partners):
  - The Conglo Risk Executive Committee (Conglo Risk ExCom) with participation of the CRO of Belins and BIP
  - The Capital Group Committee (CGC) is a joint BB and BI committee
  - The Investment Conviction Committee (ICC) is a joint BB, BI and BIP committee
  - The Assets & Liabilities Committee (ALCo) of Belins in which BB participates
  - The BIP Pricing & Methodology Committee BIP in which BB participates.
- At specific risk level, several sub-domains have a common governance with 'Belfius Together' sub-committees for various risks:
  - The Information Security Committee
  - The Anti-Fraud Steering Committee
  - The Privacy Steering Committee
  - The (Physical) Security Steering Committee
  - The Outsourcing Management Committee
  - A cross committee for ESG/Climate Risk.

The 3 main entities (BB, BI and BIP) have similar risk policies, guidelines framework and approach. They 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 cascaded down to subsidiaries; as such a RAF roll-out for the subsidiaries has been realised in 2021, based on the RAF at group level and reflecting and monitoring their own (financial and non-financial) vulnerabilities and risks.
- 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).

The Conglomerate dimension has been further developed with a closer oversight of all material subsidiaries, on other dimensions as well :

- Further alignment of major Risk policies in a conglomerate approach.
- The creation of a risk function in all material subsidiaries
- An AML-risk assessment on conglomerate level will be performed in 2022 (estimated. start Q4). Such mandatory exercise is also the opportunity for the bank as well as for all concerned subsidiaries to update and categorize their different risk factors depending on their underlying inherent risk.

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

The Risk department has further enhanced the conglomerate dimension, in line with the Group's bank-insurance strategy. The Risk Management implemented organisational changes, following the "Belfius Together" approach. The new Risk Management organisation takes more systematically a conglomerate vision while ensuring quality, efficiency and expertise in both entities at all times.

For example:

- With regards to the organisation of non-financial risks :
  - Mutual risk functions are in place ensuring coordination and alignment between both banking and insurance sides, including specialized functions such as DPO and CISO.
  - An NFR-related committee structure involving appropriate level of management from both banking and insurance sides has been set up.
  - A yearly internal control report is written, including risk profile overview of Belfius Insurance and Belfius Investment partners.
  - A risk management framework has been implemented at conglomerate level, including the adoption of NFR-related policies and the development of risk appetite frameworks with both NFR-related qualitative and quantitative indicators for all material subsidiaries.
- With regards to the organisation of financial markets risk:
  - Regarding the subsidiary Belfius Ireland is concerned, all risk management functions are centralized in the FM Risk Management team in Brussels.
  - Regarding Belfius Insurance, all aspects of risk management that belong to the competence of Financial Market Risk Management are also centralized at Belfius Bank's team.
  - For Belfius Investment Partners, FM Risk Management provides the credit risk analyses of the financial counterparties with whom BIP engages.

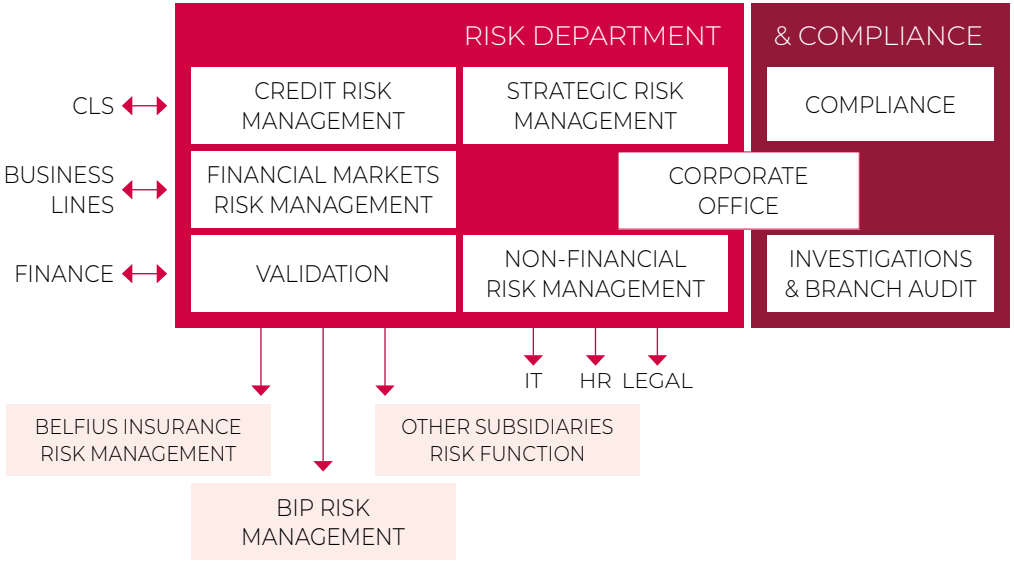
II.4.2.2. At Belfius Bank level

This risk organisation considers:

- 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 frameworks;

- the liquidity, solvency and profitability challenges;
- the necessary promotion of a risk culture within Belfius.

The main missions of the various divisions of the Risk department:



II.4.2.2.1. 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 Retail, Business & Corporates and Public Sector credit activities, based on proactive risk control and risk-challenger view.

II.4.2.2.2. FM Risk Management

The focus of FM Risk Management is to develop and to maintain an efficient and robust risk management framework for treasury, portfolio management and financial markets activities, in strict compliance with the risk appetite and the business strategy of Belfius Bank.

II.4.2.2.3. Strategic Risk Management

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

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

II.4.2.2.4. Validation

The primary task of Validation is to independently 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 understanding and use .

II.4.2.2.6. Non-Financial Risk

The Non-Financial Risks department acts as the 2nd line of defence for the main non-financial 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.

This year, a new head of Non-Financial Risk was appointed.

II.4.2.2.7. Compliance

The Compliance department acts as the 2nd line of defence for the management of the Compliance Risks, as defined in the 2012 circular of the NBB and FSMA. The department consists of a team of Compliance Business Advisors, a Compliance Risk Monitoring teams, as well as an Anti-Money Laundering team.

II.4.2.2.8. CRO corporate office

A CRO corporate office has been created in 2021 with the objective of supporting the CRO and her teams in the journey towards a more efficient and more holistic risk management. Its responsibilities namely entail the following:

- Ensure an effective Risk & Compliance organisation with clear objectives and ambitions.
- Coordinate, monitor and assess strategic (risk) projects.
- Ensure consistency, prepare and monitor relationships with internal and external stakeholders.

II.4.2.2.9. Investigations & Branch Audit department

The Investigations & Branch Audit department conducts investigations into suspicions of internal fraud and provides, through on-site reviews, reasonable assurance regarding the management of the risks resulting from human interventions in the distribution channels.

The Investigations activities cover all entities of the Belfius group, including its subsidiaries as well as the independent distribution networks whereas the Branch Audit activities do not include Belfius Insurance.

II.4.2.3. 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

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, accounting for current and forward-looking aspects.

The following table illustrates the risk identification process within Belfius. It represents the risk cartography of Belfius at 31 December 2021, which aims at screening all risks to ensure they are identified, quantified and monitored.

All risk types are classified as Financial, Non-Financial or Conglomerate risks (further segmented into financial or non-financial risk types).

Financial risks are capitalised except Liquidity Risk for which no capital is set aside as Belfius perceives that capital is not the adequate answer to cover this risk. The liquidity risk 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, is considered through Earnings at Risk and Stress Testing framework.

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

Credit risk, market risk and operational risks 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.

			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
		Setllement 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	Insurance Specific Risks (incl. Life, Non-Life and Health)		●	Yes
		Behavioural Risk (incl. Prepayment Risk)		●	Yes
		Pension Plan Risk		●	Yes
		Model Risk[3]	●	●	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 RISKS		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.
(3) consisting of Additional Value Adjustments (AVA) considered for Market and Credit Risks.

The perimeter of Pillar 2 risks is larger as Pillar 2 aims for exhaustiveness. Other risks than those included in the Pillar 1 framework are 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, 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% on a 1-year horizon instead of, respectively 99.9% and 1-year for Credit and Operational risks and 99% and 10-day for Market Risk as required by the Pillar 1 requirements.

As mentioned above, 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.

In 2021, ESG risks have been embedded in the Risk Taxonomy, not as a separate risk category but as a potential driver of several traditional risk types, including credit, market, operational, strategic, business and reputational and legal risks. The ESG components of those risks are not yet capitalized but are identified, assessed, monitored and managed through specific processes. More details about ESG Risk Management can be found in Section VIII of this report.

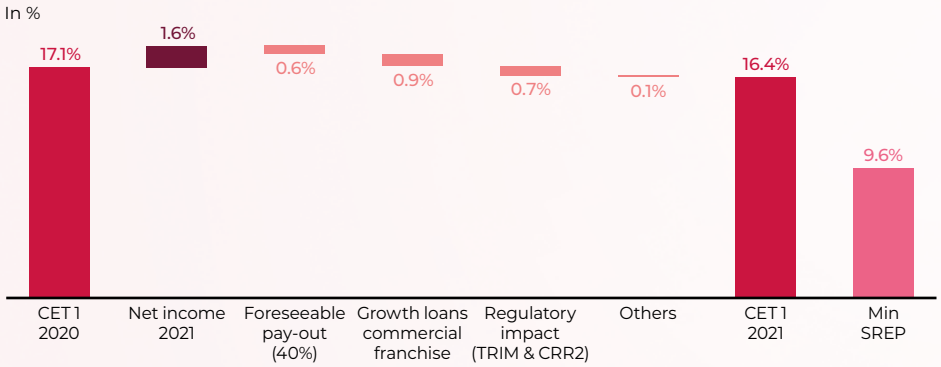
III. Equity & Capital adequacy

A solid CET 1 ratio is enabling Belfius to continue to support the Belgian economy and to execute its commercial strategy

- Belfius CET 1 ratio ended at 16,4% as of end 2021. This CET 1 ratio represents a continued strong and solid level, allowing Belfius to continue to support its strong commercial franchise development.
- The solid capital base still compares very favourably with Belfius' minimum SREP requirement of 9,64% at year-end 2021 and internally defined operational target (>13.5%). The capital buffer vs SREP requirement is close to 4.4bn.
- At year-end 2021, Belfius capacity in subordinated MREL and MREL was already exceeding the Single Resolution Board final targets to comply with on January 1st, 2024.

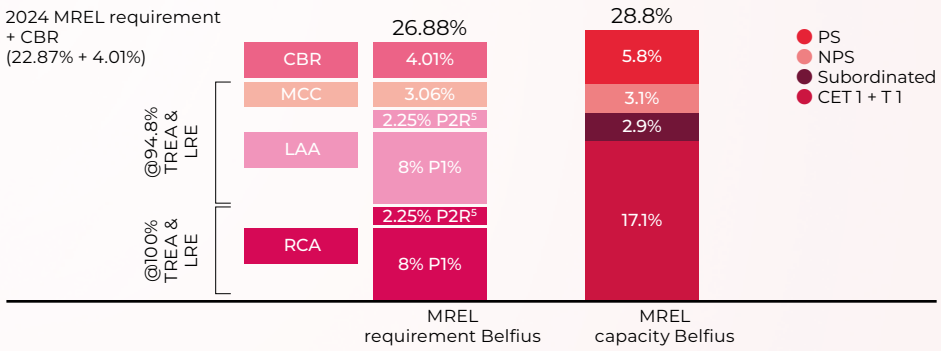
CET 1: solid at 16.4%

CET 1 in comparison to minimum SREP level



SRB MREL requirements

SRB MREL requirements compared to Beflius' compliance – in % of TREA



III.1. Equity

III.1.1. Prudential supervision

III.1.1.1 Minimum Requirement

Belfius Bank reports on its solvency position on a consolidated level and on a statutory level in line with the revised Capital Requirements Regulation and Directive, commonly referred to as CRR 2 and CRD 5:

- the minimum capital requirements ("Pillar 1 requirements") as defined by Article 92 of Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 575/2013 (CRR 2);
- the capital requirements that are imposed by the SREP decision (Supervisory Review and Evaluation Process) pursuant to 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 (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU (CRD 5).

The ECB notified Belfius on 8 April 2020 that banks are able to use capital instruments that do not qualify as Common Equity Tier 1 (such as Additional Tier 1 or Tier 2 instruments) to partially meet Pillar 2 Requirements (P2R – Article 104-a of CRD 5). As a result the P2R total capital buffer of 2% can be split into

- 1,125% to meet CET 1 instruments,
- 0,375% to meet Additional Tier 1 instruments and
- 0.5% to meet Tier 2 instruments.

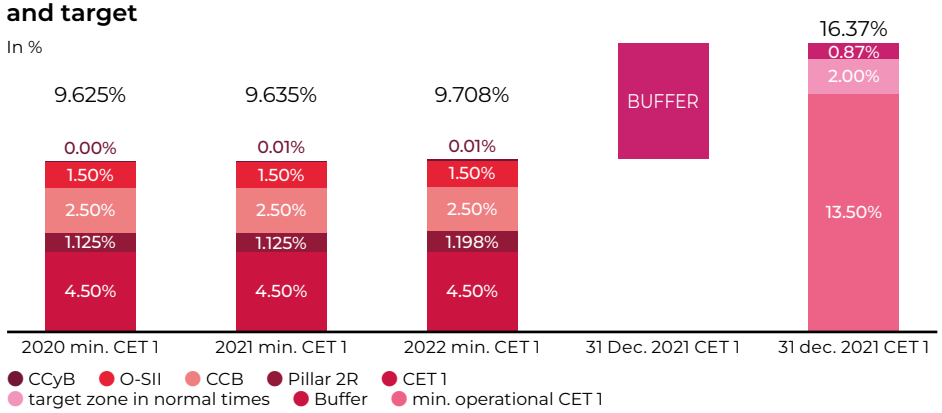
At the end of 2020 the ECB informed Belfius that the ECB is not issuing a SREP decision for the 2020 Supervisory Review and Evaluation Process cycle and that the previous '2019 SREP Decision' from the end of 2019 and its amendments remains into force. As a result, Belfius had to comply with a minimum CET 1 ratio of 9.625% for 2020.

For 2021, Belfius must comply with a minimum CET 1 ratio of 9.635%, which is composed of:

- a Pillar 1 minimum of 4.5%;
- a Pillar 2 Requirement (P2R) of 1.125% (after split of 2% P2R);
- a capital conservation buffer (CCB) of 2.5%;
- a buffer for (other) domestic systemically important institutions (O-SII buffer) of 1.5%;and
- a total countercyclical capital buffer of 0,01%.

Belfius'minimum CET 1 requirements vs. Belfius' 2021CET 1 capital position and target

Belfius'minimum CET 1 requirements vs. Belfius' 2021 CET 1 capital position and target



The countercyclical capital buffer requirement for Belfius increased to 1 bp in June 2021, relating to Belfius' very limited exposures under the countercyclical buffer requirements of Luxembourg.

Further details on the countercyclical buffer are provided in the Risk report annex (Tables CCyB1 and CCyB2).

The ECB has also confirmed the Pillar 2 Guidance (P2G) for Belfius of 1% CET 1 ratio for 2021, setting the minimum requirement at 10.635%.

The consolidated CET 1-ratio of Belfius at the end of 2021 stood at 16.37%, well above the 2021 applicable SREP CET 1 capital requirement mentioned above.

Further to these regulatory requirements, Belfius stated in its Risk Appetite Framework that, in normal market circumstances and under stable regulations, it would strive to respect a minimum operational CET 1 ratio of 13.5%, on solo and consolidated levels.

As a result of the annual "Supervisory Review and Evaluation Process" (SREP) finalised by the ECB at the beginning of 2022, Belfius has to comply for 2022 with a minimum CET 1-ratio of 9.708% (including the countercyclical capital buffer), composed of:

- a Pillar 1 minimum of 4.5%;
- a Pillar 2 Requirement (P2R) of 1.198% (after split of 2.13% P2R);
- a capital conservation buffer (CCB) of 2.5%;
- a O-SII buffer of 1.5% and
- a countercyclical capital buffer (CCyB) of 0.01%

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. The P2R total capital buffer of 2.13% can be split into

- 1,198% to meet CET 1 instruments,
- 0,399% to meet Additional Tier 1 instruments and
- 0.533% to meet Tier 2 instruments.

The increase of P2R from 2% to 2,13% is due to a temporary add-on to complete the coverage of Non Performing Exposures (NPE) which is expected to be achieved over the medium term. On 31 December 2020, Belfius' adjusted amount with respect to the coverage expectations amounts to EUR 76 million (or 0,13% add-on). This recommendation is only applicable to the identified NPE stock on 31 March 2018. To reduce this temporary add-on, measures will be taken by Belfius:

- the sale of NPE assets (write-off/sale),
- the increase of specific provisions and
- the deduction for NPE insufficient loss coverage from CET 1 capital.

Note that the ECB also notified Belfius of a Pillar 2 Guidance (P2G) of 0.75% CET 1 ratio for 2022, a recommended buffer to be held over the minimum requirements set out above, resulting in a minimum CET 1 ratio of 10.458%.

The decrease of the P2G from 1% to 0.75% results from the enhanced resilience of Belfius as highlighted by the recent EBA Stress test published in July 2021.

III.1.1.2 Applied methodology

Following the amendments of CRR 2 article 473a in 2020, Belfius requested and was granted by the ECB the application of transitional measures for the first-time adoption impact and all subsequent impacts of IFRS 9 on the expected credit loss model from 31 December 2020.

As a result, the solvency metrics of 2021 are referenced as "transitional" for both the CET 1 capital and the risk exposure amounts.

The regulator authorised Belfius to apply article 49 of the CRR 2 and to monitor and report solvency within the prudential scope, where Belfius Insurance is accounted for using the equity method (i.e. not fully consolidated), and to include the capital instruments of Belfius Insurance, subscribed by Belfius Bank, in the total regulatory risk exposure by applying a weighting of 370% (the so-called "Danish Compromise"). Following a modification to article 18 in the CRR 2 regulations, Belfius notified the ECB that, from 4Q 2020, the IFRS equity value of Belfius Insurance would be recognised in the prudential accounts. This modification resulted in a higher CET 1 capital, partially offset by higher risk exposure amounts – or an impact of +40 bps on the CET 1 ratio.

In addition to the CRR 2/CRD 5 regulations, Belfius is considered as a financial conglomerate with significant banking and insurance activities and is required to comply with the Financial Conglomerate Directive (FICO 2002/87/EC). For this purpose, specific reporting requirements with financial statements, regulatory capital, risk concentration and leverage ratio are sent to the regulator. These calculations and reports are made on the consolidated position of the bank and insurance group.

At the end of 2021, Belfius complied with all requirements requested from a financial conglomerate point of view.

III.1.2. Regulatory own funds

CET 1 capital amounted to EUR 10,658 million, compared with EUR 10,150 million at the end of 2020. The increase in CET 1 capital of EUR 508 million resulted mainly from the increase in regulatory core own funds by EUR 745 million partially offset by the increased correction for foreseeable dividend for EUR 162 million (based on a 40% pay-out ratio) and the decreased add-back of IFRS9 provisions thanks to the transitional arrangements stated in the CRR for EUR 106 million.

The transitional measures regarding the first-time adoption impact and all subsequent impacts of IFRS 9 on expected credit losses (Covid-19-related relaxation) amounted to EUR 306 million. As of 31 December 2020, Belfius is allowed to apply transitional measures to add back to its prudential CET 1 capital a portion of the increase of IFRS 9 expected credit loss provisions for the static component (relating to the FTA IFRS 9 on 1 January 2018) and the dynamic components (from 1 January 2018 until 31 December 2021), with the adjusted phasing-in timetable. These transitional arrangements will be applied untill 31 December 2024 at the latest. The transitional arrangements decreased with EUR 106 million in 2021 due to the degressive character of the transitional measures and the decrease of the stock of IFRS 9 impairments.

The increase in the "gains and losses not recognised in the statement of income" of EUR 16 million stemmed from the remeasurement of defined benefit plans of EUR 63 million mainly due to the effect of a higher discount rate, offset by the decrease in the revaluation of the portfolios of debt and equity instruments of EUR 47 million, mainly related to the Belfius Insurance portfolios, following negative fair value adjustments on bonds due to higher interest rates.

The deductions and prudential filters decreased by EUR 15 million mainly following

- a decrease in the deduction of software and other intangible assets of EUR 20 million related to accelerated depreciations and recently activated software eligible for prudential amortization,
- a decreased prudential filter for regulatory additional valuation adjustments of EUR 12 million due to changes in model risk, offset by the end of Covid-19 related regulatory relaxation measures, partially offset by
- the deduction of Defined Contribution pension plan assets for EUR 15 million due to the evolution of the plan assets and the discount rate. Note that the deduction of insufficient loss coverage for Non Performing Exposures amounts to EUR 0,3 million, this highlights the fact that the provisions are in line with the expectations set out in the NPE loss coverage regulation (CRR2). The deductions for goodwill and irrevocable payment commitment (IPC) with regard to resolution funds remained stable.

Note that the significant and non-significant investments in own funds instruments of financial entities and the stock of temporary differences in the not recognized deferred tax assets remain below the thresholds for deduction of the regulatory own funds and are included in the credit risk exposure amount.

Tier 1 capital amounted to EUR 11,155 million, compared with EUR 10,647 million at the end of 2020 as it includes the additional Tier 1 issue of EUR 500 million (nominal value) dated February 2018.

Tier 2 capital increased to EUR 1,752 million compared with EUR 1,433 million at the end of 2020. The increase of EUR 319 million was mainly related to the increase of EUR 375 million of the regulatory value of Tier 2 capital instruments following the issuance of fixed rate Tier 2 subordinated notes (EUR 497 million) and the decreased regulatory value of existing Tier 2 capital instruments (EUR 122 million), partially offset by the decreases related to the lower excess of provisions in comparison to expected losses for IRB portfolios due to methodological changes (EUR 43 million) and the lower general credit risk adjustment Standard Approach (EUR 13 million).

The composition of capital is detailed further in the Risk report annex (Tables CC1 and CC2).

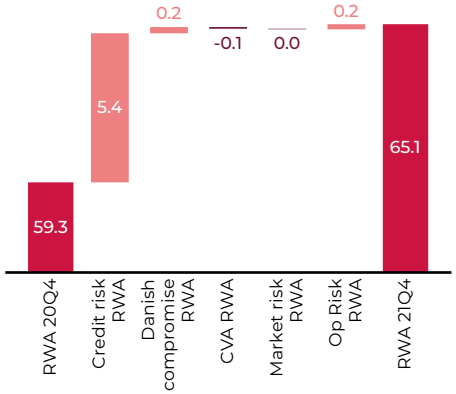
The main characteristics of the additional Tier 1 and Tier 2 instruments are detailed further in the Risk report annex (Table CCA)

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

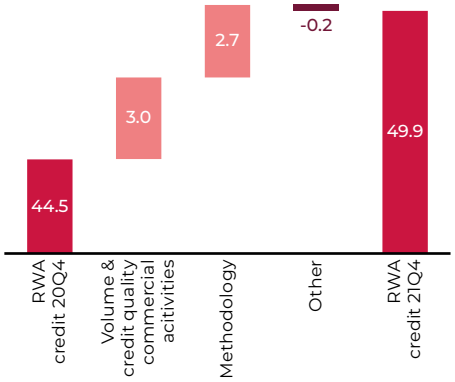
III.2. Capital requirements by type of risk

Total Risk Weighted Assets (RWA) 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 elsewhere on in this report (section IV, V & VII). The risk exposure amount also stems from the Danish Compromise, whereby the capital instruments issued by Belfius Insurance and held by Belfius Bank are included in the RWA via a weighting of 370%.

RWA evolution by type of risk



Drivers RWA credit



At the end of 2021, Belfius RWA amounted to EUR 65,095 million, an increase of EUR 5,786 million compared with EUR 59,309 million at the end of 2020.

The credit risk exposure amount including counterparty credit risk increased by EUR 5,439 million to EUR 49,998 million due to:

- **strong growth in commercial activities** (EUR +3,0 billion). Note that credit quality indicators remained good all year through showing the resilience of retail and corporates segments to the Covid 19 crisis.
- **more stringent regulatory environment** (EUR +2,7billion) with TRIM decisions affecting the large corporates and banks models and with the implementation of CRR 2 regulation,
- **de-risking**: a slight decrease on **Group Center** (EUR -0.2 billion) - excluding regulatory effects – mainly due to the unwind of an important run-off transaction at the end of the year.

The RWA for the Danish Compromise increased by EUR 232 million to EUR 9,623 million, due mainly to the to an increase of the equity value of Belfius Insurance.

The CVA RWA decreased by EUR 61 million to EUR 679 million thanks to decreasing exposures.

The market risk RWA decreased by 11 million over the year. Covid related volatile interest rate scenarios of 2020 disappeared from the historical window calculation but were replaced by new severe scenario in October generating an equivalent VaR/SVaR average increase.

Operational RWA increased (EUR +188 million) over the period, in line with the increase in income.

Further details are provided in the Risk report annex (Tables OV1, INS1, INS2, MR1, MR2, MR3, CCR2, OR1).

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 2021, CET 1-ratio amounted to 16.37%, a decrease of 74 bps compared with the end of 2020. Note that this transitional CET 1-ratio takes into account the transitional IFRS9 measures with impacts on prudential capital and risk exposure for +51 bps, a decrease by 24 bps compared with the end of 2020

The decrease in CET 1-ratio is the result of positive effects from higher CET 1 capital (+86 bps) offset by the negative effects from the higher total risk exposure (-160 bps).

At the end of 2021, Tier 1 capital ratio amounted to 17.14%, a decrease of 82 bps compared with the end of 2020.

The total capital ratio amounted to 19.83%, a decrease of 54 bps compared with the end of 2020.

Note that without the application of the IFRS9 transitional measures, the fully loaded CET 1-ratio would amount to 15.86%, the Tier 1 capital ratio amount to 16.63% and the Total Capital ratio would decrease by 52 bps amounting to 19.31%.

Applying the “Danish Compromise” compared with the deduction method for capital instruments of Belfius Insurance (equity deducted from CET 1 capital and subordinated debt instruments deducted from Tier 2 capital) would have the following impacts: an increase of 20 bps of the CET 1-ratio and a decrease of 32 bps of the Total Capital ratio

Further details are provided in the Risk report annex (Table IFRS9).

III.3.1.2. Leverage ratios on consolidated level

The leverage requirement is as from June 2021, a binding CRR 2 requirement, The CRR 2 integrated the leverage ratio in the Pillar I requirement and set the level of minimum requirement at 3%, a surcharge has also been fixed by the EBA for G-SIB with a mandate to analyse whether some O-SIB (like Belfius) should be given the same or similar additional 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, where Belfius Insurance is accounted for using the equity method.

Furthermore, the application of transitional measures for IFRS9 provisions from December 2020 has an impact on the numerator (see above) and the denominator, the Covid-19-related regulatory measure to temporarily exclude certain exposures to central banks from June 2020 has an impact on the denominator.

The risk of excessive leverage is managed through the Financial Plan process. The leverage ratio as defined in the CRR 2 is further an integrated part of the Risk appetite framework for which internal limits and targets are set which is validated by the Board of Directors. The risk of excessive leverage is included in the Belfius reporting and control processes and is monitored regularly. Any important deviation and/or prudential changes in the leverage ratio is reported to the appropriate committees for management actions.

At the end of 2021, the Belfius transitional leverage ratio stood at 7.13%, an increase of 28 bps compared with the end of 2020 and well above the minimum pillar 1 requirement of 3%, applicable from June 2021 onwards.

The increase is the result of positive effects (+33 bps) from the higher level of Tier 1 capital (see above), offset by a limited negative effect (-5 bps) from the increased total leverage exposure measure, mainly from higher volumes of loans to corporates and mortgage loans, partially offset by a decrease in securities financing transactions exposures due to decreased off balance commitments and by the temporary Covid-19 related relaxation measures allowing banks to partially exclude certain Central Bank exposures .

Without the temporary partial exclusion of certain Central Bank exposures the transitional leverage ratio would decrease by 120 bps.

Please note that the fully phased-in leverage ratio, excluding the transitional measures for IFRS9 provisions but including the temporary partial exclusion of certain Central Bank exposures would decrease by 18 bps.

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 28 January 2021, the NBB notified Belfius that going forward it is to execute the SRB MREL instruction regarding the minimum requirement own funds and eligible liabilities at the consolidated level of Belfius Bank under BRRD2. For Belfius Bank, the MREL requirement on a consolidated basis is set at 22.87% of Total Risk Exposure Amount (TREA) and 6.84% of Leverage Ratio Exposure (LRE).

Belfius Bank must meet the target no later than 1 January 2024 and must provide for a linear build-up of equity and eligible liabilities towards the requirement. The SRB also determined an intermediate target of 22.37% of TREA and 6.84% of LRE which must be met by 1 January 2022.

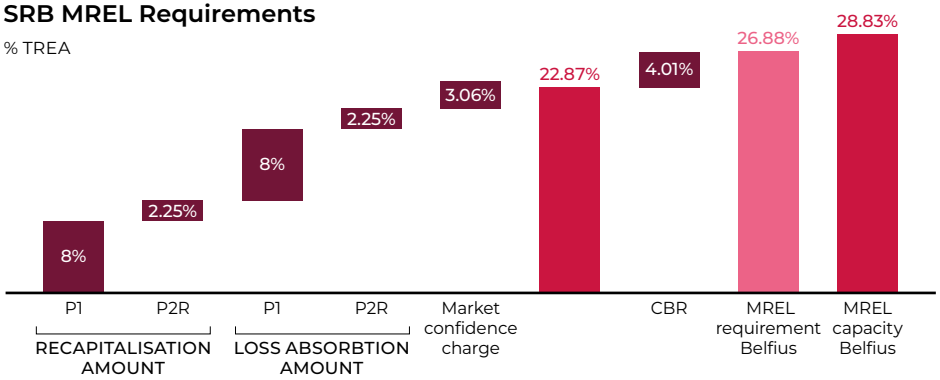
The SRB MREL instruction also provides for a subordination requirement: Belfius Bank must meet at least 15.25% of TREA and 6.84% of LRE by means of subordinated MREL. Own funds used to meet the combined buffer requirement (CBR) set out in Directive 2013/36/EU (at 4,01% of TREA for Belfius currently) are not eligible to meet the requirements expressed in TREA. Belfius Bank must comply with this subordination requirement by 1 January 2024, subject to an intermediate target of 15.25% of TREA and 6.84% of LRE by 1 January 2022.

With the annual review of MREL requirements by SRB, Belfius currently estimates that its MREL subordination requirement could be lowered from 2024 onwards, to 13.5% of TREA (or 17.51% of TREA including current CBR requirement), based on forward looking assessment of the formula applied by SRB.

Belfius already meets its expected BRRD2 MREL requirements end 2021. Indeed, expressed in TREA, Belfius MREL of EUR 18.8 billion amounts 28.83% to be compared with 26.88% of the 2024 final binding target (including a CBR of 4.01%).

In the same way, Belfius MREL subordination of EUR 15.0 billion amounts 23.1% to be compared with EUR 19.26% of the binding target (including a CBR of 4.01%). Expressed in LRE, Belfius MREL subordination of 9.6% stands in excess of 6.84% MREL requirement.

SRB MREL Requirements



Further details are provided in the Risk report annex (Table KM2)

III.3.2. Belfius Insurance

III.3.2.1. Prudential supervision

Belfius Insurance reports to its regulator, the NBB. Inter alia, 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.

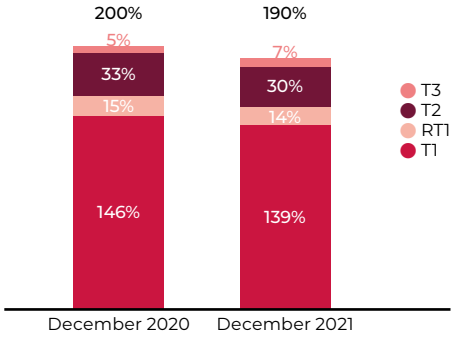
III.3.2.2. Regulatory own funds

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 after foreseeable dividend of Belfius Insurance amounted to EUR 2,314 million at the end of December 2020. It was 81% composed of the highest quality capital Tier 1. Tier 2 capital equals EUR 364 million and consists mainly of two subordinated loans granted by Belfius Bank and the Tier 3 capital relates to a deferred tax asset of EUR 80 million. At the end of 2021, one of the subordinated loans was redeemed on the early prepayment date and replaced by a new subordinated Tier 2 loan for the same nominal amount of EUR 100 million.

Available Financial Resources and Solvency Capital requirement

	31/12/2020	31/12/2021
Tier 1 after forseeable dividend	1.646	1.700
Restricted Tier 1	171	170
Tier 2	375	364
Tier 3	58	80
AFR after forseeable dividend	2.250	2.314
SCR	1.125	1.219



Compared to December 2020, the regulatory own funds of Belfius Insurance have increased by EUR 64 million, even after a foreseeable dividend of EUR 130 million, thanks to the good performance of the financial markets in 2021 which was partially offset by some refinements on models and assumptions on the liability side. Further, Belins Insurance noted an increase of the deferred tax assets which are defined as component of the regulatory own funds.

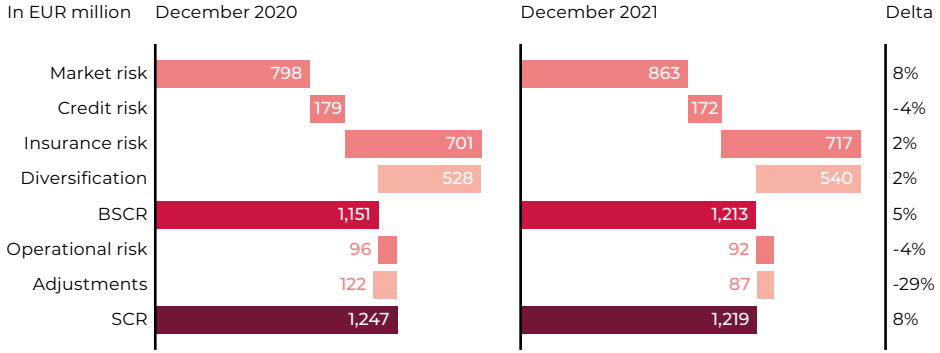
III.3.2.3. Solvency requirement

The Solvency II Capital Requirement (SCR) is calculated on the base of 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. In its SCR, Belfius Insurance has to apply the restriction on the use of Loss Absorbing Capacity of Deferred Taxes as prescribed by the NBB.

Belfius Insurance's SCR amounted to EUR 1,219 million at the end of December 2021, an increase of EUR 94 million compared to the end of 2020.

Decomposition of Solvency Capital Requirement



Loss absorbing capacity of technical provisions and deferred taxes

Market risk remains the main contributor to the required capital, due to spread and equity risk, and increased given the good performance of the financial markets. The SCR linked to interest rate risk was rather limited thanks to the ALM management of Belfius Insurance, targeting a limited global duration mismatch between assets and liabilities. A further increase in deferred tax assets, lowered the positive effect related to the use of the Loss Absorbing Capacity of Deferred Taxes in the SCR calculation.

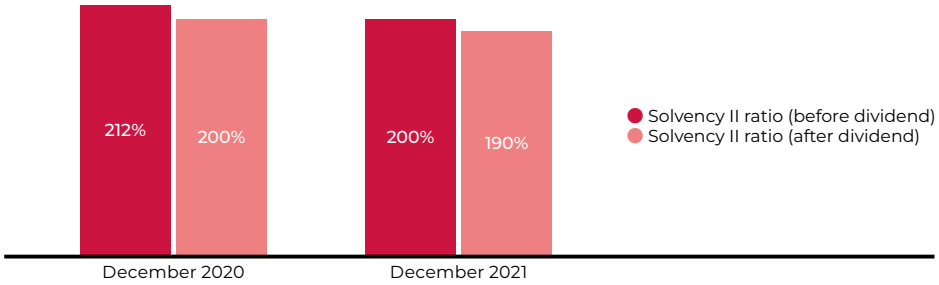
III.3.2.4. Solvency ratios at Belfius Insurance

The Solvency II ratio of Belfius Insurance stood at 200% at the end of December 2021, and after dividend we end at 190%. It dropped slightly compared to last year, given that the increase in SCR was not fully offset by a similar proportionate increase in AFR including a foreseeable dividend of EUR 130 million.

Given the comfortable level of our own funds, the Board of Directors of Belfius Insurance proposed to the General Assembly to pay a dividend over FY 2021 equal to EUR 130 million and to maintain the remaining of the profit to be allocated in retained earnings. The dividend pay-out following the contractual profit allocation amounting to EUR 4.6 million has been foreseen.

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 at a solo and a consolidated level.

Solvency II ratio



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 estimated and a number of sensitivity analyses are performed. In these analyses Belfius Insurance still has the appropriate capital margins required to absorb shocks, as stated in the Risk Appetite Framework approved by the Board of Directors.

A 50 bps fall in the interest level (compared with the level at the end of 2021) would have an impact of +5pp on the Solvency II ratio. A stock market shock of -30% on share prices would have an impact of -5 pp while a drop in the real estate portfolio of 15% would decrease the solvency ratio by -8 pp. A 50 bps rise in credit spreads across the whole bond and credit portfolio leads to a drop of -23 pp and the elimination of the Volatility Adjustment in calculation of the Best Estimate of liabilities would result in an impact of -4 pp. The reduction of the Ultimate Forward rate (UFR) from the current level of 3.75% to a level of for instance 3% would decrease the solvency ratio by -5 pp.

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 2021-2025. 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's) 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), 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,...).

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 reviewed and updated 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.

In 2021, RAF has been deployed in main subsidiaries, thereby allowing for increased consistency throughout the group and close monitoring of the risk profile by the Group Financial Conglomerate Review Committee.

Next to the quantitative part, qualitative statements consisting of guiding rules aiming to define the risk appetite that cannot be expressed through quantitative ratios are imbedded in the RAF.

The Risk Appetite Framework (RAF) has been updated and approved by the Board of Directors in December 2021. The updated RAF includes the introduction of new indicators allowing to better capture the risk related to a.o. ESG, outsourcing, projects and resources, the refinement of several indicators focusing on the safeguard of the current sound credit quality and portfolio diversification as well as the application of several accompanying management actions enhancing the steering towards a sustainable balance sheet and limiting P&L volatility.

III.3.3.2. Economic Capital

III.3.3.2.1. Definition

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 2021).

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.

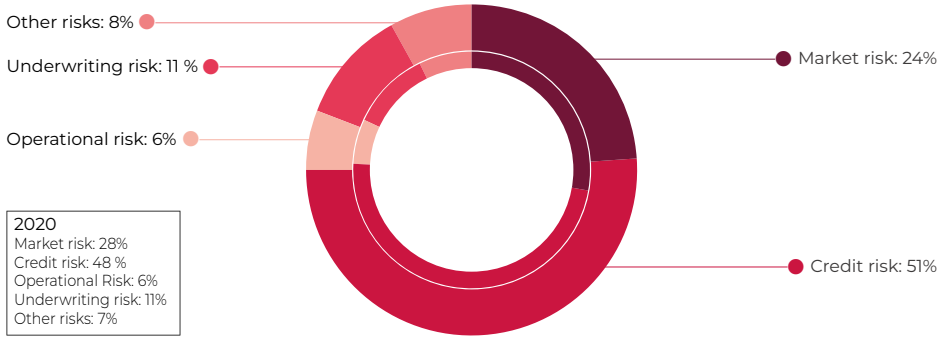
Most risks are capitalised based on measuring the unexpected loss. However, if alternative management techniques (limits, other buffers than capital, governance) are considered more appropriate to cover them, some risks are not capitalised.

The economic capital is central in the context of Belfius' risk appetite and is also complementary to the Stress Tests framework for Internal Capital Adequacy Assessment Process (ICAAP) purposes. It is also involved in pricing as well as in the assessment of Belfius' profitability.

III.3.3.2.2. Economic Capital Adequacy

The Management Board 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 monitors the (regulatory and economic) ratios, limits and triggers.

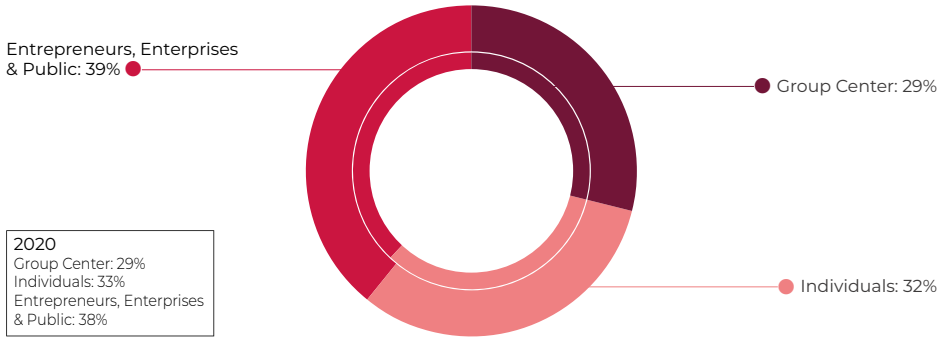
Breakdown of economic capital by type of risk (Outside 2021 – Inside 2020)



Belfius economic capital was EUR 5,709 million at the end of December 2021 (against EUR 5,579 million at the end of 2020).

Credit risk represented approximately 51% of the economic capital and was the main contributor; market risk (including interest rate risk, foreign-exchange rate risk, spread risk and equity risk) was 24%, underwriting risk 11%, operational risk 6% and other risks (prepayment, funding, etc.) 8%.

Breakdown of economic capital by business line (Outside 2021 – Inside 2020)



By business line, the economic capital was allocated as follows: Individuals and Entrepreneurs, Enterprises & Public represented 32% and 39% respectively of Belfius' economic capital; the balance was made up of 29% allocated to the Group Center (mainly for the Belfius' general balance sheet management in terms of interest and funding risks, including the bonds investment portfolios and for the portfolios of derivatives and run off credit guarantees).

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 took part in the 2021 EU-wide stress test conducted by the European Banking Authority (EBA) on a sample of 50 EU banks covering roughly 70% of total banking sector assets in the EU and Norway. Aim of these stress tests was to assess the resilience of the banks when confronted with a severe economic and financial / non-financial stress. It once again confirmed Belfius' strong financial solidity and resilience :in an extremely severe adverse scenario, Belfius would be able to limit the decline in its fully loaded CET 1 ratio to 2.70%. This is less than the impact of all previous stress tests in which Belfius has participated (2.96% in the previous stress test of 2018). Starting from a strong CET 1 fully-loaded ratio of 16.36% as at January 1st, 2021 (corresponding to a CET 1 ratio of 17.11% on a transitional IFRS9 basis), Belfius has a high CET 1 fully-loaded ratio of 13.66% at the end of the stress period (corresponding to a CET 1 ratio of 14.02% on a transitional IFRS9 basis). The outcome also compares favorably to the average of the participating banks and confirms the strong solvency position of Belfius and its solid resilience in adverse scenarios.

Belfius performed an internal stress testing programme with its financial Plan 2021-2025. The Bank developed a set of alternative and severe macroeconomic scenarios designed to anticipate different possible macroeconomic evolution for the next 5 years (a.o. for inflation, interest rates, GDP growth, stock markets, bond prices evolution, customer behaviour ...) 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 the 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 tests.

III.3.3.2.4. Recovery plan

An update of Belfius Recovery Plan has been submitted to the ECB during the second half of 2021. 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 the macroeconomic environment.

In 2021, the focus was put on developing two stress scenarios related to the possible economic and financial fall-out of the Covid-19 pandemic, one of which was a system-wide scenario and the other included an idiosyncratic element. The recovery plan demonstrates that Belfius benefits from strong recovery options. In extreme scenarios, the bank has enough measures at its disposal to restore solvency and LCR liquidity ratios within one year.

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 a 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

During the first 3 quarters of 2021, a material macro-economic recovery was observed, supported by the public support measures against Covid-19, with extensive economic stimuli and a broad vaccination campaign. In the last quarter however, a 4th Covid-contamination wave and the appearance of a new Covid-Variant led again to a negative trend in the pandemic indicators and new safety measures.

The Belfius loan portfolios - under continuous and strengthened monitoring processes - showed a strong resilience with few signs of deteriorating credit quality, a limited default and bankruptcy inflow and a normalization of the rating levels.

The formerly anticipated impact of the pandemic on the Belfius' loan books, with substantial increased IFRS 9 provisions in 2020, did not materialize. At the end of 2021, the Covid-provisioning methodology was re-assessed in the perspective of the contrasting evolutions: the observed economic recovery, the economic hiccups that could occur during the recovery, the short and medium term effects of the 4th Covid Wave, the level of resilience of the Belfius portfolio,... As a consequence, the Covid-buffer, constituted in 2020 for an amount of EUR 331 million evolved to EUR 216 million, still presenting a buffer for second round Covid effects. Indeed, going forward, new economic concerns turned up: the potential disruption of supply chains, the scarcity of resources and labor capacity, soaring energy prices, peaking inflation forecasts and geopolitical tensions require close monitoring.

With the yearly review of the Risk Appetite Framework, new credit risk indicators were introduced and other indicators have been refined to safeguard the current sound credit quality and sufficient portfolio diversification.

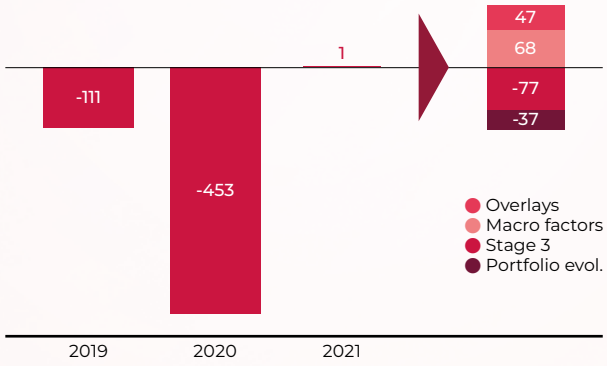
The IRBA redesign program started in 2020 was further rolled-out, with the development of new Pillar 1 models, under review by the supervisors.

Definition

Credit risk is defined as, on the one hand, the possibility that a bank's borrower or counterparty will fail to meet its obligations (in the form of non-payment or non-performance) in accordance with the agreed terms, also called the payment default risk, and on the other hand, the possibility that the bank will not be able to recover its outstanding debt by means of the collateral that is linked to the debt, i.e. the risk of non-recovery.

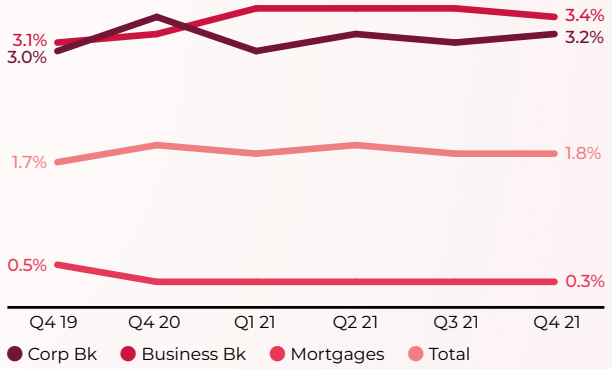
Evolution Cost of Risk

In EUR Million



NPL ratios

In %



IV.1. Fundamentals of credit risk in 2021

Since the start of the Covid-19 pandemic, major concerns grew with respect to the impact of the pandemic on the macroeconomic situation, that could lead to a substantial increase of the credit risk level in the loan portfolios. However, in the course of 2021, the rebound of the Belgian and European economies proved faster than initially expected.

At the level of the Belfius loan portfolios, so far, very few signs of deterioration of the credit quality have been detected, which is evidenced by a limited inflow of defaults, a normalization of the rating downgrades and a very high pick-up rate on the moratoria loans which have matured.

This resilience and the relatively quick rebound were favored by a series of well-targeted fiscal and social policy measures taken by the different governments, a very accommodative monetary policy and support measures from the banking system. The most important of them (payment moratoria for mortgages, business and corporate loans and a state-guaranteed loan mechanism) have expired on 30 June, 2021 after several extensions.

Combined with the emergence of new Covid-19 variants (with the risk of (local) lockdowns and renewed restrictions on mobility), the difficulty for companies to attract new staff and the increasing supply chain bottlenecks, the rising input costs in several sectors (wholesale, construction, manufacturing and agriculture sectors) and a general inflationary pressure (e.g. energy costs) call for vigilance with respect to the second round effects of the Covid-crisis. The effects on consumer demand, the disruptions of trade flows and productions chains require close monitoring.

In this context of remaining uncertainties, with favourable social and economic perspectives on the one hand and continued vigilance for second order economic effects of the pandemic on the other hand, Belfius has updated its economic forecasts and reviewed the Covid-19 specific provisioning approach that was developed in 2020 to absorb potential risks, related to Covid-19 sensitive sectors or less resilient companies/customers.

Simultaneously, Belfius further strengthened its credit risk management process: the best practices identified during the detailed screening of the loan portfolios in 2020 for Covid-19 sensitivities have been structurally embedded into the risk-based monitoring framework, through a joint effort by the Risk management teams, customer data, the loan department and the front offices. In addition, Belfius continues to reassess the credit standards at origination for the mortgage portfolio, in line with the expectations of the National Bank of Belgium.

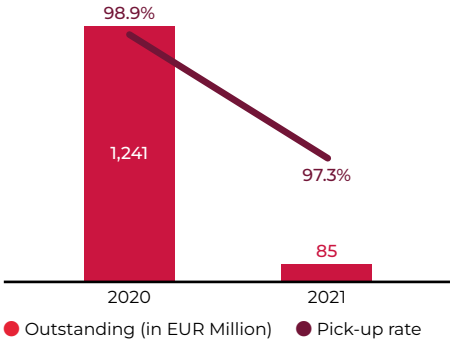
IV.1.1. Measures in Covid-19 crisis to support the Belgian Society

When it became clear at the end of 2020 that the pandemic would last longer than expected, the payment holiday and State Guarantee mechanisms to support individuals, self-employed and businesses affected by the Covid-19 crisis were extended to the first half 2021. These extensions have been rolled out first until end of March and ultimately to the end of June and were subject to specific viability criteria. However, the extensions which exceeded a maximum deferral period of nine months could not enjoy the flexible EBA guidance on forbearance measures. An extensive description of the measures under each of these two support mechanisms is available in the section IV.1.1 of the 2020 Belfius Risk Report.

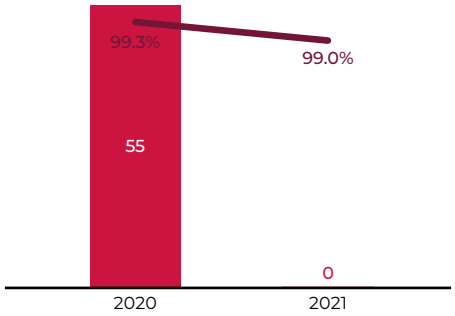
During 2020, the moratoria mechanism for companies and households was extensively used, but with the re-opening of most of the economy activities towards the end of 2020, extensions were far less requested in the first half of 2021 (2,1% of outstanding loans for companies by the end of April 2021 compared to 13% in September 2020 and 0,4% for households compared to 6%). At the end of 2021, we have returned to a more normalized level of payment deferral with only a very limited stock of remaining Covid-related payment deferrals (<0,25%), mainly for companies in sectors still affected like catering and hotels (horeca) and events.

More than 97% of corporate and business loans for which the moratoria came to an end have resumed their normal payments of formerly deferred amounts. For the mortgage loans, more than 99% of the clients have resumed their payments. 100% in the public sector.

Moratoria – Evolution E&E



Moratoria – Evolution mortgages



With respect to the State Guarantee mechanisms, as of end 2021, Belfius has respectively EUR 3.6 million and EUR 82 million of outstanding loans under the first and second state guarantee mechanisms.

In addition to the existing risk monitoring before the crisis and as part of the management of the Covid-19 situation, Belfius has put in place a robust risk mitigation strategy with specific action plans, reporting and monitoring activities. These activities have been further strengthened in 2021 to allow Belfius to periodically screen portfolios for Covid-19 impact and to mitigate risks.

IV.1.2. Cost of Risk in 2021

IV.1.2.1. IFRS 9 impairment methodology at Belfius

Reference is made to the Appendix IX.1.4. Risk Report 2019 for a full description of the Belfius process to compute IFRS 9 expected credit losses (ECL).

The basic principles of the process to compute IFRS 9 expected credit losses (ECL) are as follows:

- Belfius Bank and its subsidiaries recognise loss allowances for ECL on financial instruments at amortized cost or at fair value through Other Comprehensive Income (OCI).
- ECL are measured through a loss allowance that depends on the financial instrument's status:
  - for **performing exposures** (i.e. instruments that have not incurred a significant increase in credit risk since origination), referred to as stage 1, a 12-month ECL is calculated;
  - for **underperforming exposures** (i.e. instruments that have incurred a significant increase in credit risk since origination), referred to as stage 2, Lifetime ECL are calculated;
  - **non-performing exposures** (i.e. exposures that become credit-impaired), are classified in stage 3 and the ECL reflect the remaining exposure after a best-estimate of future recoveries.
- ECL are **probability-weighted estimates of credit losses**. 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.
  ECL calculations use probability of default (PD) and loss given default (LGD) parameters. Point-in-time PDs are used that inter alia incorporate **forward-looking macroeconomic information** through the use of four different macroeconomic scenarios. These scenarios are built upon internal information delivered by the Belfius Research department, who uses external and internal information to generate a forecast "neutral" scenario of relevant economic variables along with a representative range of other possible forecast scenarios. The external information includes economic data and forecasts published by governmental bodies and monetary authorities.
- Belfius assigns probabilities to the four forecast scenarios (neutral, optimistic, pessimistic and stress) and makes the link between macroeconomic variables and credit risk and credit losses through identified and documented relationships between key drivers of credit risk and credit losses for each portfolio of financial instruments on the one hand and statistical analysis of historical data on the other hand.

Covid-19 adjustments to the impairment methodology

In this context, Belfius' basic principles for ECL computations have remained largely unchanged. However some material adjustments to the afore-mentioned approach were required in order to maintain adequate coverage ratios on potential risks in the Covid-19 sensitive parts of the portfolio

- Expected credit loss calculations are based on a long-term average (2009-2022) for all the relevant macroeconomic factors, with a backward and a forward-looking approach.

To calculate ECL, Belfius still defines four probability weighted forward-looking scenarios each with their own macroeconomic parameters to build optimistic, neutral, pessimistic and stress cases. Yet, the scenarios have been adapted to the Covid-19 related environment.

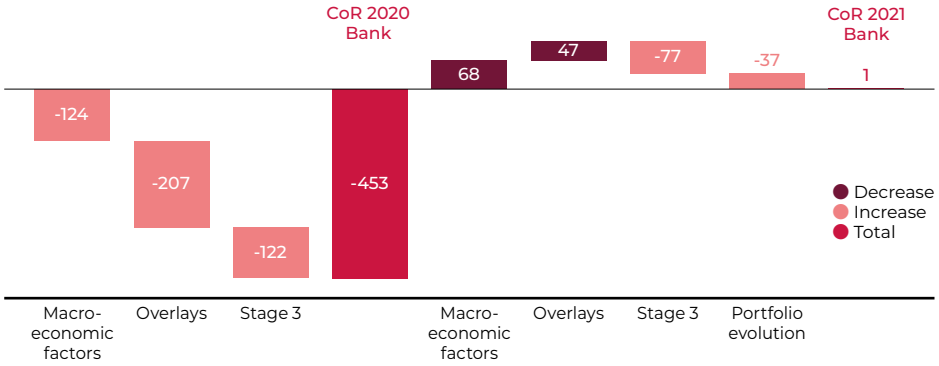
- Counteractive dampening measures have been implemented by national and regulatory authorities. These have been included in the ECL calculations. They refer, inter alia:

- to changes to avoid, to some extent, pro-cyclicality in ECL calculations by giving a greater weight to long-term normalized outlook evidenced by past experience when estimating long-term ECL (giving weight to through-the-cycle approach);
- to account for moratoria and guarantee schemes: regulatory guidance was given with respect to the treatment of exposures covered by public and private moratoria related to Covid-19, both from a prudential (forbearance as unlikely-to-pay classification) and an accounting perspective (as an indication of significantly increased credit risk).

Given that ECL estimations are complex and to a certain extent judgmental, the afore-mentioned mechanical approach is completed by management judgment through "management call" layers as authorised by the IFRS9 accounting references. These layers can be positive or negative and aim to include any elements entering in the ECL calculation which have not been taken into account by the mechanical computation on an individual level or a (sub)portfolio level. These layers have been reinforced to account for the nature and heterogenous impacts of the Covid-19 crisis on Belfius' portfolio.

IV.1.2.2. Drivers of the cost of risk in 2021

In the Covid-19 perspective, the cost of risk is built according to a waterfall principle:



- the provisions for stage 1 and 2 are calculated in a mechanical mode, based on a view on the macroeconomic conditions (past and future) (**pillar 1**);
- if Belfius considers that certain risk pockets, defined in terms of sectors or groups of companies, are not sufficiently covered by the mechanical provisions, certain expert overlays are added (**pillar 2**);
- if, additionally, expert analyses pointing to counterparts with a potentially increased credit risk, that were not detected by the mechanical approach and not yet classified 'as unlikely to pay', the provisions constituted could be insufficient. For these cases, an individual management adjustment on the expected credit loss in stage 2 is added (**pillar 3**);
- for counterparts in a default status (stage 3), the normal impairment process is run and specific provisions are calculated and booked (**pillar 4**). Provision levels are based on an individual assessment of exposure and collateral.

In 2020, the application of this provisioning logic resulted in a Cost of Risk of EUR 453 million, of which a Covid-19 driven overlay of EUR 331 million was the most significant contributor, to cover for potential credit risk impacts, especially in the Business and Corporate segments.

In 2021, the Cost of Risk 2021 came down to a net reversal of EUR 1 million. Main drivers are the release of the Covid-buffer for an amount of EUR 115 million (mainly reflecting improving macroeconomic conditions (+EUR 68 million) and a re-assessment of the potential Covid-19 effects on the loan portfolio(+ EUR 47 million)) and a still moderate allowance for defaulted loans of EUR 77 million.

More details on the changes in the stock of expected credit losses are provided in the Risk report annex (Table CR2 A).

The expected Covid-19 effects on the overall macroeconomic situation and on the key risk indicators of the Belfius loan portfolio did not (yet) materialize, the vaccination campaign being a key lever for the rebound of the economy. However, new clouds have appeared in the horizon with the appearance of the new Omicron variant resulting in a 4th Covid-19 wave and new restrictions, creating uncertainty about the societal and economic effects.

Second round Covid-19 effects and adverse economic events add to that concern.Belfius keeps a substantial buffer to cover possible second round effects from the pandemic, including the impacts on customers in light of the current surge in energy prices, the effects of higher inflation, the scarcity of resources and labor capacity in several industries, the lifting of remaining support measures and the possible reinstatement of restriction measures in case of resurgence of the pandemic and geopolitical tensions.

Pillar 1: Macroeconomic factors used in 2021

- Belfius' neutral scenario incudes an important rebound for 2021 (Belgian GDP: +5.9%). This rebound is followed by a decreasing growth in 2022 (Belgian GDP: +3.2%) enabled by the vaccination campaign and assuming that no new major lockdown effect is to be expected.
- In terms of unemployment, the neutral scenario implies an unemployment decrease from 9.2% in 2020 to 7.9% in 2021. An improvement to 6.6% in 2022 is forecasted. As in 2020, the 2021 unemployment figure includes the exceptional temporary unemployment that is expected to be, to a certain extent, converted into a structural unemployment.

	GDP (% YoY)		CPI (% YoY)		Unemployment (%)	
	2021 (2Q 21)	**2022** (2Q 21)	**2021** (2Q 21)	**2022** (2Q 21)	**2021** (2Q 21)	**2022** (2Q 21)
Belgium	**5.9** (5.5)	**3.2** (3.3)	**2.2** 1.8	**2.0** (1.4)	**7.9** (7.9)	**6.6** (6.6)
Eurozone	**4.8** (-4.4)	**4.4** (4.0)	**-** -	**-** -	**9.1** (9.1)	**8.5** (8.5)
United States	**5.8** (6.5)	**4.0** (4.0)	**-** -	**-** -	**-** -	**-** -

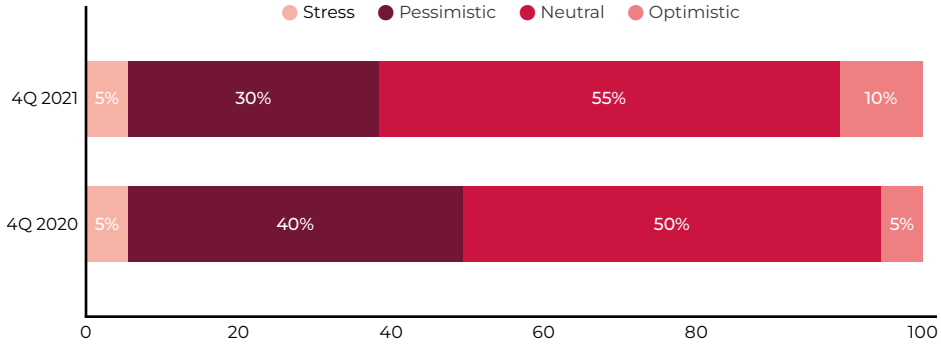
- The neutral case is completed with an optimistic, a pessimistic and a stress scenario. The table below illustrates the Belgian GDP Growth assumptions, as of 4Q 2021, under the four scenarios.

GDP BE (% YoY)

Scenarios	**As of end 2020**	**As of 4Q 2021**	
For year	**2021**	**2021** (2Q 21)	**2022** (2Q 21)
Optimstic	**9,0**	**6,5** (-6,5)	**4,0** (3,9)
Neutral	**3,9**	**5,9** (5,5)	**3,2** (3,3)
Pessimistic	**3,1**	**4,2** (4,2)	**1,3** (2)
Stress	**2,3**	**2,0** (2,0)	**1,4** (1,4)

- A 55% weight has been assigned to the neutral scenario and the weight of the more negative scenarios has been decreased due the observed recovery, bringing the weight of these scenarios to 35% instead of 45% a year earlier. The more optimistic scenario is given a 10% probability against 5% at the end of 2020. These weights were modified in 4Q 2021. These adjustments of the macroeconomic factors, led to a reversal of provision of EUR 68 million.
- This evolution is a reflection of an expected progressive reduction of the uncertainties and a normalisation of the economy towards 2023.

Scenario weights



Sensitivity of the impairment stock stage 1 & 2 to changes in scenario weights

- The following table provides an overview of the stage 1 & 2 impairments sensitivity to the weight of macroeconomic scenarios. The most relevant macroeconomic factors are GDP and Unemployment assuming the current Covid-19 IFRS-9 method is maintained. Note that the sensitivity is not linear and cannot be simply extrapolated.

(In millions of EUR)	**What if 85% optimistic**(1)	**Weighted average scenario 4Q21**	**What if 85% pessimistic**(1)	**What if 85% stress**(1)
Impairment stock stage 1&2	820	895	954	1.048
% change vs WA scenario	-8%	0%	7%	17%
		Optimistic 10% Neutral 55% Pessimistic 30% Stress 5%		

(1) 5% on each of the 3 other scenarios.

Pillar 2 and 3: overlays to cover for certain risk pockets

The Covid-19 adjusted mechanical calculations are completed with expert overlay. The overlay has been reviewed in the course of 2021 to increase provisions on clients with a deteriorated risk profile on the one hand and to reduce provisions on clients with a normalised risk profile on the other hand. The overlay is designed to result in a 'best estimate' total coverage of ECL for specifically identified risk pockets (defined in terms of sectors, groups of companies or individual exposures), where the credit risk is considered as (potentially) insufficiently covered by the mechanical provisions.

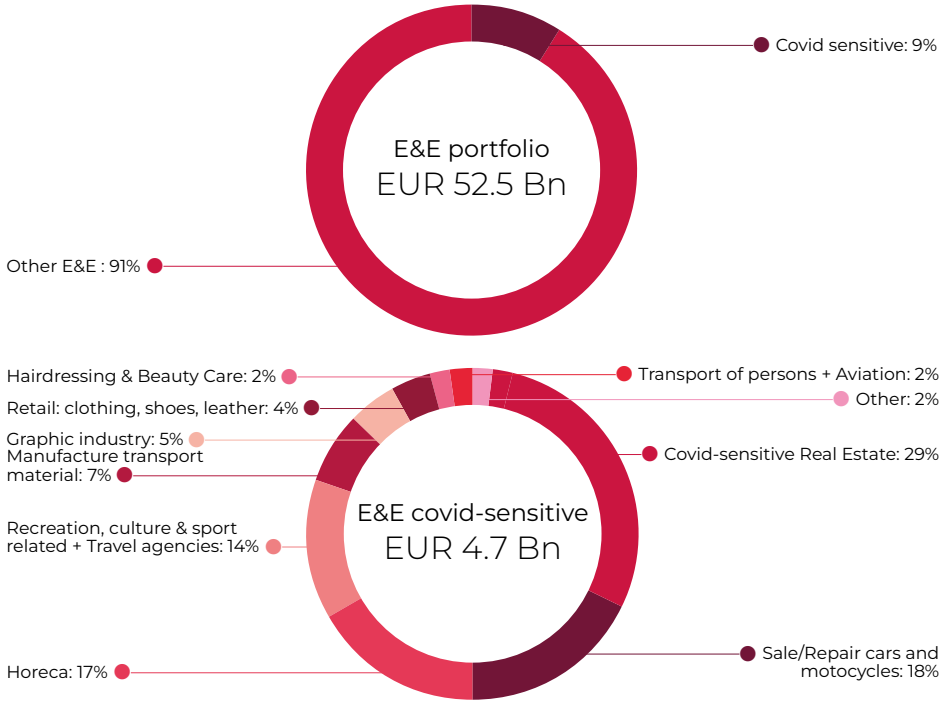
As in 2020, the extensive credit reviews and portfolio assessments fed the formal quarterly impairment process and resulted into shifts of individual files or risk pockets from stage 1 to 2 and to the application of the Expected Credit Loss levels that were deemed adequate to cover the increased credit risk.

Concretely, to determine the overlay, IFRS 9 parameters have been stressed when computing the ECL. For mortgages a stressed LGD value is applied that is based on the average Pillar 1 LGD value for loans with an average remaining maturity of approximately 15 years and higher loan to values (>80%). For Commercial Real Estate and vulnerable companies an add-on was applied on the mechanically calculated expected credit loss, reflecting the characteristic of the risk pocket; the add-ons corresponds to an increased expected credit loss, equivalent to a 1 to 2 notch rating downgrade.

During 2021, as Belfius gained more granular insights into the financial parameters of the underlying exposures, the various overlays were carefully reviewed and either increased, maintained or reversed. At the end of 2021 the following adjustments were made:

- regarding the overlays to exposures under moratoria: Belfius removed the overlay provisions for matured moratoria with a stable repayment pattern for at least 6 months. Across segments, the pick-up rate on matured moratoria is over 97%. For matured moratoria that do present past dues in their repayment schemes, case by case assessment has shown that current provisions are adequate. Finally, for the still active moratoria, Belfius decided to increase the provisioning for those running for more than 9 months
- regarding the overlays to Covid-19 sector sensitive exposures and taking into account the evolving economic impacts in the last 18 months, the initial sector sensitivity approach has been re-assessed in Q4 2021. The sectors still suffering the most from the crisis (like hotel&catering, recreation, events, retail clothing and 'high risk' commercial real estate, asleisure and retail-trade linked buildings) have been confirmed as vulnerable, whereas other retail activities and business services have recovered throughout 2021 and show a pre-covid business performance. On the other hand, based on our own internal transactional analysis and a NBB survey, a few other sectors show less resilience than initially expected (graphic industry, manufacturing of transport material, ...) and have been included in the scope of vulnerable sectors. Belfius' exposure to the Covid-19 sensitive sectors is limited to 2.4% of the total portfolio.

E&E Covid-19 sector sensitive exposures by sector



- for overlays linked to individual names identified as having a potential low Covid-19 resilience, a line-by-line review was performed. This allowed to remove the overlay for some files associated with positive evolutions such as obtention of additional collateral, strengthened shareholder support or recovery of financial results after end of lockdown.

Risk pockets

COVID-SENSITIVE EXPOSURES	• vulnerable companies with low ratings belonging to sectors identified as highly impacted by Covid-19 and flagged as having lower resilience • commercial real estate loans, with focus on leisure and retail-trade linked real estate • mortgage loans with indicators reflecting potentially higher risk pockets (buy-to-let loans, loans to borrowers with low ratings)
MORATORIA	• clients with matured moratoria for which no pickup of the repayment scheme was observed since 6 months • clients with running moratoria
INDIVIDUAL NAMES	• borrowers with a potentially increased credit risk, that were detected in the portfolio screening, but were not classified as "increased risk" in the mechanical approach and are not yet classified "as unlikely to pay".

In general, and based on a permanently deepening insight in the dynamics of the Covid-19 crisis, the credit risk management of this crisis evolves from a more pooled approach (moratoria, vulnerable sectors, ...) to a more individual approach targeting specific companies having difficulties to rebound after the crisis, even if not making use of support measures or active in a vulnerable sector.

These adjustments of Pillars 2 and 3 led to a provision release of EUR 47 million.

Governance

The governance process did not change fundamentally: the Research department is responsible for providing the macroeconomic parameters and scenarios, the computation engines (enhanced for increased flexibility and simulation power) and the governance of expert and impairment committees remain unchanged compared to pre-crisis. However, a higher frequency and in-depth reporting to the Management Board and Board of Directors has been established to ensure proper guidance and decision-making in view of the materiality of the Covid-19 impact and its unprecedented nature.

It is to be recalled that stage 1 and 2 provisions constitute protection against expected credit losses on files that could enter into a default status. To what extent these stage 1 and 2 provisions will be transformed into stage 3 provisions, covering incurred credit losses on defaulted loans, remains subject to uncertainty. If the improvement in macro-economic environment is confirmed and to the extent that the anticipated transitions to default does not occur, part of the impairments will be reversed over time.

IV.1.3. Evolution of the portfolio by segment

IV.1.3.1. Retail (Mortgages and Consumer Credits)

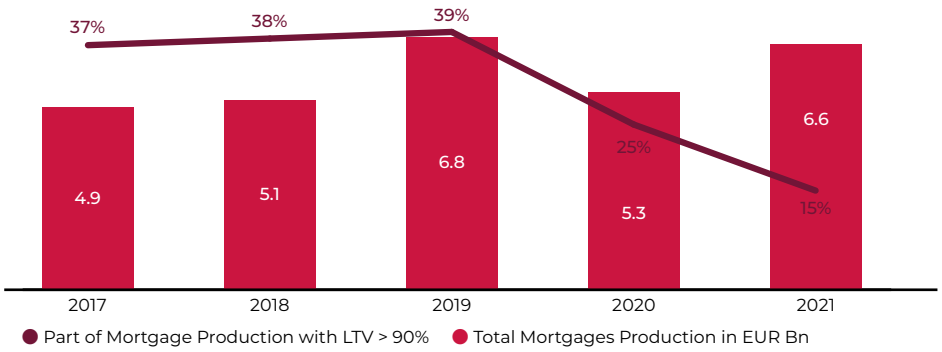
In 2021 several factors have influenced the mortgage lending activity:

- Mobility restrictions and the experience of (hard and soft) lockdowns, both in regular life and in international travelling, created an extra boost on the demand in the housing market.
- The interest rate environment remained favourable for borrowers.
- Based on the first evaluation of the supervisory expectations regarding the lending standards of mortgage loans, the NBB expressed their concern on the buy-to-let market and the market accessibility of younger first-time buyers

This market environment resulted in an increase of Belfius' mortgage portfolio at the end of 2021 to a FEAD of EUR 39.0 billion. The average PD remained stable at 0.51%.

Supported by the target risk profile of the mortgage production and portfolio, and driven by a further finetuning of the underwriting rules for specific risk pockets (with respect to Loan to Value (LTV) and Debt Service To Income (DSTIratios), Belfius succeeded to bring its mortgage production and portfolio in line with the NBB supervisory expectations, with a special attention to the high LTV segment (>80% and 90%) for both buy-to-let loans and first-time buyer loans. As from 2019, the part of the production with an LTV>90% decreased from 39% to 15%

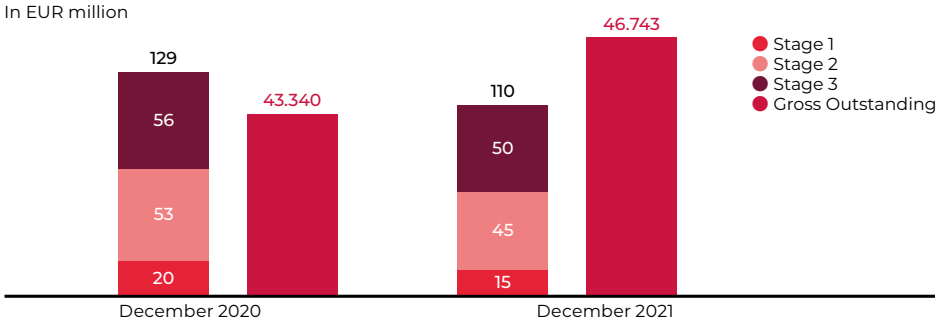
Mortgage loan production



The extinction of the public payment deferral schemes did not trigger an increase of payment arrears and consequently allowed to start to reverse part of stage 2 Covid-related provisions for clients picking up normal reimbursement for at least 6 months. Inflow of non-performingt loans (NPL) has remained at a very low level, with consequently low stage 3 impairments and a very strong asset quality ratio.

With the rebound of the economy and clients starting to reimburse again, the Cost of Risk has been impacted positively (stage 1 and 2 impairments). We continue to monitor the level of defaults, also in the perspective of a potential impact from the soaring energy prices on weaker clients.

Impairments & gross outstandings



The impacts of the July 2021 floods in the Walloon Region, confirming the emerging risks related to Climate, have been monitored and remained controlled with a limited number of flood-driven payment moratoria and liquidity support loans in the loan portfolios (mortgages as well as E&E).

The production of consumer loans increased slightly resulting in a FEAD at end 2021 of EUR 5.3 billion. The average PD decreased slightly (0.69%).

In the new segmentation, part of Professional Loans (Private and Wealth related), formerly segmented in E&E, has been transferred to Individuals. This part of the portfolio amounts to EUR 2.4billion by end 2021.

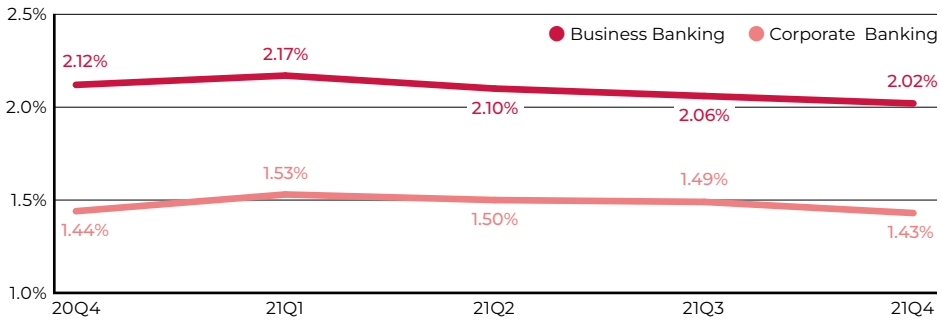
IV.1.3.2. Enterprises & Entrepreneurs (E&E)

Until September 2021, the economic circumstances evolved favourably with significant GDP growth, investments and consumption picking up rapidly and the level of bankruptcies remaining low. This evolution was supported by public support programmes, economic stimuli and boosted by an intensive vaccination campaign.

As from the end October however, a 4th Covid-contamination wave and the appearance of a new Covid-19 variant reversed the positive trend in the pandemic indicators and urged the government to take new safety measures. A series of economic sectors were hit again by the new restrictions on social activities and events, and although no new complete lockdown was declared, uncertainty about the societal and economic effects of this 4th wave was high.

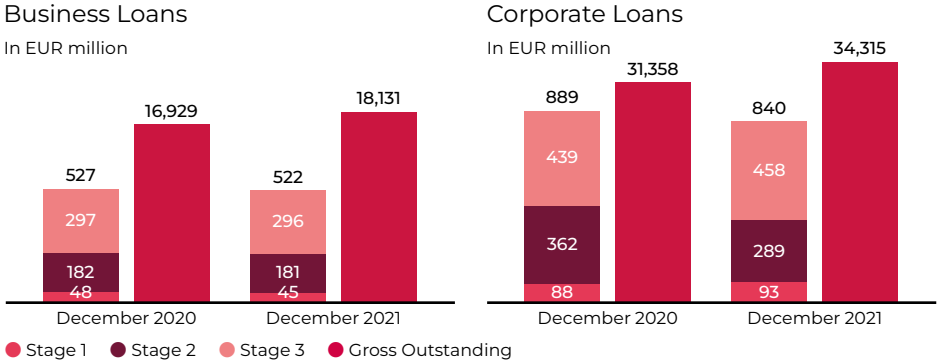
Since the start of the pandemic, an intensified Covid-driven monitoring and screening process has been in place on the Belfius E&E loan portfolio. This portfolio amounted to FEAD EUR 52.4 billion end 2021 and has, so far, shown few signs of deteriorating credit quality, as evidenced by a limited inflow of defaults and bankruptcies and a normalization of the rating downgrades. This implies that the financial impact, that could be expected at the start of the Covid-19 crisis, did not materialize thanks to a combination of a pro-active risk management approach, the strong support of the banking sector and the different public authorities and finally also the good resilience of enterprises and entrepreneurs.

Average PD of the portfolios Corporate & Business banking



Unrated exposures and exposures in default not included

Impairments and gross outstandings by segment



However, looking forward, second round effects from the pandemic raise concerns about the economic recovery: disruptions of the supply chains - causing shortages and production delays -, the scarcity of resources and labour capacity are putting pressure on the activity level in several industries, while energy prices soar and inflation forecasts are peaking.

These concerns need close monitoring. Belfius further strengthened the risk-based screening of its E&E portfolio on clients for which early warning risk indicators 'lighten-up' and that are not yet included on the Watchlist. These clients are systematically screened in order to determine if risk mitigation actions are necessary. In addition, the enhancement of the process of early warning indicators was further accelerated in order to keep permanently the risks in the E&E segment well under control.

The yearly assessment and review of Belfius' Risk Appetite Framework was performed in the same perspective, with several new credit risk indicators introduced and others refined, in order to safeguard the current sound credit quality and portfolio diversification: an indicator on leveraged transactions was added to the framework, the tolerance level for lower rated transactions was reduced and additional limits on risk concentrations in commercial real estate were applied.

IV.1.3.3. Public sector clients

Belfius' loan portfolio to the public and social sector amounted to EUR 38.2 billion end 2021 and contributes to a diversification of Belfius' global loan portfolio. It maintained its historical low risk profile (average PD at 0,10%).

Traditionally Belfius assures a key role in the financing of institutions in the Belgian public and social sector (including hospitals, schools, universities and retirement homes), these sectors being historically at the center of the Group's strategy. Belfius provides the clients in these sectors with a wide and integrated range of products and services, including credit lending.

Overall, the public and social sector loans portfolio has always shown high credit standards and it continues to maintain its very low risk profile, although local authorities remain faced with specific challenges, as the expected growth of the pension costs related to their statutory staff, the demographic evolution (the ageing population in general and the population growth in the big cities) and social cohesion, and the impact of the tax shift.

At the federal level and at the level of the regional entities, increasing budget deficits and soaring debts are an point of attention, as Belgian public finances headed for the year 2021 towards historic deficit and debt levels, accelerated by the still lasting sanitary crisis and the July floods.

Projections made by various national and regional organizations indicate that deficits will persist in the upcoming years, causing a further and sharp increase of debt, despite some announced structural deleveraging efforts. This fast-growing indebtedness could become unsustainable in case of an economic or financial shock.

This vulnerability has already led rating agencies to lower the ratings of some of these entities and/or to attach a negative outlook to their current ratings.

Belfius will embed these perspectives about debt and deficit levels into its sound risk management principles while ensuring finding the right balance in order to remain a key strong partner of the Public sector.

The current sanitary crisis is affecting municipal finances less than the other governments. Although their accumulated buffer after Covid-19 is shrinking, local authorities still have sufficient financial resources to play a key role in the economic and social recovery. However, local authorities are still confronted with structural problems such as the financing of statutory staff pension costs, which will continue to weigh heavily on their future budgets.

The multiple waves of Covid-19 pandemic weigh heavily on the hospital sector and the battle is not over yet.

It is not only the hospital staff that is put to the test. The financial situation of hospitals is also groaning under the pandemic. Various Belfius analyses have shown that hospitals are in principle unable to absorb such a shock. The sector is confronted with extremely low margins since years. This implies that even a small disruption (e.g. high inflation) can have serious consequences. The current situation also puts pressure on the investment capacity that is necessary to make the hospitals 'future proof'.

During the first wave, many hospitals faced treasury tensions as a combination of a reduced activity level in regular business and increased expenditures due to the Covid. The federal government reacted quickly with financial compensations and structural funding for the reinforcement of health personnel. These interventions have kept the hospital sector afloat in 2021. However, their financial balance globally remains fragile. At the same time, they face several major challenges. Hospitals are asked to form networks and to tailor the care offer accordingly. Huge investments are needed to digitally transform hospitals, in order to enable better information flows and to further increase cybersecurity. And in the long run, they will not escape stricter standards for energy efficiency and sustainability of infrastructure. That's why a thorough redesign of their financing is urgently required, as foreseen in the current coalition agreement of the federal government.

IV.1.3.4. 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, 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).

Even though the economy has been gradually recovering from the health crisis during 2021, new covid variants and new measures to tackle them have continued to put pressure on this recovery. Nevertheless, credit risk in financial markets remained globally stable during 2021.

The most important credit risk events are as follows:

- **Covid-19**: Some sectors such as transportation, automotive, shopping centers and recreation, ... remain pressured because of the length of the Covid-19 crisis. Nevertheless, Belfius' exposure through Financial Markets towards these sectors remains limited and to date, the impact has been manageable and limited to a small number of internal rating downgrades.
- **Brexit**: The transition period, after the 2020 agreement between the UK and the EU, has passed without any significant consequences for financial markets during 2021. An extension of the temporary recognition of UK CPP's (i.e. LCH) is to be expected in the beginning of 2022.
- **UK Healthcare**: In 2021, the sector came under pressure due to the length of the health crisis and tensions arose between the involved parties.
- **UK Utilities**: New tariff agreements have put pressure on the profitability of some water and gas companies. In addition, these companies might be impacted by ESG risks in the long term, especially in the energy sector.

The credit pressure on the UK Healthcare sector has resulted in a downgrade of the average rating of the credit derivatives portfolio from A- to BBB+. The average ratings of the ALM Liquidity and Yield portfolios have remained stable both at A-.

- Risk concentration: the main concentrations remain UK inflation-linked corporate utility bonds and Italian sovereign bonds, which remain of satisfactory credit quality and continue to be closely monitored,
- De-risking: the focus in 2021 was to reduce the remaining trading positions in the credit derivatives portfolio for which a trading derogation from the NBB was required. We have managed to derisk our two most important and P&L sensitive positions.

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.

IV.1.4. The risk management process concerning Forbearance, Watchlist, Default and Impairments

IV.1.4.1. Forbearance

Forbearance measures imply the granting of concessions towards a debtor facing or about to face difficulties in meeting its financial commitments. These concessions may take the form of modifications to the loan contract or debt restructuring.

They apply to all loans and debt securities that are on-balance sheet and also to some off-balance sheet commitments. They do not apply to debt securities held for trading exposures.

Specific criteria are established for each business segment. These provide for 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 and leads to a transfer of the exposures from stage 1 to stage 2 under IFRS 9.

In 2020, faced with the Covid-19 pandemic and its potential consequences on the financial strength of the borrowers, the EBA provided a certain flexibility and guidance to the banks with regard to forbearance reclassification. Guidelines on legislative and non-legislative moratoria were released, allowing institutions to grant payment holidays for a pre-defined set of obligors, without an automatic regulatory reclassification as forbearance exposures. However, the EBA requires banks to continue correctly identifying these situations where borrowers may face longer-term financial difficulties and classify exposures in accordance with the regulation. The release measures were extended to 31 March 2021, but a cap of 9 months was introduced on the total duration of general moratoria, beyond which the favourable treatment in terms of forbearance reclassification no longer applies.

Belfius has reviewed its forbearance policy in line with the EBA guidance : there is no automatic change in the forbearance classification for borrowers only based on the fact of a new loan granted under the state guarantee scheme or EBA compliant requested moratoria. Clients which were granted legislative, non-legislative and other moratoria during the Covid-19 pandemic continued to be assessed on an individual basis, taking into consideration the existing forbearance criteria and longer-term capacity to repay. In this context, the most vulnerable clients associated with high PD’s and, with potentially longer-term use of moratoria (beyond the 9 months cap) are recognized as forborne.

At the end of 2021, an amount of EUR 1.990 million of loans at Belfius complied with the forbearance definition, of which EUR 92 million related to Belfius Insurance compared to, respectively, EUR 1.031 million and EUR 79 million at the end of 2020. Customers in the Corporate (EUR 597 million) and Business segment (EUR 813 million) represent the highest volumes with a forbearance status.

More details on forborne exposures are provided in the Risk report annex (Table CQ1).

IV.1.4.2. Watchlist

The Watchlist Guideline defines internal and external (early warning) indicators to identify a significant increase of credit risk that may lead to an intensive follow-up and/or management of credit files. This allows the bank to closely monitor increasing credit risks and to take adequate credit mitigation measures in order to reduce them.

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.

More details on the ageing of past-due exposures are provided in the Risk report annex (Table CQ3).

IV.1.4.3. Default

A transversal default definition is applied within the entire Belfius Group and on all market segments in line with the EBA Guideline.

A default status is assigned to debtors which meet 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 an 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.

Based on regulatory evolutions, Belfius has implemented the EBA updated definition of default as of mid March 2020. Its internal guidelines were updated accordingly. The aim of the EBA guideline is to harmonize the definition of default across the EU prudential framework.

Main impacts are the materiality threshold for obligations past due that are now composed of both an absolute and a relative threshold, and the introduction of a probation period of 3 months before reclassification to a non-defaulted status.

Indicators of credit quality

		20Q4	21Q4
INDIVIDUALS	TOTAL FEAD	43.340	46.743
	Of which exposures with forbearance	199	450
	Of which in default	192	186
E&E BUSINESS	TOTAL FEAD	16.929	18.131
	Of which exposures with forbearance	356	813
	Of which in default	524	539
E&E CORPORATE	TOTAL FEAD	31.358	34.315
	Of which exposures with forbearance	394	597
	Of which in default	615	658

IV.1.5. Asset quality

At the end of 2021, the amount of impaired loans– on a consolidated basis-, amounted to EUR 2,012 million an increase of 0.75% compared to year-end 2020. During the same period, the gross outstanding loans to customers increased by 4.7% and amounted to EUR 103.306 million as the end of 2021. As a consequence, the asset quality ratio improved to 1.95% at the end of 2021. The coverage ratio remains stable to 60 %.

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

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 by the Commission implementing regulation (EU) 2021/637 different metrics referring either to accounting or to risk concepts are used in the quantitative templates disclosed in the risk report annex.

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 exposure at default calculated under the standardized approach for counterparty credit risk (SA-CCR);
- for Securities Financing Transactions: the carrying amount as well as the excess collateral provided for repurchase agreements;
- 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.

IV.2.1.1. Contribution Belfius Bank – Belfius Insurance

The figures in the below table are after elimination of intra-group exposures, but with inclusion of credit exposure from trading activities and counterparty credit risk.

Exposures are allocated to the final counterparty This means that if substitution is applied to a certain exposure to a borrower guaranteed by another party, the exposure is shifted to the region, type of exposure and rating of the guaranteeing party.

As at 31 December 2021, the total credit risk exposure, within Belfius reached EUR 213.8 billion, an increase of EUR 10.5 billion or 5.1% compared to the end of 2020.

Breakdown of credit risk by counterparty

(FEAD, in EUR million)	31/12/20	31/12/21	Of which Bank	Of which Insurer
Central governments	36,711	42,442	36,749	5,693
of which government bonds	9,703	9,146	3,694	5,452
of which EU Central Bank	25,418	31,628	31,628	0
Public sector entities	43,771	42,237	40,566	1,671
Corporate	41,901	47,941	45,484	2,457
Project Finance	2,562	2,956	2,956	0
Retail	54,555	58,228	53,988	4,240
Financial Institutions	17,229	13,703	12,137	1,566
Other[1]	6,646	6,334	5,387	947
TOTAL	203,376	213,840	197,266	16,574

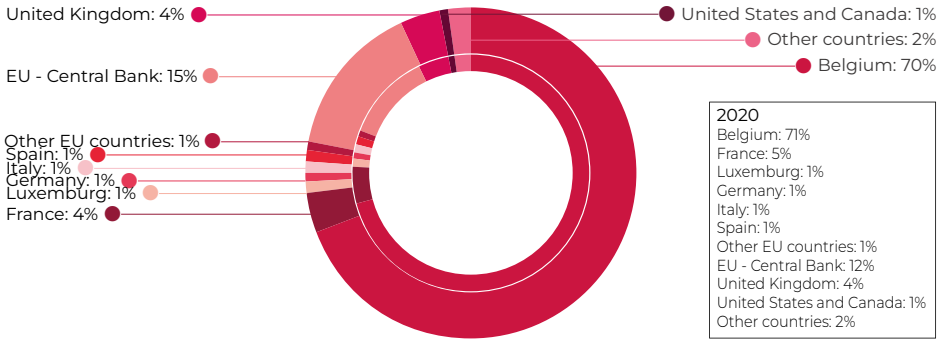
(1) Other include a.o. deferred tax assets, tangible and intangible assets and gains and losses on the hedged item in portfolio hedge of interest rate risk.

Please note that the total FEAD of 31/12/2020 is different compared to the 2020 risk report, due to the fact that the 2020 risk report was excluding equity positions and other assets not qualified as credit exposure, whereas 2021 risk report is including equity positions and other assets not qualified as credit exposure.

This increase is entirely attributable to the banking activity as the credit risk exposure at the level of Belfius Insurance remained almost unchanged at EUR 16.9 billion at the end of 2021.

- The increase by EUR 5.7 billion observed on the segment central governments is mostly due to the additional liquidity reserve taken up by Belfius and deposited at the NBB. Nearly half (49%) of the government bonds portfolio is invested in Belgian government bonds at the Group level. While at bank level the Belgian government bonds represents 44% of the total government bond portfolio, the relative proportion at Belfius Insurance stood at 49%.
- The credit risk exposure on individuals, self-employed and SMEs (27% of the total) and corporates (23% of the total) constitute the two main categories. The exposure on those categories increased by EUR 3.7 billion and EUR 6.0 billion respectively, reflecting Belfius' strategy to support the Belgian economy. However, a part of the increase observed in the corporates segment is due to a methodological change regarding guarantees induced by the CRR2.
- The credit risk exposure on public sector entities and institutions that are guaranteed by these public sector entities decreased by EUR 1.7 billion.
- The credit risk on monoline insurers is an indirect risk arising predominantly from credit protections received by Belfius Bank on bonds issued by counterparties principally active in infrastructure and public utilities projects, as well as from reinsurance of guarantees given by Belfius on the same type of underlying counterparties. With the implementation of CRR2, part (EUR 1,8 billion) of these exposures is no longer attributed to the monoline insurers but is now reported under the corporate category. The remaining exposure (EUR 2,7 billion) still benefits from the substitution mechanism and is included in the category financial institutions.

Evolution credit risk by geographical region(Outside 2021 – Inside 2020)

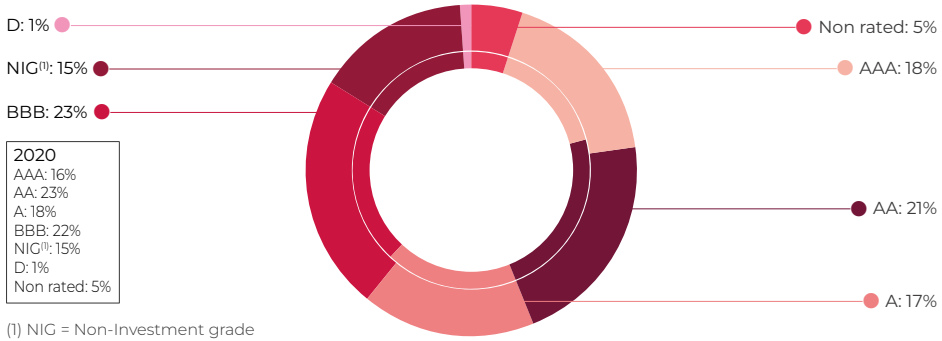


Belfius' positions are mainly concentrated in the European Union: 93% or EUR 183.0 billion at bank level and 96% or EUR 15.9 billion for Belfius Insurance. The total credit risk exposure on Belgium is 70% , 4% in the United Kingdom and in France, 1.1% in the United States and Canada, 0.8% in Spain and Germany and 0.7% in Italy.

- The credit risk exposure to counterparties in the United Kingdom amounted to EUR 8.3 billion. About 70% 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 good credit quality, and moreover most of the outstanding bonds are covered with a credit protection issued by a credit insurer with a sound rating 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 of these portfolios are also of good credit quality.

At the end of December 2021,79% of the total credit risk exposure had an investment grade (IG) internal credit rating.

Breakdown of credit risk by rating (Outside 2021 – Inside 2020)



(1) NIG = Non-Investment grade

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).

FEAD 31/12/2021	Credit risk		Counterparty credit risk			Total
(In EUR million)	On-balance-sheet amount	Off-balance-sheet amount	Securities Financing Transactions	Derivatives	Prefunded default fund contribution	
IRB EXPOSURE CLASSES						
Central governments and central banks	11,656	8,957	34	254		20,900
Institutions	18,101	3,490	1,860	2,071		25,522
Corporates	31,864	13,753	2,949	929		49,495
of which Corporates- SME	11,159	2,477	18	56		13,711
Retail	45,556	6,847		0		52,404
of which secured on RE SME	8,495	385				8,879
of which secured on RE non-SME	26,884	1,337				28,221
of which Qualifying Revolving		18				18
of which other retail SMEs	7,760	2,195				9,955
of which other retail non-SMEs	2,418	2,912				5,330
Equity	284					284
Securitisation	234					234
TOTAL IRB APPROACH	107,695	33,048	4,843	3,254		148,839
STANDARDISED EXPOSURE CLASSES						
Central governments or central banks	31,369	6		78		31,453
Regional government or local authorities	701	101		99		901
Institutions	482	242	1,188	76		1,987
Corporates	5,239	3,119		590		8,948
Retail	643	143				786
Secured by mortgages on real estate	284	25				310
Other(1)	8,952	392			95	9,439
TOTAL STD APPROACH	47,670	4,029	1,188	842	95	53,823
TOTAL	155,365	37,076	6,030	4,097	95	202,663

(1) includes exposure classes past due items, items belonging to regulatory high-risk categories,or other items and equity, including exposures under Danish Compromise:
· 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.

- At year-end 2021, 73% of the total credit risk exposures were calculated using the IRB approach. IRB exposures mainly consist of retail , corporate exposuresand public and social exposures.

For further details on the credit quality of exposures by geography, economic sector or maturity, please refer to the Risk report annex (tables CQ4, CQ5 and CR1-A).

IV.2.2. Internal rating-based approaches

IV.2.2.1. Competent Authority's Acceptance of Approach

By a 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).

IV.2.2.2. Internal Rating Systems

As a response to the latest EBA roadmap for the implementation of the regulatory review of internal models (focusing on the definition of default, PD and LGD estimations and the credit risk mitigation framework), and as a response to TRIM ("Targeted Review of Internal Models") findings, Belfius has set up in 2020 a comprehensive model transformation plan for its AIRB models.

In that context special attention is given to:

- Enhancing the data quality framework for modeling;
- Alignment to the new EBA Definition of Default
- The implementation of a comprehensive Margin of Conservatism (MoC) framework;
- The review of low default portfolios' models, given that a limited number of observed defaults may jeopardize the model calibration;

This transformation plan is rolled out over 3 years and will provide Belfius with a renewed set of models, as a cornerstone of the credit acceptance, loan life cycle management, credit risk management processes, pricing and reporting, and fully compliant with the latest regulatory requirements. Rationalization and simplification are two of the key principles that will guide this model portfolio transformation, where the following options are extensively studied (also with the finalization of Basel 3 standards in mind):

- Apply AIRB approach only to models with sufficient historical default and loss data; otherwise return to a less sophisticated approach;
- Reduce the number of models by reviewing the model scope definition in line with the Belfius Strategy;
- Simplify the model structure of certain models (e.g. assess the adequacy and need of a qualitative questionnaire as part of the model development)

At the end of 2021, the following models were submitted for supervisory approval at ECB level: the LGD model for the mortgage portfolio, the non-retail PD and LGD models on corporates, mid-corporates and satellites.

The internal models 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). 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 approach 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, reporting and use test 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, the current LGD models estimate the ultimate loss incurred in a downturn situation on a defaulting counterparty before taking the credit risk mitigants, with appropriate haircut, into account. The unsecured LGD depends on various factors such as the product type, the level of subordination for instance. LGD is an economic component accounting for direct and indirect costs related to the recovery process. The granularity of the estimate is a function of the quantity and quality of available data. For retail, LGD is mainly determined by product type and based on workout recoveries. It accounts for downturn conditions and indirect/direct costs of the recovery process. Professional loans are segmented in 5 classes subject to collateral value.

Internal estimates of Basel parameters are widely used within Belfius Bank. They are namely 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.

We refer to Appendix XI.2. for more details regarding Internal Rating Systems, including the organisational structure, governance and the control mechanisms at the different stages of the model lifecycle.

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 Capital Requirement Regulation (CRR), 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 still subject to a monitoring in order to ensure the used values are suited.

In general, the back-test procedure aims at assessing the discriminatory power of the model (ranking of the clients from "good" to "poor" grades), the calibration level (a rating system is well calibrated if the estimated PDs (or LGDs) deviate only marginally from the actual default rates) and the stability of the model's population/risk drivers.

The results of the back testing are assessed using statistical significance tests. The outcome of the significance tests drives required action plans (e.g. recalibration process, model structure re-development).

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.

An overview of the Probability of Default (PD) and the Default Rates (DR) on the Bank's main portfolio under advanced method is available in table CR9.

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. Nominated External Credit Assessment Institutions (ECAI)

Belfius uses the regulatory defined risk buckets to assess the quality, and linked risk weight, for all exposures calculated according to the Standardised approach. It also uses external ratings from S&P's, Fitch and Moody's to define the risk bucket of exposures.

The EBA standard table is used for mapping these external ratings.

If two external ratings are available, the lower of the two is used. If there are three external ratings with different risk weights attached to them, the risk weight corresponding with the second-best rating is applied. If no rating is available, the risk weight provided by the Standardised approach is used.

IV.3. Credit risk management and governance

Credit risk is defined as, on the one hand, the possibility that a bank's borrower or counterparty will fail to meet its obligations (in the form of non-payment or non-performance) in accordance with the agreed terms, also called the payment default risk, and on the other hand, the possibility that the bank will not be able to recover its outstanding debt by means of the collateral that is linked to the debt, i.e. the risk of non-recovery and the non-secured recoveries (not linked to a collateral or guarantee).

IV.3.1. Governance and committees

Belfius' counterparty limit framework, which is part of its global Risk Appetite Framework (RAF), is the main instrument to limit risk concentrations:

- it serves as a reference point to determine the risk levels for which the Management Board and the Board of Directors are qualified; and
- affects as a result also the decision limits of all (other) credit committees.

Belfius has a hierarchically organized structure of credit committees and delegation rules:

- this implies that decisions are made by a higher decision level as the amount of the credit transaction increases and/or the rating quality of the counterparty declines;
- credit committees have in general equal numbers of Risk or Credit department and Business representatives, and are always chaired by a Risk or Credit department member;
- Belfius relies increasingly on an advanced and automated decision-taking process with behavioural or financial indicators - determined by Risk - as cornerstones;
- furthermore, credit (and risk) committees are to a significant extent regionalized, strengthening the principle of decision-by proximity.

Once Belfius has credit commitments on a counterparty, it is essential to monitor and control the risk evolution, in order to take corrective measures in case of quality deterioration and, when appropriate, to establish provisions for expected credit losses:

- to this end, Belfius has set up an early warning system based on behavioural and/or financial indicators;
- counterparties showing signs of weakness are closely followed by the Watchlist Committees, whose main task is to detect emerging risks as quickly as possible and to monitor them subsequently;
- in this context, Belfius strictly applies the directives of the EBA regarding Forbearance measures, i.e. all concessions towards debtors facing or about to face difficulties in meeting their financial commitments;
- a counterparty that seriously fails to meet its obligations towards the Bank receives a default status; the formal decision is the competence of Belfius' Default Committee, composed exclusively by members of the Risk department;
- the Impairment Committees decide on the adequate impairment levels for exposures in respectively stage 1 (performing), stage 2 (performing but significant credit deterioration since inception) and stage 3 (default status).

Next to all afore-mentioned committees, Belfius also disposes of a set of:

- credit risk committees whose core mission is to provide an effective credit management oversight and steering regarding all business segments;
- Methodological committees whose main aim is to validate the internal rating systems and to ensure quality control.

We refer to annex XI.4.1. for more information on the governance of credit committees.

IV.3.2. Credit risk mitigation techniques

IV.3.2.1. 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 it 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 determine and make use of the expected realisation value at the time of a possible future default when the Bank might have to realise the collateral. The valuation of collateral used in the credit origination and life-cycle:

- must be done in connection with all new credit applications;
- 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 based on the property's market value, external appraisals or internal value estimates as set out in Belfius' internal credit risk guidelines.

Financial collaterals 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.3.2.2. 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;
- periodic 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 legally mandatory conditions, check whether the credit derivative covers restructuring clauses;
  - security portfolio: description of each security.

All relevant data concerning eligibility criteria, minimum requirements, specific characteristics and valuation are captured in various IT tools and detailed procedures are documented and implemented in the internal management process, both in line with the Basel II standards (Basel III for OTC and SFT).

More specifically, 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.

IV.3.2.3. 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 financial and physical collateral, 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.

In the Risk report annex, following detailed specifications are provided:

- an overview of the credit mitigation techniques (Table CR3);
- for exposures under the standardised approach, details on the effect of credit risk mitigation techniques and the decomposition in risk weight bands (Tables CR4 and CR5);
- for exposures under the IRB approach, the same information for the significant portfolios (Tables CR6 and CR7-A);

IV.4. Counterparty credit risk

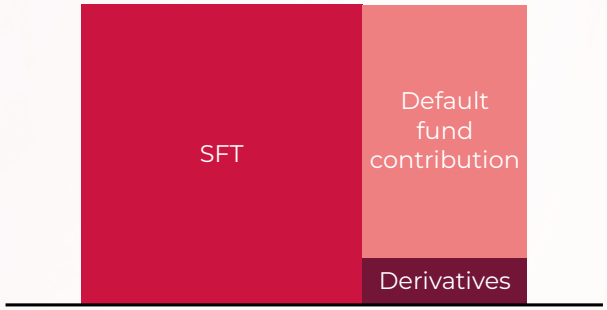
From 30 June 2021 on , counterparty credit risk exposure for derivatives is measured via the standardised method for counterparty credit risk (SA-CCR) which is a more risk sensitive method than the previously applied Current Exposure Method (CEM). There was no change in method for securities financing transactions (SFT).
As part of the derisking of our legacy portfolio, the unwind of the remaining Negative Basis Trades and Total Return Swaps positions caused a significant decrease of the exposure on the counterparties involved. Individual risk to financial institutions is reduced as, more and more transactions are executed or transferred to central clearing counterparties (CCP's).

Definition

Counterparty Credit risk is defined as the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows and applies to derivatives and securities financing transactions. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Exposure may be reduced via netting of transactions and the application of collateral posting/receipt under legal agreements (ISDA/EMA/CSA for derivatives and GMRA/GMSLA for SFT).

Exposure after netting and collateralisation

CCPs (EUR 1.2 Bn)



Other counterparties (EUR 4.9 Bn)

IV.4.1. Management of the risk

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 measurement guideline

The measurement of the exposure at default for derivatives transactions has been changed on 30 June 2021 to SA-CCR. This method is a more risk-sensitive method than the previously applied Current Exposure Method (CEM). SA-CCR penalizes uncollateralised transactions while netting benefits are better recognised for margined transactions.

To reduce the counterparty risk, Belfius' OTC derivatives are in most cases concluded within the framework of a master netting agreement (ISDA or EMA),taking into account the general rules and procedures set out in the Belfius credit risk measurement guideline. Collateral exchanges for derivative contracts are regulated by the terms and rules stipulated in a 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) and taking into account regulatory haircuts as defined by the CRR. Belfius applies netting when eligible agreements (GMRA or GMSLA) are in place.

All OTC transactions are monitored within the credit limits set up for each individual counterparty as well as on group level. Sub-limits may be put in place per type of product or activity. Credit Limits are decided by competent committees (FM CLC and CDC) and breaches to these limits are monitored on a daily basis and reported to the respective committees.

In order to avoid direct OTC counterparty risk more and more transactions are done via central clearing counterparties (CCP's).

Both for derivatives and securities financing transactions, strict guidelines are in place to avoid wrong-way risk in order to avoid that received collateral has a direct link to the counterparty or any of its affiliates.

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, based on 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).

The stock of CVA at end 2021 for Financial Markets, amounted to EUR 51.3 million, which represented a reversal of EUR 33.9 million compared to year end 2020.

The capital charge for CVA risk is calculated according to the standardised approach. In 2021, the CVA RWA decreased by EUR 61 million due to decreasing exposures.

CVA RWA by segment

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

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

To avoid direct OTC risk, more and more transactions are transferred to central counterparties (CCP's).

IV.4.2. 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). Collateral may be posted/received in the form of cash and/or securities in the form of variation margin or net independent collateral amount.

The exposure after netting and collateralisation at year-end 2021 on CCP's and other counterparties was EUR 4,074 million for derivatives and EUR 1,716 million for securities financing transactions.

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 In particular, in order for collateral to be effective in times of need, Belfius monitors:

- the concentration of the received collateral;
- the liquidity of the received bonds;
- the impact on collateralization of a possible rating downgrade of one of the contractual parties (either Belfius or the counterparty).

In the event of a one-notch downgrade of Belfius, the impact on the collateral to be posted will be limited as this downgrade will only affect a small portion of the collateral agreements in place.

IV.4.3. 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, which creates liquidity needs;
- Index CDS are used as mitigants of the CVA risk;

The unwind of the last remaining NBT and TRS positions caused a significant decrease of the exposure on the counterparties involved.

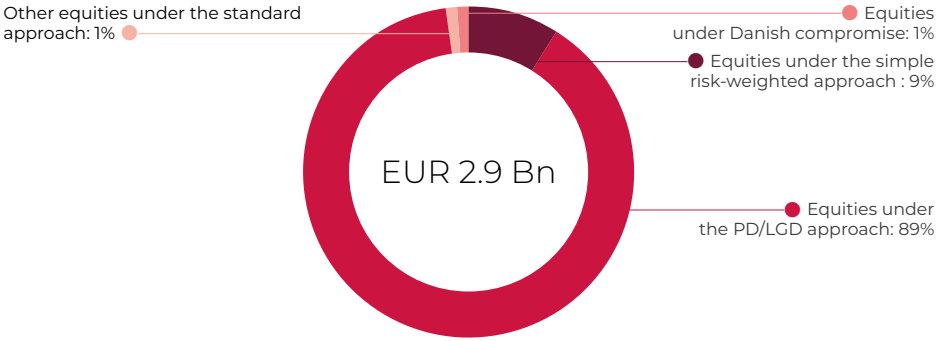
IV.5. Focus on equity exposure

For the calculation of the capital requirement for equity exposure, Belfius Bank applies the PD/LGD method. If the PD/LGD method cannot be applied (e.g. no available ratings), the simple risk weight (standardized) 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), classified under the standard approach;
- items classified as significant investments according to Article 48 of CRR are weighted at 250%.

Equity method by exposure



Further details are provided in the Risk report annex (Tables OV1, CR10.5, INS1 and CR5).

Note that as Bank-insurer group, the largest part of the equity portfolio is held as an economic hedge for long-term insurance liabilities. For information on Belfius Insurance equity exposure, we refer to the chapters Risk Management of the Annual Report 2021 of Belfius Insurance, and the Belfius' Management report (see dedicated section on insurance risks).

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 or improvement of the risk-return ratio.

Belfius Bank currently has retained asset-backed securities which can for instance be used as collateral for secured funding agreements.

IV.6.1. Objectives and roles of Belfius Bank

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 manage adequately the liquidity and funding profile.

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

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

As Arranger of Securitisation Transactions for Customers: Belfius Bank acts as arranger or advisor on securitisation transactions for customers . In general, Belfius Bank receives fees for structuring or advising on transactions.

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

Belfius' investment framework for the ALM Liquidity (LCR) portfolio allows for the investment in well rated, Simple, Stansparent ans Standardised (STS) and LCR eligible securitisations. No investments in re-securitisations are allowed. These investments are purely done from a diversification perspective within the liquidity objective of this portfolio. Capital requirements on these investments are calculated based on the STS framework, meaning with an external rating-based approach. No new acquisitions have been done during 2021 within the liquidity portfolio.

Exceptionally securitisations can be purchased as an alternative funding source for corporate clients. These can be non-STS and non-LCR eligible.

Belfius uses the external rating-based approach (SEC-ERBA) for its securitisations as investor (only STS positions possible) as mentioned in the risk report annex (where the STS category and distinction by underlying asset type is mentioned). Moody's, Fitch and S&P are used for the SEC-ERBA approach applied on the investments made. If an external rating is unavailable SEC-SA is used.

All investments within the ALM liquidity portfolio are booked at Amortised Cost. Re-securitisations are considered to be non-basic in terms of IFRS9 and would be booked at fair value through P&L but these are not allowed to be invested in.

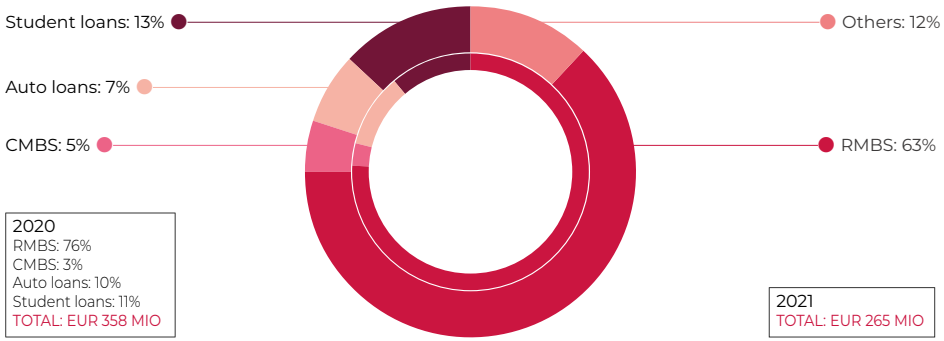
At the end of 2021, the Belfius Bank's investment portfolio was EUR 265 million, compared to EUR 358 million at the end of 2020.

The decrease is the result of the amortisation of the existing (legacy and liquidity) portfolio (EUR -123 million) and the investment in one new ABS (EUR +31 million).

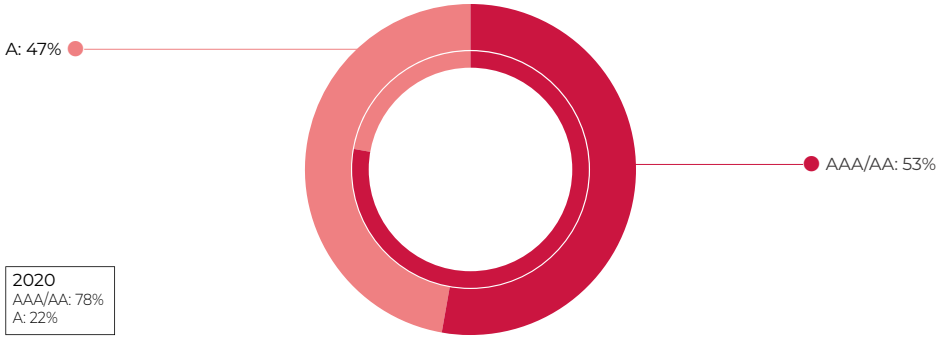
The portfolio is only composed of senior granular ABS transactions and EUR 57 Million of this exposure are STS securitisations.

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

Activity as investor – by underlying (Outside 2021 – Inside 2020)



Activity as investor – by rating (Outside 2021 – Inside 2020)



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 focusses on interest rate risk, credit spread 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 ALCo makes strategic decisions affecting the balance sheets of the insurance companies and their financial profitability taking into consideration the risk appetite pre-defined at Group level (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;
- 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 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 risk is linked to the credit spread curve that can change for a counterparty even if the credit quality (rating) remains unchanged. This impacts the XVAs and mainly the Credit Value Adjustment (CVA).

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.

V.2. Market Risk – Structural & ALM Risk

In 2021, the low interest rate environment has remained challenging, with yield curve up to 10 years negative for most of the year.
In this context, the net interest income has been further subject to downwards pressures. However, the sound management of interest rate risks to protect the net income against low interest rate, the solid diversified growth in the loan book as additional measures taken by the monetary policy authority (T-LTRO) have significantly mitigated these risks.

Definition

The structural & ALM risk exposure at Belfius results from the imbalance between its assets and liabilities in terms of volumes, durations and interest rate sensitivity.

In respect to the interest rate risk, Belfius Bank pursues a prudent risk management of its interest rate positions in the banking book within a well-defined internal and regulatory limit framework, with a clear focus on generating stable earnings and preserving the economic value of the balance sheet - macro-hedging approach - thoughtfully considering natural hedges available in the bank balance sheet.

The long-term sensitivity of the ALM perimeter was EUR **-55 million per 10 bps** at 31 December 2021 (compared to EUR -35 million per 10 bps at 31 December 2020), excluding interest positions of Belfius Insurance and of the pension funds of Belfius Bank.

A 50 bps increase of interest rates has an **estimated positive impact on net interest income (before tax) of EUR +31 million of the next book year and an estimated cumulative effect of EUR +192 million over a three year period**, whereas a 35 bps decrease would lead to an estimated impact of EUR -9 million of the next book year and an estimated cumulative effect of EUR -103 million over a three year period.

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

V.2.1. IRRBB risk management

In the first half of 2021, as observed the previous year, the low interest rate environment put considerable pressure on the Bank's standard transformation model. First, the interest paid to depositors remained close to zero (or legally floored at 11 bps) while the interest received on commercial loans was constantly lowered following market rates and competitive pressures. Second, customers continued to refinance and to prepay their mortgages. However, some buffer was given to relief these pressures thanks to the decisions taken by the ECB to introduce a tiering on deposits and the advantageous conditions related to the T-LTRO III.

In the second half of 2021, the EU inflation rose to a historically high level and, should this prove to be structural, interest rates may rise more quickly than expected and consequently alleviate the downward pressure on the Net Interest Income. The Belfius ALCo is and will remain attentive to fast changing interest rate envrironment especially if combined with changes in customers' behaviour with the primary objective to respect our risk appetite framework in the field of rate management.

In 2021, the Risk Framework was further enhanced. First, ALM Risk refined its IRRBB dashboard, acting as an early warning system. This dashboard is designed to proactively alert for any change in the rate environment and the potential impact on the models used for IRRBB management. Also, the earnings at risk indicators were refined to better account for non-parallel shift in interest rates impact. Second, next to a set of plausible scenarios, ALM risk introduced in 2021 more extreme scenarios: more important upward rate shocks combined with stress on behavioural assumptions. Since, the plausibility of these scenarios has increased in light of the observed increased inflation. The management of these upward scenarios will retain full risk attention in 2022 and the adjustment of the IRRBB management if needed.

Finally, the 2021 review of the risk appetite framework leads to a decrease of the allocation for IRRBB value indicator which will allow to limit the potential value loss in case of a materialization of the rate increase.

For more specific information about IRRBB risk management we refer to the Template EU IRRBBA in the risk report annex

V.3. Market Risk – Trading Market Risk

Although the pandemic oscillated between new covid variants and increasing vaccination rates, markets remained much calmer than in 2020, with an equity market increasing by 20% on average. Some uncertainties resurfaced at certain times (e.g. end Q3, Q4), amongst others due to raising concerns about inflation, but impact remained limited.

In 2021, Belfius has continued to improve the risk profile, with

- Succesful management of the benchmark reform ;
- De-risking of Legacy trading positions (NBT, TRS) that were previously contributing heavily to P&L volatility, RWA and tail risks;
- Low VaR consumption as from Q2 ;

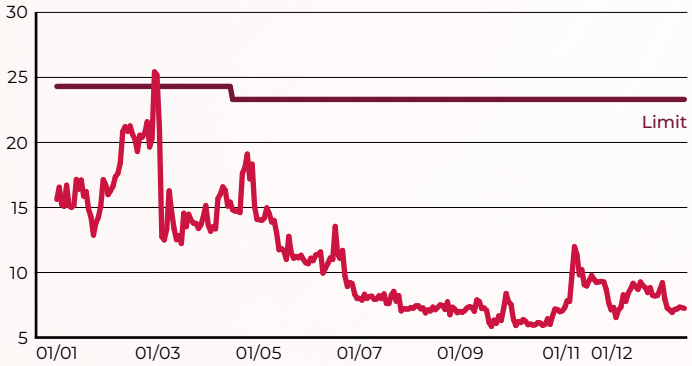
In addition and supported by market environment, FM results have been very solid. Like in 2020, there was quite some volatility in the UK real rates impacting the Risk weighted exposure (not profit & loss) via Belfius' ex-legacy UK inflation bonds. Yet the impact considered over the full year was limited.

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.

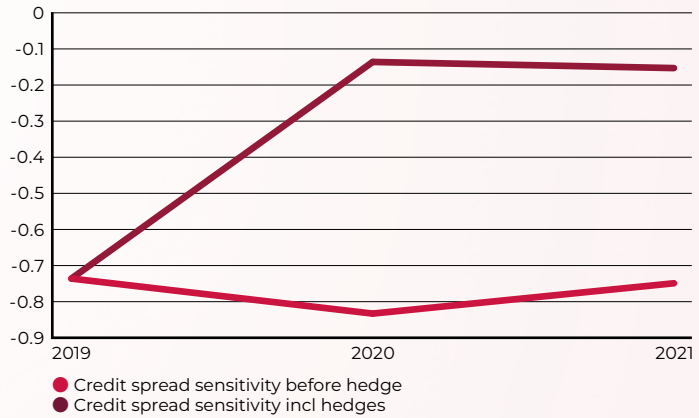
Evolution of global VaR in 2021

In millions of EUR



Evolution credit spread sensitivity before and after hedges

In millions of EUR



Financial Markets activities encompass client-oriented activities and hedge activities at Belfius Bank. No Financial Markets activities are undertaken at Belfius Insurance.

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 like hedging, investing or funding. Most positions within the trading book are centralized within the hedging desks (flow management desks) which are dynamically managing or hedging internal (e.g. ALM) and external client flows on different asset classes. Some positions also remain on Credit Derivatives, those are detailed in the Risk report annex (Table CCR6).

V.3.1. Fundamentals of market risk in 2021

Although the pandemics oscillated between new covid variants and increasing vaccination rates, the markets remained much calmer than in 2020, with an equity markets increasing by 20% on average. Some uncertainties resurfaced at certain times (e.g. end Q3, Q4), amongst others due to raising concerns about inflation, but impact remained limited in 2021.

Risk measures taken in 2020 on CVA/FVA remained in place and kept performing well, keeping the P&L volatility to a minimum and allowing to maintain the reduction of RWA (CVA). At the start of 2021 only a limited number of non-hedgeable risks remained like bond-CDS basis and own funding spread. With the unwind of a significant NBT position, one of the few remaining ex-Legacy transactions in the trading book, the main residual un-hedgeable risk is now our own funding spread used for FVA, although the exposure to this metric has decreased over 2021 due to market moves and NBT unwind.

In the context of sound market risk management, specific milestones for financial markets in 2021 have been achieved:

- Successful management of benchmark reform, which mostly impacted the ex-legacy portfolio
- De-risking of ex-Legacy trading positions for which a trading derogation is given (Negative Basis Trade, Total Return Swap). These positions were also contributing to P&L volatility, RWA and tail risks. These transactions are an additional move taken in proactive and opportunistic reduction of ex-Legacy related risks.
- Low VaR consumption as from Q2, a combination of Covid-19 scenarii exiting the 1Y window and lower exposures.
- Permanent ‘crisis’ monitoring between Risk and FO remained in place although at a lower frequency.

Like in 2020, there was quite some volatility in the UK real rates impacting the Risk weighted exposure (not profit & loss) via Belfius’ ex-legacy UK inflation bonds, but the impact, considered over the full year, has been limited. There were also some rating adjustments on the ex-legacy credit derivatives portfolio not only impacting RWA but also P&L through adjusted cost of risk provisioning.

With regards to the regulatory Internal Model and the back-testing, Covid related volatile interest rate scenarios of 2020 disappeared out of the historical window calculation, but were soon replaced by some new extreme scenarios in Q4, generating 7 backtesting overshootings and a VaR/SVaR average increase. As a consequence, the global Market RWA remains at the same level as of last year.

After inclusion of the VaR in the Risk Appetite Framework (RAF) during 2020, a further refinement was made during 2021 by improving the Market Earnings at Risk indicator to better reflect the actual exposure (i.e. VaR consumption).

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 for the risk management of 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

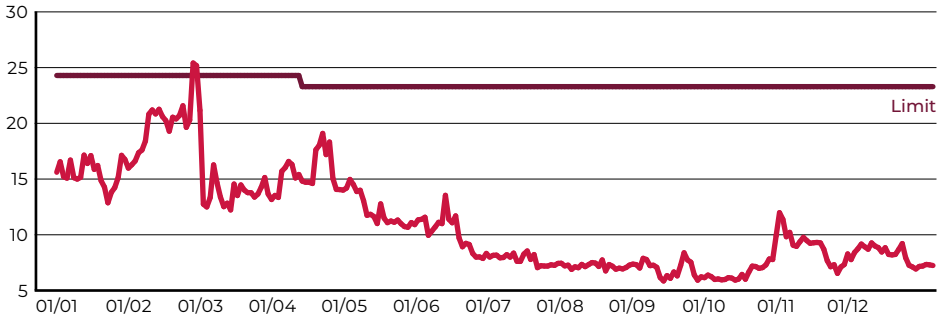
The Financial Markets Committee (FMC) is the main committee for Financial Markets Management. Its main objective is to provide effective risk management oversight and steering of the Financial Markets activities. This includes reviewing business, risk and P&L reports, and providing an appropriate risk 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 annex XI.4.1.

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:

Evolution of global VaR in 2021
In millions of EUR



- the interest rate, inflation and foreign exchange (forex) rate risk: this risk category 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.

To reduce the Earnings-at-Risk from financial markets, the overall FM VaR limit was reduced in Q3 and the EaR calculation refined to more accurately reflect trading positions based on both VaR limit and VaR consumption.

V.3.4. Market risk exposure

Value-at-risk by activity

VaR[1] (99% 10 days) (In millions of EUR)	31/12/20				31/12/21			
	IR[2] & FX[3]	Equity	Spread	Other risks[4]	IR[2] & FX[3]	Equity	Spread	Other risks[4]
By activity								
Average	7.3	5.8	1.2	0.4	5.4	4.7	0.6	0.3
EOY	8.7	6.2	0.5	0.4	3.9	2.6	0.2	0.5
Maximum	12.3	8.4	3.6	0.4	14.4	9.7	1.5	0.6
Minimum	4.5	2.6	0.2	0.3	2.4	2.4	0.1	0.3
Global								
Average		14.7				11.1		
EOY		15.8				7.2		
Maximum		21.5				25.4		
Minimum		9.4				5.9		
Limit		24.3				23.3		

(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.

The overall average VaR of Financial Markets activities decreased to EUR 11.1million in 2021 vs EUR 14.7 million in 2020.

The VaR increased in the first quarter of 2021 and even briefly breached the limit. This triggered a reduction of positions and a refined calculation methodology. After Q1, the VaR slowly started to decrease as more and more of Covid-19 crisis scenarios exited the 1Y window. There remained sudden increases as markets incorporated news on vaccines, new variants and increased inflation but with no additional limit breaches anymore.

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 market positions vulnerability 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.

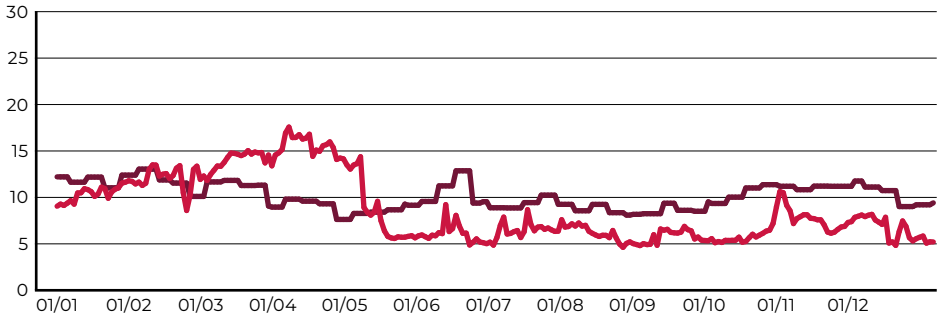
The stress test framework has been reviewed (update of the scenarios) and the scope has been enlarged to include stress tests on Fair Value Hedge positions, XVA and Credit Derivatives.

Three types of scenarios are considered: calibrated scenarios (shocks on each risk factor, calibrated as quantiles of their historical distribution), specific scenarios (specific shocks on some risk factors) and historical scenarios (scenarios based on previous crises, for which the Covid stress of 2020 has been added).

The results of these stress tests are reported on a monthly basis in the FM Risk Monitoring Report and on a quarterly basis to the FMRR.

V.3.6. Regulatory internal model and back testing

Evolution HVaR and SVaR (internal model) in 2021
In millions of EUR



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.

Technical aspects of the VaR:

- Daily returns are transformed into 10-day returns by using the scaling of time rule (using square root of time - times Sqrt(10))
- Returns are mixed (between absolute and relative)
- Where it is possible, the VaR is simulated in full evaluation. For the credit derivatives, the simulations of interest rate and Fx shocks is done in sensitivities.
- Discrepancies between full eval and sensitivities as well as effect of non-material risk factors is analyzed in the regulatory Risks Not In Model framework (RNIM) in order to ensure that their individual and global effect remain low.

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 stressed period May 2008-June 2009.

Both VaR and SVaR are calculated on the same scope:

- Flow management trading (with the exception of equity trading which is treated in standardized approach): these IR and IR options desk externalize internal flows coming from sales, structuring and ALM, within a strict limit framework.

- Credit derivatives: legacy trading scope for which Belfius has a trading derogation.
- XVA hedges: internal hedges of IR and inflation exposure coming from XVA exposure.

The regulatory capital is calculated by using both the VaR and the SVaR. In 2021, the Internal Model VaR amounted to EUR 8.7 million on average versus EUR 10.1 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).

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 exceedings”). According to this number, the regulators 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:

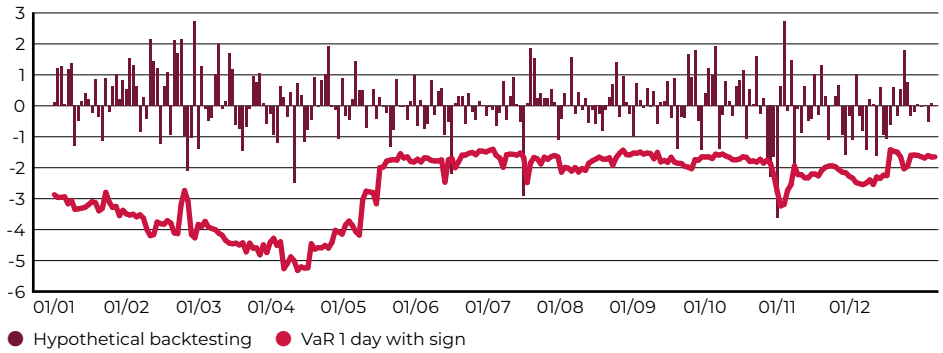
- Hypothetical back testing compares the hypothetical results of the portfolio’s end-of-day value and, assuming unchanged positions, its value at the end of the subsequent day. This result is therefore without any provisions adjustments and other non-involved risk factors. The holding period is one day. During 2021, there were 7 negative exceptions to the hypothetical back testing. 5 out of the 7 exceedings were resulting from the market volatility at the beginning of Q4, all explained by extreme movements in risk factors not predicted by a historic simulation approach. One exceeding was the result of a technical problem for which no hypothetical P&L was calculated.
- Real back testing compares the portfolio’s end-of-day value and its actual value at the end of the subsequent day excluding fees, ctechmommissions, and net interest income. In 2021, there were 3 exceptions to the real back testing, of which 1 technical, 1 during the market volatility of Q4 and finally 1 related to the de-risking of a legacy position.

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. The seven hypothetical exceptions result in an add-on of 0.65.

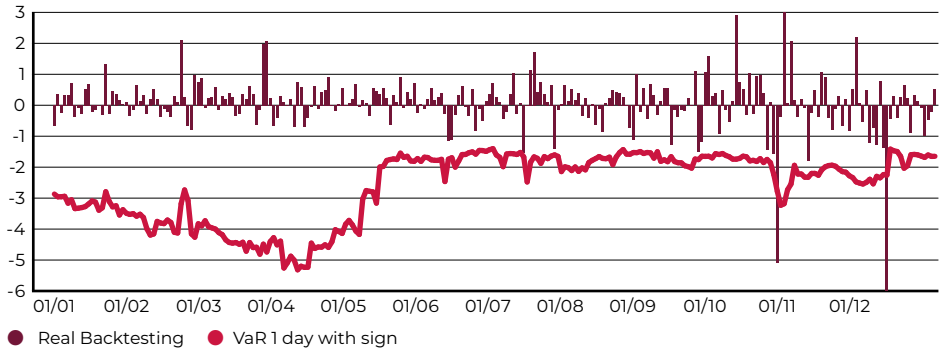
At the end of 2021, the RWA for market risk under the internal model approach was EUR 999 million.

The following charts show real and hypothetical back testing in 2021 for 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 independent 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 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 FMFV Committee composed amongst others of the Head of Market Risk, the head of Dealing Room, the head of Accounting and the head of Validation.

The FM FV reports the main topics to the FMC itself 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.

Once a year the Management Board and the Risk and Audit Committees are informed of the status of the Market Models (evolutions, points of attention, outlook).

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.

V.3.9. Valuation

Within Financial Markets we have financial instruments with complex features and sometimes limited liquidity that are valued using internally developed pricing models. To avoid Valuation errors, a sound valuation risk framework is therefore of utmost importance. Different components are key to limit the risk: validation policy, model change policy, market data policy, IPV process and Value Adjustments guidelines.

The above ensures that all models used are validated by an independent team, that changes brought to the models, when material, are correctly reviewed by an independent team, that the data that feeds the models is correctly controlled, that independent price reviews are conducted (e.g. consensus exercise, alternative price sources, collateral controls) and that, when required, value adjustments are applied in the fair value. All those elements are further detailed in section 9.1.5. Valuation techniques and data (level 1, 2 en 3) of the financial statements.

In addition to the above, an important building block for a Valuation Risk framework is Prudent Valuation. Additional valuation adjustments (AVAs) are designed to ensure that institutions prudently value their fair-valued financial instruments. The prudent value is the value at which institutions are 90% confident that they will exit a position based on the applicable market conditions at the time of the assessment.

Belfius uses the core approach to calculate its AVA. This approach prescribes the calculation of 9 AVAs, referring to different sources of valuation uncertainty, as the excess of valuation adjustments required to achieve the prudent value:

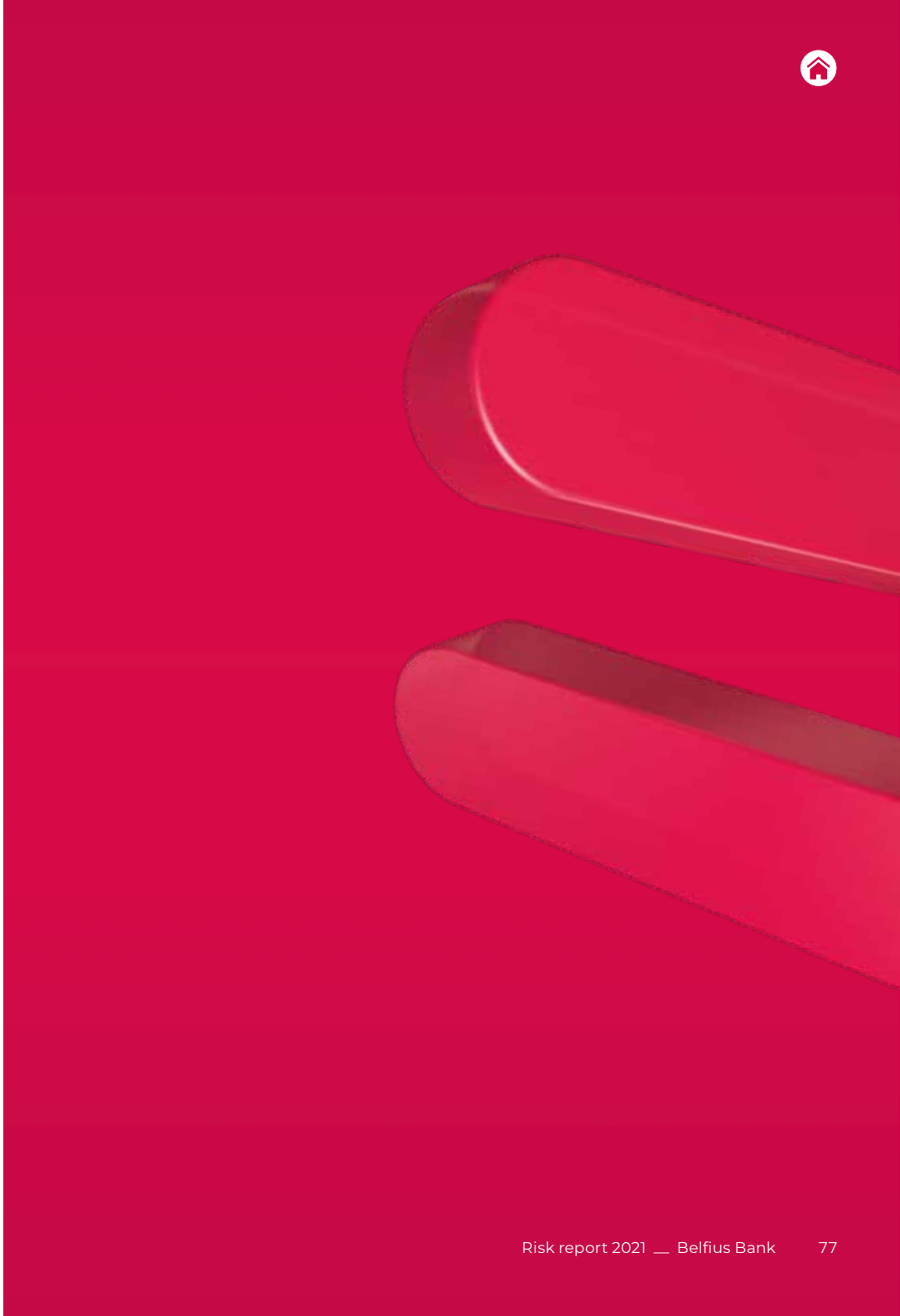
- Market price Uncertainty (MPU)
- Close out Costs (CoC)
- Model risk (MoRi)
- Unearned credit spread (UCS)
- Investing and funding costs (IFC)
- Concentrated positions (CP)
- Future administrative costs (FAC)
- Early termination (EaT)
- Operational risks (OpR)

The prudent valuation scope includes all fair-valued positions, regardless of whether they are held in the trading book or banking book. Positions for which a change in accounting valuation has no impact on CET 1 capital are excluded.

Belfius computes, for market price uncertainty, close-out costs and model risk category-level AVAs, individual AVAs for separate valuation exposures. Those are then aggregated to provide total category-level AVAs using the Method 2 provided in the Annex to the Delegated Regulation 2016/101. Unearned C-redit Spread and Investing and Funding Costs AVAs are split into their MPU, CoC and MoRi components.

In 2020, the ECB increased the diversification factor (under aggregation method 2), reducing significantly the AVA results (from €125 mio to €74 mio EOY 2020). This temporary measure was removed in 2021, but this was compensated by a significant decrease in Model Risk AVA. This was mainly driven by a decrease in FVA Model Risk, from a significant decrease in funding spreads. A second contribution to model risk decrease is the NBT unwind, removing the bond-CDS basis uncertainty and reducing the FVA sensitivity.

Details can be found in table PV1.



VI. Liquidity risk

During 2021, Belfius maintained a comfortable liquidity position with an LCR at 195%:

- The commercial activities delivered a funding surplus as the increase of deposits has been higher than the increase of the outstanding of commercial loans, leading to a Loan/Deposits ratio of 85%;
- Belfius increased its participation to the T-LTRO & reached a total amount of T-LTRO III funding of EUR 15.7 Billion;
- Belfius issued EUR 0.5 billion Preferred Senior Bonds, EUR 0.5 billion Non-Preferred Senior Bonds and EUR 0.5 billion additional Tier 2. Aside from the liquidity benefit, these issuances will enable Belfius to further contribute to the MREL requirements.

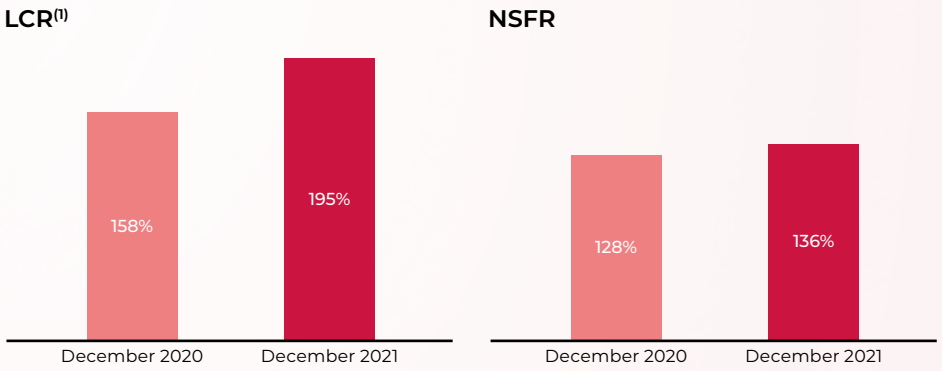
Definition

The liquidity risk at Belfius Bank is mainly stemming from:

- commercial funding collected from customers and the way these funds are allocated to customers through different types of loans/products;
- the volatility of the collateral that is to be deposited at counterparties as part of the CSA framework for derivatives and repo transactions (so called cash & securities collateral);
- the value of the liquid reserves by virtue of which Belfius Bank can collect funding on the repo market and/or from the ECB;
- the capacity to obtain interbank and institutional funding;
- concentration risk of funding sources, counterparties and maturities.

LCR & NSFR

Strong liquidity stance, even further boosted by Covid-19 crisis



(1) Calculation based on 12 months average

Liquidity risk is managed on a consolidated level, which includes the bank, its subsidiaries and branches and also the vehicles for securitization. Asset and Liability Management (ALM), a division situated within the scope of the Chief Financial Officer (CFO), is the first line manager for the liquidity requirements of Belfius Bank. This team is responsible to identify, analyse and report on current and future liquidity positions and risks, defines and coordinates funding plans and actions. The second line of controls is performed by the ALM and Liquidity Risk team, falling under the CRO responsibility, consisting in establishing a risk and control framework overseeing the first line of defense, ensuring thereby that risk management and control processes are properly designed and effectively operating. The third line of defense guarantees an independent assurance on the adequacy and the effectiveness of the governance, risk management and controls performed around the liquidity risk.

The Belfius liquidity risk management framework is articulated around several building blocks.

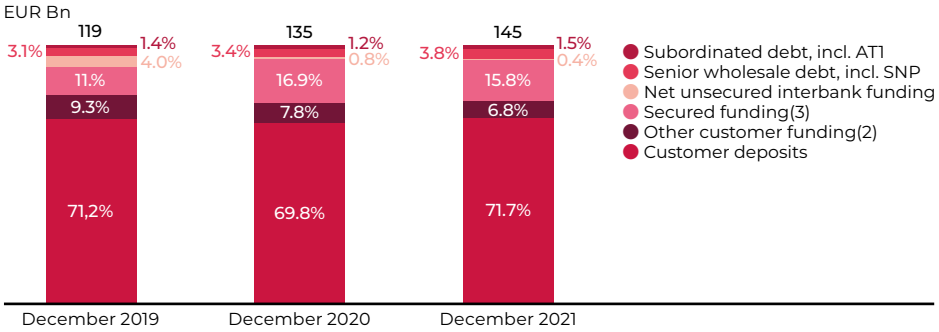
First a risk identification process ensures that evolution of risks are appropriately and pro-actively captured and emergence of new risks enters our risk management framework in a timely manner.

In terms of risk measurement, Belfius relies on a close monitoring of a set of regulatory and internal liquidity risk metrics as part of its Risk Appetite Framework defined with a main objective: "Belfius wants to maintain at all times sufficient liquidity even after severe but plausible stress". The Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) and the Asset Encumbrance ratio (AE) are the regulatory metrics in its scope. The risk appetite framework imposes an additional buffer on top of the regulatory minima to be respected at all times. This buffer combined with a set of predefined recovery measures ensures that Belfius will respect regulatory minima even under stress. In 2021, Belfius Bank has continuously displayed a strong liquidity stance, even further boosted during Covid-19 crisis.

Internal KRI's under monitoring are maturity concentration of funding, intraday liquidity risks, credit lines and liquidity buffer under stress. Belfius also takes concentration of retail deposits into account when defining stress scenarios. In this way, Belfius ensures to have a sufficient liquidity buffer even if some clients withdraw large amounts.

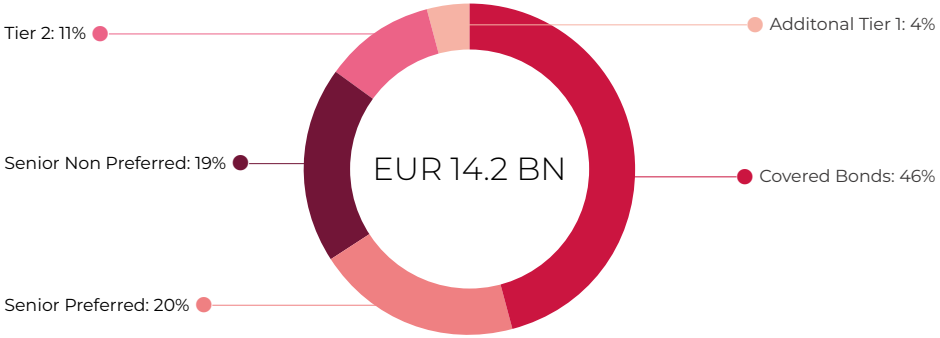
Belfius is focusing on ensuring well-diversified funding sources and a well-diversified investor base. In 2021, the bank has increased its funding base mainly driven by significant contribution from our customers and additional T-LTRO III drawing.

Evolution funding sources



Belfius has access to several wholesale markets: mid/long-term (MTL) & short-term funding and secured & unsecured funding. This complements the retail funding ensuring a diversified funding mix in terms of type of funding, maturities and seniority. In this context, 2021 was quite an active year as Belfius successfully issued a EUR 500m 7-year Senior Preferred benchmark in February 2021 and further diversified its funding sources by issuance of its inaugural EUR 500m 6-year Green Senior Non Preferred benchmark in June 2021, followed by a EUR 500m Tier 2 Benchmark in September 2021.

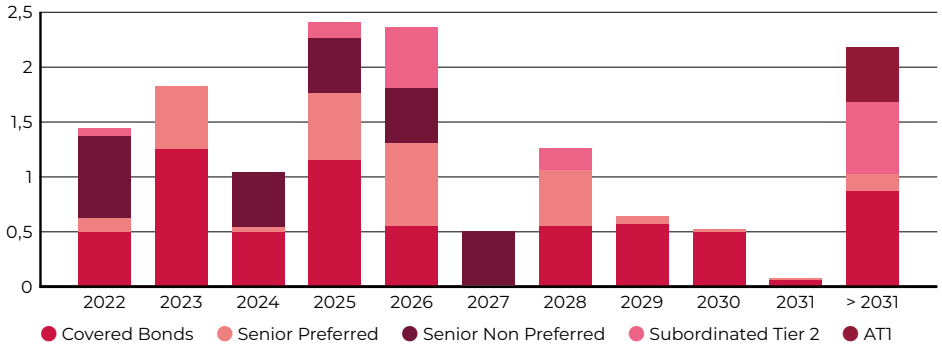
MLT wholesale funding strategy



Wholesale funding is also subject to a strong risk monitoring process due to the fact that this type of funding is quite volatile especially in stress periods. Amongst others, maturity concentrations of wholesale funding are limited in order to avoid an important appeal on wholesale funding in case of stressed financial markets.

Redemption profile MLT wholesale funding

In EUR Bn



All in all, Belfius strategy in terms of liquidity risk is to be a low risk profile bank by maintaining a conservative level of buffers and a diversified funding mix.

Another of the second line of defence controls is an early warning system that warns for a potential liquidity crisis.

The Belfius Bank liquidity risk management framework ensures that risk assessments, reporting's and proper follow-up's are performed to measure how our liquidity buffer is sufficient to cover extreme stress scenarios based on a large set of assumptions at inflow, outflow, risk source levels and on different time horizons ranging from intraday to complete stress on the funding plans while respecting the limits defined in our RAF.

Given its solid liquidity position, Belfius' funding plan is more than ever driven by MREL requirements rather than by an expected liquidity shortfall.

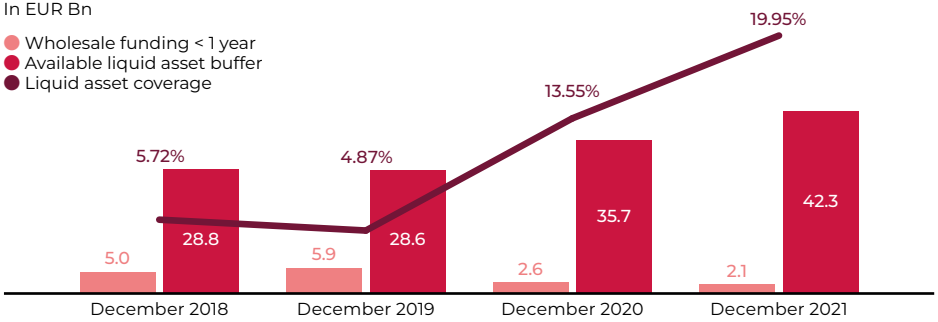
Given the T-LTRO III drawing of EUR 15.7 billion, less short-term wholesale funding has been attracted than previous years.

For the liquidity risk in general, we refer to the section Liquidity risk in the chapter Risk management of Belfius' Management report

For more specific information on liquidity risk we refer to the risk report annex (Tables LIQ1, LIQ2, Liq A and LIQ B).

Exceptional refinancing need coverage

In EUR Bn



VI.1. Covered bond activity

Belfius Bank has set up 2 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 programmes.

The main asset class of the special estate of the Mortgage Pandbrieven programme consists of residential mortgage loans that were originated by Belfius Bank (outstanding 31/12/2021 : EUR 7 292 mio; weighted average remaining life : 5.8 years) . The main asset class of the special estate of the Public Pandbrieven programme consists of public sector loans (outstanding 31/12/2021 : EUR 1 211 mio; weighted average remaining life : 7.7 years) that were originated by Belfius Bank.

Over the course of 2021, no Pandbrieven have been issued by Belfius Bank.

The main characteristics of those 2 programmes are provided in Appendix XI.3.2. and XI.3.3.

VI.2. Securitisation activity as originator

The securitisation activity as investor is described in the Section VI.6.2.

The steering of the set-up for securitisation transactions is performed by the FIG (Financial Institutions Group) & 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 on the one hand and the reliability of the reporting being produced on the other hand.

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. Only performing assets are included in the securitisation transactions. No profit or losses are realised upon sale of the assets to the Special Purpose Vehicle.

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

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

The main evolution in 2021 is the continued amortisation in the underlying portfolios of assets securitised.

For more specific information on Belfius 'Securitisation activity as originator' we refer to Table EU SECA in the risk report annex.

31/12/2021 (In EUR million)	Residential mortgage loans	Public sector loans	Corporate & SME exposures	Total
TRADITIONAL SECURITISATIONS				
Underlying assets	2,559	680	636	3,875
Defaulted assets[1]	4	0	14	18
of which exposures securitised in 2021[2]	0	0	0	0
Gains and losses on sales in 2021	0	0	0	0
SYNTHETIC SECURITISATIONS				
Underlying assets				
Defaulted assets[1]				
of which exposures securitised in 2021[2]				
RELATED SPVS	Penates Funding (Penates-6)	DSFB (DSFB-2)	Mercurius Funding (Mercurius-1)	

31/12/2020 (In EUR million)	Residential mortgage loans	Public sector loans	Corporate & SME exposures	Total
TRADITIONAL SECURITISATIONS				
Underlying assets	3,222	745	843	4,809
Defaulted assets[1]	4	0	14	18
of which exposures securitised in 2020[2]	0	0	0	0
Gains and losses on sales in 2020	0	0	0	0
SYNTHETIC SECURITISATIONS				
Underlying assets				
Defaulted assets[1]				
of which exposures securitised in 2020[2]				
RELATED SPVS	Penates Funding (Penates-6)	DSFB (DSFB-2)	Mercurius Funding (Mercurius-1)	

(1) Amount of defaulted assets (as of the date of default) using the def initions 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 CRR.

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.

Following the EBA guideline and based on the median values of the encumbrance reportings of the last four quarters, the encumbered assets at Belfius Bank amounted to EUR 46.9 billion end 2021. This represents an increase of EUR 0.5 billion compared to end 2020. The asset encumbrance ratio based on the median values amounted to 25.9% at the end of 2021. This is slighlty in breach with our internal RAF Level 2 indicator for which a first limit is set at 25% (recovery limit set at 30%). Nevertheless, this temporary breach was accepted due to the fact that it is fully explained by the T-LTRO funding and does not represent an economic risk. Note that the Asset Encumbrance ratio passed just below the limit, fully complying with the RAF, in the 4th quarter of 2021.

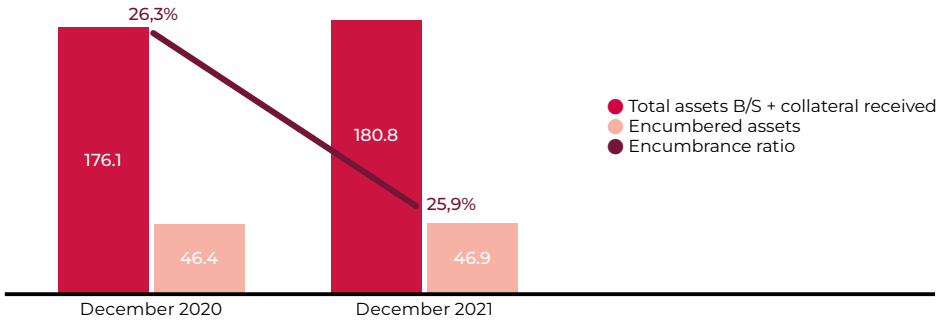
The encumbered assets are located within Belfius Bank, which is the only banking entity of the group generating encumbrance. The main sources of encumbrance are linked to the T-LTRO (EUR 20.0 billion) and the collateral pledged (gross of collateral received) for the derivatives exposures for EUR 11.1 billion (decrease with EUR 2.9 billion compared to end 2020), 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 9.6 billion median).

Given that no other currency is representing more than 5% of total Belfius liabilities, all encumbrance figures are computed in EUR.

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

In EUR billion



VI.4. Liquidity risk at Belfius Insurance

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

VII. Non-Financial Risk

As in recent years, non-financial risks have increased further in view of the evolution of external threats (cyber, fraud, outsourcing, IT, climate,) in a VUCA world. Belfius' ambitious strategy 2020-2025 also reinforces the emergence of different types of non-financial risks, requiring a reinforcement of the NFR Risk Framework, including internal controls.
In 2021, Belfius showed a strong resilience against these treats, with operational losses remaining low (2,93 mio). Even under difficult circumstances induced by Covid-19 crisis, the proper functioning of Belfius remained guaranteed, further building on the crisis organization that was rolled out last year. Through proactive pandemic risk analysis, working conditions are continuously evaluated and Belfius' organization is adapted accordingly, both to the operational needs as well as to the changing legal Covid-19 framework.
Further improvements in the overall NFR risk framework have been implemented, while risk tools have been enhanced as well. The new Permanent Control functions, with close proximity to business reality, are a reinforcement of Belfius' internal control framework. They are playing a leading role in the 1LoD risk management by ensuring that all internal controls are well implemented and operative.
With regards to Compliance, in 2021 important progress was made with the implementation of new technologies such as 'Big Data', Artificial Intelligence, Machine Learning and Robotics in order to further increase the efficiency of the internal control process. In addition, the collaboration and alignment between the first and second level of defense has been strengthened further with the creation of the new Permanent Control function and the integration of the Branch Audit/Inspection team within the Risk Perimeter.

Definition

The term Non-Financial Risk (NFR) must be understood as a broad umbrella covering among others operational risks (including fraud, HR, IT, IT security, business continuity, outsourcing, data-related risks, privacy ...) as well as reputational, compliance, anti-money laundering, legal risks, etc.

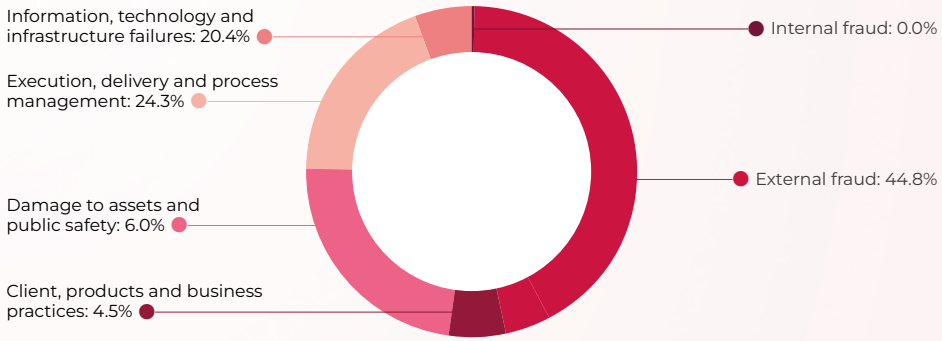
Average annual potential net losses from operational incidents (2019-2021)

EUR
2.93 million

2,5% of events represent
95% of impact

Operational incidents

Breakdown of total losses by standard category of incidents over the past three years at Belfius Bank



VII.1. Fundamentals of Non-Financial Risk in 2021

As in recent years, non-financial risks have increased further in view of the evolution of external threats (cyber, fraud, outsourcing, IT, climate) in a VUCA world. Belfius' ambitious strategy 2020-2025 also reinforces the emergence of different types of non-financial risks, requiring a reinforcement of the NFR Risk Framework, including internal controls. In this context, the new Permanent Control functions are playing a leading role in the 1LoD risk management by ensuring that all internal controls are well implemented and operative.

In terms of non-financial risks, traditional operational risks are under control, while IT-related risks remain a focal point of attention in 2021.

In 2021, the successful management of non-financial risks continued thanks to a.o. the following NFR realisations:

- The implementation of a new Business Continuity Management tool.
- The structural application of a hybrid way of working (tele-working and on premise) as well as the gradual and safe return to the offices, when allowed by the applicable national, regional and local safety measures.
- The extension of the Risk Appetite Framework on a conglomerate level with alignment of qualitative and quantitative NFR indicators.
- The issue of new guidelines for SaaS applications mitigating risks on external cloud providers.
- The validation of a Risk EUC Application policy and guidelines accompanied with an overall risk assessment and a centralized register for EUC's.
- The definition and description of the SCHREMS II process in line with the regulatory requirements with regard to data privacy outside EEA.

Even with the ongoing COVID-19 pandemic, services to clients remained fully operational in 2021. To this end, the same successful structural approach as last year was continued. This mainly consists of the following two elements:

- a transversal follow-up of the situation by a crisis team so that all aspects are closely monitored: the continuity of the critical activities, the safety on premises, the well-being of colleagues, possible sources of infection, strategic elements besides the very practical ones (meetings' organization, commercial events, travels, visitors, ...)
- performing own risk analyses targeting IT and operational risks.

As such, the Management Board was able to swiftly take appropriate measures and initiatives whenever necessary.

Furthermore, the strongly increased share of teleworking (2021 : average 80%) was consolidated in the daily organization.

As a conclusion, Belfius proved its resilience in 2021 in the field of NFR risk management and is confident to be able to adapt to further evolutions of the pandemic and to further enhance the NFR framework so that Belfius resilience will remain guaranteed in the future.

VII.2. Non-financial risk - operational risk

VII.2.1. Non-Financial Risk Management Framework

The term Non-Financial Risk (NFR) must be understood as a broad umbrella covering all risks except "financial risks" (the latter encompassing 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, anti-money laundering, legal risks, etc.

The NFR management framework determines the principles, the organisation, the governance, ... that ensure an effective management of the non-financial risks. The principles are further elaborated in specific Policies/Guidelines adapted to the business activities. These general principles are compliant with the applicable legal and regulatory requirements.

The framework is based on four axes:

- a risk mapping and taxonomy in order to ensure consistency within the organization, including a regular review in order to identify emerging or material increase in certain risks;
- transversal risk processes and related policies including risk measurement (risk appetite definition and follow-up, self-assessment of risks and internal controls, ...), reporting (incident monitoring, risk reporting, ...) and mitigation actions (business continuity and crisis management, ...).

- clear roles and responsibilities, as well as a well-defined way of working together for all the risks based on the 3 LoD model (decentralized responsibility); and
- a strong governance/committee structure involving the appropriate level of management.

The NFR department, as an independent internal control function, reports directly to the Chief Risk Officer and includes the specific functions of Data Protection Officer (DPO) and Chief Information Security Office (CISO). NFR takes on the 2nd LoD role, ensuring a clear risk management framework and sound risk governance, including assessment, management, monitoring and mitigation of risks.

The reporting, is – besides several specific reports - mainly covered via a dedicated chapter in the Quarterly Risk Report sent to the Management Board (via amongst others the NFRC) and senior management. For the various NFR risk sub-committees, we refer to annex XI.4.1.

For capital calculation, the "Standardised Approach" is used (see also Operational risk in the chapter "Regulatory framework and pillar 3 disclosures).

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 qualitative elements (statements) and quantitative elements (target values or ratios). The latter cover a.o. operational incident losses, fraud risk, data privacy risk, information security risk, outsourcing & third-party risk, NFR management capacity as well as ESG risk, resources risk and project/transformation risks.

The RAF is continuously updated and improved regarding RAF indicators, with constant challenging at the governance level and an improving level of maturity.

In order to further strengthen the conglomerate dimension, in 2021, a RAF roll-out in the subsidiaries has been realised, These RAF's are based on the RAF at group level, reflecting and monitoring the own (financial and non-financial) vulnerabilities and risks of each subsidiary.

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.

The reporting mechanisms ensure that the responsible parties are notified quickly when incidents occur.

Major incidents are investigated thoroughly and are reported to the CRO/Management Board. Such incidents are also subject to specific action plans and appropriate follow-up under the responsibility of the concerned teams / entities for avoidance, mitigation or limitation of the related risk.

For the period 2019-2021, Belfius Bank's average annual potential net losses stemming from operational incidents amounted to EUR 2.93 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. One-off costs, in order to make Belfius as operational during the covid-19 pandemic as before the crisis, accounting for all covid 19 restrictions and safety measures (i.e. disinfection of premises and air conditioning systems, personal protective equipment, thermo-scanners, plexiglass barriers, additional laptops/networks and specific communication supports, ...), have been classified in the category 'Information, technology and infrastructure failures' making this risk the 3rd most important category (in amount), whereas this category was very limited in the past.

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

VII.2.3.2. Self-Assessment of Risks and Internal Controls (SARIC)

Another important mission of NFR management is the analysis of the overall main potential risks and related key controls performed within Belfius Group's main entities. This is achieved through a bottom-up self-assessment of Risks and Internal Controls in all departments and subsidiaries, leveraging the COSO Methodology across our 3 Lines of Defense model. These exercises may result in the development of additional action plans to further mitigate potential risks and provide a complete, current and forward-looking overview of the main risk areas in the various businesses/entities. The self-assessments are conducted annually and the results are submitted to the respective Boards of Directors. Belfius Bank also submits the Senior Management Report on the Assessment of the Internal Control to its regulators.

VII.2.3.3. New Product Approval Process (NPAP)

The process of developing or changing a function (defined as a product, service, activity, process or system) involves a sound (ex-ante) risk assessment, so called the New Product Approval Process. It ensures that all risks related to any new or altered function are understood, assessed by relevant experts and addressed accordingly in order to be validated by a dedicated steering 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, 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.

The supporting process, the business continuity and crisis management, is compliant with the ISO22301 standard and the BCI Good Practice Guidelines. It is applied with a uniform approach throughout all Belfius entities.

No incident happened in 2021 that caused a Business Continuity Plan (BCP) deployment, but several tests have been organized in order to validate the analyses and to exercise the business continuity plans. Although all tests were successful, each time 'lessons-learned' were cascaded into action plans. All of them were executed in the meanwhile.

During 2021, a new Business Continuity Management tool was implemented.

Consequently, the Business Continuity Management of Belfius proves to be a very mature process guaranteeing the institution's future resilience.

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

VII.2.4.1. Information Security

The purpose of information security is to protect Belfius' information: i.e. the information generated by the business, the information belonging to our clients, and also 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 information are their loss of integrity, their loss of confidentiality and their (unplanned) unavailability. The mission of information security is to protect Belfius group 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 were to materialize, in terms of customers' confidence, financial impacts, Belfius reputation, stakeholders' confidence (regulators, financial markets,...) and relationship with our business partners. An information security strategy derived from these principles has been approved and is applicable to all actions pertaining to information security. The overall strategy includes the Belfius vision on people, technological and procedural aspects of Information Security.

In order to guarantee the information security, the Information Security Steering (ISS) Committee, hosted by the Chief Information Security Officer (CISO) and chaired by the Chief Risk Officer, ensures a well governed and coordinated strategy whereby an adequate system of "prevention", "detection", "protection" and "reaction" is put in place, in line with regulatory requirements and contractual agreements towards information security.

The steering of Belfius information security relies on tangible figures and quantitative statements. A risk appetite framework is in place for Information Security, and deviations from this risk appetite are systematically challenged and action plans are put in place. Moreover, large security projects are grouped together in a security roadmap which typically spans the course of two years. The ISS regularly reviews the maturity of the Information Security awareness via the KRIs in the RAF and via regular updates in the form of dashboards. Of course, the ever-evolving security threat landscape requires Belfius to be resilient and anticipate existing and future threats.

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 and is reinforced by Belfius commitment under the Governance component of its ESG-strategy. This is communicated externally by means of the Belfius privacy charter. Internally, this is translated into a Privacy policy and corresponding guidelines, a sound internal governance and principles to be followed in respect of GDPR. Belfius is also very committed to avoid personal data breaches and to manage any incident as quickly as possible.

All activities dealing with personal data are centrally documented by the business lines in a privacy register. GDPR conformity, including a risk assessment for the rights and freedom of the persons whose personal data are treated, is structurally integrated into every approval process to offer (existing, adapted and new) products, innovative digital tools, services and information sharing to its clients.

In order to continuously guarantee data privacy within Belfius, a dedicated steering related to GDPR meets on a regular basis. The Belfius Management and several committees are informed on a recurring basis about GDPR conformity within Belfius.

A global risk appetite framework is in place for Data privacy, and deviations from this risk appetite are challenged and if needed, lead to mitigation actions.

A network of privacy correspondents, active in each department, supports and advises the staff members in the first line regarding GDPR. They work closely with the DPO to continuously raise awareness, control and monitor processes and activities being in line with GDPR.

GDPR-awareness is passed on to all staff members via mandatory GDPR e-learnings and via an extensive communication. E-learning is subject to a three-yearly cycle of repetition and the response rate is now monitored and reported in a Key Risk Indicator as part of the RAF. In 2022, Belfius co-workers will be requested to repeat the e-learning.

GDPR data subject rights[1] can be executed by data subjects via multiple channels, including the Belfius online applications and mobile apps. In 2021 more than 98% of the data subject rights are asked via the Belfius online app and receive an answer in the same app within 1 business day.

VII.2.4.3. Fraud risk

Belfius applies a zero-tolerance policy for all forms of fraud (internal, external and mixed fraud schemes). It is therefore monitoring the threats continuously and is managing fraud risk based on a global anti-fraud policy defined and steered by senior management.

The roles and responsibilities have been clearly defined, which implies concretely that business and support lines are the first risk managers. The CRO and NFR team, including the Anti-Fraud Officer as expert, have a 2nd LoD role, completed by Internal Audit as the 3rd LoD.

In a context of evolving digital channels and faster payments processing, internal controls are continuously screened to prevent fraud and this, to protect the interests of Belfius and its employees, customers, suppliers and other stakeholders.

VII.2.4.4. Outsourcing risk

Belfius is managing outsourcing & third-party risk adequately and fully assumes its responsibilities, including but not limited to overseeing and managing the concerned arrangements and the risks involved.

The Outsourcing risk & material arrangements Policy is compliant 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. Monitoring and control of the significant providers, in particular to whom personal data is transferred, has been sharpened within the 3 lines of defense.

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 to its staff, clients, visitors and assets by ensuring that physical security measures and procedures meet high standards. To reach this goal, a Security Steering Committee monitors systematically the overall situation by means of a dashboard. It also acts as a forum to reflect on actual incidents and on action plans to reduce the risk to acceptable levels whenever needed.

(1) GDPR data subject rights : the right to be informed, of access, to rectification, to object to processing, in relation to automated decision making and profiling, to be forgotten, to data portability and to restrict processing.

VII.3. Business, strategic & execution risks

VII.3.1. Business risk

Definition

Business risk reflects the unexpected decrease of profitability compared to the expected (or budgeted) plan resulting from changes in competitive environment, lack of responsiveness to changes in the business environment (macroeconomic, regulations, client behaviour, competitive landscape, socio-demographic, climate, ...) 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. Additionally, with regards to the Financial Plan, sensitivity analyses and stress-testing are executed to tackle the business risk in a forward-looking manner.

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 adequate risk/opportunity balance.

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 and ensure the group's survival of the Group and the continuity of its activities.

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

Reputation risk is defined as the potential decrease in the value of the Belfius brand arising from adverse perception of the image of the financial institution by customers, counterparties, shareholders, investors, regulators or other stakeholders.

Organisation and management of the Risk

Reputation risk (mainly image and branding) is steered by the Brand, Experience and Communication Department in direct line with the CEO and the BoD Chairman. The CRO and NFR teams are active partners in this field.

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

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

- 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 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 ensuring a clear and univocal response to incidents or crises. The emphasis is given, amongst others, on effective response to press, interaction on social media, sound complaint management and crisis communication.

The key internal control actors, i.e. the Brand, Experience and Communication department, the Risk department, and all business departments, have set up appropriate risk management frameworks and policies to prevent, detect and monitor potential reputation impacts. Reputation risk is also taken up in the NPAP process.

They each assess risks relating to their areas of expertise on a regular basis, 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 to share information and to ensure a consistent and exhaustive risk management approach within the Bank.

Risk Appetite

Belfius wants to be perceived as a sound and trustworthy partner by its relevant stakeholders (mainly prospects, customers, investors and regulators) by proving Belfius is taking up its deep-rooted commitment to achieve client satisfaction and to focus on a long-term profit strategy with a low risk profile.

Belfius wants to affirm, promote and protect its excellent reputation.

Reputation risk is a top strategic business risk and a key business challenge. Reputation risk management is key to Belfius since the business model is based on trust. Avoiding all threats that can possibly undermine the trust of our stakeholders is central for us.

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, internal policies or prescribed best practices 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 (AML).

These three teams are supported by a specific unit which frames projects at an IT and organisational levels.

The central Compliance department may also call on the services of a large network of Compliance correspondents within the Bank's divisions, as well as on a network of Compliance managers within the branch network. They play an important role, particularly in the introduction of Compliance policy and procedures as well as in the training and awareness programs.

A Compliance Officer recognised by the FSMA and the 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 regulators.

As required by the regulations, the department also has an 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 strives not to be involved in laundering money from illegal activities, the organisation of tax fraud, financing terrorism or circumventing international embargos in line with all legal requirements. To underline this commitment, the AML CO has established preventive measures and broadened controls. Proper knowledge of the customers and their identification (Know Your Customer process), investigation on the origin of financial flows on accounts and detection of dubious transactions (Know Your Transaction process) 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 the Belfius Group. Belfius Bank traces out the group policy and defines the Compliance methodology to be used. Each regulated subsidiary company has a Compliance Officer who is responsible for the application of the transposed policy within his/her company. These Compliance officers report functionally to the Compliance Officer of Belfius Bank.

Belfius Bank has a very low risk appetite for Compliance risk. This is important to maintain a good reputation, the confidence of all stakeholders, and to avoid administrative or criminal sanctions. In this context, Belfius is continuously evaluating and reviewing its Compliance framework to remain in line with the latest regulatory evolutions, best practices in the market, and strategy of the bank. In 2021, important progress was made with the implementation of new technologies relying on Artificial Intelligence, Machine Learning and Robotics techniques in order to further increase the efficiency of the internal control process. In addition, the collaboration and alignment between the first and second lines of defense have been strengthened further with the creation of new Permanent Control functions and the integration of the Branch Audit/Inspection team within the Risk Perimeter.

Capitalisation

This risk is not covered by capital. The reasons behind the absence of quantification of Compliance risk are primarily driven by the lack of sufficient available data and/or history to support a statistically robust quantification process. In that context, capital is not the adequate answer to cover Compliance risk. We therefore consider more relevant to monitor this risk through a strong compliance culture, 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

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 and regulations;
  - incorrect application of the regulatory framework: the risk of incorrectly applying laws and regulations, 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 sufficient 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 the contracts with third parties (contracts with terms that are either inadequate, unfair or unenforceable);
  - ignorance of the contractual framework: the risk of not taking into account all the commitments made by Belfius with or towards any third party (failure to keep track of and meet or enforce contractual obligations or rights).

The materialization of the legal risk may entail the following consequences for Belfius:

- a financial impact;
- a reputational impact;
- litigation, liability (civil or criminal), sanctions (administrative or criminal), or measures imposed by a (supervisory) authority; and/or
- an impact on customer satisfaction.

Organisation and management of the Risk

In order to control legal risks, a Legal Risk Framework (also known as Legal Risk Policy - including a Risk Assessment Matrix) has been set-up and approved by Belfius' Management Board. This Legal 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 report, including a dashboard of the identified major legal risks 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 sufficient available data and/or history to support statistically robust quantification. In that context, capital is not the adequate answer to cover Legal risk. We therefore consider more relevant to monitor the Legal 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 which 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 impact cost. Sources of these risks include 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. ESG Risk Management

For a few years now, ESG risks have been considered a top risk that can affect Belfius both directly and indirectly. Since ESG risks affect other traditional risk types, the financial impacts of these risks can materialize in a whole range of ways and within different time horizons. Obviously, Belfius wants to reduce its level of exposure to ESG risks but is also committed to supporting the transition to a low-carbon climate-resilient economy, while managing its impacts on society. As such, steps have been taken to gradually integrate these considerations into the overall risk management framework.
2021 was marked by the design of a detailed ESG Action Plan covering the 13 ECB expectations and including a roadmap around ESG strategy, governance & organization, data & reporting, risk management and disclosures. Main Risk achievements of the year include the set-up of an ESG Risk competence center, the preliminary mapping of climate-sensitive exposures within Belfius loan portfolio, a first materiality assessment on transition risks in the Belfius large corporate portfolio and the integration of additional ESG key risk indicators in the Risk Appetite Framework. The development of an ESG scoring methodology for corporates is ongoing as well as the preparation for the 2022 ECB climate risk stress test. Progress is also to be noted regarding the inclusion of ESG factors in the non-financial risks sphere.

Definition of ESG risks

ESG risks are the risks of any negative financial impact on an entity, sovereign or individual stemming from current or prospective impacts of Environmental, Social or Governance factors on its financial performance or solvency.

These risks can exacerbate other risk types such as credit, market, liquidity, operational or reputational risks.

Climate-related risks

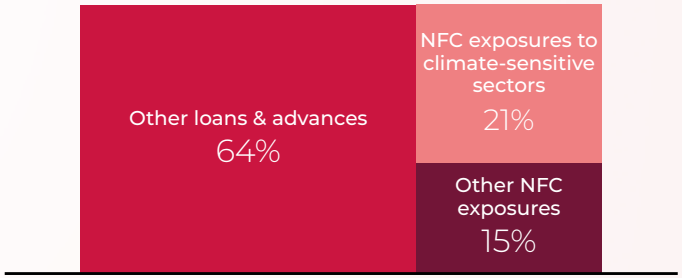
Climate-related risks relate to the risks associated with global warming and represent a sub-type of ESG risks.

Climate risk drivers include acute or chronic weather events but also policy, technological and behavioural changes.

Transmission channels include property damages, business disruptions, loss of income, higher costs and investments, lower profitability and asset values but also macro-economic changes (such as price increases and labour productivity decreases).

Climate Sensitive Exposures

Total loans & advances 31/12/2021



Please refer to Belfius' Sustainability Report for more information regarding generic sustainability matters (including Belfius ESG strategy, corporate governance and climate actions) as this section of the Risk Report focusses primarily on ESG risks and their management.

VIII.1. What are ESG risks and why do they matter?

The ESG metrics help measure the sustainability and societal impact of business activities.

What does E.S.G. stand for?

- **Environmental**: Pillar "E" usually includes topics relating to greenhouse gas emissions, use of natural resources, impact on biodiversity, waste, pollution,...
- **Social**: Pillar "S" usually includes topics relating to human rights, workforce, impact on community, product responsibility, employee training,...
- **Governance**: Pillar "G" usually includes topics relating to management, stakeholders engagement, compliance, ethical behavior,...

ESG factors create opportunities but entail risks as well. These risks can affect Belfius directly but can also impact it indirectly, through its financing activities, as these risks can negatively impact the income and wealth of individuals and the revenues and profitability of corporates.

Focussing on operational and financial resilience and ensuring that reputational, compliance, conduct and litigation risks stemming from ESG topics remain as low as possible is key in a changing environment (rising temperatures, more frequent and significant natural disasters, new climate-related policies, emerging technologies,...). Managing the risks Belfius is exposed to through its financing activities (i.e. its exposure to counterparties that may potentially contribute to or be affected by climate change) is essential too. In this field, and in line with its mission to be inspiring and meaningful for the Belgian society, Belfius is willing to play a prominent role and be a significant actor of the transition in Belgium, meaning full attention will be given to both reducing Belfius level of exposure to ESG risks and supporting our customers in their transition.

ESG risks have been identified by Belfius as a top risk for a few years now (even ranked in the top 5 risks in 2021) and are fully embedded in the risk taxonomy, not as a separate risk category but as a driver of more traditional financial and non-financial risks. In this way, ESG factors are identified as risk drivers that can affect Belfius' profitability and solvency over time. They are also part of risk reflections/recommendations, underpinning informed decision-making and strategic planning adjustments and inform a more constructive dialogue with stakeholders and the maintenance of a strong corporate reputation.

However, ESG topics are still in an emerging phase with currently no standardized consistent approach across the financial industry for identifying, measuring and managing these risks. A flexible and gradual approach is therefore recommended to tackle some issues and overcome the following challenges along the way:

- Granular data is often lacking.
- Science and technologies are evolving fast.
- Regulation and legal references are regularly updated and become more and more stringent and complex.
- Several scenarios are plausible and there is still a high degree of uncertainty regarding which risks will materialize and when and how they will materialize.
- Some risks will probably only occur in the long term (beyond 10 years) which makes predictions and projections even more complex.
- Methodologies and best practices in the field of ESG risks management are not always mature in general.

Within the category of ESG risks, climate-related risks (i.e. financial risks associated with global warming) are currently in the foreground. As climate change will undoubtedly have a significant and lasting impact on economic growth and prosperity, the management and supervision of climate-related and environmental risks have been identified as a top priority by financial institutions' regulators and supervisors.

Drivers of climate-related risks are usually categorized into physical and transition risks and are subject to various transmission channels:

- **Physicals risks** arise from the physical effects of climate change and include acute risks (mostly weather-related events and natural disasters such as storms, floods, fires or heatwaves) and chronic risks (which are incremental pattern changes such as rising sea levels, water stress or biodiversity loss).
- **Transition risks** arise from the transition to a low-carbon economy and include policy risks (such as the introduction of a carbon tax, new energy efficiency requirements for buildings,..), technological risks (rendering old technologies obsolete in favor of new ones, less damaging for the climate), market risks (such as a shift in consumers preferences), legal risks (i.e. the risk of litigation for failing to address climate-related issues) and reputational risks.

Belfius climate risk materiality matrix

Risk type	Risk driver	Description	Transmission channel	Time horizon / impact level		
				ST ≤3 years	MT 4-10 years	LT > 10 years
TRANSITION RISK	POLICY & REGULATION	Increase in cost of GHG emissions due to policy or regulatory changes (tax, quotas,...)	Increased cost of own emissions		●	
			Increased cost of emissions of customers		●●●	●●
		Mandatory renovation for energy consuming real estate	Lower household/business wealth, lower collateral value	●	●●	●●●
		Changes in regulation / prudential treatment of climate risk-sensitive assets	Increase in regulatory capital requirements	●	●●	
	TECHNOLOGY	Low-carbon technologies that replace carbon-intensive products/services	Decrease in market value of carbon-intensive assets	●	●●	
	LEGAL / COMPLIANCE	Legal risk related to compliance with ESG regulations	Administrative penalties/sanctions due to non-compliance	●●	●	
	MARKET DISRUPTION	Changes in customer preference, demand and supply shifts to sustainable products / services	Decrease in market value of non-sustainable assets	●	●●	
		Increase in cost of raw materials	Increase of own energy supply cost	●		
			Increase in energy supply cost of customers	●●		
		Non-compliance with financing/investment strategy with respect to climate change	Negative perception from the external stakeholders (reputation risk)	●●	●	
PHYSICAL RISK	ACUTE EVENTS	Heatwaves, hurricanes, wildfires, floods	Damage to production sites, disruption value chains (own operations)		●	
			Damage to production sites, disruption value chains (financing activities)	●	●●	
			Lower repayment capacity because of higher insurance premiums	●	●●	
	CHRONIC PATTERNS	Increasing droughts, sea-level rises	Increases in clients' costs, drop in client's production (e.g. agriculture)		●	●●

VIII.2. Belfius' ESG Strategy and Framework

All 3 components of sustainability (i.e. Environmental, Social and Governance) are at the core of Belfius' mission and vision (i.e. being meaningful and inspiring for Belgian society):

- Belfius wants to be a leading actor towards the transition to a sustainable Belgian economy and society and is committed to actively contributing to the Paris Climate Agreement and the Sustainable Development Goals.
- Belfius is committed to making its operations as sustainable as possible (e.g. sustainable procurement, sustainable IT,...) and to setting an example as employer in the field of sustainable development (e.g. equal opportunities, well-being, social commitment, mobility,...).
- Belfius is also committed to achieving a sustainable balance sheet by investing sustainably, encouraging its customers to do so too and supporting Belgian businesses in their shift towards sustainable activities.

Belfius overarching goal is threefold: we want to adequately manage ESG risks in order to ensure that Belfius remains resilient and stays profitable while also limiting our potential negative impact on the world and maximizing our positive impact and contribution to society.

When assessing ESG risks, we therefore always rely on the concept of double materiality:

- **Financial materiality**, i.e. the impacts of climate change on Belfius (whether directly on our own operations or indirectly through our financing activities);
- **Environmental and social materiality**, i.e. the impacts of Belfius on climate change (i.e. our positive and/or negative contribution).

There are overlaps between these two perspectives as generally speaking, a company with a higher negative impact on the climate will be more exposed to transition risks.

Since 2020, Belfius started developing a **general sustainability framework** that sets the foundations for a better framing and management of ESG risks:

- **Setting-up a specific ESG governance**, with clear allocation of roles and responsibilities, structured around 12 thematic transversal workgroups under C-level sponsorship. The ESG global strategy is designed at the conglomerate level and Belfius' subsidiaries are actively involved in the dedicated workstreams.
- **Continuously scanning the environment**, taking into account the latest scientific and technological developments, climate plans and social trends. We can rely for this purpose on the expertise of various internal departments (such as the Central sustainability team or the Research department) but also on the know-how of Belfius' subsidiaries in the fields of insurance, asset financing & asset management and the knowledge from external experts.
- **Raising awareness**. Various webinars have been broadcasted, targeting large audiences and covering various topics such as Belfius' Transition Acceleration Policy (TAP), the data collection process, the risk management action plan,... External experts' insights have also been used to feed the Boards' strategic reflections.
- **Foreseeing a good proactive regulatory watch** and anticipating changes in regulations
- **Capturing granular data**. We have set up a dedicated ESG Data Program that is currently being rolled out and whose primary focus lies on the collection of the GreenHouse Gas (GHG) emissions data of our counterparties and Energy Performance Certificates (EPC) of our real estate assets. A mix of external and internal databases is being used to this end, as well as proxies and estimations to fill the gaps whenever necessary. One illustrative example of the progress made lately: as of 01/01/2021, we systematically collected the energy performance certificates of residential buildings. Changes are being made also to our IT infrastructure in order to be able to store these additional data points in a centralized way. A new ESG Data Center was created as well.
- **Having access to best-in-class resources and tools**. We aim to capitalize on the scenarios provided by the Network for Greening the Financial System (NGFS) and the pilot exercises carried out by UNEP FI. We are also analyzing the PCAF and PACTA methodologies and already committed to implement science-based targets.
- **Sharing knowledge and best practices**. We are member of various associations (UNEP FI, PCAF, BACA,..), collaborate with other banks and participate to sectoral initiatives (FEBELFIN, ASSURALIA,...) to further expand and share the expertise.
- **Engaging with stakeholders**. We started dialoguing with our customers to better understand their needs and the support Belfius could bring to help them transition to a climate-resilient economy. A materiality assessment has also been performed lately to identify our stakeholders' most prominent concerns regarding ESG.

- **Improving our disclosures**. A TCFD section has been included in our Sustainability Report and dedicated workgroups are addressing the requirements of the SFDR, the EU Taxonomy and the Pillar 3 Disclosures.

In 2021, Belfius moved forward with the design of a detailed and ambitious ESG Action Plan, aimed at aligning our practices and plans with the expectations set by the European Central Bank (ECB) in its Guide for climate and environmental risks and at integrating ESG considerations in our Risk Management Framework. This roadmap is a pluri-annual one and assumes a gradual enhancement of our expertise (considering more insights should be gained as data, methodologies, expertise and tools are being perfected).

VIII.3. Integration of ESG considerations in the Risk Management Framework

VIII.3.1 Reinforced governance and organization

Sustainability and ESG risks can potentially impact a lot of risk types: credit risk, market risk, liquidity risk, operational risk etc. Therefore, the integration of ESG risks in the Risk Management Framework is steered by a transversal Risk team with dedicated resources to ensure a coordinated and holistic approach. Belfius is aware of the numerous challenges in the risk management area and strives for continuous improvement of its ESG risk management capabilities and has thus allocated additional financial and human resources to this project in 2021.

An ESG Risk Competence Center has been set-up within the Strategic Risk Management department.

- This department participates in the overall Group's ESG governance and is a key contributor to the Strategic Sustainability Committee.
- The members of the ESG Risk Competence Center attend various ESG related committees and are part of the ESG data core team.

This specialized team (which is supported by external advisors) oversees the implementation of the ESG Action Plan and reports regularly to the Chief Risk Officer and quarterly to the Management Committee and the Risk Committee (advisory body of the Board of Directors).

The responsibilities of the ESG Risk Competence Center include the development of a comprehensive ESG risk management framework which entails a partnership with other group Risk departments and supposes strong collaboration with other departments to feed the reflections regarding our sustainability strategy and set up the required methodologies and tools to implement that strategy.

Its role is also to raise awareness about this topic within Belfius and ensure the ESG dimension is fully embedded across the three lines of defense in the day-to-day business activities. Roles and responsibilities regarding ESG Risk Management are thus progressively integrated into the whole organization and across main subsidiaries, within each line of defense (its traditional role being extended to this new risk driver).

The Risk Mapping 2021 has been adjusted accordingly:

- Responsibilities for each risk category are allocated to the first and second lines of defense. Regarding the second line of defense, a follow-up is performed by the ESG Risk Competence Center to ensure each Risk team meets its individual objectives in integrating the ESG risks.
- The third line of defense is also playing its role with a first internal audit regarding Belfius ESG action plan performed in the second half of 2021.

VIII.3.2 The ESG Action Plan

VIII.3.2.1 Identification and assessment of ESG risks

Risk identification and assessment are a pre-requisite to more detailed risk management actions and processes. Belfius' approach is based on the materiality of the various risks and portfolios considering its specific risk profile. The main focus in a first instance therefore lies on credit risk (in terms of risk types) and on the corporate and mortgage loan portfolios (in terms of portfolios).

A. Operational and reputational risks

Attention has been dedicated to the impact of climate-related risks on Belfius operational resilience for several years. The bi-yearly threat analysis exercise measures the impact of physical risks, including natural disasters, on assets (including data centers), with a view on business continuity management and planning. If necessary, adequate mitigating actions are then taken to ensure the ability to continue or quickly resume critical activities in case of extreme events. Note also that most critical activities are executed simultaneously at different places and that the use of adequate technologies are also limiting the potential impact of climate-related risks on the activities.

Belfius has also significantly strengthened its approach regarding its suppliers with the set-up of a specific ESG due diligence screening process. Since 2020, Belfius further detailed and sharpened its commitments towards sustainable procurement. The Procurement Policy has been reviewed with the aim of integrating ESG considerations into the supplier selection process. Furthermore, we collaborated with an external partner to develop a Sustainability Code of Conduct for Suppliers, which defines the principles to comply with. As part of this process, Belfius has launched, in late 2021, a vendor assessment and monitoring initiative. Belfius also actively steers vendors to improve their ESG practices.

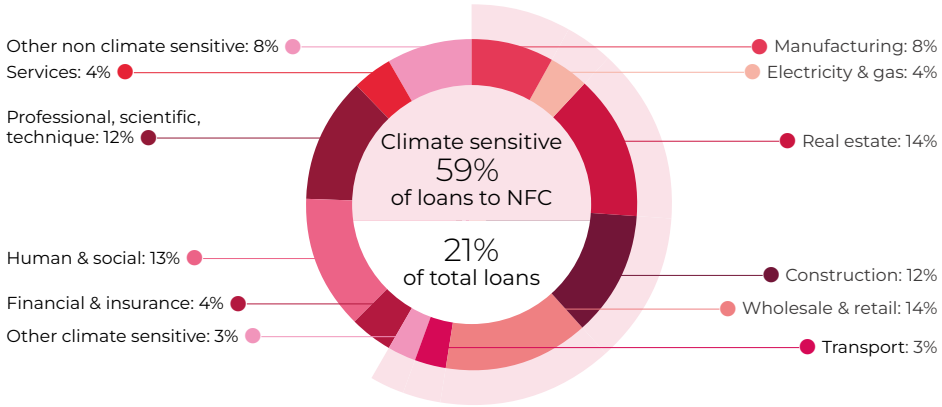
Belfius aims to keep a strong reputation in the field of ESG as well. Belfius is therefore committed to reducing its own environmental footprint and remaining carbon neutral. Details regarding Belfius' ongoing initiatives, including its voluntary commitments and its sustainable financing solutions, can be found in the Sustainability Report.

B. Credit risks

At portfolio level

As far as credit risks are concerned, the first objective is to assess the materiality of climate-related risks when mapped to the Belfius'portfolios in order to identify the most vulnerable counterparties and assets and measure our level of exposure to those risks or counterparties and assets.

In 2021, we carried out heat maps aimed at detecting sensitivities to climate-related risks within the loans & advances to non-financial corporations (NFC). The identification of sensitive sectors is based on a cross-check of multiple sources including Climate Policy Relevant Sectors (CPRS), climate stress test methodology provided by the ECB, Pillar 3 disclosures, etc. It is therefore a mix of carbon-intensive sectors, activities that are deemed to contribute highly to climate change and/or industries that are usually considered as greatly exposed to climate-related risks. The below graph constitute a rough estimate of potential sensitive exposures but a screening at counterparty level will be performed to refine these numbers and identify the exposures that are really particularly vulnerable to climate-related risks.



As shown above, we have very limited exposures to some of the most climate sensitive sectors such as agriculture and mining. Other sensitive industries like Manufacturing and Wholesale and Retail trade are quite large and require a deep dive into the activities performed to better identify the impacted sub-industries or companies

We went a step further and performed a more specific assessment targeting our non-SME corporate exposures (loans and bonds). The aim of this materiality assessment is to measure the amount of exposures that relate to companies or groups active in climate sensitive activities. Exposures were mapped and evaluated according to different classification approaches in line with the EBA recommendations ("Mapping climate risk: Main findings from the EU-wide pilot exercise" – May 2021). One of the approaches relied on the CPRS (Climate-policy relevant sectors) classification to identify sectors which are particularly sensitive to a disorderly transition. This exercise was complemented with a first estimate of our green asset ratio based on the JRC's taxonomy alignment coefficients. The conclusion from this high level materiality assessment is that Belfius has a relative sound balance sheet with sensitive assets and green asset ratios in line with the results obtained by the EBA on the European peers that were part of the study. We expect however both methodologies to be refined over time, including more granular breakdown for CPRS and development of EU Taxonomy eligibility criteria and coefficients for the green asset ratio, which will allow us to compute more precise figures.

The outcomes of these exercises are helping us to prioritize actions and feed our business and sustainability strategy, including decisions regarding how to ensure our business growth is sustainable, which kind of products and services offering would be the most valuable, how this can influence pricing, which adaptation and mitigation activities should be pursued,...

In 2022, our focus will also be on real estate assets (since mortgage loans constitute a significant share of our financing activities and the bulk of the loan exposures are secured by real estate assets). We will screen our mortgage portfolio and single out exposures and collateral that are highly exposed to transition risks on the one hand and to physical risks on the other hand.

At counterparty/asset/exposure level

Although the above-mentioned top down approach is a logical first step (as currently more data are available for sectors than for individual firms) and a useful means to get quick insights, the added value is limited since sectoral data make abstraction from the large differences in firms within a sector (type of companies' production processes and technologies, company specific strategies and dynamics over time,...). They need therefore to be complemented by bottom up analyses, i.e. assessments performed at individual firm/asset/exposure level taking into account the unique characteristics of each firm/asset/exposure.

We are currently deep diving into individual ESG risk profiles with the development of a scoring methodology for corporate exposures that will enable us to assign ESG ratings to our counterparties and rank them in function (inter alia) of their exposure to ESG factors, their willingness to take ESG issues into consideration, their ability to assess and measure ESG risks and opportunities, their capacity to monitor ESG risks, their current ESG risks management practices, the results of their mitigation actions, their level of transparency and their overall performance in this area. Engaging more deeply with our customers in order to better understand where they stand, what their key issues are, how they plan to transition to a low carbon economy and how Belfius can support them to this end is also part of the exercise and will feature high on the agenda in 2022 as well.

VIII.3.2.2. Quantification of the potential financial impact of ESG risks

One of the most efficient ways to ascertain our level of climate resilience is to perform dedicated stress tests taking into consideration various climate-related scenarios (impacting the temperature rise and transition pathways in different ways) over different time horizons. Such exercise will allow us to quantify potential impacts of certain events relating to climate change and pave the way for risk mitigation solutions.

In 2022, we will participate to the EBA Climate Stress Test, a joint learning exercise with pioneer characteristics primarily designed to enhance the capacity of both banks and supervisors to assess climate risk. The process will be similar to other regulatory stress tests but unlike other stress tests, this will not be a capital adequacy exercise but will mainly focus on the impact of global warming on a limited set of credit risk parameters and will entail a first estimation of the probabilities and magnitude of potential financial losses arising from climate-related risks.

The bottom up projections leverage on the ECB economy-wide climate stress test which are based on scenarios derived from NGFS studies, as well as a set of macro-economic parameters and shocks provided by the EBA.

Transition and physical risks will be assessed separately.

Climate Stress Tests will undoubtedly become a common feature of the financial institutions' stress test framework. At Belfius, climate scenarios will gradually be embedded into the internal stress tests for the financial planning process as well.

VIII. 3.2.3 Monitoring and management of ESG risks

Another area of progress with respect to the ESG risk management is the setup of a monitoring and management process.

We are gradually integrating the ESG dimension in the Belfius policies, guidelines and processes (including, for instance, credit acceptance policies, underwriting standards, pricing guidelines, collateral valuation tools, suppliers charter...).

As previously mentioned, ESG risks have been included in our Risk Taxonomy as potential drivers of credit, market, operational, strategic, business and reputational and legal risks.

ESG-related considerations have been embedded into the NFR management framework and various NFR risk transversal processes. For instance, dedicated surveys have been carried out in the yearly SARIC exercises for the proper identification and assessment of ESG-related risks across the organization. Simarly, ESG risks have also been included in the latest yearly Risk Identification Process feeding the ICAAP exercise and our yearly top 10 risk assessment as well as in our new product approval process.

Furthermore, in 2021, Belfius published a Transition Acceleration Policy (TAP)[1] which imposes restrictions and conditions on eight controversial or sensitive sectors and business areas (i.e. tobacco, gambling, weapons, energy, mining, palm oil and soy, agricultural commodities). This policy is expected to gradually evolve over time to include additional risk sensitive sectors from an ESG perspective. The policy is applicable to the whole group and all types of activities. It has been immediately implemented to new customers (i.e. no onboarding of customers that are not in line with the guidelines) and is progressively being applied to existing customers as well. The entry into force of the TAP has triggered modifications to other policies and guidelines such as our credit acceptance policy.

Finally, the Risk Appetite Framework (RAF), which already included social and governance key risk indicators, has been further enhanced in 2021 with a revision of the ESG-related qualitative statements and the inclusion of additional ESG quantitative risk indicators, including monitoring (with a targeted reduction) of own asset emissions, diversity at senior management level and general ESG indicators, such as the improvement of the Belfius ESG rating or Belfius' progress with respect to the execution of its ESG Action Plan. Belfius aims to gradually further extend the number of key risk indicators to include indirect impacts (through financed activities) and implement additional and more granual targets/limits.

To this end, Belfius is building a complementary ESG Risk Dashboard, in which additional metrics across several dimensions (including measurement of data availability, share of vulnerable counterparties/assets, progress towards impact targets,...) will be included. This tool will lay the foundations for a comprehensive management of ESG risks globally and will be used to both support strategic objectives and ensure the institution's global resilience. The dashboard, when mature, and together with other risk management tools such as climate stress tests, materiality assessments and ESG scorings, is expected to:

- further enrich the Risk Appetite Framework over time,
- integrate the limit framework both at portfolio and individual level and
- lead to adjustments of the Transition Acceleration Policy (such as expansions of exclusions and restrictions).

(1) TAP-Policy-EN.pdf (belfius.be)

What happens when a natural disaster strikes... A case study

The new risks from increasing hazards associated with climate change have been experienced in 2021 with the unprecedented flooding that struck parts of Wallonia in July.

Belfius Insurance activated its crisis management framework safeguarding the health and security of its employees where needed. Then additional measures were also quickly taken to support at best the impacted customers in these difficult circumstances (e.g. reachability of call centers, on-site presence for claims handling, higher upfront payments when introducing a claim, etc.).

This is the worst natural disaster for decades with insured claims above EUR 2 Bn of which a gross claim costs of EUR 181 M for Belfius' clients. The financial impact (on profitability and solvency) has been strongly mitigated for Belfius Insurance thanks to a specific reinsurance program initiated on purpose in 2019 (in the wake of an internal study about the effect of climate change) and thanks to the ad-hoc protocols signed between the three Belgian federal entities and the insurance sector.

The impact on banking activities was very limited. Requests for payment moratoria on mortgage loans were introduced for a very limited amount (167 requests representing 20M exposures). Exposures on affected business and corporate customers were also negligible (23 customers affected and 23M exposures). No provisioning measures were deemed necessary.

This dramatic event evidenced also some limitations of the current Belgian system of compensation of CATNAT. This could be redefined to some extend in order to guarantee insurability of these events, the protection of the Belgian citizens and the resilience of the insurance sector. This is particularly true in the light of climate change aggravating the phenomenon of extreme weather.

This dramatic event highlighted the importance of sound risk and financial management practices. In view of Belfius' solidity and sound reinsurance plan, Belfius Insurance has decided to intervene up to twice the legal limit. Furthermore, in order to accelerate the claims payment, staff has been reinforced, mobile teams have been deployed in concerned areas and procedures and threshold were modified to allow compensating clients faster.

Learning from this dramatic event, Belfius is improving its crisis management plan to be better prepared to deal with broad-based climate events from an operational point of view and provide the suitable support to our clients in such dramatic moments.

IX. Other financial risks

IX.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 in return 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

A common practice to reduce 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 immaterial. Belfius aims 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 that never impacted Belfius so far). It therefore consists of a fixed amount set a priori based on a judgemental assessment.

IX.2. Funding risk

Definition

Funding risk refers to potential losses linked to Belfius’ ability to raise the funds necessary to refinance its debt, cash requests, margin calls, … Funding risk also results from unexpected changes in Belfius funding mix that may impact the refinancing cost. In some unfavorable cases, assets may have to be sold at stressed market price to close the funding gap, impacting the P&L through capital losses.

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 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 the cost linked to the replacement of the existing funding that left the balance sheet by funding obtained through pledging the assets from the liquidity buffer at ECB.

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%.

IX.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 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 as described in the previous section. 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 reported 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 relies on a statistical model.

IX.4. Pension plan risk

Definition

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

These commitments and the related assets are externalized to an insurance company or an OFP (Organization for Financing Pension – legal form in Belgium) . 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 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 plan risk covers a set of underlying risk drivers. The most important 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 effective risk management, diversification needs 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 a mix of several risk factors.

IX.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/back testing;
- risk of incorrect model calibration or rank ordering power;
- 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 used for containing model risk:

- allocating experienced professionals to the development of risk models;
- developing a specific margin of conservatism layer on top of the model output
- providing a systematic “four eyes approach” via the independent 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”.

IX.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 is the risk arising from a group of companies - a financial conglomerate - composed of credit institutions, insurance undertakings and investment firms. The conglomerate manages financial companies regulated under at least two different prudential frameworks (Banks and Insurance).

Conglomerate risk comes on top of "group consolidated risk" as the financial conglomerate will be submitted to "group consolidated risk" and to "conglomerate risk".

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 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 and the bank. 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 – subsidiaries: subsidiaries may assume help from the holding company in cases of financial stress and behave riskier in a financial conglomerate than as a stand-alone institution.
- Moral hazard – conglomerate level: at conglomerate level, the moral hazard risk associated with the 'too big to fail' position may exist.
- Size & complexity: it becomes more difficult to manage and understand the operation of a firm as the organization grows. Both these issues are not specific to financial conglomerates but arise because financial conglomerates tend, generally, 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 risks.

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) below.

- The Belfius Capital Group committee in charge of monitoring the adequacy of capital management at conglomerate and sector level.
- There exist a capital and dividend policy at Group level with consistency at entity level.
- FICOD test give a view of the regulatory capital needed to cover risks in each part of the conglomerate.
- 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.
- 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.
- 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 multiple mitigating actions in place

X. Belfius Insurance risks

For more information regarding the Belfius Insurance risks, we refer to the chapters Risk Management of the Annual Report 2021 of Belfius Insurance, Risk Management and the Belfius' Management report (see dedicated section on insurance risks)

XI. Appendices

XI.1. Information exempted from disclosure

The following templates have been identified as not applicable to Belfius and therefore are **not included** in this report:

- Disclosure of templates CQ2, CQ6, CQ8 and CR2a is only required for entities with a non-performing loan ratio (NPL) of 5% or above. The NPL ratio of Belfius is below this threshold and therefore these 4 templates are not applicable, while partial disclosure is allowed for templates templates CQ4 and CQ5.
- CQ7 – **Collateral obtained by taking possession and execution processes**: the recovery procedures used by Belfius are based on the best possible performance of the available collateral. The legal procedures used are based on the transfer of property received as collateral and not on the transfer of ownership.
- At Dec 31st 2021, there were no active loans and advances subject to EBA-compliant moratoria since all those moratoria have expired. Consequently, the **Template 1** of the EBA guideline on disclosures of exposures subject to measures applied in response to the Covid-19 crisis is not longer disclosed
- CR7 – **IRB approach – Effect on the RWA of credit derivatives used as CRM techniques**: Belfius does not typically secure its credit exposure by buying protection via credit derivatives. At the current time, the Belfius credit derivatives are not used for RWA reduction via credit risk mitigation but are used in the context of its market risk activities, including CVA risk hedging.
- Templates CR10.1, CR10.2, CR10.3 and CR10.4 refer to the slotting approach for specialised lending which is not applied by Belfius (No approved model or no exposure).
- CCR7 – **RWA flow statements of CCR exposures under the IMM**: Belfius does not use the Internal Model Method (IMM) methodology for measuring the EAD for counterparty credit risk exposures.
- SEC2 – **Securitisation exposures in the trading book**: Belfius does not have any exposure to securitisation positions in its trading book under the credit risk framework.
- The role of Belfius on **securitisation is described in the sections IV.6 and VI.2. Belfius acts either as original lender or as investor. Consequently, the tables SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor** and SEC5 - **Exposures securitised by the institution - Exposures in default and specific credit risk adjustments** are not applicable

The following templates are partially included in this report as part of their requirements have been identified as not applicable to Belfius

- As Belfius does not apply the Foundation IRB approach to credit risk exposures, disclosures related to the F-IRB approach are not provided in the templates CR6 and CR7-A
- Template MRB: qualitative disclosure is limited to the VaR/ SVar models as Belfius has no correlation trading portfolio and is not subject to capital requirements for incremental default and migration risk

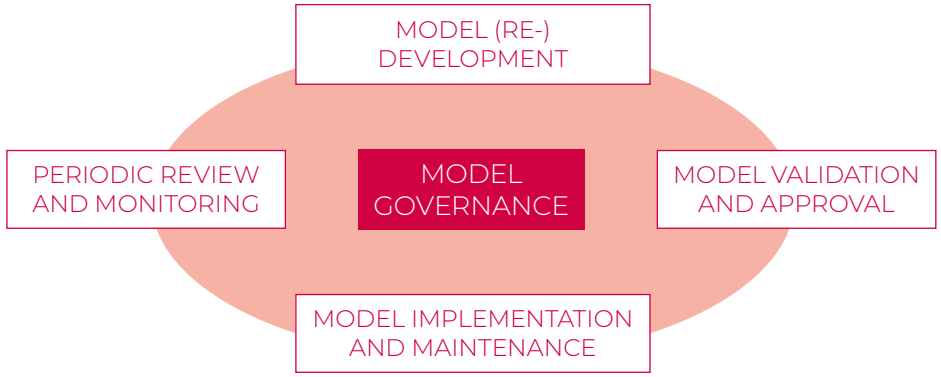
XI.2. Risk methodology

XI.2.1. Qualitative disclosure information related to IRB approach

In accordance with CRR2 Article 452, Institutions calculating risk-weighted exposure amounts under the IRB approach are required to disclose not only quantitative information on the IRB metrics and their impacts on capital requirements but also qualitative information on the internal rating systems, including the organisational structure and control mechanisms around models' development, calibration and validation, the methods and data for estimating and validating the risk parameters, and the internal use of the internal risk parameters and measurements in the internal risk management and decision-making processes. This section aims to address these qualitative disclosure requirements

XI.2.1.1. Internal ratings' organisational structure and governance

The internal rating process is organised around the main phases of the model life cycle as shown in the following figure: the model (re-) development, the model initial validation and approval, the model implementation and maintenance and the periodic review and performance monitoring.



- The team scoring and rating models is part of the Credit Risk Management division and is responsible for the entire process of developing, implementing and maintaining the IRB models. The team is also responsible for the periodic review and monitoring (i.e back-testing[1]) of the models.
- As provided for in point II.4.2.3.4 the validation division of the risk department is set up as a single, independent expert control team responsible for the independent initial validation of the internal models before theirimplementation and use for the estimation of minimum own funds requirements and other use tests, and after their implementation by performing regular assessment on the compliance of the models and associated processes (including model use) to the relevant regulations. The validation division reports directly to the CRO and is not involved in any model development in order to guarantee its independence.. The activities of the validation team are summarised in reports indicating the controls that were performed, their findings, proposed corrective actions and, when required, a validation status. These reports are also used to inform senior management through the Risk Executive Committee about the performance of the rating models and rating processes, areas needing improvement, and the status of efforts to improve previously identified deficiencies in line with Article 189 of Capital Requirements Regulation.
- In line with the corporate governance of Belfius, internal audit acts as third line of defence with regards internal rating systems. In this context, Internal Audit conducts 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, with the aim to provide the oversight bodies with reasonable assurance with regards to the evolution of the models developed and used, the material changes and the validation process (respect of planning, evolution of major recommendations raised by the Validation team...)
- Model validation is also responsible of some KRI's of the Belfius RAF aiming to monitor the status of the credit and market IRB models validation.

The Internal Rating System's (IRS) decisions are governed through two main committees:

The Risk Executive Committee

Composed of the CRO and of his direct reports, it takes the final decisions regarding the models:

- Approve to submit the new developed models or material changes to existing models for ECB supervisory approval (or decide on direct implementation of the model changes within the internal systems if prior ECB approval is not required);
- endorsement of the validation reports on the recurrent models' follow-ups (annual back testing and operational audit);
- endorsement of the corrective action plans recommended by Validation.

(1) Back-testing at least on annual basis. And the results are independently validated by Model 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 the risk analysts[1]
- 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.

For the broader view of the different risk committees, we refer to section II.2.3 on Risk governance structure and annex XI.4.1.

XI.2.2 Internal rating's main processes

Models development, validation and implementation

The key process steps followed by Belfius bank for the development, initial validation and implementation of its internal models can be summarized in the diagram hereafter.

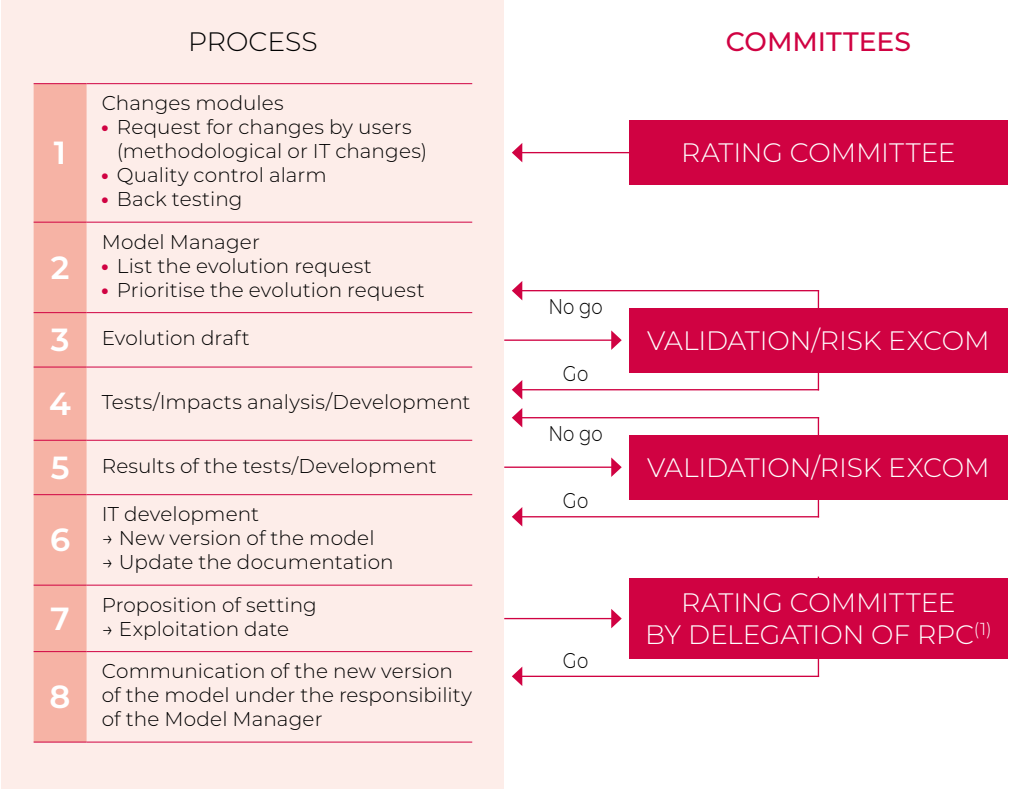
MODEL PREPARATION	MODEL SCOPING AND DATA DEFINITION	DATA COLLECTION AND VALIDATION	DETERMINATION OF THE MODEL METHODOLOGY
	• Define the scope of obligors/portfolios concerned • Data scope definition (internal vs external data, pooled data...) • define model inputs (financial ratios, historical defaults, historical ratings, losses and other quantitative and qualitative variables...)	• data gathering • data quality assessment and remediation • construction of databases if needed	• Statistical Vs expert based or (hybrid models) • ratings models at obligor level vs contract level... • construction of the development sample • engage with business/stakeholders for human judgement based modelling • document the model methodology and development steps
MODEL DEVELOPMENT & INITIAL VALIDATION	MODEL BUILDING AND CALIBRATION	MODEL TESTINGS AND DOCUMENTATION	MODEL INITIAL VALIDATION
	• quantification of risk parameters following the statistical analyses and modelling techniques in order to determine rank ordering • the calibration function (shape & level) is designed in order to ensure the right level (TTC for PD and downturn for LGD) is reached. • Adequate MOC (type A,B,C) is determined accordingly to the portfolio specificities.	• Testing the performance of the built functions and calibration levels using statistical tests • Document the procedures performed during the development, calibration and testings, serving as inputs for the initial validation • Prepare the roll-out plan for senior management approval	• engage with validation team for the independent validation of the (re) developed models. • Risk ExCom approval for ECB submission of the roll-out plan
MODEL IMPLEMENTATION (following supervisory approval)	IMPLEMENTATION OF THE MODELS	ACCEPTANCE TESTS	PROCESS AND TECHNICAL DOCUMENTATION
	• The modelling team documents the busines requirements, which serve as basis for IT technical specifications and implementation	• develop testing plans and scenarios (e.g system integration of data, user acceptance, regression test...) • Benchmark the results of the automated solution against the risk parameters identified during the development phase	• Document the technical implementation of the model. • Document user manuals or handbooks describing the rating assignment process (assignment of the risk parameters to Belfius obligors/exposures) • Provide training sessions for the use of the new models

(1) Dedicated "Overrides Committees" are regularly organized for that purpose.

Maintenance of the Models

As mentioned above, the scoring & rating models team is responsible for the ongoing maintenance of the developed models.

The model maintenance process is detailed in the diagram hereafter. The process also ensures that, before actual implementation of the different changes to internal models, the material changes receive appropriate competent authorities approval, while other non-material extensions and changes are notified to the competent authority in line with Commission Delegated Regulation 529/2014 with regard to regulatory technical standards (RTS) for assessing the materiality of extensions and changes of the IRBA.



As part of its ongoing model transformation plan running until 2023, Belfius is undertaking several initiatives aiming at enforcing its processes for the redevelopment and the maintenance of regulatory compliant internal models, including improving the technical capabilities of its modelling environment, investing in more agile delivery tools for models' implementation improving models' development and monitoring frameworks by including current industry best practices as well as reducing the number of models under management.

Periodic review and monitoring of the models

In accordance with Capital Requirements Regulation Article 179(1)(c), risk estimates should be reviewed when new information comes to light but at least on an annual basis. The ECB considers it good practice to do this on the basis of : (a) the ongoing monitoring performed by a Credit Risk Control Unit and (b) the annual validation of internal estimates performed by the validation function[1].

Belfius is organized to meet the CRR and ECB requirements: as previously mentioned, the scoring & rating models' team takes the role of the ongoing monitoring of risk estimates, this is currently done on annual basis.. The validation team also perform an annual review of the IRS, its functioning and compliance with all minimum regulatory requirements.

The controls to be performed cover the whole chain of production of the regulatory parameters under all its aspects. These controls are embedded within the model maintenance process as described above, in the sense that remediation measures to be performed as part of the model maintenance process, are the result of the level of deficiencies detected following the monitoring and validation activites.

(1) ECB guide to internal models, October 2019, point 3 – Internal governance, 3.7 – Review of estimates
(2) Area Under the Roc curve

Below is a **non-exhaustive** list of controls to be performed by the relevant teams. For some controls, multiple tests can be employed (e.g from visual inspection using boxplots and benchmarking analyses to statistical metrics accepted by industry practice such as AUROC[2] and kendall's tau for assessing the discriminatory powers, Wilcoxon signed rank test for the calibration accuracy, population stability index (PSI) for stability...). The selection of controls and relevant metrics to execute will depend on the materiality of the portfolios being reviewed, number of available defaults and loss experiences and the type of model validation to exercise (initial validation, extensive validation or recurrent monitoring/back-testing exercise).

Controls dimension	
ASSESSMENT OF THE COMPLETENESS OF MODEL DOCUMENTATION	
MODEL INPUTS	Assessment of relevance of model inputs
	Assessment of the data quality process, including data completeness, accuracy, consistency, validity and traceability of data
	Assessment of the assignment of counterparties to the right model
MODEL DEVELOPMENT AND CALIBRATION	Assessment of the chosen methodology
	Assessment of the predictive ability of the model
	Assessment of the discriminatory power of the model
	Assessment of the stability of the model
MODEL IMPLEMENTATION	Review of Business and technical requirements
	Review of the acceptance criteria
	Review of the IT architecture, its capacity and efficiency
MODEL USE	Assessment of the correct use of models by analysts
	Assessment of the models' appropriateness by analysing the occurrence of overrides
	Are the rating procedures respected? Including performing ratings in a timely manner?
	Are the parameters sufficiently embedded within the risk management and decision making process?
	Assessment of the responsiveness of the model in case of unexpected/ extreme events under the stress testing process
	Assessment of the ongoing compliance of the models with regulatory and legal environments

XI.2.3 Definitions, methods and data for Estimating PD, LGD and CCF

Default Definition used in the Models

In order to harmonize risk identification and reduce unwanted RWA difference between institutions, EBA has issued additional guidelines on the default definition provided for under CRR, providing among others with quantitative materiality thresholds to consider for the days past due computation and the application of a probation period for all defaulted loans, which means that for regulatory purposes, a credit will remain in default for a certain period after curing. This material change has been implemented in March 2021 within Belfius internal processes. The models recalibrations based on this new default definition have been submitted to ECB for approval in September 2021 and the effective recalibration of the models will be done in the first part of 2022.

Main Principles used for estimating the PD

Type of counterparties	Number of models	Portfolios	Model methodology	Time Series Used	Internal/ External Data	IRB asset class
Sovereigns	1	Countries, central banks, embassies, debtors of which liabilities are guaranteed irrevocably and unconditionally by central governments or central banks	Expert scorecard	> 10 years	External	Central government
Banks	1	Credit institutions	Statistical model	> 10 years	External	Institutions
Insurance Companies	1	Insurance companies/Monoliners	Statistical model	> 10 years	External	Corporates
Corporates	1	Large non listed or listed companies with annual sales >= 50 MEUR or belonging to a group with total annual sales >= 50 MEUR	Statistical model	> 10 years	Internal + External	Corporates
Local Public Sector	1	Belgian regional governments/ Belgian local authorities and Belgian Public interest organisations (PIO) assimilated to Belgian central and regional governments	expert based approach or assimilation approach	> 10 years	Internal + External	Central government/ institutions
Specialised Lending	1	Project finance - Energy and infrastructure	Statistical model	6 years	Internal	Corporates
Mid-Corporates	1	non-listed companies with total turnover <50 MEUR and belonging to a group with a consolidated turnover < 50 MEUR and total assets > 5 MEUR	Statistical model	6 years	Internal + External	Corporates
Other Satellites	1	Non Public undertakings sponsored by public authorities	Mixed statisrical & expert based approach	5 years	Internal	Corporates
Public Satellites	1	Belgian Public undertakings sponsored by public authorities		5 years	Internal	Institutions
Retail	4	Individuals, self-employed & Small entreprises	Statistical models	2 years	Internal	Retails

Main Principles used for estimating the LGD

Type of counterparties	Number of models	Main Hypotheses	Time Series Used	Internal/ External Data
Sovereigns	1	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	1	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	1	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
Corporates	1			
Local Public Sector	1	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	1	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	1	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	1	On the basis of internal observation and expert judgement.	5 years	Internal
Public Satellites	1			
Retail	3	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	Internal

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.). the equities under the PD/LGD approach are assigned the same parameters as a debt obligation on the same counterparty using the existing internal models.

XI.2.4. 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;
- pricing;
- Financial Planning, Stress Testing (in case of Crisis burst for instance);
- ...

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 developed for the regulatory risk estimates.

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.

Pricing

To support the credit decision process, a RoNRE (Return on Normative Regulatory Equity) based on Normative Regulatory Equity is 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.

Financial Plan & Stress Testing

The Internal rating model outputs are used by the strategic risk department teams to feed the Financial planning and its stress test version. They are of upmost relevance when assessing also forward-looking view regarding external economic event to account for as it was the case for the Covid-19 outburst during which PD's and LGD's were heavily challenged and used to forecast potential evolutions.

XI.2.5. IFRS 9 impairment methodology

The definitions of 'past-due' and 'impaired' exposures used in the risk perspective are similar to the definitions used for accounting purposes. For more information on those definitions, we refer to the section **accounting policies** and the disclosure **9.2 credit risk exposure** in the financial statements.

The methods and approaches used for determination of Expected Credit Losses is briefly described in the section accounting policies of the consolidated financial statements. For an extensive description, we refer to the Risk Report of 2019

XI.3. Additional disclosures on the liability side

XI.3.1. Belfius Bank originations

Belfius currently has three traditional securitisation vehicles: DSFB[1], Penates Funding and Mercurius Funding. The total assets of these companies amount to EUR 3,875 million at 31 December 2021 compared to EUR 4,809 million at 31 December 2020.

According to the definition of control under IFRS 10, DSFB, 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.

DSFB is a Belgian securitisation vehicle of which one compartment is active namely DSFB-2.

DSFB-2 is a securitisation transaction of loans granted to Belgian entities (public and other). All the loans are 100% guaranteed by a Belgian regional government. Under this transaction a single tranche of floating rate notes, fully guaranteed by Belfius Bank, was issued 25 April 2008. On 31 December 2021, EUR 680 million were still outstanding. The DSFB-2 Notes are held by Belfius Bank and its subsidiary Belfius Ireland.

(1) The securitisation vehicle Dexia Secured Funding Belgium was rebranded to DSFB over the course of 2021.

Penates Funding is a Belgian securitisation vehicle of which one compartment is active namely Penates-6.

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; EUR 2,490 million Class A2 Mortgage-Backed Floating Rate Notes due 2051; EUR 1,020 mil-lion Class B Mortgage-Backed Floating Rate Notes due 2051; EUR 30 million Class C Floating Rate Notes due 2051.

The Class A1 Notes were redeemed in full over the course of 2020. The outstanding amount of the Class A2 Notes stood at EUR 1,539 million, while the outstanding amounts of the other classes of notes were still at their initial amount. 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 of which one compartment is active, namely Mercurius-1.

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, Mercurius-1 issued new 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. 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.

At the end of 2021, the outstanding balance of the Class A Notes and the Class B Notes decreased to respectively EUR 375 million and EUR 300 million.

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.

XI.3.2. Belfius mortgage pandbrieven programme

Belfius Mortgage Pandbrieven Programme

Total Amount Outstanding (in EUR)	7,292,000,000
Current Weighted Average Fixed Coupon	0.87%
Weighted Average Remaining Average Life	5.80

a/ Residential Mortgage Loans

Outstanding balance of residential mortgage loans	8,776,694,462
Number of borrowers	103,739
Number of loans	178,663
Average outstanding balance per borrower	84,604
Average outstanding balance per loan	49,124
Weighted average original loan to initial value	76,37%
Weighted average current loan to current value	41,64%
Weighted average seasoning (in months)	67,11
Weighted average remaining maturity (in years, at 0% CPR)	12,33
Weighted average initial maturity (in years, at 0% CPR)	18,00
Remaining average life (in years, at 0% CPR)	6,57
Remaining average life (in years, at 2% CPR)	6,01
Remaining average life (in years, at 5% CPR)	5,22
Remaining average life (in years, at 10% CPR)	4,20
Remaining average life to interest reset (in years, at 0% CPR)	5,96
Percentage of fixed-rate loans	87.13%
Percentage of resettable-rate loans	12.87%
Weighted average interest rate	2.08%
Weighted average interest rate fixed rate loans	2.22%
Weighted average interest rate resettable-rate loans	1.11%

b/ Registered Cash

Registered cash proceeds under the residential mortgage loans	312,308,925

c/ Liquid Bond Positions

Mark-to-Market Value	78,555,925
Accounting Value	76,932,942

XI.3.3. Belfius public pandbrieven programme

Belfius Mortgage Pandbrieven Programme

Total Amount Outstanding (in EUR)	1,211,000,000
Current Weighted Average Fixed Coupon	0.32%
Weighted Average Remaining Average Life	7.68

a/ Residential Mortgage Loans

Outstanding Balance of Public Sector Assets	1,678,468,263
Number of borrowers	533
Number of loans	17,489
Average Outstanding Balance per borrower	3,149,096
Average Outstanding Balance per loan	95,973
Weighted average seasoning (in months)	105,30
Weighted average remaining maturity (in years, at 0% CPR)	11,54
Weighted average initial maturity (in years, at 0% CPR)	20,36
Remaining average life (in years, at 0% CPR)	6,27
Remaining average life (in years, at 1% CPR)	6,02
Remaining average life (in years, at 3% CPR)	5,46
Remaining average life (in years, at 5% CPR)	4,97
Remaining average life to interest reset (in years, at 0% CPR)	5,83
Percentage of Fixed Rate Loans	90.32%
Percentage of Resettable Rate Loans	9.68%
Weighted average interest rate	2.59%
Weighted average interest rate Fixed Rate Loans	2.72%
Weighted average interest rate Resettable Rate Loans	1.37%

b/ Registered Cash

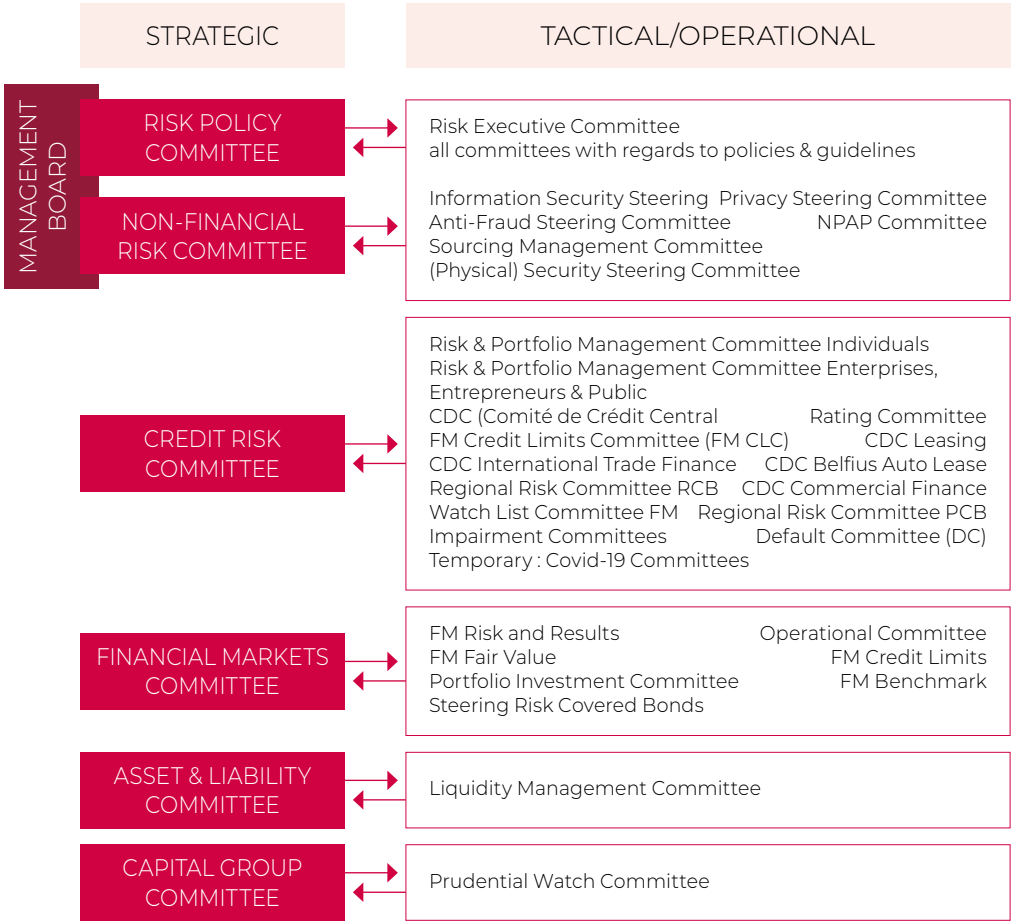
Registered cash proceeds under the Public Sector Exposures	38,487,466

c/ Liquid Bond Positions

Mark-to-Market Value	15,560,454
Accounting Value	14,952,699

XI.4. Additional information on risk governance structure

XI.4.1 Risk Committees on tactical / operational level



The sub-committees for **Non-Financial Risk Management** are:

- the **Information Security Steering (ISS)** ensures a well governed and coordinated information security strategy;
- 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;
- the **Outsourcing Management Committee** defines and monitors Outsourcing Management. It is organised by Strategic Planning and Performance Management

The sub-committees for **Credit Risk Management** are

- the **Risk & Portfolio Management Committee** Individuals 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 regarding individuals;
- the **Risk Portfolio Management Committee Enterprises, Entrepreneurs & Public (E&E&P)** 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 regarding E&E&P;
- 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 purpose 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** and the **CDC Belfius Auto Lease** handle 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 PBR** monitors the regional loan portfolio, with a special focus on the counterparties whose credit profile is weakened (watch list). It is organised by region (NO, NW, SE, SO and Centrum & Branches);
- the **Regional Risk Committee WEP** monitors the regional loan portfolio, with a special focus on the counterparties whose credit profile is weakened (watch list). It is 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);
- additional **Covid-19 committees** have been created since the Covid-19 crisis. These are temporary committees.

The sub-committees for **Financial Market Risk Management** are:

- **FM Risk and Results (FM RR)** reviewing business, risks, P/L reports and providing for an appropriate risk management and governance framework;
- **FM Fair Value (FM FV)**, in its capacity of Fair Value assessor, acts as a body in charge of "Fair Value Validation";
- **FM Benchmark**: follow-up of obligations of the Bank as panel bank for the contribution of Euribor and €STR;
- **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 WEP Trade Finance and monitors the associated credit risk for all the counterparties in scope;
- **Portfolio Investment Committee (PIC)** acts as the central supervisory and decision body on all matters regarding the 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, reporting to the ALCO

XI.5. 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 supervi-sory 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 simultane-ously 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 calcula-ting 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 objecti-vity, independence, ongoing review and trans-parency, 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.

EOPIA *European Insurance & Occupational Pensions Authority*
European Union financial regulatory institution aiming at promoting a sound regulatory framework and consistent supervisory practices in order to protect the rights of policyholders, pension scheme members and beneficiaries and contribute to the public confidence in the European Union's insurance and occupational pensions sectors.

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 out-standing at default.

LTV *Loan To Value*
Ratio between the amount borrowed and the appraised value of a property, used in mortgage underwriting to assess the lending risk.

LRE *Leverage Ratio Exposure measurement*
The IFRS balance sheet after netting of derivatives & cash collateral and including the off balance sheet commitments. The leverage ratio is the% of LRE which is covered by the Tier 1 capital.

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.

NBB LAC DT *Circular NBB Loss Absorbing Capacity of Deferred Taxes Circular*
In Solvency II, the computation of the regulatory capital requirement is based on the loss of economic own funds in case an adverse event would happen . In such an event, the amount of expected taxes to be paid would also be reduced. The LAC DT mechanism enables insurers to reduce the capital requirement by the expected tax decrease.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 methodo-logy 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.

REA *Risk Exposure Amount & RWA Risk-weighted assets*
Risk exposure amount (REA) is the total risk exposure calculated as the sum of risk-weighted exposures for credit risk, market risk, counterparty risk and operational risk. The term Risk Weighted Assets (RWA) is still commonly used and refers to the same as well as Total Risk Exposure amount which is the term used by the SRB when referring to MREL.

SARIC/RCSA *Self-Assessment of Risks and Internal Controls/Risks and Controls Self-Assessment*
Process through which the likelihood and potential impact of operational risks and the effectiveness of controls used to circumnavigate them are assessed and examined.

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.

TLOF *Total Liabilities & Own Funds*
The IFRS balance sheet after netting of derivatives & cash collateral. The amount is used to

- compute the MREL requirement in Bank Recovery & Resolution Directive 1
- compute the MREL subordination requirement in Bank Recovery & Resolution Directive 2 and
- determine the level from which a bank may have access to the Single Resolution Fund.

TLTRO(-III) *Targeted Longer Term Refinancing Operations*
One of the ECB's unconventional monetary policy instruments. They provide long-term loans to banks and thereby encourage them to increase their lending activity for the benefit of businesses and consumers in the euro area.

TRIM *Targeted Review of Internal Models*
Large scale project conducted by the ECB over 2016-2020 aiming at reducing inconsistencies and unwarranted variability when banks use internal models to calculate the risk weighted assets.

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.

List of ESG-related acronyms

BACA: Belgian Alliance for climate Action
CPRS: Climate Policy Relevant Sectors
EPC: energy performance certificate
ESG: environmental, social and governance
GAR: Green Asset Ratio
GHG: greenhouse gas
NGFS: Network for Greening the Financial System
PACTA: Paris Agreement Capital Transition Assessment
PCAF: Partnership for Carbon Accounting Financials
SBTi: Science Based Target initiative
SFDR: Sustainable Finance Disclosure Regulation
TAP: Transition Acceleration Policy
TCFD: Taskforce on Climate-related Financial Disclosures
UNEP FI: United Nations Environment Programme Finance Initiative